



GROUP

MODEL

TRA

2018-2024MY
Multiple Models
w/ IVT

NUMBER

DATE

109

July 2024

TECHNICAL SERVICE BULLETIN

SUBJECT:

IVT OIL PRESSURE SENSOR REPLACEMENT

This bulletin provides information to replace the Intelligent Variable Transmission (IVT) Oil Pressure Sensor (OPS) on some 2018-2024MY vehicles listed on page 3 equipped with IVT. The affected vehicles may exhibit a malfunction indicator lamp (MIL) illuminated on the instrument cluster with DTCs P084500, P084600, and/or P0867XX present with no drivability concerns due to a failed IVT oil pressure sensor. Follow the procedure outlined in this publication to replace the IVT oil pressure sensor on the applicable vehicle.

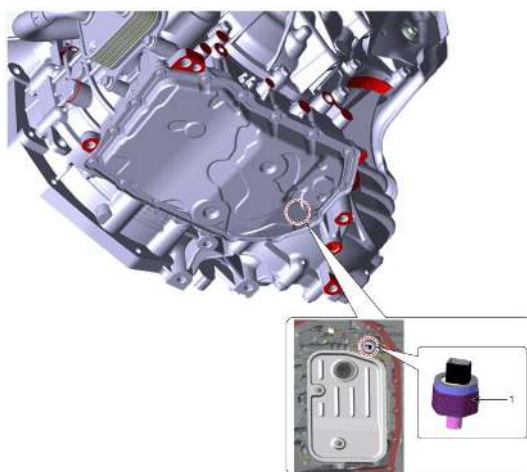
If DTC(s) P084500, P084600, and/or P0867XX are stored along with P0730XX, P0731XX, and/or P0741XX and/or drivability concerns are present, refer to TSB TRA102, TRA097/SA476, or SC199 (if applicable).

DTC Description:

P084500 - Transmission Fluid Pressure Sensor/Switch 'B' Circuit

P084600 - Transmission Fluid Pressure Sensor/Switch B Circuit Range

P0867XX - Transmission Fluid Pressure

 NOTICE

A Technical Service Bulletin is a field fix repair program without customer notification that may be performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.

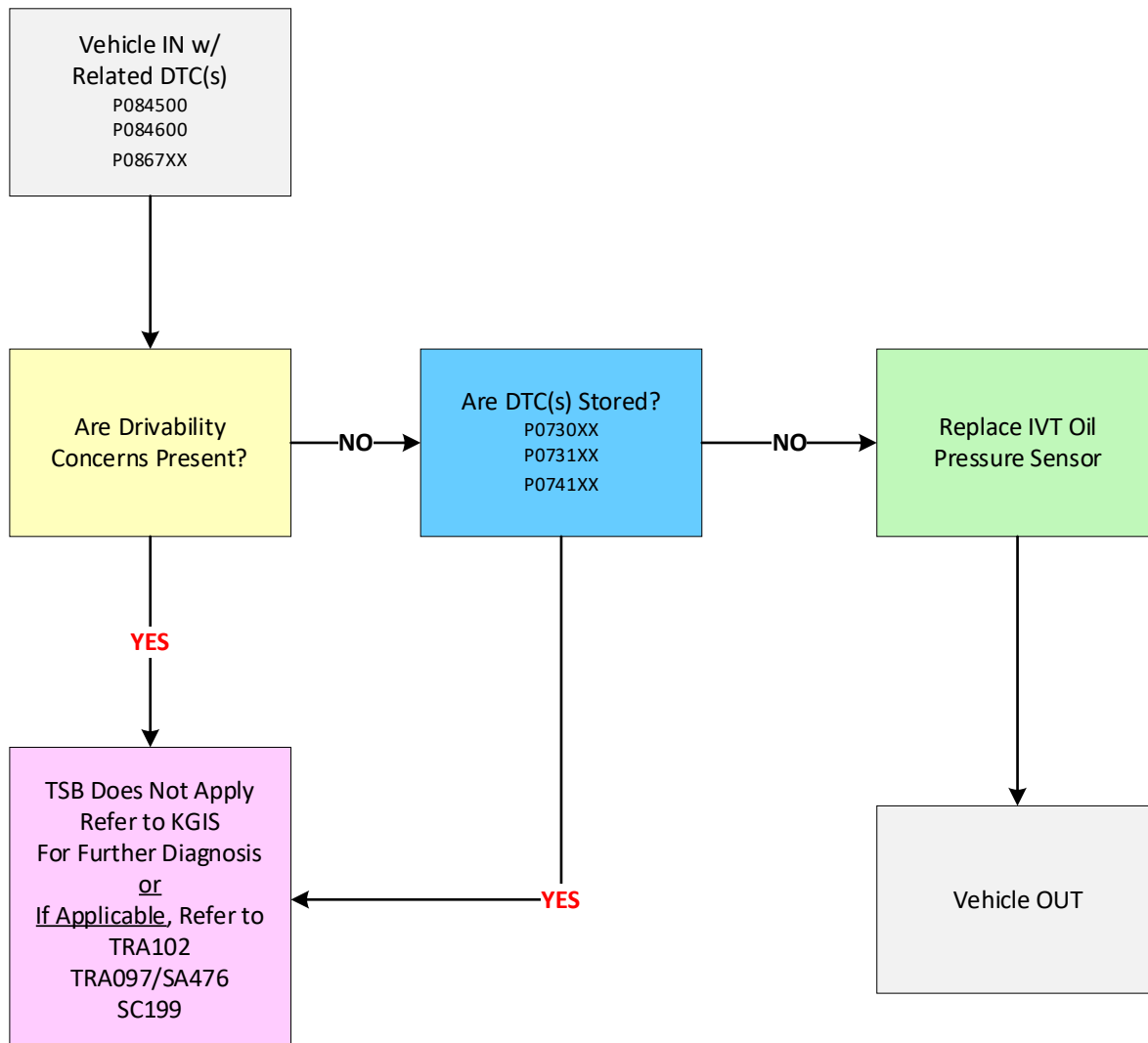
A printed copy is for reference only; publication information can be updated at any time.
Always refer to KGIS for the latest information. After logging in kdealer.com, the newest technical publications are listed in 'Service Releases' and has the latest service information that has been released.

Flowchart:

Path 1: Vehicle IN W/ Related DTC(s) Stored with no drivability concerns → Replace IVT Oil Pressure Sensor → Vehicle OUT

Path 2: Vehicle IN W/ Related DTC(s) Stored with drivability concerns → Refer to KGIS or TRA102, TRA097/SA476, or SC199 (if applicable)

Path 3: Vehicle IN W/ Related DTC(s) W/ DTC(s) P0730XX, P0731XX, P0741XX Stored → Refer to KGIS or TRA102, TRA097/SA476, or SC199 (if applicable)



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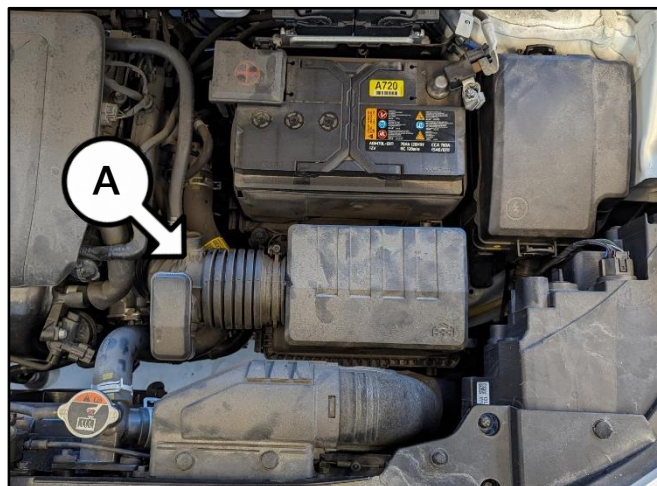
IVT OIL PRESSURE SENSOR REPLACEMENT

Replacement Procedure:

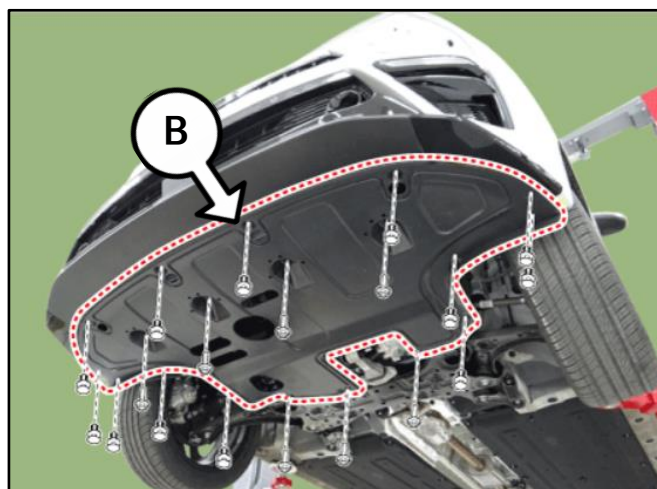
1. Using KDS, confirm DTC(s) are stored with NO drivability concerns:
 - P084500 - Transmission Fluid Pressure Sensor/Switch 'B' Circuit
 - P084600 - Transmission Fluid Pressure Sensor/Switch B Circuit Range
 - P0867XX - Transmission Fluid Pressure

If DTC(s) P084500, P084600, P0867XX are stored along with P0730XX, P0731XX, P0741XX and/or experiencing drivability concerns, **this TSB does not apply**. Refer to [TSB TRA102](#), [TRA097/SA476](#), or [SC199](#) if applicable.

2. Disconnect the negative (-) battery terminal.
3. Remove the air filter housing assembly (A).



4. Raise the vehicle on a lift.
5. Loosen the bolts and clips to remove the engine room under cover (B).



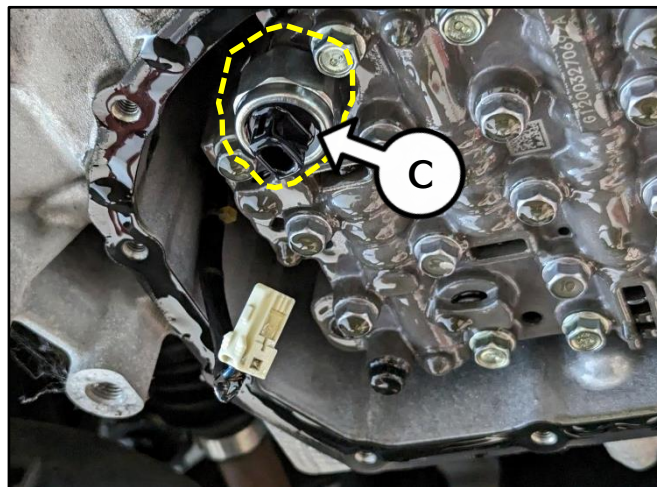
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6. Replace the Oil Pressure Sensor (C) by referring to "Intelligent Variable Transmission (IVT) System (Continuously Variable Transmission) → IVT Control System → Driven Pulley Pressure Sensor → Repair procedures" in the applicable Shop Manual on KGIS.



Tightening torque for Oil Pressure Sensor (C):
8.7 - 10.1 lb.ft (11.8 - 13.7 N.m)



7. Refill the IVT fluid. (up to 4 qts).



8. Reinstall all removed parts in reverse order of removal.

- 9a. 'START' the engine and allow to run for several minutes.

Note: Allow IVT to reach normal operating temperature (122°F).

- 9b. Apply the parking brake.
- 9c. Locate the shift lever and cycle through all the gears: 'P-R-N-D-N-R-P', repeating twice.

Data Analysis			
Stop Graph Data Capture Actuation Test			
Sensor Name(46)	Value	Unit	Link Up
Current Gear	P/N	-	
Oil Temperature Sensor	54	°C	
Engine RPM	0	RPM	
Vehicle Speed	0	km/h	
Accelerator Pedal Position Sensor	0.0	%	
Primary Pulley Speed	0	RPM	
Secondary Pulley Speed	0	RPM	
Gear Ratio	2.679	-	
Damper Clutch Slip	0	RPM	
Battery Voltage	12.3	V	
Engine Torque	0.0	%	
Shift Lever Switch	P	-	
Next Gear Position	-	-	

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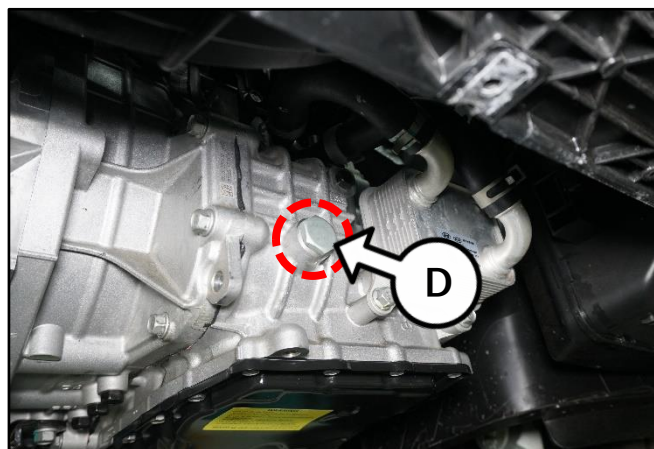
IVT OIL PRESSURE SENSOR REPLACEMENT

10. Remove the IVT side oil plug (D) and allow any residual fluid to drain.

Normal: 0.3 ± 0.15L of IVTF flows out for 2 minutes.

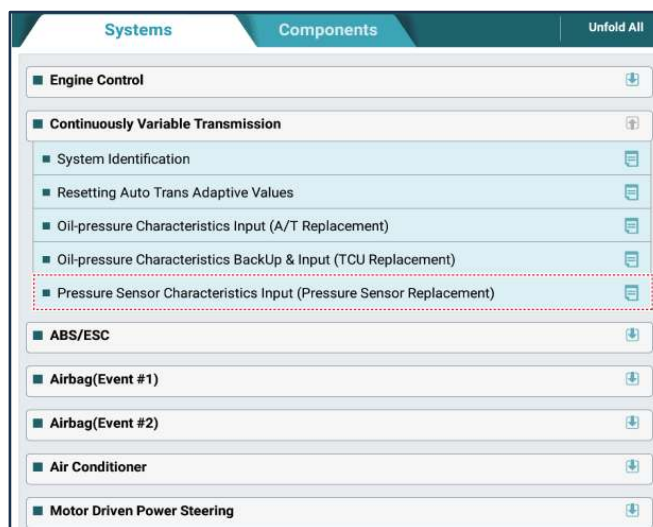
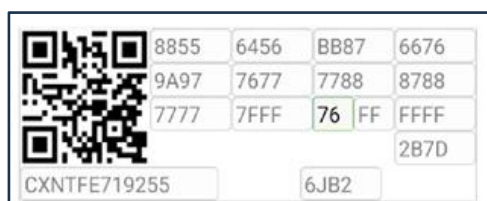
Excessive: Over 0.45L of IVTF flows out for 2 minutes.

Insufficient: Below 0.15L of IVTF flows out for 2 minutes.

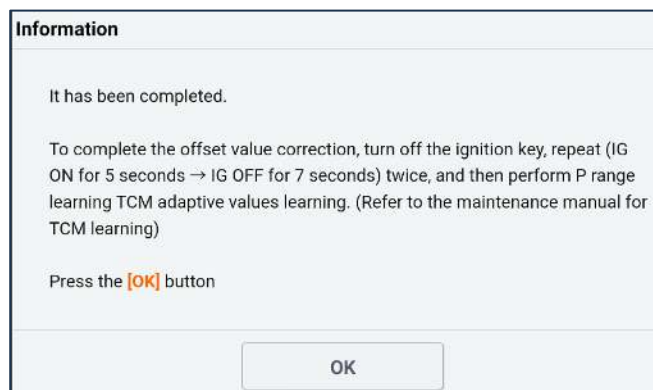


Tightening torque for oil plug (D):
25.3 - 32.5 lb.ft (34.3 - 44.1 N.m)

- 11a. Perform the Pressure Sensor Characteristics Input (Pressure Sensor Replacement) procedure.
- 11b. Enter the pressure sensor characteristics value '76' according to the guidance on the KDS screen.



12. After entering 'Pressure Sensor Characteristics Input', proceed with the offset value correction and TCM learning according to the pop-up guidance.



13. Confirm normal vehicle operation.

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AFFECTED VEHICLE RANGE:

Model	Model Year
Rio (SC)	2018 - 2023MY
Forte (BDm)	2019 - 2024MY
Soul (SK3)	2020 - 2024MY
Seltos (SP2)	2021 - 2024MY

REQUIRED PART:

Part Name	Part Number	Figure	Qty.
Oil Pressure Sensor	48885 02300		1
Transmission Pan Gasket	48282 2H000		1
Oil Plug Gasket	45323 39000		2
IVT Oil (SP-CVT1)	UM018 CH130	N/A	Up to 4qts

WARRANTY INFORMATION:

N Code: W11 C Code: ZZ3

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	48000 2H300	0	IVT Oil Pressure Sensor Replacement	48885F01	1.4 M/H	48885 02300	1
						48282 2H000	1
						45323 39000	2