



PLEASE READ THIS
BOOKLET CAREFULLY

before fixing your

PHILIPS
“PHILIDYNE”

CYCLE DYNAMO SET

to your cycle

PHILIPS LAMPS LIMITED

CENTURY HOUSE, SHAFTESBURY AVE., LONDON, W.C.2

INTRODUCTION

This booklet has been written solely to enable you to secure the maximum of efficient service from your "Philidyne" cycle dynamo set. It contains important instructions on the fixing and use of the set and you are requested to read it carefully before fixing the set on your cycle. While giving full credit to the average cyclist for being able to fix the set "on sight" there are at the same time, minor points which even the most expert can overlook, and which a reading of this booklet will prevent.

When properly fixed the dynamo will run smoothly and the whole set will give trouble-free service—an assurance which the makers can only give on condition that the set is properly fixed and reasonably treated.

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THE DYNAMO IS THE HEART OF THE "PHILIDYNE" SET

Treat it well and it will serve you well

The "Philidyne" dynamo has been designed not merely to give trouble-free and enduring service under normal conditions, but also to allow a generous margin of constructional strength and working efficiency for abnormal conditions. Every single detail has been precision-planned; it is tested at each stage of manufacture and thoroughly run in before leaving the factory, and if used in accordance with instructions will give perfect service.

If, however, through accident or misuse, the functioning of the dynamo is interfered with do not attempt to put it right yourself, but send it back to the makers for attention. Instructions on this point are given on Page 8 of this booklet.

INSTRUCTIONS FOR FITTING "PHILIDYNE" DYNAMO Type 7403

The dynamo is rated at 6 volts, .5 amp., (3 watts) and when the set is used in conjunction with a tail lamp a bulb of 6 volts, .45 amp. is required in the headlamp and a 6 volt, .04 amp. bulb in the rearlight. If used without the rearlight, a bulb of 6 volt, .5 amp. is required in the headlamp.

In order to mount the dynamo, first take the dynamo fixing bracket and completely remove screw marked "2." Loosen screw marked "1" and earthing screw marked "4." The bracket can then be mounted on the near-side front fork blade (see fig. 1, page 4, for numbers of screws referred to). Then tighten up the screws "1" and "2" sufficiently to take the weight of the dynamo. By means of screw marked "3" in fig. 1 the dynamo can then be attached to the fixing bracket, and tighten sufficiently to hold rigid, making sure that the star locking washer goes in between the fixing bracket and the dynamo mounting piece, and not directly behind the head of the screw.

Having made temporary connection of the dynamo to the bracket, adjust the height of the fixing bracket by loosening off screws "1" and "2," and either raising or lowering the bracket to bring the pulley wheel of the dynamo into correct position in relation to the wall of the tyre. The pulley must be at least $\frac{1}{8}$ " and not more than $\frac{3}{8}$ " away from the wall of the tyre when in the "off" position. Having obtained the correct position, tighten up the fixing bracket screws "1" and "2" with a spanner. Earthing screw marked "4" in fig. 1 should also be screwed up until this bites into the enamel on the fork blade. Special attention should be paid to uniformity when tightening screws "1" and "2."

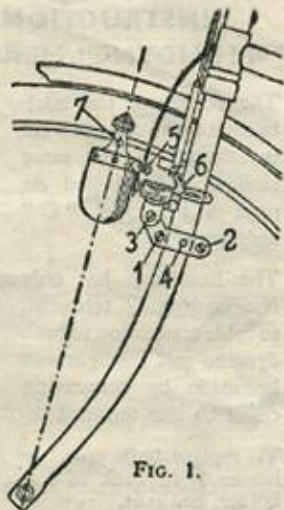


FIG. 1.

Alignment adjustment must now be made. The axis of the dynamo (illustrated in fig. 1 by the dotted line) should point in the direction of the hub of the front wheel. Loosen screw marked "3" to make this adjustment. These adjustments having been made, screw marked "3" in fig. 1 should then be tightened up. The dynamo is then ready for use. The cable for connecting the dynamo and headlamp is connected to terminal "5" (see fig. 1). Care should be taken to see that the metal tag of the cable does not touch the metal of the dynamo case. The dynamo is put into circuit by slight pressure of the lever marked "6" in fig. 1. After prolonged use of the dynamo, lubricate with a little cycle oil for which purpose the lubrication screw marked "7" in fig. 1 in the top of the dynamo must be removed.

Alignment adjustment must now be made. The axis of the dynamo (illustrated in fig. 1 by the dotted line) should point in the direction of the hub of the front wheel. Loosen screw marked "3" to make this adjustment. These adjustments having been made, screw marked "3" in fig. 1 should then be tightened up. The dynamo is then ready for use. The cable for connecting the dynamo and headlamp is connected to terminal "5" (see fig. 1). Care should be taken to see that the metal tag of the cable does not touch the metal of the dynamo case. The dynamo is put into circuit by slight pressure of the lever marked "6" in fig. 1. After prolonged use of the dynamo, lubricate with a little cycle oil for which purpose the lubrication screw marked "7" in fig. 1 in the top of the dynamo must be removed.

INSTRUCTIONS FOR FITTING "PHILIDYNE" HEAD LAMP Model "D"

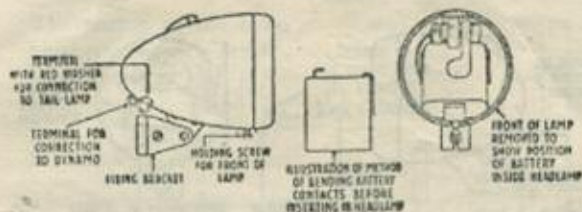


FIG. 2

Loosen the screws of the headlamp bracket before fixing to the cycle lamp bracket. The setting of the headlamp in the required position can then be made. Both fixing screws are then tightened, and the spring washers will automatically prevent any movement after fixing. It is essential that these screws are tightened to their fullest extent to ensure making good earthing contact.

The headlamp has two connecting terminals, one of which is provided with a red insulating washer. The red terminal is for cable connection to the rearlight, and the other terminal for cable connection to the dynamo.

In order to fit a stand-by battery, open the head lamp by unscrewing the terminal at base of lamp (see fig. 2). A standard 4.5 volt flat type battery is required.

The long contact strip of the battery is bent outwards and downwards (as illustrated in fig. 2), and the short contact strip bent inwards (see fig. 2). Hold the battery with the long strip towards the right above the battery cradle, then press down, making sure that the long contact strip of the battery is in between the side of the battery and the cradle. The short contact strip of the battery should be in contact with the contact spring at left rear inside the headlamp.

It will be seen that both the main light and the dipped light bulbs are contained in holders, which are adjustable for the purpose of focussing for either a "spot" or "broad" beam.

★The beam required can be obtained by moving the bulb holders forwards or backwards.

To replace or interchange a bulb, remove bulb holder from back of reflector, insert the new bulb into the holder, and refit (see page 6 for notes on switch positions).

INSTRUCTIONS FOR FITTING "PHILIDYNE" HEAD LAMP Model "S"

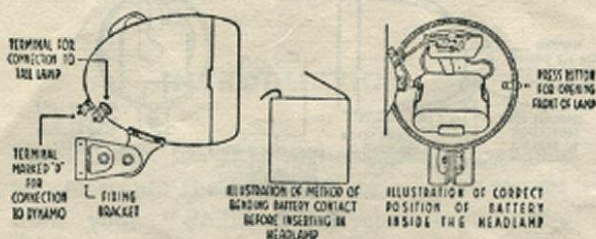


FIG. 3

The setting of the lamp bracket to the cycle bracket is effected in the same manner as described on page 5 for Type "D" headlamp.

The terminal marked "D" on the headlamp is for connection to the dynamo but the unmarked terminal is for connection to the tail lamp. Make sure that good connections have been made.

In order to fit a stand-by battery open the headlamp by pressing button at the side (see fig. 3). A 4.5 volt flat type battery is required. The short contact strip should be bent outwards and turned downwards (see fig. 3) to make contact with the headlamp casing on the left side (when you are facing the headlamp). It will be noticed that inside the headlamp there are three springs provided to hold this battery. The long contact strip of the battery should touch the strip at the back inside the headlamp and make good contact.

For focussing of bulbs see paragraph marked ★ on page 5.

INSTRUCTIONS FOR USING THE FOUR SWITCH POSITIONS on "PHILIDYNE" HEAD LAMP Models "D" and "S"

By means of the 4-way switch on top of the headlamp casing, change over from dynamo to battery can be made at any time as follows:—

Position D.1 on switch, gives main light with rearlight on dynamo
" D 2 " " " dipped " " " " dynamo
" B.2 " " " dipped " " " " battery
" B.1 " " " main " " " " battery

IMPORTANT.—In each of the switch positions referred to above, simultaneous connection is made with the rearlight. Thus the rearlight is always alight in any switch position.

INSTRUCTIONS FOR FITTING "PHILIDYNE" HEAD LAMP Model "H"

The setting of the lamp bracket to the cycle bracket is effected in the same manner as described on page 5 for type "D" headlamp.

The headlamp has only one connecting terminal, so cable connection to both dynamo and rearlight can be made by connecting either to this terminal or to the dynamo terminal.

To replace bulb open the front of the lamp, remove holder from back of reflector, insert new bulb into holder, and refit.

For focussing of bulb, see paragraph marked ★ on page 5.

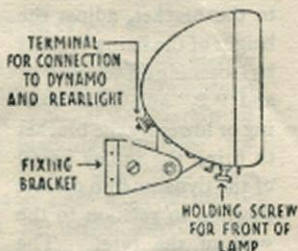


FIG. 4

INSTRUCTIONS FOR FITTING "PHILIDYNE" REARLIGHT Type 7312B/15

The "Philidyne" rearlight is so constructed that when not alight it will act as a very efficient reflector.

The rearlight has a bracket for fixing to the outside rear seat stay. This bracket should be clamped to the stay, and the earthing screw tightened until it bites into the enamel.

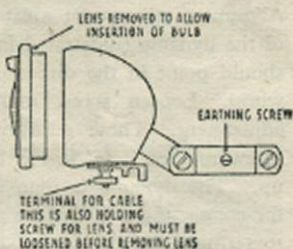


FIG. 5

To replace the bulb in the rearlight, loosen terminal screw (fig. 5) and pull the rim of the lens forward until it slides out of the lamp casing. Fit new bulb and replace lens component. The rearlight is then ready for use.

GENERAL INSTRUCTIONS

on use and servicing of

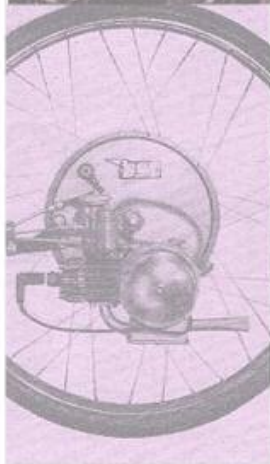
"PHILIDYNE" CYCLE DYNAMO SETS

1. Make sure the dynamo is earthed satisfactorily and check this from time to time.
2. Inspect the dynamo occasionally as regards its alignment with the wall of the tyre and the hub of the wheel.
3. The dynamo should be oiled occasionally by removing the screw marked "7" in illustration on page 4. Do not flood with oil. Only a drop is necessary as the self-lubricating bearings provide sufficient lubrication under normal conditions.
4. Do not tamper with the dynamo, and if as a result of accident or misuse, the dynamo ceases to function, **do not under any circumstances remove the casing, as serious damage may be caused to the field coil in doing so. Once the screws have been loosened from the casing the makers cannot be held responsible for damage which may result.** If the dynamo fails in any way to give satisfactory service, return it at once to "**Philidyne**" Service Dept., Philips Lamps, Ltd., Waddon Factory Estate, Purley Way, Croydon, Surrey. To facilitate repair, please state clearly the nature of the complaint and the cause (if known) such as accident, fire or immersion in water. Your name and address and the name of the Dealer from whom the set was purchased must also be included.

SERVICE.—"Philidyne" dynamos are guaranteed against faulty workmanship or material, and work will be carried out free of charge should it be found that failure has been the result of either of these two defects. A minimum charge is made where damage has been caused to the generator as a result of an accident, fair wear and tear, etc. In this case, the owner is notified of the charge before the repair work is proceeded with, and when this charge has been accepted, the set is returned in good working order, within a few days.

5. Test the bulbs in head and tail lamps occasionally to ensure that they are firmly screwed in. Vibration over a long period may loosen them.
6. When replacing bulbs, use Philips'. They are "tailor-made" for the set and will give the maximum service possible.
7. If the set is put aside during the summer months, remove the battery from headlamps "D" and "S" to avoid risk of corrosion.
8. Remember that the "Philidyne" Service Department exists to put right any trouble with your set, and prompt attention to all requests is ensured.

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