P30, P47
Transit Familiarization

Driver Familiarization

Model Years 2024 & newer

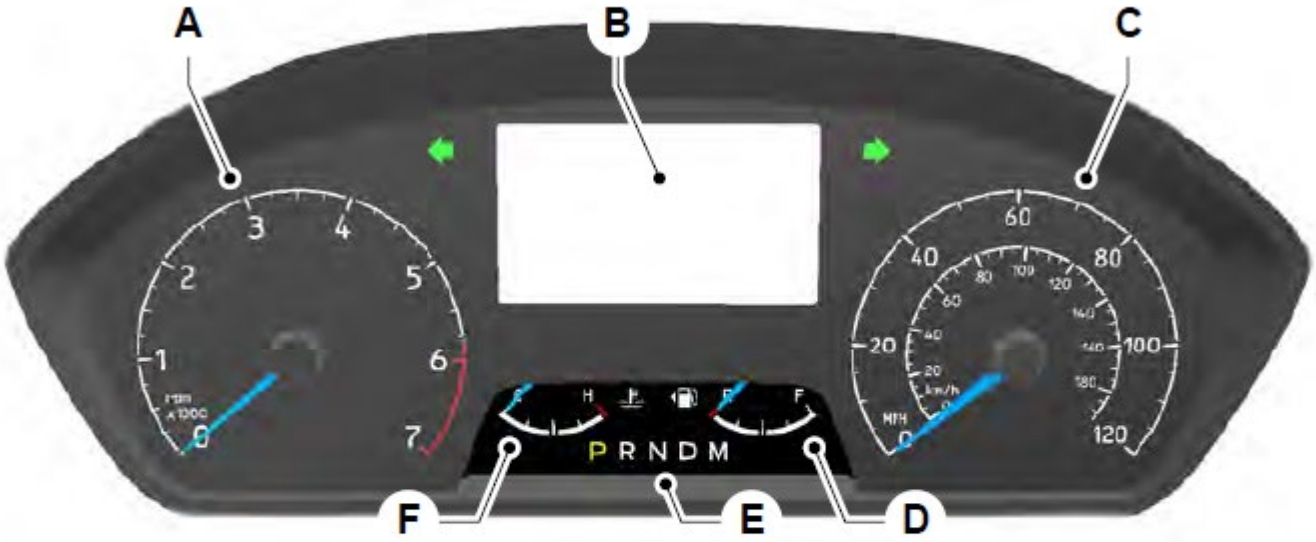
Overview

- Keyed ignition
- 3.5L PFDI V6 gas engine with 275 hp, 260 ft-lb torque
- 10-speed automatic transmission with Selectable Drive Modes
- Single Rear-wheel drive, 4.10 rear axle ratio
- 25 gallon fuel tank w/ fuel fill rearward of driver door
  - Link to video: https://www.youtube.com/watch?v=vM-EW2gDMn0
- Battery under driver's seat
  - Link to video: https://www.youtube.com/watch?v=xglmBiyTifQ

Keys

Steering Wheel

INSTRUMENT CLUSTER OVERVIEW - GASOLINE



A	Tachometer.
B	Instrument cluster display.
C	Speedometer.
D	Fuel gauge.
E	Automatic transmission position indicators.
F	Engine coolant temperature gauge.

UPS MY24 Transit Instrument Cluster Menu Options						
My View	Digital Speedometer	Radio button (on, off)	Default on			
	Fuel Economy	Radio button (on, off)	Default off			
	Calm Screen	Radio button (on, off)	Default off			
Driver Assist	Traction Control	Check box (on, off)	Default on			
	Pre-Collision Assist	Locked				
	Lane Keeping	Locked				
	Driver Alert	Locked				
	Cruise Control	Adaptive (radio button)	Default on			
		Normal (radio button)				
Phone	No Device Connected					
Settings	Information	Seatbelts				
	Display	Language	English, Spanish, French			
		Measurement units	Miles & MPG, km&L/100km, km&km/L			
		Temperature Units	F, C			
		Tire Pressure	psi, kpa			
	Driver Assist	Traction Control	Check box (on, off)	Default on		
		Pre-Collision Assist	Locked			
		Lane Keeping	Locked			
		Driver Alert	Locked			
		Cruise Control	Adaptive (radio button)	Default on		
			Normal (radio button)			
	Vehicle Settings	Chimes	Information	Checkbox (on, off)	Default on	
		Lighting	Auto High Beam	Locked		
			Autolamp Delay	Off, 10 sec, 20 sec, 120 sec	Default 20 sec	
		Locks	Autounlock	Checkbox (on, off)	Default on	
			Feedback	Audible	Checkbox (on, off)	Default on
				Exterior Lights	Checkbox (on, off)	Default on
			Mislock Chirp	Checkbox (on, off)	Default on	
			Global Unlock	Checkbox (on, off)	Default off	
			Switches Inhibit	Checkbox (on, off)	Default on	
		Remote Start	System	Checkbox (on, off)	Default on	
			Climate Control	Auto, Last Settings (radio button)	Default auto	
			Duration	5min,10min, 15 min (radio button)	Default 15 min	
		Wiper Controls	Courtesy Wipe	Checkbox (on, off)	Default off	
			Rain Sensing	Checkbox (on, off)	Default on	
	Vehicle Maintenance	Oil Life	Reset oil life	press and hold OK to reset values		
		Tire pressure	Shows tire pressures			
Trip1/2	Trip1	Radio button (on, off)				
	Reset Individual Values	Reset All Values				
		Reset Trip Odometer				
		Reset Trip Timer				
		Reset Average Fuel				
		Reset Average Speed				
	Configure View	Set to Default				
		Trip Odometer	Check box (on, off)	Default on		
		Trip Timer	Check box (on, off)	Default on		
		Average Fuel	Check box (on, off)	Default on		
		Average Speed	Check box (on, off)	Default off		
		Distance to Empty	Check box (on, off)	Default on		
		Instantaneous Fuel	Check box (on, off)	Default off		

Radio


1
2
3
4
5
6
Settings
Radio
Bluetooth
Clock
General
Display
VOL
TUNE
OK

Radio Menu Options

UPS MY24 Transit Radio Menu Options								
Settings	Radio	Radio Text	Check box (on, off)	Default on				
	Bluetooth	Bluetooth	Check box (on, off)	Default on				
		Add a Bluetooth device						
	Clock	Time						
		24h mode	Check box (on, off)	Default off				
		Date						
	General	Language	English, Espanol, Francais	Radio button (on,off)	Default English			
		Temperature unit	Fahrenheit, Celsius	Radio button (on,off)	Default F			
		Software licenses	Ford software licensing information, please visit http://www/corporate.ford.com/ford-open-source.html					
		Master reset	All user authorizations will be canceled. All user data will be erased. Your service provider subscription(s) may not be canceled at this time	Continue				
				Cancel				
	Display	Mode	Auto, Day, Night	Radio button (on,off)	Default Auto			
	Connectivity Features	Data Sharing	Fleet Telematics	Suggests options but does not advance when "Tune/OK" button pressed				
			Live Traffic	Check box (on, off)	Default off			
		Onboard modem ESN						
	Parking	Rear view camera delay	Check box (on, off)	Default off				

Adaptive Cruise Control (Model Years 2024 & newer)

When activated, Adaptive Cruise Control automatically keeps a constant speed and a preset distance from the vehicle ahead, without the driver having to work the accelerator or brake pedals. It can also resume acceleration automatically.

INCLUDED TECHNOLOGY

- Lane Centering
- Speed Sign Recognition
- Stop-and-Go

How It Works

The system helps the owner by:

- Continually measuring the preset gap distance to the vehicle in front when it is within a near range
- Automatically applying the brakes if the system detects the vehicle in front has reduced speed
- Including four Gap Distance Settings that are programmable with the gap button on the steering wheel
- Each time Adaptive Cruise Control is switched On, the gap setting will default to the last distance setting

Gap Settings

Graphic Display	Following Distance	Following Distance at 62 mph
1 bar	1 second	31 yards
2 bars	1.4 seconds	43 yards
3 bars	1.8 seconds	55 yards
4 bars	2.2 seconds	67 yards

NOTE: The gap setting is time dependent and, therefore, the distance adjusts with your vehicle speed.

Lane Centering (Model Years 2024 & newer)

Lane Centering reads lane markings to aid in keeping the vehicle within its lane. The system does not control steering and requires the driver's hands to be on the wheel at all times. It's not designed to operate on tight radius curves such as highway ramps or lanes that are abnormally wide or narrow.

Dramatization.

How It Works

To operate the Lane Centering portion of Adaptive Cruise Control:

- Use the cruise control switches/buttons to turn ON
- Accelerate to speed and press SET+
- Adjust the gap to one of four available settings by pressing GAP. Each preset gap distance appears by the number of bars in the Information Display
- Use the Lane Centering switch to turn ON. The system will warn the driver if hands are not detected on the steering wheel
- Turn the system off by pressing OFF or pressing the brake pedal, just like conventional cruise control. Full control then reverts to the driver

When using Lane Centering, keep the following points in mind:

- This is a hands-on system that will remind the driver to keep his or her hands on the wheel
- If the driver fails to put his or her hands on the steering wheel, chimes sound
- If the driver still ignores the warning, the feature cancels, a takeover warning is shown, chimes become more aggressive and the vehicle automatically slows to creep speed
- The driver must put his or her hands back on the wheel and press the RES+ button or tap the accelerator pedal to re-engage the feature and get back to Set speed

Speed Sign Recognition (Model Years 2024 & newer)

The Speed Sign Recognition feature helps your customers keep their speed at the posted limit. When driving with cruise control activated, sometimes it's easy to miss a speed limit sign and accidentally be speeding if the speed limit changes, for example on a two-lane road out in the country. Speed Sign Recognition helps the vehicle maintain the pre-set speed.

Dramatization. Previous generation vehicle shown.

How It Works

- Once the vehicle speed is set, if the system identifies a speed limit sign below the set speed, it automatically adjusts the vehicle speed accordingly and will resume to the pre-set speed once a new sign is detected
- The system can be set to maintain a speed above or below the scanned signs or disabled altogether. For example, if the Speed Sign Recognition system detects a 50 mph (80 kph) speed limit, the cruise set speed is updated to 50 mph (80 kph), unless the parameters are set above or below the detected speed limit, unless the parameters are set above or below the detected speed limit

How to Activate Speed Sign Recognition

To take advantage of this feature, the customer can activate the system through the touchscreen menu.

1. Select Settings.
2. Select Driver Assist.
3. Select Cruise Control.

Stop-and-Go (Model Years 2024 & newer)

Adaptive Cruise Control with Stop-and-Go can bring the vehicle to a complete stop and accelerate back to the preset speed within three seconds of stopping, if the vehicle in front moves forward in that time.

Dramatization.

How It Works

- Stop-and-Go keeps the vehicle at a complete stop without the driver having to press and hold the brake pedal
- If the vehicle is stopped for longer than three seconds, the driver must intervene and tap the RES+ button or press the accelerator pedal to resume system operation

NOTE: Images shown are representative. Actual screens may vary.

DRIVER-ASSIST NOTE: Driver-assist features are supplemental and do not replace the driver's attention, judgment and need to control the vehicle. It does not replace safe driving. See Owner's Manual for details and limitations.

Technician Familiarization

3.5L PFDI V6

- 275 hp, 260 ft-lb torque
- Comp Ratio - 11.8:1
- Composite upper and lower intake manifold
- Variable displacement oil pump
- Coil on plug ignition
- Flex-fuel (E85) capable
- DOHC w/ twin independent variable camshaft timing (chain)
- Die-cast aluminum block
- Piston-cooling engine oil jets help improve oil warm-up and maintain cooler piston temperatures for improved durability
- Aluminum cylinder heads have 4 valves per cylinder
- Forged-steel, fully counterweighted crankshaft
- Port Fuel (PFI) and Direct-Injection (DI) Fuel System
  - Referred to as PFDI, this dual-delivery system features two fuel injectors per cylinder
  - These injectors work together to improve power output
  - One injector located in each intake port where air enters the cylinder (Port Injection)
  - One injector located inside each combustion chamber (Direct-Injection)
  - At idle and under low-power demands, the engine operates using PFI for efficiency and emission (slow or light loads)
    - The GDI high-pressure fuel pump and injectors are turned off for less noise
  - As the demand for power increases, the engine transitions from PFI to GDI operation (merging on a freeway)
  - Under high-power demands, the engine uses GDI to increase output by precisely controlling the delivery of high-pressure fuel directly into the combustion chamber, while PFI is minimized (under heavy load or climbing a grade)

3.5L PFDI V6

- Aggressive Deceleration Fuel Shutoff (ADFSO)
  - Deactivates the fuel injectors when the vehicle is decelerating or coasting while normal engine operation is maintained, which helps promote efficiency.
  - The system is automatic and requires no interaction from the driver
  - Uses the transmission to keep the engine running at low operating levels whenever possible
  - Normal fuel delivery resumes when the vehicle reaches a low speed or when the driver accelerates
  - Excellent driveability is maintained by software that integrates this technology with powertrain operation

3.5L PFDI V6

- Fail-Safe Engine Cooling System
  - Designed to help protect the engine from potential damage due to loss of coolant, allowing the driver to travel a short distance to obtain service or reach a service facility.
  - If the engine overheats, it will switch from normal all-cylinder operation to alternating-cylinder operation
    - The non-powered cylinders act as air pumps to help cool the powered cylinders
  - The vehicle will continue to operate, but with limited engine power, and the air conditioning system will be disabled
  - Driving distance is limited by a number of factors, including vehicle load, outside temperature and road conditions

3.5L PFDI V6

- Smart Charging Alternator
  - A smart charging alternator is a standard feature that controls charging system voltage during vehicle acceleration and deceleration, helping to enhance efficiency.
  - Smart charging decreases alternator output during vehicle acceleration and increases output during vehicle braking or deceleration
    - Since there is no additional engine accessory belt load to energize the battery, less fuel is used by the engine
  - Communicates with the aggressive deceleration fuel shutoff (ADFSO) system to ensure the battery is being adequately charged

10 Speed Automatic

- Three overdrive gears and a wide 7.4:1 gear ratio span
- Integrated torque converter/turbine clutch helps reduce weight, while also reducing the packaging size of the transmission
- High-speed, one-way clutch helps deliver smooth and responsive shifting
- Engine rpm matching on coast-down shifts provides a seamless transition to lower gears — effective when cornering
- Ultra-low viscosity transmission fluid and off-axis variable-displacement pump maximize transmission performance
- Utilizes real-time adaptive shift schedule algorithms which monitor more than a dozen powertrain- and driver-control signals to help ensure the transmission is in the right gear at the right time
- Progressive Range Select allows the driver to manually lock out higher gears from the automatic transmission's shifting range
- Drive modes change the performance of electronic stability control, traction control, engine throttle response, transmission shifting and steering feel. Select the desired mode using the button on the instrument panel.
  - Normal — Balanced combination of comfort and handling for everyday driving
  - Eco — Helps deliver enhanced fuel efficiency with trade-offs in performance and comfort
  - Slippery — Designed for driving in slippery conditions
  - Tow/Haul — Improves transmission operation with trailers and heavy loads, especially over steep grades (not available on E-Transit)

Accessory Drive

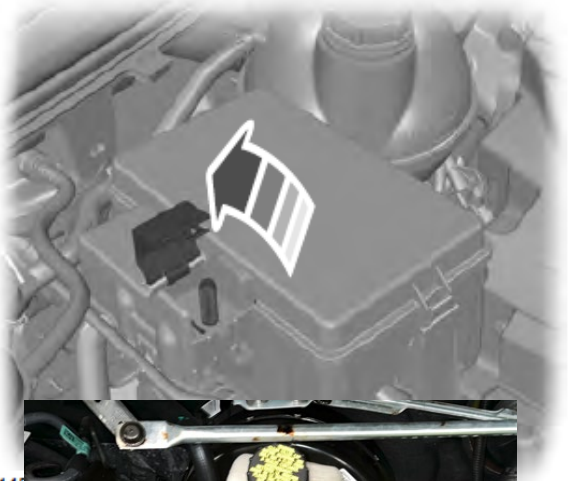
- Main drive belt has belt tensioner that can be rotated counterclockwise to remove belt
- A/C drive belt is stretchy belt that can be removed with tie wraps or special tool. Recommend watching Youtube videos.

Technician Familiarization Road Call Reference

Jump Starting - gasoline (owners manual)

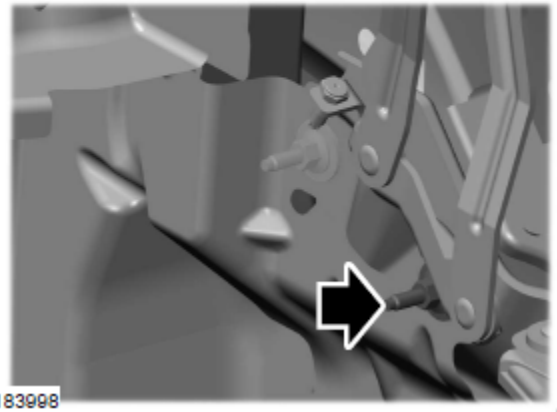
Your vehicle has a positive (+) access terminal and a negative (-) ground connection point that you can access under the hood, even though the actual battery is under the driver seat. You can jump your vehicle using these points.

The positive (+) access terminal is next to the fuse box, under a red cap. To access the positive (+) terminal, lift the red cap up.



E145

The negative (-) terminal is a post on the driver side, near the hood hinge. It is a ground connection point. You need to remove the rubber covering first.



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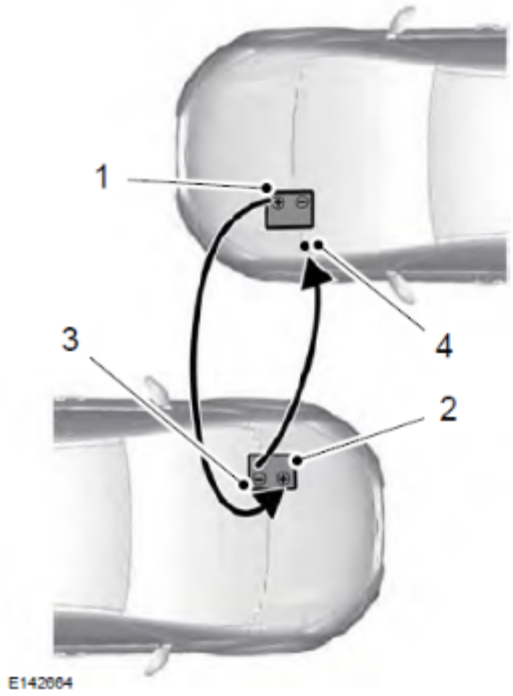
Jump Starting - gasoline (owners manual)



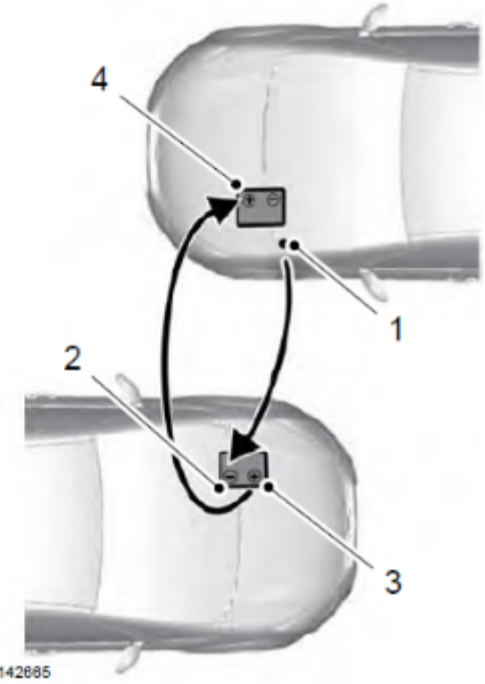
E142664

1. Connect the positive (+) jumper cable to the positive (+) access terminal of the vehicle with the discharged battery.
2. Connect the other end of the positive (+) cable to the positive (+) terminal of the assisting battery.
3. Connect the negative (-) cable to the negative (-) terminal of the assisting battery.
4. Make the final connection of the negative (-) cable to the ground connection point of the vehicle with the discharged battery.

WARNING: Do not connect the negative jumper cable to any other part of your vehicle. Use the ground point.

5. 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 rpms, as shown in your tachometer.
6. Start the engine of the disabled vehicle.
7. Once you start the disabled vehicle, run both vehicle engines for an additional three minutes before disconnecting the jumper cables.

Remove the jumper cables in the reverse order that they were connected.



E142665

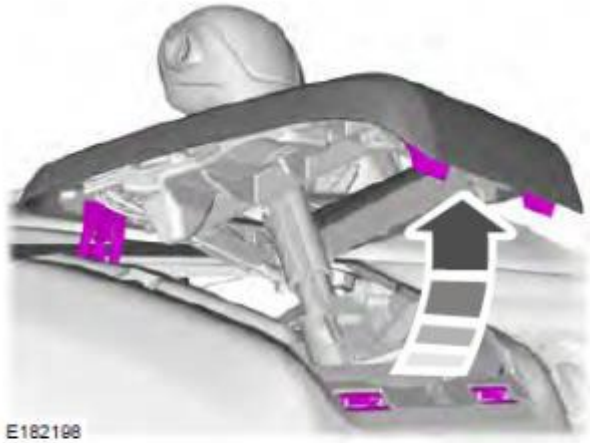
After you start the disabled vehicle and remove the jumper cables, allow your vehicle to idle for several minutes so the battery can recharge.

Shift Interlock Release (owners manual)

Use this procedure to shift your vehicle out of park (P) in the event of an electrical malfunction or emergency.

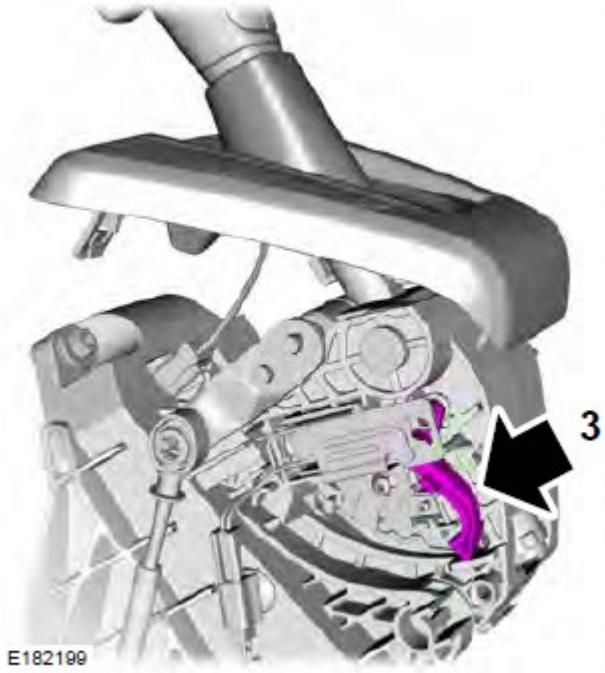
Shifting Your Vehicle Out of Park

1. Apply the parking brake.



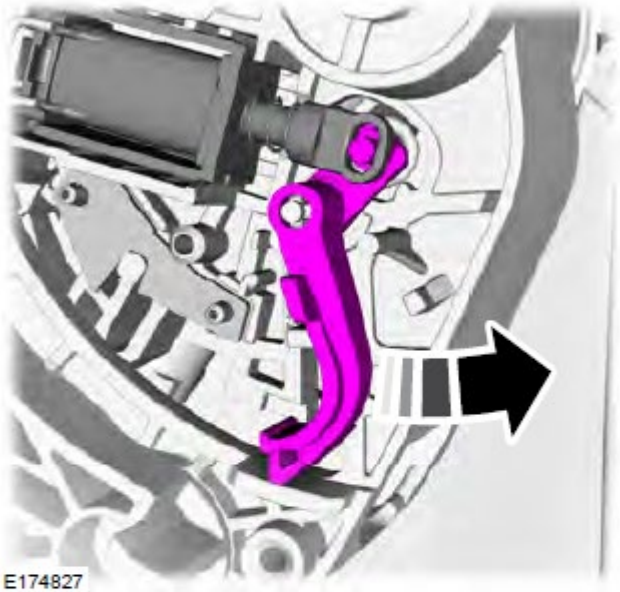
E182198

2. Remove the selector cover using using a plastic wedge or pry tool.
3. Sit in the drivers seat.
4. Press and hold the brake pedal.



E182199

5. Locate the selector override lever.



E174827

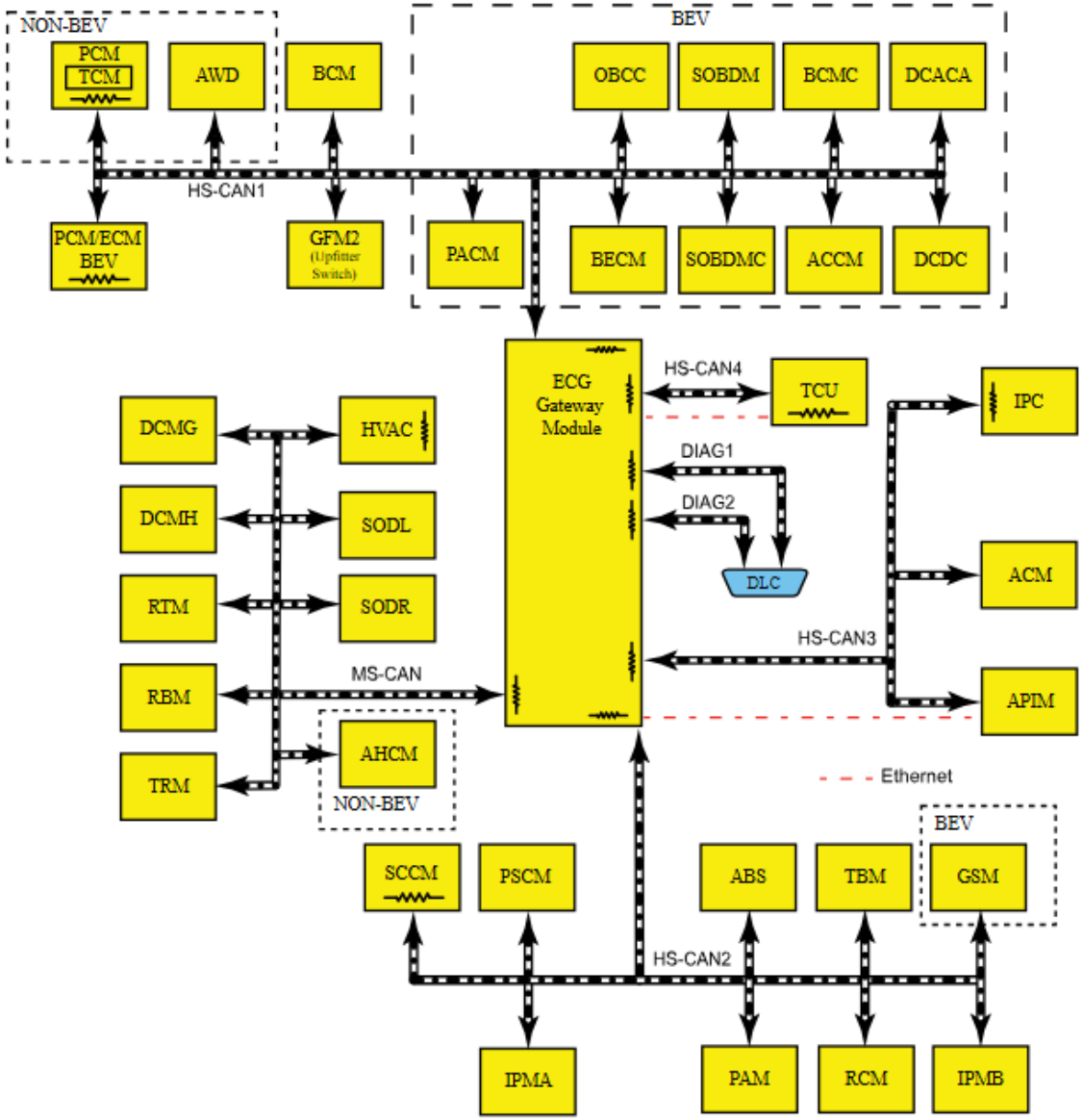
6. Push the selector override lever toward the rear of your vehicle and hold it there.
7. Shift into neutral (N).
8. Release the selector override lever.
9. Install the selector cover.
10. Release the parking brake.
11. Release the brake pedal.

Note: *Your vehicle is free to roll.*

CAN Module Communications Network

418-00B

System Diagram



CAN Module Communications Network

418-00B

Communication Message Chart **(SAMPLE ONLY BELOW. REFER TO WSM FOR FULL LIST)**

Network Message	Originating Module	Network Type	Receiving Module(s)
A/C clutch status (non-BEV only)	PCM	HS-CAN1	• GFM2 (Upfitter Switch) • GWM
A/C clutch status (non-BEV only)	GWM	HS-CAN3	• IPC
A/C clutch status (non-BEV only)	GWM	HS-CAN4	• TCU
A/C clutch status (non-BEV only)	GWM	MS-CAN	• HVAC module
ABS active	ABS module	HS-CAN2	• RCM • IPMA • PSCM (EPAS) • TBM • PAM • GWM
ABS active	GWM	HS-CAN1	• AWD module • PCM • TCM • BCM • SOBDMC

Maintenance - Transit

Published Ford interval

Interval	Service (change or replace)	Capacity	Ford P/N	UPS P/N	FLUID SPEC	Comments
Cluster	Engine Oil	12 qt			5W30	
	Engine Oil Filter		FL-500S			
20,000	Cabin air filter		FP-74			
30,000	Air Filter		FA-1916			
60,000	Spark Plugs		SP-589			
150,000	Transmission Fluid & Filter		FT-216		Motorcraft® MERCON® ULV Automatic Transmission Fluid / XT-12-QULV (WSS-M2C949-A,)	
	Rear Axle Fluid (Limited Slip)	2.15 qt			SAE 75W-85 Premium Synthetic Hypoid Gear Lubricant(U.S.) Motorcraft® Additive Friction Modifier	
	Accessory drive belt		BL3Z-8620-C Ac Dr LK4Z-8620-AA A/C belt only			
200,000	Initial Coolant (10 years)	12qt			Motorcraft Yellow Prediluted Antifreeze/Coolant VC13DLG	Initial replacement at ten years or 200,000 mi (320,000 km), then every five years or 100,000 mi (160,000 km).
3 years	Brake Fluid				DOT4	

Other Maint Parts

	Service (change or replace)	Capacity	Ford P/N	UPS P/N	FLUID SPEC	
	Battery		BAGM-48H6-760			
	Wiper blades		WW-2901-A - driver side WW-2049-A - passenger side			
	Refrigerant	30 oz			R134a	
	Refrigerant oil	3.7 oz			PAG	

PEACH STATE TRUCK CENTERS

Ford F250, Transit & E-Transit Warranty Summary

Model	Model Years	From In Service Date	Miles	Parts/Labor	Comments
All					
Base Warranty	All	36 months	36,000		
12V Battery	All	36 months	36,000		
F250 & Transit Only					
Emissions	All	60 months	50,000		
Differential	2021 and older	60 months	60,000	100%/100%	
	2022 and newer	60 months	100,000	100%/100%	EFC 09139
Transmission	2021 and older	60 months	60,000	100%/100%	
	2022 and newer	60 months	100,000	100%/100%	EFC 09139
Engine	2021 and older	60 months	60,000	100%/100%	
	2022 and newer	60 months	100,000	100%/100%	EFC 09139
E-Transit Only					
Electric Vehicle Component Coverage (from Ford esourcebook warranty coverage for EVs) High voltage battery assembly High voltage battery Bussed Electrical Center (BEC) Battery energy control module (BECM) On-board charger Inverter system controller (ISC) DC/DC converter eDrive	All	96 months	100,000	100%/100%	with retention of 70% or more of the original high-voltage battery capacity over that period