Liberty Pumps
Engineered Products

Pump Inspection Record

Report the results of this inspection to the factory BEFORE performing any work

Required Fields

Company Performing Inspection

Technician | **Pump Model**

Date of Inspection | **Pump Serial** | **Pump Date Code**

Customer | **Pump Install Location**

Pump Details and Notes:

Impeller/Cutter Rotation

Check for free rotation of the pump by rotating the impeller or cutter by hand. It's recommended a ratchet with an Allen driver be used to turn the impeller/cutter screw. Rotate the impeller/cutter in the clockwise direction when viewing the pump from the bottom. An arrow denoting direction of rotation should be cast into the bottom of the volute.

Does the pump turn freely and smoothly? ◯ Yes ◯ No

Notes:

Ground Continuity Verification

Check for continuity between the ***green*** ground lead of the ***power cord*** and a point on the exterior of the pump. One of the stainless steel fasteners is recommended as the exterior test point. Use an ohmmeter to check resistance.

Resistance: ohms

Important: If the measured value is greater than 0.25 ohm or if the circuit is open, DO NOT continue testing and consult the factory.

Motor Winding Resistance Verification

Use an ohmmeter to record motor winding resistances at the ***power cord*** leads:

Black to White: _____ ohms

Black to Red: _____ ohms

Red to White: _____ ohms

Dielectric Withstand Test (Hipot) of Motor Windings

Apply 1500 VAC to the power cord leads (B,W,R) with the ***green power cord*** lead grounded. Apply test voltage for a minimum of 10 seconds. All 3 motor leads (B,W,R) may be tested at the same time, or individually, if desired.

◯ Pass ◯ Fail

Important: If the motor windings fail this test, DO NOT continue testing and consult the factory.

Notes:

Dielectric Withstand Test (Hipot) of Motor Thermostat Circuit

Apply 1500 VAC to the power cord leads (B,W,R) with the * leads of the ***control cord*** grounded. Apply test voltage for a minimum of 10 seconds.

◯ Pass ◯ Fail

* ***black*** and ***white*** for 5-wire cords
black and ***green*** for 4-wire cords

Notes:

Thermostat Circuit Verification (Control Cord)

Use an ohmmeter to check resistance between the * leads of the ***control cord***:

Resistance: _____ ohms

* ***black*** and ***white*** for 5-wire cords
black and ***green*** for 4-wire cords

Seal Fail Circuit Verification (Control Cord)

Use an ohmmeter to check resistance between the * leads of the ***control cord***:

Resistance: _____ ohms

* ***red*** and ***orange*** for 5-wire cords
red and ***white*** for 4-wire cords

Motor Winding Megohmmeter (Megger®)/Insulation Resistance Test

Apply 1000 VDC for 60 seconds*. Apply test voltage between the ***green ground*** lead of the ***power cord*** and each power cord lead (***Black***, ***White***, ***Red***). 3 total tests will be performed.

**If a 1000V test is not available any test voltage 500 VDC or greater is acceptable. If a 60 second test is not possible record actual test duration in the results below.*

Test Voltage: _____ VDC Test Duration: _____ seconds

Measured Resistances:

Black to Ground: _____ ohms

White to Ground: _____ ohms

Red to Ground: _____ ohms

Dry Run – Run Check

If the pump has passed the ***Ground Continuity Verification*** *and* ***both Hipot tests,*** run the pump for a short period of time in air (dry run) at the rated voltage and frequency indicated on the nameplate. Record amp draw on each leg, if possible.

Note: 1-Phase pumps require the appropriate start circuit to run. Consult the factory for more information.

Test Voltage: _____ VDC Test Frequency: _____ Hz

Does the pump start and run smoothly and free of excessive noise or vibration?

◯ Yes ◯ No

Additional Notes or Observations:

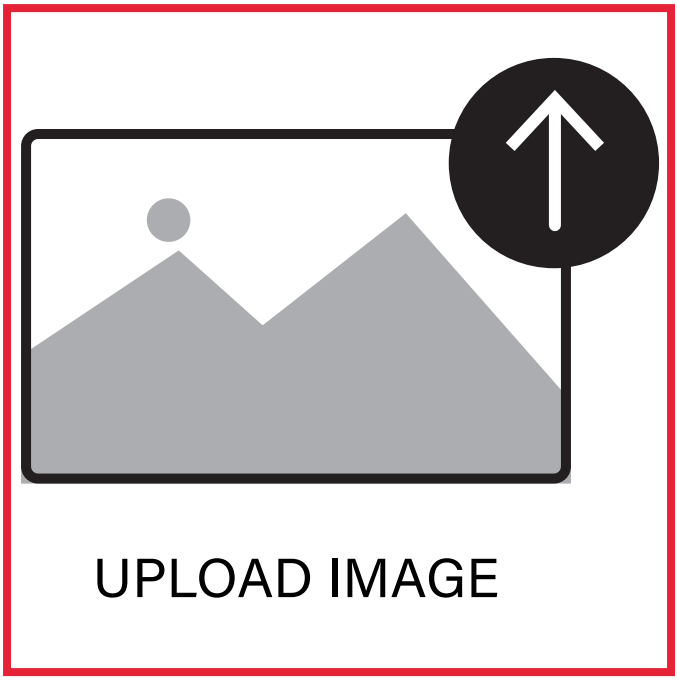
Measured Amp Draw:

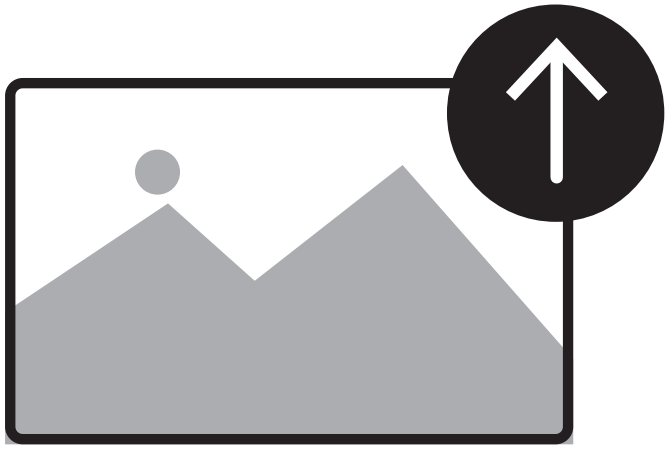
Black: _____ amps

White: _____ amps

Red: _____ amps

Include pictures to help diagnose pump failure cause





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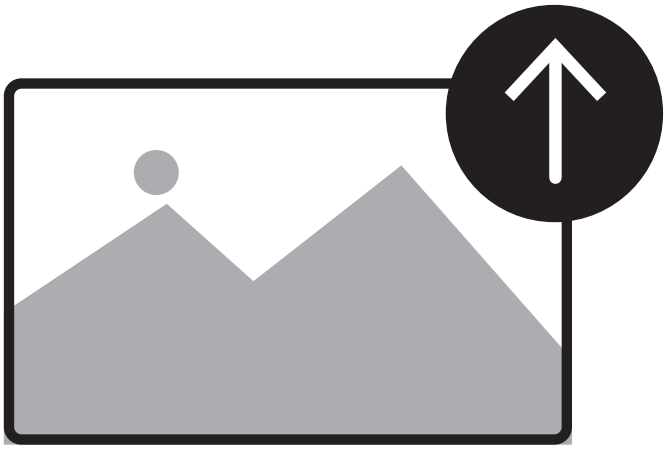

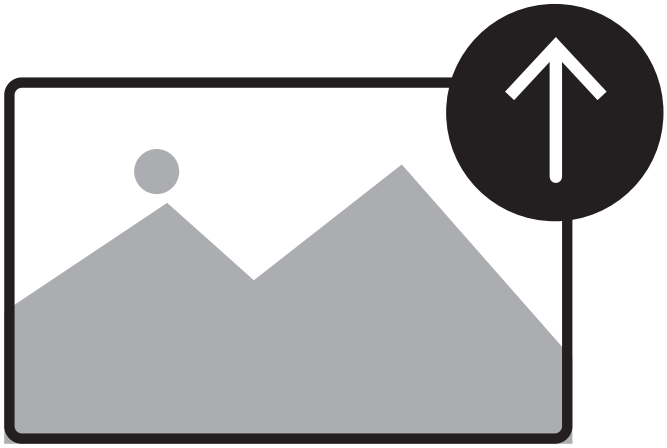

SUBMIT THE RESULTS OF THIS INSPECTION TO THE FACTORY BEFORE PERFORMING ANY WORK

Ready to Submit? | **Form Reset**

OR

EMAIL FORM TO: LEP@LibertyPumps.com