2016 **EXPEDITION** Owner's Manual

owner.ford.com

ford.ca

November 2015
Second Printing
Owner's Manual
Expedition
Litho in U.S.A.

GL1J 19A321 AA

FSC
MIX
Paper
FSC® C102270

The information contained in this publication was correct at the time of going to print. In the interest of continuous development, we reserve the right to change specifications, design or equipment at any time without notice or obligation. No part of this publication may be reproduced, transmitted, stored in a retrieval system or translated into any language in any form by any means without our written permission. Errors and omissions excepted.

© Ford Motor Company 2015

All rights reserved.

Part Number: 20151001162130

Table of Contents

Introduction
About This Manual.....7
Symbols Glossary.....7
Data Recording.....9
California Proposition 65.....11
Perchlorate.....11
Ford Credit.....11
Replacement Parts Recommendation.....11
Special Notices.....12
Mobile Communications Equipment.....12
Export Unique Options.....13

Environment
Protecting the Environment.....14

Child Safety
General Information.....15
Installing Child Restraints.....16
Booster Seats.....23
Child Restraint Positioning.....25
Child Safety Locks.....26

Seatbelts
Principle of Operation.....28
Fastening the Seatbelts.....29
Seatbelt Height Adjustment.....31
Seatbelt Warning Lamp and Indicator Chime.....32
Seatbelt Reminder.....33
Child Restraint and Seatbelt Maintenance.....34

Supplementary Restraints System
Principle of Operation.....35
Driver and Passenger Airbags.....36
Side Airbags.....37
Safety Canopy™.....38
Crash Sensors and Airbag Indicator.....39
Airbag Disposal.....40

Keys and Remote Controls
Principle of Operation.....41
General Information on Radio Frequencies.....41
Remote Control.....42
Replacing a Lost Key or Remote Control.....45

MyKey™
Principle of Operation.....46
Creating a MyKey.....47
Clearing All MyKeys.....48
Checking MyKey System Status.....49
Using MyKey With Remote Start Systems.....50
MyKey Troubleshooting.....51

Locks
Locking and Unlocking.....53
Manual Liftgate.....55
Power Liftgate.....57
Keyless Entry.....59

Security
Passive Anti-Theft System.....62
Anti-Theft Alarm.....63

Power Running Boards
Using Power Running Boards.....64

Steering Wheel
Adjusting the Steering Wheel - Vehicles With: Column Shift/Manual Adjustable Steering Column.....66
Adjusting the Steering Wheel - Vehicles With: Floor Shift/Manual Adjustable Steering Column.....66

Table of Contents

Adjusting the Steering Wheel - Vehicles With: Power Adjustable Steering Column....67
Audio Control....68
Voice Control....69
Cruise Control....70
Information Display Control....70
Heated Steering Wheel....70

Pedals

Adjusting the Pedals....71

Wipers and Washers

Windshield Wipers....72
Autowipers....72
Windshield Washers....73
Rear Window Wiper and Washers....73

Lighting

General Information....74
Lighting Control....74
Autolamps....75
Instrument Lighting Dimmer....76
Daytime Running Lamps....76
Front Fog Lamps....77
Direction Indicators....77
Interior Lamps....78
Ambient Lighting....79

Windows and Mirrors

Power Windows....80
Exterior Mirrors....81
Interior Mirror....82
Childminder Mirror....82
Rear Quarter Windows....83
Sun Visors....83
Moonroof....83

Instrument Cluster

Gauges....85
Warning Lamps and Indicators....88
Audible Warnings and Indicators....91

Information Displays

General Information....92
Information Messages....103

Climate Control

Manual Climate Control....113
Manual Climate Control - Vehicles With: Electronic Manual Temperature Control (EMTC)....114
Automatic Climate Control....116
Hints on Controlling the Interior Climate....117
Rear Passenger Climate Controls....120
Heated Windows and Mirrors....121
Remote Start....121

Seats

Sitting in the Correct Position....122
Head Restraints....122
Manual Seats....124
Power Seats....125
Memory Function....126
Rear Seats....127
Heated Seats....134
Climate Controlled Seats....135

Universal Garage Door Opener

Universal Garage Door Opener....137

Auxiliary Power Points

Auxiliary Power Points....142

Storage Compartments

Center Console....144
Overhead Console....144

Starting and Stopping the Engine

General Information.....145
Ignition Switch.....145
Keyless Starting.....145
Starting a Gasoline Engine.....146
Engine Block Heater.....149

Fuel and Refueling

Safety Precautions.....151
Fuel Quality.....152
Fuel Filler Funnel Location.....152
Running Out of Fuel.....152
Refueling.....153
Fuel Consumption.....155
Emission Control System.....156

Transmission

Automatic Transmission.....159

Four-Wheel Drive

Using Four-Wheel Drive.....164

Rear Axle

Limited Slip Differential.....171

Brakes

General Information.....172
Hints on Driving With Anti-Lock Brakes.....172
Parking Brake.....173
Hill Start Assist.....173

Traction Control

Principle of Operation.....175
Using Traction Control.....175

Stability Control

Principle of Operation.....176
Using Stability Control.....177

Terrain Response

Using Hill Descent Control.....179

Parking Aids

Principle of Operation.....181
Rear Parking Aid.....181
Front Parking Aid.....182
Rear View Camera.....183

Cruise Control

Principle of Operation.....186
Using Cruise Control.....186

Driving Aids

Blind Spot Information System.....188
Cross Traffic Alert.....190
Steering.....193
Drive Control.....194
Self-Leveling Suspension.....195

Load Carrying

Rear Under Floor Storage.....196
Roof Racks and Load Carriers.....197
Load Limit.....198

Towing

Towing a Trailer.....205
Trailer Sway Control.....206
Recommended Towing Weights.....206
Essential Towing Checks.....209
Towing Points.....216
Transporting the Vehicle.....217
Towing the Vehicle on Four Wheels.....218

Driving Hints

Breaking-In.....221
Reduced Engine Performance.....221

Expedition (TB7) Canada/United States of America, enUSA, Second Printing

Economical Driving.....221
Driving Through Water.....222
Floor Mats.....222

Roadside Emergencies

Roadside Assistance.....224
Hazard Warning Flashers.....225
Fuel Shutoff.....225
Jump Starting the Vehicle.....226

Customer Assistance

Getting the Services You Need.....229
In California (U.S. Only).....230
The Better Business Bureau (BBB) Auto Line Program (U.S. Only).....231
Utilizing the Mediation/Arbitration Program (Canada Only).....232
Getting Assistance Outside the U.S. and Canada.....232
Ordering Additional Owner's Literature.....233
Reporting Safety Defects (U.S. Only).....234
Reporting Safety Defects (Canada Only).....234

Fuses

Fuse Specification Chart.....236
Changing a Fuse.....244

Maintenance

General Information.....246
Opening and Closing the Hood.....246
Under Hood Overview.....248
Engine Oil Dipstick.....249
Engine Oil Check.....249
Oil Change Indicator Reset.....250
Engine Coolant Check.....250
Automatic Transmission Fluid Check.....254
Transfer Case Fluid Check.....255
Brake Fluid Check.....255
Washer Fluid Check.....256
Fuel Filter.....256
Changing the 12V Battery.....256
Checking the Wiper Blades.....258
Changing the Wiper Blades.....259
Adjusting the Headlamps.....259
Removing a Headlamp.....260
Changing a Bulb.....261
Bulb Specification Chart.....264
Changing the Engine Air Filter.....266

Vehicle Care

General Information.....268
Cleaning Products.....268
Cleaning the Exterior.....268
Waxing.....269
Cleaning the Engine.....270
Cleaning the Windows and Wiper Blades.....270
Cleaning the Interior.....271
Cleaning the Instrument Panel and Instrument Cluster Lens.....271
Cleaning Leather Seats.....272
Repairing Minor Paint Damage.....273
Cleaning the Alloy Wheels.....273
Vehicle Storage.....274

Wheels and Tires

General Information.....276
Tire Care.....279
Using Snow Chains.....294
Tire Pressure Monitoring System.....294
Changing a Road Wheel.....300
Technical Specifications.....305

Capacities and Specifications

Engine Specifications.....307
Motorcraft Parts.....307

Expedition (TB7) Canada/United States of America, enUSA, Second Printing

Vehicle Identification Number.....309
Vehicle Certification Label.....310
Transmission Code Designation.....310
Capacities and Specifications.....311

Audio System

General Information.....316
Audio Unit - Vehicles With: AM/FM/CD/ SYNC/Satellite Radio.....317
Audio Unit - Vehicles With: Sony AM/FM/ CD.....319
Digital Radio.....321
Satellite Radio.....323
USB Port.....326
Media Hub.....326

SYNC™

General Information.....327
Using Voice Recognition.....329
Using SYNC™ With Your Phone.....332
SYNC™ Applications and Services.....345
SYNC™ AppLink™.....353
Using SYNC™ With Your Media Player.....355
SYNC™ Troubleshooting.....365

Accessories

Accessories.....374

Extended Service Plan (ESP)

Extended Service Plan (ESP).....376

Scheduled Maintenance

General Maintenance Information.....378
Normal Scheduled Maintenance.....381
Special Operating Conditions Scheduled Maintenance.....384
Scheduled Maintenance Record.....387

Appendices

End User License Agreement.....397

Expedition (TB7) Canada/United States of America, enUSA, Second Printing

ABOUT THIS MANUAL

Thank you for choosing Ford. We recommend that you take some time to get to know your vehicle by reading this manual. The more that you know about your vehicle, the greater the safety and pleasure you will get from driving it.

WARNING

Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

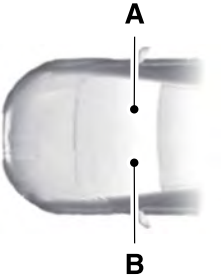
Note: *This manual describes product features and options available throughout the range of available models, sometimes even before they are generally available. It may describe options not fitted to the vehicle you have purchased.*

Note: *Some of the illustrations in this manual may show features as used in different models, so they may appear different to you on your vehicle.*

Note: *Always use and operate your vehicle in line with all applicable laws and regulations.*

Note: *Pass on this manual when selling your vehicle. It is an integral part of your vehicle.*

This manual may qualify the location of a component as left-hand side or right-hand side. The side is determined when facing forward in the seat.



E154903

A Right-hand side.

B Left-hand side.

SYMBOLS GLOSSARY

These are some of the symbols you may see on your vehicle.

Safety alert

See Owner's Manual

Air conditioning system

Anti-lock braking system

Avoid smoking, flames or sparks

Battery

Battery acid

Brake fluid - non petroleum based

Brake system

Cabin air filter

Check fuel cap

Child safety door lock or unlock

Child seat lower anchor

Child seat tether anchor

Cruise control

Do not open when hot

Engine air filter

Engine coolant

Engine coolant temperature

Engine oil

Explosive gas

Fan warning

Fasten seatbelt

Front airbag

Front fog lamps

Fuel pump reset

Fuse compartment

Hazard warning flashers

Heated rear window

Heated windshield

Interior luggage compartment release

Jack

Keep out of reach of children

Lighting control

Low tire pressure warning

Maintain correct fluid level

Note operating instructions

Panic alarm

Parking aid

Parking brake

Power steering fluid

Power windows front/rear

Power window lockout

Service engine soon

Side airbag

Shield the eyes

Stability control

Windshield wash and wipe

DATA RECORDING

Service Data Recording

Service data recorders in your vehicle are capable of collecting and storing diagnostic information about your vehicle. This potentially includes information about the performance or status of various systems and modules in the vehicle, such as engine, throttle, steering or brake systems. In order to properly diagnose and service your vehicle, Ford Motor Company, Ford of Canada, and service and repair facilities may access or share among them vehicle diagnostic information received through a direct connection to your vehicle when diagnosing or servicing your vehicle. Additionally, when your vehicle is in for service or repair, Ford Motor Company, Ford of Canada, and service and repair facilities may access or share among them data for vehicle improvement purposes. For U.S. only (if equipped), if you choose to use the SYNC Vehicle Health Report, you consent that certain diagnostic information may also be accessed electronically by Ford Motor Company and Ford authorized service facilities, and that the diagnostic information may be used for any purpose. See **SYNC™** (page 327).

Event Data Recording

This vehicle is equipped with an event data recorder. The main purpose of an event data recorder is to record, in certain crash or near crash-like situations, such as an airbag deployment or hitting a road obstacle; this data will assist in understanding how a vehicle's systems performed. The event data recorder is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less.

The event data recorder in this vehicle is designed to record such data as:

- **How various systems in your vehicle were operating;**
- **Whether or not the driver and passenger safety belts were buckled/fastened;**
- **How far (if at all) the driver was depressing the accelerator and/or the brake pedal; and**
- **How fast the vehicle was traveling; and**
- **Where the driver was positioning the steering wheel.**

This data can help provide a better understanding of the circumstances in which crashes and injuries occur.

Note: *Event data recorder data is recorded by your vehicle only if a non-trivial crash situation occurs; no data is recorded by the event data recorder under normal driving conditions and no personal data or information (e.g., name, gender, age, and crash location) is recorded (see limitations regarding 911 Assist and Traffic, directions and Information privacy below). However, parties, such as law enforcement, could combine the event data recorder data with the type of personally identifying data routinely acquired during a crash investigation.*

To read data recorded by an event data recorder, special equipment is required, and access to the vehicle or the event data recorder is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have such special equipment, can read the information if they have access to the vehicle or the event data recorder. Ford Motor Company and Ford of Canada do not access event data recorder information without obtaining consent, unless pursuant to court order or where required by law enforcement, other government authorities or other third parties acting with lawful authority. Other parties may seek to access the information independently of Ford Motor Company and Ford of Canada.

Note: *Including to the extent that any law pertaining to Event Data Recorders applies to SYNC or its features, please note the following: Once 911 Assist (if equipped) is enabled (set ON), 911 Assist may, through any paired and connected cell phone, disclose to emergency services that the vehicle has been in a crash involving the deployment of an airbag or, in certain vehicles, the activation of the fuel pump shut-off. Certain versions or updates to 911 Assist may also be capable of being used to electronically or verbally provide to 911 operators the vehicle location (such as latitude and longitude), and/or other details about the vehicle or crash or personal information about the occupants to assist 911 operators to provide the most appropriate emergency services. If you do not want to disclose this information, do not activate the 911 Assist feature.* *See* ***SYNC™*** *(page 327).*

Additionally, when you connect to Traffic, Directions and Information (if equipped, U.S. only), the service uses GPS technology and advanced vehicle sensors to collect the vehicle's current location, travel direction, and speed ("vehicle travel information"), only to help provide you with the directions, traffic reports, or business searches that you request. If you do not want Ford or its vendors to receive this information, do not activate the service. For more information, see Traffic, Directions and Information, Terms and Conditions. See **SYNC™** (page 327).

CALIFORNIA PROPOSITION 65

WARNINGS

Some constituents of engine exhaust, certain vehicle components, certain fluids contained in vehicles and certain products of component wear contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Batteries also contain other chemicals known to the State of California to cause cancer. Wash your hands after handling.

PERCHLORATE

Certain components in your vehicle such as airbag modules, safety belt pretensioners and remote control batteries may contain perchlorate material. Special handling may apply for service or vehicle end of life disposal.

For more information visit:

Web Address
www.dtsc.ca.gov/hazardouswaste/perchlorate

FORD CREDIT

(U.S. Only)

Ford Credit offers a full range of financing and lease plans to help you acquire your vehicle. If you have financed or leased your vehicle through Ford Credit, thank you for your business.

For your convenience we offer a number of ways to contact us, as well as to help manage your account.

Phone: 1-800-727-7000

For more information regarding Ford Credit, as well as to access Account Manager, please go to www.fordcredit.com.

REPLACEMENT PARTS RECOMMENDATION

Your vehicle has been built to the highest standards using quality parts. We recommend that you demand the use of genuine Ford and Motorcraft parts whenever your vehicle requires scheduled maintenance or repair. You can clearly identify genuine Ford and Motorcraft parts by looking for the Ford, FoMoCo or Motorcraft branding on the parts or their packaging.

Scheduled Maintenance and Mechanical Repairs

One of the best ways for you to make sure that your vehicle provides years of service is to have it maintained in line with our recommendations using parts that conform to the specifications detailed in this Owner's Manual. Genuine Ford and Motorcraft parts meet or exceed these specifications.

Collision Repairs

We hope that you never experience a collision, but accidents do happen. Genuine Ford replacement collision parts meet our stringent requirements for fit, finish, structural integrity, corrosion protection and dent resistance. During vehicle

development we validate these parts deliver the intended level of protection as a whole system. A great way to know for sure you are getting this level of protection is to use genuine Ford replacement collision parts.

Warranty on Replacement Parts

Genuine Ford and Motorcraft replacement parts are the only replacement parts that benefit from a Ford Warranty. Damage caused to your vehicle as a result of the failure of non-Ford parts may not be covered by the Ford Warranty. For additional information, refer to the terms and conditions of the Ford Warranty.

SPECIAL NOTICES

New Vehicle Limited Warranty

For a detailed description of what is covered and what is not covered by your vehicle's New Vehicle Limited Warranty, refer to the Warranty Manual that is provided to you along with your Owner's Manual.

Special Instructions

For your added safety, your vehicle is fitted with sophisticated electronic controls.

WARNINGS

You risk death or serious injury to yourself and others if you do not follow the instruction highlighted by the warning symbol. Failure to follow the specific warnings and instructions could result in personal injury.

Front seat mounted rear-facing child or infant seats should **NEVER** be placed in front of an active passenger airbag.

On-board Diagnostics (OBD-II)

Your vehicle's On-board Diagnostics (OBD-II) system has a data port for diagnostics, repair and reprogramming services with diagnostic scan tools. Installing a non-Ford-approved aftermarket OBD plug-in device that uses the port during normal driving, for example remote insurance company monitoring, remote vehicle diagnostics, telematics or engine reprogramming, may cause interference or damage to vehicle systems. We do not recommend or endorse the use of any non-Ford-approved aftermarket OBD plug-in devices. The vehicle Warranty may not cover damage caused by any non-Ford-approved aftermarket OBD plug-in device.

MOBILE COMMUNICATIONS EQUIPMENT

Using mobile communications equipment is becoming increasingly important in the conduct of business and personal affairs. However, you must not compromise your own or others' safety when using such equipment. Mobile communications can enhance personal safety and security when appropriately used, particularly in emergency situations. Safety must be paramount when using mobile communications equipment to avoid negating these benefits. Mobile communication equipment includes, but is not limited to, cellular phones, pagers, portable email devices, text messaging devices and portable two-way radios.

WARNING

Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

EXPORT UNIQUE OPTIONS

For your particular global region, your vehicle may be equipped with features and options that are different from the features and options that are described in this Owner's Manual. A market unique supplement may be supplied that complements this book. By referring to the market unique supplement, if provided, you can properly identify those features, recommendations and specifications that are unique to your vehicle. This Owner's Manual is written primarily for the U.S. and Canadian Markets. Features or equipment listed as standard may be different on units built for Export. **Refer to this Owner's Manual for all other required information and warnings.**

Expedition (TB7) Canada/United States of America, enUSA, Second Printing

PROTECTING THE ENVIRONMENT

You must play your part in protecting the environment. Correct vehicle usage and the authorized disposal of waste, cleaning and lubrication materials are significant steps toward this aim.

Expedition (TB7) Canada/United States of America, enUSA, Second Printing

GENERAL INFORMATION

See the following sections for directions on how to properly use safety restraints for children.

WARNINGS

Always make sure your child is secured properly in a device that is appropriate for their height, age and weight. Child safety restraints must be bought separately from your vehicle. Failure to follow these instructions and guidelines may result in an increased risk of serious injury or death to your child.

All children are shaped differently. The recommendations for safety restraints are based on probable child height, age and weight thresholds from the National Highway Traffic Safety Administration and other safety organizations, or are the minimum requirements of law. We recommend checking with a NHTSA Certified Child Passenger Safety Technician (CPST) and consult your pediatrician to make sure your child seat is appropriate for your child, and is compatible with and properly installed in your vehicle. To locate a child seat fitting station and CPST, contact NHTSA toll free at 1-888-327-4236 or go to http://www.nhtsa.dot.gov. In Canada, contact Transport Canada toll free at 1-800-333-0371 or go to www.tc.gc.ca to find a Child Car Seat Clinic in your area. Failure to properly restrain children in safety seats made especially for their height, age, and weight may result in an increased risk of serious injury or death to your child.

Do not leave children or animals unattended in the vehicle. On hot days, the temperature in the trunk or vehicle interior can rise very quickly. Exposure of people or animals to these high temperatures for even a short time can cause death or serious heat-related injuries, including brain damage. Small children are particularly at risk.

Recommendations for Safety Restraints for Children

Child	Child size, height, weight, or age	Recommended restraint type
Infants or toddlers	Children weighing 40 lb (18 kg) or less (generally age four or younger).	Use a child safety seat (sometimes called an infant carrier, convertible seat, or toddler seat).
Small children	Children who have outgrown or no longer properly fit in a child safety seat (generally children who are less than 4 ft. 9 in. (1.45 m) tall, are greater than age four and less than age 12, and between 40 lb (18 kg) and 80 lb (36 kg) and upward to 100 lb (45 kg) if recommended by your child restraint manufacturer).	Use a belt-positioning booster seat.
Larger children	Children who have outgrown or no longer properly fit in a belt-positioning booster seat (generally children who are at least 4 ft. 9 in. (1.45 m) tall or greater than 80 lb (36 kg) or 100 lb (45 kg) if recommended by child restraint manufacturer).	Use a vehicle seatbelt having the lap belt snug and low across the hips, shoulder belt centered across the shoulder and chest, and seat back upright.

- You are required by law to properly use safety seats for infants and toddlers in the United States and Canada.
- Many states and provinces require that small children use approved booster seats until they reach age eight, a height of 4 feet 9 inches (1.45 meters) tall, or 80 pounds (36 kilograms). Check your local and state or provincial laws for specific requirements about the safety of children in your vehicle.
- When possible, always properly restrain children 12 years of age and under in a rear seating position of your vehicle. Accident statistics suggest that children are safer when properly restrained in the rear seating positions than in a front seating position.

INSTALLING CHILD RESTRAINTS

Child Seats

E142594

Use a child safety seat (sometimes called an infant carrier, convertible seat, or toddler seat) for infants, toddlers, or children weighing 40 pounds (18 kilograms) or less (generally age four or younger).

Using Lap and Shoulder Belts

WARNINGS

Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the vehicle seat upon which the seat is installed all the way back.

Airbags can kill or injure a child in a child seat. Children 12 and under should be properly restrained in the rear seat whenever possible.

Depending on where you secure a child restraint, and depending on the child restraint design, you may block access to certain seatbelt buckle assemblies and LATCH lower anchors, rendering those features potentially unusable. To avoid risk of injury, occupants should only use seating positions where they are able to be properly restrained.

When installing a child safety seat with combination lap and shoulder belts:

- Use the correct seatbelt buckle for that seating position.
- Insert the belt tongue into the proper buckle until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.
- Keep the buckle release button pointing up and away from the safety seat, with the tongue between the child seat and the release button, to prevent accidental unbuckling.
- Place the vehicle seat upon which the child seat will be installed in the upright position.
- Put the seatbelt in the automatic locking mode. This vehicle does not require the use of a locking clip.

Perform the following steps when installing the child seat with combination lap and shoulder belts:

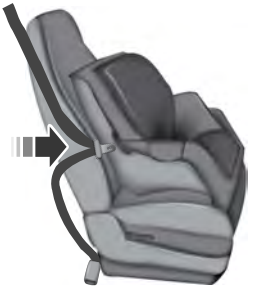
Note: *Although the child seat illustrated is a forward facing child seat, the steps are the same for installing a rear facing child seat.*

E142528

1. Position the child safety seat in a seat with a combination lap and shoulder belt.

E142529

2. Pull down on the shoulder belt and then grasp the shoulder belt and lap belt together.



E142530

3. While holding the shoulder and lap belt portions together, route the tongue through the child seat according to the child seat manufacturer's instructions. Be sure the belt webbing is not twisted.

E206121

4. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) for that seating position until you hear a snap and feel the latch engage. Make sure the tongue is latched securely by pulling on it.

E142875

5. To put the retractor in the automatic locking mode, grasp the shoulder portion of the belt and pull downward until all of the belt is pulled out.

Note: *The automatic locking mode is available on the front passenger and rear seats. This vehicle does not require the use of a locking clip.*

6. Allow the belt to retract to remove slack. The belt will click as it retracts to indicate it is in the automatic locking mode.
7. Try to pull the belt out of the retractor to make sure the retractor is in the automatic locking mode (you should not be able to pull more belt out). If the retractor is not locked, unbuckle the belt and repeat Steps 5 and 6.

E142533

8. Remove remaining slack from the belt. Force the seat down with extra weight, for example, by pressing down or kneeling on the child restraint while pulling up on the shoulder belt in order to force slack from the belt. This is necessary to remove the remaining slack that will exist once the extra weight of the child is added to the child restraint. It also helps to achieve the proper snugness of the child seat to your vehicle. Sometimes, a slight lean toward the buckle will help to remove remaining slack from the belt.
9. Attach the tether strap (if the child seat is equipped).

E142534

10. Before placing the child in the seat, forcibly move the seat forward and back to make sure the seat is securely held in place.

To check this, grab the seat at the belt path and attempt to move it side to side and forward and back. There should be no more than 1 in (2.5 cm) of movement for proper installation.

We recommend checking with a NHTSA Certified Child Passenger Safety Technician to make certain the child restraint is properly installed. In Canada, check with Transport Canada for referral to a Child Car Seat Clinic.

Using Lower Anchors and Tethers for CHildren (LATCH)

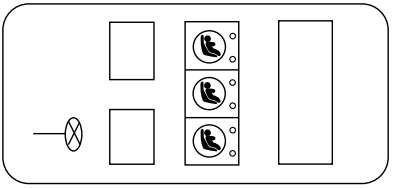
WARNING

Never attach two child safety seats to the same anchor. In a crash, one anchor may not be strong enough to hold two child safety seat attachments and may break, causing serious injury or death.

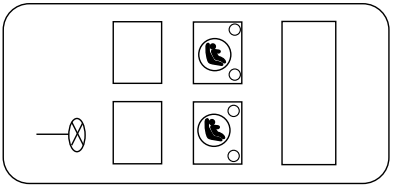
The LATCH system is composed of three vehicle anchor points: two lower anchors located where the vehicle seatback and seat cushion meet (called the seat bight) and one top tether anchor located behind that seating position.

LATCH compatible child safety seats have two rigid or webbing mounted attachments that connect to the two lower anchors at the LATCH equipped seating positions in your vehicle. This type of attachment method eliminates the need to use seatbelts to attach the child seat, however the seatbelt can still be used to attach the child seat if the lower anchors are not used. For forward-facing child seats, the top tether strap must also be attached to the proper top tether anchor, if a top tether strap has been provided with your child seat. We recommend the use of a child safety seat having a top tether strap. See Using Tether Straps in this chapter.

Your vehicle has LATCH lower anchors for child seat installation at the seating positions marked with the child seat symbol.



E205021



E206122

The LATCH anchors are at the rear section of the rear seat between the cushion and seatback, below the locator symbols on the seatback. Follow the child seat manufacturer's instructions to properly install a child seat with LATCH attachments.

E144054

The locator symbols are on round plastic buttons for the center seat and on rectangular tags for the outboard seats.

Follow the instructions on attaching child safety seats with tether straps. See Using Tether Straps in this chapter.

Attach LATCH lower attachments of the child seat only to the anchors shown.

Each time you use the safety seat, check that the seat is properly attached to the lower anchors and tether anchor, if applicable. Tug the child seat from side to side and forward and back where it is secured to the vehicle. The seat should move less than one inch when you do this for a proper installation.

If the safety seat is not anchored properly, the risk of a child being injured in a crash greatly increases.

Combining Seatbelt and LATCH Lower Anchors for Attaching Child Safety Seats

When used in combination, either the seatbelt or the LATCH lower anchors may be attached first, provided a proper installation is achieved. Attach the tether strap afterward, if included with the child seat.

Using Tether Straps

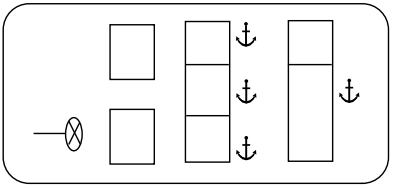
Many forward-facing child safety seats include a tether strap which extends from the back of the child safety seat and hooks to an anchoring point called the top tether anchor. Tether straps are available as an accessory for many older safety seats. Contact the manufacturer of your child seat for information about ordering a tether strap, or to obtain a longer tether strap if the tether strap on your safety seat does not reach the appropriate top tether anchor in the vehicle.

Some of the rear seats of your vehicle are equipped with built-in tether strap anchors located behind the seats as described below.

In the third row center seating position, the tether anchor is a loop at the bottom of the seatback.

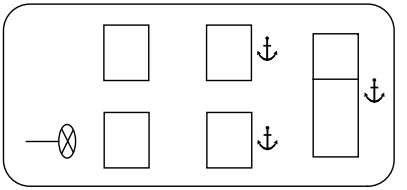
The tether strap anchors in your vehicle are in the following positions (shown from top view).

Second row bench seat



E205023

Second row bucket seats



E205024

Attach the tether strap only to the appropriate tether anchor as shown. The tether strap may not work properly if attached somewhere other than the correct tether anchor.

Once the child safety seat has been installed using either the seatbelt, the lower anchors of the LATCH system, or both, you can attach the top tether strap.

If you install a child seat with rigid LATCH attachments, do not tighten the tether strap enough to lift the child seat off the vehicle seat cushion when the child is seated in it. Keep the tether strap just snug without lifting the front of the child seat. Keeping the child seat just touching the vehicle seat gives the best protection in a severe crash.

Perform the following steps to install a child safety seat with tether anchors:

Second row outboard seating positions

E205025

Second row center seating position (if equipped)

E205026

1. For center seating positions, route the child safety seat tether strap over the back of the seat. For outboard seating positions, route the tether strap under the head restraint and between the head restraint posts. If the top of the safety seat hits the head restraint, recline the seat back slightly to obtain proper fit.
2. Locate the correct anchor for the selected seating position.

E205027

3. Grasp the tether strap and position it to the seat frame.

E205028

4. Rotate the tether strap, and clip the tether strap to the anchor on the seat frame.

E205029

5. Rotate the tether strap clip.
6. Tighten the child safety seat tether strap according to the manufacturer's instructions.

Third row center seating position

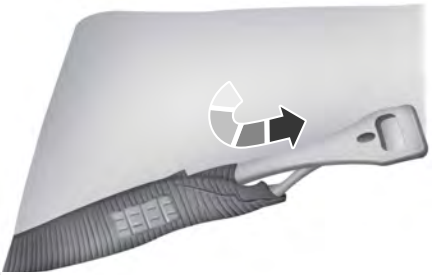
1. Route the child safety seat tether strap over the back of the seat.

E205030

2. Locate the anchor webbing loop for the seating position. You may need to pull back the top of the hinged panel along the bottom of the seatback to access the tether anchor.

E205032

3. Clip the tether strap through the anchor loop as shown. If the tether strap is clipped incorrectly, the child safety seat may not be retained properly in the event of a crash.



E205033

4. Tighten the child safety seat tether strap according to the manufacturer's instructions. If the safety seat is not anchored properly, the risk of a child being injured in a crash greatly increases.

If your child restraint system is equipped with a tether strap, and the child restraint manufacturer recommends its use, we also recommend its use.

BOOSTER SEATS

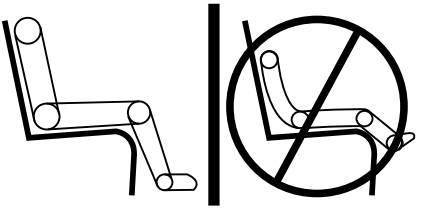
WARNING

Never place, or allow a child to place, the shoulder belt under a child's arm or behind the back because it reduces the protection for the upper part of the body and may increase the risk of injury or death in a crash.

Note: *Some booster seat safety belt guides may not accommodate the shoulder portion of the inflatable safety belt.*

Use a belt-positioning booster seat for children who have outgrown or no longer properly fit in a child safety seat (generally children who are less than 4 feet 9 inches (1.45 meters) tall, are greater than age four (4) and less than age twelve (12), and between 40 pounds (18 kilograms) and 80 pounds (36 kilograms) and upward to 100 pounds (45 kilograms) if recommended by your child restraint manufacturer). Many state and provincial laws require that children use approved booster seats until they reach age eight, a height of 4 feet 9 inches (1.45 meters) tall, or 80 pounds (36 kilograms).

Booster seats should be used until you can answer YES to ALL of these questions when seated without a booster seat:



E142595

- Can the child sit all the way back against their vehicle seat back with knees bent comfortably at the edge of the seat cushion?
- Can the child sit without slouching?
- Does the lap belt rest low across the hips?
- Is the shoulder belt centered on the shoulder and chest?
- Can the child stay seated like this for the whole trip?

Always use booster seats in conjunction with your vehicle lap and shoulder belt.

Types of Booster Seats

E68924

- Backless booster seats

If your backless booster seat has a removable shield, remove the shield. If a vehicle seating position has a low seat back or no head restraint, a backless booster seat may place your child's head (as measured at the tops of the ears) above the top of the seat. In this case, move the backless booster to another seating position with a higher seat back or head restraint and lap and shoulder belts, or consider using a high back booster seat.

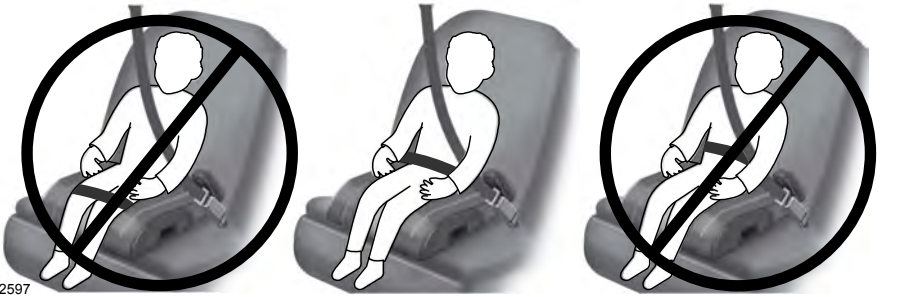
E70710

- High back booster seats

If, with a backless booster seat, you cannot find a seating position that adequately supports your child's head, a high back booster seat would be a better choice.

Children and booster seats vary in size and shape. Choose a booster that keeps the lap belt low and snug across the hips, never up across the stomach, and lets you adjust the shoulder belt to cross the chest and rest snugly near the center of the shoulder. The following drawings compare the ideal fit (center) to a shoulder belt uncomfortably close to the neck and a shoulder belt that could slip off the shoulder. The drawings also show how the lap belt should be low and snug across the child's hips.

E142596



E142597

If the booster seat slides on the vehicle seat upon which it is being used, placing a rubberized mesh sold as shelf or carpet liner under the booster seat may improve this condition. Do not introduce any item thicker than this under the booster seat. Check with the booster seat manufacturer's instructions.

CHILD RESTRAINT POSITIONING

WARNINGS

Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the vehicle seat upon which the child seat is installed all the way back. When possible, all children age 12 and under should be properly restrained in a rear seating position. If all children cannot be seated and restrained properly in a rear seating position, properly restrain the largest child in the front seat.

Always carefully follow the instructions and warnings provided by the manufacturer of any child restraint to determine if the restraint device is appropriate for your child's size, height, weight, or age. Follow the child restraint manufacturer's instructions and warnings provided for installation and use in conjunction with the instructions and warnings provided by your vehicle

WARNINGS

manufacturer. A safety seat that is improperly installed or utilized, is inappropriate for your child's height, age, or weight or does not properly fit the child may increase the risk of serious injury or death.

Never let a passenger hold a child on his or her lap while your vehicle is moving. The passenger cannot protect the child from injury in a crash, which may result in serious injury or death.

Never use pillows, books, or towels to boost a child. They can slide around and increase the likelihood of injury or death in a crash.

WARNINGS

Always restrain an unoccupied child seat or booster seat. These objects may become projectiles in a crash or sudden stop, which may increase the risk of serious injury.

Never place, or allow a child to place, the shoulder belt under a child's arm or behind the back because it reduces the protection for the upper part of the body and may increase the risk of injury or death in a crash.

To avoid risk of injury, do not leave children or pets unattended in your vehicle.

Recommendations for attaching child safety restraints for children

Restraint Type	Combined weight of child and child seat	Use any attachment method as indicated below by X				
		LATCH (lower anchors and top tether anchor)	LATCH (lower anchors only)	Safety belt and top tether anchor	Safety belt and LATCH (lower anchors and top tether anchor)	Safety belt only
Rear facing child seat	Up to 65 lb (29.5 kg)		X			X
Rear facing child seat	Over 65 lb (29.5 kg)					X
Forward facing child seat	Up to 65 lb (29.5 kg)	X		X	X	
Forward facing child seat	Over 65 lb (29.5 kg)			X	X	

Note: *The child seat must rest tightly against the vehicle seat upon which it is installed. It may be necessary to lift or remove the head restraint. See* ***Seats*** *(page 122).*

CHILD SAFETY LOCKS

When these locks are set, the rear doors cannot be opened from the inside.

E205034

The locks are located on the rear edge of each rear door and must be set separately for each door.

Move the lock control up to engage the lock. Move it down to disengage the lock.

PRINCIPLE OF OPERATION

WARNINGS

Always drive and ride with your seatback upright and the lap belt snug and low across the hips.

To reduce the risk of injury, make sure children sit where they can be properly restrained.

Never let a passenger hold a child on his or her lap while the vehicle is moving. The passenger cannot protect the child from injury in a crash, which may result in serious injury or death.

All occupants of the vehicle, including the driver, should always properly wear their safety belts, even when an airbag supplemental restraint system is provided. Failure to properly wear your safety belt could seriously increase the risk of injury or death.

It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a crash, people riding in these areas are more likely to be seriously injured or killed. Do not allow people to ride in any area of your vehicle that is not equipped with seats and safety belts. Be sure everyone in your vehicle is in a seat and using a safety belt properly.

In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a safety belt.

Each seating position in your vehicle has a specific safety belt assembly which is made up of one buckle and one tongue that are designed to be used as a pair. 1) Use the shoulder belt on the outside shoulder only. Never wear the shoulder belt under the arm. 2) Never swing the safety belt around your neck over the inside shoulder. 3) Never use a single belt for more than one person.

WARNINGS

When possible, all children 12 years old and under should be properly restrained in a rear seating position. Failure to follow this could seriously increase the risk of injury or death.

Safety belts and seats can become hot in a vehicle that has been closed up in sunny weather; they could burn a small child. Check seat covers and buckles before you place a child anywhere near them.

Front and rear seat occupants, including pregnant women, should wear safety belts for optimum protection in an accident.

All seating positions in this vehicle have lap and shoulder safety belts. All occupants of the vehicle should always properly wear their safety belts, even when an airbag supplemental restraint system is provided.

The safety belt system consists of:

- Lap and shoulder safety belts.
- Shoulder safety belt with automatic locking mode, (except driver safety belt).
- Height adjuster at the front outboard seating positions.
- Safety belt pretensioner at the front outboard seating positions.

- Safety belt warning light and chime.

- Crash sensors and monitoring system with readiness indicator.

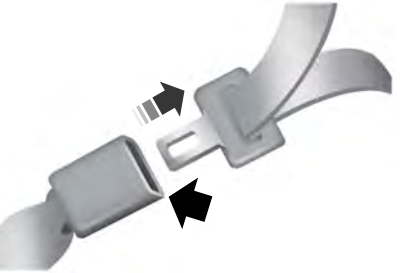
The safety belt pretensioners at the front seating positions are designed to tighten the safety belts when activated. In frontal and near-frontal crashes, the safety belt pretensioners may be activated alone or, if the crash is of sufficient severity, together with the front airbags. In side crashes and rollovers, the pretensioners will be activated when the Safety Canopy is activated.

FASTENING THE SEATBELTS

The front outboard and rear safety restraints in the vehicle are combination lap and shoulder belts.

E142587

1. Insert the belt tongue into the proper buckle (the buckle closest to the direction the tongue is coming from) until you hear a snap and feel it latch. Make sure the tongue is securely fastened in the buckle.



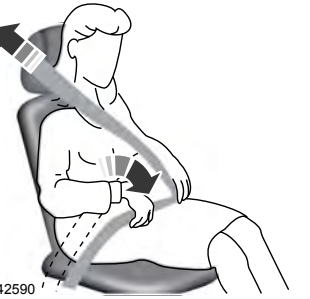
E142588

2. To unfasten, press the release button and remove the tongue from the buckle.

Using Safety Belts During Pregnancy

WARNING

Always ride and drive with your seatback upright and the safety belt properly fastened. The lap portion of the safety belt should fit snug and be positioned low across the hips. The shoulder portion of the safety belt should be positioned across the chest. Pregnant women should also follow this practice. See the following figure.



E142590

Pregnant women should always wear their safety belt. The lap belt portion of a combination lap and shoulder belt should be positioned low across the hips below the belly and worn as tight as comfort will allow. The shoulder belt should be positioned to cross the middle of the shoulder and the center of the chest.

Safety Belt Locking Modes

WARNINGS

After any vehicle crash, the safety belt system at all passenger seating positions must be checked by an authorized dealer to verify that the automatic locking retractor feature for child seats is still functioning properly. In addition, all safety belts should be checked for proper function.

The belt and retractor assembly must be replaced if the safety belt assembly automatic locking retractor feature or any other safety belt function is not operating properly when checked by an authorized dealer. Failure to replace the belt and retractor assembly could increase the risk of injury in crashes.

All safety restraints in the vehicle are combination lap and shoulder belts. The driver safety belt has the first type of locking mode. The front outboard passenger and rear seat safety belts have both types of locking modes described as follows:

Vehicle Sensitive Mode

This is the normal retractor mode, which allows free shoulder belt length adjustment to your movements and locking in response to vehicle movement. For example, if the driver brakes suddenly or turns a corner sharply, or the vehicle receives an impact of about 5 mph (8 km/h) or more, the combination safety belts will lock to help reduce forward movement of the driver and passengers.

In addition, the retractor is designed to lock if the webbing is pulled out too quickly. If this occurs, let the belt retract slightly and pull webbing out again in a slow and controlled manner.

Automatic Locking Mode

In this mode, the shoulder belt is automatically pre-locked. The belt will still retract to remove any slack in the shoulder belt. The automatic locking mode is not available on the driver safety belt.

When to Use the Automatic Locking Mode

This mode should be used any time a child safety seat, except a booster, is installed in passenger front or rear seating positions. Children 12 years old and under should be properly restrained in a rear seating position whenever possible. See **Child Safety** (page 15).

How to Use the Automatic Locking Mode

E142591

1. Buckle the combination lap and shoulder belt.
2. Grasp the shoulder portion and pull downward until the entire belt is pulled out.

Allow the belt to retract. As the belt retracts, you will hear a clicking sound. This indicates the safety belt is now in the automatic locking mode.

How to Disengage the Automatic Locking Mode

Unbuckle the combination lap and shoulder belt and allow it to retract completely to disengage the automatic locking mode and activate the vehicle sensitive (emergency) locking mode.

Safety Belt Extension Assembly

WARNING

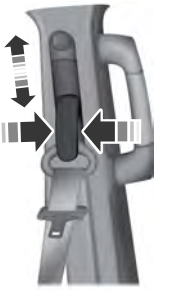
Do not use extensions to change the fit of the shoulder belt across the torso.

If the safety belt is too short when fully extended, a safety belt extension assembly can be obtained from an authorized dealer. Use only extensions manufactured by the same supplier as the safety belt. Manufacturer identification is on a label located either at the end of the webbing or on the retractor behind the trim. Also, use the safety belt extension only if the safety belt is too short for you when fully extended.

SEATBELT HEIGHT ADJUSTMENT

WARNING

Position the safety belt height adjuster so that the belt rests across the middle of your shoulder. Failure to adjust the safety belt properly could reduce the effectiveness of the safety belt and increase the risk of injury in a crash.



E205035

Adjust the height of the shoulder belt so the belt rests across the middle of your shoulder.

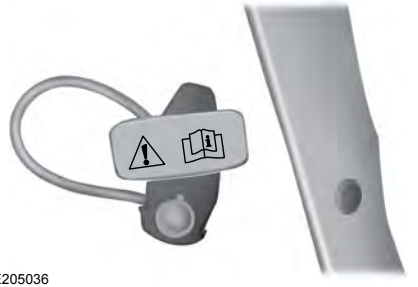
To adjust the shoulder belt height:

1. Press the side release buttons and slide the height adjuster up or down.
2. Release the buttons and pull down on the height adjuster to make sure it is locked in place.

Second Row Comfort Guide

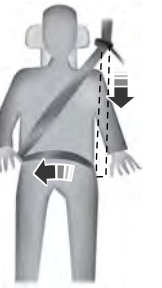
WARNING

Position the safety belt comfort guide so that the belt rests across the middle of your shoulder. Failure to adjust the safety belt properly could reduce the effectiveness of the safety belt and increase the risk of injury in a crash.



E205036

The second row outboard lap and shoulder belt is equipped with a belt comfort guide. This guide is attached to the quarter trim panel. Use it to adjust the comfort of the shoulder belt for smaller occupants in the outboard second row seats.



E205037

To adjust the comfort guide:

1. Slip the shoulder belt into the belt guide (the portion of the belt between the latch tongue and the D-ring, not the portion where the belt exits from the quarter trim panel).
2. Slide the guide up or down along the webbing so that the belt is centered on the occupant's shoulder.

SEATBELT WARNING LAMP AND INDICATOR CHIME

This lamp illuminates and an audible warning will sound if the driver's safety belt has not been fastened when the vehicle's ignition is turned on.

Conditions of operation

If...	Then...
The driver's safety belt is not buckled before the ignition switch is turned to the on position...	The safety belt warning light illuminates 1-2 minutes and the warning chime sounds 4-8 seconds.
The driver's safety belt is buckled while the indicator light is illuminated and the warning chime is sounding...	The safety belt warning light and warning chime turn off.
The driver's safety belt is buckled before the ignition switch is turned to the on position...	The safety belt warning light and indicator chime remain off.

SEATBELT REMINDER

Belt-Minder™

This feature supplements the safety belt warning function by providing additional reminders that intermittently sound a tone and illuminate the safety belt warning light when you are in the driver seat and a safety belt is unbuckled.

If...	Then...
You buckle your safety belt before you switch the ignition on or less than 1-2 minutes elapse after you switch the ignition on...	The Belt-Minder feature will not activate.
You do not buckle your safety belt before your vehicle reaches at least 6 mph (9.7 km/h) and 1-2 minutes elapse after you switch the ignition on...	The Belt-Minder feature activates, the safety belt warning light illuminates and a warning tone sounds for 6 seconds every 25 seconds, repeating for about 5 minutes or until you buckle your safety belt.
The driver safety belt is unbuckled for about 1 minute while the vehicle is traveling at least 6 mph (9.7 km/h) and more than 1-2 minutes elapse after you switch the ignition on...	The Belt-Minder feature activates, the safety belt warning light illuminates and a warning tone sounds for 6 seconds every 25 seconds, repeating for about 5 minutes or until you buckle your safety belt.

Deactivating and Activating the Belt-Minder Feature

WARNING

While the system allows you to deactivate it, this system is designed to improve your chances of being safely belted and surviving an accident. We recommend you leave the system activated for yourself and others who may use the vehicle.

Read Steps 1 - 4 thoroughly before proceeding with the programming procedure.

Before following the procedure, make sure that:

- The parking brake is set.
- The transmission is in park (P).
- The ignition is off.
- All vehicle doors are closed.
- The driver safety belt is unbuckled.

1. Switch the ignition on. Do not start the engine.
2. Wait until the safety belt warning light turns off (about one minute). After Step 2, wait an additional 5 seconds before proceeding with Step 3. Once you start Step 3, you must complete the procedure within 60 seconds.
3. Buckle then unbuckle the safety belt three times at a moderate speed, ending in the unbuckled state. After Step 3, the safety belt warning light turns on.
4. While the safety belt warning light is on, buckle then unbuckle the safety belt. After Step 4, the safety belt warning light flashes for confirmation.

- This will switch the feature off if it is currently on.
- This will switch the feature on if it is currently off.

CHILD RESTRAINT AND SEATBELT MAINTENANCE

Inspect the vehicle safety belts and child safety seat systems periodically to make sure they work properly and are not damaged. Inspect the vehicle and child seat safety belts to make sure there are no nicks, tears or cuts. Replace if necessary. All vehicle safety belt assemblies, including retractors, buckles, front safety belt buckle assemblies, buckle support assemblies (slide bar-if equipped), shoulder belt height adjusters (if equipped), shoulder belt guide on seat back (if equipped), child safety seat LATCH and tether anchors, and attaching hardware, should be inspected after a crash. Read the child restraint manufacturer's instructions for additional inspection and maintenance information specific to the child restraint.

Ford Motor Company recommends that all safety belt assemblies in use in vehicles involved in a crash be replaced. However, if the crash was minor and an authorized dealer finds that the belts do not show damage and continue to operate properly, they do not need to be replaced. Safety belt assemblies not in use during a crash should also be inspected and replaced if either damage or improper operation is noted.

Properly care for safety belts. See **Vehicle Care** (page 268).

PRINCIPLE OF OPERATION

WARNINGS

Airbags do not inflate slowly or gently, and the risk of injury from a deploying airbag is the greatest close to the trim covering the airbag module.

All occupants of your vehicle, including the driver, should always properly wear their safety belts, even when an airbag supplemental restraint system is provided. Failure to properly wear your safety belt could seriously increase the risk of injury or death.

Always transport children 12 years old and under in the back seat and always properly use appropriate child restraints. Failure to follow this could seriously increase the risk of injury or death.

Never place your arm over the airbag module as a deploying airbag can result in serious arm fractures or other injuries.

Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat upon which the child seat is installed all the way back.

Do not attempt to service, repair, or modify the airbag supplemental restraint systems or its fuses as you could be seriously injured or killed. Contact your authorized dealer as soon as possible.

Several airbag system components get hot after inflation. To avoid risk of injury, do not touch them after inflation.

If the airbag has deployed, the airbag will not function again and must be replaced immediately. If the airbag is not replaced, the unrepaired area will increase the risk of injury in a crash.

The airbags are a supplemental restraint system and are designed to work with the safety belts to help protect the driver and right front passenger from certain upper body injuries. Airbags do not inflate slowly; there is a risk of injury from a deploying airbag.

Note: *You will hear a loud bang and see a cloud of harmless powdery residue if an airbag deploys. This is normal.*

The airbags inflate and deflate rapidly upon activation. After airbag deployment, it is normal to notice a smoke-like, powdery residue or smell the burnt propellant. This may consist of cornstarch, talcum powder (to lubricate the bag) or sodium compounds (for example, baking soda) that result from the combustion process that inflates the airbag. Small amounts of sodium hydroxide may be present which may irritate the skin and eyes, but none of the residue is toxic.

While the system is designed to help reduce serious injuries, contact with a deploying airbag may also cause abrasions or swelling. Temporary hearing loss is also a possibility as a result of the noise associated with a deploying airbag. Because airbags must inflate rapidly and with considerable force, there is the risk of death or serious injuries such as fractures, facial and eye injuries or internal injuries, particularly to occupants who are not properly restrained or are otherwise out of position at the time of airbag deployment. Thus, it is extremely important that occupants be properly restrained as far away from the airbag module as possible while maintaining vehicle control.

Routine maintenance of the airbags is not required.

Restraint Safety System

The restraint safety system provides an improved overall level of frontal crash protection to front seat occupants and is designed to help further reduce the risk of airbag-related injuries. The system is able to analyze different occupant conditions and crash severity before activating the appropriate safety devices to help better protect a range of occupants in a variety of frontal crash situations.

Your vehicle restraint safety system consists of:

- Driver and passenger dual-stage airbag supplemental restraints.
- Front outboard safety belts with pretensioners, energy management retractors (first row only), and safety belt usage sensors.
- Driver seat position sensor.
- Front crash severity sensors.
- Restraints control module with impact and safing sensors.
- Restraint system warning light and backup tone.
- The electrical wiring for the airbags, crash sensor(s), safety belt pretensioners, front safety belt usage sensors, driver seat position sensor, and indicator lights.

How does the restraint safety system work?

The restraint safety system can adapt the deployment strategy of your vehicle's safety devices according to crash severity and occupant conditions. A collection of crash and occupant sensors provides information to the restraints control module. During a crash, the restraints control module may activate the safety belt pretensioners and/or either one or both stages of the dual-stage airbag supplemental restraints based on crash severity and occupant conditions.

DRIVER AND PASSENGER AIRBAGS

WARNINGS

Never place your arm or any objects over an airbag module. Placing your arm over a deploying airbag can result in serious arm fractures or other injuries. Objects placed on or over the airbag inflation area may cause those objects to be propelled by the airbag into your face and torso causing serious injury.

Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat upon which the child seat is installed all the way back.

E151127

The driver and passenger front airbags will deploy during significant frontal and near frontal crashes.

The driver and passenger front airbag system consists of:

- Driver and passenger airbag modules.

· Crash sensors and monitoring system with readiness indicator. See **Crash Sensors and Airbag Indicator** (page 39).

Proper Driver and Front Passenger Seating Adjustment

WARNING

The National Highway Traffic Safety Administration recommends a minimum distance of at least 10 in (25 cm) between an occupant's chest and the driver airbag module.

To properly position yourself away from the airbag:

- Move your seat to the rear as far as you can while still reaching the pedals comfortably.
- Recline the seat slightly (one or two degrees) from the upright position.

After all occupants have adjusted their seats and put on safety belts, it is very important that they continue to sit properly. Properly seated occupants sit upright, lean against the seat back, and center themselves on the seat cushion, with their feet comfortably extended on the floor. Sitting improperly can increase the chance of injury in a crash event. For example, if an occupant slouches, lies down, turns sideways, sits forward, leans forward or sideways, or puts one or both feet up, the chance of injury during a crash is greatly increased.

Children and Airbags

WARNING

Airbags can kill or injure a child in a child seat. Never place a rear-facing child seat in front of an active airbag. If you must use a forward-facing child seat in the front seat, move the seat upon which the child seat is installed all the way back.

E142846

Children must always be properly restrained. Accident statistics suggest that children are safer when properly restrained in the rear seating positions than in the front seating position. Failure to follow these instructions may increase the risk of injury in a crash.

SIDE AIRBAGS

WARNINGS

Do not place objects or mount equipment on or near the airbag cover, on the side of the seatbacks (of the front seats), or in front seat areas that may come into contact with a deploying airbag. Failure to follow these instructions may increase the risk of personal injury in the event of a crash.

Do not use accessory seat covers. The use of accessory seat covers may prevent the deployment of the side airbags and increase the risk of injury in an accident.

Do not lean your head on the door. The side airbag could injure you as it deploys from the side of the seatback.

WARNINGS

Do not attempt to service, repair, or modify the airbag, its fuses or the seat cover on a seat containing an airbag as you could be seriously injured or killed. Contact your authorized dealer as soon as possible.

If the side airbag has deployed, the airbag will not function again. The side airbag system (including the seat) must be inspected and serviced by an authorized dealer. If the airbag is not replaced, the unrepaired area will increase the risk of injury in a crash.

The side airbags are located on the outboard side of the seatbacks of the front seats. In certain sideways crashes, the airbag on the side affected by the crash will be inflated. The airbag was designed to inflate between the door panel and occupant to further enhance the protection provided occupants in side impact crashes.

E152533

The system consists of the following:

- A label or embossed side panel indicating that side airbags are found on your vehicle.
- Side airbags located inside the seatback of the driver and front passenger seats.
- Crash sensors and monitoring system with readiness indicator. See **Crash Sensors and Airbag Indicator** (page 39).

The design and development of the side airbag system included recommended testing procedures that were developed by a group of automotive safety experts known as the Side Airbag Technical Working Group. These recommended testing procedures help reduce the risk of injuries related to the deployment of side airbags.

SAFETY CANOPY™

WARNINGS

Do not place objects or mount equipment on or near the headliner at the siderail that may come into contact with a deploying curtain airbag. Failure to follow these instructions may increase the risk of personal injury in the event of a crash.

Do not lean your head on the door. The curtain airbag could injure you as it deploys from the headliner.

Do not attempt to service, repair, or modify the curtain airbags, its fuses, the A, B, or C pillar trim, or the headliner on a vehicle containing curtain airbags as you could be seriously injured or killed. Contact your authorized dealer as soon as possible.

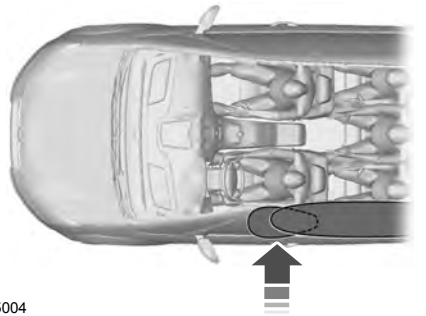
All occupants of your vehicle including the driver should always wear their safety belts even when an airbag supplemental restraint system and curtain airbag is provided. Failure to properly wear your safety belt could seriously increase the risk of injury or death.

WARNINGS

To reduce risk of injury, do not obstruct or place objects in the deployment path of the curtain airbag.

If the curtain airbags have deployed, the curtain airbags will not function again. The curtain airbags (including the A, B and C pillar trim and headliner) must be inspected and serviced by an authorized dealer. If the curtain airbag is not replaced, the unrepaired area will increase the risk of injury in a crash.

The Safety Canopy will deploy during significant side crashes or when a certain likelihood of a rollover event is detected by the rollover sensor. The Safety Canopy is mounted to the roof side-rail sheet metal, behind the headliner, above each row of seats. In certain sideways crashes or rollover events, the Safety Canopy will be activated, regardless of which seats are occupied. The Safety Canopy is designed to inflate between the side window area and occupants to further enhance protection provided in side impact crashes and rollover events.



E75004

The system consists of the following:

- Safety canopy curtain airbags located above the trim panels over the front and rear side windows identified by a label or wording on the headliner or roof-pillar trim.
- A flexible headliner which opens above the side doors to allow air curtain deployment

· Crash sensors and monitoring system with a readiness indicator. See **Crash Sensors and Airbag Indicator** (page 39).

Children 12 years old and under should always be properly restrained in the rear seats. The Safety Canopy will not interfere with children restrained using a properly installed child or booster seat because it is designed to inflate downward from the headliner above the doors along the side window opening.

The design and development of the Safety Canopy included recommended testing procedures that were developed by a group of automotive safety experts known as the Side Airbag Technical Working Group. These recommended testing procedures help reduce the risk of injuries related to the deployment of side airbags (including the Safety Canopy).

CRASH SENSORS AND AIRBAG INDICATOR

WARNING

Modifying or adding equipment to the front end of the vehicle (including frame, bumper, front end body structure and tow hooks) may affect the performance of the airbag system, increasing the risk of injury. Do not modify the front end of the vehicle.

Your vehicle has a collection of crash and occupant sensors which provide information to the restraints control module which deploys (activates) the front safety belt pretensioners, driver airbag, passenger airbag, seat mounted side airbags, and the Safety Canopy®. Based on the type of crash (frontal impact, side impact or rollover), the restraints control module will deploy the appropriate safety devices.

The restraints control module also monitors the readiness of the above safety devices plus the crash and occupant sensors. The readiness of the safety system is indicated by a warning indicator light in the instrument cluster or by a backup tone if the warning light is not working. See **Instrument Cluster** (page 85). Routine maintenance of the airbag is not required.

A difficulty with the system is indicated by one or more of the following:

The readiness light will not illuminate immediately after the ignition is turned on.

- The readiness light will either flash or stay lit.
- A series of five beeps will be heard. The tone pattern will repeat periodically until the problem, the light or both are repaired.

If any of these things happen, even intermittently, have the supplemental restraint system serviced at an authorized dealer immediately. Unless serviced, the system may not function properly in the event of a crash.

The fact that the safety belt pretensioners or front airbags did not activate for both front seat occupants in a crash does not mean that something is wrong with the system. Rather, it means the restraints control module determined the accident conditions (crash severity, belt usage) were not appropriate to activate these safety devices.

- The design of the front airbags is to activate only in frontal and near-frontal crashes (not rollovers, side impacts or rear impacts) unless the crash causes sufficient frontal deceleration.
- The design of the safety belt pretensioners is to activate in frontal, near-frontal and side crashes, and in rollovers.
- The design of the side airbags is to inflate in certain side impact crashes. Side airbags may activate in other types of crashes if the vehicle experiences sufficient sideways motion or deformation.
- The design of the Safety Canopy is to inflate in certain side impact crashes or rollover events. The Safety Canopy may activate in other types of crashes if the vehicle experiences sufficient sideways motion or deformation, or a certain likelihood of rollover.

AIRBAG DISPOSAL

Contact your authorized dealer as soon as possible. Airbags must be disposed of by qualified personnel.

PRINCIPLE OF OPERATION

The remote control allows you to:

- Remotely lock or unlock the vehicle doors.
- Unlock the doors without actively using a key or remote control (intelligent access only).
- Remotely open the power liftgate (if equipped).
- Remotely start or stop the engine and user pre-set features (if equipped).
- Arm and disarm the anti-theft system.
- Activate the panic alarm.

GENERAL INFORMATION ON RADIO FREQUENCIES

This device complies with Part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: *Changes or modifications not expressively approved by the party responsible for compliance could void the user's authority to operate the equipment. The term* ***IC*** *before the radio certification number only signifies that Industry Canada technical specifications were met.*

The typical operating range for your transmitter is approximately 33 feet (10 meters). Vehicles with the remote start feature will have a greater range. One of the following could cause a decrease in operating range:

- Weather conditions.
- Nearby radio towers.
- Structures around the vehicle.
- Other vehicles parked next to your vehicle.

The radio frequency used by your remote control can also be used by other radio transmitters, for example amateur radios, medical equipment, wireless headphones, wireless remote controls, cell phones, battery chargers and alarm systems. If the frequencies are jammed, you will not be able to use your remote control. You can lock and unlock the doors with the key.

Note: *Make sure to lock your vehicle before leaving it unattended.*

Note: *If you are in range, the remote control will operate if you press any button unintentionally.*

Intelligent Access (If Equipped)

The system uses a radio frequency signal to communicate with your vehicle and authorize your vehicle to unlock when one of the following conditions are met:

- You press any button on the keyless entry keypad within 3 ft (1 m) proximity of an intelligent access key.
- You press the luggage compartment button.
- You press a button on the transmitter.

If excessive radio frequency interference is present in the area or if the transmitter battery is low, you may need to mechanically unlock your door. You can use the mechanical key blade in your intelligent access key to open the driver door in this situation. See **Remote Control** (page 42).

REMOTE CONTROL

Integrated Keyhead Transmitter (If Equipped)

E210695

Use the key blade to start your vehicle and unlock or lock the driver door from outside your vehicle. You can also use the key blade to lock and unlock the glove compartment. The transmitter portion functions as the remote control.

E163047

Note: *Your vehicle keys came with a security label that provides important key cut information. Keep the label in a safe place for future reference.*

Intelligent Access Key (If Equipped)

Note: *A three-button remote control operates similarly.*

E138616

The intelligent access keys operate the power locks and the remote start system. The key must be in your vehicle to use the push button start.

E142431

The intelligent access key also contains a removable key blade that you can use to unlock your vehicle. You can also use the key blade to lock and unlock the glove compartment. Slide the release on the back of the remote control to release the key blade, then pull the blade out.

E138618

Note: *Your vehicle keys came with a security label that provides important key cut information. Keep the label in a safe place for future reference.*

Replacing the Battery

Note: *Refer to local regulations when disposing of transmitter batteries.*

Note: *Do not wipe off any grease on the battery terminals or on the back surface of the circuit board.*

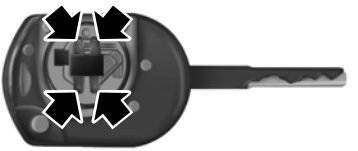
Note: *Replacing the battery does not erase the programmed key from your vehicle. The transmitter should operate normally.*

The remote control uses one coin-type three-volt lithium battery CR2032 or equivalent.

Integrated Keyhead Transmitter

E138619

1. Twist a thin coin in the slot of the transmitter near the key ring to remove the battery cover.
2. Carefully remove the rubber gasket from the transmitter if it does not come off with the battery cover.
3. Remove the old battery.



E138620

4. Insert a new battery with the + facing upward. Press the battery down to make sure it is fully in the housing.
5. Reinstall the battery housing cover onto the transmitter.

Intelligent Access Key

1. Remove the key blade from the transmitter.

E142432

2. Twist a thin coin under the tab hidden behind the key blade head to remove the battery cover. Do not use the key blade to remove the cover or you could damage it.

E138622

3. Remove the old battery.
4. Insert a new battery with the + facing downward. Press the battery down to make sure it is fully in the housing.

5. Reinstall the battery housing cover onto the transmitter and install the key blade.

Car Finder

Press the button twice within three seconds.

The horn sounds and the direction indicators flash. We recommend you use this method to locate your vehicle, rather than using the panic alarm.

Note: *If any door or the liftgate is open, or if the hood is open on vehicles with an anti-theft alarm or remote start, the horn will sound twice and the direction indicators will not flash.*

Sounding the Panic Alarm

Press the button to sound the panic alarm. Press the button again or switch the ignition on to turn it off.

Note: *The panic alarm only operates when the ignition is off.*

Remote Start (If Equipped)

WARNING

To avoid exhaust fumes, do not use remote start if your vehicle is parked indoors or in areas that are not well ventilated.

Note: *Do not use remote start if your fuel level is low.*

The remote start button is on the transmitter.

This feature allows you to start your vehicle from the outside. The transmitter has an extended operating range.

Vehicles with automatic climate control can be configured to operate when the vehicle is remote started. See **Automatic Climate Control** (page 116).

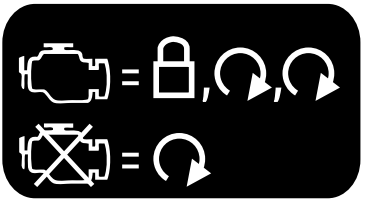
Many states and provinces have restrictions for the use of remote start. Check your local and state or provincial laws for specific requirements regarding remote start systems.

The remote start system does not work if any of the following occur:

- The ignition is on.
- The anti-theft alarm triggers.
- You switch off the feature.
- The hood is open.
- The transmission is not in park (P).
- The battery voltage is below the minimum operating voltage.
- The service engine soon indicator was on the last time your vehicle was driven.

Remote Starting Your Vehicle

Note: *You must press each button within three seconds of each other. If you do not follow this sequence, your vehicle does not start remotely, the direction indicators do not flash twice and the horn does not sound.*



E138626

The label on your transmitter details the starting procedure.

To start your vehicle remotely:

1. Press the lock button to lock all the doors.

2. Press the remote start button twice. The exterior lamps flash twice.

The horn sounds if the system fails to start, unless quiet start is on. Quiet start runs the blower fan at a slower speed to reduce noise. You can switch this feature on or off in the information display. See **General Information** (page 92).

Note: *If you remote start your vehicle with an integrated keyhead transmitter, you must switch the ignition on before driving your vehicle. If you remote start your vehicle with an intelligent access transmitter, you must press the push button ignition switch on the instrument panel once while applying the brake pedal before driving your vehicle.*

The power windows do not work during remote start and the radio does not turn on automatically.

The parking lamps remain on and the vehicle runs for 5, 10 or 15 minutes, depending on the setting.

Extending the Engine Running Time

To extend the engine running time duration of your vehicle during remote start, repeat steps 1 and 2 while the engine is running. If the duration is set to 10 minutes, the duration extends by another 10 minutes. For example, if your vehicle had been running from the first remote start for 5 minutes, your vehicle continues to run now for a total of 20 minutes. You can extend the remote start up to a maximum of 35 minutes.

Wait at least five seconds before remote starting after the engine stops running.

Turning Your Vehicle Off After Remote Starting

Press the button once. The parking lamps turn off.

You may have to be closer to your vehicle to remotely switch off your vehicle after remote starting. This is due to the added noise of your running vehicle.

You can switch this feature on or off in the information display. See **General Information** (page 92).

Memory Feature (If Equipped)

You can use the remote control to recall memory settings for the driver seat, power mirrors, power steering column and power adjustable foot pedals. Press the unlock button on the remote control or unlock your vehicle with the intelligent access key to recall the memory positions. You can program the remote control or intelligent access key to recall memory positions. See **Memory Function** (page 126).

REPLACING A LOST KEY OR REMOTE CONTROL

Replacement keys or remote controls can be purchased from an authorized dealer. Authorized dealers can program remote controls for your vehicle. See **Passive Anti-Theft System** (page 62).

PRINCIPLE OF OPERATION

MyKey allows you to program keys with restricted driving modes to promote good driving habits. All but one of the keys programmed to the vehicle can be activated with these restricted modes.

Any keys that have not been programmed are referred to as administrator keys or admin keys. They can be used to:

- Create a MyKey.
- Program configurable MyKey settings.
- Clear all MyKey features.

When you have programmed a MyKey, you can access the following information using the information display:

- How many admin keys and MyKeys are programmed to your vehicle.
- The total distance your vehicle has traveled using a MyKey.

Note: *All MyKeys are programmed to the same settings. You cannot program them individually.*

Note: *For vehicles equipped with a push-button start switch: When both a MyKey and an admin key are present when you start your vehicle, the system recognizes the admin key only.*

Non-configurable Settings

The following settings cannot be changed by an admin key user:

- Belt-Minder or safety belt reminder. You cannot disable this feature. The audio system will mute when the front seat occupants' safety belts are not fastened.
- Early low fuel. The low fuel warning is activated earlier, giving the MyKey user more time to refuel.
- Driver assist features, if equipped on your vehicle, are forced on: parking aid, blind spot information system (BLIS), cross traffic alert, lane departure warning and forward collision warning system.
- Satellite radio adult content restrictions (available only in some markets).

Configurable Settings

With an admin key, you can configure certain MyKey settings when you first create a MyKey and before you recycle the key or restart the vehicle. You can also change the settings afterward with an admin key:

- A vehicle speed limit can be set. Warnings will be shown in the display, followed by an audible tone when your vehicle reaches the set speed. You cannot override the set speed by fully depressing the accelerator pedal or by setting cruise control.

WARNING

Do not set MyKey maximum speed limit to a limit that will prevent the driver from maintaining a safe speed considering posted speed limits and prevailing road conditions. The driver is always responsible to drive in accordance with local laws and prevailing conditions. Failure to do so could result in accident or injury.

- Various vehicle speed minders can be set. Once you select a speed, it will be shown in the display, followed by an audible tone when the preselected vehicle speed is exceeded.
- Audio system maximum volume of 45%. A message will be shown in the display when you attempt to exceed the limited volume. Also, the speed-sensitive or compensated automatic volume control will be disabled.
- Always on setting. When this is selected, you will not be able to turn off Advance Trac or traction control, 911 Assist or Emergency Assistance, or Do Not Disturb (if your vehicle is equipped with these features).

CREATING A MYKEY

Use the information display to create a MyKey:

1. Insert the key you want to program into the ignition. If your vehicle is equipped with a push-button start, place the remote control into the backup position. The location of your backup position is in another chapter. See **Starting a Gasoline Engine** (page 146).
2. Switch the ignition on.
3. Access the main menu on the information display controls. Use the arrow keys to get to the following menu selections:

Message	Action and Description
Settings	Press the **OK** button or the right arrow key.
MyKey	Press the **OK** button or the right arrow key.
Create MyKey	Press the **OK** button or the right arrow key.

When prompted, hold the **OK** button until you see a message informing you to label this key as a MyKey. The key will be restricted at the next start.

MyKey is successfully created. Make sure you label it so you can distinguish it from the admin keys.

You can also program configurable settings for the key(s). See **Programming/Changing Configurable Settings**.

Programming/Changing Configurable Settings

Use the information display to access your configurable MyKey settings.

1. Switch the ignition on using an admin key or remote control.
2. Access the main menu on the information display controls. Use the arrow keys to get to the following menu selections:

Message	Action and Description
Settings	Press the **OK** button or the right arrow key.
MyKey	Press the **OK** button or the right arrow key.

Note: *You can clear or change your MyKey settings at any time during the same key cycle as you created the MyKey. Once you have switched the vehicle off, however, you will need an admin key to change or clear your MyKey settings.*

CLEARING ALL MYKEYS

You can clear or change your MyKey settings using the information display control on the steering wheel. See **Information Displays** (page 92).

Switch the ignition on using an admin key or remote control.

To clear all MyKeys of all MyKey settings, press the left arrow button to access the main menu and scroll to:

Message	Action and Description
Settings	Press the **OK** button.
MyKey	Press the **OK** button.
Clear MyKey	Press and hold the **OK** button until the following message displays.
All MyKeys Cleared	

Note: *When you clear your MyKeys, you remove all restrictions and return all MyKeys to their original admin key status.*

CHECKING MYKEY SYSTEM STATUS

You can find information on programmed MyKey(s) using the information display control on the steering wheel. See **Information Displays** (page 92).

To find information on programmed MyKey(s), press the left arrow button to access the main menu and scroll to:

Message	Description
Settings	Press the **OK** button.
MyKey	Press the **OK** button.
Select one of the following:	
MyKey Dist.	Tracks the distance when drivers use a MyKey. The only way to delete the accumulated distance is by using an admin key to clear your MyKeys. If the distance does not accumulate as expected, then the intended user is not using the MyKey, or an admin key user recently cleared and then recreated a MyKey.
{0} MyKeys	Indicates the number of MyKeys programmed to your vehicle. Use this feature to detect how many MyKeys you have for your vehicle and determine when a MyKey has been deleted.
{0} Admin Keys	Indicates how many admin keys are programmed to your vehicle. Use this feature to determine how many unrestricted keys you have for your vehicle, and detect if an additional MyKey has been programmed.

USING MYKEY WITH REMOTE START SYSTEMS

Vehicles With Ford-Approved Aftermarket Remote Start Systems

When using a Ford-approved aftermarket remote start system, the vehicle recognizes the remote start system transmitter as an additional admin key. It is the vehicle's default setting.

When you start your vehicle with a Ford-approved aftermarket remote start system transmitter, the system shuts the vehicle off after you open the door or shift your vehicle into gear. This is intentional. When you restart your vehicle, it reads the vehicle key fob status instead of the remote start system transmitter status.

With a Ford-approved aftermarket remote start system, it is possible to program all key fobs as MyKeys unintentionally. If this happens, then the remote start system transmitter is the admin key. If you want to have only one key fob as a MyKey, or do not want to have any MyKeys, then you need to use your remote start system transmitter to clear all MyKeys. In that case, follow these steps:

1. Enter your vehicle and close all doors.
2. Start your vehicle using your remote start system transmitter.
3. See **Clearing All MyKeys** (page 48). Follow Steps 1-3.

After clearing your MyKeys, you can create a new MyKey. See **Creating a MyKey** (page 47).

Note: *With push-button start, you cannot program the remote start system transmitter as a MyKey. Always treat the remote start system transmitter as you would any other admin key.*

Vehicles With Non-Ford-Approved Aftermarket Remote Start Systems

MyKey is not compatible with non-Ford-approved aftermarket remote start systems. If you choose to install a remote start system, see an authorized dealer for a Ford-approved remote start system.

The following information may help if you choose to install a non-Ford-approved remote start system. The actions provided below do not make MyKey compatible with non-Ford-approved remote start systems, but may help you retain some MyKey functions.

When using a non-Ford-approved remote start system, the vehicle may recognize the remote start system as an additional admin key with its associated privileges. If you restart the vehicle by powering it off and waiting a few seconds, and then powering the vehicle back on, you may retain some MyKey functions. This action forces your vehicle to read the vehicle key fob instead of the remote start system transmitter and then uses the MyKey associated privileges.

Note: *The MyKey system status menu display may include the remote start system as an additional key in the total count of programmed keys. See* ***Checking MyKey System Status*** *(page 49).*

With a non-Ford-approved aftermarket remote start system, it is possible to program all key vehicle key fobs as MyKeys unintentionally. If this happens, then the remote start system transmitter is the admin key. If you want to have only one vehicle key fob as a MyKey, or do not want to have any MyKeys, then you need to use your remote start system transmitter to clear all MyKeys. In that case, follow these steps:

1. Enter your vehicle and close all doors.

Expedition (TB7) Canada/United States of America, enUSA, Second Printing

2. Start your vehicle using your non-Ford-approved remote start system transmitter.
3. See **Clearing All MyKeys** (page 48). Follow Steps 1-3.

After clearing your MyKeys, you can create a new MyKey. See **Creating a MyKey** (page 47).

Note: *With push-button start, you cannot program the remote start system transmitter as a MyKey. Always treat the remote start system transmitter as you would any other admin key.*

MYKEY TROUBLESHOOTING

Condition	Potential Causes
I cannot create a MyKey.	The transmitter used to start the vehicle is not an admin key. The transmitter used to start the vehicle is the only admin key. There always has to be at least one admin key. The transmitter is not in its backup position. See **Starting a Gasoline Engine** (page 146). The passive anti-theft system is disabled or in unlimited mode. The vehicle has been started using a remote start system transmitter that is not an admin key. See **Using MyKey With Remote Start Systems** (page 50).
I cannot program the configurable settings.	The transmitter used to start your vehicle is not an admin key. There are no MyKeys programmed to your vehicle. See **Creating a MyKey** (page 47). The vehicle has been started using a remote start system transmitter that is not an admin key. See **Using MyKey With Remote Start Systems** (page 50).
I cannot clear the MyKeys.	The transmitter used to start your vehicle is not an admin key. There are no MyKeys programmed to your vehicle. See **Creating a MyKey** (page 47). The vehicle has been started using a remote start system transmitter that is not an admin key. See **Using MyKey With Remote Start Systems** (page 50).
I lost the only admin key.	Purchase a new transmitter from an authorized dealer.

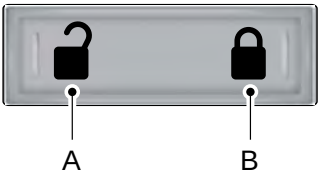
Condition	Potential Causes
I lost a key.	Program a spare transmitter. See **Passive Anti-Theft System** (page 62).
I accidentally programmed all keys as MyKeys.	The vehicle has a remote start system transmitter that is recognized as an admin key. Clear all MyKeys by using the remote start transmitter. See **Using MyKey With Remote Start Systems** (page 50). The vehicle's system does not recognize any programmed MyKeys. See **Creating a MyKey** (page 47).
MyKey total includes one additional key.	An unknown transmitter has been created as a MyKey. The vehicle has a remote start system. See **Using MyKey With Remote Start Systems** (page 50).
Admin key total includes one additional key.	An unknown transmitter has been programmed to the vehicle as an admin key. The vehicle has a remote start system. See **Using MyKey With Remote Start Systems** (page 50).
The MyKey distance does not accumulate.	The MyKey is not being used by the intended user. The MyKeys have been cleared and the MyKey system has been reset.
No MyKey functions with the transmitter.	An admin transmitter is present at vehicle start. There are no MyKeys programmed to your vehicle. See **Creating a MyKey** (page 47).

LOCKING AND UNLOCKING

You can use the power door lock control or the remote control to lock and unlock your vehicle.

Power Door Locks

The power door lock control is on the driver and front passenger door panels.



E163049

A Unlock.

B Lock.

Remote Control (If Equipped)

Unlocking the Doors (Two-Stage Unlock)

Press the button to unlock the driver door.

Press the button again within three seconds to unlock all doors. The direction indicators will flash.

Press and hold both the lock and unlock buttons on the remote control for three seconds to change between driver door or all doors unlock mode. The direction indicators flash twice to indicate a change to the unlocking mode. Driver door unlock mode only unlocks the driver door when you press the unlock button once. All door unlock mode unlocks all doors when you press the unlock button once. The unlocking mode applies to the remote control, keyless entry keypad and intelligent access. You can also change between the unlocking modes using the information display. See **Information Displays** (page 92).

Locking the Doors

Press the button to lock all doors. The direction indicators will flash.

Press the button again within three seconds to confirm that all the doors are closed. The doors will lock again, the horn will sound and the direction indicators will flash if all the doors and the liftgate are closed.

Note: *If the system does not function, use the key blade to lock and unlock your vehicle.*

Mislock

If any door or the liftgate is open, or if the hood is open on vehicles with an anti-theft alarm or remote start, the horn sounds twice and the direction indicators do not flash. You can switch this feature on or off in the information display. See **Information Displays** (page 92).

Opening the Liftgate

Press twice within three seconds to open the liftgate.

Activating Intelligent Access (If Equipped)

The intelligent access key must be within 3 ft (1 m) of the driver door or liftgate.

At a Door

You can use the keyless entry keypad to lock and unlock the doors. See **Keyless Entry** (page 59).

At the Liftgate

The liftgate unlocks and opens automatically when you press the liftgate release button.

Smart Unlocks for Integrated Keyhead Transmitter (If Equipped)

This helps to prevent you from locking yourself out of your vehicle if the key is still in the ignition.

When you open one of the front doors and lock your vehicle with the power door lock control, all the doors will lock then unlock and the horn will sound twice if the key is still in the ignition.

Your can still lock your vehicle with the key in the ignition by:

- Using the manual lock on the door.
- Locking the driver door with a key.
- Using the keyless entry keypad.
- Pressing the lock button on another remote control.

Smart Unlocks for Intelligent Access Keys (If Equipped)

This helps to prevent you from locking your key inside the passenger compartment or rear cargo area.

When you electronically lock your vehicle with any door open, the transmission is in park (P) and the ignition is off, the system searches for an intelligent access key inside your vehicle after you close the last door. If the system finds a key, all of the doors will immediately unlock and the horn will sound twice, indicating that a key is inside.

You can override the smart unlock feature and intentionally lock the intelligent access key inside your vehicle.

To do this, lock your vehicle after you have closed all the doors by:

- Using the keyless entry keypad.
- Pressing the lock button on another intelligent access key.

When you open one of the front doors and lock your vehicle using the power door lock control, all doors will lock then unlock if:

- The ignition is on.
- The ignition is off and the transmission is not in park (P).

Auto Relock

If you press the unlock button on the remote control and do not open a door within 45 seconds, your vehicle will lock and the alarm will arm. You can switch this feature on or off in the information display. See **Information Displays** (page 92).

Autolock

Autolock locks all the doors when all of the following occur:

- All doors are closed.
- The ignition is on.
- You shift into any gear putting your vehicle in motion.
- Your vehicle's speed is greater than 12 mph (20 km/h).

Autolock repeats when:

- You open then close any door while the ignition is on and your vehicle's speed is less than 9 mph (15 km/h).
- Your vehicle's speed is greater than 12 mph (20 km/h).

Enabling or Disabling

To enable or disable the autolock feature, contact an authorized dealer.

Autounlock

Autounlock unlocks all the doors when all of the following occur:

- The ignition is on, all the doors are closed, and your vehicle has been moving at a speed greater than 12 mph (20 km/h).
- You stop your vehicle and switch the ignition off or to accessory.
- You open the driver door within 10 minutes of switching the ignition off or to accessory.

Note: *The doors do not autounlock if you electronically lock your vehicle after you switch the ignition off and before you open the driver door.*

Enabling or Disabling

You can enable or disable the autounlock feature in the information display or an authorized dealer can do it for you. See **General Information** (page 92).

Illuminated Entry

The interior lamps and some exterior lamps illuminate when you unlock the doors with the remote control.

The lamps turn off if:

- The ignition is on.
- You press the remote control lock button.
- 25 seconds have elapsed.

The lamps do not turn off if:

- You turn them on with the lamp control.
- Any door is open.

Illuminated Exit

The interior lamps and some exterior lamps illuminate when all doors are closed and you switch the ignition off.

The lamps will turn off if all the doors remain closed and:

- 25 seconds have elapsed.
- You press the push button ignition switch.

Battery Saver

If you leave the courtesy lamps, interior lamps or headlamps on, the battery saver shuts them off 10 minutes after you switch the ignition off.

Battery Saver for Intelligent Access Keys (If Equipped)

If you leave the ignition switched on, it shuts off when it detects a certain amount of battery drain, or after 45 minutes.

MANUAL LIFTGATE (If Equipped)

WARNINGS

It is extremely dangerous to ride in a cargo area, inside or outside of your vehicle. In a crash, people riding in these areas are more likely to be seriously injured or killed. Do not allow people to ride in any area of your vehicle that is not equipped with seats and safety belts. Make sure everyone in your vehicle is in a seat and properly using a safety belt. Failure to follow this warning could result in serious personal injury or death.

Make sure to close and latch the liftgate to prevent drawing exhaust fumes into your vehicle. This will also prevent passengers and cargo from falling out. If you must drive with the liftgate open, keep the vents or windows open so outside air comes into your vehicle. Failure to follow this warning could result in serious personal injury.

Note: *Be careful when opening or closing the liftgate in a garage or other enclosed area to avoid damaging the liftgate.*

Note: *Do not hang anything, for example a bike rack, from the glass or liftgate. This could damage the liftgate and its components.*

Note: *Do not leave the liftgate open while driving. This could damage the liftgate and its components.*

Opening the Liftgate

Manually Opening the Liftgate

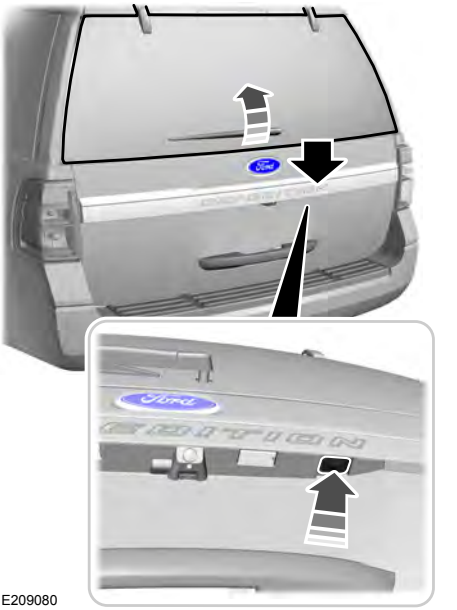
E209081

1. Press the button inside the liftgate handle.
2. Pull the liftgate upward.

With the Remote Control

Press twice within three seconds to unlatch the liftgate.

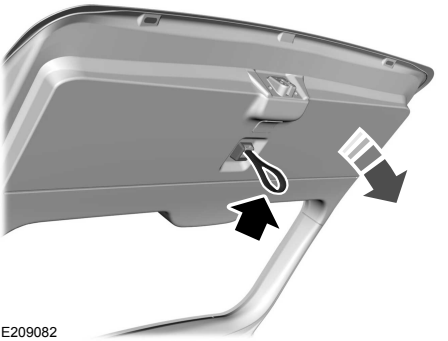
Opening the Liftgate Window



E209080

1. Press the release button.
2. Pull the liftgate glass upward.

Closing the Liftgate



A handle is located inside the liftgate to help with closing.

POWER LIFTGATE (If Equipped)

WARNINGS

It is extremely dangerous to ride in a cargo area, inside or outside of a vehicle. In a crash, people riding in these areas are more likely to be seriously injured or killed. Do not allow people to ride in any area of your vehicle that is not equipped with seats and safety belts. Make sure everyone in your vehicle is in a seat and properly using a safety belt. Failure to follow this warning could result in serious personal injury or death.

Make sure to close and latch the liftgate to prevent drawing exhaust fumes into your vehicle. This will also prevent passengers and cargo from falling out. If you must drive with the liftgate open, keep the vents or windows open so outside air comes into your vehicle. Failure to follow this warning could result in serious personal injury.

WARNINGS

Keep keys out of reach of children. Do not allow children to operate or play near an open or moving power liftgate. You should supervise the operation of the power liftgate at all times.

Note: *Make sure that you close the liftgate before operating or moving your vehicle, especially in an enclosure, like a garage or a parking structure. This could damage the liftgate and its components.*

Note: *Do not hang anything, for example a bike rack, from the glass or liftgate. This could damage the liftgate and its components.*

The liftgate only operates with the transmission in park (P).

Three warning tones sound as the liftgate begins to power close. If there is a problem with the open or close request, one of the following may occur:

- One chime sounds if the ignition is on and the transmission is not in park (P).
- Three chimes sound if the battery voltage is below the minimum operating voltage.
- One chime sounds if the vehicle speed is at or above 3 mph (5 km/h).

If the liftgate starts to close after it has fully opened, this indicates there may be excessive weight on the liftgate or a possible gas strut failure. A repetitive tone sounds and the liftgate closes under control. Remove any excessive weight from the liftgate. If the liftgate continues to close after opening, have the system checked by an authorized dealer.

Opening and Closing the Liftgate

WARNING

Make sure all persons are clear of the power liftgate area before using the power liftgate control.

Note: *Be careful when opening or closing the liftgate in a garage or other enclosed area to avoid damaging the liftgate.*

Note: *Do not leave the liftgate open while driving. This could damage the liftgate and its components.*

From the Instrument Panel

Press the button on the instrument panel.

With the Remote Control

Press the button twice within three seconds.

With the Outside Control Button

Opening the Liftgate

1. Unlock the liftgate with the remote control or power door unlock control. If an intelligent access key is within 3 ft (1 m) of the liftgate, the liftgate unlocks when you press the liftgate release button.

E209081

2. Press the button inside the liftgate handle.

Note: *Allow the system to open the liftgate. Manually pushing or pulling the liftgate may turn on obstacle detection and stop the power operation or reverse its direction. Manually interfering with the liftgate motion may also replicate a gas strut failure.*

Closing the Liftgate

WARNING

Keep clear of the liftgate when activating the rear switch.

E209084

Press and release the button in the rear cargo area.

Stopping the Liftgate Movement

You can stop the liftgate movement by doing any of the following:

- Pressing the liftgate control button.
- Pressing the liftgate button on the remote control twice.
- Pressing the liftgate button on the instrument panel.
- Activating the obstacle detection feature.

Obstacle Detection

When Closing

The system stops when it detects an obstacle. Three chimes sound and the system reverses to open. Once you remove the obstacle, you can power close the liftgate.

Note: *Entering your vehicle while the liftgate is closing can cause your vehicle to bounce and activate obstacle detection. To prevent this, let the power liftgate close completely before you enter your vehicle. Before driving off, check the instrument cluster for a liftgate or door ajar message or warning indicator. Failure to do this could result in unintentionally leaving the liftgate open while driving.*

When Opening

The system stops when it detects an obstacle and two short tones sound. Remove the obstacle to operate the liftgate.

KEYLESS ENTRY

SECURICODE™ KEYLESS ENTRY KEYPAD

The keypad is located near the driver window.

Note: *If you enter your entry code too fast on the keypad, the unlock function may not work. Re-enter your entry code more slowly.*

E163050

You can use the keypad to lock or unlock the doors without using a key.

For vehicles without intelligent access, you can operate the keypad with the factory-set 5-digit entry code. The code is located on the owner's wallet card in the glove box and is available from an authorized dealer. You can also create up to five of your own 5-digit personal entry codes.

For vehicles with intelligent access, you do not need to enter a 5-digit entry code. Press any button on keyless entry keypad once to unlock all doors.

Note: *You must have an intelligent access key within 3 ft (1 m) of your vehicle.*

Programming a Personal Entry Code

To create your own personal entry code:

1. Enter the factory-set code.
2. Press **1•2** on the keypad within five seconds.
3. Enter your personal 5-digit code. You must enter each number within five seconds of each other.
4. Press **1•2** on the keypad to save personal code 1.

The doors will lock then unlock to confirm that programming was successful.

To program additional personal entry codes, repeat Steps 1-3, then for Step 4:

- press **3•4** to save personal code 2
- press **5•6** to save personal code 3
- press **7•8** to save personal code 4
- press **9•0** to save personal code 5.

You may also program a personal entry code through the information display.

Tips:

- Do not set a code that uses five of the same number.
- Do not use five numbers in sequential order.
- The factory-set code will work even if you have set your own personal code.

Recalling Memory Positions (If Equipped)

The programmed entry codes will recall driver memory positions as follows:

- Entry code 1 will recall driver 1 memory positions.
- Entry code 2 will recall driver 2 memory positions.

Note: *Personal entry codes 3, 4 and 5 will not recall memory positions.*

Erasing a Personal Code

1. Enter the factory-set 5-digit code.
2. Press and release **1•2** on the keypad within five seconds.
3. Press and hold **1•2** for two seconds. You must do this within five seconds of completing Step 2.

All personal codes will erase and only the factory-set 5-digit code will work.

Anti-Scan Feature

The keypad will go into an anti-scan mode if you enter the wrong code seven times (35 consecutive button presses). This mode disables the keypad for one minute and the keypad lamp will flash.

The anti-scan feature will turn off after:

- one minute of keypad inactivity
- pressing the unlock button on the remote control
- switching the ignition on.

Displaying the Factory Set Code

Note: *You will need to have two programmed passive anti-theft keys for this procedure.*

To display the factory-set code in the information display:

1. Insert a key into the ignition and switch the ignition on for a few seconds.
2. Switch the ignition off and remove the key.
3. Insert the second key into the ignition and switch the ignition on.

The factory-set code will display for a few seconds.

Note: *The code may not display until after any other warning messages first display.*

Unlocking and Locking the Doors

Vehicles Without Intelligent Access

To Unlock the Driver Door

Enter the factory-set 5-digit code or your personal code. You must press each number within five seconds of each other. The interior lamps will illuminate.

Note: *All doors will unlock if you disable the two-stage unlocking mode. See* ***Locking and Unlocking*** *(page 53).*

To Unlock All Doors

Enter the factory-set code or your personal code, then press **3•4** within five seconds.

To Lock All Doors

Press and hold **7•8** and **9•0** at the same time (with the driver door closed). You do not need to enter the keypad code first.

Vehicles With Intelligent Access

Press any button on keyless entry keypad once to unlock all doors.

Note: *You must have an intelligent access key within 3 ft (1 m) of your vehicle.*

PASSIVE ANTI-THEFT SYSTEM

Note: *The system is not compatible with non-Ford aftermarket remote start systems. Use of these systems may result in vehicle starting problems and a loss of security protection.*

Note: *Metallic objects, electronic devices or a second coded key on the same key chain may cause vehicle starting problems if they are too close to the key when starting the engine. Prevent these objects from touching the coded key while starting the engine. Switch the ignition off, move all objects on the key chain away from the coded key and restart the engine if a problem occurs.*

Note: *Do not leave a duplicate coded key in the vehicle. Always take your keys and lock all doors when leaving the vehicle.*

SecuriLock®

The system is an engine immobilization system. It is designed to help prevent the engine from being started unless a coded key programmed to your vehicle is used. Using the wrong key may prevent the engine from starting. A message may appear in the information display.

If you are unable to start the engine with a correctly coded key, a malfunction has happened and a message may appear in the information display.

Automatic Arming

The vehicle arms immediately after you switch the ignition off.

Automatic Disarming

Switching the ignition on with a coded key disarms the vehicle.

Replacement Keys

Note: *Your vehicle comes equipped with two integrated keyhead transmitters or two intelligent access keys.*

The integrated keyhead transmitter functions as a programmed ignition key that operates all the locks and starts the vehicle, as well as a remote control.

The intelligent access key functions as a programmed key that operates the driver door lock and activates the intelligent access with push button start system, as well as a remote control.

If your programmed transmitters or standard SecuriLock coded keys (integrated keyhead transmitters only) are lost or stolen and you do not have an extra coded key, you will need to have your vehicle towed to an authorized dealer. You need to erase the key codes from your vehicle and program new coded keys.

Store an extra programmed key away from the vehicle in a safe place to help prevent any inconveniences. See your authorized dealer to purchase additional spare or replacement keys.

Programming a Spare Integrated Keyhead Transmitter

Note: *You can program a maximum of eight coded keys to your vehicle. All eight can be integrated keyhead transmitters.*

You can program your own integrated keyhead transmitter or standard SecuriLock coded keys to your vehicle. This procedure will program both the engine immobilizer keycode and the remote entry portion of the remote control to your vehicle

Only use integrated keyhead transmitters or standard SecuriLock keys.

You must have two previously programmed coded keys and the new unprogrammed key readily accessible. See your authorized dealer to have the spare key programmed if two previously programmed coded keys are not available.

Read and understand the entire procedure before you begin.

1. Insert the first previously programmed coded key into the ignition.
2. Switch the ignition from off to on. Keep the ignition on for at least three seconds, but no more than 10 seconds.
3. Switch the ignition off and remove the first coded key from the ignition.
4. After three seconds but within 10 seconds of switching the ignition off, insert the second previously coded key into the ignition.
5. Switch the ignition from off to on. Keep the ignition on for at least three seconds, but no more than 10 seconds.
6. Switch the ignition off and remove the second previously programmed coded key from the ignition.
7. After three seconds but within 10 seconds of switching the ignition off and removing the previously programmed coded key, insert the new unprogrammed key into the ignition.
8. Switch the ignition from off to on. Keep the ignition on for at least six seconds.
9. Remove the newly programmed coded key from the ignition.

If the key has been successfully programmed it will start the engine and operate the remote entry system (if the new key is an integrated keyhead transmitter).

If programming was not successful, wait 10 seconds and repeat Steps 1 through 8. If you are still unsuccessful, take your vehicle to your authorized dealer.

Programming a Spare Intelligent Access Key

See your authorized dealer to have additional keys programmed to your vehicle.

ANTI-THEFT ALARM

The system will warn you of an unauthorized entry to your vehicle. It will be triggered if any door, the luggage compartment or the hood is opened without using the key, remote control or keyless entry keypad.

The direction indicators will flash and the horn will sound if unauthorized entry is attempted while the alarm is armed.

Take all remote controls to an authorized dealer if there is any potential alarm problem with your vehicle.

Arming the Alarm

The alarm is ready to arm when there is not a key in your vehicle. Electronically lock your vehicle to arm the alarm.

Disarming the Alarm

Disarm the alarm by any of the following actions:

- Unlock the doors or luggage compartment with the remote control or keyless entry keypad.
- Switch your vehicle on or start your vehicle.
- Use a key in the driver door to unlock your vehicle, then switch your vehicle on within 12 seconds.

Note: *Pressing the panic button on the remote control will stop the horn and signal indicators, but will not disarm the system.*

USING POWER RUNNING BOARDS

WARNINGS

In extreme climates, excessive ice buildup may occur, causing the running boards not to deploy. Make sure that the running boards have deployed, and have finished moving before attempting to step on them. The running boards will resume normal function once the blockage is cleared.

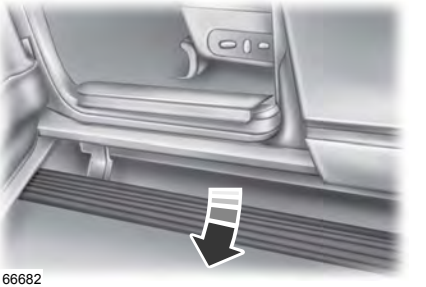
Turn off the running boards before jacking or placing any object under your vehicle. Never place your hand between the extended running board and your vehicle. A moving running board may cause injury.

Note: *Do not use the running boards, front and rear hinge assemblies, running board motors, or the running board underbody mounts to lift your vehicle when jacking. Always use proper jacking points.*

Note: *The running boards may operate more slowly in cool temperatures.*

Note: *The running board mechanism may trap debris such as mud, dirt, snow, ice and salt. This may cause unwanted noise. If this happens, manually set the running boards to the deployed position. Then, wash the system, in particular the front and rear hinge arms, with a high-pressure car wash wand.*

Automatic Power Deploy



E166682

The running boards automatically extend down and out when you open the door. This can help you enter and exit your vehicle.

Automatic Power Stow

When you close the doors, the running boards return to the stowed position after a two-second delay.

Manual Power Deploy

You can manually operate the running boards in the information display. See **General Information** (page 92).

Set the running boards in the deployed position to access the roof.

The running boards return to the stowed position and enter automatic mode when the vehicle speed exceeds 5 mph (8 km/h).

Enabling and Disabling

You can enable and disable the power running board feature in the information display. See **General Information** (page 92).

- When disabled (**OFF**), the running boards move to the stowed position regardless of the door position.
- When enabled (**AUTO**), the running boards move back to the correct positions based on the door position.

Bounce-back

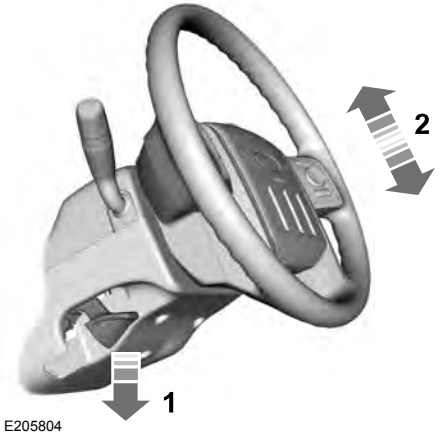
The running board will reverse direction and move to the end of travel if it encounters an object while moving.

ADJUSTING THE STEERING WHEEL - VEHICLES WITH: COLUMN SHIFT/MANUAL ADJUSTABLE STEERING COLUMN

WARNING

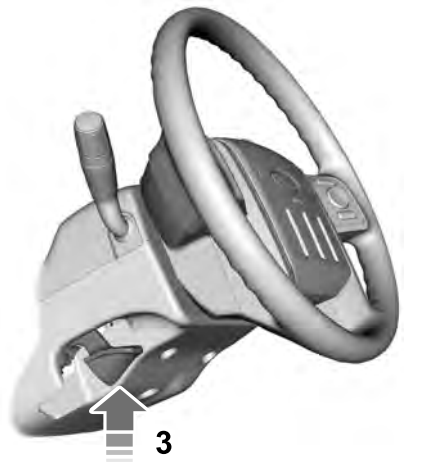
Do not adjust the steering wheel when your vehicle is moving.

Note: *Make sure that you are sitting in the correct position. See* ***Sitting in the Correct Position*** *(page 122).*



E205804

1. Unlock the steering column.
2. Adjust the steering wheel to the desired position.



E183049

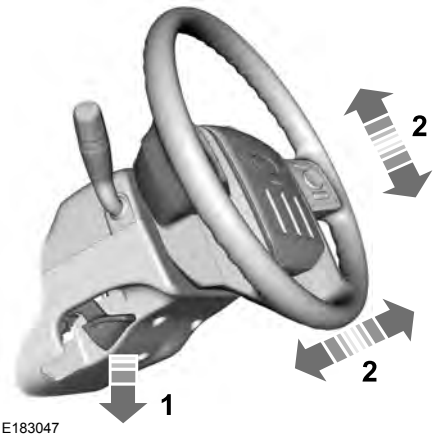
3. Lock the steering column.

ADJUSTING THE STEERING WHEEL - VEHICLES WITH: FLOOR SHIFT/MANUAL ADJUSTABLE STEERING COLUMN

WARNING

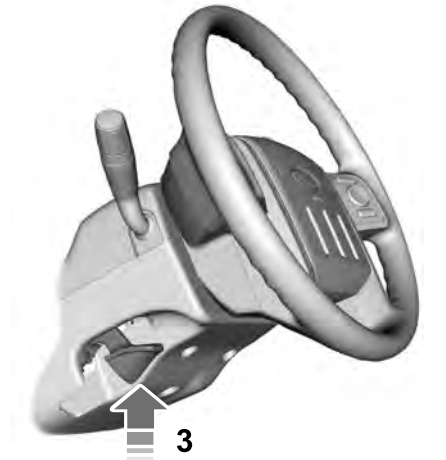
Do not adjust the steering wheel when your vehicle is moving.

Note: *Make sure that you are sitting in the correct position. See* ***Sitting in the Correct Position*** *(page 122).*



E183047

1. Unlock the steering column.
2. Adjust the steering wheel to the desired position.



E183049

3. Lock the steering column.

ADJUSTING THE STEERING WHEEL - VEHICLES WITH: POWER ADJUSTABLE STEERING COLUMN

Note: *Make sure that you are sitting in the correct position. See* ***Sitting in the Correct Position*** *(page 122).*

WARNING

Do not adjust the steering wheel when your vehicle is moving.

E161834

Use the control on the side of the steering column to adjust the position.

To adjust:

- Tilt: Press the top or bottom of the control.
- Telescope: Press the front or rear of the control.

End of Travel Position

The steering column sets a stopping position just short of the end of the column position to prevent damage to the steering column. A new stopping position sets if the steering column encounters an object when tilting or telescoping.

To reset the steering column to its normal stopping position:

1. Confirm there is nothing obstructing the motion of the steering column.
2. Press and hold the steering column control until the steering column stops moving.
3. Press the steering column control again. The steering column may begin to move again.
4. When the steering column stops, continue holding the control for an additional few seconds.
5. Repeat for each direction as necessary.

A new stopping position is set. The next time you tilt or telescope the steering column, it will stop just short of the end of the column position.

Memory Feature

You can save and recall the steering column position with the memory function. See **Memory Function** (page 126).

Note: *Pressing the adjustment control during memory recall cancels the operation.*

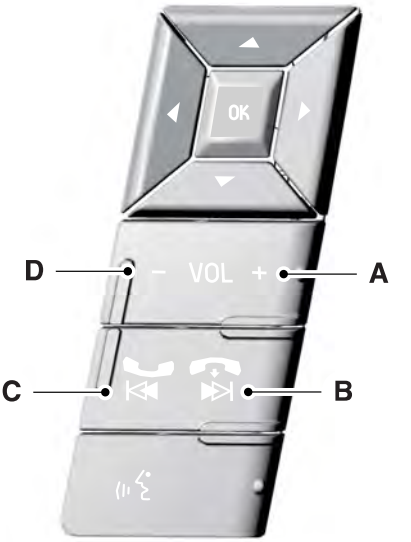
Easy Entry and Exit Feature

When you switch the ignition off, the steering column will move to allow extra room to exit your vehicle. The column will return to the previous setting when you switch the ignition on. You can enable or disable this feature in the information display. See **Information Displays** (page 92).

AUDIO CONTROL (If Equipped)

Operate the following functions with the control:

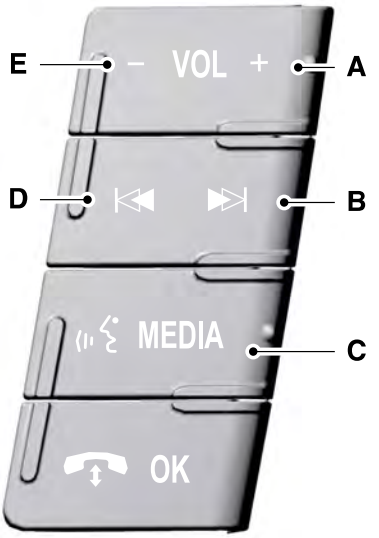
Type One



E205755

A	Volume up.
B	Seek up or next.
C	Seek down or previous.
D	Volume down.

Type Two



E205756

A	Volume up.
B	Seek up or next.
C	Media.
D	Seek down or previous.
E	Volume down.

Media

Press repeatedly to scroll through available audio sources.

Seek, Next or Previous

Press the seek button to:

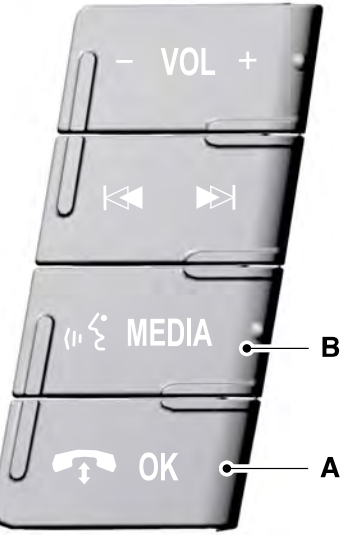
- Tune the radio to the next or previous stored preset.
- Play the next or the previous track.

Press and hold the seek button to:

- Tune the radio to the next station up or down the frequency band.
- Seek through a track.

VOICE CONTROL (If Equipped)

Type One

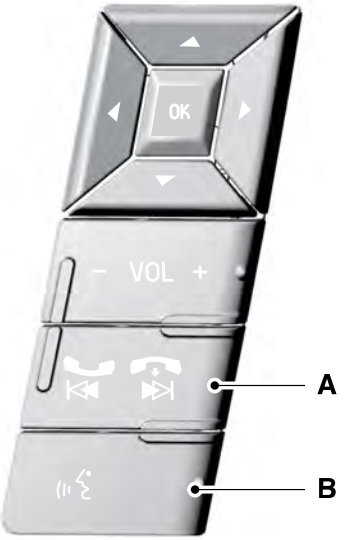


E205757

A	Phone mode.
B	Voice recognition.

See **SYNC™** (page 327).

Type Two



E205758

A Phone mode.

B Voice recognition.

See **SYNC™** (page 327).

CRUISE CONTROL

E205805

See **Cruise Control** (page 186).

INFORMATION DISPLAY CONTROL

E205806

See **Information Displays** (page 92).

HEATED STEERING WHEEL (If Equipped)

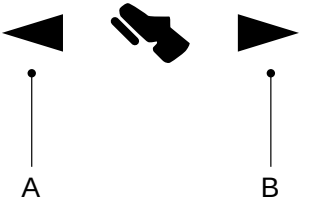
See your MyFord Touch information.

ADJUSTING THE PEDALS

WARNING

Never use the controls while your feet are on the accelerator and brake pedals and the vehicle is moving.

You can find the control on the left side of the steering column. Press and hold the appropriate side of the control to move the pedals.



E162916

A. Farther

B. Closer

You can save and recall the pedal positions with the memory feature. See **Memory Function** (page 126).

Note: *Adjust the pedals only when your vehicle is in **P** (Park).*

WINDSHIELD WIPERS

Note: *Fully defrost the windshield before you switch the windshield wipers on.*

Note: *Make sure you switch the windshield wipers off before entering a car wash.*

Note: *Clean the windshield and wiper blades if they begin to leave streaks or smears. If that does not resolve the issue, install new wiper blades. See* ***Changing the Wiper Blades*** *(page 259).*

Note: *Do not operate the wipers on a dry windshield. This may scratch the glass, damage the wiper blades or cause the wiper motor to burn out. Always use the windshield washers before wiping a dry windshield.*

E205527

Rotate the end of the control:

- Away from you to increase the wiper speed.
- Toward you to decrease the wiper speed.

Speed Dependent Wipers

When your vehicle speed increases, the interval between wipes decreases.

AUTOWIPERS (If Equipped)

Note: *Fully defrost the windshield before switching on the windshield wipers.*

Note: *Make sure you switch off the windshield wipers before entering a car wash.*

Note: *Clean the windshield and wiper blades if they begin to leave streaks or smears. If that does not resolve the issue, install new wiper blades. See* ***Changing the Wiper Blades*** *(page 259).*

Wet or winter driving conditions with ice, snow or salty road mist can cause inconsistent and unexpected wiping or smearing. In these conditions, you can do the following to help keep your windshield clear:

- Lower the sensitivity of the autowipers to reduce the amount of smearing.
- Switch to normal or high-speed wipe.
- Switch the autowipers off.

The autowipers feature uses a rain sensor, located in the area around the interior mirror. The rain sensor monitors the amount of moisture on the windshield and automatically turns on the wipers. It adjusts the wiper speed by the amount of moisture that the sensor detects on the windshield.

Note: *This autowiper feature is automatically set to on and remains on until you switch it off in the information display. You can also switch the feature back on at any time. See* ***General Information*** *(page 92).*

Use the rotary control to adjust the sensitivity of the rain sensor. Set the control to low sensitivity, and the wipers will turn on when the rain sensor detects a large amount of moisture on the windshield. Set the control to high sensitivity, and the wipers will turn on when the rain sensor detects a small amount of moisture on the windshield.

Note: *When you set the wiper system to intermittent wipe and the autowiper system is on, the autowiper sensitivity setting adjusts the wiper speed according to the moisture on the windshield only. Use the wiper lever to wipe the windshield on-demand.*

Keep the outside of the windshield clean. The rain sensor is very sensitive. If the area around the mirror is dirty, then the wipers may operate if dirt, mist or insects hit the windshield.

WINDSHIELD WASHERS

Note: *Do not operate the wipers on a dry windshield. This may scratch the glass, damage the wiper blades or cause the wiper motor to burn out. Always use the windshield washers before wiping a dry windshield.*

Note: *Do not operate the washers when the washer reservoir is empty. This may cause the washer pump to overheat.*

E205528

Press the end of the wiper lever to activate the washer:

- A brief press causes a single wipe without washer fluid.
- A quick press and hold causes the wipers to swipe the windshield three times with washer fluid.
- A long press and hold activates the wipers and washer fluid for up to 10 seconds.

A wipe occurs a few seconds after washing to clear any remaining washer fluid. You can switch this feature on and off through the information display. See **Information Displays** (page 92).

REAR WINDOW WIPER AND WASHERS

Rear Window Wiper

Note: *Make sure you switch off the wiper system before using an automatic car wash.*

E205529

Rotate the control to select:

2	Intermittent operation - the shortest pause between wipes.
1	Intermittent operation - the longest pause between wipes.
0	Off.

Rear Window Washer

E205529

Rotate and hold the control to the top or bottom position to activate the rear washer. The control returns to the **2** or **0** position when you release it.

GENERAL INFORMATION

Condensation in Lamp Assemblies

Exterior lamps have vents to accommodate normal changes in air pressure.

Condensation can be a natural by-product of this design. When moist air enters the lamp assembly through the vents, there is a possibility that condensation can occur when the temperature is cold. When normal condensation occurs, a fine mist can form on the interior of the lens. The fine mist eventually clears and exits through the vents during normal operation.

Clearing time may take as long as 48 hours under dry weather conditions.

Examples of acceptable condensation are:

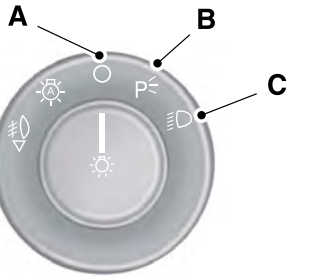
- The presence of a fine mist (no streaks, drip marks or large droplets).
- A fine mist covers less than 50% of the lens.

Examples of unacceptable condensation are:

- A water puddle inside the lamp.
- Streaks, drip marks or large droplets present on the interior of the lens.

If you see any unacceptable condensation, have your vehicle checked by an authorized dealer.

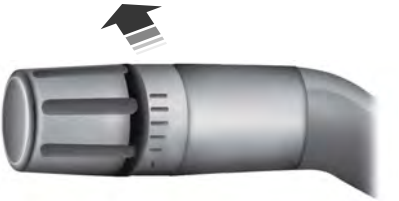
LIGHTING CONTROL



E173257

A	Off.
B	Parking lamps, instrument panel lamps, license plate lamps and tail lamps.
C	Headlamps.

High Beams

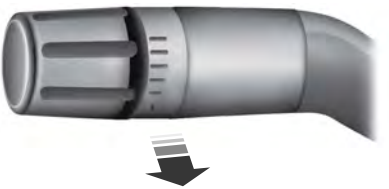


E167827

Push the lever away from you to switch the high beam on.

Push the lever away from you again or pull the lever toward you to switch the high beam off.

Headlamp Flasher



E163268

Slightly pull the lever toward you and release it to flash the headlamps.

AUTOLAMPS

WARNING

The autolamps switch position may not activate the headlamps in all low visibility conditions, such as daytime fog. Make sure the headlamps are switched to auto or on, as appropriate, during all low visibility conditions. Failure to do so may result in a crash.

E173258

When the lighting control is in the autolamps position, the headlamps automatically turn on in low light situations or when the wipers activate.

If equipped, the following also activate when the lighting control is in the autolamps position and you switch them on in the information display:

- Configurable daytime running lamps.
- Automatic high beam control.
- Adaptive headlamp control.

The headlamps remain on for a period of time after you switch the ignition off. Use the information display controls to adjust the period of time that the headlamps remain on. See **Information Displays** (page 92).

Note: *With the headlamps in the autolamps position, you cannot switch the high beam headlamps on until the autolamps system turns the low beam headlamps on.*

Windshield Wiper Activated Headlamps

The windshield wiper activated headlamps turn on within 10 seconds when you switch the windshield wipers on and the lighting control is in the autolamps position. They turn off approximately 60 seconds after you switch the windshield wipers off.

The headlamps do not turn on by wiper activation:

- During a mist wipe.
- When the wipers are on to clear washer fluid during a wash condition.
- If the wipers are in intermittent mode.

Note: *If you switch autolamps and autowipers on, the headlamps will automatically turn on when the windshield wipers continuously operate.*

INSTRUMENT LIGHTING DIMMER

E163270

Use to adjust the brightness of the instrument panel and all applicable lit components in the vehicle during headlamp and parking lamp operation.

- Tap the top or bottom of the control to brighten/dim all interior lit components incrementally, or
- Press and hold at the first position the top or bottom of the control until the desired lighting level is reached.
- Press and hold the top of the control to the full on position to activate the “dome on” feature. This will turn on the interior courtesy lights. The lights will remain on until the bottom of the control is pressed.

DAYTIME RUNNING LAMPS (If Equipped)

WARNING

The daytime running lamps system does not activate the rear lamps and may not provide adequate lighting during low visibility driving conditions. Also, the autolamps switch position may not activate the headlamps in all low visibility conditions, such as daytime fog. Make sure the headlamps are switched to auto or on, as appropriate, during all low visibility conditions. Failure to do so may result in a crash.

Type 1 - Conventional (Non-Configurable)

The daytime running lamps turn on when:

1. The ignition is switched to the on position.
2. The transmission is not in park (P) for vehicles with automatic transmissions or the parking brake is released for vehicles with manual transmissions.
3. The lighting control is in the off, parking lamp or autolamps positions.
4. The headlamps are off.

Type 2 - Configurable

Switch the daytime running lamps on or off using the information display controls. See **Information Displays** (page 92).

The daytime running lamps turn on when:

1. They are switched on in the information display. See **Information Displays** (page 92).
2. The ignition is switched to the on position.

3. The transmission is not in park (P) for vehicles with automatic transmissions or the parking brake is released for vehicles with manual transmissions.
4. The lighting control is in the autolamps position.
5. The headlamps are off.

The other lighting control switch positions do not activate the daytime running lamps, and you can use them to temporarily override autolamp control.

When switched off in the information display, the daytime running lamps are off in all lighting control switch positions.

FRONT FOG LAMPS

E193834

Pull the lighting control toward you to switch the fog lamps on.

You can switch the fog lamps on when the lighting control is in any position except Off and the high beams are not on.

DIRECTION INDICATORS

E163272

- To operate the left-hand direction indicator, push the lever down until it stops.
- To operate the right-hand direction indicator, push the lever up until it stops.
- To manually cancel direction indicator operation, push the lever again in either direction.

Lane Change

To indicate a left or right lane change:

- Push the lever up or down to the first stop position and release. The direction indicator will flash three times and stop.
- Push the lever up or down to the first stop position and hold. The direction indicator will flash for as long as you hold the lever in this position.

INTERIOR LAMPS

Front Row Map Lamps (If Equipped)

Press the switches on either side of each map lamp to turn on the lamps. The map lamps light when:

- any door is opened.
- the instrument panel dimmer switch is pressed up until the courtesy lamps come on.
- any of the remote entry controls are pressed and the ignition is off.

E163273

Front Row Map and Dome Lamps (If Equipped)

Press the switches on either side of the dome lamp to turn on the lamps. The dome lamp lights when:

- any door is opened.
- the instrument panel dimmer switch is pressed up until the courtesy lamps come on.
- any of the remote entry controls are pressed and the ignition is off.

E163274

Second Row Map Lamps (If Equipped)

The map lamps are located in the headliner above the second row seats. The map lamps light when:

- any door is opened.
- the instrument panel dimmer switch is pressed up until the courtesy lamps come on.
- any of the remote entry controls are pressed and the ignition is off.

Press the controls to activate the lamps.

E206071

Rear Cargo Lamp

The rear cargo lamps light when:

- any door is opened, and the switch is in the middle position.
- the instrument panel dimmer switch is pressed up until the courtesy lamps come on.
- any of the remote entry controls are pressed and the ignition is off (and the switch is in the middle position).

With the ignition key in the accessory or on position, the rear cargo lamp can be turned on or off by sliding the control.

E206072

Battery Saver

The battery saver will shut off the exterior lamps and interior lamps, except the hazard warning lamps if activated, 10 minutes after the ignition control has been turned off. The system will not turn off the parking lamps if the lighting control is in the parking lamps on position.

AMBIENT LIGHTING (If Equipped)

Adjust the ambient lighting using the touchscreen.

POWER WINDOWS

WARNINGS

Do not leave children unattended in your vehicle and do not let them play with the power windows. They may seriously injure themselves.

When closing the power windows, you should verify they are free of obstructions and make sure that children and pets are not in the proximity of the window openings.

E163056

Note: *You may hear a pulsing noise when just one of the windows is open. Lower the opposite window slightly to reduce this noise.*

Press the control to open the window.

Lift the control to close the window.

One-Touch Down

Press the control fully and release it. Press again or lift it to stop the window.

One-Touch Up

Lift the control fully and release it. Press again or lift it to stop the window.

Bounce-Back

The window will automatically stop and reverse some distance if it detects an obstacle while closing.

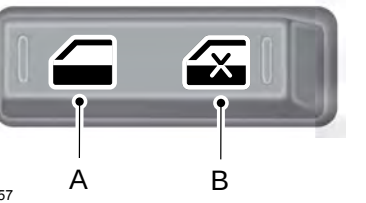
Overriding the Bounce-Back Feature

WARNING

When you override the bounce-back feature the window will not reverse if it detects an obstacle. Take care when closing the windows to avoid personal injury or damage to your vehicle.

Pull up the window switch and hold within a few seconds of the window reaching the bounce-back position. The window travels up with no bounce-back protection. The window will stop if you release the switch before the window fully closes.

Window Lock



E163057

A Unlock.

B Lock.

Press the control to lock or unlock the rear window controls.

Accessory Delay

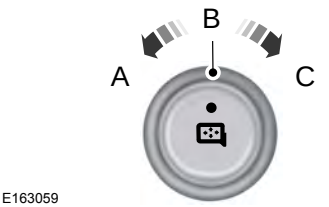
The window switches remain operational for several minutes when you switch the ignition off or until you open either front door.

EXTERIOR MIRRORS

Power Exterior Mirrors

WARNING

Do not adjust the mirrors when your vehicle is moving.



E163059

A	Left-hand mirror.
B	Off.
C	Right-hand mirror.

To adjust a mirror:

1. Select the mirror you want to adjust.
2. Move the control in the direction you want to tilt the mirror.
3. Return the control to the center position to lock the mirrors in place.

Fold-Away Exterior Mirrors

Push the mirror toward the door window glass. Make sure that you fully engage the mirror in its support when returning it to its original position.

Power-Folding Mirrors (If Equipped)

E163060

Note: *Moving the mirrors 10 or more times within one minute, or repeated folding and unfolding of the mirrors while holding the control down during full travel, may disable the system to protect the motors from overheating. Wait approximately three minutes with the vehicle running, and up to 10 minutes with the vehicle off, for the system to reset and for function to return to normal.*

Pull the control back to fold the mirrors in or out.

Loose Mirror

If you manually fold your power-folding mirrors, they may not work properly even after you re-position them. You need to reset them if:

- The mirrors vibrate when you drive.
- The mirrors feel loose.
- The mirrors do not stay in the folded or unfolded position.
- One of the mirrors is not in its normal driving position.

To reset the power-fold feature, use the power-folding mirror control to fold and unfold the mirrors. You may hear a loud noise as you reset the power-folding mirrors. This sound is normal. Repeat this process as needed each time you manually fold the mirrors.

Heated Exterior Mirrors

See **Heated Windows and Mirrors** (page 121).

Memory Mirrors (If Equipped)

You can save and recall the mirror positions through the memory function. See **Memory Function** (page 126).

Auto-Dimming Feature

The driver exterior mirror automatically dims with the auto-dimming interior mirror.

Signal Indicator Mirrors (If Equipped)

The outer portion of the appropriate mirror housing blinks when you switch on the direction indicator.

Blind Spot Monitor (If Equipped)

See **Blind Spot Information System** (page 188).

INTERIOR MIRROR

WARNING

Do not adjust the mirror when your vehicle is moving.

Note: *Do not clean the housing or glass of any mirror with harsh abrasives, fuel or other petroleum or ammonia-based cleaning products.*

You can adjust the interior mirror to your preference. Some mirrors also have a second pivot point. This lets you move the mirror head up or down and from side to side.

Auto-Dimming Mirror

Note: *Do not block the sensors on the front and back of the mirror. Mirror performance may be affected. A rear center passenger or raised rear center head restraint may also block light from reaching the sensor.*

The mirror will dim automatically to reduce glare when bright lights are detected from behind your vehicle. It will automatically return to normal reflection when you select reverse gear to make sure you have a clear view when backing up.

CHILDMINDER MIRROR

On double bin overhead consoles, the conversation mirror allows the driver to view the rear seating area.

WARNING

Do not use the childminder mirror to view rearward traffic, do not allow rear passengers to distract you from the driving task, and make sure the rear view mirror has a clear view of rearward traffic. Failure to do so could increase the risk of a crash from an unseen vehicle, which may result in serious injury.

E205354

Press the release area on the rear edge of the bin door to open the childminder mirror. The door will open to full open position.

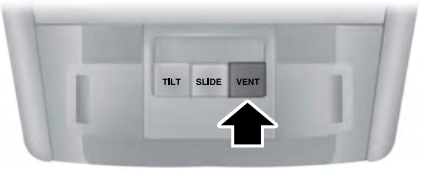
The rear view mirror may have to be adjusted to its lower arm position to prevent interference when the childminder mirror is extended down.

REAR QUARTER WINDOWS (If Equipped)

WARNINGS

Do not leave children unattended in your vehicle and do not let them play with the power windows. They may seriously injure themselves.

When closing the power windows, you should verify they are free of obstructions and make sure that children and pets are not in the proximity of the window openings.



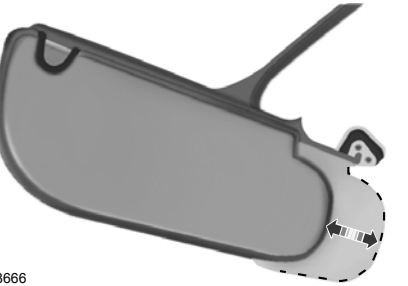
E205283

Press and hold the **VENT** control to open the rear quarter windows.

Pull and hold the **VENT** control to close the rear quarter windows.

Note: *Vehicles without a moonroof will only have the **VENT** control.*

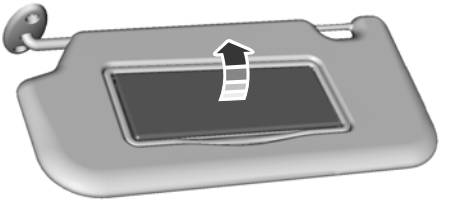
SUN VISORS



E138666

Rotate the sun visor toward the side window and extend it rearward for extra shade.

Illuminated Vanity Mirror



E162197

Lift the cover to switch the lamp on.

MOONROOF (If Equipped)

WARNINGS

Do not let children play with the moonroof or leave them unattended in the vehicle. They may seriously hurt themselves.

WARNINGS

When closing the moonroof, you should verify that it is free of obstructions and make sure that children and pets are not in the proximity of the roof opening.

You can manually open or close the sliding shade when the moonroof is closed. Pull the shade toward the front of your vehicle to close it.

The moonroof controls are located on the overhead console and have a one-touch open and close feature. To stop it during one-touch operation, press the control a second time.

Opening and Closing the Moonroof

E163063

Press and release the **SLIDE** control to open the moonroof. The moonroof will stop short of the fully opened position.

Note: *This position helps to reduce wind noise or rumbling which may happen with the moonroof fully open. Press and release the control again to fully open the moonroof.*

Pull and release the **SLIDE** control to close the moonroof.

Bounce-Back

The moonroof will stop automatically while closing. It will reverse some distance if there is an obstacle in the way.

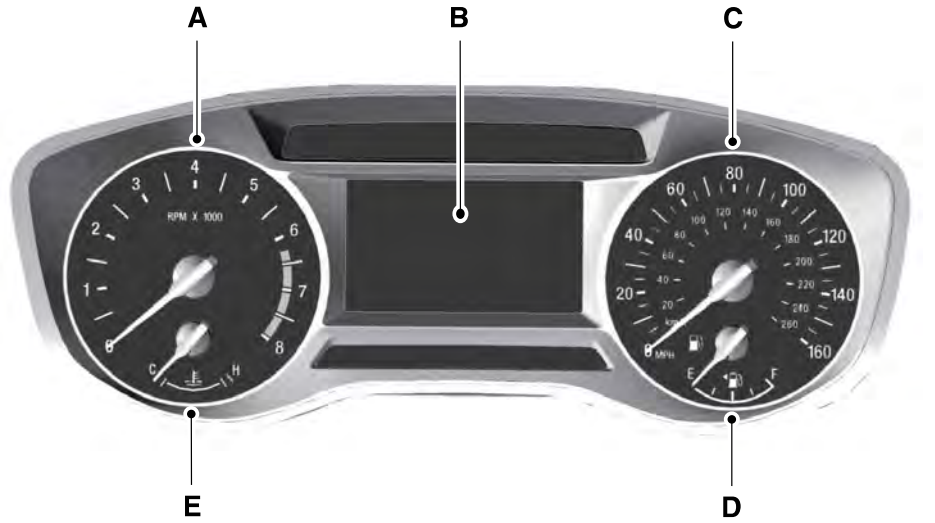
Pull and hold the **SLIDE** control within two seconds of a bounce-back event to override this function. While bounce-back is active, the closing force increases for each of the next three times that you close the moonroof.

Venting the Moonroof

Press and release the **TILT** control to vent the moonroof. Pull and hold the **TILT** control to close the moonroof.

GAUGES

Type 1 and 2



E205349

A Tachometer.
B Information display (Type 2 shown Type 1 similar).
C Speedometer.
D Fuel gauge.
E Engine coolant temperature gauge.

Information Display

Odometer

Located in the bottom of the information display. Registers the accumulated distance your vehicle has traveled.

Outside Air Temperature

Shows the outside air temperature.

Trip Computer

See **General Information** (page 92).

Vehicle Settings and Personalization

See **General Information** (page 92).

Fuel Gauge

Note: *The fuel gauge may vary slightly when your vehicle is moving or on a gradient.*

Switch the ignition on. The fuel gauge indicates approximately how much fuel remains in the fuel tank. The arrow adjacent to the fuel pump symbol indicates on which side of your vehicle the fuel filler door is located.

The needle should move toward F when you refuel your vehicle. If the needle points to E after adding fuel, this indicates your vehicle needs service soon.

After refueling, the needle may not always return to the exact same position. This is normal.

Note: *It may take a short time for the needle to reach F after leaving the gas station. This is normal and depends upon the slope of pavement at the gas station.*

Note: *The fuel amount dispensed into the tank is a little less or more than the gauge indicated. This is normal and depends upon the slope of pavement at the gas station.*

Note: *If the gas station nozzle shuts off before the tank is full, try a different gas pump nozzle.*

Note: *There is a small reserve left in the tank when the fuel gauge reaches empty.*

Low Fuel Reminder

A low reminder displays when the distance to empty reaches 50 miles (80 km) to empty.

Note: *The low fuel reminder can appear at different fuel gauge positions depending on fuel economy conditions. This variation is normal.*

Engine Coolant Temperature Gauge

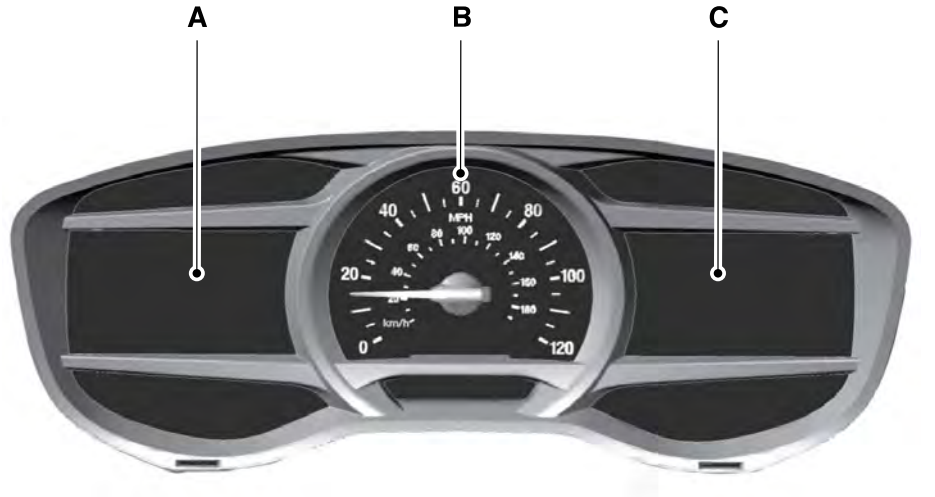
Shows the temperature of the engine coolant. At normal operating temperature, the needle remains in the center section. If the needle enters the red section, the engine is overheating. Stop the engine, switch the ignition off and determine the cause once the engine has cooled down.

Note: *Do not restart the engine until you conclude the cause of overheating.*

WARNING

Never remove the coolant reservoir cap while the engine is running or hot. The hot coolant is under pressure and may cause serious burns.

Type 3



E205350

A Left Information Display.

B Speedometer.

C Right Information Display. See **SYNC™** (page 327).

Left Information Display

Odometer

Located in the bottom of the information display. Registers the accumulated distance your vehicle has traveled.

Outside Air Temperature

Shows the outside air temperature.

Trip Computer

See **General Information** (page 92).

Vehicle Settings and Personalization

See **General Information** (page 92).

WARNING LAMPS AND INDICATORS

The following warning lamps and indicators alert you to a vehicle condition that may become serious. Some lamps illuminate when you start your vehicle to make sure they work. If any lamps remain on after starting your vehicle, refer to the respective system warning lamp for further information.

Note: *Some warning indicators appear in the information display and function the same as a warning lamp but do not display when you start your vehicle.*

Anti-Lock Braking System

If it illuminates when you are driving, this indicates a malfunction. You continue to have the normal braking system (without ABS) unless the brake warning lamp is also illuminated. Have the system checked by an authorized dealer.

Battery

If it illuminates while driving, it indicates a malfunction. Switch off all unnecessary electrical equipment and have the system checked by an authorized dealer.

Brake System

It illuminates when you engage the parking brake and the ignition is on.

If it illuminates when you are driving, check that the parking brake is not engaged. If the parking brake is not engaged, this indicates low brake fluid level or a brake system malfunction. Have the system checked immediately by an authorized dealer.

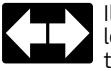
WARNING

Driving a vehicle with the brake system warning light on is dangerous. A significant decrease in braking performance may occur. It will take you longer to stop the vehicle. Have the vehicle checked by your authorized dealer as soon as possible. Driving extended distances with the parking brake engaged can cause brake failure and the risk of personal injury.

Cruise Control

It illuminates when you switch this feature on. See **Using Cruise Control** (page 186).

Direction Indicator



Illuminates when you switch the left or right direction indicator or the hazard warning flasher on. If the indicators stay on or flash faster, check for a burned out bulb.

Door Ajar

Displays when the ignition is on and any door is not completely closed.

Engine Coolant Temperature

Illuminates when the engine coolant temperature is high. Stop the vehicle as soon as possible, switch off the engine and let cool. See **Engine Coolant Check** (page 250).

Engine Oil

If it illuminates with the engine running or when you are driving, this indicates a malfunction. Stop your vehicle as soon as it is safe to do so and switch the engine off. Check the engine oil level. See **Engine Oil Check** (page 249).

Note: *Do not resume your journey if it illuminates despite the level being correct. Have the system checked by an authorized dealer.*

Fasten Safety Belt

It illuminates and a chime sounds to remind you to fasten your safety belt.

Front Airbag

If it fails to illuminate on startup, continues to flash or remains on, it indicates a malfunction. Have the system checked by an authorized dealer. A chime sounds when there is a malfunction in the indicator light.

Front Fog Lamps (If Equipped)

It illuminates when you switch the front fog lamps on.

High Beam

It illuminates when you switch the headlamp high beam on. It flashes when you use the headlamp flasher.

Hill Descent (If Equipped)

Illuminates when you switch hill descent on.

Liftgate Ajar

Lights when the liftgate is not completely closed.

Low Fuel Level

It illuminates when the fuel level is low or near empty. Refuel as soon as possible.

Low Tire Pressure Warning

It illuminates when your tire pressure is low. If the lamp remains on with the engine running or when driving, check your tire pressure as soon as possible.

The lamp also illuminates momentarily when you switch the ignition on to confirm the lamp is functional. If it does not illuminate when you switch the ignition on, or begins to flash at any time, have the system checked by an authorized dealer.

Low Washer Fluid

It illuminates when the windshield washer fluid is low.

Parking Lamps

It illuminates when you switch the parking lamps on.

Powertrain Fault

Illuminates when a powertrain fault has been detected. Contact an authorized dealer as soon as possible.

Service Engine Soon

If the service engine soon indicator light stays illuminated after you start the engine, it indicates that the On Board Diagnostics system (OBD) has detected a malfunction of the vehicle emissions control system. Refer to On Board Diagnostics (OBD) in the Fuel and Refueling chapter for more information about having your vehicle serviced. See **Emission Control System** (page 156).

If the light is blinking, engine misfire is occurring which could damage your catalytic converter. Drive in a moderate fashion (avoid heavy acceleration and deceleration) and have your vehicle serviced immediately.

WARNING

Under engine misfire conditions, excessive exhaust temperatures could damage the catalytic converter, the fuel system, interior floor coverings or other vehicle components, possibly causing a fire. Have an authorized dealer service your vehicle immediately.

The service engine soon indicator light illuminates when you first switch on the ignition before engine start to check the bulb and to indicate whether the vehicle is ready for Inspection/Maintenance (I/M) testing.

Normally, the service engine soon light stays on until you crank the engine, then turns itself off if no malfunctions are present. However, if after 15 seconds the service engine soon light blinks eight times, it means that the vehicle is not ready for I/M testing. See **Emission Control System** (page 156).

Stability Control System

Displays when the AdvanceTrac®/Traction control is active. If the light remains on, have the system serviced immediately. See **Using Stability Control** (page 177).

Stability Control System Off

Illuminates when you disable AdvanceTrac®/Traction. See **Using Stability Control** (page 177).

Transmission Tow/Haul (If Equipped)

Illuminates when you activate the tow/haul feature. If the light flashes steadily, have the system serviced immediately. Damage to the transmission could occur. See **Automatic Transmission** (page 159).

4X2

Illuminates momentarily when you engage two-wheel drive high. If the light fails to display or remains on when the ignition is on, have the system serviced immediately by an authorized dealer.

4X4 Auto

Illuminates when you engage the four-wheel drive system. If the light fails to display or remains on when the ignition is on, have the system serviced immediately by an authorized dealer.

4X4 LOW

4x4 LOW Illuminates when you engage four-wheel drive low. If the light fails to display or remains on when the ignition is on, have the system serviced immediately by an authorized dealer.

4X4 HIGH

4x4 HIGH Illuminates when you engage four-wheel drive high. If the light fails to display or remains on when the ignition is turned on, have the system serviced immediately by an authorized dealer.

AUDIBLE WARNINGS AND INDICATORS

Key in Ignition Warning Chime

Sounds when you leave the key in the ignition and the driver door open.

Headlamps On Warning Chime

Sounds when the headlamps or parking lamps are on, the ignition is off (the key is not in the ignition) and the driver door is open.

Parking Brake On Warning Chime

Sounds when you have left the parking brake on and drive your vehicle. If the warning chime remains on after you have released the parking brake, have the system checked by an authorized dealer immediately.

Direction Indicator Chime

Sounds when you leave the direction indicator on after signaling a turn and driving the vehicle more than 1.5 miles (2.4 km).

GENERAL INFORMATION

WARNING

Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any handheld device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

You can control various systems on your vehicle using the information display controls on the steering wheel. Corresponding information shows in the information display.

Information Display Controls (Type 1 and 2)

E205351

- Press the up and down arrow buttons to scroll through and highlight the options within a menu.
- Press the right arrow button to enter a sub-menu.
- Press the left arrow button to exit a menu.
- Press the **OK** button to choose and confirm a setting or message.

The arrows in the upper left corner of the display indicate additional content available when lit.

Main menu (type 1)

From the main menu bar on the left side of the information display, you can choose from the following categories:

- Display Mode.
- Trip 1 & 2.
- Fuel Economy.
- Driver Assist.
- Settings.

Scroll up/down to highlight one of the categories, then press the right arrow key or OK to enter into that category. Press the left arrow key as needed to exit back to the main menu.

Display Mode

Use the arrow buttons to choose between the following display options.

Display Mode
Distance to E
Digital Speedo
Oil Press
Oil Temp
Trans Temp

Note: *Pressing OK stops/starts the timer. Holding OK resets the odometer and timer.*

Trip 1 & 2

Use the arrow buttons to choose between the following.

Trip 1 & 2
Trip Odometer
Trip Timer
Average Fuel

- Trip Odometer — Registers the distance traveled of individual journeys.
- Trip Timer — Registers the time of individual journeys.
- Average Fuel— Indicates the average fuel consumption since the function was last reset.

Fuel Economy

Use the arrow buttons to choose the desired energy display.

Fuel Economy
Distance to E
Inst Fuel Econ
Long Term Average Fuel
Average Speed

Note: *Some items are optional and may not appear.*

Driver Assist

In this mode, you can configure different driver setting choices.

Driver Assist	
DTE Calculation	Normal history used or Towing history used
Engine Hours	Engine Hours XXXXX
Engine Idle Hours	Engine Idle Hours XXXXX

Note: *Some items are optional and may not appear.*

Settings

In this mode, you can configure different driver setting choices.

Settings			
Vehicle	Trlr Sway Control - check enabled or uncheck disabled		
	Trlr Brake Mode	Elect., Surge, None	
		Elect. over Hydraulic	
	Lighting	Autolamp Delay	Select time interval
	Locks	Autolock - check enabled or uncheck disabled	
		Autounlock - check enabled or uncheck disabled	
		Remote Unlock	All Doors or Driver
	Oil Life Reset	Set to XXX% - Hold OK to Reset	
	Power Liftgate	Enable or Disable switch	
	Wipers	Courtesy Wipe	
MyKey*	Create MyKey	Hold OK to create MyKey	
	911 Assist	Always On or User Selectable	
	Do Not Disturb	Always On or User Selectable	
	Traction Control	Always On or User Selectable	
	Max Speed	65 MPH (105 km/h), 70 MPH (110 km/h), 75 MPH (120 km/h), 80 MPH (130 km/h) or Off	
	Speed Minder	45 mph (72 km/h), 55 mph (89 km/h), 65 mph (105 km/h) or Off	

Settings		
	Volume Limiter - check enabled or uncheck disabled	
	Do Not Disturb	Always On or User Selectable
	Clear MyKeys	Hold OK to Clear All MyKeys
Display Setup	Distance	Miles & Gallons, L/100km or km/L
	Temperature	Fahrenheit or Celsius
	Language	Select Language - Hold OK to set language

*Some MyKey items only appear if a MyKey is set.

Main Menu (type 2)

From the main menu bar on the left side of the information display, you can choose from the following categories:

- Display Mode.
- Trip/Fuel.
- Towing.
- Off Road.
- Settings.

Scroll up/down to highlight one of the categories, then press the right arrow key or **OK** to enter into that category. Press the left arrow key as needed to exit back to the main menu.

Display Mode

Use the arrow buttons to choose between the following display options.

Display Mode
Distance to Empty
Digital Speedometer - Press **OK** to change units
Gauge Detail (Oil pressure, Oil temperature and Transmission temperature)
Engine Information (Oil life, Engine hours and Engine idle hours)

Trip/Fuel

Use the arrow buttons to choose between the following trip and fuel options.

Note: *Press and hold **OK** to reset the currently displayed information.*

Trip/Fuel
Trip 1 or Trip 2
Fuel Economy
Fuel History

- Trip 1 or Trip 2 - Shows your trip time, fuel used, odometer and average mpg.
- Fuel Economy - Shows your instantaneous fuel usage as a bar graph, average mpg and distance to empty.
- Fuel History - Shows your fuel usage based on time. The graph updates each minute with the fuel economy that you achieved during 30 minutes of driving. Also, shows your distance to empty.

Towing

Use the arrow buttons to configure different towing setting choices.

Towing		
Trailer Status	No Trailer connected	
	Active trailer name or Default Trailer	
	Accumulated trailer miles	
	Trailer brake gain	
Trailer Options	Trailer Sway Control - check enabled or uncheck disabled	
	Trailer Brake Mode	Elect. Surge, None or Elec. Over Hydraulic
	Change Trailer Selected	Trailers Created
		Default Trailer
		No active trailer
		Press OK to change the selected trailer
	Change Trailer Settings	Rename Trailer
		Reset Trailer Mileage

Towing		
	Delete Trailer	List of named trailers — Hold OK to Delete
	Add Trailer	Naming Editor
Connection Checklist	Ball Coupler Connected and Locked?	
	Electrical Wiring Connect?	
	Lights Function Correctly?	
	Safety Chains Connected?	
	Tongue Jack Raised?	
	Mirrors Adjusted?	
	TBC gain setting adjusted?	
	Trailer Disconnected?	
Trailer Setup	Go to start of Add Trailer Process	

Off Road

In this mode, you can view different off road information.

Off Road
Pitch, Steering Angle and Roll
Power Distribution Gauge – Displays the power distribution to the front and rear axles. The display varies based on 4x4 configuration and driving conditions.

Settings

In this mode, you can configure different driver setting choices.

Note: *Some items are optional and may not appear.*

Settings				
Driver Select Suspension	Sport, Normal or Comfort			
DTE Calculation	Normal history used or Towing history used			
Advanced Settings	Vehicle	Lighting	Autolamp Delay	Select time interval
		Locks	Autolock - check enabled or uncheck disabled	
			Autounlock - check enabled or uncheck disabled	
			Remote Unlock	Driver's Door or All Doors
		Oil Life	Remaining Life - Hold OK to Reset	
		Power Liftgate	Enable or Disable switch	
		Rear Park Aid - check enabled or uncheck disabled		
		Wiper Controls	Courtesy Wipe - check enabled or uncheck disabled	
	MyKey*	MyKey Status	Number of Admin Keys, MyKeys and MyKey Mileage	
		Create MyKey	Hold OK to Create MyKey	
		911 Assist	Always On or User Selectable	
		Do Not Disturb	Always On or User Selectable	
		Traction Control	Always On or User Selectable	
		Max Speed	65 MPH (105 km/h), 70 MPH (110 km/h), 75 MPH (120 km/h), 80 MPH (130 km/h) or Off	
		Speed Minder	Speed Minder	
		Volume Limiter - check enabled or uncheck disabled		
		Clear MyKeys	Hold OK to Clear All MyKeys	
	Display Setup	Distance	Miles & Gallons, L/100km or km/L	

Settings			
		Temperature	ºFahrenheit or ºCelsius
		Language	Select Language - Hold **OK** to Set

*Some MyKey items only appear if a MyKey is set.

Information Display Controls (Type 3)

E205352

- Press the up and down arrow buttons to scroll through and highlight the options within a menu.
- Press the right arrow button to enter a sub-menu.
- Press the left arrow button to exit a menu.
- Press the **OK** button to choose and confirm a setting or message.

The arrows in the upper left corner of the display indicate additional content available when lit.

Main menu (type 3)

From the main menu bar on the left side of the information display, you can choose from the following categories:

- Display Mode.
- Trip/Fuel.
- Towing.
- Off Road.
- Settings.

Scroll up/down to highlight one of the categories, then press the right arrow key or OK to enter into that category. Press the left arrow key as needed to exit back to the main menu.

Display Mode

Use the arrow buttons to choose between the following display options.

Display Mode
Digital tachometer and fuel level gauge
Digital tachometer, fuel level gauge and engine coolant temperature gauge
Gauge Detail (Oil pressure, Oil temperature and Transmission temperature)
Engine Hours (Engine hours and Engine idle hours)

Display Mode
Oil Life
Distance to Empty
Digital Speedometer - Press OK to change the currently units displayed

Note: *Press and hold **OK** to reset the currently displayed information.*

Trip/Fuel

Use the arrow buttons to choose between the following trip and fuel options.

Trip/Fuel
Trip 1 or Trip 2
Fuel Economy
Fuel History

- Fuel Economy - Shows your instantaneous fuel usage as a bar graph and average mpg.
- Fuel History - Shows your fuel usage based on time. The graph updates each minute with the fuel economy that you achieved during 30 minutes of driving.

Towing

Use the arrow buttons to configure different towing setting choices.

Towing		
Trailer Status	No trailer connected	
	Active trailer name or Default Trailer	
	Accumulated trailer miles	
	Trailer brake gain	
Trailer Options	Trailer Sway Control - check enabled or uncheck disabled	
	Trailer Brake Mode	Elect. Surge, None or Elec. Over Hydraulic
	Change Trailer Selected	Trailers Created
		Default Trailer
		No active trailer

Towing		
		Press **OK** to change the selected trailer
	Change Trailer Settings	Rename Trailer
		Reset Trailer Mileage
		Delete Trailer
Trailer Setup	Add Trailer	Naming Editor
Connection Checklist	Ball Coupler Connected and Locked?	
	Electrical Wiring Connect?	
	Lights Function Correctly?	
	Safety Chains Connected?	
	Tongue Jack Raised?	
	Mirrors Adjusted?	
	TBC gain setting adjusted?	
	Trailer disconnected?	

Off Road

In this mode, you can view different off road information.

Off Road
Off Road Status (Pitch, Roll, Wheel Angle)
Power Distribution Gauge – Displays the power distribution to the front and rear axles. The display varies based on 4x4 configuration and driving conditions.

Note: *Some items are optional and may not appear.*

Settings

In this mode, you can configure different driver setting choices.

Blindspot - check enabled or uncheck disabled				
Cross Traffic Alert - check enabled or uncheck disabled				
Driver Select Suspension	Sport, Normal or Comfort			
DTE Calculation	Normal or Towing			
Front Park Aid - check enabled or uncheck disabled				
Rear Park Aid - check enabled or uncheck disabled				
Advanced Settings	Vehicle	Easy Entry / Exit - check enabled or uncheck disabled		
		Lighting	Autolamp Delay	Select time interval
		Locks	Autolock - check enabled or uncheck disabled	
			Autounlock - check enabled or uncheck disabled	
			Remote Unlock	All Doors or Driver
		Oil Life	Remaining Life XXX% - Hold OK to reset	
		Power Liftgate	Enable or Disable switch	
		Pwr Running Boards	Auto, Off or Out	
		Remote Start	Climate Control	Auto or Last Setting
			Seats	Auto or Off
			Duration	5, 10 or 15 minutes
			System - check enabled or uncheck disabled	
		Wipers	Courtesy Wipe - check enabled or uncheck disabled	
			Rain Sensing - check enabled or uncheck disabled	

	MyKey*	MyKey Status	Number of Admin Keys, MyKeys and MyKey Mileage
		Create MyKey	Hold **OK** to Create MyKey
		911 Assist	Always On or User Selectable
		Do Not Disturb	Always On or User Selectable
		Traction Control	Always On or User Selectable
		Max Speed	65 MPH (105 km/h), 70 MPH (110 km/h), 75 MPH (120 km/h), 80 MPH (130 km/h) or Off
		Speed Minder	45 mph (72 km/h), 55 mph (89 km/h), 65 mph (105 km/h) or Off
		Volume Limiter - check enabled or uncheck disabled	
		Clear MyKeys	Hold **OK** to Clear All MyKeys
	Display Setup	Distance	Miles & GAL, L/100km or km/L
		Temperature	ºFahrenheit or ºCelsius
		Gauge Display	Fuel Gauge or Fuel + Tach
		Language	Select Language - Hold OK to Set

*Some MyKey items only appear if a MyKey is set.

INFORMATION MESSAGES

Note: *Depending on the vehicle options equipped with your vehicle, not all of the messages display or are available. Certain messages may be abbreviated or shortened depending upon which cluster type you have.*

E205353

Press the **OK** button to acknowledge and remove some messages from the information display. Other messages automatically clear after a short time.

You need to confirm certain messages before you can access the menus.

AdvanceTrac™ / Traction Control Messages

Message	Action
Traction control off/ Traction control on	Displays when you switch the traction control system off or on. See **Using Traction Control** (page 175).
Service AdvanceTrac	Displays when the system detects a condition that requires service. Contact an authorized dealer as soon as possible.
AdvanceTrac Off	Displays when you switch AdvanceTrac off.
AdvanceTrac On	Displays whenyou switch AdvanceTrac on.

Alarm Messages

Message	Action
Vehicle Alarm to Stop Alarm, Start Vehicle	Displays when unauthorized entry into the vehicle occurs. Switch the ignition on to stop the alarm.

Battery and Charging System Messages

Message	Action
Check Charging System	Stop your vehicle as soon as it is safe to do so and switch off the ignition. Contact an authorized dealer.
Turn Power Off to Save Battery	Displays to warn of a low 12-volt battery condition. Switch off all unneeded electrical accessories. Contact an authorized dealer.
Low Battery Features Temporarily Turned Off	Displays to warn of a low 12-volt battery condition. Switch off all unneeded electrical accessories.

Blind Spot Information System Messages

Message	Action
Blindspot Not Available Sensor Blocked See Manual	Displays when the blind spot information system/cross traffic alert system sensors are blocked. Driver can typically clean the sensor to resolve.
Blindspot System Fault	Displays when a fault with the blind spot information system occurs. Contact an authorized dealer as soon as possible.
Cross Traffic Not Available Sensor Blocked See Manual	Displays when the blind spot information system/cross traffic alert system sensors are blocked. Driver can typically clean the sensor to resolve.
Cross Traffic System Fault	Displays when a fault with the cross traffic alert system occurs. Contact an authorized dealer as soon as possible.
Cross Traffic Vehicle Coming From X	Displays when the blind spot information system with cross traffic alert (CTA) system is operating and senses a vehicle.

Brake System Messages

Message	Action
Brake Fluid Level Low	Indicates the brake fluid level is low and the brake system should be inspected immediately.
Check Brake System	Displays when the brake system needs servicing. If the warning stays on or continues to come on, contact an authorized dealer as soon as possible.
Park Brake Engaged	Displays when the parking brake is set, the vehicle is in ready to drive and the vehicle is driven more than 3 mph (5 km/h). If the warning stays on after you release the parking brake, contact an authorized dealer as soon as possible.

Door Messages

Message	Action
X Door Ajar	Displays when the door listed is not completely closed.
Liftgate Ajar	Displays when the liftgate or liftglass is not completely closed.
Factory Keypad Code XXXXX	Displays the factory keypad code after the keypad resets.

Engine Messages

Message	Action
Power Reduced to Lower Engine Temp	Displays when the engine has reduced power to help reduce high engine temperature.
Engine On	Informs you that you are exiting your vehicle and the engine is on.

Fuel Messages

Message	Action
Check Fuel Fill Inlet	Displays when the fuel fill inlet may not be properly closed.
Fuel Level Low	Displays as an early reminder of a low fuel condition.

Keys and Intelligent Access Messages

Message	Action
No Key Detected	Displays if the system does not detect the intelligent access key in the following three scenarios: When you press the start/stop button in an attempt to either start the engine or cycle through the ignition states. When the engine is running and a door is opened then closed. When the vehicle's speed exceeds 10 mph (16 km/h) for the first time after starting.
Key Programmed x Keys Total	Displays during spare key programming, when an intelligent access key is programmed to the system.
Max Number of Keys Programmed	Displays during spare key programming when the maximum number of keys have been programmed.
Press Brake to Start	Displays when you press the start/stop button without applying the brake pedal. This is a reminder that you must apply the brake pedal when pressing the start/stop button in order to start the engine.

Message	Action
Restart Now or Key is Needed	Displays when you press the start/stop button to shut off the engine and an Intelligent Access Key is not detected inside the vehicle.
Accessory Power Active	Displays when the vehicle is in the accessory ignition state.
Starting System Fault	This message displays when there is a problem with your vehicle's starting system. Contact an authorized dealer for service.

Maintenance Messages

Message	Action
LOW Engine Oil Pressure	Stop the vehicle as soon as safely possible and switch off the engine. Check the oil level. If the warning stays on or continues to come on with your engine running, contact an authorized dealer as soon as possible.
Change Engine Oil Soon	Displays when the engine oil life remaining is 10% or less.
Oil Change Required	Displays when the oil life left reaches 0%.
Engine Coolant Overtem-perature	Displays when the engine coolant temperature is excessively high.
See Manual	The powertrain needs service due to a powertrain malfunction.
Washer Fluid Level LOW	Displays when the washer fluid is low and needs to be refilled.
Factory Mode Contact Dealer	Your vehicle is still in Factory mode. This may not allow some features to operate properly. Contact an authorized dealer.
Transport Mode Contact Dealer	Your vehicle is still in Transport mode. This may not allow some features to operate properly. Contact an authorized dealer.

MyKey™ Messages

Message	Action
MyKey active Drive Safely	Displays when MyKey is active.
Speed Limited to xx MPH/km/h	Displays when starting the vehicle and MyKey is in use and the MyKey speed limit is on.
Near Vehicle Top Speed	Displays when a MyKey is in use and the MyKey speed limit is on and the vehicle speed is approaching 80 mph (130 km/h).
Check Speed Drive Safely	Displays when a MyKey is in use and the optional setting is on and the vehicle exceeds a preselected speed.
Buckle Up to Unmute Audio	Displays when a MyKey is in use and Belt-Minder activates.
Could Not Program Integrated Key	Displays when attempting to program a spare key using two existing MyKeys.
Vehicle at Top Speed of MyKey Setting	You have reached the speed limit set for your MyKey.
AdvanceTrac On MyKey Setting	With a MyKey in use, AdvanceTrac turns on.
Traction Control On MyKey Setting	With a MyKey in use, traction control turns on.
MyKey Park Aid Cannot be Deactivated	MyKey park aid cannot be deactivated with a MyKey in use, park aid is always on.

Off Road Messages

Message	Action
For Off Road Slow to 5MPH	Displays when your vehicle speed requirement for off road mode entry has not been met.
Enter Off Road Mode Enabled	Displays when off road mode becomes active.
Exiting Off Road Mode	Displays when off road mode becomes inactive.
Hill Descent Control Off	Displays when hill descent control mode deactivates.
For Hill Descent Reduce Speed	Displays when hill descent speed exceeds 20 MPH (32 KM/H).

Message	Action
For Hill Descent Select Gear	Displays when hill descent control mode requires driver shift transmission into gear.
Hill Descent Driver Resume Control	Displays when the hill control mode requires the driver to resume control.
Hill Descent Control FAULT	Displays when a hill descent system fault is present.
Hill Descent Control OFF System Cooling	Displays when hill descent control mode disables to cool the brake system.
Hill Descent Control Ready	Displays when hill descent control mode activates.

Park Aid Messages

Message	Action
Check Park Aid	Displays when the transmission is in reverse (R) and the park aid disables.
Rear Park Aid On Off	Displays the park aid status.
Check Rear Park Aid	Displays when the transmission is in reverse (R) and the park aid disables.
Check Front Park Aid	Displays when the system detects a condition that requires service. See **Parking Aids** (page 181).
Front Park Aid On Off	Displays the park aid status.

Power Steering Messages

Message	Action
Steering loss Stop safely	The power steering system detects a condition that requires service. Contact an authorized dealer.
Steering fault Service now	The power steering system detects a condition within the power steering system that requires service immediately. Contact an authorized dealer.
Steering assist fault Service required	The power steering system has disabled power steering assist due to a system error. Contact an authorized dealer.

Remote Start Messages

Message	Action
To Drive: Turn Key to On	Displays as a reminder to turn the key to on to drive the vehicle after a remote start.
To Drive: Press Brake and START Button	Displays as a reminder to apply the brake and the start button to drive the vehicle after a remote start.

Suspension System Messages

Message	Action
Driver Select Susp. malfunction Service required	Displays when there is a problem with your vehicle's suspension system. Contact an authorized dealer for service.

Tire Messages

Message	Action
Tire Pressure LOW	Displays when one or more tires on your vehicle have low tire pressure.
Tire Pressure Monitor Fault	Displays when the tire pressure monitoring system is malfunctioning. If the warning stays on or continues to come on, contact an authorized dealer.
Tire Pressure Sensor Fault	Displays when a tire pressure sensor is malfunctioning or your spare tire is in use. See **Wheels and Tires** (page 276). If the warning stays on or continues to come on, contact an authorized dealer.

Trailer Messages

Message	Action
Trailer Brake Gain: XX.X No Trailer	Displays the current gain setting for the trailer brake when a trailer is not connected.
Trailer Brake Module Fault	Displays and a chime sounds in response to faults sensed by the TBC.
Trailer Connected	Displays when a correct trailer connection is sensed during a given ignition cycle.

Message	Action
Trailer Disconnected	Displays when a trailer connection becomes disconnected, either intentionally or unintentionally, and the system senses it during a given ignition cycle. Disregard this status if your vehicle is not equipped with a factory installed trailer brake controller. This message may appear when an aftermarket TBC is used even when the trailer is connected.
Trailer Sway Reduce Speed	Displays when the trailer sway control detects trailer sway.
Wiring Fault On Trailer	Displays if there are certain faults in your vehicle wiring and the trailer wiring or brake system.
Trailer Brake Gain XX.X	Displays the current gain setting from the trailer brake.
Trailer Lighting Module Fault See Manual	There is a fault with your vehicle trailer lighting module. See **Towing a Trailer** (page 205).
Trailer Stop Lamps Fault Check Lamps	There is a fault with your trailer stop lamp. Check your lamp.
Trailer Left Turn Lamps Fault Check Lamps	There is a fault with your trailer turn lamp. Check your lamp.
Trailer Right Turn Lamps Fault Check Lamps	There is a fault with your trailer turn lamp. Check your lamp.
Trailer Park Lamps Fault Check Lamps	There is a fault with your trailer park lamp. Check your lamp.
Trailer Battery Not Charging See Manual	There is a fault with your trailer battery. See **Towing a Trailer** (page 205).

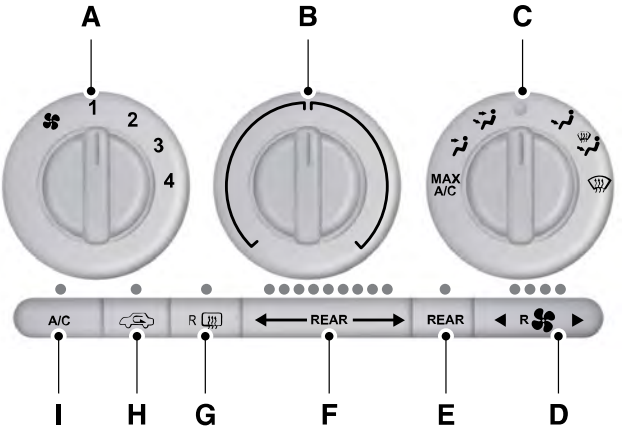
Transmission Messages

Message	Action
Transmission not in Park	Displays as a reminder to shift into park (P).
Neutral Tow Disabled	Displays when the transfer case is NOT in the neutral position. The message indicates that your vehicle is NOT safe to tow with all four wheels on the ground.
Neutral Tow Enabled Leave Transmission In Neutral	Displays when the transfer case is in the neutral position. The message indicates that your vehicle is safe to tow with all four wheels on the ground.

4WD Messages

Message	Action
Check 4X4	Displays when a 4X4 system fault is present.
4X4 Shift In Progress	Displays when the 4X4 system is making a shift.
For 4X4 Low Apply Brake	Displays when trying to select 4X4 Low.
For 4X4 Low Shift to N	Displays when you select 4X4 LOW with the vehicle stopped.
For 4X4 Low Slow To 3 MPH	Displays when you select 4X4 LOW while the vehicle is moving.
To Exit 4X4 Low Apply Brake	Displays when you select 2WD with the vehicle stopped in 4X4 LOW.
To Exit 4X4 Low Shift To N	Displays when you select 2WD with the vehicle stopped in 4X4 LOW.
To Exit 4X4 Low Slow To 3 MPH	Displays when you select 2WD while the vehicle is operating in 4X4 LOW.
Shift Delayed Pull Forward	May display when shifting to or from 4X4 LOW.

MANUAL CLIMATE CONTROL



E205762

A **Fan speed control:** Adjust the volume of air circulated in the vehicle.

B **Temperature control:** Controls the temperature of the air circulated in your vehicle.

C **Air distribution control:** Adjust the control to turn airflow from the windshield, instrument panel, or footwell vents on or off. You can distribute air through the following combinations: windshield, windshield/floor, panel, panel/floor, and floor.

D **Rear fan speed control:** Adjust the volume of air circulated to the rear of the passenger compartment.

E **Rear passenger power:** Press the button to switch the system on and off.

F **Rear passenger temperature control:** Adjust the temperature to the rear of the passenger compartment.

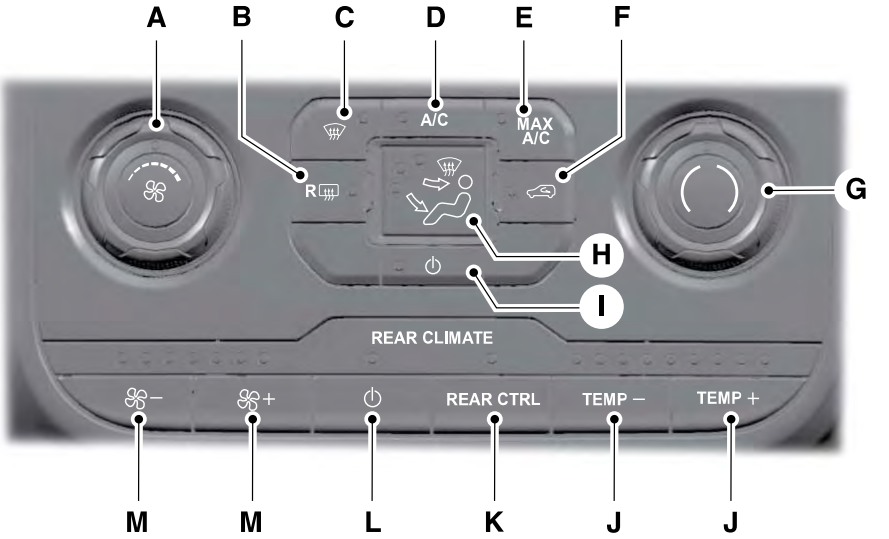
G **Heated rear window:** Press the button to switch the heated rear window on and off.

H **Recirculated air:** Press the button to switch between outside air and recirculated air. The air currently in the passenger compartment recirculates. This can reduce the time needed to cool the interior and reduce unwanted odors from entering your vehicle.

Note: Recirculated air may also turn on and off automatically in instrument panel or instrument panel and floor airflow modes during hot weather to improve cooling efficiency.

I **A/C:** Press the button to switch the air conditioning on or off. Air conditioning cools your vehicle using outside air. To improve the time to reach a comfortable temperature in hot weather, drive with the windows open until you feel cold air through the air vents.

MANUAL CLIMATE CONTROL - VEHICLES WITH: ELECTRONIC MANUAL TEMPERATURE CONTROL (EMTC)



E205761

A **Fan speed control:** Adjust the volume of air circulated in the vehicle.

B **Heated rear window:** Press the button to switch the heated rear window on and off.

C **Defrost:** Select to distribute air through the windshield air vents. Air distribution to the instrument panel and footwell vents turns off. You can also use this setting to defrost and clear the windshield of a thin covering of ice.

D **A/C:** Press the button to switch the air conditioning on or off. Air conditioning cools your vehicle using outside air. To improve the time to reach a comfortable temperature in hot weather, drive with the windows open until you feel cold air through the air vents.

Note: In certain conditions (for example, maximum defrost), the air conditioning compressor may continue to operate even though the air conditioning is switched off.

E **MAX A/C:** Adjust the control for maximum cooling. Recirculated air flows through the instrument panel vents, air conditioning automatically turns on and the fan automatically adjusts to the highest speed.

F **Recirculated air:** Press the button to switch between outside air and recirculated air. The air currently in the passenger compartment recirculates. This can reduce the time needed to cool the interior and reduce unwanted odors from entering your vehicle.

Note: Recirculated air may also turn on and off automatically in instrument panel or instrument panel and floor airflow modes during hot weather to improve cooling efficiency.

G **Temperature control:** Controls the temperature of the air circulated in your vehicle.

Note: To prevent window fogging, you cannot select recirculated air when maximum defrost is on.

H **Air distribution control:** Adjust the control to turn airflow from the windshield, instrument panel, or footwell vents on or off. You can distribute air through the following combinations: windshield, windshield/floor, panel, panel/floor, and floor.

Note: At least one of these buttons illuminates when the system is on.

I **Power:** Press the button to switch the system on and off. When the system is off, it prevents outside air from entering the vehicle.

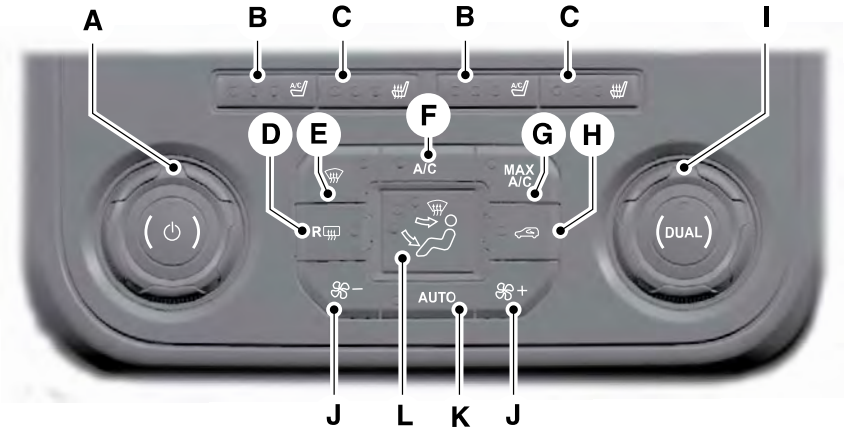
J **Rear passenger temperature control:** Adjust the temperature to the rear of the passenger compartment.

K **REAR CTRL:** When illuminated, indicates the rear climate control system is on.

L **Rear passenger power:** Press the button to switch the system on and off.

M **Rear fan speed control:** Adjust the volume of air circulated to the rear of the passenger compartment.

AUTOMATIC CLIMATE CONTROL



E205763

A **Power and Driver temperature control:** Press the button to switch the system on and off. When the system is off, it prevents outside air from entering the vehicle. Adjusts the temperature setting using the control on the driver side.

B **Climate controlled seats:** Press the button to switch the climate controlled seats on and off. See **Climate Controlled Seats** (page 135).

C **Heated seats:** Press the button to switch the heated seats on and off. See **Heated Seats** (page 134).

D **Heated rear window:** Press the button to switch the heated rear window on and off. See **Heated Windows and Mirrors** (page 121).

E **Defrost:** Select to distribute air through the windshield air vents. Air distribution to the instrument panel and footwell vents turns off. You can also use this setting to defrost and clear the windshield of a thin covering of ice.

F **A/C:** Press the button to switch the air conditioning on or off. Air conditioning cools your vehicle using outside air. To improve the time to reach a comfortable temperature in hot weather, drive with the windows open until you feel cold air through the air vents.

Note: In certain conditions (for example, maximum defrost), the air conditioning compressor may continue to operate even though the air conditioning is switched off.

G **MAX A/C:** Press the button for maximum cooling. Recirculated air flows through the instrument panel vents, air conditioning automatically turns on and the fan automatically adjusts to the highest speed.

H **Recirculated air:** Press the button to switch between outside air and recirculated air. The air currently in the passenger compartment recirculates. This can reduce the time needed to cool the interior and reduce unwanted odors from entering your vehicle.

Note: Recirculated air may also turn on and off automatically in instrument panel or instrument panel and floor airflow modes during hot weather to improve cooling efficiency.

I **Passenger temperature control:** Adjusts the temperature on the passenger side.

J **Fan speed control:** Adjusts the volume of air circulated in the vehicle.

K **AUTO:** Press the button to switch on automatic operation. Adjust to select the desired temperature. Fan speed, air distribution, air conditioning operation, and outside or recirculated air are automatically adjusted to heat or cool the vehicle to maintain the desired temperature. You can also switch off dual zone mode by pressing and holding the button for more than two seconds.

L **Air distribution control:** Adjust the control to turn airflow from the windshield, instrument panel, or footwell vents on or off. You can distribute air through any combination of these vents.

HINTS ON CONTROLLING THE INTERIOR CLIMATE

General Hints

WARNING

Prolonged use of recirculated air may cause the windows to fog up. If the windows fog up, follow the settings for demisting the windshield.

Note: *You may feel a small amount of air from the footwell air vents regardless of the air distribution setting.*

Note: *To reduce humidity build-up inside your vehicle, do not drive with the system switched off or with recirculated air always switched on.*

Note: *Do not place objects under the front seats as this may interfere with the airflow to the rear seats.*

Note: *Remove any snow, ice or leaves from the air intake area at the base of the windshield.*

Note: *To improve the time to reach a comfortable temperature in hot weather, drive with the windows open until you feel cold air through the air vents.*

Manual Climate Control

Note: *To reduce fogging of the windshield during humid weather, adjust the air distribution control to the windshield air vents position.*

Automatic Climate Control

Note: *Adjusting the settings when your vehicle interior is extremely hot or cold is not necessary. The system automatically adjusts to heat or cool the interior to your selected temperature as quickly as possible. For the system to function efficiently, the instrument panel and side air vents should be fully open.*

Note: *If you select **AUTO** during cold outside temperatures, the system directs airflow to the windshield and side window vents. In addition, the fan may run at a slower speed until the engine warms up.*

Note: *If you select **AUTO** during hot outside temperatures, or when the inside of the vehicle is hot, the system automatically uses recirculated air to maximize interior cooling. When the interior reaches the selected temperature, the system automatically switches to using outside air.*

Heating the Interior Quickly

	Vehicle with manual climate control	Vehicle with automatic climate control
1	Adjust the fan speed to a high speed setting.	Press the **AUTO** button.
2	Adjust the temperature control to the full heat setting.	Adjust the temperature control to the desired setting.
3	Select the footwell air vents using the air distribution buttons.	

Recommended Settings for Heating

	Vehicle with manual climate control	Vehicle with automatic climate control
1	Adjust the fan speed to the center setting.	Press the **AUTO** button.
2	Adjust the temperature control to the midway point of the hot settings.	Adjust the temperature control to the desired setting. Use 72°F (22°C) as a starting point, then adjust the setting as necessary.
3	Select the footwell air vents using the air distribution buttons.	

Cooling the Interior Quickly

	Vehicle with manual climate control	Vehicle with automatic climate control
1	Adjust the temperature control to the **MAX A/C** position.	Press the **MAX A/C** button.
2	Drive with the windows fully open until you feel cold air through the air vents.	

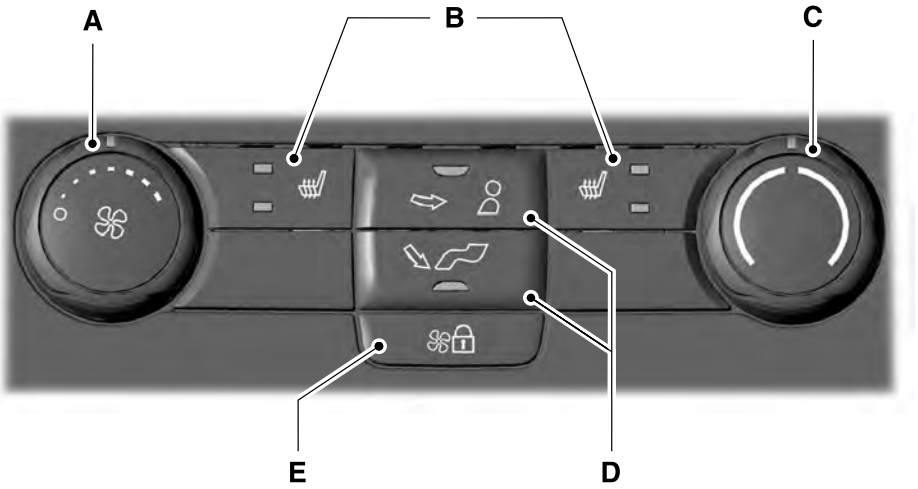
Recommended Settings for Cooling

	Vehicle with manual climate control	Vehicle with automatic climate control
1	Adjust the fan speed to the center setting.	Press the **AUTO** button.
2	Adjust the temperature control to the midway point of the cold settings.	Adjust the temperature control to the desired setting. Use 72ºF (22ºC) as a starting point, then adjust the setting as necessary.
3	Select the instrument panel air vents using the air distribution buttons.	

Side Window Defogging in Cold Weather

	Vehicle with manual climate control	Vehicle with automatic climate control
1	Select the windshield air vents using the air distribution buttons.	Press the defrost button.
2	Press the **A/C** button if the indicator is off.	Adjust the temperature control to the desired setting. Use 72ºF (22ºC) as a starting point, then adjust the setting as necessary.
3	Adjust the temperature control to the desired setting.	
4	Adjust the fan speed to a high speed setting.	

REAR PASSENGER CLIMATE CONTROLS



E188689

A **Fan speed control:** Adjust the volume of air circulated in the vehicle.

B **Heated seats (if equipped):** Press the button to switch the heated seats on and off. See **Heated Seats** (page 134).

C **Temperature control:** Control the temperature of the air circulated in your vehicle.

D **Air distribution control:** Adjust the control to turn airflow from the instrument panel or footwell vents on or off. You can distribute air through any combination of these vents.

E **Fan speed control lock:** When illuminated, you can only operate the rear passenger settings through the front controls.

HEATED WINDOWS AND MIRRORS

Heated Rear Window

Note: *Make sure the engine is running before operating the heated windows.*

Press the button to clear the heated rear window of thin ice and fog. The heated rear window will automatically turn off after a short period of time. Start the engine before you switch the heated rear window on.

Note: *Do not use razor blades or other sharp objects to clean or remove decals from the inside of the heated rear window. The vehicle warranty does not cover damage caused to the heated rear window grid lines.*

Heated Exterior Mirror (If Equipped)

When you switch the heated rear window on, the heated exterior mirrors will automatically turn on.

Note: *Do not remove ice from the mirrors with a scraper or adjust the mirror glass when it is frozen in place.*

Note: *Do not clean the mirror housing or glass with harsh abrasives, fuel or other petroleum-based cleaning products.*

REMOTE START (If Equipped)

The remote start feature allows you to pre-condition the interior of your vehicle. The climate control system works to achieve comfort according to your previous settings.

Note: *You cannot adjust the system during remote start operation.*

Turn the ignition on to return the system to its previous settings. You can now make adjustments normally, but you need to turn certain vehicle-dependent features back on, such as:

- Heated seats.
- Cooled seats.
- Heated steering wheel.
- Heated mirrors.
- Heated rear window.

You can adjust the default remote start settings using the information display controls. See **Information Displays** (page 92).

Automatic Settings

In hot weather, the system is set to 72°F (22°C). The cooled seats are set to high (if available, and selected to AUTO in the information display).

In moderate weather, the system either heats or cools (based on previous settings). The rear defroster, heated mirrors and heated seats do not automatically turn on.

In cold weather, the system is set to 72°F (22°C). The heated seats are set to high (if available, and selected to AUTO in the information display). The rear defroster and heated mirrors automatically turn on.

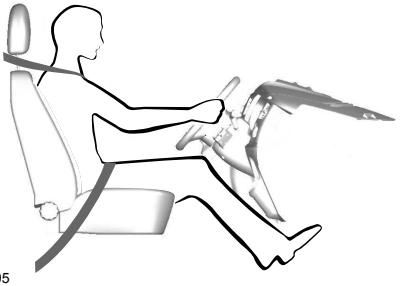
SITTING IN THE CORRECT POSITION

WARNINGS

Sitting improperly, out of position or with the seatback reclined too far can take weight off the seat cushion and affect the decision of the passenger sensing system, resulting in serious injury or death in the event of a crash. Always sit upright against your seat back, with your feet on the floor.

Do not recline the seatback as this can cause the occupant to slide under the safety belt, resulting in serious injury in the event of a crash.

Do not place objects higher than the seatback to reduce the risk of serious injury in the event of a crash or during heavy braking.



E68595

When you use them properly, the seat, head restraint, safety belt and airbags will provide optimum protection in the event of a crash.

We recommend that you follow these guidelines:

- Sit in an upright position with the base of your spine as far back as possible.
- Do not recline the seatback more than 30 degrees.
- Adjust the head restraint so that the top of it is level with the top of your head and as far forward as possible. Make sure that you remain comfortable.
- Keep sufficient distance between yourself and the steering wheel. We recommend a minimum of 10 in (25 cm) between your breastbone and the airbag cover.
- Hold the steering wheel with your arms slightly bent.
- Bend your legs slightly so that you can press the pedals fully.
- Position the shoulder strap of the safety belt over the center of your shoulder and position the lap strap tightly across your hips.

Make sure that your driving position is comfortable and that you can maintain full control of your vehicle.

HEAD RESTRAINTS

WARNINGS

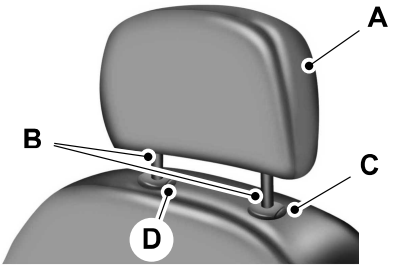
Fully adjust the head restraint before you sit in or operate your vehicle. This will help minimize the risk of neck injury in the event of a crash. Do not adjust the head restraint when your vehicle is moving.

The head restraint is a safety device. Whenever possible it should be installed and properly adjusted when the seat is occupied. Failure to adjust the head restraint properly could reduce its effectiveness during certain impacts.

WARNINGS

Install the head restraint properly to help minimize the risk of neck injury in the event of a crash.

Note: *Adjust the seatback to an upright driving position before adjusting the head restraint. Adjust the head restraint so that the top of it is level with the top of your head and as far forward as possible. Make sure that you remain comfortable. If you are extremely tall, adjust the head restraint to its highest position.*



E138642

The head restraints consist of:

A	An energy absorbing head restraint.
B	Two steel stems.
C	Guide sleeve adjust and release button.
D	Guide sleeve unlock and remove button.

Adjusting the Head Restraint

Raising the Head Restraint

Pull the head restraint up.

Lowering the Head Restraint

1. Press and hold button C.
2. Push the head restraint down.

Removing the Head Restraint

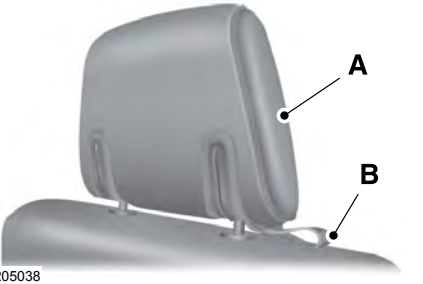
1. Pull the head restraint up until it reaches its highest position.
2. Press and hold buttons C and D.
3. Pull the head restraint up.

Installing the Head Restraint

Align the steel stems into the guide sleeves and push the head restraint down until it locks.

Second Row Outboard Head Restraints

The outboard head restraints are non-adjustable, but you can fold them.



E205038

The non-adjustable head restraints consist of:

- A trimmed energy absorbing foam and structure (A).
- A fold strap (B).

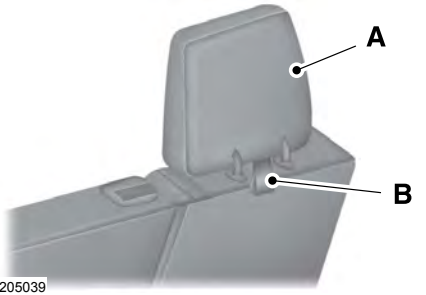
1. Pull the strap to fold the outboard head restraint.
2. Pull the head restraint up to place the head restraint back to the upright position.

Second Row Center Seat Head Restraint

The center rear head restraint is fixed and non-adjustable. The head restraint consists of a trimmed foam covering over the upper structure of the seatback.

Third Row Head Restraints

The third row head restraints are non adjustable, but you can fold them.



E205039

The non-adjustable head restraints consist of:

- A trimmed energy absorbing foam and structure (A).
- A fold strap (B).

1. Pull the strap to fold the head restraint.
2. Pull the head restraint up to place the head restraint back to the upright position.

MANUAL SEATS (If Equipped)

WARNINGS

Do not adjust the driver seat or seatback when your vehicle is moving. This may result in sudden seat movement, causing loss of control of your vehicle.

WARNINGS

Rock the seat backward and forward after releasing the lever to make sure that it is fully engaged.

Moving the Seat Backward and Forward (If Equipped)

E205040

Recline Adjustment (If Equipped)

WARNING

Before returning the seatback to its original position, make sure that cargo or any objects are not trapped behind the seatback. After returning the seatback to its original position, pull on the seatback to make sure that it has fully latched. An unlatched seat may become dangerous in the event of a sudden stop or crash.

E205041

Manual Lumbar (If Equipped)

E205042

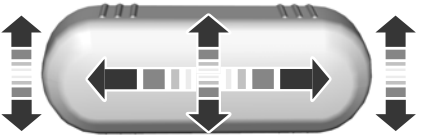
The lumbar support control is located on the outboard side of the seat. Turn the control to adjust your support.

POWER SEATS (If Equipped)

WARNINGS

Before returning the seatback to its original position, make sure that cargo or any objects are not trapped behind the seatback.

Do not adjust the driver seat or seatback when your vehicle is moving. Adjusting your seatback while your vehicle is in motion may cause loss of control of your vehicle.



E181777

The control is located on the outboard side of the seat. Move the switch in the direction of the arrow to raise or lower the seat cushion or to move the seat forward, backward, up or down.

Power Recline (If Equipped)

E162731

Move the control to recline the seatback forward or rearward.

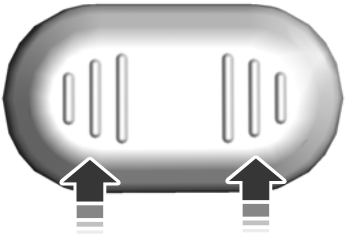
Note: *On vehicles with memory seats, to prevent damage to the seat, the power seats are designed to set a stopping position just short of the end of the seat track. If the seat encounters an object while moving forward or backward, a new stopping position will be set.*

To reset the seat to its normal stopping position:

1. After encountering the new stopping position, press the power seat control again to override.

2. Continue pressing the control until it reaches the end of the seat track.
3. Continue pressing the control for about two seconds. You will feel the seat bounce back slightly.

Power Lumbar (If Equipped)



E164101

The control is located on the outboard side of the seat. Press the forward or rearward side of the control for more or less support.

MEMORY FUNCTION (If Equipped)

WARNINGS

Before activating the seat memory, make sure that the area immediately surrounding the seat is clear of obstructions and that all occupants are clear of moving parts.

Do not use the memory function when your vehicle is moving.

This feature automatically recalls the position of the following:

- Driver seat.
- Power mirrors.
- Power steering column.
- Optional power adjustable foot pedals.

The memory control is located on the left side of the driver seat.

E205043

Saving a PreSet Position

1. Switch the ignition on.
2. Adjust the memory features to your desired position.
3. Press and hold the desired preset button until you hear a single tone.

You can save up to two preset memory positions.

You can save a memory preset at any time.

Recalling a PreSet Position

Switch the ignition on.

Press and release the preset button associated with your desired driving position. The memory features will move to the position stored for that preset.

Note: *You can only recall preset memory position when you switch the ignition off, or when you place the transmission in park (P) or neutral (N) if you switch the ignition on.*

Note: *If you enable Easy Exit, a memory recall when the ignition is off will move to the easy exit position.*

You can also recall a preset memory position by:

- Pressing the unlock button on your remote control if it is linked to a preset position.
- Unlocking the intelligent driver door handle if a linked key fob is present.
- Entering a personal entry code on the Securicode keypad. See **Locks** (page 53).

Note: *Using a linked key fob to recall your memory position when the ignition is off moves the seat and steering column to the Easy Entry position.*

Note: *Pressing any active memory feature control - power seat, mirror (or steering column switch) (or any memory button) during a memory recall cancels the operation.*

Linking a PreSet Position to your Remote Control or Intelligent Access Key Fob

Your vehicle can save the preset memory positions for up to two remote controls.

1. With the ignition on, move the memory positions to the desired positions.
2. Press and hold the desired preset button for about five seconds. A tone will sound after about two seconds. Continue holding until a second tone is heard.
3. Within three seconds, press the lock button on the remote control you are linking.

To unlink a remote control, follow the same procedure – except in step 3, press the unlock button on the remote control.

Note: *If more than one linked remote control or intelligent access key is in range, the memory function moves to the settings of the first key to initiate a memory recall.*

Easy Entry and Exit Feature (If Equipped)

This feature adjusts the position of the seat and steering column to allow easier exit and entry to the vehicle.

The driver seat automatically moves 2 inches (5 centimeters) rearward when the transmission is in park (P) and you remove the key from the ignition or you switch the ignition off.

The driver seat returns to the previous position when you put the key in the ignition or switch the ignition on.

You can enable or disable this feature in the information display. See **Information Displays** (page 92).

REAR SEATS

Folding Down the Second Row 40% Seat

WARNINGS

Use caution when folding the seatback to the flat back position as the system will move forward when you lift the release handle.

Before returning the seatback to its original position, make sure that cargo or any objects are not trapped behind the seatback. After returning the seatback to its original position, pull on the seatback to make sure that it has fully latched. An unlatched seat may become dangerous in the event of a sudden stop or crash.

Make sure that the head restraint is in the down position and no objects such as books, purses or briefcases are on the floor in front of the second row seats before folding them down.

Move the front passenger seat forward so that the second row seat head restraint clears the front seat.

E190842

1. Lower the head restraints by pulling on the strap.

E205044

2. Locate the handle on the side of the seat cushion by the door.
3. Pull up on the handle and push the seatback forward toward the front of the vehicle.

To return the seat to the upright position:

E205045

1. Lift the seatback toward the rear of the vehicle.
2. Rotate the seatback until you hear a click, locking it in the upright position.

E205046

3. Lift up on the head restraint until it locks into its original position.

Placing the Second Row Outboard 40% Seats in Cargo Mode

WARNINGS

Use caution when folding the seatback to the flat back position as the system will move forward when you lift the release handle.

Always return the seat from the kneel position prior to raising the seatback. Failure to do so could result in personal injury.

Place the second-row seats in a kneel down load floor position to allow more cargo space.

To place the seats in the cargo mode:

1. Fold down the second row seat.

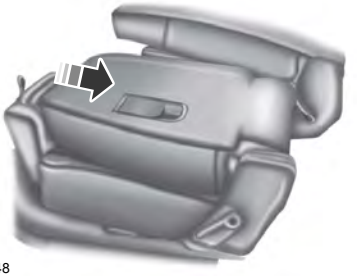
E205047

2. Pull the cargo mode lever up to release the seat into a kneel down load floor position.

Returning to the Upright Position from the Full Lowered Load Floor Position

You cannot return the seatback to the upright position until the seat is returned from the kneel down position.

To return the seat to the upright position:



E205048

1. Push the seat rearward until the latch is engaged.
2. Return the seatback to the upright position.

Adjusting the Second Row Outboard 40% Seat for E-Z Entry

WARNINGS

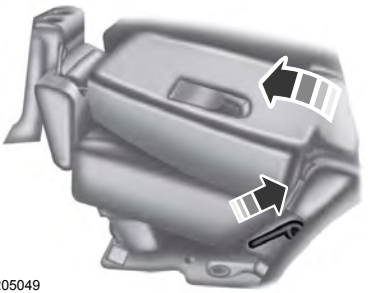
Always latch the vehicle seat to the floor, whether the seat is occupied or empty. If not latched, the seat may cause injury during a sudden stop.

After using the E-Z Entry feature, make sure there are not any objects, cargo or the feet of a third row passenger under the second row seat when latching the seat to the floor. Injury to the third row passengers feet or damage to the seat may occur.

Before returning the seatback to its original position, make sure that cargo or any objects are not trapped behind the seatback. After returning the seatback to its original position, pull on the seatback to make sure that it has fully latched. An unlatched seat may become dangerous in the event of a sudden stop or crash.

The E-Z entry seat allows for easier entry and exit to and from the third row seat.

To enter the third row seat:



E205049

1. Fold down the second row seat and release the handle.
2. Pull the handle up again until the seat releases from the floor.
3. Push the seat upward and fold it away from the third row.

To return the seat to a seating position:

E205050

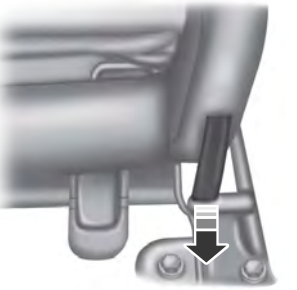
1. Push the seat down and latch to the floor.
2. Bring the seatback to an upright position. The seatback should lock into position.

Note: *If the seatback will not return to the upright position, tumble the seat again and re-latch it to the floor. Be sure that cargo or other objects are not trapped underneath the seatback.*

E205051

Note: *If a squeak is heard from the latch area, the latch striker pin should be wiped clean of dust or debris.*

Exiting the Third Row



E205052

1. Pull the strap located at the bottom outboard of the seatback to release the seat from the floor, and rotate the seat up toward the front seat.
2. Follow the directions above to return the seat from the E-Z entry to the upright position.

Reclining the Second Row Outboard 40% Seatback

WARNING

Reclining the seatback can cause an occupant to slide under the seat's safety belt, resulting in severe personal injuries in the event of a crash.

E205053

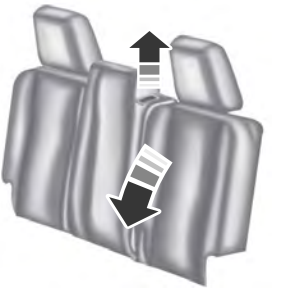
The release handle is located on the outboard side of the seat cushion. Lift it to adjust the seatback to your desired position.

Folding the Second Row Center 20% Seat (If Equipped)

WARNINGS

To prevent possible damage to the seat or safety belts, make sure that the safety belts are not buckled when moving the seat to the load floor position.

Before returning the seatback to its original position, make sure that cargo or any objects are not trapped underneath the seatback. After returning the seatback to its original position, pull on the seatback to make sure that it has fully latched. An unlatched seat may become dangerous in the event of a sudden stop or crash.



E205054

1. Locate the release handle in the upper left seatback. Pull the handle to release the folding seat latch.

E205055

2. With the latch released, lower the seatback into the load floor position.

E205056

3. To return the seat to the upright position, lift the seatback until the latch is fully engaged.

Adjusting the Second Row Center 20% Seat (If Equipped)

Note: *Move this seat forward to keep a child in a child restraint close to the front seat occupants. Move the seat to the full rearward position when it is occupied by older children or adults, including children in booster seats.*

E205057

Lift the handle to move the seat forward or backward.

Third Row Seats

Make sure that no objects are on the floor in front of the third row seats or on the seat cushion before lowering them. Make sure that the head restraints are lowered and the second row seats are not reclined.

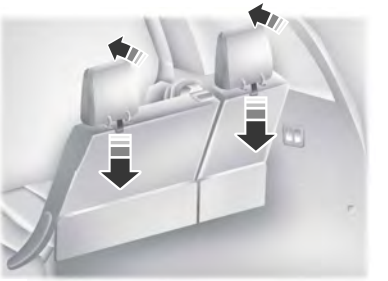
Folding Down the Third Row Seats to the Load Floor

WARNINGS

To prevent possible damage to the seat or safety belts, make sure that the safety belts are not buckled when moving the seat to the load floor position.

WARNINGS

Before returning the seatback to its original position, make sure that cargo or any objects are not trapped behind the seatback. After returning the seatback to its original position, pull on the seatback to make sure that it has fully latched. An unlatched seat may become dangerous in the event of a sudden stop or crash.



E205058

Before folding the third row seats, fold the head restraints down by pulling on the strap located at the bottom of the restraint.

E205059

Pull up on the handle located behind the seatback while pushing the seatback forward and down into the seat cushion.

To return the seatback to its original position, lift the seatback until it latches into place.

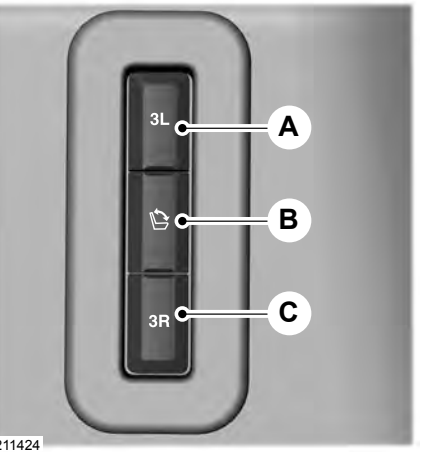
PowerFold™ Third Row Seat (If Equipped)

Note: *The power fold down seats operate for 10 minutes after you switch the ignition off. The transmission must be in park (P) and the liftgate, or liftgate glass must be open. Similar to the battery saver feature, the power third row seat disables 10 minutes after you switch the ignition off.*

Note: *Be sure that the head restraints are folded down before powering the third row seat down.*

E205060

The control buttons are located on the right-hand rear quarter trim panel (accessible from the liftgate area).



E211424

A	Press to fold the third row left side seatback down.
B	Press to fold both seatbacks down.
C	Press to fold the third row right side seatback down.

To return the seatback(s) to the original position(s), press the corresponding control again.

If the power third row seat is disabled after 10 minutes, you can enable the seat by:

- Opening any door.
- Pressing the unlock button on the key fob.
- Pressing any keyless entry keypad button.
- Turning the ignition key.

HEATED SEATS (If Equipped)

Front Seats

WARNING

People who are unable to feel pain to their skin because of advanced age, chronic illness, diabetes, spinal cord injury, medication, alcohol use, exhaustion or other physical conditions, must exercise care when using the heated seat. The heated seat may cause burns even at low temperatures, especially if used for long periods of time. Do not place anything on the seat that insulates against heat, such as a blanket or cushion. This may cause the heated seat to overheat. Do not puncture the seat with pins, needles or other pointed objects. This may damage the heating element which may cause the heated seat to overheat. An overheated seat may cause serious personal injury.

Do not do the following:

- Place heavy objects on the seat.
- Operate the heated seat if water or any other liquid spills on the seat. Allow the seat to dry thoroughly.
- Operate the heated seats unless the engine is running. Doing so can cause the battery to lose charge.

E146322

Press the heated seat symbol to cycle through the various heat settings and off. More indicator lights indicate warmer settings.

Rear Seats

WARNING

Persons who are unable to feel pain to the skin because of advanced age, chronic illness, diabetes, spinal cord injury, medication, alcohol use, exhaustion, or other physical conditions, must exercise care when using the seat heater. The seat heater may cause burns even at low temperatures, especially if used for long periods of time. Do not place anything on the seat that insulates against heat, such as a blanket or cushion, because this may cause the seat heater to overheat. Do not puncture the seat with pins, needles, or other pointed objects because this may damage the heating element which may cause the seat heater to overheat. An overheated seat may cause serious personal injury.

Do not do the following:

- Place heavy objects on the seat.
- Operate the seat heater if water or any other liquid is spilled on the seat. Allow the seat to dry thoroughly.
- Operate the heated seats unless the engine is running. Doing so can cause the battery to lose charge.

The rear seat heat controls are located on the rear of the center console.

E146322

Press the heated seat symbol to cycle through the various heat settings and off. More indicator lights indicate warmer settings.

The heated seat module resets at every ignition run cycle. While the ignition is on, press the high or low heated seat switch to enable heating mode. When activated, they will turn off automatically when you turn the engine off.

CLIMATE CONTROLLED SEATS

(If Equipped)

Heated Seats

WARNING

Persons who are unable to feel pain to the skin because of advanced age, chronic illness, diabetes, spinal cord injury, medication, alcohol use, exhaustion, or other physical conditions, must exercise care when using the seat heater. The seat heater may cause burns even at low temperatures, especially if used for long periods of time. Do not place anything on the seat that insulates against heat, such as a blanket or cushion, because this may cause the seat heater to overheat. Do not puncture the seat with pins, needles, or other pointed objects because this may damage the heating element which may cause the seat heater to overheat. An overheated seat may cause serious personal injury.

Note: *Do not do the following:*

- Place heavy objects on the seat.
- Operate the seat heater if water or any other liquid spill on the seat. Allow the seat to dry thoroughly.

The heated seats will only function when the engine is running.

E146322

Press the heated seat symbol to cycle through the various heat settings and off. More indicator lights indicate warmer settings.

Cooled Seats

The cooled seats will only function when the engine is running.

E146309

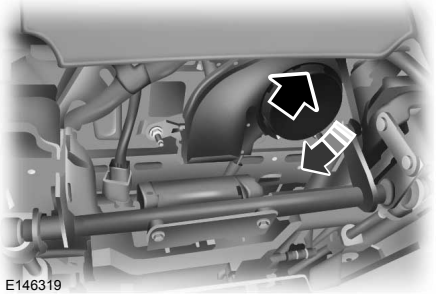
Press the cooled seat symbol to cycle through the various cooling settings and off. More indicator lights indicate cooler settings.

If the engine falls below 350 RPM while the cooled seats are on, the feature will turn itself off. You will need to reactivate it.

Climate Controlled Seat Air Filter Replacement

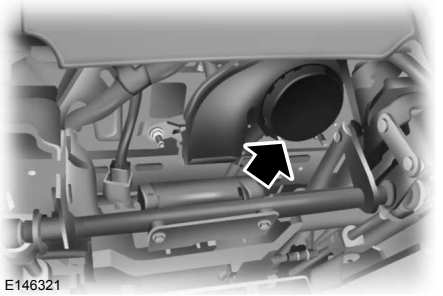
The climate controlled seat system includes air filters. You must replace them periodically. See **Scheduled Maintenance** (page 378).

Locate the filters under each front seat and access them from the second-row footwell area. Move the front seats all the way forward and to the full up positions to ease access.



To remove a filter:

1. Switch the ignition off.
2. Press up on the outside rigid edge of the filter and rotate counterclockwise once the tabs are released, then remove the filter.



To install a filter:

1. First, position the filter in its housing making sure that the far forward end is all the way up in the housing.
2. Push in on the center of the outside edge of the filter and rotate up into the housing until it clips into position.

HomeLink Wireless Control System

WARNINGS

Make sure that the garage door and security device are free from obstruction when you are programming. Do not program the system with the vehicle in the garage.

Do not use the system with any garage door opener that does not have the safety stop and reverse feature as required by U.S. Federal Safety Standards (this includes any garage door opener manufactured before April 1, 1982). A garage door opener which cannot detect an object, signaling the door to stop and reverse, does not meet current federal safety standards. Using a garage door opener without these features increases the risk of serious injury or death.

Note: *Make sure you keep the original remote control transmitter for use in other vehicles as well as for future system programming.*

Note: *We recommend that upon the sale or lease termination of your vehicle, you erase the programmed function buttons for security reasons. See* ***Erasing the Function Button Codes****.*

Note: *You can program a maximum of three devices. To change or replace any of the three devices after it has been initially programmed, you must first erase the current settings. See* ***Erasing the Function Button Codes****.*

E142657

The universal garage door opener replaces the common hand-held garage door opener with a three-button transmitter that is integrated into the driver's sun visor.

The system includes two primary features, a garage door opener and a platform for remote activation of devices within the home. As well as being programmed for garage doors, the system transmitter can be programmed to operate entry gate operators, security systems, entry door locks and home or office lighting.

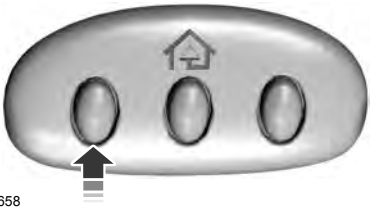
Additional system information can be found online at www.homelink.com, www.youtube.com/HomeLinkGentex or by calling the toll-free help line on 1-800-355-3515.

In-Vehicle Programming

This process is to program your hand-held transmitter and your in-vehicle HomeLink button.

Note: *The programming steps below assume you will be programming HomeLink that was not previously programmed.*

Note: *Put a new battery in the hand-held transmitter. This will ensure quicker training and accurate transmission of the radio-frequency signal.*



E142658

1. With your vehicle parked outside of the garage, turn your ignition to the **on** position, but do not start your vehicle.
2. Hold your hand-held garage door transmitter 2–6 in (5–14 cm) away from the HomeLink button you want to program.
3. Using both hands, simultaneously, press and hold the desired HomeLink button and the hand-held transmitter button. DO NOT release either one until the HomeLink indicator light flashes slowly and then rapidly. When the indicator light flashes rapidly, both buttons may be released. The rapid flashing indicates successful training.

Note: *You may need to use a different method if you live in Canada or have difficulties programming your gate operator or garage door opener. See* ***Gate Operator / Canadian Programming.***

4. Press and hold the HomeLink button you programmed for two seconds, then release. You may need to do this twice to activate the door. If your garage door does not operate, watch the HomeLink indicator light.

If the indicator light stays on, the programming is complete. No further action is needed.

If the indicator light flashes rapidly for 2 seconds and then turns to a constant light, the HomeLink button is not programmed yet. See **Programming Your Garage Door Opener Motor.**

To program additional buttons, repeat Steps 1 – 4.

For questions or comments, please contact HomeLink at www.homelink.com, www.youtube.com/HomeLinkGentex or 1-800-355-3515.

Programming Your Garage Door Opener Motor

Note: *You may need a ladder to reach the unit and you may need to remove the cover or lamp lens on your garage door opener.*

E142659

1. Press the learn button on the garage door opener motor and then you have 30 seconds to complete the next two steps.
2. Return to your vehicle.

E142658

3. Press and hold the function button you want to program for 2 seconds, then release. Repeat this step. Depending on your brand of garage door opener, you may need to repeat this sequence a third time.

Gate Operator / Canadian Programming

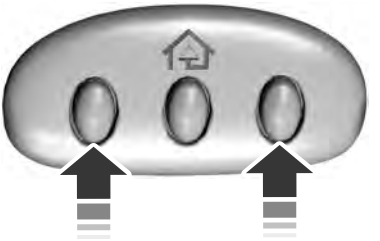
Canadian radio-frequency laws require transmitter signals to “time-out” (or quit) after several seconds of transmission – which may not be long enough for HomeLink to pick up the signal during programming. Similar to this Canadian law, some U.S. gate operators are designed to “time-out” in the same manner.

Note: *If programming a garage door opener or gate operator, it is advised to unplug the device during the “cycling” process to prevent possible overheating.*

1. Press and hold the HomeLink button while you press and release, **every two seconds**, your hand-held transmitter until the HomeLink indicator light changes from a slow to a rapidly blinking light.
2. Release both the HomeLink and hand-held transmitter buttons.
3. Continue programing HomeLink. See **In-Vehicle Programming**.

Erasing the Function Button Codes

Note: *You cannot erase individual buttons.*



E142660

1. Press and hold the outer two function buttons simultaneously for approximately 20 seconds until the indicator lights above the buttons flash rapidly.
2. When the indicator lights flash, release the buttons. The codes for all buttons are erased.

Reprogramming a Single Button

To program a device to a previously trained button, follow these steps:

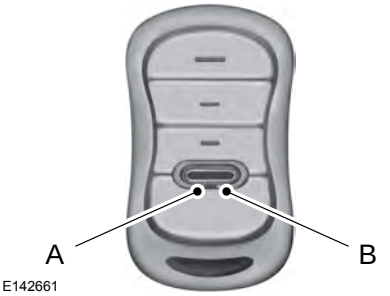
1. Press and hold the desired button. Do NOT release the button.
2. The indicator light will begin to flash after 20 seconds. Without releasing the button, follow Step 1 in the Programming section.

For questions or comments, contact HomeLink at www.homelink.com, www.youtube.com/HomeLinkGentex or 1-800-355-3515.

Programming to a Genie Intellicode 2 Garage Door Opener

Note: *The Genie Intellicode 2 transmitter must already be programmed to operate with the garage door opener.*

Note: *To program HomeLink to the transmitter you must first put the transmitter into programming mode.*



A. Red indicator light

B. Green indicator light

1. Press and hold one of the buttons on the hand-held transmitter for 10 seconds. The indicator light will change from green to red and green.
2. Press the same button twice to confirm the change to programming mode. If done properly the indicator light will appear red.
3. Hold the transmitter within 1–3 inches (2–8 centimeters) of the button on the visor you want to program.
4. Press and hold both the programmed Genie button on the hand-held transmitter and the button you want to program. The indicator light on the visor will flash rapidly when the programming is successful.

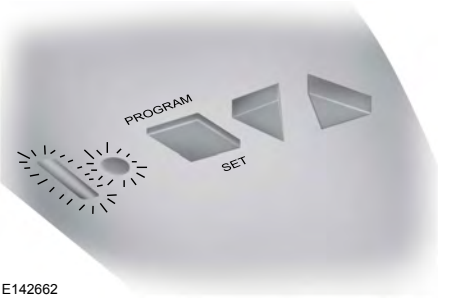
Note: *The Genie transmitter will transmit for up to 30 seconds. If HomeLink does not program within 30 seconds the Genie transmitter will need to be pressed again. If the Genie transmitter indicator light displays green and red, release the button until the indicator light turns off before pressing the button again.*

Once HomeLink has been programmed successfully, the Genie transmitter must be changed out of program mode. To do this:

1. Press and hold the previously programmed Genie button on the hand-held transmitter for 10 seconds. The indicator light will change from red to red and green.
2. Press the same button twice to confirm the change. If done correctly the indicator light will turn green.

Programming HomeLink to the Genie Intellicode Garage Door Opener Motor

Note: *You may need a ladder to access the garage door opener motor.*



1. Press and hold the program button on the garage door opener motor until both blue indicator lights turn on.
2. Release the program button. Only the smaller round indicator light should be on.
3. Press and release the program button. The larger purple indicator light will flash.

Note: *The next two steps must be completed in 30 seconds.*

4. Press and release the Genie Intellicode 2 hand-held transmitter's previously programmed button. Both indicator lights on the garage door opener motor unit should now flash purple.

5. Press and hold the previously programmed button on the visor for 2 seconds. Repeat this step up to 3 times until the garage door moves.

Programming is now complete.

Clearing a HomeLink Device

To erase programming from the three HomeLink buttons press and hold the two outer HomeLink buttons until the indicator light begins to flash. The indicator light will begin flashing in 10 to 20 seconds, at which time both buttons should be released. Programming has now been erased, and the indicator light should blink slowly to indicate the device is in train mode when any of the three HomeLink buttons are pressed.

FCC and RSS-210 Industry Canada Compliance

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications to your device not expressly approved by the party responsible for compliance can void the user's authority to operate the equipment.

12 Volt DC Power Point

WARNINGS

Do not plug optional electrical accessories into the cigar lighter socket. Incorrect use of the cigar lighter can cause damage not covered by the vehicle warranty, and can result in fire or serious injury.

Do not use a power point for operating a cigar lighter. Incorrect use of the power points can cause damage not covered by the vehicle warranty, and can result in fire or serious injury.

Note: *When you switch the ignition on, you can use the socket to power 12 volt appliances with a maximum current rating of 15 amps.*

If the power supply does not work after you switch the ignition off, switch the ignition on.

Note: *Do not hang any accessory from the accessory plug.*

Note: *Do not use the power point over the vehicle capacity of 12 volt DC 180 watts or a fuse may blow.*

Note: *Always keep the power point caps closed when not in use.*

Do not insert objects other than an accessory plug into the power point. This will damage the power point and blow the fuse.

Run the vehicle for full capacity use of the power point.

To prevent the battery from running out of charge:

- Do not use the power point longer than necessary when the vehicle is not running.
- Do not leave devices plugged in overnight or when you park your vehicle for extended periods.

Locations

Power points may be in the following locations:

- On the lower instrument panel.
- Inside the center console.
- On the rear of the center console.
- In the rear cargo area.

110 Volt AC Power Point (If Equipped)

WARNING

Do not keep electrical devices plugged in the power point whenever the device is not in use. Do not use any extension cord with the 110 volt AC power point, since it will defeat the safety protection design. Doing so may cause the power point to overload due to powering multiple devices that can reach beyond the 150 watt load limit and could result in fire or serious injury.

Note: *The power point will turn off when the ignition is switched off or the battery voltage drops below 11 volts.*

Use the power point for powering electric devices that require up to 150 watts. It is on the rear of the center console.

E193395

Note: *Depending on your vehicle, the power point cover may open to the right or upward.*

When the indicator light on the power point is:

- On: The power point is working, the ignition is on and a device is plugged in.
- Off: The power point is off, the ignition is off or no device is plugged in.
- Flashing: The power point is in fault mode.

The power outlet temporarily turns off power when in fault mode if the device exceeds the 150 watt limit. Unplug your device and switch the ignition off. Switch the ignition back on, but do not plug your device back in. Let the system cool off and switch the ignition off to reset the fault mode. Switch the ignition back on and make sure the indicator light remains on.

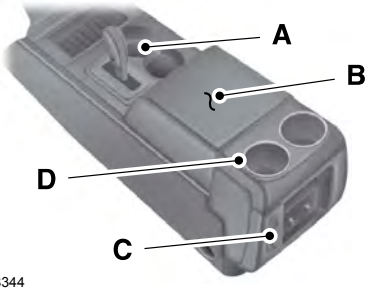
Do not use the power point for certain electric devices, including:

- Cathode-ray, tube-type televisions.
- Motor loads, such as vacuum cleaners, electric saws and other electric power tools or compressor-driven refrigerators.
- Measuring devices, which process precise data, such as medical equipment or measuring equipment.
- Other appliances requiring an extremely stable power supply such as microcomputer-controlled electric blankets or touch-sensor lamps.

CENTER CONSOLE

Stow items in the cup holder carefully as items may become loose during hard braking, acceleration or crashes, including hot drinks which may spill.

Available console features include:



E208344

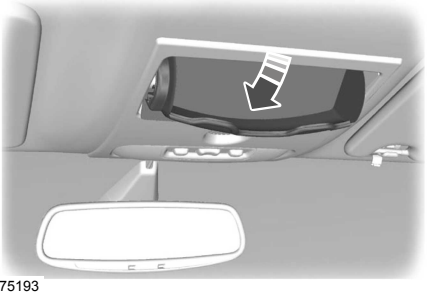
A Cup holder.

B Utility compartment, coin holder, tissue box holder, and USB ports.

C Power point, rear climate controls, and 110 volt AC power point.

D Rear cup holders.

OVERHEAD CONSOLE



E75193

Press near the rear edge of the door to open it.

GENERAL INFORMATION

WARNINGS

Extended idling at high engine speeds can produce very high temperatures in the engine and exhaust system, creating the risk of fire or other damage.

Do not park, idle or drive your vehicle on dry grass or other dry ground cover. The emission system heats up the engine compartment and exhaust system, creating the risk of fire.

Do not start the engine in a closed garage or in other enclosed areas. Exhaust fumes can be toxic. Always open the garage door before you start the engine.

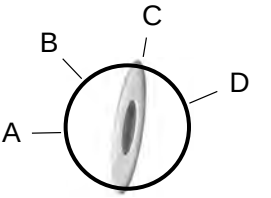
If you smell exhaust fumes inside your vehicle, have your vehicle checked by an authorized dealer immediately. Do not drive your vehicle if you smell exhaust fumes.

If you disconnect the battery, your vehicle may exhibit some unusual driving characteristics for approximately 5 miles (8 kilometers) after you reconnect it. This is because the engine management system must realign itself with the engine. You can disregard any unusual driving characteristics during this period.

The powertrain control system meets all Canadian interference-causing equipment standard requirements regulating the impulse electrical field or radio noise.

When you start the engine, avoid pressing the accelerator pedal before and during operation. Only use the accelerator pedal when you have difficulty starting the engine.

IGNITION SWITCH (If Equipped)



E163165

A (off) - The ignition is off.

Note: *When you switch the ignition off and leave your vehicle, do not leave your key in the ignition. This could cause your vehicle battery to lose charge.*

B (accessory) - Allows the electrical accessories, such as the radio, to operate while the engine is not running.

Note: *Do not leave the ignition key in this position for too long. This could cause your vehicle battery to lose charge.*

C (on) - All electrical circuits are operational and the warning lamps and indicators illuminate.

D (start) - Cranks the engine.

KEYLESS STARTING (If Equipped)

Note: *The system may not function if the passive key is close to metal objects or electronic devices, for example keys or a cell phone.*

Note: *A valid passive key must be located inside your vehicle to switch the ignition on and start your vehicle.*

Ignition Modes

E144447

The keyless starting system has three modes:

Off: Turns the ignition off.

- Without applying the brake pedal, press and release the button once when the ignition is in the on mode, or when the engine is running but your vehicle is not moving.

On: All electrical circuits are operational and the warning lamps and indicators illuminate.

- Without applying the brake pedal, press and release the button twice.

Start: Starts the engine.

- Press the brake pedal, and then press the button for any length of time. An indicator light on the button illuminates when then ignition is on and when the engine starts.

STARTING A GASOLINE ENGINE

When you start the engine, the idle speed increases. This helps to warm up the engine. If the engine idle speed does not slow down automatically, have your vehicle checked by an authorized dealer.

Note: *You can crank the engine for a total of 60 seconds without the engine starting before the starting system temporarily disables. The 60 seconds does not have to be all at once. For example, if you crank the engine three times for 20 seconds each time, without the engine starting, you reached the 60-second time limit. A message appears in the information display alerting you that you exceeded the cranking time. You cannot attempt to start the engine for at least 15 minutes. After 15 minutes, you are limited to a 15-second engine cranking time. You need to wait 60 minutes before you can crank the engine for 60 seconds again.*

Before starting your vehicle, check the following:

- Make sure all occupants have fastened their safety belts.
- Make sure the headlamps and electrical accessories are off.
- Make sure the parking brake is on.
- Make sure the transmission is in park (P).
- Switch the ignition on. For vehicles with a keyless ignition, see the following instructions.

Vehicles with an Ignition Key

Note: *Do not touch the accelerator pedal.*

1. Fully depress the brake pedal.
2. Turn the key to the start position to start the engine.

Note: *The engine may continue cranking for up to 15 seconds or until it starts.*

Note: *If you cannot start the engine on the first try, wait for a short period and try again.*

Vehicles with Keyless Start

Note: *Do not touch the accelerator pedal.*

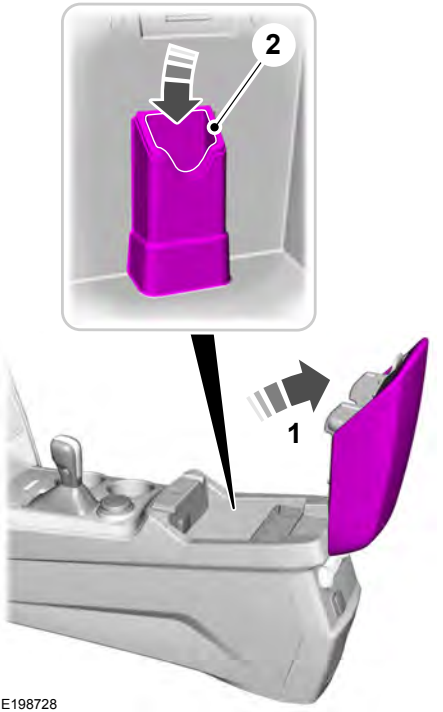
Note: *You must have your intelligent access key in your vehicle in order to shift the transmission out of park (P).*

1. Fully depress the brake pedal.
2. Press the push button ignition switch.

The system does not function if:

- The passive key frequencies are jammed.
- The key battery has no charge.

If you are unable to start your vehicle, do the following:



E198728

1. Open the floor console storage compartment lid.
2. Insert the passive key into the backup slot.
3. With the key in this position, press the brake pedal then press the push button ignition switch to switch the ignition on and start your vehicle.

Fast Restart

The fast restart feature allows you to restart your vehicle within 20 seconds of switching it off, even if it does not detect a valid passive key.

Within 20 seconds of switching the engine off, press the brake pedal and press the push button ignition switch. After 20 seconds, you can no longer start your vehicle if it does not detect a valid passive key.

Once your vehicle starts, it remains running until you press the push button ignition switch, even if your vehicle does not detect a valid passive key. If you open and close a door while your vehicle is running, the system searches for a valid passive key. You cannot start your vehicle if the system does not detect a valid passive key within 20 seconds.

Failure to Start

If you cannot start the engine after three attempts, wait 10 seconds and follow this procedure:

1. Fully depress the brake pedal.
2. Shift into park (P).
3. Fully depress the accelerator pedal and hold it there.
4. Start the engine.

Automatic Engine Shutdown

For vehicles with a keyless ignition, this feature automatically shuts down the engine if it has been idling for an extended period. The ignition also turns off in order to save battery power. Before your vehicle shuts down, a message appears in the information display showing a timer counting down from 30 seconds. If you do not intervene within 30 seconds, your vehicle shuts down. Another message appears in the information display to inform you that your vehicle has shut down to save fuel. Start your vehicle as you normally do.

Automatic Engine Shutdown Override

Note: *You cannot permanently switch off the automatic shutdown feature. When you switch it off temporarily, it turns on at the next ignition cycle.*

You can stop the shutdown, or reset the timer, at any point before the 30-second countdown has expired by doing any of the following:

- You can reset the timer by interacting with your vehicle, for example pressing the brake or accelerator pedal.
- You can temporarily switch off the shutdown feature any time the ignition is on using the information display. See **Information Displays** (page 92). The feature only remains off for the current ignition cycle.
- During the 30-second countdown, the system prompts you to press OK or RESET to temporarily switch the feature off for the current ignition cycle only.

Stopping the Engine When Your Vehicle is Stationary

Vehicles with an Ignition Key

1. Shift into park (P).
2. Switch the ignition off.
3. Apply the parking brake.

Vehicles with Keyless Start

1. Shift into park (P).
2. Press the push button ignition switch.
3. Apply the parking brake.

Note: *The ignition, all electrical circuits and all warning lamps and indicators will be turned off.*

Note: *If the engine is idling for 30 minutes, the ignition and engine automatically shut down.*

Stopping the Engine When Your Vehicle is Moving

WARNING

Switching off the engine when the vehicle is still moving will result in a loss of brake and steering assistance. The steering will not lock, but higher effort will be required. When the ignition is switched off, some electrical circuits, including air bags, warning lamps and indicators may also be off. If the ignition was turned off accidentally, you can shift into neutral (N) and re-start the engine.

Vehicles with an Ignition Key

1. Shift into neutral and use the brakes to bring your vehicle to a safe stop.
2. When your vehicle has stopped, shift into park (P) and switch the ignition off.
3. Apply the parking brake.

Vehicles with Keyless Start

1. Shift into neutral and use the brakes to bring your vehicle to a safe stop.
2. When your vehicle has stopped, shift into park (P).

3. Press and hold the push button ignition switch, or press it three times within two seconds.
4. Apply the parking brake.

Guarding Against Exhaust Fumes

WARNING

If you smell exhaust fumes inside your vehicle, have your vehicle checked by your authorized dealer immediately. Do not drive your vehicle if you smell exhaust fumes. Carbon monoxide is present in exhaust fumes. Take precautions to avoid its dangerous effects.

Important Ventilating Information

If you stop your vehicle and then leave the engine idling for long periods, we recommend that you do one of the following:

- Open the windows at least 1 in (3 cm).
- Set your climate control to outside air.

ENGINE BLOCK HEATER (If Equipped)

WARNINGS

Failure to follow engine block heater instructions could result in property damage or serious personal injury.

Do not use your heater with ungrounded electrical systems or two-pronged adapters. There is a risk of electrical shock.

Do not fully close the hood, or allow it to drop under its own weight when using the engine block heater. This could damage the power cable and may cause an electrical short resulting in fire, injury and property damage.

Note: *The heater is most effective when outdoor temperatures are below 0ºF (-18ºC).*

The heater acts as a starting aid by warming the engine coolant. This allows the climate control system to respond quickly. The equipment includes a heater element (installed in the engine block) and a wire harness. You can connect the system to a grounded 120-volt AC electrical source.

We recommend that you do the following for a safe and correct operation:

- Use a 16-gauge outdoor extension cord that is product certified by Underwriter's Laboratory (UL) or Canadian Standards Association (CSA). This extension cord must be suitable for use outdoors, in cold temperatures, and be clearly marked Suitable for Use with Outdoor Appliances. Do not use an indoor extension cord outdoors. This could result in an electric shock or become a fire hazard.
- Use as short an extension cord as possible.
- Do not use multiple extension cords.
- Make sure that when in operation, the extension cord plug and heater cord plug connections are free and clear of water. This could cause an electric shock or fire.
- Make sure your vehicle is parked in a clean area, clear of combustibles.
- Make sure the heater, heater cord and extension cord are firmly connected.
- Check for heat anywhere in the electrical hookup once the system has been operating for approximately 30 minutes.

- Make sure the system is unplugged and properly stowed before starting and driving your vehicle. Make sure the protective cover seals the prongs of the block heater cord plug when not in use.
- Make sure the heater system is checked for proper operation before winter.

Using the Engine Block Heater

Make sure the receptacle terminals are clean and dry prior to use. Clean them with a dry cloth if necessary.

The heater uses 0.4 to 1.0 kilowatt-hours of energy per hour of use. The system does not have a thermostat. It achieves maximum temperature after approximately three hours of operation. Using the heater longer than three hours does not improve system performance and unnecessarily uses electricity.

SAFETY PRECAUTIONS

WARNINGS

Do not overfill the fuel tank. The pressure in an overfilled tank may cause leakage and lead to fuel spray and fire.

The fuel system may be under pressure. If you hear a hissing sound near the fuel filler inlet, do not refuel until the sound stops. Otherwise, fuel may spray out, which could cause serious personal injury.

Automotive fuels can cause serious injury or death if misused or mishandled.

Flow of fuel through a fuel pump nozzle can produce static electricity. This can cause a fire if you are filling an ungrounded fuel container.

Gasoline may contain benzene, which is a cancer-causing agent.

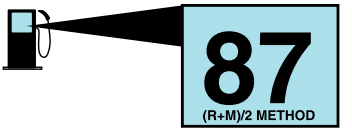
When refueling always shut the engine off and never allow sparks or open flames near the fuel tank filler valve. Never smoke or use a cell phone while refueling. Fuel vapor is extremely hazardous under certain conditions. Avoid inhaling excess fumes.

Observe the following guidelines when handling automotive fuel:

- Extinguish all smoking materials and any open flames before refueling your vehicle.
- Always turn off the vehicle before refueling.
- Automotive fuels can be harmful or fatal if swallowed. Fuel such as gasoline is highly toxic and if swallowed can cause death or permanent injury. If fuel is swallowed, call a physician immediately, even if no symptoms are immediately apparent. The toxic effects of fuel may not be visible for hours.
- Avoid inhaling fuel vapors. Inhaling too much fuel vapor of any kind can lead to eye and respiratory tract irritation. In severe cases, excessive or prolonged breathing of fuel vapor can cause serious illness and permanent injury.
- Avoid getting fuel liquid in your eyes. If fuel is splashed in the eyes, remove contact lenses (if worn), flush with water for 15 minutes and seek medical attention. Failure to seek proper medical attention could lead to permanent injury.
- Fuels can also be harmful if absorbed through the skin. If fuel is splashed on the skin, clothing or both, promptly remove contaminated clothing and wash skin thoroughly with soap and water. Repeated or prolonged skin contact with fuel liquid or vapor causes skin irritation.
- Be particularly careful if you are taking Antabuse or other forms of Disulfiram for the treatment of alcoholism. Breathing gasoline vapors could cause an adverse reaction, serious personal injury or sickness. If fuel is splashed on the skin, wash the affected areas immediately with plenty of soap and water. Consult a physician immediately if you experience any adverse reactions.

FUEL QUALITY

Choosing the Right Fuel



E161513

We recommend regular unleaded gasoline with a pump (R+M)/2 octane rating of 87. Some fuel stations offer fuels posted as regular unleaded gasoline with an octane rating below 87, particularly in high altitude areas. We do not recommend fuels with an octane rating below 87.

For vehicles with EcoBoost engines, to provide improved performance, we recommend premium fuel for severe duty usage such as trailer tow.

Do not use any fuel other than those recommended because they could lead to engine damage that may not be covered by the vehicle Warranty.

Note: *Use of any fuel other than those recommended can impair the emission control system and cause a loss of vehicle performance.*

Do not use:

- Diesel fuel.
- Fuels containing kerosene or paraffin.
- Fuel containing more than 15% ethanol or E85 fuel.
- Fuels containing methanol.
- Fuels containing metallic-based additives, including manganese-based compounds.
- Fuels containing the octane booster additive, methylcyclopentadienyl manganese tricarbonyl (MMT).
- Leaded fuel (using leaded fuel is prohibited by law).

The use of fuels with metallic compounds such as methylcyclopentadienyl manganese tricarbonyl (commonly known as MMT), which is a manganese-based fuel additive, will impair engine performance and affect the emission control system.

Do not be concerned if the engine sometimes knocks lightly. However, if the engine knocks heavily while using fuel with the recommended octane rating, contact an authorized dealer to prevent any engine damage.

FUEL FILLER FUNNEL LOCATION

The fuel filler funnel is in the rear under floor storage compartment.

RUNNING OUT OF FUEL

Running out of fuel can cause damage not covered by the vehicle Warranty.

If your vehicle runs out of fuel:

- Add a minimum of 1.3 gal (5 L) of fuel to restart the engine. If your vehicle is out of fuel and on a steep slope, more fuel may be required.
- You may need to switch the ignition from off to on several times after refueling to allow the fuel system to pump the fuel from the tank to the engine. When restarting, cranking time takes a few seconds longer than normal.

Filling a Portable Fuel Container

Use the following guidelines to avoid electrostatic charge build-up when filling an ungrounded fuel container:

- Only use an approved fuel container to transfer fuel to your vehicle. Place the container on the ground when filling it.
- Do not fill a fuel container when it is inside your vehicle (including the cargo area).
- Keep the fuel pump nozzle in contact with the fuel container when filling it.
- Do not use a device that holds the fuel pump nozzle lever in the fill position.

Adding Fuel From a Portable Fuel Container

WARNINGS

Do not insert the nozzle of a fuel container or an aftermarket funnel into the fuel system filler neck. This may damage the fuel system filler neck or its seal and cause fuel to run onto the ground.

Do not try to pry open or push open the capless fuel system with foreign objects. This could damage the fuel system and its seal and cause injury to you or others.

Do not dispose of fuel in the household refuse or the public sewage system. Use an authorized waste disposal facility.

When refueling the vehicle fuel tank from a fuel container, use the plastic funnel included with your vehicle. See **Fuel Filler Funnel Location** (page 152).

Note: *Do not use aftermarket funnels as they will not work with the capless fuel system and can damage it.*

When refueling the vehicle fuel tank from a fuel container, do the following:

1. Fully open the fuel tank filler door until it engages and remove the fuel tank filler cap.

Note: *Capless fuel systems do not have a fuel tank filler cap.*

2. Fully insert the plastic funnel into the fuel tank filler pipe opening.

3. Add fuel to your vehicle from the fuel container.
4. Remove the plastic funnel from the fuel tank filler pipe opening.
5. Replace the fuel tank filler cap and close the fuel tank filler door.
6. Clean the plastic funnel and place it back in your vehicle or properly dispose of it.

Note: *Extra funnels can be purchased from an authorized dealer if you choose to dispose of the funnel.*

REFUELING

WARNINGS

Fuel vapor burns violently and a fuel fire can cause severe injuries.

Read and follow all the instructions on the pump island.

WARNINGS

When refueling always shut the engine off and never allow sparks or open flames near the fuel tank filler valve. Never smoke or use a cell phone while refueling. Fuel vapor is extremely hazardous under certain conditions. Avoid inhaling excess fumes.

Stay outside your vehicle and do not leave the fuel pump unattended when refueling your vehicle. This is against the law in some places.

Keep children away from the fuel pump; never let children pump fuel.

Wait at least 10 seconds before removing the fuel pump nozzle to allow any residual fuel to drain into the fuel tank.

Stop refueling when the fuel pump nozzle automatically shuts off for the first time. Failure to follow this will fill the expansion space in the fuel tank and could lead to fuel overflowing.

Do not remove the fuel pump nozzle from its fully inserted position when refueling.

Use the following guidelines to avoid electrostatic charge build-up, which can produce a spark, when filling an ungrounded fuel container:

- Place approved fuel container on the ground.
- Do not fill a fuel container while it is in the vehicle (including the cargo area).
- Keep the fuel pump nozzle in contact with the fuel container while filling.
- Do not use a device that would hold the fuel pump handle in the fill position.

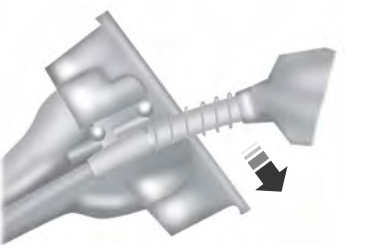
Easy Fuel™ Capless Fuel System

WARNING

The fuel system may be under pressure. If you hear a hissing sound near the fuel filler door, do not refuel until the sound stops. Otherwise, fuel may spray out, which could cause serious personal injury.

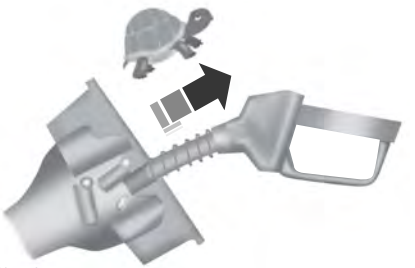
When fueling your vehicle:

1. When your vehicle has stopped, shift into park (P) and switch the ignition off.
2. Fully open the fuel tank filler door until it engages.



E156032

3. Insert the fuel pump nozzle up to the first notch on the nozzle. Hold handle higher during insertion for easier access. Leave the fuel pump nozzle fully inserted until you are done pumping.



E154765

4. Remove the fuel filler nozzle and fully close the fuel tank filler door.

Note: *A fuel spillage concern may occur if overfilling the fuel tank. Do not overfill the tank. The fill pipe is equipped with a drain hole. Excess fuel due to overfill may drain through the drain hole and drip onto the ground.*

If the fuel fill inlet was not properly closed, a service engine warning lamp may appear on the instrument cluster.

At the next opportunity, do the following:

1. Stop your vehicle as soon as safely possible and shift the transmission into park (P).
2. Switch the ignition off.
3. Open the fuel filler door and remove any visible debris from the fuel fill opening.
4. Insert either the fuel fill nozzle or the fuel fill funnel provided with the vehicle several times to allow the inlet to close properly. This will dislodge any debris preventing the inlet from sealing.

If this action corrects the problem, the message may not reset immediately. It may take several driving cycles for the message to turn off. A driving cycle consists of an engine start-up (after 4 or more hours with the engine off) followed by city or highway driving. Continuing to drive with the message on may cause the service engine soon lamp to turn on as well.

FUEL CONSUMPTION

Empty reserve is the amount of fuel remaining in the tank after the fuel gauge indicates empty. The amount of usable fuel in the empty reserve varies and should not be relied upon to increase driving range.

- The usable capacity of the fuel tank is the amount of fuel that can be added into the tank after the gauge indicates empty.
- The advertised capacity is the total fuel tank size. See **Capacities and Specifications** (page 307). It is the combined usable capacity plus the empty reserve.
- Due to the empty reserve, you may not be able to refuel the full amount of the advertised capacity of the fuel tank even when the fuel gauge reads empty.

Filling the Tank

For consistent results when refueling:

- Turn the ignition off before fueling; an inaccurate reading results if the engine is left running.
- Use the same fill rate (low-medium-high) each time the tank is filled.
- Allow no more than one automatic shut-off when refueling.

Results are most accurate when the filling method is consistent.

Calculating Fuel Economy

Do not measure fuel economy during the first 1,000 mi (1,600 km) of driving (this is your engine's break-in period). A more accurate measurement is obtained after 2,000 mi (3,200 km) to 3,000 mi (4,800 km). Also, fuel expense, frequency of fill ups or fuel gauge readings are not accurate ways to measure fuel economy.

1. Fill the fuel tank completely and record the initial odometer reading.
2. Each time you fill the fuel tank, record the amount of fuel added.
3. After at least three fill ups, fill the fuel tank and record the current odometer reading.
4. Subtract your initial odometer reading from the current odometer reading.

To calculate L/100 km (liters per 100 kilometers) fuel consumption, multiply the liters used by 100, then divide by kilometers traveled. To calculate MPG (miles per gallon) fuel consumption, divide miles traveled by gallons used.

Keep a record for at least one month and record the type of driving (city or highway). This provides an accurate estimate of your vehicle's fuel economy under current driving conditions. Keeping records during summer and winter will show how temperature impacts fuel economy.

Conditions

- Heavily loading your vehicle reduces fuel economy.
- Carrying unnecessary weight in your vehicle may reduce fuel economy.
- Adding certain accessories to your vehicle such as bug deflectors, rollbars or light bars, running boards and ski racks may reduce fuel economy.
- Using fuel blended with alcohol may lower fuel economy.
- Fuel economy may decrease with lower temperatures.
- Fuel economy may decrease when driving short distances.
- You will get better fuel economy when driving on flat terrain than when driving on hilly terrain.

EMISSION CONTROL SYSTEM

WARNINGS

Do not park, idle, or drive your vehicle in dry grass or other dry ground cover. The emission system heats up the engine compartment and exhaust system, which can start a fire.

Exhaust leaks may result in entry of harmful and potentially lethal fumes into the passenger compartment. If you smell exhaust fumes inside your vehicle, have your dealer inspect your vehicle immediately. Do not drive if you smell exhaust fumes.

Your vehicle is equipped with various emission control components and a catalytic converter that will enable your vehicle to comply with applicable exhaust emission standards. To make sure that the catalytic converter and other emission control components continue to work properly:

- Use only the specified fuel listed.
- Avoid running out of fuel.
- Do not turn off the ignition while your vehicle is moving, especially at high speeds.
- Have the items listed in scheduled maintenance information performed according to the specified schedule.

The scheduled maintenance items listed in scheduled maintenance information are essential to the life and performance of your vehicle and to its emissions system. See **Scheduled Maintenance** (page 378).

If you use parts other than Ford, Motorcraft or Ford-authorized parts for maintenance replacements, or for service of components affecting emission control, such non-Ford parts should be the equivalent to genuine Ford Motor Company parts in performance and durability.

Illumination of the service engine soon indicator, charging system warning light or the temperature warning light, fluid leaks, strange odors, smoke or loss of engine power could indicate that the emission control system is not working properly.

An improperly operating or damaged exhaust system may allow exhaust to enter the vehicle. Have a damaged or improperly operating exhaust system inspected and repaired immediately.

Do not make any unauthorized changes to your vehicle or engine. By law, vehicle owners and anyone who manufactures, repairs, services, sells, leases, trades vehicles, or supervises a fleet of vehicles are not permitted to intentionally remove an emission control device or prevent it from working. Information about your vehicle's emission system is on the Vehicle Emission Control Information Decal located on or near the engine. This decal also lists engine displacement

Please consult your warranty information for complete details.

On-Board Diagnostics (OBD-II)

Your vehicle has a computer known as the on-board diagnostics system (OBD-II) that monitors the engine's emission control system. The system protects the environment by making sure that your vehicle continues to meet government emission standards. The OBD-II system also assists a service technician in properly servicing your vehicle.

When the service engine soon indicator illuminates, the OBD-II system has detected a malfunction. Temporary malfunctions may cause the service engine soon indicator to illuminate.

Examples of temporary malfunctions are:

- the vehicle has run out of fuel—the engine may misfire or run poorly
- poor fuel quality or water in the fuel—the engine may misfire or run poorly
- the fuel fill inlet may not have closed properly. See **Refueling** (page 153).
- driving through deep water—the electrical system may be wet.

You can correct these temporary malfunctions by filling the fuel tank with good quality fuel, properly closing the fuel fill inlet or letting the electrical system dry out. After three driving cycles without these or any other temporary malfunctions present, the service engine soon indicator should stay off the next time you start the engine. A driving cycle consists of a cold engine startup followed by mixed city/highway driving. No additional vehicle service is required.

If the service engine soon indicator remains on, have your vehicle serviced at the first available opportunity. Although some malfunctions detected by the OBD-II may not have symptoms that are apparent, continued driving with the service engine soon indicator on can result in increased emissions, lower fuel economy, reduced engine and transmission smoothness, and lead to more costly repairs.

Readiness for Inspection/Maintenance (I/M) Testing

Some state/provincial and local governments may have Inspection/Maintenance (I/M) programs to inspect the emission control equipment on your vehicle. Failure to pass this inspection could prevent you from getting a vehicle registration.

If the service engine soon indicator is on or the bulb does not work, you may need to have the vehicle serviced. See On-Board Diagnostics (OBD-II).

Your vehicle may not pass the I/M test if the service engine soon indicator is on or not working properly (bulb is burned out), or if the OBD-II system has determined that some of the emission control systems have not been properly checked. In this case, your vehicle is not ready for I/M testing.

If the vehicle's engine or transmission has just been serviced, or the battery has recently run down or been replaced, the OBD-II system may indicate that the vehicle is not ready for I/M testing. To determine if the vehicle is ready for I/M testing, turn the ignition key to the on position for 15 seconds without cranking the engine. If the service engine soon indicator blinks eight times, it means that the vehicle is not ready for I/M testing; if the service engine soon indicator stays on solid, it means that the vehicle is ready for I/M testing.

The OBD-II system monitors the emission control system during normal driving. A complete check may take several days. If the vehicle is not ready for I/M testing, you may need to perform the following driving cycle consisting of mixed city and highway driving:

Drive on an expressway or highway for a steady 15 minutes, followed by 20 minutes of stop-and-go driving with at least four 30-second idle periods.

Allow the vehicle to sit for at least eight hours without starting the engine. Then, start the engine and complete the above driving cycle. The engine must warm up to its normal operating temperature. Once started, do not turn off the engine until the above driving cycle is complete. If the vehicle is still not ready for I/M testing, you will have to repeat the above driving cycle.

Expedition (TB7) Canada/United States of America, enUSA, Second Printing

AUTOMATIC TRANSMISSION

WARNINGS

Always set the parking brake fully and latch the gearshift in park (P). Turn the ignition to the off position and remove the key whenever you leave your vehicle.

Do not use the tow/haul feature when driving in icy or slippery conditions as the increased engine braking can cause the rear wheels to slide and your vehicle to swing around with the possible loss of vehicle control.

Selector Lever Positions

Column shift transmission:

E163184

Floor shift transmission:

E209112

Putting your vehicle in or out of gear:

1. Fully press down the brake pedal.
2. Move the gearshift lever into the desired gear.
3. Come to a complete stop.
4. Move the gearshift lever and securely latch it in park (P).

Park (P)

This position locks the transmission and prevents the rear wheels from turning.

Reverse (R)

With the gearshift lever in reverse (R), your vehicle will move backward. Always come to a complete stop before shifting into and out of reverse (R).

Neutral (N)

With the gearshift lever in neutral (N), your vehicle can be started and is free to roll. Hold the brake pedal down while in this position.

Drive (D)

Drive (D) is the normal driving position for the best fuel economy. The overdrive function allows automatic upshifts and downshifts through gears one through six.

Manual (M)

With the gearshift lever in manual (M), you can change gears up or down as desired by using buttons on the shift lever. See Understanding your SelectShift Automatic™ transmission later in this section.

Third (3) (Column Shifter Only)

Transmission operates in third (3) gear only. Use third (3) gear for improved traction on slippery roads.

Second (2)

Transmission operates in second (2) gear only. Use second (2) gear to start-up on slippery roads.

First (1)

- Transmission operates in first (1) gear only.
- Provides maximum engine braking.
- Allows upshifts by moving gearshift lever.
- Will not downshift into first (1) gear at high speeds; allows for first (1) gear when vehicle reaches slower speeds.

Tow/Haul Mode

TOW HAUL To activate tow/haul, press the button on the gearshift lever once. The TOW HAUL indicator light will illuminate in the instrument cluster.

The tow/haul feature:

- Delays upshifts to reduce the frequency of transmission shifting.
- Provides engine braking in all forward gears, which will slow your vehicle and assist you in controlling your vehicle when descending a grade.
- Depending on driving conditions and load conditions, may downshift the transmission, slow your vehicle and control your vehicle speed when descending a hill, without pressing the accelerator pedal. The amount of downshift braking provided will vary based upon the amount the brake pedal is pressed.

The tow/haul feature improves transmission operation when towing a trailer or a heavy load. All transmission gear ranges are available when using tow/haul.

To deactivate the tow/haul feature and return to normal driving mode, press the button on the gearshift lever twice. The TOW HAUL light will deactivate. Tow/haul will also deactivate when you power down your vehicle.

WARNING

Do not use the tow/haul feature when driving in icy or slippery conditions as the increased engine braking can cause the rear wheels to slide and your vehicle to swing around with the possible loss of vehicle control.

Forced Downshifts

- Allowed in drive (D) with the tow/haul feature on or off.
- Press the accelerator to the floor.
- Allows transmission to select an appropriate gear.

Automatic Transmission Adaptive Learning

This feature may increase durability and provide consistent shift feel over the life of your vehicle. A new vehicle or transmission may have firm shifts, soft shifts or both. This operation is considered normal and will not affect function or durability of the transmission. Over time, the adaptive learning process will fully update transmission operation.

Understanding your SelectShift Automatic™ Transmission (If Equipped)

Your vehicle is equipped with a SelectShift Automatic transmission gearshift lever. The SelectShift Automatic transmission gives you the ability to change gears up or down (without a clutch) as desired.

In order to prevent the engine from running at too low an RPM, which may cause it to stall, SelectShift will still automatically make some downshifts if it has determined that you have not downshifted in time. Although SelectShift will make some downshifts for you, it will still allow you to downshift at any time as long as the SelectShift determines that damage will not be caused to the engine from over-revving.

SelectShift will not automatically upshift, even if the engine is approaching the RPM limit. It must be shifted manually by pressing the + button.

Note: *Engine damage may occur if you maintain excessive engine revving without shifting.*

The SelectShift Automatic transmission feature has two modes: PRS and M mode.

Progressive Range Selection (PRS)

Progressive Range Selection gives you the ability to lockout gears from the automatic shifting range. This may provide you with an improved driving experience (for example, in slippery conditions or when experiencing a steep grade).

With the gearshift lever in drive (D), press the – button to active PRS. The available and selected gears are indicated on the instrument cluster.

All available gears will display with the current gear indicated. Press the – button again to lock out gears beginning with the highest gear. Example: press the – button twice to lock out 6th and 5th gears. Only the available gears will display and the transmission will automatically shift between the available gears. Press the + button to unlock gears to allow the transmission to shift to higher gears. The transmission will shift automatically within the gear range you select.

Manual (M)

Moving the gearshift lever to the manual (M) position will allow you to manually select the gear you desire. Only the current gear will display. Use the buttons on the gearshift lever to manually select gears. Press the + button to upshift or the – button to downshift. Return the transmission to a different gearshift position to deactivate manual control.

Upshift to the recommended shift speeds according to the following chart:

Upshifts when accelerating (recommended for best fuel economy)	
Shift from:	
1 – 2	15 mph (24 km/h)
2 – 3	25 mph (40 km/h)
3 – 4	40 mph (64 km/h)
4 – 5	45 mph (72 km/h)
5 – 6	50 mph (80 km/h)

Brake-Shift Interlock

WARNINGS

Do not drive your vehicle until you verify that the brake lamps are working.

When doing this procedure, you will be taking your vehicle out of park (P) which means your vehicle can roll freely. To avoid unwanted vehicle movement, always fully set the parking brake prior to doing this procedure. Use wheel chocks if appropriate.

If you fully release the parking brake and the brake warning lamp remains illuminated, the brakes may not be working properly. See your authorized dealer.

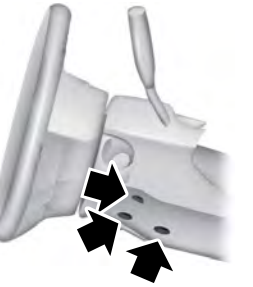
Your vehicle is equipped with a brake-shift interlock feature that prevents moving the gearshift lever from park (P) when the ignition is in the on position and the brake pedal is not pressed.

If you cannot move the gearshift lever out of park (P) position with the ignition in the on position and the brake pedal pressed, a malfunction may have occurred. It is possible that a fuse has blown or your vehicle's brake lamps are not operating properly. See **Fuse Specification Chart** (page 236).

If the fuse is not blown and the brake lamps are working properly, the following procedure will allow you to move the gearshift lever from park (P):

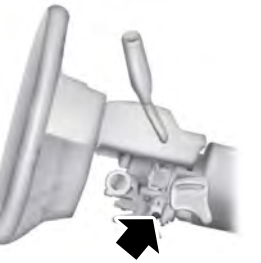
Column-shifter

1. Apply the parking brake. Turn the ignition key to the off position, then remove the key.
2. Move the steering column to the full down and full rearward position (toward the driver's seat).
3. Remove the gearshift lever boot.
4. Place fingers into gearshift lever boot hole and pull top half of shroud up and forward to separate it from the lower half of the shroud. There is a hinge at the forward edge of the top shroud. Roll the top half of the shroud upward on the hinge point to clear the hazard flasher button, then pull straight rearward toward the driver's seat to remove.
5. Remove the top half of the shroud.
6. Remove the three fasteners under the column that secure the lower shroud half to the column.



E163185

7. Pull the lock lever into the full unlocked position and remove the lower shroud cover by pulling the lever handle through the slot in the cover.



E163186

8. Apply the brake, pull the white disk then move the shifter to neutral (N).
9. Start your vehicle.

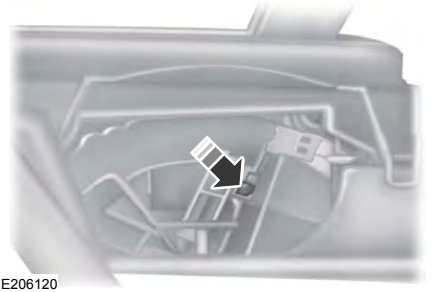
Perform Steps 4 through 8 in reverse order, making sure to engage the hinge pivots between the upper and lower halves of the shroud. Keep slight pressure in the forward direction as the halves rotate together.

Floor-shifter

1. Apply the parking brake. Turn the ignition key to the off position, then remove the key.

E206119

2. Starting at the rear of the trim panel, using a screwdriver (or similar tool), carefully pry up the trim panel from the rear attachments and disconnect it from the console to expose the inside of the gearshift.



E206120

3. Locate the brake shift interlock lever on the passenger side of the shifter assembly.
4. Apply the brake pedal. Using a screwdriver (or similar tool), press and hold the brake shift interlock lever while pulling the gearshift lever out of park (P) and into neutral (N).
5. Install the trim panel.
6. Apply the brake pedal, start the vehicle, and release the parking brake.

See your authorized dealer as soon as this procedure is used.

If Your Vehicle Gets Stuck In Mud or Snow

Note: *Do not rock your vehicle if the engine is not at normal operating temperature or damage to the transmission may occur.*

Note: *Do not rock your vehicle for more than a minute or damage to the transmission and tires may occur, or the engine may overheat.*

If your vehicle gets stuck in mud or snow, you may rock it out by shifting between forward and reverse gears, stopping between shifts in a steady pattern. Press lightly on the accelerator in each gear.

USING FOUR-WHEEL DRIVE

WARNING

For important information regarding safe operation of this type of vehicle, see General Information in the Wheels and Tires chapter.

Note: *Do not use 4H or 4L mode on dry, hard surfaced roads. Doing so will produce excessive noise, increase tire wear and may damage drive components. 4H and 4L mode is only intended for consistently slippery or loose surfaces.*

Note: *If 4L mode is selected while your vehicle is moving above 3 mph (5 km/h), the 4WD system will not perform a shift. This is normal and should be no reason for concern. Refer to Shifting to or from 4L for proper operation.*

4WD Indicator Lights

The indicator lights illuminate in the information display in the reconfigurable telltale (RTT) location under the following conditions. See **Warning Lamps and Indicators** (page 88).

Note: *When a 4X4 system fault is present, the system will typically remain in whichever 4WD mode was selected prior to the fault condition occurring. It will not default to 4X2 in all circumstances. When this warning is displayed, have your vehicle serviced by an authorized dealer.*

4X2

2H Momentarily illuminates when 2H is selected.

4X4 AUTO

4A Continuously illuminates when 4A is selected.

4X4 HIGH

4H Continuously illuminates when 4H is selected.

4X4 LOW

4L Continuously illuminates when 4L is selected.

4WD Switch Positions

WARNING

Utility and four-wheel drive vehicles are not designed for cornering at speeds as high as passenger cars any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions. Avoid sharp turns or abrupt maneuvers in these vehicles.

Note: *If your vehicle is equipped with AdvanceTrac® with RSC®, the system will automatically turn off the stability enhancement feature when you shift the 4WD system into 4L (4X4 LOW). You can manually turn the system off by pressing the AdvanceTrac button. See* ***Using Traction Control*** *(page 175). This will disable the engine management feature, allowing the vehicle to maintain full power and enhanced momentum through the obstacle. The brake traction enhancement feature will still be enabled.*

Note: *The Control Trac® selector switch should not be changed while the rear wheels are slipping.*

Expedition (TB7) Canada/United States of America, enUSA, Second Printing

E207350

The Control Trac® system functions in four modes:

- **2H** delivers power to the rear wheels only. The information display will momentarily display 2H when this mode is selected. This mode is appropriate for normal on-road driving on dry pavement and provides the best fuel economy.
- **4A** provides electronic control four-wheel drive with power delivered to all four wheels, as required, for increased traction. The information display will display 4A when this mode is selected. This mode is appropriate for all on-road driving conditions, such as dry road surfaces, wet pavement, snow, or gravel.
- **4H** provides electronically locked four-wheel drive power to front and rear wheels. The information display will display 4H when this mode is selected. This mode is not recommended for use on dry pavement. This mode is only intended for severe winter or off-road conditions, such as deep snow, ice or shallow sand.
- **4L** provides electronically locked four-wheel drive when extra power at reduced speeds is required. The information display will display 4L when this mode is selected. This mode is not recommended for use on dry pavement. Use this mode for off-road low-speed operation or when extra power is required, such as climbing steep grades, going through deep sand or pulling a boat out of the water.

Shifting between system modes

Note: *Momentarily releasing the accelerator pedal while a shift in progress message displays will improve engagement/disengagement performance.*

Note: *Do not perform this operation if the rear wheels are slipping.*

Note: *Some noise may be heard as the system shifts or engages; this is normal.*

You can move the control from 2H, 4A or 4H at a stop or while driving. The information display may display a message indicating a 4X4 shift is in progress. Once the shift is complete the information display will then display the system mode selected.

Shifting to or from 4L

Note: *4L mode is not intended for use on dry pavement.*

1. Bring the vehicle to a rolling speed of 3 mph (5 km/h) or less.
2. Place the gearshift in neutral (N).

3. Move the 4WD switch to the desired mode.

The information display will display a message indicating a 4X4 shift is in progress. The information display will then display the system mode selected.

If any of the above shift conditions are not met, the shift will not occur and the information display will display information guiding the driver through the proper range of shifting procedures.

If **SHIFT DELAYED PULL FORWARD** is displayed in the information display, transfer case gear tooth blockage is present. To alleviate this condition, place the transmission in a forward gear, move the vehicle forward approximately 5 ft (2 m), and shift the transmission back to neutral (N) to allow the transfer case to complete the range shift.

How Your Vehicle Differs From Other Vehicles

WARNING

Vehicles with a higher center of gravity such as utility and four-wheel drive vehicles handle differently than vehicles with a lower center of gravity. Utility and four-wheel drive vehicles are not designed for cornering at speeds as high as passenger cars any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions. Avoid sharp turns, excessive speed and abrupt maneuvers in these vehicles. Failure to drive cautiously could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.

Truck and utility vehicles can differ from some other vehicles. Your vehicle may be higher to allow it to travel over rough terrain without getting hung up or damaging underbody components.

The differences that make your vehicle so versatile also make it handle differently than an ordinary passenger car.

Maintain steering wheel control at all times, especially in rough terrain. Since sudden changes in terrain can result in abrupt steering wheel motion, make sure you grip the steering wheel from the outside. Do not grip the spokes.

Drive cautiously to avoid vehicle damage from concealed objects such as rocks and stumps.

You should either know the terrain or examine maps of the area before driving. Map out your route before driving in the area. To maintain steering and braking control of your vehicle, you must have all four wheels on the ground and they must be rolling, not sliding or spinning.

Driving Off-Road With Truck and Utility Vehicles

Note: *On some models, the initial shift from two-wheel drive to four-wheel drive while your vehicle is moving can cause some momentary clunk and ratcheting sounds. This is the front drivetrain coming up to speed and the automatic locking hubs engaging and is not cause for concern.*

Note: *Your vehicle may be equipped with a front air dam that can become damaged (due to reduced ground clearance) when taking your vehicle off-road. You may remove this air dam by removing eight bolts.*

Four-wheel drive vehicles are specially equipped for driving on sand, snow, mud and rough terrain and have operating characteristics that are somewhat different from conventional vehicles, both on and off the road.

The transfer case supples power to all four wheels. On four-wheel drive vehicles, the transfer case allows you to select different 4WD modes when necessary. You can find information on transfer case operation and shifting procedures in this chapter. You can find information on transfer case maintenance in the Maintenance chapter. You should become thoroughly familiar with this information before you operate your vehicle.

Four-wheel drive (when you select a 4WD mode) uses all four wheels to power your vehicle. This increases traction, enabling you to drive over terrain and road conditions that a conventional two-wheel drive vehicle cannot.

Basic Operating Principles

- Do not use 4H or 4L on dry, hard surfaced roads. Doing so will produce excessive noise, increase tire wear and may damage drive components. 4H or 4L modes are only intended for consistently slippery or loose surfaces.
- Drive slower in strong crosswinds which can affect the normal steering characteristics of your vehicle.
- When driving your vehicle on surfaces made slippery by loose sand, water, gravel, snow or ice proceed with care.

If Your Vehicle leaves the Road

If your vehicle leaves the road, reduce your vehicle speed and avoid severe braking. When your vehicle speed decreases, ease your vehicle back onto the road. Do not turn the steering wheel sharply while returning your vehicle to the road.

It may be safer to stay on the shoulder of the road and slow down gradually before returning to the road. You may lose control if you do not slow down or if you turn the steering wheel too sharply or abruptly.

It may be less risky to strike small objects, such as freeway reflectors, with minor damage to your vehicle rather than attempt a sudden return to the road which could cause your vehicle to slide sideways out of control or roll over. Remember, your safety and the safety of others should be your primary concern.

If your vehicle gets stuck

WARNING

Do not spin the wheels at over 35 mph (56 km/h). The tires may fail and injure a passenger or bystander.

Note: *Do not rock your vehicle if the engine is not at normal operating temperature, damage to the transmission may occur.*

Note: *Do not rock your vehicle for more than a minute, damage to the transmission and tires may occur or the engine may overheat.*

If your vehicle gets stuck in mud or snow it may be rocked out by shifting between forward and reverse gears, stopping between shifts, in a steady pattern. Press lightly on the accelerator in each gear.

Emergency Maneuvers

In an unavoidable emergency situation where a sudden sharp turn must be made, remember to avoid over-driving your vehicle (i.e. turn the steering wheel only as rapidly and as far as required to avoid the emergency). Excessive steering can result in loss of vehicle control. Apply smooth pressure to the accelerator pedal or brake pedal when changes in vehicle speed are required. Avoid abrupt steering, acceleration and braking. This could result in an increased risk of vehicle roll over, loss of vehicle control and personal injury. Use all available road surface to bring your vehicle to a safe direction of travel.

In the event of an emergency stop, avoid skidding the tires and do not attempt any sharp steering wheel movements.

If your vehicle goes from one type of surface to another (i.e. from concrete to gravel) there will be a change in the way your vehicle responds to a maneuver (i.e. steering, acceleration or braking).

Sand

When driving over sand, try to keep all four wheels on the most solid area of the trail. Avoid reducing the tire pressures but shift to a lower gear and drive steadily through the terrain. Apply the accelerator slowly and avoid excessive wheel slip.

Avoid driving at excessive speeds, this causes vehicle momentum to work against you and your vehicle could become stuck to the point that assistance may be required from another vehicle. Remember, you may be able to back out the way you came if you proceed with caution.

Mud and Water

Note: *Driving through deep water may damage the vehicle.*

If you must drive through high water, drive slowly. Traction or brake capability may be limited.

When driving through water, determine the depth and avoid water higher than the bottom of the hubs. If the ignition system gets wet, your vehicle may stall.

Once through water, always try the brakes. Wet brakes do not stop your vehicle as effectively as dry brakes. Drying can be improved by applying light pressure to the brake pedal while moving slowly.

Be cautious of sudden changes in vehicle speed or direction when you are driving in mud. Even 4WD vehicles can lose traction in slick mud. As when you are driving over sand, apply the accelerator slowly and avoid spinning your wheels. If the vehicle does slide, steer in the direction of the slide until you regain control of the vehicle.

If the transmission, transfer case or front axle are submerged in water, their fluids should be checked and changed, if necessary.

If the front or rear axle is submerged in water, the axle lubricant should be replaced.

After driving through mud, clean off residue stuck to rotating driveshafts and tires. Excess mud stuck on tires and rotating driveshafts causes an imbalance that could damage drive components.

E143950

“Tread Lightly” is an educational program designed to increase public awareness of land-use regulations and responsibilities in our nations wilderness areas. Ford Motor Company joins the U.S. Forest Service and the Bureau of Land Management in encouraging you to help preserve our national forest and other public and private lands by “treading lightly”.

Driving on Hilly or Sloping Terrain

Note: *Avoid driving crosswise or turning on steep slopes or hills.*

Note: *Avoid turning on steep slopes or hills. A danger lies in losing traction, slipping sideways and possible vehicle roll over. Whenever driving on a hill, determine beforehand the route you will use. Do not drive over the crest of a hill without seeing what conditions are on the other side. Do not drive in reverse over a hill without the aid of an observer.*

Although natural obstacles may make it necessary to travel diagonally up or down a hill or steep incline, you should always try to drive straight up or straight down.

When climbing a steep slope or hill, start in a lower gear rather than downshifting to a lower gear from a higher gear once the ascent has started. This reduces strain on the engine and the possibility of stalling.

If your vehicle stalls, do not try to turn around because this could cause vehicle roll over. It is better to reverse back to a safe location.

Apply just enough power to the wheels to climb the hill. Too much power will cause the tires to slip, spin or lose traction, resulting in loss of vehicle control.

E143949

Descend a hill in the same gear you would use to climb up the hill to avoid excessive brake application and brake overheating. Do not descend in neutral. Disengage overdrive or move the transmission selector lever to a lower gear. When descending a steep hill, avoid sudden hard braking as you could lose control. The front wheels have to be turning in order to steer your vehicle.

If your vehicle has anti-lock brakes, apply the brakes steadily. Do not pump the brakes.

Driving on Snow and Ice

WARNING

If you are driving in slippery conditions that require tire chains or cables, then it is critical that you drive cautiously. Keep speeds down, allow for longer stopping distances and avoid aggressive steering to reduce the chances of a loss of vehicle control which can lead to serious injury or death. If the rear end of your vehicle slides while cornering, steer in the direction of the slide until you regain control of your vehicle.

Four-wheel drive vehicles have advantages over two-wheel drive vehicles in snow and ice but can skid like any other vehicle. Should you start to slide while driving on snowy or icy roads, turn the steering wheel in the direction of the slide until you regain control.

Avoid sudden applications of power and quick changes of direction on snow and ice. Apply the accelerator slowly and steadily when starting from a full stop.

Avoid sudden braking. Although a four-wheel drive vehicle may accelerate better than a two-wheel drive vehicle in snow and ice, it will not stop any faster as braking occurs at all four wheels. Do not become overconfident as to road conditions.

Make sure you allow sufficient distance between you and other vehicles for stopping. Drive slower than usual and consider using one of the lower gears. In emergency stopping situations, apply the brake steadily. Do not pump the brake pedal. See **Hints on Driving With Anti-Lock Brakes** (page 172).

Maintenance and Modifications

The suspension and steering systems on your vehicle have been designed and tested to provide predictable performance whether loaded or empty. For this reason, we strongly recommend that you do not make modifications such as adding or removing parts (for example, lift kits or stabilizer bars) or by using replacement parts not equivalent to the original factory equipment.

We recommend that you use caution when your vehicle has either a high load or device (such as ladders or luggage racks). Any modifications to your vehicle that raise the center of gravity may cause your vehicle to roll over when there is a loss of vehicle control.

Failure to maintain your vehicle correctly may void the warranty, increase your repair cost, reduce vehicle performance and operational capabilities and adversely affect you and your passenger's safety. We recommend you frequently inspect your vehicle's chassis components when your vehicle is subject to off road usage.

Expedition (TB7) Canada/United States of America, enUSA, Second Printing

LIMITED SLIP DIFFERENTIAL

(If Equipped)

This axle provides added traction on slippery surfaces, particularly when one wheel is on a poor traction surface. Under normal conditions, the limited-slip axle functions like a standard rear axle. The axle may exhibit a slight noise or vibration during tight turns with low vehicle speed. This is normal behavior and indicates the axle is working.

GENERAL INFORMATION

Note: *Occasional brake noise is normal. If a metal-to-metal, continuous grinding or continuous squeal sound is present, the brake linings may be worn-out and an authorized dealer should check them. If the vehicle has continuous vibration or shudder in the steering wheel while braking, an authorized dealer should check your vehicle.*

Note: *Brake dust may accumulate on the wheels, even under normal driving conditions. Some dust is inevitable as the brakes wear and does not contribute to brake noise. See* ***Cleaning the Alloy Wheels*** *(page 273).*

See **Warning Lamps and Indicators** (page 88).

Wet brakes result in reduced braking efficiency. Gently press the brake pedal a few times when driving from a car wash or standing water to dry the brakes.

Brake Over Accelerator

In the event the accelerator pedal becomes stuck or entrapped, apply steady and firm pressure to the brake pedal to slow the vehicle and reduce engine power. If you experience this condition, apply the brakes and bring your vehicle to a safe stop. Switch the engine off, move the transmission to park (P) and apply the parking brake. Inspect the accelerator pedal and the area around it for any items or debris that may be obstructing its movement. If none are found and the condition persists, have your vehicle towed to the nearest authorized dealer.

Emergency Brake Assist

Emergency brake assist detects when you brake heavily by measuring the rate at which you press the brake pedal. It provides maximum braking efficiency as long as you press the pedal. Emergency brake assist can reduce stopping distances in critical situations.

Anti-lock Brake System

This system helps you maintain steering control during emergency stops by keeping the brakes from locking.

This lamp momentarily illuminates when you switch the ignition on. If the light does not illuminate during start up, remains on or flashes, the anti-lock braking system may be disabled. Have the system checked by an authorized dealer. If the anti-lock brake system is disabled, normal braking is still effective.

If the brake warning lamp illuminates with the parking brake released, have your brake system serviced immediately.

HINTS ON DRIVING WITH ANTI-LOCK BRAKES

Note: *When the system is operating, the brake pedal may pulse and may travel further. Maintain pressure on the brake pedal. You may also hear a noise from the system. This is normal.*

The anti-lock braking system will not eliminate the risks when:

- You drive too closely to the vehicle in front of you.
- Your vehicle is hydroplaning.
- You take corners too fast.
- The road surface is poor.

PARKING BRAKE

WARNING

Always set the parking brake fully and make sure the transmission is placed in park (P). Failure to set the parking brake and engage park could result in vehicle roll-away, property damage or bodily injury. Turn the ignition to the lock position and remove the key whenever you leave your vehicle.

Apply the parking brake whenever your vehicle is parked. Press the pedal downward to set the parking brake. The brake warning lamp in the instrument cluster will illuminate and remains illuminated until the parking brake is released.

To release, pull the brake release lever located at the lower left side of the instrument panel.

If you are parking your vehicle on a grade or with a trailer, press and hold the brake pedal down, then set the parking brake. There may be a little vehicle movement as the parking brake sets to hold the vehicle's weight. This is normal and should be no reason for concern. If needed, press and hold the service brake pedal down, then try reapplying the parking brake. Chock the wheels if required. If the parking brake cannot hold the weight of the vehicle, the parking brake may need to be serviced or the vehicle may be overloaded.

HILL START ASSIST

WARNINGS

The system does not replace the parking brake. When you leave your vehicle, always apply the parking brake and shift the transmission into park (P) (automatic transmission) or first gear (1) (manual transmission).

WARNINGS

You must remain in your vehicle once you have activated the system.

During all times, you are responsible for controlling your vehicle, supervising the system and intervening, if required.

If the engine is revved excessively, or if a malfunction is detected, the system will be deactivated.

The system makes it easier to pull away when your vehicle is on a slope without the need to use the parking brake.

When the system is active, your vehicle will remain stationary on the slope for two to three seconds after you release the brake pedal. This allows you time to move your foot from the brake to the accelerator pedal. The brakes release automatically when the engine has sufficient torque to prevent your vehicle from rolling down the grade. This is an advantage when pulling away on a slope, for example from a car park ramp, traffic lights or when reversing uphill into a parking space.

The system will activate automatically on any slope that will cause significant vehicle rollback. For vehicles with a manual transmission, you can switch this feature off using the information display. See **Information Displays** (page 92). The system will remain on or off depending on how it was last set.

Note: *There is no warning lamp to indicate the system is either on or off.*

Note: *If your vehicle is equipped with Auto Hold, Hill Start Assist will not be available while Auto Hold is active.*

Using Hill Start Assist

1. Bring your vehicle to a complete standstill. Keep the brake pedal pressed and select an uphill gear (for example, first (1) when facing uphill or reverse (R) when facing downhill).
2. If the sensors detect that your vehicle is on a slope, the system will activate automatically.
3. When you remove your foot from the brake pedal, your vehicle will remain on the slope without rolling away for about two or three seconds. This hold time will automatically be extended if you are in the process of driving off.
4. Drive off in the normal manner. The brakes will release automatically.

Switching the System On and Off

You can switch this feature on or off if your vehicle is equipped with a manual transmission and an information display. See **General Information** (page 92). The system remembers the last setting when you start your vehicle.

If your vehicle is not equipped with a manual transmission and an information display, you cannot turn the system on or off. When you switch the ignition on, the system automatically turns on.

PRINCIPLE OF OPERATION

The traction control system helps avoid drive wheel spin and loss of traction.

If your vehicle begins to slide, the system applies the brakes to individual wheels and, when needed, reduces engine power at the same time. If the wheels spin when accelerating on slippery or loose surfaces, the system reduces engine power in order to increase traction.

USING TRACTION CONTROL

WARNING

The stability and traction control light illuminates steadily if the system detects a failure. Make sure you did not manually disable the traction control system using the switch. If the stability control and traction control light is still illuminating steadily, have the system serviced by an authorized dealer immediately. Operating your vehicle with traction control disabled could lead to an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.

The system automatically turns on each time you switch the ignition on.

If your vehicle is stuck in mud or snow, switching traction control off may be beneficial as this allows the wheels to spin.

Note: *When you switch traction control off, stability control remains fully active.*

Switching the System Off

E166706

The switch for the stability and traction control system is on the instrument panel.

When you switch the system off, a message and an illuminated icon appear on the instrument cluster.

Use the switch again to return the traction control system to normal operation.

Your vehicle may have MyKey restrictions regarding this feature. See **Principle of Operation** (page 46).

System Indicator Lights and Messages

The stability and traction control light temporarily illuminates on engine start-up and flashes:

- When a driving condition activates either of the systems.
- If a problem occurs in either of the systems.

The stability and traction control off light temporarily illuminates on engine start-up and stays on:

- When you switch the traction control system off.
- When you select an alternative stability control mode.

PRINCIPLE OF OPERATION

WARNINGS

Vehicle modifications involving braking system, aftermarket roof racks, suspension, steering system, tire construction and wheel and tire size may change the handling characteristics of your vehicle and may adversely affect the performance of the electronic stability control system. In addition, installing any stereo loudspeakers may interfere with and adversely affect the electronic stability control system. Install any aftermarket stereo loudspeaker as far as possible from the front center console, the tunnel, and the front seats in order to minimize the risk of interfering with the electronic stability control sensors. Reducing the effectiveness of the electronic stability control system could lead to an increased risk of loss of vehicle control, vehicle rollover, personal injury and death.

Remember that even advanced technology cannot defy the laws of physics. It's always possible to lose control of a vehicle due to inappropriate driver input for the conditions. Aggressive driving on any road condition can cause you to lose control of your vehicle increasing the risk of personal injury or property damage. Activation of the electronic stability control system is an indication that at least some of the tires have exceeded their ability to grip the road; this could reduce the operator's ability to control the vehicle potentially resulting in a loss of vehicle control, vehicle rollover, personal injury and death. If your electronic stability control system activates, SLOW DOWN.

The system automatically turns on each time you switch the ignition on.

If a driving condition activates either the stability control or the traction control system you may experience the following conditions:

- The stability and traction control light flashes.
- Your vehicle slows down.
- Reduced engine power.
- A vibration in the brake pedal.
- The brake pedal is stiffer than usual.
- If the driving condition is severe and your foot is not on the brake, the brake pedal may move as the systems applies higher brake forces.

The stability control system has several features built into it to help you maintain control of your vehicle:

Electronic Stability Control

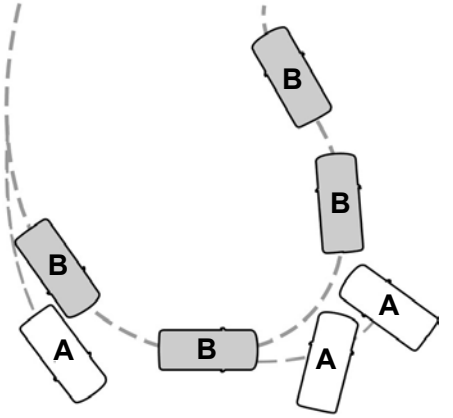
The system enhances your vehicle's ability to prevent skids or lateral slides by applying brakes to one or more of the wheels individually and, if necessary, reducing engine power.

Roll Stability Control

The system enhances your vehicle's ability to prevent rollovers by detecting your vehicle's roll motion and the rate at which it changes by applying the brakes to one or more wheels individually.

Traction Control

The system enhances your vehicle's ability to maintain traction of the wheels by detecting and controlling wheel spin. See **Using Traction Control** (page 175).



E72903

A Vehicle without stability control skidding off its intended route.

B Vehicle with stability control maintaining control on a slippery surface.

USING STABILITY CONTROL

Stability Control and Traction Control with Roll Stability Control™ (RSC™)

The system automatically activates when you start your engine. You can switch off the electronic stability control and roll stability control portions of the system below 35 mph (56 km/h). When the transmission is in reverse (R), they are disabled. You can switch off the traction control portion of the system independently. See **Using Traction Control** (page 175).

Stability Control and Traction Control with RSC Features				
Button functions	**Stability control OFF light**	**Roll stability control**	**Electronic stability control**	**Traction control system**
Default at start-up	Illuminated during bulb check	Enabled	Enabled	Enabled
Button pressed momentarily	Illuminated	Enabled	Enabled[1]	Disabled [1]
Button pressed and held for more than 5 seconds at vehicle speed under 35 mph (56 km/h)	Flashes then illuminated solid [2]	Disabled	Disabled	Disabled [4]

Stability Control and Traction Control with RSC Features				
Vehicle speed exceeds 35 mph (56 km/h) after button is pressed and held for more than 5 seconds	Illuminated	Enabled	Enabled[1]	Disabled[1]
Button pressed again after deactivation	Not illuminated	Enabled	Enabled	Enabled
Button not pressed and the transfer case is switched to 4WD Low[3]	Illuminated	Disabled	Disabled	Disabled [4]

[1]The traction control system may still be enabled but with higher entry thresholds compared to the full system. The electronic stability control entry thresholds are higher compared to the full system.

[2]When you press and hold the button for more than 5 seconds the indicator lamp blinks for three seconds.

[3]Your vehicle may or may not have this feature available. When you select 4WD low the stability control light illuminates and all stability control with RSC features are disabled.

[4]Engine traction control and two-wheel spin brake traction control functions are disabled. Single wheel spin traction control is always enabled.

USING HILL DESCENT CONTROL

Principle of Operation

WARNINGS

Hill descent control cannot control descent in all surface conditions and circumstances, such as ice or extremely steep grades. Hill descent control is a driver assist system and cannot substitute for good judgment by the driver. Failure to do so may result in loss of vehicle control, crash or serious injury.

Hill descent control does not provide hill hold at 0 mph (0 km/h). When stopped, the parking brake must be applied or the vehicle must be placed in park (P) or it may roll away.

Hill descent control allows the driver to set and maintain vehicle speed while descending steep grades in various surface conditions.

Hill descent control can maintain vehicle speeds on downhill grades between 3 mph (5 km/h) and 20 mph (32 km/h). Above 20 mph (32 km/h), the system remains armed, but descent speed cannot be set or maintained.

Hill descent control requires a cooling down interval after sustained use. The amount of time that the feature can remain active before cooling varies with conditions. The system provides a warning in the message center and a chime sounds when the system is about to disengage for cooling. At this time, manually apply the brakes to maintain descent speed.

Using Hill Descent Control

Press and release the hill descent button in the center of the terrain management control. The button illuminates and a chime sounds when you switch this feature on.

To increase descent speed, press the accelerator pedal until you reach the desired speed. To decrease descent speed, press the brake pedal until you reach the desired speed.

Whether accelerating or decelerating, once you reach the desired descent speed, remove your feet from the pedals and hill descent control maintains the chosen vehicle speed.

Note: *You may observe noise from the ABS pump motor during hill descent control operation. This is a normal characteristic of the ABS and should be no reason for concern.*

Hill Descent Modes

Information Display Message	Description
Hill Descent Control Active	Displays at speeds below 20 mph (32 km/h) when you press the Hill Descent Control and Hill Descent Control activates.
Hill Descent Control Ready	Displays at speeds below 20 mph (32 km/h) when you press the Hill Descent Control switch and conditions are not correct for hill descent activation.
For Hill Descent Reduce Speed 20MPH or Less	Displays at speeds above 20 mph (32 km/h) when you press the Hill Descent Control switch.
For Hill Descent Select Gear	Displays when you press the Hill Descent Control switch and the vehicles is in park (P) or neutral (N).

Refer to the Information Displays for additional Hill Descent Control messages. See **Information Messages** (page 103).

PRINCIPLE OF OPERATION

WARNINGS

To help avoid personal injury, please read and understand the limitations of the system as contained in this section. Sensing is only an aid for some (generally large and fixed) objects when moving on a flat surface at parking speeds. Certain objects with surfaces that absorb ultrasonic waves, surrounding vehicle's parking aid systems, traffic control systems, fluorescent lamps, inclement weather, air brakes, and external motors and fans may also affect the function of the sensing system; this may include reduced performance or a false activation.

To help avoid personal injury, always use caution when in reverse (R) and when using the sensing system.

This system is not designed to prevent contact with small or moving objects. The system is designed to provide a warning to assist the driver in detecting large stationary objects to avoid damaging your vehicle. The system may not detect smaller objects, particularly those close to the ground.

Certain add-on devices such as large trailer hitches, bike or surfboard racks and any device that may block the normal detection zone of the system, may create false beeps.

Note: *Keep the sensors, located on the bumper or fascia, free from snow, ice and large accumulations of dirt. If the sensors are covered, the system's accuracy can be affected. Do not clean the sensors with sharp objects.*

Note: *If your vehicle sustains damage to the bumper or fascia, leaving it misaligned or bent, the sensing zone may be altered causing inaccurate measurement of obstacles or false alarms.*

Note: *The sensing system cannot be turned off when a MyKey is present. See* ***Principle of Operation*** *(page 46).*

Note: *If you attach certain add-on devices such as a trailer or bike rack, the rear sensing system may detect that add-on device and therefore provide warnings. It is suggested that you disable the rear sensing system when you attach an add-on device to your vehicle to prevent these warnings.*

The sensing system warns the driver of obstacles within a certain range of your vehicle. The system turns on automatically whenever you switch the ignition on.

The system can be switched off through the information display menu or from the pop-up message that appears once you shift the transmission into reverse (R). See **General Information** (page 92).

If a fault is present in the system, a warning message appears in the information display. See **Information Messages** (page 103).

REAR PARKING AID

The rear sensors are only active when the transmission is in reverse (R). As your vehicle moves closer to the obstacle, the rate of the audible warning increases. When the obstacle is less than 10 in (25 cm) away, the warning sounds continuously. If the system detects a stationary or receding object farther than 10 in (25 cm) from the corners of the bumper, the tone sounds for only three seconds. Once the system detects an object approaching, the warning sounds again.

E130178

Coverage area of up to 6 ft (1.8 m) from the rear bumper. There may be decreased coverage area at the outer corners of the bumper.

The system detects certain objects while the transmission is in reverse (R) :

- Your vehicle is moving toward a stationary object at a speed of 3 mph (5 km/h) or less.
- Your vehicle is not moving, but a moving object is approaching the rear of your vehicle at a speed of 3 mph (5 km/h) or less.
- Your vehicle is moving at a speed of less than 3 mph (5 km/h) and a moving object is approaching the rear of your vehicle at a speed of less than 3 mph (5 km/h).

FRONT PARKING AID

The front sensors are active when the transmission is in any position other than park (P) and the vehicle speed is below 8 mph (13 km/h).

E187330

Coverage area of up to 28 in (70 cm) from the front bumper. There is decreased coverage area at the outer corners.

The system sounds an audible warning when obstacles are near either bumper in the following manner:

- Objects detected by the front sensors are indicated by a high-pitched tone from the front of the vehicle.
- Objects detected by the rear sensors are indicated by a lower pitched tone from the rear of the vehicle.
- The sensing system reports the obstacle which is closest to the front or rear of the vehicle. For example, if an obstacle is 12 in (30 cm) from the front of the vehicle and, at the same time, an obstacle is only 6 in (15 cm) from the rear of the vehicle, the lower pitched tone sounds.
- An alternating warning sounds from the front and rear if there are objects at both bumpers that are closer than 10 in (25 cm).

REAR VIEW CAMERA

WARNINGS

The rear view camera system is a reverse aid supplement device that still requires the driver to use it in conjunction with the interior and exterior mirrors for maximum coverage.

Objects that are close to either corner of the bumper or under the bumper, might not be seen on the screen due to the limited coverage of the camera system.

Back up as slow as possible since higher speeds might limit your reaction time to stop your vehicle.

Use caution when using the rear video camera and the luggage compartment door is ajar. If the luggage compartment door is ajar, the camera will be out of position and the video image may be incorrect. All guidelines disappear when the luggage compartment door is ajar.

Use caution when turning camera features on or off. Make sure your vehicle is not moving.

The rear view camera system provides a video image of the area behind your vehicle.

During operation, lines appear in the display which represent your vehicle's path and proximity to objects behind your vehicle.

E142435

The camera is located on the luggage compartment door.

Using the Rear View Camera System

The rear view camera system displays what is behind your vehicle when you place the transmission in reverse (R).

The system uses two types of guides to help you see what is behind your vehicle:

- Fixed guidelines: Show the actual path your vehicle is moving in while reversing in a straight line. This can be helpful when backing into a parking space or aligning your vehicle with another object behind you.
- Centerline: Helps align the center of your vehicle with an object (for example, a trailer).

Note: *The image may remain on momentarily when you shift the transmission out of reverse (R). If your vehicle speed reaches 6 mph (10 km/h) or 10 seconds elapse and the image remains on, have your system inspected by an authorized dealer.*

Note: *When towing, the camera only sees what you are towing behind your vehicle. This might not provide adequate coverage as it usually provides in normal operation and you might not see some objects. In some vehicles, the guidelines may disappear once you engage the trailer tow connector.*

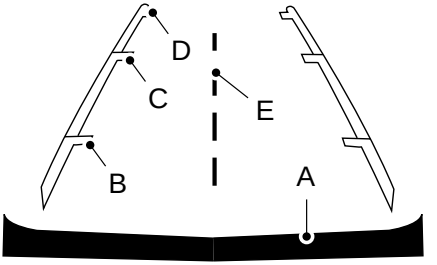
The camera may not operate correctly under the following conditions:

- Nighttime or dark areas if one or both reverse lamps are not operating.
- Mud, water or debris obstructs the camera's view. Clean the lens with a soft, lint-free cloth and non-abrasive cleaner.
- The camera is misaligned due to damage to the rear of your vehicle.

Camera Guidelines

Note: *Fixed guidelines are only available when the transmission is in reverse (R).*

Note: *The centerline is only available if fixed guidelines are on.*



E163914

A	Rear bumper
B	Fixed guideline: Red Zone
C	Fixed guideline: Yellow zone
D	Fixed guideline: Green zone
E	Centerline

Always use caution while reversing. Objects in the red zone are closest to your vehicle and objects in the green zone are farther away. Objects are getting closer to your vehicle as they move from the green zone to the yellow or red zones. Use the side view mirrors and rear view mirror to get better coverage on both sides and rear of the vehicle.

Camera System Settings

Rear view camera system settings can be accessed through the multifunctional display. See **General Information** (page 92).

Enhanced Park Aids or Park Pilot

Selectable settings for this feature are ON and OFF.

The system uses red, yellow and green highlights which appear on top of the video image when an object is detected by the reverse sensing system. The alert highlights the closest object detected. The reverse sensing alert can be disabled and if visual park aid alert is enabled, highlighted areas are still displayed.

Manual Zoom

WARNING

When manual zoom is on, the full area behind your vehicle is not shown. Be aware of your surroundings when using the manual zoom feature.

Note: *Manual zoom is only available when the transmission is in reverse (R).*

Note: *Only the centerline shows when you enable manual zoom.*

Selectable settings for this feature are Zoom in (+) and Zoom out (-). Press the symbol on the camera screen to change the view. The default setting is Zoom OFF.

This allows you to get a closer view of an object behind your vehicle. The zoomed image keeps the bumper in the image to provide a reference. The zoom is only active while the transmission is in reverse (R).

Rear Camera Delay

Selectable settings for this feature are ON and OFF. The default setting for the rear camera delay is OFF.

When shifting the transmission out of reverse (R) and into any gear other than park (P), the camera image remains in the display until:

- Your vehicle speed sufficiently increases.
- You shift your vehicle into park (P).

PRINCIPLE OF OPERATION

Cruise control lets you maintain a set speed without keeping your foot on the accelerator pedal. You can use cruise control when your vehicle speed is greater than 20 mph (30 km/h).

USING CRUISE CONTROL

WARNINGS

Do not use cruise control on winding roads, in heavy traffic or when the road surface is slippery. This could result in loss of vehicle control, serious injury or death.

When you are going downhill, your vehicle speed may increase above the set speed. The system will not apply the brakes but a warning displays. Failure to follow this warning could result in serious personal injury or death.

Note: *Cruise control will disengage if the vehicle speed decreases more than 10 mph (16 km/h) below the set speed while driving uphill.*

E208730

The cruise controls are on the steering wheel.

Switching Cruise Control On and Off

Switching Cruise Control On

Press and release **ON**.

The indicator appears in the instrument cluster.

Setting the Cruise Speed

1. Drive to desired speed.
2. Press and release **SET+**.
3. Take your foot off the accelerator pedal.

The indicator changes color in the instrument cluster.

Changing the Set Speed

Note: *If you accelerate by pressing the accelerator pedal, the set speed will not change. When you release the accelerator pedal, your vehicle returns to the speed that you previously set.*

- Press and release **SET+** or **SET-**. When you select km/h as the display measurement in the Information display the set speed changes in approximately 2 km/h increments. When you select mph as the display measurement in the information display the set speed changes in approximately 1 mph increments.
- Press the accelerator or brake pedal until you reach the desired speed. Press and release **SET +**.
- Press and hold **SET+** or **SET-**. Release the control when you reach the desired speed.

Canceling the Set Speed

Press and release **CNCL** or tap the brake pedal. The set speed does not erase.

Resuming the Set Speed

Press and release **RSM**.

Switching Cruise Control Off

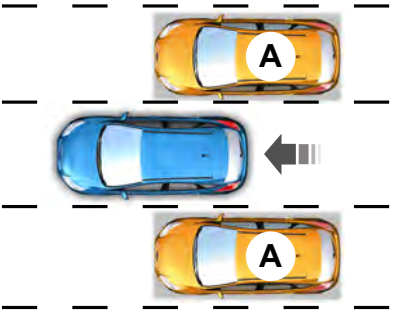
Press and release **OFF** when the system is in stand by mode or switch the ignition off.

Note: *You erase the set speed when you switch the system off.*

BLIND SPOT INFORMATION SYSTEM

WARNING

To help avoid injuries, NEVER use the Blind Spot Information System as a replacement for using the interior and exterior mirrors or looking over your shoulder before changing lanes. The Blind Spot Information System is not a replacement for careful driving.



E124788

The Blind Spot Information System is designed to aid you in detecting vehicles that may have entered the blind spot zone (A). The detection area is on both sides of your vehicle, extending rearward from the exterior mirrors to approximately 13 ft (4 m) beyond the bumper. The system is designed to alert you if certain vehicles enter the blind spot zone while driving.

Note: *The Blind Spot Information System does not prevent contact with other vehicles or objects; nor detect parked vehicles, people, animals or infrastructure (fences, guardrails, trees). It's only designed to alert you to vehicles in the blind spot zones.*

Note: *When a vehicle passes quickly through the blind spot zone, typically fewer than two seconds, the system does not trigger.*

Using the System

The Blind Spot Information System turns on when you start the engine and you drive your vehicle forward above 5 mph (8 km/h).

For automatic transmissions, the Blind Spot Information System remains on while the transmission is in drive (D). If shifted into reverse (R) or park (P) the Blind Spot Information System turns off. Once shifted back into drive (D), the Blind Spot Information System turns back on when you drive your vehicle above 5 mph (8 km/h).

For manual transmissions, the Blind Spot Information System is on for all gears except the reverse (R).

Note: *The Blind Spot Information System does not function in reverse (R) or park (P).*

System Lights and Messages

E142442

The Blind Spot Information System illuminates an amber alert indicator in the outside mirror on the side of your vehicle the approaching vehicle is coming from. When the Blind Spot Information System is alerting on a vehicle and the corresponding turn signal is ON, the Blind Spot Information System alert indicator flashes as an increased warning level.

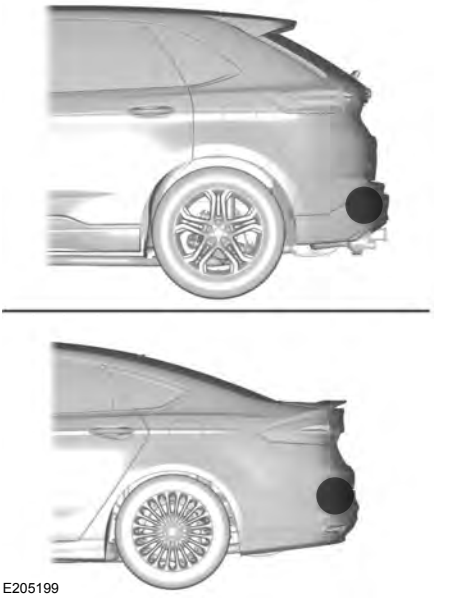
The alert indicator dims when the system detects nighttime darkness.

Note: *The alert indicator flashes in case of an alert and the turn signal is set to that side at the same time.*

System Sensor Blockage

WARNING

To help avoid injuries, NEVER use the Blind Spot Information System as a replacement for using the interior and exterior mirrors or looking over your shoulder before changing lanes. The Blind Spot Information System is not a replacement for careful driving.



The system uses radar sensors that are located behind the bumper fascia on each side of your vehicle. Any dirt, mud and snow in front of the sensors and/or driving in heavy rain can cause system degradation. Also, other types of obstructions in front of the sensor can cause system degradation. This is referred to as a ‘blocked’ condition.

Note: *Do not apply bumper stickers and/or repair compound to these areas, this can cause degraded system performance.*

If the system detects a degraded performance condition, a message warning of a blocked sensor will appear in the information display. Also the BLIS alert indicators will remain ON and BLIS will no longer provide any vehicle warnings. You can clear the information display warning but the alert indicators will remain illuminated.

A "blocked" condition can be cleared in two ways:

- After the blockage in front of the sensors is removed or the rainfall/snowfall rate decreases or stops, drive for a few minutes in traffic to allow the sensors to detect passing vehicles.
- By cycling the ignition from ON to OFF and then back ON.

Note: *If your vehicle has a tow bar with a factory equipped trailer tow module and it is towing a trailer, the sensors will automatically turn the Blind Spot Information System off. If your vehicle has a tow bar but no factory equipped trailer tow module, it is recommended to turn the Blind Spot Information System off manually. Operating the Blind Spot Information System with a trailer attached will cause poor system performance.*

System Errors

If the system senses a problem with the left or right sensor, the telltale will illuminate and a message will appear in the information display. See **Information Messages** (page 103).

Switching the System Off and On

You can temporarily switch the Blind Spot Information System off in the information display. See **General Information** (page 92). When the Blind Spot Information System switches off, you will not receive alerts and the information display shows a system off message. The telltale in the cluster also illuminates. When you switch the Blind Spot Information System on or off, the alert indicators flash twice.

Note: *The Blind Spot Information System remembers the last selected on or off setting.*

You can also have the Blind Spot Information System switched off permanently at an authorized dealer. Once switched off permanently, the system can only be switched back on at an authorized dealer.

CROSS TRAFFIC ALERT

WARNING

To help avoid personal injury, NEVER use the Cross Traffic Alert system as a replacement for using the interior and exterior mirrors and looking over your shoulder before backing out of a parking space. Cross Traffic Alert is not a replacement for careful driving.

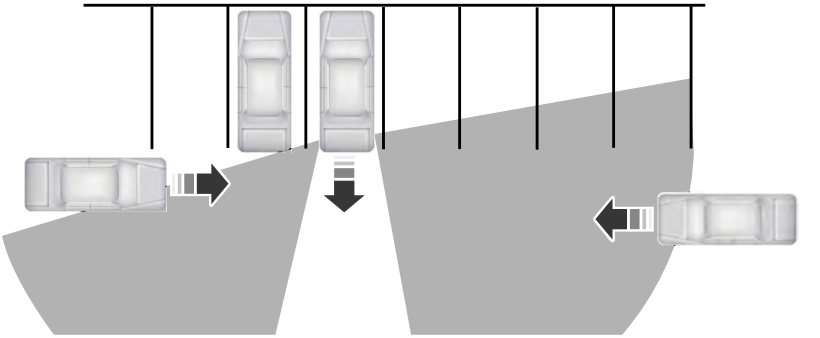
Cross Traffic Alert is designed to warn you of vehicles approaching from the sides when the transmission is in reverse (R).

Using the System

Cross Traffic Alert turns on when you start the engine and you shift into reverse (R). Once shifted out of reverse (R), Cross Traffic Alert turns off.

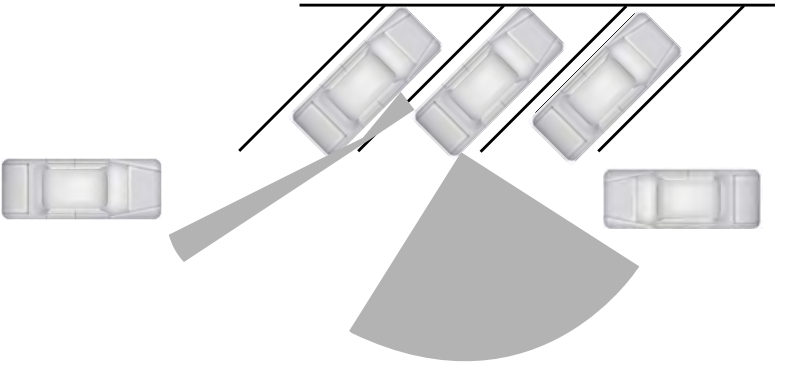
Note: *Cross Traffic Alert only functions while your transmission is in reverse (R).*

Cross Traffic Alert is designed to detect vehicles that approach with a speed up to 37 mph (60 km/h). Coverage decreases when the sensors are partially, mostly or fully obstructed. Reversing slowly helps increase the coverage area and effectiveness.



E142440

In this first example, the left sensor is only partially obstructed; zone coverage to the right is nearly maximized.



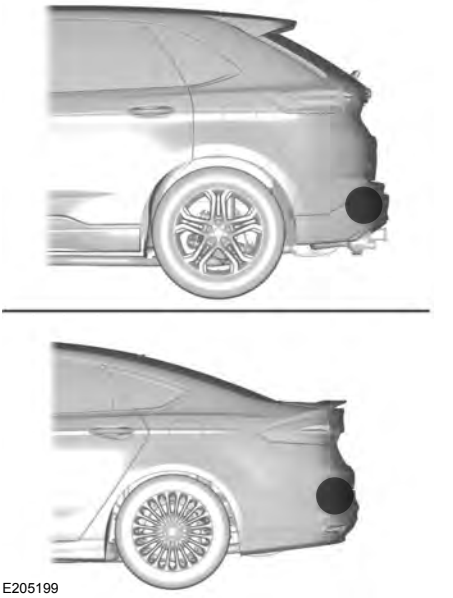
E142441

Zone coverage also decreases when parking at shallow angles. Here, the left sensor is mostly obstructed; zone coverage on that side is severely limited.

System Lights, Messages and Audible Alerts

E142442

The Cross Traffic Alert illuminates an amber alert indicator in the outside mirror on the side of your vehicle the approaching vehicle is coming from. Cross Traffic Alert also sounds an audible alert and a message appears in the information display indicating a vehicle is coming from the right or left. Cross Traffic Alert works with the reverse sensing system that sounds its own series of tones. See **Rear Parking Aid** (page 181).



E205199

The system uses radar sensors that are located behind the bumper fascia on each side of your vehicle. Do not allow mud, snow or bumper stickers to obstruct these areas, this can cause degraded system performance. See **Blind Spot Information System** (page 188). If the Blind Spot Information System is blocked, Cross Traffic Alert is also blocked. A corresponding message appears in the information display as soon as you shift the transmission into reverse (R).

System Limitations

Cross Traffic Alert has its limitations; situations such as severe weather conditions or debris build-up on the sensor area may limit vehicle detection.

The following are other situations that may limit the Cross Traffic Alert performance:

- Adjacently parked vehicles or objects obstructing the sensors.
- Approaching vehicles passing at speeds greater than 37 mph (60 km/h).
- Driving in reverse faster than 7 mph (12 km/h).
- Backing out of an angled parking spot.

False Alerts

Note: *If your vehicle has a tow bar with a factory equipped trailer tow module and it is towing a trailer, the sensors will automatically turn the Cross Traffic Alert off. If your vehicle has a tow bar but no factory equipped trailer tow module, it is recommended to turn the Cross Traffic Alert off manually. Operating Cross Traffic Alert with a trailer attached will cause poor Cross Traffic Alert performance.*

There may be certain instances when there is a false alert by the Cross Traffic Alert system that illuminates the alert indicator with no vehicle in the coverage zone. Some amount of false alerts are normal; they are temporary and self-correct.

System Errors

If Cross Traffic Alert senses a problem with the left or right sensor a message will appear in the information display. See **Information Messages** (page 103).

Switching the System Off and On

You can temporarily switch Cross Traffic Alert off in the information display. See **General Information** (page 92). When you switch Cross Traffic Alert off, you will not receive alerts and the information display will display a system off message.

Note: *The Cross Traffic Alert switches on whenever the ignition is switched on and ready to provide appropriate alerts when the transmission is in reverse (R). Cross Traffic Alert will not remember the last selected on or off setting.*

You can also have Cross Traffic Alert switched off permanently at an authorized dealer. Once switched off permanently, the system can only be switched back on at an authorized dealer.

STEERING

Electric Power Steering

WARNINGS

The electric power steering system has diagnostic checks that continuously monitor the system. If a fault is detected, a message displays in the information display. Stop your vehicle as soon as it is safe to do so. Switch the ignition off. After at least 10 seconds, switch the ignition on and watch the information display for a steering system warning message. If a steering system warning message returns, have the system checked by an authorized dealer.

If the system detects an error, you may not feel a difference in the steering, however a serious condition may exist. Obtain immediate service from an authorized dealer, failure to do so may result in loss of steering control.

Your vehicle has an electric power steering system. There is no fluid reservoir. No maintenance is required.

If your vehicle loses electrical power while you are driving, electric power steering assistance is lost. The steering system still operates and you can steer your vehicle manually. Manually steering your vehicle requires more effort.

Extreme continuous steering may increase the effort required for you to steer your vehicle. This increased effort prevents overheating and permanent damage to the steering system. You do not lose the ability to steer your vehicle manually. Typical steering and driving maneuvers allow the system to cool and return to normal operation.

Steering Tips

If the steering wanders or pulls, check for:

- Correct tire pressures.
- Uneven tire wear.
- Loose or worn suspension components.
- Loose or worn steering components.
- Improper vehicle alignment.

Note: *A high crown in the road or high crosswinds may also make the steering seem to wander or pull.*

Adaptive Learning

The electronic power steering system adaptive learning helps correct road irregularities and improves overall handling and steering feel. It communicates with the brake system to help operate advanced stability control and accident avoidance systems. Additionally, whenever the battery is disconnected or a new battery installed, you must drive your vehicle a short distance before the system relearns the strategy and reactivates all systems.

DRIVE CONTROL

Driver Select Suspension (If Equipped)

Driver select suspension delivers a unique driving experience through a suite of sophisticated electronic vehicle systems. These systems continuously monitor your driving inputs and the road conditions to optimize ride comfort, steering and handling.

Driver select suspension consists of the following systems:

- Continuously controlled damping dynamically adjusts the shock absorbers stiffness in real time to match the road surface and driver inputs. This system continuously monitors your vehicle's motion (roll, pitch, bounce), suspension position, load, speed, road conditions, and steering to adjust the suspension damping for optimal vehicle control.
- Electronically power-assisted steering adjusts steering effort and feel based on your vehicle speed and your inputs.

The configuration remains active until modified from the main menu on the information display. See **General Information** (page 92).

Modes:

- Comfort – Provides a more relaxed driving experience, maximizing comfort. Your steering effort decreases and the suspension movement is more fluid. Comfort mode is ideal when you desire enhanced traveling comfort.
- Normal – Delivers a balanced combination of comfortable, controlled ride and confident handling. This mode provides an engaging drive experience and a direct connection to the road without sacrificing any of the composure demanded from your vehicle.
- Sport – Provides a sportier driving experience. The suspension stiffens, with an emphasis on handling and control. The engine responds more directly to your inputs. Sport mode is ideal for use during more spirited driving.

SELF-LEVELING SUSPENSION

The self-leveling suspension system is designed to improve ride, handling and general vehicle performance during:

- Certain road conditions
- Steering maneuvers
- Braking
- Acceleration
- Towing

This system keeps the rear of your vehicle at a constant level through a hydraulic pump inside each rear shock. Depending on the payload or road surface conditions it will take approximately 2 mi (3.2 km) for the leveling to complete.

If the loaded vehicle is not moved for approximately 12 hours, the leveling system may bleed down to a lower height. This can be especially apparent if a trailer is left attached to the parked vehicle for long periods of time. You must drive your vehicle in order to re-level the suspension.

If a self-equalizing hitch is used, your vehicle should be driven approximately 2 mi (3.2 km) with the trailer prior to adjusting (leveling) the hitch.

REAR UNDER FLOOR STORAGE (If Equipped)

Cargo Management System

E205355

A storage compartment is located in the floor of the rear cargo area.

Lift up on the handle to open the cover.

To close, lower the cover and press down on the handle until the latch clicks.

Cargo Shelf and Divider (If Equipped)

WARNINGS

Do not load any objects on the shelf that may obstruct your vision or strike occupants of the vehicle in the case of a sudden stop or collision.

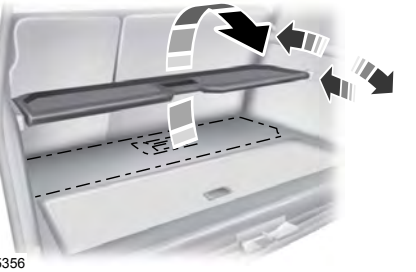
Do not place people or pets on or under the parcel shelf.

Note: *Do not put more than 30 lb (14 kg) on shelf.*

The cargo shelf and divider is located behind the rear seat of your vehicle and has two positions:

- A flat shelf, which pivots up and snaps into place.
- A divider, which pivots up and snaps vertically into place.

To move the shelf to the shelf position:



E205356

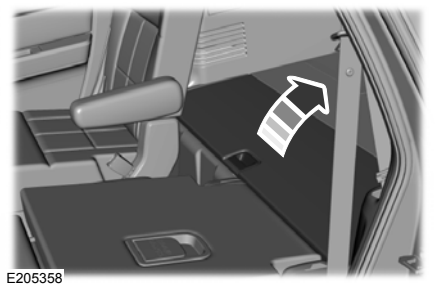
Pull up and pivot the shelf over the channels on the side trim panels and snap the shelf ends in the channels.

To move the shelf to the divider position:

E205357

Pull up and pivot the shelf over the channels on the side trim panels and snap vertically in place.

Third Row Storage Bin (If Equipped)


E205358

A storage compartment is located in the floor behind the second row of seats.

Lift up on the handle to open the cover.

To close, lower the cover and press down on the handle until the latch clicks.

ROOF RACKS AND LOAD CARRIERS

WARNING

When loading the roof racks, we recommend you evenly distribute the load, as well as maintain a low center of gravity. Loaded vehicles, with higher centers of gravity, may handle differently than unloaded vehicles. Take extra precautions, such as slower speeds and increased stopping distance, when driving a heavily loaded vehicle.

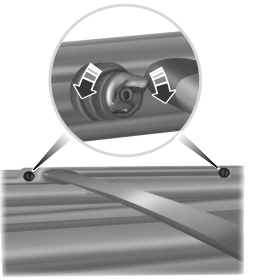
The maximum recommended load, evenly distributed on the crossbars, is 200 lb (90 kg).

Note: *Never place loads directly on the roof panel. The roof panel is not designed to directly carry a load.*

For correct roof rack system function, you must place loads directly on crossbars affixed to the roof rack side rails. When using the roof rack system, we recommend you use Ford Genuine Accessory crossbars designed specifically for your vehicle.

Make sure that you securely fasten the load. Check the tightness of the load before driving and at each fuel stop.

Adjusting the Crossbar


E142448

1. Loosen the thumbwheels at both ends of the crossbar by turning them counterclockwise (both crossbars are adjustable).
2. Slide the crossbar to the desired location.
3. Tighten the thumbwheels at both ends of the crossbar by turning them clockwise.

Make sure to check that the thumbwheels are tight each time you add or remove load from the roof rack, and periodically while traveling. Make sure that the load is secure before traveling.

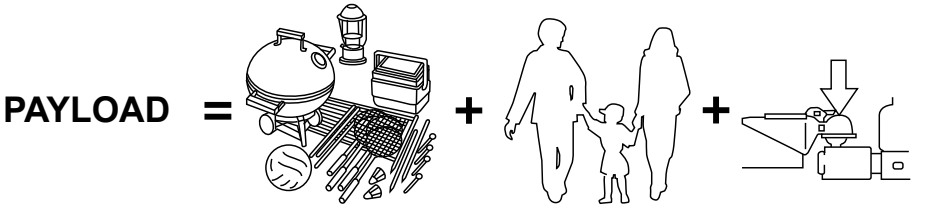
LOAD LIMIT

Vehicle Loading - with and without a Trailer

This section will guide you in the proper loading of your vehicle, trailer or both, to keep your loaded vehicle weight within its design rating capability, with or without a trailer. Properly loading your vehicle will provide maximum return of vehicle design performance. Before loading your vehicle, familiarize yourself with the following terms for determining your vehicle's weight ratings, with or without a trailer, from the vehicle's Tire Label or Safety Compliance Certification Label:

Base Curb Weight - is the weight of the vehicle including a full tank of fuel and all standard equipment. It does not include passengers, cargo, or optional equipment.

Vehicle Curb Weight - is the weight of your new vehicle when you picked it up from your authorized dealer plus any aftermarket equipment.



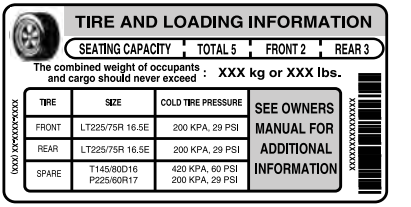
E143816

Payload - is the combined weight of cargo and passengers that the vehicle is carrying. The maximum payload for your vehicle can be found on the Tire Label on the B-Pillar or the edge of the driver door (vehicles exported outside the US and Canada may not have a Tire Label). Look for **"THE COMBINED WEIGHT OF OCCUPANTS AND CARGO SHOULD NEVER EXCEED XXX kg OR XXX lb."** for maximum payload. The payload listed on the Tire Label is the maximum payload for the vehicle as built by the assembly plant. If you install any aftermarket or authorized-dealer installed equipment on the vehicle, you must subtract the weight of the equipment from the payload listed on the Tire Label in order to determine the new payload.

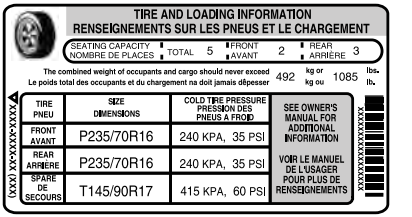
WARNING

The appropriate loading capacity of your vehicle can be limited either by volume capacity (how much space is available) or by payload capacity (how much weight the vehicle should carry). Once you have reached the maximum payload of your vehicle, do not add more cargo, even if there is space available. Overloading or improperly loading your vehicle can contribute to loss of vehicle control and vehicle rollover.

Example only:



E210944



E210945

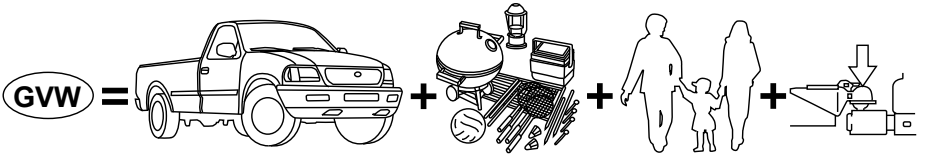
E143817

Cargo Weight - includes all weight added to the Base Curb Weight, including cargo and optional equipment. When towing, trailer tongue load or king pin weight is also part of cargo weight.

GAW (Gross Axle Weight) - is the total weight placed on each axle (front and rear) including vehicle curb weight and all payload.

GAWR (Gross Axle Weight Rating) - is the maximum allowable weight that can be carried by a single axle (front or rear). These numbers are shown on the Safety Compliance Certification Label. The label shall be affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver seating position. **The total load on each axle must never exceed its Gross Axle Weight Rating.**

Note: *For trailer towing information refer to the RV and Trailer Towing Guide available at an authorized dealer.*

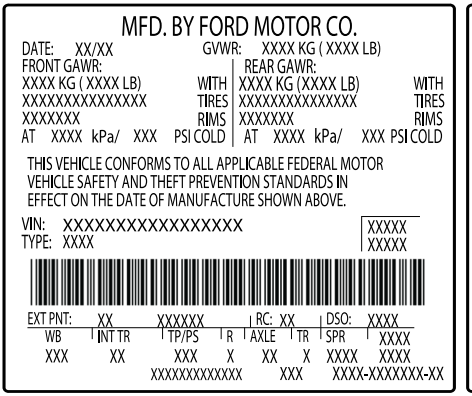


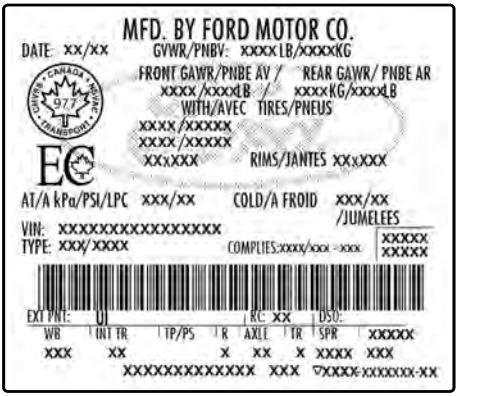
E143818

GVW (Gross Vehicle Weight) - is the Vehicle Curb Weight, plus cargo, plus passengers.

GVWR (Gross Vehicle Weight Rating) - is the maximum allowable weight of the fully loaded vehicle (including all options, equipment, passengers and cargo). It is shown on the Safety Compliance Certification Label. The label shall be affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver seating position. **The Gross Vehicle Weight must never exceed the Gross Vehicle Weight Rating.**

Example only:

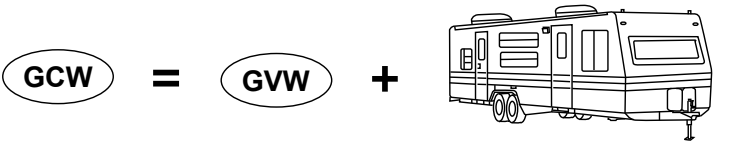




E198828

WARNING

Exceeding the Safety Compliance Certification Label vehicle weight rating limits could result in substandard vehicle handling or performance, engine, transmission and/or structural damage, serious damage to the vehicle, loss of control and personal injury.



E143819

GCW (Gross Combined Weight) - is the Gross Vehicle Weight plus the weight of the fully loaded trailer.

GCWR (Gross Combined Weight Rating) - is the maximum allowable weight of the vehicle and the loaded trailer, including all cargo and passengers, that the vehicle can handle without risking damage. (Important: The towing vehicle's braking system is rated for operation at Gross Vehicle Weight Rating, not at Gross Combined Weight Rating.) Separate functional brakes should be used for safe control of towed vehicles and for trailers where the Gross Combined Weight of the towing vehicle plus the trailer exceed the Gross Vehicle Weight Rating of the towing vehicle. **The Gross Combined Weight must never exceed the Gross Combined Weight Rating.**

Maximum Loaded Trailer Weight - is the highest possible weight of a fully loaded trailer the vehicle can tow. It assumes a vehicle with mandatory options, driver and front passenger weight (150 pounds [68 kilograms] each), no cargo weight (internal or external) and a tongue load of 10–15% (conventional trailer) or king pin weight of 15–25% (fifth wheel trailer). Consult an authorized dealer (or the RV and Trailer Towing Guide available at an authorized dealer) for more detailed information.

Tongue Load or Fifth Wheel King Pin Weight - refers to the amount of the weight that a trailer pushes down on a trailer hitch.

Examples: For a 5000 pound (2268 kilogram) conventional trailer, multiply 5000 by 0.10 and 0.15 to obtain a proper tongue load range of 500 to 750 pounds (227 to 340 kilograms). For an 11500 pound (5216 kilogram) fifth wheel trailer, multiply by 0.15 and 0.25 to obtain a proper king pin load range of 1725 to 2875 pounds (782 to 1304 kilograms).

WARNINGS

Do not exceed the GVWR or the GAWR specified on the Safety Compliance Certification Label.

Do not use replacement tires with lower load carrying capacities than the original tires because they may lower the vehicle's GVWR and GAWR limitations. Replacement tires with a higher limit than the original tires do not increase the GVWR and GAWR limitations.

Exceeding any vehicle weight rating limitation could result in serious damage to the vehicle and/or personal injury.

Steps for determining the correct load limit:

1. Locate the statement "The combined weight of occupants and cargo should never exceed XXX kg or XXX lb." on your vehicle's placard.
2. Determine the combined weight of the driver and passengers that will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX kg or XXX lb.
4. The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the "XXX" amount equals 1,400 lb. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lb. (1400-750 (5 x 150) = 650 lb.).
5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.
6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

The following gives you a few examples on how to calculate the available amount of cargo and luggage load capacity:

*Suppose your vehicle has a 1400-pound (635-kilogram) cargo and luggage capacity. You decide to go golfing. Is there enough load capacity to carry you, four of your friends and all the golf bags? You and four friends average 220 pounds (99 kilograms) each and the golf bags weigh approximately 30 pounds (13.5 kilograms) each. The calculation would be: 1400 - (5 x 220) - (5 x 30) = 1400 - 1100 - 150 = 150 pounds. Yes, you have enough load capacity in your vehicle to transport four friends and your golf bags. In metric units, the calculation would be: 635 kilograms - (5 x 99 kilograms) - (5 x 13.5 kilograms) = 635 - 495 - 67.5 = 72.5 kilograms.

*Suppose your vehicle has a 1400-pound (635-kilogram) cargo and luggage capacity. You and one of your friends decide to pick up cement from the local home improvement store to finish that patio you have been planning for the past two years. Measuring the inside of the vehicle with the rear seat folded down, you have room for twelve 100-pound (45-kilogram) bags of cement. Do you have enough load capacity to transport the cement to your home? If you and your friend each weigh 220 pounds (99 kilograms), the calculation would be: 1400 - (2 x 220) - (12 x 100) = 1400 - 440 - 1200 = - 240 pounds. No, you do not have enough cargo capacity to carry that much weight. In metric units, the calculation would

be: 635 kilograms - (2 x 99 kilograms) - (12 x 45 kilograms) = 635 - 198 - 540 = -103 kilograms. You will need to reduce the load weight by at least 240 pounds (104 kilograms). If you remove three 100-pound (45-kilogram) cement bags, then the load calculation would be: 1400 - (2 x 220) - (9 x 100) = 1400 - 440 - 900 = 60 pounds. Now you have the load capacity to transport the cement and your friend home. In metric units, the calculation would be: 635 kilograms - (2 x 99 kilograms) - (9 x 45 kilograms) = 635 - 198 - 405 = 32 kilograms.

The above calculations also assume that the loads are positioned in your vehicle in a manner that does not overload the Front or the Rear Gross Axle Weight Rating specified for your vehicle on the Safety Compliance Certification Label. The label shall be affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver seating position.

Special Loading Instructions for Owners of Pick-up Trucks and Utility-type Vehicles

WARNING

Loaded vehicles may handle differently than unloaded vehicles. Extra precautions, such as slower speeds and increased stopping distance, should be taken when driving a heavily loaded vehicle.

Your vehicle can haul more cargo and people than most passenger cars. Depending upon the type and placement of the load, hauling cargo and people may raise the center of gravity of the vehicle.

TOWING A TRAILER

WARNINGS

Do not exceed the GVWR or the GAWR specified on the certification label.

Towing trailers beyond the maximum recommended gross trailer weight exceeds the limit of the vehicle and could result in engine damage, transmission damage, structural damage, loss of vehicle control, vehicle rollover and personal injury.

Your vehicle may have electrical items, such as fuses or relays, related to towing. See **Fuses** (page 236).

Your vehicle's load capacity designation is by weight, not by volume, so you cannot necessarily use all available space when loading a vehicle or trailer.

Towing a trailer places an extra load on your vehicle's engine, transmission, axle, brakes, tires and suspension. Inspect these components periodically during, and after, any towing operation.

Load Placement

To help minimize how trailer movement affects your vehicle when driving:

- Load the heaviest items closest to the trailer floor.
- Load the heaviest items centered between the left and right side trailer tires.
- Load the heaviest items above the trailer axles or just slightly forward toward the trailer tongue. Do not allow the final trailer tongue weight to go above or below 10-15% of the loaded trailer weight.
- Select a ball mount with the correct rise or drop. When both the loaded vehicle and trailer are connected, the trailer frame should be level, or slightly angled down toward your vehicle, when viewed from the side.

When driving with a trailer or payload, a slight takeoff vibration or shudder may be present due to the increased payload weight. Additional information regarding proper trailer loading and setting your vehicle up for towing is located in another chapter of this manual. See **Load Limit** (page 198).

You can also find information in the **RV & Trailer Towing Guide** available at your authorized dealer, or online.

RV & Trailer Towing Guide Online	
Website	http://www.fleet.ford.com/towing-guides/

TRAILER SWAY CONTROL

WARNING

Turning off trailer sway control increases the risk of loss of vehicle control, serious injury or death. Ford does not recommend disabling this feature except in situations where speed reduction may be detrimental (such as hill climbing), the driver has significant trailer towing experience, and can control trailer sway and maintain safe operation.

Note: *This feature does not prevent trailer sway, but reduces it once it begins.*

Note: *This feature cannot stop all trailers from swaying.*

Note: *In some cases, if vehicle speed is too high, the system may activate multiple times, gradually reducing vehicle speed.*

This feature applies your vehicle brakes at individual wheels and, if necessary, reduces engine power. If the trailer begins to sway, the stability control light flashes and the message **TRAILER SWAY REDUCE SPEED** appears in the information display. The first thing to do is slow your vehicle down, then pull safely to the side of the road and check for proper tongue load and trailer load distribution. See **Load Carrying** (page 196).

RECOMMENDED TOWING WEIGHTS

Note: *Do not exceed the trailer weight for your vehicle configuration listed in the chart below.*

Note: *Make sure to take into consideration trailer frontal area. Do not exceed 36.5 feet² (3.39 meters²) if your vehicle is equipped with the standard towing package, or 60 feet² (5.57 meters²) if your vehicle is equipped with the optional heavy duty package.*

Note: *Exceeding this limitation may significantly reduce the performance of your towing vehicle. Selecting a trailer with a low aerodynamic drag and rounded front design helps optimize performance and fuel economy.*

Note: *For high altitude operation, reduce the gross combined weight by 2% per 1000 feet (300 meters) starting at the 1000 foot (300 meter) elevation point.*

Note: *Certain states require electric trailer brakes for trailers over a specified weight. Be sure to check state regulations for this specified weight. The maximum trailer weights listed may be limited to this specified weight, as the vehicle's electrical system may not include the wiring connector needed to activate electric trailer brakes.*

Your vehicle may tow a trailer provided the maximum trailer weight is less than or equal to the maximum trailer weight listed for your vehicle configuration on the following chart.

To calculate the maximum loaded trailer weight for your vehicle:

1. Start with the gross combined weight rating for your vehicle model and axle ratio. See the following chart.
2. Subtract all of the following that apply to your vehicle:
   - Vehicle curb weight
   - Hitch hardware weight, such as a draw bar, ball, locks or weight distributing
   - Driver weight
   - Passenger(s) weight
   - Payload, cargo and luggage weight
   - Aftermarket equipment weight.
3. This equals the maximum loaded trailer weight for this combination.

Note: *The trailer tongue load figures into the payload for your vehicle. Reduce the total payload by the final trailer tongue weight.*

Consult an authorized dealer to determine the maximum trailer weight allowed for your vehicle if you are not sure.

Vehicle Type	Towing Package	Maximum GCWR
Two-wheel drive (except EL)	Standard	12300 lb (5579 kg)
Two-wheel drive EL		12500 lb (5669 kg)
Four-wheel drive (except EL)		12500 lb (5669 kg)

Vehicle Type	Towing Package	Maximum GCWR
Four-wheel drive EL		12800 lb (5806 kg)
Two-wheel drive (except EL)	Optional Heavy Duty	14900 lb (6758 kg)
Two-wheel drive EL		15100 lb (6849 kg)
Four-wheel drive (except EL)		15200 lb (6894 kg)
Four-wheel drive EL		15300 lb (6940 kg)

ESSENTIAL TOWING CHECKS

Follow these guidelines for safe towing:

- Do not tow a trailer until you drive your vehicle at least 1000 miles (1600 kilometers).
- Consult your local motor vehicle laws for towing a trailer.
- See the instructions included with towing accessories for the proper installation and adjustment specifications.
- Service your vehicle more frequently if you tow a trailer. See your scheduled maintenance information.
- If you use a rental trailer, follow the instructions the rental agency gives you.

See **Load limits** in the Load Carrying chapter for load specification terms found on the tire label and Safety Compliance label and instructions on calculating your vehicle's load.

Remember to account for the trailer tongue weight as part of your vehicle load when calculating the total vehicle weight.

Trailer Towing Connector (Vehicles with a Trailer Towing Package and 7–Pin Connector)

E163167

When attaching the trailer wiring connector to your vehicle, only use a proper fitting connector that works with the vehicle and trailer functions. Some seven-position connectors may have the SAE J2863 logo, which confirms that it is the proper wiring connector and works correctly with your vehicle.

Color	Function
Yellow	Left turn signal and stop lamp
White	Ground (-)
Blue	Electric brakes
Green	Right turn signal and stop lamp
Orange	Battery (+)
Brown	Running lights
Grey	Reverse lights

Hitches

WARNING

The trailer hitch on this vehicle is part of the vehicle rear crash safety structure. Do not remove the trailer hitch. Failure to follow this warning could compromise vehicle crash structure and increase the risk of injury in a rear end crash.

Do not use a hitch that either clamps onto the bumper or attaches to the axle.

Distribute the trailer load so 10-15% of the total trailer weight is on the tongue.

Integrated Hitch Rating

WARNING

Towing trailers beyond the maximum tongue weight exceeds the limit of the towing system and could result in vehicle structural damage, loss of vehicle control and personal injury.

The standard integrated hitch has two ratings depending on mode of operation:

- Weight-carrying mode requires a draw bar and hitch ball. The draw bar supports all the vertical tongue load of the trailer.
- Weight-distributing mode requires an aftermarket weight-distributing system, which includes draw bar, hitch ball, spring bars and snap-up brackets. This system distributes the vertical tongue load of the trailer between the truck and the trailer.

Mode	Maximum Trailer Weight	Maximum Tongue Weight
Weight carrying	6000 lb (2721 kg)	600 lb (272 kg)
Weight distributing	9200 lb (4173 kg)	920 lb (417 kg)

Note: *These are hitch ratings only. Actual vehicle ratings are dependent on engine, transmission and axle combinations.*

Weight-distributing Hitch - Vehicles without Automatic Leveling Suspension

WARNING

Do not adjust a weight-distributing hitch to any position where the rear bumper of the vehicle is higher than it was before attaching the trailer. Doing so will defeat the function of the weight-distributing hitch, which may cause unpredictable handling, and could result in serious personal injury.

When hooking-up a trailer using a weight-distributing hitch, always use the following procedure:

1. Park the loaded vehicle, without the trailer, on a level surface.
2. Measure the height to the top of your vehicle's front wheel opening on the fender. This is H1.
3. Attach the loaded trailer to your vehicle without the weight-distributing bars connected.
4. Measure the height to the top of your vehicle's front wheel opening on the fender a second time. This is H2.
5. Install and adjust the tension in the weight-distributing bars so that the height of your vehicle's front wheel opening on the fender is approximately half the way down from H2, toward H1.
6. Check that the trailer is level or slightly nose down toward your vehicle. If not, adjust the ball height accordingly and repeat Steps 2-6.

When the trailer is level or slightly nose down toward the vehicle:

- Lock the bar tension adjuster in place.
- Check that the trailer tongue securely attaches and locks onto the hitch.
- Install safety chains, lighting, and trailer brake controls as required by law or the trailer manufacturer.

Weight-distributing Hitch - Vehicles with Automatic Leveling Suspension

WARNING

Do not adjust a weight-distributing hitch to any position where the rear bumper of the vehicle is higher than it was before attaching the trailer. Doing so will defeat the function of the weight-distributing hitch, which may cause unpredictable handling, and could result in serious personal injury.

Note: *If you do not move the loaded vehicle for approximately 12 hours, the leveling system may bleed down to a lower height. This can be especially apparent if you leave a trailer attached to the parked vehicle for long periods. You must drive your vehicle in order to re-level the suspension.*

When hooking-up a trailer using a weight-distributing hitch, always use the following procedure:

1. Load the interior of the vehicle to a weight similar to that which you intend to carry when towing. This includes things such as passenger weight and cargo.
2. Drive the vehicle for approximately 2 miles (3 kilometers) to re-level the suspension.
3. Park the loaded vehicle, without the trailer, on a level surface.
4. Measure the height to the top of your vehicle's front wheel opening on the fender. This is H1.
5. Attach the loaded trailer to your vehicle without the weight-distributing bars connected.
6. Make sure you securely attach and lock the trailer tongue to the hitch.
7. Install safety chains, lighting, and trailer brake controls as required by law or the trailer manufacturer.
8. Drive the vehicle and trailer at 20–25 mph (32–40 km/h) for approximately 2 miles (3 kilometers) to re-level the suspension.
9. Park your vehicle and trailer on a level surface.
10. Measure the height to the top of your vehicle's front wheel opening on the fender a second time. This is H2.
11. Install and adjust the tension in the weight-distributing bars so that the height of your vehicle's front wheel opening on the fender is approximately half the way down from H2, toward H1.
12. Check that the trailer is level or slightly nose down toward your vehicle. If not, remove the trailer, adjust the ball height accordingly and repeat Steps 5-11.

When the trailer is level or slightly nose down toward the vehicle:

- Lock the bar tension adjuster in place.
- Check that the trailer tongue securely attaches and locks onto the hitch.
- Install safety chains, lighting, and trailer brake controls as required by law or the trailer manufacturer.

Safety Chains

Note: *Do not attach safety chains to the bumper.*

Always connect the safety chains to the frame or hook retainers of your vehicle hitch.

To connect the safety chains, cross the chains under the trailer tongue and allow enough slack for turning tight corners. Do not allow the chains to drag on the ground.

Trailer Brakes

WARNING

Do not connect a trailer's hydraulic brake system directly to your vehicle's brake system. Your vehicle may not have enough braking power and your chances of having a collision greatly increase.

Electric brakes and manual, automatic or surge-type trailer brakes are safe if you install them properly and adjust them to the manufacturer's specifications. The trailer brakes must meet local and federal regulations.

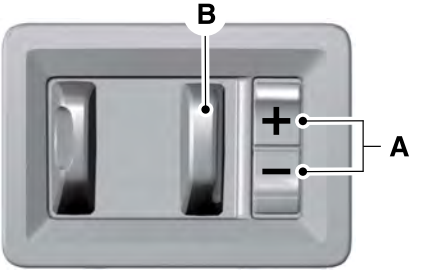
The rating for the tow vehicle's braking system operation is at the gross vehicle weight rating, not the gross combined weight rating.

Separate functioning brake systems are required for safe control of towed vehicles and trailers weighing more than 1500 pounds (680 kilograms) when loaded.

Integrated Trailer Brake Controller (If Equipped)

WARNING

The Ford trailer brake controller has been verified to be compatible with trailers having electric-actuated drum brakes (one to four axles) and most electric-over-hydraulic brakes. It will not activate hydraulic surge-style trailer brakes. It is the responsibility of the customer to ensure that the trailer brakes are adjusted appropriately, functioning normally and all electric connections are properly made. Failure to do so may result in loss of vehicle control, crash or serious injury.



E183395

When used properly, the trailer brake controller assists in smooth and effective trailer braking by powering the trailer's electric or electric-over-hydraulic brakes with a proportional output based on the towing vehicle's brake pressure.

The controller user interface consists of the following:

A: + and - (Gain adjustment buttons): Pressing these buttons adjusts the controller's power output to the trailer brakes in 0.5 increments. You can increase the gain setting to 10.0 (maximum trailer braking) or decrease it to 0 (no trailer braking). The gain setting displays in the message center.

The controller shows gain setting, output bar graph, and trailer connectivity status in the information display. They appear in the information display as follows:

- Trailer Brake Controller Gain (without trailer connected): Shows the current gain setting during a given ignition cycle and when adjusting the gain. This also displays if you use the manual control lever or make gain adjustments with no trailer connected.
- Trailer Brake Controller Gain Output: Displays when you push your vehicle's brake pedal, or upon use of the manual control. Bar indicators illuminate in the information display to indicate the amount of power going to the trailer brakes relative to the brake pedal or manual control input. One bar indicates the least amount of output; six bars indicate maximum output.
- Trailer Connected: Displays when the system senses a correct trailer wiring connection (a trailer with electric trailer brakes) during a given ignition cycle.
- Trailer Disconnected: Displays, accompanied by a single audible time, when the system senses a trailer connection and then a disconnection, either intentional or unintentional, during a given ignition cycle. It also displays if a truck or trailer-wiring fault occurs causing the trailer to appear disconnected. This message can also display if you use the manual control lever without a trailer connected. After disconnecting the trailer connector, press the brake pedal for approximately five seconds to allow the system to detect and update the trailer status.

B: Manual control lever: Slide the control lever to the left to turn on the trailer's electric brakes independent of the tow vehicle's. See the following **Procedure for adjusting gain** section for instructions on proper use of this feature. If you use the manual control while the brake is also applied, the greater of the two inputs determines the power sent to the trailer brakes.

- **Stop lamps:** Using the manual control lever illuminates both the trailer brake lamps and your vehicle brake lamps except the center high-mount stop lamp, if you make the proper electrical connection to the trailer. Pressing your vehicle brake pedal also illuminates both trailer and vehicle brake lamps.

Procedure for Adjusting Gain

Note: *Only perform this procedure in a traffic-free environment at speeds of approximately 20-25 mph (30-40 km/h).*

The gain setting sets the trailer brake controller for the specific towing condition. You should change the setting as towing conditions change. Changes to towing conditions include trailer load, vehicle load, road conditions and weather.

The gain should be set to provide the maximum trailer braking assistance while making sure the trailer wheels do not lock when using the brakes. Locked trailer wheels may lead to trailer instability.

1. Make sure the trailer brakes are in good working condition, functioning normally and properly adjusted. See your trailer dealer if necessary.
2. Hook up the trailer and make the electrical connections according to the trailer manufacturer's instructions.
3. When you plug in a trailer with electric or electric-over-hydraulic brakes, a message confirming connection appears in the information display.

4. Use the gain adjustment (+ and -) buttons to increase or decrease the gain setting to the desired starting point. A gain setting of 6.0 is a good starting point for heavier loads.
5. In a traffic-free environment, tow the trailer on a dry, level surface at a speed of 20-25 mph (30-40 km/h) and squeeze the manual control lever completely.
6. If the trailer wheels lock up, indicated by squealing tires, reduce the gain setting. If the trailer wheels turn freely, increase the gain setting. Repeat Steps 5 and 6 until the gain setting is at a point just below trailer wheel lock-up. If towing a heavier trailer, trailer wheel lock-up may not be attainable even with the maximum gain setting of 10.

Explanation of Information Display Warning Messages

Note: *An authorized dealer can diagnose the trailer brake controller to determine exactly which trailer fault has occurred. However, your Ford warranty does not cover this diagnosis if the fault is with the trailer.*

A message indicating a trailer brake module fault may display in response to faults sensed by the trailer brake controller, accompanied by a single tone. If this message appears, contact an authorized dealer as soon as possible for diagnosis and repair. The controller may still function, but performance may be degraded.

A message indicating a trailer wiring fault may display when there is a short circuit on the electric brake output wire. If this message displays, accompanied by a single tone, with no trailer connected, the problem is with your vehicle wiring between the trailer brake controller and the 7-pin connector at the bumper. If the message only displays with a trailer connected, the problem is with the trailer wiring. Consult your trailer dealer for assistance. This can be a short to ground (such as a chaffed wire), short to voltage (such as a pulled pin on trailer emergency breakaway battery) or the trailer brakes may be drawing too much current.

Points to Remember

Note: *Do not attempt removal of the trailer brake controller without consulting the Workshop Manual. Damage to the unit may result.*

- Adjust gain setting before using the trailer brake controller for the first time.
- Adjust gain setting, using the procedure above, whenever road, weather and trailer or vehicle loading conditions change from when the gain was initially set.
- Only use the manual control lever for proper adjustment of the gain during trailer setup. Misuse, such as application during trailer sway, could cause instability of trailer or tow vehicle.
- Avoid towing in adverse weather conditions. The trailer brake controller does not provide anti-lock control of the trailer wheels. Trailer wheels can lock up on slippery surfaces, resulting in reduced stability of trailer and tow vehicle.
- The trailer brake controller is equipped with a feature that reduces output at vehicle speeds below 11 mph (18 km/h) so trailer and vehicle braking is not jerky or harsh. This feature is only available when applying the brakes using your vehicle's brake pedal, not the controller.
- The controller interacts with the brake control system and powertrain control system of your vehicle to provide the best performance on different road conditions.

- Your vehicle's brake system and the trailer brake system work independently of each other. Changing the gain setting on the controller does not affect the operation of your vehicle's brakes whether you attach a trailer or not.
- When you switch the engine off, the controller output is disabled and the display and module shut down. The controller module and display turn on when you switch the ignition on.
- The trailer brake controller is only a factory-installed or dealer-installed item. Ford is not responsible for warranty or performance of the controller due to misuse or customer installation.

Trailer Lamps

WARNING

Never connect any trailer lamp wiring to the vehicle's tail lamp wiring; this may damage the electrical system resulting in fire. Contact your authorized dealer as soon as possible for assistance in proper trailer tow wiring installation. Additional electrical equipment may be required.

Trailer lamps are required on most towed vehicles. Make sure all running lights, brake lights, turn signals and hazard lights are working.

Before Towing a Trailer

Practice turning, stopping and backing up to get the feel of your vehicle-trailer combination before starting on a trip. When turning, make wider turns so the trailer wheels clear curbs and other obstacles.

When Towing a Trailer

- Do not drive faster than 70 mph (113 km/h) during the first 500 miles (800 kilometers).
- Do not make full-throttle starts.
- Check your hitch, electrical connections and trailer wheel lug nuts thoroughly after you have traveled 50 miles (80 kilometers).
- When stopped in congested or heavy traffic during hot weather, place the gearshift in position **P** to aid engine and transmission cooling and to help A/C performance.
- Turn off the speed control with heavy loads or in hilly terrain. The speed control may turn off automatically when you are towing on long, steep grades.
- Shift to a lower gear when driving down a long or steep hill. Do not apply the brakes continuously, as they may overheat and become less effective.
- If your transmission is equipped with a Grade Assist or Tow/Haul feature, use this feature when towing. This provides engine braking and helps eliminate excessive transmission shifting for optimum fuel economy and transmission cooling.
- If your vehicle is equipped with AdvanceTrac with RSC, this system may turn on during typical cornering maneuvers with a heavily loaded trailer. This is normal. Turning the corner at a slower speed while towing may reduce this tendency.
- If you are towing a trailer frequently in hot weather, hilly conditions, at the gross combined weight rating (or any combination of these factors), consider refilling your rear axle with synthetic gear lubricant (if the axle is not already filled with it). See **Capacities and Specifications** (page 307).

- Allow more distance for stopping with a trailer attached. Anticipate stops and brake gradually.
- Avoid parking on a grade. However, if you must park on a grade:

1. Turn the steering wheel to point your vehicle tires away from traffic flow.
2. Set your vehicle parking brake.
3. Place the automatic transmission in position **P**.
4. Place wheel chocks in front and back of the trailer wheels. (Chocks not included with vehicle.)

Your vehicle may be equipped with a temporary or conventional spare tire. A "temporary" spare tire is different in size (diameter or width), tread-type (All-Season or All Terrain) or is from a different manufacturer than the road tires on your vehicle. Consult information on the tire label or Safety Compliance label for limitations when using.

Launching or Retrieving a Boat or Personal Watercraft (PWC)

Note: *Disconnect the wiring to the trailer* ***before*** *backing the trailer into the water.*

Note: *Reconnect the wiring to the trailer* ***after*** *removing the trailer from the water.*

When backing down a ramp during boat launching or retrieval:

- Do not allow the static water level to rise above the bottom edge of the rear bumper.
- Do not allow waves to break higher than 6 inches (15 centimeters) above the bottom edge of the rear bumper.

Exceeding these limits may allow water to enter vehicle components:

- Causing internal damage to the components.
- Affecting driveability, emissions, and reliability.

Replace the rear axle lubricant anytime the rear axle has been submerged in water. Water may have contaminated the rear axle lubricant, which is not normally checked or changed unless a leak is suspected or other axle repair is required.

TOWING POINTS (If Equipped)

WARNINGS

Using recovery hooks is dangerous and should only be done by a person familiar with proper vehicle recovery safety practices. Improper use of recovery hooks may cause hook failure or separation from the vehicle and could result in serious injury or death.

Always slowly remove the slack from the recovery strap prior to pulling. Failure to do so can introduce significantly higher loads which can cause the recovery hooks to break off, or the recovery strap to fail which can cause serious injury or death.

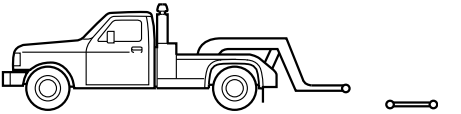
Never link two straps together with a clevis pin. These heavy metal objects could become projectiles if the strap breaks and can cause serious injury or death.

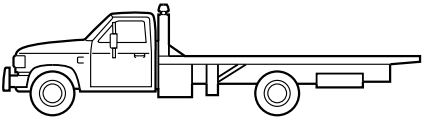
Your vehicle comes equipped with frame-mounted front recovery hooks. These hooks should never have a load applied to them greater than the gross vehicle weight rating of your vehicle.

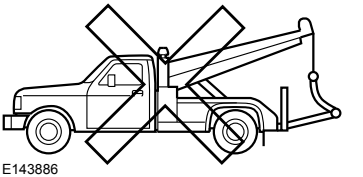
Before using recovery hooks:

- Make sure all attaching points are secure and capable of withstanding the applied load.
- Never use chains, cables or tow straps with metal hook ends.
- Only use recovery straps that have a minimum breaking strength two to three times the gross vehicle weight of the stuck vehicle.
- Make sure the recovery strap is in good condition and free of visible cuts, tears or damage.
- Use a damper device such as a tarp, heavy blanket or piece of carpet draped over the recovery strap to help absorb the energy in the event the strap breaks.
- Make sure the stuck vehicle is not loaded heavier than its gross vehicle weight rating specified on the certification label.
- Always align the tow vehicle and stuck vehicle in a straight line (within 10 degrees).
- Keep bystanders to the **sides** of the vehicle, at a distance of at least twice the length of the recovery strap. This helps avoid injury from the hazard of a recovery hook or strap breaking, or a vehicle lurching into their path.

TRANSPORTING THE VEHICLE







E143886

If you need to have your vehicle towed, contact a professional towing service or, if you are a member of a roadside assistance program, your roadside assistance service provider.

We recommend the use of a wheel lift and dollies or flatbed equipment to tow your vehicle. Do not tow with a slingbelt. Ford Motor Company has not approved a slingbelt towing procedure. Vehicle damage may occur if towed incorrectly, or by any other means.

Ford Motor Company produces a towing manual for all authorized tow truck operators. Have your tow truck operator refer to this manual for proper hook-up and towing procedures for your vehicle.

It is acceptable to have your two-wheel drive vehicle towed with the front wheels on the ground (without dollies) and the rear wheels off the ground.

We recommend towing a four-wheel drive vehicle with all wheels off the ground, such as using a wheel lift and dollies or flatbed equipment.

TOWING THE VEHICLE ON FOUR WHEELS

WARNING

If your vehicle has a steering wheel lock make sure the ignition is in the accessory or on position when being towed.

Emergency Towing

If your vehicle becomes inoperable (without access to wheel dollies, car-hauling trailer, or flatbed transport vehicle), it can be flat-towed (all wheels on the ground, regardless of the powertrain and transmission configuration) under the following conditions:

- Your vehicle is facing forward for towing in a forward direction.
- Place the transmission in position **N**. If you cannot move the transmission into **N**, you may need to override it. See **Transmission** (page 159).
- Maximum speed is 35 mph (56 km/h).
- Maximum distance is 50 mi (80 km).

Recreational Towing

Note: *Put your climate control system in recirculated air mode to prevent exhaust fumes from entering your vehicle.* *See **Climate Control** (page 113).*

Follow these guidelines if you have a need for recreational towing, for example towing your vehicle behind a motorhome. These guidelines prevent damage to your transmission.

Two Wheel Drive Vehicles

You cannot tow a two wheel drive vehicle with any wheels on the ground as vehicle or transmission damage may occur. You must tow your vehicle with all four wheels off the ground, for example when using a car-hauling trailer.

Four Wheel Drive Vehicles

You can only tow a four wheel drive vehicle with all wheels on the ground by placing the transfer case in its neutral position and engaging the four-wheel-down towing feature. Perform the steps outlined in the following section after positioning your vehicle behind the tow vehicle and properly securing them together.

Four-wheel-down Towing

Note: *Make sure you properly secure your vehicle to the tow vehicle.*

Entering Four-wheel-down Towing

1. Put the ignition in the on position, but do not start the engine. If your vehicle has an ignition key, turn the key to on. If your vehicle has intelligent access, press the engine **START/STOP** button twice without pressing the brake pedal.
2. Press and hold the brake pedal.
3. Rotate the four-wheel drive switch to **2H**.
4. Shift the transmission to position **N**.
5. Rotate the four-wheel drive switch from **2H** to **4L** and back to **2H** five times within seven seconds.

Note: *If completed successfully, the information display shows* ***NEUTRAL TOW LEAVE IN N*** *or* ***NEUTRAL TOW ENABLED LEAVE TRANSMISSION IN NEUTRAL****. This indicates that your vehicle is safe to tow with all wheels on the ground.*

Note: *If you do not see the message in the display, you must perform the procedure again from the beginning.*

Note: *You may hear an audible noise as the transfer case shifts into its neutral position. This is normal.*

6. Leave the transmission in position **N** and turn the ignition as far as it will go toward the off position (it will not turn fully off when the transmission is in position **N**). If your vehicle has an ignition key, you must leave the key in the ignition while towing. To lock and unlock your vehicle, use the keyless entry keypad or extra set of keys. If your vehicle has intelligent access, press the engine **START/STOP** button once without pressing the brake pedal. You do not need to leave your keys in the vehicle. You can lock and unlock your vehicle as you normally do.
7. Release the brake pedal.

WARNINGS

Do not disconnect the battery during recreational towing. Doing so will prevent the transfer case from shifting properly and may cause the vehicle to roll even if the transmission is in P (Park).

Shifting the transfer case to its neutral position for recreational towing may cause the vehicle to be able to roll even if the transmission is in P (Park). The driver or others could be injured. Make sure the foot brake is depressed and the vehicle is in a secure and safe position while the transfer case is being shifted to its neutral position.

WARNINGS

Failing to put the transfer case in its neutral position will damage vehicle components.

Note: *You can check four-wheel-down towing status at any time by opening the driver's door or turning the ignition to the accessory or on position and verifying the* ***NEUTRAL TOW ENABLED*** *message displays in the cluster.*

Exiting Four-wheel-down Towing

To exit four-wheel-down towing and return the transfer case to its **2H** position:

1. With your vehicle still properly secured to the tow vehicle, put the ignition in the on position, but do not start the engine. If your vehicle has an ignition key, turn the key to on. If your vehicle has intelligent access, press the engine **START/STOP** button twice without pressing the brake pedal.
2. Press and hold the brake pedal.
3. Shift the transmission out of **N** and into any gear.
4. Release the brake pedal.

Note: *If completed successfully, the instrument cluster displays* ***4X2****, and* ***NEUTRAL TOW DISABLED****.*

Note: *If the indicator light and message do not display, you must perform the procedure again from the beginning.*

Note: *You may hear an audible noise as the transfer case shifts out of its neutral position. This is normal.*

Note: *If* ***SHIFT DELAY PULL FORWARD*** *displays in the instrument cluster, transfer case gear tooth blockage is present. See the instructions after this section.*

5. Apply the parking brake, and then disconnect the vehicle from the tow vehicle.

6. Release the parking brake, start the engine, and shift the transmission to position **D** to make sure the transfer case is out of position **N**.
7. If the transfer case does not successfully shift out of position **N**, set the parking brake until you can have your vehicle serviced.

Resolving the SHIFT DELAY PULL FORWARD Message

If the instrument cluster displays **SHIFT DELAY PULL FORWARD** perform the following:

1. Press and hold the brake pedal.
2. Put the transmission into position **N**, and then start the engine.
3. With the engine running, shift the transmission to position **D** and let the vehicle roll forward, up to 3 feet (1 meter). You may hear an audible noise as the transfer case shifts out of its neutral position. This is normal.
4. Make sure the instrument cluster displays **NEUTRAL TOW DISABLED**.

Expedition (TB7) Canada/United States of America, enUSA, Second Printing

BREAKING-IN

You need to break in new tires for approximately 300 miles (480 kilometers). During this time, your vehicle may exhibit some unusual driving characteristics.

Avoid driving too fast during the first 1000 miles (1600 kilometers). Vary your speed frequently and change up through the gears early. Do not labor the engine.

Do not tow during the first 1000 miles (1600 kilometers).

REDUCED ENGINE PERFORMANCE

WARNING

Continued operation will increase the engine temperature and cause the engine to shut down completely.

If the engine coolant temperature gauge needle moves to the upper limit position, the engine is overheating. See **Gauges** (page 85).

You must only drive your vehicle for a short distance if the engine overheats. The distance you can travel depends on ambient temperature, vehicle load and terrain. The engine will continue to operate with limited power for a short time.

If the engine temperature continues to rise, the fuel supply to the engine will reduce. The air conditioning will switch off and the engine cooling fan will operate continually.

1. Reduce your speed gradually and stop your vehicle as soon as it is safe to do so.
2. Switch the engine off immediately to prevent severe engine damage.
3. Wait for the engine to cool down.
4. Check the coolant level. See **Engine Coolant Check** (page 250).
5. Have your vehicle checked by an authorized dealer as soon as possible.

ECONOMICAL DRIVING

Fuel economy is affected by several things such as how you drive, the conditions you drive under and how you maintain your vehicle.

There are some things to keep in mind that may improve your fuel economy:

- Accelerate and slow down in a smooth, moderate fashion.
- Drive at steady speeds.
- Anticipate stops; slowing down may eliminate the need to stop.
- Combine errands and minimize stop-and-go driving (When running errands, go to the furthest destination first and then work your way back home).
- Close the windows for high-speed driving.
- Drive at reasonable speeds.
- Keep the tires properly inflated and use only the recommended size.
- Use the recommended engine oil.
- Perform all regularly scheduled maintenance.

There are also some things you may want to avoid doing because they reduce your fuel economy:

- Avoid sudden or hard accelerations.
- Avoid revving the engine before turning off the car.
- Avoid long idle periods.
- Do not warm up your vehicle on cold mornings.
- Reduce the use of air conditioning and heat.

- Avoid using speed control in hilly terrain.
- Do not rest your foot on the brake pedal while driving.
- Avoid carrying unnecessary weight.
- Avoid adding particular accessories to your vehicle (e.g. bug deflectors, rollbars/light bars, running boards, ski racks).
- Avoid driving with the wheels out of alignment.

DRIVING THROUGH WATER

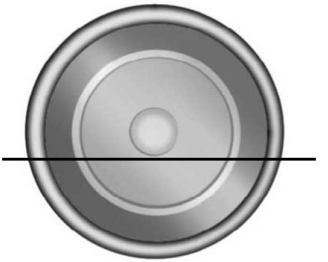
WARNING

Do not drive through flowing or deep water as you may lose control of your vehicle.

Note: *Driving through standing water can cause vehicle damage.*

Note: *Engine damage can occur if water enters the air filter.*

Before driving through standing water, check the depth. Never drive through water that is higher than the bottom of the wheel hubs.



E176913

When driving through standing water, drive very slowly and do not stop your vehicle. Your brake performance and traction may be limited. After driving through water and as soon as it is safe to do so:

- Lightly press the brake pedal to dry the brakes and to check that they work.
- Check that the horn works.
- Check that the exterior lights work.
- Turn the steering wheel to check that the steering power assist works.

FLOOR MATS

WARNINGS

Always use floor mats that are designed to fit the foot well of your vehicle. Only use floor mats that leave the pedal area unobstructed. Only use floor mats that are firmly secured to retention posts so that they cannot slip out of position and interfere with the pedals or impair safe operation of your vehicle in other ways.

Pedals that cannot move freely can cause loss of vehicle control and increase the risk of serious personal injury.

Always make sure that the floor mats are properly attached to the retention posts in the carpet that are supplied with your vehicle. Floor mats must be properly secured to both retention posts to make sure mats do not shift out of position.

Never place floor mats or any other covering in the vehicle foot well that cannot be properly secured to prevent them from moving and interfering with the pedals or the ability to control the vehicle.

WARNINGS

Never place floor mats or any other covering on top of already installed floor mats. Floor mats should always rest on top of vehicle carpeting surface and not another floor mat or other covering. Additional floor mats or any other covering will reduce the pedal clearance and potentially interfere with pedal operation.

Check attachment of floor mats on a regular basis. Always properly reinstall and secure floor mats that have been removed for cleaning or replacement.

Always make sure that objects cannot fall into the driver foot well while the vehicle is moving. Objects that are loose can become trapped under the pedals causing a loss of vehicle control.

Failure to properly follow floor mat installation or attachment instructions can potentially cause interference with pedal operation causing a loss of vehicle control.

To install floor mats, position the floor mat so that the eyelet is over the retention post and press down to lock in.

To remove the floor mat, reverse the installation procedure.

ROADSIDE ASSISTANCE

Vehicles Sold in the United States: Getting Roadside Assistance

To fully assist you should you have a vehicle concern, Ford Motor Company offers a complimentary roadside assistance program. This program is separate from the New Vehicle Limited Warranty. The service is available:

- 24 hours a day, seven days a week.
- For the coverage period listed on the Roadside Assistance Card included in your Owner's Manual portfolio.

Roadside Assistance covers:

- A flat tire change with a good spare, if provided with the vehicle (except vehicles supplied with a tire inflation kit).
- Battery jump start.
- Lock-out assistance (key replacement cost is the customer's responsibility).
- Fuel delivery — independent service contractors, if not prohibited by state, local or municipal law, shall deliver up to 2 gal (7.6 L) of gasoline or 5 gal (18.9 L) of diesel fuel to a disabled vehicle. Roadside Assistance limits fuel delivery service to two no-charge occurrences within a 12-month period.
- Winch out — available within 100 ft (30.5 m) of a paved or county maintained road, no recoveries.
- Towing — independent service contractors, if not prohibited by state, local or municipal law, shall tow Ford eligible vehicles to an authorized dealer within 35 mi (56 km) of the disablement location or to the nearest authorized dealer. If a member requests a tow to an authorized dealer that is more than 35 mi (56 km) from the disablement location, the member shall be responsible for any mileage costs in excess of 35 mi (56 km).

Roadside Assistance includes up to $200 for a towed trailer if the disabled eligible vehicle requires service at the nearest authorized dealer. If the towing vehicle is operational but the trailer is not, then the trailer does not qualify for any roadside services.

Vehicles Sold in the United States: Using Roadside Assistance

Complete the roadside assistance identification card and place it in your wallet for quick reference. This card is in the owner's information portfolio in the glove compartment.

United States Ford vehicle customers who require Roadside Assistance, call 1-800-241-3673.

If you need to arrange roadside assistance for yourself, Ford Motor Company reimburses a reasonable amount for towing to the nearest dealership within 35 mi (56 km). To obtain reimbursement information, United States Ford vehicle customers call 1-800-241-3673. Customers need to submit their original receipts.

Vehicles Sold in Canada: Getting Roadside Assistance

To fully assist you should you have a vehicle concern, Ford Motor Company of Canada, Limited offers a complimentary roadside assistance program. This program is eligible within Canada or the continental United States.

This program is separate from the New Vehicle Limited Warranty, but the coverage is concurrent with the powertrain coverage period of your vehicle.

Canadian customers who require roadside assistance, call 1-800-665-2006.

Vehicles Sold in Canada: Using Roadside Assistance

Complete the roadside assistance identification card and place it in your wallet for quick reference.

In Canada, this card is found in the Warranty Guide in the glove compartment of your vehicle.

Vehicles Sold in Canada: Roadside Assistance Program Coverage

The service is available 24 hours a day, seven days a week.

Canadian roadside coverage and benefits may differ from the U.S. coverage.

For complete program coverage details you may contact your dealer, you can call us in Canada at 1-800-665-2006, or visit our website at www.ford.ca.

HAZARD WARNING FLASHERS

Note: *If used when the vehicle is not running, the battery will lose charge. There may be insufficient power to restart your vehicle.*

The hazard warning button is located on the instrument panel. Use it when your vehicle is creating a safety hazard for other motorists.

- Press the button to turn on the hazard warning function, and the front and rear direction indicators will flash.
- Press the button again to turn them off.

FUEL SHUTOFF

WARNING

Failure to inspect and, if necessary, repair fuel leaks after a collision may increase the risk of fire and serious injury. Ford Motor Company recommends that the fuel system be inspected by an authorized dealer after any collision.

In the event of a moderate to severe collision, this vehicle includes a fuel pump shutoff feature that stops the flow of fuel to the engine. Not every impact will cause a shutoff.

Should your vehicle shut off after a collision, you may restart your vehicle. For vehicles equipped with a key system:

1. Switch off the ignition.
2. Switch on the ignition.
3. Repeat Steps 1 and 2 to re-enable the fuel pump.

For vehicles equipped with a push button start system:

1. Press the **START/STOP** button to switch off the ignition.
2. Press the brake pedal and press the **START/STOP** button to switch on the ignition.
3. Remove your foot from the brake pedal and press the **START/STOP** button to switch off the ignition.
4. You can either attempt to start the engine by pressing the brake pedal and the **START/STOP** button, or switch on the ignition only by pressing the **START/STOP** button without pressing the brake pedal. Both ways re-enable the fuel system.

Note: *When you try to restart your vehicle after a fuel shutoff, the vehicle makes sure that various systems are safe to restart. Once your vehicle determines that the systems are safe, then the vehicle will allow you to restart.*

Note: *In the event that your vehicle does not restart after your third attempt, contact an authorized dealer.*

JUMP STARTING THE VEHICLE

WARNINGS

Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lighted substances to come near the battery. When working near the battery, always shield your face and protect your eyes. Always provide correct ventilation.

Keep batteries out of reach of children. Batteries contain sulfuric acid. Avoid contact with skin, eyes or clothing. Shield your eyes when working near the battery to protect against possible splashing of acid solution. In case of acid contact with skin or eyes, flush immediately with water for a minimum of 15 minutes and get prompt medical attention. If acid is swallowed, call a physician immediately.

Use only adequately sized cables with insulated clamps.

Preparing Your Vehicle

Do not attempt to push-start your automatic transmission vehicle.

Note: *Attempting to push-start a vehicle with an automatic transmission may cause transmission damage.*

Note: *Use only a 12-volt supply to start your vehicle.*

Note: *Do not disconnect the battery of the disabled vehicle as this could damage the vehicle electrical system.*

Park the booster vehicle close to the hood of the disabled vehicle, making sure the two vehicles do not touch.

Connecting the Jumper Cables

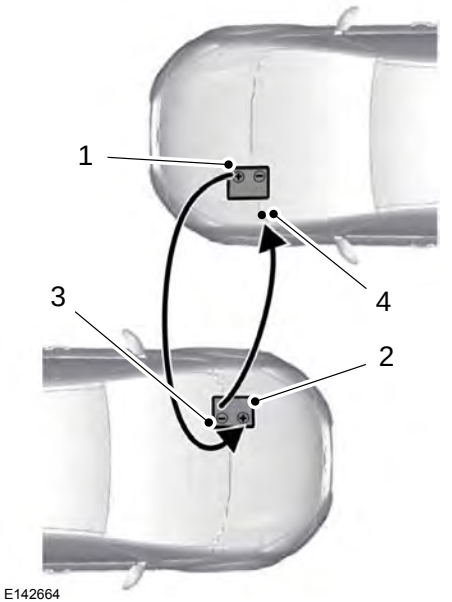
WARNINGS

Do not attach the cables to fuel lines, engine rocker covers, the intake manifold or electrical components as grounding points. Stay clear of moving parts. To avoid reverse polarity connections, make sure that you correctly identify the positive (+) and negative (-) terminals on both the disabled and booster vehicles before connecting the cables.

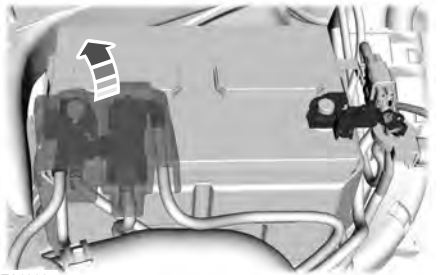
Do not attach the end of the positive cable to the studs or L-shaped eyelet located above the positive (+) terminal of your vehicle's battery. High current may flow through and cause damage to the fuses.

Do not connect the end of the second cable to the negative (-) terminal of the battery to be jumped. A spark may cause an explosion of the gases that surround the battery.

Note: *In the illustration, the bottom vehicle represents the booster vehicle.*



E142664



E213994

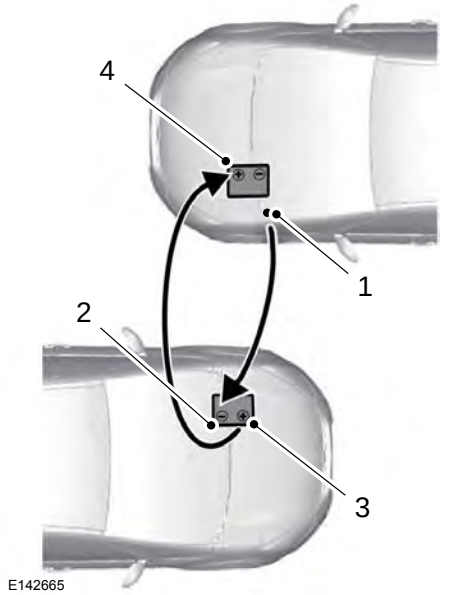
1. Connect the positive (+) jumper cable to the positive (+) terminal of the discharged battery.
2. Connect the other end of the positive (+) cable to the positive (+) terminal of the booster vehicle battery.
3. Connect the negative (-) cable to the negative (-) terminal of the booster vehicle battery.
4. Make the final connection of the negative (-) cable to an exposed metal part of the stalled vehicle's engine, away from the battery and the fuel injection system, or connect the negative (-) cable to a ground connection point if available.

Jump Starting

1. Start the engine of the booster vehicle and rev the engine moderately, or press the accelerator gently to keep your engine speed between 2000 and 3000 RPM, as shown in your tachometer.
2. Start the engine of the disabled vehicle.
3. Once the disabled vehicle has been started, run both vehicle engines for an additional three minutes before disconnecting the jumper cables.

Removing the Jumper Cables

Remove the jumper cables in the reverse order that they were connected.



1. Remove the negative (-) jumper cable from the disabled vehicle.
2. Remove the jumper cable on the negative (-) terminal of the booster vehicle battery.
3. Remove the jumper cable from the positive (+) terminal of the booster vehicle battery.
4. Remove the jumper cable from the positive (+) terminal of the disabled vehicle battery.
5. Allow the engine to idle for at least one minute.

GETTING THE SERVICES YOU NEED

Warranty repairs to your vehicle must be performed by an authorized dealer. While any authorized dealer handling your vehicle line will provide warranty service, we recommend you return to your selling authorized dealer who wants to ensure your continued satisfaction.

Please note that certain warranty repairs require special training and equipment, so not all authorized dealers are authorized to perform all warranty repairs. This means that, depending on the warranty repair needed, you may have to take your vehicle to another authorized dealer.

A reasonable time must be allowed to perform a repair after taking your vehicle to the authorized dealer. Repairs will be made using Ford or Motorcraft® parts, or remanufactured or other parts that are authorized by Ford.

Away From Home

If you are away from home when your vehicle needs service, contact the Ford Customer Relationship Center or use the online resources listed below to find the nearest authorized dealer.

In the United States:

Mailing address

Ford Motor Company
Customer Relationship Center
P.O. Box 6248
Dearborn, MI 48126

Telephone

1-800-392-3673 (FORD)
(TDD for the hearing impaired:
1-800-232-5952)

Additional information and resources are available online:

Website
www.owner.ford.com

These are some of the items that can be found online:

- U.S. dealer locator by Dealer Name, City/State or Zip Code.
- Owner Manuals.
- Maintenance Schedules.
- Recalls.
- Ford Extended Service Plans.
- Ford Genuine Accessories.
- Service specials and promotions.

In Canada:

Mailing address

Customer Relationship Centre
Ford Motor Company of Canada, Limited
P.O. Box 2000
Oakville, Ontario L6K 0C8

Telephone

1-800-565-3673 (FORD)

Website
www.ford.ca

Twitter

@FordServiceCA (English Canada)
@FordServiceQC (Quebec)

Additional Assistance

If you have questions or concerns, or are unsatisfied with the service you are receiving, follow these steps:

1. Contact your Sales Representative or Service Advisor at your selling or servicing authorized dealer.

2. If your inquiry or concern remains unresolved, contact the Sales Manager, Service Manager or Customer Relations Manager.
3. If you require assistance or clarification on Ford Motor Company policies, please contact the Ford Customer Relationship Center.

In order to help us serve you better, please have the following information available when contacting a Customer Relationship Center:

- Vehicle Identification Number.
- Your telephone number (home and business).
- The name of the authorized dealer and city where located.
- The vehicle's current odometer reading.

In some states within the United States, you must directly notify Ford in writing before pursuing remedies under your state's warranty laws, and Ford is also allowed a final repair attempt.

Additionally, in some states within the United States, a consumer has the option of submitting a warranty dispute to the BBB Auto Line before taking action under the Magnuson-Moss Warranty Act, or to the extent allowed by state law, before pursuing replacement or repurchase remedies provided by certain state laws. This dispute handling procedure is not required prior to enforcing state created rights or other rights which are independent of the Magnuson-Moss Warranty Act or state replacement or repurchase laws.

IN CALIFORNIA (U.S. ONLY)

California Civil Code Section 1793.2(d) requires that, if a manufacturer or its representative is unable to repair a motor vehicle to conform to the vehicle's applicable express warranty after a reasonable number of attempts, the manufacturer shall be required to either replace the vehicle with one substantially identical or repurchase the vehicle and reimburse the buyer in an amount equal to the actual price paid or payable by the consumer (less a reasonable allowance for consumer use). The consumer has the right to choose whether to receive a refund or replacement vehicle.

California Civil Code Section 1793.22(b) presumes that the manufacturer has had a reasonable number of attempts to conform the vehicle to its applicable express warranties if, within the first 18 months of ownership of a new vehicle or the first 18000 miles (29 000 km), whichever occurs first:

1. Two or more repair attempts are made on the same non-conformity likely to cause death or serious bodily injury OR
2. Four or more repair attempts are made on the same nonconformity (a defect or condition that substantially impairs the use, value or safety of the vehicle) OR
3. The vehicle is out of service for repair of nonconformities for a total of more than 30 calendar days (not necessarily all at one time).

In the case of 1 or 2 above, the consumer must also notify the manufacturer of the need for the repair of the nonconformity at the following address:

Ford Motor Company
16800 Executive Plaza Drive
Mail Drop 3NE-B
Dearborn, MI 48126

You are required to submit your warranty dispute to BBB AUTO LINE before asserting in court any rights or remedies conferred by California Civil Code Section 1793.22(b). You are also required to use BBB AUTO LINE before exercising rights or seeking remedies created by the Federal Magnuson-Moss Warranty Act, 15 U.S.C. sec. 2301 et seq. If you choose to seek redress by pursuing rights and remedies not created by California Civil Code Section 1793.22(b) or the Magnuson-Moss Warranty Act, resort to BBB AUTO LINE is not required by those statutes.

THE BETTER BUSINESS BUREAU (BBB) AUTO LINE PROGRAM (U.S. ONLY)

Your satisfaction is important to Ford Motor Company and to your dealer. If a warranty concern has not been resolved using the three-step procedure outlined earlier in this chapter in the Getting the Services you need section, you may be eligible to participate in the BBB AUTO LINE program.

The BBB AUTO LINE program consists of two parts – mediation and arbitration. During mediation, a representative of the BBB will contact both you and Ford Motor Company to explore options for settlement of the claim. If an agreement is not reached during mediation or you do not want to participate in mediation, and if your claim is eligible, you may participate in the arbitration process. An arbitration hearing will be scheduled so that you can present your case in an informal setting before an impartial person. The arbitrator will consider the testimony provided and make a decision after the hearing.

Disputes submitted to the BBB AUTO LINE program are usually decided within forty days after you file your claim with the BBB. You are not bound by the decision, and may reject the decision and proceed to court where all findings of the BBB Auto Line dispute, and decision, are admissible in the court action. Should you choose to accept the BBB AUTO LINE decision, Ford is then bound by the decision, and must comply with the decision within 30 days of receipt of your acceptance letter.

BBB AUTO LINE Application: Using the information provided below, please call or write to request a program application. You will be asked for your name and address, general information about your new vehicle, information about your warranty concerns, and any steps you have already taken to try to resolve them. A Customer Claim Form will be mailed that will need to be completed, signed and returned to the BBB along with proof of ownership. Upon receipt, the BBB will review the claim for eligibility under the Program Summary Guidelines.

You can get more information by calling BBB AUTO LINE at 1-800-955-5100, or writing to:

BBB AUTO LINE
3033 Wilson Boulevard, Suite 600
Arlington, Virginia 22201

BBB AUTO LINE applications can also be requested by calling the Ford Motor Company Customer Relationship Center at 1-800-392-3673.

Note: *Ford Motor Company reserves the right to change eligibility limitations, modify procedures, or to discontinue this process at any time without notice and without obligation.*

UTILIZING THE MEDIATION/ARBITRATION PROGRAM (CANADA ONLY)

For vehicles delivered to authorized Canadian dealers. In those cases where you continue to feel that the efforts by Ford of Canada and the authorized dealer to resolve a factory-related vehicle service concern have been unsatisfactory, Ford of Canada participates in an impartial third party mediation/arbitration program administered by the Canadian Motor Vehicle Arbitration Plan (CAMVAP).

The CAMVAP program is a straight forward and relatively speedy alternative to resolve a disagreement when all other efforts to produce a settlement have failed. This procedure is without cost to you and is designed to eliminate the need for lengthy and expensive legal proceedings.

In the CAMVAP program, impartial third-party arbitrators conduct hearings at mutually convenient times and places in an informal environment. These impartial arbitrators review the positions of the parties, make decisions and, when appropriate, render awards to resolve disputes. CAMVAP decisions are fast, fair, and final as the arbitrator's award is binding on both you and Ford of Canada.

CAMVAP services are available in all Canadian territories and provinces. For more information, without charge or obligation, call your CAMVAP Provincial Administrator directly at 1-800-207-0685 or visit www.camvap.ca.

GETTING ASSISTANCE OUTSIDE THE U.S. AND CANADA

Before exporting your vehicle to a foreign country, contact the appropriate foreign embassy or consulate. These officials can inform you of local vehicle registration regulations and where to find unleaded fuel.

If you cannot find unleaded fuel or can only get fuel with an anti-knock index lower than is recommended for your vehicle, contact our Customer Relationship Center.

The use of leaded fuel in your vehicle without proper conversion may damage the effectiveness of your emission control system and may cause engine knocking or serious engine damage. Ford Motor Company or Ford of Canada is not responsible for any damage caused by use of improper fuel. Using leaded fuel may also result in difficulty importing your vehicle back into the United States.

If your vehicle must be serviced while you are traveling or living in Asia-Pacific Region, Sub-Saharan Africa, U.S. Virgin Islands, Central America, the Caribbean, and Israel, contact the nearest authorized dealer. If the authorized dealer cannot help you, contact:

FORD MOTOR COMPANY
Customer Relationship Center
1555 Fairlane Drive
Fairlane Business Park #3
Allen Park, Michigan 48101
U.S.A.
Telephone: (313) 594-4857
Fax: (313) 390-0804
Email: expcac@ford.com

For customers in Guam, the Commonwealth of the Northern Mariana Islands (CNMI), America Samoa, and the U.S. Virgin Islands, please feel free to call our Toll-Free Number: (800) 841-FORD (3673).

If your vehicle must be serviced while you are traveling or living in Puerto Rico, contact the nearest authorized dealer. If the authorized dealer cannot help you, contact:

FORD MOTOR COMPANY
Customer Relationship Center
1555 Fairlane Drive
Fairlane Business Park #3
Allen Park, Michigan 48101
U.S.A.
Telephone: (800) 841-FORD (3673)
FAX: (313) 390-0804
Email: prcac@ford.com
www.ford.com.pr

If your vehicle must be serviced while you are traveling or living in the Middle East, contact the nearest authorized dealer. If the authorized dealer cannot help you, contact:

FORD MOTOR COMPANY
Customer Relationship Center
1555 Fairlane Drive
Fairlane Business Park #3
Allen Park, Michigan 48101
U.S.A.

Ford: 80004443673
Lincoln: 80004441067
If calling from the UAE: 80004441066
If calling from the Kingdom of Saudi Arabia: 8008443673
If calling from Kuwait: 22280384

FAX: +971 4 3327266
Email: menacac@ford.com
www.me.ford.com

If you buy your vehicle in North America and then relocate to any of the above locations, register your vehicle identification number (VIN) and new address with Ford Motor Company Export Operations & Global Growth Initiatives by emailing **expcac@ford.com**.

If you are in another foreign country, contact the nearest authorized dealer. In the event your inquiry is unresolved, communicate your concern with the dealership's Sales Manager, Service Manager or Customer Relations Manager. If you require additional assistance or clarification, please contact the respective Customer Relationship Center as previously listed.

Customers in the U.S. should call 1-800-392-3673.

ORDERING ADDITIONAL OWNER'S LITERATURE

To order the publications in this portfolio, contact Helm, Incorporated at:

HELM, INCORPORATED
47911 Halyard Drive
Plymouth, Michigan 48170
Attention: Customer Service

Or to order a free publication catalog, call toll free: 1-800-782-4356

Monday-Friday 8:00 a.m. - 6:00 p.m. EST

Helm, Incorporated can also be reached by their website:

www.helminc.com

(Items in this catalog may be purchased by credit card, check or money order.)

Obtaining a French Owner's Manual

French Owner's Manual can be obtained from your authorized dealer or by contacting Helm, Incorporated using the contact information listed previously in this section.

REPORTING SAFETY DEFECTS (U.S. ONLY)

E142557

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Ford Motor Company.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Ford Motor Company.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to http://www.safercar.gov; or write to:

Administrator

1200 New Jersey Avenue, Southeast

Washington, D.C. 20590

You can also obtain other information about motor vehicle safety from http://www.safercar.gov.

REPORTING SAFETY DEFECTS (CANADA ONLY)

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform Transport Canada and Ford of Canada.

Transport Canada Contact Information	
Website	www.tc.gc.ca/eng/motorvehiclesafety/safevehicles-defectinvestigations-index-76.htm (English)
Website	www.tc.gc.ca/fra/securiteautomobile/VehiculesSecuritaires-Enquetes-index-76.htm (French)
Phone	1–800–333–0510

Ford of Canada Contact Information	
Website	www.ford.ca
Phone	1–800–565-3673

FUSE SPECIFICATION CHART

Power Distribution Box

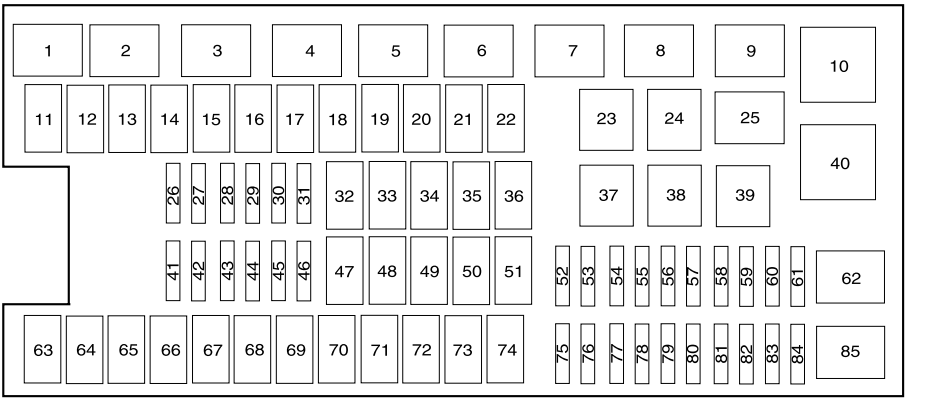
WARNINGS

Always disconnect the battery before servicing high current fuses.

To reduce risk of electrical shock, always replace the cover to the power distribution box before reconnecting the battery or refilling fluid reservoirs.

The power distribution box is located in the engine compartment. It has high-current fuses that protect your vehicle's main electrical systems from overloads.

If you disconnect and reconnect the battery, you need to reset some features. See **Changing the 12V Battery** (page 256).



E166589

The high-current fuses are coded as follows:

Fuse or relay number	Fuse amp rating	Protected components
1	Relay	Rear washer relay.
2	Relay	Starter relay.
3	Relay	Blower motor relay.
4	Relay	Rear wiper relay.
5	Relay	Fuel pump relay.

Fuse or relay number	Fuse amp rating	Protected components
6	Relay	Electronic cooling fan.
7	Relay	Rear window defroster. Heated mirror relay.
8	Relay	Electronic cooling fan.
9	Relay	Run/start relay.
10	Relay	Power distribution box relay.
11	40A*	Power running boards. Heated seats.
12	40A*	Run/start relay.
13	30A*	Starter relay.
14	50A*	Electronic cooling fan.
15	—	Not used.
16	50A*	Electronic fan.
17	—	Not used.
18	30A*	Trailer brake.
19	20A*	Power point (console).
20	20A*	4x4 module HAT 2.
21	30A*	Trailer tow module.
22	30A*	Passenger power seat.
23	Relay	Air conditioner clutch relay.
24	Relay	Trailer tow park lamp relay.
25	—	Not used.
26	10A**	ALT sensor.
27	20A**	4x4 module HAT 1.
28	25A**	Trailer tow park lamp relay.
29	10A**	Integrated wheel end solenoid.
30	10A**	Air conditioner clutch relay.
31	15A**	Trailer tow back up lamp.

Fuse or relay number	Fuse amp rating	Protected components
32	40A*	Blower motor relay.
33	40A*	110-volt AC power point.
34	30A*	Auxiliary blower motor.
35	50A*	Powertrain control module relay.
36	30A*	Power liftgate.
37	—	Not used.
38	—	Not used.
39	Relay	Trailer tow backup lamps relay.
40	Relay	Electronic fan 2 relay.
41	10A**	Powertrain control module keep-alive power.
42	5A**	Run/start relay.
43	10A**	Brake on/off switch.
44	20A**	Fuel pump relay.
45	10A**	Not used (spare).
46	15A**	Front/rear washer pump.
47	30A*	Rear wiper motor.
48	40A*	Trailer tow module.
49	—	Not used.
50	30A*	Front wiper motor relay.
51	40A*	Rear window defroster and heated mirror relay.
52	10A**	Anti-lock brake system run/start feed.
53	5A**	Powertrain control module ISP.
54	5A**	Power steering.
55	—	Not used.
56	30A**	Passenger compartment fuse panel run/start feed.

Fuse or relay number	Fuse amp rating	Protected components
57	5A**	Blower motor run/start.
58	—	Not used.
59	15A**	Heated mirrors.
60	—	Not used.
61	—	Not used.
62	—	Not used.
63	25A*	Electronic fan.
64	30A*	Moonroof.
65	20A*	Auxiliary power point (instrument panel valance panel).
66	20A*	Auxiliary power point (rear of center console).
67	40A*	Front row climate controlled seats.
68	30A*	Anti-lock brake system valves.
69	60A*	Anti-lock brake system pump.
70	30A*	Third row power fold seat.
71	20A*	Auxiliary power point/cigar lighter.
72	20A*	Auxiliary power point (right rear quarter panel).
73	20A*	Rear seat climate module.
74	30A*	Driver power seat.
75	25A**	Vehicle power 1 – powertrain control module.
76	20A**	Vehicle power 2 – powertrain control module.
77	20A**	Vehicle power 4 – ignition coils.
78	—	Not used.
79	15A**	Vehicle power 3 – powertrain control module.

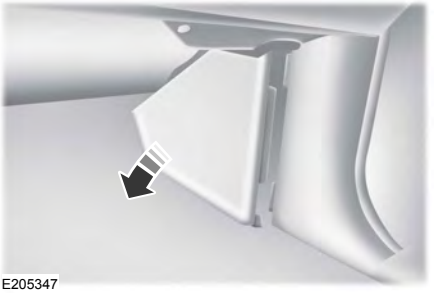
Fuse or relay number	Fuse amp rating	Protected components
80	—	Not used.
81	—	Not used.
82	5A**	Rain sensor.
83	—	Not used.
84	—	Not used.
85	Relay	Wiper motor relay.

*Cartridge fuses.

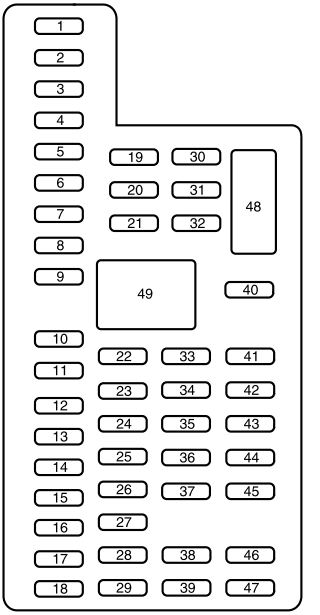
**Mini fuses.

Passenger Compartment Fuse Panel

The fuse panel is located under the right-hand side of the instrument panel.


E205347

To remove the trim panel for access to the fuse box, pull the panel toward you and swing it out away from the side and remove it. To reinstall it, line up the tabs with the grooves on the panel, then push it shut.



E163102

The fuses are coded as follows:

Fuse or relay number	Fuse amp rating	Protected components
1	30A	Driver window.
2	15A	Rear seat control. Multimedia gateway module.
3	30A	Passenger window.
4	10A	Demand lamps.
5	20A	Amplifier.
6	5A	Rear electronic automatic temperature control.
7	7.5A	Power mirror. Driver seat memory switch.
8	—	Not used.

Fuse or relay number	Fuse amp rating	Protected components
9	10A	SYNC. Power lift gate. Electric finish panel. Display.
10	10A	Run accessory relay.
11	10A	Passive entry/start module.
12	15A	Interior lighting. Puddle lamps.
13	15A	Right turn and stop/turn signals.
14	15A	Left turn and stop/turn signals.
15	15A	Reverse lamp. Center high mount stop lamp. EC mirror.
16	10A	Right front low beam.
17	10A	Left front low beam.
18	10A	Brake shift interlock/start button LED/ keypad illumination. Third row power folding seat. Passive entry touch start.
19	—	Not used.
20	20A	Lock/unlock relays.
21	—	Not used.
22	20A	Horn.
23	15A	Steering wheel control module. Cluster.
24	15A	Adjustable pedals/power adjustable column. Datalink.
25	15A	Liftgate release decklid. Liftglass release motor.
26	5A	Push to start switch.
27	20A	Passive entry/start module.

Fuse or relay number	Fuse amp rating	Protected components
28	15A	Ignition switch. Key inhibit switch.
29	20A	Radio. GPS.
30	15A	Front park lamps.
31	5A	Trailer brake on/off.
32	15A	Power vent. Driver's window motor. Power inverter.
33	10A	CCD suspension module.
34	10A	Rear park assist. Rear camera. BLIS. Heated seat.
35	5A	Climate module. O/D switch.
36	—	Not used.
37	10A	4X4 module.
38	10A	EC mirror. Moonroof. DVD. AM/FM radio.
39	15A	Left and right front high beams.
40	10A	Rear park/tail lamps.
41	7.5A	Restraints control module.
42	—	Not used.
43	—	Not used.
44	—	Not used.
45	5A	Not used (spare).
46	10A	Climate control.

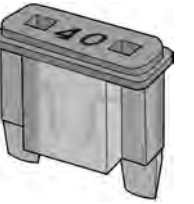
Fuse or relay number	Fuse amp rating	Protected components
47	15A	Fog lamps.
48	30A	Front passenger and rear windows circuit breaker.
49	—	Accessory delay window and vents relay.

CHANGING A FUSE

Fuses

WARNING

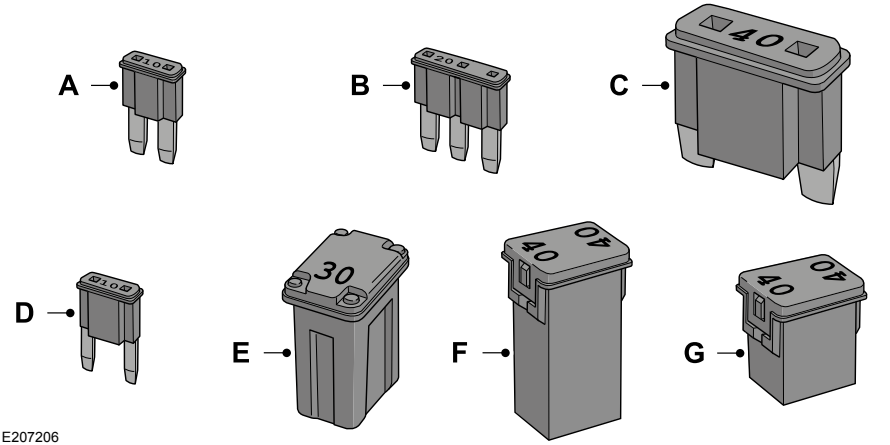
Always replace a fuse with one that has the specified amperage rating. Using a fuse with a higher amperage rating can cause severe wire damage and could start a fire.



E217331

If electrical components in the vehicle are not working, a fuse may have blown. Blown fuses are identified by a broken wire within the fuse. Check the appropriate fuses before replacing any electrical components.

Fuse Types



E207206

Callout	Fuse Type
A	Micro 2
B	Micro 3
C	Maxi
D	Mini
E	M Case
F	J Case
G	J Case Low Profile

GENERAL INFORMATION

Have your vehicle serviced regularly to help maintain its roadworthiness and resale value. There is a large network of authorized dealers that are there to help you with their professional servicing expertise. We believe that their specially trained technicians are best qualified to service your vehicle properly and expertly. They are supported by a wide range of highly specialized tools developed specifically for servicing your vehicle.

If your vehicle requires professional service, an authorized dealer can provide the necessary parts and service. Check your warranty information to find out which parts and services are covered.

Use only recommended fuels, lubricants, fluids and service parts conforming to specifications. Motorcraft® parts are designed and built to provide the best performance in your vehicle.

Precautions

- Do not work on a hot engine.
- Make sure that nothing gets caught in moving parts.
- Do not work on a vehicle with the engine running in an enclosed space, unless you are sure you have enough ventilation.
- Keep all open flames and other burning material (such as cigarettes) away from the battery and all fuel related parts.

Working with the Engine Off

1. Set the parking brake and shift to park (P).
2. Switch off the engine.
3. Block the wheels.

Working with the Engine On

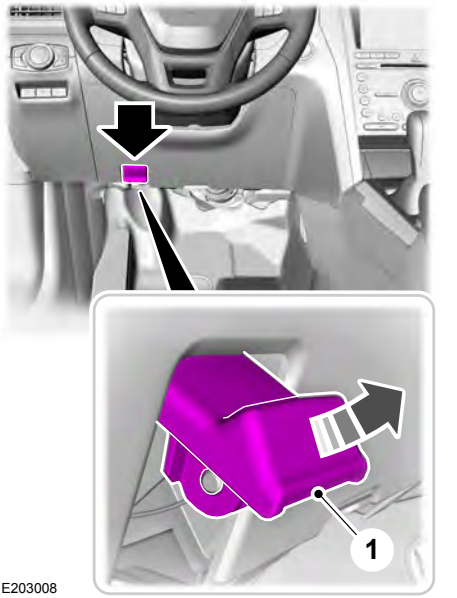
WARNING

To reduce the risk of vehicle damage and/or personal burn injuries, do not start your engine with the air cleaner removed and do not remove it while the engine is running.

1. Set the parking brake and shift to park (P).
2. Block the wheels.

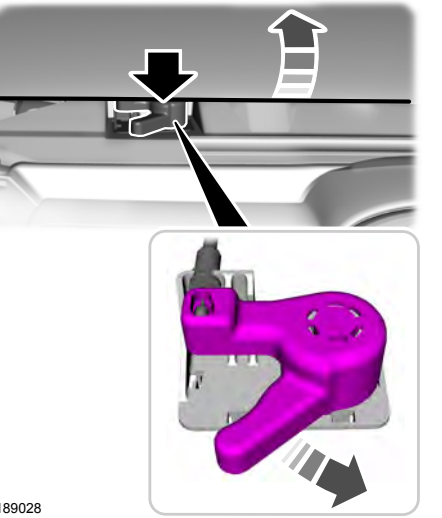
OPENING AND CLOSING THE HOOD

1. Inside the vehicle, pull the hood release handle located under the left-hand side of the instrument panel.



E203008

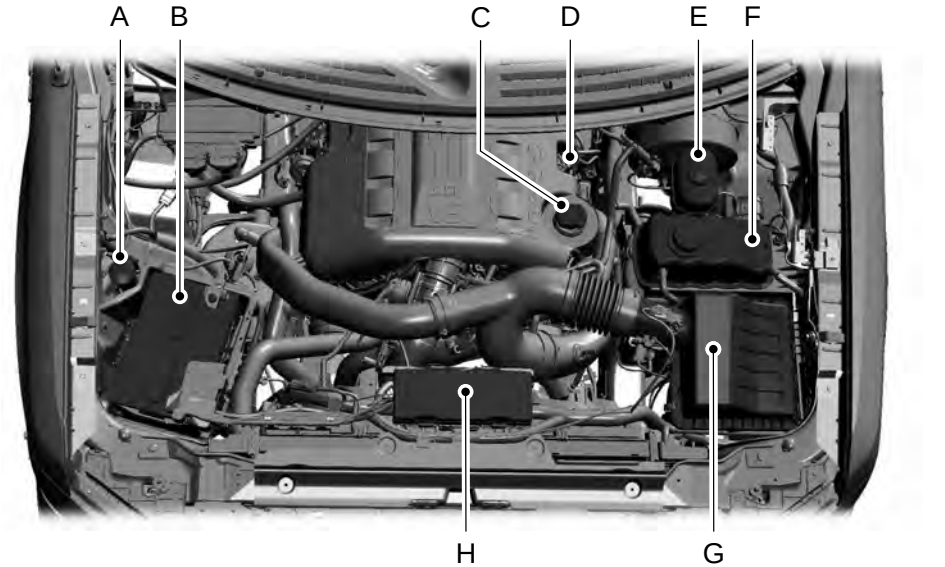
2. Go to the front of your vehicle and locate the secondary release lever under the front of the hood on the left-hand side. Release the hood latch by pushing the secondary release lever toward the center of your vehicle.



E189028

3. Lift the hood until the lift cylinders hold it open.
4. To close, lower the hood and make sure that it is closed properly and fully latched.

UNDER HOOD OVERVIEW



E166496

A. Windshield washer fluid reservoir. See **Washer Fluid Check** (page 256).
B. Battery. See **Changing the 12V Battery** (page 256).
C. Engine oil filler cap. See **Engine Oil Check** (page 249).
D. Engine oil dipstick. See **Engine Oil Dipstick** (page 249).
E. Brake fluid reservoir. See **Brake Fluid Check** (page 255).
F. Engine coolant reservoir. See **Engine Coolant Check** (page 250).
G. Air filter assembly. See **Changing the Engine Air Filter** (page 266).
H. Power distribution box. See **Fuses** (page 236).

ENGINE OIL DIPSTICK

E161560

A	MIN
B	MAX

ENGINE OIL CHECK

1. Make sure that your vehicle is on level ground.
2. Switch the engine off and wait 15 minutes for the oil to drain into the oil pan.
3. Set the parking brake and ensure the gearshift is in park (P).
4. Open the hood. Protect yourself from engine heat.
5. Locate and carefully remove the engine oil level dipstick. See **Under Hood Overview** (page 248).
6. Wipe the dipstick clean. Insert the dipstick fully, then remove it again.
   - If the oil level is between the lower and upper holes, the oil level is acceptable. DO NOT ADD OIL.
   - If the oil level is below the lower hole, add enough oil to raise the level within the lower and upper holes.
   - Oil levels above the upper hole may cause engine damage. Some oil must be removed from the engine by an authorized dealer.
7. Put the oil level dipstick back into the oil dipstick tube and ensure it is fully seated.

Adding Engine Oil

Note: *Do not remove the filler cap when the engine is running.*

Note: *Do not remove the engine oil level dipstick when the engine is running.*

Note: *Do not add oil further than the MAX mark. Oil levels above the MAX mark may cause engine damage.*

E142732

Only use oils certified for gasoline engines by the American Petroleum Institute (API). An oil with this trademark symbol conforms to the current engine and emission system protection standards and fuel economy requirements of the International Lubricants Specification Advisory Council (ILSAC), comprised of U.S. and Japanese automobile manufacturers.

1. Check the engine oil level.
2. If the engine oil level is not within the normal range, add engine oil that meets Ford specifications. See **Capacities and Specifications** (page 307).
3. Remove the engine oil filler cap and use a funnel to pour the engine oil into the opening.
4. Wipe off any spilled oil.
5. Recheck the engine oil level. Make sure the oil level is not above the normal operating range on the engine oil level dipstick.
6. Install the engine oil level dipstick and ensure it is fully seated.
7. Fully install the engine oil filler cap by turning the filler cap clockwise until three clicks are heard or until the cap is fully seated.

OIL CHANGE INDICATOR RESET

Use the information display controls on the steering wheel to reset the oil change indicator.

From the main menu scroll to:

Message	Action and description
Settings	Press the right arrow button, then from this menu scroll to the following message.
Vehicle	Press the right arrow button, then from this menu scroll to the following message.
Oil Life	Press the right arrow button, then from this menu scroll to the following message.
Hold OK to Reset	Press and hold the **OK** button until the instrument cluster displays the following message. Reset Successful
	When the oil change indicator resets the instrument cluster displays 100%. Remaining Life {00}%
	If the instrument cluster displays one of the following messages, repeat the process. Not Reset Reset Cancelled

ENGINE COOLANT CHECK

WARNINGS

Do not add engine coolant when the engine is hot. Steam and scalding liquids released from a hot cooling system can burn you badly. Also, spilling coolant on hot engine parts can burn you.

WARNINGS

Do not put engine coolant in the windshield washer fluid container. If sprayed on the windshield, engine coolant could make it difficult to see through the windshield.

To reduce the risk of personal injury, make sure the engine is cool before unscrewing the coolant pressure relief cap. The cooling system is under pressure. Steam and hot liquid can come out forcefully when you loosen the cap slightly.

Do not add coolant further than the **MAX** mark.

Checking the Engine Coolant

When the engine is cold, check the concentration and level of the engine coolant at the intervals listed in the scheduled maintenance information. See **Scheduled Maintenance** (page 378).

Note: *Make sure that the coolant level is between the **MIN** and **MAX** marks on the coolant reservoir.*

Note: *Coolant expands when it is hot. The level may extend beyond the **MAX** mark.*

Note: *If the level is at the MIN mark, below the MIN mark, or empty, add coolant immediately.*

Maintain coolant concentration within 48% to 50%, which equates to a freeze point between -30ºF (-34ºC) and -34ºF (-37ºC).

Note: *For best results, coolant concentration should be tested with a refractometer such as Robinair® Coolant and Battery Refractometer 75240. We do not recommend the use of hydrometers or coolant test strips for measuring coolant concentrations.*

Note: *Automotive fluids are not interchangeable. Do not use engine coolant, antifreeze or windshield washer fluid outside of its specified function and vehicle location.*

Adding Engine Coolant

Note: *Do not use stop leak pellets, cooling system sealants or additives as they can cause damage to the engine cooling or heating systems. Your warranty may not cover these damages.*

Note: *During normal vehicle operation, the coolant may change color from orange to pink or light red. As long as the coolant is clear and uncontaminated, this color change does not indicate the coolant has degraded nor does it require the coolant to be drained, the system to be flushed, or the coolant to be replaced.*

Do not mix different colors or types of coolant in your vehicle. Mixing of engine coolants may harm your engine's cooling system. Use prediluted engine coolant meeting the correct specification. See **Capacities and Specifications** (page 307). The use of an incorrect coolant may harm the engine or cooling system components and may not be covered by the vehicle Warranty.

In case of emergency, you can add a large amount of water without engine coolant in order to reach a vehicle service location. In this instance, qualified personnel:

1. Must drain the cooling system.
2. Chemically clean the cooling system with Motorcraft Premium Cooling System Flush.
3. Refill with engine coolant as soon as possible.

Water alone, without engine coolant, can cause engine damage from corrosion, overheating or freezing.

Do not use the following as a coolant substitute:

- Alcohol.
- Methanol.
- Brine.
- Any engine coolant mixed with alcohol or methanol antifreeze or coolant.

Alcohol and other liquids can cause engine damage from overheating or freezing.

Do not add extra inhibitors or additives to the coolant. These can be harmful and compromise the corrosion protection of the engine coolant.

When adding coolant:

1. Unscrew the cap slowly. Any pressure will escape as you unscrew the cap.
2. Add prediluted engine coolant meeting the correct specification. See **Capacities and Specifications** (page 307).
3. Check the coolant level in the coolant reservoir the next few times you drive your vehicle.
4. If necessary, add enough prediluted engine coolant to bring the coolant level to the proper level.

Recycled Engine Coolant

We do not recommend the use of recycled engine coolant as an approved recycling process is not yet available.

Used engine coolant should be disposed of in an appropriate manner. Follow your community's regulations and standards for recycling and disposing of automotive fluids.

Severe Climates

If you drive in extremely cold climates:

- It may be necessary to have an authorized dealer increase the coolant concentration above 50%.
- A coolant concentration of 60% provides improved freeze point protection. Engine coolant concentrations above 60% decrease the overheat protection characteristics of the engine coolant and may cause engine damage.

If you drive in extremely hot climates:

- It may be necessary to have an authorized dealer decrease the coolant concentration to 40%.
- A coolant concentration of 40% provides improved overheat protection. Engine coolant concentrations below 40% decrease the freeze and corrosion protection characteristics of the engine coolant and may cause engine damage.

Vehicles driven year-round in non-extreme climates should use prediluted engine coolant for optimum cooling system and engine protection.

What You Should Know About Fail-Safe Cooling

If you deplete the engine coolant supply, fail-safe cooling allows you to temporarily drive your vehicle before you incur incremental component damage. The fail-safe distance depends on ambient temperatures, vehicle load and terrain.

How Fail-Safe Cooling Works

If the engine begins to overheat, the engine coolant temperature gauge will move to the red (hot) area and:

the coolant temperature warning light will illuminate

the service engine soon indicator will illuminate.

If the engine reaches a preset over-temperature condition, the engine automatically switches to alternating cylinder operation. Each disabled cylinder acts as an air pump and cools the engine.

When this occurs, your vehicle will still operate. However:

- The engine power will be limited.
- This will disable the air conditioning system.

Continued operation increases the engine temperature, causing the engine to completely shut down. Your steering and braking effort increases in this situation.

When the engine temperature cools, you can re-start your engine. Take your vehicle to an authorized dealer as soon as possible to minimize engine damage.

When Fail-Safe Mode Is Activated

WARNINGS

Fail-safe mode is for use during emergencies only. Operate your vehicle in fail-safe mode only as long as necessary to bring your vehicle to rest in a safe location and seek immediate repairs. When in fail-safe mode, your vehicle will have limited power, will not be able to maintain high-speed operation, and may completely shut down without warning, potentially losing engine power, power steering assist, and power brake assist, which may increase the possibility of a crash resulting in serious injury.

Never remove the coolant reservoir cap while the engine is running or hot.

You have limited engine power when in the fail-safe mode, so drive your vehicle with caution. Your vehicle will not maintain high-speed operation and the engine will operate poorly.

Remember that the engine is capable of automatically shutting down to prevent engine damage. In this situation:

1. Pull off the road as soon as safely possible and switch off the engine.
2. Tow your vehicle to an authorized dealer.
3. If this is not possible, wait a short period for the engine to cool.
4. Check the coolant level and add if low.
5. Re-start the engine and drive your vehicle to an authorized dealer.

Note: *Driving your vehicle without repair increases the chance of engine damage. Contact an authorized dealer as soon as possible.*

Engine Fluid Temperature Management (If Equipped)

WARNINGS

To reduce the risk of crash and injury, be prepared that the vehicle speed may reduce and the vehicle may not be able to accelerate with full power until the fluid temperatures reduce.

Never remove the coolant reservoir cap while the engine is running or hot.

Your vehicle can pull a trailer, but because of the added load, your vehicle's engine may temporarily reach higher temperatures during severe operating conditions such as ascending a long or steep grade while pulling a trailer in high temperatures.

At this time, you may notice your engine coolant temperature gauge needle move toward the **H** and the **POWER REDUCED TO LOWER TEMP** message may appear in the information display.

You may notice a reduction in vehicle speed caused by reduced engine power. In order to manage the engine fluid temperatures, your vehicle may enter this mode if certain high-temperature and high-load conditions take place. The amount of speed reduction depends on many factors such as vehicle loading, towing, grade and ambient temperature. If this occurs, there is no need to pull off the road. You can continue to drive your vehicle while this message is active.

The air conditioning may also cycle on and off during severe operating conditions to protect overheating of the engine. When the engine coolant temperature decreases to a normal operating temperature, the air conditioning will turn on once again.

If the engine coolant temperature gauge moves fully into the red (hot) area, or if the coolant temperature warning or service engine soon messages appear in your information display:

1. Pull off the road as soon as safely possible and shift the transmission into **P**.
2. Leave the engine running until the coolant temperature gauge needle moves away from the red (hot) area. After several minutes, if the temperature does not drop, follow the remaining steps.
3. Switch the engine off and wait for it to cool before checking the coolant level.
4. If the coolant level is normal, restart your engine and continue.
5. If the coolant is low, add coolant, and restart the engine. See **Adding Engine Coolant** or **How Fail-Safe Cooling Works** in this chapter for more information.

AUTOMATIC TRANSMISSION FLUID CHECK

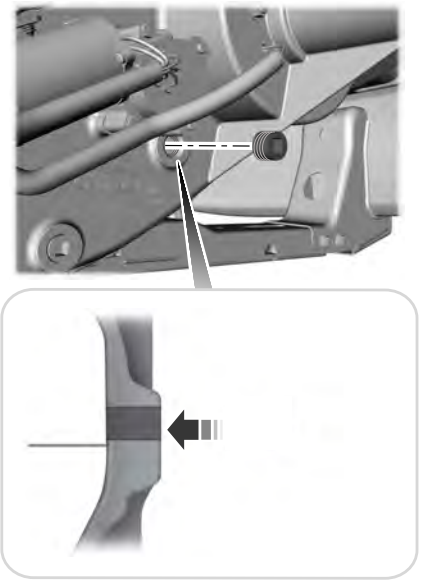
If required, have an authorized dealer check and change the transmission fluid at the correct service interval. See **Scheduled Maintenance** (page 378).

The automatic transmission does not have a transmission fluid dipstick.

Refer to your scheduled maintenance information for scheduled intervals for fluid checks and changes. Your transmission does not consume fluid. However, if the transmission slips, shifts slowly or if you notice a sign of leaking fluid, contact an authorized dealer.

Do not use supplemental transmission fluid additives, treatments or cleaning agents. The use of these materials may affect transmission operation and result in damage to internal transmission components.

TRANSFER CASE FLUID CHECK (If Equipped)



E170444

1. Clean the area around the filler plug.
2. Remove the filler plug.
3. Inspect the fluid level. The fluid level should be within 0.20 in (5mm) from the bottom of the hole.
4. Add fluid through the filler opening. Fill to the bottom of the opening.

Use only fluid that meets Ford specifications. See **Capacities and Specifications** (page 307).

BRAKE FLUID CHECK

WARNINGS

Do not use any fluid other than the recommended brake fluid as this will reduce brake efficiency. Use of incorrect fluid could result in the loss of vehicle control, serious personal injury or death.

Only use brake fluid from a sealed container. Contamination with dirt, water, petroleum products or other materials may result in brake system damage or failure. Failure to adhere to this warning could result in the loss of vehicle control, serious personal injury or death.

Do not allow the fluid to touch your skin or eyes. If this happens, rinse the affected areas immediately with plenty of water and contact your physician.

A fluid level between the **MAX** and **MIN** lines is within the normal operating range and there is no need to add fluid. A fluid level not in the normal operating range could compromise the performance of the system. Have your vehicle checked immediately.

E170684

To avoid fluid contamination, the reservoir cap must remain in place and fully tight, unless you are adding fluid.

Only use fluid that meets Ford specifications. See **Capacities and Specifications** (page 307).

WASHER FLUID CHECK

WARNING

If you operate your vehicle in temperatures below 40ºF (5ºC), use washer fluid with antifreeze protection. Failure to use washer fluid with antifreeze protection in cold weather could result in impaired windshield vision and increase the risk of injury or accident.

Note: *The front and rear washer systems are supplied from the same reservoir.*

Add fluid to fill the reservoir if the level is low. Only use a washer fluid that meets Ford specifications. See **Capacities and Specifications** (page 307).

State or local regulations on volatile organic compounds may restrict the use of methanol, a common windshield washer antifreeze additive. Washer fluids containing non-methanol antifreeze agents should be used only if they provide cold weather protection without damaging the vehicle's paint finish, wiper blades or washer system.

FUEL FILTER

Your vehicle is equipped with a lifetime fuel filter that is integrated with the fuel tank. Regular maintenance or replacement is not needed.

CHANGING THE 12V BATTERY

WARNINGS

Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lighted substances to come near the battery. When working near the battery, always shield your face and protect your eyes. Always provide correct ventilation.

When lifting a plastic-cased battery, excessive pressure on the end walls could cause acid to flow through the vent caps, resulting in personal injury and damage to the vehicle or battery. Lift the battery with a battery carrier or with your hands on opposite corners.

WARNINGS

Keep batteries out of reach of children. Batteries contain sulfuric acid. Avoid contact with skin, eyes or clothing. Shield your eyes when working near the battery to protect against possible splashing of acid solution. In case of acid contact with skin or eyes, flush immediately with water for a minimum of 15 minutes and get prompt medical attention. If acid is swallowed, call a physician immediately.

Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.

This vehicle may be fitted with more than one battery. Removing the battery cables from only one battery does not disconnect your vehicle electrical system. Make sure you disconnect the battery cables from all batteries when disconnecting power. Failure to do so may cause serious personal injury or property damage.

Your vehicle is fitted with a Motorcraft maintenance-free battery which normally does not require additional water.

When a battery replacement is required, you must use a recommended replacement battery that matches the electrical requirements of the vehicle.

Note: *After cleaning or replacing the battery, make sure you reinstall the battery cover or shield.*

Note: *If you add electrical accessories or components to the vehicle, it may adversely affect the low voltage battery performance and durability. This may also affect the performance of other electrical systems in the vehicle.*

For longer, trouble-free operation, keep the top of the battery clean and dry.

If you see any corrosion on the battery or terminals, remove the cables from the terminals and clean with a wire brush. You can neutralize the acid with a solution of baking soda and water.

Because your vehicle's engine is electronically controlled by a computer, some control conditions are maintained by power from the battery. When the battery is disconnected or a new battery is installed, the engine must relearn its idle and fuel trim strategy for optimum driveability and performance. Flexible fuel vehicles (FFV) must also relearn the ethanol content of the fuel for optimum driveability and performance.

To restore the settings, do the following:

1. Apply the parking brake.
2. Shift into park (P) or neutral (N).
3. Switch off all accessories.
4. Press the brake pedal and start your vehicle.
5. Run the engine until it reaches normal operating temperature. While the engine is warming up, complete the following: Reset the clock. See **Audio System** (page 316). Reset the power windows bounce-back feature. See **Windows and Mirrors** (page 80). Reset the radio station presets. See **Audio System** (page 316).
6. Allow the engine to idle for at least one minute.
7. Drive the vehicle at least 10 mi (16 km) to completely relearn the idle trim and fuel trim strategy.

Note: *If you do not allow the engine to relearn the idle and fuel trim strategy, the idle quality of your vehicle may be adversely affected until the engine computer eventually relearns the idle trim and fuel trim strategy.*

Note: *For flexible fuel vehicles, if you are operating on E85, you may experience poor starts or an inability to start the engine and driveability problems until the fuel trim and ethanol content have been relearned.*

Make sure that you dispose of old batteries in an environmentally friendly way. Seek advice from your local authority about recycling old batteries.

If storing your vehicle for more than 30 days without recharging the battery, we recommend that you disconnect the battery cables to maintain battery charge for quick starting.

Battery Management System (If Equipped)

The battery management system monitors battery conditions and takes actions to extend battery life. If excessive battery drain is detected, the system temporarily disables some electrical systems to protect the battery.

Systems included are:

- Heated rear window.
- Heated seats.
- Climate control.
- Heated steering wheel.
- Audio unit.
- Navigation system.

A message may appear in the information displays to alert you that battery protection actions are active. These messages are only for notification that an action is taking place, and not intended to indicate an electrical problem or that the battery requires replacement.

After battery replacement, or in some cases after charging the battery with an external charger, the battery management system requires eight hours of vehicle sleep time to relearn the battery state of charge. During this time your vehicle must remain fully locked with the ignition switched off.

Note: *Prior to relearning the battery state of charge, the battery management system may temporarily disable some electrical systems.*

Electrical Accessory Installation

To make sure the battery management system works correctly, do not connect an electrical device ground connection directly to the battery negative post. This can cause inaccurate measurements of the battery condition and potential incorrect system operation.

Note: *If you add electrical accessories or components to the vehicle, it may adversely affect battery performance and durability. This may also affect the performance of other electrical systems in the vehicle.*

CHECKING THE WIPER BLADES

E142463

Run the tip of your fingers over the edge of the blade to check for roughness.

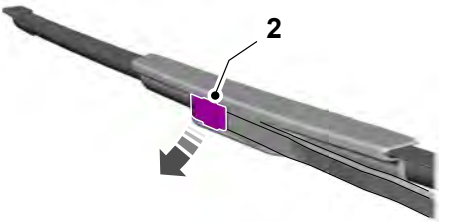
Clean the wiper blades with washer fluid or water applied with a soft sponge or cloth.

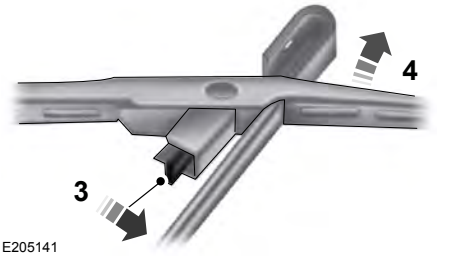
CHANGING THE WIPER BLADES

Note: *Do not hold the wiper blade when lifting the wiper arm.*

E165804

1. Pull the wiper blade and arm away from the glass.





E205141

2. Lift the wiper blade primary locking clip.
3. Press the wiper blade secondary locking clip.
4. Remove the wiper blade.

Note: *Make sure that the wiper arm does not spring back against the glass when the wiper blade is not attached.*

5. Install in the reverse order.

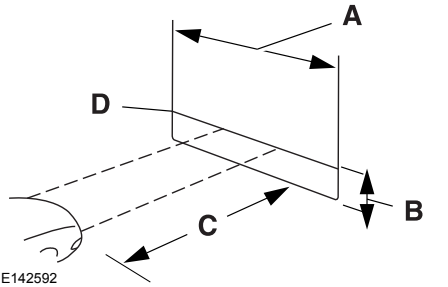
Note: *Make sure that the wiper blade locks into place.*

ADJUSTING THE HEADLAMPS

Vertical Aim Adjustment

The headlamps on your vehicle are properly aimed at the assembly plant. If your vehicle has been in an accident, contact an authorized dealer to check and realign your headlamps.

Headlamp Aiming Target



E142592

A	8 feet (2.4 meters).
B	Center height of lamp to ground.
C	25 feet (7.6 meters).
D	Horizontal reference line.

Vertical Aim Adjustment

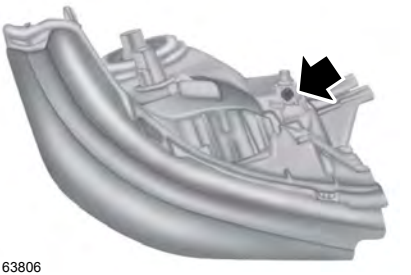
1. Park your vehicle directly in front of a wall or screen on a level surface, approximately 25 feet (7.6 meters) away.
2. Measure the height from the center of your headlamp (indicated by a 3.0 millimeter circle on the lens) to the ground and mark an 8 foot (2.4 meter) horizontal reference line on the vertical wall or screen at this height (a piece of masking tape works well).

Note: *To see a clearer light pattern for adjusting, you may want to block the light from one headlamp while adjusting the other.*

3. Switch on the low beam headlamps to illuminate the wall or screen and open the hood. Cover one of the headlamps so no light hits the wall.

E167358

4. **For halogen or LED headlamps:** On the wall or screen you will observe a light pattern with a distinct horizontal edge toward the right. If this edge is not at the horizontal reference line, you will need to adjust the beam so the edge is at the same height as the horizontal reference line.



E163806

5. Locate the vertical adjuster on each headlamp. Use a #2 Phillips screwdriver to turn the adjuster either counterclockwise or clockwise in order to adjust the vertical aim of the headlamp.
6. Repeat Steps 3 through 7 to adjust the other headlamp.
7. Close the hood and turn off the lamps.

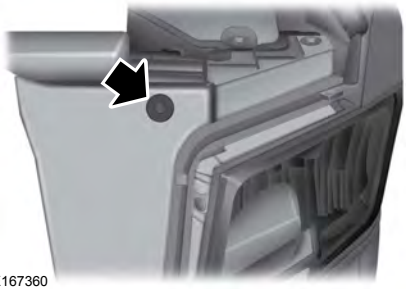
Horizontal Aim Adjustment

Horizontal aim is not required for this vehicle and is not adjustable.

REMOVING A HEADLAMP

Install in the reverse order unless otherwise stated.

1. Switch all of the lamps and the ignition off.
2. Open the hood. See **Opening and Closing the Hood** (page 246).


E167360

3. Remove the pushpin at the upper inboard corner of the lamp.

E167361

4. Remove the three retaining bolts.
5. Slide the headlamp assembly forward and disconnect the two attachments at the fender.
6. Disconnect the electrical connector.

CHANGING A BULB

WARNING

Bulbs can become hot. Let the bulb cool down before removing it. Failure to do so could result in personal injury.

Install in the reverse order unless otherwise stated.

Note: *If the bulb is accidentally touched, clean it with rubbing alcohol before installing it.*

Headlamp Bulb

1. Switch all of the lamps and the ignition off.
2. Remove the headlamp. See **Removing a Headlamp** (page 260).

E205568

3. Carefully remove the cover.
4. Disconnect the electrical connector.
5. Turn the bulb holder counterclockwise and remove it.

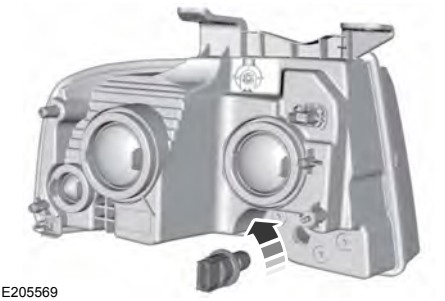
Note: *You cannot separate the bulb from the bulb holder.*

Note: *Do not touch the bulb glass.*

LED Headlamp Bulb (If Equipped)

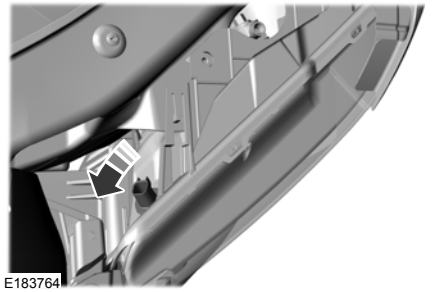
These lamps have LED bulbs. Contact an authorized dealer.

Front Direction Indicator Bulb



1. Switch all of the lamps and the ignition off.
2. Remove the headlamp. See **Removing a Headlamp** (page 260).
3. Turn the bulb holder counterclockwise and remove it.
4. Remove the bulb by pulling it straight out.

Side Marker Bulb



1. Switch all of the lamps and the ignition off.
2. Turn the bulb holder counterclockwise and remove it.

Note: *You cannot separate the bulb from the bulb holder.*

Note: *Do not touch the bulb glass.*

LED Direction Indicator and Side Marker Bulbs (If Equipped)

These lamps have LED bulbs. Contact an authorized dealer.

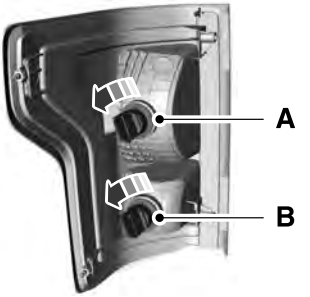
Fog Lamp Bulb (If Equipped)

1. Switch all of the lamps and the ignition off.
2. Disconnect the electrical connector.
3. Turn the bulb holder counterclockwise and remove it.

Note: *You cannot separate the bulb from the bulb holder.*

Note: *Do not touch the bulb glass.*

Rear Lamp, Brake Lamp, Rear Direction Indicator and Reverse Lamp Bulbs

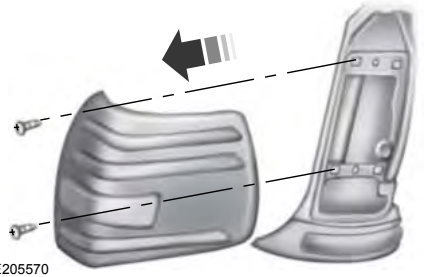


E187289

A. Reverse lamp bulb.

B. Rear lamp, brake lamp and direction indicator bulb.

1. Switch all of the lamps and the ignition off.



E205570

2. Carefully remove the cover.
3. Remove the retaining bolts from the lamp assembly.
4. Remove the lamp assembly.
5. Disconnect the electrical connector.
6. Turn the bulb holder counterclockwise and remove it.

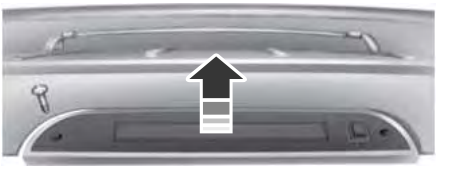
Note: *You cannot separate the bulb from the bulb holder.*

LED Rear Lamp, Brake Lamp, Rear Direction Indicator and Reverse Lamp Bulbs (If Equipped)

These lamps have LED bulbs. Contact an authorized dealer.

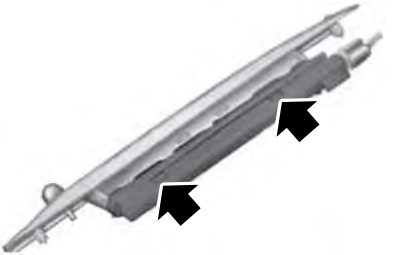
Central High-mounted Brake Lamp Bulb

1. Switch all of the lamps and the ignition off.



E205572

2. Remove the retaining bolts from the lamp assembly.



E205573

3. Remove the lamp and unclip the bulb holder.
4. Remove the bulb by pulling it straight out.

LED Central High-mounted Brake Lamp Bulb (If Equipped)

These lamps have LED bulbs. Contact an authorized dealer.

License Plate Lamp Bulb

E205571

1. Use a suitable tool, for example a screwdriver, to carefully remove the lamp.
2. Turn the bulb holder counterclockwise and remove it.
3. Remove the bulb by pulling it straight out.

Side Direction Indicator Bulb

These lamps have LED bulbs. Contact an authorized dealer.

BULB SPECIFICATION CHART

Replacement bulbs are specified in the chart below. Headlamp bulbs must be marked with an authorized D.O.T. marking for North America to make sure they have the proper lamp performance, light brightness, light pattern and safe visibility. The correct bulbs will not damage the lamp assembly or void the lamp assembly warranty and will provide quality bulb illumination time.

Exterior Lamps

Lamp	Specification	Power (Watt)
Position lamp.	W5W	5
Front direction indicator.	7444NA	5
Daytime running lamps.	LED	LED
Headlamp low beam.	H11	55
Headlamp high beam.	HB3	55
LED Headlamps.	LED	LED
Front fog lamps.	9140	55
Front side marker lamps.	W5W	5
Side direction indicator.	LED	LED
Rear lamp, brake lamp and rear direction indicator.	3057	27/6.7
Central high mounted brake lamp.	912	5
Reversing lamps.	3156	27
License plate lamp.	912	5

LED lamps are not serviceable. Contact an authorized dealer if they fail.

Interior Lamps

Lamp	Specification	Power (Watt)
Glove compartment lamp.	194	3.5
Vanity mirror lamp.	A6224PF	
Map lamp.	W5W	5
Interior lamp.[1]	W5W	5
Rear dome lamp.	578	10

[1]Second row rail lamp.

CHANGING THE ENGINE AIR FILTER

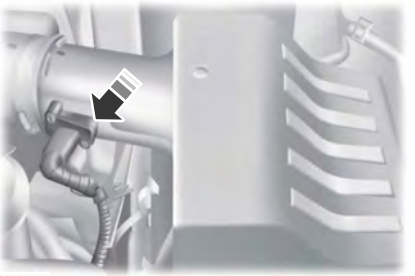
WARNING

To reduce the risk of vehicle damage and personal burn injuries, do not start your engine with the air cleaner removed and do not remove it while the engine is running.

Note: *Failure to use the correct air filter element may result in severe engine damage. Resulting component damage may not be covered by the vehicle Warranty.*

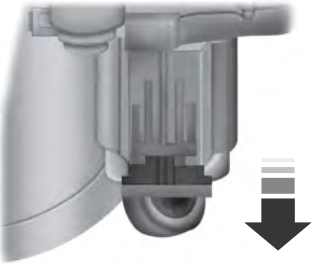
When changing the air filter element, use only the air filter element listed. See **Motorcraft Parts** (page 307).

Change the air filter element at the correct interval. See **Scheduled Maintenance** (page 378).



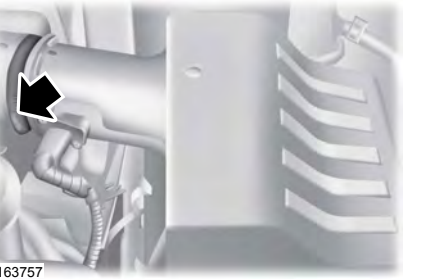
E163755

1. Locate the mass air flow sensor electrical connector on the air outlet tube. Disconnect the mass air flow sensor electrical connector.



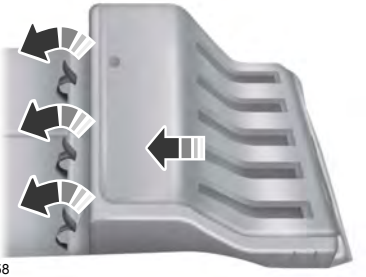
E163756

2. Reposition the locking clip on the connector (connector shown from below for clarity), squeeze the connector and pull it off of the air outlet tube.



E163757

3. Clean the area from around the air tube to the air cover connection to prevent debris from entering the system. Next, loosen the bolt on the air tube clamp so the clamp is no longer snug to the air tube. It is not necessary to completely remove the clamp.
4. Pull the air tube off from the air cleaner housing.

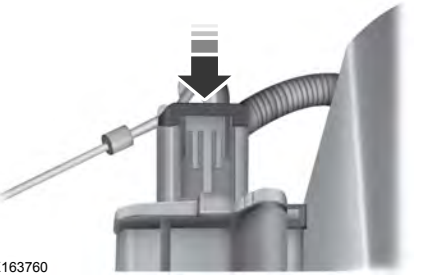


E163758

5. Release the three clamps that secure the cover to the air filter housing. Push the air filter cover toward the center of the vehicle and up slightly to release it.
6. Remove the air filter element from the air filter housing.
7. Install the new air filter element.

E163759

8. Replace the air filter housing cover and secure all the clamps. Be careful not to crimp the filter element edges between the air filter housing and cover and ensure that you properly align the tabs on the edge into the slots.
9. Slip the air tube onto the air filter housing and tighten the air-tube clamp bolt snugly. Do not over tighten air-tube clamp bolt.



E163760

10. Reconnect the mass air flow sensor electrical connector to the outlet tube. Make sure the locking tab on the connector is in the locked position (connector shown from below for clarity).

GENERAL INFORMATION

Your Ford or Lincoln authorized dealer has many quality products available to clean your vehicle and protect its finishes.

CLEANING PRODUCTS

For best results, use the following products or products of equivalent quality:

Materials

Name	Specification
Motorcraft Bug and Tar Remover ZC-42	-
Motorcraft Custom Bright Metal Cleaner ZC-15	-
Motorcraft® Detail Wash ZC-3-A	ESR-M14P4-A
Motorcraft Engine Shampoo and Degreaser (U.S.) ZC-20 (U.S.)	-
Engine Shampoo	-
Motorcraft Leather and Vinyl Cleaner ZC-56	-
Multi-Purpose Cleaner	-
Motorcraft® Premium Windshield Wash Concentrate with Bitterant (U.S.) ZC-32-B2 (U.S.)	WSS-M14P19-A
Professional Strength Carpet and Upholstery Cleaner ZC-54	-
Motorcraft Spot and Stain Remover (U.S.) ZC-14 (U.S.)	-
Motorcraft® Ultra-Clear Spray Glass Cleaner (U.S.) ZC-23 (U.S.)	ESR-M14P5-A
Motorcraft® Wheel and Tire Cleaner ZC-37-A	-

CLEANING THE EXTERIOR

Wash your vehicle regularly with cool or lukewarm water and a neutral pH shampoo, we recommend Motorcraft Detail Wash.

- Never use strong household detergents or soap, for example dish washing or laundry liquid. These products can discolor and spot painted surfaces.
- Never wash your vehicle when it is hot to the touch, or during strong or direct sunlight.
- Dry your vehicle with a chamois or soft terry cloth towel to eliminate water spotting.

- Immediately remove fuel spillages, bird droppings, insect deposits and road tar. These may cause damage to your vehicle’s paintwork or trim over time. We recommend Motorcraft Bug and Tar Remover.
- Remove any exterior accessories, for example antennas, before entering a car wash.

Note: *Suntan lotions and insect repellents can damage painted surfaces. If these substances come in contact with your vehicle, wash the affected area as soon as possible.*

Exterior Chrome Parts

- Apply a high quality-cleaning product to bumpers and other chrome parts. Follow the manufacturer’s instructions. We recommend Motorcraft Custom Bright Metal Cleaner.
- Do not apply the cleaning product to hot surfaces. Do not leave the cleaning product on chrome surfaces longer than the time recommended.
- Using other non-recommended cleaners can result in severe and permanent cosmetic damage.

Note: *Never use abrasive materials, for example steel wool or plastic pads as they can scratch the chrome surface.*

Note: *Do not use chrome cleaner, metal cleaner or polish on wheels or wheel covers.*

Exterior Plastic Parts

For routine cleaning we recommend Motorcraft Detail Wash. If tar or grease spots are present, we recommend Motorcraft Bug and Tar Remover.

Stripes or Graphics (If Equipped)

Hand washing your vehicle is preferred however, pressure washing may be used under the following conditions:

- Do not use water pressure higher than 2,000 psi (14,000 kPa).
- Do not use water hotter than 179ºF (82ºC).
- Use a spray with a 40º wide spray angle pattern.
- Keep the nozzle at a 12 in (305 mm) distance and 90º angle to your vehicle's surface.

Note: *Holding the pressure washer nozzle at an angle to the vehicle's surface may damage graphics and cause the edges to peel away from the vehicle's surface.*

Underbody

Flush the complete underside of your vehicle frequently. Keep body and door drain holes free of debris or foreign material.

WAXING

Regular waxing is necessary to protect your car's paint from the elements. We recommend that you wash and wax the painted surface once or twice a year.

When washing and waxing, park your vehicle in a shaded area out of direct sunlight. Always wash your vehicle before applying wax.

- Use a quality wax that does not contain abrasives.
- Follow the manufacturer’s instructions to apply and remove the wax.
- Apply a small amount of wax in a back-and-forth motion, not in circles.

- Do not allow wax to come in contact with any non-body (low-gloss black) colored trim. The wax will discolor or stain the parts over time.
  - Roof racks.
  - Bumpers.
  - Grained door handles.
  - Side moldings.
  - Mirror housings.
  - Windshield cowl area.
- Do not apply wax to glass areas.
- After waxing, your car's paint should feel smooth, and be free of streaks and smudges.

CLEANING THE ENGINE

Engines are more efficient when they are clean because grease and dirt buildup keep the engine warmer than normal.

When washing:

- Take care when using a power washer to clean the engine. The high-pressure fluid could penetrate the sealed parts and cause damage.
- Do not spray a hot engine with cold water to avoid cracking the engine block or other engine components.
- Spray Motorcraft Engine Shampoo and Degreaser on all parts that require cleaning and pressure rinse clean. In Canada, use Motorcraft Engine Shampoo.
- Never wash or rinse the engine while it is hot or running; water in the running engine may cause internal damage.
- Never wash or rinse any ignition coil, spark plug wire or spark plug well, or the area in and around these locations.
- Cover the battery, power distribution box, and air filter assembly to prevent water damage when cleaning the engine.

CLEANING THE WINDOWS AND WIPER BLADES

Car wash chemicals and environmental fallout can result in windshield and wiper blade contamination. Dirty windshield and wipers will result in poor windshield wiper operation. Keep the windshield and wiper blades clean to maintain windshield wiper performance.

To clean the windshield and wiper blades:

- Clean the windshield with a non-abrasive glass cleaner. When cleaning the interior of the windshield, avoid getting any glass cleaner on the instrument panel or door panels. Wipe any glass cleaner off these surfaces immediately.
- For windshields contaminated with tree sap, chemicals, wax or bugs, clean the entire windshield using steel wool (no greater than 0000 grade) in a circular motion and rinse with water.
- Clean the wiper blades with isopropyl rubbing alcohol or windshield washer concentrate.

Note: *Do not use razor blades or other sharp objects to clean or remove decals from the inside of the heated rear window. The vehicle warranty does not cover damage caused to the heated rear window grid lines.*

CLEANING THE INTERIOR

WARNINGS

Do not use cleaning solvents, bleach or dye on the vehicle's safety belts, as these actions may weaken the belt webbing.

On vehicles equipped with seat-mounted airbags, do not use chemical solvents or strong detergents. Such products could contaminate the side airbag system and affect performance of the side airbag in a collision.

For fabric, carpets, cloth seats, safety belts and seats equipped with side airbags:

- Remove dust and loose dirt with a vacuum cleaner.
- Remove light stains and soil with Motorcraft Professional Strength Carpet & Upholstery Cleaner.
- If grease or tar is present on the material, spot-clean the area first with Motorcraft Spot and Stain Remover. In Canada, use Motorcraft Multi-Purpose Cleaner.
- If a ring forms on the fabric after spot cleaning, clean the entire area immediately (but do not oversaturate) or the ring will set.
- Do not use household cleaning products or glass cleaners, which can stain and discolor the fabric and affect the flame retardant abilities of the seat materials.

CLEANING THE INSTRUMENT PANEL AND INSTRUMENT CLUSTER LENS

WARNING

Do not use chemical solvents or strong detergents when cleaning the steering wheel or instrument panel to avoid contamination of the airbag system.

Note: *Follow the same procedure as cleaning leather seats for cleaning leather instrument panels and leather interior trim surfaces. See* ***Cleaning Leather Seats*** *(page 272).*

Clean the instrument panel and cluster lens with a clean, damp and soft cloth, then use a clean, dry and soft cloth to dry these areas.

- Avoid cleaners or polishes that increase the gloss of the upper portion of the instrument panel. The dull finish in this area helps protect you from undesirable windshield reflection.
- Do not use any household cleaning products or glass cleaners as these may damage the finish of the instrument panel, interior trim and cluster lens.
- Wash or wipe your hands clean if you have been in contact with certain products such as insect repellent and suntan lotion to avoid possible damage to the interior painted surfaces.
- Do not allow air fresheners and hand sanitizers to spill onto interior surfaces. If a spill occurs, wipe off immediately. Your warranty may not cover these damages.

If a staining liquid like coffee or juice has been spilled on the instrument panel or on interior trim surfaces:

1. Wipe up spilled liquid using a clean, soft cloth as quickly as possible.
2. Use Motorcraft Premium Leather and Vinyl Cleaner or a commercially available leather cleaning product for automotive interiors. Test any cleaner or stain remover on an inconspicuous area.
3. Alternatively, wipe the surface with a clean, soft cloth and a mild soap and water solution. Dry the area with a clean, soft cloth.
4. If necessary, apply more soap and water solution or cleaning product to a clean, soft cloth and press it onto the soiled area. Allow this to set at room temperature for 30 minutes.
5. Remove the soaked cloth, then with a clean, damp cloth, use a rubbing motion for 60 seconds on the soiled area.
6. Dry the area with a clean, soft cloth.

CLEANING LEATHER SEATS (If Equipped)

Without King Ranch Edition

Note: *Follow the same procedure as cleaning leather seats for cleaning leather instrument panels and leather interior trim surfaces.*

For routine cleaning, wipe the surface with a soft, damp cloth and a mild soap and water solution. Dry the area with a clean, soft cloth.

For cleaning and removing spots and stains such as dye transfer, use Motorcraft Premium Leather and Vinyl Cleaner or a commercially available leather cleaning product for automotive interiors.

Note: *Test any cleaner or stain remover on an inconspicuous area.*

You should:

- Remove dust and loose dirt with a vacuum cleaner.
- Clean and treat spills and stains as soon as possible.

Do not use the following products as these may damage the leather:

- Oil and petroleum or silicone-based leather conditioners.
- Household cleaners.
- Alcohol solutions.
- Solvents or cleaners intended specifically for rubber, vinyl and plastics.

With King Ranch Edition

Your vehicle has seating covered in premium, top-grain leather that is extremely durable, but still requires special care and maintenance in order to preserve longevity and comfort.

Regular cleaning and conditioning maintains the appearance of the leather.

Cleaning

For dirt, use a vacuum cleaner then use a clean, damp cloth or soft brush.

For routine cleaning, wipe the surface with a soft, damp cloth. For more thorough cleaning, wipe the surface with a mild soap and water solution.

- Clean spills as quickly as possible.
- Test any cleaner or stain remover on an inconspicuous part of the leather as cleaners may darken the leather.

Expedition (TB7) Canada/United States of America, enUSA, Second Printing

- Do not spill coffee, ketchup, mustard, orange juice or oil-based products on the leather as they may permanently stain the leather.
- Do not use household cleaning products, alcohol solutions, solvents or cleaners intended for rubber, vinyl or plastics.

Scratches

Because the leather in the seat comes from genuine steer hides, there may be evidence of naturally occurring markings, such as small scars. These markings give character to the seating covers and are considered to be proof of a genuine leather product.

In order to lessen the appearance of certain scratches and other wear marks, apply conditioner on the affected area following the same instructions as in the **Conditioning** section.

Conditioning

Bottles of King Ranch Leather Conditioner are available at the King Ranch Saddle Shop. Visit the website at www.krsaddleshop.com, or call 1–800–282–KING (5464) in the United States. If you are unable to obtain King Ranch Leather Conditioner, use another premium leather conditioner.

- Clean the surfaces using the steps outlined in the Cleaning section.
- Make sure the leather is dry then apply a nickel-sized amount of conditioner to a clean, dry cloth.
- Rub the conditioner into the leather until it disappears. Allow the conditioner to dry, then repeat the process for the entire interior. If a film appears, wipe it off with a dry, clean cloth.

REPAIRING MINOR PAINT DAMAGE

Authorized dealers have touch-up paint to match your vehicle's color. Your vehicle color code is printed on a sticker on the front, left-hand side door jamb. Take your color code to your authorized dealer to make sure you get the correct color.

Before repairing minor paint damage, use a cleaner such as Motorcraft Bug and Tar Remover to remove particles such as bird droppings, tree sap, insect deposits, tar spots, road salt and industrial fallout.

Always read the instructions before using cleaning products.

CLEANING THE ALLOY WHEELS

Note: *Do not apply a cleaning chemical to warm or hot wheel rims and covers.*

Note: *Some automatic car washes may cause damage to the finish on your wheel rims and covers.*

Note: *Industrial-strength or heavy-duty cleaners in combination with brush agitation to remove brake dust and dirt, could wear away the clear coat finish over a period time.*

Note: *Do not use hydrofluoric acid-based or high caustic-based wheel cleaners, steel wool, fuels or strong household detergents.*

Note: *If you intend parking your vehicle for an extended period after cleaning the wheels with a wheel cleaner, drive your vehicle for a few minutes before doing so. This will reduce the risk of increased corrosion of the brake discs.*

Alloy wheels and wheel covers are coated with a clear coat paint finish. To maintain their condition we recommend that you:

- Clean the wheels weekly using Motorcraft Wheel and Tire Cleaner. Apply using manufacturer's instructions.
- Use a sponge to remove heavy deposits of dirt and brake dust accumulation.
- Rinse thoroughly with a strong stream of water when you have completed the cleaning process.
- To remove tar and grease, use Motorcraft Bug and Tar Remover.

VEHICLE STORAGE

If you plan on storing your vehicle for 30 days or more, read the following maintenance recommendations to make sure your vehicle stays in good operating condition.

We engineer and test all motor vehicles and their components for reliable, regular driving. Under various conditions, long-term storage may lead to degraded engine performance or failure unless you use specific precautions to preserve engine components.

General

- Store all vehicles in a dry, ventilated place.
- Protect from sunlight, if possible.
- If vehicles are stored outside, they require regular maintenance to protect against rust and damage.

Body

- Wash your vehicle thoroughly to remove dirt, grease, oil, tar or mud from exterior surfaces, rear-wheel housing and the underside of front fenders.
- Periodically wash your vehicle if it is stored in exposed locations.
- Touch-up exposed or primed metal to prevent rust.
- Cover chrome and stainless steel parts with a thick coat of auto wax to prevent discoloration. Re-wax as necessary when you wash your vehicle.
- Lubricate all hood, door and luggage compartment hinges and latches with a light grade oil.
- Cover interior trim to prevent fading.
- Keep all rubber parts free from oil and solvents.

Engine

- Change the engine oil and filter prior to storage because used engine oil contains contaminates which may cause engine damage.
- Start the engine every 15 days for a minimum of 15 minutes. Run at fast idle with the climate controls set to defrost until the engine reaches normal operating temperature.
- With your foot on the brake, shift through all the gears while the engine is running.
- We recommend that you change the engine oil before you use your vehicle again.

Fuel system

- Fill the fuel tank with high-quality fuel until the first automatic shutoff of the fuel pump nozzle.

Cooling system

- Protect against freezing temperatures.
- When removing your vehicle from storage, check coolant fluid level. Confirm that there are no cooling system leaks and that fluid is at the recommended level.

Battery

- Check and recharge as necessary. Keep connections clean.
- If storing your vehicle for more than 30 days without recharging the battery, we recommend that you disconnect the battery cables to maintain battery charge for quick starting.

Note: *It is necessary to reset memory features if battery cables are disconnected.*

Brakes

- Make sure the brakes and parking brake release fully.

Tires

- Maintain recommended air pressure.

Miscellaneous

- Make sure all linkages, cables, levers and pins under your vehicle are covered with grease to prevent rust.
- Move vehicles at least 25 ft (7.5 m) every 15 days to lubricate working parts and prevent corrosion.

Removing Vehicle From Storage

When your vehicle is ready to come out of storage, do the following:

- Wash your vehicle to remove any dirt or grease film build-up on window surfaces.
- Check windshield wipers for any deterioration.
- Check under the hood for any foreign material that may have collected during storage such as mice or squirrel nests.
- Check the exhaust for any foreign material that may have collected during storage.
- Check tire pressures and set tire inflation per the Tire Label.
- Check brake pedal operation. Drive your vehicle 15 ft (4.5 m) back and forth to remove rust build-up.
- Check fluid levels (including coolant, oil and gas) to make sure there are no leaks, and fluids are at recommended levels.
- If you remove the battery, clean the battery cable ends and check for damage.

Contact an authorized dealer if you have any concerns or issues.

GENERAL INFORMATION

Use only approved wheel and tire sizes, using other sizes could damage your vehicle. If you change the diameter of the tires from that fitted at the factory, the speedometer may not display the correct speed. Take your vehicle to an authorized Ford dealer to have the system reprogrammed. If you intend to change the size of the wheels from that fitted by the manufacturer, you can check the suitability with an authorized dealer.

Additional information related to the functionality and maintenance of your tires can be found later in this chapter. See **Tire Care** (page 279).

The Ford recommended tire inflation pressures can be found on the Tire Label, which is located on the B-pillar or the edge of the driver's door. This information can also be found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door last post; next to the driver’s seating position).

Ford strongly recommends maintaining these tire pressures at all times. Failure to follow the tire pressure recommendations can cause uneven treadwear patterns, reduced fuel economy, and adversely affect the way your vehicle handles.

Note: *Check and set the tire pressure at the ambient temperature in which you are intending to drive your vehicle and when the tires are cold.*

Note: *Check your tire pressures at least once per month.*

Set the pressure for your spare tire to the highest value given for your vehicle and tire size combination (if equipped).

Notice to utility vehicle and truck owners

WARNINGS

Utility vehicles have a significantly higher rollover rate than other types of vehicles. To reduce the risk of serious injury or death from a rollover or other crash you must avoid sharp turns and abrupt maneuvers, drive at safe speeds for the conditions, keep tires inflated to Ford recommended pressures, never overload or improperly load your vehicle, and make sure every passenger is properly restrained.

In a rollover crash, an unbelted person is significantly more likely to die than a person wearing a seat belt. All occupants must wear seat belts and children/infants must use appropriate restraints to minimize the risk of injury or ejection.

Do not become overconfident in the ability of four-wheel drive vehicles. Although a four-wheel drive vehicle may accelerate better than a two-wheel drive vehicle in low traction situations, it won't stop any faster than two-wheel drive vehicles. Always drive at a safe speed.

E145298

Utility vehicles and trucks handle differently than passenger cars in the various driving conditions that are encountered on streets, highways and off-road. Utility vehicles and trucks are not designed for cornering at speeds as high as passenger cars any more than low-slung sports cars are designed to perform satisfactorily under off-road conditions.

Study your owner's manual and any supplements for specific information about equipment features, instructions for safe driving and additional precautions to reduce the risk of an accident or serious injury.

Four-wheel drive system (If Equipped)

WARNING

Do not become overconfident in the ability of four-wheel drive vehicles. Although a four-wheel drive vehicle may accelerate better than a two-wheel drive vehicle in low traction situations, it won't stop any faster than two-wheel drive vehicles. Always drive at a safe speed.

A vehicle equipped with four-wheel drive (when selected) has the ability to use all four wheels to power itself. This increases traction which may enable you to safely drive over terrain and road conditions that a conventional two-wheel drive vehicle cannot.

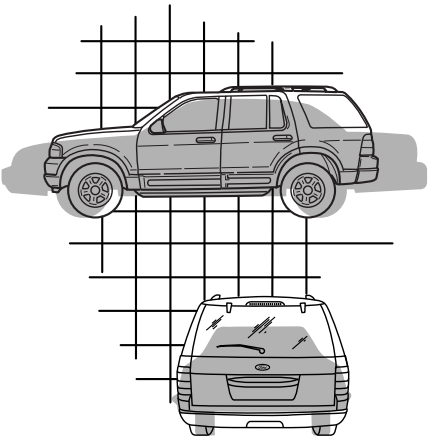
Power is supplied to all four wheels through a transfer case or power transfer unit. Four-wheel drive vehicles allow you to select different modes as necessary. For information on transfer case operation and shifting procedures, See **Four-Wheel Drive** (page 164). For information on transfer case maintenance, See **Maintenance** (page 246). You should become thoroughly familiar with this information before you operate your vehicle.

On some four-wheel drive vehicles, the initial shift from two-wheel to four-wheel drive while the vehicle is moving can cause a momentary clunk and ratcheting sound. These sounds are normal and are not cause for concern.

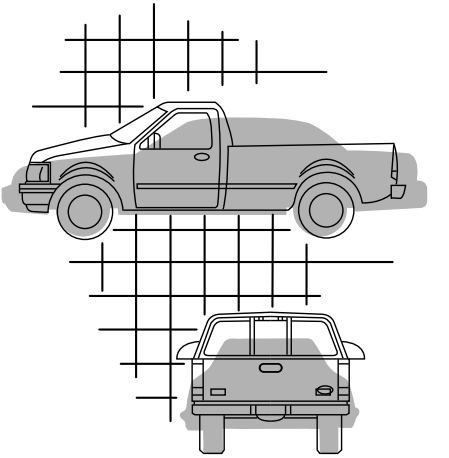
For four-wheel drive vehicles, a spare tire of a different size other than the tire provided should never be used. A dissimilar spare tire size (other than the spare tire provided) or major dissimilar tire sized between the front and rear axles could cause the four-wheel drive system to stop functioning and default to front-wheel drive. See **Using Four-Wheel Drive** (page 164).

How your vehicle differs from other vehicles

Sport utility vehicles and trucks can differ from some other vehicles in a few noticeable ways. Your vehicle may be:



E145299



E168583

- Higher - to allow higher load carrying capacity and to allow it to travel over rough terrain without getting hung up or damaging underbody components.
- Shorter - to give it the capability to approach inclines and drive over the crest of a hill without getting hung up or damaging underbody components. All other things held equal, a shorter wheelbase may make your vehicle quicker to respond to steering inputs than a vehicle with a longer wheelbase.
- Narrower - to provide greater maneuverability in tight spaces, particularly in off-road use.

As a result of the above dimensional differences, Sport utility vehicles and trucks often will have a higher center of gravity and a greater difference in center of gravity between the loaded and unloaded condition. These differences that make your vehicle so versatile also make it handle differently than an ordinary passenger car.

TIRE CARE

Information About Uniform Tire Quality Grading

E142542

Tire Quality Grades apply to new pneumatic passenger car tires. The Quality grades can be found where applicable on the tire sidewall between tread shoulder and maximum section width. For example: **Treadwear 200 Traction AA Temperature A**.

These Tire Quality Grades are determined by standards that the United States Department of Transportation has set.

Tire Quality Grades apply to new pneumatic passenger car tires. They do not apply to deep tread, winter-type snow tires, space-saver or temporary use spare tires, light truck or LT type tires, tires with nominal rim diameters of 10 to 12 inches or limited production tires as defined in Title 49 Code of Federal Regulations Part 575.104 (c)(2).

U.S. Department of Transportation Tire quality grades: The U.S. Department of Transportation requires Ford Motor Company to give you the following information about tire grades exactly as the government has written it.

Treadwear

The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear one and one-half (1 ½) times as well on the government course as a tire graded 100. The relative performance of tires depends upon the actual conditions of their use, however, and may depart significantly from the norm due to variations in driving habits, service practices, and differences in road characteristics and climate.

Traction AA A B C

WARNING

The traction grade assigned to this tire is based on straight-ahead braking traction tests, and does not include acceleration, cornering, hydroplaning or peak traction characteristics.

The traction grades, from highest to lowest are AA, A, B, and C. The grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

Temperature A B C

WARNING

The temperature grade for this tire is established for a tire that is properly inflated and not overloaded. Excessive speed, underinflation, or excessive loading, either separately or in combination, can cause heat buildup and possible tire failure.

The temperature grades are A (the highest), B and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel. Sustained high temperature can cause the material of the tire to degenerate and reduce tire life, and excessive temperature can lead to sudden tire failure. The grade C corresponds to a level of performance which all passenger car tires must meet under the Federal Motor Vehicle Safety Standard No. 139. Grades B and A represent higher levels of performance on the laboratory test wheel than the minimum required by law.

Glossary of Tire Terminology

*__Tire label:__ A label showing the original equipment tire sizes, recommended inflation pressure and the maximum weight the vehicle can carry.

*__Tire Identification Number (TIN):__ A number on the sidewall of each tire providing information about the tire brand and manufacturing plant, tire size and date of manufacture. Also referred to as DOT code.

*__Inflation pressure:__ A measure of the amount of air in a tire.

*__Standard load:__ A class of P-metric or Metric tires designed to carry a maximum load at set pressure. For example: For P-Metric tires 35 psi (2.4 bar) or 36 psi (2.5 bar) depending on tire size and for Metric 36 psi (2.5 bar). Increasing the inflation pressure beyond this pressure will not increase the tire's load carrying capability.

*__Extra load:__ A class of P-metric or Metric tires designed to carry a heavier maximum load at 42 psi (2.9 bar). Increasing the inflation pressure beyond this pressure will not increase the tire's load carrying capability.

***kPa:** Kilopascal, a metric unit of air pressure.

***PSI:** Pounds per square inch, a standard unit of air pressure.

***Cold tire pressure:** The tire pressure when the vehicle has been stationary and out of direct sunlight for an hour or more and prior to the vehicle being driven for 1 mile (1.6 kilometers).

***Recommended inflation pressure:** The cold inflation pressure found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-pillar or the edge of the driver's door.

B-pillar: The structural member at the side of the vehicle behind the front door.

***Bead area of the tire:** Area of the tire next to the rim.

* **Sidewall of the tire:** Area between the bead area and the tread.

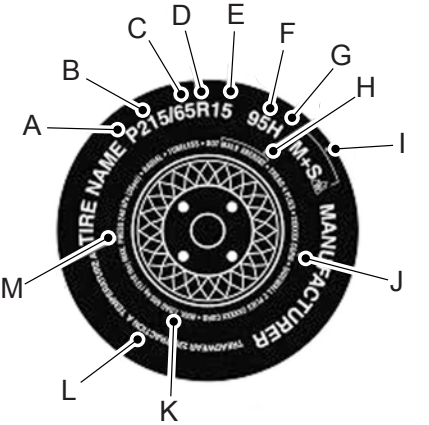
***Tread area of the tire:** Area of the perimeter of the tire that contacts the road when mounted on the vehicle.

***Rim:** The metal support (wheel) for a tire or a tire and tube assembly upon which the tire beads are seated.

Information Contained on the Tire Sidewall

Both United States and Canada Federal regulations require tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a U.S. DOT Tire Identification Number for safety standard certification and in case of a recall.

Information on P Type Tires



E142543

P215/65R15 95H is an example of a tire size, load index and speed rating. The definitions of these items are listed below. (Note that the tire size, load index and speed rating for your vehicle may be different from this example.)

A. **P:** Indicates a tire, designated by the Tire and Rim Association, that may be used for service on cars, sport utility vehicles, minivans and light trucks. **Note:** If your tire size does not begin with a letter this may mean it is designated by either the European Tire and Rim Technical Organization or the Japan Tire Manufacturing Association.

B. **215:** Indicates the nominal width of the tire in millimeters from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

C. **65:** Indicates the aspect ratio which gives the tire's ratio of height to width.

D. **R:** Indicates a radial type tire.

E. **15:** Indicates the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

F. **95:** Indicates the tire's load index. It is an index that relates to how much weight a tire can carry. You may find this information in your owner’s manual. If not, contact a local tire dealer.

Note: *You may not find this information on all tires because it is not required by federal law.*

G. **H:** Indicates the tire's speed rating. The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time under a standard condition of load and inflation pressure. The tires on your vehicle may operate at different conditions for load and inflation pressure. These speed ratings may need to be adjusted for the difference in conditions. The ratings range from 81 mph (130 km/h) to 186 mph (299 km/h). These ratings are listed in the following chart.

Note: *You may not find this information on all tires because it is not required by federal law.*

Letter rating	mph (km/h)
M	81 (130)
N	87 (140)
Q	99 (159)
R	106 (171)
S	112 (180)
T	118 (190)
U	124 (200)
H	130 (210)
V	149 (240)

Letter rating	mph (km/h)
W	168 (270)
Y	186 (299)

Note: *For tires with a maximum speed capability over 149 mph (240 km/h), tire manufacturers sometimes use the letters ZR. For those with a maximum speed capability over 186 mph (299 km/h), tire manufacturers always use the letters ZR.*

H. **U.S. DOT Tire Identification Number:** This begins with the letters DOT and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code designating where it was manufactured, the next two are the tire size code and the last four numbers represent the week and year the tire was built. For example, the numbers 317 mean the 31st week of 1997. After 2000 the numbers go to four digits. For example, 2501 means the 25th week of 2001. The numbers in between are identification codes used for traceability. This information is used to contact customers if a tire defect requires a recall.

I. **M+S or M/S:** Mud and Snow, or

AT: All Terrain, or

AS: All Season.

J. **Tire Ply Composition and Material Used:** Indicates the number of plies or the number of layers of rubber-coated fabric in the tire tread and sidewall. Tire manufacturers also must indicate the ply materials in the tire and the sidewall, which include steel, nylon, polyester, and others.

K. **Maximum Load:** Indicates the maximum load in kilograms and pounds that can be carried by the tire (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-pillar or the edge of the driver's door.

L. **Treadwear, Traction and Temperature Grades:**

***Treadwear:** The treadwear grade is a comparative rating based on the wear rate of the tire when tested under controlled conditions on a specified government test course. For example, a tire graded 150 would wear 1½ times as well on the government course as a tire graded 100.

***Traction:** The traction grades, from highest to lowest are AA, A, B, and C. The grades represent the tire's ability to stop on wet pavement as measured under controlled conditions on specified government test surfaces of asphalt and concrete. A tire marked C may have poor traction performance.

***Temperature:** The temperature grades are A (the highest), B and C, representing the tire's resistance to the generation of heat and its ability to dissipate heat when tested under controlled conditions on a specified indoor laboratory test wheel.

M. **Maximum Inflation Pressure:** Indicates the tire manufacturers' maximum permissible pressure or the pressure at which the maximum load can be carried by the tire. This pressure is normally higher than the vehicle manufacturer's recommended cold inflation pressure which can be found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-pillar or the edge of the driver's door. The cold inflation pressure should never be set lower than the recommended pressure on the vehicle label.

The tire suppliers may have additional markings, notes or warnings such as standard load or radial tubeless.

Additional Information Contained on the Tire Sidewall for LT Type Tires

Note: *Tire Quality Grades do not apply to this type of tire.*

E142544

LT type tires have some additional information beyond those of P type tires. These differences are described below.

A. **LT:** Indicates a tire, designated by the Tire and Rim Association, that is intended for service on light trucks.

B. **Load Range and Load Inflation Limits:** Indicates the tire's load-carrying capabilities and its inflation limits.

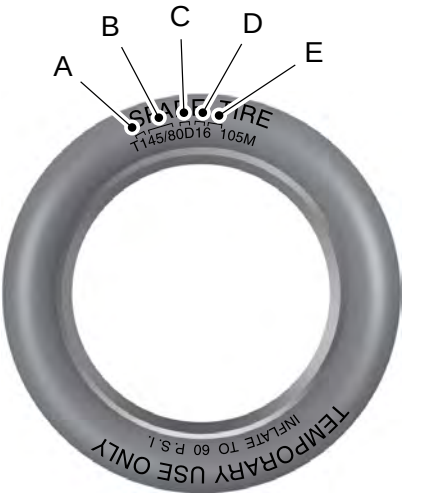
C. **Maximum Load Dual lb (kg) at psi (kPa) cold:** Indicates the maximum load and tire pressure when the tire is used as a dual; defined as four tires on the rear axle (a total of six or more tires on the vehicle).

D. **Maximum Load Single lb (kg) at psi (kPa) cold:** Indicates the maximum load and tire pressure when the tire is used as a single; defined as two tires (total) on the rear axle.

Information on T Type Tires

T145/80D16 is an example of a tire size.

Note: *The temporary tire size for your vehicle may be different from this example. Tire Quality Grades do not apply to this type of tire.*



E142545

T type tires have some additional information beyond those of P type tires. These differences are described below:

A. **T:** Indicates a type of tire, designated by the Tire and Rim Association, that is intended for temporary service on cars, sport utility vehicles, minivans and light trucks.

B. **145:** Indicates the nominal width of the tire in millimeters from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

C. **80:** Indicates the aspect ratio which gives the tire's ratio of height to width. Numbers of 70 or lower indicate a short sidewall.

D. **D:** Indicates a diagonal type tire.

R: Indicates a radial type tire.

E. **16:** Indicates the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

Location of the Tire Label

You will find a Tire Label containing tire inflation pressure by tire size and other important information located on the B-Pillar or the edge of the driver's door. See **Load Carrying** (page 196).

Inflating Your Tires

Safe operation of your vehicle requires that your tires are properly inflated. Remember that a tire can lose up to half of its air pressure without appearing flat.

Every day before you drive, check your tires. If one looks lower than the others, use a tire gauge to check pressure of all tires and adjust if required.

At least once a month and before long trips, inspect each tire and check the tire pressure with a tire gauge (including spare, if equipped). Inflate all tires to the inflation pressure recommended by Ford Motor Company.

You are strongly urged to buy a reliable tire pressure gauge, as automatic service station gauges may be inaccurate. Ford recommends the use of a digital or dial-type tire pressure gauge rather than a stick-type tire pressure gauge.

Use the recommended cold inflation pressure for optimum tire performance and wear. Under-inflation or over-inflation may cause uneven treadwear patterns.

WARNING

Under-inflation is the most common cause of tire failures and may result in severe tire cracking, tread separation or blowout, with unexpected loss of vehicle control and increased risk of injury. Under-inflation increases sidewall flexing and rolling resistance, resulting in heat buildup and internal damage to the tire. It also may result in unnecessary tire stress, irregular wear, loss of vehicle control and accidents. A tire can lose up to half of its air pressure and not appear to be flat!

Always inflate your tires to the Ford recommended inflation pressure even if it is less than the maximum inflation pressure information found on the tire. The Ford recommended tire inflation pressure is found on the Safety Compliance Certification Label or

Tire Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-pillar or the edge of the driver's door. Failure to follow the tire pressure recommendations can cause uneven treadwear patterns and adversely affect the way your vehicle handles.

Note: *Do not reduce tire pressure to change the ride characteristics of the vehicle. If you do not maintain the inflation pressure at the levels specified by Ford, your vehicle may experience a condition known as shimmy. Shimmy is a severe vibration and oscillation in the steering wheel after the vehicle travels over a bump or dip in the road that does not dampen out by itself. Shimmy may result from significant under-inflation of the tires, improper tires (load range, size, or type), or vehicle modifications such as lift-kits. In the event that your vehicle experiences shimmy, you should slowly reduce speed by either lifting off the accelerator pedal or lightly applying the brakes. The shimmy will cease as the vehicle speed decreases.*

Maximum Inflation Pressure is the tire manufacturer's maximum permissible pressure and the pressure at which the maximum load can be carried by the tire. This pressure is normally higher than the manufacturer's recommended cold inflation pressure which can be found on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-pillar or the edge of the driver's door. The cold inflation pressure should never be set lower than the recommended pressure on the Safety Compliance Certification Label or Tire Label.

When weather temperature changes occur, tire inflation pressures also change. A 10ºF (6ºC) temperature drop can cause a corresponding drop of 1 psi (7 kPa) in inflation pressure. Check your tire pressures frequently and adjust them to the proper pressure which can be found on the Safety Compliance Certification Label or Tire Label.

To check the pressure in your tire(s):

1. Make sure the tires are cool, meaning they are not hot from driving even a mile.

Note: *If you are checking tire pressure when the tire is hot, (for example, driven more than 1 mile [1.6 kilometers]), never bleed or reduce air pressure. The tires are hot from driving and it is normal for pressures to increase above recommended cold pressures. A hot tire at or below recommended cold inflation pressure could be significantly under-inflated.*

Note: *If you have to drive a distance to get air for your tire(s), check and record the tire pressure first and add the appropriate air pressure when you get to the pump. It is normal for tires to heat up and the air pressure inside to go up as you drive.*

2. Remove the cap from the valve on one tire, then firmly press the tire gauge onto the valve and measure the pressure.

3. Add enough air to reach the recommended air pressure.

Note: *If you overfill the tire, release air by pressing on the metal stem in the center of the valve. Then recheck the pressure with your tire gauge.*

4. Replace the valve cap.

5. Repeat this procedure for each tire, including the spare.

Note: *Some spare tires operate at a higher inflation pressure than the other tires. For T type mini-spare tires, see the Dissimilar spare wheel and tire assembly information for a description. Store and maintain at 60 psi (4.15 bar). For full-size and dissimilar spare tires, see the Dissimilar spare wheel and tire assembly information for a description. Store and maintain at the higher of the front and rear inflation pressure as shown on the Safety Compliance Certification Label or Tire Label.*

6. Visually inspect the tires to make sure there are no nails or other objects embedded that could poke a hole in the tire and cause an air leak.

7. Check the sidewalls to make sure there are no gouges, cuts or bulges.

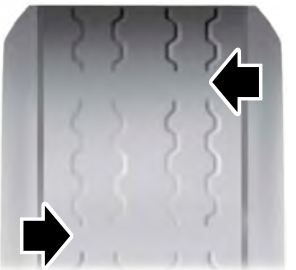
Inspecting Your Tires and Wheel Valve Stems

Periodically inspect the tire treads for uneven or excessive wear and remove objects such as stones, nails or glass that may be wedged in the tread grooves. Check the tire and valve stems for holes, cracks, or cuts that may permit air leakage and repair or replace the tire and replace the valve stem. Inspect the tire sidewalls for cracking, cuts, bruises and other signs of damage or excessive wear. If internal damage to the tire is suspected, have the tire demounted and inspected in case

it needs to be repaired or replaced. For your safety, tires that are damaged or show signs of excessive wear should not be used because they are more likely to blow out or fail.

Improper or inadequate vehicle maintenance can cause tires to wear abnormally. Inspect all your tires, including the spare, frequently, and replace them if one or more of the following conditions exist:

Tire Wear



E142546

When the tread is worn down to one sixteenth of an inch (2 millimeters), tires must be replaced to help prevent your vehicle from skidding and hydroplaning. Built-in treadwear indicators, or wear bars, which look like narrow strips of smooth rubber across the tread will appear on the tire when the tread is worn down to one sixteenth of an inch (2 millimeters).

When the tire tread wears down to the same height as these wear bars, the tire is worn out and must be replaced.

Damage

Periodically inspect the tire treads and sidewalls for damage (such as bulges in the tread or sidewalls, cracks in the tread groove and separation in the tread or sidewall). If damage is observed or suspected have the tire inspected by a tire professional. Tires can be damaged during off-road use, so inspection after off-road use is also recommended.

Age

WARNING

Tires degrade over time depending on many factors such as weather, storage conditions, and conditions of use (load, speed, inflation pressure) the tires experience throughout their lives.

In general, tires should be replaced after six years regardless of tread wear. However, heat caused by hot climates or frequent high loading conditions can accelerate the aging process and may require tires to be replaced more frequently.

You should replace your spare tire when you replace the road tires or after six years due to aging even if it has not been used.

U.S. DOT Tire Identification Number

Both United States and Canada Federal regulations require tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a U.S. DOT Tire Identification Number for safety standard certification and in case of a recall.

This begins with the letters DOT and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code designating where it was manufactured, the next two are the tire size code and the last four numbers represent the week and year the tire was built. For example, the numbers 317 mean the 31st week of 1997. After 2000 the numbers go to four digits. For example, 2501 means the 25th week of 2001. The numbers in between are identification codes used for traceability. This information is used to contact customers if a tire defect requires a recall.

Tire Replacement Requirements

Your vehicle is equipped with tires designed to provide a safe ride and handling capability.

WARNINGS

Only use replacement tires and wheels that are the same size, load index, speed rating and type (such as P-metric versus LT-metric or all-season versus all-terrain) as those originally provided by Ford. The recommended tire and wheel size may be found on either the Safety Compliance Certification Label or the Tire Label. If this information is not found on these labels then you should contact your authorized dealer as soon as possible. Use of any tire or wheel

WARNINGS

not recommended by Ford can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death. Additionally the use of non-recommended tires and wheels could cause steering, suspension, axle, transfer case or power transfer unit failure. If you have questions regarding tire replacement, contact your authorized dealer as soon as possible.

To reduce the risk of serious injury, when mounting replacement tires and wheels, you should not exceed the maximum pressure indicated on the sidewall of the tire to set the beads without additional precautions listed below. If the beads do not seat at the maximum pressure indicated, re-lubricate and try again.

When inflating the tire for mounting pressures up to 20 psi (1.38 bar) greater than the maximum pressure on the tire sidewall, the following precautions must be taken to protect the person mounting the tire:

1. Make sure that you have the correct tire and wheel size.

2. Lubricate the tire bead and wheel bead seat area again.

WARNINGS

3. Stand at a minimum of 12 ft (3.6 m) away from the wheel and tire assembly.

4. Use both eye and ear protection.

For a mounting pressure more than 20 psi (1.38 bar) greater than the maximum pressure, a Ford dealer or other tire service professional should do the mounting.

Always inflate steel carcass tires with a remote air fill with the person inflating standing at a minimum of 12 ft (3.6 m) away from the wheel and tire assembly.

Important: Remember to replace the wheel valve stems when the road tires are replaced on your vehicle.

The two front tires or two rear tires should generally be replaced as a pair.

The tire pressure sensors mounted in the wheels are not designed to be used in aftermarket wheels.

The use of wheels or tires not recommended by Ford Motor Company may affect the operation of your tire pressure monitoring system.

If the tire pressure monitoring system indicator is flashing, the system is malfunctioning. Your replacement tire might be incompatible with your tire pressure monitoring system, or some component of the system may be damaged.

Safety Practices

WARNINGS

If your vehicle is stuck in snow, mud, or sand, do not rapidly spin the tires; spinning the tires can tear the tire and cause an explosion. A tire can explode in as little as three to five seconds.

Do not spin the wheels at over 35 mph (56 km/h). The tires may fail and injure a passenger or bystander.

Driving habits have a great deal to do with your tire mileage and safety.

*Observe posted speed limits

*Avoid fast starts, stops and turns

*Avoid potholes and objects on the road

*Do not run over curbs or hit the tire against a curb when parking

Highway Hazards

No matter how carefully you drive there's always the possibility that you may eventually have a flat tire on the highway. Drive slowly to the closest safe area out of traffic. This may further damage the flat tire, but your safety is more important.

If you feel a sudden vibration or ride disturbance while driving, or you suspect your tire or vehicle has been damaged, immediately reduce your speed. Drive with caution until you can safely pull off the road. Stop and inspect the tires for damage. If a tire is under-inflated or damaged, deflate it, remove wheel and replace it with your spare tire and wheel. If you cannot detect a cause, have the vehicle towed to the nearest repair facility or tire dealer to have the vehicle inspected.

Tire and Wheel Alignment

A bad jolt from hitting a curb or pothole can cause the front end of your vehicle to become misaligned or cause damage to your tires. If your vehicle seems to pull to one side when you're driving, the wheels may be out of alignment. Have an authorized dealer check the wheel alignment periodically.

Wheel misalignment in the front or the rear can cause uneven and rapid treadwear of your tires and should be corrected by an authorized dealer. Front-wheel drive vehicles and those with an independent rear suspension may require alignment of all four wheels.

The tires should also be balanced periodically. An unbalanced tire and wheel assembly may result in irregular tire wear.

Tire Rotation

WARNING

If the tire label shows different tire pressures for the front and rear tires and the vehicle is equipped with a tire pressure monitoring system, then the settings for the system sensors need to be updated. Always perform the system reset procedure after tire rotation. If the system is not reset, it may not provide a low tire pressure warning when necessary. See the tire pressure monitoring system reset procedure in this chapter.

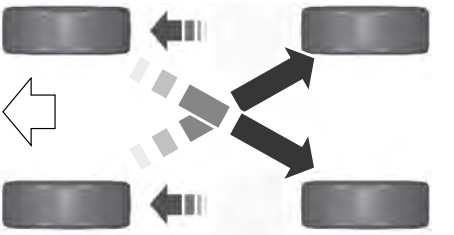
Note: *If your tires show uneven wear ask an authorized dealer to check for and correct any wheel misalignment, tire imbalance or mechanical problem involved before tire rotation.*

Note: *Your vehicle may be equipped with a dissimilar spare wheel and tire assembly. A dissimilar spare wheel and tire assembly is defined as a spare wheel and tire assembly that is different in brand, size or appearance from the road tires and wheels. If you have a dissimilar spare wheel and tire assembly it is intended for temporary use only and should not be used in a tire rotation.*

Note: *After having your tires rotated, inflation pressure must be checked and adjusted to the vehicle requirements.*

Rotating your tires at the recommended interval (as indicated in the Scheduled Maintenance chapter) will help your tires wear more evenly, providing better tire performance and longer tire life.

Rear-wheel drive vehicles and four-wheel drive vehicles (front tires at left of diagram)



E142548

Sometimes irregular tire wear can be corrected by rotating the tires.

USING SNOW CHAINS

WARNING

Snow tires must be the same size, load index, speed rating as those originally provided by Ford. Use of any tire or wheel not recommended by Ford can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death. Additionally, the use of non-recommended tires and wheels could cause steering, suspension, axle, transfer case or power transfer unit failure.

Note: *The suspension insulation and bumpers will help prevent vehicle damage. Do not remove these components from your vehicle when using snow tires and chains.*

The tires on your vehicle have all-weather treads to provide traction in rain and snow. However, in some climates, you may need to use snow tires and cables. If you need to use cables, it is recommended that steel wheels (of the same size and specifications) be used, as cables may chip aluminum wheels.

Follow these guidelines when using snow tires and chains:

- If possible, avoid fully loading your vehicle.
- Use only cable type chains or chains offered by Ford/Lincoln as an accessory or equivalent. Other conventional link type chains may contact and cause damage to the vehicle's wheel house and/or body.
- Do not install chains on the front tires as this may interfere with suspension components.
- Only certain snow cables or chains have been approved by Ford/Lincoln as safe for use on your vehicle with the following tires: 265/70R17 and 275/65R18.
- You should install snow cables or chains that have been rated as SAE Class S.
- Install chains securely, verifying that the chains do not touch any wiring, brake lines, or fuel lines.
- Do not exceed 31 mph (50 km/h) or less if recommended by the chain manufacturer while using snow chains.
- Drive cautiously. If you hear the chains rub or bang against your vehicle, stop and retighten the chains. If this does not work, remove the chains to prevent damage to your vehicle.
- Remove the tire chains when they are no longer needed. Do not use tire chains on dry roads.
- Purchase chains or cables from a manufacturer that clearly labels body to tire dimension restrictions. The snow chains or cables must be mounted in pairs on the rear tires only.

If you have any questions regarding snow chains or cables, please contact your Ford/Lincoln authorized dealer.

TIRE PRESSURE MONITORING SYSTEM

WARNING

The tire pressure monitoring system is not a substitute for manually checking the tire pressure. The tire pressure should be checked periodically (at least monthly) using a tire pressure gauge. Failure to properly maintain your tire pressure could increase the risk of tire failure, loss of control, vehicle rollover and personal injury.

Each tire, including the spare (if provided), should be checked monthly when cold and inflated to the inflation pressure recommended by the vehicle manufacturer on the vehicle placard or tire inflation pressure label. (If your vehicle has tires of a different size than the size indicated on the vehicle placard or tire inflation pressure label, you should determine the proper tire inflation pressure for those tires.)

As an added safety feature, your vehicle has been equipped with a Tire Pressure Monitoring System (TPMS) that illuminates a low tire pressure telltale when one or more of your tires is significantly under-inflated. Accordingly, when the low tire pressure telltale illuminates, you should stop and check your tires as soon as possible, and inflate them to the proper pressure. Driving on a significantly under-inflated tire causes the tire to overheat and can lead to tire failure. Under-inflation also reduces fuel efficiency and tire tread life, and may affect the vehicle's handling and stopping ability.

Please note that the TPMS is not a substitute for proper tire maintenance, and it is the driver's responsibility to maintain correct tire pressure, even if under-inflation has not reached the level to trigger illumination of the TPMS low tire pressure telltale.

Your vehicle has also been equipped with a TPMS malfunction indicator to indicate when the system is not operating properly. The TPMS malfunction indicator is combined with the low tire pressure telltale. When the system detects a malfunction, the telltale will flash for approximately one minute and then remain continuously illuminated. This sequence will continue upon subsequent vehicle start-ups as long as the malfunction exists.

When the malfunction indicator is illuminated, the system may not be able to detect or signal low tire pressure as intended. TPMS malfunctions may occur for a variety of reasons, including the installation of replacement or alternate tires or wheels on the vehicle that prevent the TPMS from functioning properly. Always check the TPMS malfunction telltale after replacing one or more tires or wheels on your vehicle to ensure that the replacement or alternate tires and wheels allow the TPMS to continue to function properly.

The tire pressure monitoring system complies with part 15 of the FCC rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This device complies with part 15 of the FCC Rules and with Licence exempt RSS Standards of Industry Canada. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Changing Tires With a Tire Pressure Monitoring System

E142549

Note: *Each road tire is equipped with a tire pressure sensor located inside the wheel and tire assembly cavity. The pressure sensor is attached to the valve stem. The pressure sensor is covered by the tire and is not visible unless the tire is removed. Take care when changing the tire to avoid damaging the sensor.*

You should always have your tires serviced by an authorized dealer.

Check the tire pressure periodically (at least monthly) using an accurate tire gauge. See Inflating Your Tires in this chapter.

Understanding Your Tire Pressure Monitoring System

The tire pressure monitoring system measures pressure in your four road tires and sends the tire pressure readings to your vehicle. The low tire pressure warning light will turn on if the tire pressure is significantly low. Once the light is illuminated, your tires are under-inflated and need to be inflated to the manufacturer's recommended tire pressure. Even if the light turns on and a short time later turns off, your tire pressure still needs to be checked.

When Your Temporary Spare Tire is Installed

When one of your road tires needs to be replaced with the temporary spare, the system will continue to identify an issue to remind you that the damaged road wheel and tire assembly needs to be repaired and put back on your vehicle.

To restore the full function of the tire pressure monitoring system, have the damaged road wheel and tire assembly repaired and remounted on your vehicle.

When You Believe Your System is Not Operating Properly

The main function of the tire pressure monitoring system is to warn you when your tires need air. It can also warn you in the event the system is no longer capable of functioning as intended. See the following chart for information concerning your tire pressure monitoring system:

Low tire pressure warning light	Possible cause	Customer action required
Solid warning light	Tire(s) under-inflated	Make sure tires are at the proper pressure. See Inflating your tires in this chapter. After inflating your tires to the manufacturer's recommended pressure as shown on the Tire Label (located on the edge of driver's door or the B-Pillar), the vehicle must be driven for at least two minutes over 20 mph (32 km/h) before the light turns off.
	Spare tire in use	Repair the damaged road wheel and tire assembly and reinstall it on the vehicle to restore system function. For a description on how the system functions, see **When your temporary spare tire is installed** in this section.
	Tire pressure monitoring system malfunction	If the tires are properly inflated and the spare tire is not in use but the light remains on, contact your authorized dealer as soon as possible.
	Tire rotation without sensor training	On vehicles with different front and rear tire pressures, the system must be retrained following every tire rotation. See **Tire Care** (page 279).
Flashing warning light	Spare tire in use	Repair the damaged road wheel and tire assembly and reinstall it on the vehicle to restore system function. For a description on how the system functions, see **When your temporary spare tire is installed** in this section.
	Tire pressure monitoring system malfunction	If the tires are properly inflated and the spare tire is not in use but the light remains on, contact your authorized dealer as soon as possible.

When Inflating Your Tires

When putting air into your tires (such as at a gas station or in your garage), the tire pressure monitoring system may not respond immediately to the air added to your tires.

It may take up to two minutes of driving over 20 mph (32 km/h) for the light to turn off after you have filled your tires to the recommended inflation pressure.

How Temperature Affects Your Tire Pressure

The tire pressure monitoring system monitors tire pressure in each pneumatic tire. While driving in a normal manner, a typical passenger tire inflation pressure may increase about 2 to 4 psi (14 to 28 kPa) from a cold start situation. If the vehicle is stationary overnight with the outside temperature significantly lower than the daytime temperature, the tire pressure may decrease about 3 psi (21 kPa) for a drop of 30ºF (17ºC) in ambient temperature. This lower pressure value may be detected by the tire pressure monitoring system as being significantly lower than the recommended inflation pressure and activate the system warning light for low tire pressure.

If the low tire pressure warning light is on, visually check each tire to verify that no tire is flat. If one or more tires are flat, repair as necessary. Check the air pressure in the road tires. If any tire is under-inflated, carefully drive the vehicle to the nearest location where air can be added to the tires. Inflate all the tires to the recommended inflation pressure.

Tire Pressure Monitoring System Reset Procedure

WARNING

To determine the required pressure(s) for your vehicle, see the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position), or Tire Label located on the B-Pillar or the edge of the driver's door.

Note: *You need to perform the tire pressure monitoring system reset procedure after each tire rotation on vehicles that require different recommended tire pressures in the front tires as compared to the rear tires.*

Overview

To provide the vehicle's load carrying capability, some vehicles require different recommended tire pressures in the front tires as compared to the rear tires. The tire pressure monitoring system equipped on these vehicles is designed to illuminate the low tire pressure warning light at two different pressures; one for the front tires and one for the rear tires.

Since tires need to be rotated to provide consistent performance and maximum tire life, the tire pressure monitoring system needs to know when the tires are rotated to determine which set of tires are on the front and which are on the rear. With this information, the system can detect and properly warn of low tire pressures.

System reset tips:

- To reduce the chances of interference from another vehicle, perform the system reset procedure at least three feet (one meter) away from another Ford Motor Company vehicle undergoing the system reset procedure at the same time.
- Do not wait more than two minutes between resetting each tire sensor or the system will time-out and the entire procedure will have to be repeated on all four wheels.
- A double horn will sound indicating the need to repeat the procedure.

Performing the System Reset Procedure

Read the entire procedure before attempting.

1. Drive the vehicle above 20 mph (32 km/h) for at least two minutes, then park in a safe location where you can easily get to all four tires and have access to an air pump.
2. Place the ignition in the off position and keep the key in the ignition.
3. Cycle the ignition to the on position with the engine off.
4. Turn the hazard flashers on then off three times. You must accomplish this within 10 seconds. If the reset mode has been entered successfully, the horn will sound once, the system indicator will flash and a message is shown in the information display. If this does not occur, please try again starting at Step 2. If after repeated attempts to enter the reset mode, the horn does not sound, the system indicator does not flash and no message is shown in the information display, seek service from your authorized dealer.
5. Train the tire pressure monitoring system sensors in the tires using the following system reset sequence starting with the left front tire in the following clockwise order: Left front (driver's side front tire), Right front (passenger's side front tire), Right rear (passenger's side rear tire), Left rear (driver's side rear tire).
6. Remove the valve cap from the valve stem on the left front tire. Decrease the air pressure until the horn sounds.

Note: *The single horn chirp confirms that the sensor identification code has been learned by the module for this position. If a double horn is heard, the reset procedure was unsuccessful, and you must repeat it.*

7. Remove the valve cap from the valve stem on the right front tire. Decrease the air pressure until the horn sounds.
8. Remove the valve cap from the valve stem on the right rear tire. Decrease the air pressure until the horn sounds.
9. Remove the valve cap from the valve stem on the left rear tire. Decrease the air pressure until the horn sounds. Training is complete after the horn sounds for the last tire trained (driver's side rear tire), the system indicator stops flashing, and a message is shown in the information display.
10. Turn the ignition off. If two short horn beeps are heard, the reset procedure was unsuccessful and you must repeat it. If after repeating the procedure and two short beeps are heard when the ignition is turned to off, seek assistance from your authorized dealer.

11. Set all four tires to the recommended air pressure as indicated on the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position) or Tire Label located on the B-Pillar or the edge of the driver's door.

CHANGING A ROAD WHEEL

WARNINGS

The use of tire sealant may damage your tire pressure monitoring system and should only be used in roadside emergencies. If you must use a sealant, the Ford Tire Mobility Kit sealant should be used. The tire pressure monitoring system sensor and valve stem on the wheel must be replaced by an authorized dealer after use of the sealant.

If the tire pressure monitor sensor becomes damaged, it will no longer function. See **Tire Pressure Monitoring System** (page 294).

Note: *The tire pressure monitoring system indicator light will illuminate when the spare tire is in use. To restore the full function of the monitoring system, all road wheels equipped with tire pressure monitoring sensors must be mounted on this vehicle.*

If you get a flat tire while driving, do not apply the brake heavily. Instead, gradually decrease your speed. Hold the steering wheel firmly and slowly move to a safe place on the side of the road.

Have a flat serviced by an authorized dealer in order to prevent damage to the system sensors See **Tire Pressure Monitoring System** (page 294). Replace the spare tire with a road tire as soon as possible. During repairing or replacing of the flat tire, have the authorized dealer inspect the system sensor for damage.

Dissimilar Spare Wheel and Tire Assembly Information

WARNING

Failure to follow these guidelines could result in an increased risk of loss of vehicle control, injury or death.

If you have a dissimilar spare wheel and tire, then it is intended for temporary use only. This means that if you need to use it, you should replace it as soon as possible with a road wheel and tire assembly that is the same size and type as the road tires and wheels that were originally provided by Ford. If the dissimilar spare tire or wheel is damaged, it should be replaced rather than repaired.

A dissimilar spare wheel and tire assembly is defined as a spare wheel and tire assembly that is different in brand, size or appearance from the road tires and wheels and can be one of three types:

1. **T-type mini-spare:** This spare tire begins with the letter T for tire size and may have Temporary Use Only molded in the sidewall.

2. **Full-size dissimilar spare with label on wheel:** This spare tire has a label on the wheel that states: THIS WHEEL AND TIRE ASSEMBLY FOR TEMPORARY USE ONLY

When driving with one of the dissimilar spare tires listed above, do not:

- Exceed 50 mph (80 km/h).
- Load the vehicle beyond maximum vehicle load rating listed on the Safety Compliance Label.
- Tow a trailer.
- Use snow chains on the end of the vehicle with the dissimilar spare tire.
- Use more than one dissimilar spare tire at a time.
- Use commercial car washing equipment.
- Try to repair the dissimilar spare tire.

Use of one of the dissimilar spare tires listed above at any one wheel location can lead to impairment of the following:

- Handling, stability and braking performance.
- Comfort and noise.
- Ground clearance and parking at curbs.
- Winter weather driving capability.
- Wet weather driving capability.
- All-wheel driving capability.

3. **Full-size dissimilar spare without label on wheel**

When driving with the full-size dissimilar spare wheel and tire assembly, do not:

- Exceed 70 mph (113 km/h).
- Use more than one dissimilar spare wheel and tire assembly at a time.
- Use commercial car washing equipment.
- Use snow chains on the end of the vehicle with the dissimilar spare wheel and tire assembly.

The usage of a full-size dissimilar spare wheel and tire assembly can lead to impairment of the following:

- Handling, stability and braking performance.
- Comfort and noise.
- Ground clearance and parking at curbs.
- Winter weather driving capability.
- Wet weather driving capability.
- All-wheel driving capability.

When driving with the full-size dissimilar spare wheel and tire assembly additional caution should be given to:

- Towing a trailer.
- Driving vehicles equipped with a camper body.
- Driving vehicles with a load on the cargo rack.

Drive cautiously when using a full-size dissimilar spare wheel and tire assembly and seek service as soon as possible.

Location of the Spare Tire and Tools

The spare tire is located under the vehicle, just forward of the rear bumper. The jack, jack handle and lug wrench are located in the following locations:

Item	Location
Spare tire	Under the vehicle, just forward of the rear bumper
Jack tools	Under the access panel located in the floor compartment behind the rear seat

Tire Change Procedure

WARNINGS

Only use replacement tires and wheels that are the same size, load index, speed rating and type (such as P-metric versus LT-metric or all-season versus all-terrain) as those originally provided by Ford. The recommended tire and wheel size may be found on either the Safety Compliance Certification Label (affixed to either the door hinge pillar, door-latch post, or the door edge that meets the door-latch post, next to the driver's seating position) or the Tire Label which is located on the B-Pillar or edge of the driver's door. If this information is not found on these labels then you should contact your authorized dealer as soon as possible. Use of any tire or wheel not recommended by Ford can affect the safety and performance of your vehicle, which could result in an increased risk of loss of vehicle control, vehicle rollover, personal injury and death. Additionally the use of non-recommended tires and wheels could cause steering, suspension, axle, transfer case or power transfer unit failure. If you have questions regarding tire replacement, contact your authorized dealer as soon as possible.

When one of the front wheels is off the ground, the transmission alone will not prevent the vehicle from moving or slipping off the jack.

To help prevent the vehicle from moving when you change a tire, be sure to place the transmission in park (P), set the parking brake and block (in both directions) the wheel that is diagonally opposite (other side and end of the vehicle) to the tire being changed.

Never get underneath a vehicle that is supported only by a jack. If the vehicle slips off the jack, you or someone else could be seriously injured.

WARNINGS

Do not attempt to change a tire on the side of the vehicle close to moving traffic. Pull far enough off the road to avoid the danger of being hit when operating the jack or changing the wheel.

Always use the jack provided as original equipment with your vehicle. If using a jack other than the one provided as original equipment with your vehicle, make sure the jack capacity is adequate for the vehicle weight, including any vehicle cargo or modifications.

Disable the power running boards before jacking, lifting, or placing any object under the vehicle. Never place your hand between the power running board and the vehicle as extended power running boards will retract when the doors are closed. Failure to follow these instructions may result in personal injury.

Failure to follow these instructions when using the spare tire carrier could cause loss of the wheel and tire and lead to personal injury: Only use the spare tire carrier to stow the tire and wheel combination specified on the Tire Label or Safety Compliance Certification Label on the B-Pillar or the edge of the driver door. Other tire and wheel combinations could cause the carrier to fail if it does not fit securely or is too heavy. Do not use impact tools or power tools operating over 200 RPM, which may cause winch malfunction and prevent a secure fit. Override the winch at least three times (there will be an audible click each time) to ensure a tight secure fit of the wheel and tire.

Note: *Passengers should not remain in the vehicle when the vehicle is being jacked.*

Park on a level surface, activate the hazard flashers and set the parking brake. Then, place the transmission in park (P) and turn the engine off.

Removing the Jack and Tools

Note: *Pay close attention to the orientation of the bag, because it will have to be reinstalled after changing the tire.*

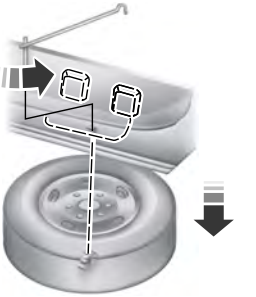
1. Open the liftgate, then locate the access panel on the floor behind the third row seat. Unlatch and remove the panel.

E208640

2. Remove the jack and tools assembly tray from the compartment by turning the wing-nut counterclockwise. Remove the bag from the jack and tools assembly tray by loosening the strap.
3. Unsnap the wheel lug nut wrench, jack extension and handle from the plastic tray.
4. Remove the hack from the tray assembly.

Removing the Spare Tire

1. Remove the jack handle and winch extension from the tray and assemble them.
2. Open the spare tire winch access plug at the bottom of the compartment for the jack and tools tray.
3. Insert the winch extension tool assembly through the access hole in the floor and engage the winch.

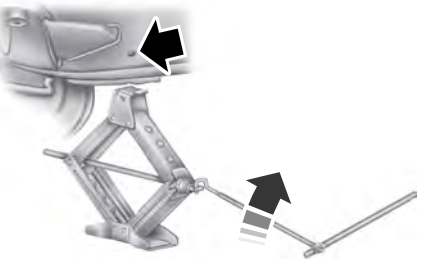


E208655

4. To remove the spare tire, turn the handle counterclockwise until the tire is lowered to the ground and the cable is slightly slack.
5. Slide the retainer through the center of the spare tire wheel and remove the spare tire.

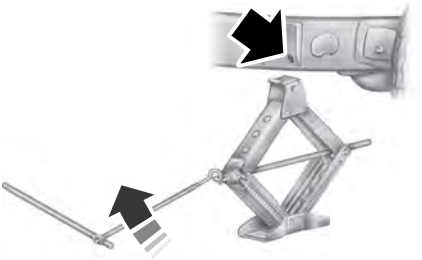
Jacking the Vehicle

Note: *Jack at the specified locations to avoid damaging your vehicle.*



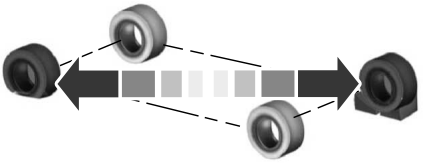
E208656

Front jacking point



E208657

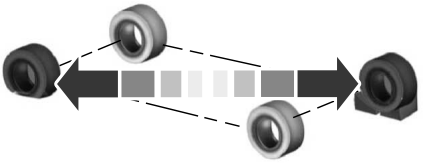
Rear jacking point



E175447

1. With the vehicle on level ground, block both sides of the wheel diagonally opposite (other side and end of the vehicle) to the wheel being changed. Do not jack the vehicle on a hill or incline.
2. Obtain the spare tire and jack tools from their storage locations.
3. Use the tip of the jack handle to remove any wheel trim.
4. Loosen each wheel lug nut one-half turn counterclockwise but do not remove them until the wheel is raised off the ground.
5. Position the jack according to the jack locator arrows found on the frame and turn the jack handle and extension tool assembly clockwise.
6. Raise the vehicle to provide sufficient ground clearance when installing the spare tire, about 1/4 inch (6 millimeters).

Installing the Spare Tire



E175447

1. Remove the lug nuts with the lug wrench.
2. Replace the flat tire with the spare tire, making sure the valve stem is facing outward.
3. Reinstall the lug nuts until the wheel is snug against the hub. Do not fully tighten the lug nuts until the wheel has been lowered.
4. Lower the wheel by turning the jack handle counterclockwise.

E166719

5. Remove the jack and fully tighten the lug nuts in the order shown. See **Technical Specifications** (page 305).

Stowing the Flat or Spare Tire

1. Lay the tire on the ground, near the rear of the vehicle, with the valve stem side facing up.
2. Slide the wheel partially under the vehicle and install the retainer through the wheel center. If equipped, you may have to remove the wheel center cap prior to pushing the retainer through the center of the wheel. To remove the center cap, press it off with the jack tool from the inner side of the wheel. Pull on the cable to align the components at the end of the cable.
3. Assemble the jack handle and winch extension, then insert the winch extension through the access hole behind the third row seat and engage the winch.
4. Turn the jack handle clockwise until the tire is raised to its stowed position underneath the vehicle. The wrench will become harder to turn and the spare tire winch will rachet or slip when the tire is raised to maximum tightness. A clicking sound will be heard from the winch indicating that the tire is properly stowed.
5. Disassembly the jack tool and winch extension and snap them back into the tool tray.
6. Reinstall the jack bag properly around the jack and tool assembly tray, making sure the strap is fastened.
7. Close the access hole with the rubber plug.
8. Reinstall the tray into the vehicle and secure it with the wing nut.

TECHNICAL SPECIFICATIONS

Wheel Lug Nut Torque Specifications

WARNING

When a wheel is installed, always remove any corrosion, dirt or foreign materials present on the mounting surfaces of the wheel or the surface of the wheel hub, brake drum or brake disc that contacts the wheel. Make sure that any fasteners that attach the rotor to the hub are secured so they do not interfere with the mounting surfaces of the wheel. Installing wheels without correct metal-to-metal contact at the wheel mounting surfaces can cause the wheel nuts to loosen and the wheel to come off while your vehicle is in motion, resulting in loss of control.

Bolt size	lb.ft (Nm)
M14 x 1.5	150 lb.ft (204 Nm)

*Torque specifications are for nut and bolt threads free of dirt and rust. Use only Ford recommended replacement fasteners.

Retighten the lug nuts to the specified torque within 100 miles (160 kilometers) after any wheel disturbance (such as tire rotation, changing a flat tire, wheel removal).

E145950

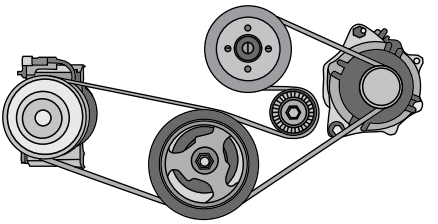
A Wheel pilot bore

Inspect the wheel pilot hole and mounting surface prior to installation. Remove any visible corrosion or loose particles.

ENGINE SPECIFICATIONS

Engine	3.5L Ecoboost
Cubic inches	214
Firing order	1-4-2-5-3-6
Ignition system	Coil on plug
Compression ratio	10.0:1
Spark plug gap	0.030 in (0.75 mm) - 0.033 in (0.85 mm)

Drivebelt Routing



E167467

MOTORCRAFT PARTS

Component	Part Number
Air filter element	FA-1883
Oil filter	FL-500-S
Battery (without Intelligent Access)	BXT-65-650
Battery (with Intelligent Access)	BXT-65-750
Spark plugs	SP-534

Component	Part Number
Windshield wiper blade	WW-2234
Rear window wiper blade	WW-1612

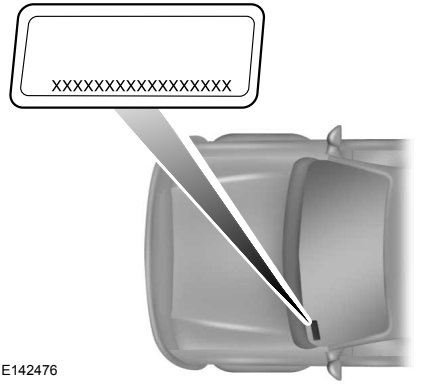
We recommend Motorcraft replacement parts available at your Ford dealer or at fordparts.com for scheduled maintenance. These parts meet or exceed Ford Motor Company's specifications and are engineered for your vehicle. Use of other parts may impact vehicle performance, emissions and durability. Your warranty may be void for any damage related to use of other parts.

If a Motorcraft oil filter is not available, use an oil filter that meets industry performance specification SAE/USCAR-36.

For spark plug replacement, contact an authorized dealer. Replace the spark plugs at the appropriate intervals. See **Scheduled Maintenance** (page 378).

VEHICLE IDENTIFICATION NUMBER

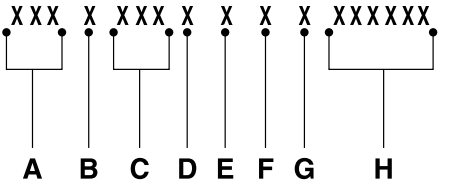
The vehicle identification number is located on the left-hand side of the instrument panel.



E142476

Please note that in the graphic, XXXX is representative of your vehicle identification number.

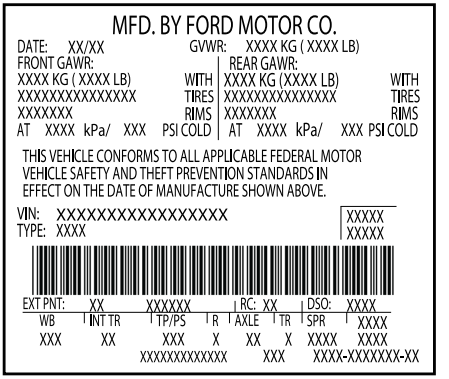
The Vehicle Identification Number contains the following information:



E142477

A	World manufacturer identifier
B	Brake system, Gross Vehicle Weight Rating, Restraint Devices and their locations
C	Make, vehicle line, series, body type
D	Engine type
E	Check digit
F	Model year
G	Assembly plant
H	Production sequence number

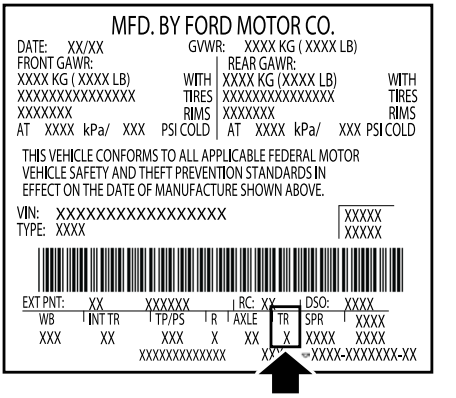
VEHICLE CERTIFICATION LABEL



E167469

The National Highway Traffic Safety Administration Regulations require that a Safety Compliance Certification Label be affixed to a vehicle and prescribe where the Safety Compliance Certification Label may be located. The Safety Compliance Certification Label shall be affixed to either the door hinge pillar, the door latch post, or the edge of the door near the door latch, next to the driver's seating position.

TRANSMISSION CODE DESIGNATION



E167814

The transmission code is on the Safety Compliance Certification Label. The following table shows the transmission code along with the transmission description.

Description	Code
Six-speed automatic transmission 6R80E	6

Capacities

WARNING

The air conditioning refrigerant system contains refrigerant R-134a under high pressure. Opening the air conditioning refrigerant system can cause personal injury. Have the air conditioning refrigerant system serviced only by qualified personnel.

Item	Capacity
Engine oil	6.0 qt (5.7 L)
Engine coolant (Base radiator with auxiliary rear heat)	18.5 qt (17.5 L)
Engine coolant (Heavy Duty trailer towing with auxiliary rear heat)	18.0 qt (17 L)
Brake fluid	Between MIN and MAX on brake fluid reservoir [1]
Front axle	3.5 pt (1.7 L)
Rear axle (Conventional differential)	4.5 pt (2.1 L) [2]
Rear axle (Limited-slip differential)	4.25 pt (2.01 L) [2,3]
Automatic transmission fluid	13.1 qt (12.4 L) [4]
Transfer case fluid	1.5 qt (1.4 L)
Windshield washer fluid	Fill as required
Fuel tank	28.0 gal (106 L)
Fuel tank (Expedition EL)	33.5 gal (126.8 L)
A/C refrigerant	44 oz (1.25 kg)

Item	Capacity
A/C refrigerant (Expedition EL)	40 oz (1.13 kg)
A/C refrigerant compressor oil	7.1 fl oz (210 ml)

[1]Reference the reservoir cap for proper fluid.

[2] The rear axle is filled with synthetic rear axle lubricant, and it is considered lubricated for life. Do not check or change the lubricant unless you suspect a leak or submerge the axle in water. Contact an authorized dealer.

[3] Add 4 oz. (118 ml) of Additive Friction Modifier XL-3 or equivalent for complete refill of Ford limited-slip differential.

[4] Approximate dry fill capacity. Actual amount may vary during fluid changes.

Specifications

Materials

Name	Specification
Recommended motor oil (U.S.): Motorcraft SAE 5W-30 Premium Synthetic Blend Motor Oil XO-5W30-QSP	WSS-M2C946-A
Recommended motor oil (Canada): Motorcraft SAE 5W-30 Super Premium Motor Oil CXO-5W30-LSP12	WSS-M2C946-A
Recommended motor oil (Mexico): Motorcraft SAE 5W-30 Synthetic Motor Oil MXO-5W30-QSP	WSS-M2C946-A
Optional motor oil (U.S. and Mexico): Motorcraft SAE 5W-30 Full Synthetic Motor Oil XO-5W30-QFS	WSS-M2C946-A
Optional motor oil (Canada): Motorcraft SAE 5W-30 Synthetic Motor Oil CXO-5W30-LFS12	WSS-M2C946-A
Engine coolant (U.S. and Mexico): Motorcraft Orange Antifreeze/Coolant Prediluted VC-3DIL-B	WSS-M97B44-D2
Engine coolant (Canada): Motorcraft Orange Antifreeze/Coolant Prediluted CVC-3DIL-B	WSS-M97B44-D2

Name	Specification
Brake fluid (U.S. and Mexico): Motorcraft DOT 3 Motor Vehicle Brake Fluid PM-1-C	WSS-M6C65-A1
Brake fluid (Canada): High Performance DOT 3 Motor Vehicle Brake Fluid CPM-1-C	WSS-M6C65-A1
Brake fluid: Motorcraft® DOT 4 LV High Performance Motor Vehicle Brake Fluid (U.S. Canada and Mexico) PM-20	WSS-M6C65-A2
Automatic transmission fluid (U.S. and Mexico): Motorcraft MERCON LV Automatic Transmission Fluid XT-10-QLVC	WSS-M2C938-A MERCON LV
Automatic transmission fluid (Canada): Motorcraft MERCON LV Automatic Transmission Fluid CXT-10-LV12	WSS-M2C938-A MERCON LV
Front axle fluid: Motorcraft SAE 75W-85 Hypoid Gear Lube XY-75W85-QL	WSS-M2C942-A
Rear axle fluid: Motorcraft SAE 75W-85 Hypoid Gear Lube XY-75W85-QL	WSS-M2C942-A
Transfer case fluid (U.S. and Mexico): Motorcraft Transfer Case Fluid XT-10-QLVC	WSS-M2C938-A MERCON® LV
Transfer case fluid (Canada): Motorcraft Transfer Case Fluid CXT-10-LV12	WSS-M2C938-A MERCON® LV
Windshield washer fluid (U.S. and Mexico): Motorcraft Premium Windshield Wash Concentrate with Bitterant ZC-32-B2	WSB-M8B16-A2
Windshield washer fluid (Canada): Motorcraft Premium Quality Windshield Washer Fluid CXC-37-(A, B, D, F)	WSB-M8B16-A2
A/C refrigerant (U.S.): Motorcraft R-134a Refrigerant YN-19	WSH-M17B19-A

Name	Specification
A/C refrigerant (Canada): Motorcraft R-134a Refrigerant CYN-16-R	WSH-M17B19-A
A/C refrigerant (Mexico): Motorcraft R-134a Refrigerant MYN-19	WSH-M17B19-A
A/C refrigerant compressor oil: Motorcraft PAG Refrigerant Compressor Oil YN-12-D	WSH-M1C231-B
Multi-purpose grease: Motorcraft Multi-Purpose Grease Spray XL-5	ESB-M1C93-B
Lock cylinders (U.S.): Penetrating and Lock Lubricant XL-1	--
Lock cylinders (Canada): Penetrating Fluid CXC-51-A	--
Lock cylinders (Mexico): Penetrating and Lock Lubricant MXL-1	--

If you use oil and fluids that do not meet the defined specification and viscosity grade, this may lead to:

- Component damage which is not covered by the vehicle warranty.
- Longer engine cranking periods.
- Increased emission levels.
- Reduced engine performance.
- Reduced fuel economy.
- Degraded brake performance.

We recommend Motorcraft motor oil for your vehicle. If Motorcraft oil is not available, use motor oils of the recommended viscosity grade that meet API SN requirements and display the API Certification Mark for gasoline engines. Do not use oil labeled with API SN service category unless the label also displays the API certification mark.

E142732

An oil that displays this symbol conforms to current engine, emission system and fuel economy performance standards of the International Lubricants Specification Advisory Council (ILSAC).

Do not use supplemental engine oil additives because they are unnecessary and could lead to engine damage that may not be covered by your vehicle warranty.

Note: *We recommend using DOT 3 or DOT 4 Low Viscosity (LV) High Performance Brake Fluid or equivalent meeting WSS-M6C65-A1 or WSS-M6C65-A2. Please refer to the brake reservoir cap for the proper brake fluid. Use of any fluid other than the recommended fluid may cause degraded brake performance and not meet the Ford performance standards. Keep brake fluid clean and dry. Contamination with dirt, water, petroleum products or other materials may result in brake system damage and possible failure.*

Note: *Automatic transmissions that require MERCON LV transmission fluid should only use MERCON LV transmission fluid. The use of any other fluid may cause transmission damage.*

GENERAL INFORMATION

Radio Frequencies and Reception Factors

AM and FM frequencies are established by the Federal Communications Commission (FCC) and the Canadian Radio and Telecommunications Commission (CRTC). Those frequencies are:

- AM: 530, 540-1700, 1710 kHz
- FM: 87.9-107.7, 107.9 MHz

Radio Reception Factors	
Distance and strength	The further you travel from an AM or FM station, the weaker the signal and the weaker the reception.
Terrain	Hills, mountains, tall buildings, bridges, tunnels, freeway overpasses, parking garages, dense tree foliage and thunderstorms can interfere with the reception.
Station overload	When you pass a ground-based broadcast repeating tower, a stronger signal may overtake a weaker one and result in the audio system muting.

CD and CD Player Information

Note: *CD units play commercially pressed 4.75-inch (12 centimeter) audio compact discs only. Due to technical incompatibility, certain recordable and re-recordable compact discs may not function correctly when used in Ford CD players.*

Note: *Do not insert CDs with homemade paper (adhesive) labels into the CD player as the label may peel and cause the CD to become jammed. You should use a permanent felt tip marker rather than adhesive labels on your homemade CDs. Ballpoint pens may damage CDs. Please contact an authorized dealer for further information.*

Note: *Do not use any irregularly shaped discs or discs with a scratch protection film attached.*

Always handle discs by their edges only. Clean the disc with an approved CD cleaner only. Wipe it from the center of the disc toward the edge. Do not clean in a circular motion.

Do not expose discs to direct sunlight or heat sources for extended periods.

MP3 and WMA Track and Folder Structure

Audio systems capable of recognizing and playing MP3 and WMA individual tracks and folder structures work as follows:

- There are two different modes for MP3 and WMA disc playback: MP3 and WMA track mode (system default) and MP3 and WMA folder mode.
- MP3 and WMA track mode ignores any folder structure on the MP3 and WMA disc. The player numbers each MP3 and WMA track on the disc (noted by the MP3 or WMA file extension) from T001 to a maximum of T255. The maximum number of playable MP3 and WMA files may be less depending on the structure of the CD and exact model of radio present.

- MP3 and WMA folder mode represents a folder structure consisting of one level of folders. The CD player numbers all MP3 and WMA tracks on the disc (noted by the MP3 or WMA file extension) and all folders containing MP3 and WMA files, from F001 (folder) T001 (track) to F253 T255.
- Creating discs with only one level of folders helps with navigation through the disc files.

If you are burning your own MP3 and WMA discs, it is important to understand how the system reads the structures you create. While various files may be present (files with extensions other than MP3 and WMA), only files with the MP3 and WMA extension are played; other files are ignored by the system. This enables you to use the same MP3 and WMA disc for a variety of tasks on your work computer, home computer and your in-vehicle system.

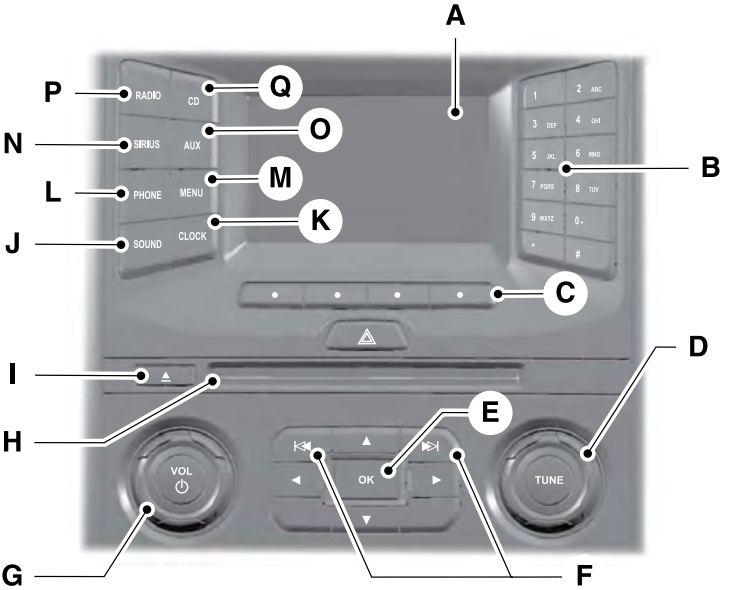
In track mode, the system displays and plays the structure as if it were only one level deep (all MP3 and WMA files play, regardless of being in a specific folder). In folder mode, the system only plays the MP3 and WMA files in the current folder.

AUDIO UNIT - VEHICLES WITH: AM/FM/CD/SYNC/SATELLITE RADIO

WARNING

Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

Note: *The touchscreen system controls most of the audio features. See your SYNC information.*



E205855

A **Display screen:** Shows audio and SYNC information.

B **Number block:** In radio mode, store your favorite stations for later access. When tuned to any station, press and hold a preset button until sound returns. In CD mode, press a button to select a track. In phone mode, press the buttons to enter a phone number.

C **Function buttons:** Select different functions of the audio system depending on which mode you are in (such as Radio mode or CD mode).

D **TUNE:** In radio mode, turn to search the frequency band in individual increments. In satellite radio mode, turn the control to tune to the next or previous channel.

E **OK and arrow buttons:** Press the up and down or left and right arrow buttons to browse menu selections. Press OK to confirm menu selections.

F **Seek:** In radio mode, select a frequency band and press this button. The system stops at the first station down the band. Press and hold the button to move quickly to the previous strong radio station or memory preset. In CD mode, press this button to select the previous track. Press and hold the button to move quickly backward through the current track.

G **Power and volume:** Press this button to switch the system off and on. Turn the control to adjust the volume.

H **CD slot:** Insert a CD.

I **Eject:** Press this button to eject a CD.

J **SOUND:** Press this button to adjust settings for Treble, Midrange, Bass, Balance and Fade.

K **CLOCK:** Press this button to access the clock setting. Use the center arrow controls to change the hours and minutes.

L **PHONE:** Press this button to access the phone features of the SYNC system.

M **MENU:** Press this button to access different audio system features.

N **MUTE or SIRIUS:** Press this button to mute the playing audio, or if equipped, listen to Sirius satellite radio.

O **AUX:** Press this button to access your auxiliary input jack or switch between devices you plug into the input jack or USB port.

P **RADIO:** Press this button to listen to the radio or change radio frequency bands. Press the function buttons below the radio screen to select different radio functions.

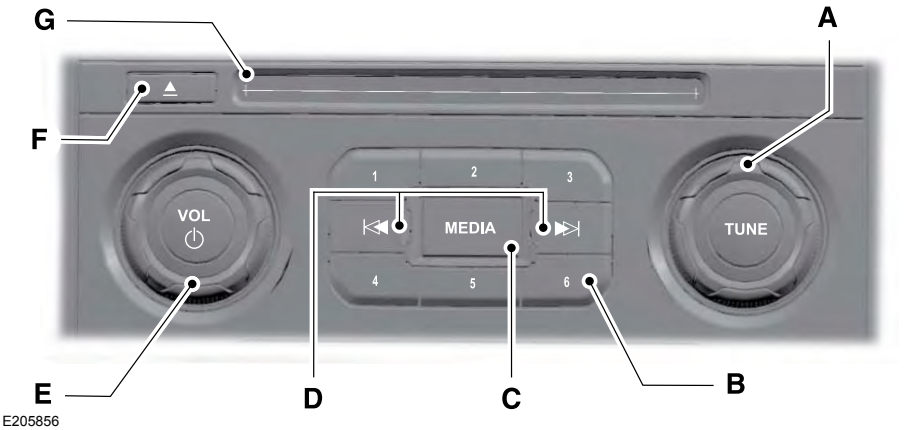
Q **CD:** Press this button to listen to a CD. Press the function buttons below the radio screen to select on-screen options of Repeat or Shuffle.

Note: *The touchscreen controls most of the audio features. See your SYNC information.*

AUDIO UNIT - VEHICLES WITH: SONY AM/FM/CD

WARNING

Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.



A **TUNE:** Turn this control to search through the radio frequency band manually.

B **Memory presets:** Store your favorite radio stations. To store a radio station, tune to the station, then press and hold a preset button until sound returns.

C **MEDIA:** Press this button to access different audio modes, such as AM, FM and A/V Input.

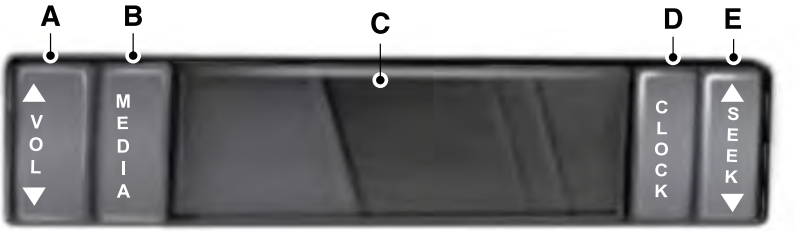
D **Seek:** In radio mode, select a frequency band and press this button. The system stops at the first station down the band. Press and hold the button to move quickly to the previous strong radio station or memory preset. In CD mode, press this button to select the previous track. Press and hold the button to move quickly backward through the current track.

E **Power and volume:** Press this button to switch the system off and on. Turn the control to adjust the volume.

F **Eject:** Press this button to eject a CD.

G **CD slot:** Insert a CD.

Rear Seat Audio Controls



E182082

A **VOL:** Adjust radio volume.

B **MEDIA:** Scroll through available audio system modes.

C **Rear audio display:** See displayed time, radio frequency, Sirius radio channel or CD track.

D **CLOCK:** Press to display the current time in 12-hour format. The time displays for a few seconds or you can press the **CLOCK** button again to switch immediately back to the last media state.

E **SEEK:** Select the next or previous stored radio frequency station, Sirius radio channel or CD track.

DIGITAL RADIO

Note: *HD Radio broadcasts are not available in all markets.*

HD Radio technology is the digital evolution of analog AM/FM radio. Your system has a special receiver that allows it to receive digital broadcasts (where available) in addition to the analog broadcasts, it already receives. Digital broadcasts provide a better sound quality than analog broadcasts with free, crystal-clear audio and no static or distortion. For more information, and a guide to available stations and programming, please visit www.hdradio.com.

When HD Radio is on and you tune to a station broadcasting HD Radio technology, you may notice the HD Radio logo on your screen. When this logo is available, you may also see Title and Artist fields on-screen.

The multicast indicator appears in FM mode (only) if the current station is broadcasting multiple digital broadcasts. The highlighted numbers signify available digital channels where new or different content is available. HD1 signifies the main programming status and is available in analog and digital broadcasts. Other multicast stations (HD2 through HD7) are only available digitally.

When HD Radio broadcasts are active, you can access the following functions:

- **Scan** allows you to hear a brief sampling of all available stations. This feature still works when HD Radio reception is on, although it does not scan for HD2-HD7 channels. You may see the HD logo appear if the station has a digital broadcast.
- **Memory presets** allow you to save an active channel as a memory preset. Touch and hold a memory preset slot until the sound returns. There is a brief mute while the radio saves the station. Sound returns when finished. When switching to an HD2 or HD3 memory preset, the sound mutes before the digital audio plays, because the system has to reacquire the digital signal.

Note: *As with any saved radio station, you cannot access the saved station if your vehicle is outside the station's reception area.*

HD Radio Reception and Station Troubleshooting

Potential reception issues	
Reception area	If you are listening to a multicast station and you are on the fringe of the reception area, the station may mute due to weak signal strength.
	If you are listening to HD1, the system switches back to the analog broadcast until the digital broadcast is available again. However, if you are listening to any of the possible HD2-HD7 multicast channels, the station mutes and stays muted unless it is able to connect to the digital signal again.
Station blending	When the system first receives a station (aside from HD2-HD7 multicast stations), it first plays the station in the analog version. Once the receiver verifies the station is an HD Radio station, it shifts to the digital version. Depending on the station quality, you may hear a slight sound change when the station changes from analog to digital. Blending is the shift from analog to digital sound or digital back to analog sound.

In order to provide the best possible experience, use the contact form to report any station issues found while listening to a station broadcasting with HD Radio technology. Independent entities own and operate each station. These stations are responsible for ensuring all audio streams and data fields are accurate.

Potential station issues		
Issues	**Cause**	**Action**
Echo, stutter, skip or repeat in audio. Increase or decrease in audio volume.	This is poor time alignment by the radio broadcaster.	No action required. This is a broadcast issue.
Sound fading or blending in and out.	The radio is shifting between analog and digital audio.	No action required. The reception issue may clear up as you continue to drive.
There is an audio mute delay when selecting HD2 or HD3, multicast preset or **Direct Tune**.	The digital multicast is not available until the HD Radio broadcast is decoded. Once decoded, the audio is available.	No action required. This is normal behavior. Wait until the audio is available.
Cannot access HD2 or HD3 multicast channel when recalling a preset or from a direct tune.	The previously stored multicast preset or direct tune is not available in your current reception area.	No action required. The station is not available in your current location.
Text information does not match currently playing audio.	Data service issue by the radio broadcaster.	Fill out the station issue form at website listed below.*
There is no text information shown for currently selected frequency.	Data service issue by the radio broadcaster.	Fill out the station issue form at website listed below.*
HD2-HD7 stations not found when **Scan** is pressed.	Pressing **Scan** disables HD2-HD7 channel search.	No action required. This is normal behavior.

* http://www.ibiquity.com/automotive/report_radio_station_experiences

HD Radio Technology manufactured under license from iBiquity Digital Corp. U.S. and foreign patents. HD Radio and the HD and HD Radio logos are proprietary trademarks of iBiquity Digital Corp. Ford Motor Company and iBiquity Digital Corp. are not responsible for the content sent using HD Radio technology. Content may be changed, added or deleted at any time at the station owner's discretion.

SATELLITE RADIO (If Equipped)

SIRIUS® broadcasts a variety of music, news, sports, weather, traffic and entertainment satellite radio channels. For more information and a complete list of SIRIUS satellite radio channels, visit www.siriusxm.com in the United States, www.siriusxm.ca in Canada, or call SIRIUS at 1-888-539-7474.

Note: *This receiver includes the eCos real-time operating system. eCos is published under the eCos License.*

Satellite Radio Reception Factors

Potential satellite radio reception issues	
Antenna obstructions	For optimal reception performance, keep the antenna clear of snow and ice build-up and keep luggage and other material as far away from the antenna as possible.
Terrain	Hills, mountains, tall buildings, bridges, tunnels, freeway overpasses, parking garages, dense tree foliage and thunderstorms can interfere with your reception.
Station overload	When you pass a ground-based broadcast-repeating tower, a stronger signal may overtake a weaker one and the audio system may mute.
Satellite radio signal interference	Your display may show ACQUIRING . . . to indicate the interference and the audio system may mute.

SIRIUS® Satellite Radio Service

Note: *SIRIUS reserves the unrestricted right to change, rearrange, add or delete programming including canceling, moving or adding particular channels, and its prices, at any time, with or without notice to you. Ford Motor Company shall not be responsible for any such programming changes.*

E208625

SIRIUS satellite radio is a subscription-based satellite radio service that broadcasts a variety of music, sports, news, weather, traffic and entertainment programming. Your factory-installed SIRIUS satellite radio system includes hardware and a limited subscription term, which begins on the date of sale or lease of your vehicle. See an authorized dealer for availability.

For more information on extended subscription terms (a service fee is required), the online media player and a complete list of SIRIUS satellite radio channels, and other features, please visit www.siriusxm.com in the United States, www.siriusxm.ca in Canada, or call SIRIUS at 1-888-539-7474.

Satellite Radio Electronic Serial Number (ESN)

You need your ESN to activate, modify or track your satellite radio account. When in satellite radio mode, tune to channel 0.

Troubleshooting

Message	Condition	Action
Acquiring...	Radio requires more than two seconds to produce audio for the selected channel.	No action required. This message should disappear shortly.
Satellite antenna fault SIRIUS system failure	There is an internal module or system failure present.	If this message does not clear shortly, or with an ignition key cycle, your receiver may have a fault. See an authorized dealer for service.
Invalid Channel	The channel is no longer available.	Tune to another channel or choose another preset.
Unsubscribed Channel	Your subscription does not include this channel.	Contact SIRIUS at 1-888-539-7474 to subscribe to the channel, or tune to another channel.
No Signal	The signal is lost from the SIRIUS satellite or SIRIUS tower to your vehicle antenna.	The signal is blocked. When you move into an open area, the signal should return.
Updating...	Update of channel programming in progress.	No action required. The process may take up to three minutes.
Questions? Call 1-888-539-7474	Your satellite service is no longer available.	Contact SIRIUS at 1-888-539-7474 to resolve subscription issues.
None found Check Channel Guide	All the channels in the selected category are either skipped or locked.	Use the channel guide to turn off the Lock or Skip function on that station.
Subscription Updated	SIRIUS has updated the channels available for your vehicle.	No action required.

USB PORT (If Equipped)

WARNING

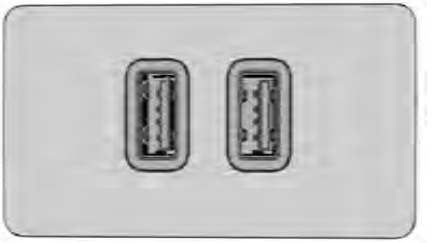
Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

E205592

The USB port allows you to plug in media playing devices, memory sticks and charge devices (if supported). See your SYNC information.

MEDIA HUB

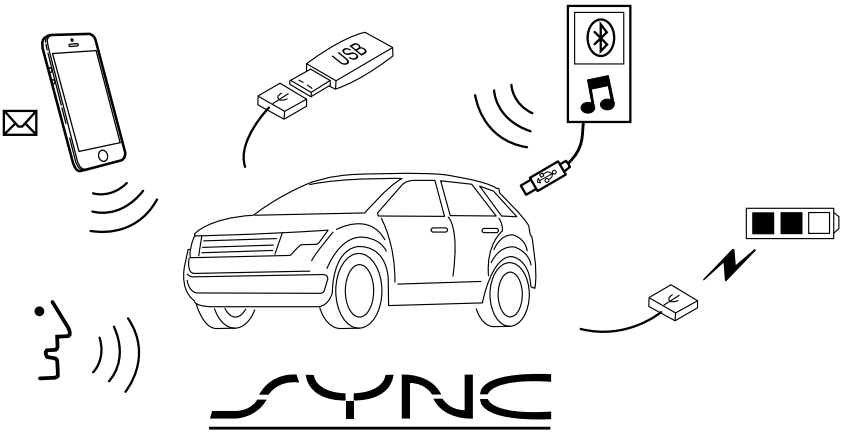
The media hub may be located on the instrument panel or center console.



E207805

See your SYNC information.

GENERAL INFORMATION



E198355

SYNC is an in-vehicle communications system that works with your Bluetooth-enabled cellular phone and portable media player. This allows you to:

- Make and receive calls.
- Access and play music from your portable music player.
- Use 911 Assist, Vehicle Health Report and SYNC Services (Traffic, Directions & Information).*
- Use applications, such as Stitcher, via SYNC AppLink.**
- Access phonebook contacts and music using voice commands.
- Stream music from your connected phone.
- Text message.
- Use the advanced voice recognition system.
- Charge your USB device (if your device supports this).

*These features are not available in all markets and require activation.

**Available AppLink enabled apps vary by market.

Make sure that you review your device's manual before using it with SYNC.

Support

The SYNC support team is available to help you with any questions you cannot answer on your own.

Monday-Saturday, 8:30am-9:00pm EST.

Sunday, 10:30am-7:30pm EST.

In the United States, call 1-800-392-3673.

In Canada, call 1-800-565-3673.

Times are subject to change due to holidays.

SYNC Owner Account

Why do I need a SYNC owner account?

- Required to activate Vehicle Health Report and to view the reports online.
- Required to activate the subscription-based SYNC Services and to personalize your Saved Points and Favorites.
- Essential for keeping up with the latest software downloads available for SYNC.
- Access to customer support for any questions you may have.

Driving Restrictions

For your safety, certain features are speed-dependent and restricted when your vehicle is traveling over 3 mph (5 km/h).

Safety Information

WARNING

Driving while distracted can result in loss of vehicle control, crash and injury. We strongly recommend that you use extreme caution when using any device that may take your focus off the road. Your primary responsibility is the safe operation of your vehicle. We recommend against the use of any hand-held device while driving and encourage the use of voice-operated systems when possible. Make sure you are aware of all applicable local laws that may affect the use of electronic devices while driving.

When using SYNC:

- Do not operate playing devices if the power cords or cables are broken, split or damaged. Place cords and cables out of the way, so they do not interfere with the operation of pedals, seats, compartments or safe driving abilities.
- Do not leave playing devices in your vehicle during extreme conditions as it could cause them damage. See your device's manual for further information.
- Do not attempt to service or repair the system. See an authorized dealer.

Privacy Information

When a cellular phone is connected to SYNC, the system creates a profile within your vehicle that is linked to that cellular phone. This profile is created in order to offer you more cellular features and to operate more efficiently. Among other things, this profile may contain data about your cellular phone book, text messages (read and unread), and call history, including history of calls when your cellular phone was not connected to the system. In addition, if you connect a media device, the system creates and retains an index of supported media content. The system also records a short development log of approximately 10 minutes of all recent system activity. The log profile and other system data may be used to improve the system and help diagnose any problems that may occur.

The cellular profile, media device index, and development log will remain in the vehicle unless you delete them and are generally accessible only in the vehicle when the cellular phone or media player is connected. If you no longer plan to use the system or the vehicle, we recommend you perform a Master Reset to erase all stored information.

System data cannot be accessed without special equipment and access to the vehicle's SYNC module. Ford Motor Company and Ford of Canada will not access the system data for any purpose other than as described absent consent, a court order, or where required by law enforcement, other government authorities, or other third parties acting with lawful authority. Other parties may seek to access the information independently of Ford Motor Company and Ford of Canada. For further privacy information, see the sections on 911 Assist, Vehicle Health Report, and Traffic, Directions and Information.

USING VOICE RECOGNITION

This system helps you control many features using voice commands. This allows you to keep your hands on the wheel and focus on what is in front of you.

Helpful Hints

- Make sure the interior of your vehicle is as quiet as possible. Wind noise from open windows and road vibrations may prevent the system from correctly recognizing spoken commands.
- After pressing the voice button, wait until after the tone sounds and Listening appears before saying a command. Any command spoken before this does not register with the system.
- Speak naturally, without long pauses between words.
- At any time, you can interrupt the system while it is speaking by pressing the voice button.

Initiating a Voice Session

Initiate a voice session by pressing the voice button on the steering wheel controls. See **Voice Control** (page 69).

When prompted you can say any of the following:

Voice command	If you want the system to carry out the following
Bluetooth Audio	Stream audio from your phone.
Cancel	Cancel the requested action.
mobile (apps | applications)	Access mobile applications.
Phone	Make calls.
USB [1]	Access the device connected to your USB port.
Vehicle Health (Report)	Run a vehicle health report.

Voice command	If you want the system to carry out the following
Voice Settings | Voice Preferences	Adjust the level of voice interaction and feedback.
Help	Hear a list of voice commands available in the current mode.

You can say any of the voice commands that appear within open and close brackets that are separated by |. For example, where (cancel | stop | exit) appears you say; cancel or stop or exit.

You must say any of the voice commands that appear outside of open and close brackets. For example, where mobile (apps | applications) appears, you must say mobile followed by either apps or applications.

You do not need to say words that appear within square brackets. For example, for where (USB [stick] | iPOD | MP3 [player]) appears, you can say USB or USB stick.

Note: *SYNC Services and Vehicle health report are only available in the United States of America.*

System Interaction and Feedback

The system provides feedback through audible tones, prompts, questions and spoken confirmations depending on the situation and the chosen level of interaction (voice settings). You can customize the voice recognition system to provide more or less instruction and feedback.

The default setting is to a higher level of interaction in order to help you learn to use the system. You can change these settings at any time.

Adjusting the Interaction Level

Initiate a voice session by pressing the voice button on the steering wheel controls. See **Voice Control** (page 69).

When prompted say the following:

Voice command	If you want the system to carry out the following
Voice Settings | Voice Preferences	
Followed by either of the following:	
Interaction Mode Standard	Provide more detailed interaction and guidance.
Interaction Mode Advanced	Provide less audible interaction and more tone prompts.

The system defaults to the standard interaction mode.

Confirmation prompts are short questions the system asks when it is not sure of your request or when there are multiple possible responses to your request. For example, the system may ask "Phone, is that correct?". If turned off, the system simply makes a best guess as to what you requested and may ask you to confirm settings.

Voice command	If you want the system to carry out the following
Confirmation Prompts Off	Make a best guess from the command; you may still occasionally be asked to confirm settings.
Confirmation Prompts On	Clarify your voice command with a short question.

The system creates candidate lists when it has the same confidence level of several options based on your voice command. When turned on, it may prompt you with as many as four possibilities for clarification.

For example, say "Say 1 after the tone to call John Doe at home. Say 2 after the tone to call Johnny Doe on mobile. Say 3 after the tone to call Jane Doe at home." You could also say "Say 1 after the tone to play John Doe, Say 2 after the tone to play Johnny Doe."

Voice command	If you want the system to carry out the following
Media Candidate Lists Off	Make a best guess from the media candidate list. You may still occasionally be asked questions.
Media Candidate Lists On	Clarify your voice command for media candidates.
Phone Candidate Lists Off	Make a best guess from the phone candidate list. You may still occasionally be asked questions.
Phone Candidate Lists On	Clarify your voice command for phone candidates.

USING SYNC™ WITH YOUR PHONE

Hands-free calling is one of the main features of SYNC. While the system supports a variety of features, many are dependent on your cell phone's functionality. At a minimum, most cell phones with Bluetooth wireless technology support the following functions:

- Answering an incoming call.
- Ending a call.
- Using privacy mode.
- Dialing a number.
- Redialing.
- Call waiting notification.
- Caller ID.

Other features, such as text messaging using Bluetooth and automatic phonebook download, are cell phone-dependent features. To check your cell phone's compatibility, see your cell phone's manual and visit www.SYNCMyRide.com, www.SYNCMyRide.ca or www.syncmaroute.ca.

Pairing a Cell Phone for the First Time

Note: *SYNC can support downloading up to approximately 1000 entries per Bluetooth-enabled cell phone.*

Note: *Make sure to switch on the ignition and the radio. Put the transmission in position park (**P**) (automatic transmission) or neutral with the parking brake applied (manual transmission).*

Note: *To scroll through the menus, press the up and down arrows on your audio system.*

Wirelessly pairing your cell phone with SYNC allows you to make and receive hands-free calls.

Press the phone button. When the display indicates there is no cell phone paired, do the following:

Message	Action and Description
NO PHONE	Press the **OK** button.
FIND SYNC	1. Press the **OK** button. 2. Put your cell phone into Bluetooth discovery mode. See your device's manual if necessary. 3. When prompted on your cell phone's display, enter the six-digit PIN provided by SYNC in the radio display. The display indicates when the pairing is successful.

Depending on your cell phone's capability and your market, the system may prompt you with questions, such as setting the current cell phone as the primary cell phone (the cell phone SYNC automatically tries to connect with first upon vehicle start-up) and downloading your phonebook.

Pairing Subsequent Cell Phones

Note: *To scroll through the menus, press the up and down arrows on your audio system.*

Note: *Make sure to switch on the ignition and the radio. Put the transmission in position park (**P**) (automatic transmission) or neutral with the parking brake applied (manual transmission).*

Press the phone button, then scroll to:

Message	Action
PHONE SETNGS	Press the **OK** button.
BT DEVICES	Press the **OK** button.
ADD DEVICE	Press the **OK** button. When the following message appears in the display.
FIND SYNC	1. Press the **OK** button. 2. Put your cell phone into Bluetooth discovery mode. See your device's manual if necessary. 3. When prompted on your cell phone's display, enter the six-digit PIN provided by SYNC in the radio display. The display indicates when the pairing is successful.

The system then prompts with questions, such as if you would like to set the current cell phone as the primary cell phone (the cell phone SYNC automatically tries to connect with first upon vehicle start-up) or download your phonebook.

Phone Voice Commands

Press the voice icon and say:

Voice Commands
Phone
You can then say any of the following commands.
Call History Incoming
Call History Missed
Call History Outgoing

Voice Commands
Phonebook ___
Phonebook ___ at Home
Phonebook ___ at Work
Phonebook ___ in Office
Phonebook ___ on Cell

___ is a dynamic listing that should be the name of a contact in your phonebook. For example you could say "Call Mom".

You can also say any of the following:

Voice Command
Call ___
Call ___ at Home
Call ___ at Work
Call ___ in Office
Call ___ on Mobile
Call ___ on Other
Dial

None of these commands are available until your cell phone information is completely downloaded using Bluetooth.

___ is a dynamic listing that should be the name of a contact in your phonebook. For example you could say "Call Mom".

The following commands are only available during active calls:

Voice Commands
Go To Privacy
Hold
Join

Phone Menu Commands

To access the phone menu with voice commands, press the voice button and when prompted say:

Voice Command
[Phone] Menu
You can then say any of the following:
[Phone] Connections | [Media] Connections | [Bluetooth] Connections

Voice Command
[Phone] Settings [Message] Notification On
[Phone] Settings [Message] Notification Off
[Phone] Settings [Set] Phone Ringer
[Phone] Settings [Set] Ringer 1
[Phone] Settings [Set] Ringer 2
[Phone] Settings [Set] Ringer 3
[Phone] Settings [Set] Ringer Off
Battery
Phone Name
Signal
Text Message Inbox
Send [New] Text Message

You do not need to say word contained within brackets for the system to understand your command.

Note: *To exit dial mode, press and hold the phone button or press MENU to go to the PHONE menu.*

Phonebook Commands

When you ask SYNC to access content, for example the phonebook name or number, the requested information appears in the display to view.

Making a Call

Press the voice button and when prompted say:

Voice Command	Action and Description
Call ___	This command is not available until your cell phone information is completely downloaded using Bluetooth.
Dial	Use to enter a phone number digit by digit.
When the system confirms the number say one of the following commands:	
Dial	To confirm the number and initiate the call.
delete	To erase the last spoken digit. You can also press the left arrow button.
clear	To erase all spoken digits. You can also press and hold the left arrow button.

To end a call, press and hold the red phone button.

Receiving Calls

When receiving a call, you can:

- Answer the call by pressing the phone button.
- Reject the call by pressing and holding the red phone button.
- Ignore the call by doing nothing.

Phone Options during an Active Call

During an active call, you have more menu features that become available, for example putting a call on hold or joining calls. Use the arrow buttons to scroll through the menu options.

Press the MENU button during an active call, then scroll to:

Message	Action and Description
CALL MENU	Press the **OK** button.
Select one of the following:	
PRIVACY	Press the **OK** button to switch a call from an active hands-free environment to your cell phone for a more private conversation.
CALL HOLD	Press the **OK** button to put an active call on hold.
JOIN CALLS	Join two separate calls. SYNC supports a maximum of three callers on a multiparty call or conference call.

Message	Action and Description	
	1. Press the phone button. 2. Access the desired contact through SYNC or use voice commands to place the second call. Once actively in the second call, press **MENU**. 3. Scroll to Join Calls, and press the **OK** button. Wait until the following message appears.	
	JOIN CALLS	Press the **OK** button.
ENTER TONES	Enter tones such as numbers for passwords. Scroll until the desired number appears in the display, then press OK; a tone sounds as confirmation. Repeat as necessary.	
PHONEBOOK	To access your phonebook contacts. 1. Press the **OK** button to select, and then scroll through your phonebook contacts. 2. Press the **OK** button again when the desired selection appears in the display. 3. Press the phone button to call the contact.	
CALL HISTORY	To access your call history log. 1. Press the **OK** button to select, then scroll through your call history options (incoming, outgoing or missed). 2. Press the **OK** button when the desired selection appears in the display. 3. Press the phone button to call the selection.	
RETURN	Exit the current menu.	

Accessing Features Through the Phone Menu

The phone menu allows you to redial a number, access your call history and phonebook and sends text messages as well as access cell phone and system settings. You can also access advanced features, for example 911 Assist, Vehicle Health Report and SYNC Services.

Press the phone button to enter the Phone Menu, then scroll to:

Message	Action and Description	
PHONE REDIAL	Press the **OK** button to redial the last number called. Press the **OK** button again to confirm.	
PHONE REDIAL	Access any previously dialed, received or missed calls after you connect your Bluetooth-enabled cell phone to SYNC.[1] Press the **OK** button then select one of the following and press the **OK** button again to confirm. INCOMING OUTGOING MISSED The system attempts to automatically re-download your phonebook and call history each time your cell phone connects to SYNC (if the auto download feature is on and your Bluetooth-enabled cell phone supports this feature).	
PHONEBOOK	To browse your phonebook select:	
	BROWSE	Press **OK**. Scroll down or up to the desired name and press **OK**. In addition to the Phonebook entry name, the phone number label (Work, Cell, Home or Other) shows on the display. If there are multiple phone number entries for a particular Phonebook name, you can scroll through the different phone labels at this time. Once you have the desired phone label on the screen press **OK**. The phone number that is stored under the selected label will be shown on the display. Press **OK** to dial this number.
	To search for a contact in your phone book select:	
	SEARCH	Press **OK**. Scroll down until you see the first letter of your phonebook entry. Press **OK**. Scroll down until you see the second letter of your desired phonebook entry. Press **OK**.

Message	Action and Description	
		Repeat entering letters to narrow your search. When you are satisfied with your entry press the right arrow key on the bezel. SYNC will jump to the phonebook contact name that matches your entry. Press **OK**. In addition to the Phonebook entry name, the phone number label (Work, Cell, Home or Other) shows on the display. If there are multiple phone number entries for a particular Phonebook name, you can scroll through the different phone labels at this time. Once you have the desired phone label on the screen press **OK**. The phone number that is stored under the selected label will be shown on the display. Press **OK** to dial this number.
TEXT MESSAGE	Press the **OK** button to send, download, read and delete text messages.[1]	
PHONE SETNGS	View your cell phone's status, set ring tones, select your message notification, change phonebook entries and automatically download your cell phone content among other features.[1]	
SYNC Services	Access the SYNC Services portal where you can request various types of information, for example traffic reports and directions.[3]	
911 Assist	Automatically place an emergency call to a 911 operator following a crash.[4]	
Vehicle Health	Create and receive a diagnostic report card on your vehicle.[3]	
APPLICATIONS	Interact with SYNC-capable mobile applications on your smartphone.	

Message	Action and Description
SYS SETTINGS	Access Bluetooth Devices menu listings and advanced menu listings.
EXIT MENU	Press the **OK** button to exit the phone menu.

[1] This is a cell phone-dependent feature.

[2] This is a cell phone-dependent and speed-dependent feature.

[3] This is an optional feature and available in the United States only.

[4] This is an optional feature and available in the United States and Canada only.

Text Messaging

Note: *This is a cell phone-dependent feature.*

SYNC allows you to receive, send, download and delete text messages. The system can also read incoming text messages to you so that you do not have to take your eyes off the road.

Receiving a Text Message

Note: *This is a cell phone-dependent feature. Your cell phone must support downloading text messages using Bluetooth to receive incoming text messages.*

Note: *Forwarding a text message is a speed-dependent feature. It is only available when your vehicle is traveling at 3 mph (5 km/h) or less.*

Note: *Only one recipient is allowed per text message.*

When a new text message arrives, an audible tone sounds and the information display indicates you have a new message.

Following the notification you can do any of the following:

Do nothing to have the message go into your text message inbox.

To have SYNC read you the message using voice commands, press the voice button and when prompted say:

Voice Command	Action and Description
Read Message | Read Text Message | Text Message	SYNC will read the most recent text message to you.

To open the test message, press OK to receive and open the text message. Press OK again and SYNC reads your message aloud as you are not able to view the message. You can then also choose whether you'd like to reply or forward the message.

Reply or forward the message, press OK and scroll to choose between:

Message	Action and Description
REPLY TO MSG	Press the **OK** button to access and then scroll through the list of pre-defined messages to send.
FORWARD MSG	Press the **OK** button to forward the message to anyone in your Phonebook or Call History. You can also choose enter a number.

Sending, Downloading and Deleting Your Text Messages

Text messaging is a cell phone-dependent feature. If your cell phone is compatible, SYNC allows you to receive, send, download and delete text messages.

Note: *Sending a text message is a speed-dependent feature. It is only available when your vehicle is traveling at 3 mph (5 km/h) or less.*

Note: *You can only have one recipient per text message.*

Press the phone button, then scroll to:

Message	Action and Description
TEXT MESSAGE	Press the **OK** button.
Select one of the following:	
SEND MSG?	Allows you to send a new text message based on a pre-defined set of 15 messages. 1. Press the **OK** button. 2. Scroll to your desired message. 3. Press the **OK** button. 4. Scroll through your phonebook, call history entries or enter a new number. 5. Press the **OK** button to enter the desired contact. 6. Press the **OK** button again when the system asks if you would like to send the message. The system sends each text message with the following signature: This message was sent from my Ford.

Message	Action and Description
DOWNLOAD MSG	Allows you to download your unread messages to SYNC. To download the messages, press the **OK** button to select. The display indicates the system is downloading your messages. When downloading is complete, SYNC returns you to the inbox.
DELETE ALL	Allows you to delete current text messages from SYNC. To delete the messages, press the **OK** button to select. The display indicates when it is finished deleting all your text messages. SYNC returns you to the text message menu.
RETURN	Press the **OK** button to exit the current menu.

Accessing Your Phone Settings

These are cell phone-dependent features. Your cell phone settings allow you to access and adjust some features. For example ring tones, text message notification, modify your phonebook and set up automatic download.

Press the phone button, then scroll to:

Message	Action and Description
PHONE SETNGS	Press the **OK** button.
Select one of the following:	
PHONE STATUS	See the provider, name, signal power, battery power and roaming status of your connected cell phone. Press **OK** to select and scroll to view the information. When done, press **OK** again to return to the phone status menu.
SET RINGER	Select which ring tone sounds during an incoming call. You can choose one of the system ring tones or your cell phone ring tones. Press the **OK** button and scroll to hear the available options. You can also choose to use to use your phone's ring tone.
	Press the **OK** button to select the desired ring tone. If your cell phone supports in-band ringing, your cell phone ring plays when you choose the phone ringer option.
MSG NTFY	You have the option of hearing an audible tone to notify you when a text message arrives.

Message	Action and Description	
	Press the **OK** button then select one of the following and press the **OK** button again to confirm. MSG NTFY ON MSG NTFY OFF	
MODIFY PHONEBOOK	Modify the contents of your phone book (such as add, delete, download). Press OK to select and scroll between:	
	ADD CONTACTS	Press the **OK** button to add more contacts from your phonebook. Push the desired contact(s) on your cell phone. See your cell phone's manual on how to push contacts.
	DELETE PHONEBOOK	Press **OK** to delete the current phone book and call history. When Delete Phonebook appears, press OK to confirm. SYNC takes you back to the Phone Settings menu.
	DOWNLOAD PHONEBOOK	Press **OK** to select and press OK again when Confirm Download? appears.
AUTODOWNLOAD	Automatically download your phone book each time your phone connects to SYNC. Press OK to select.	
	AUTO ON?	When this message appears, press **OK** to have your phonebook automatically downloaded each time. Select Off to NOT download your phonebook every time your phone connects to SYNC. Your phonebook, call history and text messages can only be accessed when your specific phone is connected to SYNC. *
SPEAK NAMES	When enabled, SYNC speaks the contact name that is displayed on the screen during phonebook browsing.	
RETURN	Exit the current menu.	

* Downloading times are cell phone-dependent and quantity-dependent. When Auto Download is on, it automatically deletes any changes, additions or deletions saved since your last download.

System Settings

This menu provides access to your Bluetooth Devices and Advanced menu features. Use the arrow buttons to scroll through the menu options.

Bluetooth Devices

The Bluetooth Devices menu allows you to add, connect and delete devices, set a cell phone as primary as well as turn your Bluetooth feature on and off.

Press the Phone button to enter the Phone Menu, then scroll to:

Message	Action and Description
SYS SETTINGS	Press the **OK** button.
BT DEVICES	Press the **OK** button.
Select one of the following:	
ADD DEVICE	See **Using SYNC™ With Your Phone** (page 332). [1]
CONNECT BT	Connect a previously paired Bluetooth-enabled phone. [2] Press **OK** to select and view a list of previously paired phones. Scroll until the desired device is chosen, then press OK to connect the phone.
SET PRIMARY?	Set a previously paired phone as your primary phone. [3] Press **OK** to select and scroll to select the desired phone. Press OK to confirm.
BT ON/OFF	Turn the Bluetooth feature on and off.[4] Press **OK** and scroll to toggle between On and Off. When the desired selection is chosen, press **OK**. Setting Bluetooth to off disconnects all Bluetooth devices and turns off all Bluetooth features.
DEL DEVICE	Delete a paired cell phone. Press the **OK** button and scroll to select the device. Press **OK** to confirm.
DELETE ALL	Delete all previously paired phones (and all information originally saved with those phones). Press **OK** to select.
RETURN	Exit the current menu.

[1] This is a speed-dependent feature. It is only available when your vehicle is traveling at 3 mph (5 km/h) or less.

[2] You can only connect one device at a time. When another cell phone is connected, the previous one is disconnected.

[3] SYNC attempts to connect with the primary phone at every ignition cycle. When a phone is selected as primary, it appears first in the list and is marked with an asterisk (*).

[4]Turning Bluetooth off disconnects all Bluetooth devices and deactivates all Bluetooth features.

Advanced

The Advanced menu allows you to access and set prompts, languages, defaults, perform a master reset, install an application and view system information.

To access the advanced menu, press the phone button to enter the Phone Menu, the scroll to:

Message	Action and Description
SYS SETTINGS	Press **OK**.
ADVANCED	Press **OK**.
Select one of the following:	
PROMPTS	Get help from SYNC by using questions, helpful hints or asking you for a specific action. To turn these prompts on or off: 1. Press the **OK** button to select and scroll to select between On and Off. 2. Press the **OK** button when the desired selection appears in the display. SYNC returns you to the Advanced menu.
LANGUAGES	1. Press **OK** to select and then scroll through the languages. Choose between English, Français and Español. Once selected, all of the radio displays and prompts are in the selected language. 2. Press **OK** when the desired selection appears in the display. If you change the language setting, the display indicates that the system is updating. When complete, SYNC returns you to the Advanced menu.
DEFAULTS	Return to the factory default settings. This selection does not erase your indexed information, for example phonebook, call history, text messages or paired devices. Press the **OK** button to select and then press **OK** again when the following message appears in the display. RESTORE?
MASTER RESET	Completely erase all information stored on SYNC, for example phonebook, call history, text messages and paired devices, and return the system to the factory default settings. Press **OK** to select. The display indicates when complete. SYNC returns you to the Advanced menu.
SYNC REBOOT	Press **OK** to select.

Message	Action and Description	
	CONFIRM REBOOT?	Press **OK** to select. You only need to press the OK button once. SYNC will be unresponsive for 2-4 minutes while it is rebooting. Wait 2-4 minutes before attempting to execute a SYNC command
INSTALL APP	Install applications you have downloaded. Press the **OK** button and scroll to select. Press the **OK** button to confirm.	
SYSTEM INFO	Access the Auto Version number as well as the FDN number. Press the **OK** button to select.	
RETURN	Exit the current menu.	

SYNC™ APPLICATIONS AND SERVICES (If Equipped)

In order for the following features to work, your cell phone must be compatible with SYNC. To check your phone's compatibility, visit www.SYNCMyRide.com, www.SYNCMyRide.ca or www.syncmaroute.ca.

- SYNC Services*: Provides access to traffic, directions and information such as travel, horoscopes, stock prices and more.
- 911 Assist: Can alert 911 in the event of an emergency.
- Vehicle Health Report*: Provides a diagnostic and maintenance report card of your vehicle.

*This is an optional feature and available in the United States only.

911 Assist (If Equipped)

WARNINGS

Unless the 911 Assist setting is set on before a crash, the system will not dial for help which could delay response time, potentially increasing the risk of serious injury or death after a crash.

Do not wait for 911 Assist to make an emergency call if you can do it yourself. Dial emergency services immediately to avoid delayed response time which could increase the risk of serious injury or death after a crash. If you do not hear 911 Assist within five seconds of the crash, the system or phone may be damaged or non-functional.

Always place your phone in a secure location in your vehicle so it does not become a projectile or get damaged in a crash. Failure to do so may cause serious injury to someone or damage the phone which could prevent 911 Assist from working properly.

Note: *The SYNC 911 Assist feature must be set on before the incident.*

Note: *Before setting this feature on, make sure that you read the 911 Assist Privacy Notice later in this section for important information.*

Note: *If any user turns 911 Assist on or off, that setting applies for all paired phones. If 911 Assist is turned off, either a voice message plays or a display message (or icon) comes on (or both) when your vehicle is started after a previously paired phone connects.*

Note: *Every phone operates differently. While SYNC 911 Assist works with most cellular phones, some may have trouble using this feature.*

If a crash deploys an airbag (excluding knee airbags and rear inflatable safety belts [if equipped]) or activates the fuel pump shut-off, your SYNC-equipped vehicle may be able to contact emergency services by dialing 911 through a paired and connected Bluetooth-enabled phone. You can learn more about the 911 Assist feature, visit www.SYNCMyRide.com, www.SYNCMyRide.ca or www.syncmaroute.ca.

See **Supplementary Restraints System** (page 35). Important information about airbag deployment is in this chapter.

See **Roadside Emergencies** (page 224). Important information about the fuel pump shut-off is in this chapter.

Switching 911 Assist On or Off

Press the phone button to enter the phone menu and scroll to:

Message	Action and Description
911 Assist	Press the **OK** button to confirm and enter the 911 Assist menu.
On Off	Press the **OK** button when the desired option appears in the radio display.

Off selections include:

Message	Action and Description
Off with reminder:	Provides a display and voice reminder at phone connection at vehicle start.
Off without reminder:	Provides a display reminder only without a voice reminder at phone connection.

To make sure that 911 Assist works correctly:

- SYNC must be powered and working properly at the time of the incident and throughout feature activation and use.
- The 911 Assist feature must be set on before the incident.
- You must pair and connect a Bluetooth-enabled and compatible cell phone to SYNC.
- A connected Bluetooth-enabled phone must have the ability to make and maintain an outgoing call at the time of the incident.

- A connected Bluetooth-enabled phone must have adequate network coverage, battery power and signal strength.
- The vehicle must have battery power and be located in the U.S., Canada or in a territory in which 911 is the emergency number.

In the Event of a Crash

Not all crashes will deploy an airbag or activate the fuel pump shut-off (the triggers for 911 Assist). If a connected cell phone sustains damage or loses its connection to SYNC during a crash, SYNC will search for and try to connect to a previously paired cell phone; SYNC will then attempt to call the emergency services.

Before making the call:

- SYNC provides a short window of time (about 10 seconds) to cancel the call. If you fail to cancel the call, SYNC attempts to dial 911.
- SYNC says the following, or a similar message: "SYNC will attempt to call 911, to cancel the call, press Cancel on your screen or press and hold the phone button on your steering wheel."

If you do not cancel the call, and SYNC makes a successful call, a pre-recorded message plays for the 911 operator, and then the occupant(s) in your vehicle is able to talk with the operator. Be prepared to provide your name, phone number and location immediately, because not all 911 systems are capable of receiving this information electronically.

911 Assist May Not Work If

- Your cellular phone or 911 Assist hardware sustains damage in a crash.
- The vehicle's battery or the SYNC system has no power.
- The phone(s) thrown from your vehicle are the ones paired and connected to the system.

911 Assist Privacy Notice

When you turn on 911 Assist, it may disclose to emergency services that your vehicle has been in a crash involving the deployment of an airbag or activation of the fuel pump shut-off. Certain versions or updates to 911 Assist may also be capable of electronically or verbally disclosing to 911 operators your vehicle location or other details about your vehicle or crash to assist 911 operators to provide the most appropriate emergency services. If you do not want to disclose this information, do not turn the feature on.

Vehicle Health Report (If Equipped, United States Only)

WARNING

Always follow scheduled maintenance instructions, regularly inspect your vehicle, and seek repair for any damage or problem you suspect. Vehicle Health Report supplements, but cannot replace, normal maintenance and vehicle inspection. Vehicle Health Report only monitors certain systems electronically monitored by your vehicle and will not monitor or report the status of any other system, (such as brake lining wear). Failure to perform scheduled maintenance and regularly inspect your vehicle may result in vehicle damage and serious injury.

Note: *This feature is only available in the United States.*

Note: *Your Vehicle Health Report feature requires activation before use. Visit www.SYNCMyRide.com to register. There is no fee or subscription associated with Vehicle Health Report, but you must register to use this feature.*

Note: *This feature may not function properly if you have enabled caller ID blocking on your cellular phone. Before running a report, review the Vehicle Health Report Privacy Notice.*

Note: *In order to allow a break-in period for your vehicle, you may not be able to create a Vehicle Health Report until your vehicle odometer has reached 200 miles.*

Note: *Cellular phone and SMS charges may apply when making a report.*

Register for Vehicle Health Report and set your report preferences at www.SYNCMyRide.com. After registering, you can request a Vehicle Health Report (inside your vehicle). Return to your account at www.SYNCMyRide.com to view your report. You can also choose for SYNC to remind you automatically to run reports at specific mileage intervals.

The system allows you to check your vehicle's overall health in the form of a diagnostic report card. The Vehicle Health Report contains valuable information, for example:

- Vehicle diagnostic information
- Scheduled maintenance
- Open recalls and Field Service Actions
- Items noted during vehicle inspections by an authorized dealer that still need servicing.

You can run a vehicle health report after your vehicle has been running a minimum of 60 seconds. Choose one of the following options.

To use voice commands, press the voice button and when prompted say:

Voice command	Action and Description
Vehicle Health (Report)	The system will run a vehicle health report of your vehicle's diagnostic systems and send the results to Ford where it combines with scheduled maintenance information, open recalls, other field service actions and vehicle inspection items that still need servicing by an authorized dealer.

To use the screen, press the phone button, then scroll to:

Message	Action and Description
Vehicle Health	Press the **OK** button.
Select one of the following:	
Auto On?	Press the **OK** button and select on or off.

Message	Action and Description
	Select On to have SYNC automatically prompt you to run a health report at certain mileage intervals.*
Report Interval	Scroll to select between 5000, 7500 or 10000-mile intervals. Select your desired option and press the **OK** button.
Run Report	Press the **OK** button for SYNC to run a health report of your vehicle's diagnostic systems and send the results to Ford where it combines with scheduled maintenance information, open recalls, other field service actions and vehicle inspection items that still need servicing by an authorized dealer.
Return	Exit the current menu.

*You must first turn this feature on before you can select the desired mileage interval.

Vehicle Health Report Privacy Notice

When you create a Vehicle Health Report, Ford Motor Company may collect your cellular phone number (to process your report request) and diagnostic information about your vehicle. Certain versions or updates to Vehicle Health Report may also collect more vehicle information. Ford may use your vehicle information it collects for any purpose. If you do not want to disclose your cellular phone number or vehicle information, do not run the feature or set up your Vehicle Health Report profile at www.SYNCMyRide.com. See www.SYNCMyRide.com (Vehicle Health Report Terms and Conditions, and Privacy Statement) for more information.

SYNC Services: Traffic, Directions & Information (TDI) (If Equipped, United States Only)

Note: *SYNC Services varies by trim level and model year and may require a subscription. Traffic alerts and turn-by-turn directions available in select markets. Message and data rates may apply. Ford Motor Company reserves the right to change or discontinue this product service at any time without prior notification or incurring any future obligation.*

Note: *SYNC Services requires activation before use. Visit www.SYNCMyRide.com to register and check your eligibility for complimentary services. Standard phone and message rates may apply. Subscription may be required. You must also have the active SYNC Services Bluetooth-enabled cellular phone paired and connected to the system in order to connect to, and use, SYNC Services. See* ***Using SYNC™ With Your Phone*** *(page 332).*

Note: *This feature does not function properly if you have enabled caller ID blocking on your cellular phone. Make sure your cellular phone is not blocking caller ID before using SYNC Services.*

Note: *The driver is ultimately responsible for the safe operation of the vehicle, and therefore, must evaluate whether it is safe to follow the suggested directions. Any navigation features provided are only an aid. Make your driving decisions based on your observations of local conditions and existing traffic regulations. Do not follow the route suggestions if doing so would result in an unsafe or illegal maneuver, place you in an unsafe situation, or if you would be directed into an area that you consider unsafe. Maps used by this system may be inaccurate because of errors, changes in roads, traffic conditions or driving conditions.*

Note: *When you connect, the service uses GPS technology and advanced vehicle sensors to collect your vehicle's current location, travel direction and speed to help provide you with the directions, traffic reports, or business searches you request. Further, to provide the services you request, for continuous improvement, the service may collect and record call details and voice communications. For more information, see SYNC Services Terms and Conditions at www.SYNCMyRide.com. If you do not want Ford or its service providers to collect your vehicle travel information or other information identified in the Terms and Conditions, do not subscribe or use the service.*

SYNC Services uses advanced vehicle sensors, integrated GPS technology and comprehensive map and traffic data, to give you personalized traffic reports, precise turn-by-turn directions, business search, news, sports, weather and more. For a complete list of services, or to learn more, please visit www.SYNCMyRide.com.

Connecting to SYNC Services Using Voice Commands

Press the voice button and when prompted say:

Voice command	Action and Description
Services	This initiates an outgoing call to SYNC Services using your paired and connected Bluetooth-enabled cellular phone. Once you connect to the service, follow the voice prompts to request the desired service, for example traffic or directions.
Once you are connected to SYNC Services, you can also say the following:	
(what are my (options | choices) | what can I say | [available] commands)	Receive a list of available services from which to choose.

Voice command	Action and Description
Services	To return to the Services main menu.
help	Receive system help.

You can say any of the voice commands that appear within open and close brackets that are separated by |. For example, where (options | choices) appears you say either; options or choices.

You must say any of the voice commands that appear outside of open and close brackets. For example, where; what are my (options | choices) appears, you must say; what are my, followed by either, options or choices.

You do not need to say words that appear within square brackets. For example, for where (what can I say [available] commands) appears, you can say, what can I say commands.

Connecting to SYNC Services Using the Phone Menu

Press the phone button, then scroll to:

Message	Action and Description
SYNC Apps	Press the **OK** button.
Services	1. Press the **OK** button. The display indicates the system is connecting. 2. Press the **OK** button again. SYNC initiates the call to the Services portal. 3. Once you connect to the service, follow the prompts to request the desired service, for example traffic or directions.

Receiving Turn-by-Turn Directions

When connected to SYNC Services, press the voice button and when prompted say:

Voice command	Action and Description
Directions	To receive directions to a location. Once you select your destination, the system uploads your current vehicle location, calculates a route based on current traffic conditions and sends it back to your vehicle. After the route download is complete, the phone call automatically ends. You then receive audible and visual driving instructions as you travel toward your destination.
Business search	To find a business or type of business. Select your destination, the system uploads your current vehicle location, calculates a route based on current traffic conditions and sends it back to your vehicle. After the route download is complete, the phone call automatically ends. You then receive audible and visual driving instructions as you travel toward your destination.
You can also say the following:	
Search near me	To find the closest business or type of business to your location, within business search.
Operator	If you need further assistance in finding a location at any time within a Directions or Business search and need to speak with a live operator. The live operator can assist you by searching for businesses by name or by category, residential addresses by street address or by name or specific street intersections. The system may prompt you to speak with an operator when it has difficulty matching your voice request. Operator Assist is a feature of your SYNC Services subscription. For more information on Operator Assist, visit www.SYNCMyRide.com/support.
Yes *	If you miss a turn, SYNC automatically asks if you want the route updated. Say yes when prompted and the system sends a new route to your vehicle.

* During an active route.

Disconnecting from SYNC Services

To disconnect from SYNC services, say:

Voice command	Action and Description
Goodbye	From the SYNC Services main menu, or press and hold the phone button on the steering wheel.

SYNC Services quick tips

SYNC Services quick tips	
Personalizing	You can personalize your Services feature to provide quicker access to your most used or favorite information. You can save address points, for example work or home. You can also save favorite information like sports teams or a news category. You can learn more about personalization by logging onto www.SYNCMyRide.com.
Push to interrupt	Press the voice button at any time while connected to SYNC Services to interrupt a voice prompt or an audio clip and say your voice command.
Portable	Your subscription is associated with your Bluetooth-enabled cellular phone number, not your VIN (Vehicle Identification Number). You can pair and connect your phone to any vehicle equipped with SYNC Services and continue enjoying your personalized services. You can even access your account outside your vehicle. Just use the number on your phone's call history. Traffic and Directions features do not function properly but information services and the 411 connect and text message features are available.

SYNC™ APPLINK™

SYNC Mobile Apps

Note: *You must pair and connect your smartphone to SYNC to access AppLink.*

Note: *iPhone users need to connect the phone to the USB port in order to start the application.*

Note: *The AppLink feature is not available if your vehicle is equipped with the MyFord Touch system.*

Note: *Depending on your display type, you can access AppLink from the media menu, the phone menu, or by using voice commands. Once an app is running through AppLink, you can control main features of the app through voice commands and steering wheel controls.*

To Access Using the Phone Menu

Press the phone button to access the SYNC phone menu on-screen. You can then scroll to:

Menu item	
Mobile Apps	Press **OK** to access a list of available applications. Scroll through the list of available applications and press OK to select a particular app. Once an app is running through SYNC, you can access an app's menu by pressing the **MENU** button to first access the SYNC menu.

Scroll until the app name followed by "Menu", is displayed (such as, sticher Menu), then press **OK**. From here, you can access an application's features, such as Thumbs up and Thumbs down.

For more information, please visit:

Website
www.SYNCMyRide.com

To Access Using the Media Menu

Press the **AUX** button on the center console.

Press the Menu button to the SYNC menu and scroll to:

Menu item	Action and description
SYNC-Media	Press the **OK** button.
Mobile Apps	Press the **OK** button and scroll through the list of available applications and select your desired app.

Scroll until the app name followed by "Menu", is displayed (such as, Stitcher Menu), then press **OK**. From here, you can access an application's features, such as Thumbs up and Thumbs down.

For more information, please visit:

Website
www.SYNCMyRide.com

To Access Using Voice Commands

Press the voice button and when prompted say:

Voice command	Action and description
Mobile Apps	Say the name of the application after the tone. The app should start. While an app is running through SYNC, you can press the voice button and speak commands specific to the app, for example, "Playlist Road Trip".
You can also say the following:	
The name of an app (such as Stitcher) followed by "help".	To discover the available voice commands.

USING SYNC™ WITH YOUR MEDIA PLAYER

You can access and play music from your digital music player over your vehicle's speaker system using the system's media menu or voice commands. You can also sort and play your music by specific categories, for example artist and album.

Note: *The system is capable of indexing up to 6,000 songs.*

SYNC is capable of hosting nearly any digital media player including: iPod®, Zune™, plays from device players, and most USB drives. SYNC also supports the following audio formats MP3, WMA, WAV and ACC.

Connecting Your Digital Media Player to the USB Port

Note: *If your digital media player has a power switch, make sure you switch it on before plugging it in.*

To Connect Using Voice Commands

Plug the device into the USB port. See **USB Port** (page 326).

Press the voice button and when prompted say:

Voice command	Action and Description
USB [1]	You can now play music by saying any of the appropriate voice commands. See Media voice commands.

You do not need to say words that appear within square brackets. For example, for where USB[1]appears, you can say USB or USB one.

To Connect Using the System Menu

Plug the device into the USB port. See **USB Port** (page 326).

Press the **AUX** button, then the **Menu** button to enter the Media Menu.

You can then scroll to:

Message	Action and Description
SELECT SRC	Press the **OK** button.
SYNC USB	Press the **OK** button. Depending on how many digital media files are on your connected device, the following message may appear in the radio display. Indexing...
When indexing is complete, the screen returns to the Play menu. You can then select one of the following:	
PLAY ALL	
ARTISTS	
ALBUMS	
GENRES	
PLAYLISTS	
TRACKS	
EXPLORE USB	
SIMILARMUSIC	
RETURN	Exit the current menu.

What's Playing?

When a track is playing, you can ask the system to tell you what is currently playing.

Press the voice button and when prompted say:

Voice command	Action and Description
Whats This? | Whats Playing?	The system reads the metadata tags of the playing track, and if the metadata tags are populated, the system will tell you what track is playing.

You can say any of the voice commands that appear within open and close brackets that are separated by \|. For example, where; (what's \| what is) appears you say; what's or what is.

You must say any of the voice commands that appear outside of open and close brackets. For example, where text shows: (what's \| what is) playing, you must say; "what's playing" or "what is playing".

Media Voice Commands

Press the voice button and when prompted say any of the following:

Voice command	
USB [1]	
You can then say any of the following	
[Phone] Connections | [Media] Connections | [Bluetooth] Connections	
Pause	
Play	
Play All	
Play Artist ___	1,2
Play Album ___	1,2
Play Genre ___	1,2
[Play] Next Folder	3
[Play] Next Track | [Play] Next Song	
Play Playlist ___	1,2
[Play] Previous Folder	3

Voice command		
[Play] Previous Track | [Play] Previous Song		
[Play] Next Track | [Play] Next Song		1,2
Repeat [On]		
Repeat Off		
Shuffle [On]		
Shuffle Off		
Search Album ___		1,2
Search Artist ___		1,2
Search Genre ___	The system searches all the data from your indexed music and, if available, begins to play the chosen type of music. You can only play genres of music which are present in the GENRE metadata tags that you have on your digital media player.	1,2

Voice command		
Search Track ___ | Search Song ___	The system searches for a specific artist/track/album from the music indexed through the USB port.	1,2
Refine album ___	This allows you to make your previous command more specific. By using this command you can filter though a previous selection, such as an artist to play only specific album.	1,2
Similar Music	The system compiles a playlist and then plays similar music to what is currently playing from the USB port using indexed metadata information.	
Autoplay Off		
Autoplay [on]	Turn autoplay on to listen to music processed during indexing. Turn autoplay off to allow the indexing process to finish before the system plays any of your music.	

[1] ___ is a dynamic listing, meaning that it could be the name of anything, such as a group, artist or song. For example you could say "Play artist The Beatles".

[2] This voice command is not available until indexing is complete.

[3] This voice command is only available in folder mode.

Bluetooth Audio Command Guide

Press the voice button and say:

Voice command
Bluetooth Audio
You can then say any of the following:
[Phone] Connections | [Media] Connections | [Bluetooth] Connections
Pause
Play
[Play] Next Track | [Play] Next Song
[Play] Previous Track | [Play] Previous Song

Media Menu Features

The media menu allows you to select your media source, how to play your music, for example by artist, genre, shuffle or repeat, and to add, connect or delete devices.

Press the **AUX** button, then the **Menu** button to enter the Media Menu.

You can then scroll to:

Message		Action and Description
PLAY MENU		Play your music by artist, album, genre, playlists, tracks, similar music or to simply, play all. You can also choose to Explore USB to view the supported digital music files on your playing device. See Play Menu later in this section for more information.
Select one of the following:		
SELECT SRC	SYNC USB	Press the **OK** button to access music plugged into your USB port. You can also plug in devices to charge them (if supported by your device). Once connected, the system indexes any readable media files.[1]
	SYNC BT	Press the **OK** button. This is a phone-dependent feature that allows you to stream music playing on your Bluetooth-enabled phone. If supported by your device, you can press seek to play the previous or next track.
	SYNC LINE IN (If Equipped)	Press the **OK** button to select and play music from your portable music player over your vehicle's speakers.[2]
MEDIA SETTIN	Choose to shuffle or repeat your music and select your Auto-play settings. Once you turn these selections on, they remain on until you turn them off. Press **SEEK** to play the previous or next track.[3]	
	SHUFFLE	Press the **OK** button to shuffle available media files in the current playlist. To shuffle all media tracks, you must select Play All in the play menu and then select Shuffle.
	REPEAT	Press the **OK** button to repeat any song.
	AUTOPLAY	Press the **OK** button to turn autoplay on to listen to music processed during indexing. Turn autoplay off to allow the indexing process to finish before the system plays any of your music.[4]

Message	Action and Description
APPLICATIONS	Interact with SYNC-capable mobile applications on your smartphone.
SYS SETTINGS	Access available Bluetooth Device menu listings as well as Advanced menu listings.
EXIT MENU	Press **OK** to exit the media menu.

[1]The time required to complete this depends on the size of the media the system needs to index. If autoplay is on, you can listen to media processed during indexing. If autoplay is off, you cannot listen to music until the system finishes indexing media. SYNC is capable of indexing thousands of average size media and notifies you if it reaches the maximum indexing file size.

[2]If you have already connected a device to the USB port, you cannot access the line in feature. Some digital media players require both USB and line in ports to stream data and music separately.

[3]Some digital media players require both USB and line in ports to stream data and music separately.

[4]Indexing times can vary from device to device and with regard to the number of songs the system needs to process.

Accessing Your Play Menu

This menu allows you to select and play your media by artist, album, genre, playlist, track, similar music or even to explore what is on your USB device.

Make sure that your device is plugged into the USB port and is turned on.

Press the **AUX** button, then the **Menu** button to enter the Media Menu.

You can then scroll to select:

Message	Action and Description
PLAY MENU	Press the **OK** button.
If there are no media files to access, the display indicates there is no media. If there are media files, you have the following options:	
PLAY ALL	Press the **OK** button. The first track title appears in the display. Play all indexed media (tracks) from your playing device in flat file mode, one at a time in numerical order.

Message	Action and Description
ARTISTS	Sort all indexed media by artist. Once selected, the system lists and then plays all artists and tracks alphabetically. If there are fewer than 255 indexed artists, the system lists them alphabetically in flat file mode. If there are more than 255, the system categorizes them alphabetically. 1. Press the **OK** button. You can select to play all artists or any indexed artist. 2. Scroll to choose the desired artist. Press the **OK** button.
ALBUMS	Sort all indexed media by albums. If there are fewer than 255 indexed albums, the system lists them alphabetically in flat file mode. If there are more than 255, the system categorizes them alphabetically. 1. Press the **OK** button. You can enter the album menu and select from playing all albums or from any individual indexed album. 2. Scroll to choose the desired album. Press the **OK** button.
GENRES	Sort indexed music by genre (category) type. SYNC lists the genres alphabetically in flat file mode. If there are more than 255, the system categorizes them alphabetically. 1. Press the **OK** button. 2. Scroll to select the desired genre. Press the **OK** button.
PLAYLISTS	Access your playlists from formats ASX, M3U, WPL or MTP. The system lists your playlists alphabetically in flat file mode. If there are more than 255, the system categorizes them alphabetically. 1. Press the **OK** button. 2. Scroll to select the desired playlist. Press the **OK** button.
TRACKS	Search for and play a specific indexed track. SYNC lists your tracks alphabetically in flat file mode. If there are more than 255, the system categorizes them alphabetically. 1. Press the **OK** button. 2. Scroll to select the desired track. Press the **OK** button.

Message	Action and Description
EXPLORE USB	Explore all supported digital media on your media device connected to the USB port. You can only view media content which is compatible with SYNC; other files saved are not visible. 1. Press the **OK** button. 2. Scroll to explore indexed media on your flash drive.
SIMILARMUSIC	Play music similar to what is currently playing from the USB port. The system uses the metadata information of each song to compile a playlist for you.* 1. Press the **OK** button. 2. The system creates a new list of similar songs and begins playing. This feature does not include tracks with incomplete metadata information. Press the **OK** button.
RETURN	Exit the current menu.

*With certain playing devices, if your metadata tags are not populated, the tracks are not available in voice recognition, play menu or similar music. However, if you place these tracks onto your playing device in "Mass Storage Device Mode", they are available in voice recognition, play menu browsing and similar music. The system places Unknown items into any unpopulated metadata tag.

System Settings

System settings provide access to your Bluetooth Devices and Advanced menu features.

Bluetooth Devices

The Bluetooth Devices menu allows you to enable, disable, add, connect and delete a Bluetooth device.

Press the **AUX** button, then the **Menu** button to enter the Media Menu.

You can then scroll to:

Message	Action and Description
SYS SETTINGS	Press the **OK** button.
BT DEVICES	Press the **OK** button.
You can then select one of the following:	
ADD DEVICE	Pair more devices to the system.*

Message	Action and Description
	1. Press the **OK** button. When find SYNC appears in the display, press the **OK** button again. 2. Follow the directions in your phone's manual to put your phone into discovery mode. A six-digit PIN appears in the display. 3. When prompted on your phone's six-digit display, enter the PIN.
Connect BT	Connect a previously paired Bluetooth-enabled phone. 1. Press **OK** to select and view a list of devices. 2. Scroll until the desired device is chosen and press **OK** to connect the device.
BT ON/OFF	Turn the Bluetooth feature on and off.** 1. Press the **OK** button and scroll to toggle between on and off. 2. Make a selection and press the **OK** button.
DEL DEVICE	Delete a paired media device. 1. Press the **OK** button and scroll to select the device. 2. Press the **OK** button to confirm.
DELETE ALL	Delete all previously paired devices. 1. Press the **OK** button. 2. Press the **OK** button to confirm.
RETURN	Exit the current menu.

*This is a speed-dependent feature. It is only available when your vehicle is traveling at 3 mph (5 km/h) or less.

**Setting Bluetooth to off disconnects all Bluetooth devices and turns off all Bluetooth features.

Advanced

The Advanced menu allows you to access and set prompts, languages, defaults and perform a master reset.

Press the **AUX** button, then the **Menu** button to enter the Media Menu.

You can then scroll to:

Message	Action and Description
SYS SETTINGS	Press the **OK** button.
ADVANCED	Press the **OK** button.
You can then select one of the following:	
PROMPTS	Have SYNC guide you by asking questions, helpful hints or ask you for a specific action. 1. Press the **OK** button and scroll to toggle between on and off. 2. Make a selection and press the **OK** button. SYNC takes you back to the Advanced menu.
LANGUAGES	Choose from the available languages. The displays and prompts are in the selected language. 1. Press the **OK** button and scroll through the available languages. 2. Press the **OK** button when the desired language appears in the display. 3. If you change the language setting, the display indicates that the system is updating. When complete, SYNC takes you back to the Advanced menu.
DEFAULTS	Return to the factory default settings. This selection does not erase your indexed information, for example phonebook, call history, text messages and paired devices. 1. Press the **OK** button. 2. Press the **OK** button. When restore defaults appears in the display, press the **OK** button again to confirm.
MASTER RESET	Completely erase all information stored on SYNC. All phonebook, call history, text messages and all paired devices will be deleted and the system will return to the factory default settings.
INSTALL APP	Download available software applications through the USB port.
RETURN	Exit the current menu.

SYNC™ TROUBLESHOOTING

Your SYNC system is easy to use. However, should questions arise, see the tables below.

Use the website at any time to check your phone's compatibility, register your account and set preferences as well as access a customer representative via an online chat (during certain hours). Visit www.SYNCMyRide.com, www.SYNCMyRide.ca or www.syncmaroute.ca for more information.

Phone issues		
Issue	**Possible cause(s)**	**Possible solution(s)**
There is excessive background noise during a phone call.	The audio control settings on your phone may be affecting SYNC performance.	Review your phone's manual about audio adjustments.
During a call, I can hear the other person but they cannot hear me.	This may be a possible phone malfunction.	Try turning off the device, resetting the device, removing the device's battery, then trying again.
SYNC is not able to download my phonebook.	This is a phone-dependent feature. This may be a possible phone malfunction.	Go to the website to review your phone's compatibility. Try turning off the device, resetting the device or removing the device's battery, then trying again. Try pushing your phonebook contacts to SYNC by using the Add Contacts feature. Use the SYNCmyphone feature available on the website.
The system says Phonebook Downloaded but the phonebook in SYNC is empty or missing contacts.	This may be a limitation on your phone's capability.	Try pushing your phonebook contacts to SYNC by using the Add Contacts feature. If the missing contacts are stored on your SIM card, try moving them to the device memory. Remove any pictures or special ring tones associated with the missing contact.

Phone issues		
Issue	**Possible cause(s)**	**Possible solution(s)**
		Depending upon your phone, you may have to grant SYNC permission to access your phonebook contacts. Make sure to confirm when prompted by your phone during the phonebook download.
I am having trouble connecting my phone to SYNC.	This is a phone-dependent feature. This may be a possible phone malfunction.	Go to the website to review your phone's compatibility. Try turning off the device, resetting the device or removing the device's battery, then trying again. Try deleting your device from SYNC, deleting SYNC from your device and trying again. Check the security and auto accept and prompt always settings relative to the SYNC Bluetooth connection on your phone. Update your device's firmware. Turn off the Auto phonebook download setting.
Text messaging is not working on SYNC.	This is a phone-dependent feature. This may be a possible phone malfunction.	Go to the website to review your phone's compatibility. Try turning off the device, resetting the device or removing the device's battery, then trying again.

USB and media issues		
Issue	**Possible cause(s)**	**Possible solution(s)**
I am having trouble connecting my device.	This may be a possible device malfunction.	Try turning off the device, resetting the device, removing the device's battery, then trying again. Make sure you are using the manufacturer's cable. Make sure you insert the USB cable correctly into the device and the USB port. Make sure that the device does not have an auto-install program or active security settings.
SYNC does not recognize my device when I turn on the car.	This is a device limitation.	Make sure you are not leaving the device in your vehicle during very hot or cold temperatures.
Bluetooth audio does not stream.	This is a phone-dependent feature. The device is not connected.	Review the device compatibility chart on the SYNC website to confirm your phone supports the Bluetooth audio streaming function. Make sure you correctly connect the device to SYNC, and that you have pressed play on your device.
SYNC does not recognize music that is on my device.	Your music files may not contain the correct artist, song title, album or genre information. The file may be corrupted. The song may have copyright protection, which does not allow it to play.	Make sure that all song details are populated. Some devices require you to change the USB settings from mass storage to MTP class.

Vehicle Health Report and Services (Traffic, Directions and Information) issues		
Issue	**Possible cause(s)**	**Possible solution(s)**
I received a text that I did not activate Vehicle Health Report.	You did not activate your account on the website. You may have the wrong VIN (vehicle identification number) listed.	This is a free feature, but you must first register online to use it. Make sure that your VIN is correctly listed in your account.
I am unable to retrieve the report on the website, or I receive a system error.	The preferred dealer information did not load correctly.	When you register your account, you must choose a preferred dealer. If it already lists a dealer, try selecting another dealer and logging out. Log back in, change it back to your preferred dealer, and retrieve the report.
I am unable to submit a report.	This could be due to your phone's compatibility. Bad signal strength. You did not register your phone correctly on the website.	Update your cellular number in your account on the website. Make sure you have full signal strength and that your Bluetooth volume level has been turned up. Make sure the currently connected phone is registered on your SYNCMyRide account. Try deleting your phone and performing a clean pairing.
I heard a commercial when I tried to use Traffic, Directions and Information.	You did not activate this phone for this service. Your phone has ID blocker active.	This is a free feature, but you must first register online to use it. Turn off ID blocker on your phone as the system recognizes you by your phone number. Make sure the currently connected phone is the same one that is registered on your SYNCMyRide account.

Voice command issues		
Issue	**Possible cause(s)**	**Possible solution(s)**
SYNC does not understand what I am saying.	You may be using the wrong voice commands. You may be speaking too soon or at the wrong time.	Review the phone voice commands and the media voice commands at the beginning of their respective sections. After pressing the voice icon, wait until after the tone sounds and Listening appears before saying a command. Any command spoken before this does not register with the system.
SYNC does not understand the name of a song or artist.	You may be using the wrong voice commands. You may be saying the name differently than the way you saved it. The system may not be reading the name the same way you are saying it.	Review the media voice commands at the beginning of the media section. Say the song or artist exactly as listed. If you say "Play Artist Prince", the system does not play music by Prince and the Revolution or Prince and the New Power Generation. Make sure you are saying the complete title, such as "California remix featuring Jennifer Nettles". If the song titles are in all CAPS, you have to spell them. LOLA requires you to say "L-O-L-A". Do not use special characters in the title. The system does not recognize them.
SYNC does not understand or is calling the wrong contact when I want to make a call.	You may be using the wrong voice commands. You may be saying the name differently than the way you saved it.	Review the Phone voice commands at the beginning of the phone section.

Voice command issues		
Issue	**Possible cause(s)**	**Possible solution(s)**
	The system may not be reading the name the same way you are saying it. Contacts in your phonebook may be very short and similar, or they may contain special characters. Your phonebook contacts may be in CAPS.	Make sure you are saying the contacts exactly as they are listed. For example, if you save a contact as Joe Wilson, say "Call Joe Wilson". Using the SYNC phone menu, open the phonebook and scroll to the name SYNC is having trouble understanding. SYNC will read the name to you, giving you some idea of the pronunciation SYNC is expecting. The system works better if you list full names, such as "Joe Wilson" rather than "Joe". Do not use special characters, such as 123 or ICE, as the system does not recognize them. If a contact is in CAPS, you have to spell it. JAKE requires you to say "Call J-A-K-E".

AppLink issues		
Issue	**Possible cause(s)**	**Possible solution(s)**
When I select "Find New Apps," SYNC does not find any applications.	An AppLink capable phone is not connected to SYNC.	Ensure you have a compatible smartphone; an Android with OS 2.3 or higher or an iPhone 3GS or newer with iOS 5.0 or higher. Additionally, ensure your phone is paired and connected to

AppLink issues		
Issue	**Possible cause(s)**	**Possible solution(s)**
		SYNC in order to find AppLink-capable apps on your device. iPhone users must also connect to SYNC's USB port with an Apple USB cable.
My phone is connected, but I still cannot find any apps.	AppLink-enabled apps are not installed and running on your mobile device.	Ensure you have downloaded and installed the latest version of the app from your phone's app store. Ensure the app is running on your phone. Some apps require you to register or login on the app on the phone before using them with AppLink. Also, some may have a "Ford SYNC" setting, so check the app's settings menu on the phone.
My phone is connected, my app(s) are running, but I still cannot find any apps.	Sometime apps do not properly close and re-open their connection to SYNC, over ignition cycles, for example.	Closing and restarting apps may help SYNC find the application if you cannot discover it inside the vehicle. On an Android device, if apps have an "Exit" or "Quit" option, select that then restart the app. If the app does not have that option, you can also manually "Force Close" the app by going to the phone's settings menu, selecting "Apps." then finding the particular app and choosing "Force stop." Don't forget to restart the app afterwards, then select "Find New Apps" on SYNC.

AppLink issues		
Issue	**Possible cause(s)**	**Possible solution(s)**
		On an iPhone with iOS7+, to force close an app, double tab the home button then swipe up on the app to close it. Tab the home button again, then select the app again to restart it. After a few seconds, the app should then appear in SYNC's Mobile App's Menu.
My Android phone is connected, my app(s) are running, I restarted them, but I still cannot find any apps.	There is a bluetooth bug on some order versions of the Android OS. This bug may cause apps that were found the last time your phone connected to SYNC not to be found again if you have not turned off bluetooth.	Reset the Bluetooth on your phone by turning it off and then turning Bluetooth back on. If you are in your vehicle, SYNC should be able to automatically re-connect to your phone if you press the "Phone" button.

AppLink issues		
Issue	**Possible cause(s)**	**Possible solution(s)**
My iPhone phone is connected, my app is running, I restarted the app but I still cannot find it on SYNC.	The USB connection to SYNC may need to be reset.	Unplug the USB cable from the phone, wait a moment, and plug the USB cable back in to the phone. After a few seconds, the app should appear in SYNC's Mobile Apps Menu. If not, "Force Close" the application and restart it.
I have an Android phone. I found and started my media app on SYNC, but there is no sound or the sound is very low.	The bluetooth volume on the phone may be low.	Try increasing the Bluetooth volume of the device by using the device's volume control buttons which are most often found on the side of the device.
I can only see some of the AppLink apps running on my phone listed in SYNC's Mobile Apps Menu.	Some Android devices have a limited number of bluetooth ports apps can use to connect. If you have more AppLink apps on your phone than the number of availble Bluetooth ports, you will not see all of your apps listed in SYNC's mobile apps menu.	Force close or uninstall the apps you do not want SYNC to find. If the app has a "Ford SYNC" setting, disable that setting in the app's settings menu on the phone.

For a complete listing of the accessories that are available for your vehicle, please contact your authorized dealer or visit the online store web site:

Web Address (United States)
www.Accessories.Ford.com

Web Address (Canada)
www.Accessories.Ford.ca

Ford Accessories are available for your vehicle through an authorized Ford dealer. Ford Motor Company will repair or replace any properly authorized dealer-installed Ford Original Accessory found to be defective in factory-supplied materials or workmanship during the warranty period, as well as any component damaged by the defective accessories.

Ford Motor Company will warrant your vehicle's accessories through the warranty that provides the greatest benefit:

- 24 months, unlimited mileage.
- The remainder of your new vehicle limited warranty.

Contact an authorized dealer for details and a copy of the warranty.

Exterior Style

- Keyless entry.
- Side window deflectors.
- Splash guards.

Interior Style

- Floor mats.
- Rear seat entertainment system*.
- Seat covers.

Lifestyle

- Ash cup or coin holder.
- Cargo organization and management.
- Roof rack and carriers*.
- SUV camping tent*.
- Trailer hitches, wiring harnesses and accessories.

Peace of Mind

- Back-up alarm.
- Bumper protector.
- Car cover*.
- Cargo area protector.
- Cargo security shade.
- Hood deflector.
- Locking fuel plug.
- Park assist sensors.
- Remote start.
- Vehicle security system.
- Wheel locks.

*Ford Licensed Accessory. The accessory manufacturer designs, develops and therefore warrants Ford Licensed Accessories, and does not design or test these accessories to Ford Motor Company engineering requirements. Contact an authorized Ford dealer for the accessory manufacturer's limited warranty details and request a copy of the Ford Licensed Accessories product limited warranty from the accessory manufacturer.

For maximum vehicle performance, keep the following information in mind when adding accessories or equipment to your vehicle:

- When adding accessories, equipment, passengers and luggage to your vehicle, do not exceed the total weight capacity of the vehicle or of the front or rear axle (GVWR or GAWR as indicated on the Safety Compliance Certification label). Ask an authorized dealer for specific weight information.
- The Federal Communications Commission (FCC) and Canadian Radio Telecommunications Commission (CRTC) regulate the use of mobile communications systems that are equipped with radio transmitters, for example, two-way radios, telephones and theft alarms. Any such equipment installed in your vehicle should comply with Federal Communications Commission (FCC) and Canadian Radio Telecommunications Commission (CRTC) regulations and should be installed only by an authorized dealer.
- Mobile communications systems may harm the operation of your vehicle, particularly if their manufacturer did not design them specifically for automotive use.
- If you or an authorized Ford dealer add any non-Ford electrical or electronic accessories or components to your vehicle, you may adversely affect battery performance and durability. In addition, you may also adversely affect the performance of other electrical systems in the vehicle.

PROTECT YOURSELF FROM THE RISING COST OF VEHICLE REPAIRS WITH A FORD EXTENDED SERVICE PLAN.

EXTENDED SERVICE PLAN (U.S. Only)

More than 32 million Ford owners have discovered the powerful protection of Ford Extended Service Plan. It is the extended service plan backed by Ford Motor Company, and provides peace of mind protection beyond the New Vehicle Limited Warranty coverage.

Ford ESP Can Quickly Pay for Itself

One service bill – the cost of parts and labor – can easily exceed the price of your Ford Extended Service Plan. With Ford ESP you minimize your risk for unexpected repair bills and rising repair costs.

Up to 1,000+ Covered Vehicle Components

There are four core Extended Service Plans with different levels of coverage. Ask your authorized dealer for details.

1. PremiumCARE - Our most comprehensive coverage. With over 1,000 covered components, this plan is so complete that we generally only discuss what's not covered.
2. ExtraCARE - Covers 113 components, and includes many high-tech items.
3. BaseCARE - Covers 84 components.
4. PowertrainCARE - Covers 29 critical components.

Ford Extended Service Plan is honored by all authorized Ford dealers in the U.S., Canada and Mexico. It is the extended service plan authorized and backed by Ford Motor Company.

That means you get:

- Reliable, quality service at any Ford or Lincoln dealership
- Repairs performed by factory trained technicians, using genuine parts

Rental Car Reimbursement

1st day Rental Benefit

You take advantage of replacement transportation if your vehicle is at your authorized dealer for same day covered repairs.

Extended Rental Benefits

If your vehicle is kept overnight for covered repairs, you are eligible for rental car coverage, including bumper to bumper warranty repairs, and Field Service Actions.

Roadside Assistance

Exclusive 24/7 roadside assistance, including:

- Towing, flat-tire change and battery jump starts
- Out of fuel and lock-out assistance.
- Travel expense reimbursement for lodging, meals and rental car.
- Destination assistance for taxi, shuttle, rental car coverage and emergency transportation.

Transferable Coverage

If you sell your vehicle before your Ford Extended Service Plan coverage expires, you can transfer any remaining coverage to the new owner. Whenever you sell your vehicle, prospective buyers may have a higher degree of confidence that vehicle was properly maintained with Ford ESP, thereby improving resale value.

Avoid the Rising Cost of Properly Maintaining Your Vehicle!

Ford Extended Service Plan also offers a Premium Maintenance Plan that covers all scheduled maintenance, and selected wear items. The coverage is prepaid, so you never have to worry about affording your vehicle's maintenance. It covers regular checkups, routine inspections, preventive care and replacement of select items that require periodic attention for normal wear:

- Windshield wiper blades.
- Spark plugs.
- The clutch disc.
- Brake pads and linings.
- Shock absorbers.
- Struts.
- Engine Belts.
- Engine coolant hoses, clamps and o-rings.
- Diesel exhaust fluid replenishment.

Interest Free Finance Options Available

Take advantage of our interest free installment payment plan. Just a 10% down payment will provide you with an affordable, no interest, no fee payment program allowing you all the security and benefits Ford ESP has to offer while paying over time. You are pre-approved with no credit checks, no hassles! To learn more, call our Ford ESP specialists at 800-367-3377.

Ford ESP
P.O. Box 321067
Detroit, MI 48232

EXTENDED SERVICE PLAN (CANADA ONLY)

You can get more protection for your vehicle by purchasing a Ford Extended Service Plan. Ford Extended Service Plan is the only service contract backed by Ford Motor Company of Canada, Limited. Depending on the plan you purchase, Ford Extended Service Plan provides benefits such as:

- Rental reimbursement.
- Coverage for certain maintenance and wear items.
- Protection against repair costs after your New Vehicle Limited Warranty Coverage expires.
- Roadside Assistance benefits.

There are several Ford Extended Service Plans available in various time, distance and deductible combinations. Each plan is tailored to fit your own driving needs, including reimbursement for towing and rental. When you purchase Ford Extended Service Plan, you receive added peace-of-mind protection throughout Canada, the United States and Mexico, provided by a network of participating authorized Ford Motor Company dealers.

Note: *Repairs performed outside of Canada, the United States and Mexico are not eligible for Ford Extended Service Plan coverage.*

This information is subject to change. For more information, visit your local Ford of Canada dealer or www.ford.ca to find the Ford Extended Service Plan that is right for you.

GENERAL MAINTENANCE INFORMATION

Why Maintain Your Vehicle?

Carefully following the maintenance schedule helps protect against major repair expenses resulting from neglect or inadequate maintenance and may help to increase the value of your vehicle when you sell or trade it. Keep all receipts for completed maintenance with your vehicle.

We have established regular maintenance intervals for your vehicle based upon rigorous testing. It is important that you have your vehicle serviced at the proper times. These intervals serve two purposes; one is to maintain the reliability of your vehicle and the second is to keep your cost of owning your vehicle down.

It is your responsibility to have all scheduled maintenance performed and to make sure that the materials used meet the specifications identified in this owner's manual. See **Capacities and Specifications** (page 307).

Failure to perform scheduled maintenance invalidates warranty coverage on parts affected by the lack of maintenance.

Why Maintain Your Vehicle at Your Dealership?

Factory-Trained Technicians

Service technicians participate in extensive factory-sponsored certification training to help them become experts on the operation of your vehicle. Ask your dealership about the training and certification their technicians have received.

Genuine Ford and Motorcraft® Replacement Parts

Dealerships stock Ford, Motorcraft and Ford-authorized branded re-manufactured replacement parts. These parts meet or exceed our specifications. Parts installed at your dealership carry a nationwide 24-month or unlimited mile (kilometer) parts and labor limited warranty.

If you do not use Ford authorized parts they may not meet our specifications and depending on the part, it could affect emissions compliance.

Convenience

Many dealerships have extended evening and Saturday hours to make your service visit more convenient and they offer one stop shopping. They can perform any services that are required on your vehicle, from general maintenance to collision repairs.

Note: *Not all dealers have extended hours or body shops. Please contact your dealer for details.*

Protecting Your Investment

Maintenance is an investment that pays dividends in the form of improved reliability, durability and resale value. To maintain the proper performance of your vehicle and its emission control systems, make sure you have scheduled maintenance performed at the designated intervals.

Your vehicle is equipped with the Intelligent Oil-Life Monitor system, which displays a message in the information display at the proper oil change interval. This interval may be up to one year or 10000 miles (16000 kilometers).

When the oil change message appears in the information display, it is time for an oil change. Make sure you perform the oil change within two weeks or 500 miles (800 kilometers) of the message appearing. Make sure you reset the Intelligent Oil-Life Monitor after each oil change. See **Oil Change Indicator Reset** (page 250).

If your information display resets prematurely or becomes inoperative, you should perform the oil change interval at six months or 5000 miles (8000 kilometers) from your last oil change. Never exceed one year or 10000 miles (16000 kilometers) between oil change intervals.

Your vehicle is very sophisticated and built with multiple, complex, performance systems. Every manufacturer develops these systems using different specifications and performance features. That is why it is important to rely upon your dealership to properly diagnose and repair your vehicle.

Ford Motor Company has recommended maintenance intervals for various parts and component systems based upon engineering testing. Ford Motor Company relies upon this testing to determine the most appropriate mileage for replacement of oils and fluids to protect your vehicle at the lowest overall cost to you and recommends against maintenance schedules that deviate from the scheduled maintenance information.

We strongly recommend the use of only genuine Ford, Motorcraft or Ford-authorized re-manufactured replacement parts engineered for your vehicle.

Additives and Chemicals

This owner's manual and the Ford Workshop Manual list the recommended additives and chemicals for your vehicle. We do not recommend using chemicals or additives not approved by us as part of your vehicle's normal maintenance. Please consult your warranty information.

Oils, Fluids and Flushing

In many cases, fluid discoloration is a normal operating characteristic and, by itself, does not necessarily indicate a concern or that the fluid needs to be changed. However, a qualified expert, such as the factory-trained technicians at your dealership, should inspect discolored fluids that also show signs of overheating or foreign material contamination immediately.

Make sure to change your vehicle's oils and fluids at the specified intervals or in conjunction with a repair. Flushing is a viable way to change fluid for many vehicle sub-systems during scheduled maintenance. It is critical that systems are flushed only with new fluid that is the same as that required to fill and operate the system or using a Ford-approved flushing chemical.

Owner Checks and Services

Make sure you perform the following basic maintenance checks and inspections every month or at six-month intervals.

Check every month
Engine oil level.
Function of all interior and exterior lights.
Tires (including spare) for wear and proper pressure.
Windshield washer fluid level.

Check every six months
Battery connections. Clean if necessary.
Body and door drain holes for obstructions. Clean if necessary.
Cooling system fluid level and coolant strength.
Door weatherstrips for wear. Lubricate if necessary.
Hinges, latches and outside locks for proper operation. Lubricate if necessary.
Parking brake for proper operation.
Safety belts and seat latches for wear and function.
Safety warning lamps (brake, ABS, airbag and safety belt) for operation.
Washer spray and wiper operation. Clean or replace blades as necessary.

Multi-Point Inspection

In order to keep your vehicle running right, it is important to have the systems on your vehicle checked regularly. This can help identify potential issues and prevent major problems. We recommend having the following multi-point inspection performed at every scheduled maintenance interval to help make sure your vehicle keeps running great.

Expedition (TB7) Canada/United States of America, enUSA, Second Printing

Multi-Point inspection	
Accessory drive belt(s)	Hazard warning system operation
Battery performance	Horn operation
Engine air filter	Radiator, cooler, heater and air conditioning hoses
Exhaust system	Suspension components for leaks or damage
Exterior lamps operation	Steering and linkage
Fluid levels*; fill if necessary	Tires (including spare) for wear and proper pressure**
For oil and fluid leaks	Windshield for cracks, chips or pits
Half-shaft dust boots	Washer spray and wiper operation

* Brake, coolant recovery reservoir, automatic transmission and window washer

**If your vehicle is equipped with a temporary mobility kit, check the tire sealant expiration Use By date on the canister. Replace as needed.

Be sure to ask your dealership service advisor or technician about the multi-point vehicle inspection. It is a comprehensive way to perform a thorough inspection of your vehicle. Your checklist gives you immediate feedback on the overall condition of your vehicle.

NORMAL SCHEDULED MAINTENANCE

Intelligent Oil-Life Monitor

Your vehicle is equipped with an Intelligent Oil-Life Monitor that determines when you should change the engine oil based on how your vehicle is used. By using several important factors in its calculations, the monitor helps reduce the cost of owning your vehicle and reduces environmental waste at the same time.

This means you do not have to remember to change the oil on a mileage-based schedule. Your vehicle lets you know when an oil change is due by displaying a message in the information display.

The following table provides examples of vehicle use and its impact on oil change intervals. It is a guideline only. Actual oil change intervals depend on several factors and generally decrease with severity of use.

When to expect the message prompting you to change your oil	
Interval	**Vehicle use and example**
7500-10000 miles (12000-16000 km)	**Normal**
	Normal commuting with highway driving No, or moderate, load or towing Flat to moderately hilly roads No extended idling
5000-7499 miles (8000-11999 km)	**Severe**
	Moderate to heavy load or towing Mountainous or off-road conditions Extended idling Extended hot or cold operation
3000-4999 miles (4800-7999 km)	**Extreme**
	Maximum load or towing Extreme hot or cold operation

Normal Maintenance Intervals

At every oil change interval as indicated by the information display*
Change engine oil and filter.**
Rotate tires, inspect tire wear and measure tread depth.
Perform a multi-point inspection (recommended).
Inspect the automatic transmission fluid level (if equipped with dipstick). Consult your dealer for requirements.
Inspect the brake pads, rotors, hoses and parking brake.
Inspect the engine cooling system strength and hoses.
Inspect the exhaust system and heat shields.
Inspect front axle and U-joints.
Inspect the half-shaft boots.

At every oil change interval as indicated by the information display*
Inspect the steering linkage, ball joints, suspension, tire-rod ends, driveshaft and U-joints.
Inspect the wheels and related components for abnormal noise, wear, looseness or drag.

* Do not exceed one year or 10000 miles (16000 kilometers) between service intervals.

** Reset the Intelligent Oil-Life Monitor after engine oil and filter changes.

Other maintenance items [1]	
Every 30000 miles (48000 km)	Replace engine air filter.
At 100000 miles (160000 km)	Change engine coolant. [2]
Every 100000 miles (160000 km)	Replace spark plugs.
	Inspect accessory drive belt(s). [3]
Every 150000 miles (240000 km)	Change automatic transmission fluid.
	Change front axle fluid (Four-wheel drive vehicles).
	Change rear axle fluid.
	Change transfer case fluid (Four-wheel drive vehicles).
	Replace accessory drive belt(s).

[1] Perform these maintenance items within 3000 miles (4800 kilometers) of the last engine oil and filter change. Do not exceed the designated distance for the interval.

[2] Initial replacement at six years or 100000 miles (160000 kilometers), then every three years or 50000 miles (80000 kilometers).

[3] After initial inspection, inspect every other oil change until replaced.

SPECIAL OPERATING CONDITIONS SCHEDULED MAINTENANCE

If you operate your vehicle **primarily** in any of the following conditions, you need to perform extra maintenance, as indicated. If you operate your vehicle **occasionally** under any of these conditions, it is not necessary to perform the extra maintenance. For specific recommendations, see your dealership service advisor or technician.

Perform the services shown in the following tables when specified or within 3,000 mi (4,800 km) of the message appearing in the information display prompting you to change your oil.

- **Example 1**: The message comes on at 28,751 mi (46,270 km). Perform the 30,000 mi (48,000 km) automatic transmission fluid replacement.
- **Example 2**: The message has **not** come on, but the odometer reads 30,000 mi (48,000 km) (for example, the Intelligent Oil-Life Monitor was reset at 25,000 mi (40,000 km)). Perform the engine air filter replacement.

Towing a trailer or using a car-top carrier	
As required	Change engine oil and filter as indicated by the information display and perform services listed in the Normal Scheduled Maintenance chart.
Inspect frequently, service as required	Inspect and lubricate U-joints (if equipped with grease fittings).
	See axle maintenance items under **Exceptions**.
Every 60,000 mi (96,000 km)	Change transfer case fluid (Four-wheel drive vehicles).
	Replace spark plugs.

Extensive idling or low-speed driving for long distances, as in heavy commercial use	
As required	Change engine oil and filter as indicated by the information display and perform services listed in the Normal Scheduled Maintenance chart.
Inspect frequently, service as required	Replace engine air filter.
Every 60,000 mi (96,000 km)	Change transfer case fluid (Four-wheel drive vehicles).
	Replace spark plugs.

Operating in dusty or sandy conditions (such as unpaved or dusty roads)	
Inspect frequently, service as required	Replace engine air filter.
Every 5,000 mi (8,000 km)	Inspect the wheels and related components for abnormal noise, wear, looseness or drag.
	Rotate tires, inspect tires for wear and measure tread depth.
Every 5,000 mi (8,000 km) or six months	Change engine oil and filter.*
Every 60,000 mi (96,000 km)	Change transfer case fluid (Four-wheel drive vehicles).

*Reset your Intelligent Oil-Life Monitor after each engine oil and filter change.

Off-road operation	
Inspect frequently, service as required	Inspect steering linkage, ball joints and U-joints. Lubricate if equipped with grease fittings.
	Replace engine air filter.
Every 5,000 mi (8,000 km) or six months	Change engine oil and filter.*
	Inspect the wheels and related components for abnormal noise, wear, looseness or drag.
	Rotate tires, inspect tires for wear and measure tread depth.
Every 30,000 mi (48,000 km)	Replace front wheel bearing grease and grease seals if non-sealed bearings are used (Two-wheel drive vehicles).
Every 60,000 mi (96,000 km)	Change transfer case fluid (Four-wheel drive vehicles).

*Reset your Intelligent Oil-Life Monitor after each engine oil and filter change.

Exceptions

There are several exceptions to the Normal Schedule.

Normal Vehicle Axle Maintenance

Rear axles and power take-off units with synthetic fluid and light-duty trucks equipped with Ford-design axles are lubricated for life; do not check or change fluid unless a leak is suspected, service is required or the assembly has been submerged in water. During long periods of trailer towing with outside temperatures above 70ºF (21ºC) and at wide-open throttle for long periods above 45 mph (72 km/h), change non-synthetic rear axle fluid every 3,000 mi (4,800 km) or three months, whichever comes first. This interval can be waived if the axle is filled with 75W140 synthetic gear fluid meeting Ford specification WSL-M2C192-A, part number F1TZ-19580-B, or equivalent. Add friction modifier XL-3 (EST-M2C118-A) or equivalent for complete refill of Traction-Lok rear axles.

Axle Maintenance

Change the axle fluid anytime an axle is submerged in water.

California Fuel Filter Replacement

If you register your vehicle in California, the California Air Resources Board has determined that the failure to perform this maintenance item does not nullify the emission warranty or limit recall liability before the completion of your vehicle's useful life. Ford Motor Company, however, urges you to have all recommended maintenance services performed at the specified intervals and to record all vehicle service.

Hot Climate Oil Change Intervals

Vehicles operating in the Middle East, North Africa, Sub-Saharan Africa or locations with similar climates using an American Petroleum Institute (API) Certified for Gasoline Engines (Certification mark) oil of SM or SN quality, the normal oil change interval is 3,000 mi (4,800 km).

If the available API SM or SN oils are not available, then the oil change interval is 1,800 mi (2,900 km).

Engine Air Filter Replacement

The life of the engine air filter is dependent on exposure to dusty and dirty conditions. Vehicles operated in these conditions require frequent inspection and replacement of the engine air filter.

SCHEDULED MAINTENANCE RECORD

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

Repair Order #:

Distance:

Engine hours (optional):

Multi-point inspection (recommended): ☐

Dealer stamp

Signature:

END USER LICENSE AGREEMENT

VEHICLE SOFTWARE END USER LICENSE AGREEMENT (EULA)

- You (“You” or “Your” as applicable) have acquired a vehicle having several devices, including SYNC ® and various control modules, ("DEVICES") that include software licensed or owned by Ford Motor Company and its affiliates ("FORD MOTOR COMPANY"). Those software products of FORD MOTOR COMPANY origin, as well as associated media, printed materials, and "online" or electronic documentation ("SOFTWARE") are protected by international intellectual property laws and treaties. The SOFTWARE is licensed, not sold. All rights reserved.
- The SOFTWARE may interface with and/or communicate with, or may be later upgraded to interface with and/or communicate with additional software and/or systems provided by FORD MOTOR COMPANY.

IF YOU DO NOT AGREE TO THIS END USER LICENSE AGREEMENT ("EULA") DO NOT USE THE DEVICES OR COPY THE SOFTWARE. ANY USE OF THE SOFTWARE, INCLUDING BUT NOT LIMITED TO USE ON THE DEVICES, WILL CONSTITUTE YOUR AGREEMENT TO THIS EULA (OR RATIFICATION OF ANY PREVIOUS CONSENT).

GRANT OF SOFTWARE LICENSE: This EULA grants you the following license:

- You may use the SOFTWARE as installed on the DEVICES and as otherwise interfacing with systems and/or services provide by or through FORD MOTOR COMPANY or its third party software and service providers.

Description of Other Rights and Limitations

- **Speech Recognition:** If the SOFTWARE includes speech recognition component(s), you should understand that speech recognition is an inherently statistical process and that recognition errors are inherent in the process. Neither FORD MOTOR COMPANY nor its suppliers shall be liable for any damages arising out of errors in the speech recognition process. It is your responsibility to monitor any speech recognition functions included in the system.
- **Limitations on Reverse Engineering, Decompilation and Disassembly:** You may not reverse engineer, decompile, translate, disassemble or attempt to discover any source code or underlying ideas or algorithms of the SOFTWARE nor permit others to reverse engineer, decompile or disassemble the SOFTWARE, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation or to the extent as may be permitted by the licensing terms governing use of any open source components included with the SOFTWARE.
- **Limitations on Distributing, Copying, Modifying and Creating Derivative Works:** You may not distribute, copy, make modifications to or create derivative works based on the SOFTWARE, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation or to the extent as may be permitted by the licensing terms governing use of any open source components included with the SOFTWARE.

- **Single EULA:** The end user documentation for the DEVICES and related systems and services may contain multiple EULAs, such as multiple translations and/or multiple media versions (e.g., in the user documentation and in the software). Even if you receive multiple EULAs, you are licensed to use only one (1) copy of the SOFTWARE.
- **SOFTWARE Transfer:** You may permanently transfer your rights under this EULA only as part of a sale or transfer of the DEVICES, provided you retain no copies, you transfer all of the SOFTWARE (including all component parts, the media and printed materials, any upgrades, and, if applicable, the Certificate(s) of Authenticity), and the recipient agrees to the terms of this EULA. If the SOFTWARE is an upgrade, any transfer must include all prior versions of the SOFTWARE.
- **Termination:** Without prejudice to any other rights, FORD MOTOR COMPANY may terminate this EULA if you fail to comply with the terms and conditions of this EULA.
- **Internet-Based Services Components:** The SOFTWARE may contain components that enable and facilitate the use of certain Internet-based services. You acknowledge and agree that FORD MOTOR COMPANY, third party software and service suppliers, its affiliates and/or its designated agent may automatically check the version of the SOFTWARE and/or its components that you are utilizing and may provide upgrades or supplements to the SOFTWARE that may be automatically downloaded to your DEVICES.
- **Additional Software/Services:** The SOFTWARE may permit FORD MOTOR COMPANY, third party software and service suppliers, its affiliates and/or its designated agent to provide or make available to you SOFTWARE updates, supplements, add-on components, or Internet-based services components of the SOFTWARE after the date you obtain your initial copy of the SOFTWARE ("Supplemental Components".) SOFTWARE updates may cause you to incur additional charges from your wireless service provider. If FORD MOTOR COMPANY or third party software and services suppliers provide or make available to you Supplemental Components and no other EULA terms are provided along with the Supplemental Components, then the terms of this EULA shall apply. FORD MOTOR COMPANY, its affiliates and/or its designated agent reserve the right to discontinue without liability any Internet-based services provided to you or made available to you through the use of the SOFTWARE.

- **Links to Third Party Sites:** The SOFTWARE may provide you with the ability to link to third party sites. The third party sites are not under the control of FORD MOTOR COMPANY, its affiliates and/or its designated agent. Neither FORD MOTOR COMPANY nor its affiliates nor its designated agent are responsible for (i) the contents of any third party sites, any links contained in third party sites, or any changes or updates to third party sites, or (ii) webcasting or any other form of transmission received from any third party sites. If the SOFTWARE provides links to third party sites, those links are provided to you only as a convenience, and the inclusion of any link does not imply an endorsement of the third party site by FORD MOTOR COMPANY, its affiliates and/or its designated agent.
- **Obligation to Drive Responsibly:** You recognize your obligation to drive responsibly and keep attention on the road. You will read and abide with the DEVICES operating instructions particularly as they pertain to safety and you agree to assume any risk associated with the use of the DEVICES.

UPGRADES AND RECOVERY MEDIA: If the SOFTWARE is provided by FORD MOTOR COMPANY separate from the DEVICES on media such as a ROM chip, CD ROM disk(s) or via web download or other means, and is labeled "For Upgrade Purposes Only" or "For Recovery Purposes Only" you may install one (1) copy of such SOFTWARE onto the DEVICES as a replacement copy for the existing SOFTWARE, and use it in accordance with this EULA, including any additional EULA terms accompanying the upgrade SOFTWARE.

INTELLECTUAL PROPERTY RIGHTS: All title and intellectual property rights in and to the SOFTWARE (including but not limited to any images, photographs, animations, video, audio, music, text and "applets" incorporated into the SOFTWARE), the accompanying printed materials, and any copies of the SOFTWARE, are owned by FORD MOTOR COMPANY, or its affiliates or suppliers. The SOFTWARE is licensed, not sold. You may not copy the printed materials accompanying the SOFTWARE. All title and intellectual property rights in and to the content which may be accessed through use of the SOFTWARE is the property of the respective content owner and may be protected by applicable copyright or other intellectual property laws and treaties. This EULA grants you no rights to use such content outside its intended use. All rights not specifically granted under this EULA are reserved by FORD MOTOR COMPANY, its affiliates, and third party software and service providers and suppliers. Use of any on-line services which may be accessed through the SOFTWARE may be governed by the respective terms of use relating to such services. If this SOFTWARE contains documentation that is provided only in electronic form, you may print one copy of such electronic documentation.

EXPORT RESTRICTIONS: You acknowledge that the SOFTWARE is subject to U.S. and European Union export jurisdiction. You agree to comply with all applicable international and national laws that apply to the SOFTWARE, including the U.S. Export Administration Regulations, as well as end-user, end-use and destination restrictions issued by U.S. and other governments.

TRADEMARKS: This EULA does not grant you any rights in connection with any trademarks or service marks of FORD MOTOR COMPANY, its affiliates, and third party software and service providers.

PRODUCT SUPPORT: Please refer to FORD MOTOR COMPANY instructions provided in the documentation for the DEVICES product support, such as the vehicle owner guide.

Should you have any questions concerning this EULA, or if you desire to contact FORD MOTOR COMPANY for any other reason, please refer to the address provided in the documentation for the DEVICES.

No Liability for Certain Damages: EXCEPT AS PROHIBITED BY LAW, FORD MOTOR COMPANY, ANY THIRD PARTY SOFTWARE OR SERVICES SUPPLIERS, AND THEIR AFFILIATES SHALL HAVE NO LIABILITY FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE SOFTWARE. THIS LIMITATION SHALL APPLY EVEN IF ANY REMEDY FAILS OF ITS ESSENTIAL PURPOSE. THERE ARE NO WARRANTIES OTHER THAN THOSE THAT MAY BE EXPRESSLY PROVIDED FOR YOUR NEW VEHICLE.

SYNC® Automotive Important Safety Information Read and follow instructions:

- Before using your SYNC® system, read and follow all instructions and safety information provided in this end user manual ("Owner Guide".) Not following precautions found in the Owner Guide can lead to an accident or other serious injuries.

General Operation

- **Voice Command Control**: Certain functions within the SYNC® system may be accomplished using voice commands. Using voice commands while driving helps you to operate the system without removing your hands from the wheel or eyes from the road.
- **Prolonged Views of Screen:** Do not access any function requiring a prolonged view of the screen while you are driving. Pull over in a safe and legal manner before attempting to access a function of the system requiring prolonged attention.
- **Volume Setting:** Do not raise the volume excessively. Keep the volume at a level where you can still hear outside traffic and emergency signals while driving. Driving while unable to hear these sounds could cause an accident.
- **Navigation Features:** Any navigation features included in the system are intended to provide turn by turn instructions to get you to a desired destination. Please make certain all persons using this system carefully read and follow instructions and safety information fully.
- **Distraction Hazard:** Any navigation features may require manual (non-verbal) setup. Attempting to perform such set-up or insert data while driving can distract your attention and could cause an accident or other serious injury. Stop the vehicle in a safe and legal manner before attempting these operations.
- **Let Your Judgment Prevail:** Any navigation features are provided only as an aid. Make your driving decisions based on your observations of local conditions and existing traffic regulations. Any such feature is not a

substitute for your personal judgment. Any route suggestions made by this system should never replace any local traffic regulations or your personal judgment or knowledge of safe driving practices.

- **Route Safety:** Do not follow the route suggestions if doing so would result in an unsafe or illegal maneuver, if you would be placed in an unsafe situation, or if you would be directed into an area that you consider unsafe. The driver is ultimately responsible for the safe operation of the vehicle and therefore, must evaluate whether it is safe to follow the suggested directions.
- **Potential Map Inaccuracy:** Maps used by this system may be inaccurate because of changes in roads, traffic controls or driving conditions. Always use good judgment and common sense when following the suggested routes.
- **Emergency Services:** Do not rely on any navigation features included in the system to route you to emergency services. Ask local authorities or an emergency services operator for these locations. Not all emergency services such as police, fire stations, hospitals and clinics are likely to be contained in the map database for such navigation features.

Your Responsibilities and Assumptions of Risk

- You agree to each of the following:(a) Any use of the SOFTWARE while driving an automobile or other vehicle in violation of applicable law or otherwise driving in an unsafe manner presents a significant risk of distracted driving and should not be attempted under any circumstances;(b) Use of the SOFTWARE at excessive volume poses a significant risk of hearing damage and should not be attempted under any circumstances;(c) The SOFTWARE may not be compatible with new or different versions of an operating system, third party software, or third party services, and the SOFTWARE may potentially cause a critical failure of an operating system, third party software, or third party service.(d) Any third party service accessed by or third party software used with the SOFTWARE (i) may charge an additional fee for access, (ii) may not work correctly, on an uninterrupted basis, or error free, (iii) may change streaming formats or discontinue operation, (iv) may contain adult, profane or offensive content; and (v) may contain inaccurate, false or misleading traffic, weather, financial or safety information or other content; and (e) Use of the SOFTWARE may cause you to incur additional charges from your wireless service provider (WSP) and any data or minute calculators that may be included in the software program are for reference only, are not warranted in any way and should not be relied upon in anyway.
- When using the SOFTWARE, you agree to be responsible for and assume the entire risk to the items set forth in Section (a) – (e) above.

Disclaimer of Warranty

YOU EXPRESSLY ACKNOWLEDGE AND AGREE THAT USE OF THE DEVICES AND SOFTWARE IS AT YOUR SOLE RISK AND THAT THE ENTIRE RISK AS TO SATISFACTORY QUALITY, PERFORMANCE, COMPATIBILITY, ACCURACY AND EFFORT IS WITH YOU. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE SOFTWARE AND ANY THIRD PARTY SOFTWARE OR THIRD-PARTY SERVICES ARE PROVIDED "AS IS" AND “AS AVAILABLE”, WITH ALL FAULTS AND WITHOUT WARRANTY OF ANY KIND, AND FORD MOTOR COMPANY HEREBY DISCLAIMS ALL WARRANTIES AND CONDITIONS WITH RESPECT TO THE SOFTWARE, THIRD PARTY SOFTWARE, AND THIRD-PARTY SERVICES, EITHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES AND/OR CONDITIONS OF MERCHANTABILITY, OF SATISFACTORY QUALITY, OF FITNESS FOR AN ARTICULAR PURPOSE, OF ACCURACY, OF QUIET ENJOYMENT, AND NON-INFRINGEMENT OF THIRD-PARTY RIGHTS. FORD MOTOR COMPANY DOES NOT WARRANT (a) AGAINST INTERFERENCE WITH YOUR ENJOYMENT OF THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES, (b) THAT THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES WILL MEET YOUR REQUIREMENTS, (c) THAT THE OPERATION OF THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES WILL BE UNINTERRUPTED OR ERROR-FREE, (d) OR THAT DEFECTS IN THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES WILL BE CORRECTED. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY FORD MOTOR COMPANY OR ITS AUTHORIZED REPRESENTATIVE SHALL CREATE A WARRANTY. SHOULD THE SOFTWARE, THIRD PARTY SOFTWARE, OR THIRD-PARTY SERVICES PROVE DEFECTIVE, YOU ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION. SOME JURISDICTIONS DO NOT ALLOW THE DISCLAIMER OF IMPLIED WARRANTIES OR LIMITATIONS ON APPLICABLE STATUTORY RIGHTS OF A CONSUMER, SO THE ABOVE DISCLAIMER MAY NOT FULLY APPLY TO YOU. THE SOLE WARRANTY PROVIDED BY FORD MOTOR COMPANY SHALL BE FOUND IN THE WARRANTY INFORMATION INCLUDING WITH YOUR OWNER GUIDE. TO THE EXTENT THAT THERE IS ANY CONFLICT BETWEEN THE TERMS OF THIS SECTION AND THE WARRANTY BOOKLET, THE WARRANTY BOOKLET SHALL CONTROL.

Applicable Law, Venue, Jurisdiction

- The laws of the State of Michigan govern this EULA and Your use of the SOFTWARE. Your use of the SOFTWARE may also be subject to other local, state, national, or international laws. Any litigation arising out of or related to this EULA shall be brought and maintained exclusively in a court of the State of Michigan located in Wayne County or in the United States District Court for the Eastern District of Michigan. You hereby consent to submit to the personal jurisdiction of a court in the State of Michigan located in Wayne County and the United States District Court for the Eastern District of Michigan for any dispute arising out of or relating to this EULA.

Binding Arbitration and Class Action Waiver

(a) Application. This Section applies to any dispute EXCEPT IT DOES NOT INCLUDE A DISPUTE RELATING TO COPYRIGHT INFRINGEMENT, OR TO THE ENFORCEMENT OR VALIDITY OF YOUR, FORD MOTOR COMPANY, OR ANY OF FORD MOTOR COMPANY'S LICENSORS' INTELLECTUAL PROPERTY RIGHTS. Dispute means any dispute, action, or other controversy between You and FORD MOTOR COMPANY, other than the exceptions listed above, concerning the SOFTWARE (including its price) or this EULA, whether in contract, warranty, tort, statute, regulation, ordinance, or any other legal or equitable basis.

(b) Notice of Dispute. In the event of a Dispute, You or FORD MOTOR COMPANY must give the other a "Notice of Dispute", which is a written statement of the name, address, and contact information of the party giving it, the facts giving rise to the dispute, and the relief requested. You and FORD MOTOR COMPANY will attempt to resolve any dispute through informal negotiation within 60 days from the date the Notice of Dispute is sent. After 60 days, You or FORD MOTOR COMPANY may commence arbitration.

(c) Small claims court. You may also litigate any dispute in small claims court in your county of residence or FORD MOTOR COMPANY'S principal place of business, if the dispute meets all requirements to be heard in the small claims court. You may litigate in small claims court whether or not You negotiated informally first.

(d) Binding arbitration. If You and FORD MOTOR COMPANY, do not resolve any dispute by informal negotiation or in small claims court, any other effort to resolve the dispute will be conducted exclusively by binding arbitration. You are giving up the right to litigate (or participate in as a party or class member) all disputes in court before a judge or jury. Instead, all disputes will be resolved before a neutral arbitrator, whose decision will be final except for a limited right of appeal under the Federal Arbitration Act. Any court with jurisdiction over the parties may enforce the arbitrator's award.

(e) Class action waiver. Any proceedings to resolve or litigate any dispute in any forum will be conducted solely on an individual basis. Neither you nor FORD MOTOR COMPANY, will seek to have any dispute heard as a class action, as a private attorney general action, or in any other proceeding in which any party acts or proposes to act in a representative capacity. No arbitration or proceeding will be combined with another without the prior written consent of all parties to all affected arbitrations or proceedings.

(f) Arbitration procedure. Any arbitration will be conducted by the American Arbitration Association (the "AAA"), under its Commercial Arbitration Rules. If You are an individual and use the SOFTWARE for personal or vehicle use, or if the value of the dispute is $75,000 or less whether or not You are an individual or how You use the SOFTWARE, the AAA Supplementary Procedures for Consumer-Related Disputes will also apply. To commence arbitration, submit a Commercial Arbitration Rules Demand for Arbitration form to the AAA. You may request a telephonic or in-person hearing by following the AAA rules. In a dispute involving $10,000 or less, any hearing will be telephonic unless the arbitrator finds good cause to hold an in-person hearing instead. For more information, see adr.org or call 1-800-778-7879. You agree to commence arbitration only in your county of residence or FORD MOTOR COMPANY'S principal place of business. The arbitrator

may award the same damages to You individually as a court could. The arbitrator may award declaratory or injunctive relief only to You individually, and only to the extent required to satisfy Your individual claim. **Arbitration fees and incentives.**

- i. Disputes involving $75,000 or less. FORD MOTOR COMPANY will promptly reimburse your filing fees and pay the AAA's and arbitrator's fees and expenses. If you reject FORD MOTOR COMPANY'S last written settlement offer made before the arbitrator was appointed ("last written offer"), your dispute goes all the way to an arbitrator's decision (called an "award"), and the arbitrator awards you more than the last written offer, FORD MOTOR COMPANY will give you three incentives: (1) pay the greater of the award or $1,000; (2) pay twice your reasonable attorney's fees, if any; and (3) reimburse any expenses (including expert witness fees and costs) that your attorney reasonably accrues for investigating, preparing, and pursuing your claim in arbitration. The arbitrator will determine the amounts.
- ii. Disputes involving more than $75,000. The AAA rules will govern payment of filing fees and the AAA's and arbitrator's fees and expenses.
- iii. Disputes involving any amount. In any arbitration you commence, FORD MOTOR COMPANY will seek its AAA or arbitrator's fees and expenses, or Your filing fees it reimbursed, only if the arbitrator finds the arbitration frivolous or brought for an improper purpose. In any arbitration FORD MOTOR COMPANY commences, it will pay all filing, AAA, and arbitrator's fees and expenses. It will not seek its attorney's fees or expenses from you in any arbitration. Fees and expenses are not counted in determining how much a dispute involves.

(h) Claims or disputes must be filed within one year. To the extent permitted by law, any claim or dispute under this EULA to which this Section applies must be filed within one year in small claims court (Section c) or in arbitration (Section d). The one-year period begins when the claim or dispute first could be filed. If such a claim or dispute is not filed within one year, it is permanently barred.

(i) Severability. If the class action waiver (Section e) is found to be illegal or unenforceable as to all or some parts of a dispute, then that portion of Section e will not apply to those parts. Instead, those parts will be severed and proceed in a court of law, with the remaining parts proceeding in arbitration. If any other provision of that portion Section e is found to be illegal or unenforceable, that provision will be severed with the remainder of Section e remaining in full force and effect.

Telenav Software End User License Agreement

Please read these terms and conditions carefully before you use the TeleNav Software. Your use of the TeleNav Software indicates that you accept these terms and conditions. If you do not accept these terms and conditions, do not break the seal of the package, launch, or otherwise use the TeleNav Software. TeleNav may revise this Agreement and the privacy policy at any time, with or http://www.telenav.com from time to time to review the then current version of this Agreement and of the privacy policy.

1. Safe and Lawful Use

You acknowledge that devoting attention to the TeleNav Software may pose a risk of injury or death to you and others in situations that otherwise require your undivided attention, and you therefore agree to comply with the following when using the TeleNav Software:

(a) observe all traffic laws and otherwise drive safely;

(b) use your own personal judgment while driving. If you feel that a route suggested by the TeleNav Software instructs you to perform an unsafe or illegal maneuver, places you in an unsafe situation, or directs you into an area that you consider to be unsafe, do not follow such instructions;

(c) do not input destinations, or otherwise manipulate the TeleNav Software, unless your vehicle is stationary and parked;

(d) do not use the TeleNav Software for any illegal, unauthorized, unintended, unsafe, hazardous, or unlawful purposes, or in any manner inconsistent with this Agreement;

(e) arrange all GPS and wireless devices and cables necessary for use of the TeleNav Software in a secure manner in your vehicle so that they will not interfere with your driving and will not prevent the operation of any safety device (such as an airbag).

You agree to indemnify and hold TeleNav harmless against all claims resulting from any dangerous or otherwise inappropriate use of the TeleNav Software in any moving vehicle, including as a result of your failure to comply with the directions above.

2. Account Information

You agree: (a) when registering the TeleNav Software, to provide TeleNav with true, accurate, current, and complete information about yourself, and (b) to inform TeleNav promptly of any changes to such information, and to keep it true, accurate, current and complete.

3. Software License

- Subject to your compliance with the terms of this Agreement, TeleNav hereby grants to you a personal, non-exclusive, non-transferable license (except as expressly permitted below in connection with your permanent transfer of the TeleNav Software license), without the right to sublicense, to use the TeleNav Software (in object code form only) in order to access and use the TeleNav Software. This license shall terminate upon any termination or expiration of this Agreement. You agree that you will use the TeleNav Software only for your personal business or leisure purposes, and not to provide commercial navigation services to other parties.

3.1 License Limitations

- **(a)** reverse engineer, decompile, disassemble, translate, modify, alter or otherwise change the TeleNav Software or any part thereof; **(b)** attempt to derive the source code, audio library or structure of the TeleNav Software without the prior express written consent of TeleNav; **(c)** remove from the TeleNav Software, or alter, any of TeleNav's or its suppliers' trademarks, trade names, logos, patent or copyright notices, or other notices or markings; **(d)** distribute, sublicense or otherwise transfer the TeleNav Software to others, except as part of your permanent transfer of the TeleNav Software; or **(e)** use the TeleNav Software in any manner that

i. infringes the intellectual property or proprietary rights, rights of publicity or privacy or other rights of any party,

ii. violates any law, statute, ordinance or regulation, including but not limited to laws and regulations related to spamming, privacy, consumer and child protection, obscenity or defamation, or

iii. is harmful, threatening, abusive, harassing, tortuous, defamatory, vulgar, obscene, libelous, or otherwise objectionable; and (f) lease, rent out, or otherwise permit unauthorized access by third parties to the TeleNav Software without advanced written permission of TeleNav.

4. Disclaimers

- To the fullest extent permissible pursuant to applicable law, in no event will TeleNav, its licensors and suppliers, or agents or employees of any of the foregoing, be liable for any decision made or action taken by you or anyone else in reliance on the information provided by the TeleNav Software. TeleNav also does not warrant the accuracy of the map or other data used for the TeleNav Software. Such data may not always reflect reality due to, among other things, road closures, construction, weather, new roads and other changing conditions. You are responsible for the entire risk arising out of your use of the TeleNav Software. For example but without limitation, you agree not to rely on the TeleNav Software for critical navigation in areas where the well-being or survival of you or others is dependent on the accuracy of navigation, as the maps or functionality of the TeleNav Software are not intended to support such high risk applications, especially in more remote geographical areas.
- TELENAV EXPRESSLY DISCLAIMS AND EXCLUDES ALL WARRANTIES IN CONNECTION WITH THE TELENAV SOFTWARE, WHETHER STATUTORY, EXPRESS OR IMPLIED, INCLUDING ALL WARRANTIES WHICH MAY ARISE FROM COURSE OF DEALING, CUSTOM OR TRADE AND INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS WITH RESPECT TO THE TELENAV SOFTWARE.
- Certain jurisdictions do not permit the disclaimer of certain warranties, so this limitation may not apply to you.

5. Limitation of Liability

- TO THE EXTENT PERMITTED UNDER APPLICABLE LAW, UNDER NO CIRCUMSTANCES SHALL TELENAV OR ITS LICENSORS AND SUPPLIERS BE LIABLE TO YOU OR TO ANY THIRD PARTY FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL OR EXEMPLARY DAMAGES (INCLUDING IN EACH CASE, BUT NOT LIMITED TO, DAMAGES FOR THE INABILITY TO USE THE EQUIPMENT OR ACCESS DATA, LOSS OF DATA, LOSS OF BUSINESS, LOSS OF PROFITS, BUSINESS INTERRUPTION OR THE LIKE) ARISING OUT OF THE USE OF OR INABILITY TO USE THE TELENAV SOFTWARE, EVEN IF TELENAV HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING ANY DAMAGES THAT YOU MIGHT INCUR FOR ANY

REASON WHATSOEVER (INCLUDING, WITHOUT LIMITATION, ALL DAMAGES REFERENCED HEREIN AND ALL DIRECT OR GENERAL DAMAGES IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE), THE ENTIRE LIABILITY OF TELENAV AND OF ALL OF TELENAV'S SUPPLIERS SHALL BE LIMITED TO THE AMOUNT ACTUALLY PAID BY YOU FOR THE TELENAV SOFTWARE. SOME STATES AND/OR JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

6. Arbitration and Governing Law

- You agree that any dispute, claim or controversy arising out of or relating to this Agreement or the TeleNav Software shall be settled by independent arbitration involving a neutral arbitrator and administered by the American Arbitration Association in the County of Santa Clara, California. The arbitrator shall apply the Commercial Arbitration Rules of the American Arbitration Association, and the judgment upon the award rendered by the arbitrator may be entered by any court having jurisdiction. Note that there is no judge or jury in an arbitration proceeding and the decision of the arbitrator shall be binding upon both parties. You expressly agree to waive your right to a jury trial. This Agreement and performance hereunder will be governed by and construed in accordance with the laws of the State of California, without giving effect to its conflict of law provisions. To the extent judicial action is necessary in connection with the binding arbitration, both TeleNav and you agree to submit to the exclusive jurisdiction of the courts of the County of Santa Clara, California. The United Nations Convention on Contracts for the International Sale of Goods shall not apply.

7. Assignment

- You may not resell, assign, or transfer this Agreement or any of your rights or obligations, except in totality, in connection with your permanent transfer of the TeleNav Software, and expressly conditioned upon the new user of the TeleNav Software agreeing to be bound by the terms and conditions of this Agreement. Any such sale, assignment or transfer that is not expressly permitted under this paragraph will result in immediate termination of this Agreement, without liability to TeleNav, in which case you and all other parties shall immediately cease all use of the TeleNav Software. Notwithstanding the foregoing, TeleNav may assign this Agreement to any other party at any time without notice, provided the assignee remains bound by this Agreement.

8. Miscellaneous

8.1

This Agreement constitutes the entire agreement between TeleNav and you with respect to the subject matter hereof.

8.2

Except for the limited licenses expressly granted in this Agreement, TeleNav retains all right, title and interest in and to the TeleNav Software, including without limitation all related intellectual property rights. No licenses or other rights which are not expressly granted in this Agreement are intended to, or shall be, granted or

conferred by implication, statute, inducement, estoppel or otherwise, and TeleNav and its suppliers and licensors hereby reserve all of their respective rights other than the licenses explicitly granted in this Agreement.

8.3

By using the TeleNav Software, you consent to receive from TeleNav all communications, including notices, agreements, legally required disclosures or other information in connection with the TeleNav Software (collectively, "Notices") electronically. TeleNav may provide such Notices by posting them on TeleNav's Website or by downloading such Notices to your wireless device. If you desire to withdraw your consent to receive Notices electronically, you must discontinue your use of the TeleNav Software.

8.4

TeleNav's or your failure to require performance of any provision shall not affect that party's right to require performance at any time thereafter, nor shall a waiver of any breach or default of this Agreement constitute a waiver of any subsequent breach or default or a waiver of the provision itself.

8.5

If any provision herein is held unenforceable, then such provision will be modified to reflect the intention of the parties, and the remaining provisions of this Agreement will remain in full force and effect.

8.6

The headings in this Agreement are for convenience of reference only, will not be deemed to be a part of this Agreement, and will not be referred to in connection with the construction or interpretation of this Agreement. As used in this Agreement, the words "include" and "including" and variations thereof, will not be deemed to be terms of limitation, but rather will be deemed to be followed by the words "without limitation".

9. Other Vendors Terms and Conditions

- The Telenav Software utilizes map and other data licensed to Telenav by third party vendors for the benefit of you and other end users. This Agreement includes end-user terms applicable to these companies (included at the end of this Agreement), and thus your use of the Telenav Software is also subject to such terms. You agree to comply with the following additional terms and conditions, which are applicable to Telenav’s third party vendor licensors::

9.1 End User Terms Required by HERE North America, LLC

The data (“Data”) is provided for your personal, internal use only and not for resale. It is protected by copyright, and is subject to the following terms and conditions which are agreed to by you, on the one hand, and Telenav (“Telenav”) and its licensors (including their licensors and suppliers) on the other hand.

© 2013 HERE. All rights reserved.

The Data for areas of Canada includes information taken with permission from Canadian authorities, including: © Her Majesty the Queen in Right of Canada, © Queen's Printer for Ontario, © Canada Post Corporation, GeoBase®, © Department of Natural Resources Canada.

HERE holds a non-exclusive license from the United States Postal Service® to publish and sell ZIP+4® information.

©United States Postal Service® 2014. Prices are not established, controlled or approved by the United States Postal Service®. The following trademarks and registrations are owned by the USPS: United States Postal Service, USPS, and ZIP+4

The Data for Mexico includes certain data from Instituto Nacional de Estadística y Geografía.

Terms and Conditions

Permitted Use. You agree to use this Data together with the Telenav Software solely for the internal business and personal purposes for which you were licensed, and not for service bureau, time-sharing or other similar purposes. Accordingly, but subject to the restrictions set forth in the following paragraphs, you agree not to otherwise reproduce, copy, modify, decompile, disassemble, create any derivative works of, or reverse engineer any portion of this Data, and may not transfer or distribute it in any form, for any purpose, except to the extent permitted by mandatory laws.

Restrictions. Except where you have been specifically licensed to do so by Telenav, and without limiting the preceding paragraph, you may not use this Data (a) with any products, systems, or applications installed or otherwise connected to or in communication with vehicles, capable of vehicle navigation, positioning, dispatch, real time route guidance, fleet management or similar applications; or (b) with or in communication with any positioning devices or any mobile or wireless-connected electronic or computer devices, including without limitation cellular phones, palmtop and handheld computers, pagers, and personal digital assistants or PDAs.

Warning. The Data may contain inaccurate or incomplete information due to the passage of time, changing circumstances, sources used and the nature of collecting comprehensive geographic data, any of which may lead to incorrect results.

No Warranty. This Data is provided to you “as is,” and you agree to use it at your own risk. Telenav and its licensors (and their licensors and suppliers) make no guarantees, representations or warranties of any kind, express or implied, arising by law or otherwise, including but not limited to, content, quality, accuracy, completeness, effectiveness, reliability, fitness for a particular purpose, usefulness, use or results to be obtained from this Data, or that the Data or server will be uninterrupted or error-free.

Disclaimer of Warranty: TELENAV AND ITS LICENSORS (INCLUDING THEIR LICENSORS AND SUPPLIERS) DISCLAIM ANY WARRANTIES, EXPRESS OR IMPLIED, OF QUALITY, PERFORMANCE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. Some States, Territories and Countries do not allow certain warranty exclusions, so to that extent the above exclusion may not apply to you.

Disclaimer of Liability: TELENAV AND ITS LICENSORS (INCLUDING THEIR LICENSORS AND SUPPLIERS) SHALL NOT BE LIABLE TO YOU: IN RESPECT OF ANY CLAIM, DEMAND OR ACTION, IRRESPECTIVE OF THE NATURE OF THE CAUSE OF THE CLAIM, DEMAND OR ACTION ALLEGING ANY LOSS, INJURY OR

DAMAGES, DIRECT OR INDIRECT, WHICH MAY RESULT FROM THE USE OR POSSESSION OF THE INFORMATION; OR FOR ANY LOSS OF PROFIT, REVENUE, CONTRACTS OR SAVINGS, OR ANY OTHER DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF YOUR USE OF OR INABILITY TO USE THIS INFORMATION, ANY DEFECT IN THE INFORMATION, OR THE BREACH OF THESE TERMS OR CONDITIONS, WHETHER IN AN ACTION IN CONTRACT OR TORT OR BASED ON A WARRANTY, EVEN IF TELENAV OR ITS LICENSORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Some States, Territories and Countries do not allow certain liability exclusions or damages limitations, so to that extent the above may not apply to you.

Export Control. You shall not export from anywhere any part of the Data or any direct product thereof except in compliance with, and with all licenses and approvals required under, applicable export laws, rules and regulations, including but not limited to the laws, rules and regulations administered by the Office of Foreign Assets Control of the U.S. Department of Commerce and the Bureau of Industry and Security of the U.S. Department of Commerce. To the extent that any such export laws, rules or regulations prohibit HERE from complying with any of its obligations hereunder to deliver or distribute Data, such failure shall be excused and shall not constitute a breach of this Agreement.

Entire Agreement. These terms and conditions constitute the entire agreement between Telenav (and its licensors, including their licensors and suppliers) and you pertaining to the subject matter hereof, and supersedes in their entirety any and all written or oral agreements previously existing between us with respect to such subject matter.

Governing Law. The above terms and conditions shall be governed by the laws of the State of Illinois [insert “Netherlands” where European HERE Data is used], without giving effect to (i) its conflict of laws provisions, or (ii) the United Nations Convention for Contracts for the International Sale of Goods, which is explicitly excluded. You agree to submit to the jurisdiction of the State of Illinois [insert “The Netherlands” where European HERE Data is used] for any and all disputes, claims and actions arising from or in connection with the Data provided to you hereunder.

Government End Users. If the Data is being acquired by or on behalf of the United States government or any other entity seeking or applying rights similar to those customarily claimed by the United States government, this Data is a “commercial item” as that term is defined at 48 C.F.R. (“FAR”) 2.101, is licensed in accordance with these End-User Terms, and each copy of Data delivered or otherwise furnished shall be marked and embedded as appropriate with the following “Notice of Use,” and shall be treated in accordance with such Notice:

NOTICE OF USE
CONTRACTOR (MANUFACTURER/ SUPPLIER) NAME: HERE CONTRACTOR (MANUFACTURER/ SUPPLIER) ADDRESS: c/o Nokia, 425 West Randolph Street, Chicago, Illinois 60606 This Data is a commercial item as defined in FAR 2.101 and is subject to these End-User Terms under which this Data was provided. © 1987 – 2014 HERE – All rights reserved.

If the Contracting Officer, federal government agency, or any federal official refuses to use the legend provided herein, the Contracting Officer, federal government agency, or any federal official must notify HERE prior to seeking additional or alternative rights in the Data.

Gracenote® Copyright

CD and music-related data from Gracenote, Inc., copyright©

2000-2007 Gracenote. Gracenote Software, copyright © 2000-2007 Gracenote. This product and service may practice one or more of the following U.S. Patents 5,987,525; 6,061,680; 6,154,773; 6,161,132; 6,230,192; 6,230,207; 6.240,459; 6,330,593 and other patents issued or pending. Some services supplied under license from Open Globe, Inc. for U.S. Patent 6,304,523.

Gracenote and CDDB are registered trademarks of Gracenote. The Gracenote logo and logotype, and the "Powered by Gracenote™" logo are trademarks of Gracenote.

Gracenote® End User License Agreement (EULA)

This device contains software from Gracenote, Inc. of 2000 Powell Street Emeryville, California 94608 ("Gracenote").

The software from Gracenote (the "Gracenote Software") enables this device to do disc and music file identification and obtain music-related information, including name, artist, track, and title information ("Gracenote Data") from online servers ("Gracenote Servers"), and to perform other functions. You may use Gracenote Data only by means of the intended End User functions of this device. This device may contain content belonging to Gracenote's providers. If so, all of the restrictions set forth herein with respect to Gracenote Data shall also apply to such content and such content providers shall be entitled to all of the benefits and protections set forth herein that are available to Gracenote. You agree that you will use the content from Gracenote ("Gracenote Content") , Gracenote Data, the Gracenote Software, and Gracenote Servers for your own personal, non-commercial use only. You agree not to assign, copy, transfer or transmit the Gracenote Content, Gracenote Software or any Gracenote Data (except in a Tag associated with a music file) to any third party. YOU AGREE NOT TO USE OR EXPLOIT GRACENOTE CONTENT, GRACENOTE DATA, THE GRACENOTE SOFTWARE, OR GRACENOTE SERVERS, EXCEPT AS EXPRESSLY PERMITTED HEREIN.

You agree that your non-exclusive licenses to use the Gracenote Content, Gracenote Data, the Gracenote Software, and Gracenote Servers will terminate if you violate these restrictions. If your licenses terminate, you agree to cease any and all use of the Gracenote Content, Gracenote Data, the Gracenote Software, and Gracenote Servers.

Gracenote, respectively, reserve all rights in Gracenote Data, the Gracenote Software, and the Gracenote Servers and Gracenote Content, including all ownership rights. Under no circumstances will either Gracenote become liable for any payment to you for any information that you provide, including any copyrighted material or music file information. You agree that Gracenote may enforce its respective rights, collectively or separately, under this agreement against you, directly in each company's own name.

Gracenote uses a unique identifier to track queries for statistical purposes. The purpose of a randomly assigned numeric identifier is to allow Gracenote to count queries without knowing anything about who you are. For more information, see the web page at www.gracenote.com for the Gracenote Privacy Policy.

THE GRACENOTE SOFTWARE, EACH ITEM OF GRACENOTE DATA AND THE GRACENOTE CONTENT ARE LICENSED TO YOU "AS IS". NEITHER GRACENOTE MAKES ANY REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, REGARDING THE ACCURACY OF ANY GRACENOTE DATA FROM THE GRACENOTE SERVERS OR GRACENOTE CONTENT. GRACENOTE COLLECTIVELY AND SEPARATELY RESERVE THE RIGHT TO DELETE DATA AND/OR CONTENT FROM THE COMPANIES' RESPECTIVE SERVERS OR, IN THE CASE OF GRACENOTE, CHANGE DATA CATEGORIES FOR ANY CAUSE THAT GRACENOTE DEEMS SUFFICIENT. NO WARRANTY IS MADE THAT EITHER GRACENOTE CONTENT OR THE GRACENOTE SOFTWARE OR GRACENOTE SERVERS ARE ERROR-FREE OR THAT THE FUNCTIONING OF THE GRACENOTE SOFTWARE OR GRACENOTE SERVERS WILL BE UNINTERRUPTED. GRACENOTE IS NOT OBLIGATED TO PROVIDE YOU WITH ANY ENHANCED OR ADDITIONAL DATA TYPES THAT GRACENOTE MAY CHOOSE TO PROVIDE IN THE FUTURE AND IS FREE TO DISCONTINUE ITS ONLINE SERVICES AT ANY TIME. GRACENOTE DISCLAIM ALL WARRANTIES EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, AND NON-INFRINGEMENT. NEITHER GRACENOTE WARRANTS THE RESULTS THAT WILL BE OBTAINED BY YOUR USE OF THE GRACENOTE SOFTWARE OR ANY GRACENOTE SERVER. IN NO CASE WILL GRACENOTE BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES OR FOR ANY LOST PROFITS OR LOST REVENUES FOR ANY REASON WHATSOEVER. © Gracenote 2007.

FCC ID: ACJ-SYNCG3-L

IC: 216B-SYNCG3-L

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING

Changes or modifications not expressively approved by the party responsible for compliance could void the user's authority to operate the equipment. The term "IC" before the radio certification number only signifies that Industry Canada technical specifications were met.

The antenna used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

4

4WD
See: Four-Wheel Drive.....164

A

A/C
See: Climate Control.....113
About This Manual.....7
ABS
See: Brakes.....172
ABS driving hints
See: Hints on Driving With Anti-Lock Brakes.....172
Accessories.....374
Exterior Style.....374
Interior Style.....374
Lifestyle.....374
Peace of Mind.....374
Accessories
See: Replacement Parts Recommendation.....11
Adjusting the Headlamps.....259
Horizontal Aim Adjustment.....260
Vertical Aim Adjustment.....259
Adjusting the Pedals.....71
Adjusting the Steering Wheel - Vehicles With: Column Shift/Manual Adjustable Steering Column.....66
Adjusting the Steering Wheel - Vehicles With: Floor Shift/Manual Adjustable Steering Column.....66
Adjusting the Steering Wheel - Vehicles With: Power Adjustable Steering Column.....67
Easy Entry and Exit Feature.....68
End of Travel Position.....68
Memory Feature.....68
Airbag Disposal.....40
Air Conditioning
See: Climate Control.....113
Air Filter
See: Changing the Engine Air Filter.....266
Alarm
See: Anti-Theft Alarm.....63
Ambient Lighting.....79
Anti-Theft Alarm.....63
Arming the Alarm.....63
Disarming the Alarm.....63
Appendices.....397
Audible Warnings and Indicators.....91
Direction Indicator Chime.....91
Headlamps On Warning Chime.....91
Key in Ignition Warning Chime.....91
Parking Brake On Warning Chime.....91
Audio Control.....68
Media.....69
Seek, Next or Previous.....69
Type One.....68
Type Two.....69
Audio System.....316
General Information.....316
Audio Unit - Vehicles With: AM/FM/CD/SYNC/Satellite Radio.....317
Audio Unit - Vehicles With: Sony AM/FM/CD.....319
Rear Seat Audio Controls.....321
Autolamps.....75
Windshield Wiper Activated Headlamps.....75
Automatic Climate Control.....116
Automatic Transmission.....159
Brake-Shift Interlock.....162
If Your Vehicle Gets Stuck In Mud or Snow.....163
Selector Lever Positions.....159
Understanding your SelectShift Automatic™ Transmission.....160
Automatic Transmission Fluid Check.....254
Autowipers.....72
Auxiliary Power Points.....142
110 Volt AC Power Point.....142
12 Volt DC Power Point.....142
Locations.....142

B

Battery
See: Changing the 12V Battery.....256
Blind Spot Information System.....188
Switching the System Off and On.....190
System Errors.....190
Using the System.....188

Bonnet Lock
See: Opening and Closing the Hood.....246
Booster Seats.....23
Types of Booster Seats.....24
Brake Fluid Check.....255
Brakes.....172
General Information.....172
Breaking-In.....221
Bulb Specification Chart.....264

C

California Proposition 65.....11
Capacities and Specifications.....311
Specifications.....312
Car Wash
See: Cleaning the Exterior.....268
Center Console.....144
Changing a Bulb.....261
Central High-mounted Brake Lamp Bulb.....263
Fog Lamp Bulb.....262
Front Direction Indicator Bulb.....262
Headlamp Bulb.....261
LED Central High-mounted Brake Lamp Bulb.....263
LED Direction Indicator and Side Marker Bulbs.....262
LED Headlamp Bulb.....261
LED Rear Lamp, Brake Lamp, Rear Direction Indicator and Reverse Lamp Bulbs.....263
License Plate Lamp Bulb.....264
Rear Lamp, Brake Lamp, Rear Direction Indicator and Reverse Lamp Bulbs.....263
Side Direction Indicator Bulb.....264
Side Marker Bulb.....262
Changing a Fuse.....244
Fuses.....244
Changing a Road Wheel.....300
Dissimilar Spare Wheel and Tire Assembly Information.....300
Location of the Spare Tire and Tools.....301
Tire Change Procedure.....302
Changing the 12V Battery.....256
Battery Management System.....258
Changing the Engine Air Filter.....266
Changing the Wiper Blades.....259
Checking MyKey System Status.....49
Checking the Wiper Blades.....258
Childminder Mirror.....82
Child Restraint and Seatbelt Maintenance.....34
Child Restraint Positioning.....25
Child Safety.....15
General Information.....15
Child Safety Locks.....26
Cleaning Leather Seats.....272
With King Ranch Edition.....272
Without King Ranch Edition.....272
Cleaning Products.....268
Cleaning the Alloy Wheels.....273
Cleaning the Engine.....270
Cleaning the Exterior.....268
Exterior Chrome Parts.....269
Exterior Plastic Parts.....269
Stripes or Graphics.....269
Underbody.....269
Cleaning the Instrument Panel and Instrument Cluster Lens.....271
Cleaning the Interior.....271
Cleaning the Windows and Wiper Blades.....270
Clearing All MyKeys.....48
Climate Control.....113
Climate Controlled Seats.....135
Cooled Seats.....135
Coolant Check
See: Engine Coolant Check.....250
Crash Sensors and Airbag Indicator.....39
Creating a MyKey.....47
Programming/Changing Configurable Settings.....47
Cross Traffic Alert.....190
False Alerts.....193
Switching the System Off and On.....193
System Errors.....193
System Lights, Messages and Audible Alerts.....192
System Limitations.....192
Using the System.....190
Cruise Control.....70
Principle of Operation.....186
Cruise control
See: Using Cruise Control.....186

Expedition (TB7) Canada/United States of America, enUSA, Second Printing

Customer Assistance.....229

D

Data Recording.....9
Event Data Recording.....9
Service Data Recording.....9
Daytime Running Lamps.....76
Type 1 - Conventional (Non-Configurable).....76
Type 2 - Configurable.....76
Digital Radio.....321
HD Radio Reception and Station Troubleshooting.....322
Direction Indicators.....77
Lane Change.....77
Drive Control.....194
Driver Select Suspension.....194
Driver and Passenger Airbags.....36
Children and Airbags.....37
Proper Driver and Front Passenger Seating Adjustment.....37
Driving Aids.....188
Driving Hints.....221
Driving Through Water.....222
DRL
See: Daytime Running Lamps.....76

E

Economical Driving.....221
Emission Control System.....156
On-Board Diagnostics (OBD-II).....157
Readiness for Inspection/Maintenance (I/M) Testing.....158
End User License Agreement.....397
VEHICLE SOFTWARE END USER LICENSE AGREEMENT (EULA) 397
Engine Block Heater.....149
Using the Engine Block Heater.....150
Engine Coolant Check.....250
Adding Engine Coolant.....251
Checking the Engine Coolant.....251
Recycled Engine Coolant.....252
Severe Climates.....252
What You Should Know About Fail-Safe Cooling.....252
Engine Immobilizer
See: Passive Anti-Theft System.....62
Engine Oil Check.....249
Adding Engine Oil.....249
Engine Oil Dipstick.....249
Engine Specifications.....307
Drivebelt Routing.....307
Environment.....14
Essential Towing Checks.....209
Before Towing a Trailer.....215
Hitches.....209
Launching or Retrieving a Boat or Personal Watercraft (PWC).....216
Safety Chains.....211
Trailer Brakes.....212
Trailer Lamps.....215
Trailer Towing Connector (Vehicles with a Trailer Towing Package and 7–Pin Connector).....209
When Towing a Trailer.....215
Event Data Recording
See: Data Recording.....9
Export Unique Options.....13
Extended Service Plan (ESP).....376
EXTENDED SERVICE PLAN (CANADA ONLY).....377
EXTENDED SERVICE PLAN (U.S. Only).....376
Exterior Mirrors.....81
Auto-Dimming Feature.....82
Blind Spot Monitor.....82
Fold-Away Exterior Mirrors.....81
Heated Exterior Mirrors.....82
Memory Mirrors.....82
Power Exterior Mirrors.....81
Power-Folding Mirrors.....81
Signal Indicator Mirrors.....82

F

Fastening the Seatbelts.....29
Safety Belt Extension Assembly.....31
Safety Belt Locking Modes.....30
Using Safety Belts During Pregnancy.....29
Floor Mats.....222
Fog Lamps - Front
See: Front Fog Lamps.....77

Foot Pedals
See: Adjusting the Pedals.....71
Ford Credit.....11
(U.S. Only).....11
Four-Wheel Drive.....164
Front Fog Lamps.....77
Front Parking Aid.....182
Fuel and Refueling.....151
Fuel Consumption.....155
Calculating Fuel Economy.....156
Filling the Tank.....155
Fuel Filler Funnel Location.....152
Fuel Filter.....256
Fuel Quality.....152
Choosing the Right Fuel.....152
Fuel Shutoff.....225
Fuses.....236
Fuse Specification Chart.....236
Passenger Compartment Fuse Panel.....240
Power Distribution Box.....236

G

Garage Door Opener
See: Universal Garage Door Opener.....137
Gauges.....85
Type 1 and 2.....85
Type 3.....87
General Information on Radio Frequencies.....41
Intelligent Access.....41
General Maintenance Information.....378
Multi-Point Inspection.....380
Owner Checks and Services.....379
Protecting Your Investment.....378
Why Maintain Your Vehicle?.....378
Why Maintain Your Vehicle at Your Dealership?.....378
Getting Assistance Outside the U.S. and Canada.....232
Getting the Services You Need.....229
Away From Home.....229

H

Handbrake
See: Parking Brake.....173
Hazard Warning Flashers.....225
HDC
See: Using Hill Descent Control.....179
Headlamp Adjusting
See: Adjusting the Headlamps.....259
Headlamp Removal
See: Removing a Headlamp.....260
Head Restraints.....122
Adjusting the Head Restraint.....123
Heated Seats.....134
Front Seats.....134
Rear Seats.....134
Heated Steering Wheel.....70
Heated Windows and Mirrors.....121
Heated Exterior Mirror.....121
Heated Rear Window.....121
Heating
See: Climate Control.....113
Hill Start Assist.....173
Switching the System On and Off.....174
Using Hill Start Assist.....174
Hints on Controlling the Interior Climate.....117
Cooling the Interior Quickly.....119
General Hints.....117
Heating the Interior Quickly.....118
Recommended Settings for Cooling.....119
Recommended Settings for Heating.....118
Side Window Defogging in Cold Weather.....119
Hints on Driving With Anti-Lock Brakes.....172
Hood Lock
See: Opening and Closing the Hood.....246

I

Ignition Switch.....145
In California (U.S. Only).....230
Information Display Control.....70
Information Displays.....92
General Information.....92

Information Messages.....103
4WD Messages.....112
AdvanceTrac™ / Traction Control Messages.....104
Alarm Messages.....104
Battery and Charging System Messages.....104
Blind Spot Information System Messages.....105
Brake System Messages.....105
Door Messages.....105
Engine Messages.....106
Fuel Messages.....106
Keys and Intelligent Access Messages.....106
Maintenance Messages.....107
MyKey™ Messages.....108
Off Road Messages.....108
Park Aid Messages.....109
Power Steering Messages.....109
Remote Start Messages.....110
Suspension System Messages.....110
Tire Messages.....110
Trailer Messages.....110
Transmission Messages.....111
Installing Child Restraints.....16
Child Seats.....16
Combining Seatbelt and LATCH Lower Anchors for Attaching Child Safety Seats.....20
Using Lap and Shoulder Belts.....17
Using Lower Anchors and Tethers for CHildren (LATCH).....19
Using Tether Straps.....20
Instrument Cluster.....85
Instrument Lighting Dimmer.....76
Interior Lamps.....78
Front Row Map and Dome Lamps.....78
Front Row Map Lamps.....78
Rear Cargo Lamp.....79
Second Row Map Lamps.....78
Interior Mirror.....82
Auto-Dimming Mirror.....82
Introduction.....7

J

Jump Starting the Vehicle.....226
Connecting the Jumper Cables.....226
Jump Starting.....227
Preparing Your Vehicle.....226
Removing the Jumper Cables.....227

K

Keyless Entry.....59
SECURICODE™ KEYLESS ENTRY KEYPAD.....59
Unlocking and Locking the Doors.....61
Keyless Starting.....145
Ignition Modes.....146
Keys and Remote Controls.....41
Principle of Operation.....41

L

Lighting Control.....74
Headlamp Flasher.....75
High Beams.....74
Lighting.....74
General Information.....74
Limited Slip Differential.....171
Load Carriers
See: Roof Racks and Load Carriers.....197
Load Carrying.....196
Load Limit.....198
Special Loading Instructions for Owners of Pick-up Trucks and Utility-type Vehicles.....204
Vehicle Loading - with and without a Trailer.....198

Locking and Unlocking.....53
Activating Intelligent Access.....53
Autolock.....54
Auto Relock.....54
Autounlock.....55
Battery Saver.....55
Illuminated Entry.....55
Illuminated Exit.....55
Power Door Locks.....53
Remote Control.....53
Smart Unlocks for Integrated Keyhead Transmitter.....54
Smart Unlocks for Intelligent Access Keys.....54
Locks.....53
Lug Nuts
See: Changing a Road Wheel.....300

M

Maintenance.....246
General Information.....246
Manual Climate Control.....113
Manual Climate Control - Vehicles With: Electronic Manual Temperature Control (EMTC).....114
Manual Liftgate.....55
Closing the Liftgate.....57
Opening the Liftgate.....56
Opening the Liftgate Window.....56
Manual Seats.....124
Manual Lumbar 125
Moving the Seat Backward and Forward.....124
Recline Adjustment.....124
Media Hub.....326
Memory Function.....126
Easy Entry and Exit Feature.....127
Saving a PreSet Position.....126
Message Center
See: Information Displays.....92
Mirrors
See: Heated Windows and Mirrors.....121
See: Windows and Mirrors.....80
Mobile Communications Equipment.....12
Moonroof.....83
Bounce-Back.....84
Opening and Closing the Moonroof.....84
Venting the Moonroof.....84
Motorcraft Parts.....307
MyKey Troubleshooting.....51
MyKey™ 46
Principle of Operation.....46

N

Normal Scheduled Maintenance.....381
Intelligent Oil-Life Monitor.....381
Normal Maintenance Intervals.....382

O

Oil Change Indicator Reset.....250
Oil Check
See: Engine Oil Check.....249
Opening and Closing the Hood.....246
Ordering Additional Owner's Literature.....233
Obtaining a French Owner’s Manual.....234
Overhead Console.....144

P

Parking Aids.....181
Principle of Operation.....181
Parking Brake.....173
Passive Anti-Theft System.....62
SecuriLock®.....62
PATS
See: Passive Anti-Theft System.....62
Pedals.....71
Perchlorate.....11
Power Door Locks
See: Locking and Unlocking.....53
Power Liftgate.....57
Obstacle Detection.....59
Opening and Closing the Liftgate.....58
Stopping the Liftgate Movement.....59
Power Running Boards.....64
Power Seats.....125
Power Lumbar.....126
Power Recline.....125

Power Windows.....80
Accessory Delay.....80
Bounce-Back.....80
One-Touch Down.....80
One-Touch Up.....80
Window Lock.....80
Protecting the Environment.....14

R

Rear Axle.....171
Rear Parking Aid.....181
Rear Passenger Climate Controls.....120
Rear Quarter Windows.....83
Rear Seats.....127
Adjusting the Second Row Center 20% Seat.....132
Adjusting the Second Row Outboard 40% Seat for E-Z Entry.....129
Exiting the Third Row.....130
Folding Down the Second Row 40% Seat.....127
Folding Down the Third Row Seats to the Load Floor.....132
Folding the Second Row Center 20% Seat.....131
Placing the Second Row Outboard 40% Seats in Cargo Mode.....128
PowerFold™ Third Row Seat.....133
Reclining the Second Row Outboard 40% Seatback.....130
Returning to the Upright Position from the Full Lowered Load Floor Position.....129
Third Row Seats.....132
Rear Under Floor Storage.....196
Cargo Management System.....196
Cargo Shelf and Divider.....196
Third Row Storage Bin.....197
Rear View Camera.....183
Using the Rear View Camera System.....183
Rear View Camera
See: Rear View Camera.....183
Rear Window Wiper and Washers.....73
Rear Window Washer.....73
Rear Window Wiper.....73
Recommended Towing Weights.....206
Reduced Engine Performance.....221
Refueling.....153
Easy Fuel™ Capless Fuel System.....154
Remote Control.....42
Car Finder.....44
Integrated Keyhead Transmitter.....42
Intelligent Access Key.....42
Memory Feature.....45
Remote Start.....44
Replacing the Battery.....43
Sounding the Panic Alarm.....44
Remote Start.....121
Automatic Settings.....121
Removing a Headlamp.....260
Repairing Minor Paint Damage.....273
Replacement Parts Recommendation.....11
Collision Repairs.....11
Scheduled Maintenance and Mechanical Repairs.....11
Warranty on Replacement Parts.....12
Replacing a Lost Key or Remote Control.....45
Reporting Safety Defects (Canada Only).....234
Reporting Safety Defects (U.S. Only).....234
Roadside Assistance.....224
Vehicles Sold in Canada: Getting Roadside Assistance.....224
Vehicles Sold in Canada: Roadside Assistance Program Coverage.....225
Vehicles Sold in Canada: Using Roadside Assistance.....225
Vehicles Sold in the United States: Getting Roadside Assistance.....224
Vehicles Sold in the United States: Using Roadside Assistance.....224
Roadside Emergencies.....224
Roof Racks and Load Carriers.....197
Adjusting the Crossbar.....197
Running-In
See: Breaking-In.....221
Running Out of Fuel.....152
Adding Fuel From a Portable Fuel Container.....153
Filling a Portable Fuel Container.....153

S

Safety Canopy™.....38
Safety Precautions.....151
Satellite Radio.....323
Satellite Radio Electronic Serial Number (ESN).....324
Satellite Radio Reception Factors.....324
SIRIUS® Satellite Radio Service.....324
Troubleshooting.....325
Scheduled Maintenance Record.....387
Scheduled Maintenance.....378
Seatbelt Height Adjustment.....31
Second Row Comfort Guide.....32
Seatbelt Reminder.....33
Belt-Minder™.....33
Seatbelts.....28
Principle of Operation.....28
Seatbelt Warning Lamp and Indicator Chime.....32
Conditions of operation.....33
Seats.....122
Security.....62
Self-Leveling Suspension.....195
Side Airbags.....37
Sitting in the Correct Position.....122
Snow Chains
See: Using Snow Chains.....294
Special Notices.....12
New Vehicle Limited Warranty.....12
On-board Diagnostics (OBD-II).....12
Special Instructions.....12
Special Operating Conditions Scheduled Maintenance.....384
Exceptions.....385
Speed Control
See: Cruise Control.....186
Stability Control.....176
Principle of Operation.....176
Starter Switch
See: Ignition Switch.....145
Starting a Gasoline Engine.....146
Automatic Engine Shutdown.....148
Failure to Start.....147
Guarding Against Exhaust Fumes.....149
Important Ventilating Information.....149
Stopping the Engine When Your Vehicle is Moving.....148
Stopping the Engine When Your Vehicle is Stationary.....148
Vehicles with an Ignition Key.....146
Vehicles with Keyless Start.....146
Starting and Stopping the Engine.....145
General Information.....145
Steering.....193
Electric Power Steering.....193
Steering Wheel.....66
Storage Compartments.....144
Sunroof
See: Moonroof.....83
Sun Visors.....83
Illuminated Vanity Mirror.....83
Supplementary Restraints System.....35
Principle of Operation.....35
Symbols Glossary.....7
SYNC™ Applications and Services.....345
911 Assist.....345
SYNC Services: Traffic, Directions & Information (TDI) (If Equipped, United States Only).....349
Vehicle Health Report (If Equipped, United States Only).....347
SYNC™ AppLink™.....353
SYNC Mobile Apps.....353
SYNC™.....327
General Information.....327
SYNC™ Troubleshooting.....365

T

Tailgate
See: Manual Liftgate.....55
See: Power Liftgate.....57
Technical Specifications
See: Capacities and Specifications.....307
Terrain Response.....179
The Better Business Bureau (BBB) Auto Line Program (U.S. Only).....231

Tire Care.....279
Glossary of Tire Terminology.....280
Information About Uniform Tire Quality Grading.....279
Information Contained on the Tire Sidewall.....281
Temperature A B C.....280
Traction AA A B C.....279
Treadwear.....279
Tire Pressure Monitoring System.....294
Changing Tires With a Tire Pressure Monitoring System.....296
Understanding Your Tire Pressure Monitoring System 296
Tires
See: Wheels and Tires.....276
Towing a Trailer.....205
Load Placement.....205
Towing Points.....216
Towing the Vehicle on Four Wheels.....218
Emergency Towing.....218
Four-wheel-down Towing.....218
Recreational Towing.....218
Towing.....205
Traction Control.....175
Principle of Operation.....175
Trailer Sway Control.....206
Transfer Case Fluid Check.....255
Transmission Code Designation.....310
Transmission.....159
Transmission
See: Transmission.....159
Transporting the Vehicle.....217

U

Under Hood Overview.....248
Universal Garage Door Opener.....137
HomeLink Wireless Control System.....137
USB Port.....326
Using Cruise Control.....186
Switching Cruise Control Off.....187
Switching Cruise Control On and Off.....186
Using Four-Wheel Drive.....164
4WD Indicator Lights.....164
4WD Switch Positions.....164
Driving Off-Road With Truck and Utility Vehicles.....166
How Your Vehicle Differs From Other Vehicles.....166
Using Hill Descent Control.....179
Principle of Operation.....179
Using Hill Descent Control.....179
Using MyKey With Remote Start Systems.....50
Vehicles With Ford-Approved Aftermarket Remote Start Systems.....50
Vehicles With Non-Ford-Approved Aftermarket Remote Start Systems.....50
Using Power Running Boards.....64
Automatic Power Deploy.....64
Automatic Power Stow.....64
Bounce-back.....65
Enabling and Disabling.....64
Manual Power Deploy.....64
Using Snow Chains.....294
Using Stability Control.....177
Stability Control and Traction Control with Roll Stability Control™ (RSC™).....177
Using SYNC™ With Your Media Player.....355
Accessing Your Play Menu.....360
Connecting Your Digital Media Player to the USB Port.....355
Media Menu Features.....358
Media Voice Commands.....357
System Settings.....362
What's Playing?.....356

Using SYNC™ With Your Phone.....332
Accessing Features Through the Phone Menu.....336
Accessing Your Phone Settings.....341
Making a Call.....335
Pairing a Cell Phone for the First Time.....332
Pairing Subsequent Cell Phones.....333
Phone Options during an Active Call.....335
Phone Voice Commands.....333
Receiving Calls.....335
System Settings.....342
Text Messaging.....339
Using Traction Control.....175
Switching the System Off 175
System Indicator Lights and Messages.....175
Using Voice Recognition.....329
Initiating a Voice Session.....329
System Interaction and Feedback.....330
Utilizing the Mediation/Arbitration Program (Canada Only).....232

V

Vehicle Care.....268
General Information.....268
Vehicle Certification Label.....310
Vehicle Identification Number.....309
Vehicle Storage.....274
Battery.....275
Body.....274
Brakes.....275
Cooling system.....274
Engine.....274
Fuel system.....274
General.....274
Miscellaneous.....275
Removing Vehicle From Storage.....275
Tires.....275
Ventilation
See: Climate Control.....113
VIN
See: Vehicle Identification Number.....309
Voice Control.....69
Type One.....69
Type Two.....70

W

Warning Lamps and Indicators.....88
4X2.....90
4X4 Auto.....90
4X4 HIGH.....91
4X4 LOW.....91
Anti-Lock Braking System.....88
Battery.....88
Brake System.....88
Cruise Control.....88
Direction Indicator.....88
Door Ajar.....88
Engine Coolant Temperature.....88
Engine Oil.....89
Fasten Safety Belt.....89
Front Airbag.....89
Front Fog Lamps.....89
High Beam.....89
Hill Descent.....89
Liftgate Ajar.....89
Low Fuel Level.....89
Low Tire Pressure Warning.....89
Low Washer Fluid.....89
Parking Lamps.....89
Powertrain Fault.....89
Service Engine Soon.....90
Stability Control System.....90
Stability Control System Off.....90
Transmission Tow/Haul.....90
Washer Fluid Check.....256
Washers
See: Cleaning the Exterior.....268
See: Wipers and Washers.....72
Waxing.....269
Wheel Nuts
See: Changing a Road Wheel.....300
Wheels and Tires.....276
General Information.....276
Technical Specifications.....305
Windows and Mirrors.....80
Windshield Washers.....73
Windshield Wipers.....72
Speed Dependent Wipers.....72
Wiper Blades
See: Checking the Wiper Blades.....258
Wipers and Washers.....72

Wrecker Towing
See: Transporting the Vehicle.....217

Expedition (TB7) Canada/United States of America, enUSA, Second Printing