

Chapter 39

WARNING LAMPS, THORN PRESS-TO-TEST TYPES

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Introduction

1. The Thorn series of Press-to-test warning lamps are used in many aircraft systems, and provide for the functional test of the

lamp and of the filament. Details of the individual lamps are given in Table 1, and details of the filament carrier caps are given in Chapter 38 of this Section.

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DESCRIPTION

2. The lamps are panel mounted and are secured by a front plate, and a locking washer and circular nut, which are screwed onto the body of the lampholder. Contained within the aluminium alloy body are the spring loaded press-to-test switch and the M.E.S. lampholder. The leaf spring contacts of the switch are connected to the terminal posts, which may have terminal screws or soldering spills for cable connection, and are spring loaded to bear on a barrel machined integrally with the side-contact of the lampholder. Holes drilled in the barrel permit the contacts to rest on an inner insulating sleeve, open circuiting the lamp connection as shown in fig. 2. The positioning of these holes determine the internal circuit of the lamp, and in this series gives the five circuit variants shown in fig. 2, the suffix letter of the lamps listed in Table 1 indicates the circuit used in each lamp. The filament carrier caps used with the warning lamps may be of glass or plastic construction, with or without a day/night dimmer and are identical to those described and illustrated in Chapter 38.

SERVICING

3. Servicing of the warning lamps is confined to inspection and functional testing, and the renewal of filaments, broken carrier caps or whole assemblies. Servicing of the contacts, which have the spring tension pre-set during manufacture, is not practicable.



Fig. 1. Thorn, Press-to-test lamp

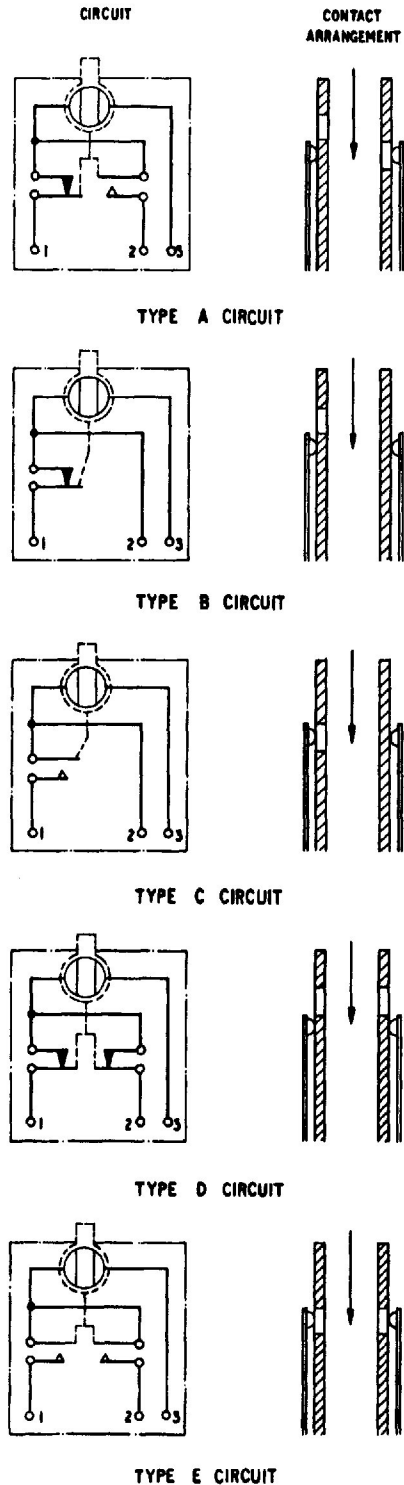


Fig. 2. Circuit diagrams and contact arrangements

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TABLE 1

Thorn warning lamps and accessories

Thorn Part No. 80/10/	Description
Warning Lamps	
0590/A	Solder terminals, short dimmer cap grooved
0590/B	Solder terminals, short dimmer cap grooved
0590/C	Solder terminals, short dimmer cap grooved
0590/D	Solder terminals, short dimmer cap grooved
0590/E	Solder terminals, short dimmer cap grooved
0591/A	Solder terminals, short plastic indicator cap
0591/B	Solder terminals, short plastic indicator cap
0591/C	Solder terminals, short plastic indicator cap
0591/D	Solder terminals, short plastic indicator cap
0591/E	Solder terminals, short plastic indicator cap
0592/A	Screw terminals, short dimmer cap ground
0592/B	Screw terminals, short dimmer cap ground
0592/C	Screw terminals, short dimmer cap ground
0592/D	Screw terminals, short dimmer cap ground
0592/E	Screw terminals, short dimmer cap ground
0593/A	Screw terminals, short plastic indicator cap
0593/B	Screw terminals, short plastic indicator cap
0593/C	Screw terminals, short plastic indicator cap
0593/D	Screw terminals, short plastic indicator cap
0593/E	Screw terminals, short plastic indicator cap
1461/A	Screw terminals, short glass indicator cap
1461/B	Screw terminals, short glass indicator cap
1461/C	Screw terminals, short glass indicator cap
1461/D	Screw terminals, short glass indicator cap
1461/E	Screw terminals, short glass indicator cap
Accessories	
0500	Front plate
0096	Top washer
0097	Bottom washer

Note...

The Thorn Part Numbers of the lamps listed, would normally have an additional suffix representing the colour of the indicator cap (i.e. 80/10/0591/A/Amber or 80/10/0591/A/Red) but for clarity these, and the A.M. Ref. No., have been omitted.

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