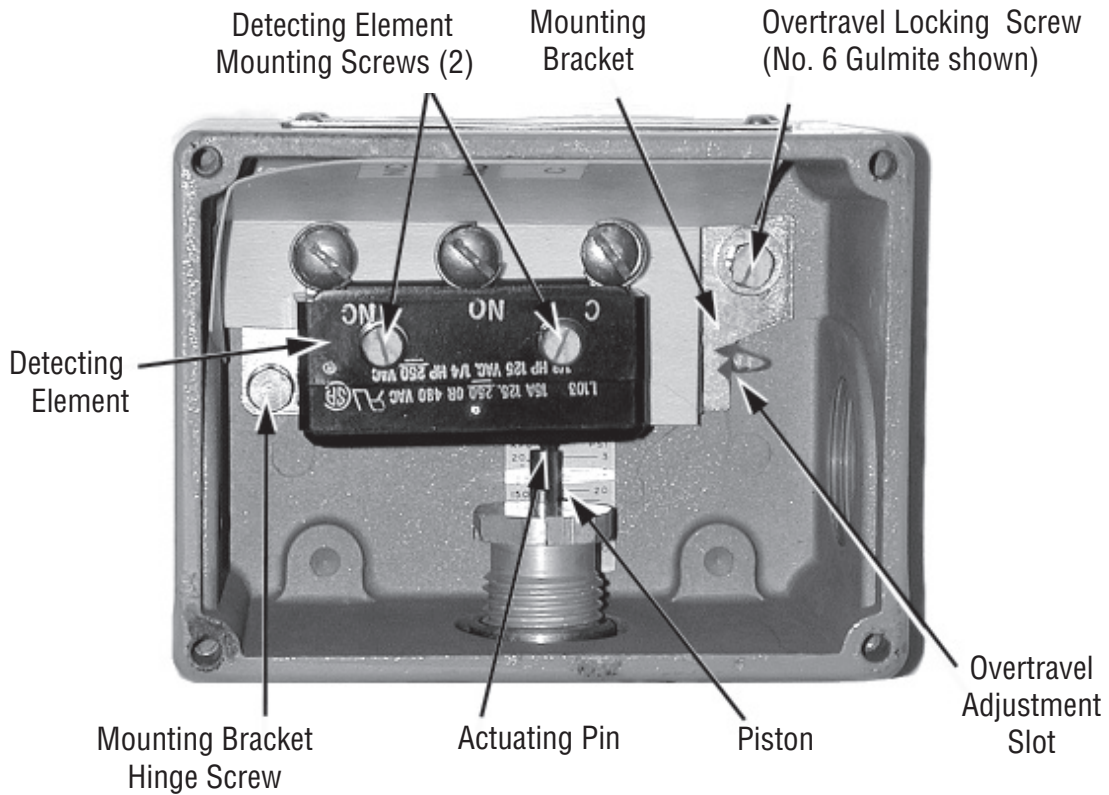




SPDT Detecting Element/Bracket for SOR® Weathertight Pressure Detectors

General Instructions



NOTE: If you suspect that a product is defective, contact the factory or the SOR Representative in your area for a return authorization number (RMA). This product should only be installed by trained and competent personnel.

*Design and specifications are subject to change without notice.
For latest revision, go to www.sorinc.net*

Replacement of Detecting Element/Mounting Bracket Assembly

- 1 Disconnect electrical power to the defective detecting element and unhook wires from screw terminals, or wire leads (if installed) from junction box.



Failure to disconnect electrical power before performing these procedures could result in severe personal injury or death.

- 2 Remove mounting bracket assembly with defective detecting element from housing by removing overtravel locking screw and mounting bracket hinge screw. (See photo.)
- 3 Use an awl or sharp tool to remove filler material from the overtravel adjustment slot and clean interior of pressure detector housing. Inspect tapped holes from which screws were removed.
- 4 Install replacement mounting bracket assembly. Use thread locker adhesive on screw threads to ensure weathertight integrity of housing and to prevent the screws from loosening.
- 5 Reconnect wires to screw terminals or wire leads to junction box or wire nuts on circuit wires and energize the circuit.
- 6 Perform overtravel adjustment (See page 4).

Replacement of Detecting Elements

- 1 Disconnect electrical power to the defective detecting element and unhook wires from screw terminals, or wire leads (if installed) from junction box.



Failure to disconnect electrical power before performing these procedures could result in severe personal injury or death.

- 2 Remove two detecting element mounting screws. (See photo.)
- 3 Remove the defective detecting element and discard.
- 4 Loosen the overtravel locking screw. Do not remove. (See photo.)
- 5 Use an awl or sharp tool to remove filler material from the overtravel adjustment slot, insert flat blade screwdriver into slot and turn to open the detecting element mounting bracket, i.e. move it away from the piston. Lightly tighten the overtravel locking screw.
- 6 Check that detecting element bracket is securely mounted to housing. There must be no movement between the bracket and the housing.
- 7 All insulation must be replaced exactly to ensure the safety of the product.

NOTE: detecting Element Bracket design and configuration may vary slightly depending upon date of manufacture, housing, number of detecting elements, etc. Check the micro detector mounting screws and the overtravel locking screw to determine the type of screwdriver(s) required for this procedure:

- No. 6 Gulmite screwdriver
 - Torx head screwdriver
 - 1/4" Hex nutdriver
 - Phillips head screwdriver
- 8 Position replacement detecting element on the bracket so the actuator pin aligns with the piston. Use a threaded-locker adhesive on screw threads. Insert the detecting element mounting screws and tighten securely to 10 in-lbs.
 - 9 Perform overtravel adjustment (See page 4).

Overtravel Adjustment

Prior to returning the pressure detector to service, it is necessary to perform overtravel calibration as follows:

- ① Connect the pressure detector to a suitable controllable pressure source. Apply pressure to a value above the adjustable range. (This ensures maximum piston travel.) Do not exceed overrange.
- ② Connect a continuity tester, ohmmeter or test light to the C-common and NO-Normally Open contacts.
- ③ Attach a dial indicator so the end of the indicator lever contacts the bottom of the detecting element near the actuating pin.
- ④ Loosen the overtravel locking screw just enough to permit precise movement of the detecting element bracket. (See photo.)
- ⑤ Insert flat blade screwdriver into overtravel adjustment slot and turn to move detecting element bracket toward the piston until actuation occurs; audible click and light illuminates or ohmmeter deflects. Note dial indicator reading.
- ⑥ Turn screwdriver to move the detecting element bracket on additional .005 inch toward the piston. Tighten overtravel locking screw securely to prevent further movement of the detecting element bracket. The overtravel adjustment slot may be filled with potting material as desired.

The pressure detector can be calibrated and returned to service.

