		GROUP	NUMBER	
A	HYUNDAI	AUTOMATIC TRANSMISSION	18-AT-015	
Taskai	a Comico Dullatin	DATE	MODEL	
Technical Service Bulletin		NOVEMBER, 2018	SONATA (LFa) 2.0T SANTA FE (TMa) 2.0T/2.4L	
AUTOMATIC TRANSMISSION OIL PRESSURE DATA TRAI				
SUBJECT:	gds mobile (8-speed transmission)			

Description:

This bulletin provides a procedure to transfer pressure data to the TCU using <u>GDS Mobile.</u> This procedure is necessary to reduce the transmission learning time and improve the shift quality.

- After replacing an automatic transmission: Input the data into the TCU using the GDS.
- <u>After replacing a PCM (ECU/TCU)</u>: Back up the oil pressure data from the old TCU into the GDS and then transfer the data to the new TCU.

NOTICE

Before installing the transmission, the technician should: (1) Use GDS to transfer the pressure characteristics to the TCU or (2) Take a photo of the tag or (3) Record all digits on the tag. The pressure characteristics tag is difficult to read after installation.

The oil pressure characteristics bar code location under the air cleaner is shown below.

-	7777	7777	4333	7337
思想	8899	9889	7788	8778
HQ.	7777	8777	746F	FBFF
(C), 41	9766	5FFF	15EE	1
	SDJX	AA5876	77	
4G				
G1				



Applicable Vehicles	2017~ Sonata (LFa) 2.0T
	2019~ Santa Fe (TMa) 2.0T/2.4L

Warranty Information: Normal warranty applies.

NOTE: Labor operation for automatic transmission or PCM (ECU/TCU) replacement includes the time for data transfer.

I. DATA INPUT – AFTER REPLACING AUTOMATIC TRANSMISSION

Oil pressure data input procedure using GDS Mobile

 From the GDS Mobile home screen, select S/W Management, Automatic Transaxle and Oil pressure characteristics Input (A/T Replacement). Select OK.

Select **OK** and follow the prompts.

2. Select **OK** and use the QR Reader to read the barcode tag on the transmission. Select **OK** and follow the prompts.

The GDS will transfer the data to the TCU.

If the QR Reader did not successfully transfer the data, select **SERIAL INPUT** and go to Step 3.

Systems Components	Unfold A
	6.777 (A.C.)
Engine Control	8
System Identification	E
Resetting Adaptive Values	E
Resetting E-CVVT Values	E
Auto Detected Configuration Reset	e
Evap. Leakage Test	e
Read VIN	E
Write VIN	e
ETC TEST(Option)	E
Alternator TEST	e
ECU Mapping Verification	e
Automatic Transaxle	8
System Identification	E
Resetting Auto Trans Adaptive Values	E
 Oil-pressure Characteristics Input (A/T Replacement) 	e
 Oil-pressure Characteristics BackUp & Input (TCU Replacement) 	e
Oil-pressure Characteristics Input (Solenoid Valve Replacement)	E
S/W Management	

re Characteristics Input (A/T Replacement)

• [Oil-pressure Characteristics Input (A/T replacement)]

This function allows users to enter barcode information from QR code attached to the transmission and insert it to TCU when changing the transmission.

•[Condition] 1. Ignition Key On 2. Shift Lever : P 3. Vehicle Speed : 0 Km/h 4. Engine Stop

After pressing [OK] button, recognize the QR code attached to the transmission.

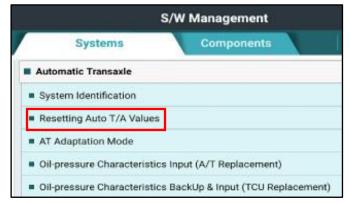


3. If the QR Reader did not successfully read the barcode, manually input the transaxle serial number (12 digits) and select **Done**. If the GDS fails to input the data, manually input the complete pressure characteristics data (72 numbers and letters). Select **OK**.

The GDS will confirm the oil pressure characteristics were input into the TCU. Select OK.

HOME Online SANTAFE(TMA)/2019/G 2.4 GDI VCI 🕸 😽 🔀	👫 HOME Online SANTAFE(TMA)/2019/G 2.4 GDI VCI 🕸 😽 🔀
S/W Management	S/W Management
Oil-pressure Characteristics Input (A/T Replacement)	 Oil-pressure Characteristics Input (A/T Replacement)
Oli-pressure Characteristics Input (A/T Replacement) Input serial number and press [OK] button. [Input method] Input complete serial number or only 6 numbers among serial number. SDJXAA587677	 Oil-pressure Characteristics Input (A/T Replacement) [Oil-pressure Characteristics Input (A/T replacement)] Please enter the serial number and the oil-pressure characteristics of the barcode sticker attached on the new transmission in the order in the space below.
OK Cancel	OK Cancel

- 4. Check for DTC and delete any DTC.
- 5. Clear any DTCs in the Blue Link system according to instructions in TSB 12-BE-005-2.
- Reset the automatic transmission adaptive values using GDS, S/W Management, Automatic Transaxle and Resetting Auto T/A Values. Follow the prompts on the GDS.



II DATA INPUT - AFTER REPLACING OR EXCHANGING A PCM (ECU/TCU)

Oil pressure data backup and input procedure using GDS Mobile:

NOTICE

If the PCM has been replaced and the oil pressure data has not been input to the new TCM, the shift position indicator lamps on the instrument cluster or shift lever will blink continuously with the ignition on and the engine off.

 From the GDS Mobile home screen, select S/W Management, Automatic Transaxle and Oil Pressure Characteristics BackUp & Input (TCU Replacement).

Select **OK** and follow the prompts.

- S/W Management = Systems Engine Control 1 E System Identification ECU Mapping Verification Resetting Adaptive Values Auto Detected Configuration Reset Read VIN Write VIN ETC TEST(Option) Alternator TEST E Evap. Leakage Test Engine coolant filling mode æ Automatic Transaxle System Identification Resetting Auto T/A Values AT Adaptation Mode Oil-pressure Characteristics Input (A/T Replacement) Oil-pressure Characteristics BackUp & Input (TCU Replacement) ABS/ESC (SCC/AEB
- 2. The GDS will prompt you to backup the pressure characteristics to the GDS. Select **Backup**.

S/W Management			
Oil-pressure Characteristics BackUp & Input (TCU Replacement)			
 [Oil-pressure Characteristics BackUp & Input (TCU replacement)] 			
If you want to back up data from old TCU, press [BACKUP] button.			
Or if you want to input them to new TCU, press [INPUT] button.			
[Procedures]			
1. BACKUP (Back up data from old TCU to Scan Tool)			
2. Exchange old TCU with new one			
3. INPUT (Input the backed up data to new TCU with Scan Tool)			
BackUp Input			

NOTICE

If the GDS cannot communicate with the old TCU, you must locate the oil pressure characteristics tag under the air cleaner and manually input the values into the GDS.

3. The GDS will prompt you to back up to the Scan Tool. Select **OK.**

The GDS will confirm the oil pressure characteristics of the old TCU was backed up. Select **OK**.

Turn the ignition off and install the new PCM (ECU/TCU).

7777 7777 4333 7337 8899 9889 7788 8778 7777 8777 746F FBFF 9766 5FFF 15EE SDJXAAST67 4G 61 5 5 5			7777			
7777 8777 746F FBFF 9766 5FFF 15EE SDJXAA587677 46		0000	1	4333	7337	
9766 5FFF 15EE SDJXAA587677 4G		8899	9889	7788	8778	
SDJXAA587677 4G		7777	8777	746F	FBFF	
4G	E1.41.5	9766	5FFF	15EE		
		SDJXA	A5876	77		
G1	4G					
	G1					
	ок					

 From the GDS Mobile home screen, select S/W Management, Automatic Transaxle and Oil Pressure Characteristics BackUp & Input (TCU Replacement). Select OK and follow the prompts.

Select Input.

S/W Mor	acomont			
S/W Management				
Oil-pressure Characteristics BackUp & Input (TCU Replacement)				
Oil-pressure Characteristics BackUp	& Input (TCU replacement)]			
If you want to back up data from old TCU, press [BACKUP] button.				
Or if you want to input them to new TCU, press [INPUT] button.				
[Procedures]				
1. BACKUP (Back up data from old TO	CU to Scan Tool)			
2. Exchange old TCU with new one				
3. INPUT (Input the backed up data to	new TCU with Scan Tool)			
BackUp	Input			

5. The GDS will prompt you to input the oil pressure characteristics to the new TCU. Select **OK**.

The GDS will confirm the oil pressure characteristics were input to the new TCU. Select **OK**.



- 6. Check for DTCs and delete any DTCs.
- 7. Clear any DTCs in the BlueLink system according to instructions in TSB 12-BE-005-2.
- 9. Confirm proper operation of the vehicle.