907RAD-ON Installation Manual

Installation instructions for 907RAD-ON automatic radio shutdown bypass for 2019-2023 Sprinter MBUX radio.

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INTRODUCTION

The 907RAD-ON is designed to allow users to bypass the automatic radio shutdown built into the 907 Sprinter. Normally, with the engine off the vehicle will shut down the radio automatically to conserve battery. For many Sprinter builds, battery consumption from the radio is not a concern for a variety of reasons. The 907RAD-ON will keep the MBUX system on even when the engine is off- giving the user access to all the MBUX system features, including OEM WiFi hotspot.

The system utilizes an on/off switch. Turn the switch on (**white dot *pressed in***) when you want the radio to stay on, turn the switch off (***blank side* pressed in**) to have the vehicle shut the radio off automatically.

Note: the 907RAD-ON will not provide power to the radio or change the power source of the radio. Be sure to account for the power consumption when using the 907RAD-ON with the engine not running. If radio is not being used when engine is not running, be sure to turn off the 907RAD-ON

NOTE FOR SERVICING: The 907RAD-ON should be bypassed ***before***performing flash updates. To bypass the module, simply unplug the OEM CAN plug from the 907RAD-ON harness and plug it back into any empty spot in the OEM distribution block.

PARTS:

- 907RADON (1)

Step 1 — Remove panel at end of knee bolster



- Using pry tool, remove panel at end of knee bolster

Step 2 — Remove screws and panel at end of footwell



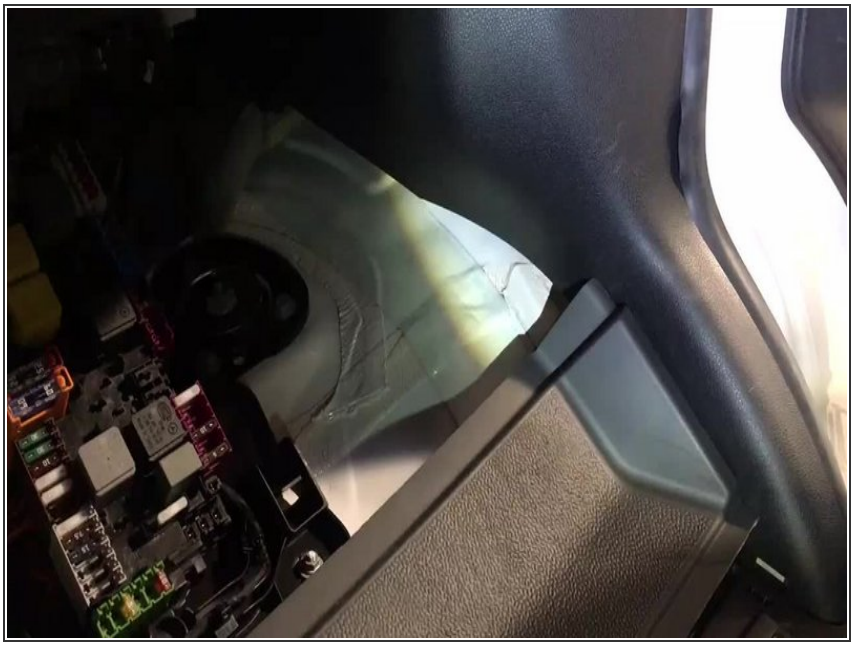
- Remove two screws and panel and end of footwell

Step 3 — Remove access panel in foot well



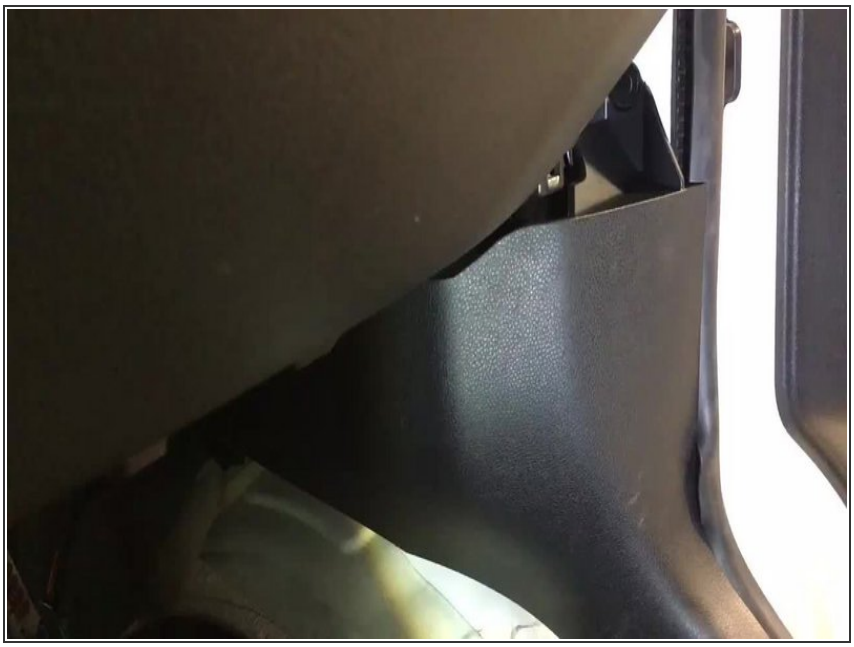
- Turn plastic screws in counter clockwise
- Remove panel
- Pull back floor and remove fuse access panel

Step 4 — Remove sill panel screw under floor



- Pull back plastic floor
- Remove one screw holding sill panel in place

Step 5 — Remove sill panel tabs



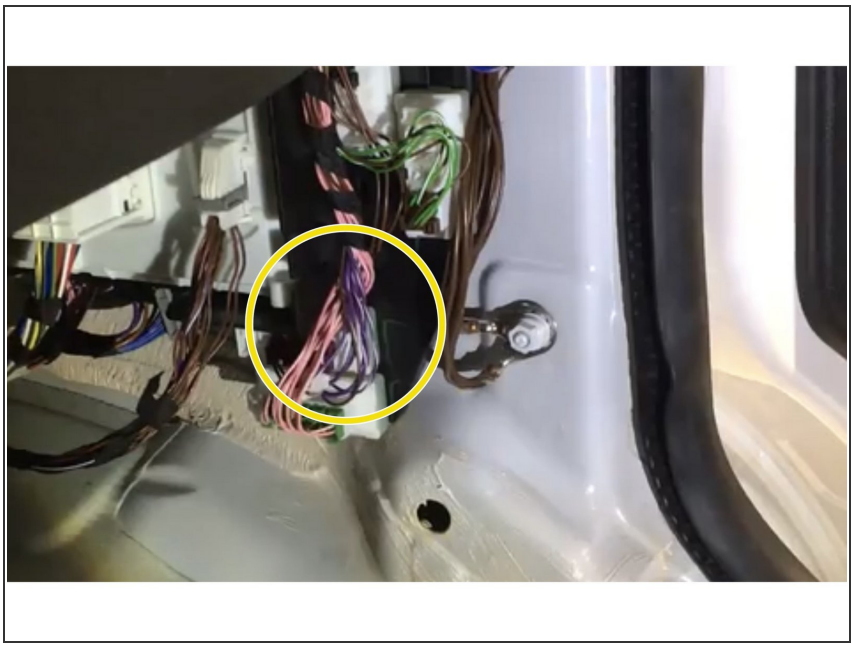
- Remove 2 plastic panel tabs

Step 6 — Remove and set aside sill panel



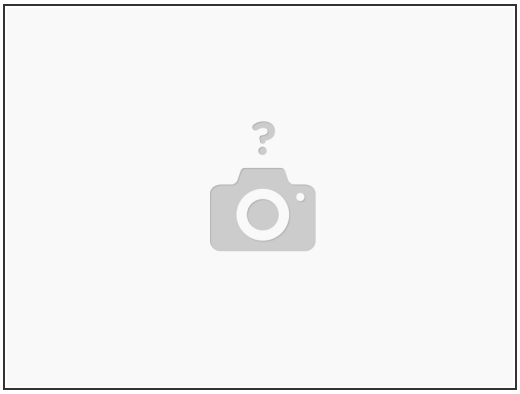
- Pull back floor and remove sill panel

Step 7 — Locate CAN distribution block



- Locate CAN distribution block below the A pillar with **purple and purple/white wires**

Step 8 — Begin CAN plug test

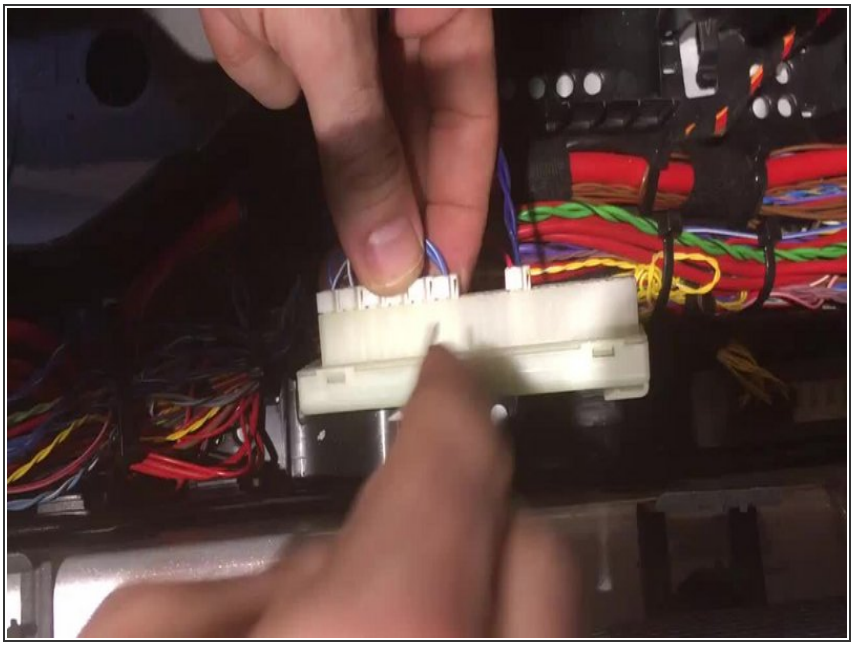


⚠ Be sure vehicle is in safe location to start and run

- Start engine using push to start button
- Turn radio on

ⓘ To locate the CAN plug that will be connected to the T-harness a short test is performed using the radio. It is important for the engine to be running as you will be looking for conditions that cause the radio to shut off and you do not want a false positive.

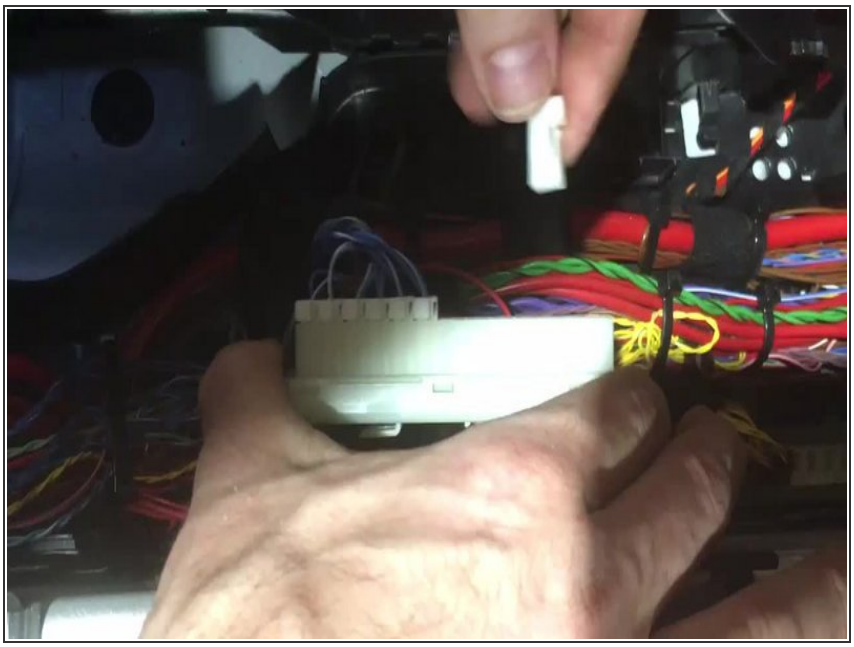
Step 9 — Locate CAN plug



- The only plugs that need to be tested are the 2 pin plugs at the distribution block with purple and purple/white wires.
- Using a pick tool, carefully un-plug 1 of the 2 pin connectors in the distribution block.
- Check to see if radio shuts off. If the radio ***does* shut off** after un-plugging the first connectors, click here to move to step 10
- If the first connector tested **did *not*** shut the radio off, plug connector back into the block.
- Un-plug a 2 pin connector from the distribution block that was not previously tested. Confirm that radio shuts off.
- It may take up to 10 seconds for CAN network to react. Please leave plugs disconnected for at least 10 seconds for accuracy. If there are more than 2X 2 pin connectors in the distribution block, continue test until you find the plug that **shuts off the radio** when disconnected from block

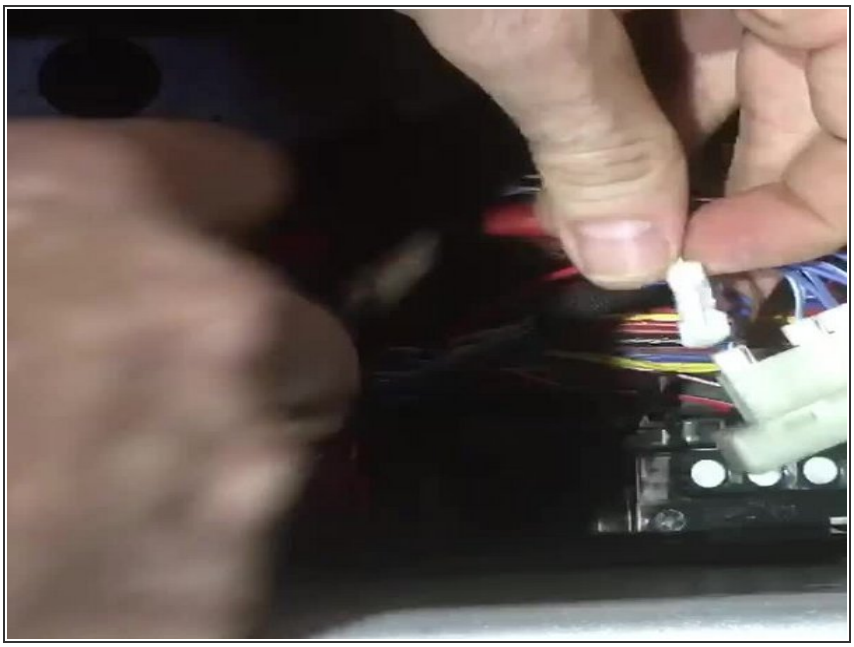
ⓘ If there are more than 2X 2 pin plugs in the distribution block, repeat test until you find the plug that causes the radio to shut off when disconnected from the block

Step 10 — Connect T-harness plug into distribution block



- Connect 2 pin white plug from provided T-harness (side **without** exposed pins) into any empty spot in the block

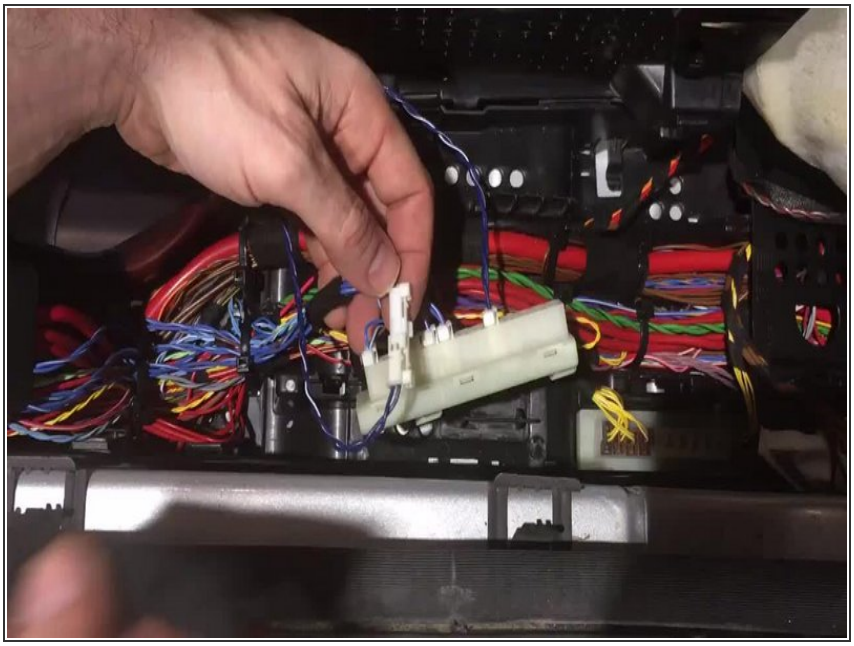
Step 11 — Connect male connector from OEM plug



- Connect OEM CAN plug that was removed from the block and connect to male connector from provided T-harness (side with exposed pins). Be sure to line up the **solid purple** wire from the T-harness to the **solid purple** wire from the OEM plug

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Step 12 — Insulate connection and replace distribution block



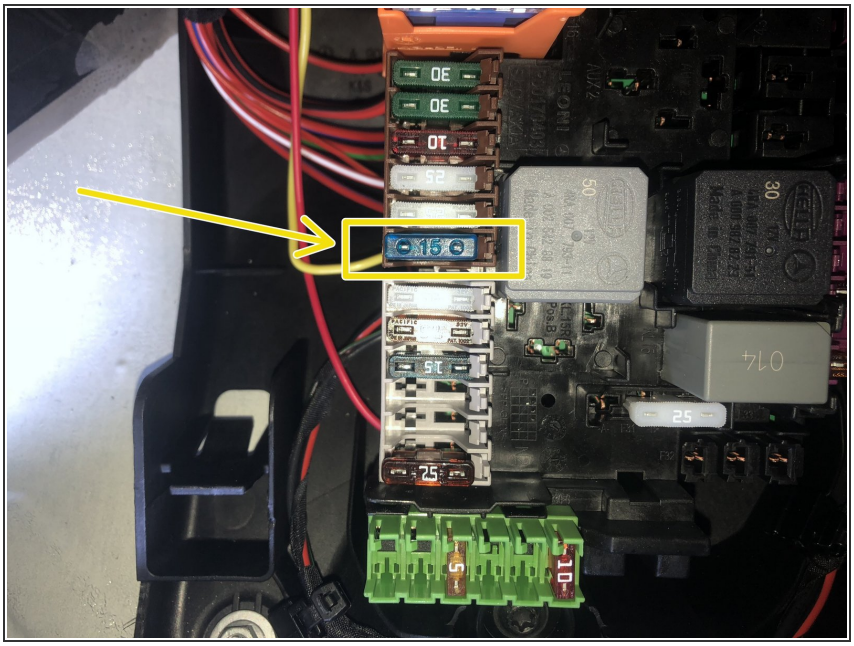
- Tape connection made between factory plug from block and T-harness connector and find secure location for T-harness wires
- Re-install distribution block into original location

Step 13 — Connect ground



- Remove bolt near door opening
- Connect ring terminal from provided black wire on post
- Replace bolt and tighten

Step 14 — Connect power

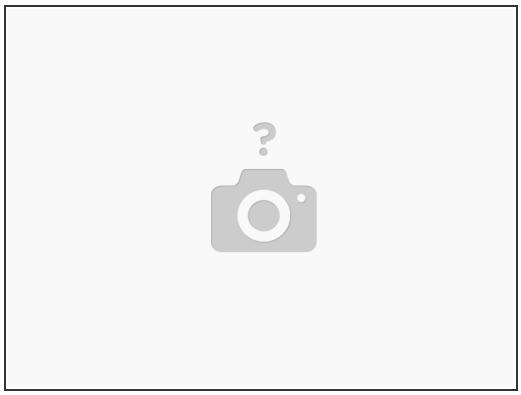


ⓘ The 907RAD-ON harness comes with a red power lead terminating at a fuse holder terminal. This fuse

will pin into the fuse box under the passenger floor

- Remove provided fuse and route empty fuse holder terminal through underside of fuse box and insert into one side of fuse location marked on picture left (yellow wire shown in picture)
- From top of the fuse box connect provided fuse to fuse holder terminal

Step 15 — Mount on/off switch



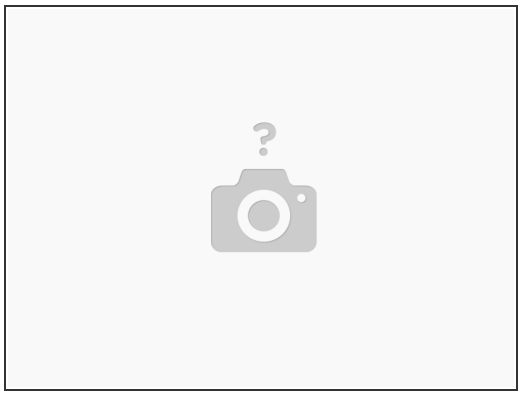
ⓘ The 907RAD-ON includes a black toggle switch with a white dot. This switch is used to operate the 907RAD-ON. When the switch is in the **ON** position (**white dot pressed in**)- the 907RAD-ON module will be powered on and bypass the automatic radio shutdown (radio will stay on with ignition off as long as the switch is in the on position)

ⓘ When the switch is in the **OFF** position (**blank side pressed in**) the module will not have power and the radio will operate normally (shut down automatically after ignition is turned off)

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- Drill hole for and mount on/off switch in desired location

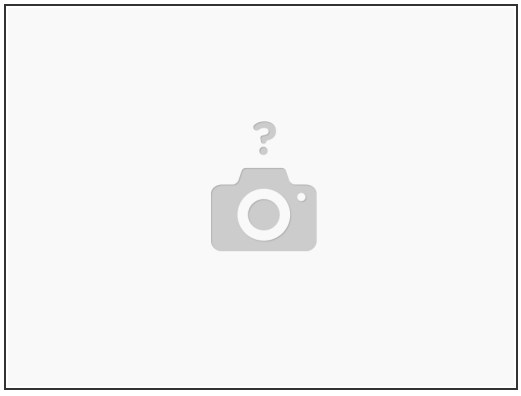
Step 16 — Make sure switch connector is plugged into module



- Connected to the on/off switch is a black or white 4 pin connector. This connector must be connected to the **red** 4 pin plug on the 907RAD-ON module.

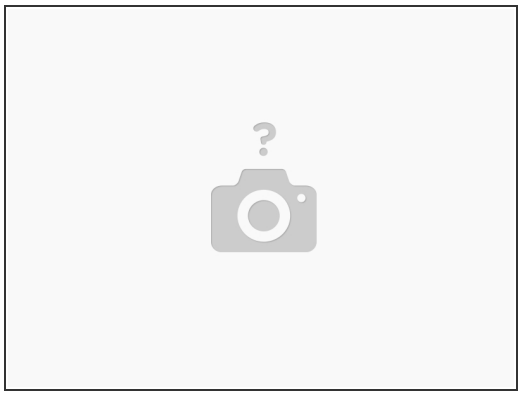
ⓘ The black or white 4 pin connector comes already plugged into the module, but please make sure that it is connected before testing the module.

Step 17 — Test operation



- Turn switch to **ON** position (white dot pressed **in**)
- With ignition off, turn radio on
- Make sure radio stays on for extended time
- Turn valet switch to off position to ensure that automatic radio shutdown behaves normally

Step 18 — Mount module and reassemble



⚠ Securely mount module away from any moving parts or heat sources

- Reassemble dash and floor area

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