



Gen V Instructions

Interior Harness

Pink wire- Connect this wire to a ignition source in the interior fuse panel. This must be hot with key on and **DURING CRANK**.

Blue wire- Brake input- This is connect to the brake switch. This needs to have 12volts with brakes applied. This provides the ECU with a brake signal for the transmission to function. This is critical to hook or performance will be reduced.

OBDII port. Mount anywhere that you like. The LED will illuminate with key on before start as a test of function. It will light when engine running if a DTC is present.

OBDII Eyelet- Hook to chassis ground

Standard Fuel Pump control

Hook single 14 gauge wire located under the fuse panel. It will be labeled fuel pump power-This power your fuel pump. Ground your fuel pump to a good chassis ground or to battery

Fuel Pressure Control Module (OPTIONAL)

20 Pin black connector- Plug into 20 pin connector located by the Bussman fuse box. This connector contains FPCM signals and the low pressure fuel connector signals

14 gauge red wire- labeled F pump. Connect to the fuel pump to provide power-this is for pwm fuel pumps only

14 gauge black-Labeled F pump Gd- Connect to fuel pump ground-PWM fuel pump only

3 pin grey connector- This is for the gm low pressure fuel sensor Must be used for the FPCM to function correctly

Flex Fuel and Low pressure sensor connector

This is a optional. Flex fuel and low presure sensors and sub harness can be purchased from SwapTime for an additional cost. This will allow flex fuel sensor and low pressure fuel sensor to be installed

ECU and Busmann

- A. 12 gauge yellow wire is starter. Connect your starter solenoid wire from your key side to this. This sends the crank power from your key to the gen v starter.
- B. 2 wires twisted together. This is for AC compressor turn on. Connect your vehicle ac compressor turn on to this. This needs 12 volts to activate. 1 wire is for clutch and the other is for the variable displacement valve
- C. 14 Gauge Red wire- Fuel pump power. This will connect to your fuel pump and will power it directly.

12 gauge Blue wire- connect this to the alternator stud to grab 12v battery. **Make sure alternator also has its own wire to the battery.**

PWM fan wire- Brown and yellow-Gen V's can only control a fan with a PWM fan. No more relay control like previous models. This wire goes to the PWM fan control wire. I have fan options and fan control

Black 20 pin Connector(OPTIONAL) Emissions only

This is for the emissions Only used if emission are being used.

Engine Harness

Grounds- Connect 3 grounds must be connected on the engine harness to block

Ground 1- Located by the vacuum pump location.

Ground 2 and 3-Behind each cylinder head

Fuel injection connections. The short leg goes to drivers side. This contains bank 1 fuel injectors and high pressure fuel rail sensor(CRITICAL!!) Make sure the fuel sensor in the fuel rail under the intake matches your year of engine and ecu. 4 wire sensor is for 2104-16 models only. 3 wire sensor is for 17 and up

Long leg goes to passenger side. This contains Bank 2 and the mechanical fuel pump control

Please watch my detailed video on youtube explaining all the connections

https://www.youtube.com/watch?v=ry9v_0olaeA&t=2s

Part listing

ACDelco 12655055 GM starter

12630766 oil cover

12623359 oil cover gasket

[23262343](#) MAF

12666673 upstream black(only used if your harness has a passenger side upstream BLACK connector)

12659516 upstream O2(only used if your harness has a passenger side upstream grey connector)

12657188 Downstream O2 x2 (Emissions ONLY)

8 speed transmission lines 23347504

6 speed transmission lines 92236244 or 6 speed Dorman line 624-994

11546665 Vacuum pump block off pump x2

6.2 throttle body 12620263

Only used to convert 2017 and newer engine harness to 2015 style

2015 injector harness 12623131

2015 Fuel rail pressure sensor 4 wire 12673824

Trouble shooting

With a no start condition check the following

1. Check the fusepanel on the swaptime harness. The fuses should all be hot with ignition on.. If they are not check for power at the alternator. The alternator need to be hooked to battery to charge and receive power for the swaptime harness.
2. Check for codes. This shows the ECU is fully powered up. Any codes related to Fuel Pressure will cause a no start. Please confirm if you have a 3 or 4 pin sensor on the drivers fuel rail under the intake manifold and contact me. Use a scanner and read (FRP). If it reads 95000 psi a mismatch has occurred. If 0 during crank a mismatch has occurred
3. Sometimes the fuel rails get air locked. Crank for 10 seconds or less with a 30 second break between each test. It should be able to clear the air out after a minute or two and fire up.
4. Make sure your Engine ECU has been Fully Reprogrammed

ECU and Bussman panel mount

The mount is made from 10 gauge steel. It is great to weld and modify as needed

