

# The EPG Connection

Your Resource for Landfill, Environmental, and Industrial Solutions!

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### **Old Motor Leads Cause Shorts**

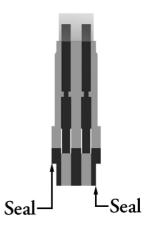
We've seen it hundreds of times. The problem is created during the pump installation and/or maintenance and progresses to a pump motor failure, a frustrated customer and expensive pump repair or replacement. By default, the pump or motor manufacturer is blamed for faulty equipment, and though sometimes true, it may not necessarily be the case.

One of the key factors leading to an expensive pump repair, failure or replacement is the quality and condition of the motor lead during pump installation or maintenance.

EPG pumps are shipped with motor leads sealed to the motors. Designed to provide years of moisture-free, safe and dependable service, each motor lead comes with a rubber grommet seal, jacketed cables, and a large grounding surface. EPG motor leads are thoroughly tested, first with a megaohm meter and then submerged and pressure tested at 150psi.

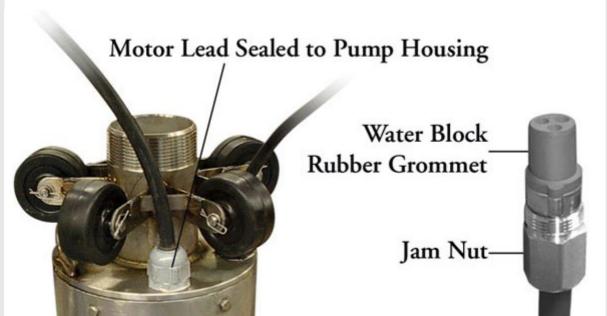
Unlike competitors, EPG conducts pressure testing to insure that no potentially explosive gases can migrate through the cable housing to the control panel.

But even though EPG motor leads are considered "best in the field", they are not intended to be removed and re-attached to the motor. When new EPG motor leads are tightened to the motor, a rubber grommet expands within the connection chamber causing a permanent moisture-tight seal.



Pump heat during operation solidifies this seal providing years of moisture-free connection. If the motor lead is detached from the pump housing, the heat-set rubber grommet will not provide a permanent moisture-free seal. After maintenance, some service technicians simply re-attach the motor lead and without realizing an adequate seal might not be made.

We've seen hardened, cracked or twisted motor leads that were apparently reused either to save time or money but shortly thereafter, the pump was shipped back to our service department as faulty or with a failed motor due a to short or disintegrated connection in the motor lead chamber.



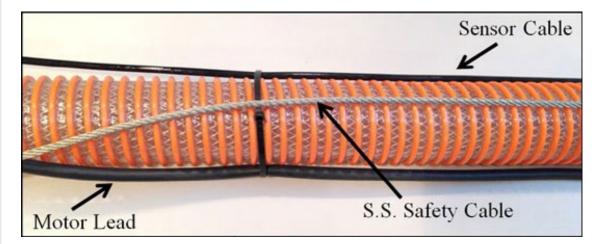


Another condition created when working with a motor lead applies to three-phase applications. During new motor lead installations, wires can be connected to the terminals incorrectly causing the pump to run backwards during operation. The pump will run but liquid flow is typically less than 25% of the pumps capacity. If left in this condition, the pump can destroy itself internally. To help avoid the possibility of costly pump repairs and replacements due to motor lead problems, EPG highly recommends the correct installation of a new motor lead on all EPG pumps prior to installation. Can all equipment malfunction or failure be avoided? Not likely. But if installed and serviced correctly, EPG equipment will provide years of dependable cost-effective service.

## EPG Quick Tip - Bundling Lead Wires with Discharge Hose

Over the years, EPG has determined and promoted many "best practices" based on trials, testing, and feedback from our customers. Here's one of many tips we hope to share with you in future newsletters.

Fasten motor and sensor leads to the pumps discharge line every 5' to 7' with straps or plastic wire ties on opposite sides of the discharge line and use padding between cables and any metal straps to protect the cable jacket. Doing so helps isolate the motor lead from the sensor lead which can be susceptible to noise and interference from the power supplied to the pump. This also helps prevent tangling and bunching up of the hose and lead wires during installation.



CAUTION: Do not fasten stainless steel safety cable as this will snap off straps or ties when pulling the pump out of the sump or riser.

If you have any questions about the information above, please call EPG at **1-800-443-7426**.

#### **Industry Events**

This list of events is updated each month. We will do our best to keep the list accurate when published.

Aug 16-18 Wyoming Solid Waste & Recycling Conference Saratoga, WY (The Reich Co. Exhibiting)

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Sep 7-9 Arkansas SWANA Conference Springdale, AR (The Reich Co. Exhibiting)

Sep 15-17 Louisiana Solid Waste Assoc. Conference Lafayette, LA (The Reich Co. Exhibiting)

Oct 5-7 Kansas SWANA Solid Waste Mgmt. Conference Mulvane, KS (The Reich Co. Exhibiting)

> Nov 1-3 SWANA Colorado Conference Boulder, CO (The Reich Co. Exhibiting)

Nov 4 ESD Solid Waste Technical Conference East Lansing, MI (EPG Exhibiting)

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