

Circular Letter

FROM: Maserati TSO

TO: Maserati Network



Maserati

PERSONAL SERVICE LAB

MASTERS OF CARE

Introduction to the new Maserati Grecale Folgore



DATE: JULY 10, 2024

We are pleased to introduce the latest addition to the Maserati lineup. Developed at the Maserati Innovation Lab in Modena, the Grecale Folgore is the company's first fully electric SUV. Folgore is the name that identifies Maserati's electric range, embodying innovation, luxury, functional beauty, and a vision that bridges past and future in Maserati's incomparable style.

The new Grecale Folgore will be available in a single version, capable of delivering up to 400 kW of power and equipped with a 105 kWh battery.

This letter provides important guidelines for the technical management of the new Maserati Grecale Folgore. For further details and general information regarding the entire Folgore range, please refer to bulletin MAS003876 (or newer) and its subsequent revisions.

This document includes in detail:

- Vehicle maintenance and periodic battery checks.
- Indications of best practices and technical notes for Service.
- Pre-delivery inspection checklist.
- Activation of the technical team.
- Unveiling tech-doc/diagnosis and special tools.

Please read and review this bulletin first before starting the procedure.

Contact your Regional AfterSales Manager (RAM) or the Technical Support Helpdesk if you have any questions.

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1 Vehicle maintenance and periodic battery checks

The specifics on the maintenance of the vehicles in stock are reported as usual in the dedicated circular letter which undergoes periodic updates (**MAS003825 and its subsequent revisions**). In particular, the new Maserati GranTurismo features require more restrictive 12V battery charge status control logistics than other models in the Maserati family. The checks involve:

- **Performing a Battery test using the E-XTEQ MAXIMUS at PDI.**
- **Performing a Battery test using the E-XTEQ MAXIMUS during the entire storage period.**

1.1 12V Battery Inspection at PDI

Performing a Battery test using the E-XTEQ MAXIMUS at PDI.

Result = Battery is Good:

- Voltage 12.6V or above = PROCEED WITH LOGISTICS MODE REMOVAL
- Voltage 12.5V or below = RECHARGE THE BATTERY

Result = Battery is Bad:

- REPLACE BATTERY

For more info about battery maintenance and check procedures. Refer to “MAS003833 and MAS003397 (Or Newer)”

1.2 Check/ restore 12V battery State Of Charge (SOC)

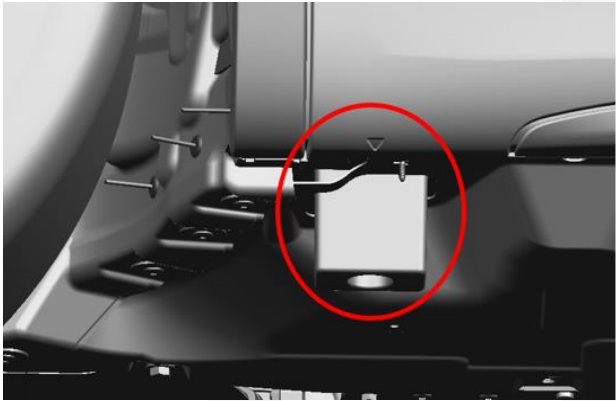
Performing a Battery test using the E-XTEQ MAXIMUS during the entire storage period at Intervals outlined in “MAS003825 MCL 24-13 MGNT And Maintenance Of Instock Maserati Vehicles”.

2 Best practices in the workshop for service

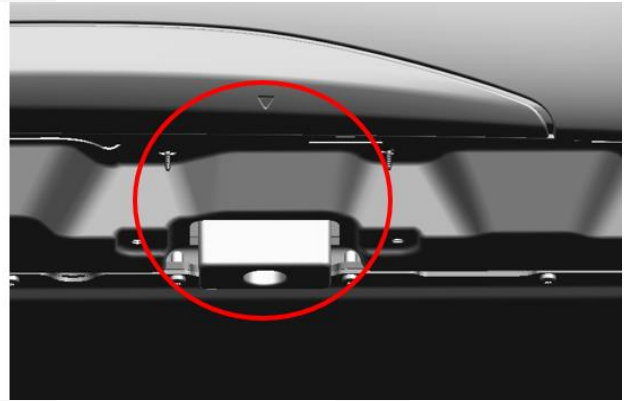
The following chapter includes a list of best practices and technical notes for Maserati Grecale service; this vehicle's features require precautions that may otherwise not be noticed or highlighted while the vehicle is undergoing normal operations in the workshop. First, please note that before driving an electric vehicle inside the workshop environment, a series of specific checks must be carried out; all the details are reported in the dedicated documentation.

2.1 Lifting the vehicle

The position of the lifting points is indicated by an inverted triangle stamped on the edge of the body; there are also the vehicle side pads for interfacing the lift arms.

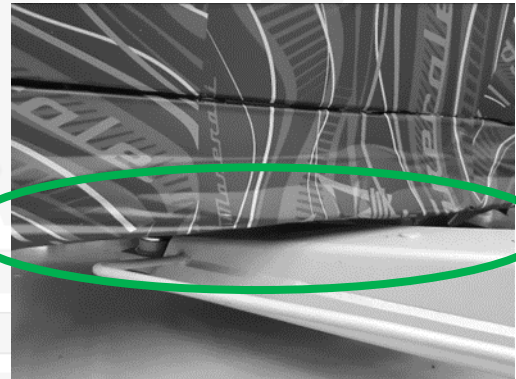


Front pad



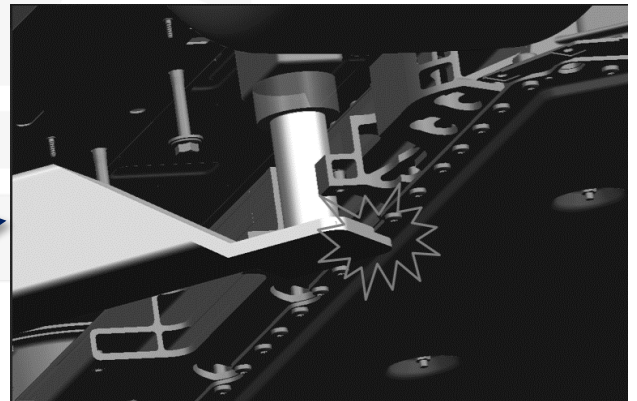
Rear pad

Be careful about the lift arms geometry to prevent damaging the vehicle during the lifting operation. We recommend removing all possible loads from the vehicle (passengers, luggage, spare tire, etc.) to increase the distance from the ground (in case there are no air springs). It is also recommended to use lift plates with a flat surface on the lifter.



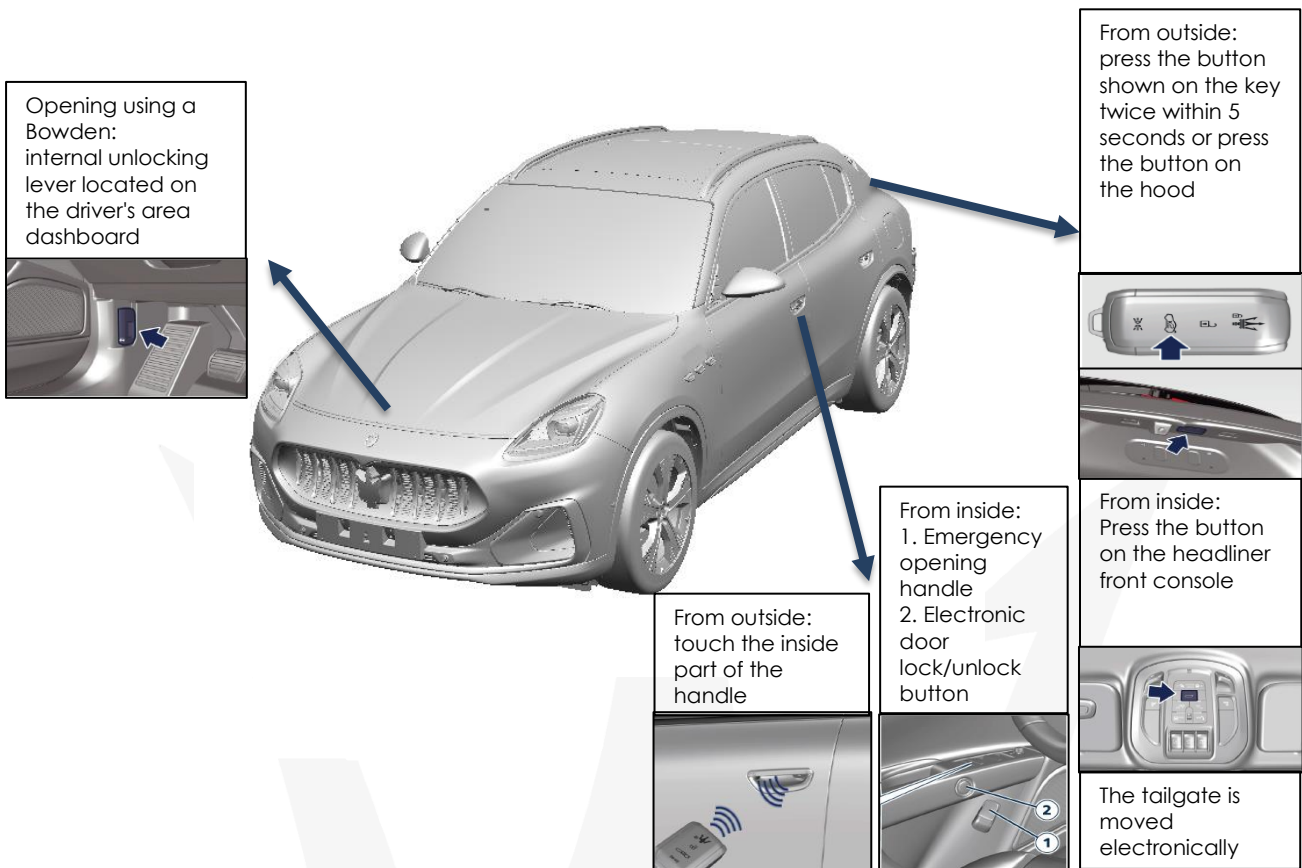
Please note that due to the proximity between the rear lifting pads and the battery pack, the use of special lift plates may be necessary to assist the battery; the absence of this precaution makes the safe removal/installation of the HV battery impossible due to interference between the battery itself and the lifting arms. Please, refers to bulletin MAS003533 (and its subsequent revisions) for further information or consult the supplier of the lifter for compatibility checks.

NOTE: It is mandatory to use a lifter with underground or upper cable gland to not hinder the HV battery Removal/Installation operation.



2.2 Door Opening

The following diagram summarizes the instructions in the On-board Documentation concerning the door opening controls:

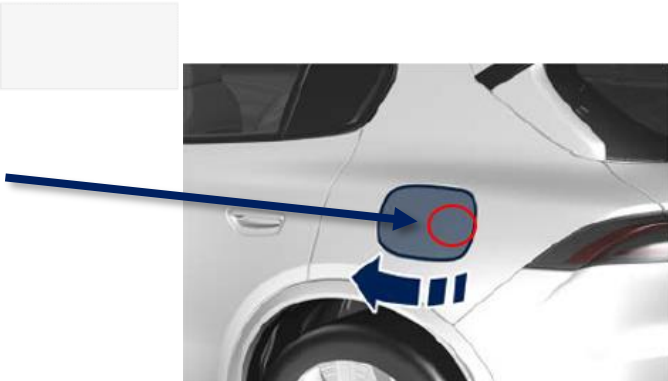


If the electric locks cannot be powered, the key fob has an emergency mechanical key that can unlock the driver's side door using a lock corresponding to the handle itself, as shown in the figure below:



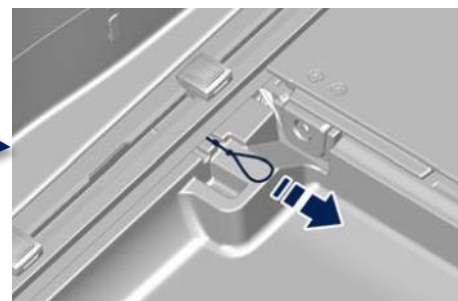
Unlocking the High voltage battery charging port door

To open the charging port door (located on the rear left side of the vehicle). Vehicle doors must be unlocked. Press to release and open the charging port door, the charging door will open completely.



If the charging cable does not unlock at the end of the charging procedure, it must be unlocked manually by operating a special emergency unlocking device located on the left side of the boot compartment.

For more information about correct procedures to carry out, consult the Owner's Manual.

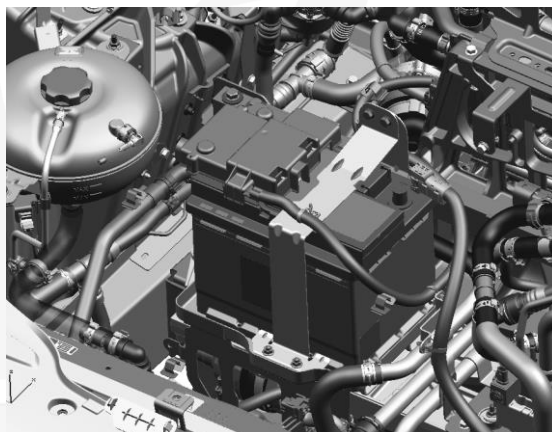


2.3 12V Battery Management

The state of charge of the 12V battery is periodically monitored by the VDCM. If the battery voltage falls below a certain threshold, the VDCM will recharge it, ensuring the battery remains charged. Therefore, it is not necessary to de-energize the battery during vehicle downtime. However, the negative terminal will need to be disconnected for certain repair services. Note that disconnecting the 12V battery does not disconnect all electrical systems. Please refer to the Service Manual for further details.

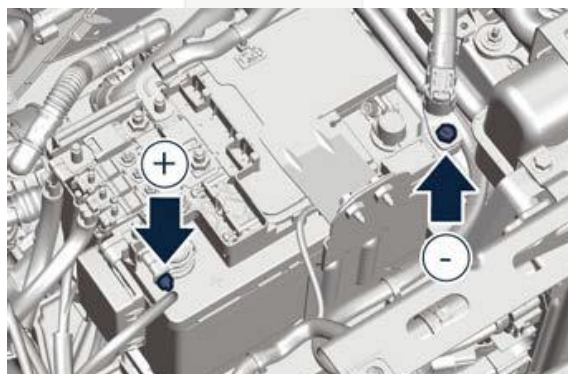
12V battery access

The 12V battery is located in the front hood compartment. To access it, remove the cover to access the battery posts. (shown below)



2.4 Emergency start - dead Battery

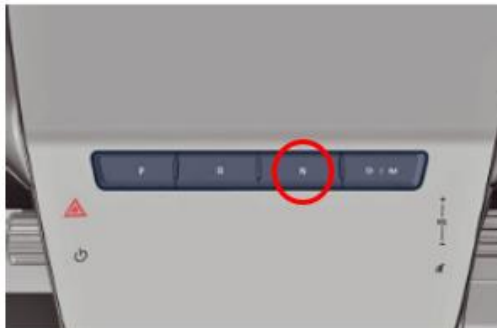
The 12V battery is periodically recharged by the HV (High Voltage) battery system; however, if the HV battery SOC falls below a certain threshold, it will not maintain charging of the Low Voltage (LV) battery. Consequently, discharging the 12V battery after a short time. Therefore, the vehicle cannot be started or recharged if the HV and LV batteries are low or dead. It will be necessary to recharge the 12V battery first with an external source or replacement after which the HV battery can be recharged/recovered using an external source via the HV charging port. Please note that this can only be done if there are no faults related to the HV system and that the HV battery is not completely dead or below a certain threshold. Please review the training material or the workshop manual in case of a dead HV battery. To power the 12V battery using a suitable external source, use the connecting points as shown below the positive directly on the battery post and the negative using the ground pin located on the side:



2.5 Transmission Park Release (Front e-axle unlock)

To move the vehicle with the power off it is necessary to unlock the electric axle. To this end, it is possible to activate the "Car Wash" mode as indicated below:

- The vehicle must be on a level surface.
- Start the electric motors.
- Put the transmission in N (Neutral) by using the control on the dashboard.



- Turn the engine off by pressing the START/STOP button.

The driver's door must be closed during these steps. This condition lasts for about 15 minutes, after which the transmission moves automatically to P (Park).

If it is not possible to start the electric motors, proceed as follows:

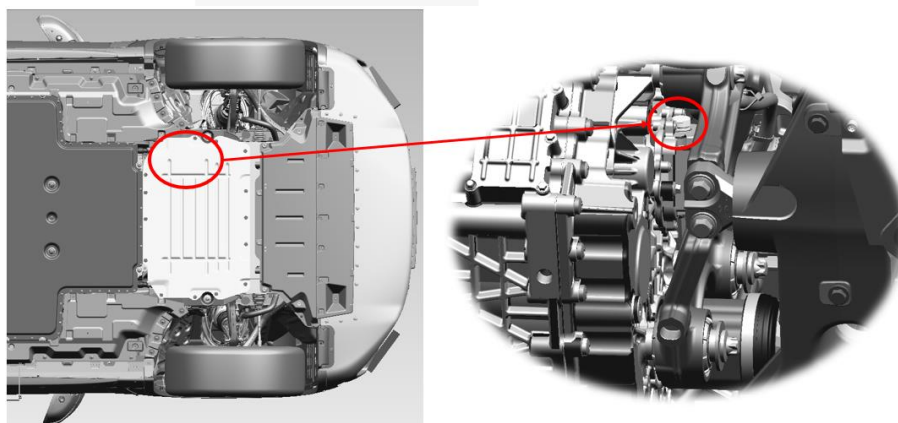
- Perform Key ON (12V power supply required)
- Deactivate the electric parking brake
- With the brake pedal pressed, press the Neutral (N) button to deactivate the Park state (the message is shown on the display)

Attention: in this state, it is not possible to turn the Key OFF; put the vehicle back into Park (P) to be able to turn it off.

The front axle can also be unlocked mechanically by acting on a dedicated mechanism. To access this mechanism, it is necessary:

- Disconnect the 12V battery
- Lift the vehicle
- Remove the central underbody shield
- Identify the mechanism on the axle (see circled area in the figure)
- Remove the protective cap
- Turn the release screw using a suitable 3mm hexagonal wrench

For further details, please refer to the dedicated procedure reported in the workshop manual. **ATTENTION:** The vehicle cannot be towed on its own wheels but can only be pushed by hand or with a vehicle pusher (Maximum speed =8 km/h (5 mph) for a maximum continuous distance of 20 meters).



3 Pre-Delivery inspection checklist

To support you in delivering the new Maserati Grecale Folgore, we have developed a specific Checklist, adding new checks to test the new features and ensure that the customer can drive the vehicle with maximum satisfaction. The Check Lists are attached to this communication. The checklist will guide you through the various stages of vehicle inspection and preparation. Each Checklist includes a set of actions and procedures to be carried out on each vehicle during the PDI. At the end of each vehicle preparation, we ask you to keep a copy of the checklist, signed by the operator who has performed the checks, to support process traceability that could be helpful to improve the quality of the service offered, where necessary. Maserati could also request a copy of the same during the PDI or the contractual warranty period for product improvement or warranty claims assessment purposes.

PDI procedure to carry out with MDEvo

The warranty start date and "Customer Mode" setting to be performed during PDI are described in Circular Letter MAS003368 (and corresponding updates).

4 Activation of the technical team

A cross-functional Technical Team has been established, comprising individuals from Product Support, Engineering, Quality, Spare Parts, Customer Care, and RAM departments. In addition to introducing innovative technical content, the team is dedicated to offering comprehensive support for accurate diagnosis and resolution during initial interventions within the network. Furthermore, they aim to conduct swift and effective investigations into all reported anomalies. **For details on submitting BOLs to report anomalies, please consult the latest "Blue On Line Policy Update" Bulletin.**

To monitor the correct progress of the vehicle repair on new models and assure corrective action for anomalies found during PDI, maximum care is required in manually setting the Service Entry status. Please also remember that the Service Entry status is automatically set up in "Awaiting Spare Parts" when the parts to be replaced are related to interventions covered by the contractual warranty and ordered in VOR mode. With a view to product improvement, and to allow Maserati to improve the diagnostic effectiveness, you will also need to analyze promptly the defective components replaced. For this purpose, applying the following indications for the entire duration of the Technical Team is required:

1. A warranty claim must be entered within two working days of closing the Service Entry.
2. Components replaced and requested for urgent return must be sent within two working days of receiving the request. Please refer to the Maserati warrant urgent parts return bulletin in Modis for details.

5 Technical Documents and Special tools

5.1 Technical Information

TechDocs has been updated to include technical documentation for the new GranTurismo:

- Parts catalog
- Labor Times
- Workshop Manual
- Wiring Diagrams
- Diagnostic Help

5.2 Special Tools

Maserati has created a set of special tools specifically for the new Grecale Folgore to ensure the highest levels of quality in driving assistance and safety. Such mandatory tools will be supplied automatically and will also be present on ModisCS+ Special Tool Catalogue. The tools created are listed below in the table:

Part Numbers	Description
900030927	HVB lifting equipment
900001696	HVB lifter rods interfaces
900001697	HVB Ground support equipment
900031096	Centering pin for inverter positioning on EDM
900030925	Rear axle removal equipment
900030924	Front axle removal equipment
900031019	Front/rear axle bench support brackets
900030922	Adapters for coolant circuits drain
900100007	Breakout box for high-voltage system voltage and insulation measurements
900031020	Battery pack and battery cooling circuit leak tester
900031127	Plug kits for leak tester
900030810	Cable for HV battery off-board diagnosis
900031123	Differential Oil seal installation tool
900030923	Bev centering columns

Furthermore, how to use each tool will be detailed in the relative procedure in ModisCS+.