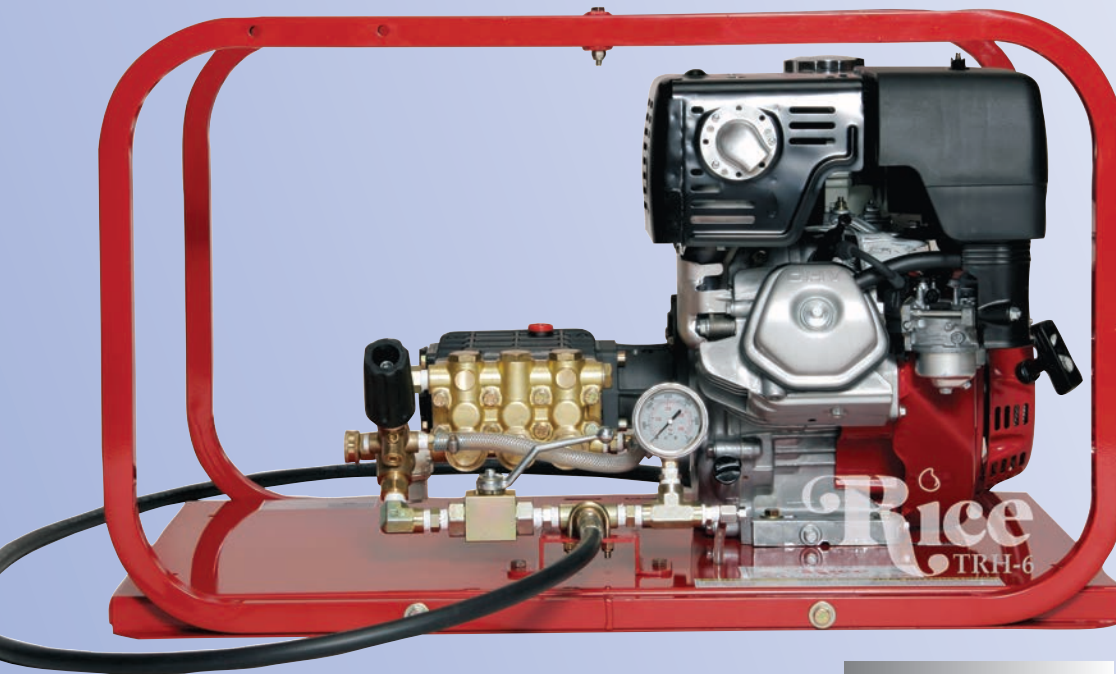


**HYDROSTATIC TEST PUMPS****Model TR-Series • Up to 5.5 GPM • 5000 PSI**

**T**he TR-Series are large volume, high pressure hydrostatic pumps.

Designed for testing boilers, vessels, process piping, steam and gas lines. The ceramic plunger pump, has an inner oil bath, ensuring long life and increased stability. Their high flow characteristics for pumps in this pressure range will speed testing as it quickly removes air from the test environment.

There are no external moving parts for operator safety and reduced liability risks. Virtually indestructible, the TR-Series is enclosed in a rugged roll cage of welded heavy gauge steel. These units are available with gas, diesel or electric power sources. Special order options available, pumps can be built to suit.

- **Automatic Pressure Regulator with Inlet Bypass**
- **Stainless Steel Liquid-Filled Gauge Ensure Accurate Readings, with Less Flutter**
- **Enclosed in a Rugged Roll Cage & Heavy Gauge Steel Base**
- **Stainless Steel Ballvalve to Isolate Pressure**



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

| <b>T R S E R I E S</b> |                                                        |                             |                          |                          |                          |                            |
|------------------------|--------------------------------------------------------|-----------------------------|--------------------------|--------------------------|--------------------------|----------------------------|
| <b>Pump</b>            | <b>TRH-2</b>                                           | <b>TRE-6</b>                | <b>TRH-8</b>             | <b>TRE-8</b>             | <b>TRH-10</b>            | <b>TRD-8E</b>              |
| PSI                    | 2000                                                   | 2700                        | 3600                     | 3600                     | 5000                     | 3500                       |
| GPM                    | 3                                                      | 4                           | 4                        | 4                        | 4.5                      | 4                          |
| Inlet                  | 3/4"                                                   | 3/4"                        | 3/4"                     | 3/4"                     | 3/4"                     | 3/4"                       |
| Outlet                 | 3/8"                                                   | 3/8"                        | 3/8"                     | 3/8"                     | 3/8"                     | 3/8"                       |
| Motor/Engine           | Honda<br>6.5 HP<br>163 CC                              | Baldor<br>7 1/2 HP<br>60 HZ | Honda<br>13 HP<br>389 CC | Baldor<br>10 HP<br>60 HZ | Honda<br>20 HP<br>614 CC | Diesel<br>7.3 KW<br>462 CC |
| Shipping<br>Dimensions | 25X21X17                                               | 35X25X19                    | 35X25X19                 | 35X25X19                 | 35X25X21                 | 35X25X21                   |
| Shipping<br>Weight     | 120 LBS                                                | 255 LBS                     | 177 LBS.                 | 286 LBS                  | 250 LBS                  | 250 LBS                    |
| <b>Options:</b>        | Engines: Briggs & Stratton, Honda or Diesel            |                             |                          |                          |                          |                            |
| <b>Motors:</b>         | Explosion proof, Variation in Hertz, Voltage and Phase |                             |                          |                          |                          |                            |

**Hydrostatic Test Pumps • Post Hole Diggers • Shoring Pressure Pumps • Hand Pumps**

RICE HYDRO, INC. - MANUFACTURER'S OPERATING INSTRUCTIONS  
TR-SERIES MODEL TEST PUMPS  
**FOR WARRANTY REGISTRATION CALL: 1-800-245-4777**

**REMEMBER THESE CAUTIONS:**

1. **Electric Models** - 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 pump.
3. Use a sound 3/4" or larger supply hose.
4. DO NOT run dry or pump chlorine through the unit.
5. Protect the pump from freezing, FLUSH with anti-freeze.

**CONNECTING THE PUMP:**

1. Check oil level of engine as well as the oil level of pump thru sight glass, use 10W30 non-detergent as needed. **Electric Models** - 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 (minimum 3/4") 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:**

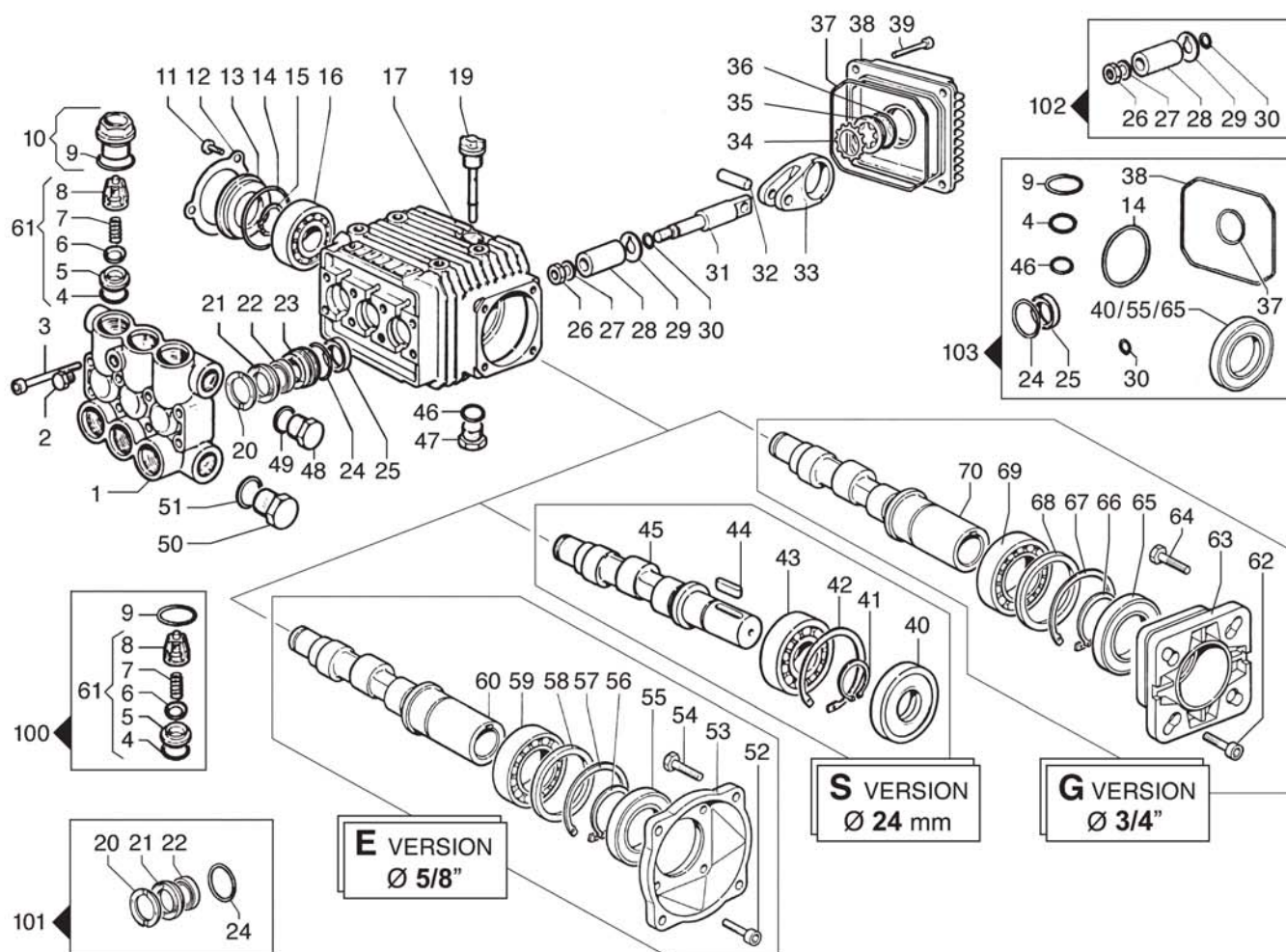
1. Turn the outlet ballvalve to the open position, begin water flow and start the engine. The engine RPM is preset at the factory, **DO NOT ADJUST!**
2. The pressure regulator has been preset at the factory. **To change this setting you must make this adjustment while the water is flowing freely, and 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 engine.**
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 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 the engine after first 5 hours of use, and every 80 hours thereafter.



**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)



| N° | Cod.      | Descrizione             | Description             | Note       | Q.ty | Model |
|----|-----------|-------------------------|-------------------------|------------|------|-------|
| 1  | 3218 0317 | Testata Pompa Ottone    | Brass Pump Manifold     | Ø15        | 1    |       |
| 2  | 3202 0018 | Tappo                   | Cap                     | G1/8       | 1    |       |
| 3  | 3609 0108 | Vite                    | Screw                   | M6x55      | 8    |       |
| 4  | 1210 0046 | Guarnizione OR          | O-Ring                  | 2,62x17,13 | 6    |       |
| 5  | 3009 0087 | Sede Valv. Aspir./Mand. | Suct./Del. Valve Seat   |            | 6    |       |
| 6  | 3604 0017 | Valvola Aspir./Mand.    | Suct./Del. Valve        |            | 6    |       |
| 7  | 1802 0177 | Molla Valv. Asp./Mand.  | Suct./Del. Valve Spring |            | 6    |       |
| 8  | 1205 0025 | Gabbia Valv. Asp./Mand. | Suct./Del. Valve Cage   |            | 6    |       |
| 9  | 1210 0048 | Guarnizione OR          | O-Ring                  | 2,62x20,24 | 6    |       |
| 10 | 3202 0312 | Tappo + OR              | Cap + O-Ring            |            | 6    |       |
| 11 | 3609 0088 | Vite                    | Screw                   | M5x10      | 3    |       |
| 12 | 1004 0012 | Flangia Tenuta          | Crankcase Flange        |            | 1    |       |
| 13 | 0402 0172 | Coperchio               | Cover                   |            | 1    |       |
| 14 | 1210 0386 | Guarnizione OR          | O-Ring                  | 3,53x44,04 | 1    |       |
| 15 | 3019 0011 | Seeger Esterno          | Outer Seeger            |            | 1    |       |
| 16 | 0438 0066 | Cuscinetto a Sfere      | Ball Bearing            | 20x52x15   | 1    |       |
| 17 | 0403 0128 | Carter Pompa            | Pump Crankcase          |            | 1    |       |
| 19 | 3200 0051 | Asta Livello Olio       | Oil Dipstick            |            | 1    |       |
| 20 | 0009 0196 | Anello Pressione        | Packing Head Ring       | Ø15        | 3    |       |
| 21 | 1241 0065 | Guarnizione Tenuta      | Packing                 | Ø15        | 3    |       |
| 22 | 1241 0030 | Guarnizione Tenuta      | Packing                 | Ø15        | 3    |       |
| 23 | 0009 0198 | Anello Portaguarniz.    | Packing Retainer        | Ø15        | 3    |       |
| 24 | 1210 0223 | Guarnizione OR          | O-Ring                  | 1,78x26,7  | 3    |       |
| 25 | 0019 0095 | Anello Tenuta           | Oil Seal                | 15x24x5    | 3    |       |
| 26 | 0600 0048 | Dado Speciale           | Special Bolt            |            | 3    |       |
| 27 | 2811 0080 | Rondella                | Washer                  | 8,2x14x1,5 | 3    |       |

| N° | Cod.      | Descrizione        | Description       | Note        | Q.ty | Model  |
|----|-----------|--------------------|-------------------|-------------|------|--------|
| 28 | 0202 0020 | Bussola Ceramica   | Ceramic Bushing   | Ø15         | 3    |        |
| 29 | 2812 0038 | Rondella           | Washer            |             | 3    |        |
| 30 | 1210 0055 | Guarnizione OR     | O-Ring            | 1,78x6,07   | 3    |        |
| 31 | 2409 0044 | Pistone Guida      | Piston Guides     |             | 3    |        |
| 32 | 3011 0014 | Spinotto           | Gudgeon Pin       |             | 3    |        |
| 33 | 0205 0048 | Kit Biella         | Con. Rod Assembly |             | 3    |        |
| 34 | 3019 0033 | Seeger Esterno     | Outer Seeger      | Ø28         | 1    |        |
| 35 | 3201 0026 | Spia Livello Olio  | Oil Indicator     |             | 1    |        |
| 36 | 1210 0333 | Guarnizione OR     | O-Ring            | 1,78x23,52  | 1    |        |
| 37 | 1210 0621 | Guarnizione OR     | O-Ring            | 3,0x94      | 1    |        |
| 38 | 0402 0142 | Coperchio Carter   | Crankcase Cover   |             | 1    |        |
| 39 | 3609 0041 | Vite               | Screw             | M6x25       | 4    |        |
| 40 | 0019 0094 | Anello Tenuta      | Oil Seal          | 25x62x10/7  | 1    |        |
| 41 | 3019 0006 | Seeger Esterno     | Outer Seeger      |             | 1    |        |
| 42 | 3020 0012 | Seeger Interno     | Inner Seeger      |             | 1    |        |
| 43 | 0438 0075 | Cuscinetto a Sfere | Ball Bearing      | 25x62x17    | 1    |        |
| 44 | 1602 0045 | Linguetta          | Key               | 8x7x25      | 1    |        |
| 45 | 0001 0286 | Albero Passante    | Throughshaft      | Ø24         | 1    | 2015 S |
| 46 | 0001 0332 | Albero Passante    | Throughshaft      | Ø24         | 1    | 3020 S |
| 47 | 1210 0441 | Guarnizione OR     | O-Ring            | 2x14        | 1    |        |
| 48 | 3200 0007 | Tappo              | Plug              | 3/8 GAS     | 1    |        |
| 49 | 3200 0007 | Tappo              | Plug              | 3/8 GAS     | 1    |        |
| 50 | 2811 0084 | Rondella           | Washer            | 16,7x22x1,5 | 1    |        |
| 51 | 3202 0015 | Tappo              | Plug              | G1/2        | 1    |        |
| 52 | 2811 0086 | Rondella           | Washer            | 21,2x27x1,5 | 1    |        |
| 53 | 3609 0032 | Vite               | Screw             | M6x20       | 4    |        |

## 3400 RPM

| N° | Cod.      | Descrizione             | Description               | Note               | Qty | Model           |
|----|-----------|-------------------------|---------------------------|--------------------|-----|-----------------|
| 53 | 3016 0016 | Flangia                 | Flange                    | NEMA 56 C          | 1   |                 |
| 54 | 3607 0200 | Vite Testa Esagonale    | Hexagonal Screw           | 3/8"16 UNCx3/4"    | 4   |                 |
| 55 | 0019 0075 | Anello Tenuta Olio      | Oil Seal                  | 35x62x7            | 1   |                 |
| 56 | 3019 0004 | Seeger Esterno          | Outer Seeger              | Ø35                | 1   |                 |
| 57 | 3020 0012 | Seeger Interno          | Inner Seeger              | Ø62                | 1   |                 |
| 58 | 2812 0064 | Rondella Distanziale    | Spacer                    |                    | 1   |                 |
| 59 | 0438 0015 | Cuscinetto a Sfere      | Ball Bearing              | 35x62x14           | 1   |                 |
| 60 | 0001 0336 | Albero Femmina          | Hollow Shaft              | Ø 5/8"             | 1   | 2015 E - 2020 E |
|    | 0001 0337 | Albero Femmina          | Hollow Shaft              | Ø 5/8"             | 1   | 3020 E          |
|    | 0001 0532 | Albero Femmina          | Hollow Shaft              | Ø 5/8"             | 1   | 3522 E          |
| 61 | 1220 0030 | Gruppo Valv. Asp./Mand. | Suct./Del. Valve Assy kit |                    | 6   |                 |
| 62 | 3609 0032 | Vite                    | Screw                     | M 6x20             | 4   |                 |
| 63 | 3016 0012 | Flangia                 | Flange                    | SAE J 609 A        | 1   |                 |
| 64 | 3607 0199 | Vite Testa Esagonale    | Hexagonal Screw           | 5/16"24 UNF x 3/4" | 4   |                 |
| 65 | 0019 0075 | Anello Tenuta Olio      | Oil Seal                  | 35x62x7            | 1   |                 |
| 66 | 3019 0004 | Seeger Esterno          | Outer Seeger              | Ø35                | 1   |                 |
| 67 | 3020 0012 | Seeger Interno          | Inner Seeger              | Ø62                | 1   |                 |
| 68 | 2812 0064 | Rondella Distanziale    | Spacer                    |                    | 1   |                 |

| N° | Cod.      | Descrizione        | Description  | Note     | Qty | Model           |
|----|-----------|--------------------|--------------|----------|-----|-----------------|
| 69 | 0438 0015 | Cuscinetto a Sfere | Ball Bearing | 35x62x14 | 1   |                 |
| 70 | 0001 0334 | Albero Femmina     | Hollow Shaft | Ø 3/4"   | 1   | 2020 G          |
|    | 0001 0406 | Albero Femmina     | Hollow Shaft | Ø 3/4"   | 1   | 2520 G - 2525 G |
|    | 0001 0451 | Albero Femmina     | Hollow Shaft | Ø 3/4"   | 1   | 3020 G - 3025 G |
|    | 0001 0383 | Albero Femmina     | Hollow Shaft | Ø 3/4"   | 1   | 3515 G - 3522 G |

## Kit Ricambi

## Spare Parts Kit

|     |           |                       |                |                    |   |                                                                                                       |
|-----|-----------|-----------------------|----------------|--------------------|---|-------------------------------------------------------------------------------------------------------|
| 100 | 5025 0011 | Kit Valvole           | Valve Kit      |                    | 1 |                                                                                                       |
| 101 | 5019 0035 | Kit Guarnizioni Acqua | Water Seal Kit | Ø15                | 1 |                                                                                                       |
| 102 | 2409 0071 | Kit Pistone           | Piston kit     | Ø15                | 1 |                                                                                                       |
| 103 | 5019 0040 | Kit Guarnizioni Olio  | Oil Seal Kit   | Male/Solid         | 1 | 2015 S - 3020 S                                                                                       |
|     | 5019 0041 | Kit Guarnizioni Olio  | Oil Seal Kit   | Femmina/<br>Hollow | 1 | 2015 E - 2020 E<br>2020 G - 2520 G<br>2525 G - 3020 G<br>3020 E - 3025 G<br>3515 G - 3522 G<br>3522 E |

## PARTS BREAKDOWN FOR MODEL TRH-2

RICE HYDRO, INC.

**\*\* Serial numbers #60424 and after \*\***

## PUMP PARTS:

| REF# | PART NUMBER.. | DESCRIPTION..       | REQ'D |
|------|---------------|---------------------|-------|
| 1    | LWD-3218-0317 | BRASS PUMP MANIFOLD | 1     |
| 2    | LWD-3202-0018 | CAP                 | 1     |
| 3    | LWD-3609-0108 | SCREW               | 8     |
| 4    | LWD-1210-0046 | O-RING              | 6     |
| 5    | LWD-3009-0087 | VALVE SEAT          | 6     |
| 6    | LWD-3604-0017 | VALVE               | 6     |
| 7    | LWD-1802-0177 | VALVE SPRING        | 6     |
| 8    | LWD-1205-0025 | VALVE CAGE          | 6     |
| 9    | LWD-1210-0048 | O-RING              | 6     |
| 10   | LWD-3202-0312 | CAP & O-RING        | 6     |
| 11   | LWD-3609-0088 | SCREW               | 3     |
| 12   | LWD-1004-0012 | CRANKCASE FLANGE    | 1     |
| 13   | LWD-0402-0172 | COVER               | 1     |
| 14   | LWD-1210-0386 | O-RING              | 1     |
| 15   | LWD-3019-0011 | OUTER SEEGER        | 1     |
| 16   | LWD-0438-0066 | BALL BEARING        | 1     |
| 17   | LWD-0403-0128 | PUMP CRANKCASE      | 1     |
| 19   | LWD-3200-0051 | OIL DIPSTICK        | 1     |
| 20   | LWD-0009-0196 | PACKING HEAD RING   | 3     |
| 21   | LWD-1241-0065 | PACKING             | 3     |
| 22   | LWD-1241-0030 | PACKING             | 3     |
| 23   | LWD-0009-0198 | PACKING RETAINER    | 3     |
| 24   | LWD-1210-0223 | O-RING              | 3     |
| 25   | LWD-0019-0095 | OIL SEAL            | 3     |
| 26   | LWD-0600-0048 | SPECIAL BOLT        | 3     |
| 27   | LWD-2811-0080 | WASHER              | 3     |
| 28   | LWD-0202-0020 | CERAMIC BUSHING     | 3     |
| 29   | LWD-2812-0038 | WASHER              | 3     |
| 30   | LWD-1210-0055 | O-RING              | 3     |
| 31   | LWD-2409-0044 | PISTON GUIDES       | 3     |
| 32   | LWD-3011-0014 | GUDGEON PIN         | 3     |
| 33   | LWD-0205-0048 | CONNECTING ROD ASSY | 3     |
| 34   | LWD-3019-0033 | OUTER SEEGER        | 1     |
| 35   | LWD-3201-0026 | OIL INDICATOR       | 1     |
| 36   | LWD-1210-0333 | O-RING              | 1     |
| 37   | LWD-1210-0621 | O-RING              | 1     |
| 38   | LWD-0402-0142 | CRANKCASE COVER     | 1     |
| 39   | LWD-3609-0041 | SCREW               | 4     |
| 46   | LWD-1210-0441 | O-RING              | 1     |
| 47   | LWD-3200-0007 | DRAIN PLUG          | 1     |
| 48   | LWD-3200-0007 | PLUG                | 1     |
| 49   | LWD-2811-0084 | WASHER              | 1     |
| 50   | LWD-3202-0015 | PLUG                | 1     |
| 51   | LWD-2811-0086 | WASHER              | 1     |
| 61   | LWD-1220-0030 | VALVE ASSY KIT      | 6     |
| 62   | LWD-3609-0032 | SCREW               | 4     |
| 63   | LWD-3016-0012 | FLANGE              | 1     |
| 64   | LWD-3607-0199 | HEXAGONAL SCREW     | 4     |
| 65   | LWD-0019-0075 | OIL SEAL            | 1     |
| 66   | LWD-3019-0004 | OUTER SEEGER        | 1     |
| 67   | LWD-3020-0012 | INNER SEEGER        | 1     |
| 68   | LWD-2812-0064 | SPACER              | 1     |
| 69   | LWD-0438-0015 | BALL BEARING        | 1     |
| 70   | LWD-0001-0451 | HOLLOW SHAFT        | 1     |

## PARTS BREAKDOWN FOR MODEL TRH-2

RICE HYDRO, INC.

\*\* Serial numbers #60424 and after \*\*

## MISCELLANEOUS PARTS..

|                      |                                  |   |
|----------------------|----------------------------------|---|
| HONDA-GX200UT2-QX2   | 196 CC FLANGE MOUNT HONDA        | 1 |
| MUFFLER-CAP-GX200    | HONDA MUFFLER CAP                | 1 |
| PUMP-PLGR-3.0/20     | TRIPLEX PLUNGER PUMP             | 1 |
| GAUGE-3000           | LIQUID FILLED GAUGE              | 1 |
| BALLVALVE-3/8HP      | OUTLET BALLVALVE                 | 1 |
| NEEDLEVALVE-1/4      | BLEED VALVE                      | 1 |
| HOESWIVEL-1/2        | SWIVEL HOSE INLET                | 1 |
| LINESTRAINER-1/2     | INLET LINE STRAINER              | 1 |
| LABEL-KIT-TR         | INSTRUCTION AND CAUTION STICKERS | 1 |
| VALVE-RELIEF-2000PSI | PRESSURE REGULATOR               | 1 |

## OUTLET HOSE..

|                                                                                            |                                |   |
|--------------------------------------------------------------------------------------------|--------------------------------|---|
| HOSE-3/8X8-RH                                                                              | 8' FOOT OUTLET HOSE - STANDARD | 1 |
| <i>*3/8" Male Rigid Fitting &amp; 3/8" Male Swivel Fitting included on 8ft outlet hose</i> |                                |   |
| COUPLERBODY-BR-3/8F                                                                        | FEMALE PUMP OUTLET - HOSE      | 1 |
| COUPLERPLUG-3/8M                                                                           | MALE PUMP OUTLET - PIPING      | 1 |
| HOSE-3/8-3000XFT                                                                           | SPECIFY LENGTH OF HOSE         |   |
| 3/8" Male Rigid Fitting & 3/8" Male Swivel Fitting                                         |                                | 1 |

## REF#

## KITS:

|     |               |                |   |
|-----|---------------|----------------|---|
| 100 | LWD-5025-0011 | VALVE KIT      | 1 |
| 101 | LWD-5019-0035 | WATER SEAL KIT | 1 |
| 102 | LWD-2409-0071 | PISTON KIT     | 1 |
| 103 | LWD-5019-0041 | OIL SEAL KIT   | 1 |