

MILLER INSULATION CHECKER

Digital Above Ground Insulation Checker

Operating Instructions

Last Updated: 7/9/2019

Revision 2.0



How to check a flange gasket

1. Apply the flexible probe to one side and the fixed probe to the other side of the flange system, make sure to break through any paint or coating that may be present.
2. Press and hold the “**TEST**” push button.

Possible outcomes:

1. Green Light – Gasket is a good insulator.
2. Red Light – Gasket is not a good insulator, or, there is a shorted bolt (see below regarding how to test the individual flange bolts).
3. Flashing red light – Indicates the relative level of insulation failure. The faster the red flashes, the greater the damage to the insulator.

Below lists the severity of insulator damage from least to most damage:

- a. Red/Green flashing
- b. Slow flashing red light
- c. Fast Flashing red light

How to locate a shorted flange

Double insulated flange unit

Apply the fixed probe to one flange and the flexible probe to each bolt in turn on the opposite flange. Make sure to break through any paint or coating that may be present. Press and hold the “**TEST**” push button for each bolt. Repeat the process with the fixed probe on the other flange.

Single insulated flange unit – Bolts are insulated through on flange only

Apply the fixed probe to the flange through which the bolts are insulated and the flexible probe to each bolt in turn around the same flange. Make sure to break through any paint or coating that may be present. Press and hold the “**TEST**” push button for each bolt.

Possible outcomes for each bolt tested:

1. Green light – Bolt insulation is good
2. Red light – Bolt insulation is not good
3. Flashing Red or Flashing Red/Green - Partial Insulation failure (Possible electrolytic short)

Maintaining your device

Checking battery of Miller Insulation Checker

Make sure nothing is connected to either probes, press and hold the “TEST” push button. If the green light is solid, the batteries are good. If the green light flashes, the batteries are low and must be replaced.

Replacing battery of Miller Insulation Checker

The insulation checker uses 2 AA battery. Please use premium alkaline batteries for best battery life.

To replace the battery, slide the batter cover down on the back of the insulation checker, turn the insulation checker around and give it a sharp tap against your palm and the batteries will pop out. When inserting fresh batteries, put the battery in with the positive side first and follow the polarity diagram printed above the battery compartment.

Changing the probe tips

Each Miller Insulation Checker comes with 4 spare probe tips that are stored on the inside of the battery cover. To change probe tips, twist the locking collar on the probes counterclockwise to loosen the tip and clockwise to secure the tip to the probe.

Warning: Probe tips are SHARP! Please use caution when handling them to avoid injuries.

