

## **MODEL S3 POLLUTION PROOF YARD HYDRANT**

### **TROUBLESHOOTING AND MAINTENANCE**

❖ Water leaks from the diverter or from under the casing cover when the hydrant is off.

Check the closing force of the handle. The handle, at the end of the closing stroke, should "snap" closed. Follow instructions below on how to adjust the linkage.

If the leak is a fast stream, or the above adjustment does not stop the leak, the check valve at the venturi may be fouled and should be cleaned or replaced. Also check that the spring side of the check valve is positioned on top.

❖ Packing leak. Water leaks from around the brass stem below the linkage when the hydrant is on.

The packing nut will occasionally need to be tightened to stop a packing leak. Tighten the packing nut until snug and the leak stops. Persistent leaks will require a new packing (10101).

❖ Hydrant will not drain when shut off.

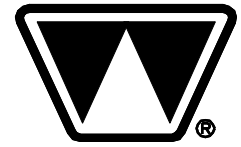
The reservoir may be full. Operate the hydrant at full flow, through the diverter, for a minimum of 30 seconds to evacuate the reservoir. Also, improper linkage adjustment (not enough tension) may prevent the hydrant from draining properly.

❖ Water leaks from the diverter while the hydrant is on and the diverter is pulled down.

The O-ring seal in the diverter may be damaged or pulled loose from the groove. Use a pair of needle nose pliers, stuck into the outlet of the diverter, to remove the diverter. Inspect for damage or reinsert the O-ring into the groove. Replace the diverter if necessary.

❖ Hydrant will not flow water through the backflow preventer when the hydrant is on.

If water will not flow through the backflow preventer with the diverter pulled down, the backflow preventer may be obstructed or damaged. Remove the backflow preventer and inspect for obstruction or damage.



## ♦ Linkage adjustment.

To adjust the linkage, remove the lower link bolt that connects the lower link to the clevis assembly. Loosen the set screw in the lower link.

Turn the lower link out (counterclockwise) to increase tension and in to decrease tension. The adjustment can be made with the water supply on by tightening the packing nut enough to hold the hydrant closed.

## ♦ Operating pipe assembly removal.

Shut off the water supply to the hydrant. Lift the handle to the open position. Remove the handle and linkage assembly. Loosen the packing nut. Remove the head casting using two pipe wrenches, one on pipe and one on the head casting. Remove the operating pipe assembly by gripping the pipe (not the brass stem) with vise grips and prying up. To remove the plunger, use either pipe wrenches or vise grips. When reinstalling the operating pipe assembly in the hydrant, use a soft mallet or a block of wood to drive the plunger into the valve seat. Applying a non-toxic lubricant that is safe for rubber such as silicone on the plunger rubber will aid in seating the rubber. Reinstall the head casting, handle and linkage. Adjust the linkage to the proper tension.

## ♦ Hydrant removal from the reservoir.

To remove the hydrant from the reservoir: Mark the position of the hydrant to the reservoir before removal. Shut off the water supply to the hydrant. Remove the three screws on the side of the casing cover. Pull the hydrant straight up and remove from the reservoir.

To reinstall the hydrant, clean and inspect the two venturi O-rings and the rubber O-ring inside the casing cover. Replace if damaged. Lubricate O-rings with silicone grease or other non-toxic lubricant that is safe for rubber. Insert the hydrant in the reservoir. Align the marks so the casing cover screws will line up with the dimples in the reservoir. Reinstall and tighten each screw equally until snug.