

National Association of Lift Makers

NALM

33/34 Devonshire Street London W1N 1RF
Director D M Fazakerley

telephone: 071-935 3013
fax: 071-935 3321

To: All Members
cc: The Quality and Technical Committee (Code No: 1722)

24 September 1993

Dear Sir

OTIS TYPE 10/15 ATL MACHINE BRAKES

A previous circular to all members relating to the above equipment was issued on 21 October 1988.

The company has since been made aware of a brake failure on a unit which they do not maintain caused by incorrect adjustment and excessive wear. Although fortunately this did not result in an accident the situation was potentially dangerous. It is therefore recommended that all installations with this type of brake are checked as a matter of urgency for adjustment and wear and as stated in the instruction attached (see Fig 1).

In the event of doubt the company's local office will be willing to assist in checking that the brake operation is in accordance with the enclosed instructions.

Please be guided accordingly.

Yours faithfully



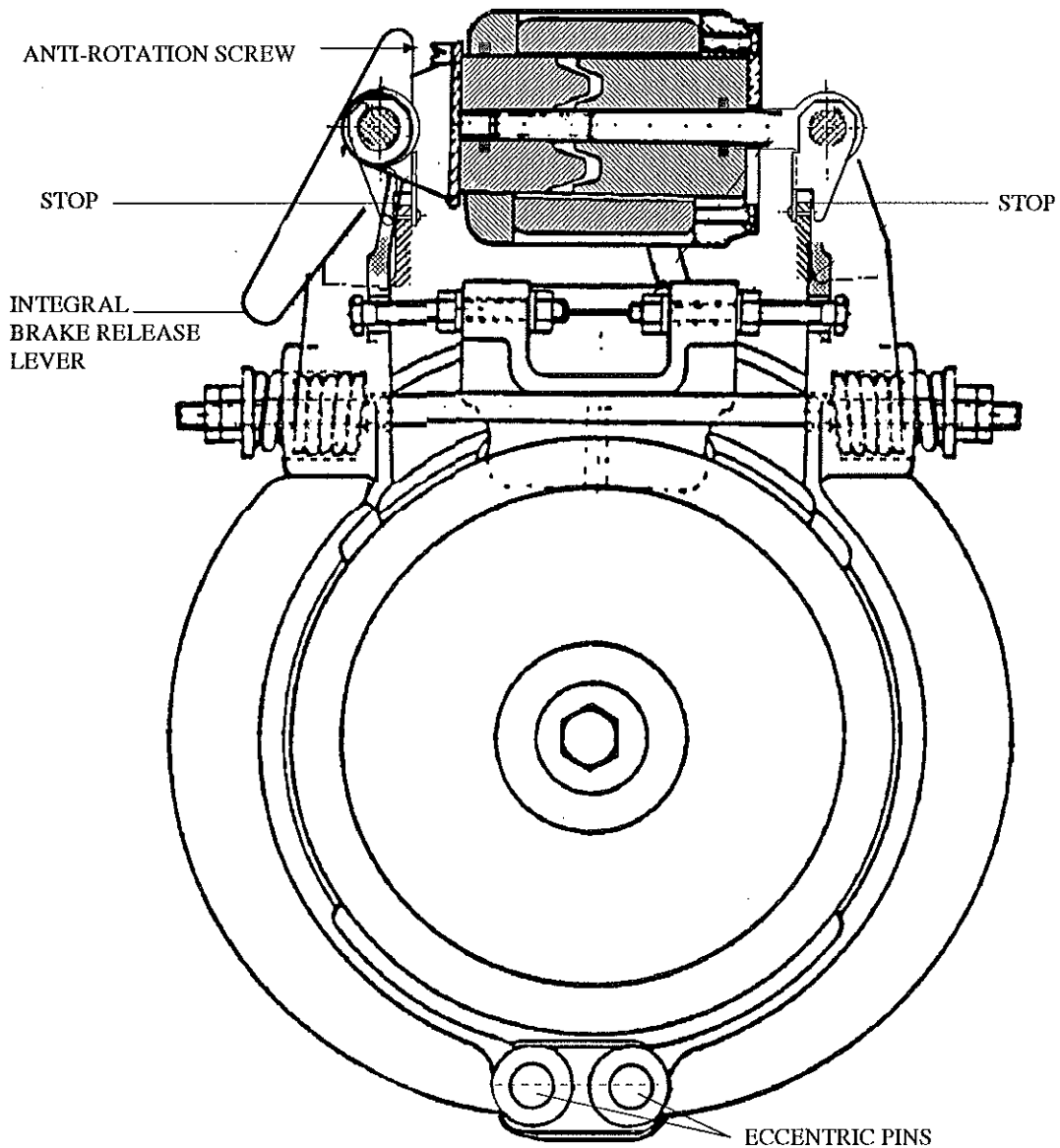
D M Fazakerley
Director

10/15 ATL BRAKE

Before any work is carried out on the brake, the empty lift car must be overtravelled at the top floor so that the counterweight is buffered.

Record the length of the exposed spring rod as shown in figure 2

FIG. 1



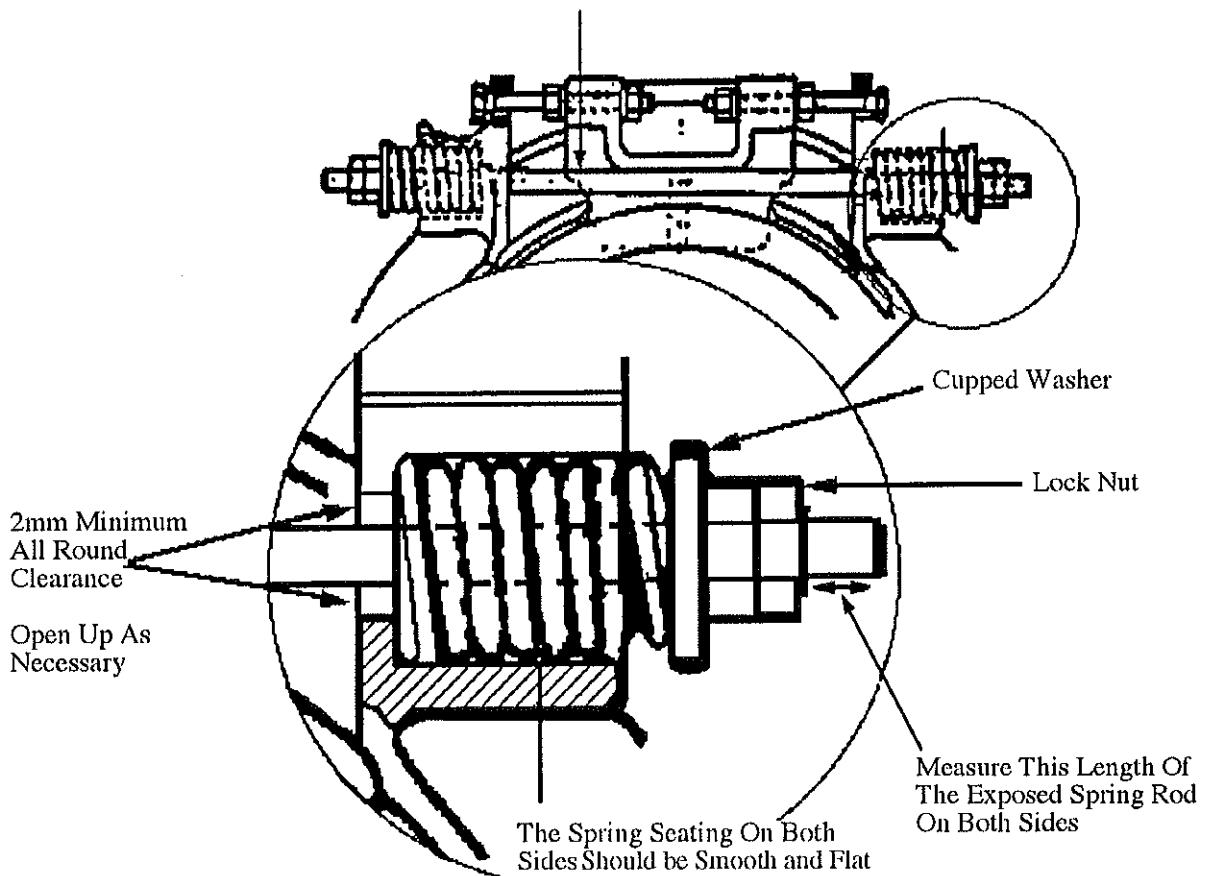
10/15 ATL BRAKE

Where the integral brake release lever is present, dismantle brake and remove lever and both riveted stops.

The revised method of manually releasing the brake is to be carried out by the use of a portable brake release ordered on the local Otis office.

- 1x LXMC0288W1 10 ATL Brake Release
- or 1x LXCM0288W2 15 ATL Brake Release,
- and 1x 78/9/49/048/06/1976 (Rev 10-92) 10/15 ATL Geared Machine Hand Winding notices.

FIG. 2.
Spring Rod



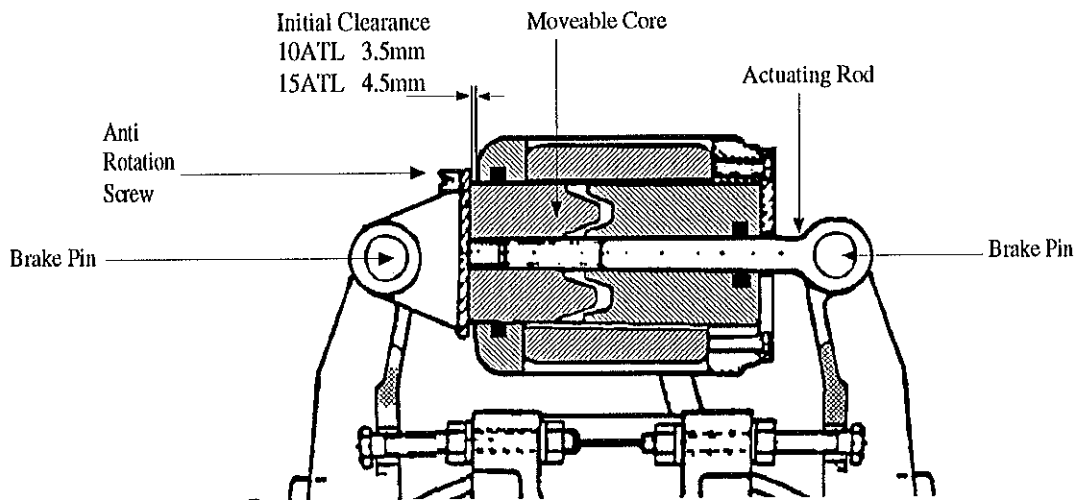
Clean up and lightly lubricate the movable core with graphite dust, the actuating rod and the brake pins (Fig. 3). Observe the condition of all internal parts and replace where necessary.

Check that the springs are correctly seated and that the rods are in the holes in the arms with at least 2mm all round clearance.

Remove the anti-rotation screw and measure the length of its thread. If the thread is longer than 5mm, then cut it to size.

10/15 ATL BRAKE

FIG. 3.



Rotate the magnet disc to leave an initial clearance between the disc and the solenoid housing:

10 ATL	3.5mm
15 ATL	4.5mm

It is important that at least 80% of the lining must be in contact with the drum centrally, this is achieved by adjusting the eccentric pins. If this adjustment cannot be achieved, then it may be necessary to replace the brake linings.

Ensure that the brake is mechanically free to operate and returns to the set position, without any signs of binding after it has been lifted by use of the brake release.

Ensure that the brake operates electrically. It may be necessary to move the jumper band on the series resistor "B", which is located in the controller, to insert minimum resistance until the brake does operate correctly.

Set the spring pressure so that the brake retards the lift car plus 125% contract load moving down at contract speed in the lower half of the hoistway.

*Dynamic load 1/25
only where brake will
maintained correctly
happy no need*