

Fire Hose Testers

The FH series is the most versatile, reliable, and sought-after Fire Hose Tester on the market today. Models in this series offer “gallon per minute” flow rates up to 26 (GPM); with “pounds per square inch” testing capabilities up to 1000 (PSI). These hose testers are designed to safely test any diameter fire hose in accordance with NFPA 1962 testing standards. Available in Gasoline, Electric and Pneumatic driven models. RICE units can be “Build to Suit” with various voltage, phase, hertz, and explosion-proof motor configurations offered. A large 2 & 1/2 inch swivel inlet aids in the ability to quickly fill and eliminate excess air from the test environment. The FH Series is a safe, less costly and more efficient way to test your fire hose, keeping your pumper ready for action, where it should be.



FH3 3 GPM 500 PSI

- Five Year Full Product Warranty
- Four independently controlled 1 & 1/2 inch Stainless Steel outlet ballvalves with male (NST) couplings
- 2 & 1/2 inch Swivel inlet enables speedy filling of lines, and expedites the elimination of excess air
- 1 HP Electric motor TEFC, 110V or 220V, 50/60HZ
- Stainless Steel liquid filled gauge, ensures accurate readings with less flutter
- Included: Casters - 4 inch, 2 Rigid & 2 Swivel



EL-FHT 3 GPM 500 PSI

- Five Year Full Product Warranty
- Two independently controlled 1 & 1/2 inch Stainless Steel outlet ballvalves with male (NST) couplings
- Dual inlets - 3/4 inch and 2 & 1/2 inch Swivel inlet enables speedy filling of lines and expedites the elimination of excess air
- 1 HP Electric motor TEFC, 110V or 220V, 50/60HZ
- Stainless Steel liquid filled gauge, ensures accurate readings with less flutter
- Optional: Casters - 4 inch, 2 Rigid & 2 Swivel



FH2-H 3.5 GPM 1000 PSI

- Five Year Full Product Warranty
- Four Independently controlled 1 & 1/2 inch Stainless Steel outlet ballvalves with male (NST) couplings
- 2 & 1/2 inch Swivel inlet enables speedy filling of lines and expedites the elimination of excess air
- 196 CC 6.5 HP, air cooled 4 cycle, with engine oil alert
- Stainless Steel liquid filled gauge, ensures accurate readings with less flutter
- Included: Casters - 4 inch, 2 Rigid & 2 Swivel



FH-12.5/500 12.5 GPM 500 PSI

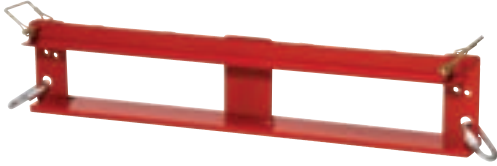
- Five Year Full Product Warranty
- Four independently controlled 1 & 1/2 inch Stainless Steel outlet ballvalves with male (NST) couplings
- 2 & 1/2 inch Swivel inlet enables speedy filling of lines and expedites the elimination of excess air
- 270 CC 9 HP, air cooled 4 cycle, with engine oil alert
- Stainless Steel liquid filled gauge, ensures accurate readings with less flutter
- Included: Casters - 6 inch, 4 Swivel



FH5-E 5 GPM 800 PSI

- FH4-E 4 GPM 1000 PSI
- Five Year Full Product Warranty
- Four independently controlled 1 & 1/2 inch Stainless Steel outlet ballvalves with male (NST) couplings
- 2 & 1/2 inch Swivel inlet enables speedy filling of lines and expedites the elimination of excess air
- 3 HP Electric motor TEFC, 220V, 60HZ
- Stainless Steel liquid filled gauge, ensures accurate readings with less flutter
- Included: Casters - 4 inch, 2 Rigid & 2 Swivel

FH Series Accessories



LINEAGE-1

- Meets NFPA 1962 requirements of securing and anchoring firehoses while being tested.
US Patent #7,905,455
- Locking hitch pins enclose and secure the hose into the Lineage
- Quick links for fast and easy anchoring of this device
- Safely limits the movement of the line in the event of rupture
- The Lineage is designed with multiple locking holes to accommodate various hose sizes
- Heavy gauge welded steel frame, powder coated to withstand the elements.



FHWA-1

- Ideal for Haz-Mat and contaminated equipment wash down
- Dual tips offer the option of either spraying water only or a soap and water solution
- 50 feet of high-pressure hose for long range mobility
- Adjustable injector for soap and other cleaning solvents
- Quick disconnects for easy on/off hose connection
- Only available for the EL-FHT and FH3 models



Adapters

- Machined Brass for durability
- Male NST adapters facilitate test pump to hose connections
- Included: 1 & 1/2 male (NST) on all FH-Series hose testers, one adapter per outlet
- Optional: 1 & 1/2 X 2 & 1/2 male (NST)
- Made in the USA

RICE HYDRO INC

3500 Arrowhead Drive • Carson City • Nevada 89706

Web: ricehydro.com • Email: sales@ricehydro.com • Phone: 800-245-4777 • Fax: 800-998-7423

RICE HYDRO, INC.
MANUFACTURER'S OPERATING INSTRUCTIONS - FIRE HOSE TESTER SERIES
FOR WARRANTY REGISTRATION CALL: 1-800-245-4777

Hose Testing guidelines and procedures follow: NFPA 1962

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.
5. **Supplying the unit with water, inlet pressure should not exceed 90 PSI.**
6. **Before use: Remove "shipping plug" on pump and replace with vented plug.**

CONNECTING THE PUMP:

1. Check oil level of pump use 30WT non-detergent, and engine use 10W30 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. To check pressure setting and re-adjust as necessary. Upon reaching desired pressure setting, tighten locknut and prepare to begin test.
9. Open one of the 1&1/2" ballvalves at the outlets and begin building pressure in one of the lines at a time. In the event there is an acceptable leak in the system that must be overcome by leaving the pump running.. Crack the 1/2" back bleed valve allowing a small amount of clean fresh water to flow while in bypass. **Once pressure has been reached, you may close all ballvalves and shut off pump, check for leaks; open ballvalves as needed to monitor existing pressure. If ballvalves are in the open position with the unit running during test duration, you must crack the back bleedvalve to allow the unit to pull in fresh cool water; leaving the unit running in bypass for long periods of time will cause the water to heat and possibly damage the 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 1&1/2" outlet ballvalves closed holding existing pressure, open back bleed 1/2" ballvalve to release pressure in piping/manifold down to 70 PSI or below. Turn motor/unit on and close 1/2" 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 1/2" 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.*

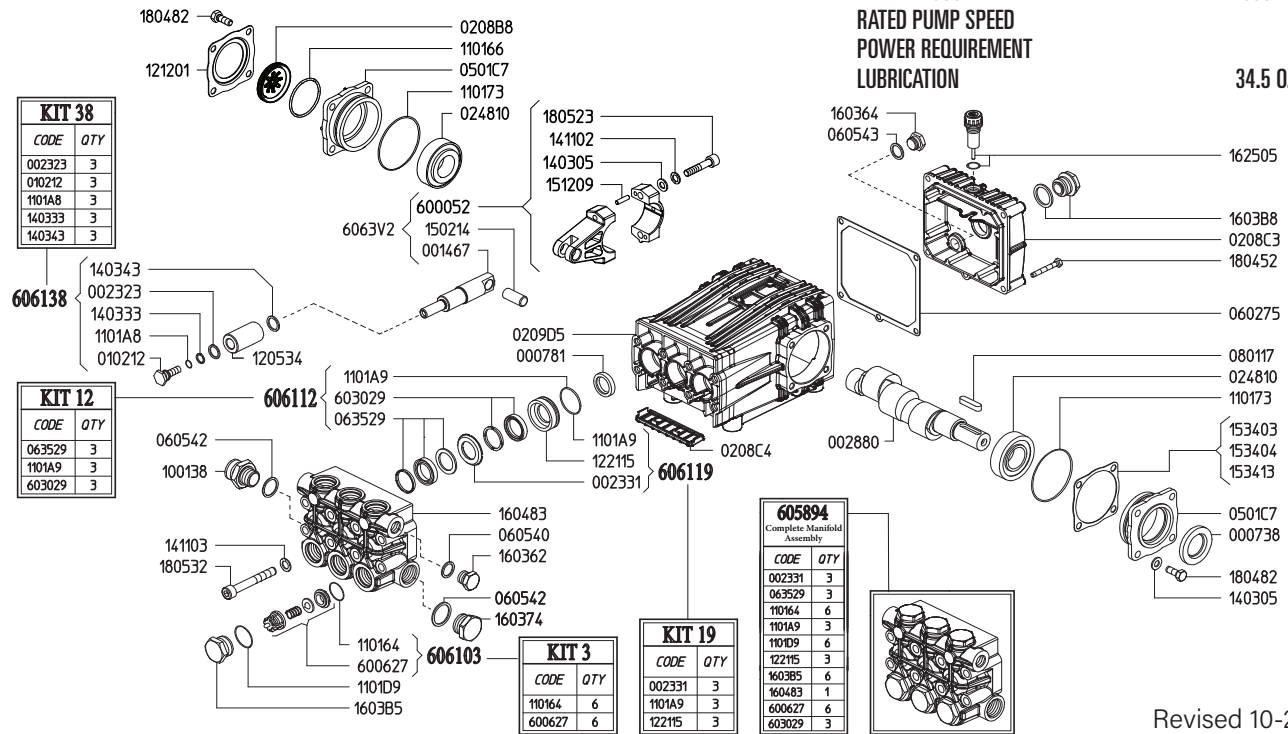
GAUGE

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

MAX FLOW 13.2 GPM / 50.0 L.MIN
MAX PRESSURE 2900 PSI / 200 BAR
RATED PUMP SPEED 1450 RPM
POWER REQUIREMENT 26.0 HP GAS
LUBRICATION 34.5 OZ UDOR LUBE

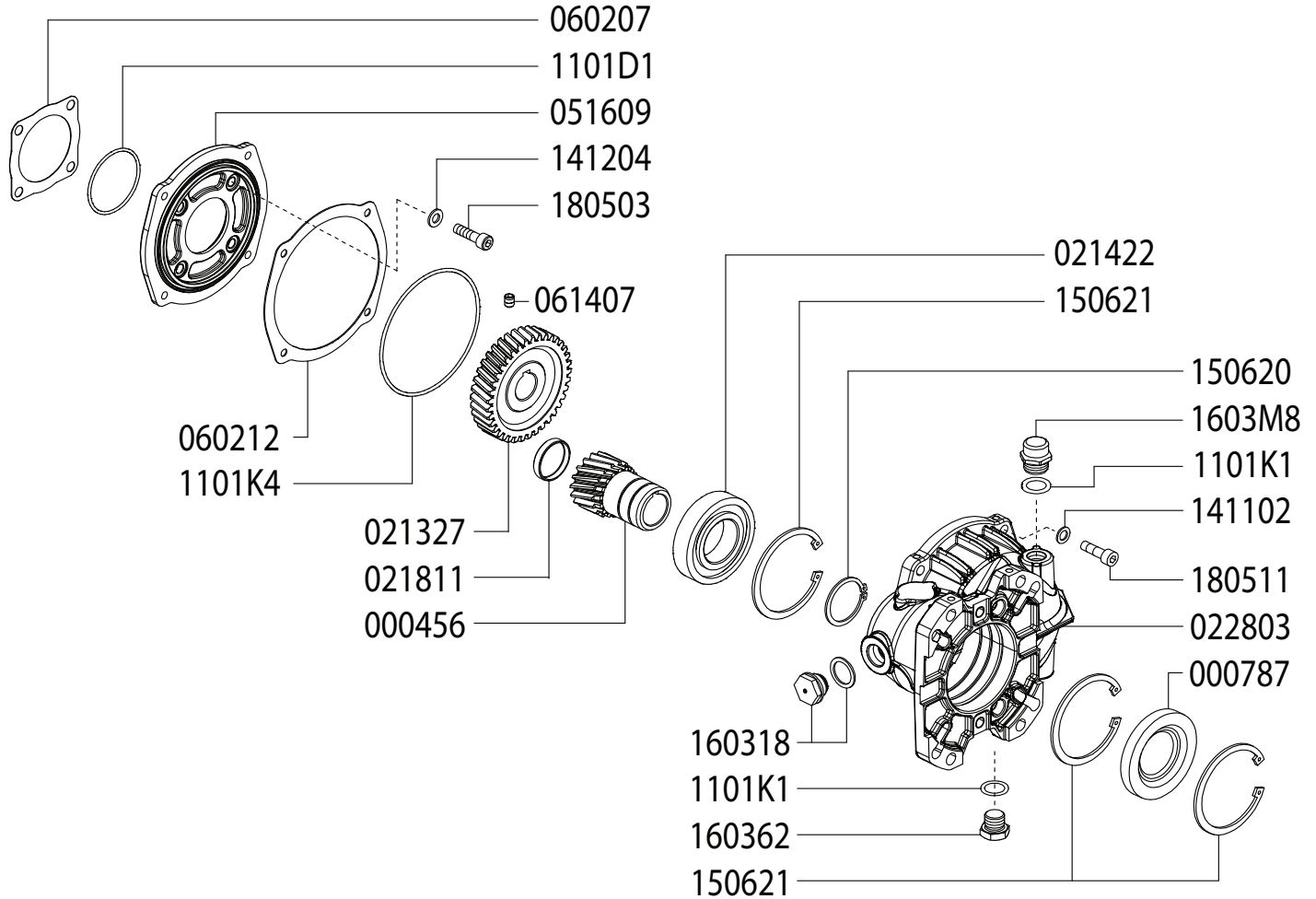


Revised 10-27-2023

Part #	Description	Qty	Part #	Description	Qty
0007.38	OIL SEAL D30	1	1403.43	WASHER D13.2	3
0007.81	OIL SEAL D20	3	1411.02	SERATED WASHER D8	6
0014.67	PLUNGER GUIDE D22/25/28 "C/CK"	3	1411.03	SERATED WASHER D10	8
0023.23	RING D10.4 ^B	3	1502.14	PIN D14X32	3
0023.31	UPPER RING D28 ^{D E}	3	1512.09	PLUG D5X20 UNI1707	6
0028.80	MALE SHAFT D24	1	1534.03	SHIM 0.1MM	-
0102.12	PLUNGER BOLT ^B	3	1534.04	SHIM 0.2MM	-
0208.B8	OIL SIGHT GLASS	1	1534.13	SHIM 0.05MM	-
0208.C3	BACK COVER "C/CK"	1	1603.62	PLUG G31/2	1
0208.C4	COVER "CK"	1	1603.64	PLUG G3/8	1
0209.D5	CRANKCASE "C/CK/CH"	1	1603.74	PLUG G3/4	1
0248.10	ROLLER BEARING D30	2	1603.B8	OIL PLUG G3/4 + GASKET	1
0501.C7	BEARING HOLLOW FLANGE	2	1603.H7	VALVE PLUG "CK" PISTON D22/25 ^E	6
0602.75	BACK COVER GASKET	1	1604.83	HEAD "CK" D28 ^E	1
0605.40	GASKET D21.5	1	1625.05	OIL PLUG G3/8	1
0605.42	GASKET D27	2	1804.52	HEX BOLT M6X45	5
0605.43	GASKET D17	1	1804.82	HEX BOLT M8X22	8
0635.29	HIGH PRESSURE SEAL KIT D28 ^{C E}	3	1805.23	ALLEN BOLT M8X40	6
0801.17	KEY A8X7X35	1	1805.32	ALLEN BOLT M10X75	8
1001.38	NIPPLE G3/4M - G1"M	1	6000.52	ROD ASSEMBLY	3
1101.64	O-RING - VALVE ^{A E}	6	6006.27	VALVE ASSEMBLY W/O O-RING ^{A E}	6
1101.66	O-RING - OIL SIGHT GLASS	1	6030.29	LOW PRESSURE SEAL ASSY D28 ^{C E}	3
1101.73	O-RING - BEARING FLANGE	2	6058.94	COMPLETE MANIFOLD ASSEMBLY	1
1101.A8	O-RING - PLUNGER BOLT ^B	3	6061.03	KIT 3 VALVE KIT	1
1101.A9	O-RING - PRESSURE RING ^{C D E}	3	6061.38	KIT 38 PLUNGER KIT	1
1101.D9	O-RING - VALVE PLUG ^E	6	6061.12	KIT 12 WATER SEAL KIT D28 "C/CK"	1
1205.34	CERAMIC PLUNGER D28	3	6061.19	KIT 19 BRASS RING KIT D28 "C/CK"	1
1212.01	RETAINER - OIL SIGHT GLASS	1			
1221.15	PRESSURE RING D28 ^{D E}	3			
1403.05	WASHER D8.4	10			
1403.33	WASHER D13.4 ^B	3			

^A Parts in 6061.03 (Kit 3).
^B Parts in 6061.38 (Kit 38).
^C Parts in 6061.12 (Kit 12).
^D Parts in 6061.19 (Kit 19).
^E Parts in 6058.94 (Complete Manifold Assembly).

**GAS ENGINE GEAR REDUCTION FOR
B/BK/MS/MWT/C/CS/CWT/CK/CX-SERIES PLUNGER PUMPS
on GAS ENGINES with 1" SHAFTS
REQUIRES 9.0 OZ. 90W GEAR LUBE**

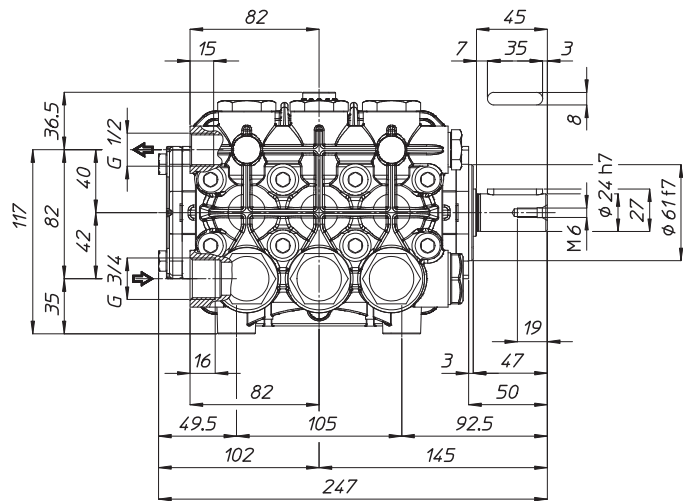
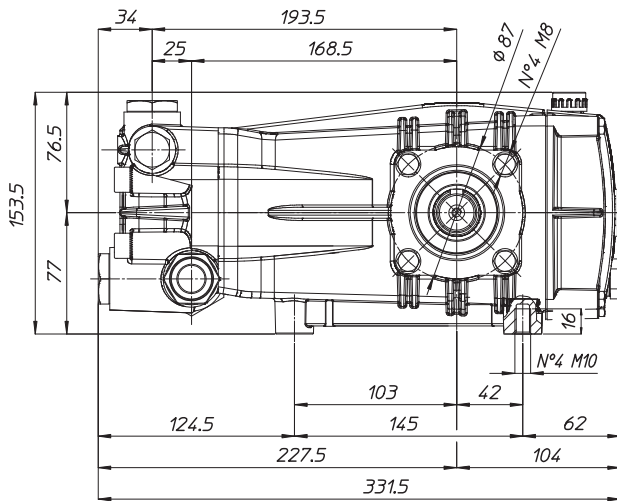


Revised 10-27-2023

Part #	Description	Qty	Part #	Description	Qty
0004.56	GEAR SHAFT "RC122" 1"	1	1101.K4	O-RING - RC122 FLANGE - INSIDE	1
0007.87	SEAL	1	1403.05	WASHER D8,4	4
0213.27	GEAR "RM122" IP	1	1411.02	SERATED WASHER D8	4
0214.22	BALL BEARING D40 "RC122K"	1	1412.04	BONDED WASHER D8.3	4
0218.11	CAP - D37X7	1	1506.20	SNAP RING D40	1
0228.03	COUPLER "RC122"	1	1506.21	SNAP RING D80	3
0516.09	FLANGE "RC122"	1	1603.18	OIL PLUG G1/2 + GASKET	1
0602.07	GASKET "RC122"	1	1603.62	PLUG G1/2	1
0602.12	GASKET "RC122" SPLIT BODY	1	1603.M8	OIL CAP - RC122	1
0614.07	SET SCREW M8X10 UNI5929	1	1805.03	ALLEN SCREW M8X30	4
1101.D1	O-RING - RC122 FLANGE - OUTSIDE	1	1805.11	ALLEN SCREW M8X25	4
1101.K1	O-RING - OIL PLUG / OIL CAP	2			

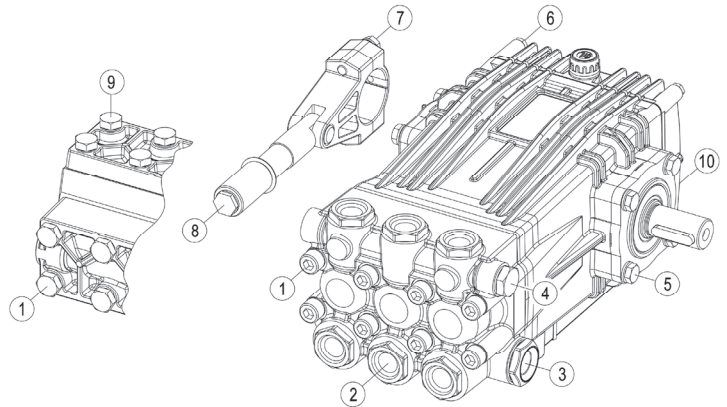
*Dimensional Drawings are
Shown in Millimeters.
To Convert to Inches,
Multiply Dimension x 0.03937*

CK SERIES PUMPS 10 GPM & OVER



TORQUE SPECS

Ref.	Description	Ft./lb.	Nm	Loctite®
1	Head Bolts	37	50	-
2	Valve Caps	103	140	243
3	Inlet Cap	103	140	-
4	Outlet Cap	103	140	243
5	Bearing Flange Bolts	19	25	-
6	Rear Cover Bolts	8	11	-
7	Connecting Rod Bolts	19	25	270
8	Plunger Bolts	15	20	270
9	Valve Cover Bolts	-	-	-
10	Oil Drain Plug	8	11	-



PARTS BREAKDOWN FOR MODEL FH-12.5/500
RICE HYDRO, INC.

PART NUMBER..	DESCRIPTION..	QTY REQ'D
UD04-0007.38	OIL SEAL	1
UD04-0007.81	OIL SEAL	3
UD04-0014.67	PLUNGER GUIDE	3
UD04-0023.23	SUPPORT RING	3
UD04-0023.31	UPPER RING	3
UD04-0028.80	MALE SHAFT	1
UD04-0102.12	PLUNGER BOLT	3
UD04-0208.B8	OIL SIGHT GLASS	1
UD04-0208.C3	BACK COVER	1
UD04-0208.C4	COVER	1
UD04-0209.D5	CRANKCASE	1
UD04-0248.10	ROLLER BEARING	2
UD04-0501.C7	BEARING HOLLOW FLANGE	2
UD04-0602.75	BACK COVER GASKET	1
UD04-0605.40	GASKET	1
UD04-0605.42	GASKET	2
UD04-0605.43	GASKET	1
UD04-0635.29	HIGH PRESSURE SEAL KIT	3
UD04-0801.17	KEY	1
UD04-1001.38	NIPPLE	1
UD04-1101.64	O-RING - VALVE	6
UD04-1101.66	O-RING - OIL SIGHT GLASS	1
UD04-1101.73	O-RING - BEARING FLANGE	2
UD04-1101.A8	O-RING - PLUNGER BOLT	3
UD04-1101.A9	O-RING - PRESSURE RING	3
UD04-1101.D9	O-RING - VALVE PLUG	6
UD04-1205.34	CERAMIC PLUNGER	3
UD04-1212.01	RETAINER - OIL SIGHT GLASS	1
UD04-1221.15	PRESSURE RING	3
UD04-1403.05	WASHER	10
UD04-1403.33	WASHER	3
UD04-1403.43	WASHER	3
UD04-1411.02	SERATED WASHER	6
UD04-1411.03	SERATED WASHER	8
UD04-1502.14	PIN	3
UD04-1512.09	PLUG	6
UD04-1534.03	SHIM 0.1MM	
UD04-1534.04	SHIM 0.2MM	
UD04-1534.13	SHIM 0.05MM	
UD04-1603.62	PLUG	1
UD04-1603.64	PLUG	1
UD04-1603.74	PLUG	1
UD04-1603.B8	OIL PLUG	1
UD04-1603.H7	VALVE PLUG	6
UD04-1604.83	HEAD	1
UD04-1625.05	OIL PLUG	1
UD04-1804.52	HEX BOLT	5
UD04-1804.82	HEX BOLT	8
UD04-1805.23	ALLEN BOLT	6
UD04-1805.32	ALLEN BOLT	8
UD04-6000.52	ROD ASSEMBLY	3
UD04-6006.27	VALVE ASSY W/O O-RING	6
UD04-6030.29	LOW PRESSURE SEAL KIT	3
UD04-6058.94	COMPLETE MANIFOLD ASSY	1

PARTS BREAKDOWN FOR MODEL FH-12.5/500
RICE HYDRO, INC.

PART NUMBER..	DESCRIPTION..	QTY REQ'D
GEAR REDUCTION..		
UD04-0004.56	1" GEAR SHAFT	1
UD04-0007.87	SEAL	1
UD04-0213.27	GEAR	1
UD04-0214.22	BALL BEARING	1
UD04-0218.11	CAP	1
UD04-0228.03	COUPLER	1
UD04-0516.09	FLANGE	1
UD04-0602.07	GASKET	1
UD04-0602.12	GASKET	1
UD04-0614.07	SET SCREW	1
UD04-1101.D1	O-RING - FLANGE - OUTSIDE	1
UD04-1101.K1	O-RING - OIL PLUG / OIL CAP	2
UD04-1101.K4	O-RING - FLANGE - INSIDE	1
UD04-1403.05	WASHER	4
UD04-1411.02	SERATED WASHER	4
UD04-1412.04	BONDED WASHER	4
UD04-1506.20	SNAP RING	1
UD04-1506.21	SNAP RING	3
UD04-1603.18	OIL PLUG + GASKET	1
UD04-1603.62	PLUG	1
UD04-1603.M8	OIL CAP	1
UD04-1805.03	ALLEN SCREW M8x30	4
UD04-1805.11	ALLEN SCREW M8x25	4
MISCELLANOUS PARTS..		
PUMP-12.5/500	TRIPLEX PLUNGER PUMP	1
HONDA-GX270UTQA2	270 CC 9 HP HONDA GEAR REDUCTION	1
CHECKVALVE-1/2CON	1/2" FEMALE CHECKVALVE	1
BALLVALVE-1/2	1/2" BALLVALVE	1
BALLVALVE-S-1&1/2	STAINLESS STEEL BALLVALVE	5
SPRAY-6815-700-1/2	PRESSURE REGULATOR	1
ADAPTER-NST-1&1/2	1&1/2" NPT X NST OUTLET ADAPTER	4
SWIVEL-INLET-FH3	2&1/2" FEMALE SWIVEL INLET	1
CASTER-SWIVEL-6	6" SWIVEL CASTER	4
GAUGE-600	0-600 PSI LIQUID FILLED GAUGE	1
LABEL-KIT-FH	INSTRUCTION AND CAUTION STICKERS	1
KITS..		
	*Kits are all inclusive	
UD04-6061.03	VALVE KIT (KIT 3)	1
UD04-6061.12	WATER SEAL KIT (KIT 12)	1
UD04-6061.19	BRASS RING KIT (KIT 19)	1
UD04-6061.38	PLUNGER KIT (KIT 38)	1



3295 Cobb International Blvd. Kennesaw, Georgia 30152 • Tel: 800-367-1377 • Fax: 770-429-0795 • website: www.picgauges.com

CERTIFICATE OF COMPLIANCE

***RIC445-1 4001-4LW SEC-201L-254K
SEC-201L-254N SEC-201L-254O SEC-201L-254P
SEC-201L-254Q SEC-201L-254S SEC-201L-254U***

The Products Listed Above:

- [X] Are manufactured to ANSI B40.1 standards***
- [X] Are Designed to Meet the Specifications & Requirements of those Standards***
- [X] Are Designed to Meet all Catalog Specifications***

This is to certify that the item(s) listed above are manufactured to meet ASME Standard B40.100 - 1998 in all aspects including Dimensions, Materials of Construction and Accuracy, and that the products are tested and calibrated during the manufacturing process and are suitable for general use. For further information please refer to ASME Standard B40.100 – 1998.

Note:

1. All of our products are manufactured to be in accordance with ASME B-40.100-1998.
2. Each product is individually tested and calibrated during the assembly process.
3. Although each product is individually tested, they are not individually traceable to NIST Standards and therefore not Certified as a standard of production.
4. If certification of accuracy is required independent testing against a known and traceable standard (i.e.; a certified dead weight tester) will be required.

Although all of our products are manufactured and tested to be accurate and in calibration, rough handling during shipment may cause products to be 'knocked out' of calibration. This can happen even though good packaging practice was used.

The American National Standard on products (ASME B40.100 - 1998), recognizes this by including the following paragraph: ***“CAUTION TO USERS: PRODUCTS CAN BE RENDERED INACCURATE DURING SHIPMENT DESPITE CARE TAKEN IN PACKAGING. TO INSURE CONFORMANCE TO THE STANDARD GRADE TO WHICH THE PRODUCT WAS MANUFACTURED, IT SHOULD BE CHECKED BEFORE USE.”***

Please make sure your customers are aware of this information.

If there are any questions concerning this Certificate of Compliance,
Please fax them to (770) 429-0795; Attention Q.A. Department