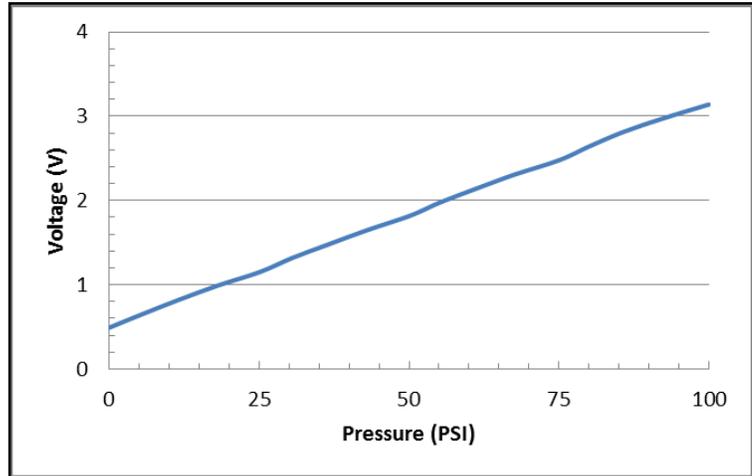


## Sensata Oil Pressure Sensor (ACC0122) Installation Guidelines (MAN0089R2.0)

### General Information

1. Works with GSC400, TG410, or TE410 only. These have a 5VDC output to power the sensor.
2. GSC400 must be one of the following models: LSB/LSX/LSC/LXC. The LS/LX models do not work with the Sensata Oil Pressure Sensor.
3. The voltage to pressure relationship can be found in the graph to the right.
4. The sensor range is  $0.5V_{DC}$  to  $4.5V_{DC}$ . If a voltage outside of this range is observed it could indicate a damaged sensor.
5. The sensor part number is ACC0122. The sensor harness part number is ACC0125.



### Installation Instructions – TG410 / TE410

1. Using RapidCore Configuration Software, under Sensors > Oil Pressure:
  - a. Signal Source must be either Sensor Port C or Sensor Port D.
  - b. Set Sensor Type to Custom.
  - c. Under Custom Sender, check Build Table. Set Input Type to “Voltage”. In Sender dropdown select “Sensata 67CP – 0320150GFNA0C”.
2. **DWG1477** “Advanced I/O Harness” is required. This inserts into J3 (2x4pin) plug on the controller.
3. **DWG1410** “kit of 5 pre-crimped wires” is required.
4. J3-6 is the 5 VDC out to power the sensor. The wire is not populated by default in the DWG1477 harness. Use a crimped wire from DWG1410 and insert into J3-6. Connect the other end to the sensor harness red wire.
5. Connect the sensor harness black wire to J3-7 (sensor ground).
6. Connect the sensor harness green wire to Sensor Port C (J4-14) or Sensor Input D (J3-8) depending on the Signal Source programming in step 1.

### Installation Instructions – GSC400

1. Program the controller with the appropriate settings as follows (do only one of the following):

If you have firmware 2.04.05 or latter:

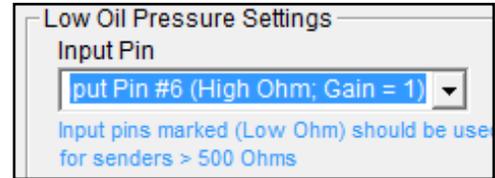
In the front panel menu do the following.

- a. Set the Input Pin to Input **6** (Analog6).
- b. Set the Signal Source to **Sensata** (or Sender 3 in PC Configurator).

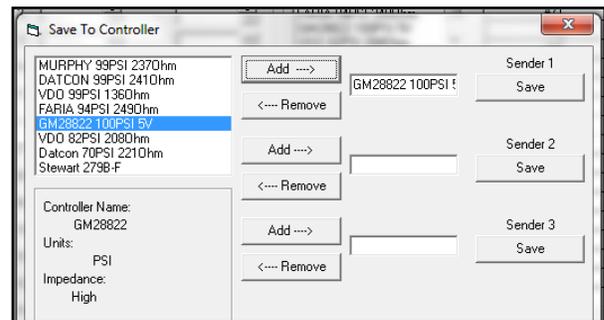
If you have firmware 2.04.03 or earlier:

You will need a GSC400 programmer.

- c. Under Analog Inputs, the oil pressure input pin must be set to '**Input 6**' as shown to the right. The Signal Source must be set to **Sender 1**. Save Analog settings before proceeding to Step #2.



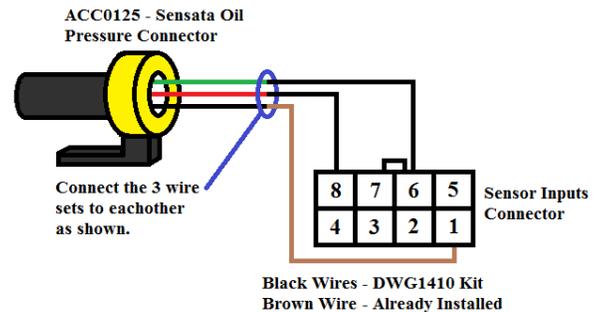
- d. Under Tools -> Edit Sender Tables -> Oil Pressure, click 'Save Tables to Controller' and set '**Sender 1**' to GM28822. Select 'Add' then 'Save'. The screen should look like the figure shown to the right.



2. Insert two of the wires from '**DWG1410**' kit in connector J2-6 and J2-8. J2-1 wire should already be installed (brown wire). **NOTE: Make sure the crimp pin is in the proper orientation when inserting into the connector so that it locks in place.**

3. Connect to sensor harness (DWG1376) as follows.

- a. Green wire from ACC0125 connects to J2-6.
- b. Red wire from ACC0125 connects to J2-8.
- c. Black wire from ACC0125 connects to J2-1 (brown).



## Troubleshooting

1. Verify that 5VDC is being applied to the sensor by measuring the voltage across the red and black wires.
2. With sensor not attached to engine, or the engine not running, measure the voltage across the green and black wires. There should be a reading of 0.5VDC (0 PSI).
3. Run engine and check the sensor output (between the black and green wires). The voltage should match that given in the graph above.
4. Disconnect green sensor wire from controller. The controller should read 100 PSI. If the controller displays a value other than this, recheck the installation steps. Ensure the green wire of the sensor output connected to the proper controller terminal.