Chapter 11

IDENTIFICATION SWITCHBOX, TYPE B

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LIST OF ILLUSTRATIONS

LEADING PARTICULARS

Identification switchbox, Type B...	*Stores Ref. 5CW/372*
Overall dimensions	*3·7 in. × 3·6 in. × 1·15 in.*
Weight	*13½ oz.*
Current rating	*6 amp.*

Introduction

1. This switchbox, also known as the No. 2 Mk. 3, provides a means of control of the upward and downward identification lamps of an aircraft. It incorporates two 3-position switches, one for each lamp, and a signalling key by which visual signalling may be carried out from either or both lamps.

DESCRIPTION

2. The switchbox consists of a moulded plastic base with body ring and hinged cover of aluminium. The two switches are mounted in the base, and operated by handles in front of the cover. Each handle is attached to a spindle turning in a bush in the cover, and an arm beneath the cover, also attached to the spindle, carries a pin which engages in a hole in the switch arm. Thus when the cover is opened, the handles are disengaged from the switches. A projection on the handles engages in indentations on the front of the cover in each of the three positions and holds the handle in place.

3. The signalling key is built into the upper part of the box. The spindle projects through the side of the box, and the knob is carried at the end of an arm fixed to the spindle at right angles. The contracting arm is fixed to the spindle inside the box, projecting downwards, and the fixed contact is mounted on the base near the centre. The return spring is a helical spring in torsion, and is anchored to a spindle connected to an external adjusting ring and lock.

4. The four terminals for the external connections are arranged along the lower edge of the base. The internal connections are made by means of strips moulded into the base, except for the connection to the key arm, which is made by coiled wire.

OPERATION

5. Each identification lamp may be lit continuously by turning the corresponding switch to the STEADY position, or either or both may be flashed by turning the appropriate switch or switches to the MORSE position and operating the signalling key.

6. The range of movement of the key may be adjusted to suit the operator by turning the screw in the centre of the cover. The spring pressure on the key may be adjusted by disengaging the lock at the upper left-hand corner and turning the ring until the required pressure is obtained, when the lock should be released to engage in one of the slots.

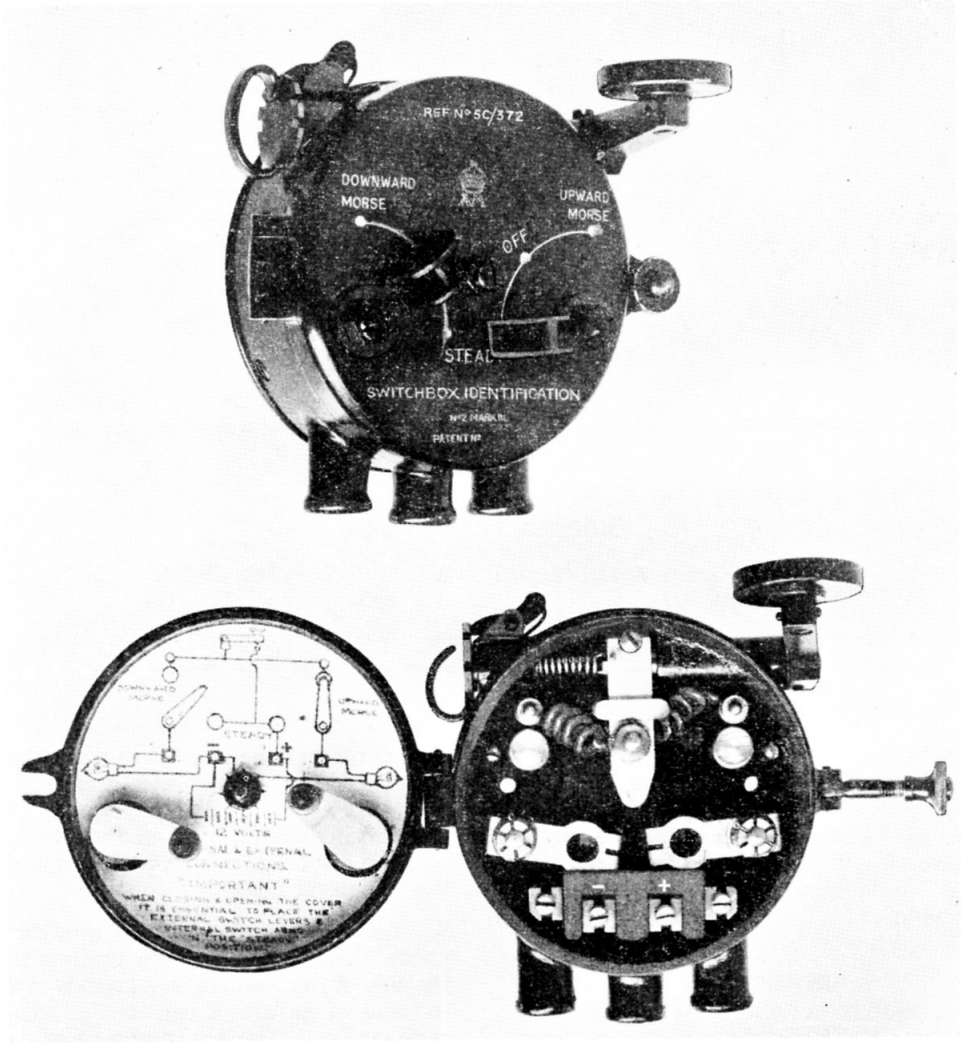

Fig. 1. Identification switchbox, Type B

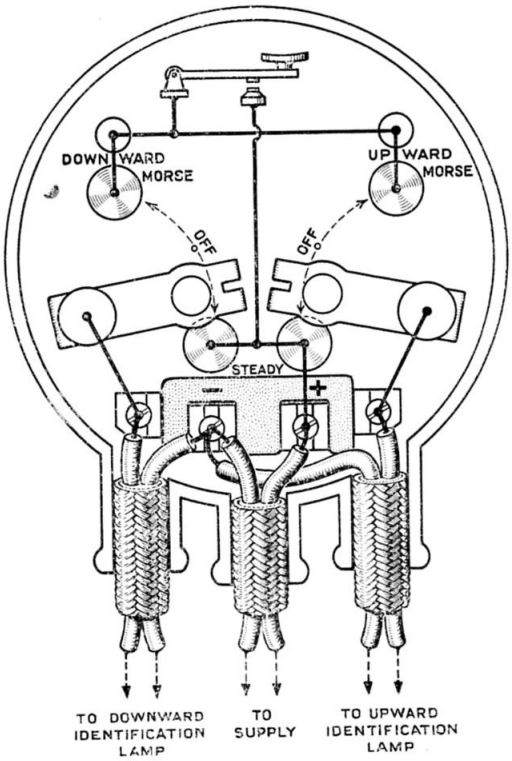

Fig. 2. Internal and external connections

SERVICING

7. The switch and key contacts should be kept clean and flat; if they become pitted or burned, they should be flattened with a smooth file or fine emery paper, and then wiped with a cloth moistened with lead-free gasoline. The rocking spindle of the key should occasionally be lubricated with a little oil OM-13 (Stores Ref. 34D/293) introduced through the hole at the top of the switch-box, and a little oil should be applied to the cover hinge, the latch screw, and the bearings of the switch levers. The joint between the cover and the box should be smeared with vaseline before the cover is closed to make the joint waterproof.

8. When the cover is to be opened the two switch levers should first be turned to the STEADY position, and when the cover is closed care must be taken to engage the operating pins in the holes in the switch arms. The cover must be firmly secured after it has been opened by screwing up the latch screw finger tight.