

## Chapter 30

### ACTUATOR, WESTERN, TYPE EJ 50, Mk. 35 AND 35A

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#### Introduction

1. This actuator differs from that described in A.P.4343, Vol. 6, Sect. 17, Chap. 2 App. 15 on Western EJ 50 series in respect of end fittings, length and time of stroke, reduction gears, worm thread and electrical connection. Details of these variations are given below.

#### DISMANTLING, INSPECTION, REPAIR AND RE-ASSEMBLY

2. These are all described in A.P.4343, Vol. 6, Sect. 17, Chap. 2, App. 15.

#### End fittings

3. This actuator is attached at the fixed

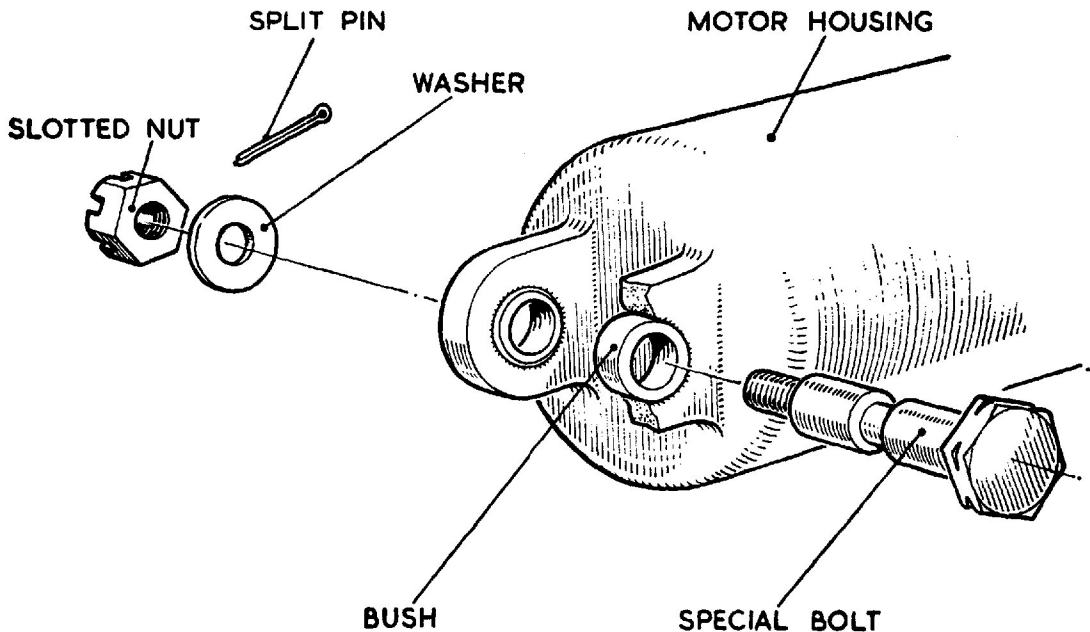


Fig. 1. Fixed end fitting



end by a special bolt 0.249 in. diameter, which passes through a fixed trunnion which is integral with the motor housing, whilst the moving end is attached by a  $\frac{1}{4}$  in. screwed plug.

4. The fixing centres, length and time of stroke, are as follows:—

- ## Reduction gears

**5. Four-stage epicyclic reduction gears are fitted, having a total reduction ratio of 581 : 1.**

6. The worm is a single start, 14 threads per inch, right hand Acme thread.

7. This actuator is fitted with a 4-pole Breeze plug, Ref. No. 5X/4003.

## Actuator

8. Load tests as follows are to be carried out on the actuator after repair and re-assembly.

- | <i>Load<br/>(lb.)</i> | <i>Max. current<br/>(amp.)</i> | <i>Max. time<br/>(sec.)</i> |
|-----------------------|--------------------------------|-----------------------------|
| 0                     | 1·20                           | 32                          |
| 50                    | 1·25                           | 33                          |
| 100                   | 1·30                           | 34                          |

**9. Motor tests are described in A.P.4343, Vol. 6, Sect. 17, Chap. 2, App. 15.**