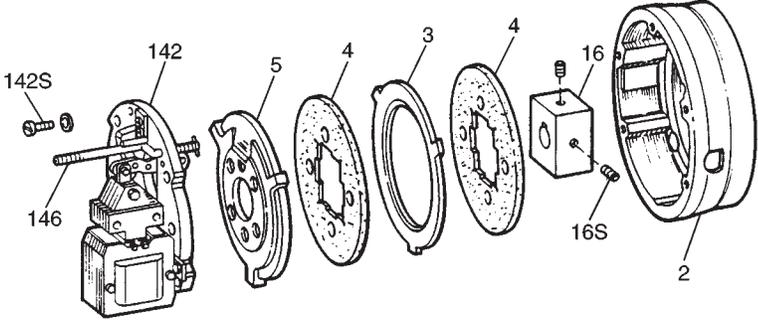
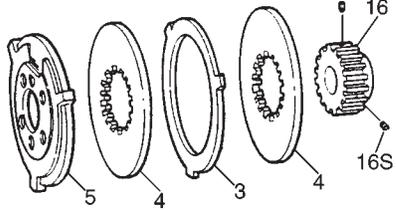


## Service Instructions for Disc Kits Series 87,000; 87,100; 87,200 and 87,700 Disc Brakes SPECIAL FOR HIGH INERTIA FRICTION DISCS

Kit	Item No.	Description of Parts Included in Kit	Qty. per Kit
High inertia friction disc	4	Friction disc - splined	1

 <p>8-004-718-00 (Standard Hub)</p>	 <p>8-004-716-00 (Splined Hub)</p>
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### IMPORTANT

Use of the high inertia friction disc should only be considered when one or more of the following applications are met.

1. Brake speeds at 3600 rpm or above.
2. Brake thermals in excess of 10 hp sec/min.

3. Expanding thermal capacity of a cast iron endplate.
4. Stop times in excess of 1 second.
5. Ambient temperatures in excess of 120° F.

Please consult the factory before using high inertia friction discs as a replacement for standard friction disc.

### 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 serviced 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

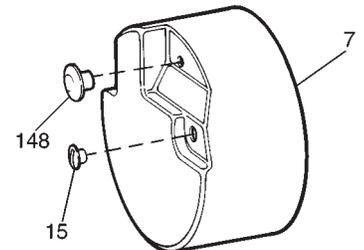
1. Servicing shall be in compliance with applicable local safety codes including Occupational Safety and Health Act (OSHA). All wiring and electrical connections must comply with the National Electric Code (NEC) and local electric codes in effect.
2. To prevent an electrical hazard, disconnect power 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 and inhaling it, as this may be dangerous to your health.

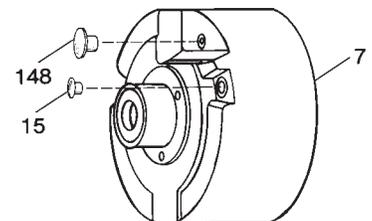
- a) Wear a filtered mask or a respirator while removing dust from the inside of a brake.
  - b) Use a vacuum cleaner or a soft brush to remove dust from the brake. When brushing, avoid causing the dust to become airborne. Collect the dust in a container, such as a bag, which can be sealed off.
6. Maintenance should 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.

### 87,000 and 87,100 Series



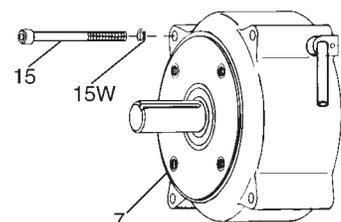
Remove manual release knob (148), housing nuts (15) and housing (7) by pulling back.

### 87,200 Series



- a) Remove any accessories, sprockets, sheaves, etc., from brake shaft on housing side.
- b) Remove manual release knob (148), housing nuts (15) and housing (7).

### 87,700 Series



- a) Remove the brake and motor as a unit from the gear reducer.
- b) Remove four housing cap screws (15), lock washers (15W) housing (7) and shaft assembly.

**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 shown on front side, then continue with the following steps.
2. Disconnect coil lead wires, and secure the solenoid plunger to the solenoid frame with safety wire 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 any of these components be certain that the disc pack is reassembled in the proper sequence as shown in the exploded drawing.

Check that all disc pack components slide freely. Clean mating areas as required.

**Note:** Brakes with a single friction disc will contain no stationary discs. 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.

4. Mount support plate assembly, torque screws to 50 in-lbs in aluminum endplate and to 60 in-lbs in cast iron endplate. 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. Remove the safety wire from the solenoid plunger.
5. Manually lift solenoid plunger to maximum travel. Depress fully 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 solenoid air gap measurement should be as factory set between 13/16" to 15/16".

The solenoid air gap may be increased by raising or decreased by lowering the wrap spring stop (76). To accomplish this, loosen two stop screws (76S), move wrap spring stop

slightly and retighten screws. Repeat Step 5 after each change in wrap spring stop position to obtain correct solenoid air gap measurement of 13/16" to 15/16".

6. Reconnect solenoid coil leads.
7. Replace housing, screws and manual release knob in the reverse order of the appropriate point in Step 1.
8. **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.**

