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

Rice 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



LINECAGE-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 Linecage
- Quick links for fast and easy anchoring of this device
- Safely limits the movement of the line in the event of rupture
- The Linecage 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



DRO 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.

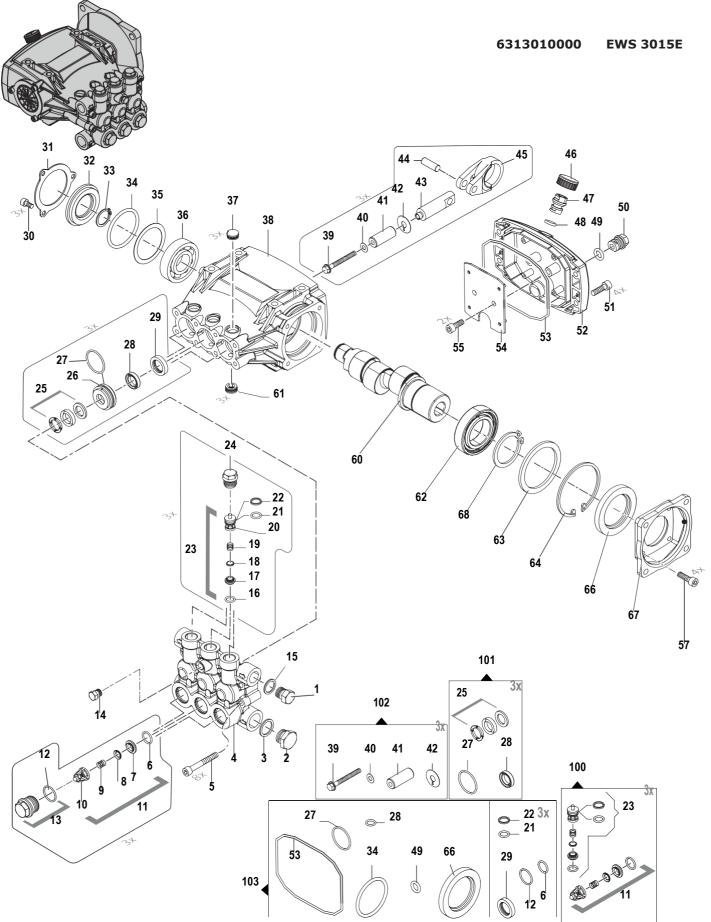
Push thermal overload button to reset.

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

1750 RPM





PARTS BREAKDOWN FOR MODELS EL-FHT & FH3 RICE HYDRO, INC.

**Serial numbers (EL-FHT 55760 & after) (FH3 56269 & after) **

REF#	PART NUMBER	DESCRIPTION	QTY REQ'D
1	EWS-3200-0007	CAP	1
2	EWS-3202-0015	CAP	1
3	EWS-2811-0086	WASHER	1
4	EWS-3218-0596	PUMP MANIFOLD	1
5	EWS-3609-0090	SCREW	8
11	EWS-1220-0194	SUCTION VALVE ASSY KIT	3
12	EWS-1210-0669	O-RING	3
13	EWS-3202-0441	SUCTION CAP KIT	3
14	EWS-3202-0018	CAP	1
15	EWS-2811-0084	WASHER	1
23	EWS-1220-0215	DELIVERY VALVE ASSY KIT	3
24	EWS-3202-0279	DELIVERY CAP	3
25	EWS-1241-0087	PACKING	3
26	EWS-0009-1021	PACKING RETAINER	3 3
27	EWS-1210-0223	O-RING	3
28	EWS-1241-0028	PACKING	3
29	EWS-0019-0095	OIL SEAL	3
30	EWS-3609-0088	SCREW	3
31	EWS-1004-0012	CRANKCASE FLANGE	1
32	EWS-0402-0360	TRANSPARENT COVER	1
33	EWS-3019-0011	OUTER SEEGER	1
34	EWS-1210-0386	O-RING	1
35 36	EWS-0009-0275 EWS-0438-0137	SPACER	1 1
36 37	EWS-3202-0435	BALL BEARING	3
3 <i>1</i> 38	EWS-0403-0534	CAP PUMP CRANKCASE	1
39	EWS-3605-0152	SPECIAL SCREW	3
40	EWS-2811-0235	WASHER	3
41	EWS-0202-0163	CERAMIC BUSHING	3 3
42	EWS-2812-0129	WASHER	3
43	EWS-2409-0291	PISTON GUIDE	3
44	EWS-3011-0014	GUDGEON PIN	3
45	EWS-0205-0048	CONNECTING ROD	3
46	EWS-0402-0537	PLUG COVER	1
47	EWS-3202-0434	BREATHER PLUG	1
48	EWS-1210-0056	O-RING	1
49	EWS-1210-0557	O-RING	1
50	EWS-3202-0220	PLUG	1
51	EWS-3625-0062	SCREW	4
52	EWS-0402-0530	CRANKCASE COVER	1
53	EWS-1210-0769	O-RING	1
54	EWS-2404-0218	PLATE	1
55	EWS-3625-0051	SCREW	1
57	EWS-3606-0032	SCREW	4
60	EWS-0001-0532	ECCENTRIC SHAFT	1
61	EWS-3202-0440	DRILLED CAP	3
62	EWS-0438-0015	BALL BEARING	1
63	EWS-2812-0064	SPACER	1
	KITS:		
100	EWS-5025-0075	COMPLETE VALVE KIT	
101	EWS-5025-0075	WATER SEAL KIT	
101	EWS-2409-0347	PISTON KIT	
102	EWS-5019-0800	OIL SEAL KIT	
100	5013 0000	~ V	

PARTS BREAKDOWN FOR MODELS EL-FHT & FH3 RICE HYDRO, INC.

**Serial numbers (EL-FHT 55760 & after) (FH3 56269 & after) **

REF#	PART NUMBER	DESCRIPTION	QTY REQ'D
	CHECKVALVE-1/2F	1/2" FEMALE CHECKVALVE	1
	BALLVALVE-1/2	1/2" BLEED VALVE	1
	BALLVALVE-S-1&1/2	STAINLESS STEEL BALLVALVE	3
	GAUGE-600	0-600 PSI LIQUID GAUGE	1
	VALVE-RELIEF-500PSI	50-500 PSI PRESSURE REGULATOR	1
	HOSE-1/2X2-RH	FH SERIES HOSE	1
	HOSESWIVEL-1/2"	1/2" x $3/4$ " INLET HOSE SWIVEL (EL-FHT (ONLY)
	SWIVEL-INLET-FH3	2&1/2" FEMALE SWIVEL INLET	1
	ADAPTER-NST-1&1/2	1&1/2" NPT X NST OUTLET ADAPTER	2 or 4
	ADAPTER-NST-2&1/2	2&1/2" NPT X NST OUTLET ADAPTER	2 or 4
	CASTER-SWIVEL-4	4" SWIVEL CASTER	2
	CASTER-RIGID-4	4" RIGID CASTER	2
	LABEL-KIT-FH	INSTRUCTION AND CAUTION STICKERS	1
	MOTOR-1HP-CFACE	1HP 110/220V 1 PHASE 50/60HZ	1
	MUST ORDER THE FOLLOWING WHEN REPLACING PND TO EWS PUMP		
	EL-BR-1/2Mx1/2MJIC	TRIPLEX PLUNGER PUMP BRASS ELBOW 90 DEGREE BRASS HOSEBARB	1 1 1
	HODEDIED DR 1/2x5/0	JO DEGILLE DIVIDO INCOLDINO	-

^{**}Prices subject to change without notice**