

Winding Resistance



Turn the power off and disconnect the motor lead from the converter. Using an ohmmeter, set the scale to R X 1. Zero-adjust the meter and measure the resistance between any two power conducting leads (prongs on the motor lead plug).

If the ohm value is too low, the motor may be shorted. If too high, the motor windings or the leads may be open.

| Lead Length | Ohm Value |
|-------------|-------------|
| 0 ft | 3.0 - 3.5 Ω |
| 50 ft | 3.6 - 4.1 Ω |
| 75 ft | 3.9 - 4.4 Ω |
| 100 ft | 4.2 - 4.7 Ω |
| 125 ft | 4.5 - 5.0 Ω |
| 150 ft | 4.8 - 5.3 Ω |
| 175 ft | 5.1 - 5.6 Ω |
| 200 ft | 5.4 - 5.9 Ω |
| 250 ft | 6.0 - 6.5 Ω |
| 300 ft | 6.6 - 7.1 Ω |

Insulation Resistance

Turn the power off and disconnect the motor lead from the converter. Use a 500V megohmmeter or megger (1 Meg = 1 M = 1 million). Zero-adjust the meter and measure the resistance between any power conducting leads (prongs on the motor lead plug) and ground. If the pump has been removed from the well, a good way to test this (as shown at right) is to submerge the motor lead and Redi-Flo2® pump in a bucket of water. Touch one lead of the megohmmeter to the pump and one to a motor lead.



If the ohm value is lower than 1.5M Ω on any lead other than ground, the motor or lead is defective and must be replaced.

Checking Components For Wear

The pump components should be periodically checked to ensure they are still within their minimum operating tolerances (illustrated below).

- Impeller** (position 5) The impellers should show no visible wear.
- Guide Vane** (position 3) The guide vanes should show no visible wear.
- Wear Ring** (position 4) The minimum thickness ("A" in the illustration) should never be less than 1.0 mm.



In addition, visually check all components for cracks, corrosion, or wear.

Storage Requirements

The pump should be thoroughly cleaned before storage to ensure no contamination is present. Both the pump and the converter should be stored in a clean and dry area in the following temperature range:

1°C to +50°C
or
34°F to 120°F