 HYUNDAI Technical Service Bulletin	GROUP AUTOMATIC TRANSMISSION	NUMBER 24-AT-001H-1
	DATE DECEMBER 2024	MODEL(S) SONATA (DN8A) TUCSON (NX4A) SANTA CRUZ (NXT)
SUBJECT:	TCU UPDATE - ROUGH SHIFT AND HESITATION IMPROVED LOGIC	

This TSB updates TSB 24-AT-001H to remove 2023 Santa Fe (TMA) from the vehicle list. For 'SW update for TMA ISG Logic improvement' TSB, please refer to TSB 24-FL-004H.

Description: This bulletin provides the procedure for updating the automatic transmission TCU (Transmission Control Unit) software to improve shift quality, judder and hesitation when accelerating.

Applicable Vehicles (Certain):

- 2021~22MY Sonata (DN8A) – VIN starts with “5”
- 2022MY Tucson (NX4A) – VIN starts with “5”
- 2022MY Santa Cruz (NXT)

GDS Information:

System	Event #	Description
AT	1060	DN8A 2.5GDI ROUGH SHIFT AND HESITATION IMPROVED LOGIC (TCU)
	1061	NX4A 2.5GDI ROUGH SHIFT AND HESITATION IMPROVED LOGIC (TCU)
	1062	NX4A OB 2.5GDI ROUGH SHIFT AND HESITATION IMPROVED LOGIC (TCU)

(*or use a later available event as listed in the GDS **Automatic Transmission** Update screen if one is available.)

Warranty Information:

Model	Op. Code	Operation	Op. Time	Casual Part	Nature Code	Cause Code
Sonata (DN8A)	39110FH7	TCU Update	0.4 M/H	Refer to Web LTS for applicable part to labor Op Code combination	I14	ZZ3
Tucson (NX4A)						
Santa Cruz (NXT)						

NOTE 1: Normal warranty applies.

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

NOTE 3: This TSB includes Rrepair validation photos. Op times include VIN, Mileage and photo capture of the “ECU Update Complete” screen as outlined in the Digital Documentation Policy.

NOTE 4: 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.

Service Procedure:**STUI**

This TSB includes Repair validation photos. Refer to the latest Digital Documentation Policy for requirements.

NOTICE

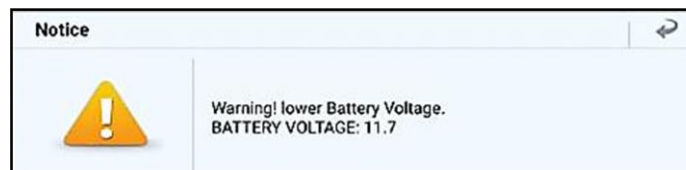
You must initially perform the GDS TCU Update in Auto Mode.

- If the ECU Update starts but then fails in Auto Mode, perform the update in Manual Mode to recover.

NOTICE

GDS Vehicle Battery Low Voltage Warning:

If voltage is below 12 volts as per the below GDS warning, then select **Back** and attach a 12V battery charger to ensure an adequate battery state of charge for reliable update results. Turn ignition back on, and then retry the ECU update again.

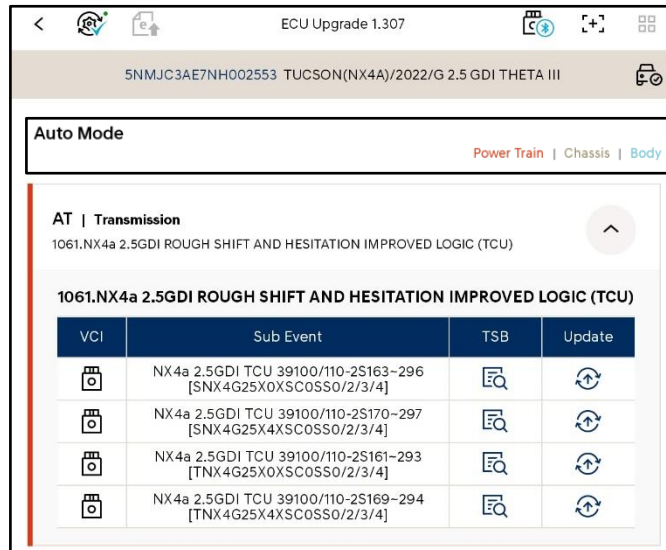


1. Perform the TCU Update in Auto Mode.

Use the Auto Mode ID Check to verify the ECU ROM ID before updating the software.

i Information

Refer to TSB 24-GI-012H, “ECU Update Procedure for Tablet-Based GDS-Smart”, for additional information.

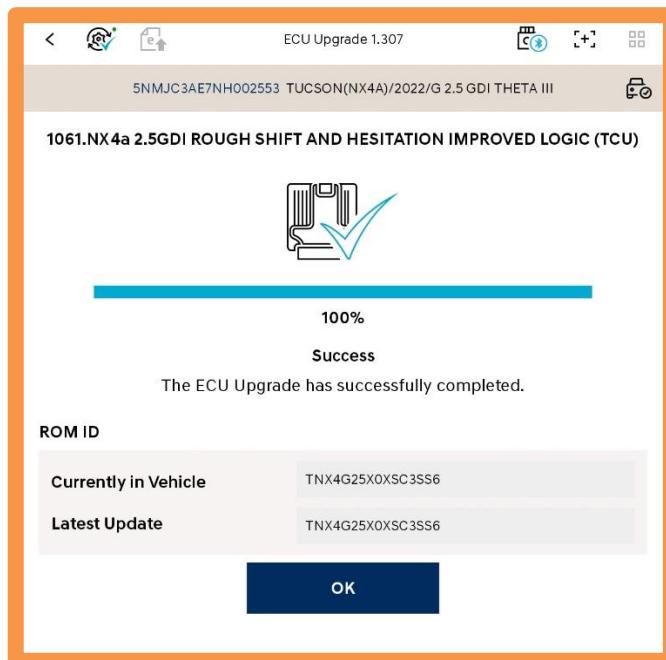


- 2.

STUI



Take a screenshot of the “ECU Update Complete” screen using your particular tablet’s screenshot save method and upload to STUI.



3. After the Update process shows 100% complete, cycle the ignition key to OFF for at least 10 seconds to reset the control unit.
4. Perform an All Systems Fault Code search and erase the history of the DTC that had incidentally occurred from the ECU update.
5. Start the engine and drive the vehicle to confirm proper operation of the transmission.

ROM ID Information:**#1060. DN8A 2.5GDI ROUGH SHIFT AND HESITATION IMPROVED LOGIC (TCU)**

Event #	Model	TCU Part Number	ROM ID	
			Old	New
#1060	Sonata (DN8A) 2.5L GDI	39100-2SDJ0 39100-2SDK0	SDN8G25NB2	SDN8G25NB5

#1061. NX4A 2.5GDI ROUGH SHIFT AND HESITATION IMPROVED LOGIC (TCU)

Event #	Model	TCU Part Number	ROM ID	
			Old	New
#1061	Tucson (NX4A) 2.5L GDI	39110-2S163 39110-2S164 39110-2S283	SNX4G25X0XSC0SS0 SNX4G25X0XSC1SS2 SNX4G25X0XSC2SS3 SNX4G25X0XSC3SS4	SNX4G25X0XSC3SS6
		39110-2S161 39110-2S162 39110-2S165 39110-2S166 39110-2S181 39110-2S182 39110-2S280 39110-2S281 39110-2S286 39110-2S287 39110-2S292 39110-2S293	TNX4G25X0XSC0SS0 TNX4G25X0XSC1SS2 TNX4G25X0XSC2SS3 TNX4G25X0XSC3SS4	TNX4G25X0XSC3SS6

#1062. NX4A OB 2.5GDI ROUGH SHIFT AND HESITATION IMPROVED LOGIC (TCU)

Event #	Model	TCU Part Number	ROM ID	
			Old	New
#1062	Santa Cruz (NXT) 2.5L GDI	39110-2S171 39110-2S172 39110-2S177	TNX4G25X2XSC0NS1 TNX4G25X2XSC0NS2	TNX4G25X2XSC1NS4
		39110-2S173 39110-2S174 39110-2S178	TNX4G25X4XSC0NS1 TNX4G25X4XSC0NS2	TNX4G25X4XSC1NS4

Manual Mode Password:

Event #	Model	Password
#1060	DN8a 2.5GDI TCU 39100-2SDE0/F0/J0/K0/L0/M0, 39103-2SDG0, 39104-2SDH0, 39105-2SDJ0/K0/L0/M0	2200
#1061	Tucson (NX4a) 2.5GDI TCU 39100/110-2S163~296 [SNX4G25X0XSC0SS0/2/3/4]	3296
	Tucson (NX4a) 2.5GDI TCU 39100/110-2S170~297 [SNX4G25X4XSC0SS0/2/3/4]	0297
	Tucson (NX4a) 2.5GDI TCU 39100/110-2S161~293 [TNX4G25X0XSC0SS0/2/3/4]	1293
	Tucson (NX4a) 2.5GDI TCU 39100/110-2S169~294 [TNX4G25X4XSC0SS0/2/3/4]	9294
#1062	Santa Cruz (NX4a AT) 2.5GDI TCU 39100/110-2S171/2/7	1176
	Santa Cruz (NX4a AT) 2.5GDI TCU 39100/110-2S173/4/8	1177