



# CUBEX LTD. PRODUCT UPDATE

**BULLETIN:** PU-0020

**DATE:** DECEMBER 5, 1995

**SUBJECT:** AFTERCOOLER CIRCUIT

**INFORMATION:** The aftercooler cools the air being discharged from the air compressor. Proper air temperature is essential to extend the drill's service life. The temperature actuated valve ensures adequate water flow through the aftercooler during all operating conditions. **CAUTION: TURN THE WATER SUPPLY ON BEFORE STARTING THE COMPRESSOR.**

If the water supply is shut off while the air compressor is operating, the aftercooler may overheat, causing the air temperature to rise above the maximum 375°F (190°C). This is especially true in low mine air pressure situations. Also, when the water flow is turned on, the instant cooling will create thermal shocking which may damage the aftercooler.

#### ADJUSTING THE TEMPERATURE ACTUATED VALVE

When the drill is operating at high pressure, the operator must monitor the temperature actuated valve occasionally to ensure that water is flowing from the discharge hose (See Fig. P-020-1). When the operator turns the drilling air off, the air compressor unloads, causing the discharge air pressure to drop. This reduces the discharge air temperature. The temperature actuated valve senses the temperature change and stops the water flow.

Adjust the temperature actuated valve as follows:

- 1) Locate the temperature actuated valve (Fig. P-020-1)
- 2) Adjust the temperature actuated valve to open circuit when water discharge is approximately 125°F (52°C). Turn temperature adjusting screw clockwise to decrease opening temperature set point. Turn it counterclockwise to increase opening temperature.
- 3) Check that water is being discharged when compressor is operating at high pressure.

#### SERVICING THE AFTERCOOLER

The aftercooler must be serviced every 1000 hours. Use a mild concentration of a suitable heat exchanger cleaner. Flush it with clean water from the water outlet side. **CAUTION: DRAIN AFTERCOOLER WHEN EXPOSED TO FREEZING CONDITIONS.**

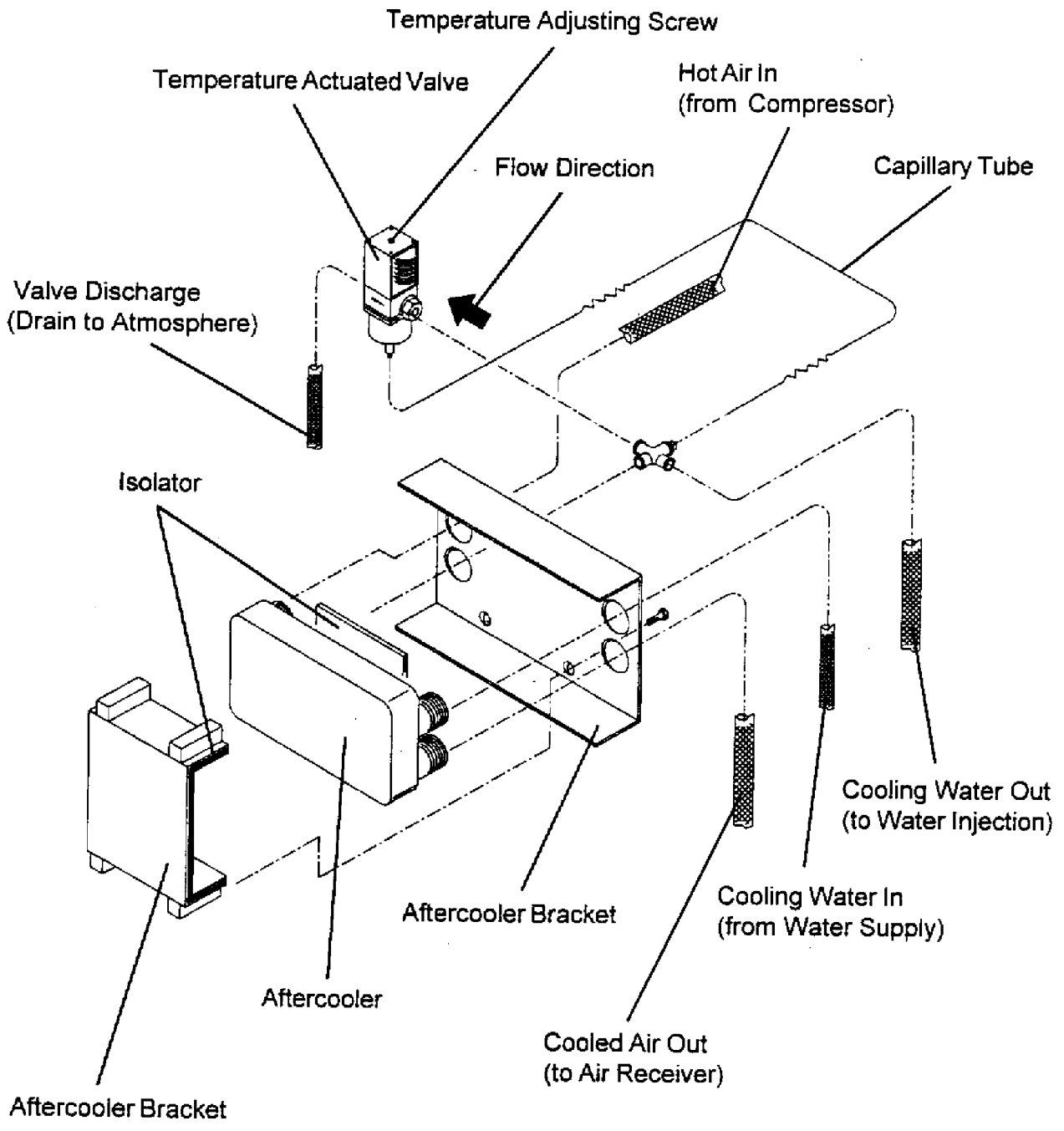


FIG. P-020-1 - AFTERCOOLER CIRCUIT