

SB/LP/69 HOME
F/5 EXPORT
MAY 1966

MODEL A.L.127 STOP LAMP INDICATOR-

DESCRIPTION AND OPERATION

General

The Lucas stop lamp indicator (see fig.1) comprises a combined lens and housing made of plastics, and a 2 A.R.A. relay which is a slide fit into the housing. The metal container of the relay-when in position-is rolled over on to an insulated plate fitted with three Lucar terminals marked "L" "P" and "B". At the other end of the container is fitted the indicator bulb.

The primary use of the indicator is to give visual and audible indication that the vehicle stop lamps are working correctly and therefore, giving warning to following traffic.

It is important, therefore, that the vehicle driver should have an uninterrupted view of the indicator. This condition will normally be fulfilled if the unit is mounted in a convenient position on the lower edge of the instrument panel.

Operation

A unit may be inserted either before or after the stop light switch. Typical circuits are illustrated in fig.2 and fig.3 The internal workings of the relay are contained within the chain lines.

The armature is shown at rest, its contacts being open.

It will be seen from the illustrations that the return path for the indicator bulb is via the metal container of the relay which, in turn, is connected to terminal "P".

When the stop lamp switch contacts are closed action is as follows:-

Current will flow through the series winding via terminals "L" and "B" and the armature will be attracted to the iron core.

Provided full lamp load passes through the coil the resulting magnetism will be sufficient to attract the armature and hold

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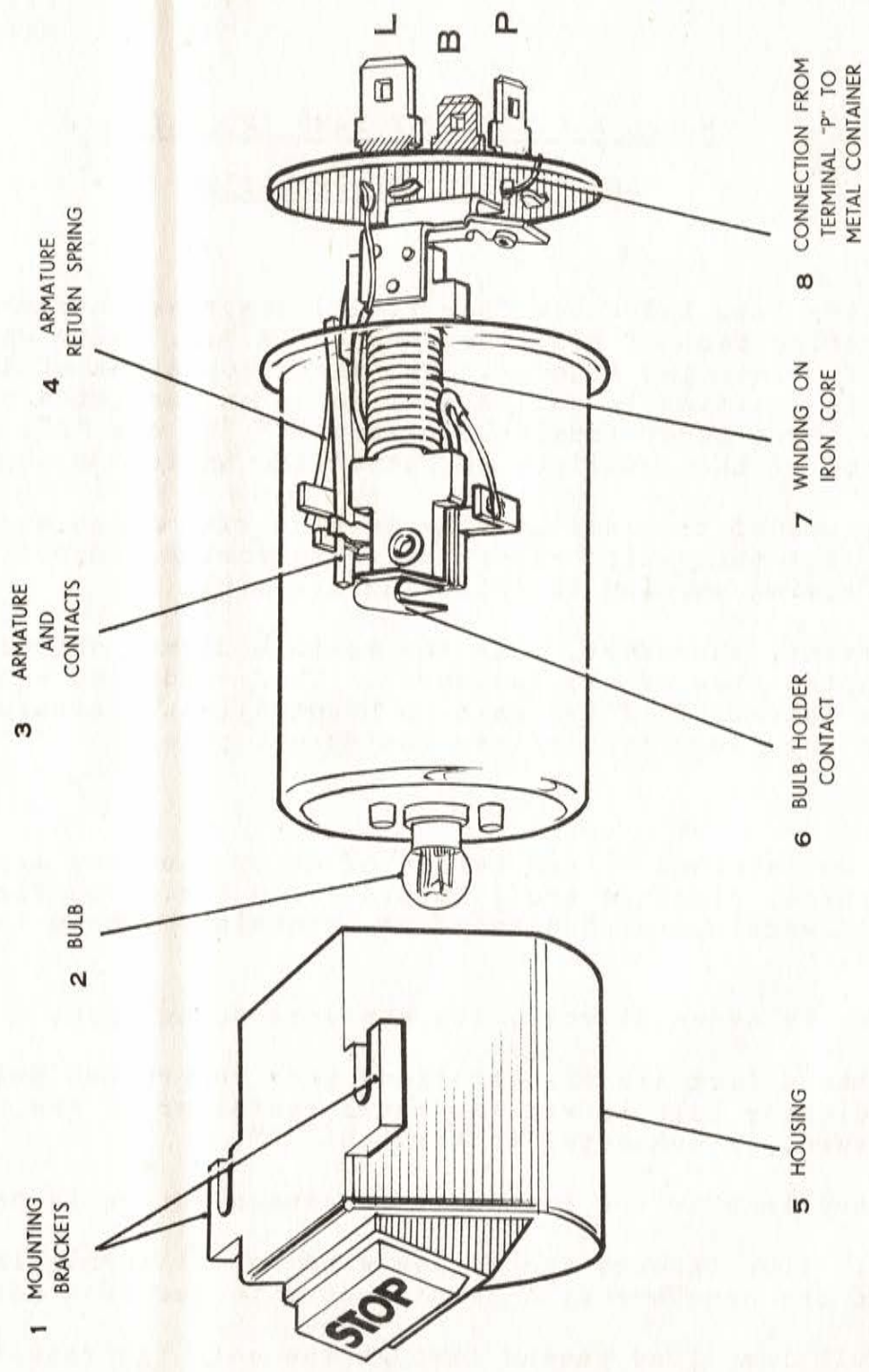


FIG. 1 STOP LAMP INDICATOR — INTERNAL VIEW

the contacts firmly closed. Under these conditions the indicator bulb will remain illuminated until the stop lamp switch contacts are opened again.

Should one stop lamp bulb fail, the reduced current flow and its consequent reduction of magnetism will result in the armature being initially attracted to the iron core and then returning to its original position.

Under these changed conditions the contacts will only close momentarily resulting in the indicator bulb being illuminated and then extinguished once each time the stop lamp switch is operated.

Installation

The unit may be attached to the instrument panel with two self tapping screws which must be spaced at $1 \frac{21}{32}$ " (42.07mm) centres.

Connexions should be made as illustrated in either fig.2 or fig.3. Suitable size cable for this purpose is 14/.010. Connexion to the relay should be made by using 3 Lucar connectors (part no.54942078) and covers (part no.54190042).

Connecting Unit - Fig.3

1. Ensure that stop lamps are working correctly.
2. Ensure that ignition supply is switched off.
3. Remove stop lamp switch feed cable from ignition switch controlled supply (at fuse if fitted) and extend to relay terminal "L". The two cables can be joined by using two snap connectors (part no.900269) and a sleeve (part no.900288).
4. Connect additional cable from ignition controlled supply to terminal "B" on relay.
5. Connect terminal "P" to a good earth on the vehicle.

Connecting Unit - Fig.2

1. Ensure that stop lamps are working correctly.
2. Ensure that ignition supply is switched off.
3. Remove from stop lamp switch the cable from stop lamps, and extend to terminal "L" on relay. The two cables can be joined by using two snap connectors (part no.900269) and a sleeve (part no.900288).
4. Connect an additional cable from the vacant terminal of stop lamp switch to terminal "B" on relay.

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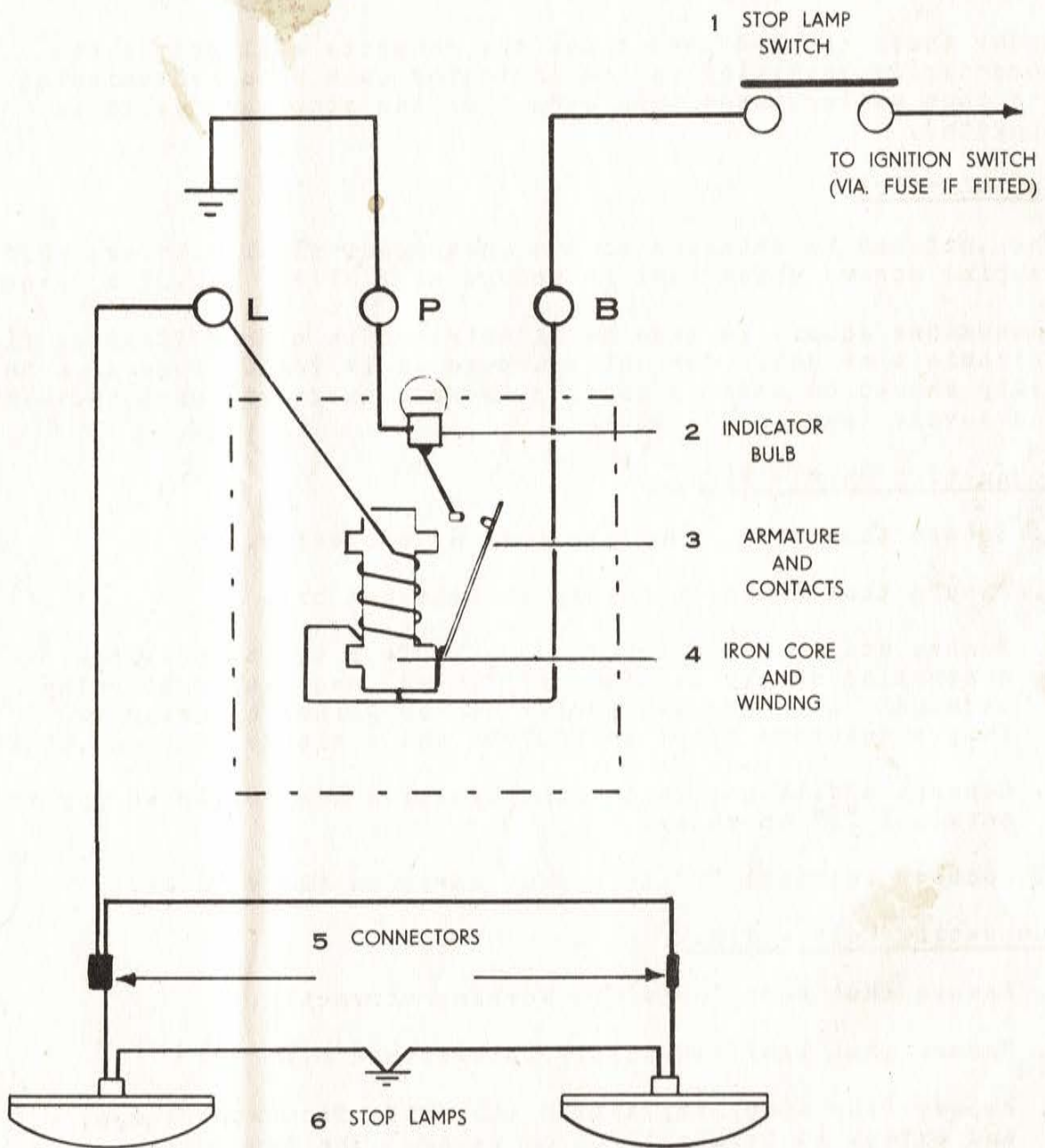


FIG. 2 INDICATOR INSERTED AFTER STOP LAMP SWITCH

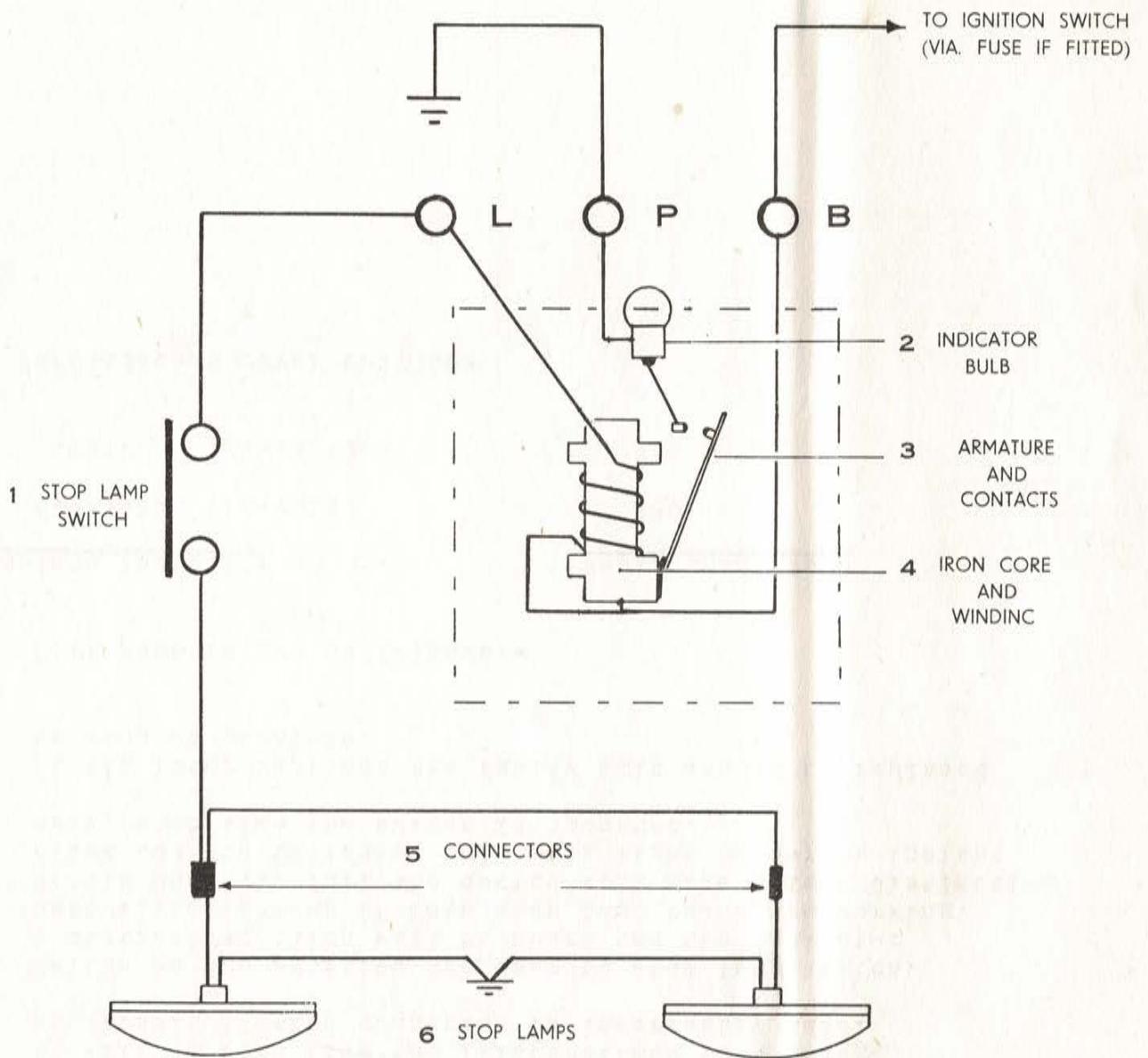


FIG. 3 INDICATOR INSERTED BEFORE STOP LAMP SWITCH

5. Connect terminal "P" to a good earth on the vehicle.

Checking Installation of Unit

1. Ensure that relay is correctly connected, particularly that the earth connexion is ONLY made to terminal "P". It will be seen from the illustrations that damage can result if this connexion is incorrectly made.
2. Switch on the ignition and operate stop lamp switch. A distinctive click will be heard and the indicator bulb will light up if both stop lamp bulbs are working. Should one bulb fail the device will give a less distinctive click and the indicator bulb will light up for an instant only, each time the switch is operated.

In the later instance the faulty bulb should be replaced as soon as possible.

Part Numbers are as follows:-

Complete Indicator

Replacement Bulb

62057024 (12-volt)

280

2505726 (24-volt)

285

Replacement cover 62570462