

DYNATEK

PERFORMANCE PRESSURE SWITCH

P.N. PPS-75

0-75 PSI

The Dynatek Performance Pressure Switch (PPS) is a high quality, adjustable, pressure activated switch intended for use in turbo charged and super charged applications. The PPS can be used to trigger other systems according to boost level. The PPS has very repeatable and adjustable operation from pressure levels of 3 to 75 PSI.

ADJUSTING THE SWITCH

The PPS contains an internal pressure bellows which expands with increasing pressure. The PPS contains a high current (7 Amp) micro switch which is activated by the expanding action of the internal bellows. The PPS is adjustable by loosening the lock ring located around the center of the PPS body, then turning the top of the body. Turning the top of the body into the base places the micro switch closer to the bellows causing the switch to activate at lower pressure. Turning the top of the body out of the base forces the bellows to move farther to activate the switch thereby making the switch activate at a higher pressure.

CONNECTIONS

The PPS has three wires extending from it. These are the Common, Normally Closed, and Normally Open outputs from the internal micro switch.

Black - Common

Red - Normally Closed

White - Normally Open

When the pressure applied to the switch is below the set point, the black wire will be internally connected to the red wire. When the pressure applied to the switch is above the set point, the black wire will be internally connected to the white wire.

CALIBRATING THE ADJUSTMENT

The PPS has been rough calibrated at the factory to the zero reference point (explained below). The following procedures can be used for setting the switch:

Method 1. - Loosen the lock ring on the PPS body. Carefully screw the top of the PPS down into the base. About ½ turn before the top bottoms out you will hear the micro switch depress (faint click). You could also check for this switching action with an ohm meter on the wires of the PPS. This is the zero reference setting. The label on the top of the PPS has calibration lines marked 0 through 9. At the zero reference setting, the '0' mark should line up with the arrow on the base of the PPS. You can now use the following chart to set the PPS based on screwing the top out from the zero reference setting to the setting listed:

Setting	Approximate pressure required to activate the switch (PSI)
0	0 (zero reference setting)
1	2.8
2	6.0
3	9.6
4	14
5	20
6	26
7	33
8	40
9	49
0	58
1	68
2	78

Method 2. - If a precisely known pressure set point is desired, a pressure switch test fixture must be constructed. The test fixture consists of a manifold onto which a pressure gauge, the pressure switch, an inlet valve, and an outlet valve are mounted. The manifold is slowly pressurized with compressed air until the switch point is reached. Through observation of the pressure gauge and adjustment of the pressure switch, an accurate set point can be established.