

**HYDROSTATIC TEST PUMPS**

**Model EL-Series • 5 GPM • 1800 PSI**

The EL-series is a line of low volume high pressure hydrostatic test pumps, offering flow rates up to 5 GPM, and pressures to 1800 PSI. Designed for testing sprinkler systems, irrigation lines, pressure vessels, plant process piping, and small diameter water lines. The triplex ceramic plunger pump has an

inner oil bath, ensuring long life with minimal maintenance.

Standard motor features include; overload protection, totally enclosed fan cooled, 110 to 220 volt, and the 1 HP motors are capable of reading 50/60 Hertz.

There are no external moving parts for increased operator safety and reduced liability risk. All RICE units can be "Built to Suit", contact the factory for special order options available or details on your required specifications.



- Automatic Pressure Regulator with Inlet Bypass
- Stainless Steel Liquid-Filled Gauge Ensures Accurate Readings, with Less Flutter
- Rugged Roll Cage Construction, Protects Pump From Damage
- High Pressure Ballvalve and Fittings



3500 Arrowhead Drive  
Carson City  
Nevada  
89706

web site:  
[www.ricehydro.com](http://www.ricehydro.com)

e-mail:  
[sales@ricehydro.com](mailto:sales@ricehydro.com)


Phone:  
(775) 885-1280

Fax:  
(800) 998-7423

E L S E R I E S						
MODELS	EL1	EL1A	EL2	EL3	EL4/18	EL5/500
PSI	300	500	1000	1500	1800	500
GPM	3	3	1.5	1.5	4	5
INLET	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
OUTLET	1/2"	1/2"	3/8"	3/8"	3/8"	1/2"
MOTOR	1/2HP 60HZ 110/220V	1HP 50/60HZ 110/220V	1HP 50/60HZ 110/220V	1.5HP 50/60HZ 110/220V	5HP 60HZ 220V	2HP 60HZ 110/220V
DIMENSIONS	22X14X14	22X14X14	22X14X14	22X14X14	25X21X17	25X21X17
WEIGHT	60 LBS	74 LBS	85 LBS	86 LBS	175 LBS	125 LBS
OPTIONS:	Explosion Proof, Phase, Hertz and Voltage options available					

RICE HYDRO, INC.  
MANUFACTURER'S OPERATING INSTRUCTIONS  
EL-SERIES MODEL TEST PUMPS

**FOR WARRANTY REGISTRATION CALL: 1-800-245-4777**

 **WARNING:** Operating, servicing and maintaining this equipment can expose you to chemicals including engine exhaust, carbon monoxide and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, operate and service your equipment in a well-ventilated area and wear gloves or wash your hands frequently when servicing your equipment. For more information go to: [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

**CAUTIONS:**

1. Power source must meet voltage, phase, hertz and amperage requirements of electric motor, as stated on label. **If an extension cord is used, requires at least 12 gauge 3 wire with maximum of 25 foot length.**
2. Check ALL fluid levels prior to operating the unit.
3. Use a sound 3/4" or larger supply hose.
4. Protect the pump from freezing, FLUSH with anti-freeze.
5. DO NOT run dry or pump chlorine thru the unit.

**CONNECTING THE PUMP:**

1. With motor switch in the off position, connect power cord of motor to a standard wall outlet. *Extension cord: when needed, requires a 12 gauge 3 wire, **maximum 25 foot length** plugged into a 20 or larger amp breaker, depending on individual motor requirements.*
2. Connect **CLEAN** pressurized water source to the inlet of the pump. It is recommended that the unit be pressure fed. For gravity feed locate water within 8 feet and elevated 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, start the motor.
2. The pressure regulator has been preset at the factory. **To change this setting you must make this adjustment while the water is flowing freely, and the unit is under NO pressure.** To adjust the pressure, first loosen the locknut. Turn the T-handle/Knob clockwise to increase and counter-clockwise to decrease the pressure. Place a ballvalve or similar open and close valve at the end of the outlet hose, open and close this valve multiple times as needed, to check pressure setting and re-adjust as necessary. It is also recommended that you open and close the hosebib located under the gauge to bleed excess air from piping and ensure accurate pressure gauge readings. Upon reaching desired pressure setting, tighten locknut and prepare to begin test.
3. With the ballvalve open begin building pressure in the test environment. Be sure to bleed the air from hosebib under gauge at least once during this process. Once test pressure has been reached, close the ballvalve and shut-off motor. An inlet checkvalve prevents water pressure from bleeding back into the pump.
4. Once the outlet ballvalve is closed and your test begins, you have now isolated the test pump from the test environment, any loss of pressure is due to leaks or trapped air being compressed in the test environment.

**RECOMMENDED MAINTENANCE**

1. Pumps use non-detergent 30wt oil, gear reductions use 90wt gear oil.

PARTS BREAKDOWN FOR MODELS: EL1, EL1A, EL2, EL3  
RICE HYDRO INC.

PART NUMBER..	DESCRIPTION..	QTY REQ'D
UD04-0006.09	BEARING	1
UD04-0007.18	SEAL	3
UD04-0007.24	SEAL	1
UD04-0009.09	RETAINER CLIP	1
UD04-0014.20	PLUNGER ROD	3
UD04-0023.22	SUPPORT RING	1
UD04-0031.42	CRANKSHAFT - EL2/EL3	1
UD04-0031.45	CRANKSHAFT - EL1/EL1A	1
UD04-0103.41	ALUMINUM CONNECTING ROD	3
UD04-0208.70	BACK COVER	1
UD04-0208.72	CRANKCASE COVER	1
UD04-0209.56	CRANKCASE	1
UD04-0214.21	BEARING	1
UD04-0301.42	SLINGER RING	1
UD04-0303.18	PLUNGER NUT	1
UD04-0517.08	ELECTRIC FLANGE	1
UD04-0602.76	GASKET - CRANKCASE COVER	1
UD02-0605.09	ALUMINUM WASHER	1
UD04-0605.33	PLUNGER WASHER	1
UD04-0605.49	O-RING	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 (pictured as 1101.86)	1
UD04-1101.A7	O-RING	1
UD04-1101.A7	O-RING (pictured as 1101.D7)	1
UD04-1205.35	PLUNGER - 15 MM	3
UD04-1212.10	SIDE PLATE	1
UD04-1411.01	WASHER	12
UD04-1502.15	CONNECTING ROD PIN	3
UD04-1506.26	SNAP RING	1
UD04-1603.64	3/8" PLUG	1
UD02-1603.67	DRAIN PLUG	1
UD04-1603.69	SIGHT GLASS	1
UD04-1603.72	VALVE CAP	6
UD04-1604.C7	ALUMINUM MANIFOLD EL1/EL1A	1
UD04-1604.59	BRASS MANIFOLD EL2/EL3	1
UD04-1805.19	BOLT	4
UD04-1805.20	BOLT	8
UD04-1805.39	BOLT	8
UD04-6058.26	OIL VENT CAP	1

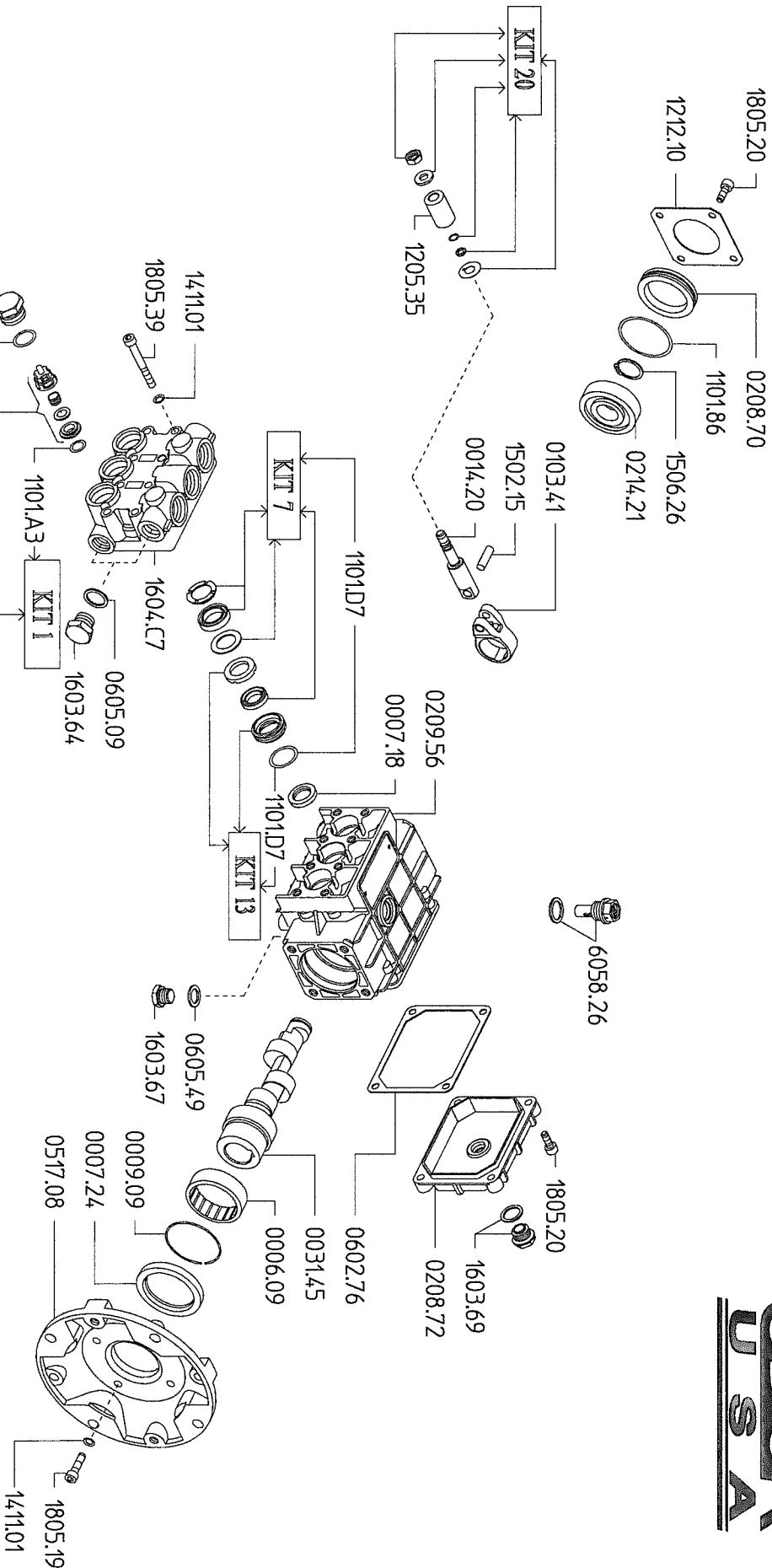
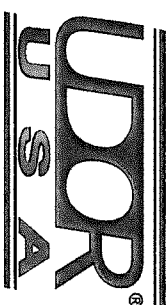
OUTLET HOSES:

HOSE-1/2X8-RH (EL1/1A)	8' FOOT OUTLET HOSE - STANDARD	1
COUPLERBODY-1/2 (EL1/1A)	FEMALE PUMP OUTLET - HOSE	1
COUPLERPLUG-1/2 (EL1/1A)	MALE PUMP OUTLET - PIPING	1
FITTING-1/2-MPIPE (EL1/1A)	FITTING FOR HOSE - RIGID	1
FITTING-1/2-MPX (EL1/1A)	FITTING FOR HOSE - SWIVEL	1
HOSE-1/2-2500XFT (EL1/1A)	SPECIFY LENGTH OF HOSE	
HOSE-3/8X8-RH (EL2/3)	8' FOOT OUTLET HOSE - STANDARD	1
COUPLERBODY-BR-3/8F (EL2/3)	FEMALE PUMP OUTLET - HOSE	1
COUPLERPLUG-3/8M (EL2/3)	MALE PUMP OUTLET - PIPING	1
FITTING-3/8-MPIPE (EL2/3)	FITTING FOR HOSE - RIGID	1
FITTING-3/8-MPX (EL2/3)	FITTING FOR HOSE - SWIVEL	1
HOSE-3/8-3000XFT (EL2/3)	SPECIFY LENGTH OF HOSE	

PARTS BREAKDOWN FOR MODELS: EL1, EL1A, EL2, EL3  
RICE HYDRO INC.

PART NUMBER..	DESCRIPTION..	QTY REQ'D
<b>MOTORS &amp; PUMPS:</b>		
MOTOR-1/2HP-EL1 - L (EL1)	1/2HP 110/220V 1 PHASE 60HZ	1
MOTOR-1HP-CFACE (EL1A/2)	1HP 110/220V 1 PHASE 50/60HZ	1
MOTOR-1.5HP-50/60HZ (EL3)	1.5HP 110/220V 1 PHASE 50/60HZ	1
SPEC-PND-3.0/15-ZA (EL1/1A)	TRIPLEX PLUNGER PUMP	1
SPEC-PNL3.0/20-Z (EL2/3)	TRIPLEX PLUNGER PUMP	1
<b>MISCELLANEOUS PARTS:</b>		
HOSESWIVEL-1/2	HOSE SWIVEL INLET	1
HOESCREEN&WASHER	INLET HOSE SCREEN	1
BALLVALVE-1/2 (EL1/1A)	OUTLET BALLVALVE	1
BALLVALVE-3/8HP (EL2/3)	OUTLET BALLVALVE	1
VALVE-RELIEF-500PSI (EL1/1A) BLUE SPRING 50-500 PSI	PRESSURE REGULATOR	1
VALVE-RELIEF-900PSI (EL2) RED SPRING 100-900 PSI	PRESSURE REGULATOR	1
VALVE-RELIEF-2000PSI (EL3) YELLOW SPRING 200-2000 PSI	PRESSURE REGULATOR	1
GAUGE-600 (EL1/1A)	0-600 PSI LIQUID GAUGE	1
GAUGE-1500 (EL2)	0-1500 PSI LIQUID GAUGE	1
GAUGE-2000 (EL3)	0-2000 PSI LIQUID GAUGE	1
NEEDLEVALVE-1/4	AIR BLEED VALVE	1
KING-EL1A	SHIPPING BOX	1
LABEL-KIT-EL	INSTRUCTION AND CAUTION STICKERS	1
<b>KITS:</b>		
	*Kits are all inclusive for PND/PNL pumps	
UD04-KIT-UD1	VALVE KIT	
UD04-KIT-UD7	SEAL KIT	
UD04-KIT-UD13	BRASS KIT 15MM	
UD04-KIT-UD20	PLUNGER O-RING KIT 15MM	

# PND 3.0/15-ZA



## PND 3.0/15-ZA Quick Reference

Maximum Flow .....	3.0 GPM	Valve Kit .....	04-KIT UD-1
Maximum Pressure .....	1500 PSI	Seal Kit .....	04-KIT UD-7
Rated Pump Speed .....	1750 RPM	Brass Kit .....	04-KIT UD-13
Oil Capacity .....	12 oz. UDOR LUBE or SAE 30W	Plunger Bolt Kit .....	04-KIT UD-20
		Plunger Part # .....	1205.35
		Non-Detergent Oil	Plunger Diameter .....
			15 MM