

101/121 Differential Pressure Standard O-Ring and Diaphragm Replacement

General Instructions

These instructions provide information on how to replace the o-ring and the diaphragm in the 101/121 Differential Pressure Switches.



Carefully read these instructions BEFORE attempting to replace diaphragms. If this procedure is not followed or the same type diaphragm and o-ring is not installed, the warranty is null and void.

None of the metal parts (nor the micro switch) can be replaced, nor can the body be loosened without affecting the factory-adjusted overtravel. Diaphragms and o-rings can usually be replaced without affecting factory adjusted overtravel.

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.



Replacement Instructions

• Relieve range spring pressure by unscrewing the adjusting nut or screw counter clockwise.



2 Remove the high port after removing the bolts and nuts.

3 Remove all internal parts from the sensing assembly and discard the diaphragm and o-rings. The low piston shaft can be removed to aid in removing the o-ring.

• Thoroughly clean all metal parts in a quick-drying solvent that leaves no residue. Blow completely dry with clean, dry air or gas.

6 Install new o-rings and diaphragms with the low port facing upwards. Follow these instructions:

- a. Insert the small o-ring into the low port. Insert the low piston shaft through this o-ring.
- b. Insert the low piston into the low port. Make sure the round edge is facing the diaphragm. Insert the o-ring into the groove in the low port.
- c. Lay the diaphragm over the low piston, aligning holes with low port. The primary diaphragm may be black, transparent or metallic, depending on the diaphragm option.
- d. Center the high piston over the diaphragm. Make sure the round edge is facing the diaphragm.
- e. Insert the o-ring into the high port.
- f. Place the high port over the high piston and insert bolts. Make sure the o-rings and high piston are in their recess.
- g. Tighten the bolts and nuts in a cross pattern to 32 in/lbs of torque.



This table lists primary diaphragms and o-rings, both of which are exposed to process media, and should be checked for compatibility prior to installation.

O-Ring (wetted)	Diaphragm (wetted primary)	Designator
Viton	Hastelloy-B	H4
Buna-N	316SS	M2
Viton		M4
Viton	TCP Teflon-Coated Polyimide	N1
Buna-N		N4
Viton	Viton	S1



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14685 West 105th Street, Lenexa, KS 66215 = 913-888-2630 = 800-676-6794 USA = Fax 913-888-0767

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