

HYDROSTATIC TEST PUMPS

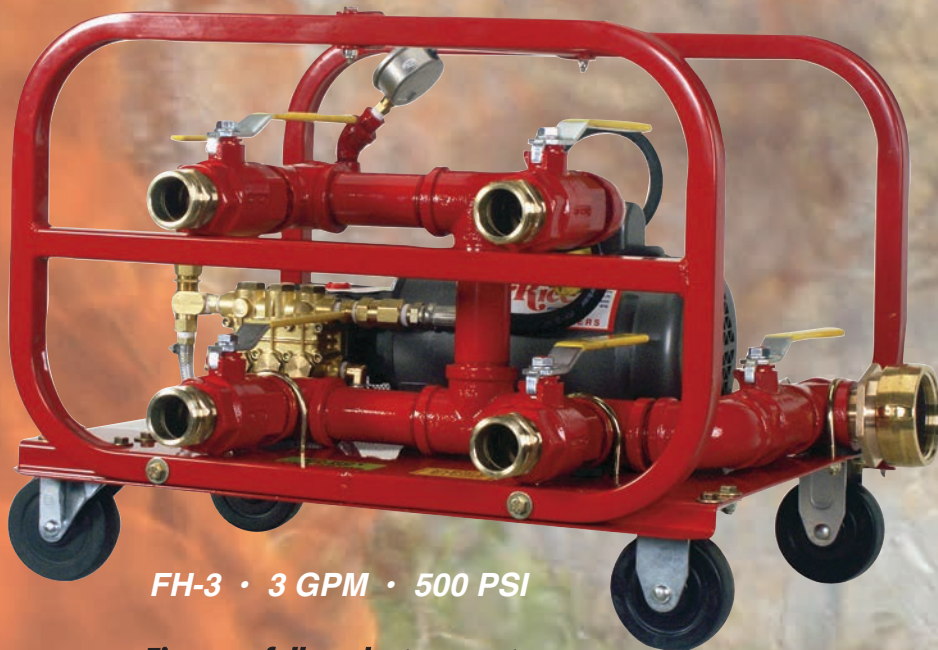
# FH Series

## FIRE HOSE TESTERS

The FH-series line of fire hose testers, offers testing pressures up to 1,000 PSI, with flow rates up to 10 GPM. Gas, Electric, and Diesel driven models, designed to safely test fire hose up to 6" in diameter. A large 2 & 1/2" swivel inlet aids in the ability to quickly fill and bleed the fire hoses through the large 1 & 1/2" heavy duty manifold, with independently controlled stainless steel ballvalves. NO WILD LINES - unique to the RICE Hydro line of fire hose testers, a ballvalve strategically placed on the inlet piping allows the user to fill with "LARGE VOLUME at LOW PRESSURE" and test with "LOW VOLUME at HIGH PRESSURE", eliminating the elements that may cause wild lines. The FH-series hose testers, meet or exceed test standards set forth by the NFPA 1962. A safe, less costly and more efficient way to test your fire hose, keeping your pumper ready for action, where it should be!

| MODEL        | GPM | PSI  | POWER    |
|--------------|-----|------|----------|
| FH-3         | 3   | 500  | ELECTRIC |
| EL-FHT       | 3   | 500  | ELECTRIC |
| FH-5(B) (H)  | 5   | 1000 | GAS      |
| FH5-E        | 5   | 800  | ELECTRIC |
| FH4-E        | 4   | 1000 | ELECTRIC |
| FH2-(B) (H)  | 3.5 | 1000 | GAS      |
| FH10-(B) (H) | 10  | 450  | GAS      |

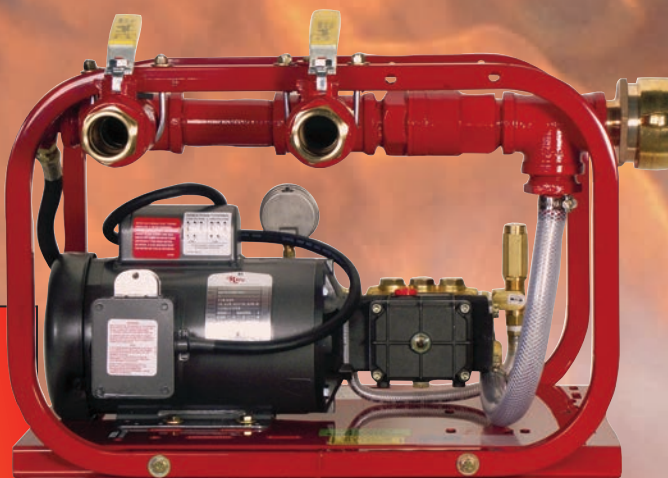
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**FH-3 • 3 GPM • 500 PSI**

- **Five year full product warranty**
- **Up to Ten Independently Controlled Outlets, 1 & 1/2" Stainless Steel Ballvalves, with NST Couplings**
- **Stainless Steel Liquid-Filled Gauge Ensures Accurate Readings, with Less Flutter**
- **Rugged Roll Cage Construction Protects Pump From Damage**

### MINI HOSE TESTER EL-FHT



**EL-FHT • 3 GPM • 500 PSI**

- **Two Independently Controlled Outlets, 1 & 1/2" Stainless Steel Ball valves, with NST Couplings**
- **1 HP 50/60 Hz Electric Motor with MTO, and TEFC**
- **Dual Swivel Inlets: 2 & 1/2" NST and 3/4" GHT.**
- **Liquid Filled Stainless Steel Gauge**

The EL-FHT is a mini hose tester with all the power and design of the FH-3, yet just half its size. Great for on board ships, inside factories and plants or any confined spaces.

Pressure Wands



Fire Hose Testers



Hose Restraints



Hand Pumps

ricehydroworld.com



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)

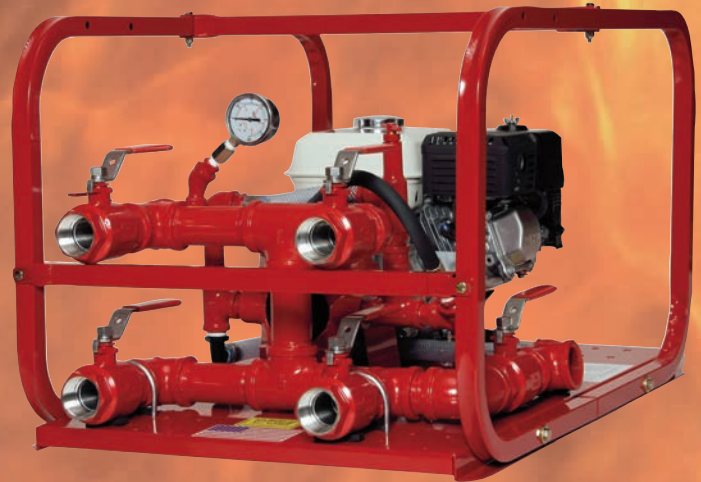
Toll Free U.S. & Canada:  
(800) 245-4777  
Phone:  
(775) 885-1280

Fax:  
(800) 998-7423

## FH10-H

**F**reedom and Versatility! The FH10-H is one of six gas models offered in the Rice Hydro line of fire hose testers. Excellent for testing requirements in rural and remote areas, or anywhere electricity is not readily available.

- **Shown with Honda engine, OHV, oil alert**
- **All units enclosed in a Rugged Steel Rollcage**
- **Increased speed and efficiency with higher GPM flow ratings**



**FH10-H • 10 GPM • 450 PSI**

## FH-series Wand Accessory

**I**deal for Haz-Mat and contaminated equipment wash down. Strong cleaning power at 500 psi, yet soft enough to offer less risk for damage of department decals or custom paint jobs. The FHWA-1 wand accessory makes your FH-series fire hose tester a year round contributor to your equipment fleet.



- **Dual Tips offer option of Spraying Either Water only or Soap & Water**
- **50 Feet of High Pressure Hose for Long Range Mobility**
- **Quick Disconnects for Easy On/Off Capability**
- **Adjustable Injector for Soap or other Cleaning Solvents**
- **Steel Construction, with Nylon Tip Guards and Handle**



**Keep'M Caged!  
Safety Anchor &  
Securement Device**



The **LineCage**, a patented design, for safely securing and anchoring your fire hose during pressure testing.

RICE HYDRO, INC.  
MANUFACTURER'S OPERATING INSTRUCTIONS  
FIRE HOSE TESTER SERIES

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

**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. Protect the pump from freezing, FLUSH with anti-freeze.
4. DO NOT run dry or pump chlorine thru the unit.

**CONNECTING THE PUMP:**

1. Check oil level of pump and engine (if gas unit), use 10W30 ND oil.
2. Connect inlet to fire hydrant.
3. Connect fire hose to be tested to suitable adapters on manifold outlets. Hose should have nozzles on the end to bleed the air from the lines at full flow. Hoses should be lying up hill from pump if possible.
4. Connect garden hose to back bleed & direct to a drain away for dry test area.
5. ASSURE MOTOR IS "OFF". Connect the power cord to a standard wall outlet.  
**Extension cord: when needed, a 12 gauge 3 wire, maximum 25 ft. length, plugged into a 20 amp breaker is required.**

**OPERATING THE PUMP:**

1. Close all ballvalves, slightly crack open the 1/2" bleeder ballvalve.
2. Open inlet ballvalve. Open outlet ballvalves one at a time and allow each hose to be filled through manifold. Do not turn pump on at this time.
3. To ensure air is safely bled from hoses, bleed each hose, one line at a time with hydrant volume and pressure, utilizing a nozzle at the end of each hose.
4. When each line is filled, free of air, with nozzle closed, close the ballvalve at the manifold outlet to seal the line. Bleed **ALL** outlets whether or not in use for testing. All air must be removed.
5. With back bleed open, turn on the pump. This will bleed air out of the pressure side of the pump - out to the drain area.
6. **Close the 1&1/2" ballvalve at the inlet of manifold/unit, directing water flow from the hydrant to pressure side of pump. No pressure will build until this ballvalve is closed.**
7. Slowly close the 1/2" back bleed ballvalve, check the gauge to verify pressure setting of relief valve.
8. 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 counterclockwise 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. Upon reaching desired pressure setting, tighten locknut and prepare to begin test.

9. Open the 1½" ballvalves at the outlets and begin building pressure in all the lines. In the event there is an acceptable leak in the system that must be overcome by leaving the pump running.. Crack the ½" back bleed valve allowing a small amount of clean fresh water to flow while in bypass. **Once pressure has been reached, close all ballvalves and shut off pump.**
10. If the air has been bled as outlined, the pump will build pressure quickly and safely with only hose stretch to overcome. If a hose ruptures, the only volume of water available is through GPM of the pump. NO SURGE OF VOLUME, NO WILD LINE.
11. It is impossible to ensure that air is not caught behind couplings. If air is caught behind a coupling that fails - it could cause an explosion and fragmentary effect. DO NOT BEND OVER THE TOP OF THE PUMP. Treat hoses and couplings under pressure as dangerous.

NOTE: When dealing with existing pressured hoses or to re-pressurize hose, unit's existing manifold/piping pressure must be bled back down to 70 psi. **DO NOT LOWER PRESSURE ON HOSES OR TEST ENVIROMENT**, just in manifold/piping section of pump. High existing "head pressure" will cause motor to stall, not start at all, or pump to fail. Examples: hoses are pre-filled and have existing pressure of 120 PSI, and you need to build to 150 PSI, the positive displacement pump will struggle with overcoming this existing head pressure. **TO OVERCOME:** with 1½" outlet ballvalves closed holding existing pressure, open back bleed ½" ballvalve to release pressure in piping/manifold down to 70 PSI or below. Turn motor/unit on and close ½" back bleed ballvalve building pressure within piping/manifold to at least 30 psi above existing test pressure (this will allow the pump to overcome the existing head pressure) and begin to open individually the 1 ½" ballvalves.

#### **TROUBLE SHOOTING:**

**NOT building pressure**

**Inlet ballvalve has not been closed.**

**AIR, AIR AND MORE AIR**

**Ensure air is bled from hoses, manifold, piping.  
The length of time to build pressure and test hoses  
is directly related to overcoming air buildup.**

**Motor will not Run**

**Verify plugged directly into wall outlet, or using  
minimum 12 gauge 3 wire, maximum 25' extension cord.  
Push thermal overload button to reset.**

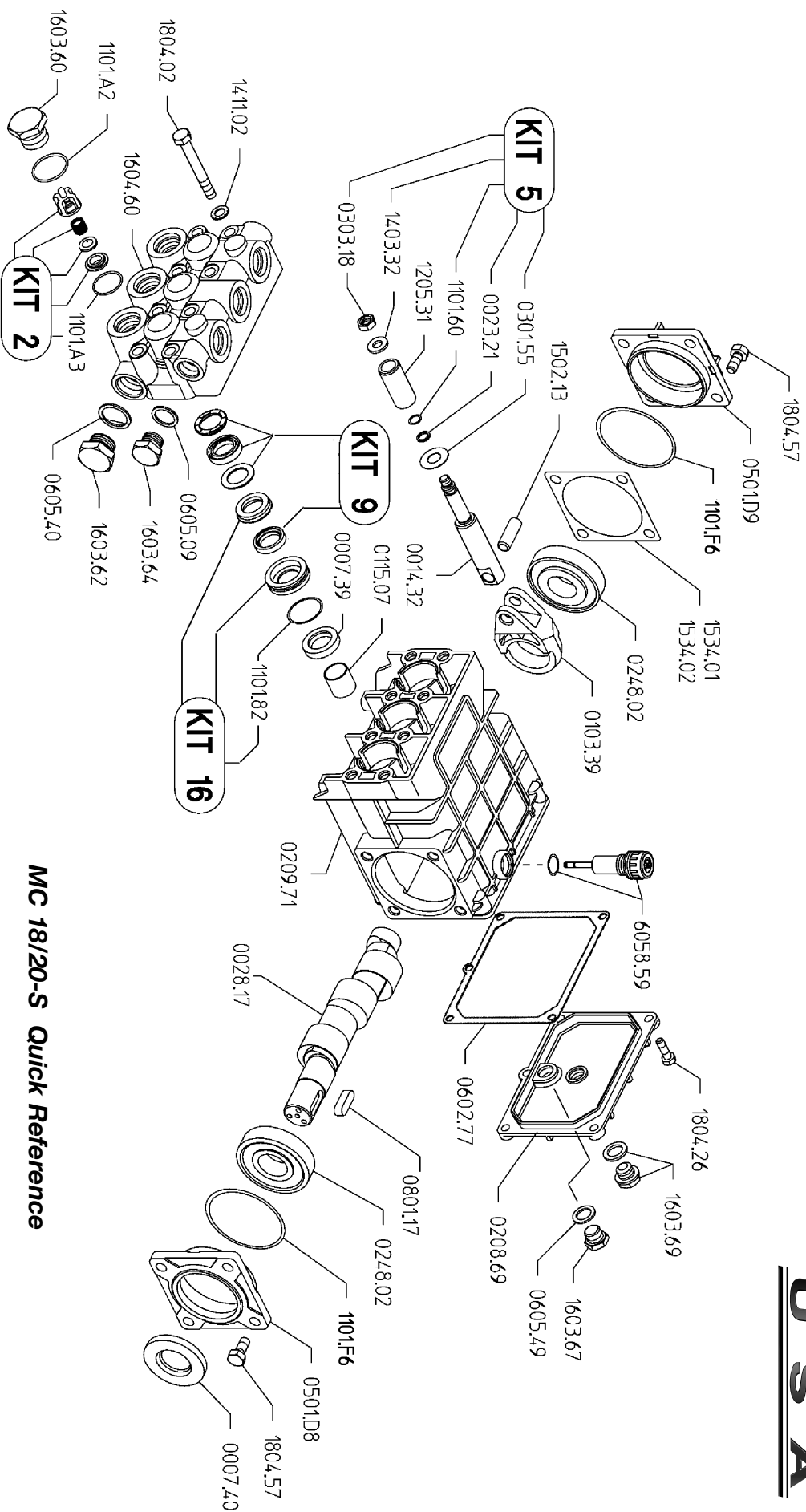
**GAUGE**

**Pegged or faulty, order new gauge.**



**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)**

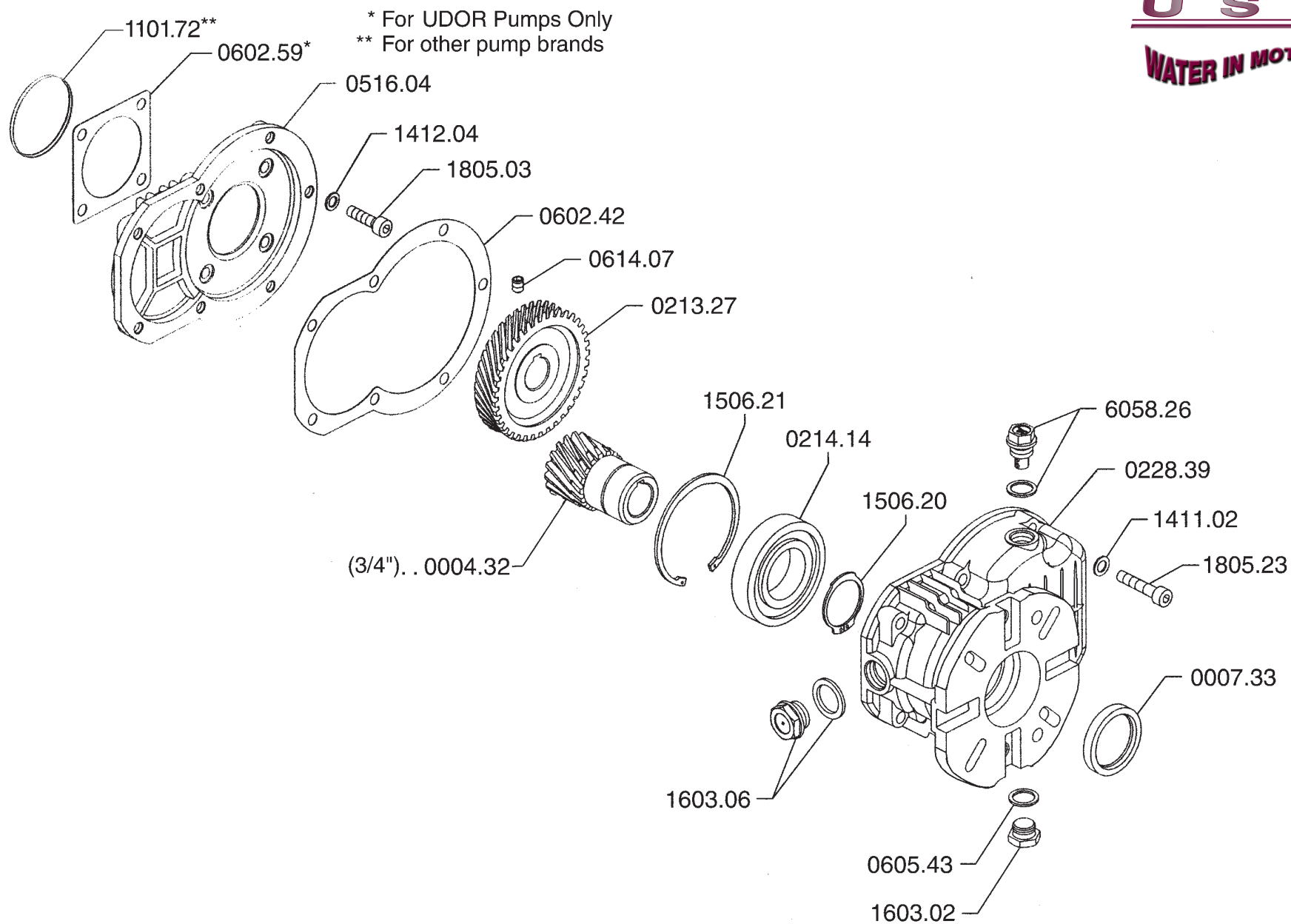
**UDR<sup>®</sup>**  
**USA**



|                        |                                |                        |              |
|------------------------|--------------------------------|------------------------|--------------|
| Maximum Flow .....     | 5.0 GPM                        | Valve Kit .....        | 04-KIT UD-2  |
| Maximum Pressure ..... | 3000 PSI                       | Seal Kit.....          | 04-KIT UD-9  |
| Rated Pump Speed ..... | 1450 RPM                       | Brass Kit .....        | 04-KIT UD-16 |
| Oil Capacity.....      | 20 oz. UDOR LUBE<br>or SAE 30W | Plunger Bolt Kit ..... | 04-KIT UD-5  |
|                        |                                | Plunger Part # .....   | 04-1205.31   |
|                        | Non-Detergent Oil              | Plunger Diameter.....  | 20 MM        |

Revised 10-12-2016

# 5062.C2 GEAR BOX



PARTS BREAKDOWN FOR MODEL FH5-SERIES  
RICE HYDRO, INC.

| PART NUMBER.. | DESCRIPTION..         | QTY<br>REQ'D |
|---------------|-----------------------|--------------|
| UD04-0007.39  | SEAL                  | 3            |
| UD04-0007.40  | SEAL                  | 1            |
| UD04-0014.32  | PLUNGER ROD           | 3            |
| UD04-0023.21  | SUPPORT RING          | 3            |
| UD04-0028.17  | CRANKSHAFT            | 1            |
| UD04-0103.39  | BRONZE CONNECTING ROD | 3            |
| UD04-0115.07  | ROD GUIDE             | 3            |
| UD04-0208.69  | BACK COVER            | 1            |
| UD04-0209.71  | CRANKCASE             | 1            |
| UD04-0248.02  | BEARING               | 2            |
| UD04-0301.55  | SLINGER RING          | 3            |
| UD04-0303.18  | PLUNGER NUT           | 3            |
| UD04-0501.D8  | BEARING CAP           | 1            |
| UD04-0501.D9  | BEARING CAP           | 1            |
| UD04-0602.77  | GASKET                | 1            |
| UD02-0605.09  | O-RING                | 1            |
| UD04-0605.40  | WASHER                | 1            |
| UD04-0605.49  | WASHER                | 1            |
| UD04-0801.17  | KEY                   | 1            |
| UD04-1101.A2  | O-RING                | 6            |
| UD04-1101.A3  | O-RING                | 6            |
| UD04-1101.F6  | O-RING                | 2            |
| UD04-1101.60  | O-RING                | 3            |
| UD04-1101.82  | O-RING                | 3            |
| UD04-1205.31  | PLUNGER 20 MM         | 3            |
| UD04-1403.32  | PLUNGER WASHER        | 3            |
| UD04-1411.02  | WASHER                | 8            |
| UD04-1502.13  | CONNECTING ROD PIN    | 3            |
| UD04-1534.01  | SHIM .003             | 1            |
| UD04-1534.02  | SHIM .010             | 1            |
| UD04-1603.60  | VALVE CAP             | 6            |
| UD04-1603.62  | INLET PLUG 3/4"       | 1            |
| UD04-1603.64  | DISCHARGE PLUG        | 1            |
| UD02-1603.67  | DRAIN PLUG            | 1            |
| UD04-1603.69  | SIGHT GLASS           | 1            |
| UD04-1604.60  | MANIFOLD              | 1            |
| UD04-1804.02  | BOLT                  | 8            |
| UD04-1804.26  | BOLT                  | 5            |
| UD02-1804.57  | BOLT                  | 8            |
| UD04-6058.59  | DIP STICK             | 1            |

GEAR REDUCTION..

|              |                  |   |
|--------------|------------------|---|
| UD04-0004.32 | 3/4" GEAR        | 1 |
| UD04-0007.33 | SEAL             | 1 |
| UD04-0213.27 | PUMP GEAR        | 1 |
| UD04-0214.14 | BEARING          | 1 |
| UD04-0228.39 | GEAR BOX HOUSING | 1 |
| UD04-0516.04 | FLANGE           | 1 |
| UD04-0602.42 | GASKET           | 1 |
| UD04-0602.59 | GASKET           | 1 |
| UD04-0605.43 | GASKET           | 1 |
| UD04-0614.07 | SET SCREW        | 1 |
| UD04-1411.02 | WASHER           | 7 |
| UD04-1412.04 | WASHER           | 4 |
| UD04-1506.20 | SNAP RING        | 1 |
| UD04-1506.21 | SNAP RING        | 1 |
| UD04-1603.02 | DRAIN PLUG       | 1 |
| UD04-1603.06 | OIL SIGHT GLASS  | 1 |
| UD04-1805.03 | BOLT             | 4 |
| UD04-1805.23 | BOLT             | 7 |
| UD04-6058.26 | OIL VENT CAP     | 1 |

PARTS BREAKDOWN FOR MODEL FH5-SERIES  
RICE HYDRO, INC.

| PART NUMBER..        | DESCRIPTION..                    | QTY<br>REQ'D |
|----------------------|----------------------------------|--------------|
| BRIGG-130G32-0022-F1 | 5.5 HP 206 CC FLANGE MOUNT       | 1            |
| HONDA-GX200UT2-QX2   | 6.5 HP 196 CC FLANGE MOUNT       | 1            |
| DIESEL-1B20XRS-9901  | 232 CC DIESEL ENGINE             | 1            |
| DIESEL-1B20-PTO      | 3/4" SHAFT FOR DIESEL ENGINE     | 1            |
| PUMP-5.5/1000/PLNGR  | TRIPLEX PLUNGER PUMP             | 1            |
| GAUGE-1500           | 0-1500 PSI LIQUID FILLED GAUGE   | 1            |
| VALVE-RELIEF-900PSI  | PRESSURE REGULATOR               | 1            |
| BALLVALVE-HP-1/2     | 1/2" BLEED VALVE                 | 1            |
| BALLVALVE-S-1&1/2    | STAINLESS STEEL BALLVALVE        | 5            |
| CHECKVALVE-1/2F      | 1/2" FEMALE CHECKVALVE           | 1            |
| HOSE-1/2X2-RH        | FH SERIES HOSE                   | 1            |
| SWIVEL-INLET-FH3     | 2&1/2" FEMALE SWIVEL INLET       | 1            |
| CASTER-RIGID-4       | 4" RIGID CASTER                  | 2            |
| CASTER-SWIVEL-4      | 4" SWIVEL CASTER                 | 2            |
| LABEL-KIT-FH         | INSTRUCTION AND CAUTION STICKERS | 1            |

**KITS:**

**\*\*KITS ARE ALL INCLUSIVE\*\***

|               |                   |   |
|---------------|-------------------|---|
| UD04-KIT-UD2  | VALVE KIT         | 1 |
| UD04-KIT-UD5  | PLUNGER ORING KIT | 1 |
| UD04-KIT-UD9  | SEAL KIT 20 MM    | 1 |
| UD04-KIT-UD16 | BRASS KIT 20 MM   | 1 |

## ADAPTERS & ACCESSORIES..

|                   |                                 |   |
|-------------------|---------------------------------|---|
| ADAPTER-NST-1&1/2 | 1&1/2" NPT X NST OUTLET ADAPTER | 4 |
| ADAPTER-NST-2&1/2 | 2&1/2" NPT X NST OUTLET ADAPTER | 4 |
| FHWA1             | PRESSURE WAND ACCESSORY         | 1 |
| LINEAGE-1         | SAFETY ANCHOR DEVICE            | 1 |