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|------------------------|--|
| GROUP | MODEL |
| Safety Recall Campaign | 2021MY Sorento (MQ4a) and 2021-2022MY K5 (DL3a) w/2.5L T-GDI |
| NUMBER | DATE |
| SC214 | July 2021 |

SAFETY RECALL CAMPAIGN

SUBJECT:

HIGH-PRESSURE FUEL PIPE INSPECTION, REPLACEMENT AND TIGHTENING (SC214)

This bulletin provides information to inspect and, if required, replace the high-pressure fuel pipe on some 2021MY Sorento (MQ4a) and some 2021-2022MY K5 (DL3a) vehicles equipped with Theta III 2.5L T-GDI engines (refer to table below for production dates). Also, whether the fuel pipe is replaced or not, dealers are to ensure it is tightened with the proper torque. The fuel pipe connecting the high-pressure fuel pump to the fuel rail may have been installed with insufficient torque during assembly. In addition, a limited number of fuel pipes may have been manufactured out of specification for concentricity. As a result of insufficient torque or improper concentricity, fuel may leak at the pipe connections. Leaking fuel increases the risk of a fire, thereby increasing the risk of injury.

Follow the procedure outlined in this bulletin to inspect the Lot number and/or check for fuel leaking and, if required, replace the high-pressure fuel pipe. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.

| MY | Model | Engine | Production Date |
|---------|----------------|------------|--------------------------|
| 2021 | Sorento (MQ4a) | 2.5L T-GDI | 10/26/2020 to 06/08/2021 |
| 21-22MY | K5 (DL3a) | | 11/16/2020 to 05/12/2021 |

NOTICE

There is no charge to the vehicle owner for this repair. Under applicable law, you may not sell or otherwise deliver any affected vehicle until it has been repaired pursuant to the procedures set forth in this bulletin.

NOTICE

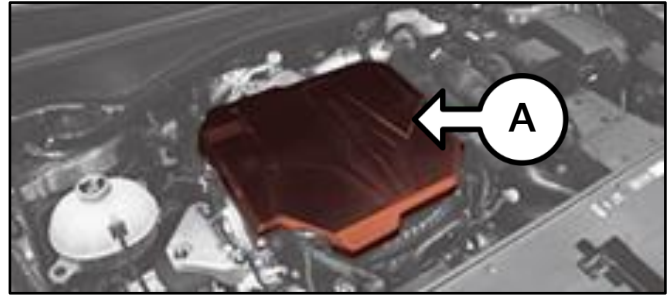
To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service → Warranty Coverage → Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.

SUBJECT:

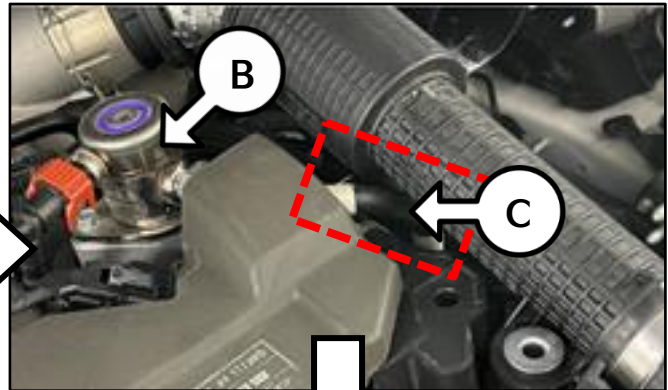
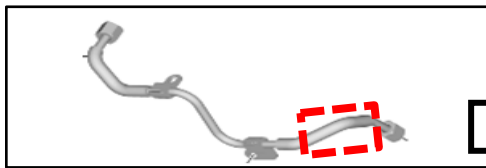
HIGH-PRESSURE FUEL PIPE INSPECTION, REPLACEMENT AND TIGHTENING (SC214)

Inspection Procedure:

1. Open hood and remove the engine cover (A).



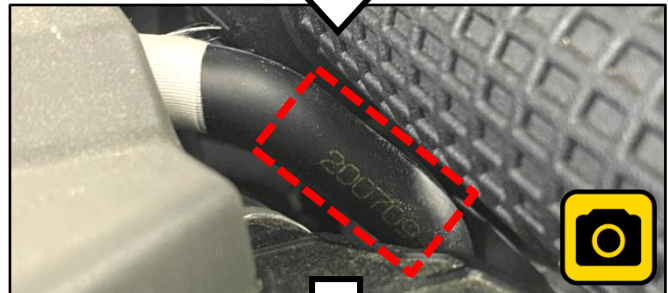
- 2a. From the high-pressure pump (B), locate the high-pressure fuel pipe (C) and pipe insulator.



- 2b. Check the lot number printed on the high-pressure fuel pipe insulator.

NOTICE

REQUIREMENT: Using the Warranty Claim Attachment feature on KVID, **take one (1) clear KVID photo of the lot number printed on the high-pressure fuel delivery pipe.**
(Attachment Type: 'XX').



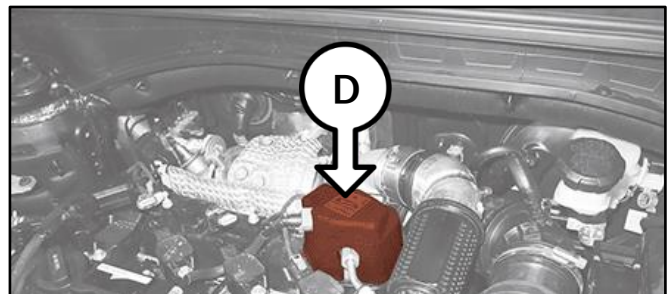
- 3a. If the Lot Number is **210111 (NG)**, replace the high-pressure fuel delivery pipe by referring to the 'Replacement Procedure' on page 4.

- 3b. If the Lot Number is **NOT 210111 (OK)** (as shown), then proceed to step 4 on page 3.



4. Remove the high-pressure fuel pump foam cover (D).

Note: It may be necessary to lift up on the ignition coil foam cover, DO NOT remove it or disconnect the ignition coil connectors as it is not required.



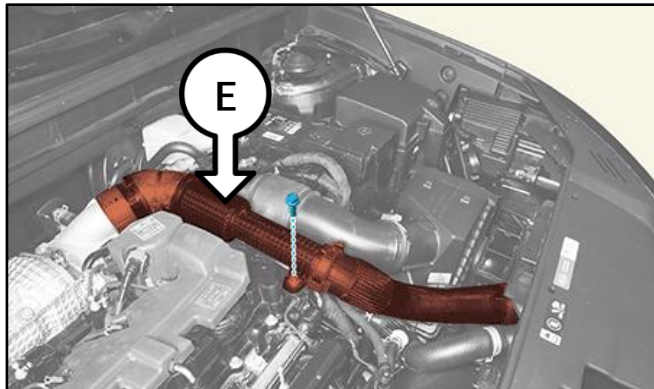
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- Remove the intercooler/intake hose (E) after removing the retaining bolt.

Note: Other interfering wire/hose connectors may be required to be disconnected to allow room for torque wrench space for step 6b below, [refer to page 6, step 5 \(A, B and D\)](#).

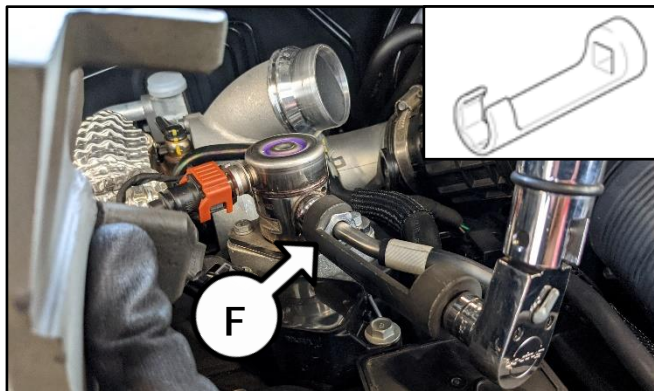
Note: The air cleaner assy. does NOT need to be removed.



- Using a torque wrench and SST 09314 3Q100, confirm that the high-pressure fuel pump flare nut (F) is torque to specification.

Tightening torque for flange nut F:
19.5 - 26. lb. ft. (26.5 - 32.4 Nm.)

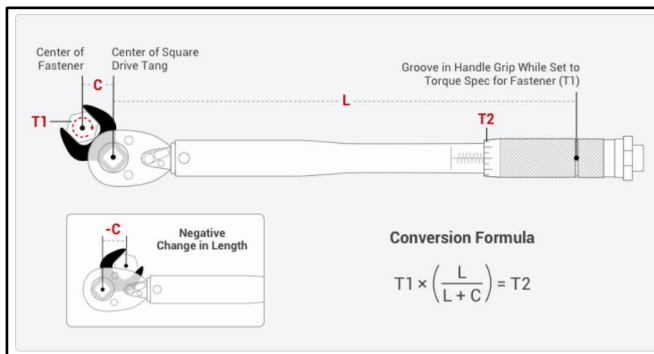
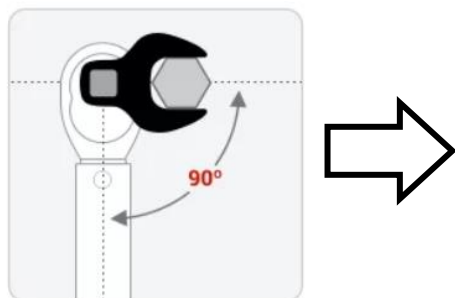
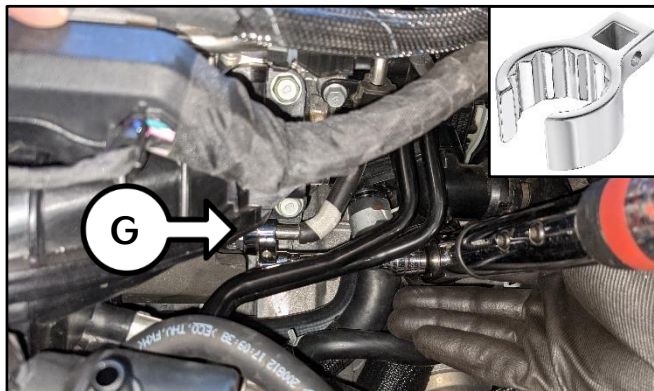
Note: Be sure to use the correct Op Code if the fuel pipe flange nut (F or G) is found to be loose and required to be torqued.



- Using a torque wrench and a 12pt/19mm crowfoot wrench, confirm that the opposite end high-pressure fuel delivery pipe flare nut (G) is torqued to converted specification below.

Tightening torque for flange nut G:
(using crowfoot wrench with a 1" change in length).

Using a 15" Torque Wrench Handle Length:
18.3 - 24.4 lb. ft. (24.8 - 33.1 Nm.)



Images courtesy of Tekton®.com

Reference: [Crowfoot Wrench Torque Conversion Calculator](#)



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7. **'Start'** the engine and press the accelerator pedal, two to three (2-3) times, up to 5,000 RPMs. Then allow engine to idle.

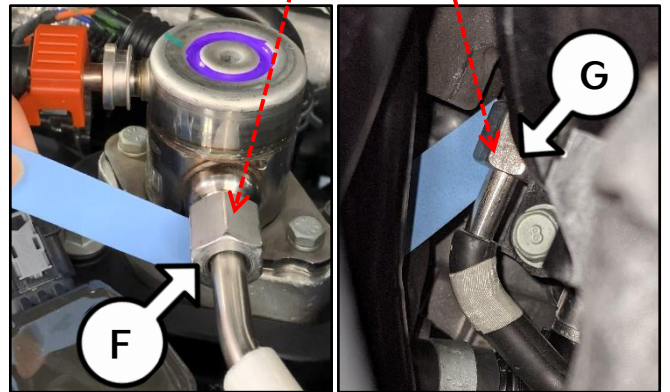
8a. Inspect the high-pressure fuel delivery pipe/flare nuts (F & G) for any smell/visual fuel leaks.

8b. Inspect the two (2) high-pressure fuel delivery pipe flare nuts (F & G) for fuel leak using a sheet of test paper (see below). Check both sides (L&R) of each flare nut with test paper.



| NG: Fuel Leakage | OK: No Leakage |
|------------------|----------------|
| | |

CAUTION
 Be sure to shut the engine 'OFF' immediately if a fuel leak is present.



9a. • If a fuel leak is found (NG), replace the high-pressure fuel delivery pipe by referring to the 'Replacement Procedure' on page 5.

9b. • If no leak is found (OK), reinstall all of the removed parts in the reverse order of removal.

NOTICE
 Never release a vehicle to a customer with a fuel leak. If any leak(s) are found that cannot be corrected, as outlined in this bulletin, please open a Techline Case Online.

IMPORTANT
 If a leak was present, be sure to wipe off any excess fuel that may have spread around surrounding parts/components.



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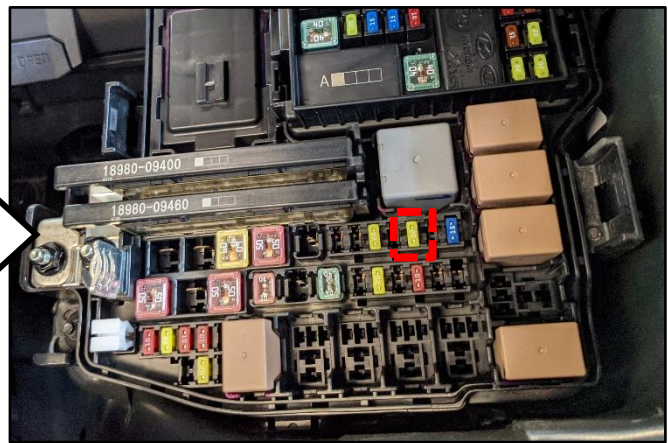
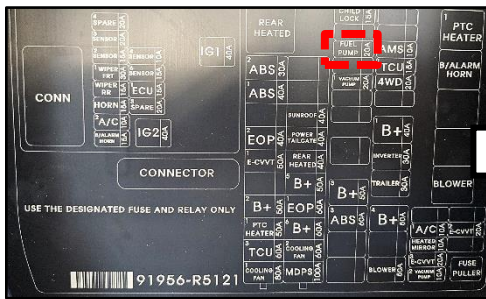
Replacement Procedure:

CAUTION

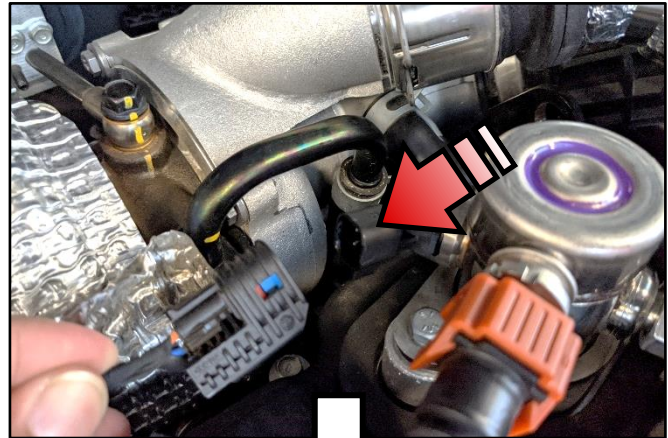
If the high-pressure fuel pipe is removed immediately after shutting the engine off, injury may occur by the release of highly pressurized fuel. **Please wait after engine is 'OFF' to start repairs. Refer to the applicable shop manual for further cautions when removing high pressure fuel system components.**

1. Shut the engine 'OFF'.

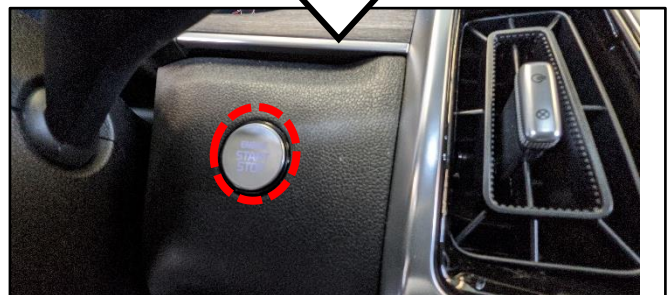
2. Remove the 20A fuel pump fuse.



3a. Disconnect the high-pressure fuel pump connector.



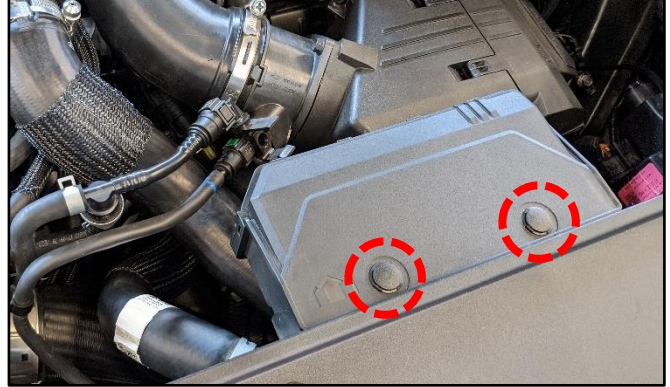
3b. Press the 'Start' button and allow the engine to run until it stalls.



SUBJECT:

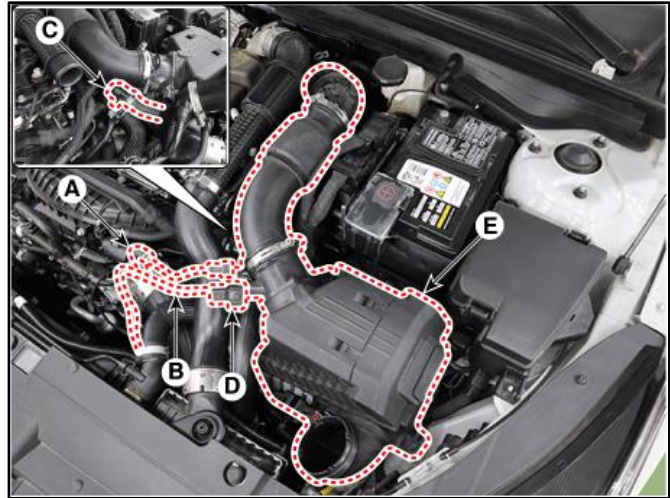
HIGH-PRESSURE FUEL PIPE INSPECTION, REPLACEMENT AND TIGHTENING (SC214)

4. Remove the two (2) air duct retaining fasteners.

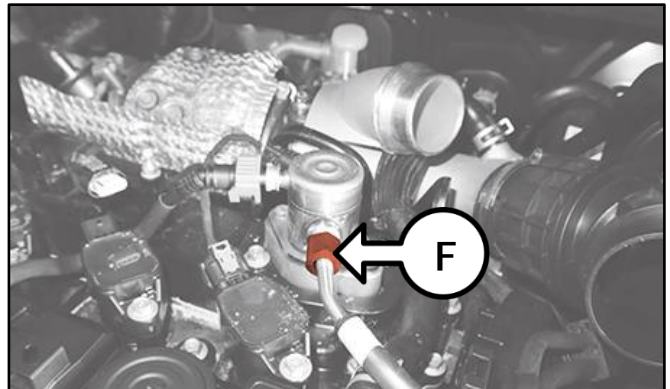


5. Disconnect the following prior to removing the air cleaner assembly (E):

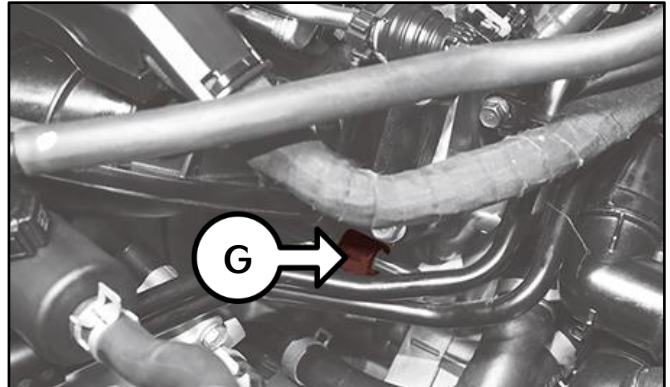
- A. Disconnect RCV hose
- B. Disconnect the vacuum hose.
- C. Disconnect the PCV hose
- D. Disconnect the ejector



6. Loosen the fuel pipe flange (F) at the high-pressure fuel pump using SST 09314 3Q100.



7. Loosen the fuel pipe flange (G) on the bottom opposite end using a 12pt/19mm crowfoot wrench.



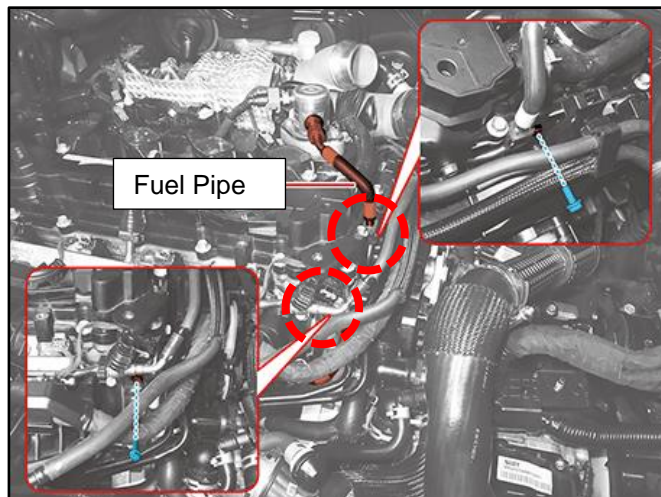
SUBJECT:

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8. Remove the two (2) fuel pipe retaining bolts to remove the fuel delivery pipe assembly from the vehicle.

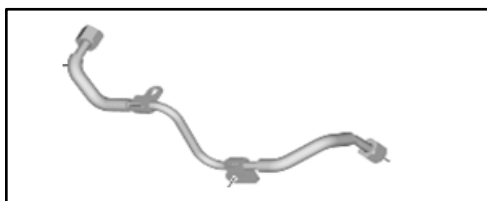
ⓘ IMPORTANT

Reuse the two (2) fuel delivery pipe retaining bolts. Ensure that the 'removed' high-pressure fuel pipe CANNOT be reused and discard.



Note: Use shop towels to help absorb residual fuel when removing the fuel pipe assembly.

9. Install the new high-pressure fuel pipe.



10. Install all removed parts/connections/fuse in the reverse order of removal.
11. **REINSPECTION:** Refer to page 4, (steps 7 - 8a, 8b) and confirm the new fuel pipe connections are not leaking fuel using the test strip.
12. Confirm normal vehicle operation and no DTCs.

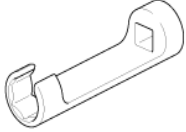



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AFFECTED VEHICLE RANGE:


| Model | Production Date Range |
|----------------|-----------------------------------|
| Sorento (MQ4a) | October 26, 2020 to June 8, 2021 |
| K5 (DL3a) | November 16, 2020 to May 12, 2021 |

REQUIRED TOOL:

| Tool Name | Figure | Comments |
|--|---|---|
| Torque Wrench Socket SST 09314 3Q100 |  | SST No. 09314 27130 may also be used |
| Test Paper NWPGEN180 |  | For order <u>or</u> replacement, contact Snap-on Business Solutions at (888) 542-1011 |
| Deep Flare Nut 19mm Crowfoot Wrench* (3/8" Drive 12-point) |  | Snap-On P/N ANM19 <u>or</u> other equivalent. Locally Sourced |
| Torque Wrench (3/8" Drive - 15" Long) |  | Locally Sourced |

*Dealers will be reimbursed \$45 for the purchase of the 12pt/19mm flare nut wrench on their monthly parts statement.

REQUIRED PART:

| Part Name | Part Number | Figure | Qty. |
|--------------------|----------------|--|------|
| Fuel Delivery Pipe | 35305 2S200QQK |  | 1 |

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WARRANTY INFORMATION:

N Code: N99 C Code: C99

| Claim Type | Causal P/N | Qty. | Repair Description | Labor Op Code | Op Time | Replacement P/N | Qty. |
|------------|----------------|------|---|---------------|------------|-------------------|------|
| R | 35305 2S200 | 0 | (SC214) Lot Inspection (OK) + Fuel Pipe Flange Torque Check (OK) + Engine REV (OK) + Leak test (OK) | 211A21I0 | 0.5 M/H | N/A | 0 |
| | | | (SC214) Lot Inspection (OK) + Fuel Pipe Flange Torque Check (NG) + Engine REV (OK) + Leak test (OK) | 211A21R0 | | | |
| | | | (SC214) Lot Inspection (NG) + High-Press. Fuel Pipe replacement + Engine REV (OK) + Leak test (OK) | 211A21R1 | 1.0 M/H | 35305 2S200QQK | 1 |
| | | | (SC214) Lot Inspection (OK) + Flange Torque Check (OK) + Engine REV (OK) + Leak Test (NG) + High-Press. Fuel Pipe replacement + Engine REV (OK) + Leak test (OK) | 211A21R2 | 1.3 M/H | 35305 2S200QQK | 1 |

Refer to Warranty Bulletin 2021-14 for claim submission procedures. A photo of the Lot number found on the hi-pressure fuel pipe must be attached using the KVID app as a Warranty Claim Attachment type 'XX - Other', regardless of replacement or inspection only.

NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SC214 when accessing the WebDCS system.

