



STAR ONLINE PUBLICATION



Case Number: S228A000003 – REV. A

Release Date: September 2022

Symptom/Vehicle Issue: Uconnect Box Error Message On Radio Screen And Diagnostic Trouble Code (DTC) code B22A9-96 Set

Discussion: The customer may report “Uconnect Box requires service” error popup on radio screen every time the vehicle starts. wiTECH shows active DTC B22A9-96 (ECU internal performance) set by Telematics Box Module 2, (TBM2).

Engineering is looking into this code and is looking for error code details in the TBM2 data if code is set active. Please add a scan report and this DTC data to the Repair Order (R/O) information. If a Star case is opened, please provide the data in the Star case. Here is the procedure:

Please use wiTECH tool to check the TBM2 data.

Select TBM2 module -> Data tab -> ECU internal fails screen and record the value of:

Modem – fail,	Yes / No
SIM module – fail,	Yes / No
GNSS/Modem receiver – fail,	Yes / No
Wi-Fi module – fail,	Yes / No
Accelerometer E60 – fail,	Yes / No

Log the name and “value” (yes/no) of those items to R/O and/or the STAR case.

If all the ECU internal fails values are set to fail, communication between vehicle controller and modem is not working. Please check the harness connections and reset the TBM to recover.

If one of the ECU internal fails value is sent to fail, it indicates a component failure. Check harness connections and update TBM2 software if any available.

This document does not authorize warranty repairs. This communication documents a record of past experiences. STAR Online does not provide any conclusions about what is wrong with the vehicle. Rather, it captures all previous cases known that appear to be similar or related to the vehicle symptom / condition. You are the expert, and you are responsible for deciding on the appropriate course of action.

Contact STAR Center, or your Technical Assistance Center Via TechConnect, eCONTACT or Service Library entry if no solution is found.



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Diagnosis / Repair:

1. Check the TBM2 software version and update the TBM2 if service software is available.
2. Verify if Uconnect box error message disappeared and DTC went stored.
3. If the issue continues, pull out the TBM2 module fuse.
4. Disconnect all TBM2 harness connectors.
5. Disconnect all related in-line harness connections (if equipped).
6. Disconnect the related component harness connectors.
7. Inspect harness connectors, component connectors, and all male and female terminals for connector improper installation, connector lock damage, corrosion, water intrusion, bent terminals, overheating or terminal discolored, terminals pushed out.
Perform a terminal drag test on each connector terminal to verify proper terminal tension.
8. Repair any conditions that are found.
9. Reconnect all TBM2 harness connectors and in-line harness connectors and related component harness connectors. Be certain that all harness connectors are fully seated, and the connector locks are fully engaged.
10. Plug in the TBM fuse.
11. Perform Proxi and TBM2 hard reset.
12. Erase the DTCs and perform wiTech scan again.
13. Replace the TBM2 module, if B22A9-96 DTC is still active.

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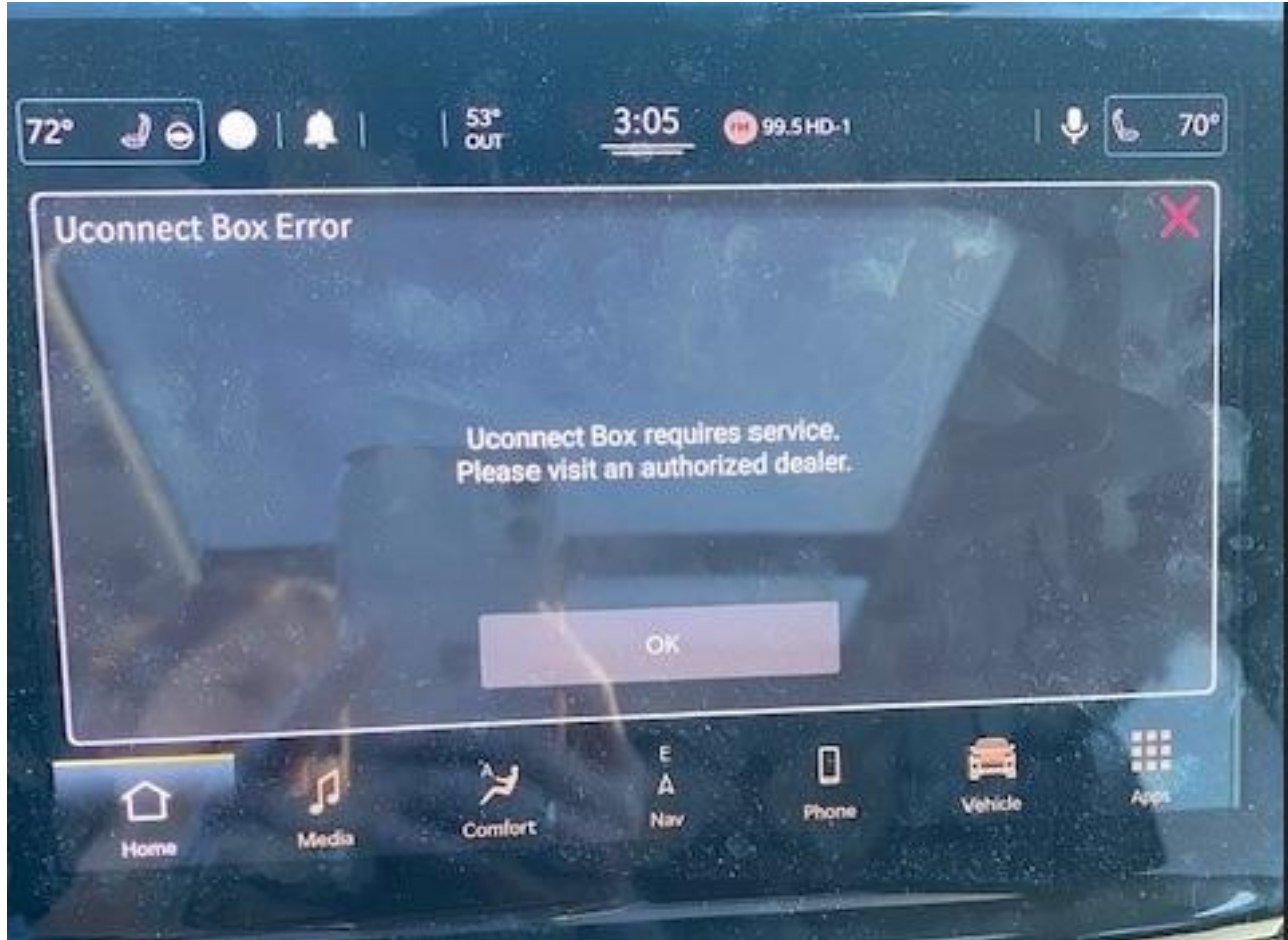


Fig 1 Error Message

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T1359JD

Create JIRA



2021 JEEP GRAND CHEROKEE 3.6L V6 24V VVT ENGINE UPG I W/ESS
1C4RJKBG0M8120205

SOW



13.00 Volts



Action Items

Topology All DTCs All Flashes Recalls RRTs Misc Functions System Tests History

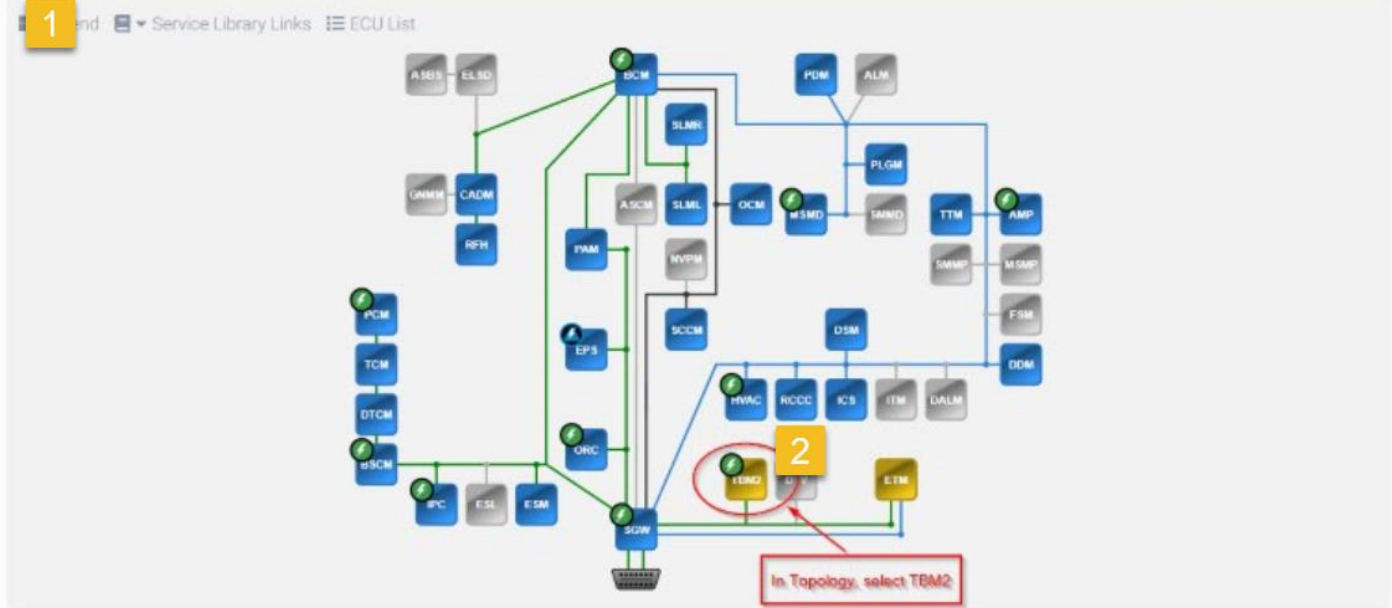


Fig 2 TBM2

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2022 JEEP GRAND CHEROKEE 3.6L V6 24V VVT ENGINE U...
1C4RJKEG4N8500872

T9350DR Create JIRA

11.70 Volts

TBM2
Telematic Box Module 2

Flash DTC Data Misc Functions System Tests Actuators Details Configuration

3

Once in TBM2, click on the DATA tab.

Expand the ECU Internal Fails box and all data requested will be displayed.

5 items

4

NAME	VALUE	UNIT	TYPE
Modem - Fail	No		Sensors
SIM Module - Fail	No		Sensors
GNSS/Modem Receiver - Fail	No		Sensors
WiFi Module - Fail	No		Sensors
Accelerometer - E6D - Fail	No		Sensors

NAME	VALUE	UNIT	TYPE
Odometer	3472	km	Bussed Inputs
Cellular Signal Strength	5		Sensors
Battery Voltage	11.8	V	Bussed Inputs
Network Connection Status	Connected		Sensors
GPS DateYear	2022	-	Sensors
GPS Date Month			Sensors

Fig 3 TBM2 Data - ECU Internal Fails

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