

This TSB supersedes TSB 18-AT-015 to add additional models.

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.





Serial number

APPLICABLE VEHICLES:

2018~	19 Sonata (LFa) 2.0T
2020~	Sonata (DN8) 1.6T/2.5L
2019~	Santa Fe (TMa) 2.0T/2.4L

2020~ Palisade (LX2) 3.8L

Warranty Information: Normal warranty applies.

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

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

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.

S/W Management	
Systems Components	Unfold A
Engine Control	e
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
I 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	

[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.

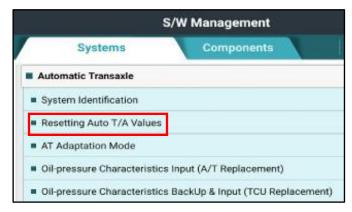


3. If the QR Reader did not successfully read the barcode, manually input the transaxle serial number (12 digits) and select **Done**. If the GDS fails to input the data, manually input the complete pressure characteristics data. Select **OK**.

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
S/W Management	S/W Management
Oil-pressure Characteristics Input (A/T Replacement)	Oil-pressure Characteristics Input (A/T Replacement)
◎ [Oil-pressure Characteristics Input (A/T replacement)]	• [Oil-pressure Characteristics Input (A/T replacement)]
Input serial number and press [OK] button. [Input method]	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.
Input complete serial number or only 6 numbers among serial number.	7777 7777 4333 7337
SDJXAA587677	8899 9889 7788 8778
	7777 8777 746F FBFF
	9766 5FFF 15EE
	SDJXAA587677
	4G
	G1
OK Cancel	OK Cancel

- 4. Check for DTC and delete any DTC.
- 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 I AII 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	Do you want to back up to	o Scan To	ol?			
7777 8777 746F FBFF 9766 5FFF 15EE SDJXAA587677 46		7777	7777	4333	7337	
9766 5FFF 15EE SDJXAA587677 4G		8899	9889	7788	8778	
SDJXAA587677 4G	200	7777	8777	746F	FBFF	
4G	121, 41, 24	9766	5FFF	15EE		
		SDJXA	A5876	77		
G1	4G					
	G1					

 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.

 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. [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) 	S/W Management					
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	 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					
BackUp						

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**.

	S/W Management						
■ Oil-p	ressure Characteristics	BackUp 8	& Input (T	CU Repla	cement)		
= [0	il-pressure Characteris	tics Backl	Jp & Inpu	t (TCU re	placemen	nt)]	
Th	is data is the Oil-pressu	re Charact	teristics o	f old TCU	J		
tha	at was backed up in Sca	in Tool. If y	you want	to input t	his		
Ch	aracteristics to new TC	U press (C	kl buttor	1			
0.1		o, press [e	ing button				
	11575	7778	8788	7887	8878	1	
	14777 A	6666	9666	4455	7445		
		5644	6FFF	46FF	5FF5		
		1			8147		
	KKGGCA309	9198		4BD0			
	ок			с	ancel		

- 6. Check for DTCs and delete any DTCs.
- 7. Confirm proper operation of the vehicle.