



Risk of electrical shock. Pumps are supplied with a grounding conductor and grounding-type attachment plug on the power cord. To reduce the risk of electrical shock, be certain that it is connected only to properly grounded, grounding-type receptacle.

use an extension cord with this pump. When wiring this pump follow all local electrical, safety codes and ordinances as well as most recent National Electric Code (NEC-ANSI/NFPA).

The HVR200 Series grinder pumps have a GROUND WIRE that is connected to a screw in the metal motor housing. This wire goes to the receptacle or control box which must be connected to a good outside GROUND such as a metal water pipe or GROUND STAKE driven at least 8 feet into the ground.

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- 9. Replace retaining washer and screw in the end of the shaft. Be sure screw is tight. A screwdriver can be used to hold the shaft in place by wedging it between one of the four socket head cap screws and the rotating cutter while tightening the screw.
- 10. Be sure shaft turns freely after reassembly. Some drag will occur due to the seal, but there should be no binding or tight spots when turning the
- 11. If rotating cutter rubs or drags on stationary cutter plate, recheck gap and re-shim rotating cutter.
- 2. Loosen the cord nut on power cord until cord is loose
- 3. Remove four bolts from motor housing and bump housing with a plastic hammer to loosen. Lay pump
- 4. Remove the housing carefully to be sure that enough cord is pushed into the housing so as not to create

- capacitors and to be able to lay the housing down.
- 6. Disconnect wiring from capacitor and loosen capacitor clamp and slide capacitor out. Replace
- 7. Check all wiring connectors to be sure they
- 8. Be sure 0-ring is in place.
- 9. Slide motor housing back onto pump while pulling the cord out slowly. Assemble motor housing with
- 10. Reassemble cord nut. Be sure washers are seated and cord is pulled up against the washers. Tighten

submersible pump oil.

12. Be sure pump turns freely before connecting power. Turn pump on side and turn impeller, using screwdriver in slotted shaft. Plug pump into receptacle to test operation. Pump must run quietly

#### Pump does not run or hum.

See A, B, C, D, E or F.

### Pump runs but does not deliver water.

See G, H, I, J, K or L.

# Pump runs and pumps out sump but does not stop.

See M.

### Pump runs but delivers only small amount of water.

See I, J, K, L or N.

## Fuse blows or circuit breaker trips when pump starts.

See K, L, N, O or P.

Motor runs for short time then stops. Then after short period starts again. Indicates tripping overload caused by symptom shown.

See K, L, N or P.

For any other symptoms contact a Hydromatic authorized service facility.

- . Line circuit breaker may be off; or fuse, if used, may be blown
- . Water level in sump may be too

Pump cord plug may not be

. If pump is using the series cord plug, the two plugs may not be

operates freely in basin. Check

- . If all symptoms check OK, motor winding may be open; take to
- . Check valve may be installed backward. Arrow on valve points
- Discharge shut-off valve, if used,
- Pump may be air locked. Start and stop several times by plugging and unplugging cord.
   Check vent hole on pump case

- Pump head may be too high.
  Horizontal distance does not affect pumping, except loss due
- . Inlet holes in pump base may be clogged. Remove pump and
- Impeller or volute openings may be plugged or partially plugged.
   Remove pump and clean. Check
- . Float is stuck in up position.
- . Pump impeller may be partially clogged causing motor to run
- . Fuse size or circuit breaker is too small. Must be 20 amps.
- . Defective motor stator. Return to Hydromatic service center.

#### For use with product built with Warathon motor.

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#### HV200 SERIES

Pentair Hydromatic\* warrants its HV and HVR series grinders against defects in material and workmanship for a period of 24 months from the manufacturing date, or 36 months from the manufacturing date with completion of a start-up report within 30 days of installation. Product must be properly installed, serviced and operated in compliance with the manufacturer's instruction manuals.

During the warranty period and subject to the conditions set forth, Pentair Hydromatic, at its discretion, will repair or replace to the original user, the parts that prove defective in materials and workmanship. Pentair Hydromatic reserves the right to change or improve its products or any portions thereof without being obligated to provide such a change or improvement for prior sold and/or shipped units.

Start-up reports and electrical schematics may be required to support warranty claims. Submit at the time of start-up through the Pentair Hydromatic website: http://forms.pentairliterature.com/startupform/startupform.asp?type=h. All seal fail and heat sensing devices must be connected, functional and monitored or this warranty will be void. Pentair Hydromatic will cover only the lower seal and labor thereof for all

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