Created ACH 09/19/2018 Revised ACH 10/02/18 – **A2** 



#### **General Applicability:**

2018- KIA Sedona

#### Issues

N/A

#### **Kit Contents:**

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

#### **Installation Kit Contents:**

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Item#	Component Description	
1	Warning Labels	
2	Quick Splice Terminals	
3	Wire Ties	

#### **Recommended Tools:**

	Noodilliidiaa Toolo.			
Safety Tools				
Seat/ Floor Covers	Blankets			
Installation Tools				
10mm Socket / Ratchet	NRT-Nylon Removal Tool			
13mm Socket / Ratchet	Side Cutters			
16mm Socket/Ratchet	Razor Knife			
Hook Tool	#2 Phillips Screwdriver			
Pick	Small Flat Screwdriver			
Wire Puller				
Special Tools				

#### Legend



<u>STOP:</u> Damage to the vehicle may occur. Do not proceed until process has been complied with. <u>OPERATOR SAFETY:</u> 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 KIA Sedona. (Figure A)
- 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.
- 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

- 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. Remove opposite side. (Figure B2a-b)

Figure A1



Figure B1a



Figure B1b



Figure B2a

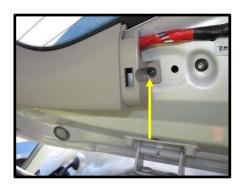


Figure B2b



3. Using a #2 Phillips screwdriver, remove the 3 screws holding the large liftgate trim piece. Using a small flat screwdriver, remove the small trim covers on the hidden screw in the rear left corner. Use #2 Phillips screwdriver to remove screw. (Figure B3a-c)

4. Using a small flat screwdriver, remove the small

trim covers on the Liftgate pull handle. Then

bolts. Once the bolts and handle have been

removed pull large trim panel down by hand.

remove the handle by loosening the (2) 10mm

Figure ВЗа



Figure B3b



Figure B3c



Figure B4a



**Figure** B4b



(Figure B4a-b)



5. Pop out the rear tailgate button blank. This will allow for the new button to be installed. (Figure B5)

**Figure B**5



**6.** Pry rubber harness gaskets away from liftgate and vehicle panels. (Figure B6)

**Figure** B6



7. Pull rubber trim from around left side of tailgate opening. Lower trim may need to be removed for harness routing. NOTE: be careful of gasket sealer when removing gasket, it can be sticky and may stain fabric. (Figure B7)

Figure B7



**8.** Remove headliner fastener using a NRT, this will allow for harness routing. (Figure B8) Figure B8



area. (Figure B9a-b)

**Figure** B9a



**9.** Remove lower door sill panel from slider door

Figure B9a



**10.** Pull up and remove front lower panel.

(Figure B10a-b)

Figure B10a



Figure B<sub>10</sub>b



11. Using a #2 Phillips Screwdriver, remove screw

holding the hood release handle. Pull up and

back to remove lower panel. (Figure 11)







**Figure** B<sub>1</sub>1b





**12.** Remove the fuse panel door by hand. (Figure 12)

Figure B12



13. Open sunglass holder of the upper center console, remove (2) screws using a #2 Phillips Screwdriver. By hand, pry the console down from the forward edge. (Figure B13a-b)

Figure B13a



Figure B13b



14. Locate the blank button in the upper center console. Using a small flat blade screwdriver pry button out of the button cavity.

(Figure B14a-b)

Figure B14a



Figure B14b



15. 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.



STOP

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 B15a-b)



Figure B15a



16. Using a 13mm Socket/Ratchet, remove the upper liftgate ball mounts. Using a 10mm Socket/Ratchet, remove lower ball mount bracket from vehicle side of tailgate opening.
(Figure B16a-c)

Figure B16a



Figure B16b



Figure B16c



#### C. Electric Strut Bar Installation

1. Using a 16mm Socket/Ratchet, install new upper ball mounts. Using a 10mm Socket/Ratchet, install new lower/vehicle side ball mount brackets. (Figure C1a-b)

Figure C1a



Figure C1b



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. (Figure C2a-b)

Figure C2a



Figure C2b

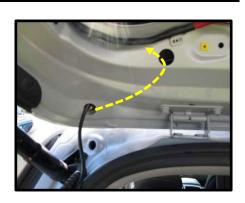


Pop out the factory bushing. Route strut cable through bushing opening and out through liftgate opening. (Figure C3a-b)

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

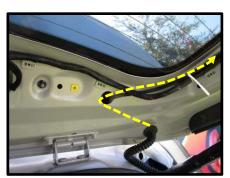


Figure C4c

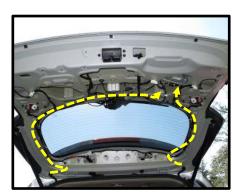


Figure D1a



D. Control Box Location

1. Temporarily mount Control Box to right rear brace of the liftgate. The Control box will mount above the support frame. Install the bracket to the lower side as shown. The screws should run through the bracket up to the module. Do not crush the bracket by tightening the screws too tight. NOTE: Leave control box hand tight until installation is complete. (Figure D1a-c)





Figure D1b



Figure D1c



# E. Rear Cable Routing

 Locate Tailgate latch connector (4 pin Black connector). Disconnect the connector and insert Lock T harness of 3110122001124. Continue routing cable towards Control Box.

(Figure E1a-b)

Figure E1a

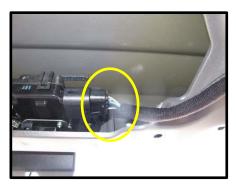


Figure E1b

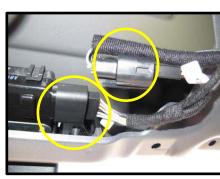


Figure E2a



2. Locate Tailgate button connector (white connector). Connect wire clamp for the unlock signal to back button connector-RED WIRE.
Attach green wire of 3110122001124 harness to the other half of the wire clamp.

(Figure E2a-c)

Figure E2b

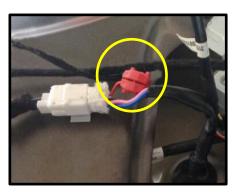
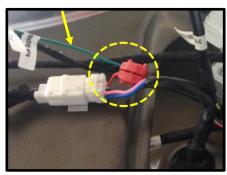


Figure E2c



3. Mount buzzer (PBB2828020000) and switch harness 3140122001015 to rear tailgate in location that will not interfere with tailgate trim panel. This cable also routes into rear switch. Temporarily leave switch hooked up for testing. (Figure E3a-b)

Figure E3a



Figure E3b



Figure E4



STOP



Protect harness connectors by taping over them so they pass through easier. (Figure E4)

gasket. Allow enough harness to extend towards

rear of vehicle to reach Control box. NOTE: use

a wire puller to pull harness through gasket.

**4.** Route the main harness through the rubber

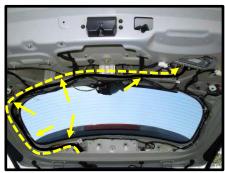
### SMART ELECTRIC TAILGATE LIFT SYSTEM

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-b)

Figure E5a



Figure E5b



6. Now route main harness into vehicle. Continue routing main cable through gasket between headliner and over to rear left side panel.
Continue behind side interior panel down to floor.
Continue routing cable forward towards front of vehicle. Tuck cable under rear side trim panels.
DO NOT route harness where it may interfere

with seat belt. (Figure E6a-b)

Figure E6a



Figure E6b



7. Once harness exits passenger door area, tuck harness alongside trim panel and across sill area (Figure E7)

Figure E7





8. Continue routing cable forward tucked under lower B-pillar panel and into driver side sill area.
(Figure E8a-b)

Figure E8a



Figure E8b



# F. Front Cable Routing

1. Locate Main power supply connector inside fuse box opening (white connector). Unplug factory connector. Connect factory connector into Power T-Harness (3140122001036). Connect T-Harness into BCM/Fuse box. Route cable and ground eyelet down to kick panel area. Connect ground loop eyelet to the factory stud shown. Continue routing power cable towards main harness in kick panel. (Figure F1a-d)

Figure F1a



Figure F1b



Figure F1c



Figure F1d



2. Locate OBD just right and below fuse door opening. Release OBD connector tabs and remove from trim panel. Connect OBD extension cable to OBD. Remount new OBD to dash by locking connector into dash trim panel. Route CAN BUS cable over to foot well to be connected later. (Figure F2a-b)

Figure F2a



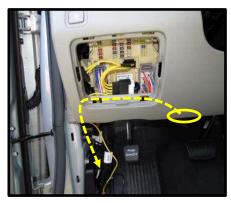
Figure F2b



Figure F2c



Figure F2d



3. Install new switch cover into old blank area. Disconnect main harness on back side of the upper center console. Locate the green wire in cavity #2. Connect wire clamp for the open signal to the green. (Figure F3a-c)

Figure F3a



Figure F3b

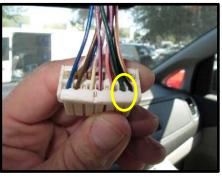


Figure F3c



4. Connect the blue wire of harness

clamp. (Figure F4a-b)



1901454235500 to the other side of the wire

Figure F4a



**Figure** F4b



5. Continue routing cable under headliner edge over to driver "A" pillar. Route cable behind "A" pillar and down to driver kick panel. NOTE; Do not route cable over air bag. Do not interfere with any air bag or air bag straps.

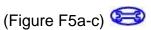


Figure F5a

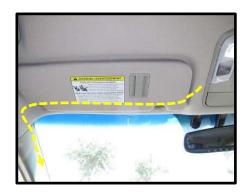


Figure F5b



Figure F5c



**Figure** F6a









**6.** Make connections from upper switch harness and OBD harness to the BUS module. Connect BUS module to main harness. Install BUS Module to lower side kick panel wall with

supplied double side tape. (Figure F6a-c)

7. Make final connection of power wire to main harness. (Figure F7)

# Figure F7



#### **G.** Control Box Connections

**1.** Attach harnesses per diagram and connector fit.

(Figure G1a-c)



- 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
- 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)
- 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.

Figure G1a



Figure G1b

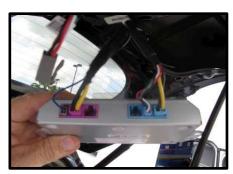


Figure G1c



Figure G2







## H. System Testing

- 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 the trunk release button.
- 5. Check safety Intelligent anti-pinch. Close liftgate using button, put obstacle in path of closing door. Door will automatically stop and reverse position.

## H. System Adjustments

- 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

- I. Reassemble Trim and Complete Installation
  - Re-install rear tailgate trim panel with rear button installed. (Figure I1)
  - **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 I1



For Customer or Technical support please call VOXX Support: 1-800-645-4994 9 AM - 6 PM (EST -Eastern 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 (If available)

### **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 harness
- 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
- B. Tailgate button out
- C. Lock control in
- D. 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







