

**CHECK OFF LIST ELECTRIC W/O TRANSFER SWITCH**

**Yes No**

- 1. Does HP and Voltage on Nameplate, agree with Motor HP and Voltage? \_\_\_ \_\_\_
- 2. Is supply Voltage on. Does it agree with Nameplates? \_\_\_ \_\_\_
- 3. Is Controller Part Winding or Wye-Delta Type? (Six Leads Required) \_\_\_ \_\_\_
- 4. How many Leads from controller to motor? \_\_\_\_\_
- 5. Check CB trip settings on Nameplate and verify on CB. \_\_\_ \_\_\_
- 6. Examine controller for debris, or tools, look at CB and incoming wires. \_\_\_ \_\_\_
- 7. Look for slugs from holes drilled by the electrician. \_\_\_ \_\_\_
- 8. Examine pushbuttons and see if there are wires off or the contacts are loose. \_\_\_ \_\_\_
- 9. Examine the top of the contactor for anything unusual. \_\_\_ \_\_\_
- 10. Examine motor leads coming from the load side of the Contactor. \_\_\_ \_\_\_
- 11. Are all Power wire connections tight? \_\_\_ \_\_\_
- 12. Lift the Yellow Emergency handle slowly and listen for the micro switch. \_\_\_ \_\_\_
- 13. Are the wires connected to Micro Switch? \_\_\_ \_\_\_
- 14. Make sure relays or timers are plugged into their sockets. \_\_\_ \_\_\_
- 15. Check the connection on the Power Module to see if in place and tight. \_\_\_ \_\_\_
- 16. Check the back of the Display module for loose wires or loose plugs. \_\_\_ \_\_\_
- 17. Examine Transducer for damage. \_\_\_ \_\_\_
- 18. Check motor leads at motor for proper connections. (See instructions) \_\_\_ \_\_\_
- 19. Is the jumper on 3 and 6 in the terminal board. \_\_\_ \_\_\_
- 20. Are the remote alarms connections consistent. (all N.O. or all N.C) \_\_\_ \_\_\_
- 21. Is this a Reduced Voltage Start Type Controller? \_\_\_ \_\_\_
- 22. If so is: 1AT Timer set correctly? \_\_\_ \_\_\_
  - 10640 Autotransformer, Set 1AT at 3 Secs. \_\_\_ \_\_\_
  - 10650 Primary Resistor, Set 1AT at 3 Secs. \_\_\_ \_\_\_
  - 10670 Part Winding, Set 1AT at 1.5 Secs. \_\_\_ \_\_\_
  - 10680 Wye-Delta (Closed) Set 1AT at 2 Secs. \_\_\_ \_\_\_
  - 10690 Wye-Delta (Open) Set 1AT at 2.5 Secs. \_\_\_ \_\_\_

Does controller have Transfer Switch, if not you are ready to bump. \_\_\_ \_\_\_

Job name \_\_\_\_\_

Date \_\_\_\_\_

Controller Catalog # \_\_\_\_\_

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**FOR CONTROLLERS WITH TRANSFER SWITCH**

**Yes No**

- 1. Is Transfer Sw. Compartment Completely Free of Debris? — —
- 2. Any Loose Connections? — —
- 3. Are Terminals 51 and 52 in the Controller Wired to Generator? — —
- 4. Manually put Transfer Switch in Emergency Position! This will accomplish Two Things as follows:
  - A. That Transfer Switch is Free to Transfer.
  - B. We will find out if Transfer Sw. Transfers back to Normal Position later when we apply Normal Power to Controller. Many times the Generator may not be ready and this is all we can check.
- 5. Test the Fire Pump on the Normal side for flow, like you would a non-Transfer Sw. Type of Controller. Than kill the Normal power, the Transfer Sw. will start the Generator, if it is Generator Type, if not the power will be there from the Dual Utility. The transfer will take place, then rebump the motor for proper rotation.

Notes: \_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_

## **BUMPING MOTOR FOR THE FIRST TIME**

- A) CLOSE AND LATCH THE DOOR**
- B) IF THERE IS GOING TO BE A MALFUNCTION, ELECTRICALLY MECHANICAL, OR HYDRAULICALLY THIS IS WHEN IT WILL OCCUR. (ARCING IN THE MOTOR TERMINAL BOX, OR CONTROLLER, PIPE OR VALVE OR FLANGE BREAKING)**
- C) ALL CHECK LIST SHOULD BE COMPLETED.**

**Ask if the Motor has been bumped for rotation. I like to know if anyone has applied power to this unit without you being there.**

**The factory settings on the Pressure Recorder are Cut in: 25 Cut out: 35**

- 1. Hold the Stop button, lift the Disconnect Handle to the On position.**
- 2. If pump did not start when you released the stop button, it means you have at least 25 PSI to hold the pressure recorder from calling for a start. In which case press the start button for one second. Depress and hold stop button, and turn Circuit Breaker handle to off.**
- 3. If rotation was incorrect, reverse ANY TWO LEADS from controller to motor.**

**REMEMBER! If the Controller is a Wye-Delta or Part Wind Type, Two Motor Leads in EACH SET will have to be interchanged. THEY MUST BE THE SAME TWO LEADS IN EACH SET! (A & B, & A & B)**

- 4. Rebump if rotation was changed, Remember to close and latch the door**
- 5. Controller current and Voltage can be read on the display without opening the door.**
- 6. With the pump at Shut-Off ( No water Flow), current is usually between, 50 % and 75 % of FLA of motor.**
- 7. if Current is at that time, approaching 115 % of FLA (Something is Wrong) A lot of water could be flowing somewhere.**
- 8. if Current is approaching 120 % of FLA SHUTDOWN! Find out why, if all the steps above were taken, the motor is where I would look.**
- 9. If Current appears close to normal Record same. Record voltage as well, it should be pretty well balanced within 10 % between phases.**
- 23. See if the RED Phase Reversal light is lit. If it is, flipflop the wires in 1L1 & 1L2 on the Power Monitor. (PM) TURN OFF THE POWER FIRST.**

**Note: If a Phase Reversal condition exists you cannot Transfer the Transfer Switch.**

**We are now ready for the Pump Test.**