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

Description: This bulletin provides the procedure for updating the automatic transmission TCU and ECU software (Santa Fe ONLY) to improve shift quality, judder with ISG enabled and hesitation when accelerating.

Applicable Vehicles:

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

GDS Information: (TCU & ECU Update)

System	Event #	Description
TCU	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)
	1063	TMA 2.5GDI ROUGH SHIFT AND HESITATION IMPROVED LOGIC (TCU)
ECU	1065	TMA 2.5GDI ROUGH SHIFT AND HESITATION IMPROVED LOGIC (ECU)

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

Warranty Information:

Model	Op. Code	Operation	Op. Time	Casual Part	Nature Code	Cause Code
Sonata (DN8A)	39110FH7	TCM Update	0.4M/H	Refer to Web LTS for applicable part to labor Op Code combination	I14	ZZ3
Tucson (NX4A)						
Santa Cruz (NXT)						
Santa Fe (TMA)						
Santa Fe (TMA)	39100F43	ECM Update	0.3M/H			

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

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

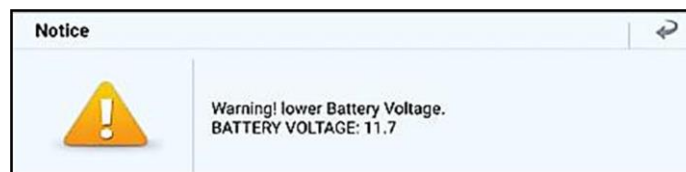
You must initially perform the GDS TCU Update in Auto Mode.

- 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 ECU 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 15-GI-001 for additional tablet-based Mobile GDS ECU update information.

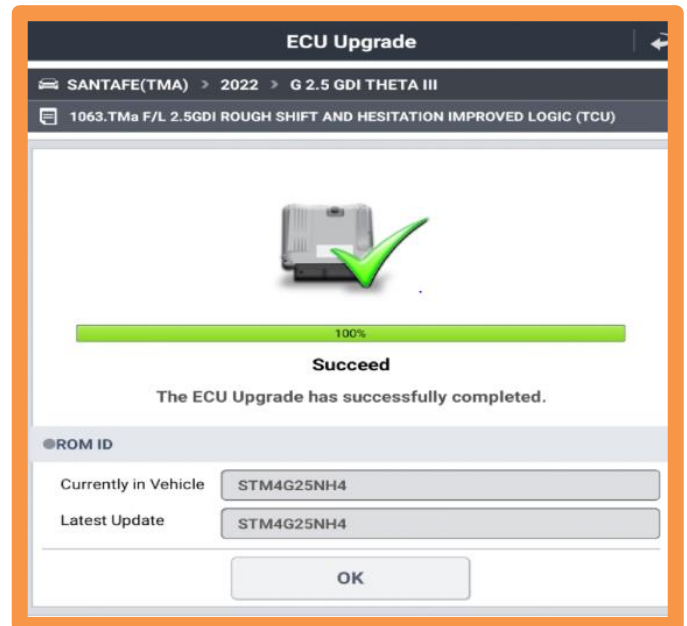


- 2.

STUI



Take a screenshot of the “TCU Update Complete” or “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 Table:

#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

#1063. TMA F/L 2.5GDI ROUGH SHIFT AND HESITATION IMPROVED LOGIC (TCU)

Event #	Model	TCU Part Number	TCU ROM ID	
			Old	New
#1063	Santa Fe (TMA) 2.5L GDI	39110-2S092	STM2G25NH1	STM2G25NH4
		39110-2S094	STM2G25NH2	
		39110-2S274	STM2G25NH3	
		39110-2S276		
		39110-2S298		
		39110-2S093	STM4G25NH1	STM4G25NH4
		39110-2S095	STM4G25NH2	
		39110-2S275	STM4G25NH3	
39110-2S277				
39110-2S299				

#1065 TMA F/L 2.5GDI ROUGH SHIFT AND HESITATION IMPROVED LOGIC (ECU)

Event #	Model	ECU Part Number	ROM ID	
			Old	New
#1065	Santa Fe (TMA) 2.5L GDI	39110-2S059	TACVN5GMH3XXXG2C TACVN5GMH3XXXH0A TACVN5GMH3XXXH0B	TACVN5GMH3XXXH0C
		39110-2S067	TACVN5GMI3XXXG2C TACVN5GMI3XXXH0A TACVN5GMI3XXXH0B	TACVN5GMI3XXXH0C
		39110-2S060	TACVN5GSH3XXXG2C TACVN5GSH3XXXH0A TACVN5GSH3XXXH0B	TACVN5GSH3XXXH0C
		39110-2S068	TACVN5GSI3XXXG2C TACVN5GSI3XXXH0A TACVN5GSI3XXXH0B	TACVN5GSI3XXXH0C
		39110-2S092	TADVN5GMH3XXXJ1A TADVN5GMI3XXXJ1A	TADVN5GMH3XXXL8B
		39110-2S093	TADVN5GMH3XXXJ1B TADVN5GMH3XXXL8A	
		39110-2S274	TADVN5GMH3XXXL5A TADVN5GMH3XXXL5B	
		39110-2S275	TADVN5GMH3XXXL8A	
		39110-2S094	TADVN5GSH3XXXJ1A TADVN5GSH3XXXJ1B	TADVN5GSH3XXXL8B
		39110-2S095	TADVN5GSH3XXXL8A	
		39110-2S276	TADVN5GSH3XXXL5A TADVN5GSH3XXXL5B	
		39110-2S277	TADVN5GSH3XXXL8A	
		39110-2S298	TAEVN5GMH3XXXM0A TAEVN5GMH3XXXM1A	TAEVN5GMH3XXXM1B
		39110-2S299	TAEVN5GMI3XXXM0A TAEVN5GMI3XXXM1A	TAEVN5GMI3XXXM1B

Manual Mode Password:

Event #	Model	Pasword
#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
#1063	Santa Fe (TMa) F/L 2.5GDI TCU 39100/110-2S092~300 [STM2G25NH1/2/3]	2300
	Santa Fe (TMa) F/L 2.5GDI TCU 39100/110-2S093~301 [STM4G25NH1/2/3]	3301
#1065	Santa Fe (TMa) PE 2.5GDI ECU 39110-2S059	9502
	TMa PE 2.5GDI ECU 39110-2S067	7602
	TMa PE 2.5GDI ECU 39110-2S060	0602
	TMa PE 2.5GDI ECU 39110-2S068	8602
	TMa PE 2.5GDI ECU 39110-2S092/093/274/275	5722
	TMa PE 2.5GDI ECU 39110-2S094/095/276/277	7722
	TMa PE 2.5GDI ECU 39110-2S298	8922
	TMa PE 2.5GDI ECU 39110-2S299	9944
	TMa PE 2.5GDI ECU 39110-2S300	0032
	TMa PE 2.5GDI ECU 39110-2S301	1032