

Quality

# **EQUIPMENT**

**VOLUME 2** 

# WORKSHOP INSTRUCTIONS

**TRAFFICATORS** 

MODELS SF80 and SE100



## LUCAS WORKSHOP INSTRUCTIONS

### **TRAFFICATORS**

MODELS SF80 and SE100

#### GENERAL

These direction indicators are of the illuminated semaphore type. Model SF80 is flush fitting, while Model SE100 is basically the same unit enclosed in a metal case and externally mounted. When the control switch is operated, the solenoid is energised and attracts a plunger to which the arm is hinged, causing the arm to move upwards. At the end of its travel a contact on the arm mechanism engages with a spring leaf contact, so completing the circuit to the bulb inside the translucent moulding. When the current is switched off, the arm falls under its own weight. A spring locking catch holds the arm in the lowered position until the solenoid is energised.

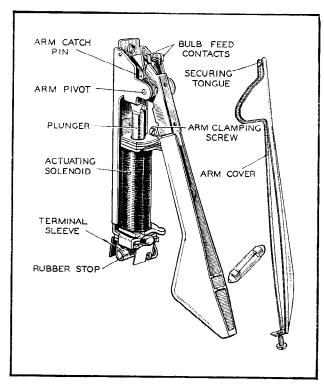


Fig. 1
Trafficator Model SF80 with arm cover removed

#### ROUTINE MAINTENANCE

In normal service the Trafficators need very little maintenance. Bulb replacements are dealt with in paragraph 3(d).

#### Lubrication — Every 6,000 miles

IT IS IMPORTANT TO USE ONLY THE SLIGHTEST TRACE OF OIL, AS ANY EXCESS MAY AFFECT THE OPERATING MECHANISM.

Lift the Trafficator arm and apply one drop of S.A.E. 30 oil to the bearing on which the arm pivots.

#### 3. SERVICING

#### (a) REPLACEMENTS

In the event of Trafficator failure through an internal fault, it is generally better to replace the complete movement rather than to attempt a repair. Replacement arms are supplied, and the procedure for fitting them is given in paragraph (e).

The bracket of the Trafficator movement is secured by a single screw to a fixing plate, shaped to suit the individual car and itself secured to the pillar or body member by two screws. This fixing plate is not supplied with a replacement Trafficator movement.

#### (b) TRAFFICATORS DO NOT OPERATE

(i) If both Trafficators are out of action, examine the fuse protecting the Trafficator circuit. Also examine the wiring from the supply point to the switch, from the switch to the Trafficators, and from the Trafficators to the earthing point. Normally the Trafficators are earthed through their brackets to the chassis, but if an earthing cable is fitted it should be examined also. Remember that a blown fuse may be caused by a short circuit in any of the other circuits protected by the fuse. Replace any defective cables and fit protective sleeving at points where chafing has occurred.

If the fuse still blows, remove the escutcheon plates or pillar facings to expose each Trafficator movement. Examine the internal connections, and especially the cable to the bulb in the arm, for chafed insulation and other signs of a short circuit.

(ii) Failure of one Trafficator only may be caused by the moving arm fouling the bodywork. Loosen the two screws securing the Trafficator fixing plate and move it until the arm can operate freely.

Lift the Trafficator arm by hand, and work it up and down. If it does not move freely, lubricate as described in paragraph 2, and apply a **slight trace** of Belmoline E oil to the inside of the bracket where the operating plunger bears on it.



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Do not use grades of grease, or oil which, when warm, might run down into the solenoid and cause the plunger to stick.

If excessive lubrication has caused clogging of the movement, clean the moving parts with petrol.

Examine the internal connections of the Trafficator for worn leads or a broken wire.

#### (c) TRAFFICATORS DO NOT LIFT TO FULL EX-TENT OR DO NOT FALL COMPLETELY HOME

See that the Trafficator arm does not foul the bodywork, and that the movement is correctly lubricated.

If the arm, although capable of moving freely, does not lift to its full extent, and at the same time the bulb lights with less than its usual brilliance, it is possible that a discharged or faulty battery, or a wiring fault, has reduced the operating voltage at the Trafficator.

# (d) TRAFFICATOR ARM LIFTS BUT BULB DOES NOT LIGHT

Remove the screw at the end of the Trafficator arm and lift the arm cover, pushing it inwards to disengage the small locating tongue at the inner end of the arm cover.

The bulb is a tubular festoon type, fitting between two moulded ribs inside the translucent cover. One connection to the bulb is made by a coil spring in the arm, and the other by the metal arm cover. When fitting a new bulb, take care that the connecting spring and bulb make good contact.

Examine the supply wire from the main terminal to the bulb, especially the connections to the contacts at the base of the arm and the body.

#### (e) REPLACING A DAMAGED ARM

Note: A new arm moulding and cover can be supplied as a replacement, and should be fitted in accordance with the instructions below. The Trafficator mechanism need not be removed from its mounting in either the flush fitting on externally mounted models.

Remove the screw at the end of the arm and lift the arm cover clear as in paragraph (d). To remove the moulding, loosen the captive clamping screw at its base. Before withdrawing the moulding from its socket lift clear the bulb contact spring.

Insert the new moulding in the socket and tighten the securing screw, then replace the bulb contact spring in the moulding. After inserting the bulb, replace the arm cover by sliding it along the moulding and arm base until the tongue is located. Then draw outwards until the arm cover securing screw can be replaced.

