

Chapter 99

ACTUATOR, ENGLISH ELECTRIC, TYPE AE 4028

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LEADING PARTICULARS

Actuator Type AE 4028 ... ..	Ref.No. 5W/3574
Rated voltage ... ..	28V d.c.
Maximum working load ... ..	150 lb.
Normal working load ... ..	100 lb.
Clutch slip load ... ..	170-340 lb.
Static load, (as in aircraft strut) ... ..	400 lb.
Normal working stroke ... ..	1.1 in.
Time of stroke (on normal load at	
28V d.c.) ... ..	7 sec.
Distance between centres (on retract	
limit switch settings) ... ..	8.2 in.
New brush length ... ..	5/16 in.
Minimum brush length ... ..	0.225 in.
Brush spring pressure ... ..	4 - 5 oz.
Weight ... ..	2.75 lb.

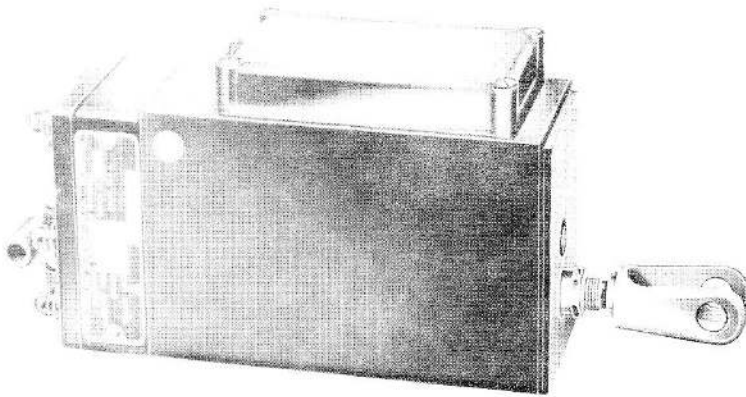


Fig.1 General view of actuator, Type AE 4028

#### Introduction

1. The linear actuator, Type AE 4028 (Fig.1) has been designed to provide remotely controlled linear motion against tensile and compressive loads up to a maximum of 150 lb.

#### DESCRIPTION

2. This actuator belongs to the same series as the AE 4010, Mk.3, the main difference being:-

- (1) The mounting point on the ram is a fork end on this actuator.
- (2) The retracted centre distance between the mounting points is  $8.200 \pm 0.010$  in.

(3) The stroke is  $1.10 \pm 0.005$  in.

(4) The potentiometer servicing instructions are the same as those for the AE 4010 Mk.3, except that in the extended position, the resistance between terminals 5 and 6 is 183 ohms  $\pm 7\frac{1}{2}$  per cent.

(5) The ball bearing at the commutator end of the motor has a flanged outer race.

(6) The speed of operation differs from that of the basic actuator.

3. The detailed description of the actuator Type AE 4010, Mk.3, given in A.P.4343, Vol.1, Sect.17, Chap.2, Appendix 13, is otherwise applicable to this actuator.

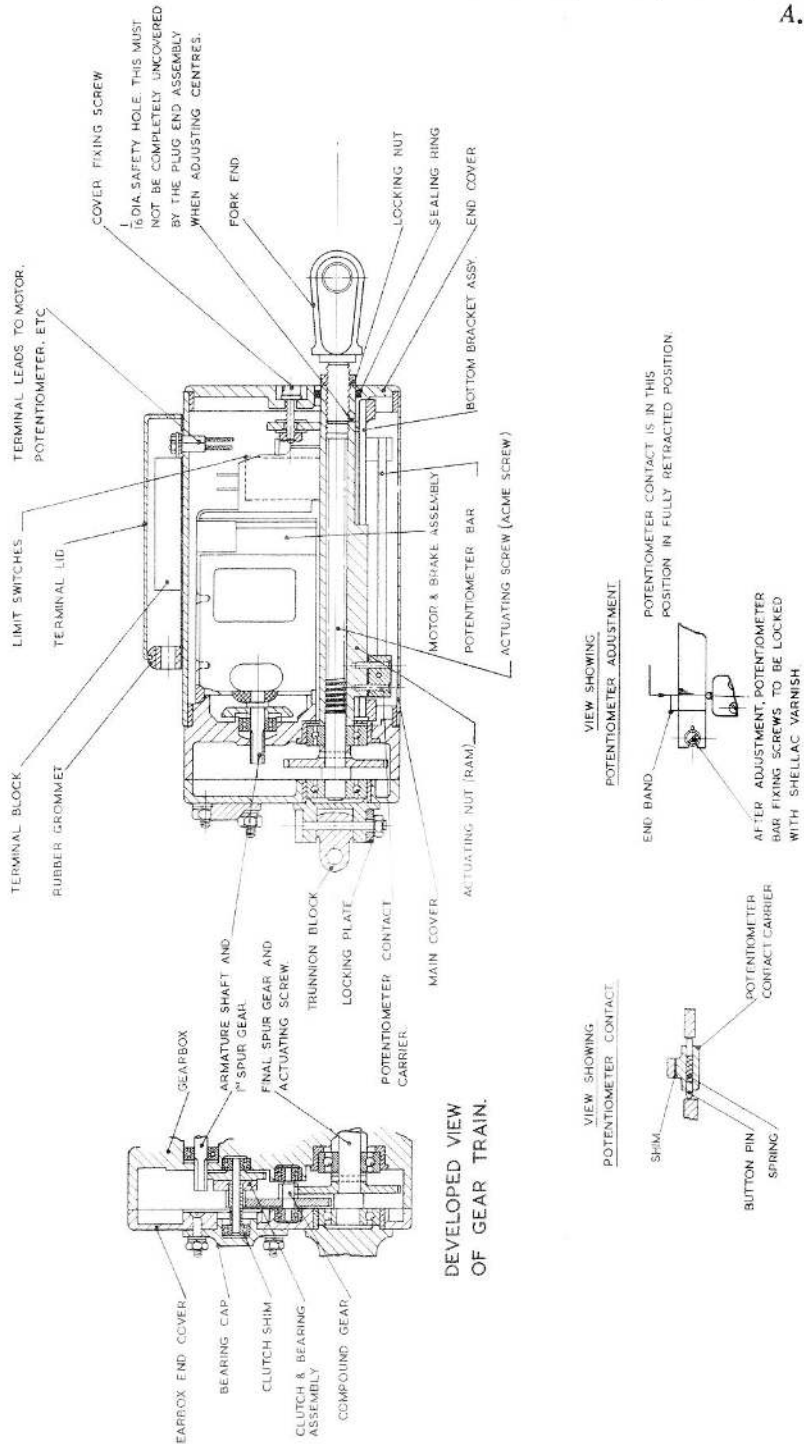


Fig.2 Sectional view of actuator

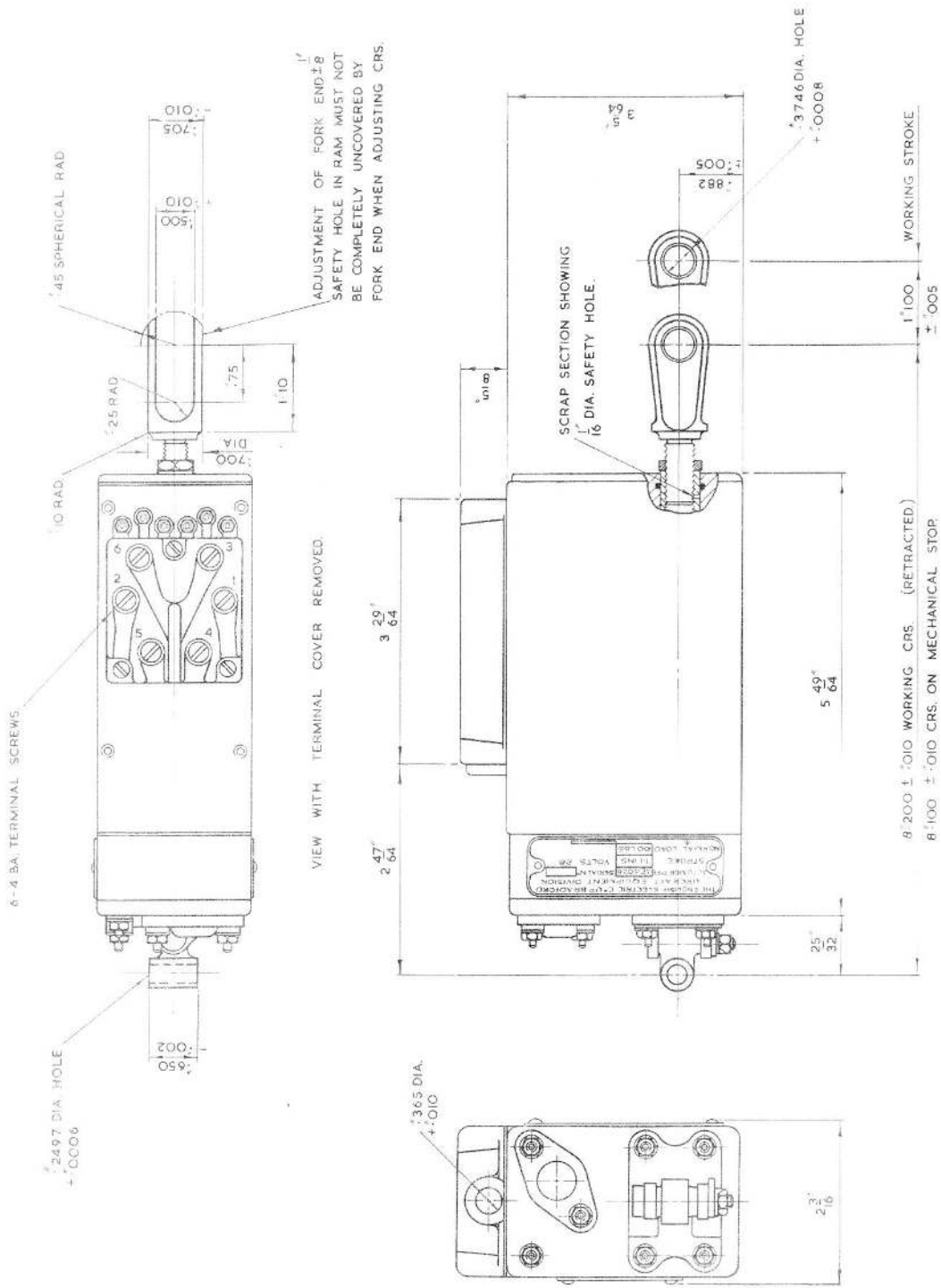


Fig.3 Installation drawing

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