



# HYUNDAI

## Technical Service Bulletin

GROUP <b>Campaign</b>	NUMBER <b>21-01-038H</b>
DATE <b>May, 2021</b>	MODEL(S) <b>Accent (HC)</b>

**SUBJECT:** TCU UPDATE AND / OR IVT REPLACEMENT  
(SERVICE CAMPAIGN T6J)

### ★ IMPORTANT

#### \*\*\* Dealer Stock and Retail Vehicles \*\*\*

Dealers must perform this Service Campaign on all affected vehicles prior to customer retail delivery and whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the Service Department, access Hyundai Motor America's "Vehicle Information Screen (VIS)" via WEBDCS to identify open Campaigns.

**Description:** Certain 20-21MY Accent (HC) vehicles may experience an illuminated warning light due to Diagnostic Trouble Codes (DTC) listed below. Perform the TCU update, and, if necessary, replace the IVT (Intelligent Variable Transmission) to resolve this condition.

- TCU DTC Codes: **P0730, P0731, P0741, P0867, P1603**

**Applicable Vehicles:** Certain 20-21MY Accent (HC) Equipped With IVT

### Parts Information:

MODEL	PART NAME	BEFORE	QTY	AFTER	
Accent (HC)	IVT	48000-2H001	1	48000-2H001QQH	48000-2H001QQHRM*
	SP-CVT1	N/A	7 qt.	N/A	00232-19081**

\* Use reman part number whenever possible.

\*\* Fluid is for reman units only.

### TCU

VEHICLE	ENGINE	PCU P/No.	ROM ID	
			OLD	NEW
Accent (HC)	1.6L	39100-2M358 39100-2M359 39100-2M011 39100-2M012	CHC0M16NS0	CHC0M16NS1

## NOTICE

**Performing Section C – IVT, TCU Pressure Learning** (Manual transmission relearn and verification) is critical step. After updating the IVT TCU software complete the pressure learning and verification (park position leaning value) procedure in order insure the IVT has not been damaged.

Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

**GDS Information:**

System Selection: **TRANSMISSION CONTROL UNIT (TCU)**

Event #	Description
679	679.HC 1.6MPI – IVT Driving Performance Improvement

\*or use a later available event as listed in the GDS TCU Update screen if one is available.

**Warranty Information:**

MODEL	OP CODE	PART NUMBER USED	OPERATION	OP TIME	CAUSAL PART	NATURE CODE	CAUSE CODE
Accent (HC)	210M05R0	N/A	Check TCU DTC - Update TCU - Transmission Relearn - DTC Check	0.3 M/H	48000-2H001QQH	I3A	ZZ3
	210M05R1	48000-2H001QQH	Check TCU DTC – IVT Replacement – Update TCU – Transmission Relearn	3.2 M/H	48000-2H001QQH	I3A	ZZ3
	210M05R3	48000-2H001QQHRM					
	210M05R2	48000-2H001QQH	Check TCU DTC – Update TCU – Transmission Relearn – IVT Replacement – Transmission Relearn	3.3 M/H	48000-2H001QQH	I3A	ZZ3
	210M05R4	48000-2H001QQHRM					

**Note 1:** Submit Claim on Campaign Claim Entry Screen.

**Note 2:** If a part that is not covered by this campaign is found in need of replacement while performing Service Campaign T6J 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.

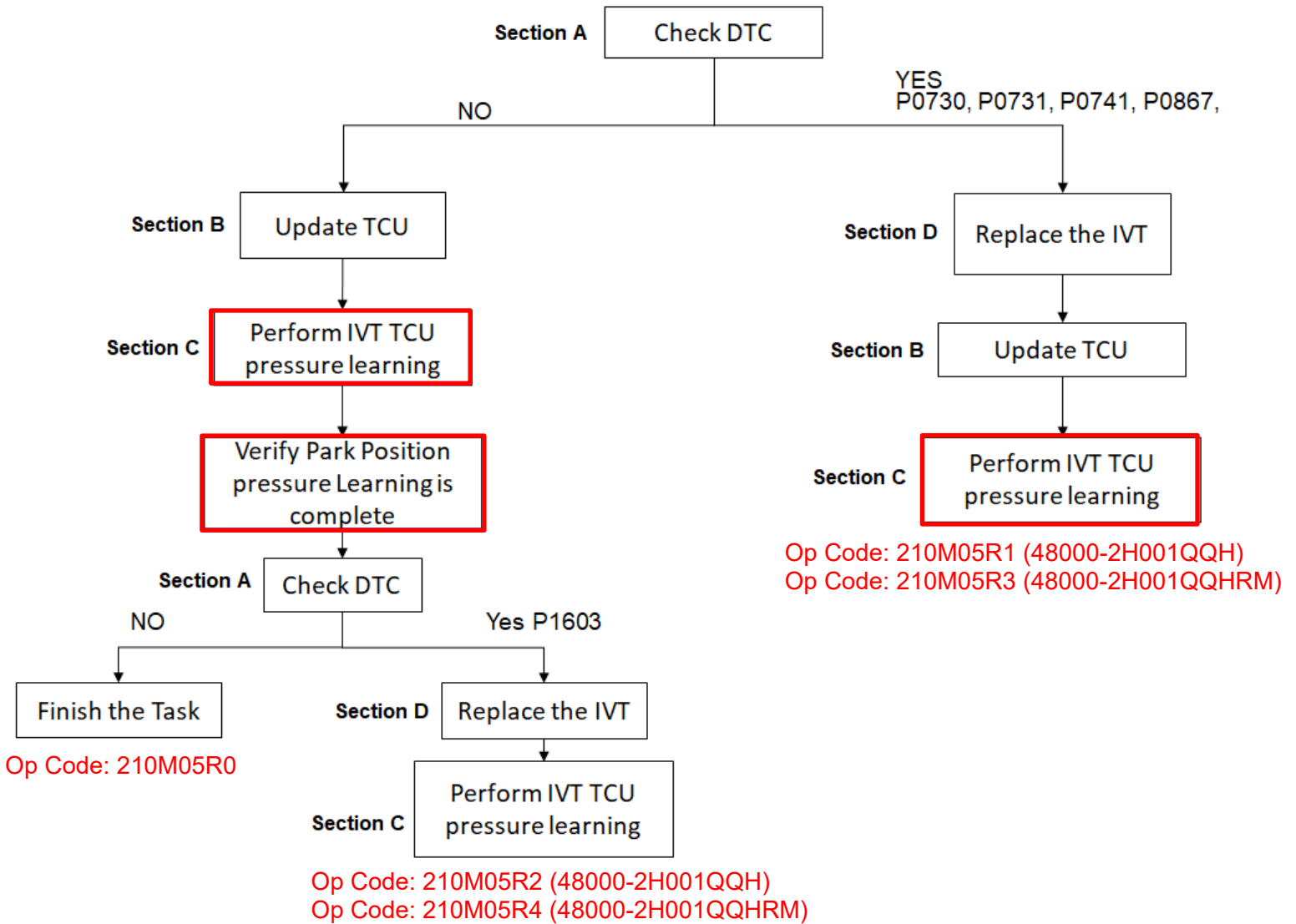
**Note 3:** When using a Reman Transmission, reimbursement for use of transmission fluid will be provided under labor operations **210M05R3** and **210M05R4**.

**NOTICE**

Read and familiarize with **Section C – IVT, TCU Pressure Learning** before starting TCU update process.

**TCU Update Flow (HC with IVT)**

1. Refer to the flowchart below to update the procedure.



**NOTICE**

1. Use the GDS-M to check the TCU DTC.
2. If one of the DTC(s) P0730, P0731, P0741, P0867, P1603 applies (History, Current, or Pending), replace the IVT.
3. Replace the IVT according to the applicable vehicle shop manual.
4. After IVT replacement, perform TCU update first, then perform the IVT resetting auto T/A values, TCU adaptive values learning procedure.

**NOTICE**

**Initially perform GDS TCU Update in Auto Mode.**  
If the TCU Update starts but then fails in Auto Mode, perform the update in Manual Mode to recover.

**⚠ CAUTION**

1. Verify the vehicle battery has reasonable charge.
2. Turn off all lamps (Do not leave head lamp switch in auto mode.), and all accessories.
3. Perform update with the ignition switch in the **ON** position.
4. Do not disconnect any cables connected to the vehicle or scan tool during update.
5. Do not start the engine during update.
6. Do not turn off the ignition switch during update.

**⚠ WARNING**

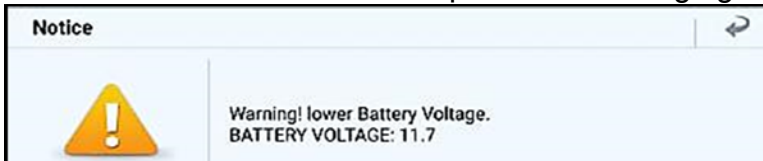
**GDS-M Vehicle Battery Low Voltage Warning:**

When the vehicle battery is lower than 12 volts, the GDS-M will trigger a Low Battery Voltage Warning. If this Warning occurs,

**A.** Connect the battery to a fully charged battery jump pack or GR8 charger using “Power Supply Mode” to continue the software update.

**OR**

**B.** Select “BACK” to exit the SW update. Then, start the engine and idle with the headlights on for 20 minutes. Return to the SW update after charging the battery.



**Service Procedure:**

**A. Check DTC**

1. Scan the vehicle for any of the following DTC Codes:

**P0730, P0731, P0741, P0867**

**B. Update TCU**

1. Perform GDS Mobile software update per TSB 15-GI-001.

**NOTICE**

**Section C is required to complete the service procedure. The transmission may fail from not performing IVT, TCU Pressure Learning, and is subject to warranty debit.**

**C. IVT, TCU Pressure Learning**

1. Perform IVT Resetting Auto T/A Values using the GDS-M.



2. Perform the TCU adaptive values learning procedure.

**NOTICE**

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

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

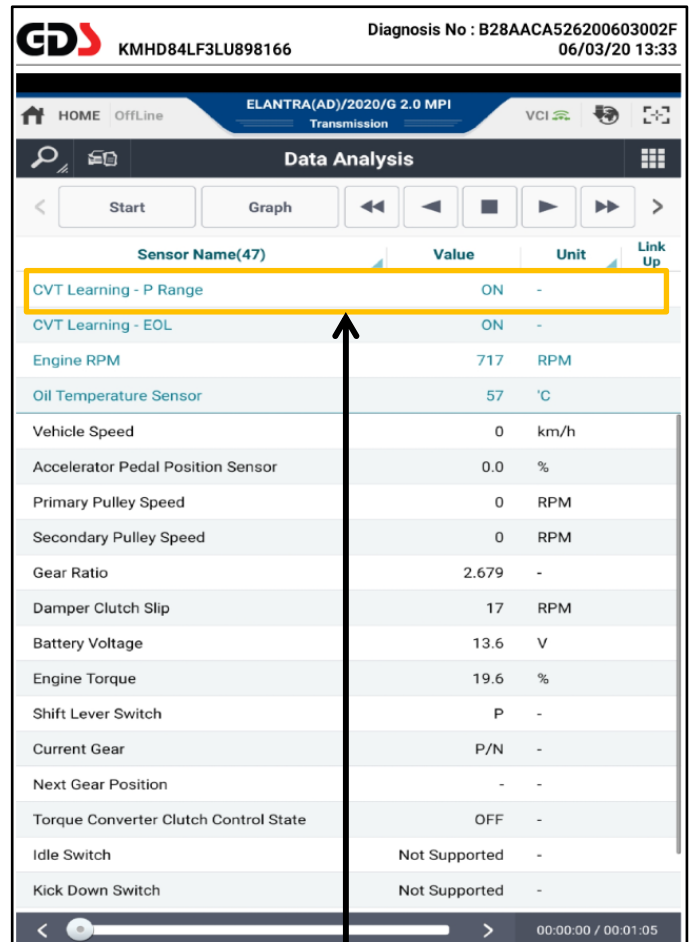
Engine RPM will rise to approximately 1000 rpm after starting the engine.

After 30-120 seconds, the learning is completed when the engine RPM reaches the normal IDLE level.

Use the GDS-M to verify the IVT P-Range learning is complete, and check TCU for DTC P1603 (EOL P-Range Pressure Learning Failed).

(1) If IVT- P Range learning is not complete, and P1603 is present, Replace the IVT (Refer to **Section D.**)

(2) If IVT-P Range is not complete, and P1603 is not present, the learning condition has not been met. Re-perform **Section C - IVT, TCU Learning.**



**NOTICE**

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)

**CAUTION**

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

**D. IVT Replacement**

1. If transmission replacement is needed, follow the applicable shop manual section:



2. If IVT replacement is performed, refer to **Section C** for IVT, TCU Learning.

**NOTICE**

**You must initially perform GDS TCU Update in Auto Mode.**  
If the TCU Update starts but then fails in Auto Mode, perform the update in Manual Mode to recover.

**Manual Mode Password:**

1. From the GDS-M home screen, select **ECU Upgrade**.
2. From the ECU Upgrade screen, select **Manual Mode**, then select the **Update Event 679**.

**Update Event**  
**679.HC 1.6MPI – IVT Driving Performance Improvement**



3. A password prompt will appear. Enter the password and select **Upgrade**.

MENU	PASSWORD
HC 1.6MPI TCU 39100-2M358/359/011/012	3917

4. The update will occur.  
Once the update finishes, turn the ignition off for 10 seconds, then turn the ignition back on.
5. Check if any Diagnostic Trouble Codes (DTCs) were created by the update, and clear all related DTCs.
6. Reset the TCU adaptive learning values.
7. Start the engine to confirm the proper operation of the vehicle.
8. The service procedure is now complete.