



# **LSF PACKAGED RESIDENTIAL FIRE PUMPS**

## **O&M INSTRUCTION MANUAL**

# TALCO FIRE SYSTEMS

## LSF Start-Up Instructions

1) IMPORTANT: Inspect the unit for damage. Report any damage to the freight carrier immediately.

2) PRE-START-UP: Be sure there is water in the pump. Bleed air at all high points in the system and at the plug located next to the discharge in the top of the pump casing. If possible, allow water to flow through the pump and system drain.

3) INITIAL START-UP: After completing step #2 close the discharge valve and turn the pump on by placing the toggle switch in the "MANUAL" position. Observe the discharge pressure gauge. If the pump fails to quickly build pressure, makes excessive noise, or vibrates turn it off immediately and see the "TROUBLESHOOTING" section for help. If the pump does build pressure quickly, flip the toggle switch from "MANUAL" to "AUTO" and let the pump run. If the pump will not run in "AUTO" bleed pressure from the system drain to cycle the pressure switch. If the pump still does not run in "AUTO" see the "TROUBLESHOOTING" section for help. Once the pump starts in "AUTO" it should quickly build enough pressure to trip the pressure switch (you should hear it click if you listen closely). Allow the pump to run until the 3-minute minimum-run timer expires and the pump cycles off. Now slowly open the discharge ball valve allowing the pump to slowly fill the system. Once the system is charged to the maximum pressure noted earlier and the pump cycles off, fully open the ball valve. The system is now ready for normal operation.

4) PRESSURE SWITCH ADJUSTMENT: The pressure switch has been factory wired and adjusted. In the unlikely event adjustment of the switch setting is required please note the following: A) The small spring controls the differential between cut-in and cut-out pressure. This is factory set for a 20PSI differential. Turn the adjusting nut clockwise to increase. (B) The large spring affects both the cut-in and cut-out points equally. Turn the adjusting nut clockwise to equally raise the pressure for both.

5) PERIODIC TESTING: The system can be tested at any time by slowly opening the system drain until the pump starts. After the pump starts slowly close the system drain and observe the maximum pressure and verify that the pump stops automatically when the 3-minute timer expires.

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## LSF Troubleshooting

**!!!WE STRONGLY RECOMMEND THAT A QUALIFIED ELECTRICIAN OR PUMP TECHNICIAN PERFORM ALL TROUBLESHOOTING!!!**

### 1) PUMP WON'T START:

- A) Make sure incoming power has been routed into the gray control box and tied into the red & black wires with bare ends. NOT THE PRESSURE SWITCH.
- B) Check for incoming power. Check the circuit breakers feeding the pump and reset as necessary.
- C) Check for motor overload. Compare running motor amps to the values noted on the shop test report. If overload condition is present check for low input voltage or foreign material binding the pump. Motor overloads may have tripped and will need to cool in order to reset. Determine and correct cause of overload.
- D) Place the toggle switch in the "MANUAL" position. If the pump runs in "MANUAL" but not in "AUTO" (1) The pressure switch cut-in pressure is set too low and needs to be raised. (2) There is a problem with the pressure switch. (3) There is a problem with the time delay relay in the control box.
- E) If the motor smells burnt it may be burned out. Have a qualified motor shop test the motor and replace if necessary.

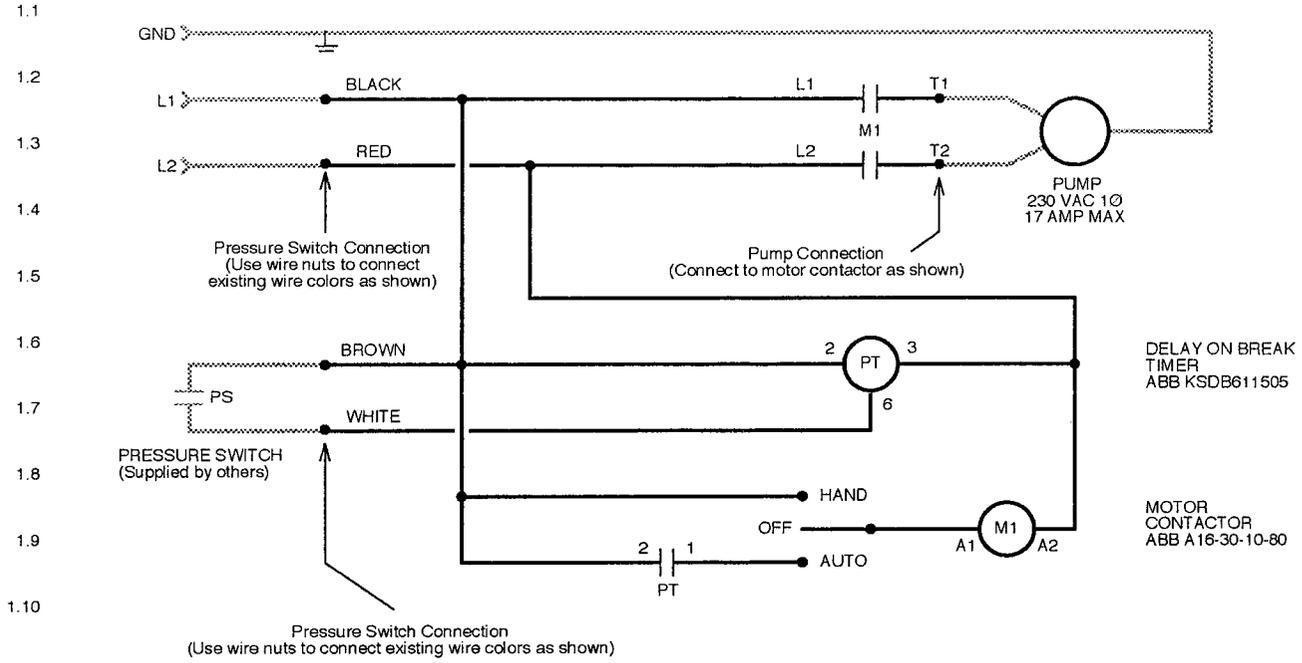
### 2) MOTOR RUNS BUT PUMP MAKES NOISE:

- A) Check for debris in the pump case.
- B) Check to make sure there is adequate water from the supply.
- C) The motor bearings may be bad. This needs to be remedied by a qualified technician.

# Panel Wiring Diagram Model TALCO SIMPLEX-A

From Main Power Panel  
230 VAC, 1 Phase, 60 Hz.  
Branch Circuit Protection  
And Main Disconnect  
Provided By Others.

— = Factory Wire  
- - - = Field Wire



# TALCO FIRE SYSTEMS

## Limited Warranty

All goods are warranted to be free of defects in material and workmanship for a period of one year from start-up or (18) months from the date of shipment, whichever comes first. Except as specifically indicated, TALCO makes no warranties, expressed or implied, oral or written, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose.

### **THIS WARRANTY IS SPECIFICALLY SUBJECT TO THE FOLLOWING:**

1. The limited warranty is limited to replacement or repair of defective materials and workmanship at the discretion of TALCO.
2. Equipment sold, but not manufactured by TALCO, is subject to the manufacturer's warranty only. TALCO makes no warranties, either expressed or implied, for goods manufactured by others.
3. The limited warranty is conditioned on the purchaser giving TALCO notice within five days of discovery of any alleged defect. Notice should be directed to TALCO FIRE SYSTEMS, by mail: 6040 NE 112th Ave, Portland OR, 97220; by fax: (503) 688-1234; or via E-mail: admin@talcofire.com.
4. The limited warranty shall be considered null and void if any product or part of the packaged system has been repaired or altered in any way by others without prior authorization from TALCO. Fitting leaks and electrical damage are considered the responsibility of the installing contractor.
5. TALCO shall not be liable for any incidental or consequential loss, damage or expense arising directly or indirectly from the use of any goods subject to this limited warranty, nor shall TALCO be liable for any damages or charges for labor or expense in making repairs or adjustments to the goods. TALCO shall not be liable for any damages or charges sustained in the adaptation or use of its engineering data or services.
6. This warranty shall not apply to any goods subject to misuse due to common negligence or accident, nor to any goods manufactured by TALCO which are not operated in accordance with TALCO printed instructions.
7. The liability of TALCO is limited to material replacements FOB Portland, Oregon.
8. All shipments are FOB TALCO dock and it will be the responsibility of the purchaser to check the goods when they are received and report to the Freight Company any damage that might have occurred.