

## INSTRUCTION SHEET

### Bulletin 511 Type "S" 8½" A-c Brake

### INSTRUCTIONS

**1. Mounting** — Loosen jam nut "F" (See Fig. 1). Clamp the brake on the wheel by compressing torque spring "D" and tightening the adjusting nut "E". Insert shims between the mounting stand and the base of the brake until the brake is setting solid on base. Note — These brakes should be mounted in a horizontal position with the base below the solenoid and shoes. Side or vertical mounting can result in accelerated wear of the solenoid.

**2. Adjustment** — a. Compress the torque spring "D" until the desired torque is obtained. The approximate compressed length of this spring, to obtain rated torque, is given in the table below and on a small plate mounted on the pivot block, item 19. It is an approximate dimension and further adjustment may be necessary.

While making the torque adjustment, maintain a clearance of ½" at "C" when the brake is applied. Be sure that the solenoid is completely dropped out when checking the ½" clearance. The adjusting nut "B" will hold itself in this position. Tighten jam nut "F" to 40 ft.-lbs. minimum after final adjustment of "E" and "C".

b. Equalize the clearance between the shoes and wheel when the brake is released by setting screw "A".

**3. Re-Adjustment** — When the lining wears, the clearance "C" decreases. Never permit this clearance to become zero since complete loss of braking torque will result. When the clearance "C" becomes low, loosen jam nut "F" and again adjust to ½" by turning screw "E". No change in

torque will result from this adjustment if nut "B" is not changed. Re-tighten jam nut "F" to 40 ft.-lbs. minimum.

**4. Solenoid Spring Adjustment** — If the shoes are removed (to be replaced or relined), the solenoid spring adjusting screw "G" must be readjusted. Adjustment is made to give the proper solenoid spring length ("K" dimension) from the table below.

**5. a. Solenoid Renewal** — When replacing the solenoid coil, plunger, plunger guides, or complete solenoid observe the following precautions:

When removing the solenoid plunger remove one roll pin at either connecting link pin "L" or "M". Before re-assembly, degrease both the connector link pin and the new roll pin in a clean solvent. When re-assembling connector link pin "M" use loctite #271 with the new roll pin. When re-assembling connector link pin "L", regrease the upper link pivot pin after re-assembly. DO NOT grease the lower link pivot pin.

b. To replace the coil remove the solenoid upper thru bolt assembly "O" including the stop bracket and rubber spacers, and remove the coil. When re-assembling the solenoid upper thru bolt assembly and stop bracket, be sure that all washers and spacers are located as shown in Figure 2. Use additional thin washers as required to keep the plunger from binding. The self locking nuts on the solenoid upper thru bolt assembly should be torqued from 12-14 ft.-lbs.

c. When replacing entire solenoid, the mounting plate screws "P" must be torqued to a minimum of 8 ft.-lbs.

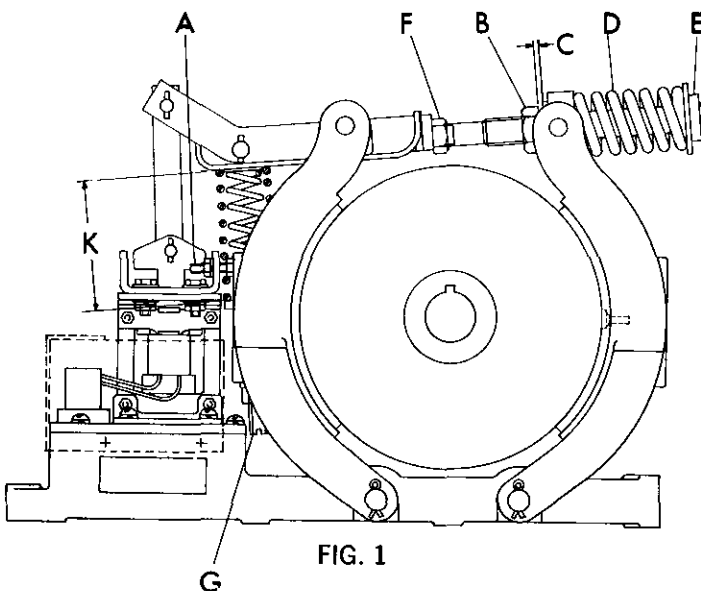


FIG. 1

Size of Brake	Torque Rating	Compressed Length of Spring "D"	Solenoid Spring Length "K" Dim.
8½"	85 Lbs. Ft.	3.10" (79mm)	3.66" (93mm)
8½"	110 Lbs. Ft.	3.10" (79mm)	3.82" (97mm)

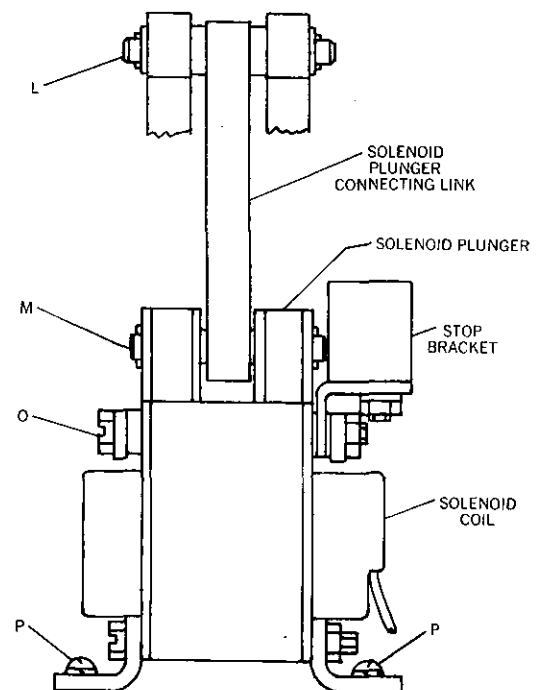
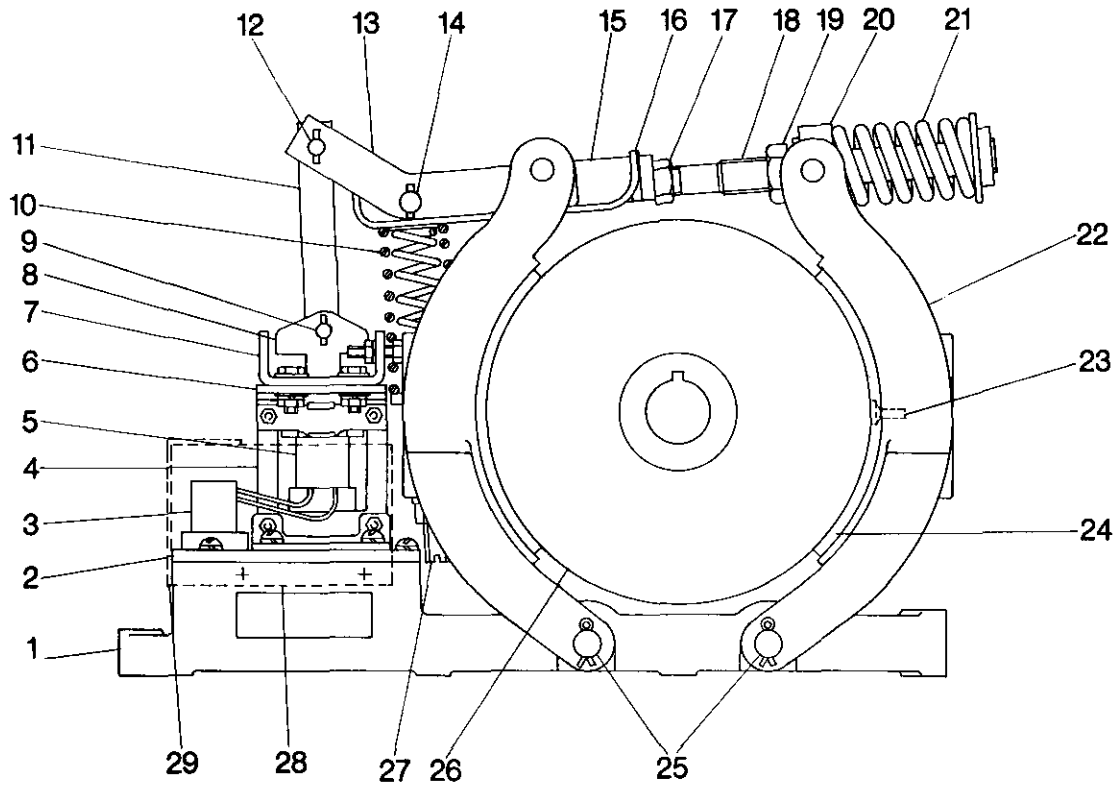


FIG. 2



### RENEWAL PARTS — Information Required

Parts **CANNOT** be sent promptly unless you include the **FOLLOWING** with your order: **PUBLICATION NO. 15475, ITEM NO., PART NO., DESCRIPTION AND COMPLETE NAMEPLATE DATA ON THE BRAKE**

Item No.	Description of Part	No. Req.	Part Number
1	Base	1	17-10818
2	Support Plate	1	79-9138
3	Terminal Block Assembly		
	Terminal Block	2	C381TP
	End Section	1	C381ES
4	Solenoid Complete (without coil)	1	88-2631
5	Coil (Give No. on Coil)	1	
6	Bracket	1	79-11159
7	Bracket	1	79-11158
	3/16-18 Hex Screw	1	911-5600
	3/16-18 Hex Nut	1	915-803Z
	3/16 Lockwasher	2	916-198
▲ 8	Plunger Assembly	1	51-1470
9	Pin	1	13-317-18
	Spring Pin	2	13-3186-16
▲ 10	Solenoid Spring		
	Inner (110 lbs. ft. torque only)	1	69-2890
	Outer	1	69-2889
11	Link Assembly	1	61-2540
12	Pin	1	13-317-10
	Sleeve	1	18-615-15
	Spacer	2	29-1440-2
	Washer	2	916-882Z
	Spring Pin	2	13-3187-2
13	Lever	2	24-5437

Item No.	Description of Part	No. Req.	Part Number
14	Pin	1	13-1145-13
	Spring Pin	2	13-3187-2
	Washer	2	29-934
15	Adjusting Stud Nut	1	15-1010
16	Spring Gland	1	49-4632
17	Jam Nut	1	15-175
18	Adjusting Stud	1	14-611
19	Lock Nut	1	15-1014
	Washer	1	916-1601Z
20	Block Assembly	1	17-10797
▲ 21	Torque Spring		
	85 Lb. Ft. Torque	1	69-2861
	110 Lb. Ft. Torque	1	69-741
22	Shoe Complete (Includes Items 23 and 24)	2	48-1149-2
23	Groove Pin	12	13-4762
24	Lining	2	48-1161
25	Pin	2	13-4679
* 26	Brake Wheel (See Below)	1	
27	Adjusting Stud	1	14-869
	Hex Nut	1	915-1403Z
	Lock Washer	1	916-199
28	Case	2	39-19798
29	Cover	1	47-21013
▲ 30	Set of Linings for Repairs (Includes 23 and 24)	1	6-166-6

▲ We recommend that these items be stocked. The quantity to be stocked will depend upon the total number in use.

\* Give Catalog "H" No. when stamped on the wheel or, if this No. does not appear on the wheel, give complete brake nameplate data and bore and keyway dimensions.