

Configuring the G3 For Your Engine's Fuel System

Overview:

The G3 is capable of interfacing with numerous fuel system configurations, and need only be told which arrangement your engine is equipped with. The selection is made on the **Engine Configuration** screen, item #6 "Fuel".

There are presently three possible selections: **Injected**, **Carb**, or **PCarb**.

Select **Injected** for engines equipped with **fuel injection with a single supply line**.

Select **Carb** for engines equipped with a **carburetor with a single supply line**.

Select **PCarb** for pressurized carburetors **equipped with a supply line and a separate return line**.

The first two items are the most common arrangements used on aircraft engines, and need little additional explanation. The fuel transducer is installed along the fuel supply path to either the fuel distributor or the carburetor, and measures the total amount of fuel supplied to the engine.

This transducer is connected to the FF1 input of the G3.

Engine fuel systems equipped with a return line require some additional hardware to configure. In this case a fuel transducer is still used to measure the amount of fuel supplied to the carburetor, but a second fuel transducer must be used to measure the amount of fuel returned to the fuel tanks by way of the return line. The amount of fuel measured by the return sensor is then subtracted from the fuel measured by the supply sensor, with the result yielding the fuel consumed by the engine, which is the quantity we wish to display on the G3. The supply sensor must be connected to FF1 of the G3 and the return sensor to FF2.

Using the knobs to navigate the G3:

The G3 has two knobs: one at the top and one at the bottom.

There are two functions built into each knob: the push button switch activated by pressing the knob in, and the selection is activated by turning the knob either clockwise or counter clockwise.

The top knob, labeled PG for page, is used to select the various pages or screens.

The bottom knob, labeled SEL for select, is used to make a selection on the current page.

There are two sets of screens or pages. The main screens are automatically used by default.

In order to enter the configuration screens turn off the avionics power to the G3, wait several seconds, then press and hold the top button, and finally turn on the avionics without releasing the top button.

This will take you to the **Registration Config** screen.

From this screen turn the top knob clockwise two clicks to get to the **Engine Configuration** screen.

Once you are there you do not use the top knob any more because turning it takes you away from the current screen.

The bottom button is pressed to select a line.

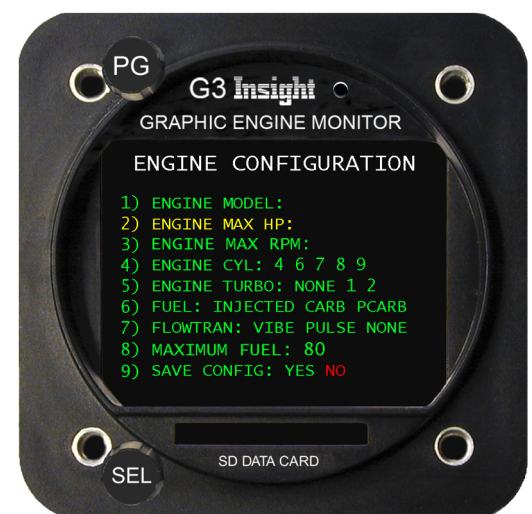
When you first enter a screen by default no line is selected.

Pressing the bottom button once selects line 1.

The selected line is shown in yellow.

Pressing it a second time selects line 2, etc.

On lines that allow you to select from multiple items the selected item is shown in red.



Configuring the Fuel System Type:

Line 6 of the **Engine Configuration** screen is the **Fuel** parameter that defines the fuel system configuration. There are three choices **INJECTED**, **CARB** or **PCARB**. The bottom knob is turned to make a selection on this line.

For example to set the G3 up for a pressurized carburetor with a separate return line perform the following procedure:

When on line 6 turn the bottom knob clockwise or counter clockwise to select PCARB. The current selection is shown in red. Use the bottom pushbutton to select Line 9. On line 9 turn the bottom knob clockwise or counter clockwise to set the Save Config parameter to select YES.

Press the bottom button to save your changes into permanent memory.

