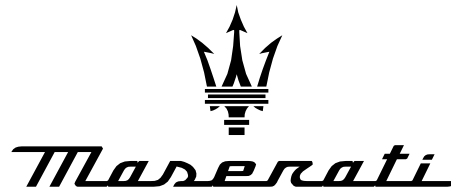


Diagnostic Sheet

FROM: Maserati TSO

TO: Maserati Network



PERSONAL SERVICE LAB

MASTERS OF CARE

TBM2 Diagnostic Checklist

IMPORTANT NOTICE This bulletin supersedes MAS004504 BOL 25-01 released on Jan 14, 2025. It contains updated information, please ensure all previous versions are discarded.

DATE: JULY 31, 2025

This bulletin provides a diagnostic checklist to identify, troubleshoot, and resolve issues related to the TBM2 (Telematics Box Module) system in Grecale, GranTurismo, and GranCabrio models. It outlines specific concerns associated with DTCs and step-by-step procedures to ensure accurate diagnosis and effective resolution of connectivity, communication, and hardware-related concerns.

MODELS AFFECTED: M182 Grecale 2.0 L4 MHEV and M189 GranTurismo(All MY).

CUSTOMER CONCERNS:

Concern A: Pop-up message on display:

A.1: Service

A.2: SOS

A.3: Wi-Fi

A.4: Backup battery

Concern B: Missing TBM communication (offline on RSV, in red)

Concern C: The Mobile App for remote management is not working

Concern D: SOS/help call and WiFi hotspot icons cannot be selected

Preliminary Checks

- Capture a photo of the concern (If possible)
- Gather information on appearance mode, frequency, and first onset
- Perform a full scan report, including environmental parameters
- Perform a 12V battery test with printout

Concern A.1: Pop-up message – Maserati Connect Module Requires Service

DTC Check:

If DTC B22A996 is present, → Go to **Procedure 1**

If DTC B22A996 is not present, → Go to **Procedure 2**

Note: Ignore DTC U008000 (Ethernet Bus) as it does not affect the related service operation.

Procedure 1 (DTC B22A996)

Check Variable **2796 – “ECU Internal Fails”** via the scan report

- If only 1 of 5 parameters failed → HW fault, replace the TBM
- If all 5 parameters failed → SW fault, perform reset below:

Cellular Signal Strength	Parametri errati
Variabile: 2793 - GNSS Visible Satellite GPS Visible Satellite	Parametri errati
Variabile: 2794 - Network Connection Network connection status	Parametri errati
Variabile: 2796 - ECU Internal Fails Modem	yes
SIM module	yes
GNSS/Modem receiver	yes
WiFi module	yes
Accelerometer - E6D	yes
Variabile: 2800 - Dati Modem Codice IMEI (International Mobile Equipment Identity)	Parametri errati

Reset Procedure:

Clear DTCs

Key OFF → Wait 2 minutes → Key ON → Wait 2 minutes

Read DTCs

Repeat up to 3 times. If DTC persists, open a BOL as Support Request for Auth to replace the TBM.

- If TBM has obsolete SW R3B4 (M182) or R3G1(M189), replace HW compatible with SW R5S2
- If TBM has SW R5F, it can be updated to R5S2

TBMs that cannot be upgraded to SW R5S2 are shown below

	F187	F188	F191
R3B4 (M182)	670292884	52223558	52182933
R3G1 (M189)	670292884	52227403	52182933

TBMs compatible with the new SW R5S2 are shown below.

	F187	F188	F191
R5F	670309418	52245562	52219959
R5S2	670358241	52270644	52219959

Procedure 2 (No DTC)

Check Variable **“2794 - Network Connection”** via the scan report:

Variable: 2792 - Cellular Signal Strength Cellular Signal Strength	0
Variable: 2793 - GNSS Visible Satellite GPS Visible Satellite	00
Variabile: 2794 - Network Connection Network connection status	Not Connected
Variabile: 2796 - ECU Internal Fails Modem	no
SIM module	no
GNSS/Modem receiver	no
WiFi module	no
Accelerometer - E6D	no
Variabile: 2800 - Modem Data IMEI (International Mobile Equipment Identity) Number	015857002209142

- If connection error → Perform a hard reset using Mdevo
 - If the issue persists, → Open BOL for Technical Support

Concern A.2: Pop-up message – SOS

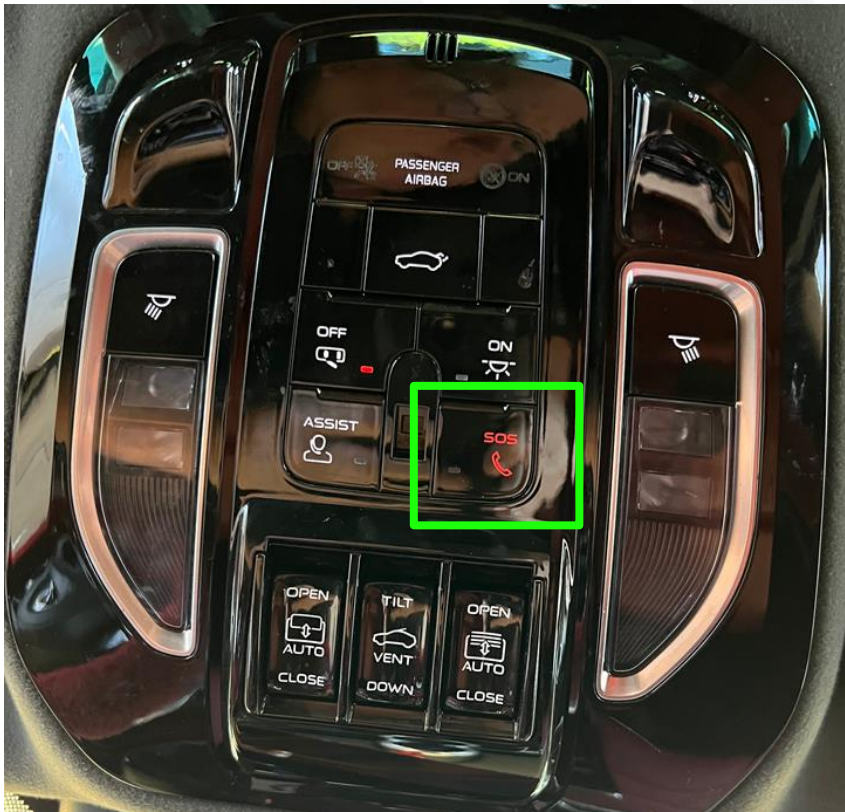


DTC Check:

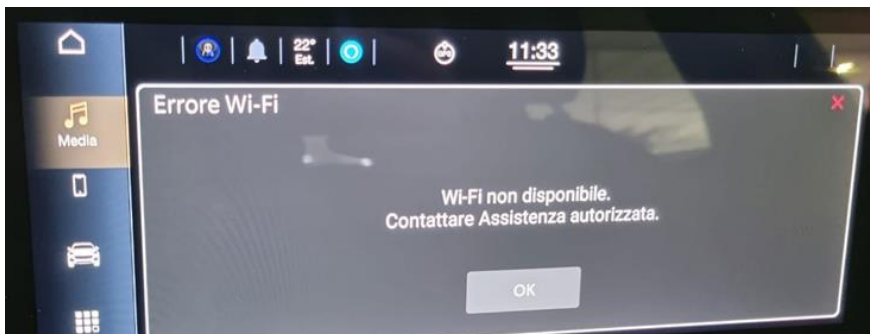
If any of the listed DTCs are present, perform electrical diagnosis per TechDocs:

- B1401-11 Emergency Call Speaker-Circuit Short to Ground
- B1401-12 Emergency Call Speaker-Circuit Short to Battery
- B1401-13 Emergency Call Speaker-Circuit Open
- B1401-2B Emergency Call Speaker-Wires Shorted Together
- B143A-12 Microphone 1-Circuit Short to Battery
- B143A-13 Microphone 1-Circuit Open
- B143A-2B Microphone 1-Wires Shorted Together
- B1560-13 Cellular Antenna 1-Circuit Open
- B1561-11 Cellular Antenna 2-Circuit Short to Ground
- B1561-13 Cellular Antenna 2-Circuit Open
- B1562-14 GPS Antenna-Circuit Short to Ground or Open
- U0452-86 Implausible Data Received From Restraints Control Module-Signal Invalid

These DTCs are associated with the red warning light on the SOS button.



Concern A.3: Pop-up message – Wi-Fi unavailable. Contact authorized support.



DTC Check:

If DTC B22A996 is present:

Check Variable “2796 - ECU Internal Fails” via the scan report

- If the Wi-Fi Module fails, → It is a HW fault, replace the TBM.

Variable: 2792 - Cellular Signal Strength	Cellular Signal Strength	4
Variable: 2793 - GNSS Visible Satellite	GPS Visible Satellite	16
Variable: 2794 - Network Connection	Network connection status	Connected
Variable: 2796 - ECU Internal Fails	Modem	no
	SIM module	no
	GNSS/Modem receiver	no
	WiFi module	yes
	Accelerometer - E6D	no
Variable: 2800 - Modem Data	IMEI (International Mobile Equipment Identity) Number	015857003249709

Concern A.4: Pop-up message– Backup Battery Low or Faulty

Checks:

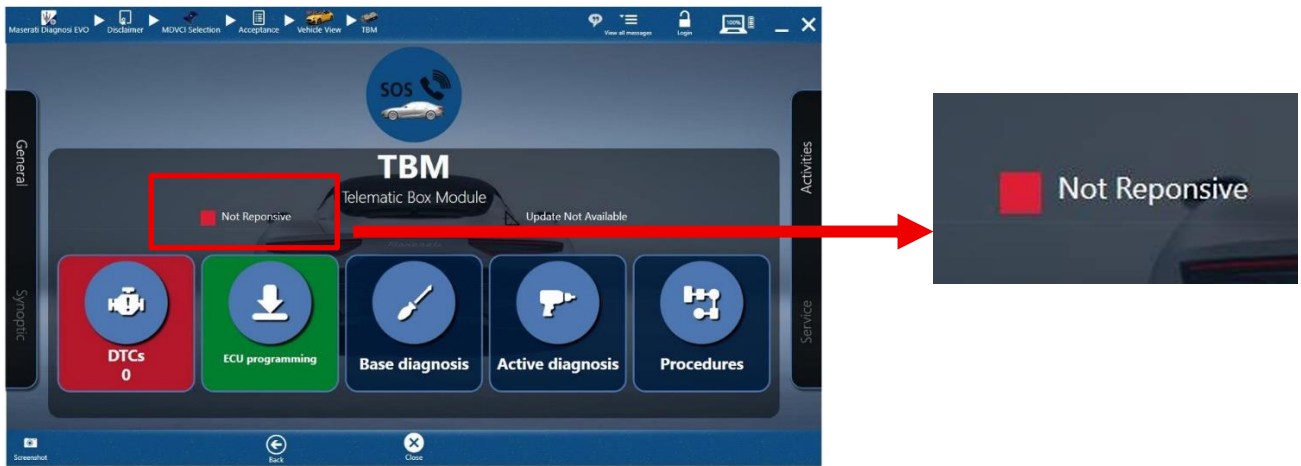
Perform a 12V battery test using the E-XTEQ

- Check TBM parameter Variable 2907 – charge level must be $\geq 40\%$

Variable: 2907 - Backup battery charge level	Backup Battery Voltage	3.343 V
	Backup Battery Charge level	88 %

- Disconnect the TBM for a few minutes, then reconnect it
- Run the engine for 30 minutes, check whether the battery charge rises
- If the issue persists, → Open BOL for Technical Support

Concern B: TBM Communication Missing (offline on Vehicle Scan Report, in red)



Checks:

- Check if the TBM is set as Present on the proxy side
- Verify TBM electrical integrity (power/grounds, connectors, wiring)
- Document any electrical anomalies with photos
- If no fault is found and the issue persists, → Open BOL for Technical Support

CAN node 35 (TBM)
present

ASSIST ICON **NOT** HIGHLIGHTED = OFF

ASSIST ICON HIGHLIGHTED = ON

Concern C: Mobile App Not Working

- 1) Collect detailed information about the concern (e.g., what functions are not available, under what conditions, for how long, which mobile version/operating system, etc.)
- 2) Open BOL as Technical Support, attaching evidence of the information collected

Concern D: Non-selectable Icons (SOS, Assist, Wi-Fi)

Follow **SECTION 08.71 - 1**, → **Procedure 08.71.224.35 TBM - CONNECTION UNLOCK** in TechDocs.

If the issue persists, → Open BOL for Technical Support.

Below are example screenshots of the SOS and ASSIST ICONS:



Final Notes

Maserati reserves the right to modify or reject claims that do not meet the criteria.

We remain at your disposal for clarification.