POWER TAILGATES

General Application

2016-2019 Ford Edge

Issues

N/A

Kit Contents

Item #	Component Description
1	Strut Bar Right
2	Strut Bar Left
3	Control Box
4	Unlock Box
5	Front Button
6	Rear Button
7	Buzzer
8	Main Power Harness
9	Power Supply Harness
10	Unlock Box Harness
11	OE Switch / Latch Harness
12	Rear Button Harness
13	OBD2 Harness
14	Guides - Owner's
15	Left brackets (2016)
16	Right bracket

Installation Kit Contents

Item #	Component Description	
1	16mm Drill Bit	
2	Plastic Wire Ties	
3	Control Box Mounting Plate	
4	(2) - 10mm Nuts	
5	Warning Stickers / Switch Template	

Recommended Tools:

Safety Tools		
Seat / Floor Covers	Blankets	
Safety Glasses	Gloves	

Legend

STOP	STOP: Damage to the vehicle may occur. Do not Proceed until process has been completed.
4	Operator Safety: Use caution to avoid risk of injury.
!	Critical Process: Proceed with caution to ensure a quality installation. These Points will be audited on a completed vehicle installation.
9	Tools & Equipment: This calls out specific tools and equipment required for this process.
	Revision Mark: This mark highlights a change in installation with respect to previous issue.

Precaution / Installation Notes:

- After Safety mandated preparatory steps have been taken, the installation sequence is the suggested method for completing the accessory installation.
- When prying panels, use masking tape on all surfaces that a tool may come in contact with to prevent marring.
- After a wire tie is fully fastened, cleanly cut excess wire tie length with a pair of wire cutters.
- The wiring information is on an "as is" basis without any representation or warranty. It is the installer's responsibility to verify any circuit before interfacing with it using a digital multimeter.
- Manufacturer's service documents can be used for any vehicle disassembly that may be depicted differently from what the instruction states.
- To ensure safety and normal usage of the lift gate, please let a professional complete the install. Do not dismantle the lift gate product, may cause damage to vehicle.
- Start engine before installation; check dashboard display function, check button operation, and check for scratches or damage to exterior and interior. Report any issues immediately.
- Check whether the Tailgate can normally open and close. Check that interior lights are working with tailgate operation.
- Do not change any wires with engine ON.

Installation Tools		
NRT - Nylon Removal Tool	Ratchet	
T-40 Torx	Drill	
10mm Socket	Side Cutters	
7mm Socket	Dremel Tool	

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Disconnecting the battery prior to any ground or harness removal / tapping to prevent possible vehicle damage is recommended. The battery may be temporarily reconnected and disconnected throughout the installation process to perform various tasks. However, prior to doing so all connectors and harnesses must be reassembled and reconnected. Once tasks are completed disconnect battery until installation is complete and Electric Tailgate system is ready to be tested. After testing, the vehicles interior may be re-assembled. Disconnecting the battery may cause certain vehicle settings to be lost. Manufacturer's recommendations for the battery removal should be followed.

A. Pre-Installation Precaution and Preparation

- 1. 2016-2019 Ford Edge. (Figure A1)
- 2. Familiarize yourself with the installation instructions. Inspect kit components to verify everything is present, there is no damage, and to familiarize yourself with the parts.
- 3. Use Seat and Floor protectors to avoid damage to vehicle surfaces.
- B. Disassemble Vehicle Trim



- Starting with the center panel and moving from right to left, Use a Nylon Removal Tool (NRT) to remove the Upper Trim Panel. (Figure B1).
- 2. Locate the Tailgate Handle. (Figure B2)
- 3. Use an NRT to remore cover of tailgate handle. Exposing two 7mm screws
- 4. Using a 7 mm socket remove two 7mm screws in each side of handle. (Figure B3)

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Figure A1



Figure B1



Figure B2



Figure B3









5. Remove the left and right middle trim panels Figure from the tailgate. (Figure B4)







Starting on the right, use the NRT to release the plastic clips in the lower tailgate panel. (Figure B5)

Figure B5





7. Remove lower tailgate panel and set aside.

Figure В6





8. Remove rear driver side panels, upper or lower depending on preference of harness routing. (Figure B6)

Figure B7





9. Remove the door sill panel from the front and rear driver side door. (Figure B7)



NOTE: To perform this process the installer



STOP



must have a second person to hold the tailgate up or jack stand to hold tailgate in place.

11. Using a small hook tool, release the retaining clips on the upper strut mounts. Do not remove the clip completely. Wedging the hook tool between the clip and the strut should allow removal of the strut. Repeat for lower clip as well. (Figure B10 a-b)

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Figure B₁0a



Figure B10b



12. Repeat Step 11 above on the opposite strut. (Figure B11)





Figure C1



C. Power Strut Installation



- 1. Using a T40 Torx bit remove the right factory lower strut mount bracket.
- 2. Using the original screws, install new lower strut mount bracket labled R on right side. (Figure C1)

3. Install Right power strut onto vehicle.

NOTE: The strut should be installed with
the power cable end pointed to the vehicle's
tailgate. (Figure C2)

Figure C2



4. Locate and remove the factory rubber grommet approximately 2" above the upper factory ball mount. (Figure C3)

Figure C3



- 5. Using a long wire tie or fish tape, route the motor power cable though the hole to the inside of the tailgate. (Figure C4)
- 6. Insert the new grommet and pull remaining wire into the tailgate. Make sure the excess wire does not interfere with the closing of the tailgate. (Figure C4)

Figure C4





5. Repeat Steps 1 to 6 above on the left side of the tailgate. (Figure C5) Note: be sure to use the correct left lower strut mount bracket.

Two are included in the kit.





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Figure D1



1. The control box will be mounted in the

D. Control Box Installation

tailgate using the supplied bracket. Locate the opening pictured in Figure D1

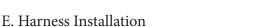


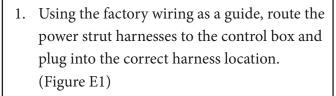


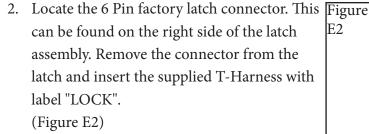


2. Use the supplied mounting bracket and 10mm nuts to secure the control box to the tailgate.

NOTE: Make sure all connector locations are accessible and the control box will not prohibit the tailgate trim panel from being reinstalled. (Figure D2)







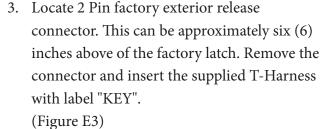






Figure E1



E2







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4. Route the "LOCK/KEY" harness from the factory connector to the control box and insert into the proper location.

(Figure E4)



5. Route the Rear Switch Harness From the control box to the rear latch location.

The rear switch will be mounted in this approximate location. Connect and mount the buzzer to the rear switch harness and mount the buzzer in the rear tailgate.

(Figure E5)



Figure E4



6. Route the Main Power harness from the control location to the factory tailgate rubber boot. (Figure E6)

Figure F6



STOP





7. Using a long wire tie or fish tape, Route the Main Power wire though the factory rubber boot. (Figure E7)

Note: Do not poke a hole in the rubber boot. This will allow water to enter the vehicle's cabin and damage the interior.

8. Route the Main Power harness from the rear of the vehicle to the front driver's kick panel. Plug the main power harness into the mounted control box. Ground the black wire on the main power harness to metal in the tail gate . (figure E8)





Figure E8



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9. Locate the 12v power supply. There is a black Figure plug to the left of the brake peddle. In this plug there is a Red 12 AWG wire. Connect the yellow from the main power harness to this wire.(Figure E11)

E11



Note: Remove the 30A fuse from the holder before connecting the Power Supply harness.



10. Install the UNLOCK Box and harness into the vehicle and connect the harness to the Main Power harness extended from the rear of the vehicle. (Figure E 12)





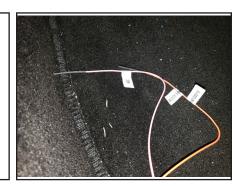
11. Connect the Orange wire from the unlock box labeled unlock signal, to vehicles unlock motor wire. The vehicles unlock motor wire is located high in driver kick panel. It is in a black plug and is blue with a green stripe(blue/green). Figure E13)

Figure E13



12. Connect the pink wire labeled ACC from the unlock box to a wire in the vehicle showing voltage with the vehicles ignition in the on postition. This prevents the tailgate from opererating from the unlock switch on the door while thie vehicles igntion is on. (Figure E 14)

Figure E14



13. In the lower driver kick panel you can find a purple wire with a green stripe(purple/ green). This wire shows voltage with key on only. Connect the unlock box harness pink wire here. (Figure E15)

Figure E15







F. Switch Installation

Figure F1



1. Identify a suitable location for the driver's front open/close switch. The recommended location is pictured in Figure F1.

STOP





2. Using the Supplied 16mm drill bit, drill a mounting hole for the front open/close switch F2 and mount the switch into the dash panel.

Connect to Front Switch Connector to the Unlock Box harness. The Brown wire labled ILL is optional, attach this wire to a positive 12v source when you want to illuminate the switch.

(Figure F2)

Caution: Check both sides of the panel for obstruction. Be sure to drill in a location that will accommodate the depth of the switch.

3. Identify the proper location for the rear close switch.(Figure F3)





Figure F3



STOP









4. After checking clearence on the inside of the tailgate use the supplied 16mm hole saw bit to drill a hole. Insert switch and hand tighten from behind.

(Figure F4)

5. Connect the rear switch to the rear switch harness installed in Step E5 and reinstall the tailgate trim panels the vehicle. The added weight from this panel can affect the tailgate open/close procedure.

Note: Check all connectors & secure all loose wiring before assembling the trim panel.

Figure F4



Figure F5



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G. System testing





- 1. Check all connections before inserting the main power fuse. Ensure all connectors are fully seated and there are no bare wires.
- 2. Ensure the rear tailgate trim panels are reassembled before testing. This panel can affect the weight of the tailgate causing the system to not completely close.
- 3. Connect the main power fuse. The system will begin to beep one (1) time every 5 seconds. This beep will notify the installer or customer that the tailgate system has reset. Manually close the vehicle tailgate to complete the reset procedure. (Figure G1)
- 4. Test the power lift gate system from all open/close options.
 - a. Open the power lift gate using the vehicle's exterior switch. (Figure G2)
 - b. Close the tailgate from the NEW rear close switch. (Figure G3)
 - c. Open and close the tailgate from the NEW Front open/close switch. (Figure G4)
 - d. Open and close the tailgate by pressing Unlock of the vehicle's factory remote three (3) times within three (3) seconds. (Figure G5)

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Figure G1



Figure G2



Figure G3



Figure



Figure G5



H. System Adjustments

- Height Adjustment
 Open the tailgate to the desired height.
 Press and hold the inside rear close button
 until the system beeps two (2) times, then
 release. Cycle the tailgate to verify height
 adjustment.
- 2. Speed Adjustment
 To switch between the 2 settings, Press and hold the inside rear close button until the system beeps five (5) times, then release.
 The system will provide feedback to indicate the setting:

Ten (10) quick beeps = fast One (1) long beep = slow (default).

- H. Reassemble Trim and Complete Installation
- 1. Replace all trim panels removed at the beginning of the installation.
- 2. After installing all trim panels, repeat step G4 again to verify full operation of the lift gate system.

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Figure G1



Figure G2





Main Power Harness

- A. Connect to Unlock Box Harness B
- B. Connect to Power Supply Harness -A
- C. Ground
- D. Connect to Control Box 6
- E. Connect to Control Box 5

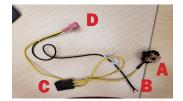
Power Supply Harness

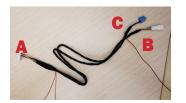
- A. Power Supply Input
- B. Power Supply Ground
- C. 30A Fuse
- D. Connect to Main Power Harness B

Unlock Box Harness

- A. Connect to Unlock Box
- B. Connect to Main Power Harness A
- C. Connect to Front Button







Tailgate Harness

- A. Connect to OE Latch Switch Harness
- B. Connect to OE Latch Harness
- C. Connect to Control Box 1

Rear Switch Harness

- A. Connect to Rear Switch
- B. Connect to Buzzer
- C. Connect to Control Box 3

Electric Struts

- A. Connect to Control Box 8/9
- B. Connect to Control Box 7





