

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

REQUIRED FIELDS

Inspection Company

Inspection Date

Technician

Pump Model

Pump Serial

Pump Date Code

Pump Config 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. A ratchet with an Allen driver is recommended to turn the impeller/cutter screw. Rotate the impeller/cutter in the clockwise direction when viewing the pump from the bottom.

Note: Most pumps have an arrow denoting direction of rotation 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
red and **white** for 4-wire cords

For pumps built before April 1, 2025,
use wire colors below:
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
red and **white** for 4-wire cords

For pumps built before April 1, 2025,
use wire colors below:
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
black and **green** for 4-wire cords

For pumps built before April 1, 2025,
use wire colors below:
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: VAC 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

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

OR

EMAIL FORM TO: LEP@LibertyPumps.com