Actuator Rubber Diaphragm Repair Kit for D-3070, D-3073, D-3153, D-3244 and D-3246 actuators

Kit Includes

1. Diaphragm

Disassembly Procedures

The disassembly procedure listed below and shown on the picture are the same for all the actuators, the picture will be slightly different for some actuators.

⚠️ CAUTION: Before proceeding with any work on the actuator, make sure that there is no air pressure to the actuator and that the “lock nut” is on the piston rod.

Figure 1: Actuator Components

1. For assembly purposes, note position of cylinder head air connection in relation to the cylinder assembly or match mark the cylinder.

2. Remove the four head bolts securing the cylinder head to the actuator assembly.

3. Remove the cylinder head.

4. Remove old diaphragm and piston cup. On some older D-3244 and D-3246 models, the diaphragm may be glued to the piston cup. Remove any excess glue from the piston cup prior to assembly.
Assembly Procedures

1. Before removing diaphragm from bag, shake bag to coat diaphragm with excess powder that may have settled in the bottom of the bag. If diaphragm is not powdered, common baby powder can be used.

2. Take the new diaphragm and turn it inside out so the identifying letters and/or numbers are on the inside of the diaphragm.

3. Place the piston cup inside the diaphragm and move flange “A” of the diaphragm in the direction of the arrow to form a cuff.

4. Place the piston cup and diaphragm assembly into the cylinder head, making sure that flange “A” seats into the groove in the cylinder head.

5. Install the cylinder head to the cylinder assembly making sure that the air connection is in the position noted in Step 1 of Disassembly Procedures.

6. Install the head bolts and torque to specifications in table below.

<table>
<thead>
<tr>
<th>ACTUATOR MODEL</th>
<th>CODE NUMBER</th>
<th>HEAD BOLT TORQUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-3070</td>
<td>D-3073-600</td>
<td>40 to 50 lb-in (4.5 to 5.6 N-m)</td>
</tr>
<tr>
<td>D-3073</td>
<td>D-3073-600</td>
<td>40 to 50 lb-in (4.5 to 5.6 N-m)</td>
</tr>
<tr>
<td>D-3153</td>
<td>D-3153-601</td>
<td>90 to 110 lb-in (10.2 to 12.4 N-m)</td>
</tr>
<tr>
<td>D-3244</td>
<td>D-3244-615</td>
<td>60 to 70 lb-in (6.7 to 7.9 N-m)</td>
</tr>
<tr>
<td>D-3245</td>
<td>D-3244-615</td>
<td>60 to 70 lb-in (6.7 to 7.9 N-m)</td>
</tr>
</tbody>
</table>

Checkout Procedures

1. Furnish a variable air source to the air connection of the actuator.

2. Increase the air pressure slowly, the piston rod should extend in a smooth manner until fully stroked.

3. Check the assembly for leaks.

4. Decrease the air pressure and the piston rod should retract.

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