

RICE HYDRO, INC.
MANUFACTURER'S OPERATING INSTRUCTIONS
TR-SERIES (TRH2, TRH8, TRH10) MODEL TEST PUMPS

FOR WARRANTY REGISTRATION CALL 800-245-4777.

CONNECTING THE PUMP:

1. Check oil level of engine, thru sight glass, use 10W30 as needed. Also oil level of pump thru sight glass, use 30 non-detergent as needed.
2. Connect **CLEAN** pressurized water source (minimum ¾") to the inlet of the pump. *It is recommended that the unit be pressure fed.* For gravity feed locate water within 8 feet and above level of unit, and then prime the pump.
3. Connect high-pressure outlet hose to the pump and your test environment.

OPERATING THE PUMP:

1. Turn the outlet ballvalve to the open position, begin water flow, and start engine. **DO NOT ADJUST ENGINE RPM**, it has been preset at the factory.
2. The pressure regulator has been preset at factory also. **To change this setting you must make this adjustment while the water is flowing freely, under no pressure.** To adjust pressure, first loosen the locknut. Turn the **T-handle/knob** clockwise to increase and counter-clockwise to decrease the pressure. Place a ballvalve at the end of outlet hose, open and close ballvalve to check pressure setting and re-adjust as necessary. It is also recommended that you open and close the RICE bleed valve to remove excess air from piping and ensure accurate pressure readings. Once desired pressure setting is reached, **IT IS VERY IMPORTANT THAT YOU RE-TIGHTEN THE LOCK/JAM NUT**, do not leave adjustment handle free to move or vibrate out of setting. If unloader valve handle does fall out see attached diagram to replace parts correctly. **CAUTION: IT IS VERY COMMON TO REPLACE POPPET/BUTTON BACKWARDS, THE LONGER LEG WITH STEEL BALL FACES AWAY FROM THE SPRING.** With the ballvalve open begin building pressure in test environment. Bleed air thru RICE bleed valve at least once during this process. Once test pressure has been reached, **close ballvalve and shut off engine.**
4. Once the outlet ballvalve is closed and your test begins, you have now isolated the test pump from your test environment; any loss of pressure is due to leaks or trapped air in the line.

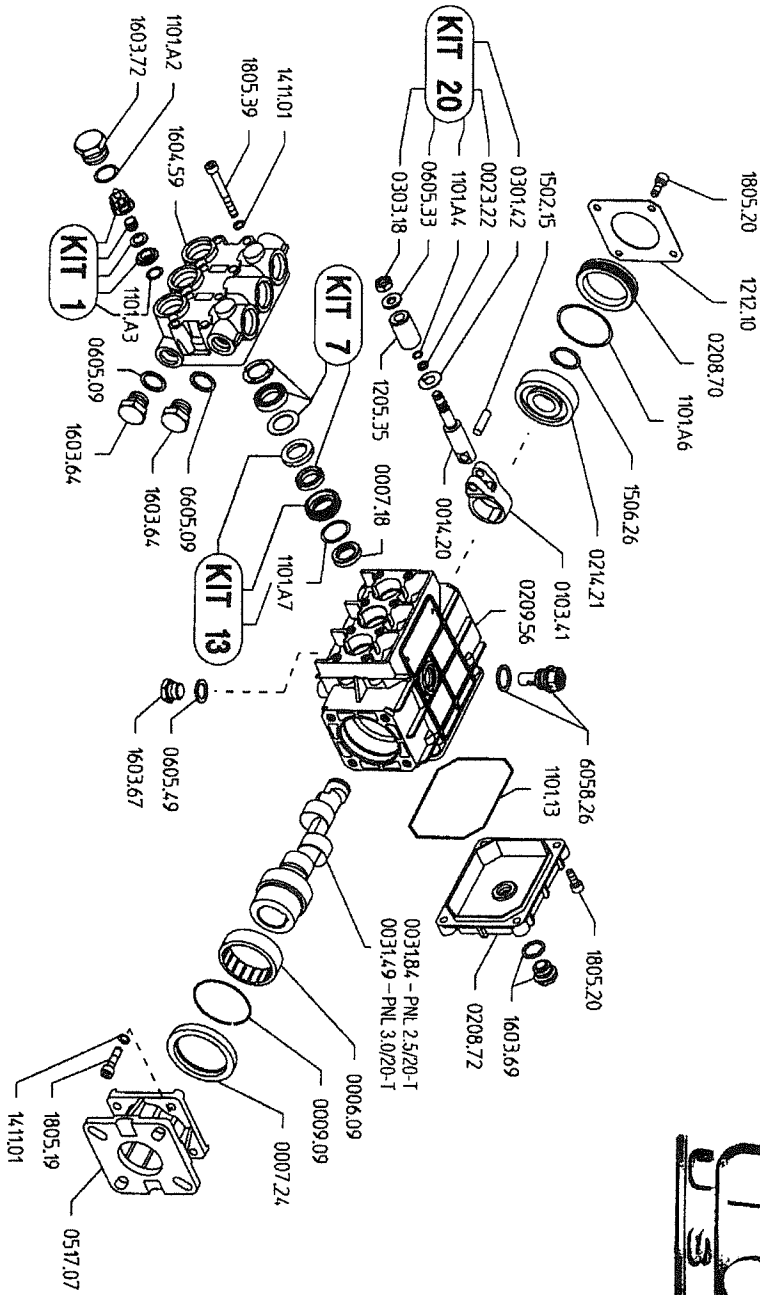
REMEMBER THESE CAUTIONS:

1. Check all oil/fluids in unit before operation.
2. Use a sound ¾" or larger supply hose.
3. DO NOT run dry or pump chlorine through the unit.
4. Protect the pump from freezing, FLUSH with anti-freeze.

RECOMMENDED PERIODIC MAINTENANCE PROCEDURE

1. **Plunger pump - Change oil in the pump body after first 50 hours of use, and every 250 hours thereafter. Change oil in engine after first 5 hours of use, and every 80 hours thereafter.**

PNL 2.5/20-T & PNL 3.0/20-T



PNL 2.5/20-T & PNL 3.0/20-T Quick Reference

Max. Flow	PNL 2.5/20-T2.5 GPM	Valve Kit	04-KIT UD-1
	PNL 3.0/20-T3.0 GPM	Seal Kit	04-KIT UD-7
Maximum Pressure2000 PSI	Brass Kit	04-KIT UD-13
Rated Pump Speed3400 RPM	Plunger Bolt Kit	04-KIT UD-20
Oil Capacity12 oz. UDOR LUBE	Plunger Part #	04-1205.35
	or SAE 30W Non-Detergent Oil	Plunger Diameter	15 MM

PNL 2.5/20-T
PNL 3.0/20-T

PARTS BREAKDOWN FOR MODEL TRH-2

RICE HYDRO, INC.

PART NUMBER..	DESCRIPTION..	QTY REQ'D
UD04-0006.09	BEARING	1
UD04-0007.18	SEAL	3
UD02-0007.24	SEAL	1
UD04-0009.09	RETAINER CLIP	1
UD04-0014.20	PLUNGER ROD P SERIES	3
UD04-0023.22	SUPPORT RING	1
UD04-0031.84	CRANKSHAFT	1
UD04-0103.41	CONNECTING ROD P SERIES	3
UD04-0208.70	BEARING COVER	1
UD04-0208.72	BACK COVER P SERIES	1
UD04-0209.56	CRANKCASE P SERIES	1
UD04-0214.21	BEARING	1
UD04-0301.42	SLINGER RING	1
UD04-0303.18	PLUNGER NUT	1
UD04-0517.07	FLANGE P SERIES GAS	1
UD04-0602.76	GASKET	1
UD02-0605.09	GASKET	2
UD04-0605.33	PLUNGER WASHER	1
UD04-0605.49	WASHER	1
UD04-1101.A2	O-RING	6
UD04-1101.A3	VALVE O-RING	6
UD04-1101.A4	O-RING	1
UD04-1101.A6	O-RING	1
UD04-1101.A7	O-RING	1
UD04-1205.35	PLUNGER 15MM	3
UD04-1212.10	END PLATE	1
UD04-1411.01	WASHER P - PUMP	8
UD04-1502.15	CONNECTING ROD PIN	3
UD04-1506.26	SNAP RING	1
UD04-1603.64	DISCHARGE PLUG 3/8	2
UD02-1603.67	DRAIN PLUG	1
UD04-1603.69	SIGHT GLASS	1
UD04-1603.72	VALVE CAP P SERIES	6
UD04-1604.59	MANIFOLD P SERIES 15MM	1
UD04-1805.19	BOLT	4
UD04-1805.20	BOLT	8
UD04-1805.39	BOLT	8
UD04-6058.26	OIL VENT CAP P SERIES	1
MISC PARTS..		
HONDA-GX200UT2-QX2	196 CC FLANGE MOUNT HONDA	1
SPEC-PNL3.0/20-T	TRIPLEX PLUNGER PUMP	1
GAUGE-3000	LIQUID FILLED GAUGE	1
BALLVALVE-3/8HP	OUTLET BALLVALVE	1
NEEDLEVALVE-1/4	BLEED VALVE	1
UNLOADER-500/4000PSI	PRESSURE REGULATOR	1
HOSESWIVEL-1/2	SWIVEL HOSE INLET	1
LINESTRAINER-1/2	INLET LINE STRAINER	1
COUPLERPLUG-3/8M	QUICK CONNECT PLUG	1
COUPLERBODY-BR-3/8F	QUICK CONNECT BODY	1
HOSE-3/8X8-RH	8 FOOT OUTLET HOSE	1
FITTING-3/8-MPIPE	RIGID HOSE END	1
FITTING-3/8-MPX	SWIVEL HOSE END	1
HOSE-3/8-3000XFT	HIGH PRESSURE OUTLET HOSE	8
	CUSTOMER CAN SPECIFY LENGTH	
KITS..		
KITS ARE ALL INCLUSIVE		
UD04-KIT-UD1	VALVE KIT P-SERIES	
UD04-KIT-UD7	SEAL KIT P 15MM	
UD04-KIT-UD13	BRASS KIT P 15MM	
UD04-KIT-UD20	PLUNGER O-RING KIT P 15MM	

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

REVISED 09/01/14