

AfterSales Diagnostic Sheet



MAS002343
(BOL 21-27)

From: Aftersales - TSO
To: Maserati Network
Auburn Hills, MI.
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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 fuel transfer system inside the fuel tank

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

Models: Maserati M156, M157 and M161 V6 with gasoline engines

Issue Description:

- Lack of fuel on the left side of the fuel tank due to the malfunction of the fuel transfer system

Conditions: Customer complaint is always present, the IPC still shows the presence of fuel in the tank (normally less than half a tank on gauge)

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

Troubleshooting:

- Using a multimeter with the ignition in RUN and without disconnecting the pump connector on the fuel tank, check the Voltage value of the signal read by the two level senders (right and left) on pin 1 of the connector. This value can change from 0.5V (full tank) to 4.5V (empty tank).

- If the values show the left side of the tank is empty, remove the low fuel pressure pump (left side of the tank) and check to see if fuel is actually there or not.

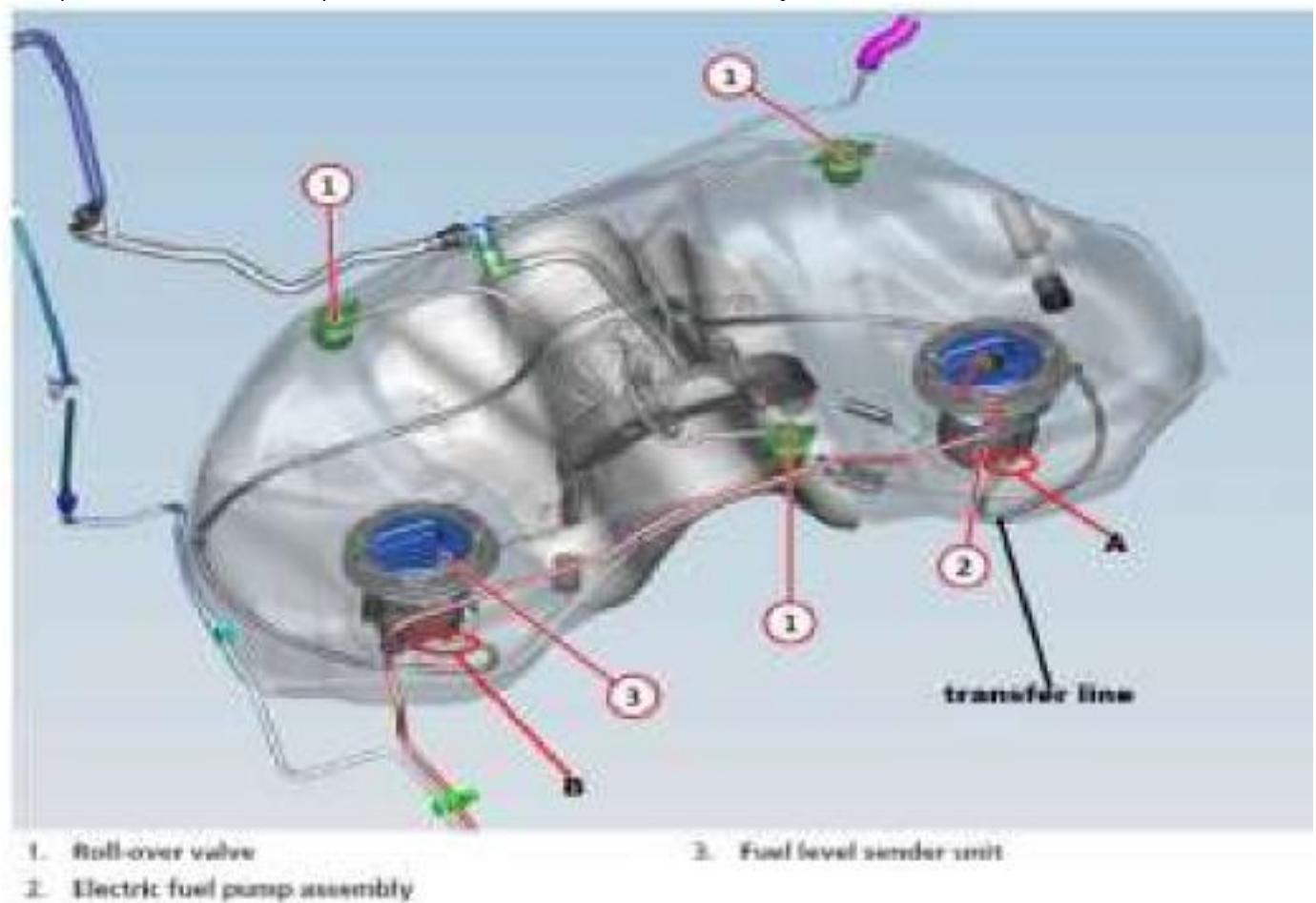


Figure 1

- If no fuel can be found, perform a fuel filling of at least 13 liters and start the engine.
- If the engine starts, inspect the fuel transfer pipe from the right side to the left side of the fuel tank (refer to Figure 1) and in particular:
 - a) Check that the quick connector of junction A (figure 1) is correctly inserted and that the sealing o-ring is present (figure 2). If the pipe is not correctly inserted proceed to restore the connection. If the o-ring is not present, the low pressure fuel pump must be replaced.



Figure 2: Sealing o-ring

- b) Disconnect the transfer pipe from the basket on the right side of the tank (component B in Figure 1), and check that by connecting a transparent tube to it (figure 3), the fuel is correctly sucked when the engine is running. If the fuel is not sucked, continue with step c.



Figure 3

- c) Check that the transfer line is not kinked, damaged or blocked

Considerations: In the event that the transfer pipe is intact and correctly connected but the fuel is not sucked in (based on the test performed in point b), it is possible that the left side fuel pump has an internal problem and the fuel pump needs to be replaced.

Note: In order not to distort the possible diagnosis by Maserati on the returned components (in case the part is requested to be returned for analysis), please do not disassemble the fuel pump.