**Service Instructions for Vertical Mounting Kits**

**Series 65,300 Disc Brakes**

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**Components**

<table>
<thead>
<tr>
<th>Kit</th>
<th>Item No.</th>
<th>Part Description</th>
<th>Qty. per Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stationary disc kit - vertical mounting</td>
<td>3</td>
<td>Stationary disc</td>
<td>1</td>
</tr>
<tr>
<td>Pressure plate kit - vertical mounting</td>
<td>5</td>
<td>Pressure plate</td>
<td>1</td>
</tr>
<tr>
<td>Vertical mounting spring kit - blue</td>
<td>62</td>
<td>Springs - blue</td>
<td>3</td>
</tr>
<tr>
<td>Vertical mounting spring kit - white</td>
<td>62</td>
<td>Springs - white</td>
<td>3</td>
</tr>
<tr>
<td>Vertical mounting spring kit - red</td>
<td>62</td>
<td>Springs - red</td>
<td>3</td>
</tr>
</tbody>
</table>

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**Instructions**

1. To remove housing, unbolt four cap screws (15S), washers (15U), lock washers (15W) and hex nuts (15N). (Earlier models only used cap screws and washers.) Then remove housing by pulling back.

2. Disconnect coil lead wires (139), and remove support plate assembly (142) by unscrewing and removing three screws (142S) and washers (142W).

3. Disc pack components, and vertical mounting components are now accessible for replacement. When replacing these components, be certain they are replaced in the same order as they were removed.

4. To install vertical components, follow instructions listed below.

   a) Disc pack, spring and pin arrangements for vertical above motor are shown in Diagram 1 (on other side). Friction discs must be free to rotate. Check by rotating hub, if possible, and compress disc pack to make sure that components slide freely over pin. If springs do not return

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**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.

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**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.

   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.

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.

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**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.
components, pins may be bent, and will have to be straightened.

b) Disc pack, spring and pin arrangements for vertical below motor are shown in Diagram 2 (below). Before attempting to use pressure plate (5) it will be necessary to obtain three vertical mounting pins (63). Select appropriate pins, determined by brake torque, from Repair Parts List, Sheet 317. Pins must be pressed into the three mounting holes provided in the ears of pressure plate (5). Make sure that the pins are perpendicular to pressure plate face and flush with opposite surface. Be careful not to bend pins while seating them.

c) Trial fit stationary disc(s) over pins in pressure plate to make sure that they slide freely. Insert assembly into endplate to make sure it slides freely in slots. Straighten pins if required.

d) Assemble complete disc pack on bench, and compress to make sure that springs return components. Friction discs must be free to rotate. Center and align friction discs, and assemble disc pack into endplate. Make certain that friction discs (4) slide freely over hub (16).

5. Remount support plate assembly to the brake, drawing the screws down evenly.

6. 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. If solenoid air gap exceeds 11/16", adjustment is necessary. The solenoid air gap measurements are shown in Table below.

Table: Solenoid Air Gap Measurement

<table>
<thead>
<tr>
<th>Nominal Static Torque (lb-ft)</th>
<th>Inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5; 3</td>
<td>13/32</td>
</tr>
<tr>
<td>6</td>
<td>1/2</td>
</tr>
<tr>
<td>10</td>
<td>9/16</td>
</tr>
<tr>
<td>15</td>
<td>9/16</td>
</tr>
</tbody>
</table>

7. The solenoid air gap may be decreased by turning both wear adjustment screws (10) equal amounts clockwise, approximately 1/8 turn, until appropriate solenoid gap is obtained.

8. Reconnect solenoid coil leads.

9. Orient housing so that manual release knob is approximately 20° counterclockwise from vertical centerline. Slide housing over endplate register and rotate clockwise to align bolt holes. Rotate manual release knob clockwise and check that motor shaft turns freely. If not, determine cause of binding and correct. Return release knob to original position. Replace hardware in reverse order of Step 1.

10. 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.