

on your trim/flap position sensor. Connect the ground input on the sensor to a ground common to the FlightDEK-D180. Connect the output of the sensor to the desired GP input. You may connect up to three trim/flap sensors. For physical installation, refer to the instructions that came with your position sensor.

If you are using the output from a Ray Allen servo or sensor, connect its white/orange wire to the Dynon 5V excitation line (pin 18), its white/blue wire to ground, and its white/green wire to your GP input of choice.

Be sure to configure the FlightDEK-D180 to recognize the various sensors on the general-purpose inputs as described in the General Purpose Inputs section on page 6-16. Additionally, you will need to calibrate each flap/trim sensor as described on page 6-4.

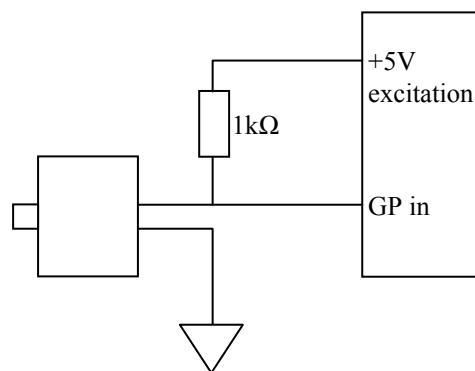
COOLANT PRESSURE SENSOR

You will find two 1k Ω resistors (color bands: brown, black, black, brown, brown; connect in either direction) in the accessories package (Dynon part # 100446-000) included with the FlightDEK-D180. You will be using one of these resistors for proper installation of this sensor.

The Dynon-supplied coolant pressure sensor is a 0-30 psi sensor (Dynon part # 100411-000). First, mount the pressure sensor to a fixed location using an Adel clamp or other secure method. The pressure sensor must *not* be installed directly to the engine due to potential vibration problems. Next, connect the sensor to the coolant line using appropriate hoses and fittings. Its pressure port has a 1/8-27 NPT pipe thread fitting; you may need adapters to connect to the pressure port on your engine. Locate (or drill and tap) the pressure port along the coolant line. This port must have a pressure fitting with a restrictor hole in it. This restrictor hole ensures that, in the event of a sensor failure, coolant leakage rate is minimized, allowing time for an emergency landing.

Crimp a standard 1/4" female Faston onto one of the ground wires (see the Grounding section on page 2-2) coming from the 37-pin harness. Crimp another 1/4" female Faston onto both the wire that corresponds to the desired GP input and a 1k Ω resistor (color bands: brown, black, black, brown, brown; connect in either direction), or splice the resistor into the GP input line elsewhere on the run. Push the two Fastons onto the two terminals on the fuel pressure sensor. Polarity is not important. Connect the other side of the 1k Ω resistor (color bands: brown, black, black, brown, brown; connect in either direction) to the 5V Excitation Circuit, pin 18, as shown in the diagram.

EMS DB37 Pin	EMS harness Color	Function
Desired GP input #	See chart on page 3-12	GP
18	White/Red	5V supply to 1k Ω resistor
Ground pin	Black	Ground in (common to EMS)



WARNINGS:

- Due to vibration issues, never connect the pressure sensor directly to engine.