

APPLICATIONS:

Any system in which it is desired to change a varying pneumatic signal to an on/off output signal.

FEATURES:





- Pneumatic snap action
- Adjustable
- No dead center
- Direct action

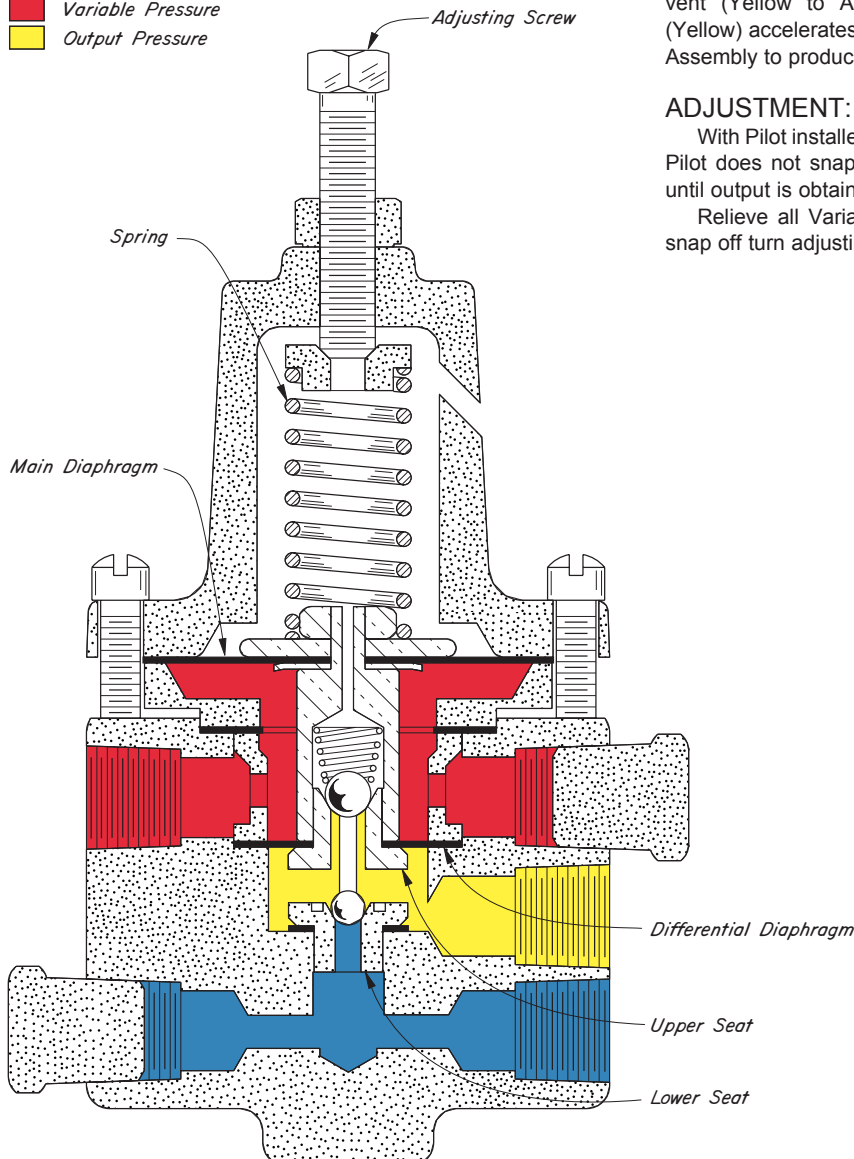
SUPPLY PRESSURE:

15 to 30 psig

VARIABLE PRESSURE:

12 psig minimum
30 psig maximum

-  Diaphragm Assembly
-  Supply Pressure
-  Variable Pressure
-  Output Pressure



OPERATION:

Assume Variable Pressure (Red) is at a minimum and the Diaphragm Assembly is in a down position. With an increase in Variable Pressure (Red) on the MAIN DIAPHRAGM sufficient to overcome the load of the SPRING, the Diaphragm Assembly starts to move up. The UPPER SEAT, which is the pressure vent (Yellow to Atmosphere) closes first. Further upward movement of the Diaphragm Assembly opens the LOWER SEAT, which is the supply gas inlet (Blue to Yellow). As Output Pressure (Yellow) increases, the DIFFERENTIAL DIAPHRAGM loads the Diaphragm Assembly in an upward direction. The accelerated upward movement of the Diaphragm Assembly produces a sudden opening of the LOWER SEAT (Blue to Yellow).

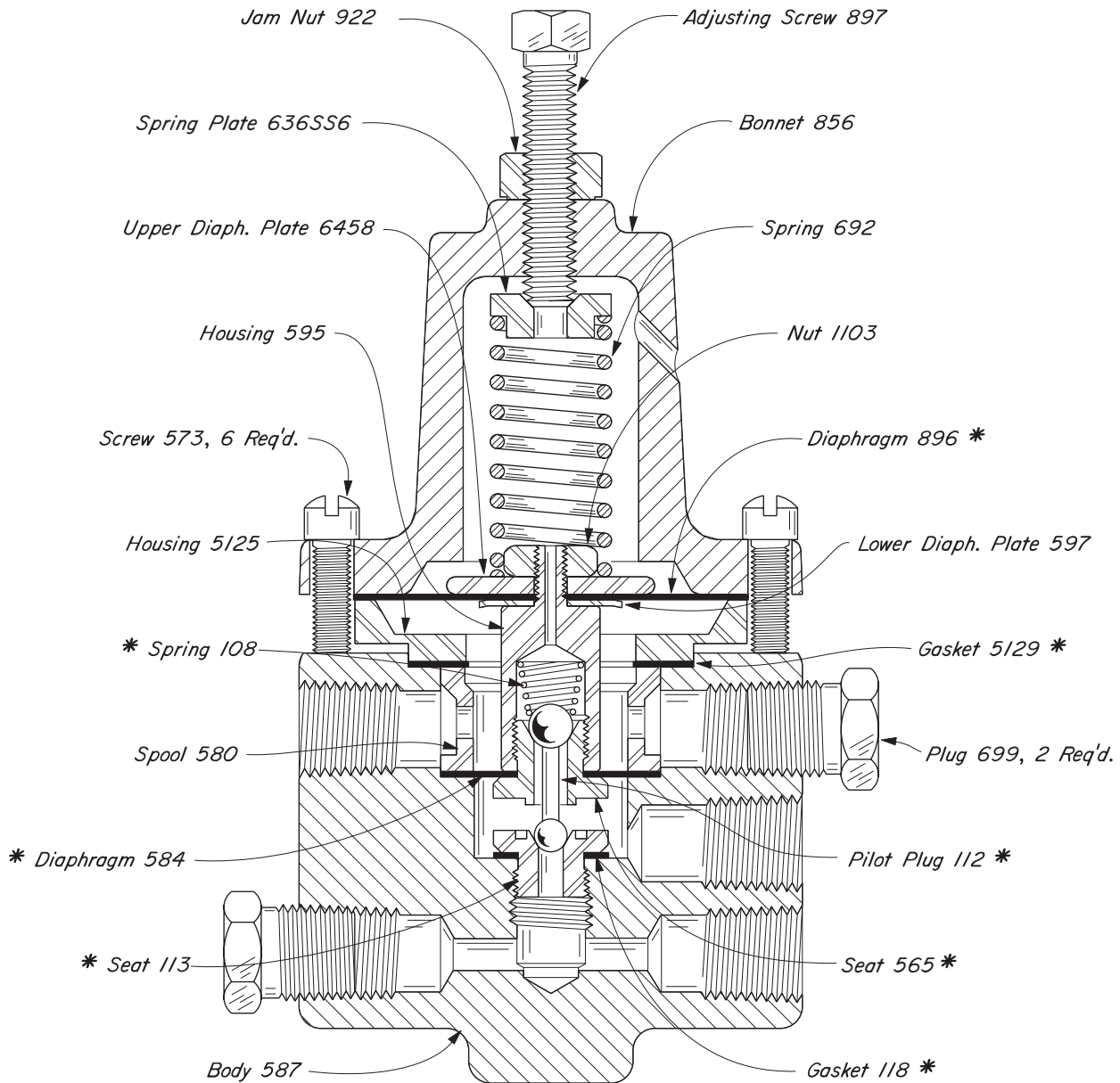
In order to reverse the above action, Variable Pressure (Red) must be reduced so that the downward force of the SPRING is greater than the upward force of Variable Pressure acting on the MAIN DIAPHRAGM plus the force of Output Pressure (Yellow) acting on the DIFFERENTIAL DIAPHRAGM. As the Diaphragm Assembly starts to move down the LOWER SEAT which is the Supply Gas Inlet (Blue to Yellow) closes first. Further downward movement opens the UPPER SEAT which is the pressure vent (Yellow to Atmosphere). Decreasing Output Pressure (Yellow) accelerates the downward movement of the Diaphragm Assembly to produce a sudden opening of the UPPER SEAT.

ADJUSTMENT:

With Pilot installed, apply full Variable Pressure. If output from Pilot does not snap on turn adjusting screw counter clockwise until output is obtained.

Relieve all Variable Pressure. If output from Pilot does not snap off turn adjusting screw clockwise until output shuts off.

DIRECT SNAP
CAST IRON



THRU VALVES AVAILABLE:

CAT. NO.	PILOT	OPER. PRES.	MAX W.P.	KIT
YBH	30 PS DA	30	30	RLZ

NOTES:

*These parts are recommended spare parts and are stocked as repair kits.