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Chapter 6

CONTROL BOX, PLESSEY Mk. 8

(Completely revised)

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LEADING PARTICULARS

Control box Mk. 8 (7CZ.106201) ...	Ref. No. 37F/20045
<i>Time switch</i>	<i>Teddington FHM/A79</i> (Plessey Part No. 7Z.42310)
<i>Slugged Relay, Type K.3000</i>	<i>Siemens Type RDJ.7397</i> (Part No. 7Z.106345)
<i>Speed control relay</i>	<i>Plessey Type Aβ/IM/28/30</i> (Part No. 7CZ.102260/1)
<i>Voltage range</i>	16—29V d.c.
<i>Input current</i>	15A max. (includes 6A for 180 mS for Ignition Unit)
<i>Overall dimensions</i>	Length 8.465 in. Width 7.025 in. Height 4.08 in.
<i>Weight</i>	5 lb. 10 oz.

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Introduction

1. The control box Mk. 8 (fig. 1) is used to govern the timed sequence of operations in Plessey liquid-fuel turbo-starter systems described in A.P.1181B, Vol. 1 and 6, Part 1, Sect. 1, Chap. 3, in which para. 40 to 48 and fig. 4 cover the operation of the control box system.

DESCRIPTION

General (fig. 1)

2. The control box houses a slugged relay, a speed control relay and a time switch together with their associated wiring and three connector plugs. The box is closed by a cover secured with six captive screws.

3. The three main components are mounted adjacent to each other on the base; the three plugs locate in apertures in one side; the cables are suitably bound together and routed to prevent fouling. The box and cover joint is sealed with a gasket.

Time switch

4. The time switch is covered in the FHM series of time switches described in A.P.4343C, Vol. 1, Book 2, Sect. 3, Chap. 21. Nine electrical connections are made to the switch, six at numbered locations in a terminal block and three at colour-identified solder tags.

Slugged relay, Type K3000

5. The slugged relay has a 16—29V d.c. operating coil and two normally-open contacts, both of which are used. Connections to the coil and contacts are made via solder tags.

6. The relay is fitted with a toe slug which delays the opening of the contacts for 0.18 seconds. The relay coil is energized when the cockpit push-button is pressed and is de-energized during the ignition cycle. The contacts stay closed for the delay period, allowing the speed control relay to remain energized until combustion has commenced when an alternative supply path to the coil

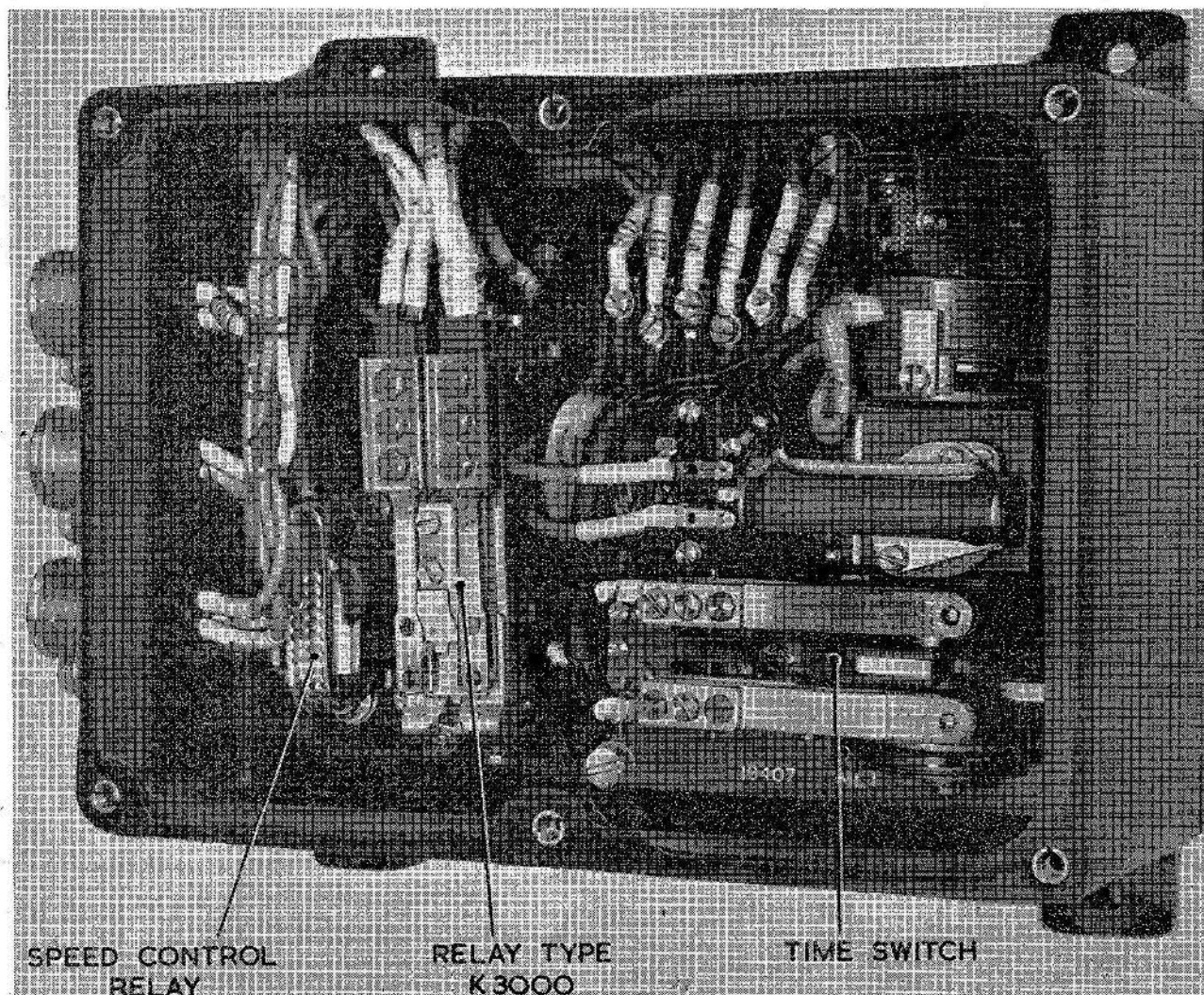


Fig. 1. View of Mk. 8 control box with cover removed

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