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.
   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.

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 under each individual brake series.
2. Disconnect coil lead wires and remove support plate assembly (142) by unscrewing and removing three screws (142S).

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Kit Numer and Description of Parts</th>
<th>Quantity per Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 161</td>
<td>5-66-8452-00 Friction disc</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Stabilizing spring</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>5-66-8351-00 Stationary disc</td>
<td>1</td>
</tr>
</tbody>
</table>

55,000 Series

Remove housing nuts (15) by unscrewing from housing studs (150). Remove housing (7) by pulling back.

55,500 and 57,500 Series

Remove housing nuts (15) by unscrewing from housing studs (150). Remove housing (7) by pulling back.

55,200 Series

a) Remove wraparound sheet metal housing (7) by turning wing-nut on latch counterclockwise until the latch releases.
b) Open housing and slide over the brake or away from the floor stand (34).

55,700 Series

a) Remove housing (7) by unscrewing nuts from the four mounting studs (128) that protrude through the reducer flange.
b) Grasp the coupler brake and motor as a unit and pull free from the reducer.
c) Pull housing from the mounting studs (128). These studs are threaded into the motor C-face and should remain in place.
3. Disc pack components – stationary disc (3) and friction disc (4) are now accessible. When replacing any of these components, be certain they are replaced in the same order as they were removed.  

**Note:** Multiple friction disc vertically mounted brakes have special pins which hold spacer springs. Note color coded sequence of springs when removing for proper reinstallation. Be sure pins do not restrict free disc pack movement.

For single disc brakes, stabilizing springs (161) are in kit. They are for use with one-disc brakes only. Check that disc slides are placed at 90° apart. Disc is slid on hub with prongs trailing. Use of stabilizing springs on multiple disc brakes may cause brake burnup due to increased drag caused by springs.

Check that new friction disc(s) slide freely on hub (16). It may be necessary to file area of disc contacting hub to be sure the disc(s) slide freely when reassembling. See Note above.  

**Note:** When replacing friction disc(s), turn both wear adjust screws (10) two full turns counterclockwise prior to replacing support plate assembly.  

Check to be sure wear adjust screws are of equal height. Measure from inboard side of support plate with depth micrometer. Turn one screw to obtain equal height.

4. Remount support plate assembly to the brake drawing the screws down evenly. Torque to 43 in-lbs. Be sure that the assembly is mounted so that the solenoid is upright (plunger above the frame) when the brake is horizontally mounted including ceiling or horizontally wall mounted.

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.

If solenoid air gap is less than or exceeds measurements shown in Table 1, adjustment is necessary.  

The solenoid air gap measurements are shown in Table 1 inches.

6. 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 attained. To increase gap, turn screws counterclockwise equal amounts.

7. Reconnect solenoid coil leads.

<table>
<thead>
<tr>
<th>Nominal static torque (lb-ft)</th>
<th>55,000 and 55,200</th>
<th>55,500 and 55,700</th>
<th>57,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5; 3</td>
<td>13/32</td>
<td>13/32</td>
<td>—</td>
</tr>
<tr>
<td>6</td>
<td>1/2</td>
<td>1/2</td>
<td>—</td>
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<tr>
<td>10</td>
<td>9/16</td>
<td>1/2</td>
<td>9/16</td>
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<tr>
<td>15</td>
<td>9/16</td>
<td>9/16</td>
<td>9/16</td>
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<tr>
<td>20 and 25</td>
<td>9/16</td>
<td>—</td>
<td>9/16</td>
</tr>
</tbody>
</table>

8. Replace housing and housing nuts in 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.