 <b>HYUNDAI</b> <b>Technical Service Bulletin</b>	GROUP <b>Fuel System</b>	NUMBER <b>25-FL-001H</b>
	DATE <b>JANUARY 2025</b>	MODEL(S) <b>SEE BELOW</b>
<b>SUBJECT: GDI INJECTOR REPLACEMENT DUE TO MISFIRE DTC(S)</b>		

**This TSB supersedes 23-FL-002H-1 to update the entire bulletin to replacement of all GDI injectors. All sections – including Parts Information, Warranty Information, and Service Procedure have been updated.**

**Description:** Some vehicles equipped with a 2.5L GDI Theta III engine (non-Turbo) may exhibit one or more misfire DTCs due to the GDI injectors leaking internally. This may be caused by internal filter breakage in the injector. Follow the procedure in this TSB to replace all 4 injectors on affected vehicles, using the kit in the Parts Information section.

**Possible misfire DTCs: P0300, P0301, P0302, P0303, P0304**

<b>Applicable Vehicles with 2.5L GDI non-Turbo engines:</b> <ul style="list-style-type: none"> <li>• 2022MY Santa Cruz (NXT) produced from 05/26/2021 – 06/23/2022 (VINs start with 5NT)</li> <li>• 2021-2022MY Santa Fe (TMA) produced from 03/01/2021 – 07/15/2022 (VINs start with 5NM)</li> <li>• 2021-2023MY Sonata (DN8) produced from 02/08/2021 – 01/19/2023 (VINs start with KMH)</li> <li>• 2021-2022MY Sonata (DN8A) produced from 03/01/2021 – 02/14/2022 (VINs start with 5NP)</li> <li>• 2022-2023MY Tucson (NX4) produced 01/23/2021 – 11/05/2022 (VINs start with KM8)</li> <li>• 2022MY Tucson (NX4A) produced 03/01/2021 – 07/11/2022 (VINs start with 5NM)</li> </ul>
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**SST Information:**

Tool Name	Tool #	Figure	Remarks
Torque Wrench Socket	09314-L1100		Use for High Pressure Fuel Pipe Removal

**SUBJECT:****GDI INJECTOR REPLACEMENT DUE TO MISFIRE DTC(S)****Parts Information:**

Part Name	Part Number	Figure	Remarks
Kit (contents below)	35399-2S133QQH		Use 1 Kit per vehicle
1. Fuel Injector – GDI	35310-2S000		Qty: 4
2. Clip – Fuel Injector	35309-04AA0		Qty: 4
3. Pipe – High Pressure	35305-2S000		Qty: 1
4. Gasket - Port	28411-2S010		Qty: 3
5. Gasket – Port FKM	28411-2S020		Qty: 1
6. Gasket – Throttle Body	28411-2S000		Qty: 1
7. Gasket – EGR Pipe	28493-2S000		Qty: 1
8. Gasket – Oil Filter Housing	26333-2S000		Qty: 2

**Warranty Information:**

HMMA models (VINs start with '5NP', '5NM', or '5NT')

Model	Op. Code	Operation	Op. Time	Causal Part	Nature Code	Cause Code
Santa Cruz (NXT) Santa Fe (TMA) Sonata (DN8A) Tucson (NX4A)	20DA14R9	GDI Fuel Injector Replacement (All 4 Injectors)	1.3 M/H	35310-2S000	W17	ZZ5

HMC models (VINs start with 'KMH' or 'KM8')

Model	Op. Code	Operation	Op. Time	Causal Part	Nature Code	Cause Code
Sonata (DN8) Tucson (NX4)	20DA14RA	GDI Fuel Injector Replacement (All 4 Injectors)	1.3 M/H	35310-2S000	W17	ZZ5

**NOTE 1:** Submit claim on Campaign Claim Entry Screen as "Campaign" Type.

**NOTE 2:** 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.

**NOTE 3:** This TSB includes a repair validation photo(s). Op times include VIN, Mileage, and Repair Validation photo(s) as outlined in the Digital Documentation Policy.

**NOTE 4:** The incident parts are subject to callback through the normal Warranty Technical Center (WTC) parts return process. **Claim is subject to debit if the part is not returned.**

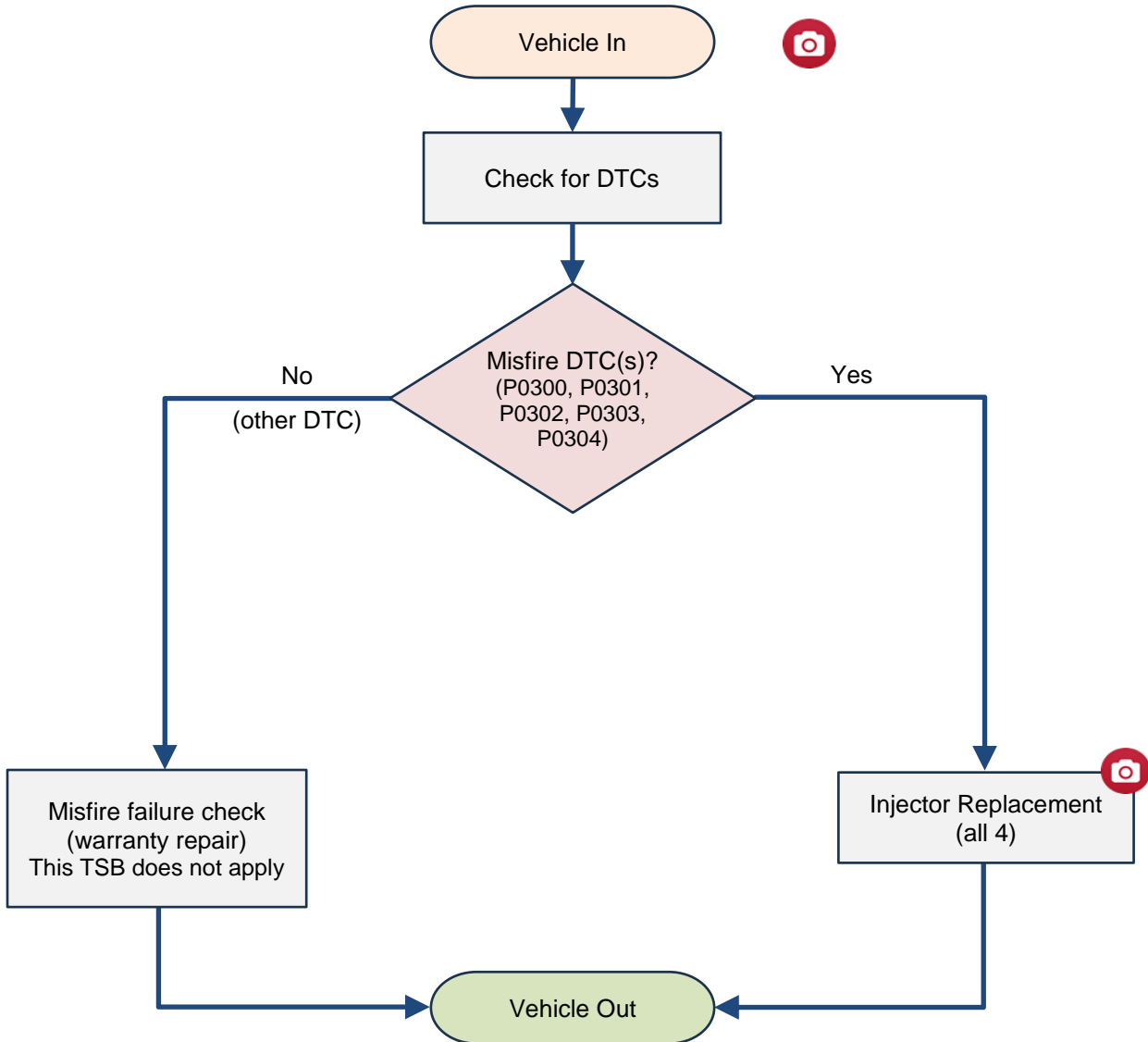
**Service Procedure:**

**STUI**



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

**Service Procedure Flowchart:**



## DTC Inspection

Perform a Fault Code Search for one or more of the following misfire DTCs:

- **P0300, P0301, P0302, P0303, P0304**

If one or more of these are found, and vehicle falls within the Applicable Vehicle range, proceed to **Injector Replacement**.

If none of these DTCs are found, and/or vehicle is **NOT** within the Applicable Vehicle range, then this TSB does **NOT** apply. Continue with normal diagnosis and repair.

## Injector Replacement

1. Release the Residual Pressure in the Fuel Line.

Refer to Shop Manual:

- **Engine Control / Fuel System > Fuel Delivery System > Release Residual Pressure in Fuel Line**

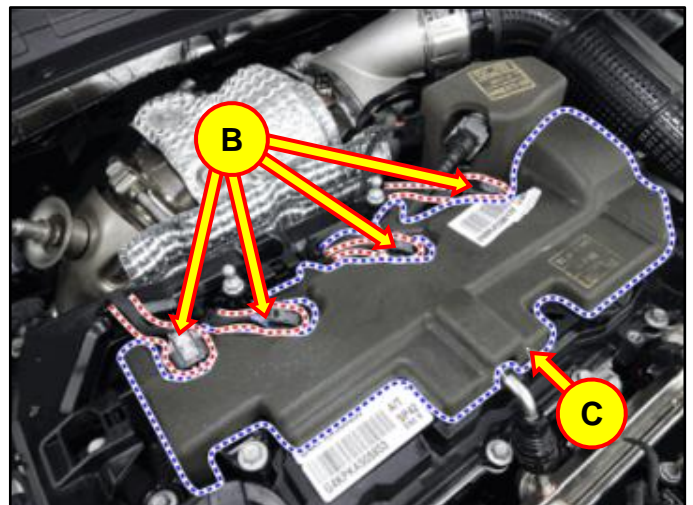
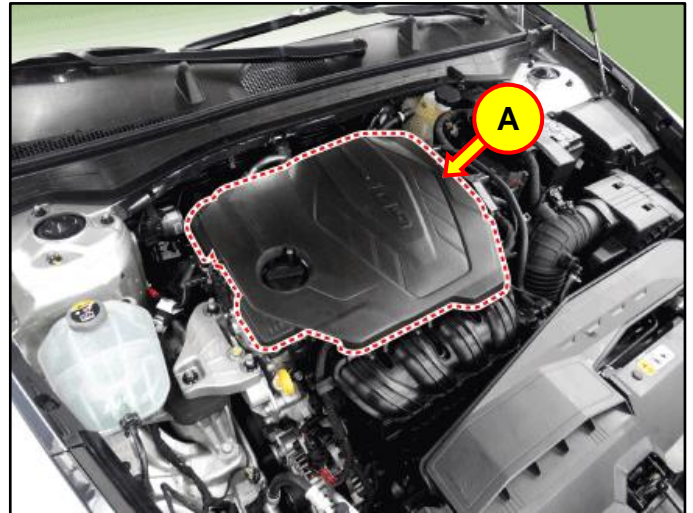
2. Record customer's radio presets, if applicable, then turn ignition **OFF** and disconnect the negative (-) battery cable.

3. Remove the engine cover (A).

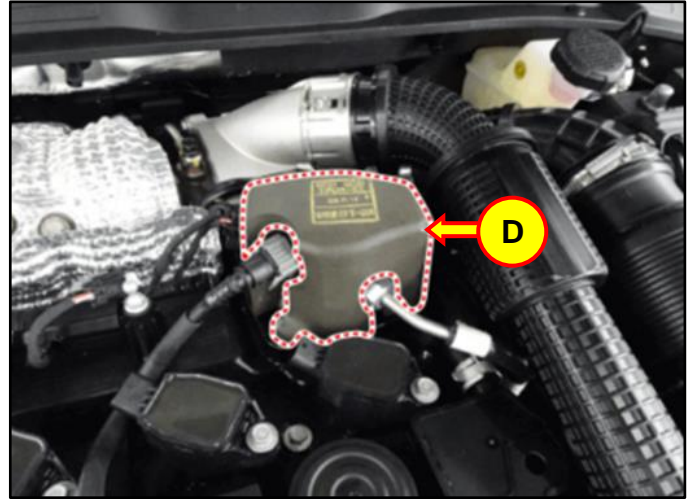
Refer to Shop Manual:

- **Engine Mechanical System > Engine And Transaxle Assembly > Engine Cover > Repair procedures**

4. Remove the ignition coil connectors (B), then remove the ignition coil foam (C).



5. Remove the high pressure pump foam (D).

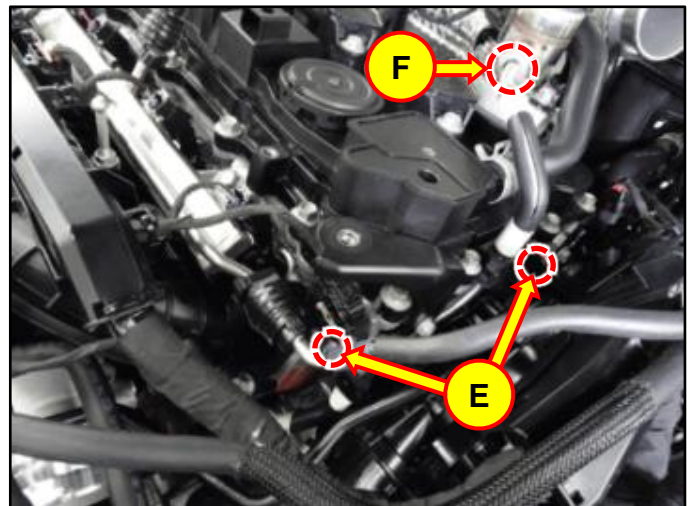


6. Remove the air cleaner assembly.

Refer to Shop Manual:

- **Engine Mechanical System > Intake And Exhaust System > Air Cleaner > Repair procedures**

7. Remove the high pressure fuel pipe bracket bolts (E), then remove the flange nut (F).



**Tightening Torque:**

**Bracket bolts:**

lb-ft	7.9
lb-in	95
N.m	11

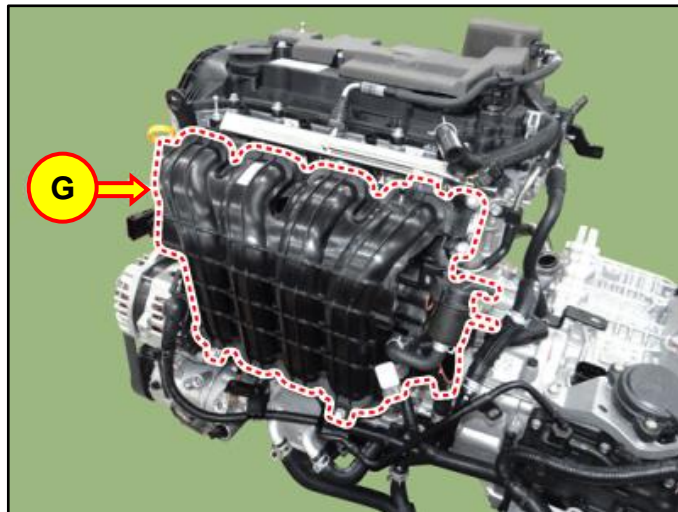
**Flange nut:**

lb-ft	22
N.m	29

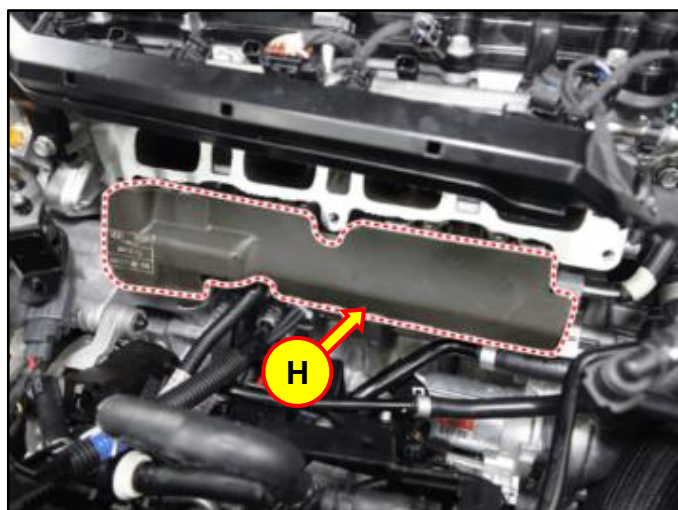
- Remove the intake manifold (G).

Refer to Shop Manual:

- Engine Mechanical System > Intake And Exhaust System > Intake Manifold > Repair procedures**



- Remove the injector foam (H).



- Remove the high pressure fuel pipe flange nut (I).

- After removing the 4 bolts (J), remove the delivery pipe and injector assembly.

**Tightening Torque:**

**Flange nut (I):**

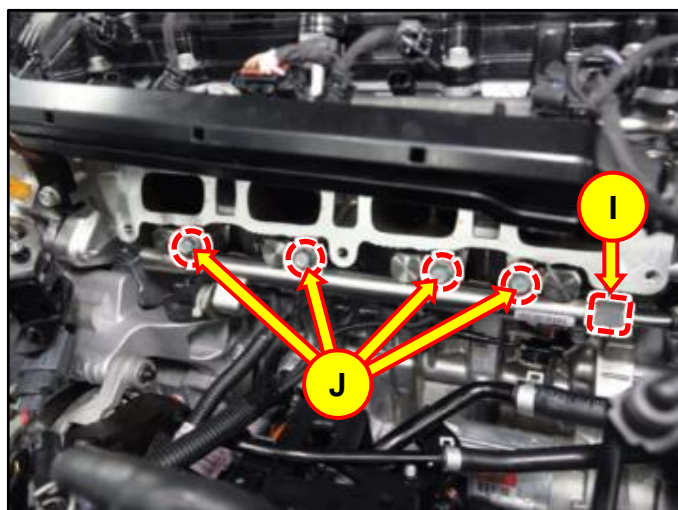
lb-ft	22
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N.m	29
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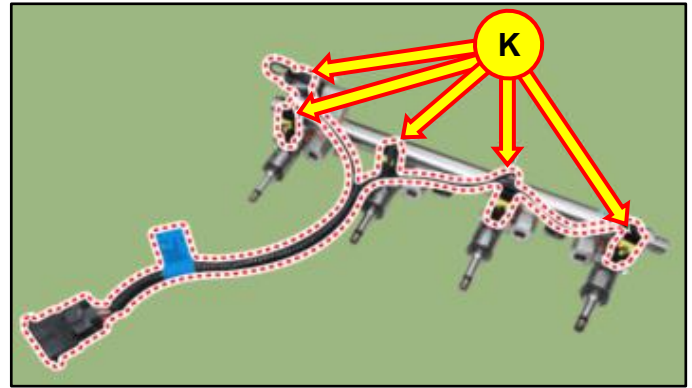
**Bolts (J):**

lb-ft	16
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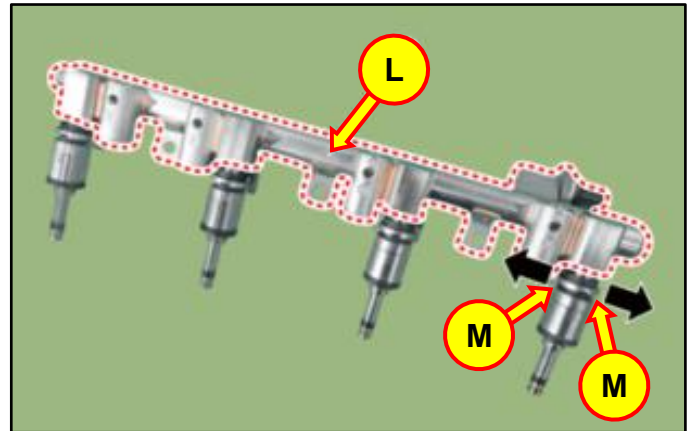
N.m	21
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12. Disconnect the injector and rail sensor connectors (K).



13. Remove the injectors from the fuel rail (L) after releasing the clips (M) on both sides.



14. Install the new injector parts in the reverse order of removal.

**i Information**

Before installing new injectors be sure to clean each cylinder head hole. Use a brush to remove carbon deposits and foreign materials.

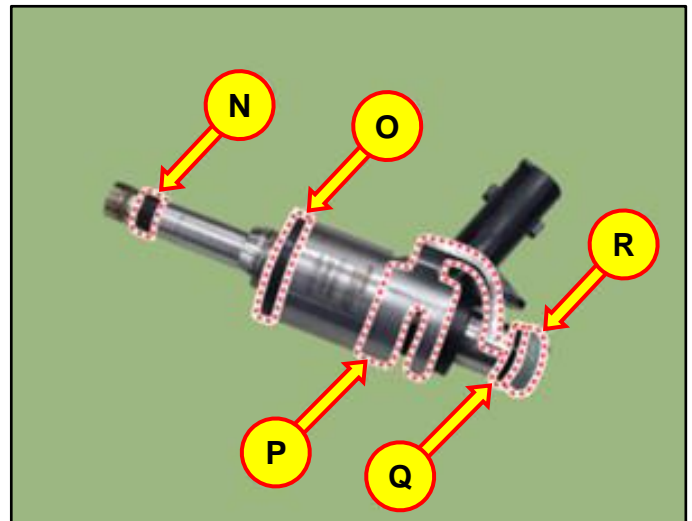
**i Information**

GDI Fuel Injector components:

- Combustion seal (N)
- Rubber washer (O)
- Injector clip (P)
- Support disk (Q)
- O-ring (R)

**NOTICE**

- Be careful **NOT** to deform the new high pressure fuel pipe.
- When inserting the injector, be careful **NOT** to damage the injector tip.
- Do **NOT** apply oil, grease, or lubricant to the combustion seal.
- Do **NOT** tilt the torque wrench when tightening nuts.
- Carefully observe all torque specifications.
- Use SST 09314-L1100 for installing the high pressure fuel pipe flange nut.



15.

**STUI**

Using STUI, take a photo of the new injectors next to the old injectors with the fuel rail removed with the last 6 digits of the VIN and the date of repair on a piece of paper.

Upload the photo to STUI.



16. Reinstall all remaining parts in reverse order of removal.
17. Reset customer's radio presets, if applicable, and reconnect the negative (-) battery cable.
18. Start the engine and confirm proper operation of the vehicle.