2018 WRECKER TOWING MANUAL

ABOUT THIS WRECKER TOWING MANUAL

Ford Motor Company salutes and applauds the towing industry for many fine years of service to the automotive industry. We will continue to work to provide our customers with guidelines to help assist with safe and efficient towing.

This manual contains the latest towing procedures for 2017 Ford and Lincoln vehicles. Ford Motor Company has created easy-to-follow instructions with illustrations showing the correct hook-up to help prevent damage when towing.

New body effects and aerodynamic styling require new methods of towing to reduce the possibility of damage while in-tow. Wheel lifts or flatbed equipment are required to tow Ford Motor Company vehicles. Refer to the instructions given for the specific vehicle to be towed.

NOTE, NOTICE AND WARNING

As you read through this manual, you may come across a NOTE, NOTICE or WARNING. Each one is there for a specific purpose: A NOTE calls attention to unique, additional or essential information related to the subject procedure. A NOTICE identifies a hazard that could damage the vehicle or property. A WARNING identifies a hazard to yourself or others that could result in severe injury or death.

GENERAL TOWING INFORMATION



WARNING: When working with a vehicle that has been damaged or in an accident, always proceed with caution around undeployed airbags. As a precaution the airbag system should be disabled by disconnecting the battery in a safe manner.

NOTICE: Incorrect towing of a vehicle may result in damage to components such as the transmission/transaxle, transfer case, front or rear fascia, steering/suspension and exhaust. Always follow the specified towing procedures. It is recommended that only an unloaded vehicle be towed.

NOTICE: Prior to transporting a battery electric or hybrid electric vehicle that has experienced physical damage to the body, underbody or powertrain, refer to the Towing, Recovery and Storage of Damaged Ford Motor Company Electric and Hybrid-Electric Vehicles section of this guide.

NOTICE: Ford Motor Company does not recommend the use of slingbelts or tow bars, which may cause damage to the fascia, lower body panels, air dams and/or other components.

NOTICE: Always consult the tow equipment manufacturer for specific instructions on how to operate their equipment. If a vehicle has been modified, consult the equipment modifier or supplier for the specific towing instructions.

NOTICE: When a vehicle is towed over rough pitching roads, such as a crowned road at a railroad crossing, reduce the towing speed to avoid damaging the vehicle undercarriage.

FCS-12141-18

NOTICE: Never hook a J-hook to any suspension, wheel or driveline component. Securing a vehicle using this method may cause damage to the vehicle.



SHEET 1 OF 14

December, 2017 Ver.1

2017 Wrecker Towing Manual

CPR © 2017 FORD MOTOR COMPANY DEARBORN, MICHIGAN 48121 12/2017

NOTICE: On rough pavement or whenever the tow truck operator is not sure of road surface conditions, the maximum towing speed is 55 km/h (35 mph). To prevent damage to the vehicle, it is the tow equipment operator's responsibility to evaluate and adjust to the specific towing conditions.

NOTE: When towing the vehicle, turn the ignition to the OFF position to deactivate the airbag system.

NOTE: Disabling the airbag system when towing an undamaged vehicle as instructed in this manual is not necessary. Standard towing or recovery procedures will not cause airbag deployment.

- As a general rule tow the vehicle with the drive wheels off the ground. If the vehicle is towed on its drive wheels use tow dollies as indicated by the Model-Specific Transport Guidelines in this manual.
- When a vehicle is being towed with the front wheels on the ground, lock the steering wheel into place using an approved locking device.
- Do not use the steering column ignition lock to secure the wheels.
- When a vehicle is being towed with the rear wheels on the ground, the steering wheel must not be locked and must be free to rotate.

PREPARATORY STEPS

- 1. Make sure the ignition is in the OFF position.
 - Refer to Starting And Stopping the Engine section in the Owner's Guide for details on the keyless ignition system.

NOTE: The ignition must be in the OFF position to prevent accidental airbag deployment when transporting the vehicle.

- 2. Release the parking brake.
 - For vehicles equipped with an electronic parking brake, the ignition must be turned on to release the parking brake.
 - If the battery is dead, jump start to supply power.
 - If the parking brake cannot be released, use tow dollies or manually release the electronic parking brake as follows:



MARNING: Never get under a vehicle that is supported only by a jack. The jack could unintentionally lower. Always support the vehicle with floor stands. Failure to follow these instructions may result in serious personal injury.



WARNING: Identify the correct jacking points by locating the triangle stamped into the uni-body sheet metal or vehicle frame. Raising a vehicle in any other location may result in vehicle shifting or falling. Failure to follow this instruction may result in serious personal injury.



FCS-12141-18

SHEET 2 OF 14

2017 Wrecker Towing Manual



MARNING: Only raise the vehicle when positioned on a hard, level surface. Attempting to raise the vehicle on an uneven or soft surface may result in the vehicle slipping or falling from the jack or jackstand. Failure to follow this instruction may result in serious personal injury.



WARNING: When jacking or lifting the vehicle, block all wheels remaining on the ground. Set the parking brake if the rear wheels will remain on the ground. These actions help prevent unintended vehicle movement. Failure to follow these instructions may result in serious personal injury.

NOTICE: The jack provided with the vehicle is intended to be used in an emergency for changing a deflated tire. To avoid damage to the vehicle, never use the jack to hoist the vehicle for any other purpose.

NOTICE: Do not attempt to use jack pressure on either the front bumper or the rear bumper on any vehicle. Damage to bumper covers will occur.

- a. Block the front wheels.
- b. Disconnect the electrical connector at the rear brake caliper.
- c. Remove the two 5 mm hex screws retaining the parking brake actuator motor.
- d. Twist the parking brake actuator motor to remove it from the rear brake caliper.
- e. Rotate the exposed ball screw driveshaft clockwise 120°.
- f. Repeat on other side.
- 3. Place the transmission/transaxle in N (Neutral).
 - All Ford and Lincoln vehicles incorporate a brake-shift interlock feature that prevents shifting from P (PARK) unless the ignition is in the ON/ACC position and the brake pedal is pressed.
 - Set the parking brake or block the wheels to prevent the vehicle from moving.

NOTE: If the battery is dead, jump start the vehicle to supply power.

For vehicles with a key:

- a. Press the brake pedal.
- b. Turn the key to the ON (II) position.
- c. Shift the transmission to the N position.
- d. Turn the ignition to the OFF position.

For vehicles with push button start:

- a. With the brake not pressed, press the start/stop button. This turns the ignition ON.
- b. Press the brake pedal.
- c. Shift the vehicle to N.
- d. Release the brake pedal.
- e. Press the start/stop button to turn the ignition OFF.

NOTE: If the gearshift lever cannot be moved out of P with the ignition in the ON/ACC position and the brake pedal pressed, refer to brake-shift interlock in the Transmission section of the Owner's Guide.



FCS-12141-18

SHEET 3 OF 14

FLATBED

- 1. When winching the vehicle onto the flatbed, care must be taken to avoid damaging the fascia, bumper, lower body panels and/or air dams.
 - · Refer to the Model-Specific Transport Guidelines in this manual for winching locations.
 - Ramps or wooden blocks may be needed to gain enough clearance to winch the vehicle onto the flatbed.
 - It may be necessary to cover the cable or chain with a rag to prevent damage to the fascia.
 - Crossbeam/spacer blocks may be used to keep the cable from coming in contact with the air deflector

2. To secure the vehicle:

- Use a T-hook inserted in the appropriate tie-down slot as indicated in the Model-Specific Transport Guidelines in this manual.
- 8-point basket or tire/wheel straps may also be used on select vehicles as indicated in the Model-Specific Transport Guidelines in this manual.
- o The rated capacity must equal or exceed the vehicle weight at each tire.
- o After installation always inspect the strap on the backside of the tire to make sure it is not contacting any brake, steering or suspension components.
- Ford Motor Company does not recommend or approve securing a vehicle through the wheel or wheel spoke.
- On vehicles equipped with an air suspension system, the air suspension service switch must be turned off prior to the vehicle being tied down. Refer to the Owner's Guide for the switch location.

WHEEL LIFT

- Position dollies under the wheels if a distance of 80 km (50 mi), a speed of 55 km/h (35 mph) is to be exceeded, or when the vehicle is towed with the drive wheels toward the rear.
- Refer to the tow dolly manufacturer for equipment speed and weight limitations.
- Refer to the Model-Specific Transport Guidelines in this manual for safety chain slot locations.
- Secure the vehicle to the wheel lift crossbar using safety chains equipped with T-hooks or safety
 hooks to prevent excessive jounce travel of the suspension which may cause damage to the
 underbody.
- Make sure there is no slack in the safety chain between the vehicle and the crossbar.



FCS-12141-18

SHEET 4 OF 14

TOWING SPEEDS AND DISTANCE

- Refer to the Model-Specific Transport Guidelines towing speed and distance limitations in this manual.
- Refer to the tow dolly manufacturer for speed and weight limitations.
- Towing speed should not exceed 80 km/h (50 mph).
- On rough pavement, the maximum towing speed is 55 km/h (35 mph).

TOWING FOUR-WHEEL DRIVE VEHICLES



WARNING: Shifting the transfer case to its neutral position for neutral flat towing may allow the vehicle to roll even if the transmission is in Park (P). Make sure the brake is pressed and the vehicle is in a secure and safe position while the transfer case is being shifted to its neutral position. Failure to follow this instruction may result in serious personal injury.

ELECTRONIC SHIFT TRANSFER CASE WITH 2H/4H/4L SWITCH SELECTION POSITIONS - Rear Wheel Lift Towing Only

- 1. Place automatic transmission in PARK or manual transmission in 1st gear.
- 2. Shift the transfer case into 2H.
 - With the ignition in the ON position, both the 4x4 HI and the LOW RANGE indicators will be off.
 - If the battery is dead, jump start the battery to supply power. Verify the indicator lights are off.
- 3. On F-Super Duty vehicles, set the manual locking hubs to the AUTO position.
 - Verify the hubs are unlocked by manually rotating the driveshaft. It should turn freely.
 - Use dollies if the hubs do not unlock.
- 4. Refer to the Model-Specific Transport Guidelines in this manual for detailed towing guidelines.

ELECTRONIC SHIFT TRANSFER CASE WITH 2H/4A/4H/4L SWITCH SELECTION POSITIONS - For Front Or Rear Wheel Lift

- 1. Turn the ignition to the ON position. Do not start the engine.
- 2. Press and hold the brake pedal.



FCS-12141-18

SHEET 5 OF 14

- 3. Shift the mode select switch to 2H.
- 4. Shift the transmission to N (Neutral).
- 5. Rotate the mode select switch from 2H to 4L and back to 2H five (5) times within 7 seconds.
 - If completed successfully, the instrument panel will display Neutral Tow Leave In N or Neutral Tow Enabled Leave Transmission In Neutral, indicating the vehicle is safe to tow with either the front or rear wheels on the ground.
 - If the message is not displayed, the entire procedure must be performed again.
 - An audible noise may be heard as the transfer case shifts into neutral, this is normal operation.
- 6. Leave the transmission in neutral 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 neutral).
 - The key must be left in the ignition while towing.
 - To lock and unlock the vehicle, use the keyless entry keypad or the extra set of keys.
- 7. Release the brake pedal.

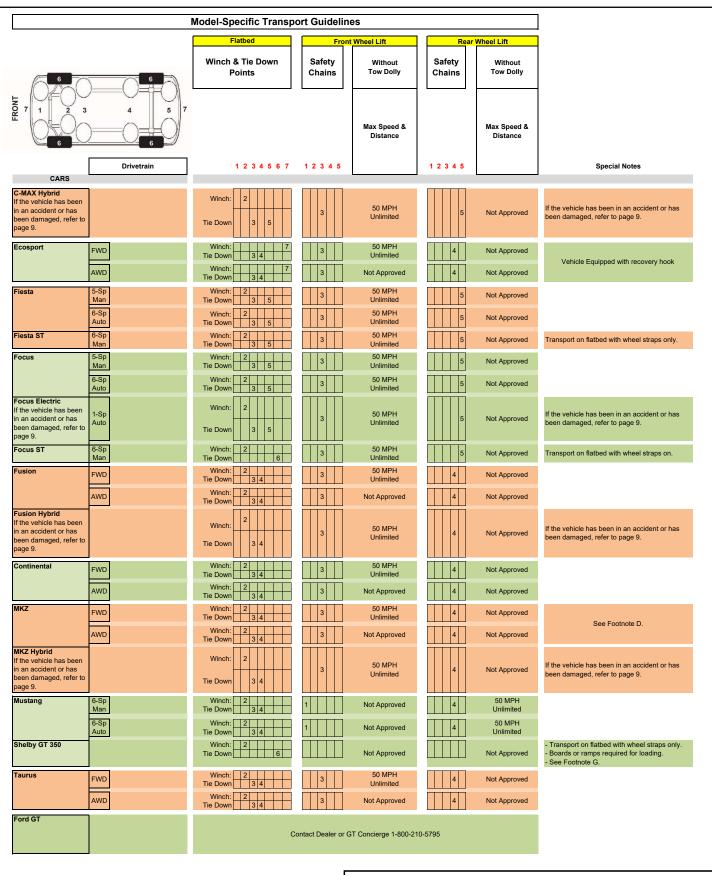
LEVER-OPERATED TRANSFER CASE - For Front Or Rear Wheel Lift

- 1. Place the automatic transmission in PARK or the manual transmission in 1st gear.
- 2. Place the transfer case in N (Neutral).
 - The N (Neutral) setting is located between 4H and 4L.
 - To select N (Neutral), move the lever slightly to the left and rear of the 4H position.
- 3. With the ignition in the ON position, both the 4x4 and LOW RANGE indicators will be OFF when the transfer case is in neutral.
 - If the battery is dead, jump start the battery to supply power. Verify the indicator lights are
 off.
- 4. Set the manual locking hubs to the FREE position.
 - · Verify the hubs are unlocked by manually rotating the driveshaft. It should turn freely.
 - Use dollies if the hubs do not unlock.
- 5. Refer to the Model-Specific Transport Guidelines in this manual for detailed towing guidelines.



FCS-12141-18

SHEET 6 OF 14





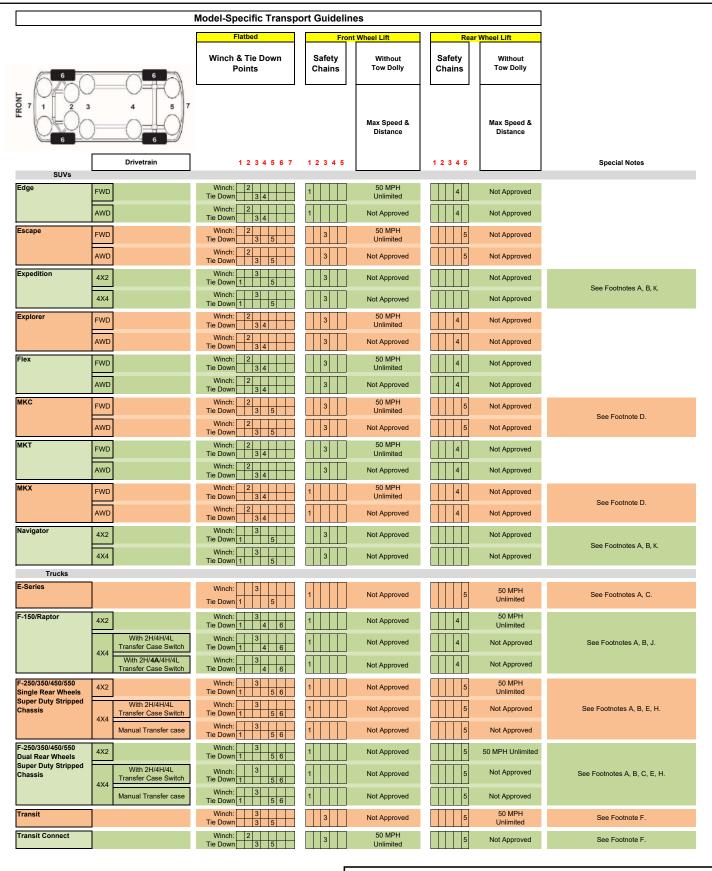
FCS-12141-18

SHEET 7 OF 14

2017 Wrecker Towing Manual

December, 2017 Ver.1

CPR © 2017 FORD MOTOR COMPANY DEARBORN, MICHIGAN 48121 12/2017





CPR © 2017 FORD MOTOR COMPANY DEARBORN, MICHIGAN 48121 12/2017

FCS-12141-18

SHEET 8 OF 14

2017 Wrecker Towing Manual

TOWING, RECOVERY AND STORAGE OF DAMAGED FORD MOTOR COMPANY ELECTRIC AND HYBRID - Electric Vehicles

For questions contact Ford USA 1-800-392-3673 / Ford Canada 1-800-565-3673

In the event of damage or fire involving an Electric Vehicle (EV) or Hybrid-Electric Vehicle (HEV):

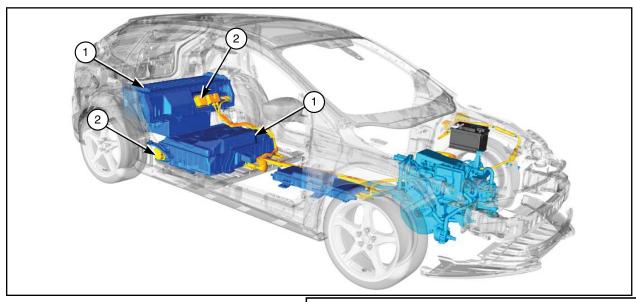
- Always assume the high voltage (HV) battery and associated components are energized and fully charged.
- Exposed electrical components, orange HV cables/wires and HV batteries present potential HV shock hazards.
- Venting/off-gassing of HV lithium ion battery vapors are potentially toxic and flammable.
- There is a potential for delayed fire or delayed release of toxic and/or flammable gases with lithium-ion batteries.

Vehicle Shutdown and HV System Disabling

- Advise your dispatcher and all other responders that an electric or hybrid-electric vehicle is involved.
- Always approach the vehicle from the sides to stay out of potential travel path. It may be difficult to determine if the vehicle is running due to lack of engine noise.
- Place the vehicle into P (Park), set the parking brake, turn the vehicle off, activate hazard lights, and remove keys to a distance at least 16 feet from the vehicle until loading the vehicle for transport.
- If you detect leaking fluids, sparks, smoke, flames, increased temperature, gurgling, popping or hissing noises from the HV battery compartment, ventilate the passenger area and call 911.

Focus Electric Battery and High Voltage Service Disconnect Locations

- 1. High voltage batteries.
- 2. High voltage service disconnects.





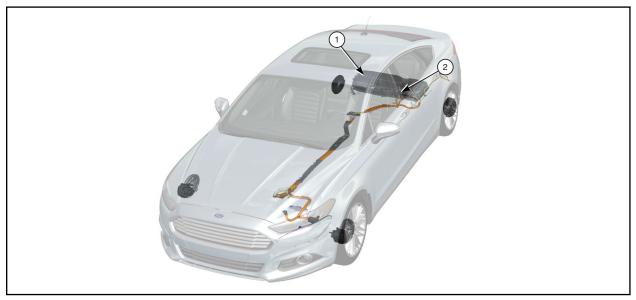
CPR © 2017 FORD MOTOR COMPANY DEARBORN, MICHIGAN 48121 12/2017 FCS-12141-18

SHEET 9 OF 14

2017 Wrecker Towing Manual

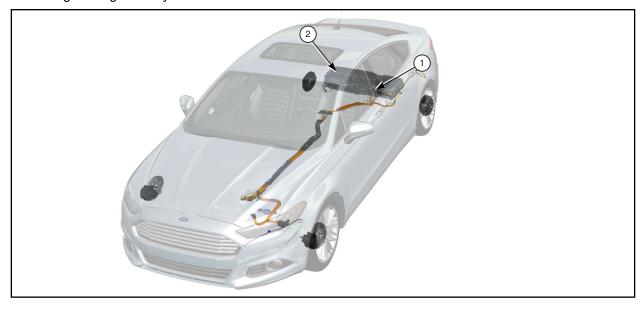
Fusion PHEV Hybrid Battery and High Voltage Service Disconnect Locations

- 1. High voltage battery.
- 2. High voltage service disconnect.



Fusion/MKZ Hybrid Battery and High Voltage Service Disconnect Locations

- 1. High voltage service disconnect.
- 2. High voltage battery.





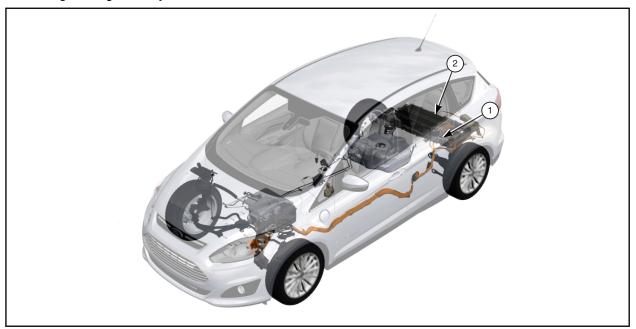
FCS-12141-18

SHEET 10 OF 14

2017 Wrecker Towing Manual

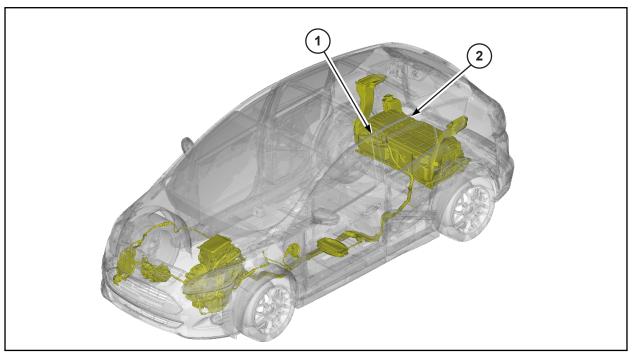
C-Max Hybrid Battery and High Voltage Service Disconnect Locations

- 1. High voltage service disconnect.
- 2. High voltage battery.



C-Max Hybrid PHEV Energi Battery and High Voltage Service Disconnect Locations

- 1. High voltage service disconnect.
- 2. High voltage battery.





CPR © 2017 FORD MOTOR COMPANY DEARBORN, MICHIGAN 48121 12/2017 FCS-12141-18

SHEET 11 OF 14

2017 Wrecker Towing Manual

Storing Hybrid and Electric Vehicles

- If the HV battery is confirmed or suspected of being physically damaged, notify Ford USA 1-800-392-3673 or Ford Canada 1-800-565-3673 as there may be additional steps necessary to secure, discharge, handle, and/or store the HV battery and vehicle.
- Do not store a severely damaged vehicle with a lithium-ion battery inside a structure or within 50 feet (15m) of any structure or vehicle.
- Make sure that passenger and cargo compartments remain ventilated.
- Prior to placing and while located in storage area/tow lot, continue to inspect vehicle for leaking fluids, sparks, smoke, flames, gurgling or bubbling sounds from the HV battery and call 911 if any of these are detected.
- Maintain clear access to stored vehicles for monitoring and emergency response if needed.

For specific information and safety preparation regarding the HV system, refer to **WWW.MOTORCRAFTSERVICE.COM**, select quick guides for the appropriate vehicle emergency response guide.

Transport-Guideline Footnotes

A	Remove the driveshaft for flat towing and for front wheel-lift towing without a rear dolly. Always mark the location of the driveshaft to the attaching flange before removal so the driveshaft can be correctly indexed upon installation. Replace driveshaft attachment bolts with OEM bolts or bolts with threadlocking compound added to the original bolts. When towing without a dolly, refer to Page 5 for transfer case gear/range selection requirements.	G	FLATBED STACKED 4X4
С	Rear wheel lift towing may require a medium duty wrecker to accommodate the width of the dual rear wheels.		CROSSBEAM/SPACER BLOCKS MATERIAL - CROSSBEAMS AMERICAL - CROSSBEAMS
D	Push Button Shift Procedure: 1. Engage the parking brake or block wheels. 2. Press and hold the override button in the center console using a tool. 3. While holding, press any non-park gearshift button. 4. Shift the transmission to N (Neutral). The electronic shifter requires 6.5 volts to operate.	н	ONE 4x4x460" LONG - ONE 4x4x48" LONG for F-Super Duty SECTION A SPACER BLOCKS CAN BE FABRICATED AS SHOWN. MATERIAL-SPACER BLOCKS FOUR- 2x4x80" LONG BERTT - 1/4" "WASHER SECTION A SEC
E	If the electronic shifter is inoperative, disconnect the shift cable and manually shift to N. Reconnect the shift cable and place in P (Park) upon arrival. When loading a vehicle on a flatbed, crossbeam/ spacer blocks must be used to keep the cable from coming in contact with the chin spoiler. The crossbeam/spacer blocks can be held in place on the frame using bungee cords.	J	V STRAP-FORGED CLUSTER HOOKS
F	Transit: For Rear Wheel Drive (RWD), the driveshaft must be removed to tow with the rear wheels on the ground (see footnote A). For the Front Wheel Drive (FWD), towing with the front wheels on the ground is not approved.		SPACER BLOCKS CAN BE FABRICATED AS SHOWN. MATERIAL-SPACER BLOCKS FOUR-2448F-1049 TWO-2448-172 LONG HIGHT-1/44-WASHER SECTION A SECTION A

FCS-12141-18



2017 Wrecker Towing Manual

December, 2017 Ver.1

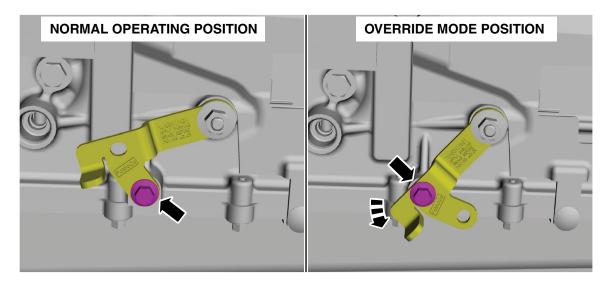
SHEET 12 OF 14

CPR © 2017 FORD MOTOR COMPANY DEARBORN, MICHIGAN 48121 12/2017

Transport-Guideline Footnotes (Continued)

To transport your vehicle it may be necessary to put the transmission in the MANUAL PARK OVERRIDE position, using the release lever on the side of the transmission. IN MANUAL PARK OVERRIDE THE VEHICLE IS FREE TO MOVE AND PARK CAN NOT BE ENGAGED. SECURE VEHICLE PRIOR TO MANUALLY OVERRIDING PARK.

- 1. Block wheels to prevent vehicle movement.
- 2. Remove bolt from manual override lever.
- 3. Move lever from Normal to Override position.
- 4. Re-install bolt and torque to 20Nm (bolt can be reused once).
- 5. Move vehicle as required.
- 6. Block wheels to prevent vehicle movement.
- 7. Remove bolt from manual park override lever.
- 8. Move lever from Override to Normal position.
- 9. Install new bolt and torque to 20Nm (lever must be secured with a fastener).





12/2017

FCS-12141-18

SHEET 13 OF 14

2017 Wrecker Towing Manual

Transport-Guideline Footnote "K" (Continued)

K

To assist in maneuvering the vehicle it may be possible to achieve Neutral Hold temporarily (without changing the transmission Manual Park Override position) with sufficient battery power. In this mode the vehicle is free to move. Secure vehicle prior to entering this mode. To enter **Stay in Neutral - No Start** follow the steps below:

Stay in Neutral Mode - No Start

- 1. With the brake not pressed, press the start/stop button.
- 2. Step on brake pedal (keep brakes on through Step 6).
- 3. Press the accelerator pedal to the floor (hold through Step 6).
- 4. Rotate the gear selector to Neutral (N) and press the manual (M) button. For Lincoln vehicles with a push button gear select module press N twice.
- 5. Press then release the push to start button (transmission needs minimum of 2 seconds to exit park).
- 6. When N (neutral) is displayed the brake and accelerator pedals can be released.
- 7. To exit Stay in Neutral Mode No Start, select a different gear.

Required: Do not tow your vehicle in this mode.

NOTE: Stay in neutral mode is a temporary vehicle state with the ignition off. Once in this mode, sufficient battery voltage must be maintained or your vehicle returns to park. **Do not tow your vehicle in this mode.**



FCS-12141-18

SHEET 14 OF 14

2017 Wrecker Towing Manual