

AfterSales TSO – Circular Letter



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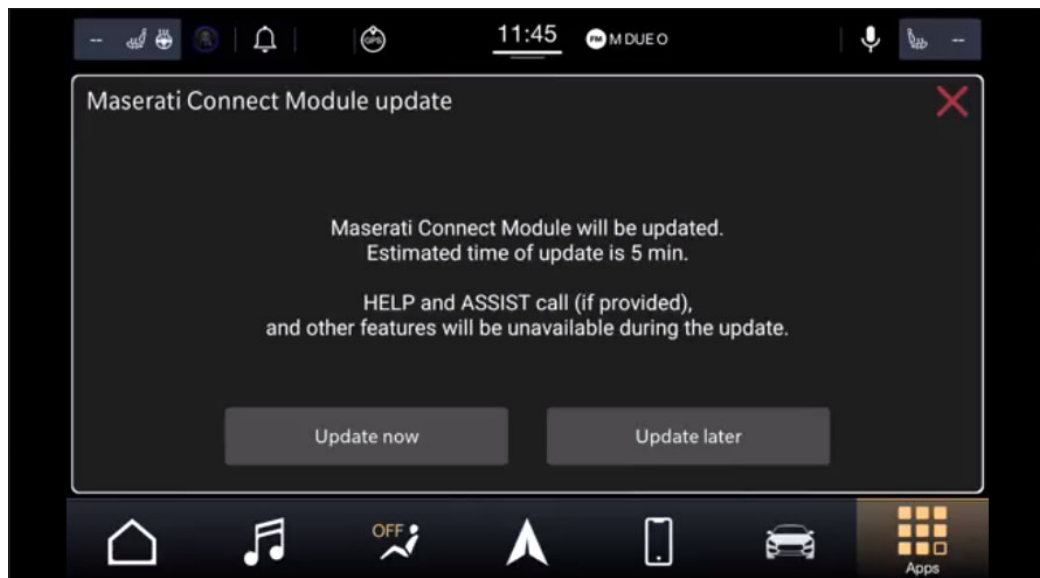
From: Aftersales – TSO
To: Maserati Network
Auburn Hills, MI | December 14, .2020

FOTA – A Finger Ready Update – Short introduction and Update Procedures

Starting with MY21, Maserati Vehicles become connected. The new Connectivity services will make it easier for each Customer to interact with their vehicle which introduces a new way of interfacing with their car.

Car Connectivity is much more than just that. Maserati, in collaboration with its technical partners has implemented a new technology starting on MY21 vehicles whereby the Customer will be able to update several system control modules by themselves with the simple press of a finger on the Display.

FOTA (Firmware Over The Air) enables all of this.



The system control modules that can be updated with this technology are those directly involved with the connectivity of the vehicle, the TBM and the ETM. For these modules, each customer can perform the updates independently, just as they do with other daily use devices from a mobile phone to a Smart TV.

Since introducing **FOTA**, we will always have updated, state of the art vehicles, with the latest software versions available.

FOTA will help you during your daily work to reduce the number of requests for assistance on issues concerning the Radio and Multimedia features in general.

As a reminder, in service (at the workshop) will be possible to update vehicles using traditional tools (MD EVO, USB memory stick, etc.) when the tool software becomes available.

Each **FOTA** action will be started as an Official Service Campaign with the relative publication of a specific Bulletin in ModisCS+.

You will be informed about the specific procedures for each future **FOTA** action through the publication of a dedicated Bulletin.

Attached to this Bulletin is an Appendix of Frequently Asked Questions (FAQ's) that will assist you in explaining the FOTA system and how it works in the event that questions arise. Also attached at the end of this Bulletin are the instructions to complete this Service Campaign.

If you have any questions, contact the Technical Support helpdesk at:
MaseratiTechSupport.com.

Thank You for your continued support and cooperation.

Maserati North America Inc.
Aftersales Dept.

Appendix: F.A.Q. Frequently Asked Questions

This FAQ section will help you to better understand the logic behind the FOTA updates and will provide you with guidelines on how to manage the most frequently asked questions.

1. How will the updates be distributed via FOTA?

- Each FOTA action will be started by Headquarters from Maserati TSO (Technical Service Operations) in Modena. The Maserati Network will be informed through the publication of a Service Campaign Bulletin in MODIS CS+.
- All of the affected VIN's will be listed in ModisCS+.

2. How do I notice (in the workshop) that there is an update?

- A message will appear on the ETM screen (Only if the Download phase has been concluded).
- Checking in ModisCS+ there will be an open campaign listed for the Vin.
- If the update message via FOTA appears on the ETM display, we recommend to use FOTA to update the Vehicle. FOTA is certainly the fastest and most efficient to do. *In this case, no warranty claim must be entered.*
- In the near future when the MDEVO software is available, you can always update the Vehicle using the standard tool (MDEVO for TBM and USB Memory Stick for ETM). *In this case, the warranty claim must be entered to flag the Vehicle as done into the system.*

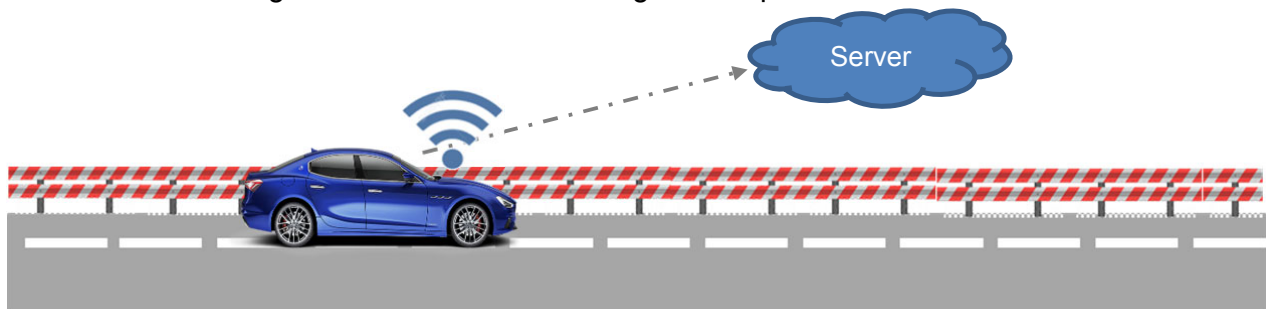
Use this way only to update vehicles in case of problems with FOTA (No FOTA message on main display, poor 3G/4G connection etc).

3. How FOTA works?

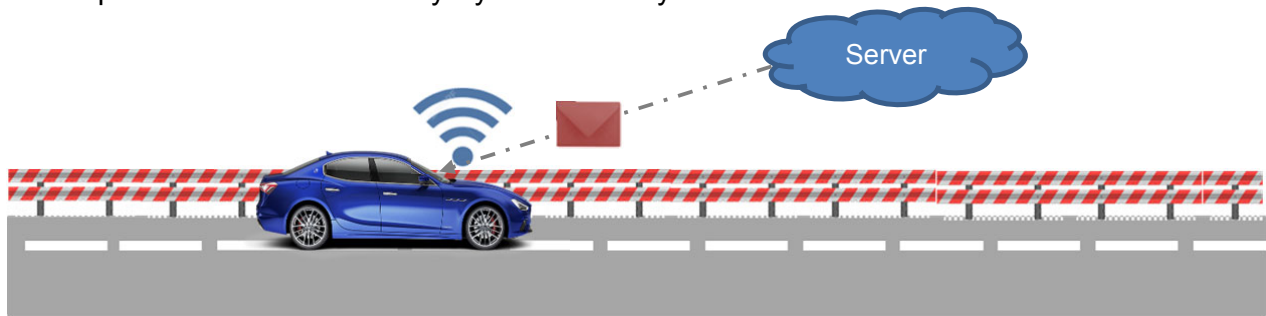
To better understand FOTA functionality, we will subdivide the action in 2 phases. **Download** of the Software and **Installation of the software**.

a) Software Download

- At each KEY-ACC (key turned on) the Car (if 3G/4G/HotSpot and GPS are available) starts a dialogue with the server checking for an update.



- If a new Software is available, it will be sent to the vehicle and stored on a dedicated portion of the Connectivity System memory.



- In this phase, the Software will NOT be installed on the vehicle and **no message will appear on the main display to disturb the driver.**
- The Software Download may not start instantly, but in general within 24 hours from the KEY-ACC. This phase is managed directly by the Server according to its internal rule.

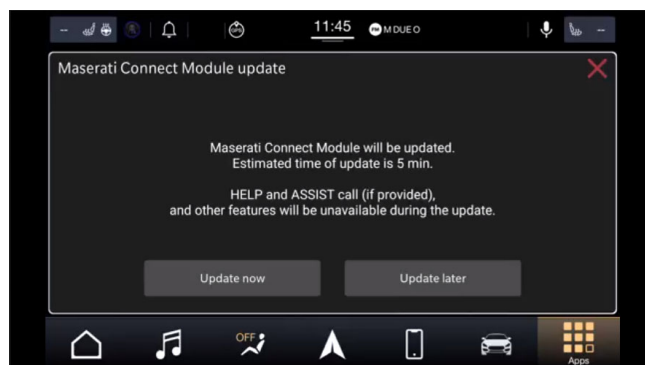
There is no functionality to check for an update or to force or check the download percentage progress. In this way the Customer will not have to worry about the Download phase which will be automatically managed by the systems and has no impact on the car.

Only at the end of the Download phase, after the first KEY OFF, a message appears on the main display to inform the customer about an update to install.

- If the Customer switches off the car, the download restarts from the same point after the next KEY-ACC.
- Data Traffic is for free using a virtual SIM inside the TBM. This subscription is valid for 10 years.

b) Software Installation

- Installation starts with the first KEY-OFF after the software is Downloaded into the system memory. A message on the main screen will appear to inform the Customer.



- Pushing on the “Update Now” icon will start the Installation. The installation cannot be interrupted. If it is interrupted, (key turned on, car driven, etc.) the installation will be interrupted, all connectivity functions will be operable and the software installation will resume at the next key off.

- The Customer can also choose to update later. In this case the same message will be displayed at the next KEY-OFF.
- **The installation cannot be interrupted.** If the engine is restarted, it doesn't affect the installation. There is no way to interrupt the installation (open/close doors, ON/OFF lights etc.).
- The Customer can leave the vehicle, close the vehicle and the procedure will continue automatically. (the key only needs to be inside the vehicle to start the procedure).
- The update takes 10-15 minutes. During the update some functions related to the updated modules may not work. Refer to the pre-installation screen.
- At the end of the update, the control unit performs a self-check of the newly installed content. In the remote case of a failure, the module restores the previous version. For this reason, the procedure is 100% safe.
- In this phase 3G/4G and GPS coverage is not necessary (due to the software being previously downloaded into the system memory and waiting for the installation phase).

4. What happens if the customer always chooses to postpone the installation?

- After several postponements, the update will be forced automatically at KEY-OFF. If the radio is on, a pop-up will be displayed. This installation cannot be interrupted or postponed again.

5. Preconditions

- Vehicle must be under 3G/4G and GPS signal (only for the Download phase).
- Key inside the vehicle with the ignition off (just to start the installation phase then the key can be removed from the vehicle).
- SOC > 75%. (Battery State Of Charge greater than 75%)
- Vehicle parked and in KEY-OFF position to start the installation.

NOTE: The system does not inhibit the functionality of the vehicle, which could be restarted immediately after starting the installation phase. Restarting the vehicle does not block the installation. Maserati does not recommend driving the car while the FOTA update is in progress as some driver assistance functions (Radio, Navigation, etc.) may not be available during the software installation phase. This is why the Installation phase starts at the key off position (then pressing the "Update Now" icon) is that the vehicle will be parked and off for an extended period of time or overnight.

Update Procedures

1. Check if the vehicle is involved in Campaign 399 and if the campaign has not been previously performed.

2. Perform the TBM FOTA Update as explained below.

2.1. Vehicle must be under 3G/4G and GPS Signal*

**Customer Enrolment is not necessary.*

2.2. SOC greater than 70%

2.3. Key inside the vehicle to start the Download due to the need for authentication.

2.4. For the **Download** phase, put the Car Key in ACC with a battery maintainer for 20 minutes (or engine running for 20 minutes) to ensure download from the server)

✓ 20 minutes is the minimum time to complete the Download from the Server.

2.5. The new Software will be downloaded from the server without any operation from the technician. There are no messages or operations to perform.

2.6. At the first Key-OFF after the download a message appears to start the Update



2.7. Push the Update Now Button to start the **Installation**.

✓ The installation cannot be interrupted. If the engine is restarted, it doesn't affect the installation. There is no way to interrupt the installation (open/close doors, ON/OFF lights etc...).

✓ The update takes 10-15 minutes. During the update some functions related to the updated modules may not work. Refer to the pre-installation screen.

2.8. If the Update Now screen does not appear, repeat steps starting from 2.1 after 2 hours