

## Service Instructions for No. 4 AC Coil Kit

### Single and Dual Voltage Coils Series 65,000 and 65,300 Brakes

|  | Item no. | Description of Parts Included in Kit                | Qty per Kit |
|--|----------|---|-------------|
|  | 12A      | Coil  | 1           |
|  | 139*     | Lead wire and terminal assy. (standard brakes only) | 2           |
|  | 139S     | Terminal screw                                      | 2           |
|  | 139W     | Terminal lock washer                                | 2           |
|  | 82       | Plunger guide                                       | 2           |
|  | 84       | Screw - plunger guide                               | 2           |
|  | 12AN**   | Wirenut   | 2           |
|  | 12AT**   | Crimp terminal                                      | 2           |
| <p>*Dual voltage coils only<br/>** Dual voltage coils only</p> |          |   |             |

#### 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, LLC, 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.

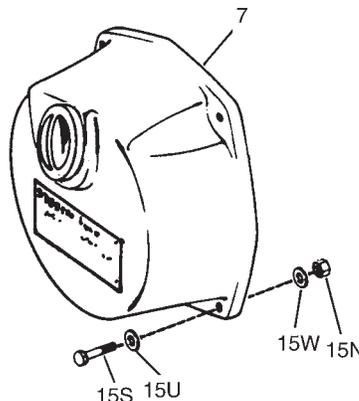
DO NOT BLOW OFF DUST using an air hose. It is important to avoid dispersing dust into the air or inhaling it, as this may be dangerous to your health.

- 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 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.

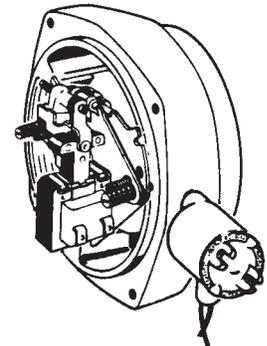
**Warning!** Any mechanism or load held in position by the brake should be secured to prevent possible injury to personnel or damage to equipment before any disassembly of the brake is attempted or before the manual release knob or lever is operated on the brake.

#### Instructions

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

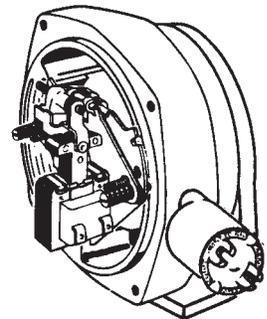


#### 65,300 Series



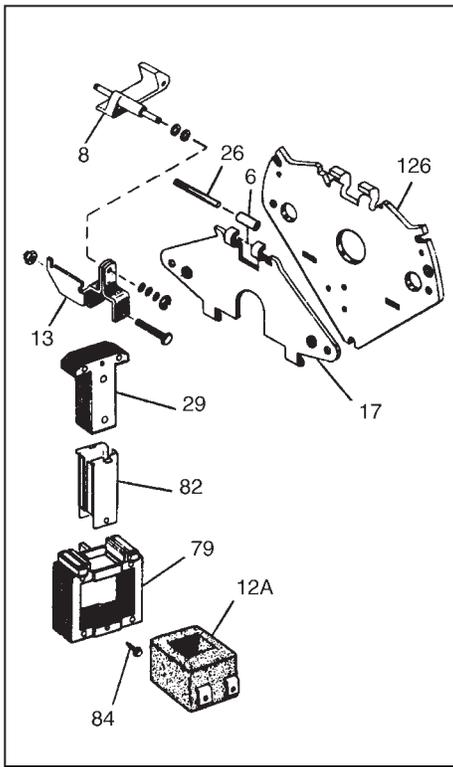
Series 65,300 brakes use four through-bolts (15S), four flat washers (15U), four lock washers (15W) and four hex nuts (15N). Remove all and pull back on housing (7) to free it.

#### 65,000 Series



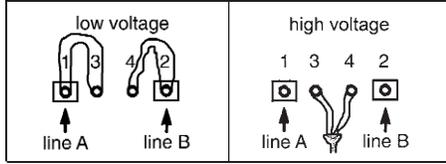
Series 65,000 brakes use four bolts (15S), threaded into endplate and four lock washers (15W). Remove all and pull back on housing (7) to free it.

**Note:** Some older design Series 65,300 brakes used the same bolt arrangement as Series 65,000.



2. To replace the solenoid coil, disconnect lead wire terminal screws (139S), lock washers (139W) and lead wires (139).
3. Insert a screwdriver between support plate (126) and top of lever arm (17). With screwdriver wedge apart; remove bearing pin (26) and solenoid lever (8) with solenoid link (13) and plunger (29). It is not necessary to separate the solenoid lever, solenoid link and plunger.
4. Remove plunger guide screw(s) (84). Remove both plunger guides (82) by prying up on the flanges. Discard plunger guides.
5. Slide coil (12A) sideways from solenoid frame (79). If necessary, tap coil lightly with soft hammer. If coil had burned out, be sure to remove all foreign material from the solenoid plunger (29) and solenoid frame (79).

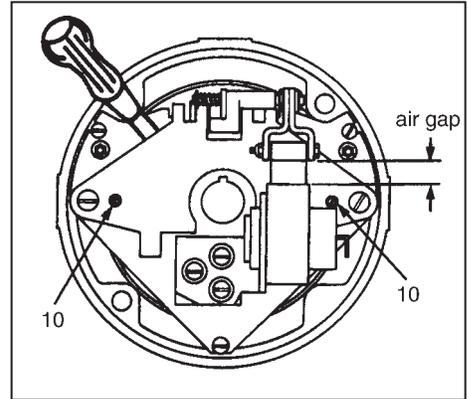
6. Install new coil (12A) into solenoid frame with same relative position as old coil. Assemble new plunger guides (82) and plunger guide screws(s) (84).



7. Low Voltage:  
Jumper leadwire 3 to terminal 1  
Jumper leadwire 4 to terminal 2  
Incoming power to terminals 1 & 2
8. High Voltage:  
Jumper leadwires 3 & 4 together  
Incoming power to terminals 1 & 2
9. Be sure to check the following when installing lead wires:
  - 1) Must not be tight or pinched.
  - 2) Must not make contact with friction disc.
  - 3) Must not be trapped between solenoid plunger and frame.
10. 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 in next column.
11. 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.
12. Reconnect coil leads.

**Table: Solenoid Air Gap Measurement (inches)**

| Nominal Static Torque (lb-ft) | 65,000 Series | 65,300 Series |
|-------------------------------|---------------|---------------|
| 1.5 and 3                     | 13/32         | 13/32         |
| 6                             | 13/32         | 13/32         |
| 10                            | 1/2           | 1/2           |
| 15                            | 9/16          | 9/16          |



13. 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. Replace hardware in reverse order of Step 1.
  14. **Caution 1!** 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.  
  
**Caution 2!** Class H coils with terminals. Do not bend lead wire crimp connection as this causes fatigue in the metal which may break under vibration.
- NOTE: For complete instructions, with troubleshooting, request sheet applicable to the series of brake that you have.**