



GROUP	MODEL
Voluntary Service Campaign	2021-2023MY Seltos (SP2) AWD
NUMBER	DATE
SC297	April 2024

VOLUNTARY SERVICE CAMPAIGN

SUBJECT:

4WD ECU INSPECTION/REPLACEMENT (SC297)

This bulletin provides information to inspect and, if necessary, replace/repair the 4WD Electronic Control Unit (ECU) and wire harness and also to install a protective cover over the 4WD ECU on certain 2021-2023MY Seltos (SP2) All-Wheel Drive (AWD) vehicles produced from November 20, 2019 through March 2, 2023 that were originally sold or are currently registered in one of 36 states and the District of Columbia with significant snowfall (AK, CO, CT, DC, DE, IA, ID, IL, IN, KS, KY, MA, MD, ME, MI, MN, MO, MT, ND, NE, NH, NJ, NM, NV, NY, OR, OH, PA, RI, SD, UT, VA, VT, WA, WI, WV, and WY). In the 36 states and District of Columbia with significant snowfall, snow may be tracked into the driver's footwell area. Meltwater from this snow may enter the 4WD ECU located under the driver's seat and, over time, damage the 4WD ECU circuit board components. This can lead to the illumination of the 4WD Warning Light and deactivation of the vehicle's 4WD feature. If this occurs, the vehicle can continue to be driven in the front-wheel drive mode. This service campaign is to improve protection of the 4WD ECU against water intrusion. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.



NOTICE

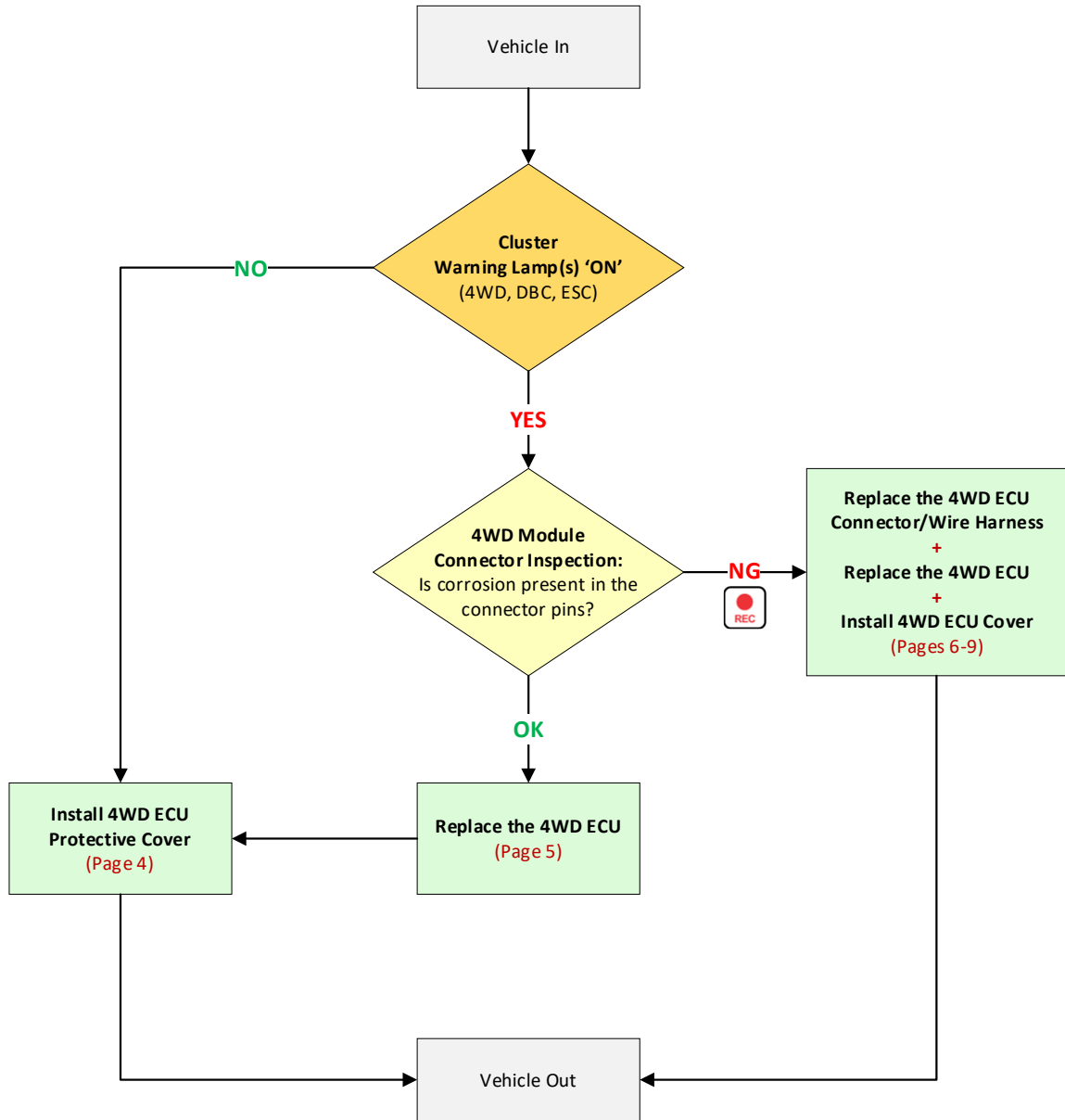
There is no charge to the vehicle owner for this repair.

Repair status for a VIN is provided on KDealer+ (Service → Warranty Coverage → Warranty Coverage Inquiry → Campaign Information). Not completed Recall / Service Action reports are available on KDealer+ (Consumer Affairs → Not Completed Recall → Recall VIN → Select Report), which includes a list of affected vehicles.

A printed copy is for reference only; publication information can be updated at any time. Always refer to KGIS for the latest information. After logging in kdealer.com, the newest technical publications are listed in 'Service Releases' and has the latest service information that has been released.

Flowchart:

Follow the flowchart below to inspect and repair the affected vehicle.



Path 1: Vehicle IN → Cluster Warning Lamp(s) 'ON' (NO) → Install 4WD ECU Protective Cover → Vehicle OUT

Path 2: Vehicle IN → Cluster Warning Lamp(s) 'ON' (YES) → 4WD ECU Connector Corroded (OK) → Replace 4WD ECU → Install 4WD ECU Protective Cover → Vehicle OUT

Path 3: Vehicle IN → Cluster Warning Lamp(s) 'ON' (YES) → 4WD ECU Connector Corroded (NG) + KVID Video → Wire Harness Repair → Replace 4WD ECU → Install 4WD ECU Protective Cover → Vehicle OUT






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Inspection Procedure:

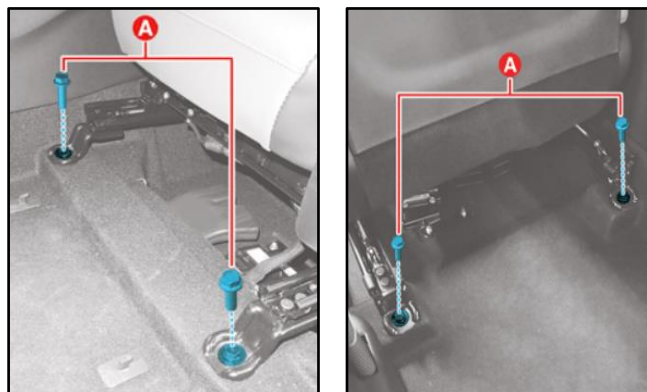
- Are the 4WD, DBC, and/or ESC warning lamps illuminated on the instrument cluster?
 - NO:** If **4WD, DBC, and/or ESC warning lamp(s)** are NOT illuminated, proceed to 'ECU Cover Installation' on page 4.
 - YES:** If **4WD, DBC, and/or ESC warning lamp(s)** ARE illuminated, proceed to step 2.

4WD (4-Wheel Drive System)	DBC (Downhill Brake Control)	ESC (Electronic Stability Control)
		

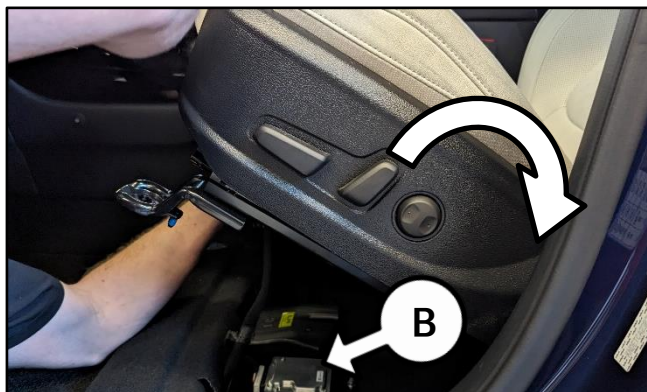
- Loosen the four (4) driver front seat assembly retaining bolts (A).



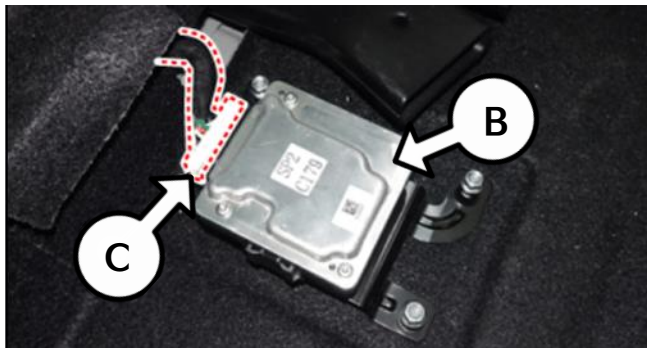
Tightening torque for bolts:
32.5 - 58.8 lb.ft (44.1 - 11.8 N.m)



- Tilt the seat backwards to access the 4WD ECU (B).

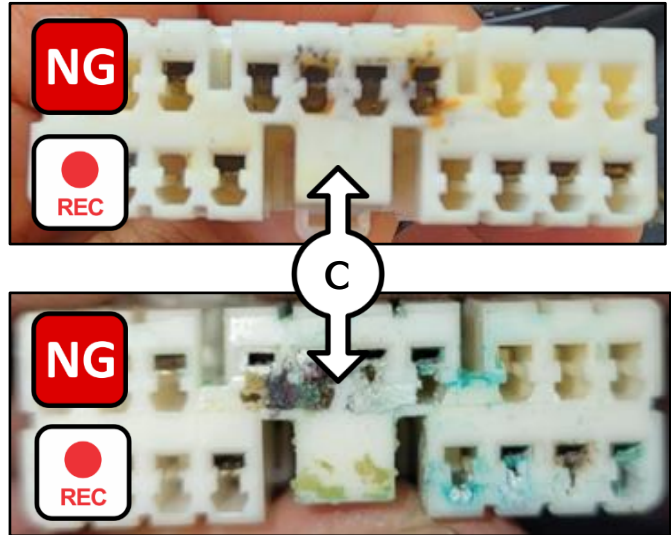


- Disconnect the 4WD ECU (B) connector (C).



5. Inspect the 4WD ECU connector (C) for corrosion damage:

- If damage/corrosion IS found (**NG**), take a KVID video starting from the VIN label on the door and then show the (**NG**) connector, then proceed to the 'Repair Procedure' (4WD ECU Connector/Wire Harness) on page 5.



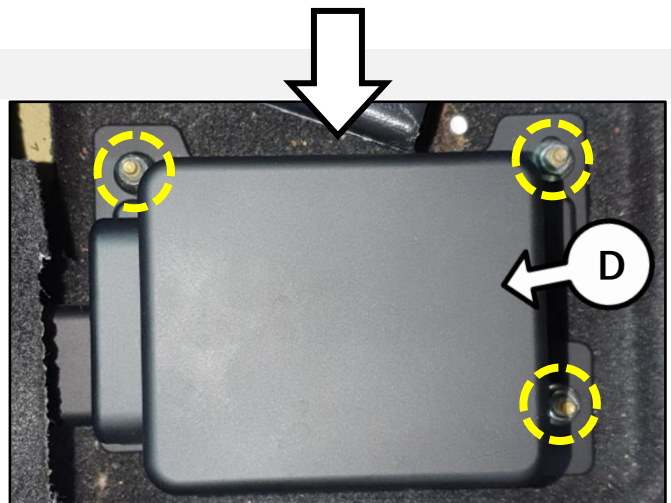
6. If corrosion damage is NOT found (**OK**), re-connect the 4WD ECU connector and proceed to the 4WD 'ECU Cover Installation' procedure below.

ECU Cover Installation:

- Install the 4WD ECU protection cover (D) over the ECU by removing the three (3) ECU retaining bolts.
- Reinstall all removed parts in the reverse order of removal.



Tightening torque for bolts:
7.2 - 8.7 lb.ft (9.8 - 11.8 N.m)



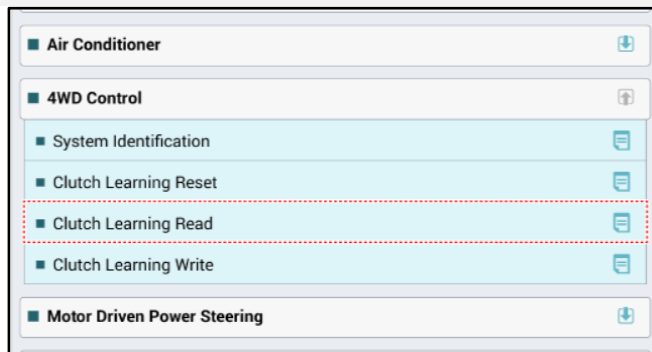
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Replacement Procedure: (4WD ECU)

- Using KDS, perform 4WD 'Clutch Learning Read' procedure.

Note: Write down the existing/original ECU clutch learning ID as it is required in step 9.



- Open the hood and disconnect the negative (-) 12V battery terminal.
- Remove the 4WD ECU (B) by removing the (3) 4WD ECU retaining bolts (D).
- Install a new 4WD ECU (B).
- Reconnect the wire harness connector.

IMPORTANT

Complete the 'ECU Cover Installation'
by referring to the bottom of page 4.

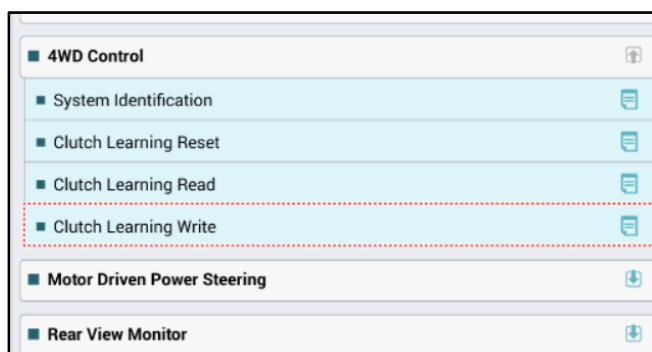
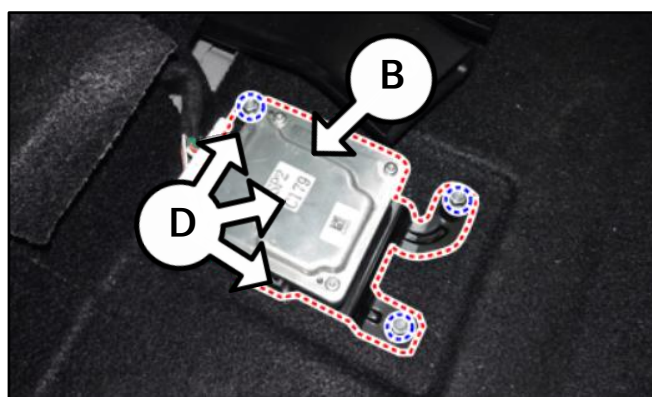


Tightening torque for bolts:
7.2 - 8.7 lb.ft (9.8 - 11.8 N.m)

- Reconnect the negative (-) 12V battery terminal.
- Reinstall the driver seat in the reverse order of removal.
- Using KDS, perform the 'Clutch Learning Write' procedure.

Note: Enter the original ECU clutch learning ID from step 1.

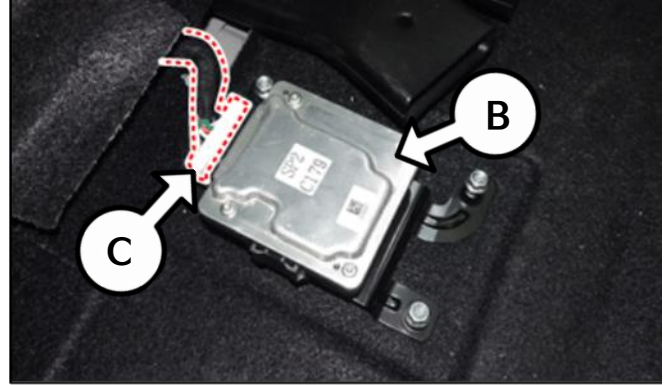
- Confirm normal vehicle operation and that no instrument cluster warning lamps are 'ON'.



Repair Procedure: (4WD ECU Connector/Wire Harness)

After a (NG) 4WD ECU connector inspection result (page 4, step 5).

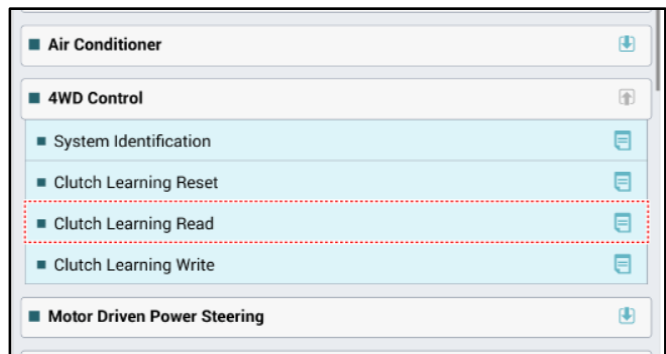
1. Reconnect the 4WD ECU (B) connector (C).



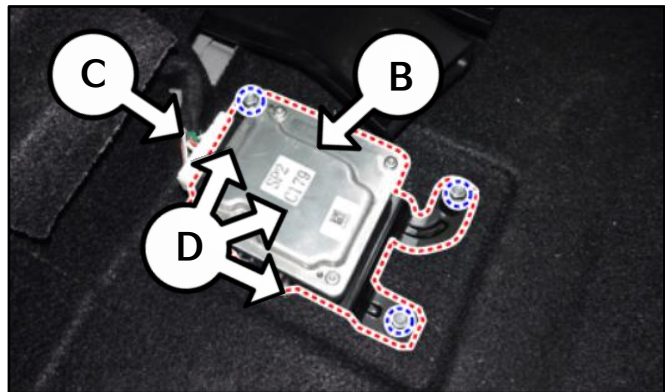
2. Using KDS, perform 4WD 'Clutch Learning Read' procedure.

Note: Write down the existing/original ECU clutch learning ID as it is required in step 20.

3. Open the hood and disconnect the negative (-) 12V battery terminal.



4. Disconnect the 4WD ECU connector (C).
5. Remove the 4WD ECU (B) by removing the (3) 4WD ECU retaining bolts (D).



6. Carefully, cut into the insulation protective tape of the ECU wiring harness to expose the wires.



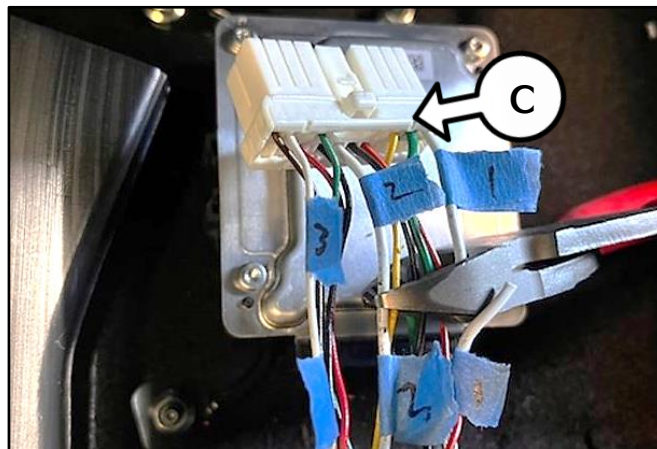
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7. Using wire cutters, cut-off the connector from the harness (about 2" in. from the connector end).

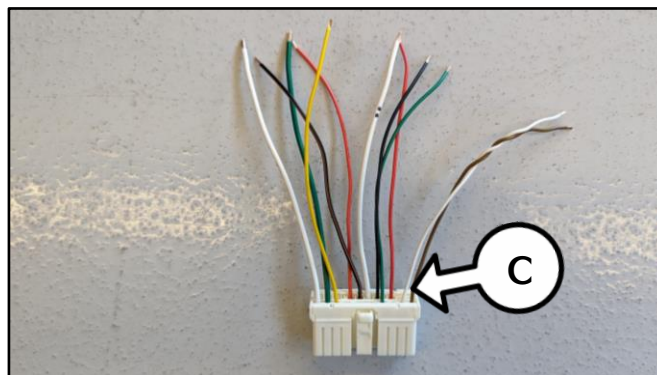
⚠ CAUTION

Mark each of the three (3) white wires with a tape and/or marker. If the wires are connected incorrectly, damage to the ECU may occur.



8. Take the new 4WD ECU connector (C) and using a pair of wire strippers, strip 10mm (0.40" in.) of insulation from each of the eleven (11) connector wires, as shown.

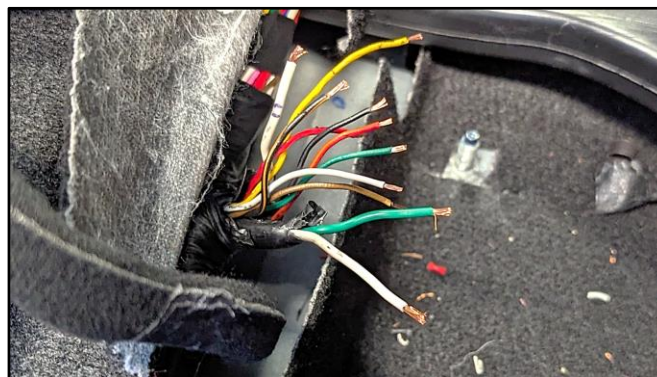
Note: Cut-off any excess wiring as needed but not too short as it will be more difficult to re-connect to the existing harness.



9. Using a pair of wire strippers, strip 10mm (0.40" in.) of insulation from each of the eleven (11) harness wires, as shown.

⚠ CAUTION

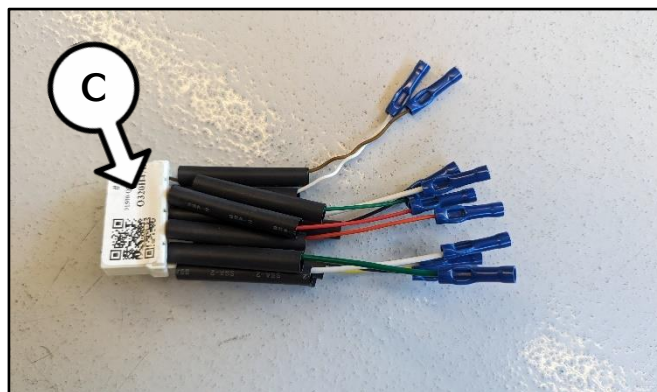
Mark each of the three (3) white wires with a tape and/or marker. If the wires are connected incorrectly, damage to the ECU may occur.



10. Take the new 4WD ECU connector (C) and crimp the butt splice connectors to the wires and insert the heat shrink tubes as shown.

📄 NOTICE

Discard the wire crimp connectors provided in the wiring kit and use locally sourced heat shrink self-solder connectors or butt splice connectors.



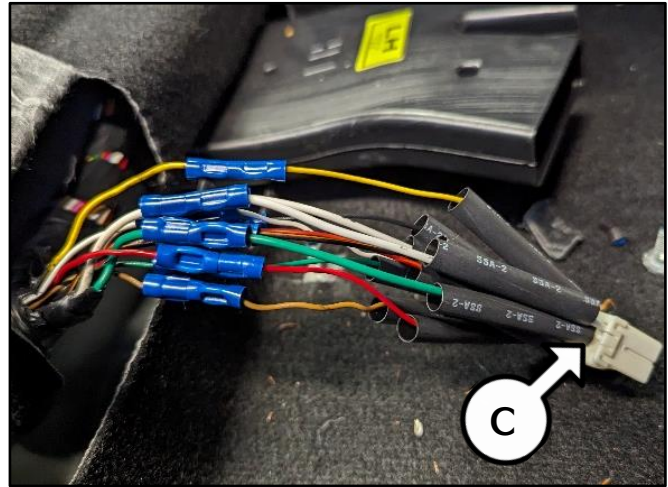
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11. Connect the new 4WD ECU connector (C) to the existing wire harness by crimping butt splice connectors to the wires as shown.

Note: Perform a push-pull on each wire to confirm it is securely crimped on both ends.

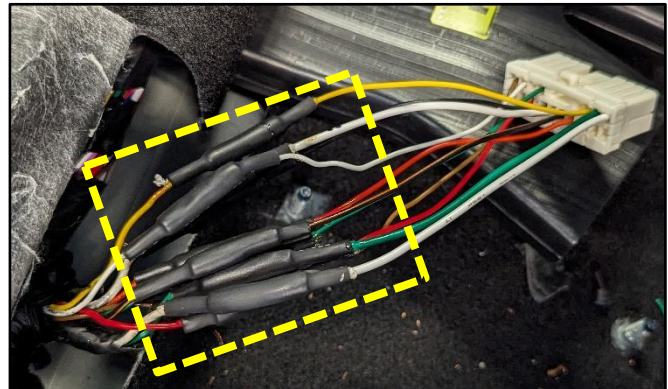
CAUTION

Match each of the three (3) white wires previously marked. If the wires are re-connected incorrectly, damage to the ECU may occur.



12. Using a heat gun, apply heat to the shrink tube sleeves by covering the butt splice connector area.

Note: Repeat for all 11 wires.

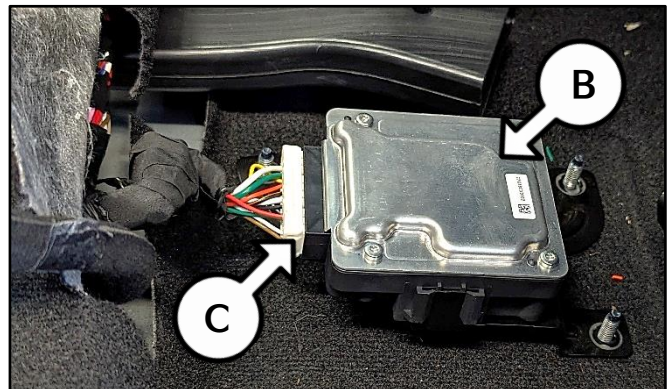


13. Using electrical or Tesa tape, wrap the wiring harness repair area.

Note: Ensure to cover all exposed wires with tape as shown.



14. Install a new 4WD ECU (B).
15. Reconnect the 4WD ECU connector (C).



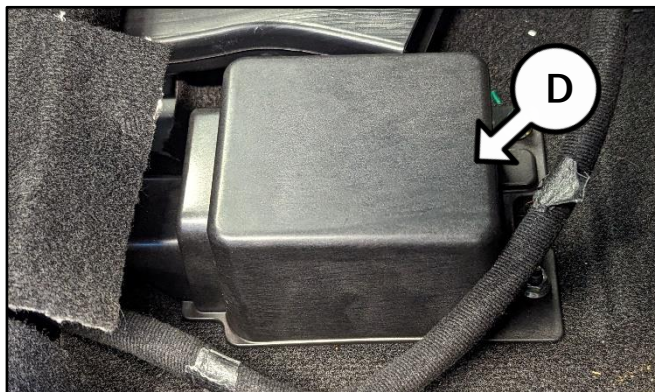
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16. Install the new 4WD ECU protection cover (D) over the ECU and tighten the three (3) ECU retaining bolts.



Tightening torque for bolts:
7.2 - 8.7 lb.ft (9.8 - 11.8 N.m)

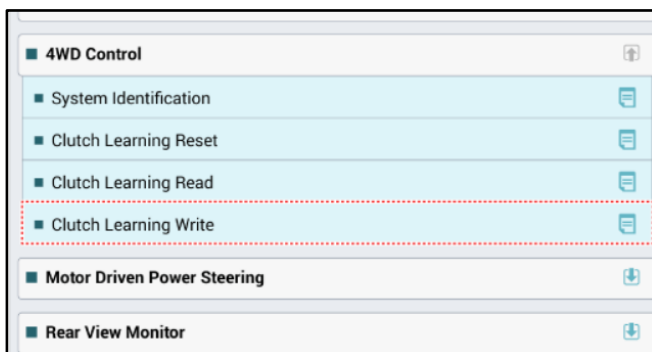


17. Reinstall the driver seat in the reverse order of removal.
18. Reconnect the negative (-) 12V battery terminal.



19. Using KDS, perform the 'Clutch Learning Write' procedure.

Note: Enter the original ECU clutch learning ID from step 2.





20. Confirm normal vehicle operation and that no instrument cluster warning lamps are 'ON'.

SUBJECT:

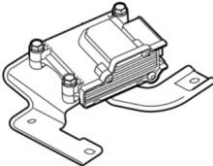



4WD ECU INSPECTION/REPLACEMENT (SC297)**AFFECTED VEHICLE RANGE:**

Model	Production Date Range
Seltos (SP2)	November 20, 2019 to March 2, 2023

REQUIRED TOOL:

Tool Name	Part Number	Figure	Comments
Heat Gun	N/A		Locally Sourced
Wire Stripper	N/A		

REQUIRED PART:

Part Name	Part Number	Figure	Qty.	Comments
4WD ECU	95447 2D205		1	Replace only if Applicable
ECU Cover	95449 2D000QQK		1	Install on <u>ALL</u> vehicles
4WD ECU Connector & Harness Kit	91500 Q5999QQK**		1	Discard the wire terminal connectors provided in kit.
Heat Self-Soldering or Butt Splice Connectors	Locally Sourced		11	Locally Sourced

****Note:** The replacement part number 91500 Q5999QQK will require a VIN entry for parts ordering. DO NOT order this part for stocking purposes, related to this Campaign. Supply is very limited. Until supply stabilizes, please confirm part availability before scheduling customers. Please be sure to expedite warranty claim filing.

SUBJECT:

4WD ECU INSPECTION/REPLACEMENT (SC297)**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	95447 2D200	0	(SC297) Warning Lamp(s) Inspection (OK) + ECU Cover Installation	240049R0	0.3 M/H	95449 2D000QQK	1
			(SC297) Warning Lamp(s) Inspection (NG) + Connector Inspection (OK) + ECU Replacement + ECU Cover Installation	240049R1	0.4 M/H	95447 2D205	1
			95449 2D000QQK			1	
			(SC297) Warning Lamp(s) Inspection (NG) + Connector Inspection (NG) + ECU Replacement + Harness Repair + ECU Cover Installation	240049R2*	0.9 M/H	95449 2D000QQK	1
			95447 2D205			1	
			91500 Q5999QQK			1	

Note: Refer to [Warranty Bulletin 2024-18](#) for claim submission procedures. Use sublet code 'X1' with a maximum allowed amount of \$6.00 per vehicle for locally sourced heat shrink self-solder connectors or butt splice connectors. Manually enter sublet code 'X2' for reimbursement of one roundtrip rideshare expense or up to three (3) days of rental expense, with supporting documentation.

*A KVID Video recording of the NG connector is required for labor op 240049R2. If a KVID video for the NG connector is not created as described in this TSB, Warranty claim submission issues will occur. All claims are subject to review and Warranty chargeback.

NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SC297 when accessing the KDealer+ system.

