



# Technical Service Bulletin

<b>GROUP</b>	<b>NUMBER</b>
<b>RECALL</b>	<b>24-01-022G-2</b>
<b>DATE</b>	<b>MODEL(S)</b>
<b>OCTOBER 2024</b>	<b>GV70 (JK1A)</b>

**SUBJECT:** TRANSMISSION CONTROL HARNESS/E-MODULE CONNECTOR PIN REWORK & REPLACEMENT (RECALL 020G)

**This TSB supersedes TSB 24-01-022G-1 to add additional parts on page 2, additional OP codes for replacement on page 3, and additional instructions to replace the transmission control harness and e-module on pages 15-16.**

**\* IMPORTANT**

Vehicle repairs related to safety recalls are critically important and must be performed properly in accordance with TSB procedures. Review this bulletin in its entirety prior to beginning any repair work.

As required by federal law, retailers must not deliver new vehicles for sale or for lease to guests until all open recalls have been performed. Retailers must also perform all open recalls on used vehicles, demo, and rental vehicles prior to placing them into guest use and whenever an affected vehicle is in the shop for any maintenance or repair.

Access the "Vehicle Information" screen via WebDCS to identify open recalls.

**Description:** Certain GV70 vehicles may be equipped with control wiring harness connectors that may be susceptible to water inflow due to incorrect installation of the connector blanking pins at the supplier. Water inflow could lead to an electrical short, resulting in an abnormal signal, Malfunction Indicator Light (MIL) ON, and/or the system to shift the transmission to Neutral when the vehicle is in Park. Unexpected vehicle movement can increase the risk of a crash or injury.

Follow the service procedure outlined in this bulletin to inspect the E-module connector and transmission control harness connector for corrosion. If no corrosion is found, complete the rework outlined for the blanking pin.

If corrosion is found on either the E-module connector and/or the control harness connector, follow the procedure in this TSB for replacement of corroded components.

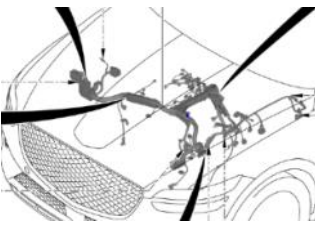


**Applicable Vehicles (Certain):**

- 2024MY GV70 (JK1A) produced from 05/10/2023 - 02/25/2024

**SUBJECT:**

TRANSMISSION CONTROL HARNESS/E-MODULE  
CONNECTOR PIN REWORK & REPLACEMENT (RECALL 020G)



**Parts Information:**

Model	Part Name	Part Number	Figure	Remarks
GV70 (JK1A) 2.5T & 3.5T	Control wiring harness	91400-IY070QQH (2.5T) 91410-IY070QQH (3.5T)		QTY: 1
	E-module	46305-47700QQH (2.5T) 46305-4J700QQH (3.5T)		QTY: 1
	Drain plug O-ring	45285-47400		QTY: 1
	Valve cover filter O-ring	45286-47400		QTY: 1
	Valve cover filter O-ring	45287-47400		QTY: 1
	Oil injection plug washer	45323-39000		QTY: 1
	Front propeller shaft bolt	49319-T6100		QTY: 3
	Front propeller shaft nut	49329-3M000		QTY: 3
	Rear propeller shaft bolt	49319-T6000		QTY: 3
	Front exhaust gasket	28751-3J000		QTY: 2
	Rear exhaust gasket	28751-2S000		QTY: 2
	Blanking Pin	GV70CAMPPIN		

**NOTE:** A bag of 5 blanking pins was previously sent to each retailer for this recall. They are to be used ONLY if the pin is found missing OR if technician accidentally loses during rework being performed. They should not be replaced with every rework performed.

Please refer to Recall 020G Parts Bulletin for additional pin orders.

**SUBJECT:**TRANSMISSION CONTROL HARNESS/E-MODULE  
CONNECTOR PIN REWORK & REPLACEMENT (RECALL 020G)**Suggested Tool:**

Name	Part Number	Figure	Remarks
GIT Borescope	G0DKDNN039		<p>This suggested tool, in conjunction with the STUI application, will be utilized to inspect and capture an image of the male E-Module connector as it is in an out-of-view location.</p> <p>This tool is available for purchase through GIT America at (833) 681-3926.</p> <p>If a borescope is not used for this case, a mirror and camera can be used as an alternative.</p>
Long Clip Tool	–		<p>This suggested and locally sourced tool will be utilized to detach/secure a hard-to-reach harness clip on top of the transmission housing.</p>

**Warranty Information:**

Model	Op. Code	Operation	Op. Time	Causal Part	Nature Code	Cause Code
GV70 (JK1A)	41DA03R0	Corrosion Inspection & Connector Pin Rework	1.2 M/H	91400-IY070	B33	ZZ7
	41DA03R1	2.5T Control Harness and E-module replacement	7.9 M/H	91400-IY070		
	41DA03R2	3.5T Control Harness and E-module replacement	7.9 M/H	91410-IY070		

**NOTE 1:** Submit claim on Claim Entry Screen as “Campaign” type.

**NOTE 2:** If a part is found in need of replacement while performing this recall 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.

**NOTE 3:** This TSB includes Repair validation photos. Op times include VIN, Mileage, and Repair validation photos as outlined in the Digital Documentation Policy.

**NOTE 4:** The incident parts are subject to callback through the normal Warranty Technical Center (WTC) parts return process. **Claim is subject to debit if the part is not returned.**

**Service Procedure:****STUI**

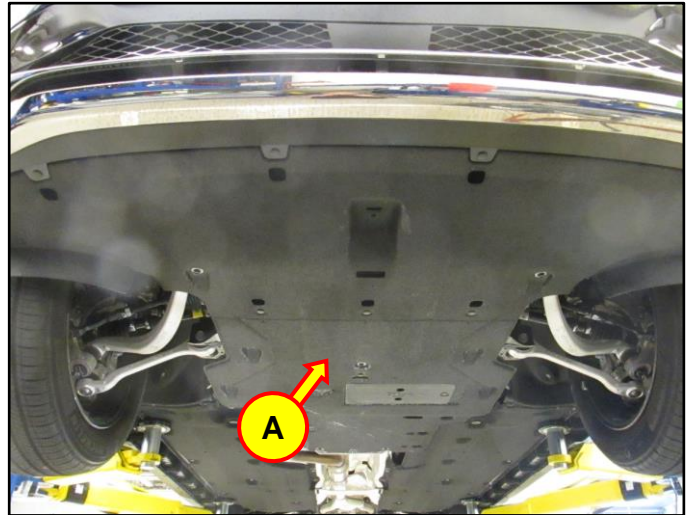
This TSB includes Repair validation photos. Refer to the latest Warranty Digital Documentation Policy for requirements.

**Section A. Inspection/Pin Rework**

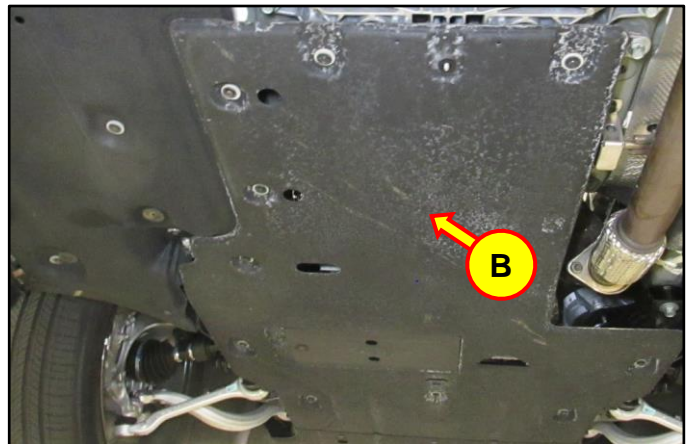
1. Move the vehicle to a hoist.  
Disconnect the negative (-) battery cable.  
Raise the vehicle on a hoist.  
Remove the clips and remove the lower engine cover (A) to access the transmission area.

**NOTICE**

Be sure to record the audio station presets (XM, AM, FM, etc.) prior to disconnecting the battery.



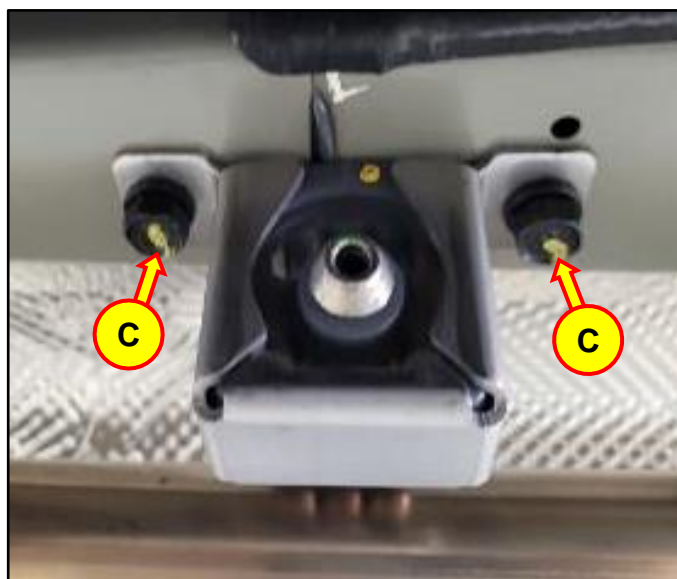
2. Remove the bolts and remove the undercover below the transmission (B).



3. Remove the bolts for the exhaust hanger(s) (C).
- 2.5T: 1 hanger
  - 3.5T: 2 hangers

**Tightening Torque:**

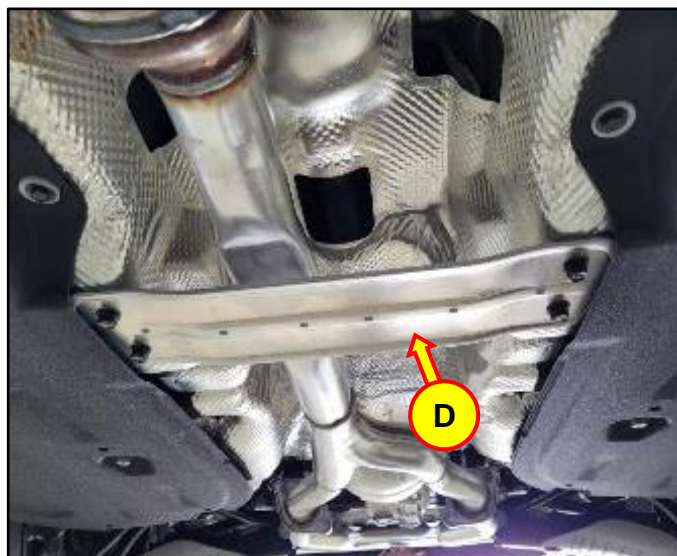
lb-ft	25
N.m	34



4. Remove the crossbar support (D).

**Tightening Torque:**

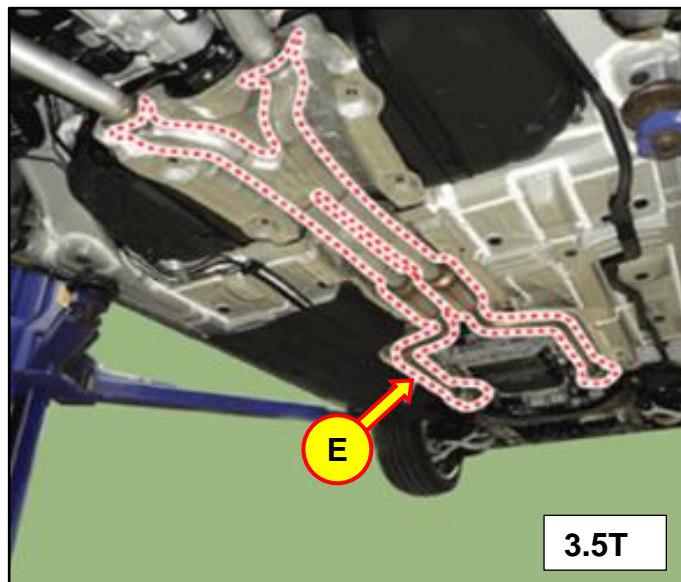
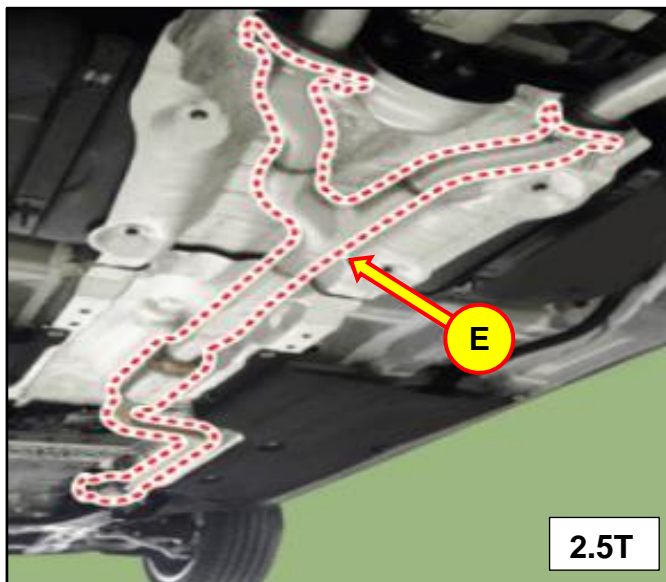
lb-ft	25
N.m	34



5. Remove the center exhaust section (E) as defined by the illustrations below.

**Tightening Torque:**

lb-ft	39
N.m	53



6. Remove the heat shield over the propeller shaft (F) to access the propeller shaft support.



- Remove the bolts securing the propeller shaft support (G). This will allow the propeller shaft to lower slightly to enable lowering the transmission.

**Tightening Torque:**

lb-ft	42
N.m	56

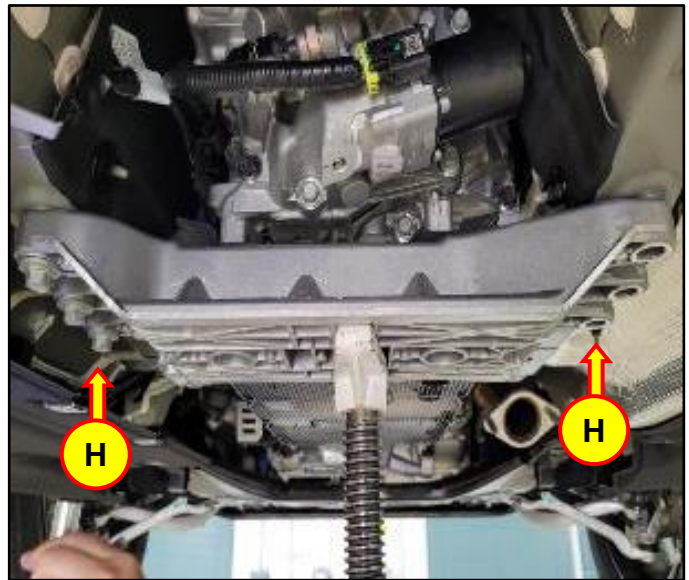


- Use a transmission jack or screw jack and position it under the cross member. Remove the bolts (H) securing the transmission cross member.

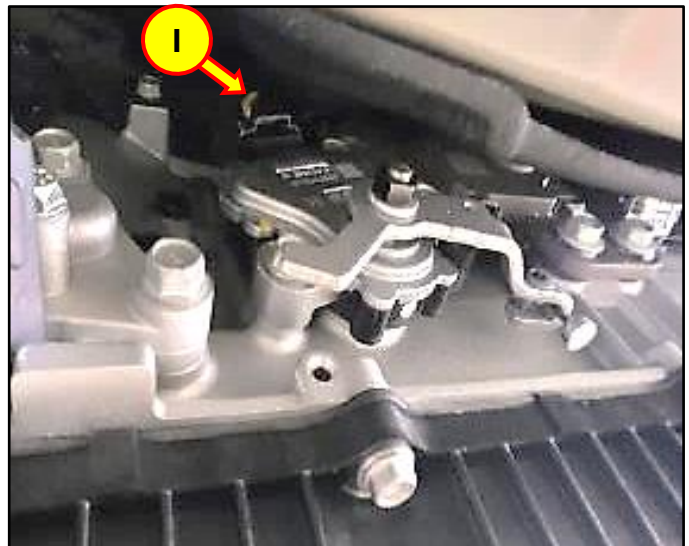
**Tightening Torque:**

lb-ft	49
N.m	66

Lower the transmission about 2~3 inches to allow for removal of components and to access the harness for inspection and rework.



- Disconnect the park switch connector (I). Loosen the fastener and disconnect the park release cable.



10. Insert a pin, Allen hex key or suitable bolt (J) to prevent lever movement. Remove the retaining nut and washer (K). Remove the lever.

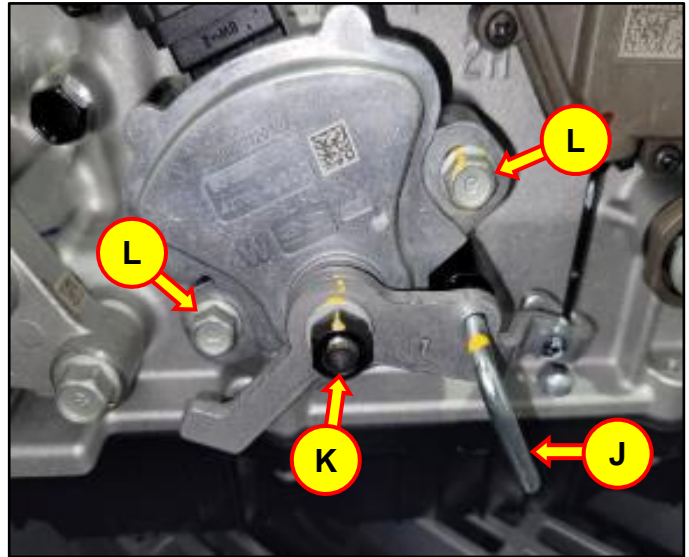
**Tightening Torque (K):**

lb-ft	15
N.m	21

Remove 2 bolts (L). Remove the park switch.

**Tightening Torque (L):**

lb-ft	8
N.m	11



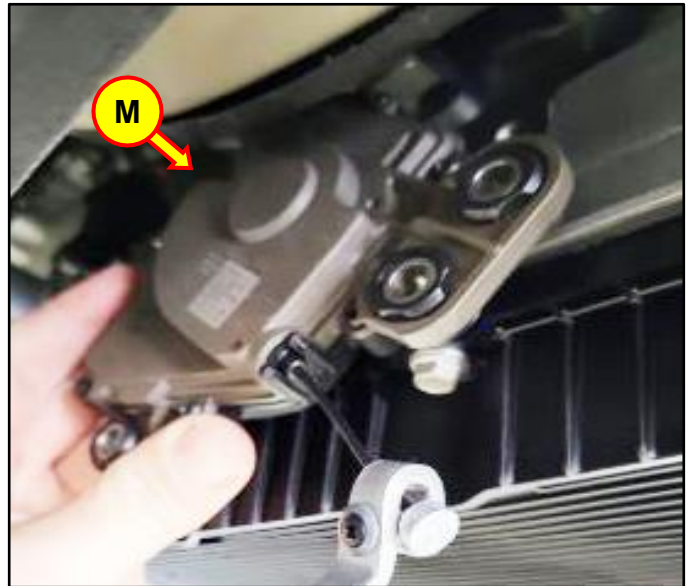
11. Disconnect the park actuator connector (M). Remove the 3 bolts and remove the park actuator.

**Tightening Torque:**

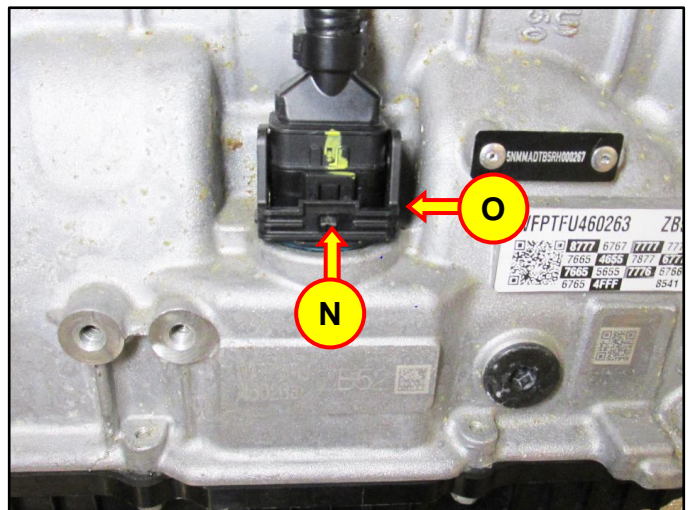
lb-ft	15
N.m	21

***i* Information**

Rotate the park actuator counterclockwise to provide enough clearance for removal.



12. Reach up the side on the transmission and push in the tab (N) on the lever. Pull up on the lever (O) and disconnect the E-Module connector.

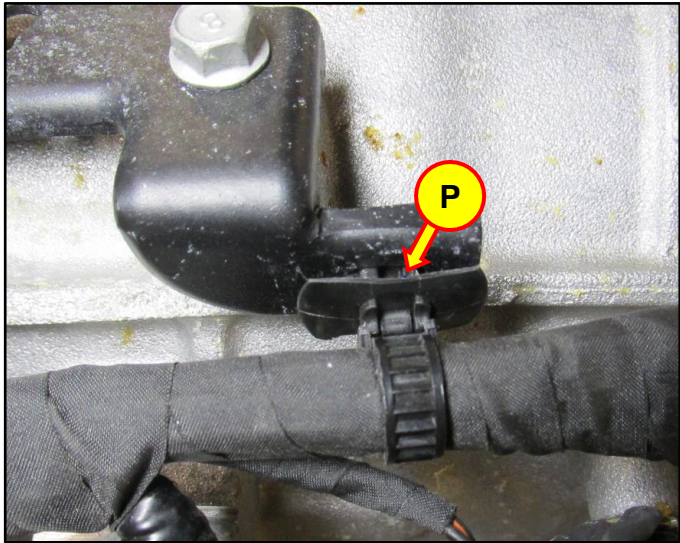


13. Reach up on top of the transmission and use a long clip tool to pinch the tab (P).

Disconnect the harness from the bracket. This will allow additional slack in the harness for connector access.

**NOTE:** This harness mounting clip is difficult to access due to the location on top of the transmission housing. A long clip tool is suggested to aid in removal/installation.

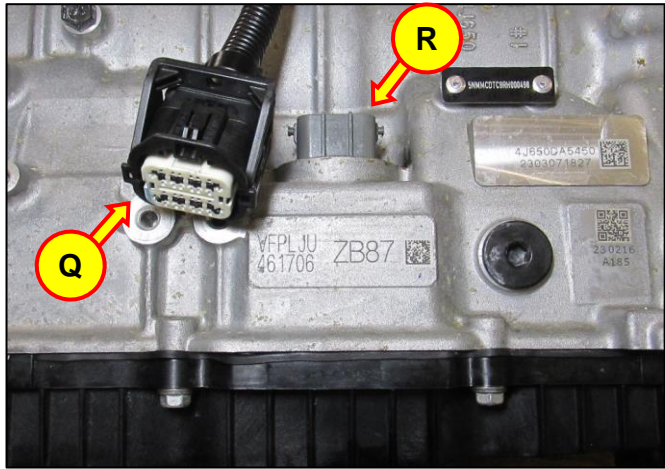
**Suggested Tool:  
Long Clip Tool**



14. Gently maneuver the harness female connector (Q) down and inspect for corrosion on pins.

Using a mirror or borescope, inspect the E-module male connector (R) for corrosion on pins.

**i Information**  
Refer to the examples in Step 15 below.



15. **E-module Male Connector**

Inspect the male connector for corrosion as shown to the right.

**OK – No corrosion**

**NG - Corrosion**

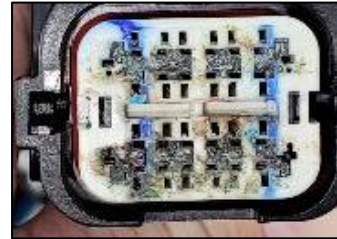


**Harness Female Connector**

Inspect the female connector for corrosion as shown to the right.

**OK – No corrosion**

**NG - Corrosion**



16.

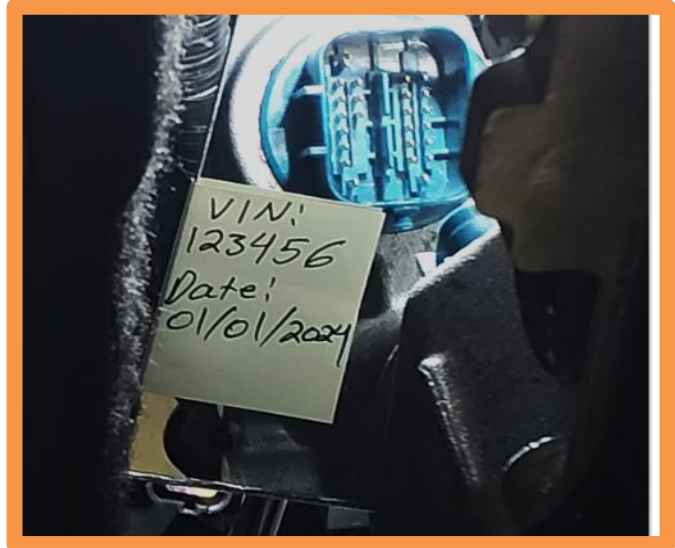
STUI



Using STUI, take a photo with either a borescope or camera and mirror of the E-module male connector with the last 6 digits of the VIN and the date of repair on a piece of paper.

**HINT:** Attach the sticky note to a mirror with the VIN and date of repair and take a photo of the E-module male connector on top of the transmission.

Upload the photo to STUI.

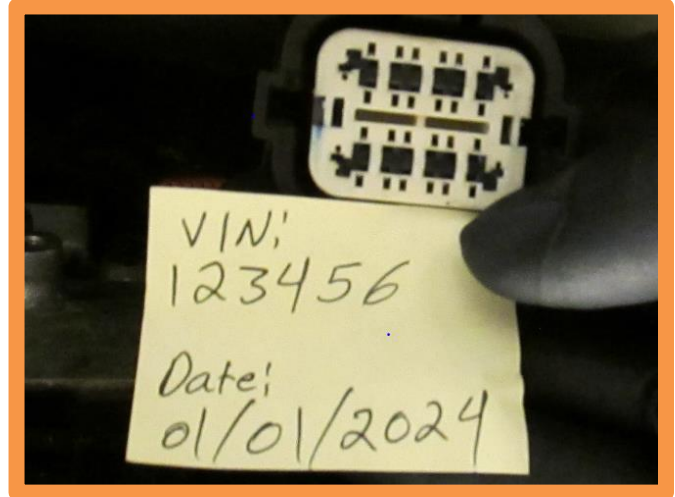


STUI



Using STUI, take a photo of the E-Module female connector with the last 6 digits of the VIN and the date of repair on a piece of paper.

Upload the photo to STUI.



17.

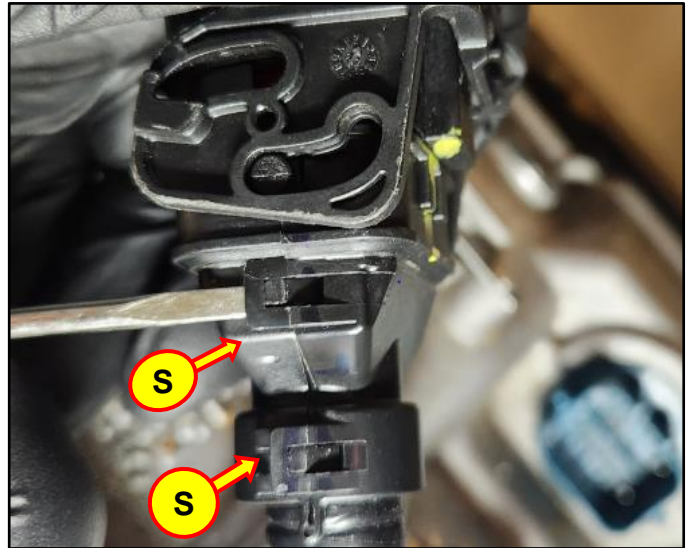
**NOTICE**

- If corrosion is **not** found on the E-module male connector or harness female connector shown above, go to Steps 18~29 and complete the Pin Rework Procedure.
- If any corrosion **is found on either** the E-module male connector or harness female connector shown above:
  - Proceed to **Section B** on page 15 and replace the E-module.
  - Proceed to **Section C** on page 15 and replace the control harness.
  - Go to Steps 25~29 and complete the repair.

18. Use a small screwdriver to disconnect 2 locking tabs (S).

Rotate the connector and disconnect 2 more locking tabs.

Remove the cover for the connector.

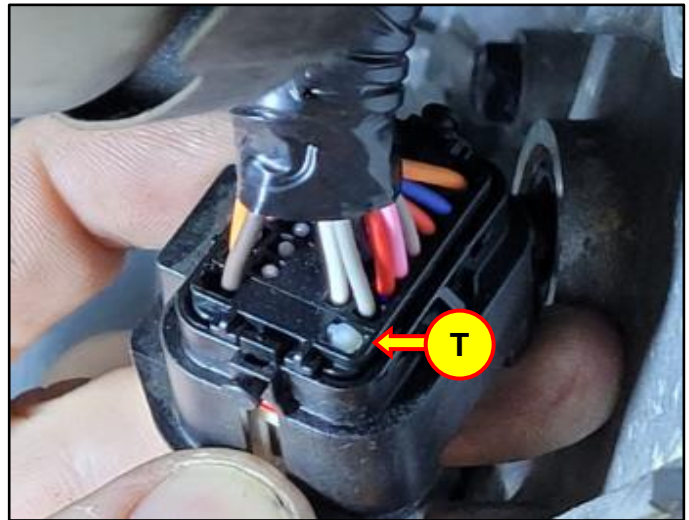


19. Follow the steps below to remove and correctly reinstall the blanking pin (T). If the blanking pin is missing, replace it with a new one.

**i Information**

If necessary, order part number GV70CAMPPIN for additional blanking pins. Please note that these pins should only be replaced if missing upon inspection or lost by technician during inspection.

The pin does not need to be replaced for every rework.

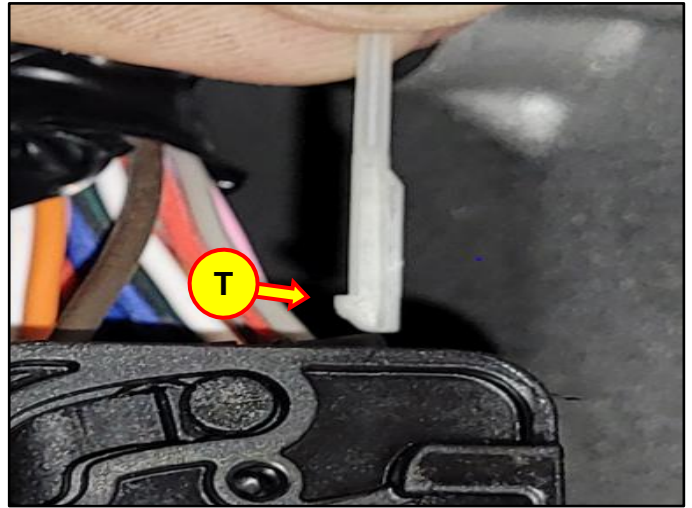


20. From the connector side, push the plastic blanking pin out of the connector.

Remove the plastic blanking pin by pulling it out of the back of connector as shown.



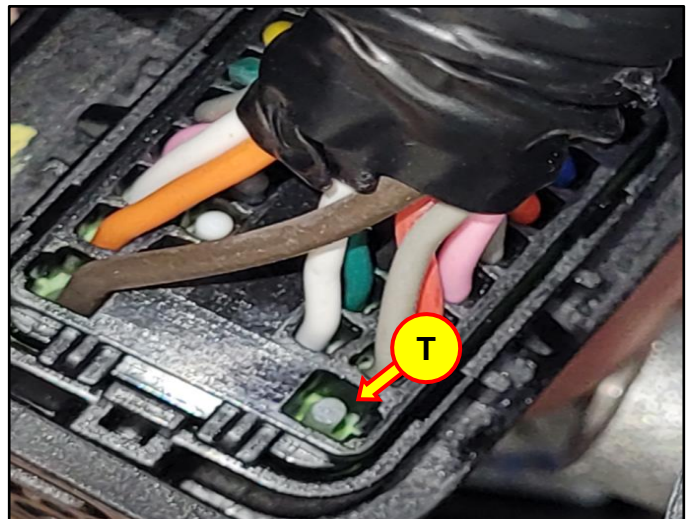
21. Confirm the blanking pin (T) is installed with the tab facing the brown wire in the opposing corner of the connector.



22. Push the blanking pin down until it clicks and is flush with the top of the connector.



23. Verify proper repair by referencing the correctly installed pin (T) in the image to the right.



24.

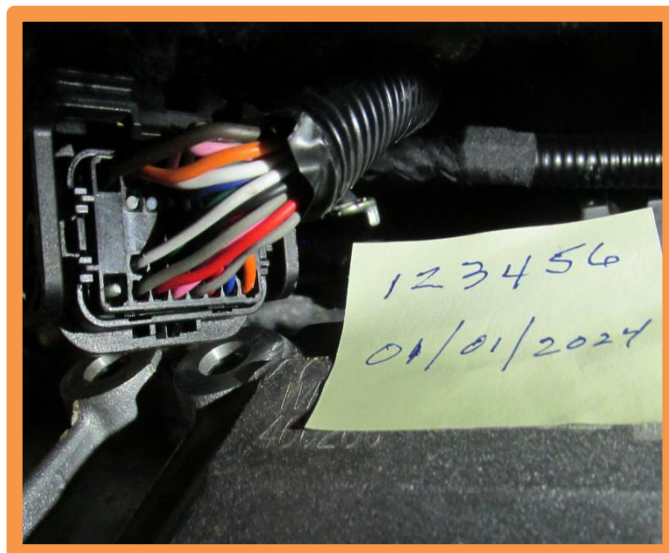
**STUI**



Using STUI, take a photo of the harness connector wiring side with the blanking pin (T) correctly installed. Include the last 6 digits of the VIN and the date of repair on a piece of paper.

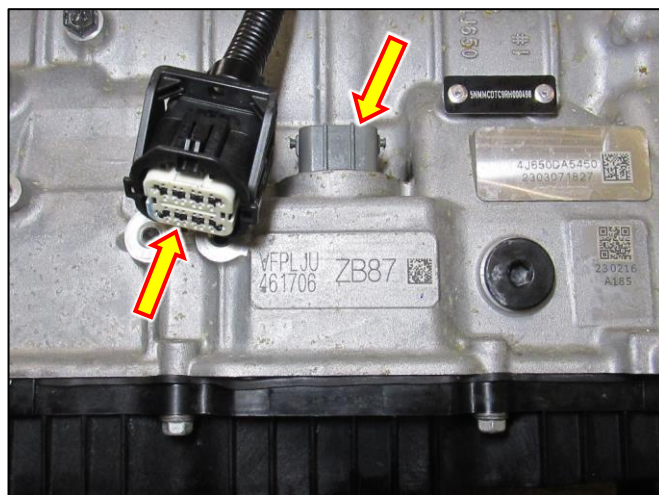
Upload the photo to STUI.

Ensure the photo is clear and upload the photo to STUI.



25. Use compressed air to blow out any debris or residual moisture in both the E-Module male and female connectors.

Reconnect the E-Module.



26. Reinstall all remaining parts in the reverse order of removal. Refer to Step #10 and ensure the park switch is reassembled in the original orientation by aligning the fastener markings with the mounting bolts.

**Tightening Torque (K):**

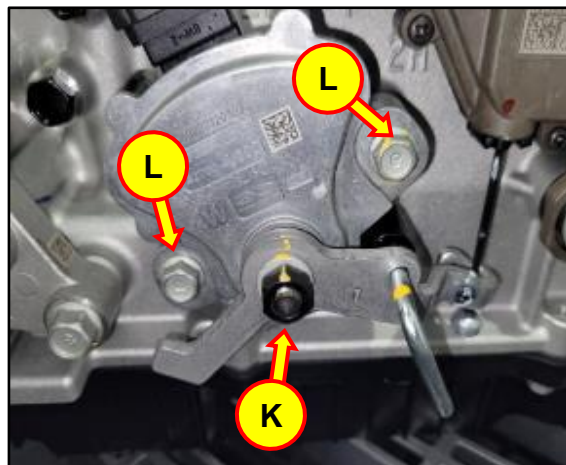
lb-ft	15
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N.m	21
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**Tightening Torque (L):**

lb-ft	8
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N.m	11
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27. After completion, clear DTC(s) using GDS diagnostic scan tool.

**i** **Information**

The procedure described above may have caused DTC(s) to set. Erase all DTCs before releasing the vehicle to the customer.

28. Restore customer audio station presets (XM, AM, FM, etc).

29. The service procedure is complete.

**Section B. E-module Replacement**

1. Refer to 2024 GV70 (JK1A) Shop Manual:
  - Select 2.5T or 3.5T Engine.
    - Automatic Transmission System (SBW)
      - Automatic Transmission Control System
    - E-Module - Removal
2. After replacing the E-Module, proceed to **Section C.**

**Section C. Control Harness Replacement**

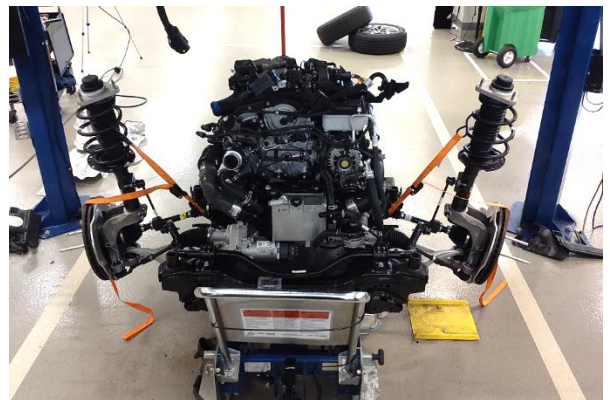
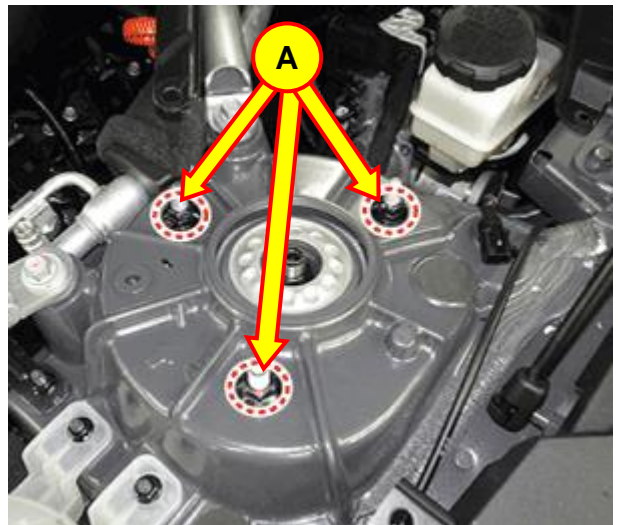
1. Refer to 2024 GV70 (JK1A) Shop Manual:
  - Select 2.5T or 3.5T Engine.
    - Engine Mechanical System
      - Engine and Transmission Assembly
    - Engine and Transmission Assembly – Removal
2. While removing Engine assembly, remove the top strut mount nuts (A).

**NOTICE**

The front struts do **not** need to be removed from the steering knuckle as shown in the Shop Manual.

**Tightening Torque:**

lb-ft	54.2
N.m	73.5



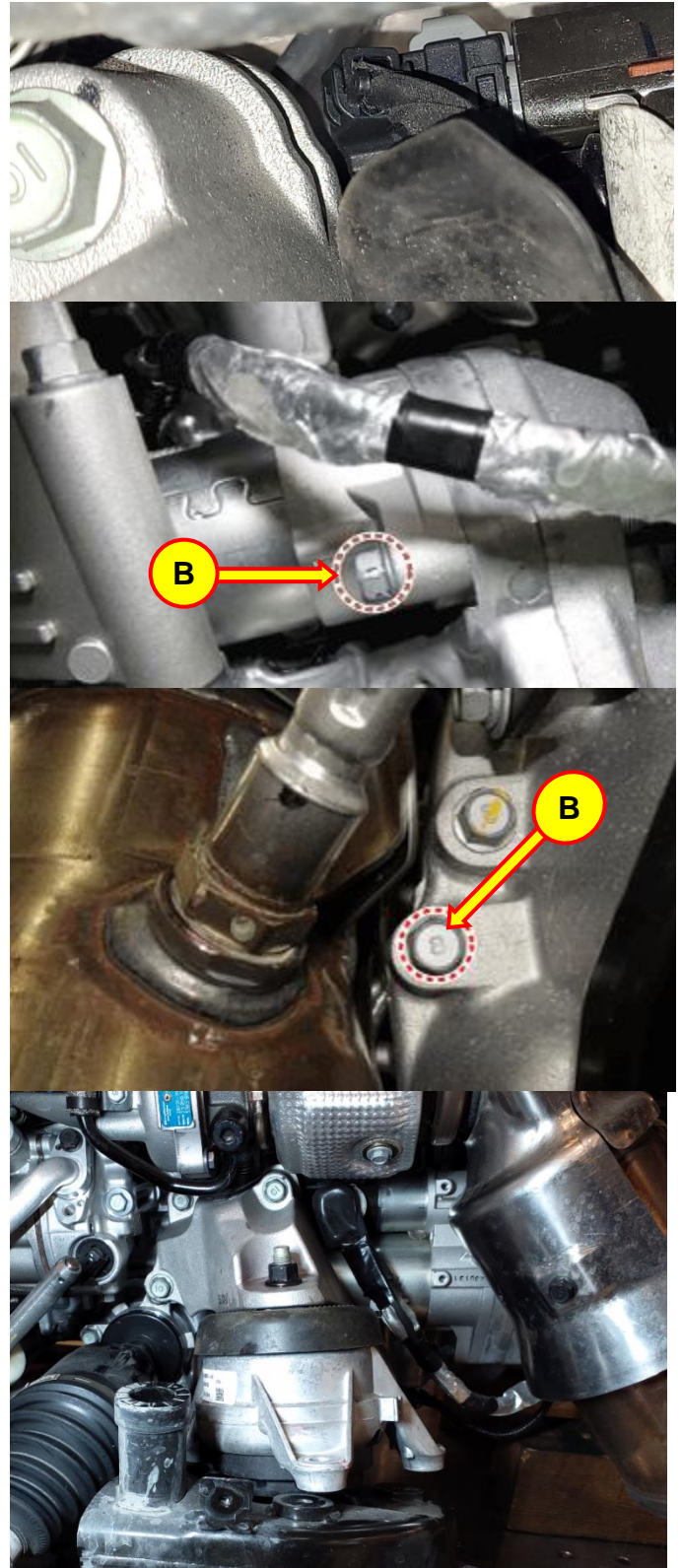
- For vehicles equipped with **3.5T engine**, to disconnect the starter terminal connectors, the starter mounting bolts (B) can be removed, allowing the starter to be tilted upwards to allow access to the connectors.

**NOTICE**

The LH engine mount and bracket does **not** need to be removed as shown in the Shop Manual.

**Tightening Torque:**

lb-ft	47.0
N.m	63.7



- After replacing the control harness, proceed to **Section A**, Steps 25-29.