

 <b>HYUNDAI</b> <b>Technical Service Bulletin</b>	<b>GROUP</b> <b>CAMPAIGN</b>	<b>NUMBER</b> <b>22-01-006H-3</b>
	<b>DATE</b> <b>MARCH, 2022</b>	<b>MODEL(S)</b> <b>SANTA FE (TMa)</b> <b>SONATA (DN8)</b> <b>SONATA (DN8a)</b> <b>TUCSON (NX4)</b> <b>TUCSON (NX4a)</b>
<b>SUBJECT:</b> ECU/TCU UPDATE – DRIVABILITY (SERVICE CAMPAIGN T7R)		

*This TSB supersedes 22-01-006H-2 to add Sonata (DN8a).*

**★ IMPORTANT**

**\*\*\* Dealer Stock Vehicles Only \*\*\***

Dealers must perform this Service Campaign prior to customer retail delivery.

When a vehicle arrives at the Service Department, access the “Vehicle Information” screen via WEBDCS to identify open Campaigns.

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

**APPLICABLE VEHICLES:** Following vehicles equipped with 8-speed transmission:

- Certain 2022 MY Santa Fe (TMa) - VIN starting with 5NM
- Certain 2022 MY Tucson (NX4a) – VIN starting with 5NM
- Certain 2022 MY Tucson (NX4) – VIN starting with KM8
- Certain 2022 MY Sonata (DN8) – VIN starting with KMH
- Certain 2022 MY Sonata (DN8a) – VIN starting with 5NP

**GDS INFORMATION:** System Selection: **Engine:**

Event #	Description
#771	TMa THETA 2.5GDI 8AT ACCELERATION LOGIC IMPROVEMENT (ECU)
#773	DN8a THETA 2.5GDI 8AT ACCELERATION LOGIC IMPROVEMENT (ECU)
#775	NX4a THETA 2.5GDI 8AT ACCELERATION LOGIC IMPROVEMENT (ECU)
#791	NX4 2.5GDI 8AT ACCELERATION DRIVABILITY ENHANCED LOGIC (ECU)
#781	DN8 2.5GDI ISG AND ACCELERATION DRIVABILITY ENHANCED LOGIC (ECU)

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

Event #	Description
#772	TMa THETA 2.5GDI 8AT ROUGH SHIFT AND HESITATION IMPROVED LOGIC (TCU)
#774	DN8a THETA 2.5GDI 8AT ACCELERATION LOGIC IMPROVEMENT (TCU)
#776	NX4a THETA 2.5GDI 8AT ROUGH SHIFT AND HESITATION IMPROVED LOGIC (TCU)
#776	NX4 THETA 2.5GDI 8AT ROUGH SHIFT AND HESITATION IMPROVED LOGIC (TCU)
#782	DN8 2.5GDI ROUGH SHIFT AND HESITATION IMPROVED LOGIC (TCU)

**WARRANTY INFORMATION:**

Model	Op Code	Operation	Op Time	Causal Part	Nature Code	Cause Code
Sonata (DN8a)	10D221R0	ECU + TCU UPGRADE	0.5 M/H	39100-2SDK0	I14	ZZ3
Tucson (NX4a)	10D221R1		0.5 M/H	39110-2S161	I14	ZZ3
Santa Fe (TMa)	10D221R2		0.5 M/H	39101-2STN5	I14	ZZ3
Sonata (DN8)	10D221R4		0.5 M/H	39110-2S039	I14	ZZ3
Tucson (NX4)	10D221R5		0.5 M/H	39110-2S105	I14	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 ECU or 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.

**ECU ROM ID TABLE - Santa Fe (TMA) – VIN begins with 5NM:**

Model	Part Number		ROM ID	
	Old	New	Old	New
Santa Fe (TMa)	39110-2S092 39110-2S093	39110-2S274 39110-2S275	TADVN5GMH3XXXL5A TADVN5GMH3XXXJ1A TADVN5GMH3XXXJ1B	TADVN5GMH3XXXL5B
	39110-2S094 39110-2S095	39110-2S276 39110-2S277	TADVN5GSH3XXXL5A TADVN5GSH3XXXJ1A TADVN5GSH3XXXJ1B	TADVN5GSH3XXXL5B

**ECU ROM ID TABLE – Sonata (DN8) – VIN begins with KMH:**

Model	Part Number		ROM ID	
	Old	New	Old	New
Sonata (DN8)	39110-2S039	39110-2S278	DNDVD5GMCCXXXJ1A DNDVD5GMCCXXXJ1B DNDVD5GMCCXXXL5A	DNDVD5GMCCXXXL5B
	39110-2S040	39110-2S279	DNDVD5GMC3XXXJ1A DNDVD5GMC3XXXJ1B DNDVD5GMC3XXXL5A	DNDVD5GMC3XXXL5B

**ECU ROM ID TABLE – Sonata (DN8a) – VIN begins with 5NP:**

Model	Part Number		ROM ID	
	Old	New	Old	New
Sonata (DN8a)	39100-2SDJ0	39100-2SDL0	DNDVN5GMCCXXXL5A DNDVN5GMCCXXXJ1A DNDVN5GMCCXXXJ1B	DNDVN5GMCCXXXL5B
	39100-2SDK0	39100-2SDM0	DNDVN5GMC3XXXL5A DNDVN5GMC3XXXJ1A DNDVN5GMC3XXXJ1B	DNDVN5GMC3XXXL5B

**ECU ROM ID TABLE - Tucson (NX4a) – VIN begins with 5NM:**

Model	Part Number		ROM ID	
	Old	New	Old	New
Tucson (NX4a)	39110-2S161	39110-2S280	NADWN5GMFXXXXL6A NADWN5GMFXXXXJ1A NADWN5GMFXXXXJ1B	NADWN5GMFXXXXL6B
	39110-2S162	39110-2S281	NADWN5GMGXXXXL6A NADWN5GMGXXXXJ1A NADWN5GMGXXXXJ1B	NADWN5GMGXXXXL6B
	39110-2S169	39110-2S282	NADWN5GMJXXXXL6A NADWN5GMJXXXXJ1A NADWN5GMJXXXXJ1B	NADWN5GMJXXXXL6B
	39110-2S163	39110-2S283	NADWN5GMHXXXXL6A NADWN5GMHXXXXJ1A NADWN5GMHXXXXJ1B	NADWN5GMHXXXXL6B
	39110-2S164	39110-2S284	NADWN5GMIXXXL6A NADWN5GMIXXXJ1A NADWN5GMIXXXJ1B	NADWN5GMIXXXL6B
	39110-2S170	39110-2S285	NADWN5GMKXXXXL6A NADWN5GMKXXXXJ1A NADWN5GMKXXXXJ1B	NADWN5GMKXXXXL6B
	39110-2S165	39110-2S286	NADWN5GSFXXXXL6A NADWN5GSFXXXXJ1A NADWN5GSFXXXXJ1B	NADWN5GSFXXXXL6B

**ECU ECU ECU ROM ID TABLE - Tucson (NX4a) - Continued:**

Model	Part Number		ROM ID	
	Old	New	Old	New
Tucson (NX4a)	39110-2S166	39110-2S287	NADWN5GSGXXXXL6A NADWN5GSGXXXXJ1A NADWN5GSGXXXXJ1B	NADWN5GSGXXXXL6B
	39110-2S175	39110-2S288	NADWN5GSJXXXXL6A NADWN5GSJXXXXJ1A NADWN5GSJXXXXJ1B	NADWN5GSJXXXXL6B
	39110-2S167	39110-2S289	NADWN5GSHXXXXL6A NADWN5GSHXXXXJ1A NADWN5GSHXXXXJ1B	NADWN5GSHXXXXL6B
	39110-2S168	39110-2S290	NADWN5GSIXXXXXL6A NADWN5GSIXXXXXJ1A NADWN5GSIXXXXXJ1B	NADWN5GSIXXXXXL6B
	39110-2S176	39110-2S291	NADWN5GSKXXXXL6A NADWN5GSKXXXXJ1A NADWN5GSKXXXXJ1B	NADWN5GSKXXXXL6B
	39110-2S181	39110-2S292	NADWN5GKFXXXXL6A NADWN5GKFXXXXJ1A NADWN5GKFXXXXJ1B	NADWN5GKFXXXXL6B
	39110-2S182	39110-2S293	NADWN5GKGXXXXL6A NADWN5GKGXXXXJ1A NADWN5GKGXXXXJ1B	NADWN5GKGXXXXL6B
	39110-2S183	39110-2S294	NADWN5GKJXXXXL6A NADWN5GKJXXXXJ1A NADWN5GKJXXXXJ1B	NADWN5GKJXXXXL6B
	39110-2S184	39110-2S295	NADWN5GKHXXXXL6A NADWN5GKHXXXXJ1A NADWN5GKHXXXXJ1B	NADWN5GKHXXXXL6B
	39110-2S185	39110-2S296	NADWN5GKIXXXXXL6A NADWN5GKIXXXXXJ1A NADWN5GKIXXXXXJ1B	NADWN5GKIXXXXXL6B
	39110-2S186	39110-2S297	NADWN5GKKXXXXL6A NADWN5GKKXXXXJ1A NADWN5GKKXXXXJ1B	NADWN5GKKXXXXL6B

**ECU ROM ID TABLE – Tucson (NX4) – VIN begins with KM8:**

Model	Part Number		ROM ID	
	Old	New	Old	New
Tucson (NX4)	39110-2S105	39110-2S262	NXDWD5GMAXXXXJ0A NXDWD5GMAXXXXJ1A NXDWD5GMAXXXXJ1B NXDWD5GMAXXXXL6A	NADWN5GMFXXXXL6B
	39110-2S107	39110-2S263	NXDWD5GMCXXXJ0A NXDWD5GMCXXXJ1A NXDWD5GMCXXXJ1B NXDWD5GMCXXXL6A	NADWN5GMGXXXXL6B
	39110-2S119	39110-2S264	NXDWD5GKAXXXXJ1A NXDWD5GKAXXXXJ1B NXDWD5GKAXXXXL6A	NADWN5GMJXXXXL6B
	39110-2S120	39110-2S265	NXDWD5GKCXXXJ1A NXDWD5GKCXXXJ1B NXDWD5GKCXXXL6A	NADWN5GMHXXXXL6B
	39110-2S113	39110-2S266	NXDWD5GSAXXXXJ0A NXDWD5GSAXXXXJ1A NXDWD5GSAXXXXJ1B NXDWD5GSAXXXXL6A	NADWN5GMIXXXXL6B
	39110-2S114	39110-2S267	NXDWD5GSCXXXJ0A NXDWD5GSCXXXJ1A NXDWD5GSCXXXJ1B NXDWD5GSCXXXL6A	NADWN5GMKXXXXL6B
	39110-2S115	39110-2S268	NXDWD5GMJXXXJ0A NXDWD5GMJXXXJ1A NXDWD5GMJXXXJ1B NXDWD5GMJXXXL6A	NADWN5GSFXXXXL6B
	39110-2S116	39110-2S269	NXDWD5GMKXXXJ0A NXDWD5GMKXXXJ1A NXDWD5GMKXXXJ1B NXDWD5GMKXXXL6A	NADWN5GSGXXXXL6B
	39110-2S121	39110-2S270	NXDWD5GKJXXXJ1A NXDWD5GKJXXXJ1B NXDWD5GKJXXXL6A	NADWN5GSJXXXXL6B
	39110-2S122	39110-2S271	NXDWD5GKKXXXJ1A NXDWD5GKKXXXJ1B NXDWD5GKKXXXL6A	NADWN5GSHXXXXL6B
	39110-2S117	39110-2S272	NXDWD5GSJXXXJ0A NXDWD5GSJXXXJ1A NXDWD5GSJXXXJ1B NXDWD5GSJXXXL6A	NADWN5GSIXXXXL6B
	39110-2S118	39110-2S273	NXDWD5GSKXXXJ0A NXDWD5GSKXXXJ1A NXDWD5GSKXXXJ1B NXDWD5GSKXXXL6A	NADWN5GSKXXXXL6B

**TCU ROM ID TABLE:**

Model	Part Number		ROM ID	
	Old	New	Old	New
Santa Fe (TMa)	39110-2S092	39110-2S274	STM2G25NH1	STM2G25NH2
	39110-2S093	39110-2S275	STM4G25NH1	STM4G25NH2
	39110-2S094	39110-2S276	STM2G25NH1	STM2G25NH2
	39110-2S095	39110-2S277	STM4G25NH1	STM4G25NH2
Sonata (DN8)	39110-2S039	39110-2S278	SDN8G25NB2	SDN8G25NB3
	39110-2S040	39110-2S279	SDN8G25NB2	SDN8G25NB3
Sonata (DN8a)	39100-2SDJ0	39100-2SDL0	SDN8G25NB2	SDN8G25NB3
	39100-2SDK0	39100-2SDM0	SDN8G25NB2	SDN8G25NB3
Tucson (NX4a)	39110-2S161	39110-2S280	TNX4G25X0XSC1SS2	TNX4G25X0XSC2SS3
	39110-2S162	39110-2S281	TNX4G25X0XSC1SS2	TNX4G25X0XSC2SS3
	39110-2S169	39110-2S282	TNX4G25X4XSC1SS2	TNX4G25X4XSC2SS3
	39110-2S163	39110-2S283	SNX4G25X0XSC1SS2	SNX4G25X0XSC2SS3
	39110-2S164	39110-2S284	SNX4G25X0XSC1SS2	SNX4G25X0XSC2SS3
	39110-2S170	39110-2S285	SNX4G25X4XSC1SS2	SNX4G25X4XSC2SS3
	39110-2S165	39110-2S286	TNX4G25X0XSC1SS2	TNX4G25X0XSC2SS3
	39110-2S166	39110-2S287	TNX4G25X0XSC1SS2	TNX4G25X0XSC2SS3
	39110-2S175	39110-2S288	TNX4G25X4XSC1SS2	TNX4G25X4XSC2SS3
	39110-2S167	39110-2S289	SNX4G25X0XSC1SS2	SNX4G25X0XSC2SS3
	39110-2S168	39110-2S290	SNX4G25X0XSC1SS2	SNX4G25X0XSC2SS3
	39110-2S176	39110-2S291	SNX4G25X4XSC1SS2	SNX4G25X4XSC2SS3
	39110-2S181	39110-2S292	TNX4G25X0XSC1SS2	TNX4G25X0XSC2SS3
	39110-2S182	39110-2S293	TNX4G25X0XSC1SS2	TNX4G25X0XSC2SS3
	39110-2S183	39110-2S294	TNX4G25X4XSC1SS2	TNX4G25X4XSC2SS3
	39110-2S184	39110-2S295	SNX4G25X0XSC1SS2	SNX4G25X0XSC2SS3
	39110-2S185	39110-2S296	SNX4G25X0XSC1SS2	SNX4G25X0XSC2SS3
	39110-2S186	39110-2S297	SNX4G25X4XSC1SS2	SNX4G25X4XSC2SS3
Tucson (NX4)	39110-2S105	39110-2S262	TNX4G25X0XSC1SS2	TNX4G25X0XSC2SS3
	39110-2S107	39110-2S263	SNX4G25X0XSC1SS2	SNX4G25X0XSC2SS3
	39110-2S119	39110-2S264	TNX4G25X0XSC1SS2	TNX4G25X0XSC2SS3
	39110-2S120	39110-2S265	SNX4G25X0XSC1SS2	SNX4G25X0XSC2SS3
	39110-2S113	39110-2S266	TNX4G25X0XSC1SS2	TNX4G25X0XSC2SS3
	39110-2S114	39110-2S267	SNX4G25X0XSC1SS2	SNX4G25X0XSC2SS3
	39110-2S115	39110-2S268	TNX4G25X4XSC1SS2	TNX4G25X4XSC2SS3
	39110-2S116	39110-2S269	SNX4G25X4XSC1SS2	SNX4G25X4XSC2SS3
	39110-2S121	39110-2S270	TNX4G25X4XSC1SS2	TNX4G25X4XSC2SS3
	39110-2S122	39110-2S271	SNX4G25X4XSC1SS2	SNX4G25X4XSC2SS3
	39110-2S117	39110-2S272	TNX4G25X4XSC1SS2	TNX4G25X4XSC2SS3
	39110-2S118	39110-2S273	SNX4G25X4XSC1SS2	SNX4G25X4XSC2SS3

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

Model	Menu		Password
Santa Fe (TMa)	#771	TMa PE 2.5GDI 8AT 39110-2S274/5	7711
	#771	TMa PE 2.5GDI 8AT 39110-2S276/7	7712
	#772	TMa PE 2.5GDI 8AT 39110-2S274/6	2252
	#772	TMa PE 2.5GDI 8AT 39110-2S275/7	4252
Sonata (DN8a)	#773	DN8a 2.5GDI 8AT 39100-2SDL0	7721
	#773	DN8a 2.5GDI 8AT 39100-2SDM0	7732
	#774	DN8a 39100-2SDL0/M0	8252
Sonata (DN8)	#781	DN8 2.5GDI 39110-2S278	2278
	#781	DN8 2.5GDI 39110-2S279	3279
	#782	DN8 2.5GDI 39110-2S278/9	8252
Tucson (NX4a)	#775	NX4a 2.5GDI 8AT 39110-2S280	7501
	#775	NX4a 2.5GDI 8AT 39110-2S281	7502
	#775	NX4a 2.5GDI 8AT 39110-2S282	7503
	#775	NX4a 2.5GDI 8AT 39110-2S283	7504
	#775	NX4a 2.5GDI 8AT 39110-2S284	7505
	#775	NX4a 2.5GDI 8AT 39110-2S285	7506
	#775	NX4a 2.5GDI 8AT 39110-2S286	7507
	#775	NX4a 2.5GDI 8AT 39110-2S287	7508
	#775	NX4a 2.5GDI 8AT 39110-2S288	7509
	#775	NX4a 2.5GDI 8AT 39110-2S289	7510
	#775	NX4a 2.5GDI 8AT 39110-2S290	7511
	#775	NX4a 2.5GDI 8AT 39110-2S291	7512
	#775	NX4a 2.5GDI 8AT 39110-2S292	7513
	#775	NX4a 2.5GDI 8AT 39110-2S293	7514
	#775	NX4a 2.5GDI 8AT 39110-2S294	7515
	#775	NX4a 2.5GDI 8AT 39110-2S295	7516
	#775	NX4a 2.5GDI 8AT 39110-2S296	7517
	#775	NX4a 2.5GDI 8AT 39110-2S297	7518
	#776	NX4/NX4a 2.5GDI 8AT 39110-2S280/81/86/87/92/93/62/64/66	2280
	#776	NX4/NX4a 2.5GDI 8AT 39110-2S282/88/94/68/70/72	2282
#776	NX4/NX4a 2.5GDI 8AT 39110-2S283/84/89/90/95/96/63/65/67	2283	
#776	NX4/NX4a 2.5GDI 8AT 39110-2S285/91/97/69/71/73	2285	

Model	Menu	Password	Model
Tucson (NX4)	#791	NX4 2.5GDI 8AT 39110-2S262	1010
	#791	NX4 2.5GDI 8AT 39110-2S263	1020
	#791	NX4 2.5GDI 8AT 39110-2S264	1030
	#791	NX4 2.5GDI 8AT 39110-2S265	1040
	#791	NX4 2.5GDI 8AT 39110-2S266	1050
	#791	NX4 2.5GDI 8AT 39110-2S267	1060
	#791	NX4 2.5GDI 8AT 39110-2S268	1070
	#791	NX4 2.5GDI 8AT 39110-2S269	1080
	#791	NX4 2.5GDI 8AT 39110-2S270	1090
	#791	NX4 2.5GDI 8AT 39110-2S271	1100
	#791	NX4 2.5GDI 8AT 39110-2S272	1110
	#791	NX4 2.5GDI 8AT 39110-2S273	1120
	#776	NX4/NX4a 2.5GDI 8AT 39110-2S280/81/86/87/92/93/62/64/66	2280
	#776	NX4/NX4a 2.5GDI 8AT 39110-2S282/88/94/68/70/72	2282
	#776	NX4/NX4a 2.5GDI 8AT 39110-2S283/84/89/90/95/96/63/65/67	2283
	#776	NX4/NX4a 2.5GDI 8AT 39110-2S285/91/97/69/71/73	2285