Domestic Pump

**INSTRUCTION MANUAL**

**DN0479**

# Solenoid Discharge Valve

## Applies to all Domestic VLR/VL and Hoffman HV Vacuum Heating Units Utilizing a Bellows Style Discharge Valve

**INSTALLER:** PLEASE LEAVE THIS MANUAL FOR THE OWNER'S USE.

**WARNING**
Disconnect and lockout power before servicing. Failure to follow these instructions may result in injury or death.

### REMOVAL OF EXISTING BELLOWS VALVE AND CONTROL COMPONENTS

1. Disconnect power to the unit and lockout. Fig. 1
2. Close inlet and outlet valves to isolate the vacuum unit from the system.
3. Drain the receiver, and remove the piping from the bellows discharge valve.
4. Loosen and remove the tubing fitting at the top of the discharge valve, bend the tubing back out of the way.
5. Using a pipe wrench, loosen and remove the discharge valve assembly. Remove the nipple and bushing used to mount the valve to the manifold body. Fig. 2/3
6. Locate existing 1/4" control valve mounted to receiver, remove the copper tubing and fitting at the control valve, the other end of this tubing was removed in step 3. The tubing can be lifted away and discarded.
7. Locate the DIN conduit fitting on the solenoid of the control valve. Loosen the screw holding the fitting to the solenoid, the conduit and DIN fitting can now be pulled away from the solenoid.
8. Thread the control valve and attached nipple out of the receiver wall and replace with 1/4" NPT plug.
9. For most units the wire and conduit, that was removed from the control valve, will need to be lengthened in order to attach to the new discharge valve. Terminal connections for the new discharge valve and the previous control valve are identical. Consult the original wiring diagram and make a note of the terminal number when removing wires so they can be replaced correctly.

FIG. 1

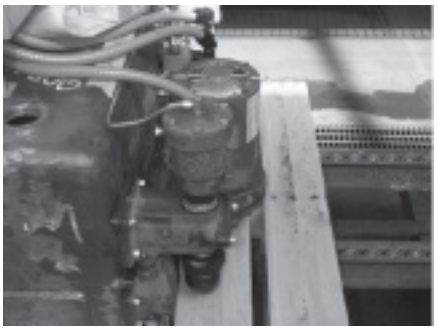


FIG. 2

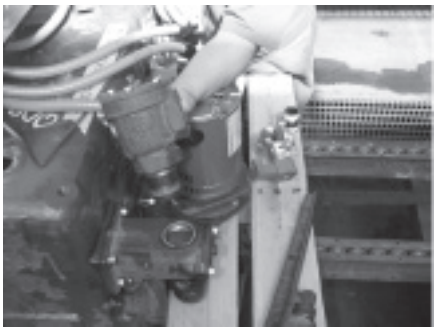
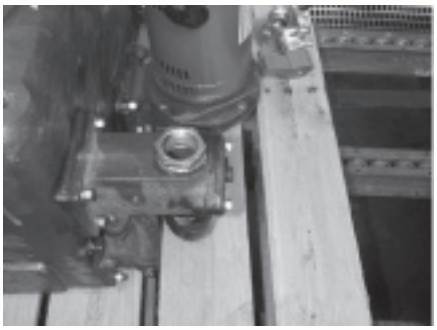


FIG. 3



## INSTALLATION OF SOLENOID DISCHARGE VALVE

1. Install replacement bushing (if required), always use thread compound.
2. Install nipple into manifold body. Fig. 4
3. Thread 90° elbow onto nipple, aligning the elbow along the centerline of the manifold body. Fig. 4
4. Install the second nipple into the elbow. Fig. 4
5. Orient the solenoid valve such that the port marked "IN" is facing the unit.
6. Thread the solenoid valve into place. Fig. 5
7. Align the discharge piping with the new valve, this may require some piping rework, and thread the discharge line back into the discharge valve body.
8. When the wires and conduit have been lengthened, the DIN connector should be plugged into the solenoid of the discharge valve (the plug can only be inserted one way). Tighten the screw holding the DIN connector.

**WARNING**
Double-check the security of all electrical connections before restoring power to the unit.

9. Restore power to the unit and open the valves connecting the unit to the heating system.
10. Observe the first few cycles to insure proper operation.

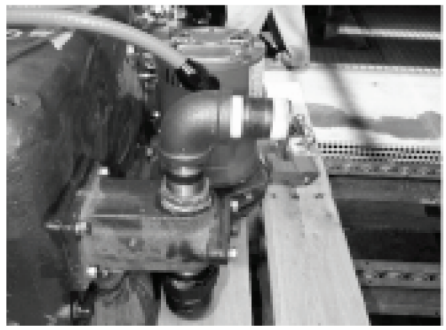


**FIG. 4**

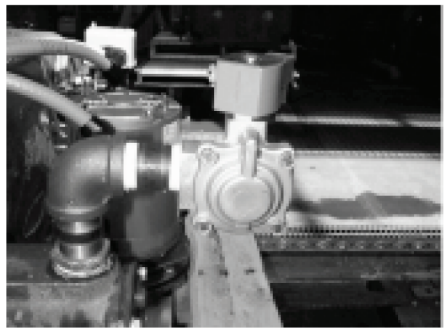


**FIG. 5**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