 HYUNDAI Technical Service Bulletin	GROUP AUTOMATIC TRANSMISSION	NUMBER 23-AT-010H
	DATE AUGUST 2023	MODEL(S) ELANTRA (AD/ADa) ELANTRA (CN7/CN7a) ACCENT (HC) KONA (OS) VENUE (QX)
SUBJECT: OIL PRESSURE SENSOR REPLACEMENT (DTC P0845/P0846/P0867) – PARTIAL REPAIR OF IVT & RELEARN ADAPTIVE VALUES		

Description: Certain vehicles equipped with the Intelligent Variable Transmission (IVT) may experience a check engine light or malfunction indicator light due to Diagnostic Trouble Codes (DTC) listed below. This bulletin provides information on replacing the oil pressure sensor to remedy these DTCs, rather than replacing the entire IVT assembly.

Applicable Vehicles equipped with IVT: <ul style="list-style-type: none"> • 2020MY Elantra (AD/ADa) • 2021MY ~ Elantra (CN7/CN7a) • 2020MY ~ Accent (HC) • 2022MY ~ Kona (OS) • 2020MY ~ Venue (QX)

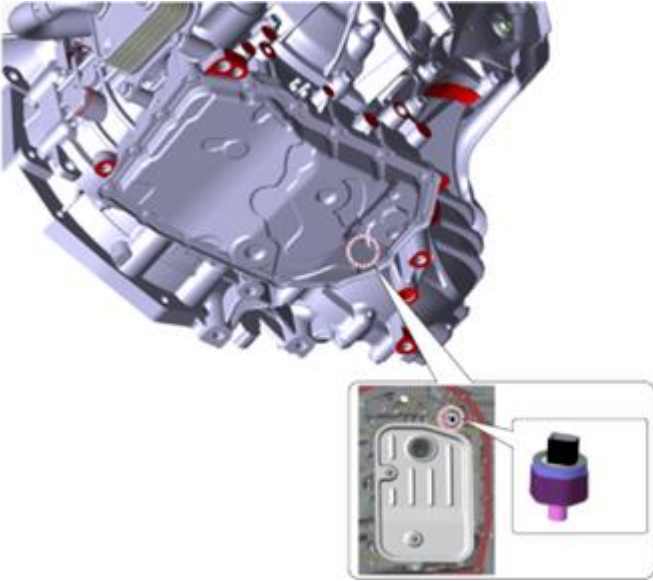
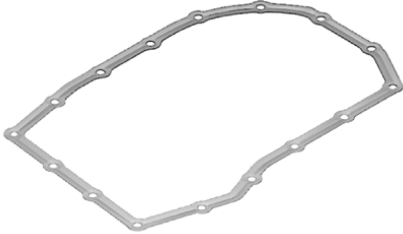
DTC Information:

DTC	DTC Description	Malfunction Criteria	Threshold Value
P0845	Open/Short in Oil Pressure Sensor Circuit	Sensor output voltage low/high	$\leq 0.27V$ OR $\geq 4.50V$
P0846		Sensor Output Voltage, target driven pulley pressure – current driven pulley pressure	$2.5V \leq x \leq 3.5V$ AND $\geq 4bar$
P0867	Difference between target and actual IVT fluid pressure	Target Secondary Pully Pressure-Current Secondary Pully Pressure	$>7 bar$

i Information

Only replace the oil pressure sensor if the vehicle has only DTCs present and no drivability concerns (eg. IVT slipping/shift shock, poor acceleration, or unable to shift into gear). If drivability concerns are present, replace the entire IVT assembly.

Part Information:

MODEL	PART NAME	PART NO.	QTY	FIGURE
ALL	Oil Pressure Sensor	48885-02300	1	
ALL	(IVT) Oil Pan Gasket	48282-2H000	1	
ALL	Fill Plug Gasket	45323-39000	1	Note: For top fill plug
All	Gasket	17512-14000	2	Note: For drain plug and fluid level plug
ALL	Transmission Fluid	00232-19081	7 qts.	

Warranty Information:

MODEL	OP CODE	OPERATION	OP TIME	CAUSAL PART	NATURE CODE	CAUSE CODE
ALL	48885R0I	Replace Oil Pressure Sensor (IVT)	1.1 M/H	48885-02300	W11	ZZ4

NOTE 1: Normal warranty applies.

NOTE 2: Submit Claim on Claim Entry Screen as “Warranty” type.

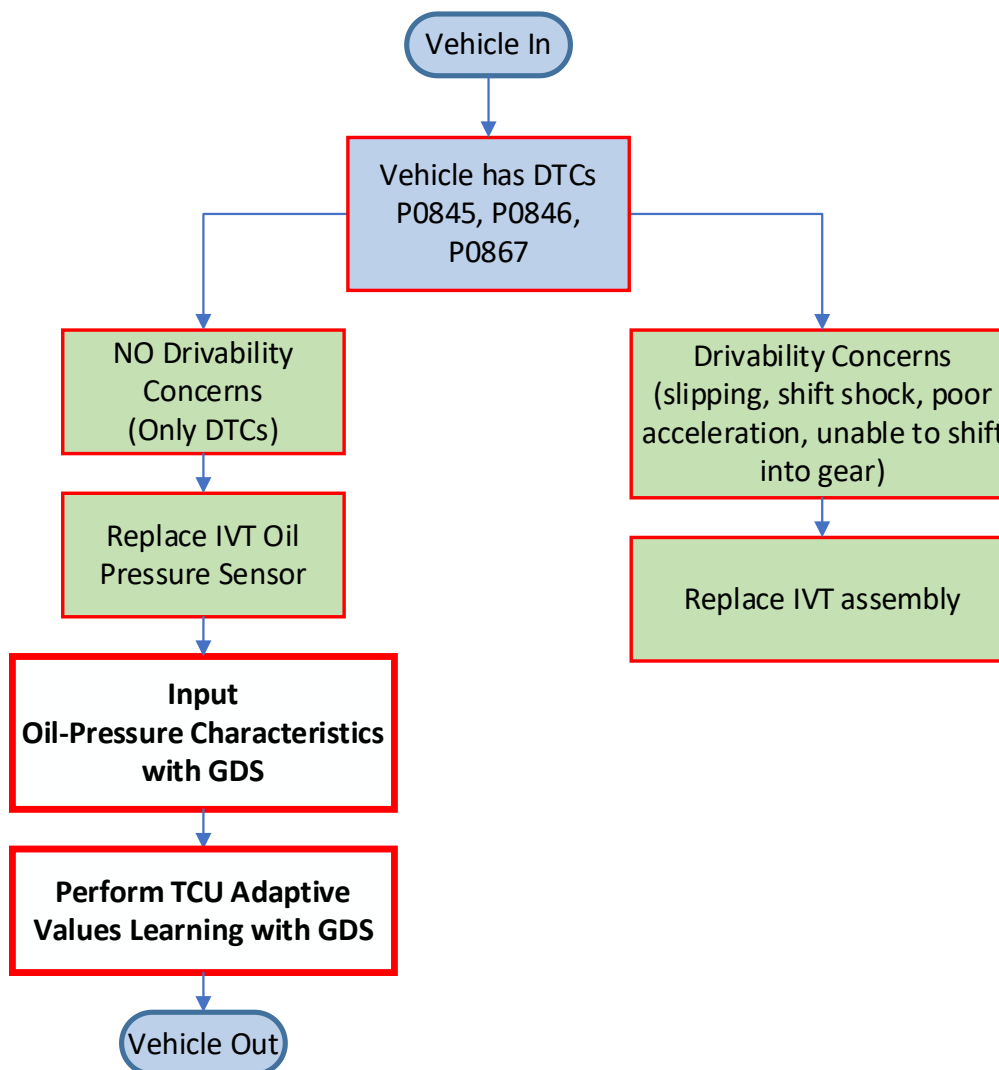
NOTE 3: Refer to the latest Digital Documentation Policy for repair validation requirements.

NOTE 4: The incident parts are subject to callback through the normal Warranty Technical Center (WTC) parts return process. **Claim is subject to debit if the part is not returned.**

NOTE 5: If a part is found in need of replacement while performing this TSB and the affected part is still under warranty, submit a separate claim using the same repair order. If the affected part is out of warranty, submit a Prior Approval request for goodwill consideration prior to performing the work.

IVT Oil Pressure Sensor Replacement Flowchart

1. Refer to the flowchart below for overall procedure.



Service Procedure:

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Refer to the latest Warranty Digital Documentation Policy for repair validation requirements.

A. Replace the IVT Oil Pressure Sensor

Follow the applicable shop manual section:



NOTICE

Maintain a clean working environment when working on the IVT. Use a coated apron, latex gloves, and a clean stainless-steel tray to prevent any foreign material from entering the IVT, especially when replacing the oil pressure sensor. Otherwise, damage to the transmission may occur.

NOTICE

The IVT is composed of delicate components. Be careful not to cause any damage to the components when disassembling and reassembling the IVT.

i Information

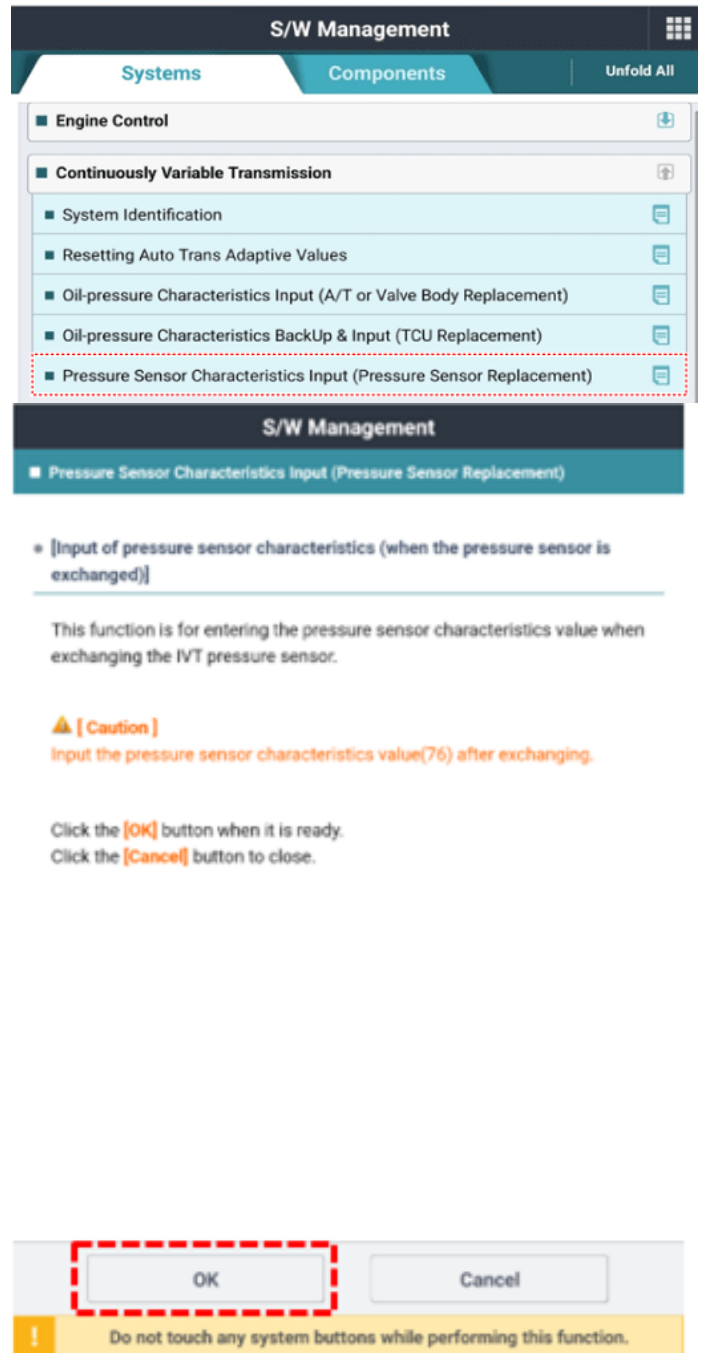
Replace the IVTF drain plug gasket with a new one (do not reuse the existing gasket).

i Information

Do not reuse the Intelligent Variable Transmission Fluid (IVTF). Follow the shop manual to refill the IVT with new IVTF.

B. Perform Pressure Sensor Characteristics Input

1. Select the “Oil Pressure Characteristics Input (Solenoid Valve Replacement)” using GDS-M.




- 2. Input “76” for the pressure sensor characteristic value and then press “OK”.

S/W Management

■ Pressure Sensor Characteristics Input (Pressure Sensor Replacement)

• [Input of pressure sensor characteristics (when the pressure sensor is exchanged)]

Enter the characteristics value(76) of the pressure sensor exchanged, and click the **[OK]** button.

	6788	8888	5898	7987
	8977	8778	7788	8888
	5677	7FFF	76	FFFF

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Input 76

S/W Management

■ Pressure Sensor Characteristics Input (Pressure Sensor Replacement)

• [Input of pressure sensor characteristics (when the pressure sensor is exchanged)]

Enter the characteristics value(76) again to enter the correct value, and click the **[OK]** button.

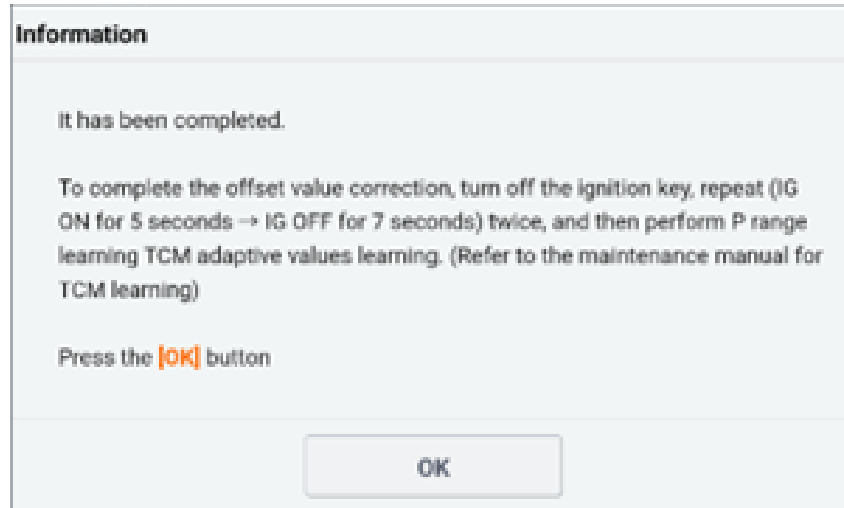
	6788	8888	5898	7987
	8977	8778	7788	8888
	5677	7FFF	76	FFFF

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OK	Cancel
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! Do not touch any system buttons while performing this function.

3. Follow the instructions on the GDS-M. It will instruct you to perform the TCU adaptive values learning procedure.



i Information

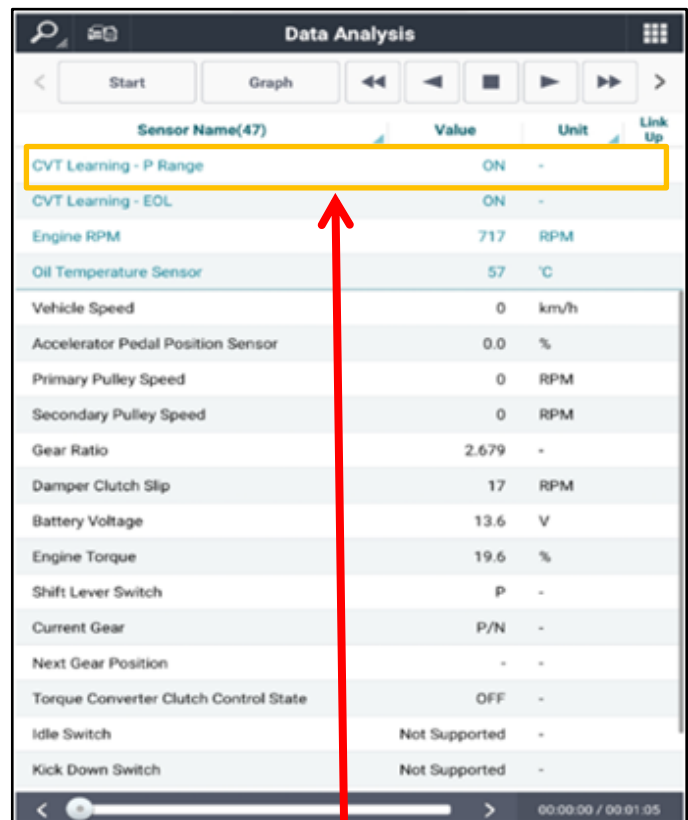
Learning condition:
Intelligent Variable Transmission Fluid (IVTF) temperature: 86 - 194°F (30 - 90°C)

i Information

Do not apply accelerator pedal and brakes, or operate shift levers during P range, learning.
(If operated during learning, re-engage after shutting off.)

4. Start the engine after checking the IVTF temperature with the Ignition ON.

Engine RPM will rise to approximately 1000 rpm after starting the engine.
5. After 30-120 seconds, the learning is completed when the engine RPM reaches the normal IDLE level.



i Information

Learning completion can be confirmed by using GDS-M to verify the IVT (“CVT”) P-Range learning value is “ON”. (“OFF” learning has not been completed)