

 GROUP	NUMBER
RECALL	21-01-010H
DATE	MODEL(S)
February, 2021	Tucson (TL)

## 2016-2021MY TUCSON (TL) ABS FUSE KIT INSTALLATION AND SOFTWARE UPDATE (RECALL CAMPAIGN 195)

This TSB supersedes TSB# 20-01-040H, expanding model year applicability and adding procedures / parts information for 2016-2018MY vehicles.

<b>*</b> IMPORTAN	T
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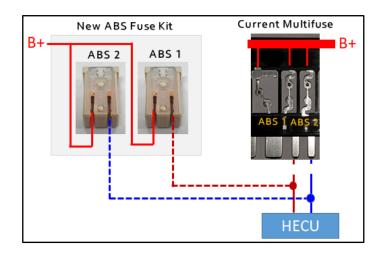
SUBJECT:

\*\*\* Dealer Stock and Retail Vehicles \*\*\*

Dealers must perform this Recall Campaign on all affected vehicles prior to customer retail delivery and whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the service department, access Hyundai Motor America's "Warranty Vehicle Information Screen (VIS)" via WEBDCS to identify open Campaigns.

**Description:** Certain 2016-2021MY Tucson (TL) vehicles may be equipped with Anti-lock Brake System ("ABS") modules that over time could exhibit an electrical short. An electrical short in the ABS module could increase the risk of an engine compartment fire. This bulletin describes the procedure to install a fuse kit into the ABS module electrical circuit and if necessary, update the ABS/ESC software.



Applicable Vehicles: Certain 2016-2021MY Tucson (TL) vehicles.

Parts Information		RT NUMBER	QTY.
Fuse Repair Kit		<ul> <li>(1) U-Type Crimp Connector</li> <li>(2) Heat Shrink Tubing</li> <li>(3) Micro Fuses</li> <li>(4) Cable Ties</li> <li>(5) Labels</li> <li>(6) Red Lead Wire</li> <li>(7) White Lead Wire</li> </ul>	1
	91KIT-D325AQQH (Contains 25A Micro Fuses)	For use with HECU P/Ns 58920-D3530 and 58920-D3550	
	91KIT-D330AQQH (Contains 30A Micro Fuses)	For use with HECU P/N 58920-D3100	
	<u>.</u>		

### Note: The HECU part number can be found on the label affixed to the HECU.

#### Warranty Information:

MODEL	OP. CODE	OPERATION	OP. TIME	CAUSAL PART NO.	NATURE CODE	CAUSE CODE
Tucson (TL) HECU P/N: 58920-D3550 58920-D3100		HECU FUSE WIRING REWORK (58920-D3550, 58920-D3100)	0.6	91KIT-	111	ZZ3
Tucson (TL) HECU P/N: 58920-D3530	01D072R1	HECU FUSE WIRING REWORK AND ESC UPDATE (58920-D3530)	0.8	D325AQQH	111	223

**NOTE 1:** Submit Claim on Campaign Claim Entry Screen

**NOTE 2:** If a part is found in need of replacement while performing Recall 195 and the affected part is still under warranty, submit a separate claim using the same Repair Order. If the affected part is out of warranty, submit a Prior Approval Request for goodwill consideration prior to performing the work.

## NOTICE

ABS/ESC software update only applies to vehicles equipped with hydraulic unit assembly (HECU) part number 58920-D3530.

ABS Fuse Kit Service Procedure:

# NOTICE

If the "ABS", "ESC" or "Brake" indicator lamps are illuminated, refer to the appropriate section of the repair manual prior to installing the ABS Fuse Kit.

- 1. If applicable, record the customer's radio preset stations and turn the ignition switch OFF.
- 2. Remove the air intake duct clips (A) and remove air intake duct (B).

 Disconnect the battery negative (-) terminal (C), then disconnect the positive (+) terminal (D). Remove the battery mounting bracket (E), and remove the battery.

> Battery Negative (-) Terminal Tightening Torque: 3.9 ~ 5.9 Nm (0.4 ~ 0.6 kgf.m, 2.9 ~ 4.3 lbft)

> Battery Positive (+) Terminal Tightening Torque: 7.8 ~ 9.8 Nm (0.8 ~ 1.0 kgf.m, 5.8 ~ 7.2 lbft)

Battery Mounting Bolt Tightening Torque: 8.8 ~ 13.7 Nm (0.9 ~ 1.4 kgf.m, 6.5 ~ 10.1 Ib-ft)



4. Loosen the air duct clamp (F), remove the air cleaner mounting bolt (G) and remove the air cleaner body.

Air Duct Clamp Tightening Torque: 2.9 ~ 4.9 N.m (0.3 ~ 0.5 kgf.m, 2.2 ~ 3.6 lb-ft)

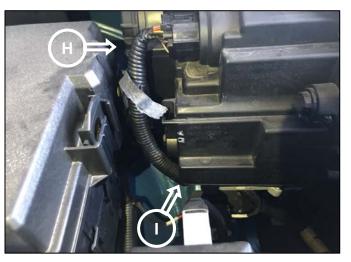
Air Cleaner Bolt Tightening Torque: 7.8 ~ 9.8 N.m (0.8 ~ 1.0 kgf.m, 5.8 ~ 7.2 lb-ft)



# NOTICE

If equipped with halogen headlamps, proceed to Step 6.

If equipped with LED headlamps, disconnect the headlamp connector (H) and disconnect the wire harness clip (I).



6. Disconnect the wire harness clip (J) from the ECM bracket and remove the three mounting fasteners (K).

Leave the ECM electrical connector connected and move the ECM away from the junction box.

ECM Fastener Tightening Torque: 9.8 ~ 11.8 N.m (1.0 ~ 1.2 kgf.m, 7.2 ~ 8.7 lb-ft)

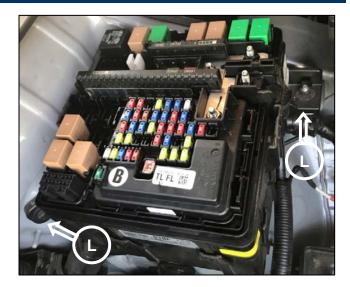


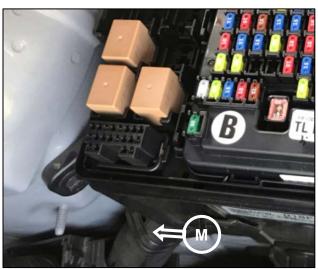
 Remove the junction box upper cover. Remove the junction box mounting nut and bolt (L).

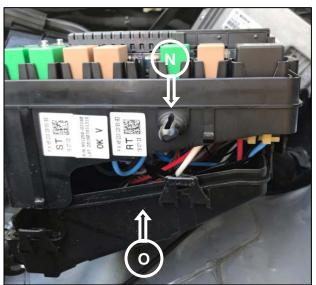
> Junction Box Nut Tightening Torque: 4.9 ~ 7.8 N.m (0.5 ~ 0.8 kgf.m, 3.6 ~ 5.8 lb-ft)

> Junction Box Bolt Tightening Torque: 6.9 ~ 9.8 N.m (0.7 ~ 1.0 kgf.m, 5.0 ~ 7.2 lb-ft

8. Cut and remove the cable tie at the base of the lower junction box cover (M).







9. Gently pry the junction box body away from the vehicle body to release the junction box locating pin (N).

Release the six locking tabs around the outside of the junction box and separate the lower junction box cover (O) from the junction box.

10. Locate the 40A ABS1 and 40A ABS2 portion of the multifuse in the junction box (P).



11. Locate the red wire and white wire (Q) exiting the 40A ABS1 and 40A ABS2 multifuse on the underside of the junction box.

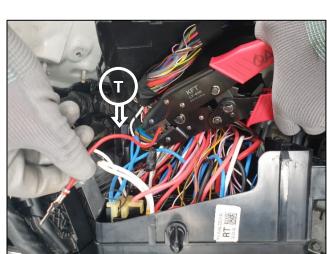
12. Cut the ABS1 and ABS2 fuse wires (red wire and white wire) approximately 50mm (~2") from the underside of the junction box (R).

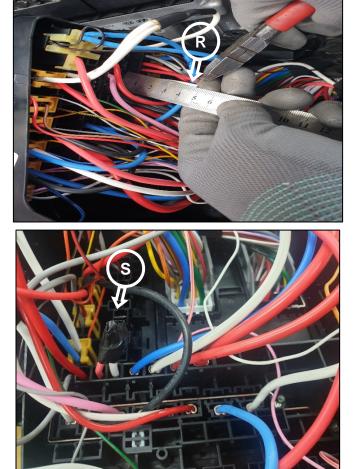
13. Wrap the ends of the white wire and red wire attached to the multifuse with black electrical tape (S).

Connect the supplied lead wires (T) to the un-capped ends of the red wire and white wire using the supplied u-type crimp connectors and heat shrink tubing.

Slide the heat shrink tubing over the wire prior to crimping the lead wire.

14.



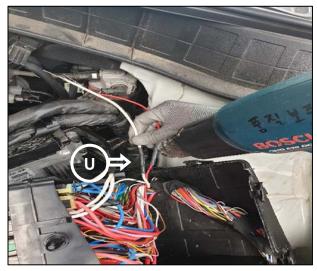


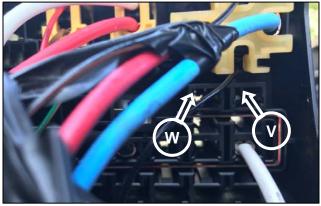
15. Heat the heat shrink tubing (U) using a heat gun.

# **A** CAUTION

Use caution when using the heat gun to avoid damaging the wiring.

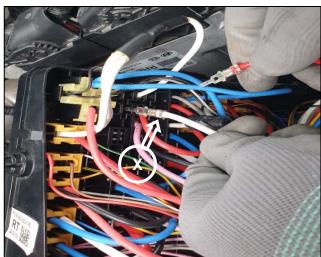
16. Insert the red lead wire into the open space of the empty fuse holder (V) and the white lead wire into the adjacent open space (W).





# NOTICE

Insert the lead wires with the terminal crimp facing upward (X). Be sure to insert until a click is heard and the terminals are secure.



17. Install the supplied micro fuses in the new fuse locations (Y).

# NOTICE

HECU part number 58920-D3530 requires <u>25A</u> micro fuses

HECU part number 58920-D3550 requires <u>25A</u> micro fuses

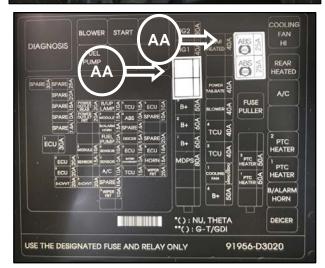
HECU part number 58920-D3100 requires <u>30A</u> micro fuses

18. Reattach the lower junction box cover to the junction box. Install the supplied cable tie in the same position as the cable tie that was previously removed (Z).

- 19. Attach the labels (AA) to the inside of the junction box upper cover and install the junction box cover.
- 20. Reassemble the vehicle in the reverse order of component removal.







21. Confirm the hydraulic unit assembly part number (BB).

If the Part Number is 58920-D3550 or 58920-D3100, <u>software update is not</u> <u>required.</u> Start the engine. Confirm the "ABS", "ESC" and "Brake" indicator lamps are not illuminated, clear any incidental DTCs and reprogram the customer's radio preset stations.

If the Part Number is 58920-D3530, proceed to the ABS/ESC software update procedure below.



### ABS/ESC Software Update Procedure

# NOTICE

This Service Procedure is performed using GDS-mobile. For update information and general precautions, please refer to TSB #15-GI-001.

Manual mode should only be performed when the Auto update fails.

If the auto update fails, turn the ignition OFF for 10 seconds, then back ON again to reset the control unit before performing the manual update.

#### GDS Information:

EVENT# 628*		DESCRIPTION		
		TL- ESC CONTROL LOGIC IMPROVEMENT		
	* Use the latest event that appears in the ABS/ESC Aute Made event list for the particular			

\* Use the latest event that appears in the ABS/ESC Auto Mode event list for the particular vehicle.

#### **ROM ID Information Table:**

MODEL	ESC P/N	ROM ID		
		OLD	NEW	
	58900-D3530	TL ESC 1.00 1.02	TL ESC 1.00 1.04	
		Y06GAF1E11-2-8730	Y06GAG1F11-2-A921	
	58900-D3530	TL ESC 1.00 1.03	TL ESC 1.00 1.04	
Tucson	58900-D3630	Y06GAF1F11-2-9520	Y06GAG1F11-2-A921	
(TL)	58900-D7530	TL ESC 1.00 1.03	TL ESC 1.00 1.04	
	58900-D7630	Y16GAG1D11-2-9216	Y16GAH1D11-2-A922	
	58900-D7560	TL ESC 1.00 1.04	TL ESC 1.00 1.05	
	58900-D7660	Y16GAH1D11-2-9217	Y16GAI1D11-2-A923	

#### Manual Mode Password Information Table:

MENU	PASSWORD
TL ESC 58900-D3530/630	3530
TL ESC 58900-D7530/630	7530
TL ESC 58900-D7560/660	7560

- 1. Select ECU Upgrade.
- 2. Select ABS/ESC as the system to update.
- 3. Check the current version of the ABS/ESC ROM ID and compare it to the ROM ID Information Table listed above before attempting to update the ABS/ESC system.
- 4. Perform GDS software update. Refer to TSB 15-GI-001 for the tablet-based Mobile GDS ECU update procedures.
- After the software has updated, check for
  5. Diagnostic Trouble Codes in the ALL menus and erase any DTCs. Reprogram the customer's radio preset stations.