VOLTAGE REGULATOR-RECTIFIER

PERMANENTLY REPLACES RECTIFIERS AND ZENER DIODES ON NORTON, TRIUMPH, BSA AND OTHER ENGLISH MOTORCYCLES

Part Numbers

620701 Six volt

620401 Twelve volt

INSTALLATION: POSITIVE GROUND

1. Remove zener diode and tape over, or cut, wire leading to it.
2. Disconnect and remove rectifier.
3. Bolt Tympanium regulator to metal part of chassis for heat-sinking. Ensure that wires disconnected from rectifier will reach regulator terminals.
4. Connect wires according to color code:

TYMPANIUM		EXISTING WIRES	FUNCTION
Twelve volt	Six volt		
Black	Black	Brown	B-, battery
Yellow	White	Yellow/Green	AC, Alternator
Yellow	White	White/Green	AC, Alternator
Red	Red	Red	Positive ground

Ground connection can be made either through bolting red lead to chassis with mounting screw if chassis is ground, or by plugging red male terminal into existing female lead if ground is made at another point of the electrical system.

For additional information see other side.

VOLTAGE REGULATOR-RECTIFIER

Replaces existing selenium rectifier and regulator on most permanent magnet alternator systems

Part Numbers

620701 Six volt

620401 Twelve volt

INSTALLATION: NEGATIVE GROUND

1. Remove regulator and tape over, or cut, wires leading to it.
2. Disconnect and remove rectifier.
3. Bolt Tympanium regulator to metal part of chassis for heat-sinking. Ensure that wires disconnected from rectifier will reach regulator terminals.
4. Connect wires according to color code:

TYMPANIUM		FUNCTION
Twelve volt	Six volt	
Black	Black	B-, ground
Yellow	White	AC, Alternator
Yellow	White	AC, Alternator
Red	Red	B+, battery

Ground connection can be made either through bolting Black lead to chassis with mounting screw if chassis is ground, or by plugging Black male terminal into existing female lead if ground is made at another point of the electrical system.

This unit is warranted for 2 years from date of purchase against defects in material and workmanship. Return, postage prepaid, with a copy of the sales slip showing purchase date. The unit will be repaired or replaced at no charge. Please include your return address.

For battery elimination order P. N. 701001.

tympanium corporation
67 MAPLEWOOD STREET
MALDEN, MASS. 02148 U.S.A.

BATTERY ELIMINATION CAPACITOR & MOUNTING SPRING

PART NO. 701001

INSTALLATION INSTRUCTIONS

The 701001 is an aluminum electrolytic capacitor for use with Tympanium voltage regulator-rectifiers. It provides for battery elimination in battery-excited ignition systems. Its construction provides the necessary large capacitance, but in a small package at an economical cost. However, the aluminum electrolytic capacitor must be installed with reasonable care if trouble free "no-battery" operation is to be realized.

1) NOTE THAT THE CAPACITOR IS POLARITY SENSITIVE. The (+) terminal must be connected to the B+ wire that formerly was connected to the (+) terminal of the battery. The other terminal, unmarked or marked (-), must be connected to where the B- or (-) terminal of the battery was connected. IF THE CAPACITOR IS WIRED INCORRECTLY AND POWER IS APPLIED, THE CAPACITOR WILL BE PERMANENTLY DAMAGED.

2) Mount the capacitor to best isolate it from shock, vibration and high temperatures.

NOTE: The 701001 capacitor may be used as a replacement for the Lucas 2MC capacitor on English bikes. Installation considerations are the same as above.

NOTE: When properly mounted for good heat sinking, your Tympanium regulator-rectifier can handle up to 10 amperes of current if it is available from your bike's alternator. In permanent magnet alternator systems, the regulator limits the power available to the battery and load, it does not cause more current to be generated as is the case with most automotive systems.

Because your regulator limits the current, it may be possible for you to add charging capacity to your electrical system, at least during daylight operation. Check to see if your bike has an additional night lighting coil in parallel with the battery charging coil. If so, it is probably activated by the day/night switch that turns on the headlight. With the Tympanium regulator installed, it is quite likely that you can permanently wire that lighting coil on. If you try this technique, then be sure to check that the battery voltage does not rise above 14.8V. Check again after a long (1 hour or more) ride on your bike with the headlight off. Check the water level in your battery regularly and fill with distilled water only (available at any drug store or apothecary). If water consumption appears excessive, then recheck to see that the battery voltage is not too high with the engine running. If it is, return day/night wiring back to normal function.