AfterSales Diagnostic Sheet

MASERATI

MAS002808

(BOL 21-26)

From: Aftersales - TSO
To: Maserati Network
Auburn Hills, MI.
October 25, 2021

NOTE: The below in depth diagnostic procedures are to be used along with the procedures listed in the Workshop Manuals if a more comprehensive diagnosis is required.

Diagnosis of the tank fuel pump

Issue: Possible DTCs P0087-00 P304C-00 or P0148-00 in ECM, reduced engine power or difficult to start the engine (crank but no start)

Models: Maserati M156, M157 and M161 with gasoline engines (also MHEV in LATAM)

Issue Description: Lack of fuel pressure from the tank fuel pump

Conditions: Anomaly constantly or intermittently present

ECU Errors:

The following DTCs may be present in the ECM module:

- P0087-00 (008700) Fuel rail pressure too low (Bank 1)
- P304C-00 (304C00) Fuel rail pressure sensor - performance low
- P0148-00 – Fuel Delivery Error

Troubleshooting:

If the anomaly is suspected of being related to an incorrect supply of fuel by the low-pressure pump, proceed with the following diagnostic steps:

- Do not remove the pump from the tank. Take a picture of the two tank flanges (both right and left) to show that the seal shown in Figure 1 is still present and intact

- Install a T-junction with a fuel pressure gauge on the fuel delivery line. Connect a multimeter to the rear part of the pump connector between pins 3 and 4 to measure the pump supply voltage.

Figure 1

- Start the engine (if possible) and perform a test drive verifying that the low pressure value is always at 6 bar (rapid oscillations of the pressure gauge around 6 bar must be considered as normal pulsations generated by the high pressure pump). The pump's supply voltage must be approximately 8.5-9 Volts in low speed mode and 13 Volts in high speed (for the V8 GTS and Trofeo engines, the power supply voltage is managed via PWM (Pulse Width Modulated signal) by the FPCM module)
- Record a video to document any anomaly with the pressure found during the road test and be sure to show the presence of the two seals indicated in Figure 1. (please find attached to this Bulletin in ModisCS, a sample video of an abnormal pressure drop visible during an acceleration at high engine load)
- In cases of an abnormal drop in fuel pressure values that are below specifications, this could be associated with power supply values. Investigate and check for any electrical anomaly on the power supply or ground circuit of the pump.
- In cases of an abnormal drop in fuel pressure values that are below specifications and no anomalies were found with the power supply values, there is the possibility of a problem with the low pressure pump or in the fuel transfer system between the two tank saddles.
- In order to check the function of fuel transfer system, continue with the diagnosis referring to Bulletin MAS002343_ Diagnosis of the fuel transfer system inside the fuel tank

Considerations: If the diagnosis indicates a problem with a fuel tank pump, please open a Blue on Line as Factory Information and attach the following::

- The results of the diagnostic steps performed.
- Pictures of the flanges of the two tank pump units (both right and left) showing the traceability labels.
- A video of the pressure measured with a pressure gauge and the pump power supply voltage when the anomaly occurs.