

Diagnosis & Maintenance, UDOR U.S.A. Plunger Pumps

| Problem | Probable Cause | Solution |
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| Low Pressure | Worn or Plugged Nozzle | Replace or clean nozzle, of proper size. |
| | Belt Slippage. | Tighten or replace belt. |
| | Air leak in inlet plumbing. | Disassemble, reseal and reassemble. |
| | Pressure gauge inoperative or not registering accurately. | Check with new gauge; replace worn or damaged gauge. |
| | Relief / unloader valve stuck, partially plugged or improperly adjusted; valve seat worn. | Repair/replace and adjust relief / unloader valve; check for worn and dirty valve seats. |
| | Inlet suction strainer clogged or improper size. | Clean, use adequate size, check more frequently. |
| | Worn seals. Abrasives in pumped fluid or severe cavitation. Inadequate water supply. | Install and maintain proper filter. Replace seals. Check inlet water supply. Max. 6 in. inlet vacuum. |
| | Fouled or dirty inlet or discharge valves. | Clean inlet and discharge valve assemblies. |
| | Worn inlet or discharge valves. | Replace worn valves. |
| | Leaky discharge hose. | Replace discharge hose. |
| Pump runs extremely rough, pressure very low | Restricted inlet or air entering the inlet plumbing. | Proper size inlet plumbing; check for air tight seal at fittings & filter. |
| | Inlet restrictions and/or air leaks. Stuck inlet or discharge valves. | Replace worn seals, clean out material in valves or replace worn valves. |
| | Plugged Inlet Filter | Clean or replace filter. |
| Water leakage from under the manifold. | Worn inlet seals, Cracked plunger. | Replace seals. Install new plungers. |
| Oil leak between crankcase and pumping section. | Worn crankcase oil seals. | Replace crankcase oil seals. |
| Oil leaking in the area of crankshaft. | Worn crankshaft seal, bearing or case o-ring. | Replace crankshaft seal, bearing or case o-ring. |
| | Bad bearing. | Replace bearing. |
| Excessive play in the end of the crankshaft | Worn bearing. | Replace ball bearing. |
| Water in crankcase. | May be caused by humid air condensing into water inside the crankcase. | Change oil at 3 month or 500 hour intervals using UDOR LUBE (or SAE 30W non-detergent oil). |
| | Worn or improperly installed inlet water seals. | Replace seals. Follow proper installation procedures. Contact UDOR pump supplier for servicing. |
| Oil leaking at the rear portion of the crankcase. | Damaged or improperly installed sight glass or crankcase rear cover gasket and drain plug gasket. | Replace sight glass, crankcase cover gasket or drain plug gasket. |
| Loud knocking noise in pump. | Pulley loose on crankshaft. | Check key and tighten set screw. |
| | Broken or worn bearing. | Replace bearings. |
| Frequent or premature failure of the packing | Scored plungers. Over pressure to inlet manifold. Abrasive material in the fluid being pumped. Excessive temperature of fluid being pumped Running pump dry. | Replace plungers Reduce inlet pressure. Max. 75 PSI. Install proper filtration on pump inlet plumbing. Assure fluid inlet temperature are within specified range. Max. 160° F DO NOT run pump without fluid. |
| Strong surging at the inlet and low pressure discharge. | Foreign particles in the inlet or discharge valve or worn inlet and/or discharge valves. | Replace worn valves. Check supply tank for contamination. Install and regularly clean filter. Never pump abrasive fluids. |