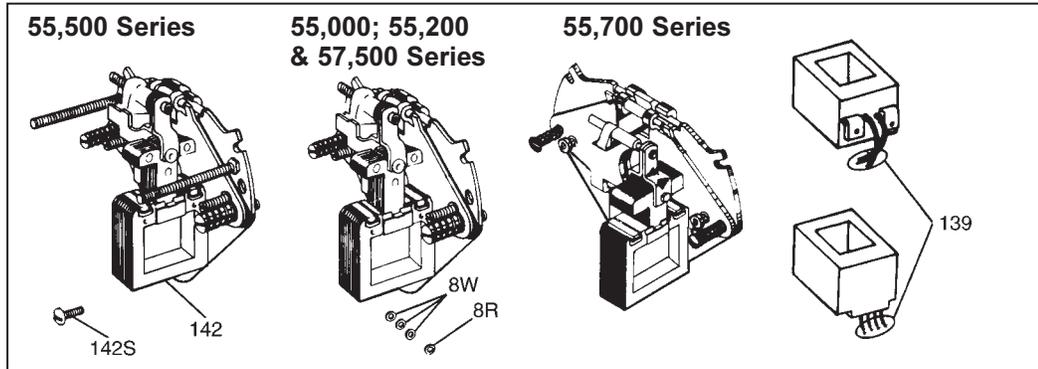


Service Instructions for Support Plate Assembly Less Solenoid, Coil and Solenoid Link Series 55,000; 55,200; 55,500; 55,700 and 57,500 Disc Brakes

Item No.	Description of Part Included in Kit
142S	Mounting screw Spacer washer Retaining ring Support plate assembly less solenoid, coil and solenoid link
8W	
8R	
142	
Note: Support plates shown with solenoids (not supplied) installed.	



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.

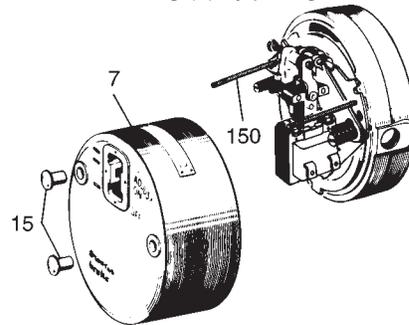
Warning! Any mechanism or load held in position by the brake should be secured to prevent possible injury to personnel or damage to equipment before any disassembly of the brake is attempted or before the manual release knob or lever is operated on the brake.

Instructions

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

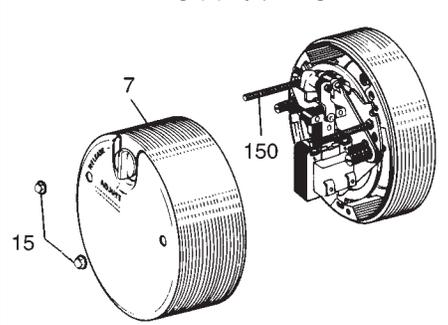
55,000 Series

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



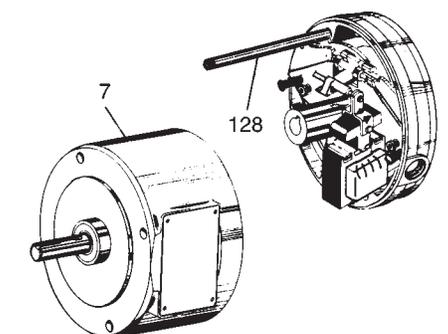
55,500 and 57,500 Series

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

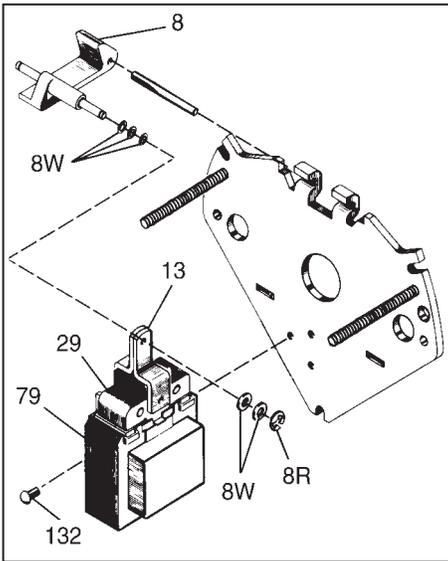


57,700 Series

- 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.



2. Disconnect coil lead wires (139) and remove support plate assembly (142) by unscrewing and removing three screws (142S). If solenoid and coil assembly are serviceable, proceed to Step 3. Otherwise, first obtain appropriate solenoid and/or coil kit(s) from brake replacement parts list.
3. Remove three solenoid mounting screws (132) to free solenoid frame (79).
4. Disconnect solenoid plunger (29) and solenoid link (13) as an assembly and save spacers (8W) for reuse. Discard old support plate assembly.
5. Install new support plate assembly less solenoid and coil (142), using new mounting screws (142S).
6. Reinstall spacers (8W) in reverse order of removal from SStep 4, on solenoid lever (8). Attach solenoid plunger link (13) to solenoid lever (8), then two spacers (8W) and new retaining ring (8R).
7. Slide solenoid frame (79) over plunger (29). Note: Upper set of mounting screw holes are used for



55,000; 55,200; 55,500 and 57,500. Lower set are only used for 55,700. Before tightening mounting screws (132), align plunger and frame so that mating surfaces are parallel. Manually pulling the plunger (29) down into the sealed position will aid this procedure. Energize coil and align frame for buss-free operation. Be sure screws are tight.

8. Adjust pressure spring(s) length to insure correct and/or equal height. Original spring lengths (under screw head to lever arm) for various brake series are given in the following Tables so that correct setting may be obtained by turning screws (11).

55,000; 55,200 and 57,500 Series

Torque (lb-ft)	Spring Length	
	55,000 55,200	57,500
1.5	1 1/8"	—
3 thru 10	1"	1"
15	1"	7/8"
20 & 25	1 7/8"	1 7/8"

55,000 and 55,700 Series

Torque (lb-ft)	Spring Length
1.5	1"
3 thru 10	7/8"
15	1 27/32"

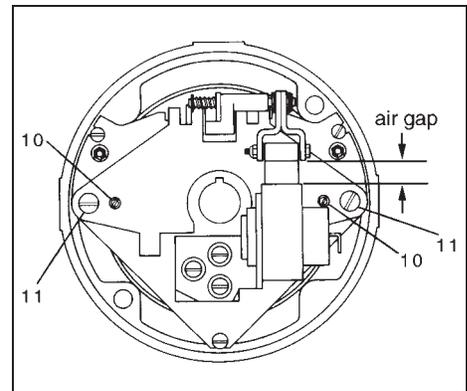
9. Manually lift solenoid plunger to maximum travel. Depress and allow solenoid plunger to snap out several times. Measure solenoid air gap between mating surfaces of solenoid frame and solenoid plunger. (On vertically mounted brakes, it will be necessary to push solenoid plunger into solenoid frame to the point where spring pressure is felt, before measuring solenoid air gap.) Then adjust solenoid gap to appropriate specifications.

The solenoid air gap measurements are shown in the following Table.

Solenoid Air Gap Measurements

Nominal Static Torque (lb-ft)	55,000 55,200 57,500	55,000 55,700
1.5 & 3	13/32"	13/32"
6	1/2"	1/2"
10	9/16"	9/16"
15	9/16"	9/16"
20 & 25	9/16"	—

10. 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 screw equal amounts counterclockwise.



11. Reconnect solenoid coil leads.
12. Replace housing and housing nuts in reverse order of the appropriate point in Step 1.
13. **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.