

 HYUNDAI Technical Service Bulletin	GROUP CAMPAIGN	NUMBER 21-01-075H
	DATE DECEMBER, 2021	MODEL(S) SONATA (DN8a) SANTA FE (TMa) TUCSON (NX4/NX4a)
SUBJECT:	DTC P2074XX ECM UPDATE (SERVICE CAMPAIGN T7M)	

★ 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 via WEBDCS to identify open Campaigns/Recalls.

Description:

Certain 2020-22MY Sonata (DN8a), 2021-22MY Santa Fe (TMa), and 2022MY Tucson (NX4/NX4a) vehicles equipped with 2.5L engine may exhibit a MIL with DTC(s):

- P2074: Mass Airflow Sensor Plausibility
- P2074F0: Manifold Absolute Pressure/Mass Air Flow - Throttle Position Correlation at Lower Load
- P2074F1: Manifold Absolute Pressure/Mass Air Flow - Throttle Position Correlation at Medium or High Load

Secondary DTC(s) below may also be stored:

- C136081: ESP Irreversible Error
- C161308: CAN Signal Error EMS
- C161386: CAN Signal Error EMS
- C169381: Blind-Spot Collision Warning – CAN signal failure - ESC
- C174181: ESC Not Available VSM (Check ESC)
- C183586: CAN Message Failure ESC/IEB

Vehicles diagnosed with DTC(s) may also experience reduced engine performance and limited power reduction mode. The ECM software revises the logic to accurately detect the amount of air the engine is receiving.

Applicable Vehicle: Certain vehicles equipped with 2.5L GDI engines:

- 2020-22MY Sonata (DN8a)
- 2021-22MY Santa Fe (TMa)
- 2022MY Tucson (NX4/NX4a)

GDS Information:

System Selection: **ENGINE CONTROL MODULE (ECM)**

#Event	Description
749*	NX4 DIAGNOSIS IMPROVED LOGIC (P2074)
750*	NX4a DIAGNOSIS IMPROVED LOGIC (P2074)
766*	DN8a – ECU LOGIC IMPROVEMENT (P2074)
767*	TMa – ECU LOGIC IMPROVEMENT (P2074)

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

Circulate To: Service Manager, Warranty Manager, Service Advisors, Technicians, Fleet Repair

Warranty Information:

Model	Op. Code	Operation	Op. Time	Causal Part	Nature	Cause
Sonata (DN8a)	10D208R2	ECM UPGRADE	0.3 M/H	39101-2SDA0	S21	ZZ3
Santa Fe (TMa)	10D208R3			39110-2S059		
Tucson (NX4/NX4a)	10D208R0	ECM UPGRADE	0.3 M/H	39110-2S101 (NX4) 39110-2S161 (NX4a)	S21	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 this Service Campaign and the affected part is still under warranty, submit a separate warranty 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:

1. Perform GDS Mobile software update per TSB **15-GI-001**.
2. After successful completion of **ECM software update**, check for Diagnostic Trouble Codes in **ALL** menus and erase any DTC.
3. Confirm normal vehicle operation.

NOTICE

You must initially perform GDS-M ECM Update in Auto Mode.

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

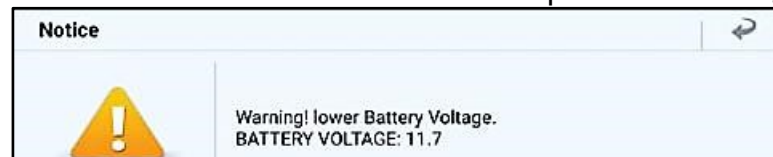
⚠ WARNING**GDS-M Vehicle Battery Low Voltage Warning:**

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.



ROM ID Information Table:

MODEL	Model Year	ECU P/No.	ROM ID	
			OLD	NEW
Sonata (DN8a)	2020	39101-2SDA0	DNBVN5GMCCXXXDAA DNBVN5GMCCXXXDBB DNBVN5GMCCXXXDCA DNBVN5GMCCXXXG2F	DNBVN5GMCCXXXG2G
		39102-2SDB0	DNBVN5GMC3XXXDAA DNBVN5GMC3XXXDBB DNBVN5GMC3XXXDCA DNBVN5GMC3XXXG2F	DNBVN5GMC3XXXG2G
		39103-2SDE0	DNCVN5GMCCXXXF0A DNCVN5GMCCXXXG2F	DNCVN5GMCCXXXG2G
		39104-2SDF0	DNCVN5GMC3XXXF0A DNCVN5GMC3XXXG2F	DNCVN5GMC3XXXG2G
	2021	39100-2SDG0	DNCVN5GMCCXXXG2A	DNCVN5GMCCXXXG2C
		39100-2SDH0	DNCVN5GMCCXXXG2B	DNCVN5GMC3XXXG2C
	2022	39100-2SDJ0	DNDVN5GMCCXXXJ1A	DNDVN5GMCCXXXJ1B
		39100-2SDK0	DNDVN5GMC3XXXJ1A	DNDVN5GMC3XXXJ1B
Santa Fe (TMa)	2021	39110-2S059	TACVN5GMH3XXXH0A TACVN5GMH3XXXG2C	TACVN5GMH3XXXH0B
		39110-2S067	TACVN5GMI3XXXH0A TACVN5GMI3XXXG2C	TACVN5GMH3XXXH0B
		39110-2S060	TACVN5GSH3XXXH0A TACVN5GSH3XXXG2C	TACVN5GSH3XXXH0B
		39110-2S068	TACVN5GSI3XXXH0A TACVN5GSI3XXXG2C	TACVN5GSH3XXXH0B
	2022	39110-2S092	TADVN5GMH3XXXJ1A	TADVN5GMH3XXXJ1B
		39110-2S093	TADVN5GMH3XXXJ1A	TADVN5GMH3XXXJ1B
		39110-2S094	TADVN5GSH3XXXJ1A	TADVN5GSH3XXXJ1B
		39110-2S095	TADVN5GSH3XXXJ1A	TADVN5GSH3XXXJ1B
Tucson (NX4) - (VIN begins with "K")	2022	39100-2S105	NXDWD5GMAXXXXJ0A NXDWD5GMAXXXXJ1A	NXDWD5GMAXXXXJ1B
		39100-2S107	NXDWD5GMCXXXXJ0A NXDWD5GMCXXXXJ1A	NXDWD5GMCXXXXJ1B
		39100-2S119	NXDWD5GKAXXXXJ1A	NXDWD5GKAXXXXJ1B
		39100-2S120	NXDWD5GKCXXXXJ1A	NXDWD5GKCXXXXJ1B
		39100-2S113	NXDWD5GSAXXXXJ0A NXDWD5GSAXXXXJ1A	NXDWD5GSAXXXXJ1B

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		39100-2S114	NXDWD5GSCXXXXJ0A NXDWD5GSCXXXXJ1A	NXDWD5GSCXXXXJ1B
		39100-2S115	NXDWD5GMJXXXXJ0A NXDWD5GMJXXXXJ1A	NXDWD5GMJXXXXJ1B
		39100-2S116	NXDWD5GMKXXXXJ0A NXDWD5GMKXXXXJ1A	NXDWD5GMKXXXXJ1B
		39100-2S121	NXDWD5GKJXXXXJ1A	NXDWD5GKJXXXXJ1B
		39100-2S122	NXDWD5GKKXXXXJ1A	NXDWD5GKKXXXXJ1B
		39100-2S117	NXDWD5GSJXXXXJ0A NXDWD5GSJXXXXJ1A	NXDWD5GSJXXXXJ1B
		39100-2S118	NXDWD5GSKXXXXJ0A NXDWD5GSKXXXXJ1A	NXDWD5GSKXXXXJ1B
Tucson (NX4a) - (VIN begins with "5")	2022	39100-2S161	NADWN5GMFXXXXJ0A NADWN5GMFXXXXJ1A	NADWN5GMFXXXXJ1B
		39100-2S162	NADWN5GMGXXXXJ0A NADWN5GMGXXXXJ1A	NADWN5GMGXXXXJ1B
		39100-2S169	NADWN5GMJXXXXJ0A NADWN5GMJXXXXJ1A	NADWN5GMJXXXXJ1B
		39100-2S163	NADWN5GMHXXXXJ0A NADWN5GMHXXXXJ1A	NADWN5GMHXXXXJ1B
		39100-2S164	NADWN5GMIXXXXXJ0A NADWN5GMIXXXXXJ1A	NADWN5GMIXXXXXJ1B
		39100-2S170	NADWN5GMKXXXXJ0A NADWN5GMKXXXXJ1A	NADWN5GMKXXXXJ1B
		39100-2S165	NADWN5GSFXXXXJ0A NADWN5GSFXXXXJ1A	NADWN5GSFXXXXJ1B
		39100-2S166	NADWN5SGSXXXXJ0A NADWN5SGSXXXXJ1A	NADWN5SGSXXXXJ1B
		39100-2S175	NADWN5GSJXXXXJ0A NADWN5GSJXXXXJ1A	NADWN5GSJXXXXJ1B
		39100-2S167	NADWN5GSHXXXXJ0A NADWN5GSHXXXXJ1A	NADWN5GSHXXXXJ1B
		39100-2S168	NADWN5GSIXXXXXJ0A NADWN5GSIXXXXXJ1A	NADWN5GSIXXXXXJ1B
		39100-2S176	NADWN5GSKXXXXJ0A NADWN5GSKXXXXJ1A	NADWN5GSKXXXXJ1B
		39100-2S181	NADWN5GKFXXXXJ1A	NADWN5GKFXXXXJ1B
		39100-2S182	NADWN5GKGXXXXJ1A	NADWN5GKGXXXXJ1B
		39100-2S183	NADWN5GKJXXXXJ1A	NADWN5GKJXXXXJ1B
		39100-2S184	NADWN5GKHXXXXJ1A	NADWN5GKHXXXXJ1B
		39100-2S185	NADWN5GKIXXXXXJ1A	NADWN5GKIXXXXXJ1B
		39100-2S186	NADWN5GKKXXXXJ1A	NADWN5GKKXXXXJ1B

Manual Mode Password Information Table:

MODEL	EVENT #	MENU	PASSWORD
Sonata (DN8a)	#766	DN8a 2.5GDI 39101-2SDA0	6601
		DN8a 2.5GDI 39102-2SDB0	6602
		DN8a 2.5GDI 39103-2SDE0	6603
		DN8a 2.5GDI 39104-2SDF0	6604
		DN8a 2.5GDI 39100-2SDG0	6605
		DN8a 2.5GDI 39100-2SDH0	6606
		DN8a 2.5GDI 39100-2SDJ0	6607
		DN8a 2.5GDI 39100-2SDK0	6608
Santa Fe (TMa)	#767	TMa 2.5GDI 39110-2S059/2S067	0596
		TMa 2.5GDI 39110-2S060/2S068	0608
		TMa 2.5GDI 39110-2S092/2S093	0923
		TMa 2.5GDI 39110-2S094/2S095	0945
Tucson (NX4) - (VIN begins with "K")	#749	NX4 2.5GDI 39100-2S105	5012
		NX4 2.5GDI 39100-2S107	7012
		NX4 2.5GDI 39100-2S119	9112
		NX4 2.5GDI 39100-2S120	0212
		NX4 2.5GDI 39100-2S113	3112
		NX4 2.5GDI 39100-2S114	4112
		NX4 2.5GDI 39100-2S115	5112
		NX4 2.5GDI 39100-2S116	6112
		NX4 2.5GDI 39100-2S121	1212
		NX4 2.5GDI 39100-2S122	2212
		NX4 2.5GDI 39100-2S117	7112
		NX4 2.5GDI 39100-2S118	8112
Tucson (NX4a) - (VIN begins with "5")	#750	NX4a 2.5GDI 39100-2S161	2161
		NX4a 2.5GDI 39100-2S162	2162
		NX4a 2.5GDI 39100-2S169	2169
		NX4a 2.5GDI 39100-2S163	2163
		NX4a 2.5GDI 39100-2S164	2164
		NX4a 2.5GDI 39100-2S170	2170
		NX4a 2.5GDI 39100-2S165	2165
		NX4a 2.5GDI 39100-2S166	2166
		NX4a 2.5GDI 39100-2S175	2175

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		NX4a 2.5GDI 39100-2S167	2167
		NX4a 2.5GDI 39100-2S168	2168
		NX4a 2.5GDI 39100-2S176	2176
		NX4a 2.5GDI 39100-2S181	2181
		NX4a 2.5GDI 39100-2S182	2182
		NX4a 2.5GDI 39100-2S183	2183
		NX4a 2.5GDI 39100-2S184	2184
		NX4a 2.5GDI 39100-2S185	2185
		NX4a 2.5GDI 39100-2S186	2186