

# Chapter II

## LIMIT SWITCH, WESTERN, TYPE LS1721

### LIST OF CONTENTS

|                 | Para. |               | Para. |
|-----------------|-------|---------------|-------|
| Introduction... | 1     | Servicing ... | 5     |
| Description ... | 2     |               |       |

### LIST OF ILLUSTRATIONS

|                                       | Fig. |                         | Fig. |
|---------------------------------------|------|-------------------------|------|
| Limit switch, Type LS1721, Mk. 35 ... | 1    | Contact arrangement ... | 3    |
| Sectional drawing of switch ...       | 2    |                         |      |

### LEADING PARTICULARS

|                                       |                      |
|---------------------------------------|----------------------|
| Limit switch, Type LS1721, Mk. 35 ... | Stores Ref. 5CW/5147 |
| Operating voltage ...                 | 24 d.c.              |
| Current rating ...                    | 30 amp.              |
| Overall dimensions—                   |                      |
| Length ...                            | 1.9 in.              |
| Width ...                             | 1.45 in.             |
| Height (excluding trip lever) ...     | 0.67 in.             |
| Weight ...                            | $\frac{3}{4}$ oz.    |

#### Introduction

1. The limit switch, Type LS1721, Mk. 35, is of the snap-action type, and is operated by a trip lever 0.655 in. long.

#### DESCRIPTION

2. This switch (fig. 1 and 2) is a double-pole snap-action change-over type. The mechanism is contained in a black plastic case mounted on a duralumin base plate, and provided with two mounting slots.

3. The switch is operated by a central longitudinal spindle which carries a toggle guide connected through a toggle plate and spring to a moving contact bar assembly. As the trip lever at the end of the operating shaft is moved outwards, i.e., to the left as shown in fig. 2, the toggle plate is stressed until it passes top dead centre. At this point

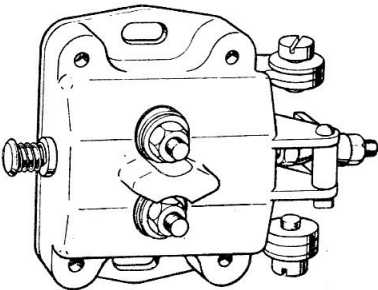


Fig. 1. Limit switch, Type LS1721, Mk. 35

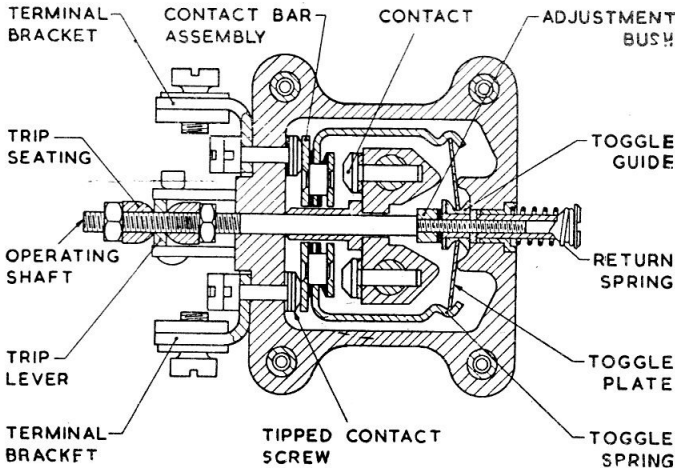


Fig. 2. Sectional drawing of switch

it snaps over to its new position, carrying the contact bar assembly with it, so breaking contacts C and D and making contacts A and B. After the pressure is released, a spring returns the switch mechanism to its normal position.

4. Terminal brackets at the trip lever end of the switch carry 10 B.A. terminal screws for contacts C and D, and on the top of the switch are 6 B.A. terminal nuts for contacts A and B. The contact arrangement is shown in fig. 3.

#### SERVICING

5. No servicing is permissible, apart from an inspection for freedom from damage and security of connections. The mechanism

should snap over positively when the trip lever is actuated, and a faulty switch must be renewed.

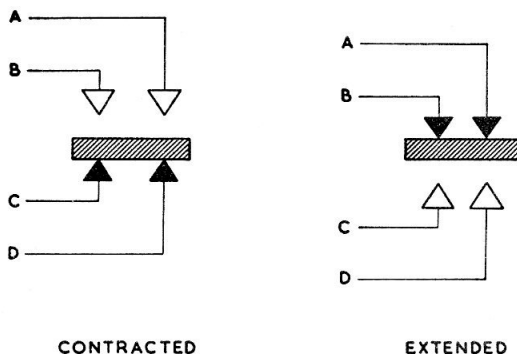


Fig. 3. Contact arrangement