INSTRUCTIONS FOR FITTING AND MAINTENANCE OF LUCAS ELECTRIC WINDSCREEN WIPERS TYPES MT

The best position for mounting the Wiper depends upon the type of windscreen and the space available for the Wiper body. Models are available for mounting at the top or bottom of the windscreen.

FITTING.

It should be noted that if the Wiper is replacing a Lucas Wiper of the pneumatic or hand-operated type, the existing drillings in the windscreen frame can be utilized, as the spacings for the fixing bolts and shaft are exactly the same for all types.

Provided that the following instructions are carefully carried out, no difficulty should be experienced in installing the Wiper.

It is necessary to drill three holes in the windscreen—two for the fixing studs and one for the Wiper arm shaft. It is most important that the sizes and spacing of these holes are in accordance with the diagram on page 2. This page is perforated and can therefore be detached and used as a template for drilling.

The centres of the holes should be carefully marked with a centre punch, care being taken that they are in line. It is advisable, before drilling, to check them by measurement, and also to see that there will be sufficient space for the Wiper body when fitted in the position decided upon. For instance, in a touring car, see that there will be a clearance when the hood is up.

It is advisable to drill the holes with a small drill first, say about $\frac{1}{8}$", then to use the correct size drills, working from both sides of the screen.

When it is anticipated that there is danger of the $\frac{1}{8}$" drill encountering the glass*, it is advisable to use a still smaller

** It is not advisable to drill holes through glass of the safety or non-splintering variety. If the Wiper cannot be fitted without doing this, we recommend that the makers of the glass undertake the drilling.*

one. After drilling right through frame, countersink the holes from both sides of frame with the correct size drills. If glass does intercept the passage, open out the holes to the correct size with a small round file. It will be found that the filing away of the glass is a simple process if the file is dipped in turpentine.

Care must be taken that the centre hole is free from any rubber that is used for packing the glass.

Now fit the Wiper to the screen, placing the cork washers over the fixing studs, one on either side of the glass. On the outside, place the celeron washer, and secure the Wiper by means of the fixing nuts. It is very important to see that the Wiper shaft is at right angles to the glass screen, and that it does not foul the screen or the packing washers.

As the fixing studs are provided to suit all thicknesses of screens, it may happen that the studs are too long. In these circumstances, it is advisable to cut off the studs flush with the nuts, care being taken not to allow filings to get into the Wiper.

To fit the Wiper arm to the spindle, slide the collar attached to the tension spring over the spindle and then locate the spindle end in the hole in the Wiper arm bush. Secure the arm, by tightening the set screw, so that the blade gives a symmetrical angle of wipe.

WIRING.

The Wiper is fitted with a length of twin flexible cable. The red lead should be connected to the positive feed, and the black lead to the negative side of the supply. With the majority of Lucas switchboxes and instrument panels, the supply terminal is marked "A," and the negative terminal "—B." With earth return sets, an earthing terminal marked "E" is usually fitted. If this is not provided, the black lead must be secured in good electrical contact with some metal part of the chassis.

With combined cut-out, junction box and fuse units, the positive supply terminal is marked "AUX" or "+" and the earthing terminal is marked "E."

OPERATION.

To start the Wiper, pull out the small knob and give it a spin. To stop, simply push in the knob. It is important that the knob is pushed right home, as although the Wiper can be stopped by holding the knob, the current will not be switched off unless this precaution is taken.

With most models, a hand control is provided which is operated by a curved metal handle which also acts as a lock for the switch. To start the Wiper, pull out the curved handle and swing it aside so as to move the cleaning arm into position on the screen. Then pull out the switch knob and give it a spin. To stop the Wiper, push in the knob. Then pull out the curved handle to disengage the Wiper blade from the gears, and turn the end of the handle into the top of the switch knob. This locks the cleaning arm out of the line of vision of the driver and ensures that the Wiper is switched off.

Unless the Wiper is switched off when not in use, it may be irretrievably damaged.

MAINTENANCE.

The Wiper motor requires absolutely no attention; all moving parts are packed with grease during assembly, and no lubrication is necessary.

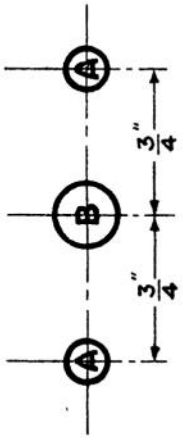
If the rubber squeegee becomes worn or perished, it can be easily replaced at very small cost.

GUARANTEE.

We stand by all goods of our manufacture. All usual and reasonable precautions have been taken by us to ensure excellence of materials and workmanship, and in the event of any defect in any LUCAS product which is not caused by wear and tear, misuse, accident, or negligence, being disclosed within six months of its being put into use, we will either supply new parts or components in exchange for those defective, or repair such defective parts or components, free of charge. We do not undertake to dismantle or re-assemble, or bear the cost of dismantling or re-assembling any such part or component on the vehicle or chassis. This undertaking shall be deemed to exclude any and every other obligation whatsoever, and all liability for any loss or damage, howsoever or whensoever caused or arising, except the cost of replacement or repair in accordance with this undertaking.

LUCAS WINDSCREEN WIPERS

Template or Guide for Drilling Holes in Windscreen Frame.



A. Fixing Holes $\frac{3}{16}$ in. dia., $\frac{3}{16}$ in. or No. 12 Drill.

B. Clearance Hole for Shaft, $\frac{5}{16}$ in. dia., $\frac{5}{16}$ in. or Letter **O** Drill.

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