

# DIRECT ACTING OUNCES PRESSURE REDUCING VACUUM PILOT

**APPLICATIONS:**

Used to produce a proportional pneumatic output signal when the monitored vacuum becomes stronger than the set vacuum. The pneumatic signal source is isolated from the monitored pressure.

**SUPPLY PRESSURE:**

30 psig. Max.

**VACUUM RANGE:**

1 in. to 5 in. Hg

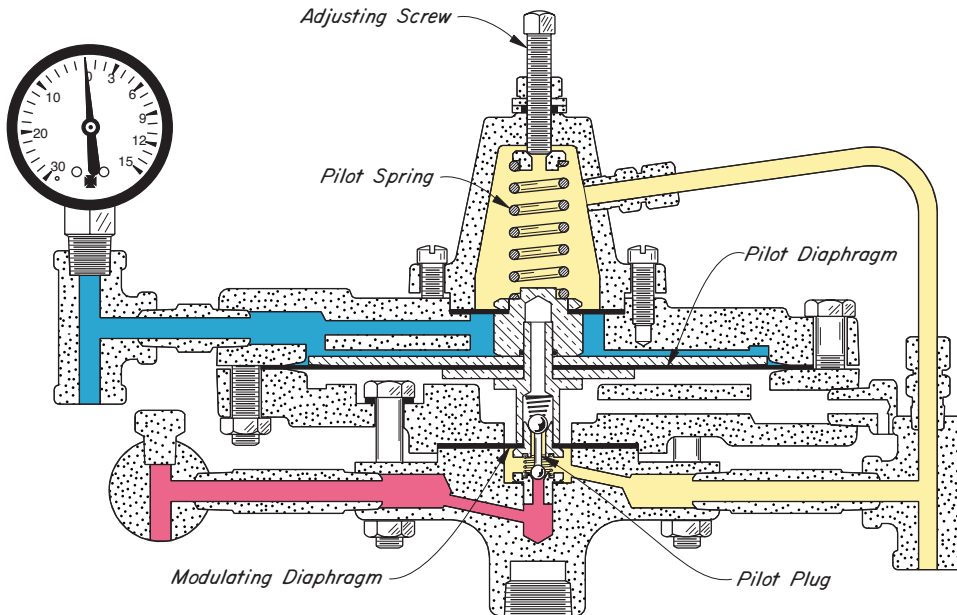
Optional springs provide maximum setpoint of 10 in. Hg or 30 in. Hg.

**OPERATION:**

The Pilot Assembly, which moves as a unit without friction within the housing, is supported by the PILOT DIAPHRAGM and the MODULATING DIAPHRAGM. The PILOT SPRING loads the upper side of the Pilot Assembly and is opposed on the underside by Controlled Vacuum (Blue) action on the net area of the PILOT and MODULATING DIAPHRAGMS (area of PILOT DIAPHRAGM minus area of MODULATING DIAPHRAGM).

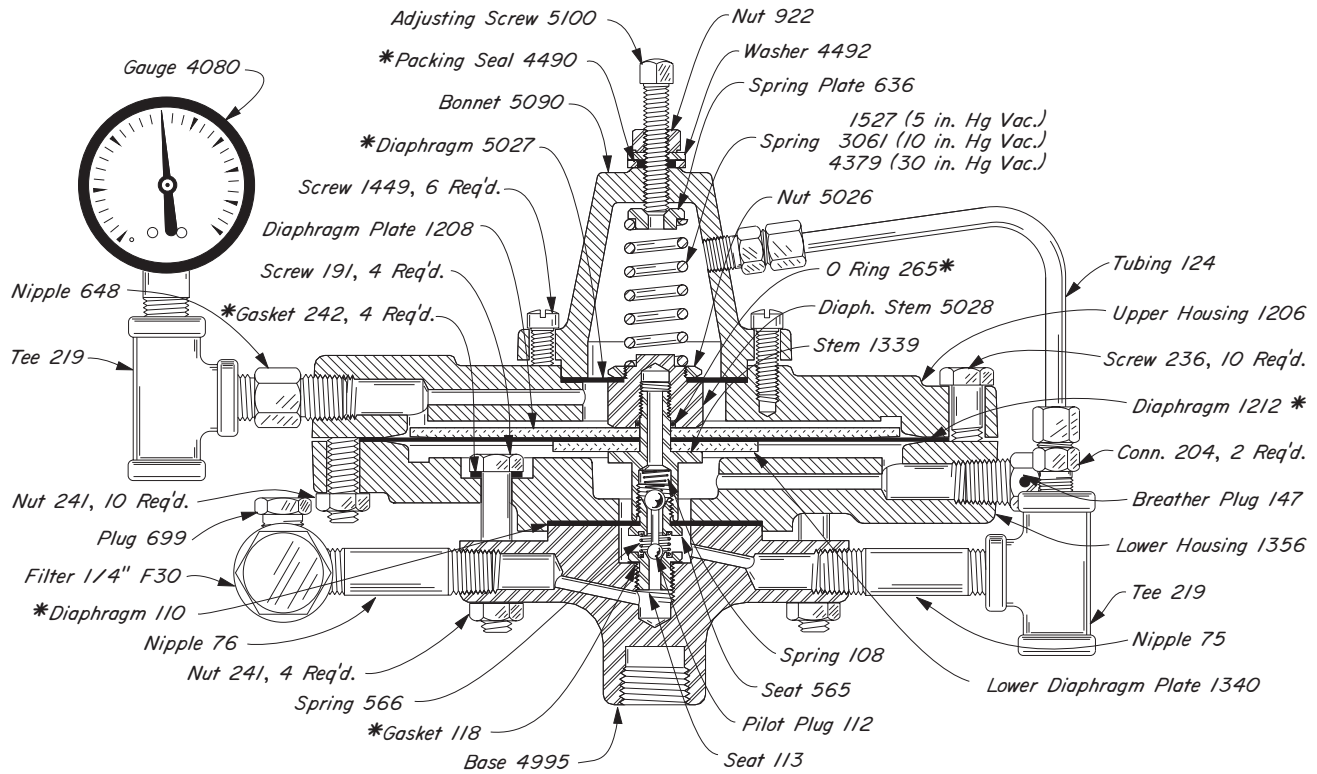
With a slight decrease in Controlled Vacuum (Blue) the Pilot Assembly is forced downward by the PILOT SPRING. The upper seat of the PILOT PLUG (Yellow to Atmosphere) is closed and the lower seat of the PILOT PLUG (Red to Yellow) is opened. This results in an increased Output Pressure (Yellow is opened. This results in an increased Output Pressure (Yellow) under the MODULATING DIAPHRAGM which balances the lost upward force due to the slight decrease of Controlled Vacuum (Blue). The Pilot Assembly returns to a position at which both the upper and lower seats are closed. A slight increase in Controlled Vacuum (Blue) opens the upper seat and closes the lower seat to reduce the Output Pressure (Yellow).

- Pilot Assembly
- Output Pressure
- Controlled Vacuum
- Supply Pressure



# DIRECT ACTING OUNCES PRESSURE REDUCING VACUUM PILOT

0.5 PG OPRV DA  
CAST IRON  
5, 10, 30 in. Hg Vac.



**PILOTS AVAILABLE:**

CAT. NO.	PILOTS	DES. PRESS.	OPER. PRESS.
YIC-2.5	0.2 PG OPRV DA	175	5 in. Hg Vac.
YIC-5	0.5 PG OPRV DA	175	10 in. Hg Vac.
YIC-20	2 PG OPRV DA	175	30 in. Hg Vac.

\*These are recommended spare parts and are stocked as repair kits. To order repair kit, specify: "0.5 PG OPRV DA Repair Kit, RWN"