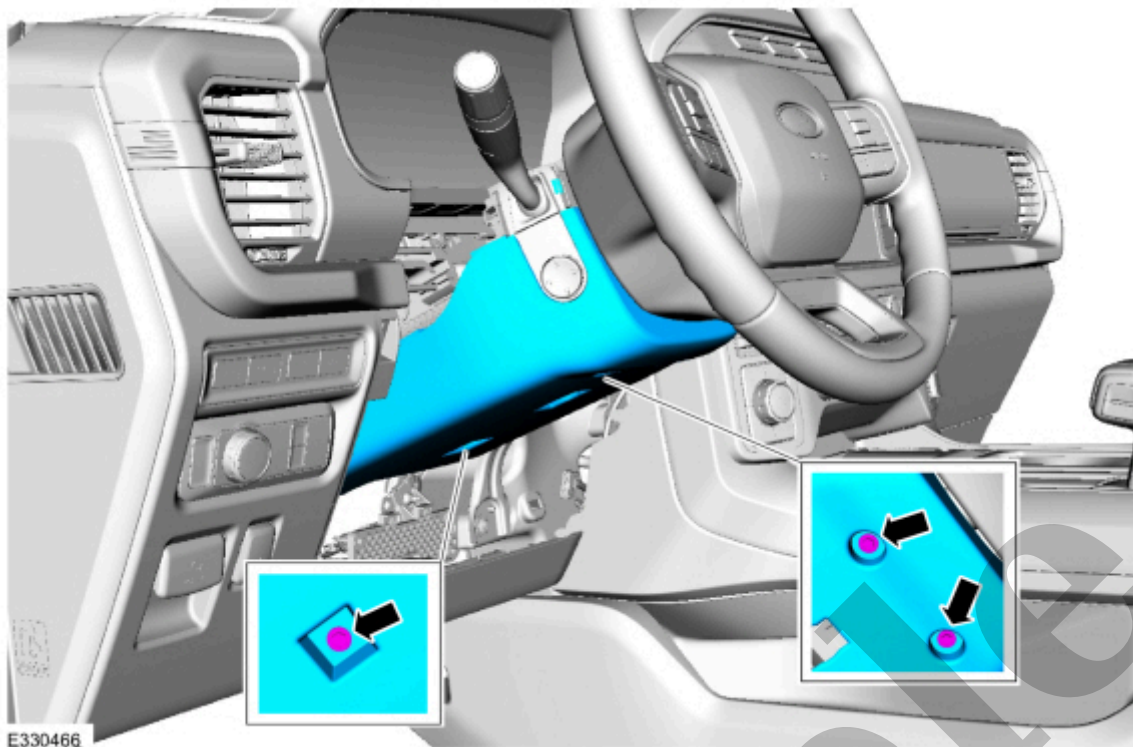


# Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

## 2018 FORD F-150 Regular Cab OEM Service and Repair Workshop Manual

[Go to manual page](#)



[Click here to learn about symbols, color coding, and icons used in this manual.](#)

## Installation

1. To install, reverse the removal procedure.

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4. **NOTICE**

To avoid paint failure, do not allow the product to dry on the vehicle.

**NOTE**

Use a separate clean twisted lambs wool wash mitt for each product applied to the vehicle. Rinse frequently to remove any particles trapped in the fibers.

Working quickly and beginning at the top of the vehicle and working to the sides, apply the neutralizer mix to the entire vehicle. Keep the vehicle wet with the solution and lightly agitate for 5 to 7 minutes. Continue around the vehicle 4 to 5 times. For severe conditions, work the product for up to 8 minutes.

5. Rinse the vehicle completely with cold water to remove the product.

6. Dry only the horizontal surfaces of the vehicle, do not dry the glass at this time.

7. **NOTICE**

To avoid damage to the paint surface, do not apply the alkaline neutralizer directly to the vehicle plastic trim.

**NOTE**

Use a separate clean twisted lambs wool wash mitt for each product applied to the vehicle. Rinse frequently to remove any particles trapped in the fibers.

**NOTE**

Alkaline neutralizer is a ready-to-use product. Do not mix with water.

Pour the alkaline neutralizer into a squirt bottle and apply the solution to a clean closed-loop wash mitt.

**Material** : Motorcraft® Alkaline Neutralizer / ZC-2-A

8. **NOTICE**

To avoid paint failure, do not allow the alkaline neutralizer to dry on the vehicle.

16. Using a locally available car wash soap, wash and dry the vehicle.

## Repair

### NOTE

Refinishing - Manufacturing Damage

#### 1. WARNING

Before beginning any service procedure in this manual, refer to health and safety warnings in section 100-00 General Information. Failure to follow this instruction may result in serious personal injury.

Refer to: [Body Repair Health and Safety and General Precautions](#) (100-00 General Information, Description and Operation).

2. Wash the repair area with pH-neutral soap and water.
3. Remove any trim, emblems and hardware from the area to be repaired.

#### 4. NOTE

All delamination must be removed.

Sand or media blast the damaged surface, keeping the repair area as minimal as possible.

5. Treat any bare metal surface to prevent flash corrosion, and prime and block sand as necessary prior to refinishing.
6. Mask the adjacent panels to protect from overspray.
7. Spot repair the base coat as necessary, following the paint manufacturer's prescribed procedures.
8. Following the paint manufacturer's prescribed procedure, apply clear coat to the entire panel.
9. Reapply any trim, emblems and hardware previously removed from the repair area.

### **Styleside pickup beds:**

- come standard with 4 pickup bed tie-down hooks.

### **The tailgate assembly consists of:**

- tailgate.
- tailgate hinges.
- tailgate support cables.
- torsion rod.
- tailgate damper (if equipped).
- tailgate step (if equipped).
- tailgate step handle (if equipped).
- rear view camera (if equipped).
- power locking tailgate latch release (if equipped).

For power locking tailgate latch release diagnosis,

For additional information, refer to: [Locks, Latches and Entry Systems](#)

(501-14 Handles, Locks, Latches and Entry Systems, Diagnosis and Testing).

### **Tailgate Step Binding**

Binding can consist of any of the three conditions:

- Increased operational effort and/or inability to open or close the tailgate step after button deployment.
- Increased operational effort and/or inability to open or close the tailgate step during normal operation.
- When fully extended the tailgate step won't drop down or won't slide back into the tailgate from the drop down position without excessive effort.

Should any of these conditions exist:

For additional information, refer to: [Tailgate Step Adjustment](#)

(501-04 Pickup Bed and Platform Body, General Procedures).

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3	Power tailgate latch RH (right-hand)
4	Power tailgate latch LH (left-hand)

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Sample



# Power Tailgate - System Operation and Component Description

<i>501-04 Pickup Bed and Platform Body</i>	<i>2022 F-150</i>
<i>Description and Operation</i>	<i>Procedure revision date: 09/1/2021</i>

## Power Tailgate - System Operation and Component Description

System Operation

System Diagram

2	Exterior Power Tailgate Release Switch
3	Power Tailgate Step
4	Front Power (Instrument Panel) Tailgate Release Switch
5	Passive Key
6	BCM (body control module)
7	RTM (radio transceiver module)
8	GWM (gateway module A)
9	APIM (SYNC module)
10	GWM (gateway module A)
11	IPC (instrument panel cluster)
12	RGTM (rear gate trunk module)
13	Electromagnetic Clutch
14	Motor
15	Power Tailgate Motor
16	Latch/Cinch Switches
17	Cinch Motor
18	Release Motor
19	Power Tailgate Latch LH (left-hand)
20	Latch/Cinch Switches
21	Cinch Motor
22	Release Motor



Power tailgate chime request	IPC (instrument panel cluster)	Used by the IPC (instrument panel cluster) to sound the power tailgate chime.
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## Power Tailgate

### Power Open

The power tailgate power open operation begins when:

- the RGTM (rear gate trunk module) detects the front power tailgate switch is activated.
- the RGTM (rear gate trunk module) detects the rear exterior tailgate release switch is activated.
- the RGTM (rear gate trunk module) receives a message from the BCM (body control module) (indicating a request from a programmed RKE (remote keyless entry) transmitter).

Once the RGTM (rear gate trunk module) receives an open request, the power tailgate opens by carrying out the following:

- The RGTM (rear gate trunk module) checks the gear selector lever position and vehicle speed status from the messages received.
- The RGTM (rear gate trunk module) disables the power tailgate feature under the following condition.
  - If the gear selector lever not in Park position.
  - If the vehicle speed is greater than 4km/h.
- The RGTM (rear gate trunk module) supplies power to the unlatch motors, releasing the tailgate latches.
- The RGTM (rear gate trunk module) monitors the tailgate ajar state (upon power release, latch pawl switch closes, and forkbolt primary switch opens to indicate latch is fully released from striker).
- When the RGTM (rear gate trunk module) detects the power tailgate latches are fully unlatched, it supplies power to the drive motor, opening the power tailgate.
- While the power tailgate is opening, the RGTM (rear gate trunk module) monitors the tailgate motor position sensor for tailgate position and velocity. If an obstruction is detected, the RGTM (rear gate trunk module) stops and reverses the tailgate motor.
- When the power tailgate reaches the full open position, the RGTM (rear gate trunk module) removes the power from the drive motor.

If any of the power tailgate switches is activated or a double press of the button on a RKE (remote keyless entry) transmitter occurs during a power open, the tailgate stops and reverses the direction. The tailgate does

home switches indicates a start position. If any of the power tailgate switches are activated or the button on the RKE (remote keyless entry) transmitter is double pressed during a power close, the tailgate stops and reverses its direction.

- If any of the power tailgate switches are activated or the button on the RKE (remote keyless entry) transmitter is double pressed during a power open, the tailgate will reverse close from any gate position greater than 15° open. All user inputs are ignored when the gate is less than 15° open and power opening.

If any of the power tailgate switches are activated or the button on the RKE (remote keyless entry) transmitter is double pressed during a power close, the tailgate stops and reverses its direction.

#### NOTE

The power tailgate may not operate correctly under the following conditions:

- Excessive weight (such as snow or ice) is present on the tailgate.
- A low voltage or drained battery.
- A disconnected battery.

#### Lift-to-Close

The tailgate will close automatically if the tailgate is lifted by approximately 10° and held for a few seconds. The power tailgate motor will take over and complete the tailgate close operation.

#### NOTE

If the tailgate position is more than halfway between open and close, it may not close automatically.

#### NOTE

The RGTM monitors the tailgate step position and the power tailgate function will not work for at least 30 seconds if the tailgate step is deployed.

#### Manual Mode

The power tailgate feature can be put into manual mode by accessing the vehicle settings using the touchscreen. The tailgate can be operated using the exterior tailgate release switch in the manual mode. If the front power tailgate switch is pressed in the manual mode, a "Manual Mode Alert" is flashed in the message center.

#### Power Tailgate Chime