



PHILIPS LIGHTING, City House, London Road, Croydon CR9 3QR

NUMBER:

C.I.S. 10/9

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INSTALLATION & SERVICING INSTRUCTIONS FOR MA SOX ROAD LIGHTING LANTERNS

Caution: Ensure the electrical supply is disconnected
at the mains during installation and servicing.
If in doubt consult a qualified person.

ENSURE THIS INSTRUCTION LEAFLET IS PASSED ONTO THE END USER.

1. For use in normal outdoor conditions, IP54 Splash proof.
2. For use with Philips SOX or SOX-E lamps.
3. Refer to rating label on luminaire for nominal voltage/frequency requirements.
4. Classification – Class 1 (Important: this lantern must be earthed).
5. For luminaire weights and dimensions see Table 1.
6. Luminaire made in Great Britain.
7. For use with 90W, 135W and 180W SOX lamps or SOX-E66, 91 and 131 lamps.
8. MAE Lanterns and gear shoes with an "E" (e.g. R8021E) contain SOX-E optimum gear and suitable for SOX-E lamps only.

Remove the lantern from the packing and ensure the lamp position is set up for the required distribution. If the lamp position is required to be changed, proceed as follows:—

1. LIGHT DISTRIBUTION ADJUSTMENT (ALL TYPES)

To unfasten refractor bowl, release all clips (four or six). There are two types of clips used to retain the refractor bowl. One set of clips (Type A) disconnect from the bowl on release; the other set (Type B) are fixed to the bowl. For complete removal of the bowl, pull and lift the clip and rotate over the locating lug (A).

The lantern should be adjusted to give the desired distribution:—

BS.4533 Cut-Off Distribution. The lamp support and lampholder should be located in position 1.

BS.4533 Semi-Cut-Off Distribution. The lamp support and lampholder should be located in position 3.

NOTE: Position 2 is for Continental Semi-Cut-Off use.

The lanterns are factory set as follows:— all MA60 types position 1 (cut-off)
all MA90 and MA50 types position 3 (semi-cut off)

2. MOUNTING THE LANTERN

Mount the lantern spigot entry onto the column spigot ensuring it is correctly located (see Fig. 1). If the lantern is mis-located (see Fig. 2) it could come loose during service.

Lantern alignment in the plane parallel to the road surface may be achieved by using a spirit level across the bottom edges of the canopy.

Tighten the two M10 Allen screws to a torque of 22-24Nm. It is advised that a torque wrench is used for this process. The procedure should be to tighten the first screw, tighten the second screw, then re-check the first screw to ensure it has not become loose (see Fig. 3).

3. INSTALLATION OF LANTERN WITH REMOTE CONTROL GEAR "S" VERSIONS (FIG. 4).

Connect the incoming cables from the control gear to the terminals marked L and N.

Connect the incoming earth to the terminal marked . Tighten the cable clamp.

Photocell.

Where a NEMA photocell socket is supplied, the Photocell connections are marked on the four-way terminal block. Where it is required to fit a two part photocell in an *2 lantern a suitable hole is provided together with a two-way terminal block in the lamp housing for electrical connections. Use high temperature P.V.C. cable.

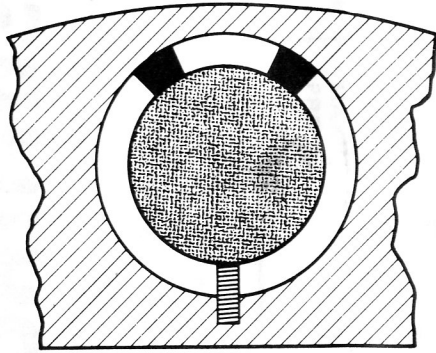


Fig. 1

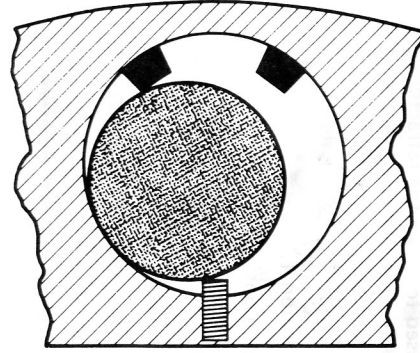


Fig. 2

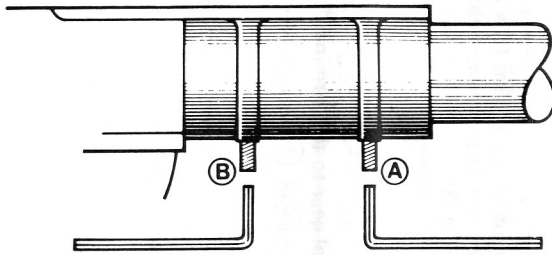


Fig. 3

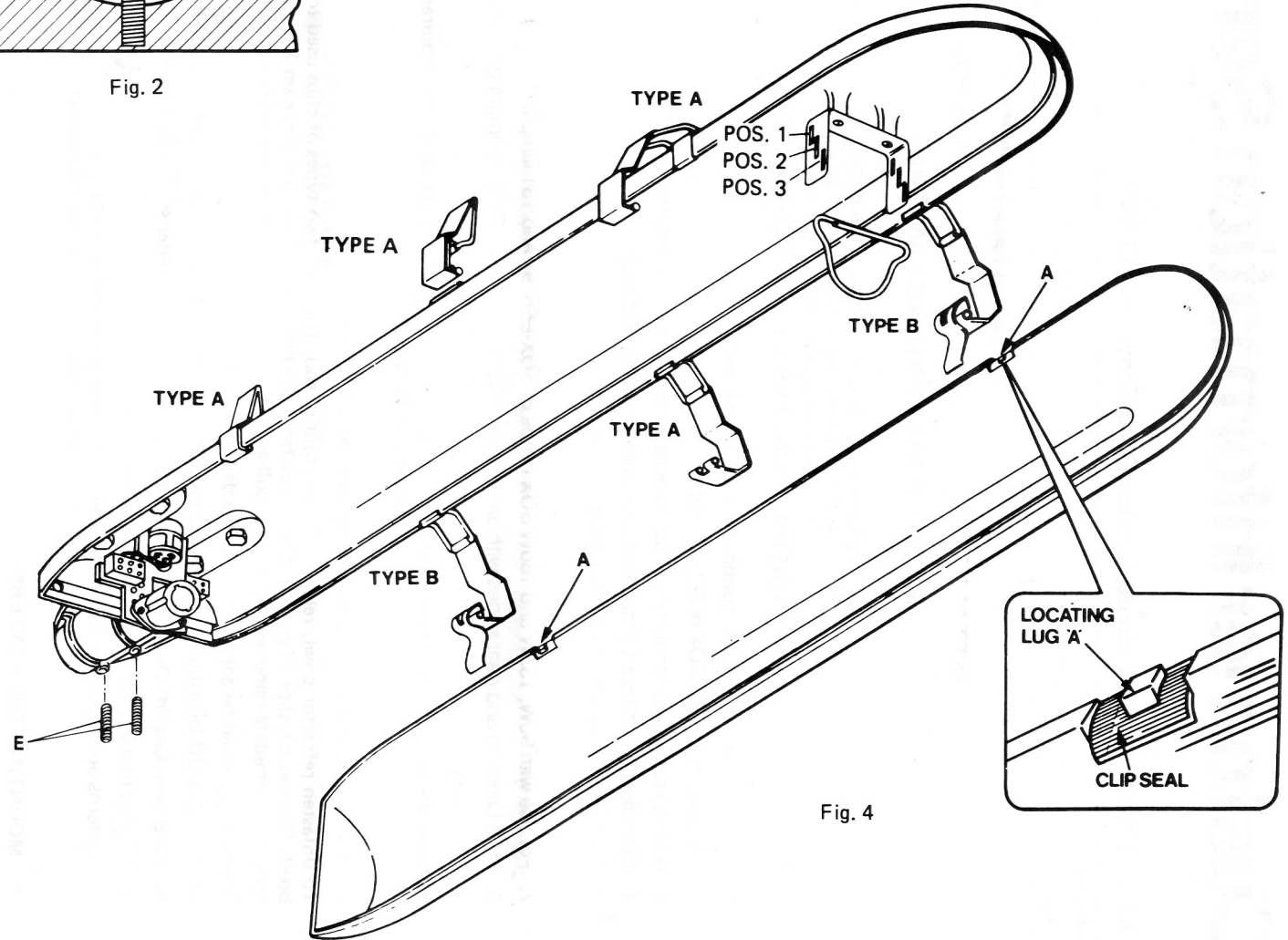


Fig. 4

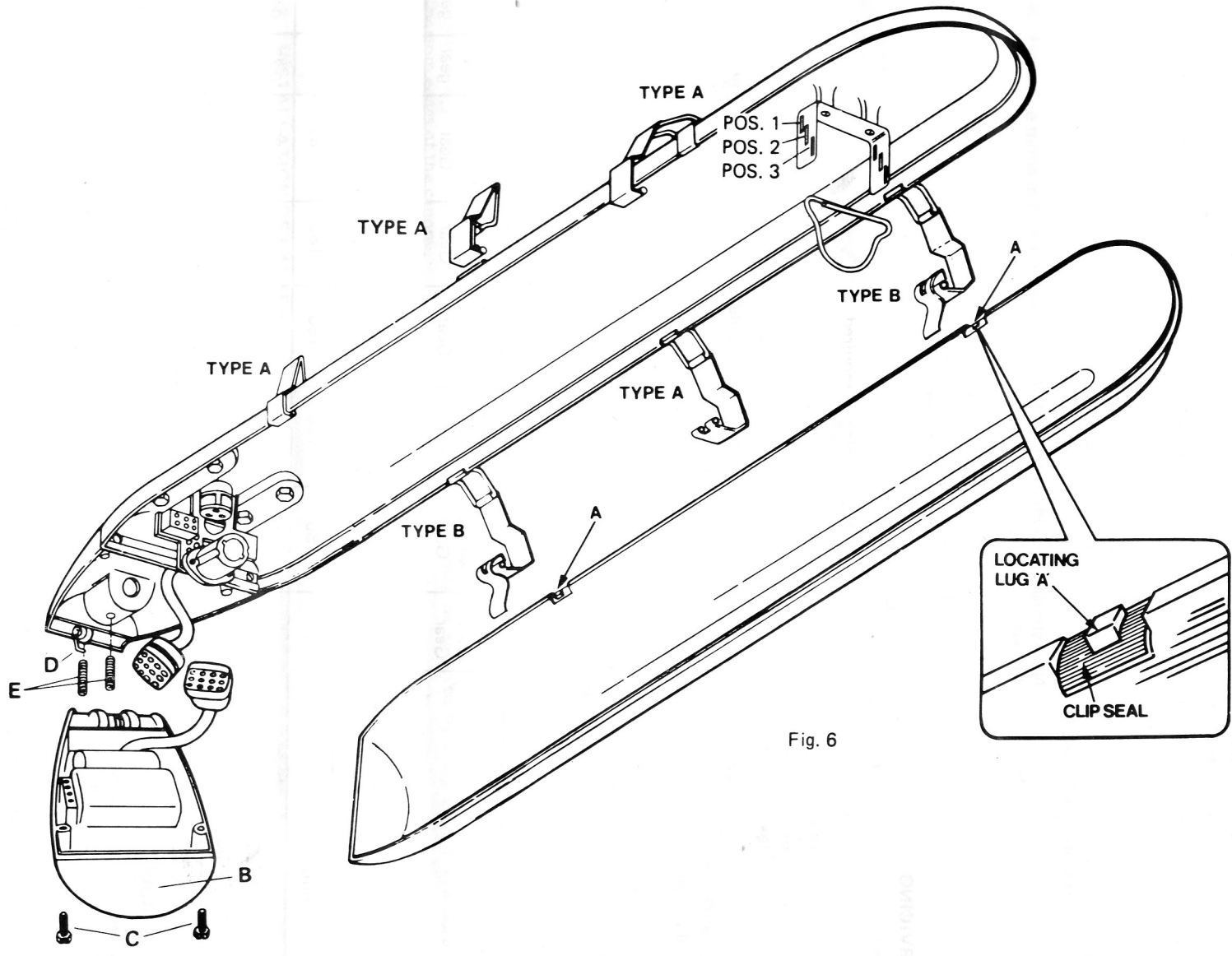


Fig. 6

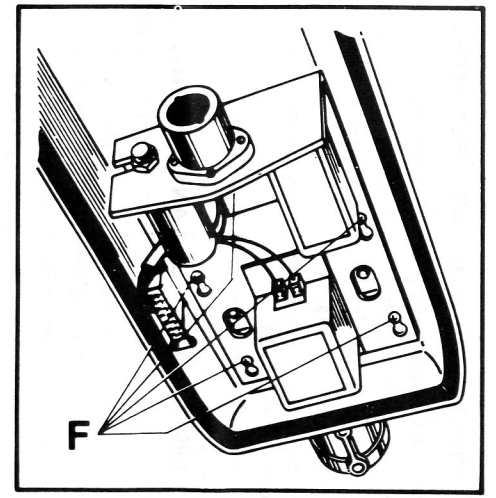



Fig. 5

4. INSTALLATION OF LANTERNS WITH INTEGRAL CONTROL GEAR "S" VERSIONS (FIG. 5).

Connect the incoming line to the terminal marked L.

Connect the incoming Neutral to the terminal marked N.

Connect the incoming Earth to the terminal marked 

Tighten the cable clamp.

For servicing, the gear tray may be removed. The connections from the gear tray to the supply terminal block should be removed.


Loosen the fixing screws F and slide the gear tray to release from the keyhole slot.

5. INSTALLATION OF LANTERNS WITH INTEGRAL CONTROL GEAR (FIG. 6).

NOTE: The lantern and gear shoe are packed separately.

Connect the incoming Live to the terminal marked L.

Connect the incoming Neutral to the terminal marked N.

Connect the incoming Earth to the terminal marked . Tighten the cable clamp.

Attach the gear shoe (B) to the lantern. Lift and hold the safety catch (D) while offering the hinged slot on the gear tray over the hinge-pin: release safety catch.

IMPORTANT: Ensure the safety clip D is moved fully downwards once the gear shoe is attached and at all subsequent times when the gear shoe is lowered.

Check gear tray is correctly seated and secured. Mate the push-on connector. Close the gear shoe and secure by the two retaining screws (C).

6. NOMENCLATURE

There are various versions of each lantern type available, which can be identified from the ordering codes. The following suffixes have the following meanings.

No Asterisk . . No Photocell Option

*1 NEMA Socket Fitted and Wired

*2 14mm hole for two part cell

*3 NEMA Socket with Fog Override fitted and wired

*4 2 part cell fitted and wired

*5 Hole for single part electronic cell

7. SERVICING

Removing the Refractor Bowl

The lantern offers the facility of bowl removal for workshop cleaning, if required.

Two types of clips are used on each lantern to retain the refractor bowl.

Hold the bowl underneath to support the weight and release all the clips. One set of clips (Type A) disconnect from the bowl on release, the other set (Type B) are fixed to the bowl and support it in an open position.

If the refractor bowl is to be completely detached, the clips on the bowl should be lifted and rotated over the locating lug (A).

For assembly reverse the procedure ensuring that the clip seal is not dislodged.

8. DESIGN ATTITUDE

For mounting on spigots with the following external diameters.

42mm – 'S' versions without gear shoe.

42 - 48mm – Gear shoe versions.

TABLE 1

		90W with Gear	66 & 90W without Gear	135W with Gear	91 & 135W without Gear	180W with Gear	131 & 180W without Gear	66 with gear	91 with gear	131 with gear
TOTAL WEIGHT (kg) (incl. lamp)		9.0	5.2	12.5	6.6	17.2	8.5	9.7	12.5	13.2
OVERALL LENGTH (mm)		1056	819	1411	1066	1594	1411	1066	1411	1594
DEPTH (mm)		180	180	180	180	180	180	180	180	180
MAXIMUM PROJECTED AREA	Plan	0.27	0.20	0.37	0.27	0.42	0.37	0.27	0.37	0.42
	Elevation	0.16	0.12	0.22	0.16	0.27	0.22	0.16	0.22	0.27
TYPE		MA90GOS	MA900OS	MA50GOS	MA500OS	MA60GO +R8021	MA600OS	MAE90GOS	MAE 50GOS	MA60GO + R8021E

9. SPARE BOWLS

Type reference

MA90 BOWL

MA50 BOWL

MA60 BOWL

Description

Spare bowl for MA9000, MA90G0, MA9000S

Spare bowl for MA5000, MA50G0, MA5000S, MA90G0S

Spare bowl for MA6000, MA60G0, MA6000S, MA50G0S