

# Innovate AFR installation manual for C5 Corvette



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# Throttle Position Sensor (TPS)

Parts needed:

-- Innovate meter & power cord.



Figure 1

--LMA-2 Auxiliary Input Cable



Figure 2

Location & Installation:



Figure 3

The best way to connect to the TPS is to "T" into the tach output wire at the tach module, which is located with the electronic control module (ECM). These are both located in the rear of the front passenger side wheel well as shown in figure 3. The TPS - tach output is a dark blue wire and is pin #1, within connector #2 of the tach module. Once you have located the tach output wire, "T" into it with a separate piece of wire and connect that wire to any open channel on the LMA-2 Auxiliary Input Cable. Now using the Innovate meter, designate that channel as TPS data measurement.

# Manifold Absolute Pressure (MAP)

(Factory MAP Signal)

Parts needed:

-- Innovate meter & power cord.



Figure 1

--LMA-2 Auxiliary Input Cable



Figure 2

Location & Installation:

There are two ways to connect the Innovate meter to measure the MAP sensor. The first way is to "T" into the green wire leading to the gray plug (shown in figure 3), which is located in the rear of the intake manifold. Although, this is usually very difficult to access.



Figure 3



Figure 4

The second way is to "T" into the MAP sensor signal wire, which is a light green wire and is pin #32 within the red connector of the ECM. The ECM is located in the rear of the front passenger side wheel well as shown in figure 4. Once you have located the MAP wire, "T" into it with a separate piece of wire and connect that wire to any open channel on the LMA-2 Auxiliary Input Cable. Now using the Innovate meter, designate that channel as MAP data measurement.

# Air-Fuel Ratio (AFR)

Parts needed:

-- Innovate meter & power cord.



--Wide-band O2 Sensor Cable



--Wide-band O2 Sensor



Location & Installation:

To use the air & fuel ratio (AFR) measurement feature of the Innovate meter, your vehicle must have the extra oxygen sensor bung welded onto the exhaust system before any measurement can be done. Please refer to Innovate meter manual for the installation instructions.

Reference the Innovate Meter manual for initial oxygen sensor calibration prior to installation.

Remove the oxygen sensor bung plug and install the supplied wide band O2 sensor. Connect the supplied O2 sensor cable to the wide band oxygen sensor and then plug the other end into the Innovate meter.

# RPM Measurement

## Parts needed:

-- Innovate meter & power cord.



Figure 1

--LMA-2 Auxiliary Input Cable



Figure 2

## Location & Installation:

To measure the engines RPM, you must "T" in a secondary wire to the "engine speed" output wire located at the engine control module (ECM). The ECM is located in the rear of the front passenger side wheel well as shown in figure 3. The engine speed output wire is a white wire connected to pin #10 within the red connector of the ECM.

Using a piece of wire, "T" into the engine speed output wire and then connect that wire to an open channel on the auxiliary input cable (Figure 2). Now using the Innovate meter, designate that channel as RPM data measurement.



Figure 3