



General Applicability:

2018-19 Hyundai Tucson

Issues

Different T-harness for rear Lock Control from 2016-18 and 2019

Kit Contents:

Item #	Component Description
1	Stay Bar (Strut)(right)
2	Stay Bar (Strut)(left)
3	Upper Ball Mounts
4	Control Box
5	Control Box Bracket
6	Front Switch w/Harness
7	Rear Switch (Factory Style)
8	Rear Buzzer
9	BUS Box w/Harness
10	Main Harness
11	Power Supply Harness
12	Rear Button / Buzzer Harness
13	Lock Control Harness (2 types)
14	Hardware bag (Screws)

Installation Kit Contents:

Item #	Component Description
1	16mm Hole Bit
2	Warning Labels
3	Wire Ties

Recommended Tools:

Safety Tools	
Seat/ Floor Covers	Blankets
Installation Tools	
8mm Socket / Ratchet	Drill / Assorted Bits
10mm Socket / Ratchet	Side Cutters
13mm Socket / Ratchet	16mm Socket / Ratchet
NRT-Nylon Removal Tool	Razor Knife
Hook Tool	#2 Phillips Screwdriver
Pick	Small Flat Screwdriver
Special Tools	

Legend

	STOP: Damage to the vehicle may occur. Do not proceed until process has been complied with.
	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.
	TOOLS & EQUIPMENT: This calls out the 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 liftgate, please let a professional complete the install. Do not dismantle the liftgate 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.


A. Pre-Installation Precaution and Preparation

1. 2018-19 Hyundai Tucson. (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.



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.

B. Disassemble Vehicle Trim

1. Detach upper tailgate cover by using a Nylon Removal Tool /NRT and prying along upper edge. (Figure B1a-b) 
2. Using a #2 Phillips screwdriver, remove the screw at front edge of the corner trim. By hand pull out on trim to release fasteners.


(Figure B2a-b) 

Figure A1



Figure B1a



Figure B1b



Figure B2a



Figure B2b




3. Using a #2 Phillips screwdriver, remove the 5 screws holding the large liftgate trim piece. (2 screws at front edge, 2 screws rear corners 1 screw on rear edge) (Figure B3a-c) 

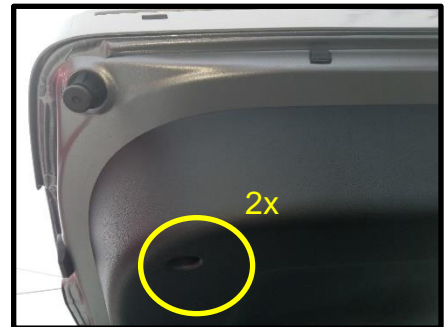
Figure B3a



Figure B3b



Figure B3c




4. Using a small flat screwdriver or trim tool, remove the handle insert on the Liftgate. Pull down by hand on the complete trim panel and release all fasteners. (Figure B4a-b) 

Figure B4

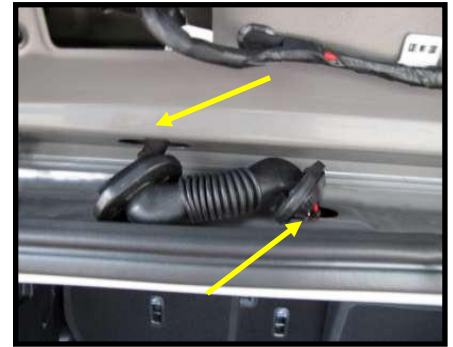


Figure B4b



5. Pry rubber harness gasket away from liftgate and vehicle panels. (Figure B5)

Figure B5



6. Remove rear driver side panels, upper or lower depending on preference of harness routing.

Figure B6



Note: Always check for airbags and seatbelt routing before routing main harness.

(Figure B6)


7. Remove headliner fasteners using a NRT to allow for harness routing. (Figure B7) 

Figure B7

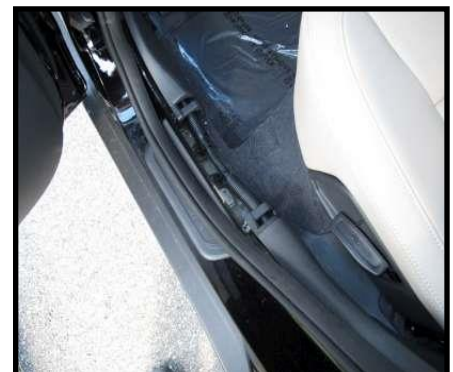


8. Loosen rear driver side rubber gasket and remove lower door sill panel. (Figure B8a-b)

Figure B8a



Figure B8b




9. Using a NRT, pry off the hood release handle.
 Pull up and remove lower panel. Pull up and
 remove front lower panel. (Figure B9a-c) 

Figure B9a



Figure B9b



Figure B9c



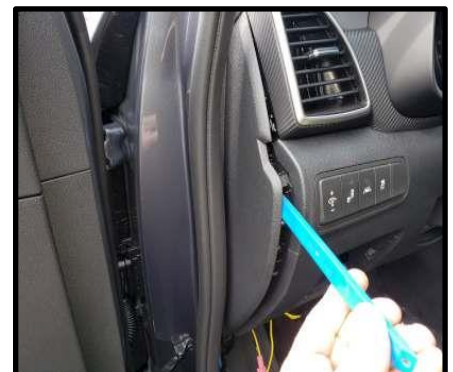
10. Remove the fuse panel door by hand.
 (Figure 10)

Figure B10



11. Using a NRT, pry away the instrument panel
 end trim panel. Remove the (3) screws holding
 the lower dash panel on , using a Phillips
 screwdriver. Pull panel out for easy access to
 front wiring. (Figure B11a-b)

Figure B11a



12. Using a hook tool pull out on retaining clips of the rear tailgate air struts. Do not remove clip completely, by wedging hook tool between clip and strut should allow removal of the strut.



NOTE: To perform this process the installer



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

place. (Figure B11a-c) 

Figure B11b



Figure B12a



Figure B11b



Figure B11c



C. Electric Strut Bar Installation

1. Using a 12mm socket/ratchet, remove the upper/ liftgate ball mount. Using a 12mm socket/ratchet install the new ball mount.


(Figure C1a-b) 

Figure C1a



2. Install new electric struts into place making sure that the strut marked **LEFT** is on the **Driver** side. Push upper and lower strut sockets onto strut ball with harness down and facing the vehicle.
- Continue installing **Passengers/ Right** side strut and ball mount. (Figure C2a-b)

Figure C1b



Figure C2a



Figure C2b



3. Pop out the factory bushing. Route strut cable through bushing opening and out through liftgate opening. (Figure C3a-b)

Figure C3a



Figure C3b



4. Remove slack in cable and rubber casing. Push bushing into the hole. Continue routing cable through liftgate area towards control module position. (Figure C4a-c)

Figure C4a



Figure C4b



Figure C4c



D. Control Box Location

1. Temporarily mount Control Box to left rear brace of the liftgate. The Control box will mount above the support frame. Set module above frame and attach using second bracket and (4) 8mm Screws. Do not crush the bracket by tightening the screws too tight. **NOTE: Leave control box hand tight until installation is complete.** (Figure D1a-d)

Figure D1a



Figure D1b



E. Rear Cable Routing

1. Locate Tailgate latch connector (6 pin Black connector). Disconnect the connector and insert Lock T harness of 3110122001087. Continue routing cable towards Control Box.
(Figure E1a-b)

2A. For 2018 Tucson locate Tailgate button



connector (12 pin white connector). Disconnect the connector and insert Button T-harness 2016 and connect it to the 3110122001087 harness. Route the rest of the harness to the control box.
(Figure E2Aa-b)

Figure D1c



Figure D1d



Figure E1a



Figure E1b

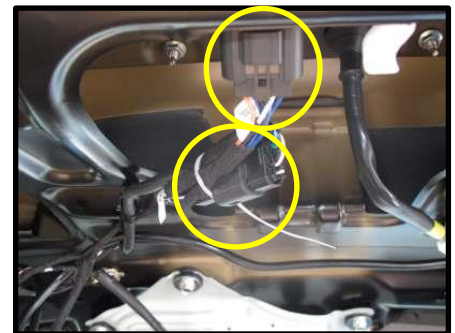


Figure E2Aa





2B. For 2019 Tucson locate Tailgate button connector (8 pin black connector). Disconnect the connector and locate the red wire in pin location #5 (next to black ground wire). On the 3110122001087 harness, cut the connector of the green wire. Connect the green wire of the 3110122001087 harness to the red wire of the vehicle. Route the rest of the harness to the control box. **NOTE: You may solder or use connectors to make this connection.**

(Figure E2Ba-d)

Figure E2Ab



Figure E2Ba



Figure E2Bb

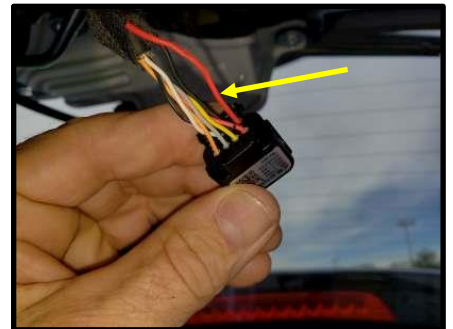
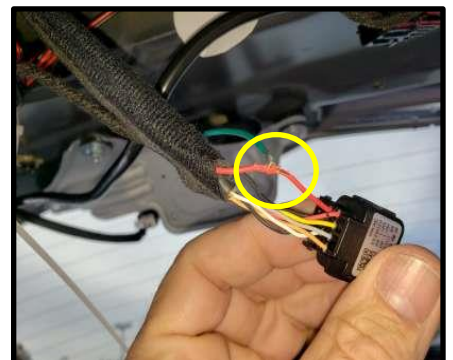


Figure E2Bc



Figure E2Bd



3. Mount buzzer and switch harness 4360730 to rear tailgate in location that will not interfere with tailgate trim panel. This cable also routes into rear switch. Continue routing cable to control box. Temporarily leave switch hooked up for testing. (Figure E3a-b)

Figure E3a

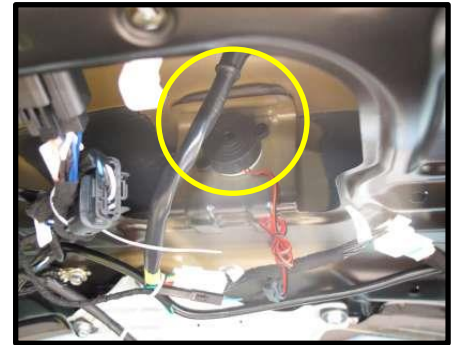
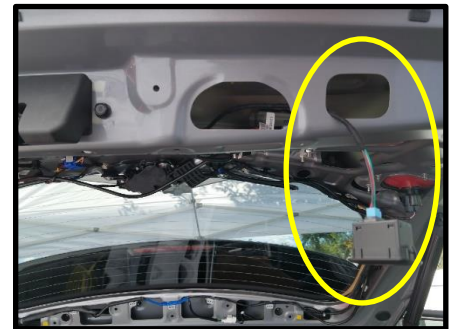


Figure E3b



4. Route the main harness through the rubber gasket. Allow enough harness to extend towards rear of vehicle to reach Control box. **NOTE: use a wire puller to pull harness through gasket. Protect harness connectors by taping over them so they pass through easier.** (Figure E4)

Figure E4

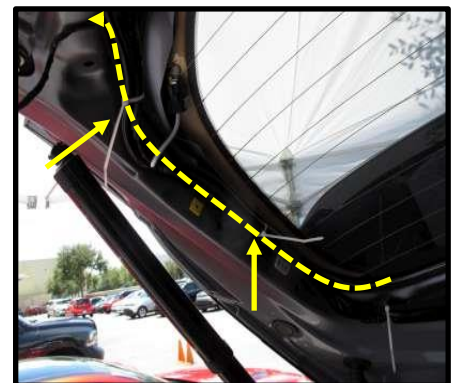


Figure E5a


5. Continue routing main harness into liftgate. Once inside liftgate, route harness following factory harness to rear of liftgate and Control box securing harness with supplied wire ties. (Figure E5a-c)



Figure E5b



6. Using an 10mm socket install ground terminal of the main harness to the stud shown in figure.

(Figure E6) 

7. Now route main harness into vehicle. Continue routing main cable through gasket between headliner and over to rear side panel. Continue behind side interior panel or lower panel depending on routing preference. **DO NOT route harness where it may interfere with seat belt or air bags.** (Figure E7a-b)

8. Once harness exits passenger door area, tuck harness alongside trim panel and across sill area (Figure E8)

Figure E5c

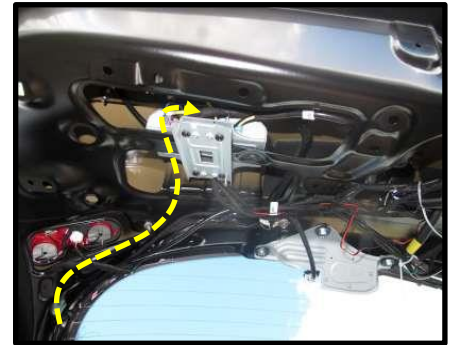


Figure E6



Figure E7a



Figure E7b



Figure E8

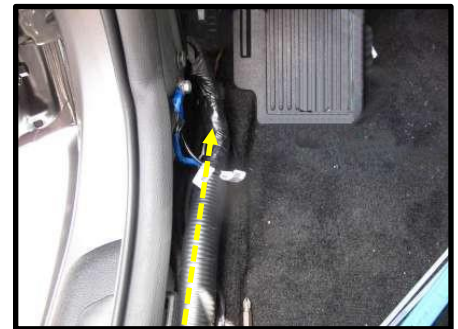


9. Continue routing cable forward tucked under lower B-pillar panel and into driver side sill area. (Figure E9a-b)

Figure E9a



Figure E9b



F. Front Cable Routing

1. Locate Main power supply connector inside fuse box opening (Blue wire/ Grey connector). Connect X-large Tap connector (4120356) to the Blue wire (**Disconnect connector for easier install of X-large Tap connector**). Screw Tap cover into place. Route cable and ground eyelet down to door sill. Connect ground loop eyelet to the factory stud shown. Continue routing power cable towards main harness in kick panel.

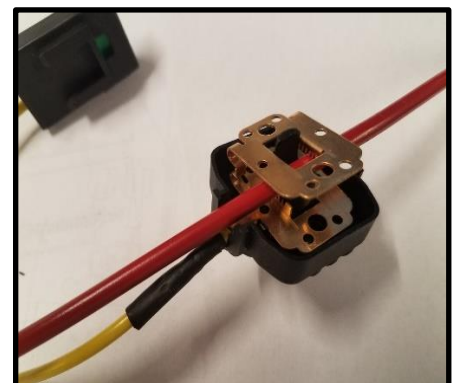
Figure F1a



Figure F1b




Figure F1c



Blue wire (**Disconnect connector for easier install of X-large Tap connector**). Screw Tap

cover into place. Route cable and ground eyelet down to door sill. Connect ground loop eyelet to the factory stud shown. Continue routing power cable towards main harness in kick panel.

(Figure F1a-f) 

2. Drill using 16mm bit and install switch /cable 4540012 into dash trim panel where indicated (there are 2 locations possible based on your preference. Check area behind drilling point for any obstructions. **CAUTION: Drill bit is supplied for this switch, check size and clearance before drilling.** Route cable down to kick panel.




(Figure F2a-b) 

Figure F1d

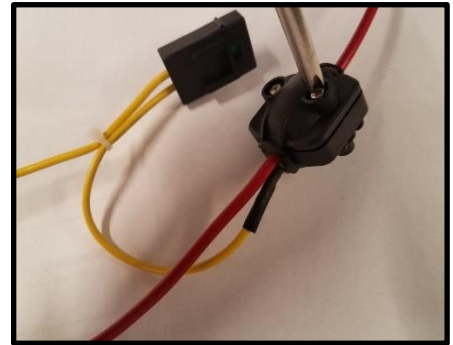


Figure F1e



Figure F1f



Figure F2a

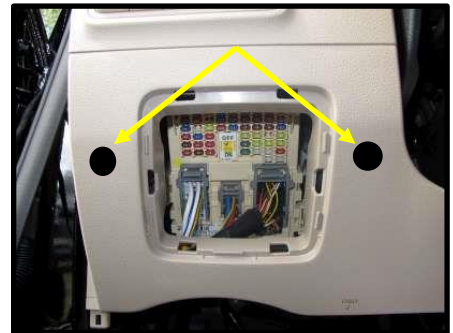


Figure F2b



3. Locate the OBD connector below steering wheel. Disengage OBD connector from bracket. Connect OBD T-harness 3040160001258 to the Factory OBD connector. Insert new OBD connector into the bracket. Route T-harness green wires over to drivers kick panel. Secure excess cable with wire ties. (Figure F3a-c)

4. Install BUS Box 4360736 to lower side kick panel wall with supplied double side tape. Route and plug in switch wires and OBD wires into BUS box. Connect BUS box cable to Main harness. (Figure F4a-c)

Figure F2c



Figure F3a



Figure F3b

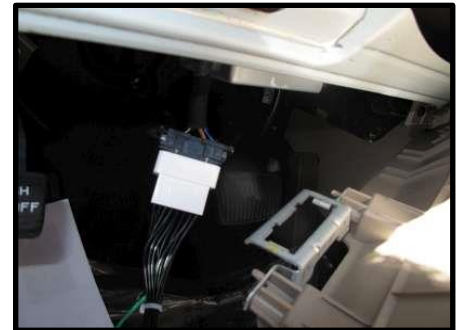


Figure F3c

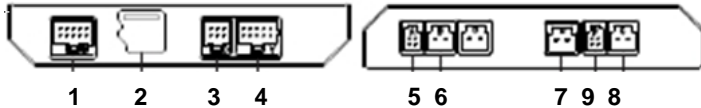


Figure F4a



G. Control Box Connections

1. Attach harnesses to Control Box per diagram and connector fit. (Figure G1a-b)



- 1.Tailgate Button/Lock harness
- 3.Button/Buzzer Harness
- 5.Main Harness
- 6.Main Harness
- 7.Passenger Stay Bar Harness
- 8.Driver Stay Bar Harness
- 9.Driver stay Bar Harness

Figure F4b



Figure F4c



Figure G1a



Figure G1b



Figure G1c



2. Mount Control box permanently. Use wire ties to clean up all routing making sure cables do not rattle or interfere with any other vehicle parts or operation. (Figure G2)

3. Before replacing Tailgate trim, connect rear button to proper wire for testing. (Figure G3)



4. IMPORTANT: Manually close the tailgate door to initialize the Power Lift Gate System. Function test the System to verify proper operation as follows.

H. System Testing

1. With tailgate in the closed position, push the front button to open and close the liftgate.
2. Open tailgate using rear outer factory button.
3. Close tailgate using rear inner button.
4. With Keyless Remote, press and hold Tailgate button to open or close liftgate.
5. Check safety Intelligent anti-pinch. Close liftgate using button, put obstacle in path of closing door. Door will automatically stop and reverse position.

Figure G2



Figure G3



I. System Adjustments

1. **Height Adjustment:** Manually adjust tailgate to preferred height. Press and hold inside **TAILGATE BUTTON** until system beeps 2 times, then release. Cycle system to verify height adjustment.
2. **Speed Adjustment:** Press and hold inside **TAILGATE BUTTON** until system beeps 5 times, then release 10 quick beeps= fast, 1 long beep=slow (default)
3. Video of adjustments available on YouTube @ <https://www.youtube.com/watch?v=HZY5rlysk4Y>

J. Reassemble Trim and Complete Installation

1. Re-install rear tailgate trim panel with rear button installed. (Figure J1a-b)
2. Re-install all other trim panels previously removed.
3. Check all previously disconnected factory connectors and accessories to ensure they are all connected and operational.

Figure J1a



Figure J1b

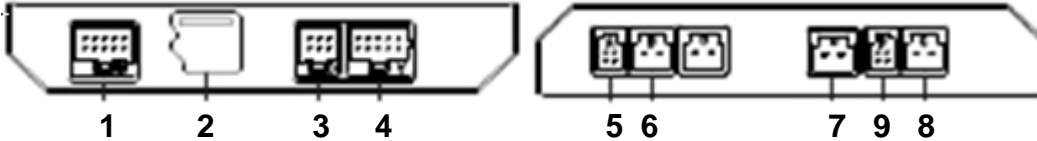


For Customer or Technical support please call VOXX Support:

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Monday - Friday)**

HARNESS CONNECTIONS:



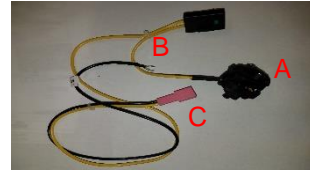
POWER WIRE

- A. Connect to Control box port. -5
- B. Connect to Control box port. -6
- C. Connect to BUS box wire -D
- D. Connect to Power supply unit -B
- E. Ground



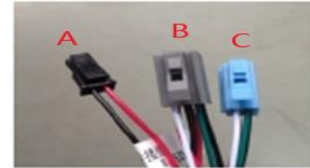
POWER SUPPLY UNIT

- A. Power out
- B. Ground
- C. Connector joint power wire -A



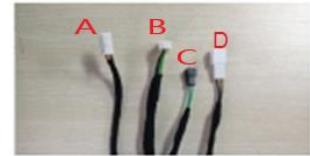
REAR BUTTON WIRE

- A. Buzzer -A
- B. Control box port -3
- C. Rear button port



BUS BOX WIRE

- A. Front button terminal
- B. Connect to BUS box
- C. Connect to communication -C
- D. Connector joint power wire -B



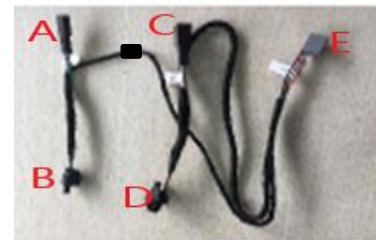
OBD ADAPTER

- A. OBD out
- B. Connect to BUS box wire -C
- C. OBD in



LOCK CONTROL WIRE

- A. Tailgate button in (2015 and 2016 T-harness supplied)
- B. Tailgate button out
- C. Lock control in
- D. Lock control out
- E. Control box port -1



ELECTRIC STRUT

- A. Connect to Control box port -8-9
- B. Connect to Control box port -7



Buzzer

- A. Connect to Rear button wire -A

