

## Chapter 7I

### SWITCHBOX ASSEMBLIES, PART No. 8027, 8028 AND 8029

#### LIST OF CONTENTS

	Para.		Para.
Introduction ... ..	1	Single unit ... ..	6
Description ... ..		Operation ... ..	7
Double unit... ..	3	Servicing ... ..	9

#### LIST OF ILLUSTRATIONS

	Fig.
Double switchbox assembly, Part No. 8028 ...	1

#### Introduction

1. These switchbox assemblies, which are fitted to hydraulic jacks installed in aircraft, are coupled to green and red warning lights to indicate whether the jack is in the retracted or extended and locked position.

2. The differences between these units are:—

- (1) Part No. 8027. Double unit. Four terminals are joined by a commoning link and each switchette unit functions as a change-over switch.

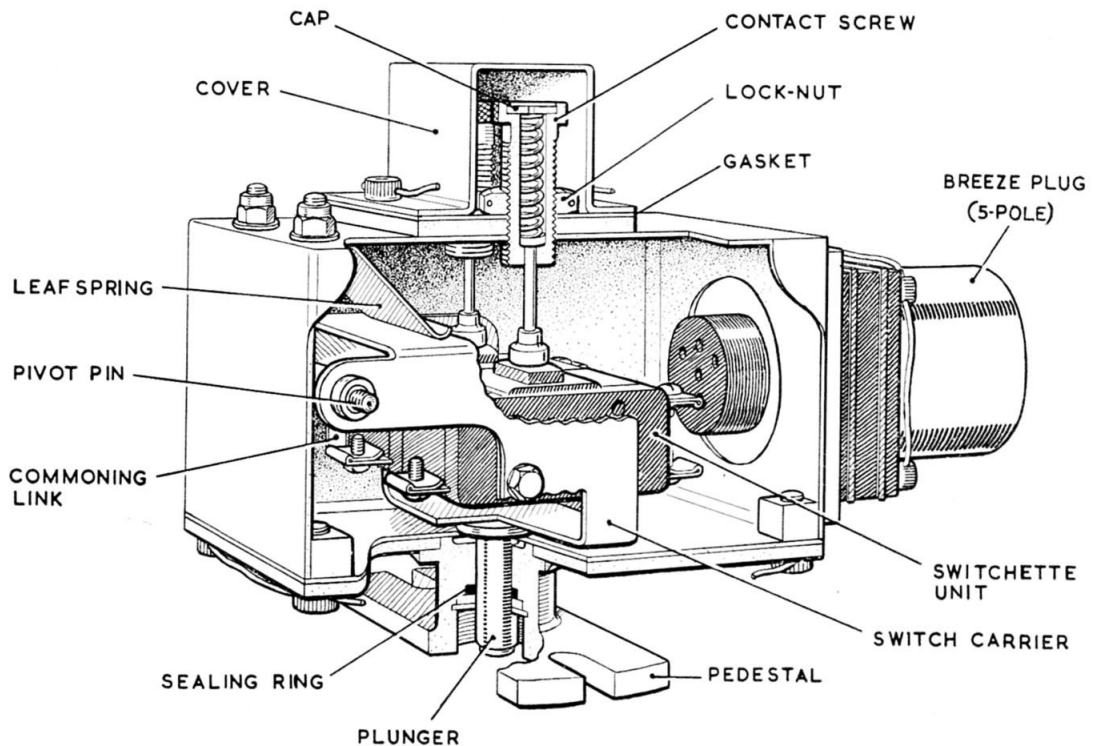


Fig. 1. Double switchbox assembly, Part No. 8028

- (2) Part No. 8028. Double unit. Two terminals are joined by a commoning link; one switchette unit functions as a change-over switch and the other switchette unit as a single-pole on/off switch.
- (3) Part No. 8029. Single unit. One switchette unit which functions as a change-over switch.

#### DESCRIPTION

##### Double unit

3. Each double switchbox assembly (*fig. 1*) consists of two switchette units which are mounted side by side on a switch carrier housed in an aluminium case. The switch carrier, which is pivoted on a pivot pin, is tensioned by a leaf spring secured to the top of the case by two bolts. An insulating piece of Bakelized paper is fitted between one of the switchette units and the switch carrier.

4. The base plate is secured to the case by four screws, and embodies a slotted pedestal housing an operating plunger, sealing ring and washer which are secured by a circlip.

5. The switchette units are actuated by two spring-loaded adjustable contact screws located beneath a cover on the upper case; each contact screw is locked by a lock-nut after setting. A 5-pole Breeze plug for the electrical

connection is mounted on the side of the unit and secured by four screws; gaskets are fitted between the external joints of the unit to prevent the ingress of moisture.

##### Single unit

6. The single switchbox unit, which functions as a change-over switch, is basically similar to that described and illustrated above, except that it has only one switchette unit and one spring-loaded contact screw. The Breeze plug is of the 4-pole type, and the terminals have no commoning link.

#### OPERATION

7. When the plunger is depressed, it contacts the switch carrier which pivots and depresses the spring-loaded contact screws and the buttons of the switchette units to make the circuit.

8. When the pressure on the plunger is removed, the spring-loaded contact screws return to their original position, permitting the switchette button to rise and break the circuit.

#### SERVICING

9. No servicing of this unit is permitted other than to remove the top cover to make the necessary adjustments for the correct functioning of the green and red warning lights, as given in A.P.1803F, Vol. 1, Book 2, Sect. 9. Defective switches should be renewed.