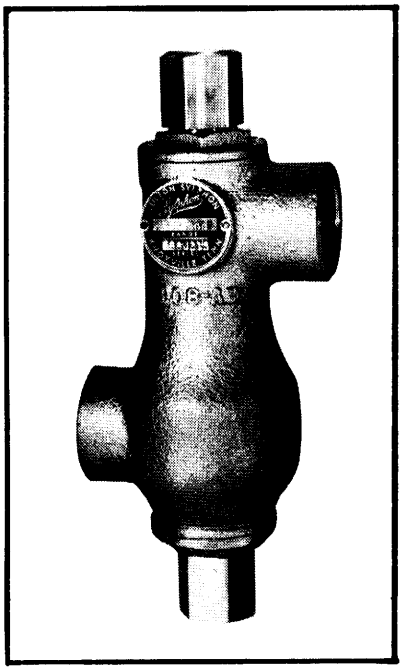

# INSTRUCTIONS FOR INSTALLATION AND OPERATION

## No. 908-A Series COOLING WATER REGULATOR

**Note to Installer:** After installing, give this instruction folder to operating personnel or see that it is filed for future reference.

## INSTALLATION

Locate in outlet water lines as close as possible to equipment being cooled.

If pressure drop across the regulator is less than 50 psi, install the regulator so that the water flow is in direction indicated by arrow on valve body. (See Figure 3.)

IMPORTANT – When pressure drop across regulator exceeds 50 psi, the direction of flow must be reversed (opposite direction of arrow indicated on body). The valve will not close if flow is not reversed.

The regulator must be installed so that the body will always be full of water regardless of rate of flow. It is advisable to install a self-cleaning strainer in the inlet line ahead of the regulator.

### TYPICAL APPLICATION

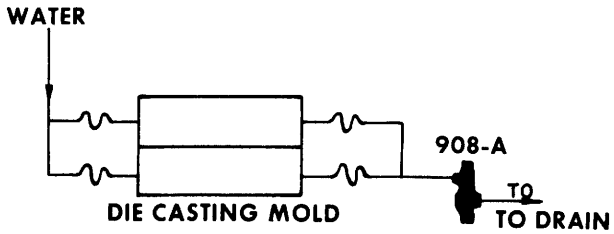


Figure 1

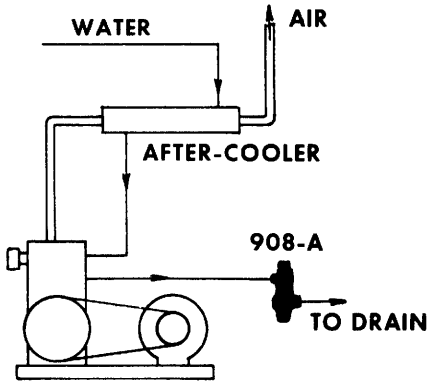


Figure 2

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INSTRUCTION MANUAL NUMBER

P-2156

Rev. A

## ADJUSTMENT

1. **Temperature** – To change temperature setting of the regulator:
   a. Remove top cap "A"
   b. Loosen locknut "B"
   c. Turn adjusting screw "C" clockwise to lower setting or counterclockwise to raise setting.
   d. Tighten locknut and replace cap "A"

   After any change of setting, allow several minutes to assure control.
2. **Leakage** – To adjust the leakage or constant bypass flow of the regulator:
   a. Remove bottom cap "D"
   b. Loosen locknut "E"
   c. Turn adjusting screw "F" clockwise to decrease flow and counterclockwise to increase flow.

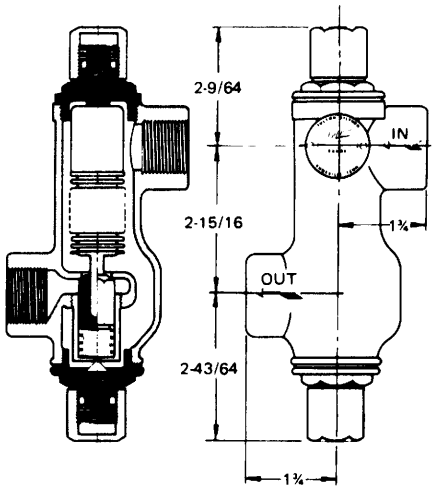


Figure 3

**CAUTION:**
The leakage should never be completely stopped, as a small amount of flow over the thermostat is absolutely necessary for proper operation.

## PRINCIPAL OF OPERATION

1. These regulators are simple, self-contained instruments for controlling cooling applications by regulating the flow of cooling water in accordance with discharge water temperature. They are applicable to plastic molds, die casting molds, small condensers, air compressors, etc.

   When the cooling water reaches the set temperature, the water circulating over the thermostat causes the thermostat to gradually open, to allow more water to flow through the apparatus being cooled.

   Temperature range is 100° F. to 160° F. Other 60° ranges available on order.
2. Maximum pressure – 125 lbs.
3. The 908-A2 and A3 have 3/8" ports and a capacity of 5 gpm at 10 lbs. pressure drop. The No. 908-A2 has 3/4" standard pipe connections; No. 908-A3 has 1" standard pipe connections – otherwise, they have the same construction.

   The 908-A4 and A5 have 9/16" port and a capacity of 12 gpm at 15 lbs. pressure drop. The 908-A4 has 3/4" standard pipe connections and the 908-A5 has 1" standard pipe connections – otherwise, they have the same construction.

## SERVICE

Do not disassemble the regulator unless absolutely necessary, as you may damage the thermostat.

To test the thermostat for loss of thermostatic charge, remove the thermostatic assembly from regulator body. Immerse the thermostat in cold water for several minutes and measure overall length. Immerse in hot water (above setpoint) for several minutes and measure the overall length. If there is no difference in this measurement, the thermostat is defective and must be replaced.

IMPORTANT – When ordering replacement parts or replacement regulators, always specify the serial number of the regulator, which can be found on the nameplate.