



**BOYER BRANSDEN
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PBOX00312

THE POWER BOX DYNAMO REGULATOR
TYPE 12 VOLT NEGATIVE EARTH.

This unit is designed to replace the mechanical voltage regulator and cutout used on many motorcycles using the LUCAS E3 TWO BRUSH DYNAMO. This dynamo is designed to charge a 6 volt system, but when connected to a POWER BOX electronic dynamo regulator it will charge 12 volts at over 120 watts without placing undue load on the dynamo windings. It will also replace the electronic aftermarket direct current regulator units. Dynamos that have been rewound for 12 volt can also be used.

The E3 dynamo can be polarized to run positive or negative earth, but the correct regulator must be used.

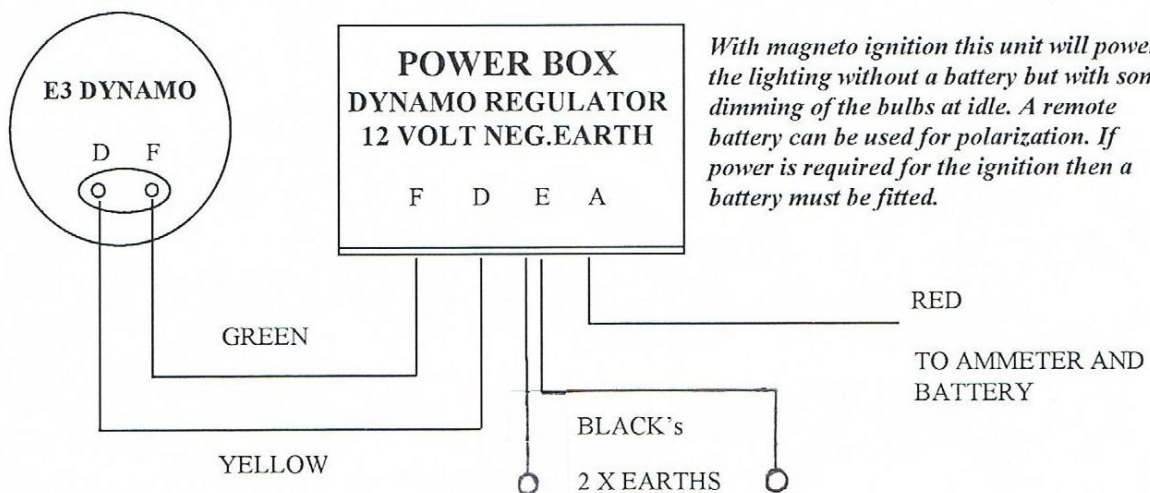
(Check the part number and wire colours on the unit)

DYNAMO POLARIZATION. (This should be done if the machine has stood without running for a long period and has stopped charging, or has been rebuilt.)

With the battery connected the correct way round with its NEGATIVE to frame, connect a wire from the POSITIVE terminal to the (F) Field terminal of the dynamo, hold this wire on to the terminal for two seconds and repeat this three or four times. The dynamo will now be polarized negative earth. This should be done with the (F) field wire disconnected for best results, but once charging the power box will maintain the polarized field magnet.

WIRING:- For best results use modern crimp up or screw terminals and hide them under the unit if required. Soldered connections will fracture with vibration unless a strong shrink sleeve is used.

TWO EARTH(GROUND) WIRES ARE PROVIDED, these should be connected to a good earth point that cannot be broken. If either or both wires are broken the unit will low charge, if the wires are joined and broken from earth the dynamo will over charge and could burn out. Many older machines have no fusing in the main battery feed, we suggest a 15 to 18 amp inline fuse be fitted when this unit is used.



With magneto ignition this unit will power the lighting without a battery but with some dimming of the bulbs at idle. A remote battery can be used for polarization. If power is required for the ignition then a battery must be fitted.

MOUNT IN ANY POSITION, THE LUCAS COVER CAN BE PUSHED OVER THE UNIT AND HELD WITH LOCKING WIRE OR CLEAR PLASTIC STRAP. THIS WILL GIVE AN ORIGINAL APPEARANCE WHEN REQUIRED



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