



GROUP	MODEL
Safety Recall Campaign	2008-2009MY Sportage (KM)
NUMBER	DATE
SC253	December 2022

SAFETY RECALL CAMPAIGN

HECU INSPECTION/REPLACEMENT AND FUSE REPLACEMENT (SC253)

This bulletin provides information relating to the inspection and, if necessary, replacement of the Hydraulic Electronic Control Unit (HECU) in the 2008-2009MY Sportage (KM) vehicles produced from August 9, 2007 through May 13, 2009 that were previously recalled under Kia's Campaign SC138. In addition, the two (2) '40A' fuses for the HECU circuits will be replaced with new '30A' and '20A' fuses to prevent an over-current condition in the HECU's electrical circuit board to mitigate the risk of a fire. An engine compartment fire originating from the area of the HECU may occur while the subject vehicle is being driven or while parked after replacement of the HECU connector cover under the previously launched SC138 recall. Although the exact cause is unknown, it is believed that an internal electrical short circuit can occur from foreign substances remaining on the printed circuit board. Follow the procedure outlined in this publication to inspect the HECU and its wiring harness and connectors for proper functionality and condition and, if necessary, to replace the HECU with a new one. In addition, dealers are to replace the HECU '40A' ABS1 and ABS2 fuses with new '20A' ABS1 and '30A' ABS2 fuses and install new fuse labels. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs. **NOTE: SC253 is a new recall in addition to the previous launched SC138.**



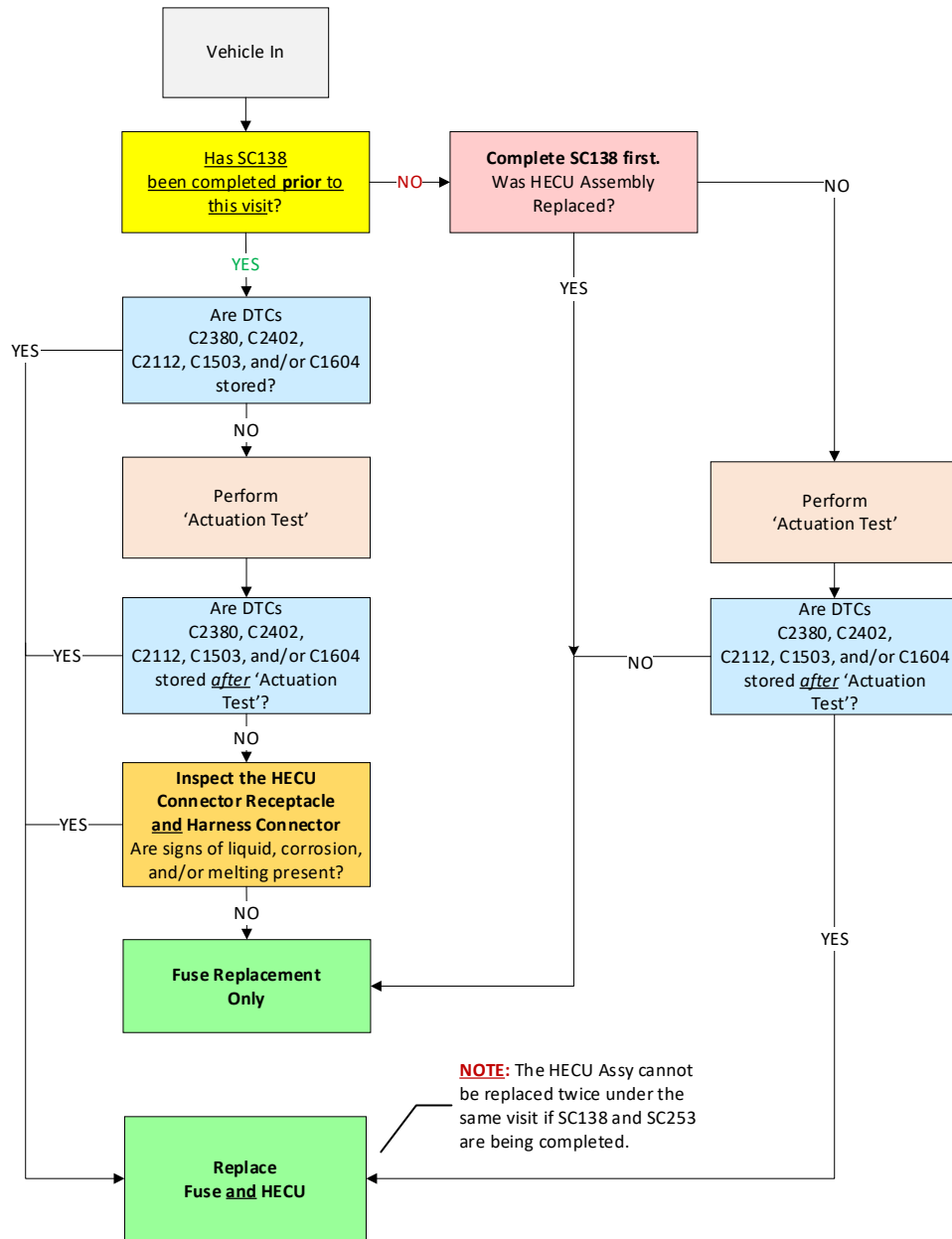
NOTICE

There is no charge to the vehicle owner for this repair. Under applicable law, you may not sell or otherwise deliver any affected vehicle until it has been repaired pursuant to the procedures set forth in this bulletin.

NOTICE

To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service → Warranty Coverage → Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.

Flowchart:



NOTICE

For the vehicles that have NOT completed SC138 during SC253 visit: SC138 needs to be completed first. The re-inspection of HECU Connector & Wire Harness is not required as it was part of SC138.

DO NOT replace the HECU assembly a second time. All replaced HECU's will be collected for inspection and are subject to Warranty review and chargeback.

A Vehicle Diagnosis Number (VDN) must be created prior to replacement. If a VDN is not created, Parts Ordering and Warranty claim submission issues WILL occur.



SUBJECT:

HECU INSPECTION/REPLACEMENT AND FUSE REPLACEMENT (SC253)**Inspection Procedure:**

1. Was [SC138](#) completed on a prior date visit?

Yes - Proceed to step 2.

No - Complete [SC138](#) first.

Was the HECU replaced under SC138 this visit?

Yes - Proceed to page 11 to 'Replacement Procedure' for the Fuse Kit to complete this campaign.

No - Skip to step 3 below to perform the 'Actuation Test'.

2. Using KDS, scan for campaign related DTCs in the table below and proceed with instructions:

DTC	DTC Name
C2380	ABS/TCS/ESP Valve Error
C2402	Motor Electrical
C2112	Valve Relay Error
C1503	TCS/ESP Switch Error
C1604	ECU Hardware Error

Related DTC(s) Stored - Proceed to 'Replacement Procedure' for HECU Assembly on page 7 and the Fuse Kit on page 11.

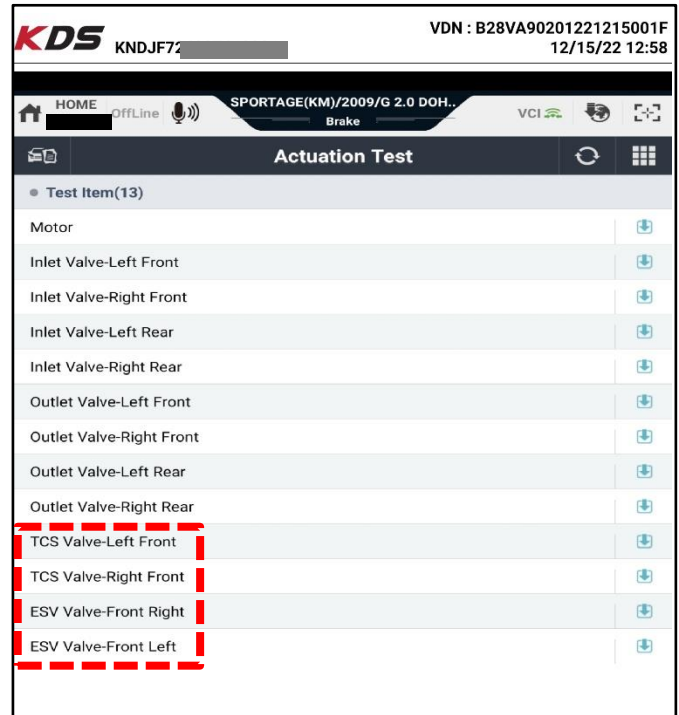
No related DTC(s) Stored - Proceed to step 3 below.

3. Using the KDS, perform the 'Actuation Test'.



4. Force-start TCS and ESV valves.

- TCS Valve-Left Front and press 'Stop' three (3) seconds after pressing 'Start'. Repeat five (5) times.
- TCS Valve-Right Front and press 'Stop' three (3) seconds after pressing 'Start'. Repeat five (5) times.
- ESV Valve-Front Right and press 'Stop' three (3) seconds after pressing 'Start'. Repeat five (5) times.
- ESV Valve-Front Left and press 'Stop' three (3) seconds after pressing 'Start'. Repeat five (5) times.



5. Using KDS, re-scan for DTCs from table on page 3, step 2.

Related DTC(s) Stored - Proceed to 'Replacement Procedure' for HECU Assembly on page 7 and the Fuse Kit on page 11.

NOTICE

For the vehicles that have NOT completed SC138 during current SC253 visit: SC138 needs to be completed first. The re-inspection of HECU Connector & Wire Harness is not required as it was part of SC138.

If DTC's are present after HECU assembly was replaced under SC138 during the same visit, open a Techline case and follow their instructions to close SC253 campaign. **DO NOT replace the HECU assembly twice in the same visit for SC138 and SC253 for DTC stored concern.**

No DTC(s) Stored - Proceed to 'HECU Connector Inspection' on page 5.

Non-Related DTC(s) Stored - Proceed to 'HECU Connector Inspection' on page 5 and the 'Replacement Procedure' for Fuse Kit on page 11. Refer to the applicable Shop Manual on KGIS to diagnose (not covered under SC138 or SC253 campaigns).

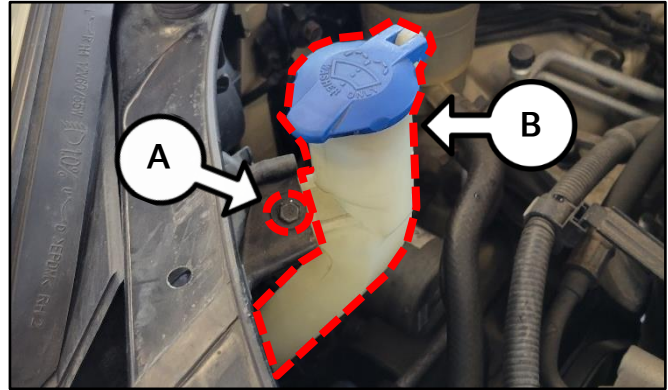
IMPORTANT

A Vehicle Diagnosis Number (VDN) must be created prior to HECU (and harness with Techline approval) replacement. If a VDN is not created, Parts Ordering and Warranty claim submission issues WILL occur.

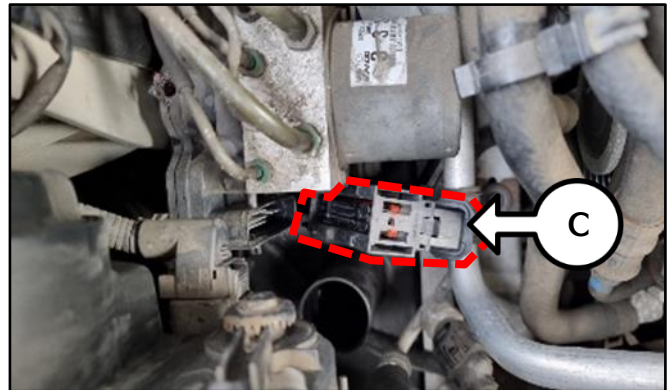
SUBJECT: **HECU INSPECTION/REPLACEMENT AND FUSE REPLACEMENT (SC253)**

HECU Connector Inspection:

1. To access the HECU, loosen the bolt (A) and remove the washer fluid reservoir filler neck (B).



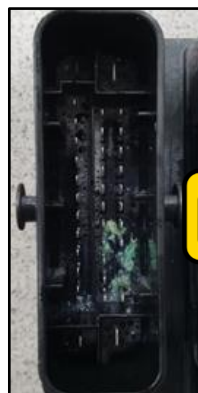
2. Move locking lever to release the connector (C) and remove it from the HECU.



3. Inspect the HECU connector (C) and harness for signs of fluid intrusion, corrosion, and melting.



Fluid Intrusion



Corrosion



Melting

4. Are there signs of fluid intrusion, corrosion, and/or heat damage?

Yes - Proceed to 'Replacement Procedure' for HECU Assembly on page 7 and the Fuse Kit on page 11.

No - Proceed to step 5.

📌 IMPORTANT

For corrosion and melting, take picture(s) and attach to the claim using 'XX other. If picture is not attached, claim submission concerns may apply.



SUBJECT: HECU INSPECTION/REPLACEMENT AND FUSE REPLACEMENT (SC253)

- 5. Re-connect the HECU connector and secure with the locking lever.

Note: Thoroughly clean HECU connector using air gun and prior to re-connecting.



- 6. Confirm that the orange connector seal is NOT visible (NG) from the top. If so, properly reconnect HECU connector and secure (OK).



- 7. Reinstall washer reservoir filler neck.



- 8. Proceed to 'Replacement Procedure' for the Fuse Kit only instructions outlined on page 11.



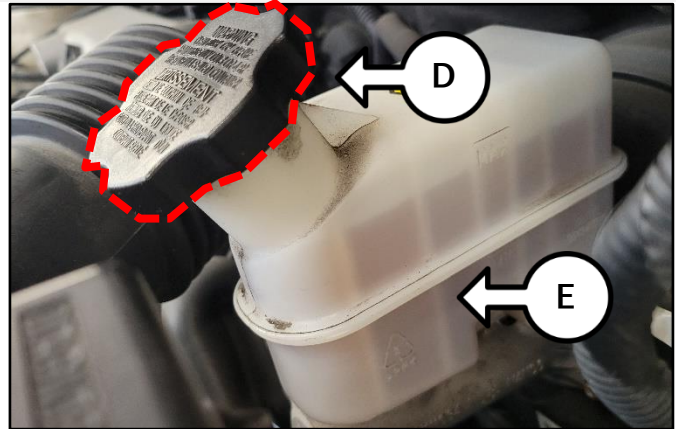
SUBJECT:

HECU INSPECTION/REPLACEMENT AND FUSE REPLACEMENT (SC253)**Replacement Procedure: (HECU)**

1. Remove the brake fluid reservoir cap (D) and drain brake fluid from the reservoir (E).

NOTICE

Remove power steering fluid reservoir from the body and move to the side. DO NOT disconnect or drain.



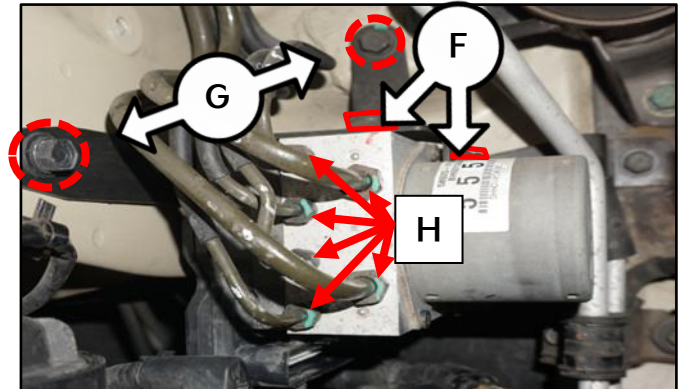
2. Replace the HECU by referring to the "Brake System → ESC (Electronic Brake-force Distribution) → ESC Control Module → Repair procedures" chapter in the applicable Shop Manual on KGIS.



Tightening torque for bolt (F):
5.82-7.27 lb.ft (7.84-9.8 N.m)

Tightening torque for HECU Bracket
Mounting Bolt (G):
12.36-18.9 lb.ft (16.66-25.48 N.m)

Tightening torque for HECU Brake Tube
Nut (H):
9.45-12.36 lb.ft (12.74-16.66 N.m)

**NOTICE**

Install a brake pedal depressor to maintain system pressure and to reduce fluid loss once the lines are disconnected.

IMPORTANT

Mark HECU lines prior to removing the HECU and document for future reference to avoid incorrect re-assembly. Thoroughly clean HECU connector using air gun prior to re-connecting.

3. Fill the brake fluid reservoir with brake fluid to the 'MAX' level.

(Recommended fluid: DOT3 or DOT4)

NOTICE

If there is any brake fluid on any painted surface, wash it off immediately.
When pressure bleeding, do not depress the brake pedal.

SUBJECT: HECU INSPECTION/REPLACEMENT AND FUSE REPLACEMENT (SC253)

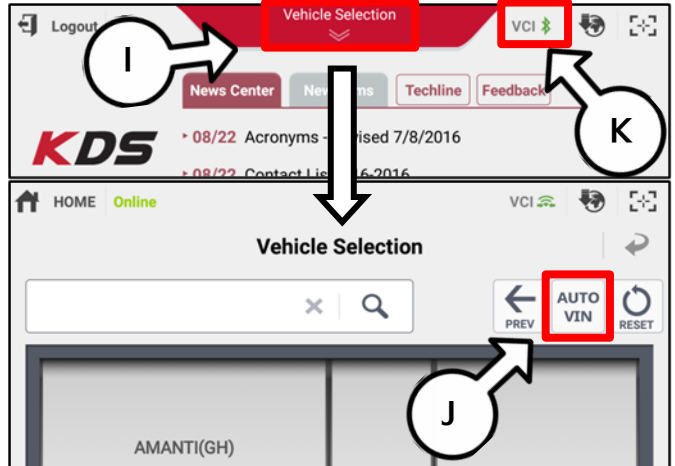
- 4. Connect the VCI-II to the OBD-II connector, located under the driver's side of the instrument panel.



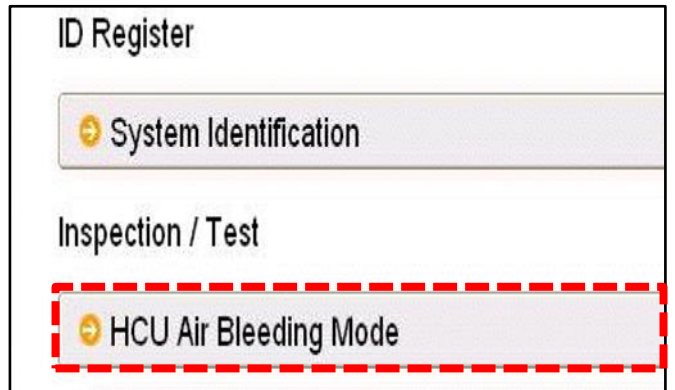
- 5. With the ignition ON, turn ON the KDS tablet. Select 'KDS' from the home screen.



- 6. Confirm communication with VCI (K) and then configure the vehicle (I) using the 'AUTO VIN' (J) feature.

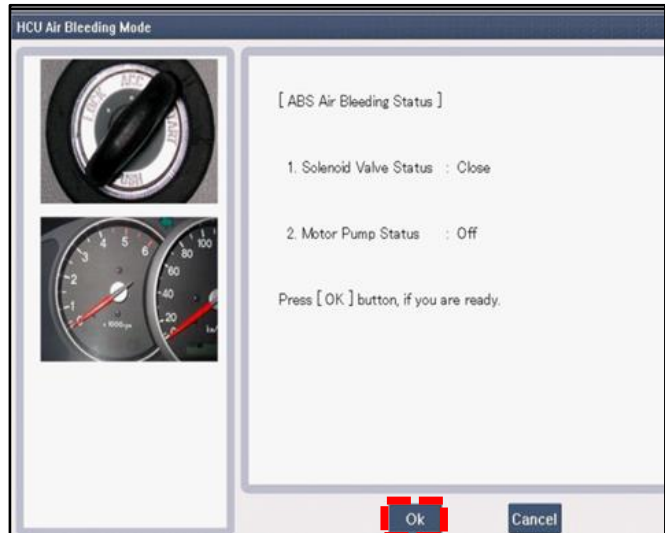


- 7. Select 'HCU Air Bleeding Mode'.



SUBJECT: HECU INSPECTION/REPLACEMENT AND FUSE REPLACEMENT (SC253)

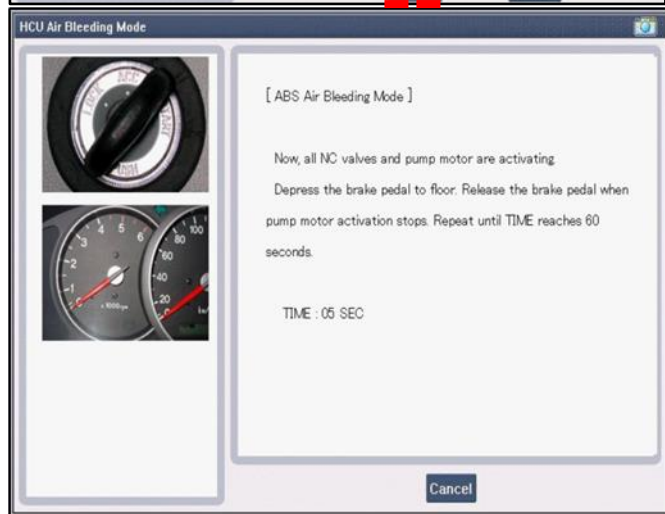
8. Press "OK" to operate motor pump and solenoid valve.



9. Follow instructions on screen, except keep pedal depressed until 'test cycle completed' message shows.

! WARNING

Do not exceed the maximum operating time (60 seconds) of the ABS motor with the KDS to prevent the motor pump from burning.



10. Once the test is completed as indicated on the screen, remove KDS.

Connect a clear plastic tube to the right rear wheel caliper bleeder screw and insert the other end of the tube into a clear plastic bottle half-filled with new brake fluid.



11. Pump the brake pedal several times, and then loosen the bleeder screw on the right rear wheel until brake fluid starts to flow without bubbles.

Close the bleeder screw and repeat as necessary.



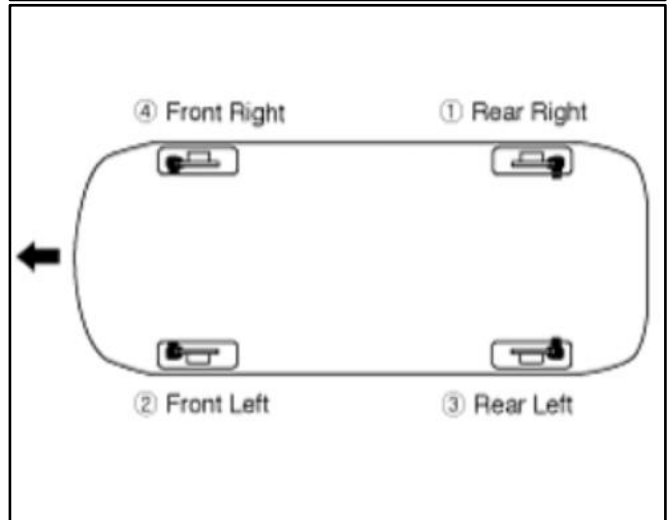
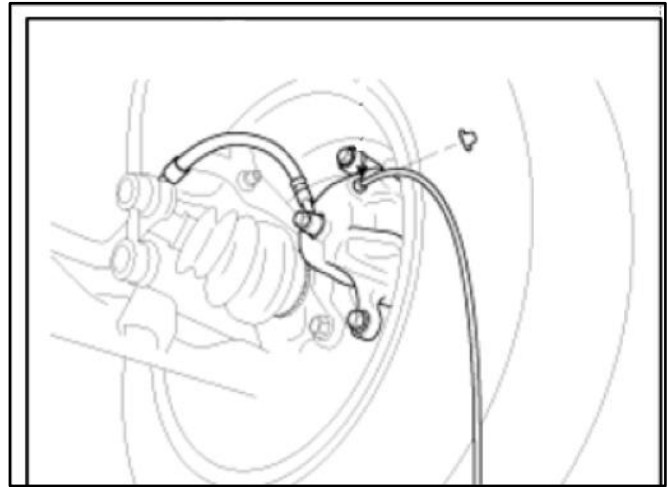
**Tightening torque for Bleeder Screw:
5.1-9.4 lb.ft (6.8-12.7 N.m)**

12. Follow sequence below and as shown in the illustration.
 1. Rear Right
 2. Front Left
 3. Rear Left
 4. Front Right

Repeat step 20 for each wheel until there are no more bubbles are seen in the fluid.

❶ IMPORTANT

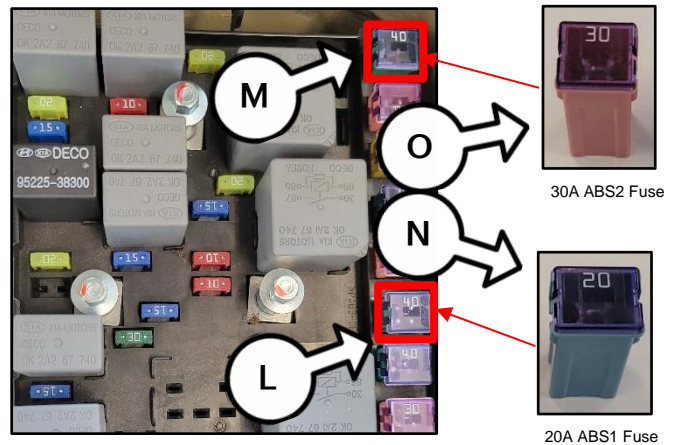
Keep brake fluid level near 'MAX' during the procedure and add fluid as necessary once the bleeding is completed.



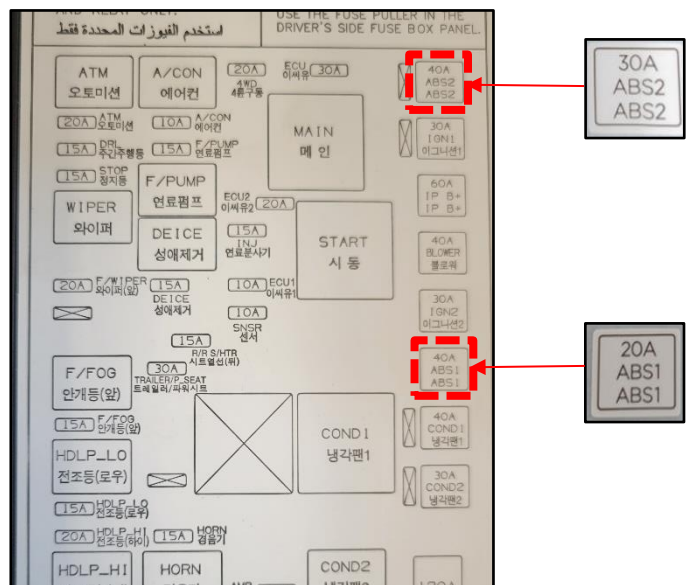
13. Reassemble all parts in reverse order of disassembly.
14. Confirm proper operation.

SUBJECT: HECU INSPECTION/REPLACEMENT AND FUSE REPLACEMENT (SC253)
Replacement Procedure: (Fuse Kit)

1. Disconnect the negative (-) battery cable.
2. Remove the engine room junction block upper cover.
3. Remove '40A' ABS1 (L) and '40A' ABS2 (M) fuses.
4. Install '20A' ABS1 fuse (N).
5. Install '30A' ABS2 fuse (O).



6. Install fuse labels to the underside of the engine room junction block upper cover.



7. Reinstall the engine room junction block upper cover.
8. Reconnect the negative (-) battery cable.

SUBJECT: HECU INSPECTION/REPLACEMENT AND FUSE REPLACEMENT (SC253)

AFFECTED VEHICLE RANGE:

Model	Production Date Range
Sportage (KM)	August 9, 2007 to May 13, 2009

REQUIRED PART:

Part Name	Part Number	Figure	Qty.
Fuse Kit	91940 1F000QQK		1
HECU (2WD)	58920 1F300QQK		1
HECU (4WD)	58920 1F350QQK		
Brake Fluid	UM040 CH013	N/A	2

WARRANTY INFORMATION:

N Code: N99 C Code: C99

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
R	58920 1F300	0	(SC253) DTC Inspection + Actuation Test+ Connector Inspection+ Fuse Kit Replacement	221154R0	0.4 M/H	91940 1F000QQK	1
			(SC253) DTC Inspection+ Actuation Test+ HECU Replacement+ Connector Inspection+ Fuse Kit Replacement	221154R1	1.8 M/H	91940 1F000QQK and 58920 1F300QQK or 58920 1F350QQK	1
						UM040 CH013	2

Refer to Warranty Bulletin 2022-46 for claim submission procedures. Note: For all part replacements, a photo of the HECU must be attached using the KVID app and photo must be attached to claim using Warranty Claim Attachment type 'XX - Other'. Claims will be subject to chargeback if photos are not submitted.

 NOTICE

A **Vehicle Diagnosis Number (VDN)** must be created prior to HECU replacement. If a VDN is not created, Parts Ordering and Warranty claim submission issues WILL occur.

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference **SC253** when accessing the WebDCS system.