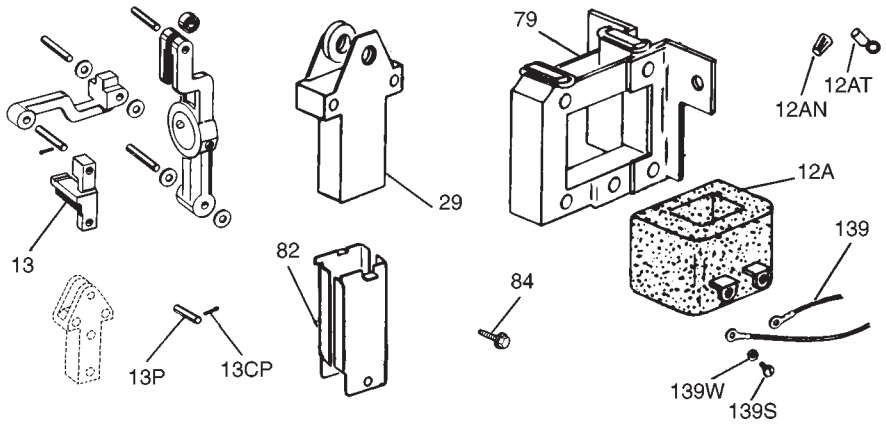
Service Instructions for No. 8 AC Coil Kit

Single and Dual Voltage Coils
Series 67,000 and 77,000 Brakes



Item no.	Description of Parts Included in Kit	Qty. per Kit
12A	Coil	1
139	Lead wire and terminal assembly	2
139S	Terminal screw	2
139W	Terminal lock washer	2
82	Plunger guide (metallic)	2
84	Screw - plunger guide	2
12AN*	Wirenut	2
12AT*	Crimp terminal	2

*Dual voltage kits only

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 dispers-ing 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.

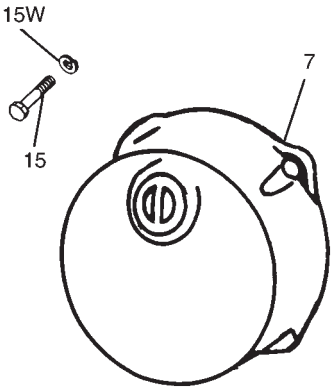
   b) Use a vacuum cleaner or a soft brush to remove dust from the brake. When brushing, avoid causing the dust to become airborne. Collect the dust in a container, such as a bag, which can be sealed off.
6. Maintenance should be performed only by qualified personnel familiar with the construction and operation 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 operated on the brake.

Instructions

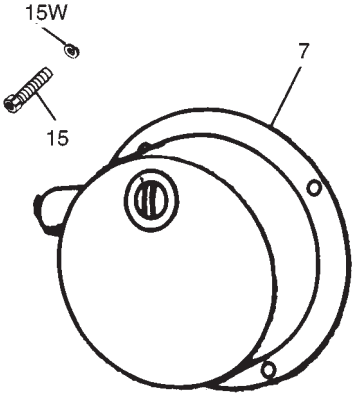
1. To remove housing, follow instructions listed under each individual brake series shown in the next column, then continue with the following steps.

67,000 Series



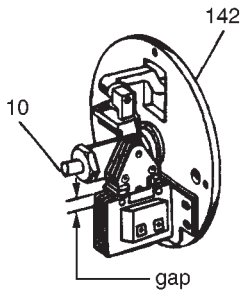
Remove four housing cap screws (15), lock washers (15W), and housing (7) by pulling back.

77,000 Series



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

67,000 and 77,000 Series



2. To replace the coil (12A), disconnect lead wire terminal screws (139S), lock washers (139W) and lead wires. It is *not* necessary to remove the support plate assembly (142).

   NOTE: Lead wire and terminal assembly (139) included in kit is for standard brakes only and cannot be used with the series 67,000 or 77,000 brakes.

3. Disconnect solenoid plunger (29) from link (13) by removing one of two cotter pins (13CP) and pin (13P). Save pin (13P) for reuse later. Lift plunger (29) from frame (79).
4. For metallic plunger guides (82), remove plunger guide screw (84) and lock washer (84W). Remove both plunger guides (82) by prying up on the flanges. Discard plunger guides.
5. Slide coil (12A) out from solenoid frame (79) in the direction of the coil terminals. If necessary, tap coil lightly with soft hammer. If solenoid coil had burned out, be sure to remove all foreign material from the solenoid plunger (29) and solenoid frame.
6. Install new coil (12A) into solenoid frame with same relative position as old coil. Assemble new plastic plunger guides (82), plunger guide screw (84) and lock washer (84W).
7. Reassemble plunger into solenoid by reversing Step 3. Use new cotter pin (not supplied) to replace used cotter pin (13CP).
8. To connect dual voltage coil *for low voltage only,* use crimp terminals (12AT) to attach *black* pigtail leads to coil terminals.
9. To connect dual voltage coil *for high voltage only,* use wirenut (12AN) to join *black* pigtail leads.
10. 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.
11. 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 measurement is 5/8”.
12. To adjust gap, insert screwdriver into adjusting stud (10) and turn clockwise or counterclockwise as required until 5/8” solenoid gap is attained.
13. Reconnect solenoid coil leads.
14. Replace housing and housing bolts in reverse order of the appropriate point in Step 1.
15. **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 a 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.

Rexnord Industries, Inc., Stearns Division, 5150 S. International Dr., Cudahy, Wisconsin 53110, (414) 272-1100 Fax (414) 277-4364