



Engineered for life

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WARNING

Conoflow products are designed and manufactured using materials and workmanship required to meet all applicable standards. The use of these products should be confined to services specified and/or recommended in the Conoflow catalogs, instructions, or by Conoflow application engineers.

To avoid personal injury or equipment damage resulting from misuse or misapplication of a product, it is necessary to select the proper materials of construction and pressure-temperature ratings which are consistent with performance requirements.

INSTRUCTION AND MAINTENANCE MANUAL Model GH28VT Vacuum Regulator

STANDARD SPECIFICATIONS

Connections: 1/4" NPT with 1/8" NPT Vacuum Sensing Port
Regulated Vacuum: 0-15" and 30" Hg (38.1 and 76.2 cm Hg)
Flow Capacity (Max): 1.5 SCFM (42 SLPM)
Sensitivity: 0.2" H₂O (0.5 cm)
Temperature Range: -20 to 150 °F (-29 to 66 °C)
Approximate Shipping Weight: 1 lb (.45 kg)

PRINCIPLE OF OPERATION

The GV28VT regulator is used to provide a regulated vacuum. Turning the handwheel changes the force exerted by the range spring on the diaphragm assembly, and changes the setting of the vacuum regulator. Clockwise rotation increases the force of the range spring on the diaphragm assembly, and increases the regulated vacuum setting accordingly.

Counterclockwise rotation reduces the setting of the regulator, allowing atmospheric air to bleed into the vacuum, increasing the absolute pressure of the regulated vacuum.

INSTALLATION

All connections are 1/4" NPT. The user pipes the vacuum pump to the port marked "IN". The regulated vacuum port is marked "OUT". Gauge ports are marked G1 and G2.

Vacuum sensing is internal – no external piping is required.

The regulator can be mounted by hard piping, or by panel mounting at the bonnet with the panel nuts (standard).

MAINTENANCE

Periodic replacement of the diaphragm and nozzle assembly is recommended for services where the regulator is on stream continuously and where consistent high accuracy regulation is required. The frequency of replacement will depend on the nature of the service, the cleanliness and/or moisture levels in the air, and other environmental variables such as vibration or heat.

To replace the diaphragm assembly, relieve any vacuum from the system. Unscrew the handwheel and stem until adjustment compression is relieved from the range spring. Loosen and remove the fillister head machine screws and lift off bonnet, spring button, range spring, spacer and diaphragm assembly. Install the spacer in the new diaphragm assembly, and install with the diaphragm plate and staked side face upward (away from the body). Place the range spring, spring button, restrictor plate (if applicable) and bonnet over the diaphragm assembly then secure the bonnet with the fillister head machine screws tightened to 30 in-lb

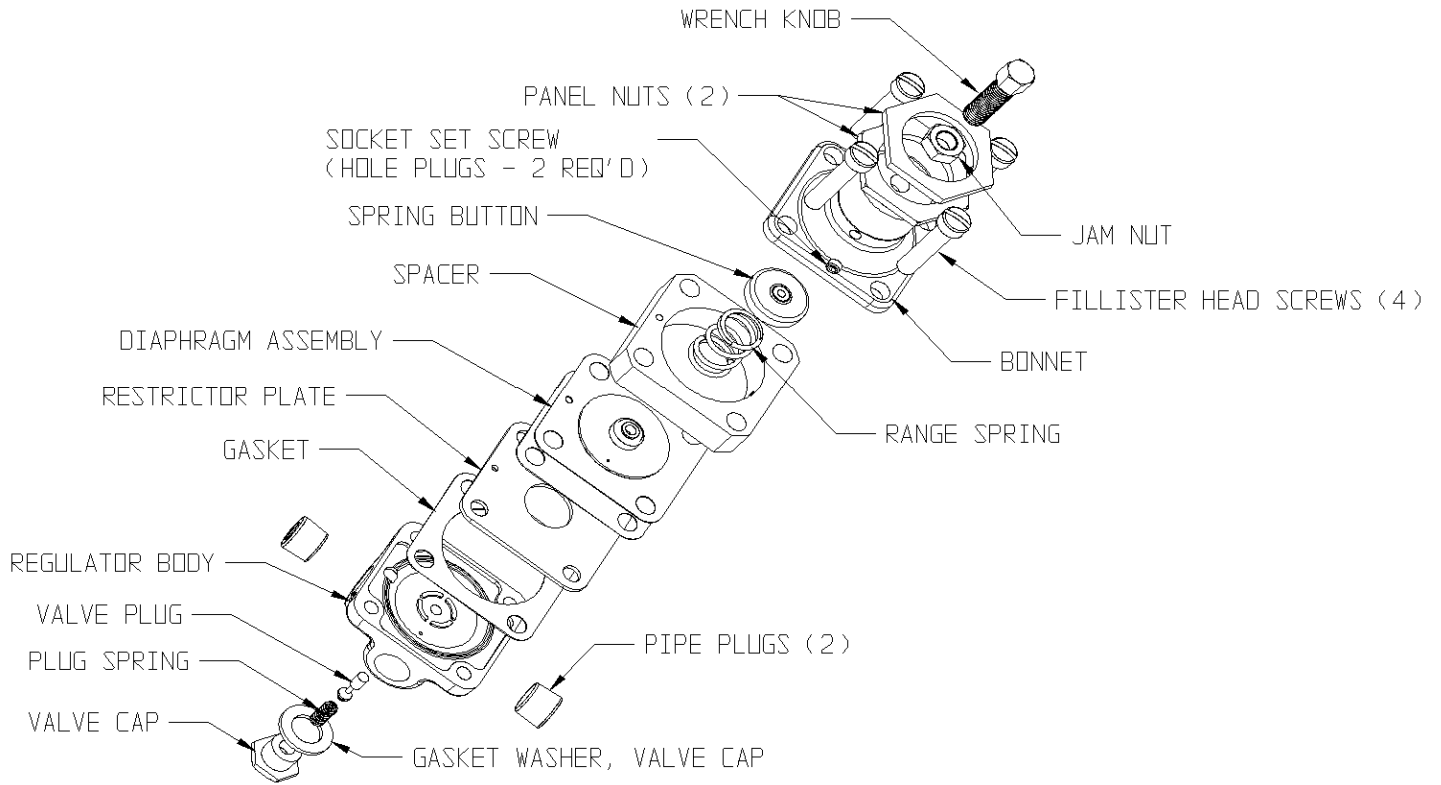
The valve cap can be removed to access and remove the valve plug and plug spring. The body and metal valve plug may be cleaned in solvent and reused.

A new valve cap washer gasket is recommended whenever the valve cap is removed. When installing the valve cap, tighten to 42 in-lb assembly torque.

ORDERING INSTRUCTIONS

When ordering replacement parts and spare parts, specify the complete model number, serial number and description from the product nameplate. This information will permit positive identification and rapid processing of the order.

Note: For certified dimensional drawing, refer to A17-90.



<u>Character Position</u>	<u>Feature by Code Character</u>
1-5 Model	GH28VT = Regulator with All-Metal Nozzle
6 – Bonnet Options	S = Plain Bonnet T = Threaded Bonnet (Standard)
7 - Adjustment Selections	H = Handwheel K = Wrench Knob (Standard)
8 – Diaphragm Selections	E = Buna "N" (w/Relief, No Bleed)
9 – Seat Selections	X = Metal to Metal
10 – Material Options	X = Aluminum (Standard)
11 – Cleaning Options	A = Cleaned for Oxygen Service X = Standard - Unless option code is specified
12 – Range Selections	N = 0-15" Hg (0-5 psi) P = 0-30" Hg (0-15 psi)