

Macan E-box Water Intrusion Causes Electrical Errors

Vehicles Affected

Models	Model Year	Model Type	VIN Range	Vehicle-Specific Equipment
Macan	As of 2019 up to 2022	95B	N/A	N/A

Revision History

Revision	Release Date	Changes
0	May 13, 2022	Original document

Condition

The customer complains about any of multiple possible faults. These include faults for: engine, transmission, four wheel drive, power steering, and the fuel system.

The specific faults include:

Control Unit	Fault Code
PSM	052284 052204
All-wheel drive (transfer box)	C12085 C1209D
Transmission electronics (PDK)	U010000
Various ECUs	C12002 - No communication with engine electronics control unit (DME) U111100 - Data bus – fault value received from engine electronics (DME) control unit Other faults for loss of communication with PSM, DME, and AWD

Technical Background

This condition may be the result of water entering the e-box and causing corrosion on the contacts or splices. When investigating, open the e-box and look for evidence of water intrusion.

See illustrations for examples.

Note the object area of the blue arrows (in figure 1) and note if there are traces of water related residue on the bottom of the e-box (like in figure 2).

Also, look for corrosion on the contacts or splices (Figure 3).

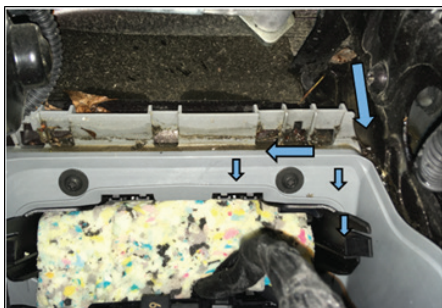


Figure 1



Figure 2

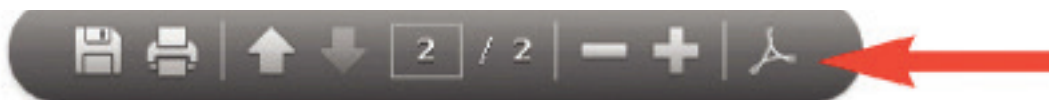


Figure 3

Service Information

Remove existing corrosion from the splices and wiring and reattach to the e-box. Follow instructions in the attached document. Please note: it is necessary to replace the cover for the e-box.

To open the attachment, download the pdf and click on the paperclip icon to the left of your Adobe Acrobat window. If the paperclip is not visible, pass your mouse pointer over the lower part of the Acrobat window and the Acrobat toolbar should appear as seen below. Click on the Acrobat icon on the far right to access the paperclip, then click on the paperclip to open the attachment.



Warranty

As always, please document the repair completely in PCSS.

For this repair, please code the "cause" as follows:

Cause location: 97930 Central electrical system cover

Cause symptom: 5000 Leaks

Use the following troubleshooting labor operation: (Examples)

97450199	Wiring diagnosis
97840900	Fuse box loosened and fastened
97454199	Wiring repair
97920199	Test all fuses + ground points
97521999	Wiring trace and repair
97524199	Repair wiring
97194299	Rep corroded wires to CUs
97090199	Check the joint connection for main harness for short/op
97090901	Main wire harness loosened and fastened
97094199	AT85TU : Harness open, search for splices Fix the splice
97094199	AT55TU: Harness closed and isolate with tape
97094199	Wire harness repair, main harness to fuse box

Important disclaimer: Actual time must be supported by a separate identifiable punch on the repair order for each time claimed. The actual time claimed for the listed labor operations must be fair, realistic and justified based on the technicians separate, identifiable punch.

Search Items

Macan, E-Box, Corossion, wiring diagnosis, splice, fuse box, harness, joint connection, crimp faulty, engine wire harness, water, intrusion, residue

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