# Chapter 20

# SWITCH, MAGNETIC, TYPE 7A, NO. 6 (ROTAX D9311)

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#### LEADING PARTICULARS

Switch, magnetic, Type 7A, No. 6		Stores	Ref. 5CW/5049
Voltage			
Main and shunt field contacts	 	•••	112V, d.c.
Operating coil	 		29V, d.c.
Current rating			
Main contacts	 		150 amp.
Shunt field contacts	 		2·5 amp.
Auxiliary contacts	 		5 amp.
Coil resistance (20 deg. C.)	 	12.35	to 13.65 ohms
Operating temperature range	 +	40 to	— 70 deg. C.
Weight	 		7 lb. 9 oz.

# Introduction

1. This magnetic switch, in common with others in the D9300 Series, is designed for use in 112-volt d.c. installations where a double pole reversing contactor is required for a short rated duty, e.g. to reverse the direction of rotation of an actuator motor.

### DESCRIPTION

**2.** The Type 7A. No. 6 switch (fig. 1) is identical to that described in A.P.4343, Vol. 1, Sect. 11, Chap. 13, except that it is fitted with fool-proof terminals.

### **SERVICING**

**3.** Assuming that the unit has been correctly installed and operated, servicing will normally

be restricted to visual inspection; if the unit is functioning satisfactorily, it should be assumed to be serviceable for continued use.

#### Inspection

- **4.** Remove the covers, and inspect the contact surfaces for signs of excessive pitting due to arcing. If the degree of pitting warrants it, the unit must be removed from service and a new one fitted.
- **5.** Inspect all the terminal points and ensure that the cables are securely connected and show no signs of damage due to vibration.
- **6.** Inspect the casing and mouldings for signs of physical damage or distortion and

(A.L.27, July, 55)

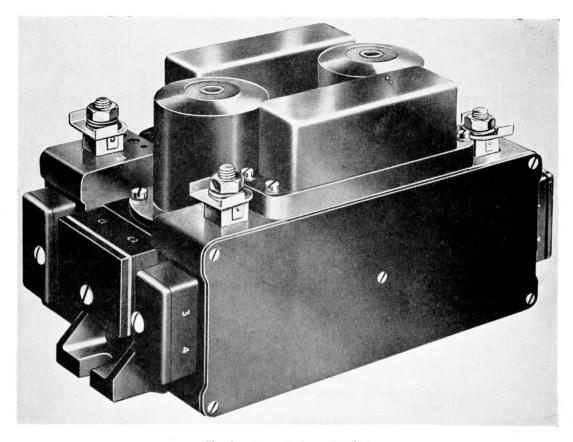


Fig. I. General view of switch

ensure that the mounting bolts are securely locked. Finally replace all covers, and fasten them securely.

## Operational test

7. After inspecting the unit in the aircraft, a test must be made to ensure satisfactory functioning. The equipment controlled by the unit should be operated to ensure that a complete operation is not restricted, and that current consumption is within the stated limits.

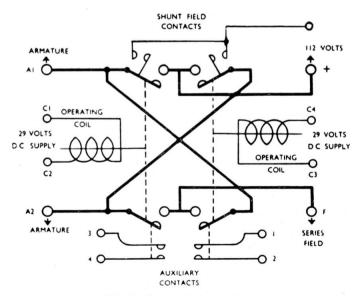


Fig. 2. Internal connections

# RESTRICTED