



# HYUNDAI

## Technical Service Bulletin

GROUP <b>RECALL</b>	NUMBER <b>19-01-001H</b>
DATE <b>MARCH 2019</b>	MODEL(S) <b>APPLICABLE VEHICLES BELOW</b>

**SUBJECT:** HIGH PRESSURE FUEL PIPE INSPECTION AND REPLACEMENT  
(RECALL CAMPAIGN 180)

### ★ IMPORTANT

**\*\*\* Dealer Stock and Retail Vehicles \*\*\***

Dealers must perform this Recall Campaign on all affected vehicles prior to customer retail delivery and whenever an affected vehicle is in the shop for any maintenance or repair.

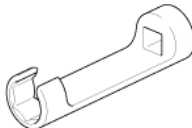
When a vehicle arrives at the service department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

**Description:** The high pressure fuel pipe may have been damaged, misaligned, or improperly torqued during prior engine replacement allowing fuel to leak, increasing the risk of a fire. This bulletin describes the procedure to confirm the high pressure fuel pipe is properly installed.

#### Applicable Vehicles:

Certain 2011-2014 MY Sonata (YF) vehicles with 2.0L Turbo and 2.4L engines  
 Certain 2015-2018 MY Sonata (LF) vehicles with 2.0L Turbo and 2.4L engines  
 Certain 2013-2018 MY Santa Fe Sport (AN) vehicles with 2.0L Turbo and 2.4L engines  
 Certain 2014-2015 MY Tucson (LM) vehicles with 2.4L engines  
 Certain 2018 MY Tucson (TL) vehicles with 2.4L engines

#### SST Information:

Description	Part #	Comment
TORQUE WRENCH SOCKET	 09314-3Q100-01	
OIL TEST PAPER	SP045-07305	1 box contains 100 test strips

**Note:** The above tools will be provided to all dealers. Additional units can be ordered through Bosch at 1-866-539-4248.

**Parts Information:**

Model	MY	Part Name	Part Number	QTY	Comment
Sonata (YF)	11-14 MY	HIGH PRESSURE FUEL PIPE	35305-2G700QQH	1	Only required if fuel pipe replacement is needed based on vehicle inspection.  Refer to Steps 7 and 10.
Sonata (LF)	15-18 MY	HIGH PRESSURE FUEL PIPE	35305-2GGA0QQH	1	
Santa Fe Sport (AN)	13-16 MY	HIGH PRESSURE FUEL PIPE	35305-2G700QQH	1	
	17-18 MY	HIGH PRESSURE FUEL PIPE	35305-2GGA0QQH	1	
Tucson (LM)	14-15 MY	HIGH PRESSURE FUEL PIPE	35305-2G700QQH	1	
Tucson (TL)	18MY	HIGH PRESSURE FUEL PIPE	35305-2GGA0QQH	1	
Vehicles with 2.0L Turbo	ALL	O-RING (NIPPLE ASSY-RAD)	25649-2G540QQH	1	

**Warranty Information:**

Model / Engine	Op. Code	Operation	Op. Time	Causal Part No.	Nature Code	Cause Code
All Models 2.4L	91C004I0	FUEL LEAKAGE INSPECTION	0.3 M/H	11235-06226-K	E74	ZZ7
	91C004R0	FUEL LEAKAGE INSPECTION AND HIGH PRESSURE FUEL PIPE REPLACEMENT	0.6 M/H			
All Models 2.0L Turbo	91C004I1	FUEL LEAKAGE INSPECTION	0.7 M/H			
	91C004R1	FUEL LEAKAGE INSPECTION AND HIGH PRESSURE FUEL PIPE REPLACEMENT	0.9 M/H			

**Notes:**

- 1) Submit Claim on Campaign Claim Entry Screen
- 2) If a part is found in need of replacement while performing this campaign and the affected part is still under warranty, submit a separate claim using the same Repair Order. If the affected part(s) are out of warranty, request a Prior Authorization # for goodwill consideration prior to completing the Campaign.
- 3) Oil test paper will be reimbursed via sublet.
- 4) Two gallons of coolant will be reimbursed on all 2.0L Turbo claims.

**⚠ CAUTION**

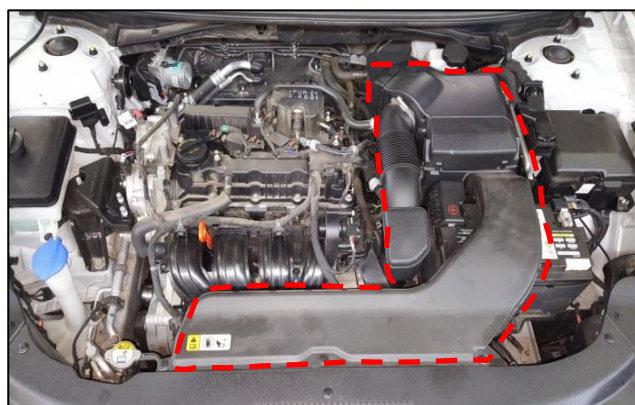
Follow all procedures in TSB 19-FL-001H. If fuel pipe installation is required based on vehicle inspection, follow the exact tightening process and sequence to install the fuel pipe. Fuel leakage can occur if the fuel pipe is installed incorrectly.

**Service Procedure:**

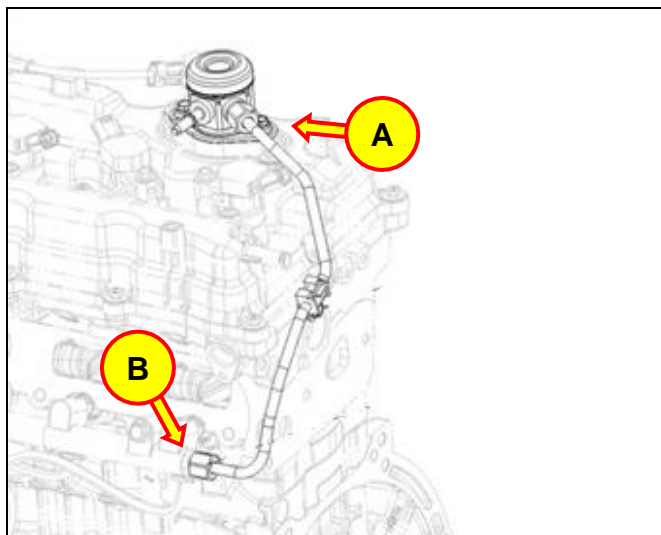
1. Record the vehicle's audio presets, then disconnect the negative (-) battery cable.

**For 2.0L Turbo vehicles,** also remove the engine undercover.

2. Remove the engine cover, air duct, and air intake hose according to the applicable vehicle shop manual.



3. Remove debris on the high pressure fuel pump and the high pressure fuel pipe nuts at (A) and (B) using compressed air.

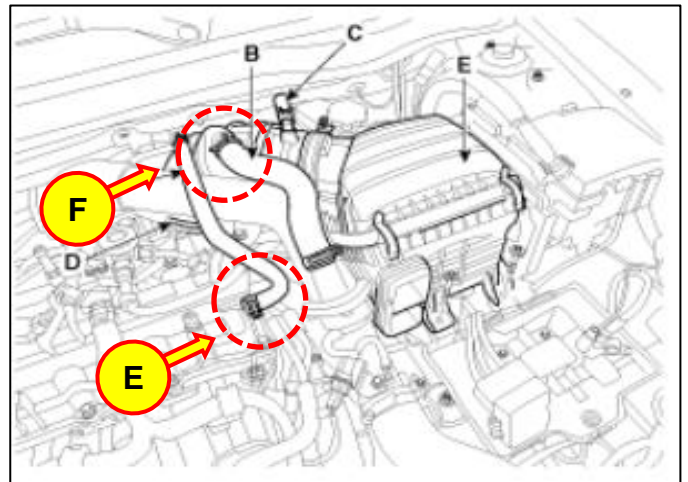


4. For 2.4L vehicles, skip to Step 5.

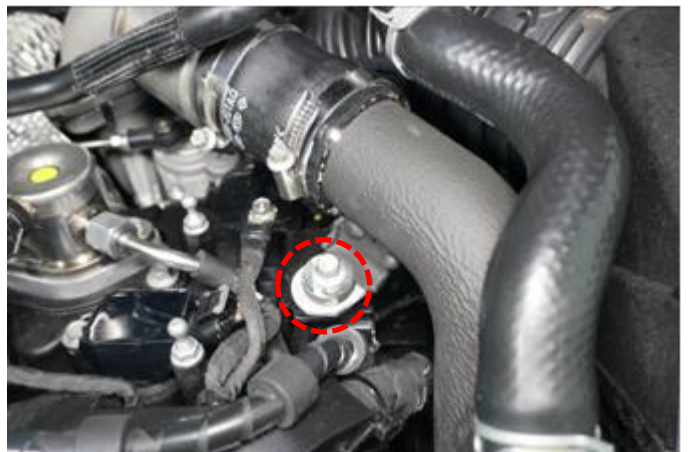
For 2.0L Turbo vehicles, disconnect the recirculation solenoid valve connector (C) and hose (D).



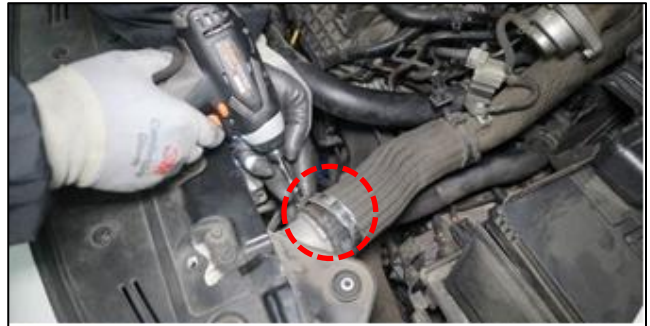
4A. For 2.0L Turbo vehicles, remove the breather hose (E) and recirculation hose (F).



4B. For 2.0L Turbo vehicles, remove the intercooler inlet hose retaining bolt.



4C. For 2.0L Turbo vehicles, loosen the intercooler inlet hose clamps and remove the intercooler inlet hose.



4D. For 2.0L Turbo vehicles, remove the ground.



5. Disconnect the ignition coil connector and remove the ignition coil from cylinder #4.

***Tightening Torque:***

***3.9 ~ 5.9N.m (0.4 ~ 0.6kgf.m, 2.9 ~ 4.3lb-ft)***



6. For 2.4L vehicles, skip to Step 7.

For 2.0L Turbo vehicles, remove the PCSV (Purge control solenoid valve) connector, hoses, and assembly.

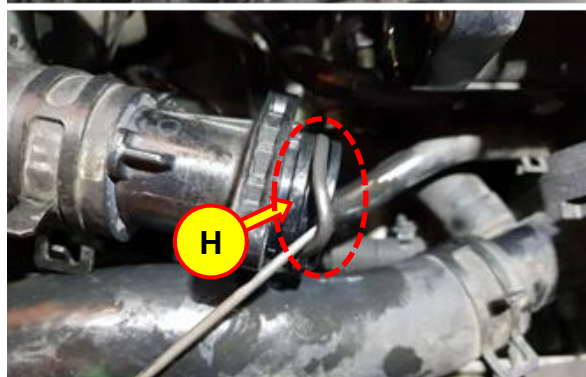
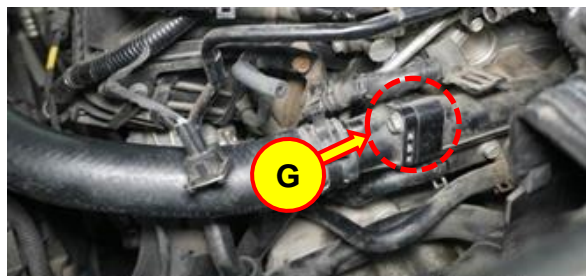


6A. For 2.0L Turbo vehicles, drain about ½ gallon of coolant from the radiator.



6B. For 2.0L Turbo vehicles, remove the two upper radiator hose bolts (G) from the water temperature control assembly. Replace the O-ring (H) with a new one during reinstallation.

**Note:** The O-ring (H) does not require a second replacement if the high pressure fuel pipe is replaced.



7. Set a torque wrench to 19.5 lb-ft and check the torque of the fuel pipe nuts (A) and (B) **using the SST.**

**Tightening Torque:**

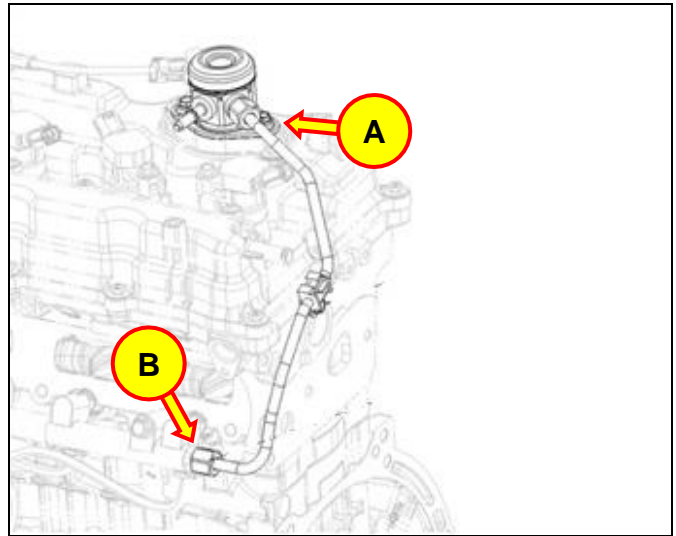
**26.5 ~32.4 Nm (2.7 ~ 3.3 kgf.m, 19.5 ~ 23.9 lb-ft)**

**If both the fuel pipe nuts meet the minimum specification of 19.5 lb-ft:**

- Continue to the next step.

**If either of the fuel pipe nuts are below the minimum specification of 19.5 lb-ft:**

- Skip to Step 11 to replace the fuel pipe assembly.



8. Install the ignition coil in cylinder #4, connect the ignition coil connector, and connect negative (-) battery cable.

**For 2.0L Turbo vehicles,** also install the upper radiator hose (with new O-ring) and top off the coolant.

**Tightening Torque (ignition coil):**

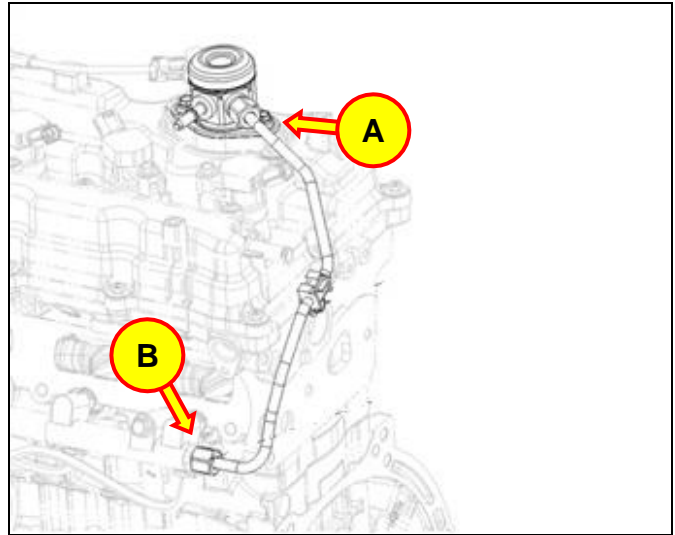
**3.9 ~ 5.9N.m (0.4 ~ 0.6kgf.m, 2.9 ~ 4.3lb-ft)**



9. Start the vehicle and rev the engine to 4,000 RPM three times.

10. **While the engine is idling**, check the area where the fuel pipe connects to the high pressure fuel pump (A) and fuel rail (B) for any indication of fuel leakage or smell.

**While the engine is idling**, wipe the areas around the high pressure fuel pipe nuts and the gap between the pipe and nuts using the oil test paper.



**OK:**

If the oil test paper appearance does not change:

- Reinstall all removed parts in the reverse order of removal.
- Reprogram the vehicle's audio presets.
- **For 2.0L Turbo vehicles**, refill and bleed the cooling system.
- Check for DTCs and perform the appropriate diagnostic service. Ensure no warning lights are present to complete the procedure.



**OK**



**NOT OK:**

If the oil test paper becomes darker or if there is indication of fuel leakage/smell, follow the procedure to replace the high pressure fuel pipe.



**NOT OK**



**High Pressure Fuel Pipe Replacement (if required):**

11. If high pressure fuel pipe replacement is required based on the steps above, repeat Steps 1-5 from above as needed **for 2.4L vehicles**.

**For 2.0L Turbo vehicles, repeat Steps 1-6B.**

12. Release the residual pressure in fuel line. Refer to the **'Release residual pressure in fuel line'** section in the applicable vehicle shop manual.

**Shop Manual > Fuel System > Fuel Delivery System**

**CAUTION**

**Do NOT perform any repairs on the high pressure fuel components immediately after the engine stops due to high pressure fuel in the system.**

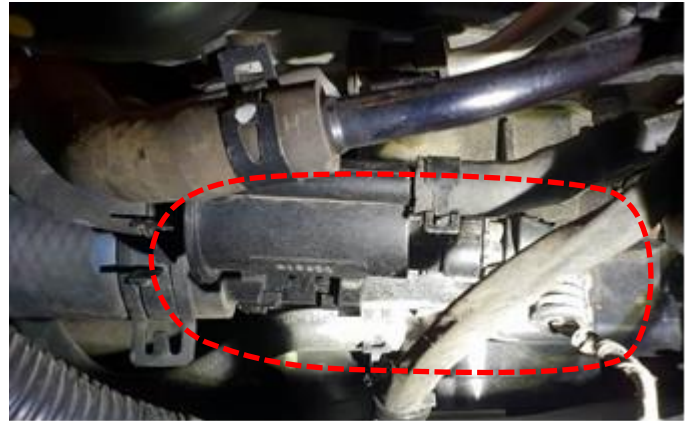


13. Remove the two (2) ignition wiring harness retaining bolts.



14. **For 2.4L vehicles**, remove the PCSV (Purge control solenoid valve) connector, hoses, and assembly.

**Note:** The PCSV was previously removed for 2.0T vehicles in a prior step.



15. Remove the fuel pipe clamp bolt and bracket.

**Tightening Torque:**

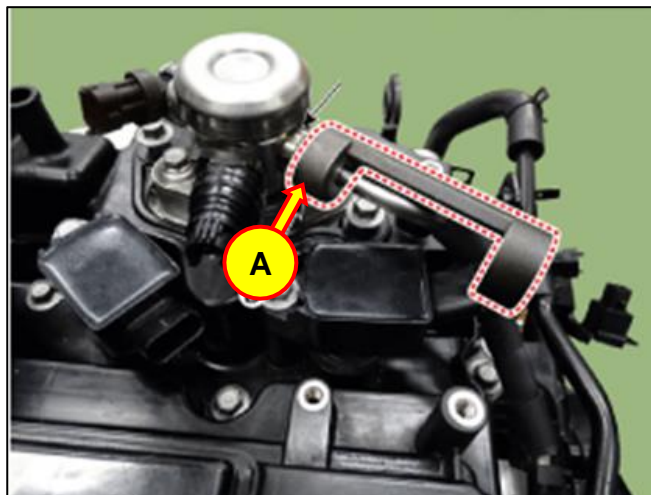
**7.8 ~11.8 Nm (0.8 ~ 1.2 kgf.m, 5.8 ~ 8.7 lb-ft)**



16. Remove the high pressure fuel pipe nut (A) from the high pressure fuel pump **using the SST**.

**Tightening Torque:**

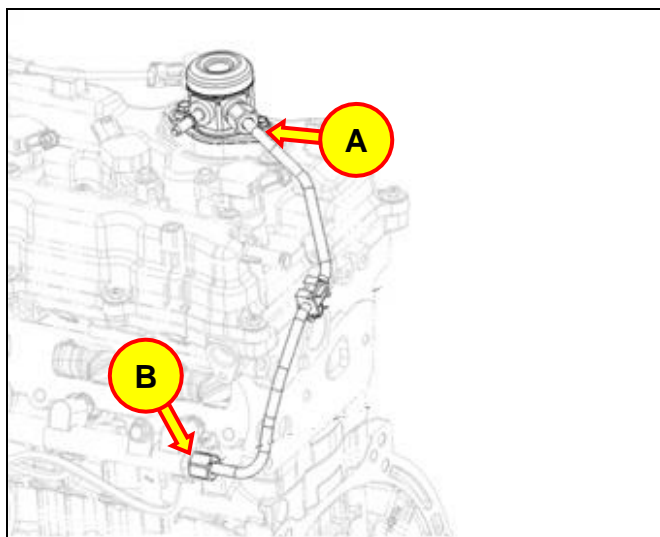
**26.5 ~32.4 Nm (2.7 ~ 3.3 kgf.m, 19.5 ~ 23.9 lb-ft)**



17. Remove the high pressure fuel pipe nut (B) from the delivery pipe **using the SST**.

**Tightening Torque:**

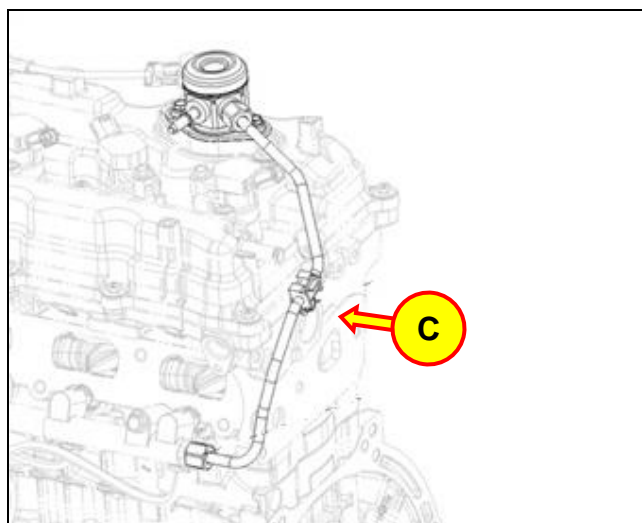
**26.5 ~32.4 Nm (2.7 ~ 3.3 kgf.m, 19.5 ~ 23.9 lb-ft)**



18. Loosen the function block nut (C) and remove and discard the old high pressure fuel pipe. Transfer the center bracket from the old pipe to the new pipe if needed.

**Tightening Torque:**

**7.8 ~11.8 Nm (0.8 ~ 1.2 kgf.m, 5.8 ~ 8.7 lb-ft)**



## ⚠ CAUTION

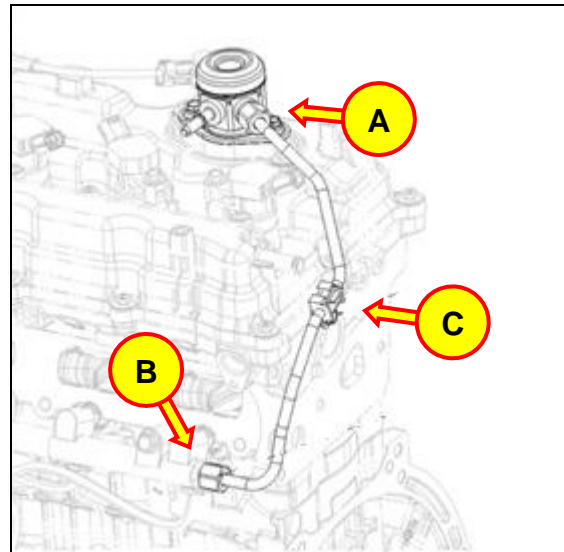
Follow the exact tightening process and sequence below to install the fuel pipe. Follow all procedures in TSB 19-FL-001H.

- Torque wrench is required for installation.
- Do not fully tighten or use a power tool when noted.
- Fuel leakage can occur if the fuel pipe is installed incorrectly.

19. Install the new high pressure fuel pipe **using the correct sequence**. Hand-tighten the fuel pipe nuts (A) and (B) at both ends of the fuel pipe.

## ⚠ CAUTION

Do NOT fully tighten.  
Do NOT use a power tool.



20. Attach the fuel pipe center bracket clamp to the engine by hand-tightening bracket nut (C). Then tighten nut (C) completely **using a torque wrench**.

### **Tightening Torque:**

**7.8 ~11.8 Nm (0.8 ~ 1.2 kgf.m, 5.8 ~ 8.7 lb-ft)**

21. Tighten the fuel pipe nuts (A) and (B) completely at both ends of the fuel pipe **using a torque wrench with the SST**.

### **Tightening Torque:**

**26.5 ~32.4 Nm (2.7 ~ 3.3 kgf.m, 19.5 ~ 23.9 lb-ft)**

22. Reinstall all removed parts in the reverse order of removal. Reprogram vehicle's audio presets. **For 2.0L Turbo**, fill and bleed the cooling system with new coolant.

## ⚠ CAUTION

Torque wrench required

## ⚠ CAUTION

Torque wrench and SST required

23. Start the vehicle and rev the engine to 4,000 RPM three times. Check for any indication of fuel leakage or fuel smell with an unused portion of the test paper used previously.

24. Check for any DTCs and perform the appropriate diagnostic service. Ensure no warning lights are present to complete the procedure.