

Maserati Technical Bulletin

Date: January 15, 2019

Bulletin No. – MAS001749 – MTB 19-02 Fuel Delivery
Line Replacement - US

Safety Recall Campaign - #378

Supersedes: N/A

MASERATI

Model: Quattroporte (M156) and Ghibli (M157)

Model Years: 2014 and 2015

Subject: Vehicle Safety Recall Campaign #378 - Fuel Delivery Line Replacement

MASERATI SAFETY RECALL BULLETIN

PERFORM THE PROCEDURE OUTLINED IN THIS TECHNICAL BULLETIN ON ALL AFFECTED NEW VEHICLES <u>BEFORE CUSTOMER DELIVERY</u> OR FOR VEHICLES ALREADY SOLD AND DELIVERED THE NEXT TIME THE VEHICLE IS IN THE SHOP FOR MAINTENANCE OR REPAIRS.

Maserati dealers must ensure recalls are completed after having been notified by Maserati North America, Inc. (MNA) that a safety-related defect or noncompliance exists in any motor vehicle or item of replacement equipment in the dealer's possession at the time of notification. In MNA's case, this notification would typically be made by the issuance of a recall notification in the form of a Technical Bulletin.

Under the National Traffic and Motor Vehicle Safety Act of 1966, as amended, if a recall campaign is announced by MNA, dealers must ensure that all recalls on new vehicles and new items of replacement equipment are completed BEFORE delivery to the consumer. This means that dealers may not legally deliver new motor vehicles or new items of replacement equipment to consumers with an open recall.

The Safety Act also prohibits dealers from selling or leasing the motor vehicle or item of replacement equipment, unless and until the open recall has been completed BEFORE delivery. This also pertains to vehicles in the Certified Pre-Owned program, and to items of replacement equipment.

Finally, MNA dealers should not sell or use parts that have been recalled by MNA. Please follow the specific instructions provided by MNA on the return or disposition of any parts.

Description of Vehicle Safety Recall #378

Maserati S.p.A. and MNA have determined that the above described vehicles were manufactured with plastic fuel lines (Num. 9 in Fig.1) that may have been damaged by foreign particles present during fuel line production and assembly by the supplier that may have scratched the inside of the fuel line eventually leading to a fuel leak. Leaking fuel may, in certain circumstances and in the presence of an ignition source, lead to a fire. A fire can result in increased risk of occupant injury and injury to persons outside the vehicle.

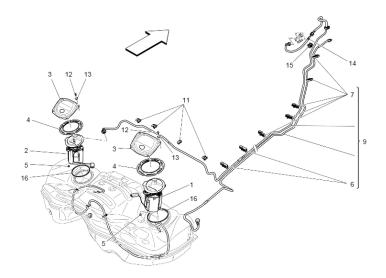


Fig.1

Which Vehicles Are Affected

Please refer to ModisCS+ for the affected vehicles.

Vehicle Remedy Information

- 1. Check that the vehicle is included in this Recall Campaign, and that this repair has not been previously performed.
- Install the new fuel delivery line kit as shown below.
- 3. The recall procedure is now complete.

This repair procedure will be performed free of charge to the customer.

Parts Needed For The Recall

For this Recall Campaign, the fuel delivery line kit (3 lines and clamps) must be ordered from the Maserati Parts Department.

Line Kit P/N Model	Line Kit P/N Model
673007365 for M156 V6 AWD	673007368 for M157 V6 RWD
673007366 for M156 ∀8 Dual pump	673007369 for M157 V6 AWD
673007367 for M156 ∨8 Single pump	

NOTE: P/N: 673007367 is blocked. You must submit a PHD with the VIN when ordering.

The original 1 piece fuel delivery line will now be replaced by the above kits which contain 3 lines. The engine connection line (1), the body line (2), and the fuel tank connection line (3).

OPERATING PROCEDURES FOR V6

NOTE: Perform this repair when the engine is cold.

NOTE: It is recommended that the fuel level be less than a half tank for this repair.

- 1. Drive the vehicle on the lift.
- 2. Disconnect the battery (Section 8.20.001 02 of the Workshop Manual).
- 3. Use the fuel fill funnel located in the trunk to vent any fuel tank pressure by inserting it into the filler neck.
- 4. Remove the rear seat cushion (Section 9.42.006 02 of the Workshop Manual).
- 5. Remove the windshield water containment bay as shown below and in Section 9.15.016 02 of the Workshop Manual.

- a. Remove the wiper arms and the engine cover panels.
- b. Using a Teflon wedge, remove the I/s and r/s windshield trim. (Fig.2)



Fig.2

c. Remove the I/s and r/s inspection covers. (Fig.3)





Fig.3

Fig.4

- d. Remove the exterior lower windshield trim. (Fig.4)
- e. Remove the nuts holding the water containment tray. (Fig.5)





Fig.5 Fig.6

f. Remove the bolts on the engine compartment front cross member. (Fig.6)

g. Remove the bolt between wiper linkage and the front cross member. (Fig.7)



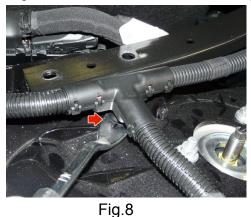


Fig.7

- h. Unsnap the wire harness support clip and move the front cross member to the side. (Fig.8)
- 6. a. Remove the 4 screws and then the I/s fuel pump inspection cover (Fig.9).





Fig.9 Fig.10

b. Release the safety (2) and unsnap the quick release fuel delivery line (3) as shown in Fig.10.

NOTE: Use an absorbent cloth to wipe off any residual fuel when disconnecting the delivery line from the pump as shown in Fig.11.



Fig.11

7. In the engine compartment, remove the engine cover, release the safety and disconnect the fuel delivery line, then unclip the fastening clamp. (1 in Fig.12)



Fig.12

8. Unclip the delivery line from the 2 fastening clamps. (Fig.13)



Fig.13

9. Remove the screw on the heat shield between the engine and the r/s dome. (Fig.14)



Fig.14

10. Pull the heat shield back and then unclip the fuel delivery line from the securing clamp. (Fig.15)



Fig.15

11. Only on the Ghibli AWD, remove the 3 bolts and the metal plate behind the r/s cylinder head. (Fig.16)



Fig.16

12. Release the safety and unhook the quick release on the fuel delivery line located behind the r/s cylinder head. (Fig.17)



Fig.17

13. Replace the old fuel delivery line on the engine with the new fuel delivery line from the kit as shown in Fig.18.



Fig.18

- 14. Remove the I/s and r/s central underbody panels as shown in sections 9.14.043 00 and 9.14.044 00 of the Workshop Manual.
- 15. Position a hydraulic lift with a brace to support the fuel tank as shown in Fig.19



Fig.19

16. Remove the bolts on the fuel tank support straps. (Fig.20)



Fig.20

17. Lower the fuel tank just enough to unsnap the fuel delivery line from the 4 clamps located between the fuel tank and the chassis. (Fig.21)





Fig.21

18. On the TPMS sensor, unlock the safety tab and disconnect the wire connector, then release the harness fastener. (1 in Fig.22)





Fig.22

Fig.23

- 19. Unclip the fuel delivery line from the 3 fastening clamps. (Fig.23)
- 20. Remove the heat shield screws and the fasteners (1) then remove the 2 heat shields as shown in Fig.24 and Fig.25.





Fig.24





Fig.25

21. Unclip the fuel delivery line from the clamps located between the engine and the r/s dome. (Fig.26)





Fig.26

Fig.27

- 22. Unclip the fuel delivery line from the lower 2 clamps. (1 in Fig.27)
- 23. Cut the old fuel delivery line (Fig.28) to facilitate the next several steps.





Fig.28

24. With snap ring pliers, loosen the clamps and remove the remaining sections of the fuel delivery line. (Fig.29)

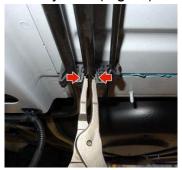


Fig.29

- 25. Install the new fuel lines following the removal procedures in reverse order.
- 26. Secure the new engine line into the engine compartment clamps. (Fig.30)



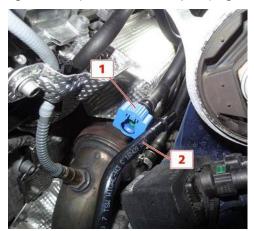


Fig.30

Fig.31

27. Attach the new body delivery line to the engine delivery line and snap the lock closed. (Fig.31)





Fig.32

Fig.33

- 28. Attach the new tank delivery line to the fuel pump. (3 in Fig.32)
- 29. Snap the new delivery line into the securing clamps. (2 in Fig.33)

30. Attach the new tank delivery line (3) to the new body delivery line (2) and snap the lock closed. (Fig.34)

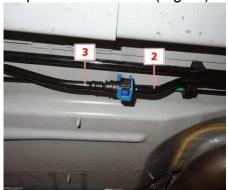




Fig.34

Fig.35

- 31. Snap the new tank delivery line into the securing clamps above the fuel tank. (Fig.35)
- 32. Tighten the fuel tank strap bolts to 35Nm. (Fig.36) and remove the lift.



Fig.36

- 33. With the new fuel delivery lines installed and secured, perform the following function test of the system before re-installing the rear seat cushion and the windshield water containment bay.
 - a. Cycle the ignition to the run position and leave on for 30 seconds, during these 30 seconds inspect the connections and tubing for any signs of fuel leakage.
 - b. Repeat the ignition cycle one additional time prior to cranking engine. Verify that there are no leaks in the system.
- 34. Re-install the remaining components.

OPERATING PROCEDURES FOR V8

NOTE: Perform this repair when the engine is cold.

NOTE: It is recommended that the fuel level be less than a half tank for this repair.

- 1. Drive the vehicle on the lift.
- 2. Disconnect the battery (Section 8.20.001 02 of the Workshop Manual).

NOTE: Use the fuel fill funnel located in the trunk to vent any fuel tank pressure by inserting it into the filler neck.

- 3. Remove the rear seat cushion as shown in Section 9.42.006 02 of the Workshop Manual.
- 4. Remove the 4 screws and then the I/s fuel pump inspection cover. (Fig.1)
 - On a dual pump system, remove the r/s inspection cover also.



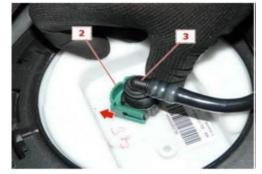


Fig.1

Fig.2

5. Release the safety (2) and unsnap the quick release on the fuel delivery line (3) as shown in Fig.2.

NOTE: Use an absorbent cloth to wipe off any residual fuel when disconnecting the delivery line from the pump as shown in Fig.3.





Fig.3

Fig.4

6. In the engine compartment, remove the engine cover then release the engine fuel delivery line from the securing clamps. (Fig.4)





Fig.5 Fig.6

- 7. Disconnect the engine fuel delivery line from the body fuel delivery line with pinch pliers (e.g. Mac Tools P11LRGLA, 11" pliers) as shown in Fig. 5.
- 8. Remove the engine fuel delivery line. (Fig.6)
- 9. Remove the I/s and r/s central underbody panels as shown in sections 9.14.043 00 and 9.14.044 00 of the Workshop Manual.
- 10. Position a hydraulic lift with a brace to support the fuel tank as shown in Fig.7.





Fig.7

Fig.8

- 11. Remove the bolts on the fuel tank support straps. (Fig.8)
- 12. Lower the fuel tank just enough to unclip the fuel delivery line from the 4 clamps located between the fuel tank and the chassis. (Fig.9 and Fig.10)





Fig.9

Fig.10

13. On the TPMS sensor, unlock the safety tab and disconnect the wire connector, then release the harness fastener (1 in Fig.11).



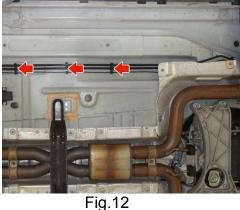


Fig.11

- 14. Unclip the fuel delivery line from the 3 fastening clamps. (Fig.12)
- 15. Remove the heat shield screws and the fasteners (1) then remove the 2 heat shields as shown in Fig.13 and Fig.14.





Fig.13





Fig.14

16. Unclip the fuel delivery line from the clamps located between the engine and the r/s dome. (Fig.15)



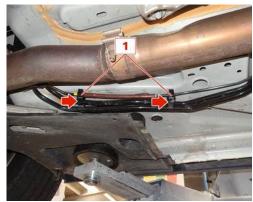


Fig.15

Fig.16

- 17. Unclip the fuel delivery line from the lower 2 clamps. (1 in Fig.16)
- 18. Cut the old fuel delivery line (Fig.17) to facilitate the next several steps.





Fig.17

19. With snap ring pliers, loosen the clamps and remove the remaining sections of the fuel delivery line. (Fig.18)

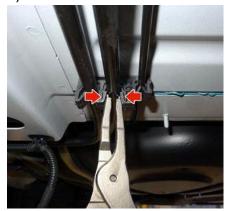


Fig.18

20. Install the new engine delivery line (Fig.19) into the engine compartment clamps. (Fig.20)





Fig.19 Fig.20

21. Attach the new body delivery line (2) to the engine delivery line (1) and snap the lock closed. (Fig.21)

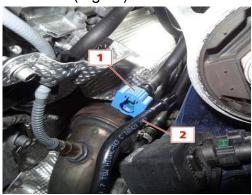




Fig.21

Fig.22

- 22. Attach the new tank delivery line to the fuel pump. (3 in Fig.22)
- 23. Snap the new delivery line into the securing clamps. (2 in Fig.23)





Fig.23 Fig.24

24. Attach the new tank delivery line (3) to the new body delivery line (2) and snap the

lock closed. (Fig.24)

25. Snap the new tank delivery line into the securing clamps above the fuel tank. (Fig.25)





Fig.25

Fig.26

- 26. Tighten the fuel tank strap bolts to 35Nm. (Fig.26) and remove the lift.
- 27. With the new fuel delivery lines installed and secured, perform the following function test of the system before re-installing the rear seat cushion.
 - a) Cycle the ignition to the run position and leave on for 30 seconds, during these 30 seconds inspect the connections and tubing for any signs of fuel leakage.
 - b) Repeat the ignition cycle one additional time prior to cranking engine. Verify that there are no leaks in the system.
- 28. Re-install the remaining components.

NOTE: Dispose of the old fuel line according to all Local and Federal **Environmental Guidelines.**

Warranty Information

Campaign Number	378
Warranty Code	24
Defect Code	063
Component code	1.43.109
 Labor Operation for V6 engine vehicles 	1.43.109.9 (2.25h)
 Labor Operation for V8 engine vehicles 	1.43.109.8 (1.7h)
Component Part Number	See parts section