 <b>HYUNDAI</b> <b>Technical Service Bulletin</b>	<b>GROUP</b> <b>CAMPAIGN</b>	<b>NUMBER</b> <b>22-01-059H</b>
	<b>DATE</b> <b>AUGUST, 2022</b>	<b>MODEL(S)</b> <b>SANTA FE (TMA)</b> <b>SONATA (DN8A)</b> <b>SANTA CRUZ (NXT)</b>
<b>SUBJECT:</b> TCU UPDATE – DRIVABILITY (SERVICE CAMPAIGN T8N)		

**\* 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.

Access the “Vehicle Information” screen (VIS) via WEBDCS to identify open campaigns.

**DESCRIPTION:** This bulletin provides the procedure to update the TCU software to improve drivability and shift quality.

**APPLICABLE VEHICLES:** Certain 2021~22 vehicles equipped with 2.5T engine and 8-speed DCT

- 2021~22MY Santa Fe (TMa) produced from 11/20/2020 ~ 07/11/2022
- 2021~22MY Sonata (DN8a) produced from 11/24/2020 ~ 02/12/2022
- 2022MY Santa Cruz (NXT) produced from 06/22/2021 ~ 06/13/2022

**GDS INFORMATION: System Selection: A/T**

Event #	Description
#840	TMa PE THETA 2.5T SOL. VALVE OPERATING FREQUENCY LOGIC IMPROVEMENT(TCU)
#841	DN8a THETA 2.5T SOL. VALVE OPERATING FREQUENCY LOGIC IMPROVEMENT(TCU)
#842	NX4AT THETA 2.5T SOL. VALVE OPERATING FREQUENCY LOGIC IMPROVEMENT(TCU)

**WARRANTY INFORMATION:**

Model	Op Code	Operation	Op Time	Causal Part	Nature Code	Cause Code
Santa Fe (TMa) Sonata (DN8a) Santa Cruz (NXT)	20DA17R0	TCU UPGRADE + Air Bleeding	0.6 M/H	954A1-2N250 (TMa) 954A1-2N060 (DN8a) 954A1-2N460 (NXT)	I3T	ZZ3

**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 the Service Campaign 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 the repair.

## SERVICE PROCEDURE:

**NOTICE**

**You must initially perform GDS ECU and TCU Update in Auto Mode.**

- If the TCU Update starts but then fails in Auto Mode, disconnect the battery cables and touch the cables together for one minute. Reconnect the battery cables, attach a battery charger and perform the update in Manual Mode to recover.
- Refer to the General Instructions found in TSB 15-GI-001 (GDS Mobile).

After the TCU Update is completed, check for Diagnostic Trouble Codes and erase any DTC.

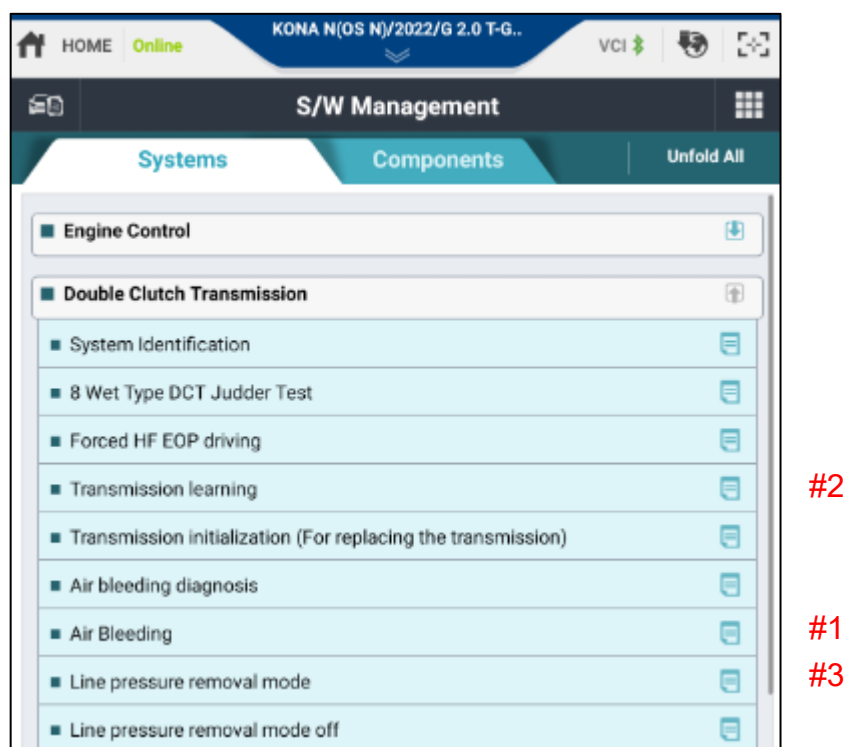
## TCU ROM ID TABLE

Event	Model	Comment	Part Number	ROM ID	
				Old	New
#840	Santa Fe (TMA)	SBW	954A0-2N240	VTMPT25XXX720NS0 VTMPT25XXX720NS1 VTMPT25XXX730NS2 VTMPT25XXX800NS3 VTMPT25XXX800NS4 VTMPT25XXX800NS5 VTMPT25XXX832NS6	VTMPT25XXX900NS8
#841	Sonata (DN8a)	SBW	954A0-2N060	VDN8T25XXX700NS0 VDN8T25XXX700NS1 VDN8T25XXX720NS2 VDN8T25XXX720NS3 VDN8T25XXX720NS4 VDN8T25XXX730NS5 VDN8T25XXX800NS6 VDN8T25XXX832NS7 VDN8T25XXX832NS8	VDN8T25XXX900NSA
#842	Santa Cruz (NXT)	2WD	954A0-2N450	WNX4T25X2X730NS0 WNX4T25X2X800NS1 WNX4T25X2X800NS2 WNX4T25X2X800NS3 WNX4T25X2X800NS4 WNX4T25X2X832NS5	WNX4T25X4X900NS7
		4WD	954A0-2N460	WNX4T25X4X730NS0 WNX4T25X4X800NS1 WNX4T25X4X800NS2 WNX4T25X4X800NS3 WNX4T25X4X800NS4 WNX4T25X4X832NS5	WNX4T25X4X900NS7

**MANUAL UPDATE:** If the TCU Update starts but then fails in Auto Mode, perform the update in Manual Mode to recover:

Event	Model	Menu	Password
#840)	Santa Fe (TMa)	TMA PE THETA 2.5T 954A0-2N240	2240
#841	Sonata (DN8)	DN8A THETA 2.5T 954A0-2N060	2060
#842	Santa Cruz (NXT)	NX4AT THETA 2.5T 954A0-2N450	2450
		NX4AT THETA 2.5T 954A0-2N460	2460

Attach a GDS and select **S/W Update** and **Double Clutch Transmission**.  
Perform the following procedures in the order shown.



Drive the vehicle to confirm the transmission shifts correctly.