Stearns® Brake Replacement Parts

Service Instructions for Stationary Disc Kit
Series 67,000 and 77,000 Disc Brakes

Important
Please read these instructions carefully before servicing your Stearns brake. Failure to comply with these instructions could cause injury to personnel and/or damage to property if the brake is installed or operated incorrectly. For definition of limited warranty/liability, contact Rexnord Industries, Inc., Stearns Division, 5150 S. International Dr., Cudahy, Wisconsin 53110, (414) 272-1100.

Caution
1. Servicing shall be in compliance with applicable local safety codes including Occupational Safety and Health Act (OSHA). All wiring and electrical connections must comply with the National Electric Code (NEC) and local electric codes in effect.

2. To prevent an electrical hazard, disconnect power source before working on the brake. If power disconnect point is out of sight, lock disconnect in the off position and tag to prevent accidental application of power.

3. Be careful when touching the exterior of an operating brake. Allow sufficient time for the brake to cool before disassembly. Surface may be hot enough to be painful or cause injury.

4. Do not operate brake with housing removed. All moving parts should be guarded.

5. After usage, the brake interior will contain burnt and degraded friction material dust. This dust must be removed before servicing or adjusting the brake.

DO NOT BLOW OFF DUST using an air hose. It is important to avoid dispersing dust into the air or inhaling it, as this may be dangerous to your health.

6. Maintenance shall be performed only by qualified personnel familiar with the construction and operation of the brake.

7. For proper performance and operation, only genuine Stearns parts should be used for repairs and replacements.

Warning! Any mechanism or load held in position by the brake should be secured to prevent possible injury to personnel or damage to equipment before any disassembly of the brake is attempted or before the manual release knob or lever is operated on the brake.

Instructions
1. To remove housing, follow instructions listed below for appropriate brake series.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description of Parts Included in Kit</th>
<th>Qty per Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Stationary disc</td>
<td>1</td>
</tr>
</tbody>
</table>

67,000 Series

Remove four housing cap screws (15), lock washers (15W), and housing (7) by pulling back.

77,000 Series

Remove four housing cap screws (15), lock washers (15W), and housing (7) by pulling back.

a) Wear a filtered mask or a respirator while removing dust from the inside of a brake.

b) Use a vacuum cleaner or a soft brush to remove dust from the brake. When brushing, avoid causing the dust to become airborne. Collect the dust in a container, such as a bag, which can be sealed off.

67,000 and 77,000 Series

- solenoid air gap
2. Disconnect coil lead wires and remove support plate assembly (142) by unscrewing and removing three screws (142S) and washers (142W).

3. Disc pack components - pressure plate (5), friction discs (4), and stationary disc (3) - are now accessible for replacement. When replacing stationary disc (3) be certain that the disc pack is reassembled in the proper sequence as shown in the exploded drawing and that all components slide freely.

Note: Vertically mounted brakes will have special pins which hold spacer springs and, in some cases, spring washers. Note color coded sequence of springs and location of washers if used. Be sure pins do not restrict free disc pack movement.

4. Remount support plate assembly to the brake, drawing the screws down evenly. Torque to 10 ft-lbs. Be sure that the assembly is mounted so that the solenoid is upright (plunger above the frame) when the brake is mounted in the horizontal position.

5. Manually lift solenoid plunger to maximum travel. Depress and allow solenoid plunger to snap out several times. Measure solenoid air gap between mating surfaces of solenoid frame and solenoid plunger. (On vertically mounted brakes, it will be necessary to push solenoid plunger into solenoid frame to the point where spring pressure is felt, before measuring solenoid air gap.) The correct solenoid air gap measurements are shown in Table. (See illustration on front page.)

<table>
<thead>
<tr>
<th>Nominal Static Torque (lb-ft)</th>
<th>67,000</th>
<th>77,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>7/16</td>
<td>7/16</td>
</tr>
<tr>
<td>15</td>
<td>7/16</td>
<td>7/16</td>
</tr>
<tr>
<td>25</td>
<td>7/16</td>
<td>7/16</td>
</tr>
<tr>
<td>35</td>
<td>9/16</td>
<td>9/16</td>
</tr>
<tr>
<td>50</td>
<td>9/16</td>
<td>9/16</td>
</tr>
<tr>
<td>75</td>
<td>5/8</td>
<td>5/8</td>
</tr>
<tr>
<td>105</td>
<td>5/8</td>
<td>5/8</td>
</tr>
</tbody>
</table>

6. To restore correct solenoid gap, insert screwdriver and turn adjusting stud (10) clockwise to increase air gap or counterclockwise to decrease air gap until proper solenoid gap is attained. Repeat Step 5 after each adjustment.

7. Reconnect solenoid coil leads.

8. Replace housing, screws and lock washers in the reverse order of the appropriate point in Step 1.

9. Caution! Do not run motor with brake in manual release position. It is intended only for emergency manual movement of the driven load, not as a substitute for full electrical release.

NOTE: For complete instructions, with troubleshooting, request sheet applicable to the series of brake that you have.