TROUBLE SHOOTING
UDOR PLUNGER PUMPS

REFER TO THE PROPER PUMP BREAKDOWN AND PLUNGER PUMP SERVICE GUIDE BEFORE PERFORMING ANY MAINTENANCE OR SERVICING OF THE PUMP. www.udorusa.com

UDOR plunger pumps "pump volume", not pressure. The pressure is determined by adjusting the pressure relief valve or unloader valve and selecting the proper orifice size of spray nozzle or nozzles.

NEVER run any UDOR plunger pump without a pressure relief valve or unloader valve installed on the pump or in the discharge plumbing.

PROBLEM	CAUSE	REMEDY
• LOW PRESSURE	1) Worn or plugged nozzle 2) Belt Slippage 3) Air leak in inlet plumbing 4) Pressure gauge inoperative or not registering accurately 5) Relief/unloader valve worn, partially plugged or improperly adjusted 6) Inlet suction strainer clogged or improper size (too small) 7) Worn wet end seals; Abrasives in pumped fluid or severe cavitation; Inadequate water supply 8) Fouled or dirty inlet or discharge valves 9) Worn inlet or discharge valves 10) Leaky discharge hose	• Replace or clean nozzle; check for proper size • Tighten or replace belts • Disassemble, reseal and reassemble; use blue threadlocker • Check with new gauge; replace worn or damaged gauge • Repair/replace and adjust relief/unloader valve • Clean; use a proper size; check more frequently • Install and maintain proper filter; replace seals; check inlet water supply; Max. 6 in. inlet vacuum • Clean inlet and discharge valve assemblies • Replace worn valves • Replace discharge hose
• PUMP RUNS EXTREMELY ROUGH • PRESSURE VERY LOW	1) Restricted inlet or air entering the inlet plumbing 2) Inlet restrictions and/or air leaks; stuck inlet or discharge valves 3) Plugged inlet filter	• Proper size inlet plumbing; check for air tight seal at fittings and filter • Replace worn seals; clean out material in valves or replace worn valves • Clean or replace filter
• WATER LEAKAGE FROM UNDER THE MANIFOLD	1) Worn wet end seals 2) Cracked plungers	• Replace seals • Replace plungers
• OIL LEAK BETWEEN CRANKCASE AND PUMP HEAD	1) Worn crankcase oil seals 2) Scored or damaged plunger rods	• Replace crankcase oil seals • Replace plunger rods
• OIL LEAKING IN THE AREA OF CRANKSHAFT	1) Worn crankshaft seal or case o-ring 2) Bad bearing	• Replace crankshaft seal or case o-ring • Replace bearing
• EXCESSIVE PLAY IN THE END OF THE CRANKSHAFT	1) Worn bearings	• Replace bearings
• WATER IN CRANKCASE OIL	1) May be caused by humid air condensing into water inside the crankcase 2) Worn or improperly installed wet end seals	• Change oil at 3 month or 500 hour intervals using UDOR LUBE (or SAE 30W non-detergent oil) • Replace seals; follow proper installation procedures (refer to UDOR USA Plunger Pump Service Guide) or contact UDOR pump supplier for servicing
• OIL LEAKING AT THE REAR PORTION OF THE CRANKCASE	1) Damaged or improperly installed sight glass or crankcase rear cover gasket or drain plug gasket	• Replace sight glass, crankcase cover gasket or drain plug gasket
• LOUD KNOCKING NOISE IN PUMP	1) Pulley loose on crankshaft 2) Broken or worn bearing	• Check shaft key and tighten set screw or bolts • Replace bearings
• FREQUENT OR PREMATURE FAILURE OF THE WET END SEALS	1) Scored plungers 2) Over-pressure to inlet manifold 3) Abrasive material in the fluid being pumped 4) Excessive temperature of fluid being pumped 5) Running pump dry	• Replace plungers • Reduce inlet pressure; Max. 75 PSI • Install proper filtration on pump inlet plumbing • Assure fluid inlet temperature is within specified range; Max. 160º F • DO NOT run pump without fluid / Replace seals
• STRONG SURGING AND LOW PRESSURE DISCHARGE	1) Foreign particles in the inlet or discharge valves or worn inlet and/or discharge valves 2) Worn wet end seals	• Clean valves or replace worn valves; check supply tank for contamination; install and regularly clean filter; never pump abrasive fluids • Replace seals

Revised 2-1-2011