



MASTERS OF CARE

Introduction to Maserati Grecale



DATE: OCTOBER 31 2022

The new Parts & Service mission aims to ensure a unique customer experience. A few important guidelines for the technical management of the New Maserati Grecale are set out in this letter. Maserati Grecale represents the right balance between versatility, elegance, performance, and innovation, guaranteeing services, comfort, and safety at the same time; features that combine with off-road capabilities and steadfast driving pleasure.

The new MY23 Grecale SUV, developed at Maserati Innovation Lab in Modena, is a range within the range, the most complete and innovative ever in the House of the Trident. The range of available engines varies from the traditional combustion to the hybrid engine and includes three launch versions: GT, powered by a 4-cylinder Hybrid capable of developing 300 HP, Modena with a 330 HP 4-cylinder Hybrid engine, and the powerful Trofeo, equipped with a performing 530 HP 3.0L V6 petrol engine, derived from the Neptune engine which equips MC20.

Topics covered in this Bulletin:

- Taking charge of the vehicle and periodic checks.
- Indications of best practices and technical notes for the Grecale 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. (MaseratiTechsupport@maserati.com)

Thank You for your continued support and cooperation.

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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 (**MAS003194** and its subsequent revisions). In particular, the new Maserati Grecale features require more restrictive 12V battery charge status control logistics than other models in the Maserati family. The checks involve:

- Checking the voltage value when the car arrives in the shop
- Monitoring the charge status (voltage value) during the entire storage period.

1.1 12V Battery Inspection

During PDI, the voltage value across the 12V battery must be measured and recorded (for access to the battery, refer to paragraph 2.3). The voltage value must be greater than or equal to 12.5 V; if the battery voltage value is lower than that but over 12.1V, the battery must be completely recharged; if the voltage is less than 12.1V, the battery must be replaced.

IMPORTANT NOTE: To measure the voltage correctly, the negative cable must be disconnected from the battery and no charge maintainer must be connected. Before measuring the voltage, wait 2 hours after disconnecting the negative cable or the charge maintainer.

1.2 Charge status monitoring

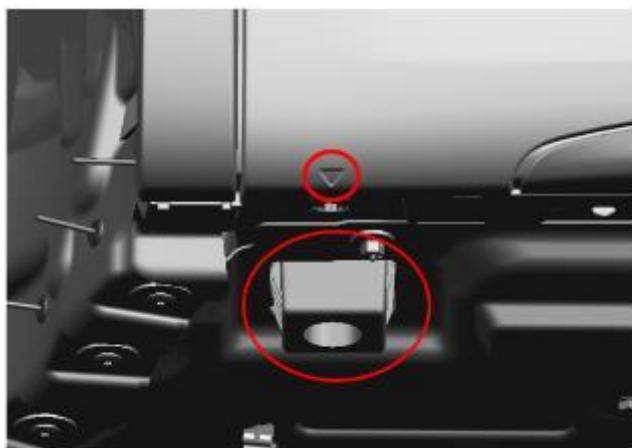
As the circular letter **MAS003194** (and related updates) indicates, checking the charge must be performed at regular intervals and recorded in the appropriate documentation.

2 Best practices in the workshop for Grecale 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 car is undergoing normal operations in the workshop.

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 axle positioning.

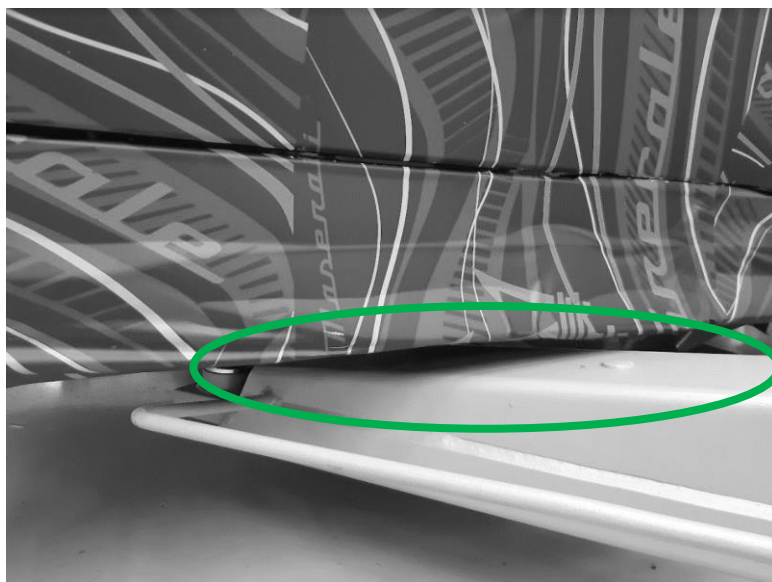


Front pad



Rear pad

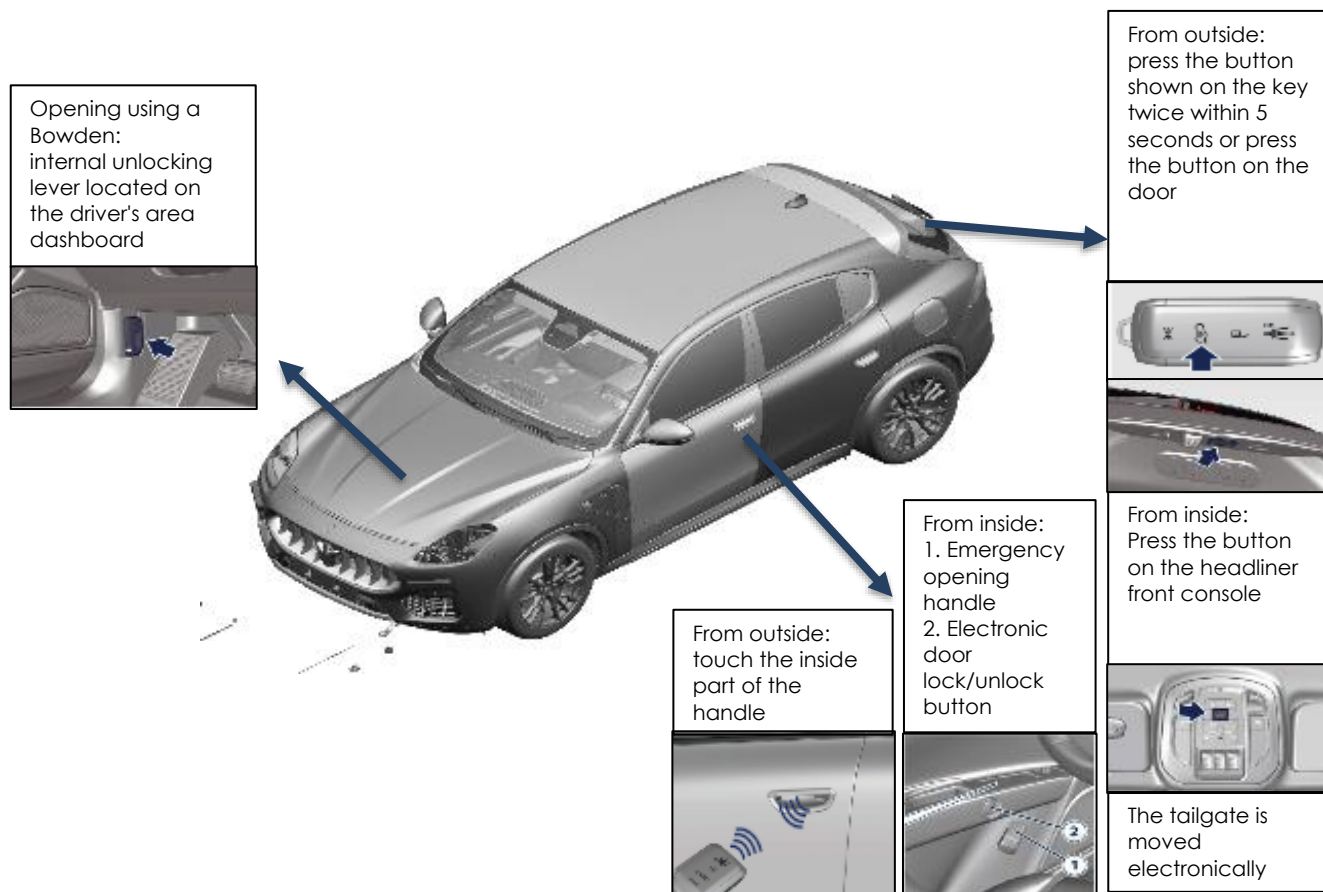
Be careful about the axle geometry to prevent damaging the vehicle during the lifting operation. We recommend removing all possible loads from the vehicle (passengers, luggage, spare tire, etc.) to increase the distance from the ground (in case there are no air springs).



We recommend using plates with a diameter no greater than 125mm for the front axle and centering the plate on the lifting dowel as well as possible to prevent contact with the car's floor trim.

2.2 Door Opening

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

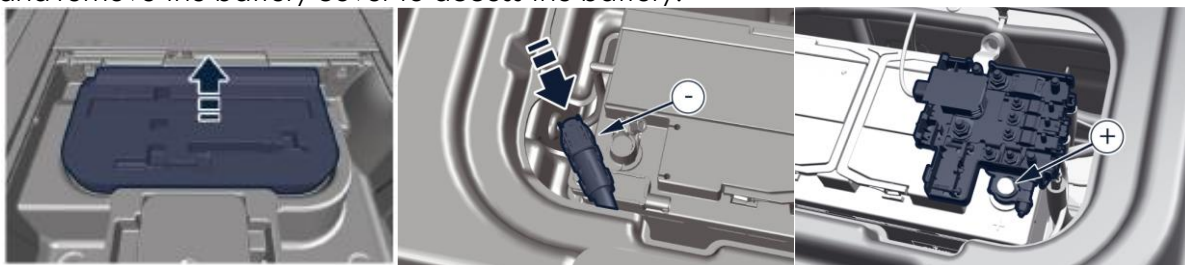


If the 12 V battery is discharged and the electric locks cannot be powered, the key fob has an emergency mechanical key that can unlock the driver's side door with a lock corresponding to the handle itself, as shown in the figure below:



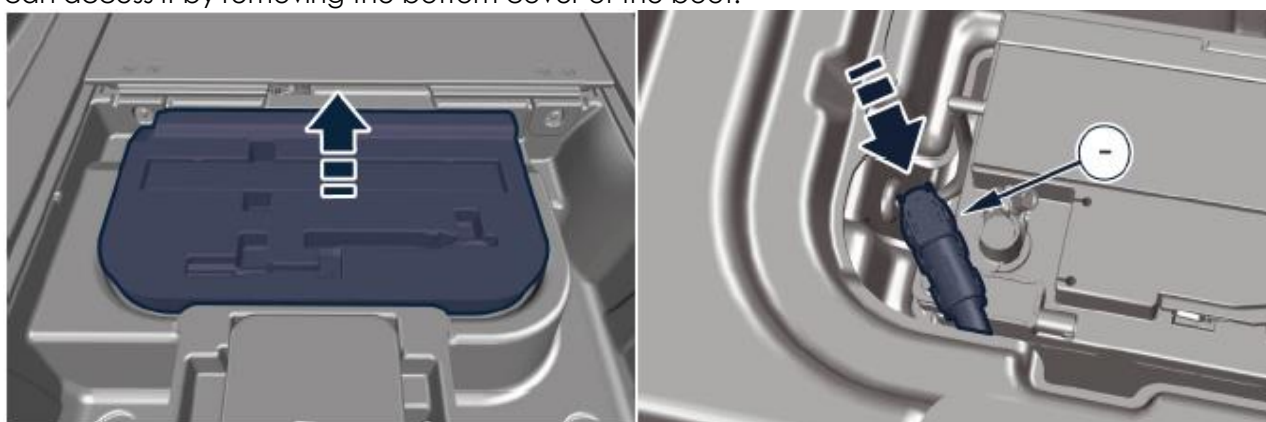
2.3 12 V Battery access

The battery is positioned on the inside of the boot lid in the center. You need to lift the boot lid bottom panel and remove the battery cover to access the battery.



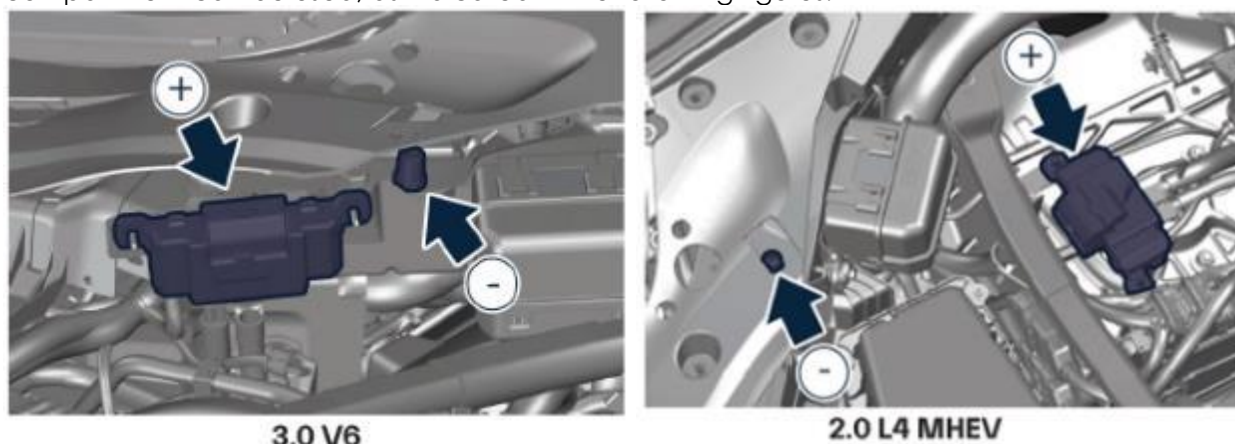
2.4 Disconnect the 12V Battery negative cable

If you need to disconnect the 12V battery negative pole (for example due to long vehicle inactivity), you can access it by removing the bottom cover of the boot:



2.5 Emergency start - dead Battery

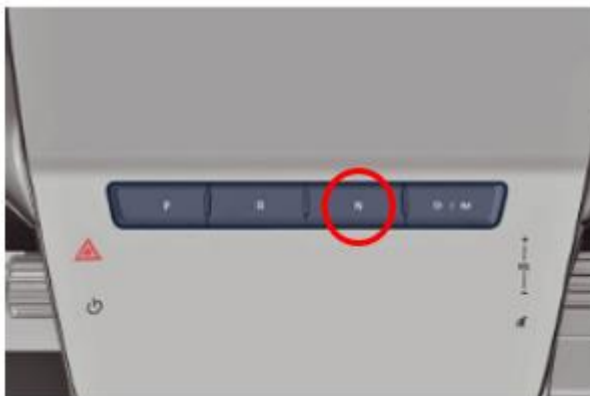
If an emergency start is needed for a dead battery, the remote poles located in the engine compartment can be used, as indicated in the following figures:



2.6 Transmission Park Release

If you need to move the car with the engine off, the "Car Wash" mode can be activated as shown below:

- The car must be on a level surface, not moving
- Put the transmission in N (Neutral) by using the control on the dashboard

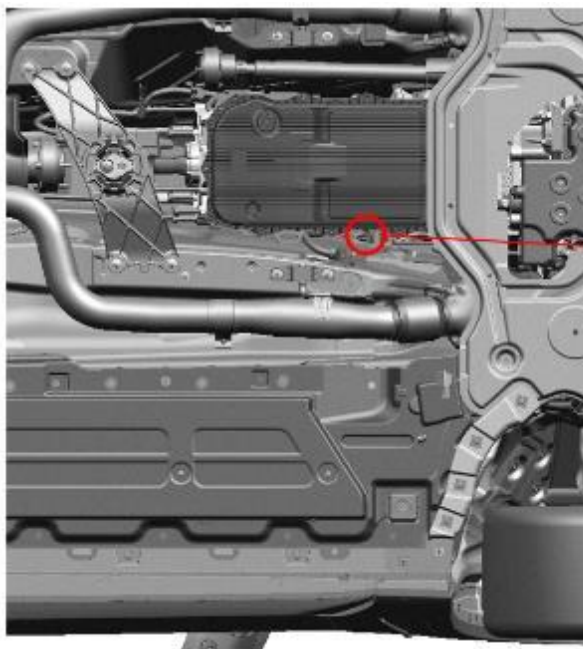


- Turn the engine off by pressing the START/STOP button

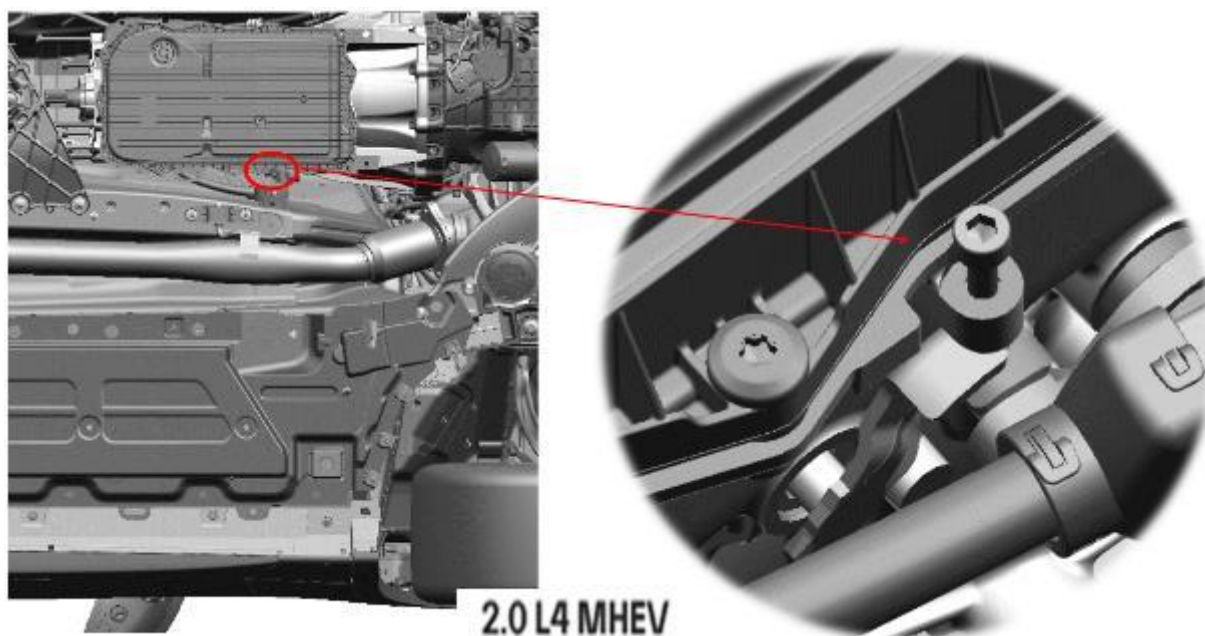
The driver's door must be shut during these steps. This condition must be maintained for about 15 minutes, after which the transmission moves to P (Park).

If this solution is not possible or if there are other transmission problems, the transmission can be released manually as follows:

- Lift the car just enough to be able to reach the inside central area
- Identify the automatic transmission and the release actuator lever



3.0 V6



2.0 L4 MHEV

Warning: the transmission unblock lever actuator is not in the car: you need to use an M6 screw at least 32.4 mm long.

3 Pre-Delivery inspection checklist

To support you in delivering the new Maserati Grecale we have developed a specific Check List, adding new checks to test the new features and ensure that the customer can drive the car with maximum satisfaction. In addition, some policies regarding the control of the charge status of the 12V battery have been modified. The Check Lists are attached to this communication.

The Check List will guide you through the various stages of vehicle inspection and preparation. Each Check List includes a set of actions and procedures to be carried out on each car during the PDI.

At the end of each car preparation, we ask you to keep a copy of the Check List, 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 contractual warranty period for statistical purposes for its product improvement processes.

3.1 Procedure performed with the MEVO

Setting the vehicle in "Customer Mode" to be performed at the POI stage, is set out in Circular Letter **MAS003184** (and its updates).

4 Activation of the technical team

On the launch of the new Grecale, the inter-functional Technical Team consists of personnel belonging to the Product Support, Engineering, Quality, Spare Parts, Customer Care, and RAM departments. In addition to introducing various innovative technical contents, Grecale represents the model we expect to generate an important increase in sales volumes and an important challenge to guarantee maximum satisfaction to our customers. The Technical Team aims to provide maximum support for correct diagnosis and resolution at the first intervention of cases in the network and a rapid and effective investigation of all reported anomalies.

Within the first 6 months after the start of the sale, a BOL must be submitted before any work is performed even if a solution is available. Please review bulletin **MAS003088** "New Blue On Line Policy Update". For further details.

During this period, and before carrying out any service intervention related to an alleged product quality problem, any anomaly must be reported to the Technical Support team by opening a Blue On Line report as "Information to the Factory".

If a BOL was opened as "Support Request" or "Request of authorisation to claim" by mistake. Then, a refund may be requested equal to 0.2 hours of labor when entering the report as "Information to the factory" by entering the warranty claim of the operation code 0.20.001.A - Information to the Factory 0-3 MIS (0.2 h).

ALL Blue On Line reports must be detailed, complete, and include; Parameters, DTCs, Videos, Images, etc., and must document the complaint/fault(s) so that Technical Support can assist effectively and promptly. For hard-to-diagnose concerns, Product Support may coordinate with the technical Support Team to arrange on-site diagnosis by sending a TA to the site as a last resort.

To monitor the correct progress of the vehicle repair, 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. The warranty claim must be entered within two working days of closing the Service Entry
2. The components replaced and requested for urgent return must be sent within two working days of receiving the request and by the operating procedure indicated in Warranty Bulletin **MAS001556**.

5 Technical Documents, Electronic Diagnosis, and Special tools

5.1 Technical Information

As of 07/19/2022, TechDocs has been updated to include technical documentation for both Grecale Hybrids (GT and Modena) and Grecale V6 (Trofeo):

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

5.2 New GUI MDEVO for Grecale

With the new Maserati Grecale launch, MDEVO introduces a new GUI (Graphical User Interface) specifically for the new generation of vehicles.

5.2.1 Vehicle view

The new Vehicle View for Maserati Grecale (M182) appears as in the figure below:



The new view allows you to identify all the vehicle's internal CAN and CAN-FD networks. Five sections are inside the Vehicle View:

1. Topological view: a view of all the ECU, CAN, and CAN-FD connections
2. Zoom function: to enlarge, reduce and restore the topological view
3. ECU list: lets you order the ECU according to the different filters (alphabetical, upgrades, errors, and nodes)
4. ECU groupings: this allows you to highlight the selected ECU functional unit (transmission, engine, ADAS, etc.)
5. ECU research: the control unit is highlighted in the topological view while the others are darkened

With one click on the ECU, you can access the control unit's standard section, to follow diagnostic operations (basic diagnosis, active, procedures, programming, reading, and deleting DTC).

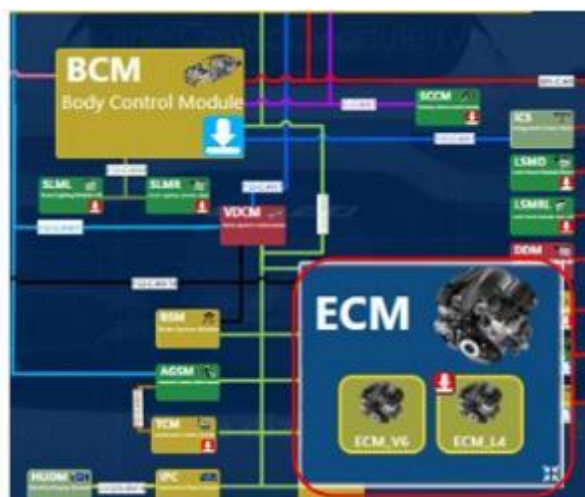
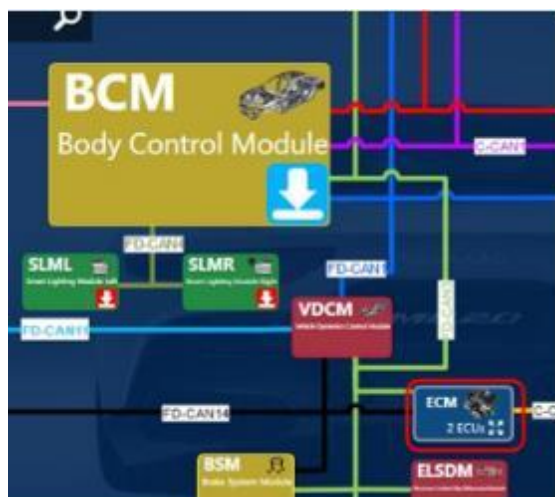
5.2.2 PROXI unaligned between vehicle and server

The new GUI shows all the control units available for Maserati Grecale, making those not present in the identified vehicle configuration transparent and unselectable.



If the PROXI (Vehicle Configuration) readings on BCM are different from the ones on the server, all ECUs will be displayed as selectable.

For alternative control units, such as ECM V6 (ICE) and ECM L4 (MHEV), selecting the functional control unit (ECM) will open a pop-up that will allow you to choose the correct one, thus accessing the standard section to perform the diagnostic operations.



5.3 Special tools

Maserati has created a set of special tools specifically for the new Grecale 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 are listed below in the table, along with a brief technical description:

P/N	Name	Engine
900030610	Engine-transmission removal tool upgrade	Hybrid/ICE
900030611	Rear axle removal tool upgrade	Hybrid/ICE
900030612	Tool for transmission oil filler cap	Hybrid
900030613	Assembly tool for brake pad springs	Hybrid
900030614	L4 engine lifting brackets	Hybrid
900030616	V6 engine lifting brackets	ICE
900084528	Engine mount on TRANSMISSION SIDE	ICE
900030617	Engine mount on SERVICES SIDE	ICE
900030807	M182 Car Bench Template Kit	Hybrid/ICE
900030806	M182 Global Jig Template Kit	Hybrid/ICE
900030739	Flex plate locking tool V6	ICE
900030737	Belt tensioner	Hybrid
900084527	Upper oxygen sensor tightener	ICE
900030741	Chain tensioner pin	Hybrid

- **Engine-transmission towing tool upgrade** (900030610): this front towing tool upgrade will be used for assembling and disassembling the engine and transmission for both engine versions.
- **Rear axle towing tool upgrade** (900030611): this rear axle towing tool upgrade will be used for assembling and disassembling the rear suspension chassis, for both engine versions.
- **Transmission oil filler cap tool** (900030612): this tool will be used to unscrew and re-tighten the Hybrid variant transmission oil cap.
- **Brake pad spring assembly tool** (900030614): this tool will be used to assemble and correctly position the Hybrid variant front brake pad spring.
- **L4 engine lifting brackets** (900030614): this tool will allow you to lift the 4-cylinder engine, holding it in suspension with suitable equipment.
- **V6 engine lifting brackets** (900030616): this tool will allow you to lift the 6-cylinder engine, holding it in suspension with suitable equipment.
- **TRANSMISSION SIDE Engine Mount** (900084528): This tool will allow you to bench install the 6-cylinder engine from the transmission side.
- **SERVICE SIDE engine support** (900030617): this tool will allow you to bench install the 6-cylinder engine on the service side.
- **M182 Car Bench Template Kit** (900030807): this kit, to be used with the templates already in the workshops' possession, will allow you to check and repair the vehicle's bodywork correctly for both engine versions.
- **M182 Global Jig Template Kit** (900030806): this kit, to be used with the templates already in the workshops' possession, will allow you to check and repair the vehicle's bodywork correctly for both engine versions.
- **V6 Flex Plate Lock** (900030739): this tool will allow you to lock the V6 engine flex plate.
- **Belt tensioner** (900030737): this tool will allow you to replace the Hybrid engine service belt.
- **Upper oxygen sensor tightener** (900084527): This tool will allow you to tighten the V6 engine oxygen sensors to the correct torque.
- **Belt Tensioner pins** (900030741): this tool will allow you to lock the Hybrid engine chain tensioners correctly.