

Chapter 6

GROUND/FLIGHT SWITCH, TYPE D

LIST OF CONTENTS

	Para.		Para.
Introduction	1	Operation	5
Description	2	Servicing	8
Installation	4		

LIST OF ILLUSTRATIONS

	Fig.		Fig.
Ground/flight switch, Type D	1	Rear view of ground/flight switch	2

LEADING PARTICULARS

Ground/flight switch, Type D	Stores Ref. 5CW/3043
Height	5 $\frac{7}{16}$ in.
Width	5 in.
Depth	4 $\frac{3}{4}$ in.
Weight	2 lb. 4 oz.

Introduction

1. The ground/flight switch, Type D (fig. 1 and 2) is rated continuously at 120 amp. When in the GROUND position, the switch isolates the aircraft battery from the general

services circuits. It connects the aircraft battery in circuit when placed in the FLIGHT position. This allows ground testing of equipment to be carried out, using a ground starter trolley battery as a source of supply.

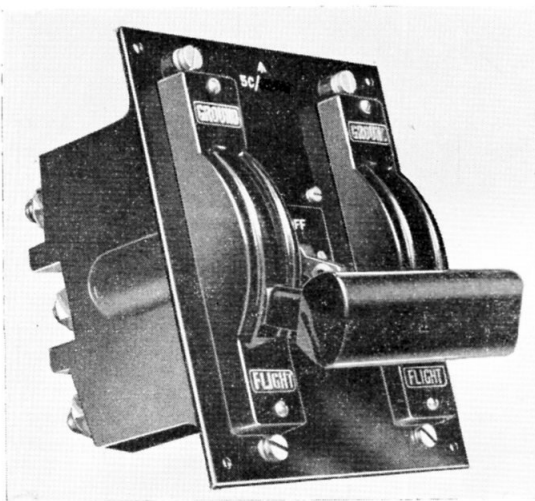


Fig. 1. Ground/flight switch, Type D

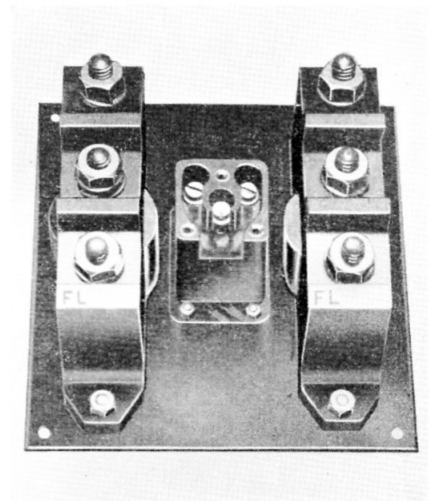


Fig. 2. Rear view of ground/flight switch

(A.L.12, Apr. 55)

DESCRIPTION

2. This triple-pole switch consists of two ground/flight switches, Type C, and one single-pole switchbox, Type B (Stores Ref. 5CW/543), mounted on a plate of zinc-plated mild steel. The switches are described in the relevant chapters of this section.

3. The switches are mechanically coupled by a bar fitting over the lever heads of the two Type C switches. An extension link connects the dolly of the Type B switchbox to the coupling bar; the bar is made in two halves and can be dismantled to allow removal of individual switches.

INSTALLATION

4. The switch may be mounted in any position convenient for wiring and accessible for operation. It is normally used in conjunction with the external supply socket described in Sect. 5 of this publication; for individual installation details, however, reference should be made to the appropriate Aircraft Handbook.

OPERATION

5. When the aircraft is on the ground with the switch in the GROUND position, the aircraft battery is isolated from the general services circuits.

6. With the switch in the GROUND position and the ground starter trolley plug inserted in the socket, the aircraft electrical services may be ground tested from the trolley battery.

7. When the aircraft engine is run up, and the switch is placed in the FLIGHT position, the electrical services are supplied by the engine-driven generator and the battery in the normal manner. It is essential that before take-off the switch is placed in the FLIGHT position.

SERVICING

8. Little servicing is normally required. During inspection, the switch blades and contacts should be lightly smeared with protective PX-7 (Stores Ref. 34B/238). An indication that the switch contacts are in good condition is given by a millivolt drop test; with a current of 80 amp. flowing, the drop between the terminal studs should not exceed 50 mV. The minimum permissible insulation resistance is 20 megohms.

RESTRICTED