



Technical Service Bulletin

GROUP	NUMBER
AUTOMATIC TRANSMISSION	23-AT-001G
DATE	MODEL(S)
MARCH, 2023	G70 (IK), G80 (DH), G80 (RG3), G90 (HI), GV80 (JX1), GV70 (JK1)

SUBJECT: AUTOMATIC TRANSMISSION SOLENOID DTC P0741, P0743, P0748, P0753, P0758, P0763, P0768, P076A, P076D, P0773, P0785, P078A, P2709

This TSB supersedes TSB 21-AT-003G to add GV70 (JK1).

DESCRIPTION: When servicing a vehicle with a “Check Engine light” and any of the DTCs listed below, follow the Service Procedure to replace the related solenoid and E-module or park position switch.

APPLICABLE VEHICLES:

2019~	G70 (IK)	2021~	G80 (RG3)
2019~20	G80 (DH)	2021~	GV80 (JX1)
2019~	G90 (HI)	2022~	GV70 (JK1)

DTC LIST WITH PART NUMBER INFORMATION: Refer to the parts catalog for the part number.

DTC	DESCRIPTION	PNC	PART NO.
P074100	Torque converter clutch circuit performance or stuck off	46202A	46313-3B01*
P074300	Torque Converter Clutch Circuit Electrical (TC)	46202A	46313-3B01*
P074800	Line Pressure Control Solenoid Valve A Electrical (LP)	46313A	46313-3B60*
P075300	Shift Control Solenoid Valve A Electrical (UD)	46313	46313-4J10*
P075800	Shift Control Solenoid Valve B Electrical (6)	46313	46313-4J10*
P076300	Shift Control Solenoid Valve C Electrical (35R)	46313E	46313-4J20*
P076800	Shift Control Solenoid D (4&OD)	46313E	46313-4J20*
P076A00	Park System fault – Park position switch	42700E 46313D	42700-4J*** 46313-3B***
P076D00	ON/OFF Solenoid C – (Park circuit – SBW)	46313D	46313-3B***
P077300	Shift Control Solenoid Valve E Electrical (27)	46313	46313-4J10*
P078500	ON/OFF Solenoid A (Drive circuit – SBW)	46313D	46313-3B03*
P078A00	ON/OFF Solenoid B (Reverse circuit – SBW)	46313D	46313-3B03*
P270900	Shift Control Solenoid Valve F Electrical (8LR)	46313	46313-4J10*
All	E-Module	46305C	46305-4****

Circulate To: Service Manager, Warranty Manager, Service Advisors, Technicians, Fleet Repair

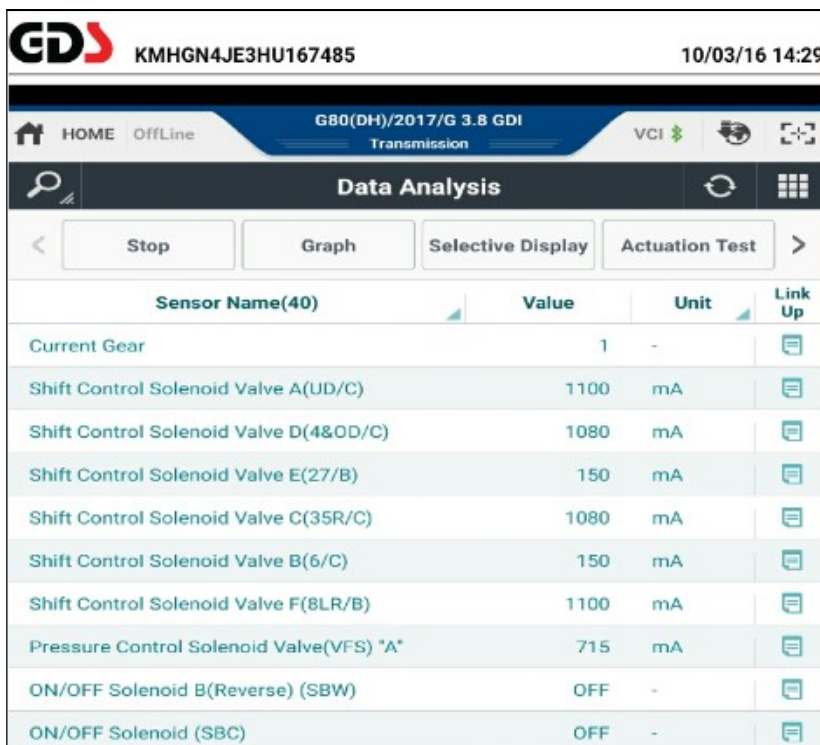
WARRANTY INFORMATION:

MODEL	OP CODE	OPERATION	OP TIME	CAUSAL PART	NATURE CODE	CAUSE CODE
G70 (IK) G80 (DH) G90 (HI) G80 (RG3) 3.5T GV80 (JX1) 3.5T GV70 (JK1) 3.5T	45775R8T	Solenoid valve assy.	Refer to WEBLTS for current LTS	Refer to part numbers in the table on Page 1	I3A	ZZ3
G80 (RG3) 2.5T GV80 (JX1) 2.5T GV70 (JK1) 2.5T	45775R8L					
ALL	42700R00	Park position switch				

NOTE: Normal Warranty Applies

SERVICE PROCEDURE:

1. Attach a GDS and select **DTC Analysis** and **A/T** menu. Record the DTC and description. Delete the DTC.
2. From the GDS home screen, select **Data Analysis** and **A/T** menu and the solenoid parameters shown below. If the solenoids show:
 - Continuous and changing output while driving, the wiring **currently** has no open/short circuits. Go to Step 4.
 - No continuous and changing output, go to Step 3.



3. Visually check the control wiring harness between the TCM and transmission for a damaged wire or connector. Check for an open/short circuit.
 - If so, repair or replace the control harness and drive the vehicle to confirm the repair.
 - If no damage is found, go to Step 4.
4. Record the audio preset stations and disconnect the negative battery terminal.

5. Locate the harness connector on the passenger side of the transmission.

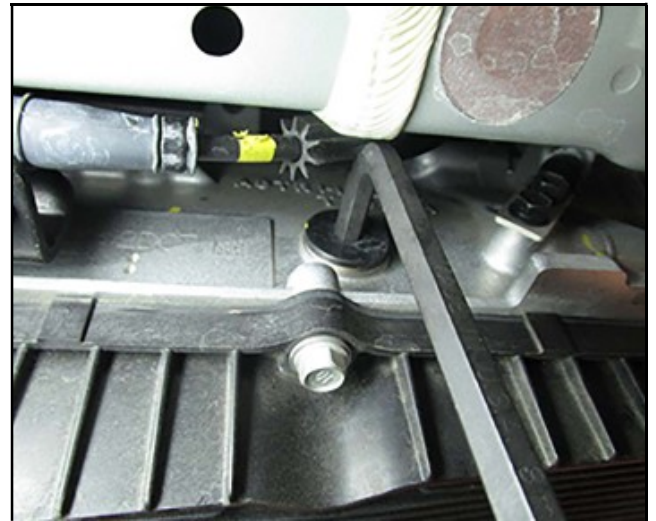
Press the tab in the center of the latch and push the latch upward.

Push the connector up to disconnect the connector from the valve body.

To gain better access to the connector, place a support under the rear transmission support, loosen the bolts about ½ inch and lower the support about ½ inch.



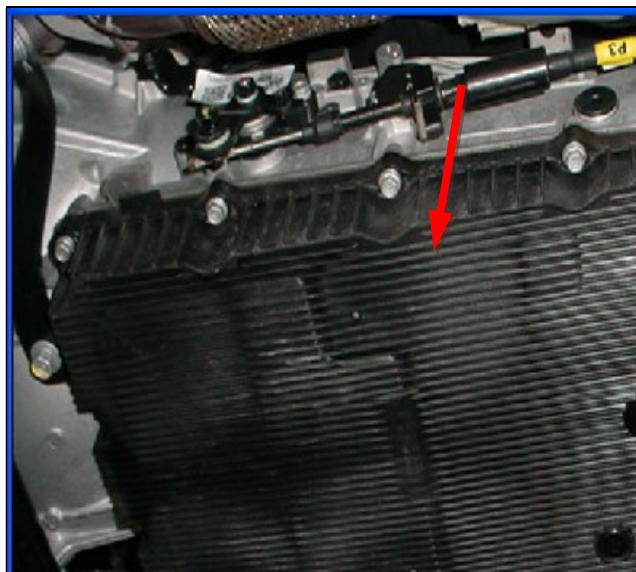
6. Use an 8mm or 5/16" hex wrench and remove the fill plug.



7. Use an 8mm or 5/16" hex socket and remove the drain plug and drain the ATF. Reinstall the drain plug.

Torque: 17~18 lb.ft (2.3~2.5 kgf.m, 22~24 N.m)

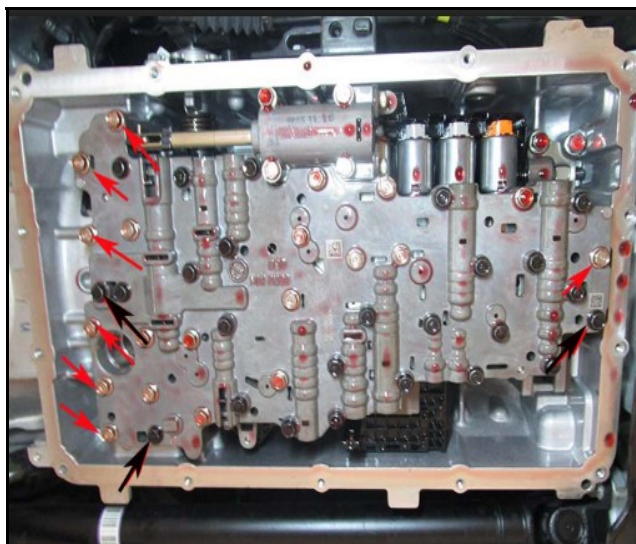
Remove the oil pan.



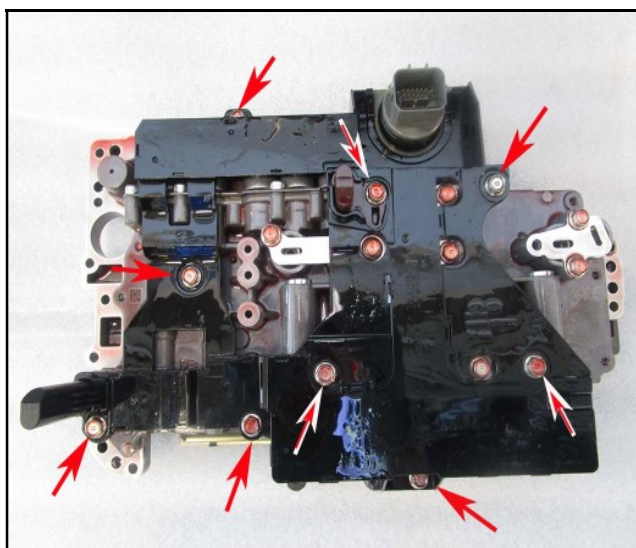
8. Remove 10 bolts that secure the valve body to the case and remove the valve body.

Note the location of the 3 black bolts (shown with black arrow).

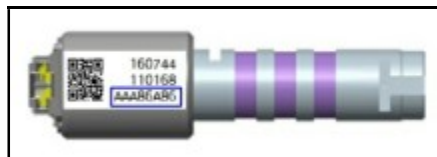
If the valve body is stuck in the transmission, insert a screwdriver between the valve body and case and carefully pull the valve body out of the transmission.



9. Remove 9 bolts and remove the E-module.

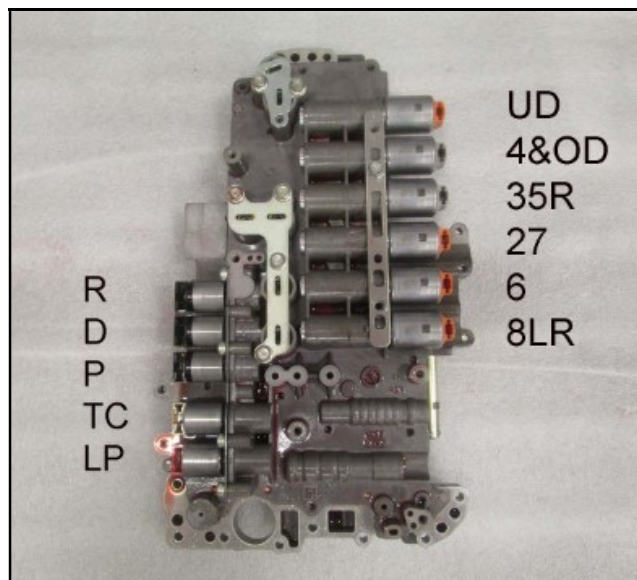


10. Record the 8-digit code on the solenoid.



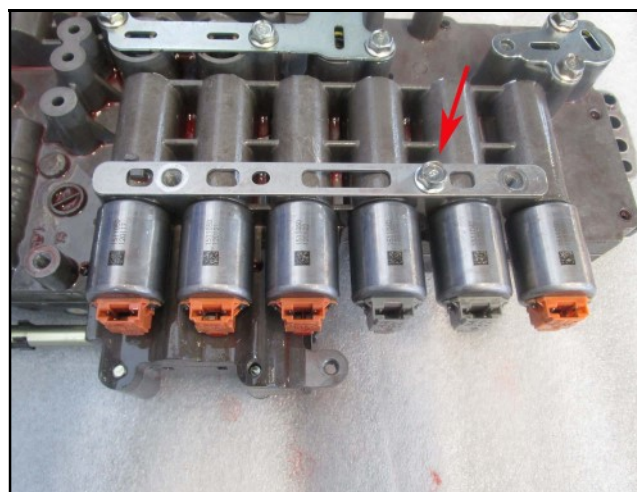
11. Refer to the solenoid DTC recorded in Step 1 and replace the related solenoid.

DTC	SOLENOID	PNC
P075300	UD	46313
P076800	4&OD	46313E
P076300	35R	46313E
P077300	27	46313
P075800	6	46313
P270900	8LR	46313
P078500	D	46313D
P078A00	R	46313D
P076D00	P	36313D
P074300	TC	46202A
P074800	LP	46313A



12. **For UD, 4&OD, 35R, 27, 6 and 8LR solenoids:**

Remove the bolt and remove the solenoid support.

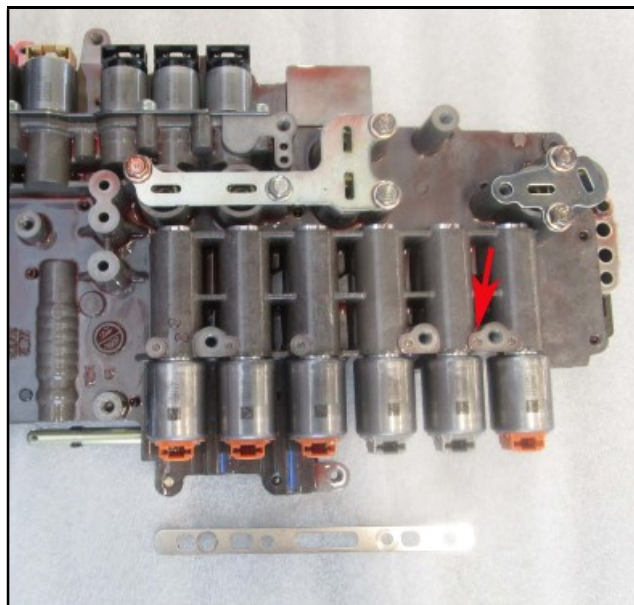


13. Use a magnet to remove the pin that secures the affected solenoid.

Pull out the affected solenoid and install the new solenoid.

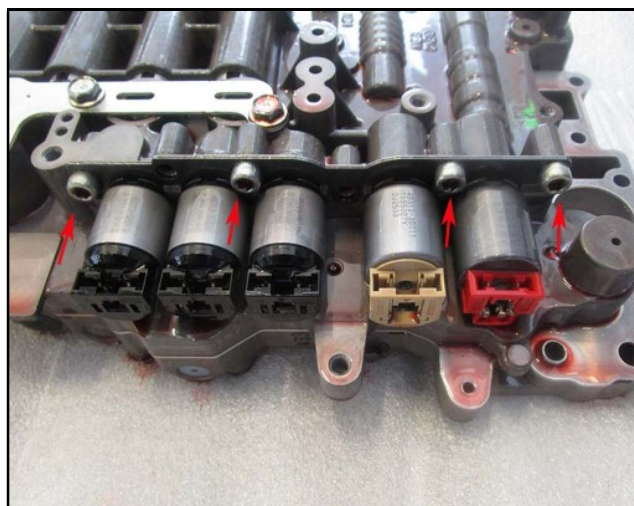
Reinstall the pin.

Reinstall the solenoid support using one bolt.



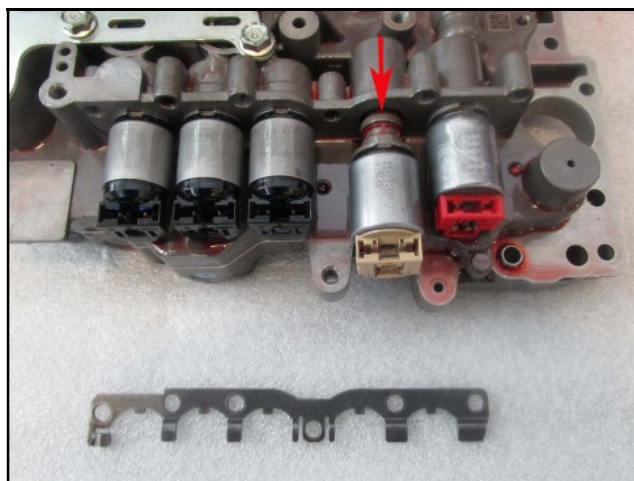
14. **For R, D, P, TC and LP solenoids:**

Use a 5mm hex wrench or socket to remove 4 bolts that secure the support to the valve body and remove the support.



15. Pull out the related solenoid and install a new solenoid.

Reinstall the support.

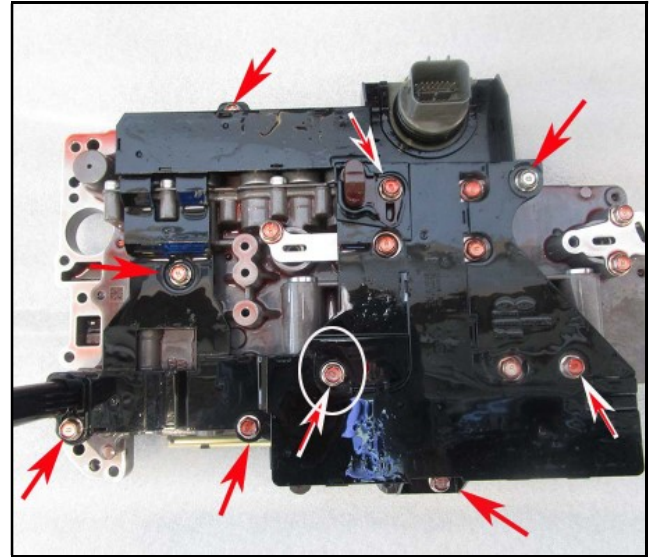


16. Install a new E-module.

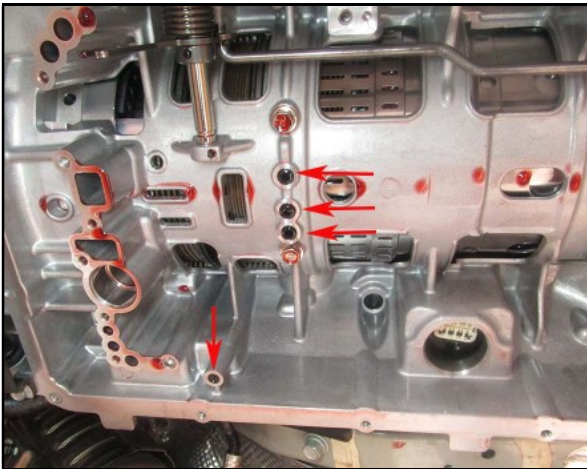
Install 9 bolts and torque to specification.

NOTE: Install the short bolt in the location shown in the circle.

Torque: 7~9 lb.ft (1.0~1.2 kgf.m, 10~12 N.m)



17. **FOR SHIFT-BY-WIRE (SBW):**
Confirm that 4 O-rings are seated in the case.



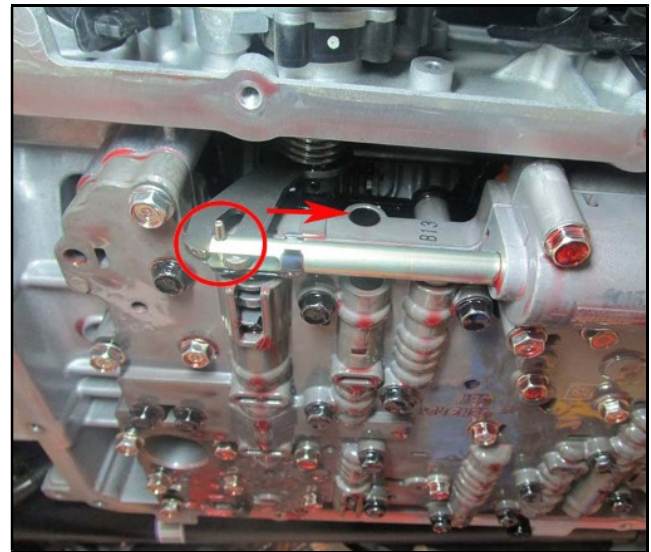
- FOR SHIFT-BY-CABLE (SBC):**
Confirm 5 O-rings are seated in the case.



18. Place the valve body on a transmission jack.
Rotate the park switch counter-clockwise and carefully raise the valve body and insert the manual valve into the shift lever.
Install the valve body fully into the transmission case.

NOTICE

Confirm the manual valve pin faces outward from the valve body.

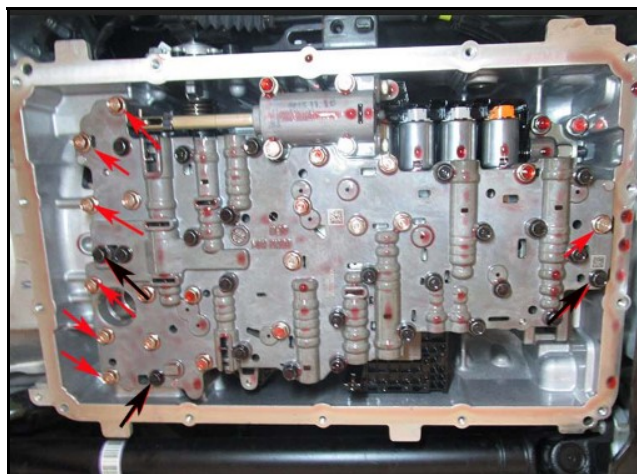


19. Install 3 black bolts in the locations shown (black arrow).

Install 7 brass bolts in the location shown (red arrows).

Torque the bolts to specification.

Torque: 7~9 lb.ft (1.0~1.2 kgf.m, 10~12 N.m)



20. Use a 90° pick or similar tool to pull the connector down into position on the valve body.

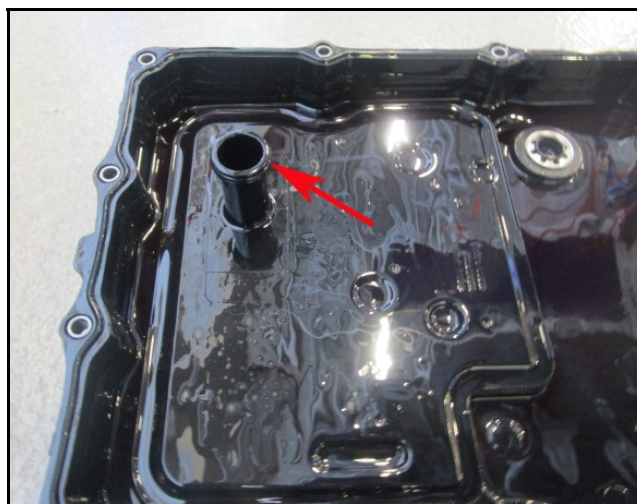
Pull the latch down until it clicks into the tab.



21. Confirm the O-ring is installed at the location shown.

Reinstall the valve body cover and torque to specification.

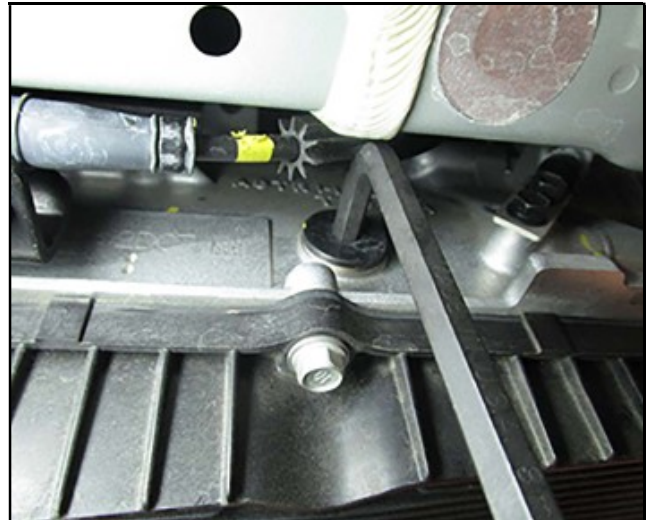
Torque: 10~12 lb.ft (1.4~1.6 kgf.m, 14~16 N.m)



22. Reconnect the negative battery terminal.
Reset the audio preset stations.

23. With the engine off, lift the vehicle on a hoist.

Use an 8mm or 5/16" hex socket and remove the fill plug and washer.



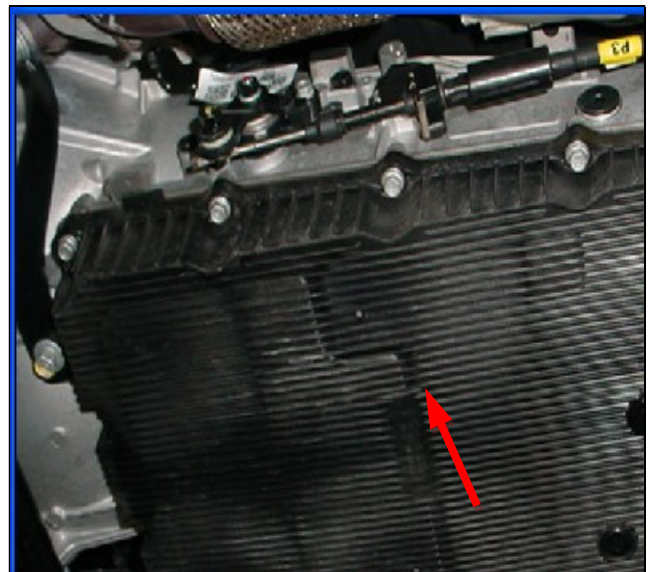
24. Remove the overflow plug.

Use a fluid pump or suction gun to add **SP-IV-RR** ATF through the fill plug until ATF flows from the overflow plug.

Reinstall the fill plug and overflow plug.

NOTICE

Use only **SP-IV-RR** ATF, P/N 00232-19052.



25. Attach a GDS and select vehicle, **Data Analysis, A/T** menu and **Oil Temperature Sensor**.

Drive the vehicle until the ATF is at the low end of the range of 122~140°F (50~60°C).

Move the shift lever from P-R-D-P.

26. Start the engine, shift to Park and raise the vehicle on a hoist.

Remove the fill plug and overflow plug.

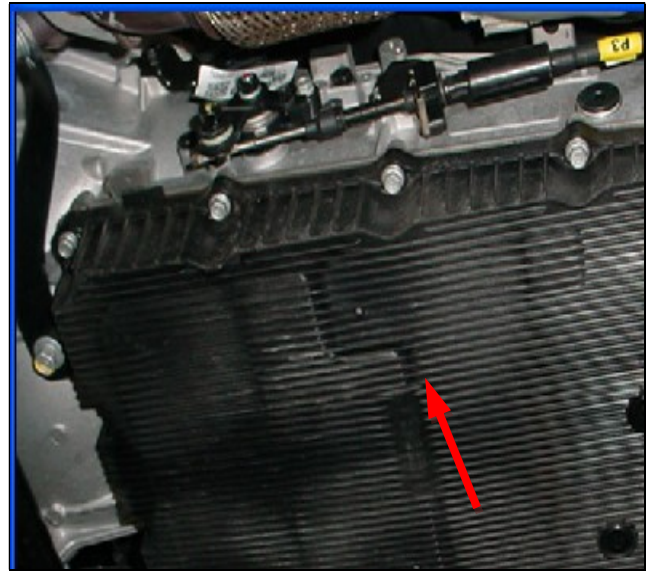
Add **SP-IV-RR** ATF through the fill plug until the ATF flows out the overflow.

Reinstall the overflow plug.

Torque: 16~18 lb-ft (2.3~2.5 kgf.m, 22~24 N.m)

Reinstall the fill plug and washer.

Torque: 25~32 lb.ft (3.4~4.4 kgf.m, 33~43N.m)



**ATF TEMPERATURE = 122~140°F (50~60°C)
SHIFT LEVER IN "P" AND ENGINE RUNNING**

27. If the shift cable was moved to add ATF:

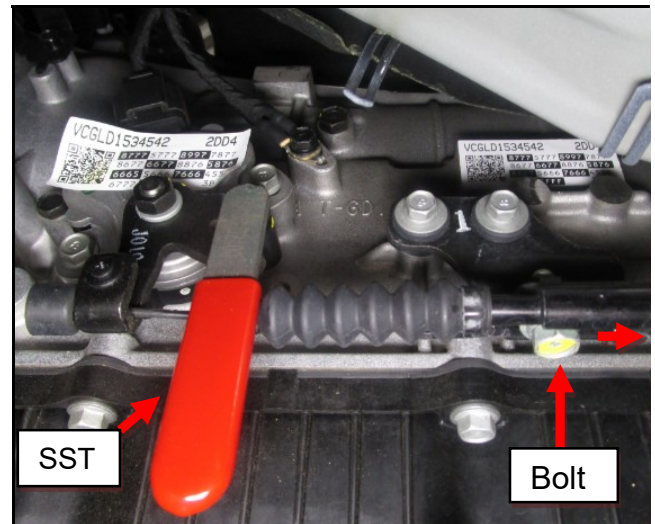
Install the SST (09480-D2100) or 5mm bolt in the alignment hole of the park position switch.

Loosen the adjustment bolt shown.

Slide the adjustment bracket rearward to remove the slack in the park cable.

Tighten the bolt to specification.

Torque: 7~8 lb-ft (0.9~1.0 kgf.m, 9~10 N.m)



28. Clear the codes and test drive the vehicle for two driving cycles (two key-on to key-off driving cycles, including 1-2-3-4-5-6-7-8 upshifts and 8-7-6-5-4-3-2-1 downshifts). If the solenoid DTC returns, perform the following repairs:

DTC	SOLENOID DTC REPAIR PROCEDURE
P074100	<ul style="list-style-type: none"> • Replace the transmission <ul style="list-style-type: none"> • Replace the control harness between the TCU and transmission. <ul style="list-style-type: none"> ➤ If the solenoid DTC does not occur again, return the vehicle to the customer. ➤ If the solenoid DTC returns again, replace the TCU.
P074300	
P074800	
P075300	
P075800	
P076300	
P076800	
P076A00	
P076D00	
P077300	
P078500	
P078A00	
P270900	

DTC	PARK POSITION SWITCH DTC REPAIR PROCEDURE
P076A00	If the DTC returns, refer to the related Shop Manual and follow the repair diagnosis for Wiring Inspection and ETM .

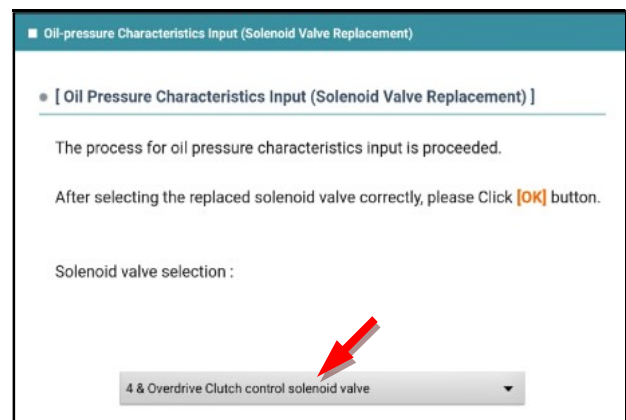
29. Solenoid Oil Pressure Data Characteristics Input:

NOTICE

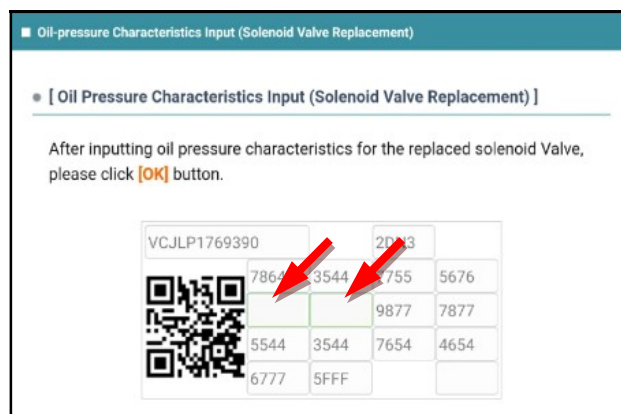
This procedure is necessary only for the following solenoids: P075300, P075800, P076300, P076800, P077300.

30. Select **S/W Management, Automatic Transaxle** and **Oil Pressure Characteristics Input (Solenoid valve Replacement)**. Select **OK** and follow the prompts.

Select the type of solenoid from the drop-down menu. Select **OK**.



31. Input the 8-digit code recorded in Step 10 in the blank spaces in the GDS. Select **OK**.
Input the 8 digit code again and select **OK**.
The GDS will confirm the procedure was completed.



32. Drive the vehicle to confirm the proper operation of the transmission.