



Technical Service Bulletin

GROUP AUTOMATIC TRANSMISSION	NUMBER 20-AT-007H
	DATE FEBRUARY 2020
MODEL ACCENT (HC) ELANTRA (AD/ADa) ELANTRA GT (PD) KONA (OS) SANTA FE SPORT (AN) TUCSON (TL) VELOSTER (JS)	

SUBJECT: AUTOMATIC TRANSAXLE SOLENOID DTC P074100, P074300, P074800, P075300, P075800, P076300, P076800, P077300

This TSB supersedes TSB 19-AT-016H to revise the Elantra (AD/ADa) applicable years.

Description: If you are servicing an applicable vehicle with a “Check Engine” light on and one or more of the DTC listed below, follow the repair procedure and replace the related solenoid and oil pressure harness.

NOTE: The 6-speed vehicles listed below are equipped with a Generation2 valve body with 7 solenoids. Previous 6-speed transmissions have a Generation1 valve body with 8 solenoids (Refer to TSB 20-AT-008H).

Applicable Vehicles:

2018~19	Accent (HC) 1.6L
2017~19	Elantra (AD/ADa) 2.0L
2018~	Elantra GT (PD) 2.0L
2018~	Kona (OS) 2.0L
2017~18	Santa Fe Sport (AN) 2.4L
2018~	Tucson (TL) 2.4L
2019~	Veloster (JS) 2.0L

Parts Information: Refer to the PNC in the parts catalog to order the correct part number.

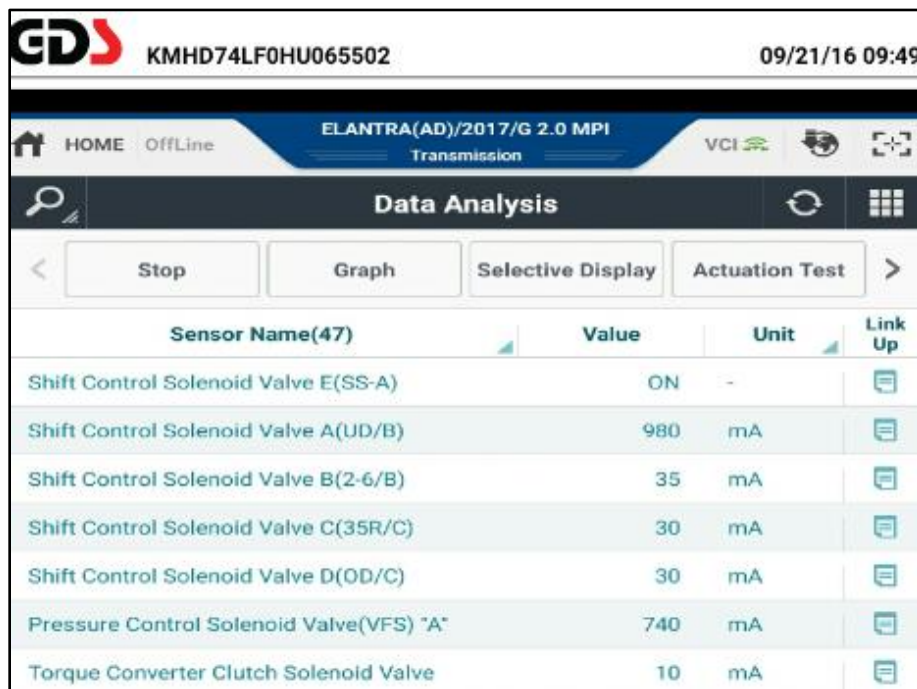
MODEL	DTC	DESCRIPTION	PNC	PART NUMBER
2018~19 Accent (HC) 1.6L 2017~19 Elantra (AD/ADa) 2.0L 2018~ Elantra GT (PD) 2.0L 2018~ Kona (OS) 2.0L 2017~18 Santa Fe Sport (AN) 2.4L 2018~ Tucson (TL) 2.4L 2019~ Veloster (JS) 2.0L	P074100	Torque converter clutch system	45000	45000-****
	P074300	Torque converter (TC)	46202A	46313-3B***
	P074800	Pressure control solenoid (PC)	46313A	46313-3B***
	P075300	Shift solenoid A (UD)	46313C	46313-2F***
	P075800	Shift solenoid B (26)	46313B	46313-3B***
	P076300	Shift solenoid C (35R)	46313B	46313-3B***
	P076800	Shift solenoid D (OD)	46313C	46313-3B***
	P077300	Shift solenoid E (SS-A)	46313D	46313-3B***
ALL	All	Oil pressure switch harness	46307	46307-2F***

Warranty Information:

MODEL	OP CODE	OPERATION	OP TIME	CAUSAL PART	NATURE CODE	CAUSE CODE
2018~19 Accent (HC) 1.6L 2017~19 Elantra (AD/ADa) 2.0L 2018~ Elantra GT (PD) 2.0L 2018~ Kona (OS) 2.0L 2017~18 Santa Fe Sport (AN) 2.4L 2018~ Tucson (TL) 2.4L 2019~ Veloster (JS) 2.0L	45775R00	Solenoid replacement	Refer to WEBLTS for current LTS time	Refer to Parts Information table on Page 1	13A	ZZ3
ALL	45775RQ0	GDS Operation				

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 wiring harness between the PCM and transmission for a damaged wire or open/short circuit. Check for a damaged pin or pin not fully inserted into the connector.
 - If damage exists, repair or replace the control wiring and drive the vehicle to confirm the repair.
 - If no damage or open/short circuit, go to Step 4.

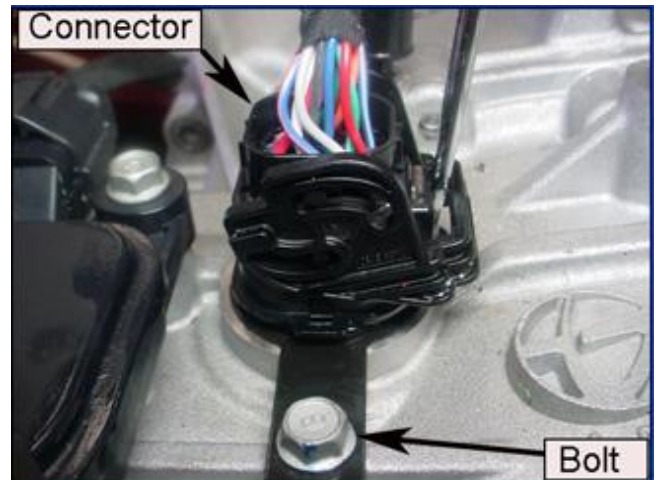
4. Refer to the DTC recorded in Step 1 and follow the repair procedure shown below:

DTC		REPAIR PROCEDURE
P074100	Torque converter clutch system	Go to Step 5 and replace the related solenoid and oil pressure switch harness.
P074300	Torque converter (TC)	
P074800	Pressure control solenoid (PC)	
P075300	Shift solenoid A (UD)	
P075800	Shift solenoid B (26)	
P076300	Shift solenoid C (35R)	
P076800	Shift solenoid D (OD)	
P077300	Shift solenoid E (SS-A)	

5. Record the preset radio stations.
Remove the air cleaner, battery and battery tray.
6. Remove the undercover below the transmission.
7. If necessary to access the solenoids, drain the radiator and remove the lower radiator hose from the radiator.
Drain the ATF.

8. Use a screwdriver to release the tab and remove the harness connector on top of the case.

Remove the bolt that secures the retainer and push the connector into the transmission.



9. Remove the oil pan bolts and remove the pan.

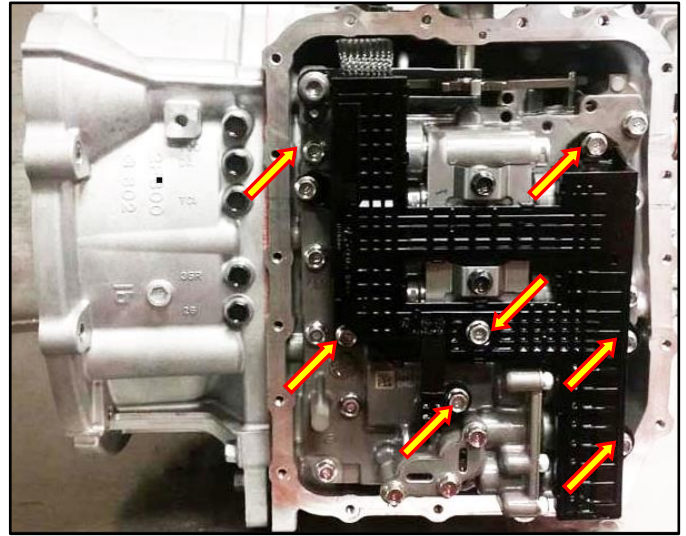
CAUTION

Use a rubber hammer to tap the oil pan cover on a corner until the cover is loose.



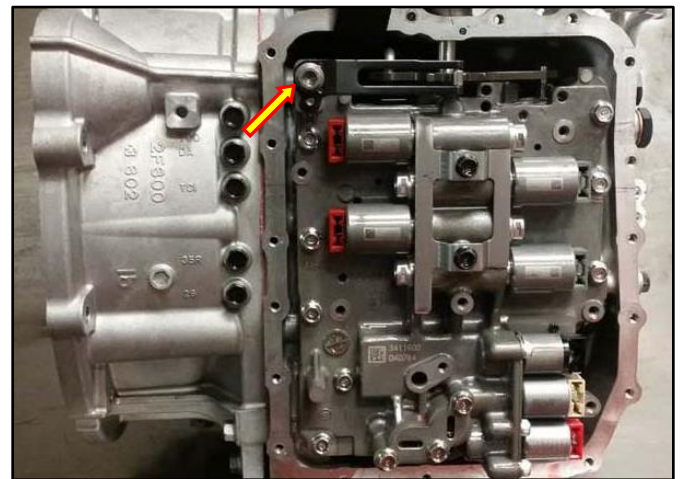
10. Remove 7 bolts to the oil pressure switch harness.

Pull the harness outward and move the harness out of position.



11. Remove the bolt that secures the detent spring and remove the spring.

Torque: 8~11 lb.ft (1.2~1.5 kgf.m/10~13 N.m)



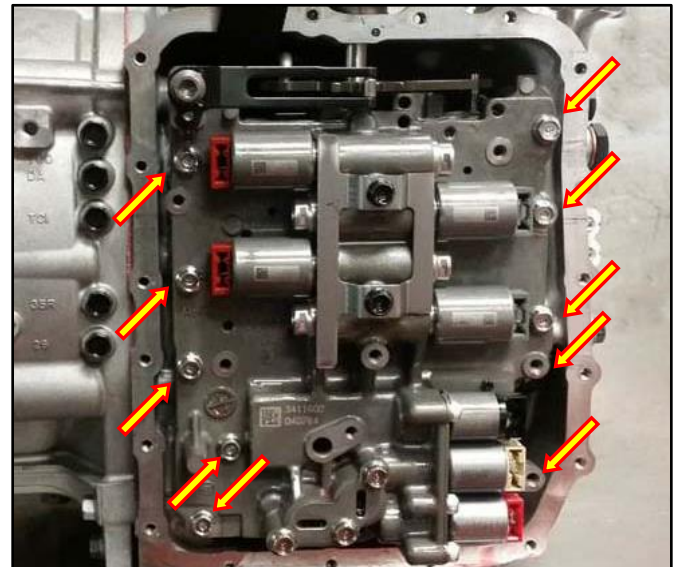
12. Remove the valve body bolts from the outermost bolts to the center bolts.

Remove the valve body.

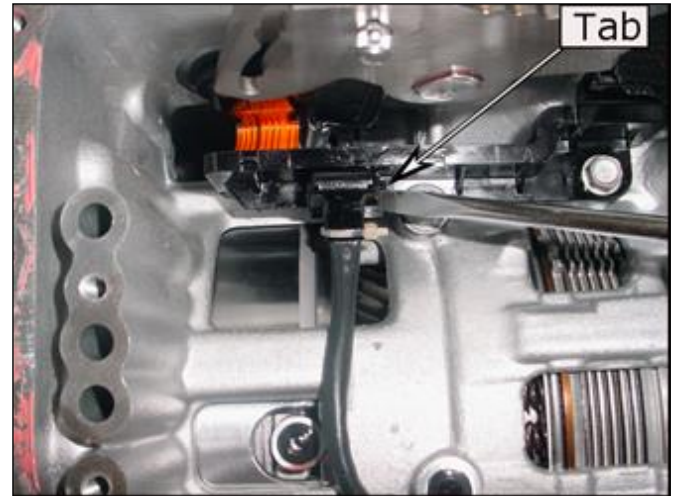


CAUTION

Place the valve body on a clean paper towel. Placing the valve body on a rag may cause lint to enter the valve body.



13. Use a screwdriver to depress the locking tab on the connector and pull outward on the connector.



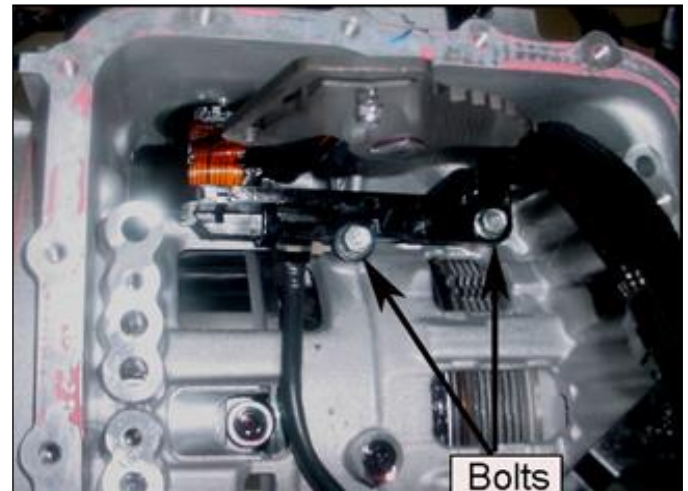
14. Remove two bolts that secure the harness to the case.

Pull the harness downward out of the case.

Install a new harness and insert the connector into the case. Attach the retainer and bolt on top of the case as shown in Step 8.

Reinstall the bolts that secure the harness.

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

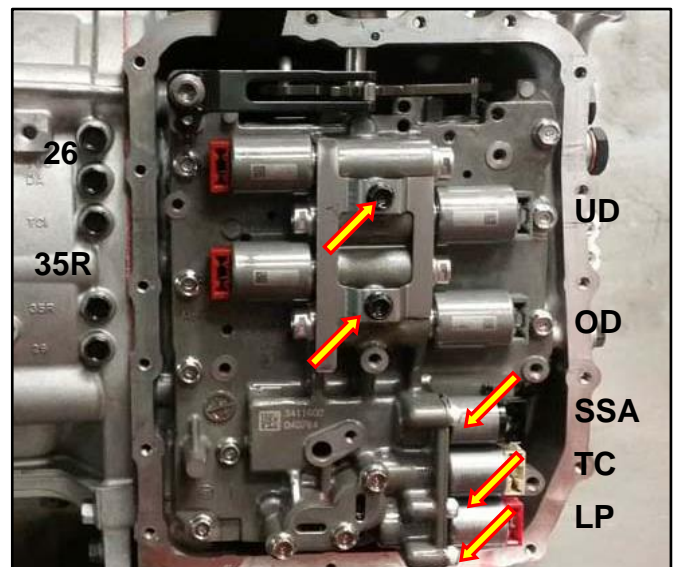


15. **For UD, OD, 26 and 35R solenoids:**

- Use a 10mm socket and ratchet to remove two bolts to the upper solenoid support. Remove the support.

For SS-A, TC and PC solenoids:

- Use a 5mm hex socket and remove three hex bolts that secure the solenoid support. Remove the support.



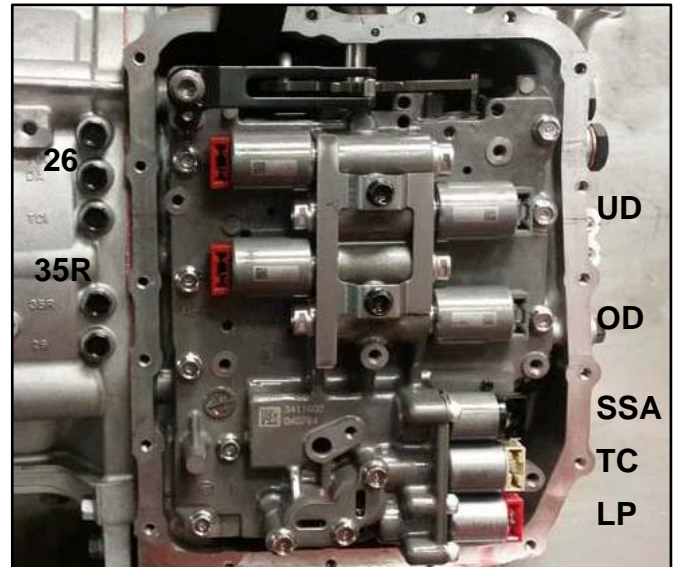
16. Record the 8-digit code on the solenoid.



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

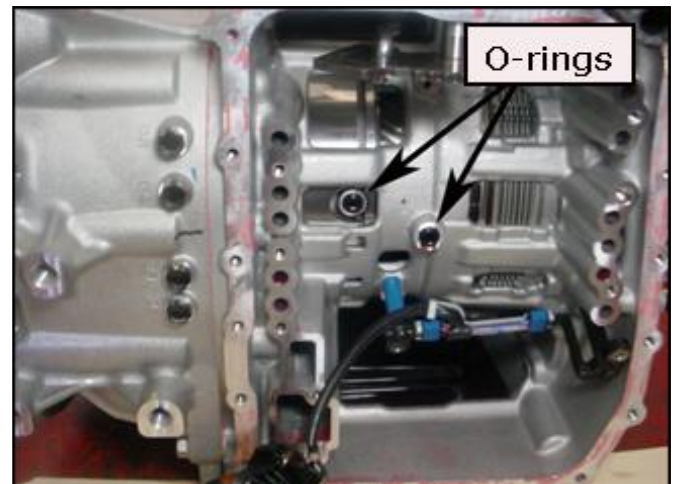
DTC		Solenoid
P074100	TC	TC solenoid (TC)
P074300	TC	TC solenoid (TC)
P074800	LP	Line pressure control
P075300	UD	Shift solenoid (UD)
P075800	26	Shift solenoid (26)
P076300	35R	Shift solenoid (35R)
P076800	OD	Shift solenoid (OD)
P077300	SSA	Shift solenoid (SSA)

Reinstall the solenoid support.

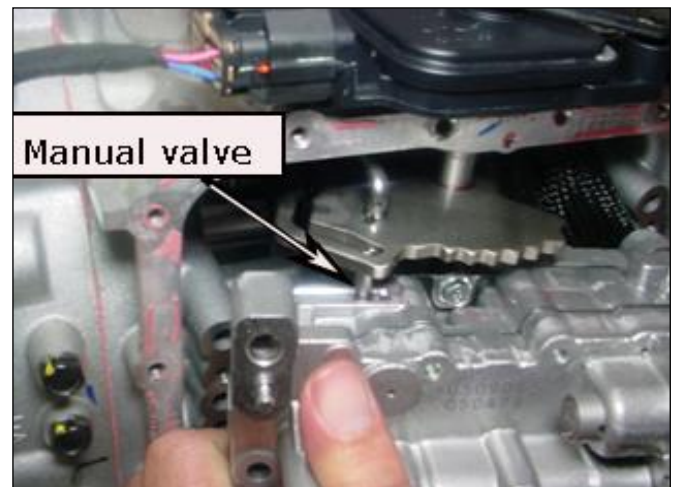


18. Reconnect the harness to the input and output speed sensor (see Step 13).

Confirm the O-rings are installed correctly in the case.



19. Align the manual shaft to the shift lever and install the valve body.

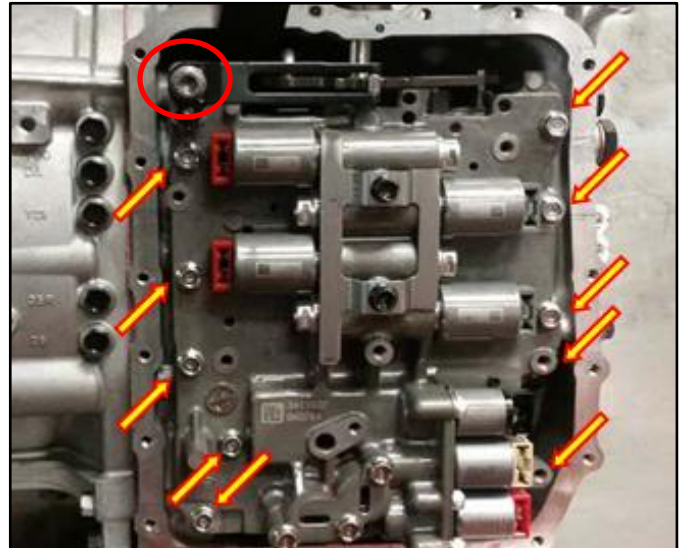


20. Install the valve body bolts and torque the bolts to specification from the center bolts to the outermost bolts.

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

Reinstall the bolt and detent spring.

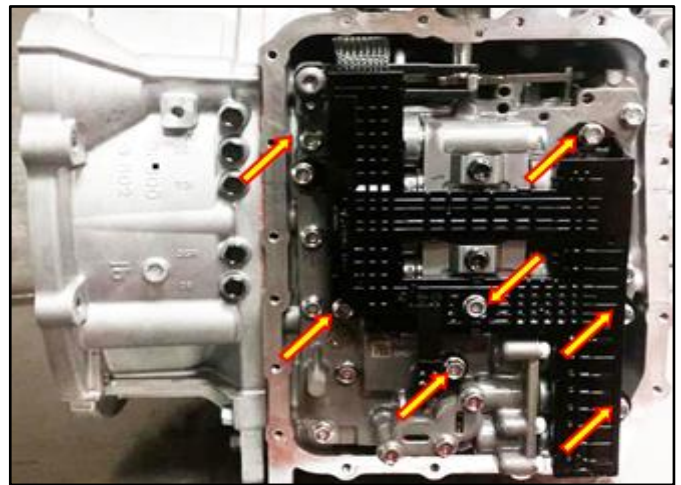
Torque: 8~11 lb.ft (1.2~1.5 kgf.m/10~13 N.m)



21. Connect the oil pressure harness to the solenoids.

Install the bolts to the harness and torque to specification.

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



22. Reinstall the pan and tighten the bolts to specification.

Torque: 9~10 lb.ft (1.2~1.4 kgf.m/12~14 N.m)



23. Attach the lower radiator hose. Add ethylene glycol engine coolant to the radiator and check the level according to the appropriate shop manual, "Engine" section.

24. Reconnect the battery.
Input the radio stations recorded in Step 5.

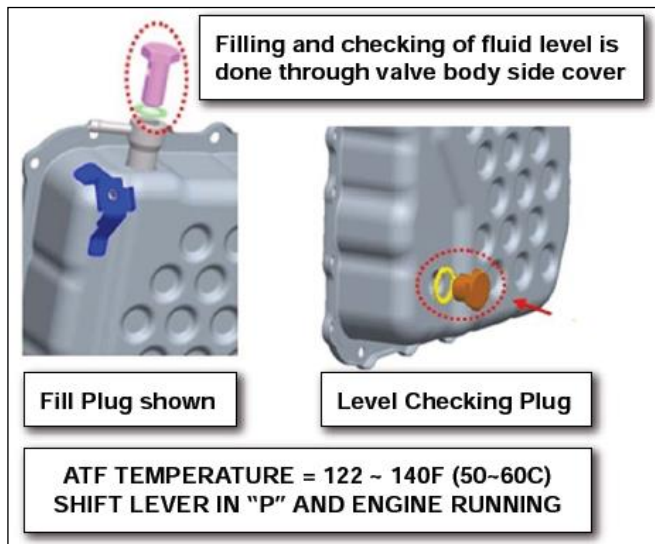
25. Remove the transaxle fill plug.

Use a funnel to add approximately 5~6 quarts of SP4-M ATF through the fill plug opening. Reinstall the fill plug.

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

Start the engine and shift to R, D and place in Park. When the ATF is 122°F~140°F (50~60°C), remove the level checking plug. The level is correct when oil flows out of the level checking plug in a thin steady stream.

Collect and dispose of any excess fluid in accordance with local regulations.



26. Clear the DTC and test drive the vehicle for two key-on/key-off driving cycles, including 1-2-3-4-5-6 upshifts and 6-5-4-3-2-1 downshifts. If the DTC returns, perform the following repairs:

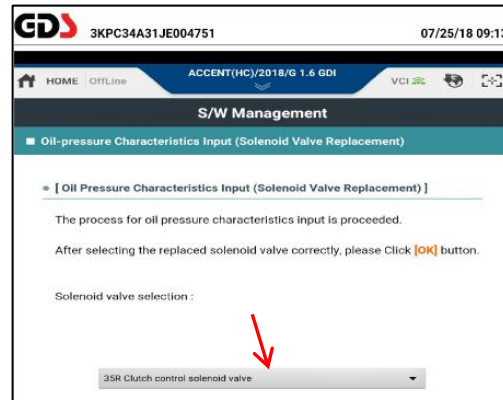
DTC	Repair Procedure
P074100	Replace the transmission.
P074300	Replace the control wiring harness between the PCM and transmission. <ul style="list-style-type: none"> • If the solenoid DTC does not return, return the vehicle to the customer. • If the solenoid DTC returns again, replace the PCM.
P074800	
P075300	
P075800	
P076300	
P076800	
P077300	

27. Attach a GDS and select **S/W Management, Automatic Transaxle** and **Oil-pressure Characteristics Input (Solenoid Valve Replacement)**. Select **OK** and follow the prompts on the GDS.

NOTICE

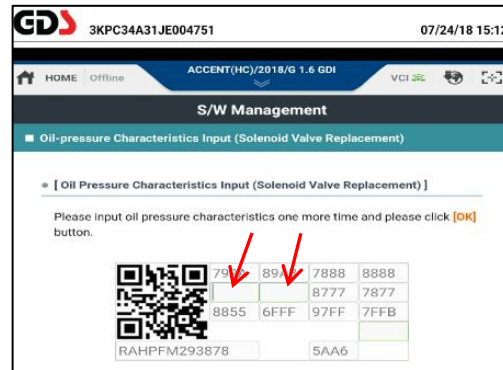
This procedure is necessary only for the UD, 26, 35R and OD solenoids.

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



29. Input the 8-digit code recorded in Step 16 in the blank spaces in the GDS. Select **OK**.

Input the 8 digit code again and select **OK**.
Confirm the procedure was completed.



30. Drive the vehicle to confirm the transmission is operating as designed.