



GROUP

MODEL

FUE

2016-2020MY  
Optima (JFa)

NUMBER

DATE

061

October 2022

## TECHNICAL SERVICE BULLETIN

SUBJECT:

## FUEL PUMP FILTER INSPECTION/REPLACEMENT

This bulletin provides information associated with the 'Warranty Extension Program' (WTY028) to inspect and, if necessary, replace the fuel pump filter assembly on 2016-2020MY Optima (JFa) vehicles produced from August 28, 2015 through June 23, 2020, for repairs that may be necessary to address a low-pressure fuel pump failure to be covered for 15 years / 150,000 miles, whichever comes first starting from the date the vehicle was first put into service. The affected vehicles may exhibit an intermittent reduction in engine power, contain an active or stored DTC P1233 and/or exhibit a 'No Start' condition due to a cracked fuel pump filter housing. Follow the procedure outlined in this publication to inspect and, if necessary, replace the Fuel Pump Filter Assembly with a new one. Refer to the table guide below.

## DTC Description:

P1233: Low Pressure Fuel System - High Deviation between target and current pressure.

| MY        | Engine Type                                            | Inspection Procedure  | Page |
|-----------|--------------------------------------------------------|-----------------------|------|
| 2016-2020 | 2.0L-T GDI / 2.4L GDI THETA II<br>and 1.6L-T GDI GAMMA | A                     | 2    |
| 2016-2018 |                                                        |                       |      |
| 2019-2020 | 1.6L-T GDI GAMMA                                       | B                     | 3    |
|           |                                                        |                       |      |
| MY        | Engine Type                                            | Replacement Procedure |      |
| 2016-2020 | All                                                    | Same                  | 3    |



A printed copy is for reference only; publication information can be updated at any time.

Always refer to KGIS for the latest information. After logging in kdealer.com, the newest technical publications are listed in 'Service Releases' and has the latest service information that has been released.

**Inspection Procedure 'A': (for 16-18MY 1.6L-T GAMMA and 16-20MY 2.0L-T, 2.4L GDI THETA II)**

1. Using KDS and with engine running 'ON', confirm if DTC P1233 is present.

- DTC P1233 is not stored, proceed to step 2.
- DTC P1233 is stored, then proceed to Replace the fuel filter by referring to "Engine Control / Fuel System → Fuel Delivery System → Fuel Filter → Repair procedures" in the applicable Shop Manual on KGIS to complete service.

2. Shut engine 'OFF' and allow vehicle to sit for three (3) minutes.

3. Turn ignition switch to 'ON' position.

**DO NOT START THE ENGINE.**

- 4a. Using KDS, select 'Data Analysis' and highlight the following two (2) items:

- 4b. Select 'Text' and change to 'Graph'.

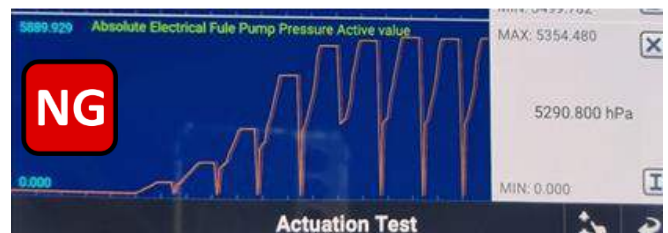
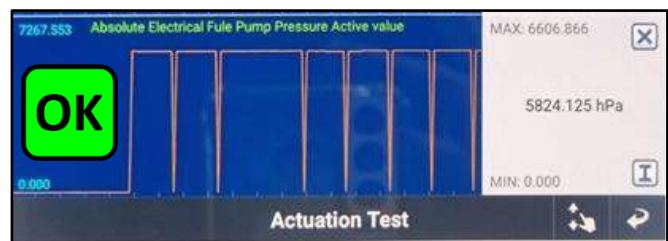
- 4c. Select 'Actuation Test' tab and find 'Fuel Pump Relay'.

1. Absolute Electrical Fuel Pump Low Pressure Active Value.
2. Absolute Electrical Fuel Pump Low Pressure Set Point.

- 5a. Start the actuation of the Fuel Pump Relay and immediately observe the 'Absolute Electrical Fuel Pump Low Pressure Active Value' graph on the KDS screen.

- 5b. Graph displays five (5) or more even and continuous bars of pressure (OK), then no further action is required.

- 5c. Graph displays uneven bars (NG), then proceed to 'Replacement Procedure' on page 3.



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**FUEL PUMP FILTER INSPECTION/REPLACEMENT****Inspection Procedure 'B': (for 19-20MY 1.6L T-GDI GAMMA)**

- 1a. DTC P1233 is not stored, proceed to step 2.
- 1b. DTC P1233 is stored, then proceed to 'Replacement Procedure' below to replace the fuel filter.
2. Release residual pressure in fuel line by referring to 'Engine Control / Fuel System → Fuel Deliver System → Release Residual Pressure in Fuel Line' in the applicable Shop Manual on KGIS.



**Failure to properly follow the 'Release Residual Pressure in Fuel Line Procedure' may result in serious injuries.**

3. Check fuel pressure by referring to 'Engine Control / Fuel System → Fuel Delivery System → Fuel Pressure Test (Low pressure system)' in the applicable Shop Manual on KGIS.

**After shutting engine off:**

- Fuel pressure gauge reading remains above 100 kPa (14.5 PSI) after 1 minute (OK), diagnose customer concern(s) using normal service procedures. Follow reassembly instruction on KGIS.
- Fuel pressure gauge reading drops below 100 kPa (14.5 PSI) within 1 minute (NG), then proceed to the 'Replacement Procedure' below.

**Replacement Procedure:**

1. Replace the fuel filter by referring to "Engine Control / Fuel System → Fuel Delivery System → Fuel Filter → Repair procedures" in the applicable Shop Manual on KGIS to complete service.



SUBJECT:

**FUEL PUMP FILTER INSPECTION/REPLACEMENT****AFFECTED VEHICLE RANGE:**

| Model        | Production Date Range            |
|--------------|----------------------------------|
| Optima (JFa) | August 28, 2015 to June 23, 2020 |

**REQUIRED TOOL:**

| Tool Name                   | Figure                                                                            | Comments              |
|-----------------------------|-----------------------------------------------------------------------------------|-----------------------|
| KDS                         |  | Kia Diagnostic System |
| Fuel Pressure Gauge Adapter |  | SST K353 D4100        |
| Fuel Pressure Gauge         |  | SST 09353 24100       |

**REQUIRED PART:**

| Part Name   | Part Number | Figure                                                                              | Qty. |
|-------------|-------------|-------------------------------------------------------------------------------------|------|
| Fuel Filter | 31112 C2500 |  | 1    |

**WARRANTY INFORMATION:****N Code: I3T C Code: ZZ4**

| Model            | Claim Type | Causal P/N  | Qty. | Repair Description                                                                      | Labor Op Code | Op Time | Replacement P/N | Qty. |
|------------------|------------|-------------|------|-----------------------------------------------------------------------------------------|---------------|---------|-----------------|------|
| JFa<br>(16-20MY) | W          | 31120 C2500 | 0    | Fuel Pump Pressure<br><u>Inspection 'A'</u>                                             | 222A09I0      | 0.2 M/H | N/A             | 0    |
|                  |            |             |      | Fuel Pump Pressure<br><u>Inspection 'A'</u> & Fuel Filter Replacement                   | 222A09R0      | 0.8 M/H | 31112 C2500     | 1    |
| JFa<br>(19-20MY) | W          | 31120 C2500 | 0    | Fuel Pump Pressure<br><u>Inspection 'B'</u><br>(1.6L-T Gamma)                           | 222A20I0      | 0.3 M/H | N/A             | 0    |
|                  |            |             |      | Fuel Pump Pressure<br><u>Inspection 'B'</u> & Fuel Filter Replacement<br>(1.6L-T Gamma) | 222A20R0      | 0.9 M/H | 31112 C2500     | 1    |