## **TRM Sensors LLC**

## TRM-CC, TRM-CB, TRM-CBX, TRM Relay Unit Type-C, TRM Flasher-BE

## **Recommended Maintenance Procedures and Spare Parts**

# TRM-CC, TRM-CB, TRM-CBX probes

Cleaning / Reset / Maintenance Procedure:

- 1. De-energize sensor by disconnecting power to monitoring instrument
- 2. Remove sensor from field mount
- 3. <u>If sensor is contaminated with dirt or mud</u>, remove any mud or caked dirt or sediment by soaking sensor in warm water
  - a. DO NOT USE DETERGENT or other solvents WATER ONLY
  - b. DO NOT STIR OR SHAKE Passive soaking, with repeated water exchanges as necessary until sensor is clean
  - c. DO NOT insert any foreign object into are protected by plastic or stainless steel screen
  - d. Allow to dry on paper towels or other absorptive surface
- 4. <u>If sensor probe is contaminated with diesel, jet fuel, crude oil or other heavy hydrocarbons liquids,</u>
  - a. Soak sensor for 15 minutes in naphtha (Use Coleman Camp Stove Fuel or Painters' Naphtha)
  - b. DO NOT STIR OR SHAKE passive soaking in naphtha only
  - c. DO NOT insert any foreign object into are protected by plastic or stainless steel screen
  - d. Allow sensor to dry for 60 minutes on paper towels. DO NOT use forced air.
  - e. Check to see if sensor has reset by connecting it to monitoring instrument in field or bench top equivalent.
  - f. Repeat steps a. to e. up to three times (four total attempts)
- 5. Reinstall sensor probe,, connect to monitoring instrument and reenergize if cleaning and resetting is successful. SENSOR MUST BE REPLACED with new equipment if 4 repetitions of Step 4 fail to restore sensor to functionality.

#### TRM FLASHER-BE Monitoring Unit

Cleaning / Reset / Maintenance Procedure:

- 1. There is a TEST / RESET button located on the lower edge of the enclosure beneath the red lens.
  - a. TEST button can be pressed when a probe is connected
    - i. GOOD test is indicated by a flash at the rate of one per second
    - ii. BAD test is if flasher remains dark confirm that a probe is connected to the leader cable, check integrity of wiring, replace 2 x "AA" standard Alkaline batteries – DO NOT use Lithium batteries
  - b. TEST button can be used as a "RESET" button if strobe is flashing and there is reason to believe that the probe has cleared or reset (for instance after probe is lifted from brine)
    - i. GOOD reset is indicated by strobe going dark after button is released. (Note that strobe will continue to flash if TEST/RESET button is held in pushed position)
    - ii. BAD reset is indicated if strobe remains flashing at one per second rate after button is released - This usually indicates that the probe is not yet reset. Try cleaning and reset procedure for TRM Sensor Probes in previous section of this document.
- 2. TRM FLASHR-BE enclosure can be cleaned with a damp cloth
- 3. Replace units that are physically damaged or that cannot be restored to normal functionality. Circuits are encapsulated and cannot be repaired in the field.

## TRM Relay Unit Type-C

Cleaning / Reset / Maintenance Procedure:

- 1. There are no test or reset functions for the TRM Relay Unit Type-C
- 2. If unit fails to function normally
  - a. Check tightness of wiring at all terminal blocks
  - b. TRM Relay Unit Type-C must be replaced with a new or factory reconditioned unit if it fails to function normally. Field repairs are not authorized for this unit.
- 3. TRM Relay Unit Type-C enclosure can be cleaned with a damp cloth.