### Fadal

# **VH5C Three Position Collet Air Valve**



*Lever in Horizontal or Neutral position. Remove and adjust Collet.* 



Lever in Down position. Loosen Collet—Relieves the tension on Collet allowing removal of part.



*Lever in Up position. Tighten Collet—Holds work in position.* 

See back of sheet for additional information.

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### **Detailed Information**

Several improvements have been made to the system. Internally, the ROT-0072 Collet Draw Tube and ROT-0074 End Cover have been redesigned to more positively allow airflow to evenly press upon the piston for opening and closing the collet. Externally, a new 3-position Air Switch is installed where the middle neutral position allows easier handling of the manual tightening. (See below). This 3-position Air Switch is arranged so that to *release* the Collet, the lever must be turned DOWN. To *tighten* the Collet, the lever must be turned UP. CENTER is the lever's neutral position.

The neutral position of the switch is connected to an EXHAUST air line, intended to carry exhausted air up out of the machining area to prevent any coolant contamination of the internal components of the Collet Closer system.

All new VH5Cs being shipped will have these modifications to the Collet Closer system. In addition, units returned for service to the Collet Closer System will be updated upon request. Installation of a VH5C unit with these modifications is similar to previous procedures:

- 1) Connect fittings as show below in the diagram. COLLET air line connects directly to 80 PSI air supply at machine regulator. EXHAUST is the vent line and is tied to the main connector as shown. BRAKE is connected to the brake control solenoid and activated by M60 and M61.
- 2) Be certain that no moisture is allowed into the Collet Closer system. If no Dryer is installed on customer's main air supply to prevent moisture contamination, then one must be installed on the machine. Fadal part number REG-0031 may be used for this purpose.
- 3) Collet operation procedure is as follows:
  - a. Open the collet by lifting Air Switch lever DOWN. Insert workpiece into collet.
  - b. Move Air Switch lever to CENTER (neutral) to relieve air pressure.
  - c. Tighten ROT-0073 Adjustable Collar on back of Draw Tube. When rotational resistance is felt at workpiece as Collet tightens around it, *loosen* the Adjustable Collar 3/4 turn.
  - d. Turn Air Switch lever UP to *tighten* Collet with air pressure.

**CAUTION:** If step "c" is not followed, (i.e. loosening Collar 3/4 turn), Collet system may lock up from excessive loading.

