



HYUNDAI | NEW THINKING.
NEW POSSIBILITIES.

Technical Service Bulletin

GROUP AUTOMATIC TRANSMISSION	NUMBER 16-AT-014
DATE DECEMBER 2016	MODEL ELANTRA (AD/ADa) 2.0L, SANTA FE SPORT (AN) 2.4L

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

The 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.

Description: If you are servicing an applicable vehicle with a complaint of "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.

Applicable Vehicles:	2017~ Elantra Sedan (AD/ADa) 2.0L 2017~ Santa Fe Sport (AN) 2.4L
-----------------------------	---

Parts Information:

Refer to the PNC in the parts catalog to order the correct solenoid part number.

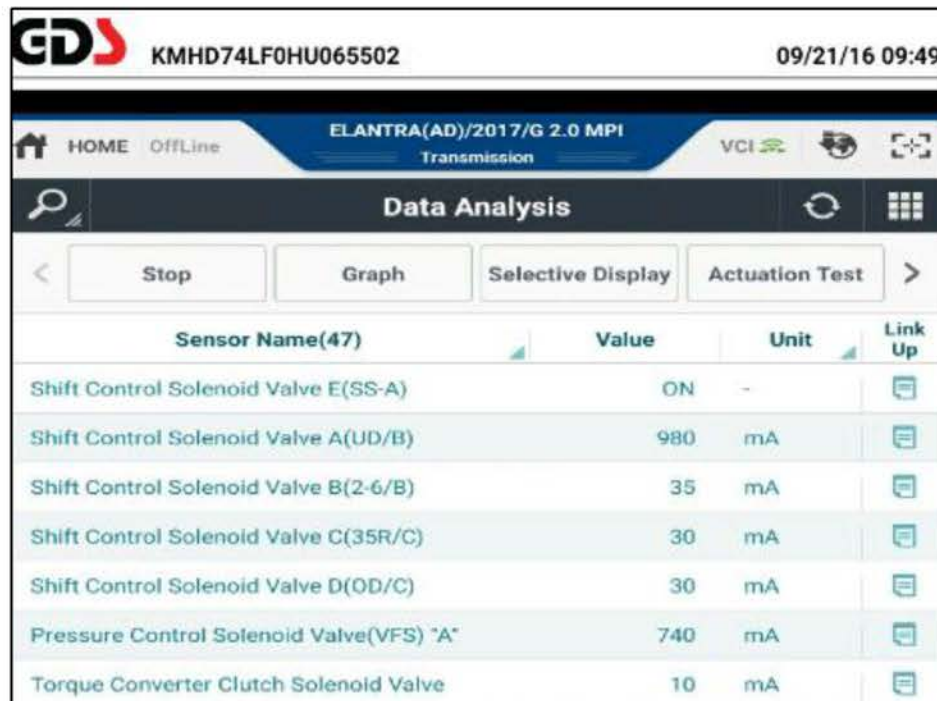
MODEL	DTC	PART	PNC	PART NUMBER
2017~ Elantra Sedan (AD/ADa) 2.0L	P074100	Torque converter clutch system	45000	00268-**** 45000-****
	P074300	Torque converter (TC)	46202A	46313-3B***
	P074800	Pressure control solenoid (PC)	46313A	46313-3B***
	P075300	Shift solenoid A (UD)	46313C	46313-2F***
2017~ Santa Fe Sport (AN) 2.4L	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	46307-3B***

Warranty Information:

MODEL	OP CODE	OPERATION	OP TIME	CAUSAL PART	NATURE CODE	CAUSE CODE
2017~ Elantra 2.0L (AD/ADa)	45775R00	Solenoid replacement	Refer to WEBLTS for current LTS time	See parts catalog	13A	ZZ3
2017~ Santa Fe Sport 2.4L (AN)						
2017~ Elantra 2.0L (AD/ADa) 2017~ Santa Fe Sport 2.4L (AN)	45775RQ0	GDS Operation	0.3			

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 ECM control harness and drive the vehicle to confirm the repair.
 - If no damage or open/short circuit, go to Step 4.

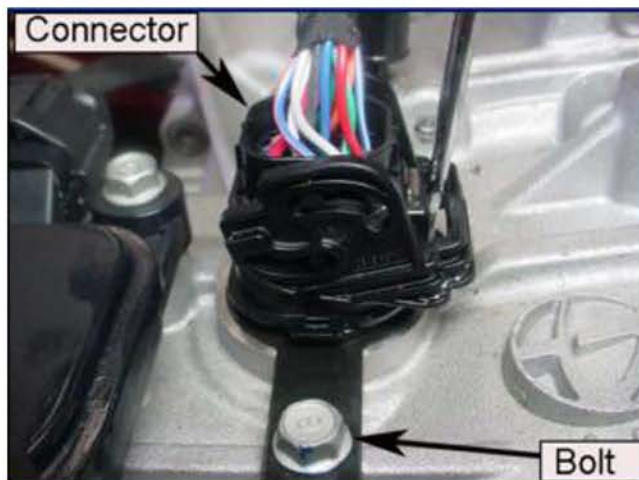
4. Refer to the DTC recorded in Step 1 and follow the repair procedure shown below:

DTC		REPAIR PROCEDURE
P074100	Torque converter clutch system	Replace the ATM if P074300 is not set. Go to Step 5 and replace the related solenoid and oil pressure switch harness.
P074300	Torque converter (T/C)	
P074800	Pressure control solenoid (P/C)	
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 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 solenoid connector on top of the case.

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



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

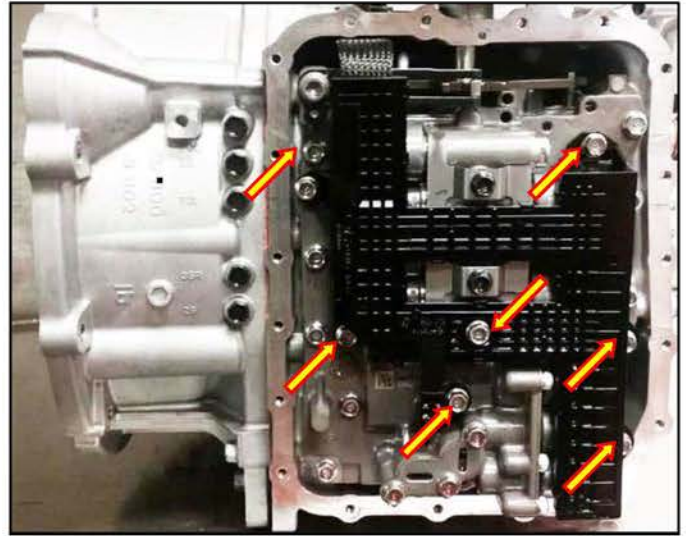
CAUTION

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



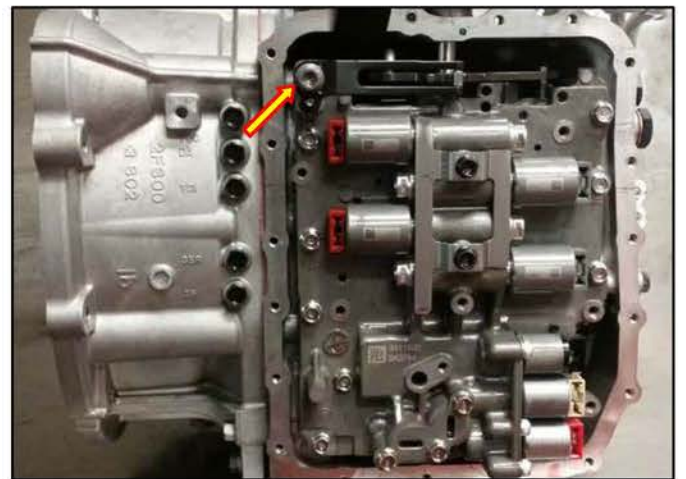
10. Remove 7 bolts to the oil pressure switch harness.

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

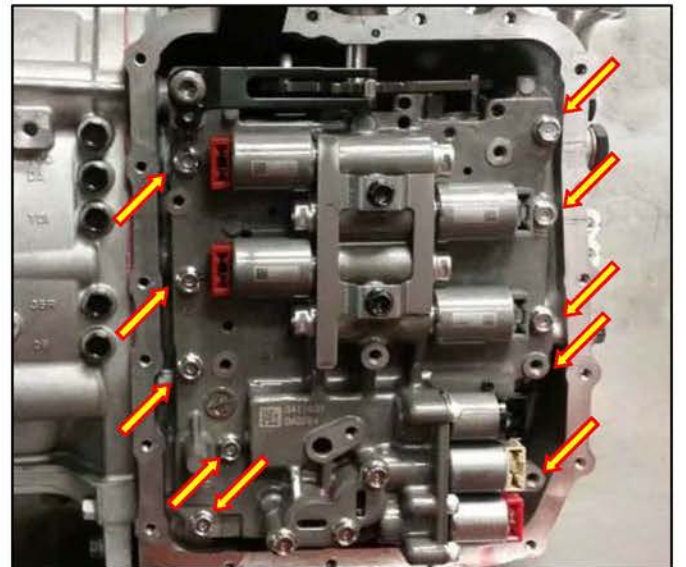


11. Remove the bolt that secures the detent spring and remove the spring.

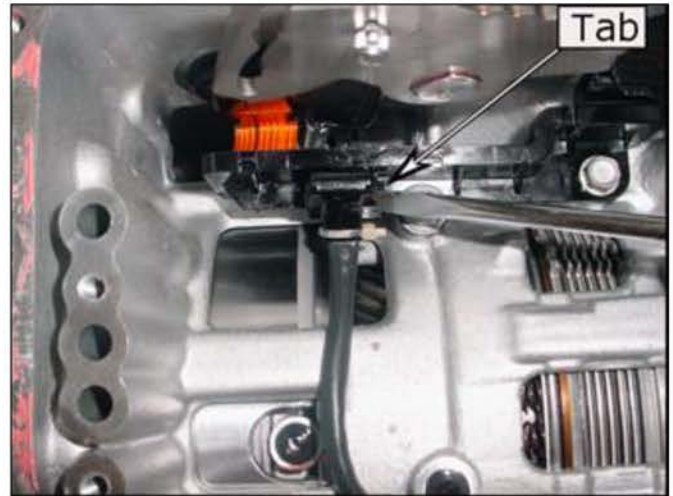
Torque: 8~11 lb.ft (1.2~1.5 kgf.m/10~13 N.m)



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



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



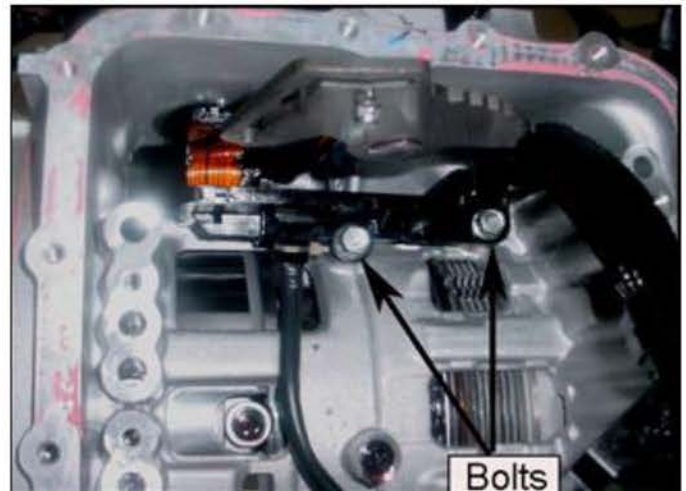
14. Remove two bolts that secure the harness to the case.

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)

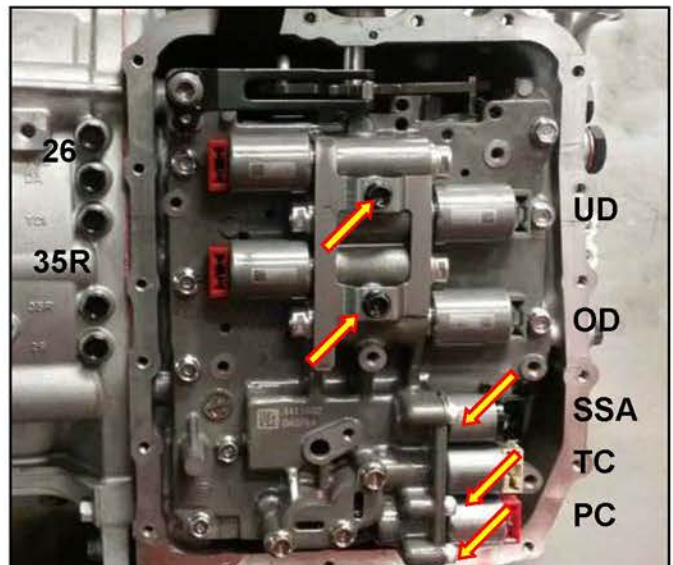


15. **For UD, OD, 26 and 35R solenoids:**

- 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:

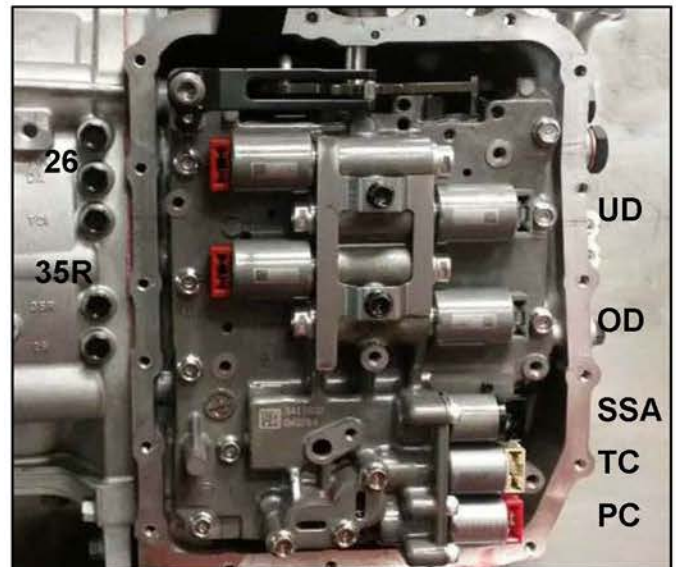
- Use a 5mm hex socket and remove three hex bolts that secure the solenoid support. Remove the support.



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

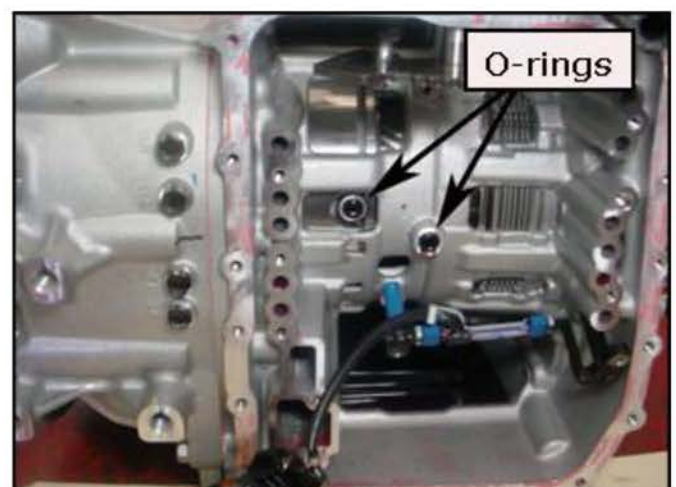
DTC		Solenoid
P074300	TC	TC solenoid (TC)
P074800	PC	Pressure control
P075300	UD	Shift solenoid A (2UD)
P075800	26	Shift solenoid B (26)
P076300	35R	Shift solenoid C (35R)
P076800	OD	Shift solenoid D (OD)
P077300	SS-A	Shift solenoid E (SS-A)

Reinstall the solenoid support.



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

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



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

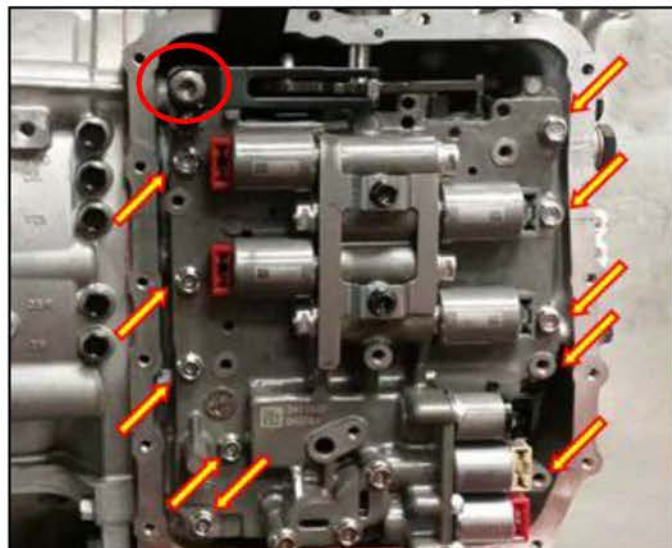


19. Install the valve body bolts and torque the bolts to specification from the center bolts to the outermost bolts.

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

Reinstall the bolt and detent spring.

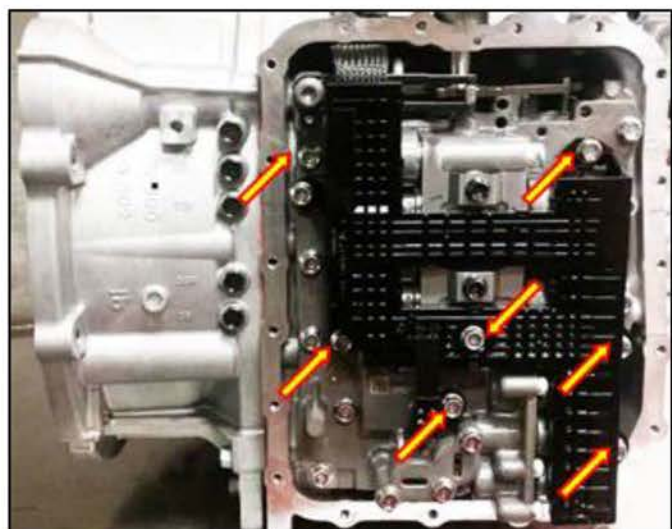
Torque: 8~11 lb.ft (1.2~1.5 kgf.m/10~13 N.m)



20. Reconnect 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)



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

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



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

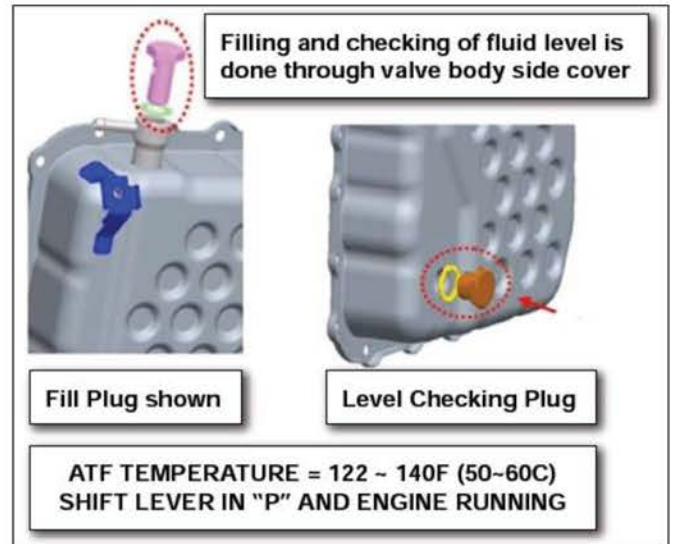
23. Reconnect the battery.
Input the radio stations recorded in Step 5.

24. 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 to the DLC 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.

25. 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
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	
P074100	
P074300	
P074800	

26. Clear the DTC in the Blue Link system per instructions of TSB 12-BE-005-2.

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