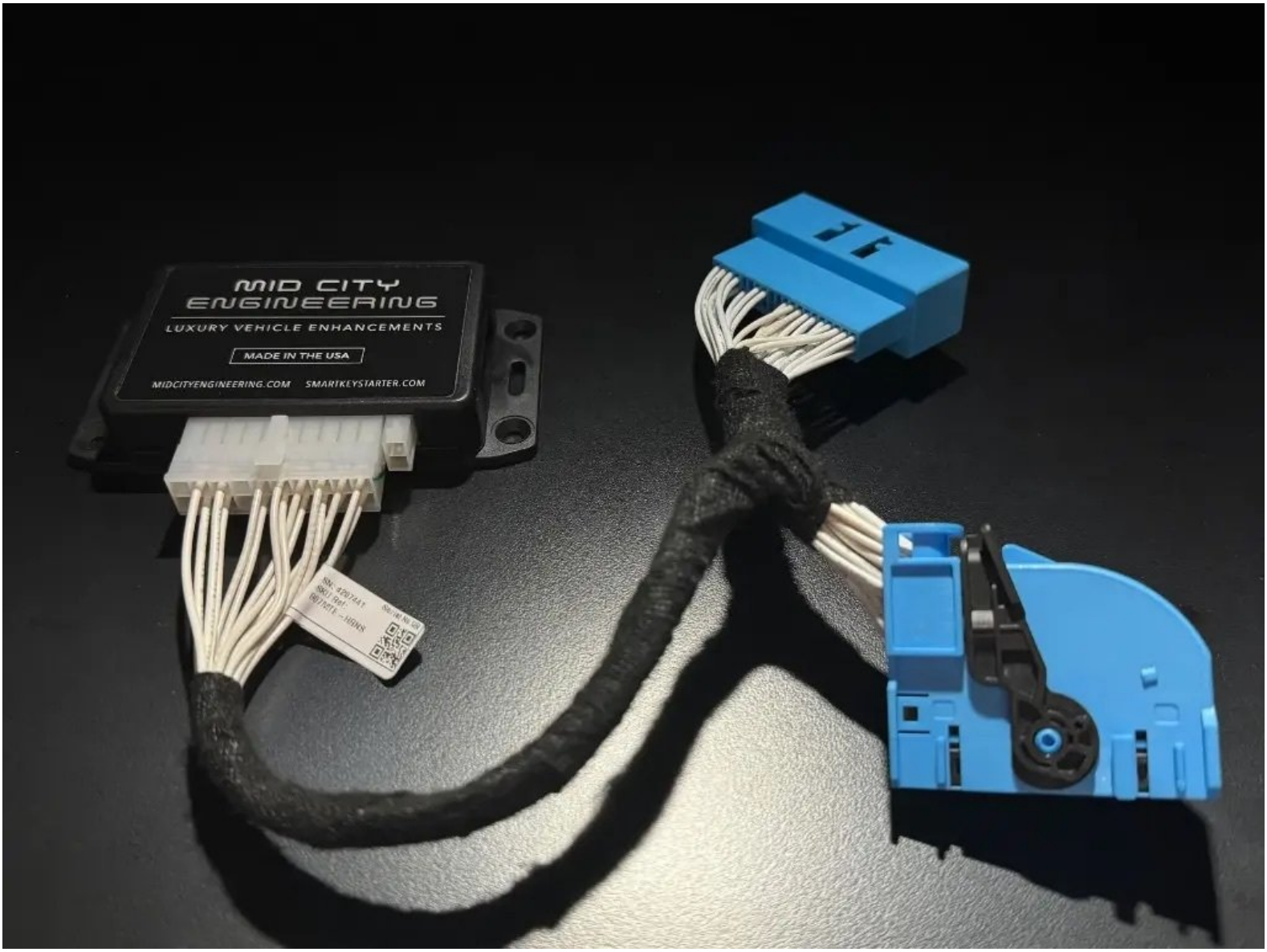
907MTE Miles to Empty and J51 Programmer Installation Instructions

907MTE Installation Instructions for Sprinter miles to empty module

Written By: Mid City Support



INTRODUCTION

NOTE: Modules with a build date of 9/12/25 or newer (V1.25) have a new tank programming procedure and the default tank size is now set for 47 gallons

See below for legacy firmware programming instructions.

V1.25 Tank programming procedure:

Default tank size is 47 gallons

1. Press push to start button 2X with no foot on the brake to turn on IGN

2. Hold high beam stalk towards you and press UNLOCK button on OEM key fob 1X to change to 45 gallon tank size. You will see the the miles to empty on the cluster change

3. To program for 40 gallon tank, press the unlock button on the key fob a second time (you will see miles to empty on the cluster change again). Pressing the unlock button again will not change the tank size.

4. To increase the tank size one step, turn ignition on, pull the high beam stalk towards you and press the the LOCK button on the key fob. It will increase the tank size 1 step with each lock press, until the maximum (and default) tank size of 47 gallons

LEGACY FIRMWARE (build date before 9/12/25) Tank size programming:

1. Press push to start button 2X to turn on ignition (you will see all warning lights on in instrument cluster)
2. Pull high beam/turn signal stalk towards you and hold
3. Tank size is adjusted in 10% increments using the OEM key fob:
4. Press Lock button for +10% (increase tank size)

* Press Unlock button for -10% (decrease tank size)

Default programming is for 48 gallon tank

Step 1 — Locate battery quick disconnect



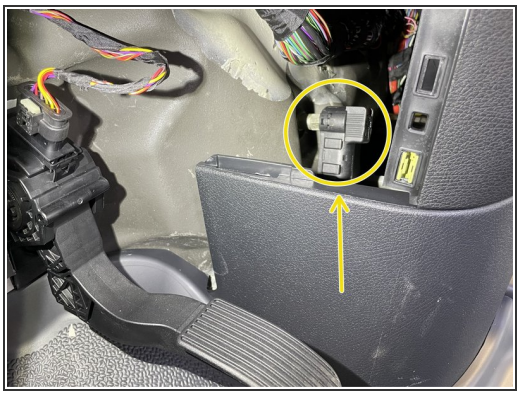
There is a battery quick disconnect that should be used to disconnect the chassis battery ground before performing this bypass

⚠ The battery disconnect instructions are for general reference only. For instructions and chassis specific details, refer to your vehicles owner manual before performing this disconnect.

The battery disconnect instructions are for general reference only. For instructions and chassis specific details, refer to your vehicles owner manual before performing this disconnect.

- Battery disconnect is located under the driver side dash to the right of the accelerator pedal
- Remove access panel above and to the right of the accelerator pedal

Step 2 — Un-plug battery quick disconnect cable





- Locate battery quick disconnect cable behind access panel
- There is a red tab on the top of the disconnect cable. To release the cable from the post, the red tab needs to be pushed downward
- Push the red tab downward to release the cable and pull towards the rear of the cable at the same time to remove cable from post

⚠ Carefully place battery disconnect cable to the side

Step 3 — Pull back weather seal



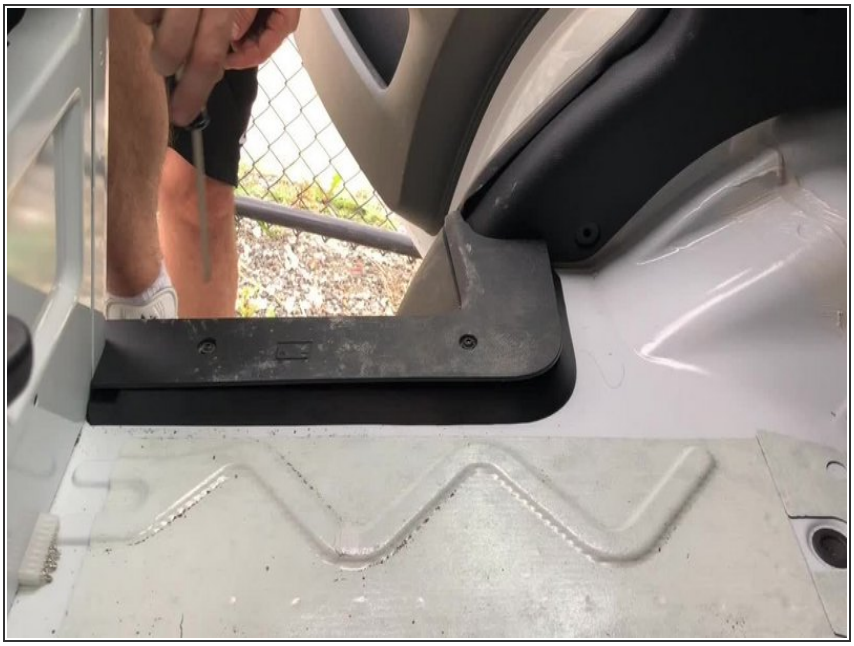
- Pull back weather seal from driver door jam

Step 4 — Remove intermediate panel



- Using a pry tool remove intermediate panel between A pillar and kick panel

Step 5 — Remove sill cover



- Remove the 2 x T20 screws from the sill cover
- Remove sill cover and carefully set aside

Step 6 — Remove 1 x T20 from below hood release



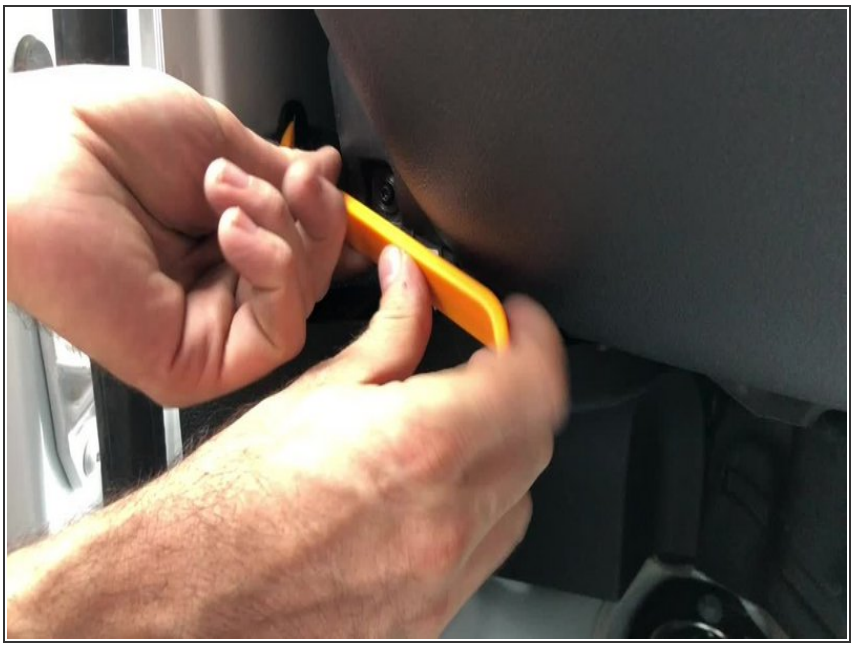
- Remove 1 x T20 from below hood release

Step 7 — Remove 1 x T20 from bottom of kick panel



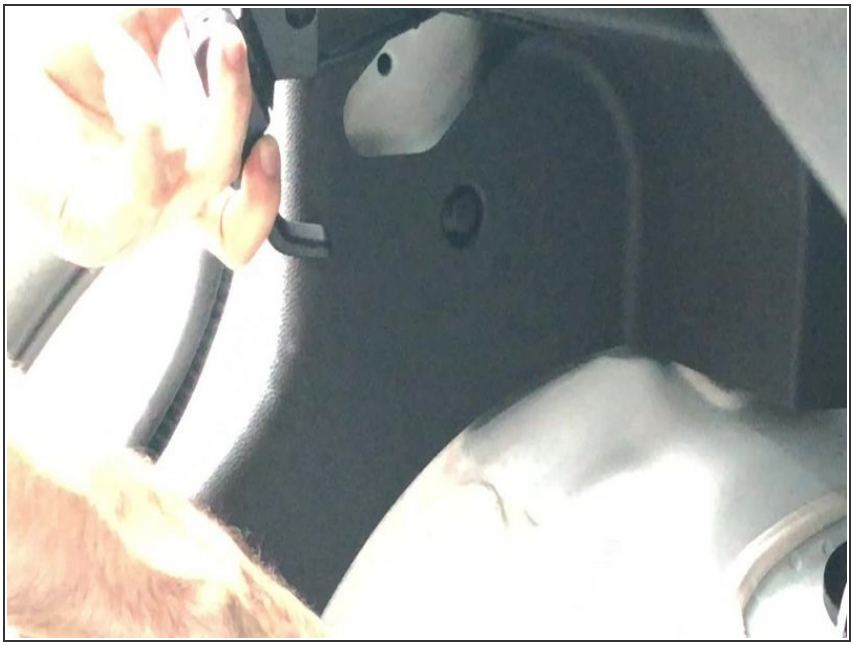
- Remove 1 x T20 from bottom of kick panel

Step 8 — Remove plastic push fastener next to knee bolster



- Remove plastic push fastener next to knee bolster

Step 9 — Remove 2nd plastic push pin from kick panel



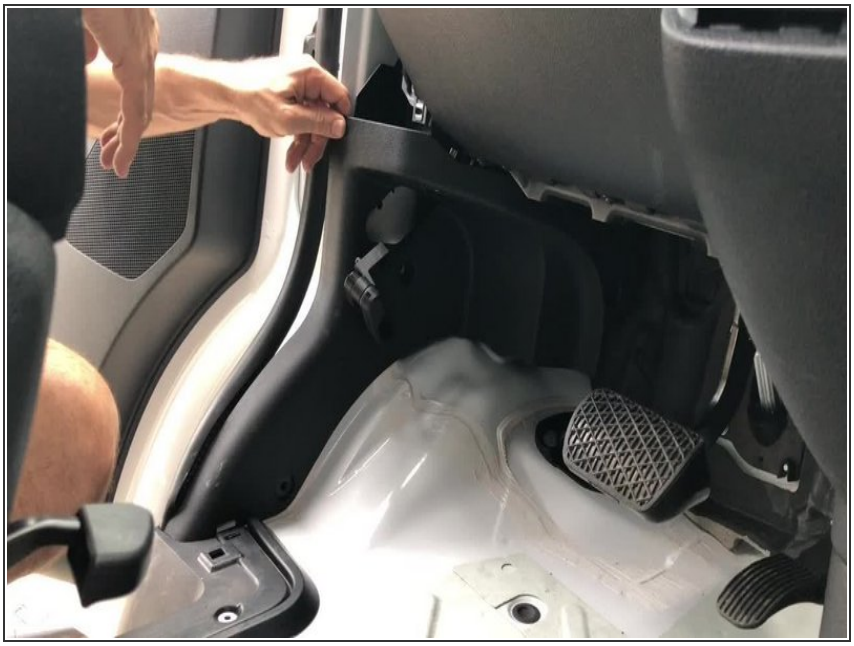
- Remove plastic push pin from kick panel (behind hood release)

Step 10 — Remove 3rd plastic push fastener from kick panel



- Remove 3rd plastic push fastener from kick panel

Step 11 — Remove kick panel



- Remove kick panel
- Route hood release through kick panel opening

⚠ Be careful of OBD harness

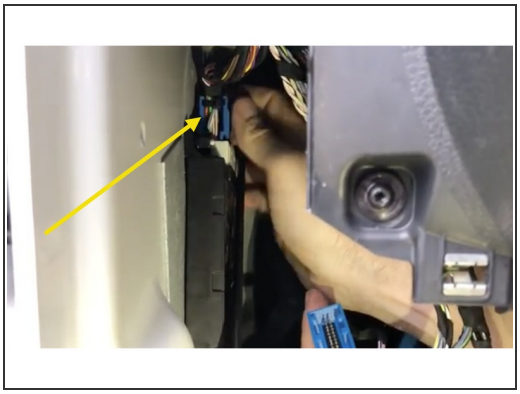
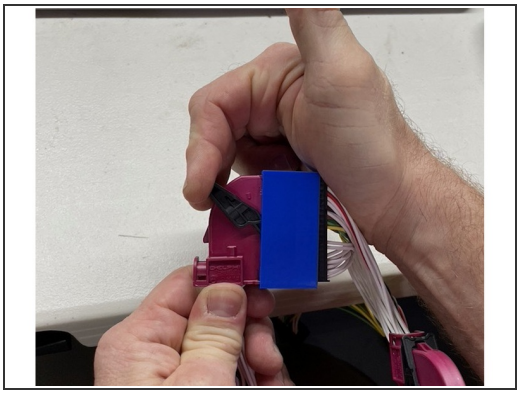
Step 12 — Disconnect OBD harness and set aside panel



- Disconnect OBD harness

⚠ Carefully route hood release through opening and set trim piece panel aside

Step 13 — Install T-harness at EIS module and chassis harness


- Locate EIS module in driver kick (mounted to exterior wall below A pillar)
- Unlatch and unplug 40-pin **BLUE** connector from top of EIS module
- Connect 40-pin **BLUE** connector from EIS to mating connector on T-harness
- Connect 40-Pin **BLUE** connector from the T-harness to OEM EIS module

⚠ The blue or pink mating plugs have a latch. When connecting the T-harness to the OEM module and the OEM harness to the T-harness, make sure that the plug latches and clicks into place (latch should be straight up.

Note: if you are installing or have already installed the SmartKey Starter® remote start/remote start and high idle, connect the SmartKey Starter® directly to the OEM EIS module and connect the 907MTE harness between the SmartKey Starter T-harness and the OEM harness

Step 14 — Re-connect chassis battery disconnect cable



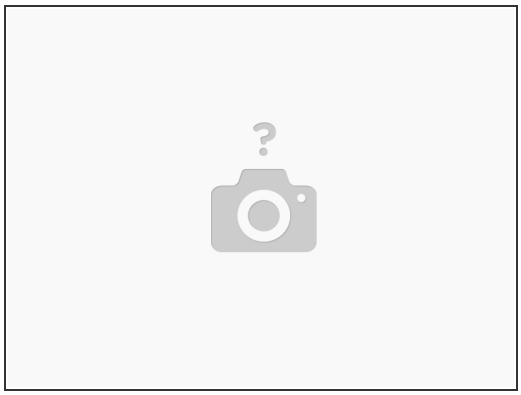


- Reconnect battery disconnect cable from to post from step 2

⚠ **Ensure that cable locks into place on post. You should feel the tab lock into place. Once connected, you should not be able to remove cable from post without pressing red tab downward**

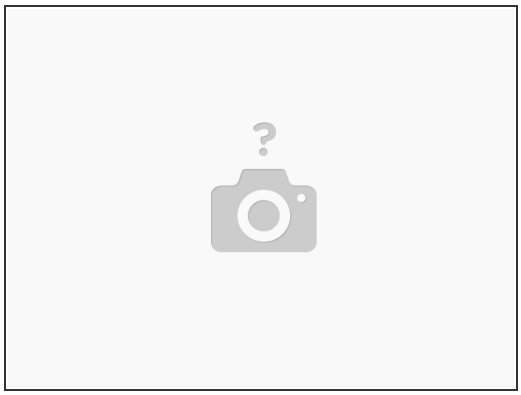
- Replace access panel

Step 15 — OPTIONAL: J51 Option Programming



- The J51 option code programmed ON tells the vehicle to use the fuel tank internal float to calculate fuel level, rather than just the vehicle computer. Please check with your fuel tank provider to determine if the J51 option code should be turned on.
- To program J51 on, press the push to start button 2X (without your foot on the brake) to turn on ignition. You should see all the warning lights on in the dash.
- Pull and hold high beam/turn signal stalk towards you until the green LED on the 907MTE module turns on (about 10 seconds). Release the stalk and turn ignition off.
- The entire programming sequence should be done within 20 seconds of turning ignition on.

Step 16 — OPTIONAL: Tank Size Programming



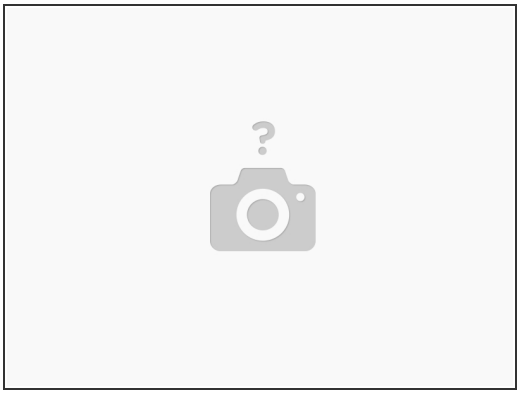
- Press push to start button 2X to turn on ignition (you will see all warning lights on in instrument cluster)

NOTE: These are the programming instructions for V1.25 (module build date of 09/12/25 or newer). For older firmware, please see introduction above for legacy firmware programming.

Default tank size for V1.25 (modules with build date after 9/12/25) is ***47 gallons***

- Pull and hold high beam/turn signal stalk towards you. To lower the tank size to 45 gallons, press the UNLOCK button on the key fob 1X. You will see miles to empty on cluster lower.
  - To decrease tank size to 40 gallons, continue holding the high beam stalk towards you and press the unlock button on the key fob a second time (miles to empty on cluster will lower again)
  - To increase tank size, hold high beam stalk towards you and press the LOCK button. The tank size will increase in steps from 40, 45, to the maximum of 47 gallons.

Step 17 — Mount modules and re-assemble vehicle



- Mount 907MTE module using zip ties. Suggested location is to wiring harness in driver under dash.

⚠ **DO NOT** mount the module on or near any heat sources or moving parts (eg, vents or steering column)

- Re-assemble vehicle in reverse order of disassembly steps