

Maserati Technical Bulletin

Date: June 26th, 2017

Bulletin No. – MAS001282 - Front Seat Wiring Harness
Inspection/Replacement

Recall Campaign - 342 Supersedes: N/A

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Model: Levante (M161), Quattroporte (M156) and Ghibli (M157)

Model Year: 2014, 2015, 2016, 2017

Subject: Vehicle Safety Recall Campaign 342 – Front Seat Wiring Harness

Inspection / 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 342

Maserati S.p.A. and MNA have determined that the above described vehicles may have been manufactured with an incorrect seat wiring harness layout, which can cause the seat wiring harness to rub against metal points on the seat/seat frame assembly. Through normal seat adjustment operation, and over time, this can lead to an inoperative seat adjustment system, and in rare cases, a potential risk of fire due to an electrical short to ground between the seat wiring harness and the seat adjustment motor assembly.

Which Vehicles Are Affected

Please refer to VIN list in ModisCS+ for the affected vehicles in the U.S. and Canada

Vehicle Remedy Information

- 1. Check that the vehicle is included in this Recall campaign, and that this repair has not been previously performed.
- 2. Inspect the Driver Front Seat Wiring Harness for proper routing and protection, and if necessary, replace the Driver Front Seat Wiring Harness.
- 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, you will need "Fabric Tape", 4 wire ties and 2 "25A" low profile mini fuses that should be purchased from Wurth. The "Fabric Tape" is also available from the Maserati Parts Department and if necessary, from FCA (MOPAR) Dealers. The wire harness (if needed) must be ordered with a "PHD" from the Maserati Parts Dept.

- 1. Wurth tape, P/N: 198510025 (1 roll for 15 vehicles) or, Tape, Maserati P/N: 673004874 (1 roll for 15 vehicles) or, Tape, MOPAR P/N: 68065586AA (1 roll for 15 vehicles)
- 2. Wurth Wire Ties (size 4.8 X 280 mm) P/N: 0502151 (4 for each seat)
- 3. Wurth low profile mini fuses, 25A (2 per vehicle) P/N: 1731325
- 4. Driver Seat wire harness (if necessary) Reference the attached Excel File: "PN Look-up Maserati Recall 342"

OPERATING PROCEDURES

L/F Seat removal

Procedure "A" – Installation of fuses – Refer to the "PN Look-up Maserati Recall 342" file to find out if the VIN requires the installation of the fuses.

Procedure "B" – Inspecting / Taping of the Motors and Routing of the harness Procedure "C" – Replacing the Driver Side Seat Harness

L/F Seat removal





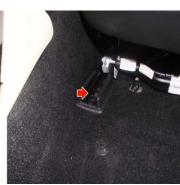


Fig.1

Fig.2

- 1. Move the L/F seat as forward as possible and then remove the rear mounting bolts. (Fig.1)
- 2. Move the L/F seat as far back as possible and remove the front mounting bolts. (Fig.2)
- **3.** Disconnect the battery.
- **4.** Carefully tilt the seat back and disconnect the wire connectors. (Fig.3)





Fig.3

Fig.4

5. Carefully remove the seat from the vehicle and place it on a bench. (Fig.4)

Procedure "A" - Installation of Fuses

NOTE: Check the "**PN Look-up Maserati Recall 342**" file to see if the vehicle being worked on requires the fuses.

1. With the battery disconnected, remove the 2 circuit breakers (F31 and F38) located in the rear distribution unit (RDU) and install the 2 25A fuses. (Fig.5.)

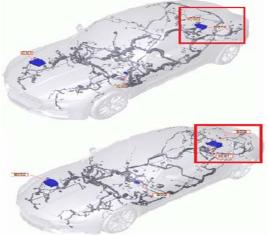




Fig.5

<u>Procedure "B" – Inspecting / Taping of the Motors and Routing of the harness</u>

1. With the L/F front seat on the bench, inspect the routing of the wiring harness to determine if it comes in contact with any of the adjustment motors. (Fig.6)



Fig.6

If the harness was not in contact with the motors, proceed to Step 3, "Taping the motors and routing the harness."

2. If the harness is in contact with the motors (Fig.6), or there are any marks on the harness from contact with the motors (Fig.7), gently bend the harness by hand at the contact point and inspect for any visible signs of copper wiring. (Fig.8)

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Fig.7



Fig.8

NOTE: If the harness is damaged (e.g. copper visible, insulation rubbed through, etc.) the harness must be replaced. Open a BOL and attach pictures of the harness showing the anomaly, then go to Procedure "C" Replacing the Driver Seat Harness.

3. Taping the motors and routing the harness



Fig.9

- If the vehicle is equipped with the REAR SEAT ENTERTAINMENT system, the minimum number of tape turns must be 3.
- If the vehicle is not equipped with RSE, the minimum number of tape turns must be 2.
- If necessary, apply the tape to the motors (Fig.9) to meet the above number of turns by following the procedures below.

Apply the tape as follows:

• Apply the tape so that a minimum width of 5mm's (Fig.10) covers the edge of the motor housing as shown in Fig.11.



Fig.10

Fig.11

Check the wiring harness routing on the seat. Install the 4 wire ties to the locations circled in Fig.12 to ensure the harness is away from the motor edges.

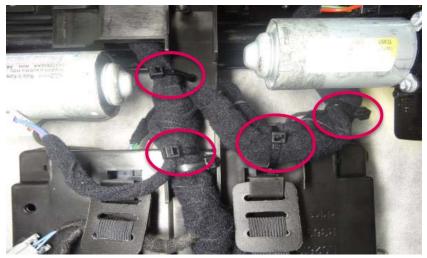


Fig.12

WARNING: Pay attention to the routing of the cable circled in green; the cable MUST NOT pass through the trimmed portion of the plastic carrier (red line). (Fig.13)

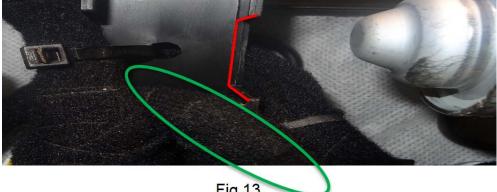


Fig.13

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Cut the excess portion of the wire ties as shown below in Fig.14.



Fig.14

- 4. Re-install the front seat.
- **5.** Reconnect the battery.
- 6. Delete any DTC's with the MDEVO.



Fig.15

- 7. Perform a functional test of the front seat. (Fig.15)
- **8.** If the functional test is positive, the procedure is complete.
- **9.** If the functional test is negative, perform a diagnosis on the seat ECU.

<u>Procedure "C" – Replacing the Driver Seat Harness</u>

1. Lay the seat on its side and remove the leather wing from the carrier and seat frame.(Fig.16)



Fig.16

2. Remove the screws from the back panel. (Fig.17)



Fig.17

3. Stand the seat up and then remove the side trim screw. (Fig.18)



Fig.18

4. Remove the back cover by gently pushing the back cover down. (Fig.19)



Fig.19

5. Using a Teflon wedge, disengage the leather from the frame. (Fig.20)

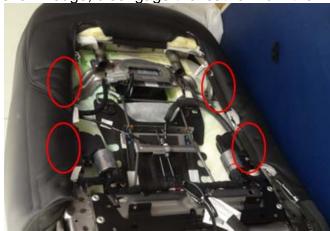


Fig.20

6. Disconnect the electrical connectors from the motors. (Fig.21)

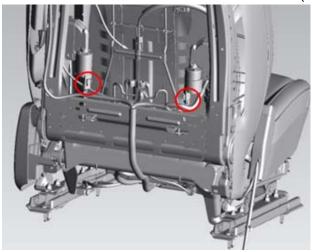


Fig.21

7. Remove the wire tie. (Fig.22)



Fig.22

8. Disconnect the circled connector and remove the clip from the seat. (Fig.23)

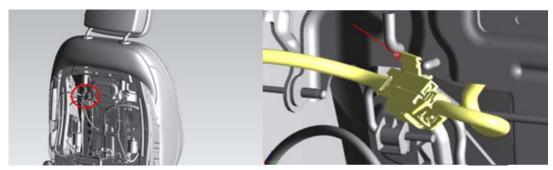


Fig.23

9. Remove the connector and then the wire harness from all of the clips. (Fig.24)

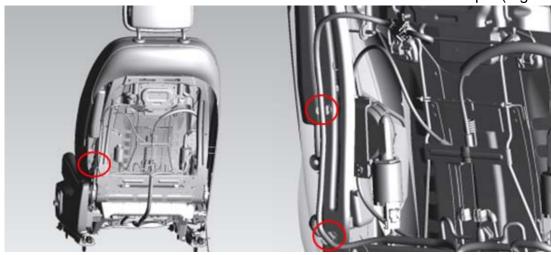


Fig.24

10. Remove the harness fastener and the ground connection. (Fig.25)

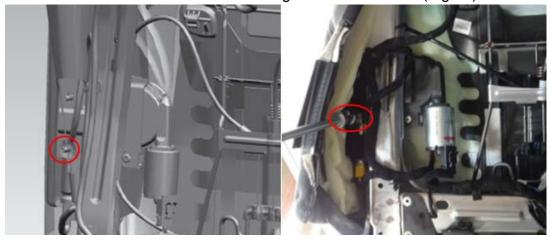


Fig.25

11. Position the seat as shown and disconnect all of the remaining electrical connectors. (Fig.26)

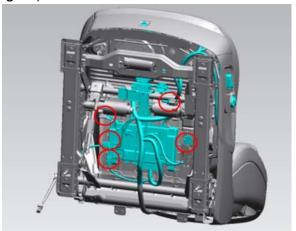


Fig.26

12. Disconnect the front motor connector. (Fig.27)

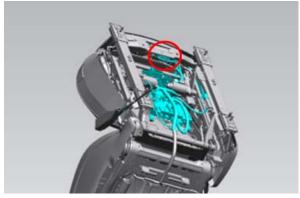


Fig.27

13. Remove the wire tie. (Fig.28)



Fig.28

14. If equipped, remove the switch (Fig.29) and the mounting plate (Fig.30) for the pedal control adjustment.



Fig.29



Fig.30

15. Remove the screws (red circles), then gently pull back the trim. (Fig.31)



Fig.31

16. Unsnap the trim and remove the electrical connector from the switch. (Fig.32)



Fig.32

17. Disconnect the lower front electrical connector circled in red. (Fig.33)



Fig.33

18. Unsnap the cable clip then remove the wire harness. (Fig.34)



Fig.34

19. Disconnect the upper connector from the frame. (circled in red, Fig.35) then disconnect the wire connectors from the seat motors.



Fig.35

20. Unhook the control unit carrier from the seat springs by pulling down (Fig.36)

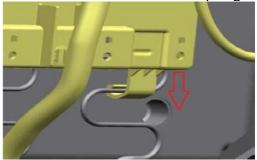


Fig.36

21. Remove the control unit carrier (Fig.37) together with the wire harness and the seat control unit. (Fig.38)

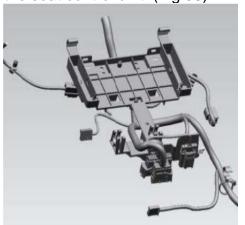




Fig.37 Fig.38

- 22. Remove the original wire harness from the carrier. Attach the new wiring harness to the control unit carrier following the layout of the harness as shown in Fig's. 12 and 13 on Page 6.
- **23.** Re-install the harness together with the control unit carrier to the seat.
- 24. When re-installing the control unit carrier on to the seat springs, make sure the distance between the carrier (Green circles) and the seat motor bracket (Red circles) is between 52 and 53 mm's. (Fig.39 and Fig. 40)



Fig.39 Fig.40

- **25.** Install the tape on the motors as shown in Fig's 10 and 11 on Page 6.
- **26.** Re-install all of the components removed following the removal instructions in reverse order.
- **27.** Re-connect the battery.
- 28. Clear any DTC's with the MDEVO.
- **29.** Perform a functional test of the front seat as shown in Fig.15 on Page 7 to be sure it is operating as designed.

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Warranty Information

| • | Campaign Number | 342 |
|--|---|----------|
| • | Warranty Code | 24 |
| • | Defect Code | |
| • | Component Code | 9.41.090 |
| • | Labor Operation Codes A = Install fuses B = Install zip ties and tape motors C = Install L/F seat wire harness | |
| A + B - (Install fuses, install zip ties, tape motors)9.41.090.4 (0.55h) | | |
| B - (Install zip ties, tape motors) | | |
| A+B+C - (Install fuses, replace harness, install zip ties, tape motors)9.41.090.2 (0.9h) | | |
| | | |

B + C - (Replace harness, install zip ties, tape motors).........9.41.090.1 (0.8h)

NOTE: 1 of P/N: 980900015 will automatically be entered into each claim for reimbursement of the tape and wire ties used on each vehicle.