

The TRIUMPH Corporation

SERVICE BULLETIN

January 24, 1968

68/1

TO ALL EASTERN TRIUMPH DEALERS

SUBJECT: Fitting Lucas 2MC Capacitor to Triumph Motorcycles

When properly installed, the 2MC capacitor will allow use of lighting and/or ignition without battery.

54170009	- Ignition Capacitor 2MC	-	List Price - \$5.05A
54483156	- Capacitor Mounting Spring	-	List Price - \$1.80A
54953455	- Sub - Harness - to Connect Capacitor	-	List Price - \$1.60A

These parts can very conveniently be fitted to 1968 Triumph twins. A capacitor mounting bracket is welded to the underside of battery box. Lucas diagram and instruction sheet No. 2802 is packaged with each capacitor, No. 54170009. The following important points should be noted.

1. Lucas 2MC capacitor is only suitable for use on Zener diode regulated, alternator systems.
2. Front mounted, finned heat sink, No. H2237 should be employed.
3. The capacitor must be positioned with its terminals pointing downward.
4. Capacitor can be ruined if connected wrong. 3/16" Lucar terminal (red point dot) is positive. 1/4" Lucar terminal is negative.
5. Capacitor equipped Triumphs can be run with or without battery. If battery is removed, be certain to insulate negative battery wire from ground. Otherwise capacitor may be ruined.
6. If battery is removed, lights must be switched off to allow engine to be started. On the back of this page is a simplified wiring diagram which can be used for competition Triumphs where you require neither battery or lighting equipment.

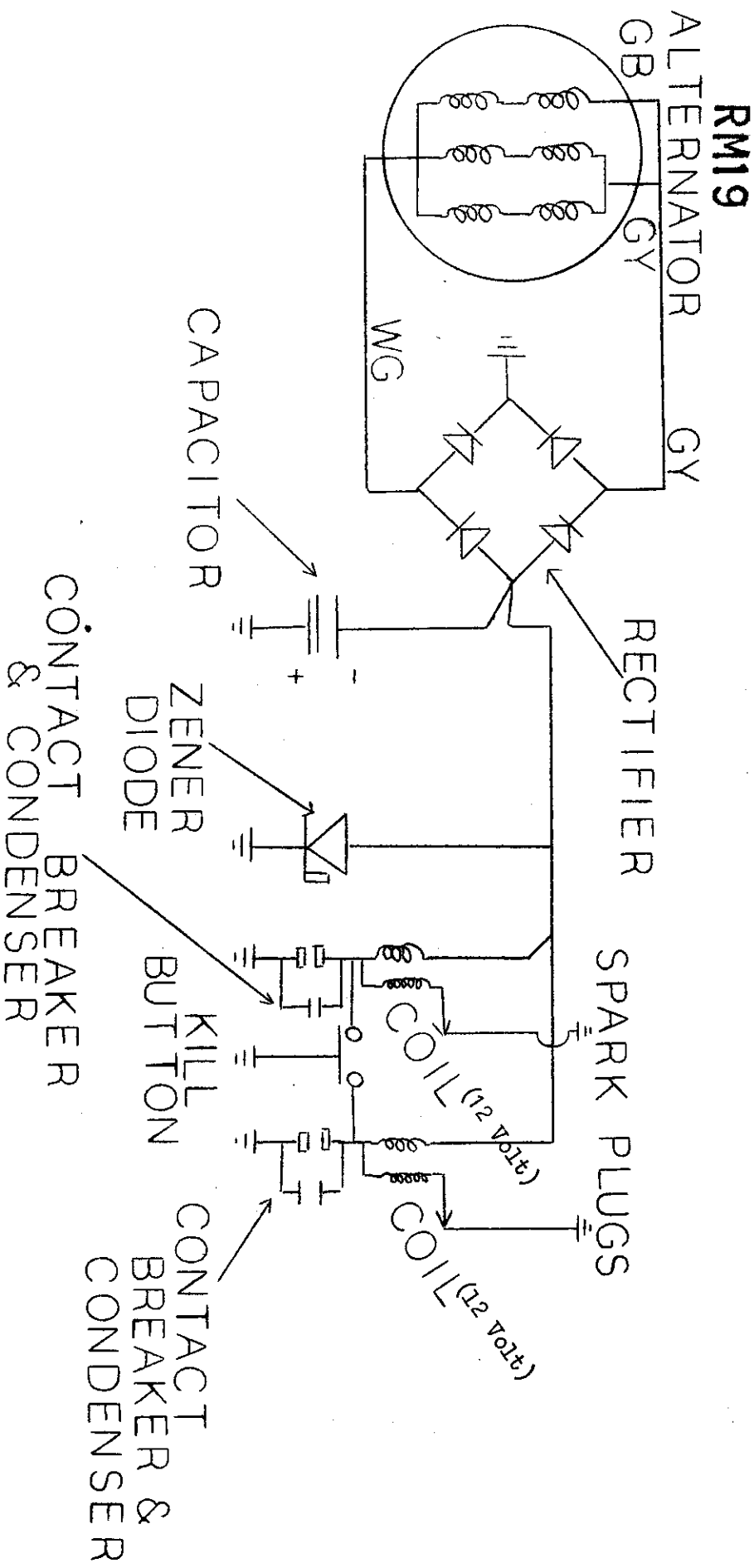
Very truly yours,

THE TRIUMPH CORPORATION


Service Manager

Rod Coates:bjh

COMPETITION WIRING DIAGRAM WITH CAPACITOR
FOR "B" & "C" RANGES





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LUCAS/GIRLING/C.A.V.

SERVICE INFORMATION



Parent Company
JOSEPH LUCAS LTD.
Birmingham 19, England

MOTORCYCLE CAPACITOR SYSTEM

Object of the System

The new motorcycle capacitor system has been developed to enable the rider to operate the motorcycle with or without a battery. The rider therefore has the choice of normal battery operation or running without a battery if desired - e.g. competing in trials or other competitive events and for emergency operation in case of battery failure. The machine can readily be started without the battery and run as normal, including the use of the headlights. Additional accessories cannot normally be operated or, of course, parking lights, unless the battery is connected.

Components

The system incorporates basically the standard 12-volt battery - coil ignition components with the zener diode regulator on an adequate heat sink plus a spring-mounted, high-capacity electrolytic capacitor of a special shock-resistant type. This is the Lucas model 2MC No. 541 700 09.

Method of Operation

The capacitor stores the energy pulses from the alternator, which insures sufficient current flowing through the ignition coil at the moment of contact opening, thus producing an adequate spark for starting. When running, the capacitor helps to reduce the voltage ripple from the alternator. This system has an advantage over the a.c. ignition system of considerably less critical alternator magnetic timing. Providing the centers of the rotor and stator poles are roughly in line in the fully retarded position, satisfactory starting will be obtained. Furthermore, any auto-advance angle and speed characteristics may be used and perfect running ignition performance achieved.

Continued

Wiring and Installation

It is most important that the zener diode is mounted on an adequate heat sink. This must be a minimum 6 x 6 x 1/8" aluminum, with the diode centrally mounted and the whole assembly in the clear air stream. The alternator should be connected to give full output (i.e. Green/Yellow and Green/Black leads joined together). The capacitor negative terminal and zener diode must both be connected to the rectifier output (center terminal) or other convenient connection on the Brown/White lead. (not to ignition coils as normal practice). The small (positive) capacitor terminal is connected to ground. The capacitor should be mounted in its spring with the terminals downwards.

