

Chapter 39

ROTARY SWITCH, WESTERN, TYPE RS331

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LEADING PARTICULARS

Rotary switch, Type RS331, Mk. 2	...	Stores Ref. 5CW/4844
Operating voltage	...	24 d.c.
Current rating	...	5 amp.
Overall dimensions—		
Length	...	3.89 in.
Diameter	...	2.3 in.

Introduction

1. The rotary switch, Type RS331, Mk. 2, is used for the control of engine anti-icing equipment. It is provided with a 12-pole plug for making the electrical connections.

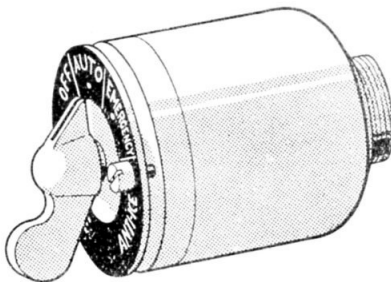


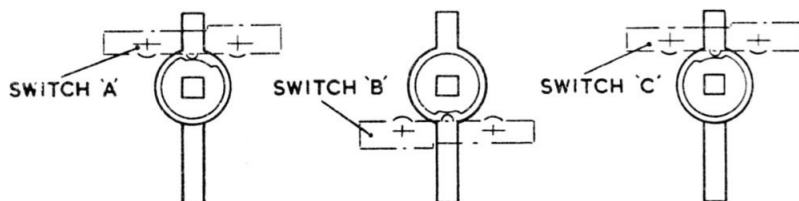
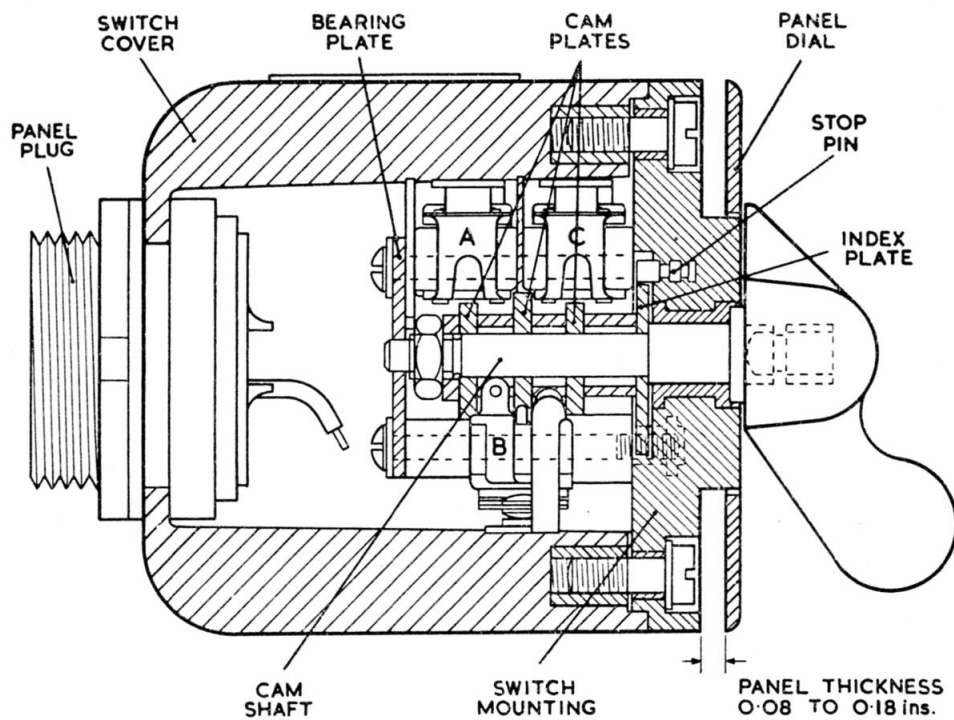
Fig. 1. Rotary switch, Type RS331, Mk. 2

DESCRIPTION

2. A general view of the switch is given in fig. 1, with a sectional drawing in fig. 2. The switch has three positions, OFF, AUTO and EMERGENCY, the latter engraved with red letters; at each setting of the operating knob, indentations on an index plate carried on the shaft engage with two spring-loaded balls in the switch mounting (not illustrated in fig. 2), so giving a positive detent action. A cut-away portion of the index plate comes up against a stop pin in the switch mounting at each extreme of travel of the operating knob.

3. On the shaft are three cam plates, which operate three snap-action switches, designated A, B and C respectively. These switches are shown in the diagram in fig. 3, together with the circuits connected at each setting of the operating knob.

(A.L.49, Dec. 55)



RELATIVE POSITIONS OF CAMS AND SWITCHES
VIEWED FROM TERMINAL END

Fig. 2. Sectional drawing of switch

RESTRICTED

4. External connection is made by means of a 12-pole Mk. 4 miniature plug, Ref. Z560150, six pins of which are not used. The internal wiring is shown in fig. 3; access to the switch mechanism is obtained, after removal of the switch from the panel, by unscrewing the two 4 B.A. ch/hd. screws which secure the switch cover to the mounting.

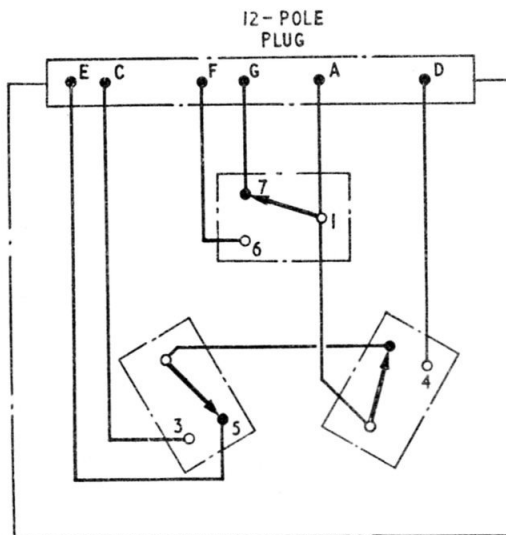
INSTALLATION

5. The switch is panel mounted, being

secured by means of the two 2 B.A. rd/hd. screws passing through the panel dial, which are suitable for a panel thickness of 0.08 in. to 0.18 in.

SERVICING

6. No servicing is permissible, apart from an inspection for freedom from damage and security of connections. The switch should operate positively for each setting of the operating knob; a faulty switch must be renewed.



KNOB POSITION	CIRCUIT CONNECTED
OFF	A - F - C
AUTO	A - G - D
EMERGENCY	A - G - E

Fig. 3. Circuit diagram