

125.OA

Bulletin No. M-103-CB



Warning

Forward this manual to the person responsible for Installation, Operation and Maintenance of the product described herein. Without access to this information, faulty Installation, Operation or Maintenance may result in personal injury or equipment damage.

Maintenance and Service Instructions of Airflex[®] Magnetic Brake Model SB (Spring Applied)



Caution:

Use Only Genuine Airflex[®] Replacement Parts

The Airflex Division of Won Corporation recommends the use of genuine Airflex replacement parts. The use of non-genuine Airflex replacement parts could result in substandard product performance, and may void your Eaton warranty. For optimum performance, contact Airflex:

In the U.S.A. and Canada: (800) 2335890

Outside the U.S.A. and Canada: (216) 281-2211

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SB BRAKE -SPRING SET

MAINTENANCE AND SERVICE:

There is no adjustment for wear or for torque, on standard units, and therefore no periodic maintenance required on these units, except when oil is used on disc pack. It is then necessary to maintain oil level, or lubricate the pack when operation becomes erratic. Use of oil provides smoother operation, but stopping and holding action is reduced from that of a dry unit. Service life is much improved by oil operation.

SERVICE OF DISC PACK, WHEN REPLACEMENT IS REQUIRED, IS AS FOLLOWS:

1. Remove coil housing by removing six screws located on flange of housing. Six springs will protrude from housing and must not be lost.
2. Remove pressure plate and slide entire disc pack off gear.
3. Replace with new disc pack, putting spring clips (if any) exactly as they were originally on the steel discs and interleave with friction discs, exactly in the order they were originally.
4. Add pressure plate and coil housing and **check,pressure** plate travel as coil is turned on. This travel should be visible (approximately $1/64''$) to ensure free-running disc pack with brake released.

SB BRAKE - SPRING SET

GENERAL:

Construction of these units is basically a fixed coil housing, which pulls a pressure plate away from the disc pack to provide release, when coil is energized. No manual release is provided, on standard units.

When coil is turned off, springs force pressure plate against disc pack, providing stopping and holding of the splined gear, thus braking the shaft on which gear is mounted.

INSTALLING:

Splined gear is first mounted on shaft, keyed, and fastened securely, either with set screws, or with positive stop on both ends of gear to prevent axial movement.

Entire brake unit then is slipped on over the gear, by indexing teeth of gear with splined discs in brake. Mounting bolts are then secured, coil connected to source of d-c power, and brake is ready to operate.

OPERATING:

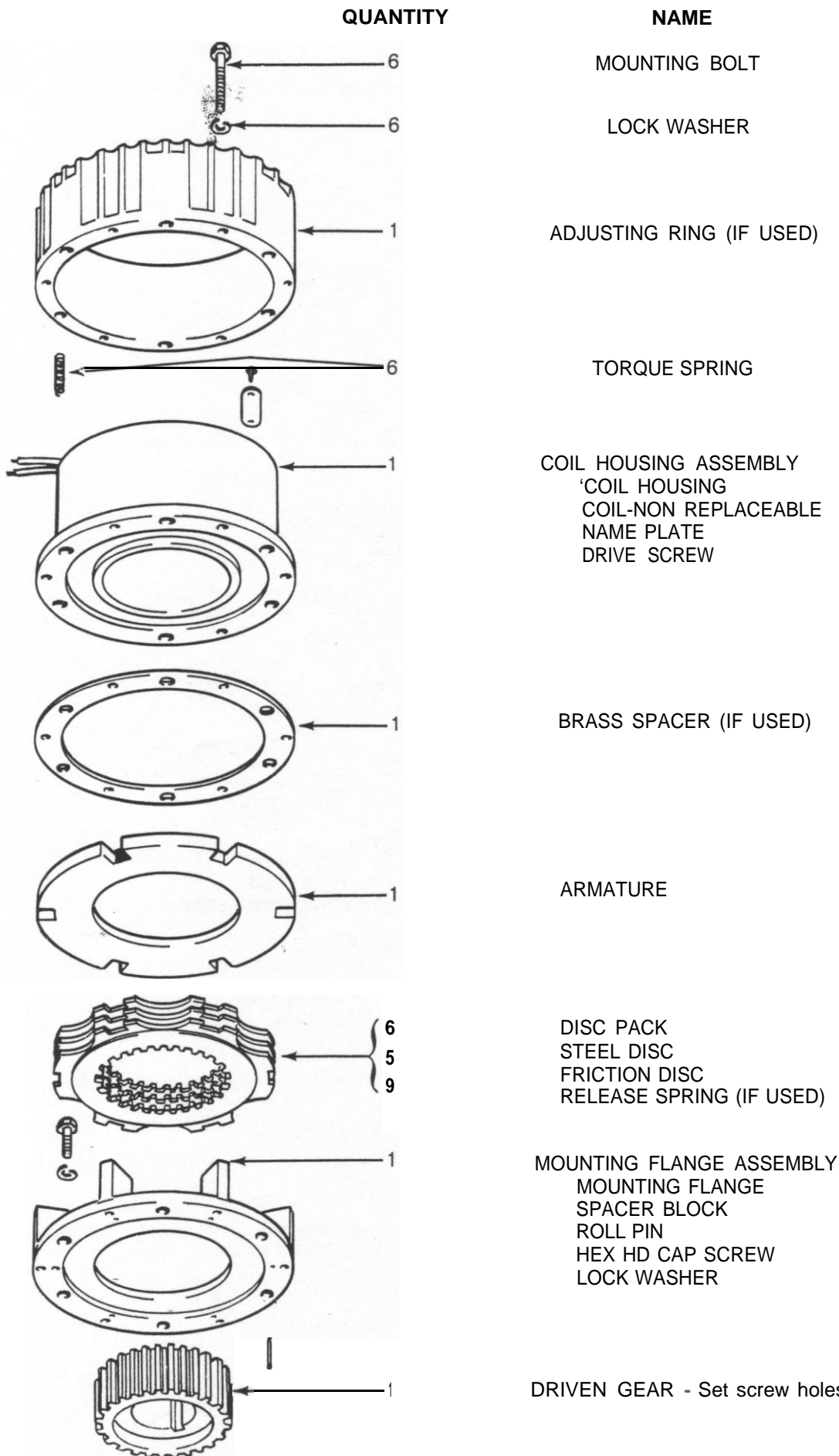
Brake is released by current in coil, and spring-set by the removal of that current. Therefore braking action **cannot** be controlled by the amount of current in the coil; brake is essentially an "ON-OFF" device, built for full release when full rated voltage is applied to coil.

There is a delay between application of voltage to brake and the full release of brake, which is listed as the "Torque Decay" time, by model, in Bulletin MAL-1 71-4. This is important when **shaft** rotation is attempted at the same instant as brake voltage is applied. Brake will delay or prevent **this rotation** until the time period is over, and when this is a major objection, such as in quick-cycle duty, or in clutch-brake drives, an **Airflex** control for SB brakes can be used to shorten this time delay.

Likewise, there is a delay between removal of voltage and the full setting of the brake, listed as "Torque Build-up" time on above data sheet. This short delay (or coast) before brake fully sets, is seldom objectionable, but if so, can be removed by cutting off brake voltage ahead of time by the amount of this delay.

Call or write for additional information Eaton **Corporation, Industrial** Drives Division 9919 Clinton Road, Cleveland, Ohio 441 1 1.

SB BRAKE - SPRING SET



EATON PRODUCT WARRANTY

Subject to the conditions stated herein, Eaton Corporation warrants to the Purchaser that each new Airflex Product manufactured by Eaton will be free from failures caused by defects in material and workmanship, and will deliver its rated capacity, for a period of twelve (12) months from the date of shipment to Purchaser, provided such Product is properly installed, properly maintained, operated under normal conditions and with competent supervision. Warranty claims shall be made in writing and the part or parts shall, if requested by Airflex Division, be returned prepaid to the Airflex Division for inspection. Upon a determination that a defect exists, Eaton shall thereupon correct any defect, at its option either by repairing any defective part or parts or by making available at Eaton's plant a repaired or replacement part. This warranty does not extend to normal wear parts or components of the Product, such as friction material and friction surfaces.

LIMITATION OF WARRANTY

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER WRITTEN, ORAL OR IMPLIED. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY EXCLUDED.

In no event shall Eaton be liable for special, incidental or consequential damages. Eaton's liability arising out of the supplying of such Product, or its use, whether in warranty, contract or otherwise, shall in no case exceed the cost of correcting defects in the Products as herein provided. Upon expiration of the twelve (12) month period, all such liability shall terminate. THE FOREGOING SHALL CONSTITUTE THE SOLE REMEDY OF PURCHASER AND THE SOLE LIABILITY OF EATON.