907SMRT-V2 and 907SMRT-V3 Installation Instructions - 2019-2024 Sprinter (907)

Installation and programming instructions for 907SMRT-V2 and 907SMRT-V3 high idle control module for 2019-2024 Sprinter (907)

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INTRODUCTION

There are two modules which need to be installed:

- OBD programmer module. This module should be removed after programming
- CAN interface connected on passenger side using T-harness. Power and ground for this module can be connected to fuse box using provide Mercedes connector and ground bolt near door opening using provided ring terminal.

The high idle can be used with or without an on/off switch. A negative trigger input (V2 = purple wire, V3 = yellow wire) is provided to use for a switch. For high idle turn on, the purple or yellow wire must be grounded, the vehicle must be in park, and the parking brake must be engaged.

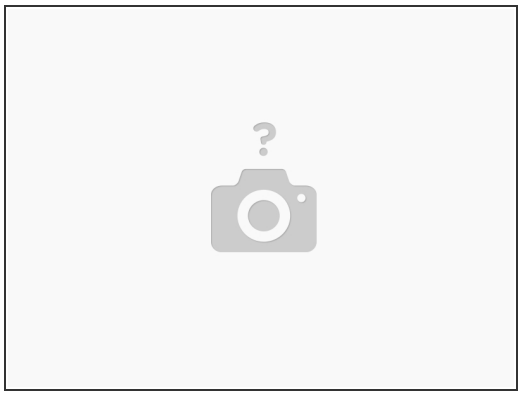
- If you are using a switch to activate the high idle, connect the switch to the purple (V2) or yellow (V3) wire and chassis ground
- If you are not using a switch to activate high idle, connect the purple (V2) or yellow (V3) wire directly to chassis ground

Click here for 907-SMRT-V2 and 907-SMRT-V3 operation instructions

PARTS:

- 907SMRT-V2 (1)

Step 1 — OBD Programming

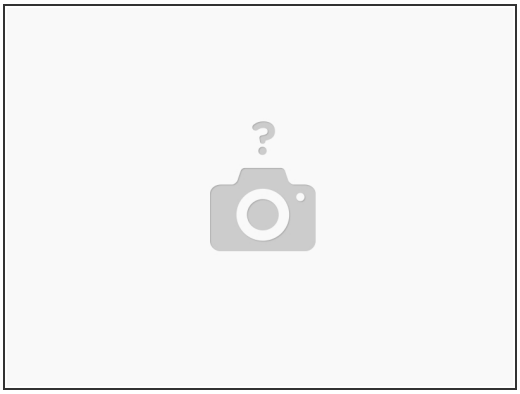


- To make sure that CAN network is awake, turn ignition on (without OBD programmer plugged in)
  - To turn ignition on, press the push to start button 2X without your foot on the brake
- Turn ignition off by pressing the push to start button 1X
- Within 5 seconds of turning ignition off, plug OBD programmer in and turn ignition back on (without starting engine) by pressing the push to start button 2X without your foot on the brake
  - OBD programming process will happen automatically after ignition is turned back on.

  When ignition is on, you will see all warning lights illuminated on the dash, if you do not see the warning lights illuminate, the vehicle is likely in ACC and not ignition.
- There is an LED inside the OBD programmer case that will illuminate when it is plugged in. Once programming is complete, the LED will turn off

  If LED begins to flash, the programmer has already been used and locked to another VIN. The OBD programmer is a 1 vehicle use programmer. Once used on a vehicle, it is locked to the VIN. The programmer can be used to program the same vehicle multiple times.

Step 2 — Remove programmer



- Once programming is complete, un-plug programmer from OBD port.

⚠ Do not start engine with OBD programmer plugged in

Step 3 — Remove panel at end of knee bolster

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

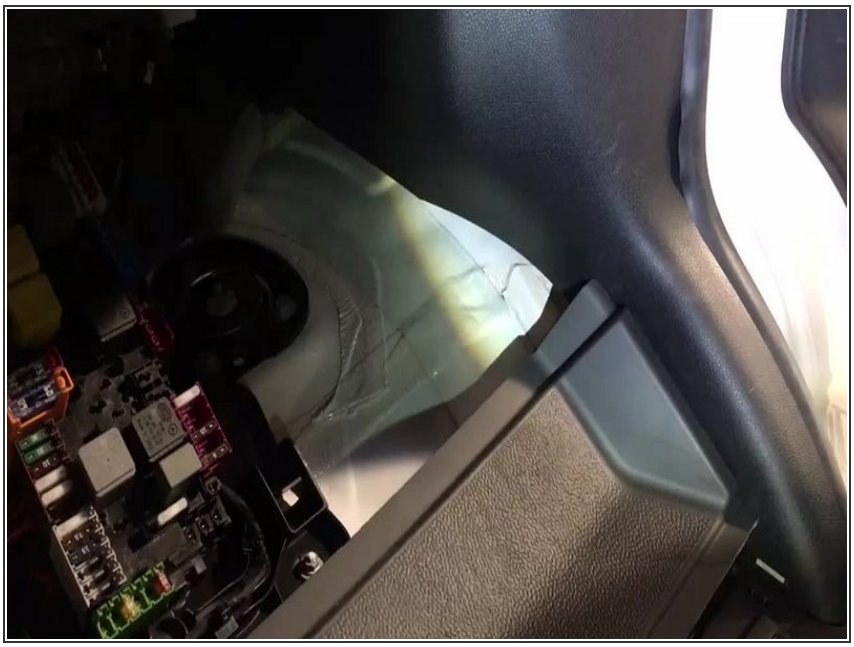
Step 4 — Remove screws and panel at end of footwell

- Remove two screws and panel and end of footwell

Step 5 — Remove access panel in foot well

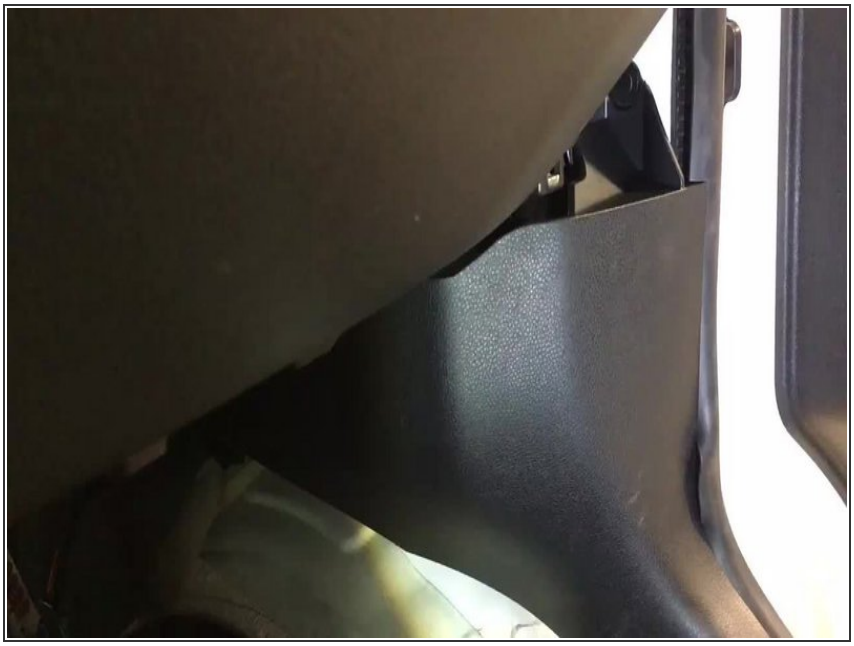
- Turn plastic screws in counter clockwise
- Remove panel
- Pull back floor and remove fuse access panel

Step 6 — Remove sill panel screw under floow



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

Step 7 — Remove sill panel tabs

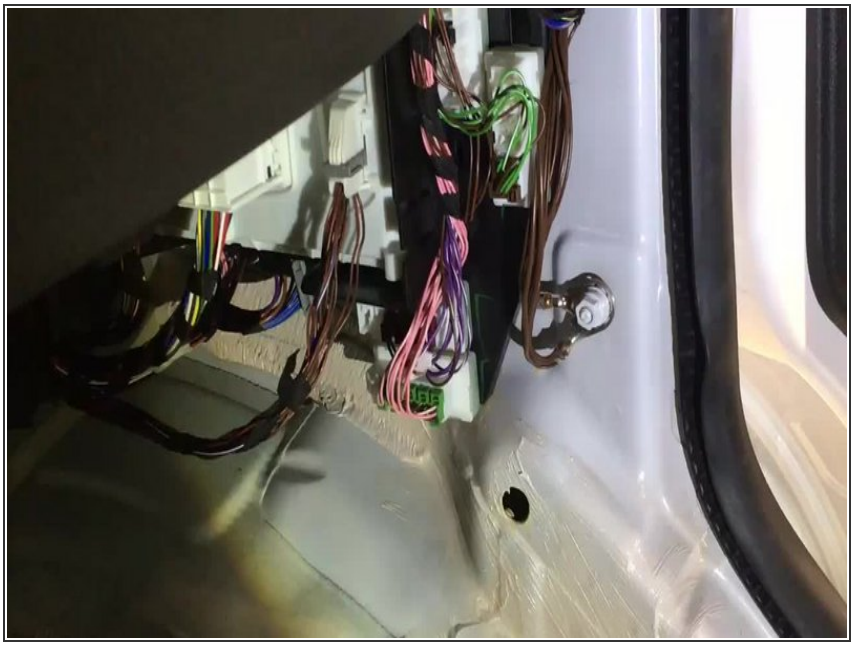


- Remove 2 plastic panel tabs

Step 8 — Remove and set aside sill panel

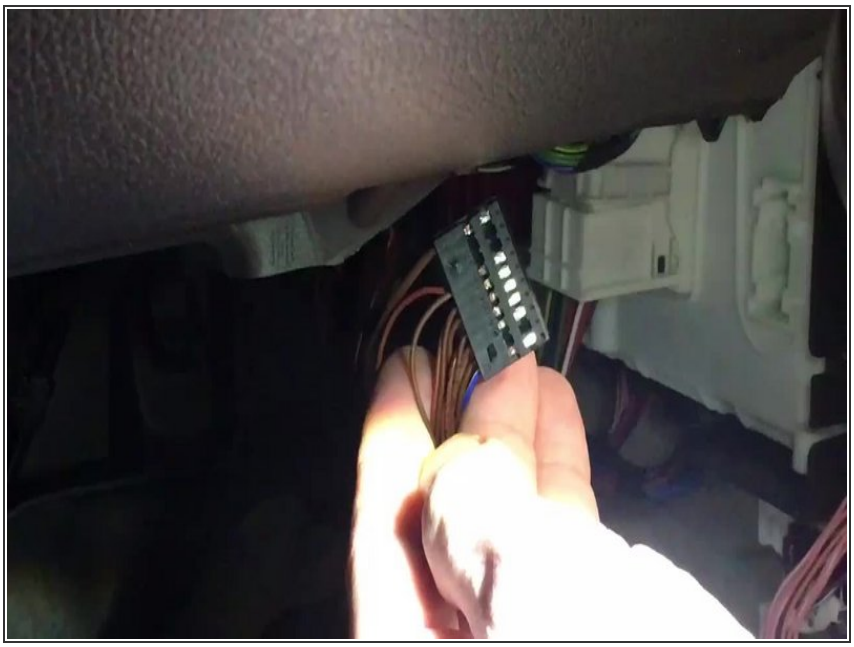
- Pull back floor and remove sill panel

Step 9 — Remove CAN B plug from SAM module



- Pull out CAN B plug from SAM module
- Remove white shroud from plug

Step 10 — Un-pin CAN wires



- Using pick tool, carefully remove brown (pin 7) and brown/red (pin 17) wires from CAN B plug

Step 11 — Pin provided CAN wires into CAN B plug

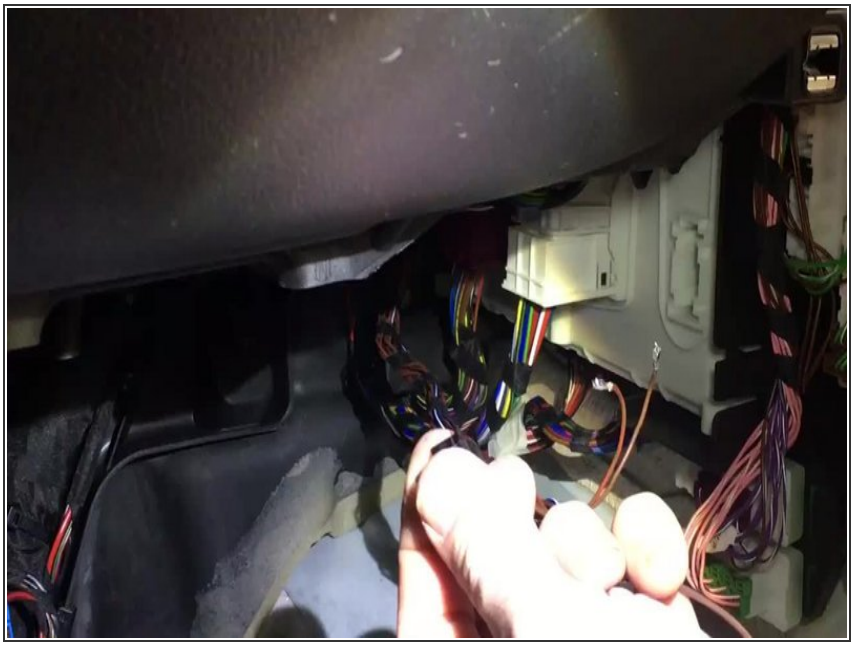
- Pin provided brown wire into spot where factory brown wire was removed (pin 7)
- Pin provided brown/red wire into spot where factory brown/red wire was removed (pin 17)

⚠ Be sure to pin CAN high/CAN low into spots where factory CAN high (pin 17)/CAN low (pin 7) were removed

Step 12 — Remove adapter from provided 2 pin black CAN plug

- Remove adapter from end of provided CAN plug. Factory CAN wires will be pinned into this plug

Step 13 — Pin factory CAN wires to adapter



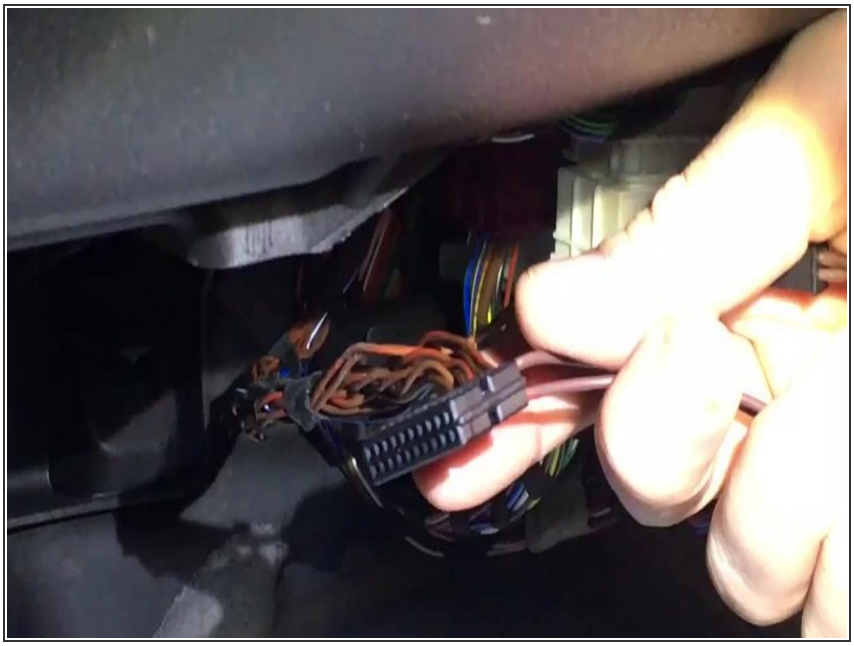
- Insert **factory brown/red** CAN wire that was removed from CAN B plug into **pin 1** on adapter
- Insert **factory brown** CAN wire that was removed from CAN B plug into **pin 2** on adapter

Step 14 — Connect adapter to harness

- Plug adapter with factory wires into 2 pin CAN plug on provided harness

ⓘ Make sure that factory brown and brown/red wires align with brown and brown/red wires on harness

Step 15 — Replace factory shroud over CAN B plug



- Slide factory shroud over CAN B plug so that it can be plugged into the SAM module

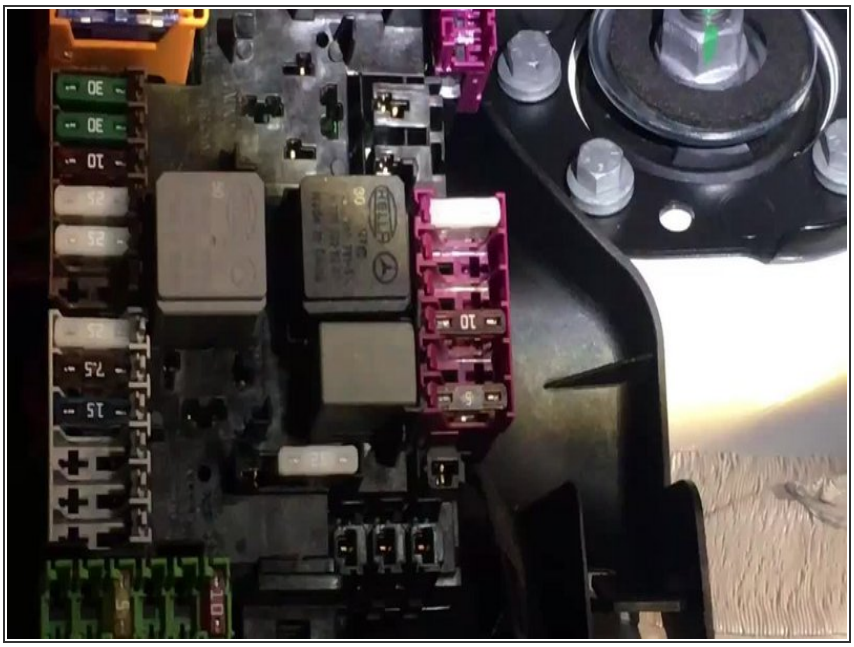
Step 16 — Plug CAN B plug into front SAM

- Plug factory CAN B plug back into front SAM module

Step 17 — Ground connection

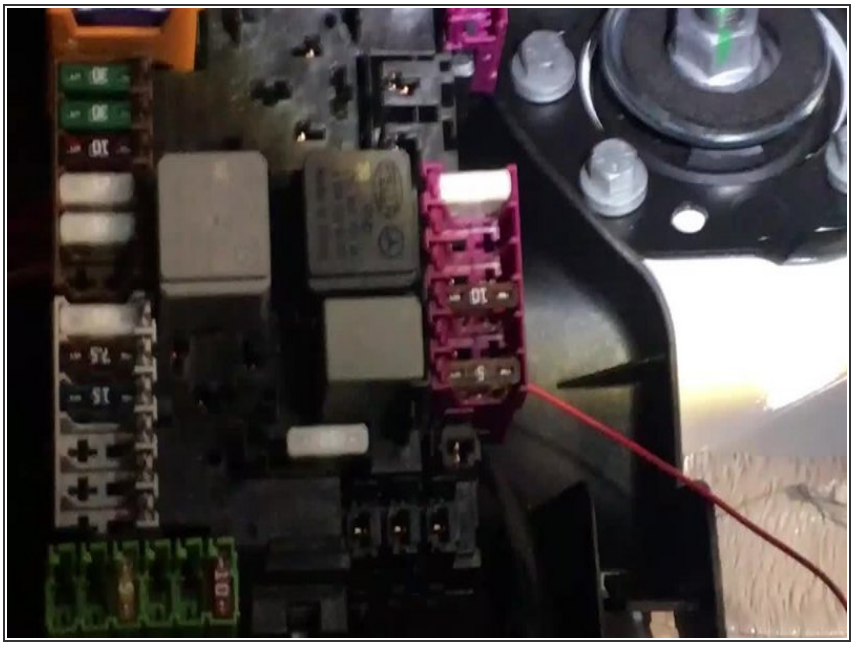
- Remove bolt near door opening
- Connect ring terminal from provided black wire on post
- Replace bolt and tighten

Step 18 — Power wire connection



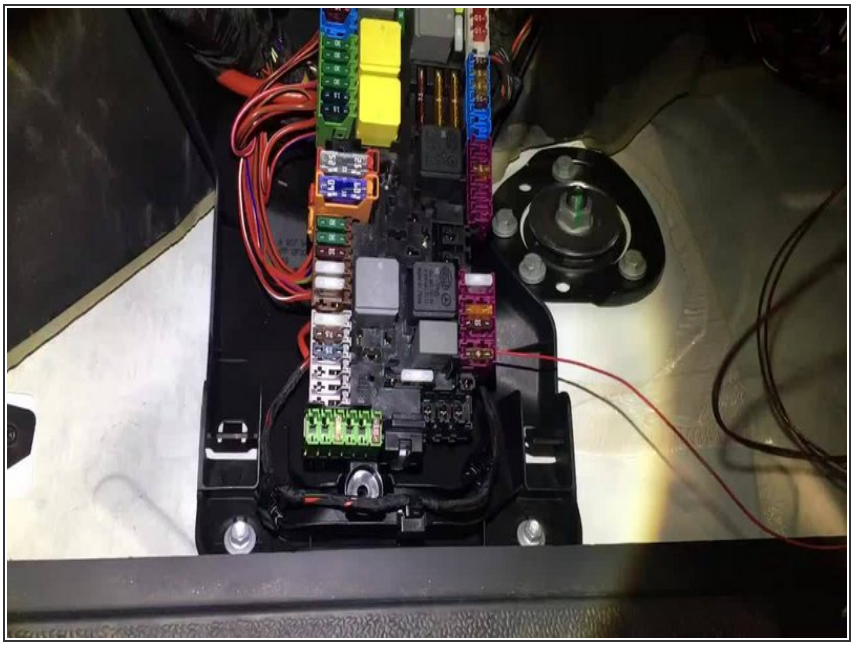
- Pin provided fuse terminal on red wire into open spot shown in video

Step 19 — Fuse connection



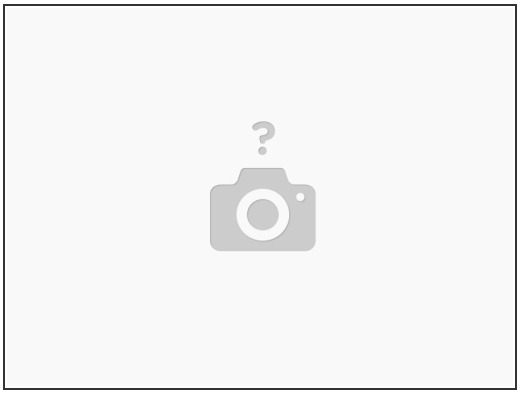
- Connect fuse to fuse terminal

Step 20 — Connect module



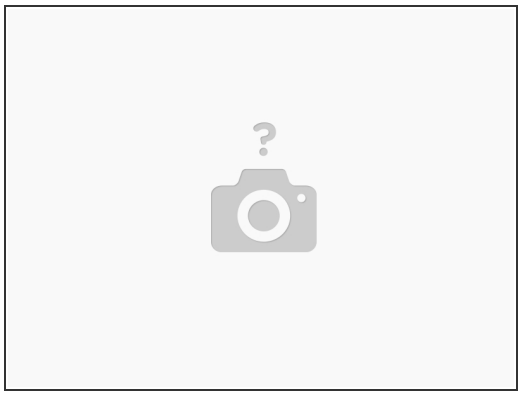
- Connect harness to interface module

Step 21 — Confirm power



- Looking through end cap of interface make sure that red LED turns on with igniton

Step 22 — Select operation mode



The 907SMRT-V3 has selectable operation modes.

- Note: the 907SMRT-V2 only has one operation mode (switch mode) and uses a yellow wire for the activation input. Connect yellow wire to switch to ground to activate high idle.

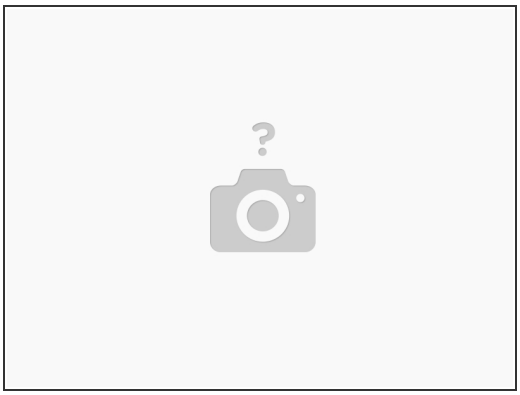
Default: the high idle will be activated by engaging the parking brake and then using the high beam/turn signal stalk.

- Default operation is as follows: 1. Engage parking break 2. Pull high beam stalk towards operator to activate high idle. 3. Press the turn signal stalk up to increase RPM and down to decrease RPM.

Switch mode: the high idle will be activated by engaging the parking brake and grounding the yellow wire.

- To put the system into "switch mode" connect the orange wire on the 6-pin pigtail to chassis to black wire on 6-pin pigtail
- If using a switch, connect one side of the interrupt switch to the yellow wire on the 6-pin pigtail and connect the opposite side of the switch to the black wire on the 6-pin pigtail (ground)
- Switch mode operation is as follows: When the yellow wire on the 6-pin pigtail is grounded and the parking brake is on, high idle will be on. Use turn signal stalk up and down to increase and decrease RPM.

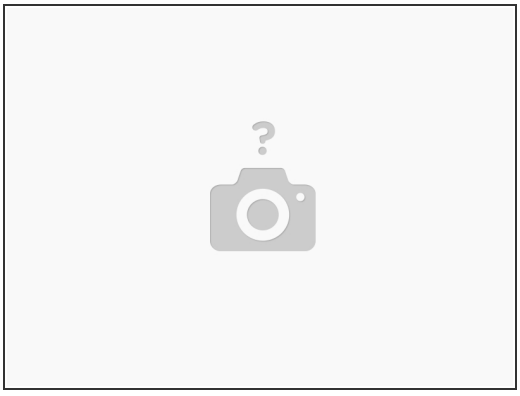
Step 23 — Connect negative trigger



- The provided purple wire (907SMRT-V2) or yellow wire (907SMRT-V3) is the negative input for high idle activation
- Connect the purple wire (907SMRT-V2) or yellow wire (907SMRT-V3) to whichever trigger is being used to activate high idle

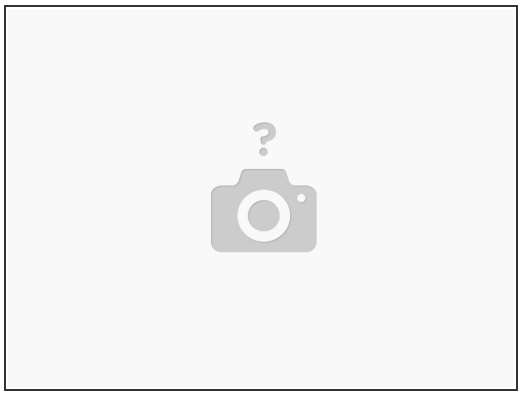
☒ Parking brake must be engaged for high idle to work

Step 24 — Test operation



- Start engine and engage parking brake
- Ground purple wire and confirm high idle activation

Step 25 — Mount module and re-assemble kick area



Securely mount module away from any moving parts or heat sources