

# **POWER TAILGATES**

# **General Application**

2018-2020 Hyundai Kona

#### 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	Soft close latch motor
13	Soft close latch motor wire harness
14	Rear Button Harness
15	Tailgate support left
16	Tailgate support right
17	Guides - Owner's
18	Left body support
19	Right body support

#### Installation Kit Contents

Item #	Component Description
1	16mm Drill Bit
2	Plastic Wire Ties
3	Control Box Mounting Plate
4	(2) - m8 5mm screws
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.
	Operator Safety: Use caution to avoid risk of injury.
<b>!</b>	Critical Process: Proceed with caution to ensure a quality installation. These Points will be audited on a completed vehicle installation.
	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 multi-meter.
- 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	12mm Wrench	
T-40 Torx	Drill	
File	3/8 Drill Bit	
Pick Tool	Dremel Tool	



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Figure B4



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7. Remove lower tailgate panel and set aside.

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B5





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



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





# SMART ELECTRIC TAILGATE LIFT SYSTEM Figure

B10a







- 1. To install the support bracket for the power struts included in the kit you must first drill out the factory mount using a 5/8 drill
- 2. Using a protective cover drill out the hole







6. Install new upper power strut bracket and ball mount. Use screw supplied in kit, tighten with 5mm Allen wrench. (Figure C6)





SMART ELECTRIC TAILGATE LIFT SYSTEM

- 7. With new power strut support brackets in place, install power struts. Be sure to keep the wiring towards the car side of the tail gate. Remove factory grommet. Then feed wiring through hole and secure grommet attached to power strut wiring. (Figure C7)
- 8. Repeat these steps for the opposite side of the tailgate.



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- D. Latch/lock latch installation1. Remove the factory lock latch using a T40 Torx bit. (Figure D1)
- 2. Install new lock latch provided in kit using the factory screws. (Figure D2)

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 Using a 10mm socket remove 3 bolts securing the factory latch to the tail gate. (Figure D3)



 The new soft close latch consists of a cable driven latch, motor, and latch mounting plate. (Figure D4)



5. First mount the latch motor in the tailgate using supplied bracket. Position the latch so that it can be slid into place from inside the tailgate. (Figure D5)





STOP

6. Slide the latch through the opening from the<br/>inside of the tailgate. (Figure D6)Fig<br/>D6

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Figure D7

- Attach the latch mounting plate by sliding it over the latch that was put through the opening in the tailgate. The latch mounting plate will line up with 3 of screw holes on the outside of the tailgate. (Figure D7)
- 8. The mounting plate will also align with 2 holes on the inside of the latch. (Figure D8)



 Using the supplied screws, attach the mounting plate to the inside of the latch. (Figure D9)



10. Using the factory 10mm bolts, attach the latch plate to the outside of the tailgate. (Figure D10)



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E Control Box Installation

1. Using the supplied bracket, mount the control box in the opening in the tailgate. (Figure E1)

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E1







- 1. Using the factory wiring as a guide, route the power strut harnesses to the control box and plug into the correct harness location. (Figure F1)
- 2. Route the "LOCK/KEY" T harness to the appropriate connectors in the tailgate and to the control box.

3. The connector on the T harness labeled "Lock" plugs into the connector removed from the factory latch. (Figure F2a-F2b)







4. The connector labeled "Key" on the harness plugs into the factory connector located near the opening where the latch motor was mounted in step D5. (Figure F3)



- 5. The harness labeled "Latch" connects to the Control Box and the new aftermarket latch installed in step D5. The 4Pin Black connector plugs into the Latch Motor pictured in Figure F4. The 2Pin Black connector plugs into the latch.
- Route the Rear Switch harness from the control box to the rear switch 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 tailgate. (Figure F5)
- Route the Main Power harness from the control box location to the factory tailgate rubber boot. (Figure F6)

- 8. Using a long wire tie or fish tape, Route the Main Power wire though the factory rubber boot. (Figure F7) Note: Do not poke a hole in the rubber boot. This will allow water to enter the vehicle's cabin and damage the interior.
- 9. 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 tailgate. (figure F8)

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10. Locate the 12v power supply. This can be found in a Black 4Pin plug at the driver side fuse box. In this plug there is a Red 12 AWG wire. Connect the Yellow wire from the power supply harness to this wire. (Figure F9)

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

- 11. 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 F10)
- 12. Connect the Orange wire from the unlock box labeled Unlock Signal, to vehicle's unlock motor wire. The vehicle's unlock motor wire is located in a Gray connector in the driver's kick panel. Connect the Unlock Signal wire to the White wire in pin 30. (Figure F11)
- 13. Connect the Pink wire labeled ACC from the unlock box to a wire in the vehicle showing voltage when the Ignition is in the ON position. This prevents the tailgate from operating from the OEM remote while the Ignition is ON. Connect the ACC wire to the Pink 12 AWG wire at the vehicle's ignition switch. This wire shows 12 Volts (+) when the key is in the ON position. (Figure F12)

#### SMART ELECTRIC TAILGATE LIFT SYSTEM Figure

F9













# SMART ELECTRIC TAILGATE LIFT SYSTEM



STOP



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- Identify a suitable location for the driver's front open/close switch. The recommended location is pictured in (Figure G7).
- 8. Using the supplied 16mm drill bit, drill a mounting hole for the front open/close switch and mount the switch into the dash panel. Connect the Front Switch Connector to the Unlock Box harness. The Brown wire labeled ILL is optional, attach this wire to a positive 12v source when you want to illuminate the switch. Caution: Check both sides of the panel for obstruction. Be sure to drill in a location that will accommodate the depth of the

switch. (Figure G8)



Figure



STOP

H. System testing

- 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.
- 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 H1)
- 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 H2)

b. Close the tailgate from the NEW rear close switch. (Figure H3)

c. Open and close the tailgate from the NEW Front open/close switch. (Figure H4)

d. Open and close the tailgate by pressing Unlock of the vehicle's factory remote three (3) times within three (3) seconds.

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- 1. 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.(Figure I1
- 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.(FIgure I2) The system will provide feedback to indicate the setting: Ten (10) quick beeps = fast One (1) long beep = slow (default).
- J. 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 H4 again to verify full operation of the liftgate system.

# SMART ELECTRIC TAILGATE LIFT SYSTEM

I1





#### SMART ELECTRIC TAILGATE LIFT SYSTEM



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 Tailgate Button B. Connect to OE Tailgate Button Harness C. Connect to Control Box - 1 D. Connect to OE Latch Harness

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

Electric Latch harness A. Connect to Control Box -10 B. Connect to Electric latch motor C. Connect to Electric latch motor.













