

	GROUP	MODEL			
	Safety Recall Campaign	2008-2009MY Sportage (KM)			
	NUMBER	DATE			
	SC138 (Rev 1, 4/19/2017)	November 2016			
SAFETY RECALL CAMPAIGN					
		B			

HECU ASSEMBLY AND CONNECTOR COVER **INSPECTION AND REPLACEMENT (SC138)**

*** NOTICE**

This bulletin has been revised to include additional information. New/revised sections of this bulletin are indicated by a black bar in the margin area.

This bulletin provides information relating to the inspection and replacement of the Hydraulic Electronic Control Unit (HECU) connector cover or HECU assembly and connector cover in 2008-2009MY Sportage (KM) vehicles produced from August 9, 2007 through May 13, 2009. Corrosion of the wire harness connector pins in the HECU assembly can occur due to improper sealing of the HECU's wire harness connector. If moisture contaminated with road salt reaches the HECU's circuit board, electrical short circuits may occur to the circuit board and can lead to a thermal event, including the possibility of an engine compartment fire. In some cases, the ESC warning light may also illuminate. Before conducting the procedure, verify the vehicle is included in the list of affected VINs. If so, follow the procedure outlined in this bulletin.







***** NOTICE

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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.

To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service \rightarrow Warranty Coverage \rightarrow 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.

File Under: <safety campaign="" recall=""></safety>						
Circulate To:	🗵 General Manager	Service Manager	I Parts Manager			
I Service Adviso	rs 🛛 🖾 Technicians	🛛 Body Shop Manager	I Fleet Repair			

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HECU Connector Inspection Procedure:

1. Check for HECU related (current or history) DTCs.

If any of the following DTCs are found, replace the HECU per the procedure on page 5.

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

If no DTCs are found, proceed to step 2.

2. Loosen bolt and remove washer fluid filler neck to provide access to the HECU.



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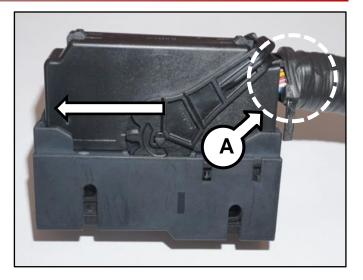
3. Move locking lever to release the connector and remove it from the HECU.

Carefully cut the zip tie and tape (A).

***** NOTICE

Connector shown removed from the HECU for illustration purposes only.

4. Press tab to release, remove, and discard the old connector cover.





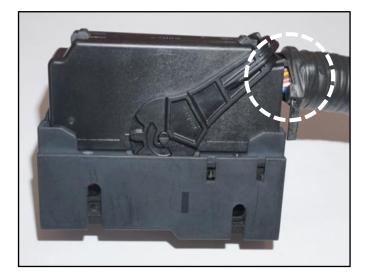
Use the correct new cover. (Refer to the parts information on page 9.) The three (3) different production ranges overlap; always select the new cover so that it matches the original.

Re-assemble the connector in the reverse order of disassembly.

Be sure and secure the cover to the harness with a tie wrap and tape.



Check for "clicking" sound to make sure the cover is locked onto the connector.



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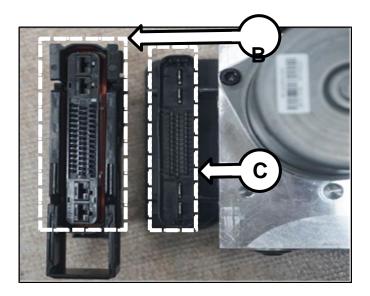
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- 6. Confirm proper lever/lock operation.
- Blow off any foreign substances from the wiring harness connector and the HECU connector receptacle with an air gun.
 - (B) Wiring harness side
 - (C) HECU side

Using a mirror and flashlight, carefully check for any corrosion and/or contamination of the connector pins/terminals in the HECU connector receptacle.

- 8. In case there is contamination on the connector, replace the HECU assembly by proceeding to the "HECU Assembly and Replacement Procedure" on the next page.
- 9. If there is no corrosion and/or contamination, re-install the connector onto the HECU.
- 10. Reinstall the washer fluid filler neck and secure with bolt.
- 11. Start the vehicle, confirm proper operation and confirm no MIL ON after HECU self-check.



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HECU Replacement Procedure:

 If corrosion/contamination was found on the connector terminals, or any DTCs listed on page 2 are found, replace the ABS Control Unit (HECU) referring to the Shop manual:

Brake System \rightarrow ESC (Electronic Stability Control System) \rightarrow ESC Module \rightarrow Repair procedures

***** NOTICE

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

Loosen and remove both the HECU bracket to the body and the bracket to the HECU bolts.

Torque Specifications:

Bracket to Body Bolts 12.3-18.8 lb·ft, (16.7-25.5 Nm, 1.7-2.6 kgf m)

Bracket to HECU Bolts 8.1-10.3 lb·ft, (11-14 Nm,1.1-1.4 kgf m)

2. Mark HECU lines prior to removing the HECU and document for future reference to avoid incorrect re-assembly.

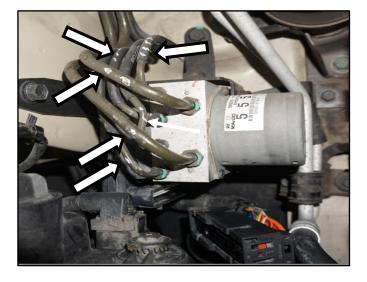
Install a brake pedal depressor to maintain system pressure and to reduce fluid loss once the lines are disconnected.

Remove the lines and remove the HECU.

Torque Specifications:

9.4-12.3 lb·ft (12.7-16.7 Nm, 1.3-1.7 kgf m)





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- 3. Install the new HECU in reverse order of removal.
- 4. Remove the brake pedal depressor.

Remove the reservoir cap and fill the brake reservoir with brake fluid. (Recommended fluid: DOT3 or DOT4)



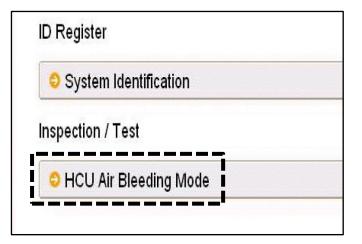
If there is any brake fluid on any painted surface, wash it off immediately. When pressure bleeding, do not depress the brake pedal.

- 5. Connect the GDS/KDS to the data link connector located underneath the dash panel.
- 6. Select and operate according to the instructions on the GDS/KDS screen.

***** NOTICE

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

- 7. Select vehicle name, and select Anti-Lock Brake system.
- 8. Select HCU Air Bleeding Mode.



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

HCU Air Bleeding Mode	2
	[ABS Air Bleeding Status] 1. Solenoid Valve Status : Close
	2. Motor Pump Status : Off Press [OK] button, if you are ready.
	Ok Cancel

10. Follow instructions on screen except keep pedal depressed until test cycle completed message shows.

HCU Air Bleeding Mode	
	[ABS Air Bleeding Mode] Now, all NC valves and pump motor are activating Depress the brake pedal to floor. Release the brake pedal when pump motor activation stops. Repeat until TIME reaches 60 seconds. TIME : 05 SEC
	Cancel

11. Once the test is completed as indicated on the screen, remove GDS/KDS.

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

HCU Air Bleeding Mode	
	[ABS Air Bleeding Mode] Now, all NC valves and pump motor are activating
3 4 5 6 60 -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -2 -1 -2 -2 -1 -2 -2 -2 -2 -2 -2 -2 -2 -2 -2	Test completed !!! Press [OK] button.
	Ok
	Cancel

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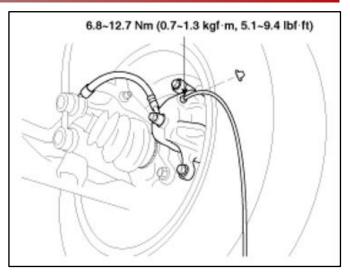
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12. Pump the brake pedal several times, and then loosen the bleeder screw on the right rear wheel until fluid starts to run out without bubbles.

Close the bleeder screw and repeat as necessary.

Torque Specifications: 5.1-9.4 lb·ft (6.8-12.7 Nm, 0.7-1.3 kgf m)



13. Follow sequence shown in the illustration.

Repeat step 12 for each wheel until there are no more bubbles in the fluid.

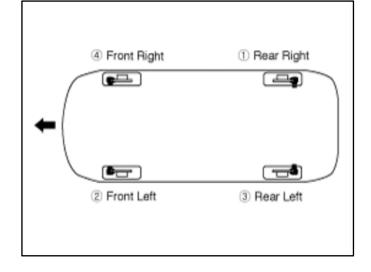
Tighten the bleeder screw.

Torque Specifications: 5.4-9.5 lb·ft (7-13 Nm, 0.7-1.3 kgf m)

***** NOTICE

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

- 14. Re-assemble all other parts in reverse order of disassembly.
- 15. Start the vehicle, confirm proper operation, make sure there are no brake fluid leaks, and confirm no MIL ON after HECU self-check.



HECU ASSEMBLY AND CONNECTOR COVER INSPECTION AND REPLACEMENT (SC138)

AFFECTED VEHICLE RANGE:

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

REQUIRED PARTS:

SUBJECT:

Part Name	Part Number	Figure
HECU (2WD)	58920 1F300QQK	
HECU (4WD)	58920 1F350QQK	
Connector Cover The three (3) different production ranges overlap. Always select the new cover so that it matches the original.	91299 1F010QQK For Production Dates: 08/9/07 – 05/01/08	FCI
	91299 1F020QQK For Production Dates 10/01/07 – 05/13/09	
	91299 1F030QQK For Production Dates: 08/09/07 – 10/01/07	Yellow Lock Lever

HECU ASSEMBLY AND CONNECTOR COVER INSPECTION AND REPLACEMENT (SC138)

WARRANTY INFORMATION:

Claim Type	Causal P/N	Qty.	N Code	C Code	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
				HECU Connector Inspection & Cover	161111R1	0.4 M/H	91299 1F010QQK Production Dates: 08/09/07 – 05/01/08	1	
							91299 1F020QQK Production Dates: 10/01/07 – 05/13/09	1	
					Replacement			91299 1F030QQK Production Dates: 08/09/07 – 10/01/07	1
								HECU 58920 1F300QQK (2WD)	1
	R 58920 0						(Cover) 91299 1F010QQK Production Dates: 08/09/07 – 05/01/08		
R		0	0 N99	C99			1.8 M/H	or (Cover) 91299 1F020QQK Production Dates: 10/01/07 – 05/13/09	1
			Ass C	HECU Assembly and Connector Cover Replacement	1011110		or (Cover) 91299 1F030QQK Production Dates: 08/09/07 – 10/01/07		
					161111R0		HECU 58920 1F350QQK (4WD)	1	
							(Cover) 91299 1F010QQK Production Dates: 08/09/07 – 05/01/08		
					1.8 M/H	or (Cover) 91299 1F020QQK Production Dates: 10/01/07 – 05/13/09	1		
								or (Cover) 91299 1F030QQK Production Dates: 08/09/07 – 10/01/07	

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Notes:

For Labor Op 161111R0: use of zip tie, electrical insulation tape, and brake fluid, sublet code X1 (maximum allowance \$13.55) will be automatically added to each claim.

For Labor Op 161111R1: use of zip tie and electrical insulation tape, sublet code X1 (maximum allowance \$0.75) will be automatically added to each claim.

* NOTICE

To ensure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service \rightarrow Warranty Coverage \rightarrow 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.