

Parts - Tools - Accessories Bulletin

September 26, 1967

Bulletin #67-21P

Six Months Lucas Battery Guarantee

All Lucas batteries are guaranteed against failure due to faulty materials or workmanship for six months after the date of sale. This guarantee applies to both original equipment batteries in new motorcycles, and replacements sold over the counter. If a battery proves defective within this six months period, send us a completed Triumph claim tag to report the failure and we will ship you a free replacement battery. Be sure to give us the part number of the battery, the date of failure, the date the battery was put in service (date the motorcycle or replacement was sold), and the explanation of failure, such as "shorted," "open circuit," "leaking," etc. Claim tags for PUZ5A (12 volt) battery failures MUST also show the battery code number which is located under the white fill strip. Remove the fill strip and you will find the code number between the filler holes. The code number will be one letter and one or two numbers, such as W1, W5, W11, W12, etc. It is not necessary to return the defective battery. The information requested above, however, MUST be given on the claim tag in order for us to honor the claim.

Lucas Guarantee Parts

When returning defective Lucas parts under guarantee the claim stubs MUST be attached to the parts. The claim tag must be completely filled out, giving dealers name, model, engine number, mileage, and date part put in service. We must also have the explanation of failure written in.

We must have all of the above information before we can send you free of charge Lucas parts.

Exchange Lucas Parts

We also have available exchange Lucas parts such as stators, rotors, regulators, generators, at a good saving to the dealer. We can only supply an exchange unit when we receive, from you, the unit to be exchanged. Refer to Bulletin #67-20P for prices and part numbers of exchange parts that we carry in stock.

The TRIUMPH Corporation

Parts - Tools - Accessories Bulletin

February 3, 1967

Bulletin 67-4P

(Supersedes Service Bulletins 62/10, 63/8, 65/2 and 65/12)

RE: Lucas Stators and Rotors Fitted to Triumph Motorcycles - 1954 thru 1967.

"A" RANGE

RM No.	STATOR PART No.	NUMBER OF LEADS-COILS	ROTOR PART No.	No. STAMPED ON ROTOR	MODEL	YEAR
RM13	47105	3 - 6	466124	465904	T15, T20 & T20C	54-62
RM13	47177	4 - 6	466124	465904	T20S, T20W, T20SL, T20T, T20SR, & T20SC E.T. Ign.	59-62
RM18	47161	3 - 6	54213903	54212284**	T20 (w/two piece crankcase)	62-65
RM19	47188*	5 - 6	54213901	54215824**	T20SR, T20SC, T20SM E.T. Ign. (w/two piece crankcase)	62-67

"B" RANGE

RM14	466168	3 - 6	466230	465969	5T & 6T	54-58
RM15	47127	3 - 6	423506	466177	6T	59-61
RM13/15	47171	3 - 6	423506	466177	T110, T120, TR7 & TR6	60-61
RM19	47183	3 - 6	54213901	54215824**	T120R, TR6SR, & TR6SC	62
RM19	47181	3 - 6	54213901	54215824**	6T	62
RM19	47162	3 - 6	54213901	54215824**	6T, TR6 & T120	63-67
RM19	47188	5 - 6	54213901	54215824**	T120TT & TR6C	63-67

"C" RANGE

RM13/15	47105	3 - 6	423506	466177	3TA & 5TA	58-61
RM13/15	47149	5 - 6	54211596	54211595	1960 T100A & TR5AR E.T. Ign	61
RM13/15	47105	3 - 6	54211596	54211595	up to Engine #H21122 TR5AR Battery-Coil Ign	61
RM13/15	47177	4 - 6	54211596	54211595	after Engine #H21122 TR5AC E.T. Ign up to	61
RM19	47188*	5 - 6	54213901	54215824**	Engine #H25251	
RM19	47162	3 - 6	54213901	54215824**	T100SC E.T. Ign	62
RM19	47188	5 - 6	54213901	54215824**	3TA, 5TA & T100SR	62-67
					T100SC E.T. Ign	63-67

*The 47188 five lead Stator has superseded the 47173 four lead Stator previously fitted to E.T. Ignition models. In this application the black-yellow lead from the 47188 Stator must be grounded.

**54213901 rotor may be stamped either 54212006 or 54215824.

SUPERSESSIONS

47105---supersedes---47119, 47124, 47137, 47168, 465915, 468678, & 468973
 47127---supersedes---469427
 47171---supersedes---47134 & 47178
 47177---supersedes---47138, 47165, 47166, & 47175
 47181---supersedes---47164
 47188---supersedes---47173
 54213901---supersedes---54214272 & 54215824

The TRIUMPH Corporation

Parts - Tools - Accessories Bulletin

February 24, 1967

Bulletin No. 67-6P

PARTS CATALOGUE CORRECTIONS

Please make the following corrections
in your parts catalogues immediately.

REPLACEMENT PARTS CATALOGUE NO. 8 FOR 1967 "C" RANGE MODELS

<u>Page No.</u>	<u>Ref. No.</u>	<u>Corrections</u>
31	9	ADD: 54419124 Cam for battery ignition models (new 160° type), fitted as standard equipment to all 1967 T100R models. ADD: 54415751 Sleeve and Action Plate for T100R. 54415747 Sleeve and Action Plate for T100C.
41	1 1	CHANGE: T1476 to T1476/18. NOTE: All sprockets listed are available from stock if gearing changes at the gearbox are desired.
43	11 ✓	NOTE: Correct part number for this stud is F3665.
51	8 & 9	DELETE: H2100 Top Lug, and H1527 Bonded Bushings. Not fitted to 1967 "C" range models. All 1967 "C" range models are fitted with the H2099 Top Lug as illustrated on page 52. H2100 Top Lugs and hardware for rubber mounted handlebars are stocked if this type of mounting is desired.
53	7	NOTE: H1696 Covers are stocked for use if headlight is removed, but are not fitted as original equipment to 1967 "C" range models.
59		NOTE: Although not fitted to U.S. models, many parts for Q.D. wheels are stocked. See page 57, #5 "B" range parts catalogue for parts stocked. <u>ONLY</u> the items for which prices are shown on the stick-on price list are available.
65	10	NOTE: F1717 Petrol Taps, although not fitted to 1967 T100 models as supplied to the Eastern United States, are available from our parts stock. This petrol tap is an excellent accessory to offer riders desiring a petrol tap incorporating a reserve fuel supply feature. Repair kits are also available for these petrol taps, Part No. CD480.
	15 & 16	NOTE: Parcel Grids and Mounting Screws are available from our parts stock for use on gas tanks supplied with tapped mounting holes.

-OVER-

February 24, 1967

-2-

Bulletin No. 67-6P

REPLACEMENT PARTS CATALOGUE NO. 5 FOR 1967 "B" RANGE MODELS

<u>Page No.</u>	<u>Ref. No.</u>	<u>Corrections</u>
27		ADD: 54415751 Sleeve and Action Plate for T12OR and TR6R. 54415747 Sleeve and Action Plate for T12OTT and TR6C.
49 and 51	10 3	NOTE: The correct part number for the new fork lock is F6738 as listed in the parts catalogue. The number F6728 in Bulletin No. 66-2P is a typographical error and should be corrected to F6738.
SPECIAL NOTE: Where it is stated in our correction bulletins that an item is "not fitted to U.S. models," this means <u>ONLY</u> that the part is <u>not fitted at the factory to that particular range as supplied that year to the Eastern United States</u> . These same parts may very well be fitted to other Triumph ranges, or may be available from our parts stock.		

Let Bonny

The **TRIUMPH** *Corporation*

Parts - Tools - Accessories Bulletin

March 6, 1968

Bulletin #68-7P

TO ALL EASTERN TRIUMPH DEALERS

SUBJECT: 1968 "B" Range Parts Book No. 6 (Tan Cover)

1968 "C" Range Parts Book No. 9 (Green Cover)

We are sending every dealer a copy of the new Parts Books.

Included with each book will be a printed list showing suggested retail price of each part. The list has a self-adhesive backing so you can quickly insert the prices on each page between the reference number and part number column.

This plan has been developed to help you make better use of your "B" and "C" Range Triumph Parts Books and to provide you with current price information covering the latest and most popular 650cc and 500cc models.

We are charging \$1.00 for each price list.

You can order additional copies of Triumph Parts Books for the regular price of \$1.76 net.

Very truly yours,

THE TRIUMPH CORPORATION

S. E. Lovell
S. E. Lovell,
Parts Manager

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The TRIUMPH Corporation

Parts - Tools - Accessories Bulletin

April 20, 1967

Bulletin 67-7P

MOUNTING INSTRUCTIONS FOR CD464 COMBINATION LUGGAGE RACK/SEAT RAIL 1967 "B" & "C" Range Machines

Hardware

- 1 R.H. Rear Support Bracket
- 1 L.H. Rear Support Bracket
- 2 1/4-28 1 1/4 Hex Head Cap Screw
- 2 1/4-28 1 1/2 Hex Head Cap Screw
- 4 1/4 Lockwasher
- 4 1/4-28 Hex Nuts
- 2 1/4 x 3/4 OD x 5/8 length Spacer

Remove F5424 lifting handle and install F7850 lifting handle, do not install the two fender bolts in lifting handle at this time. Assemble R.H. and L.H. rear support brackets to rear holes in side plates of luggage rack using the two 1/4-28 x 1/2 hex head cap screws, two 1/4-28 nuts and two 1/4 lockwashers. Mount luggage rack to frame by attaching side rails to the holes in the frame just in front of top shock mounts with the two 1/4-28 x 1 1/4 hex head cap screws, two 1/4 hex nuts, two lockwashers and two 1/4 x 3/4 OD x 5/8 length spacers. The 1/4 x 3/4 spacers are placed between the side rails of the luggage rack and the motorcycle frame. Attach the two rear brackets to the F7850 lifting handle.

NOTE: When fitting saddlebags to this carrier CD466/B Bracket Set must be used for "B" Range and CD466/C Bracket Set for "C" Range machine.

MOUNTING INSTRUCTIONS FOR CD466B AND CD466C SADDLE BAG MOUNTS

"B" Range

Attach lower front to muffler bolt. Attach upper rear to rear hole in side plate of luggage rack.

"C" Range

Attach lower front by pillion footrest bolt. Attach upper rear to rear hole in side plate of luggage rack.

The TRIUMPH Corporation

Parts - Tools - Accessories Bulletin

April 20, 1967

Bulletin 67-8P

MOUNTING INSTRUCTIONS FOR CD469 COMBINATION LUGGAGE RACK/SEAT RAIL 1963 to 1966 "B" and "C" Range Machines

Hardware

- | | |
|---|-----------------------------------|
| 2 | 1/4-28 x 1 1/4 Hex Head Cap Screw |
| 2 | 1/4-28 Hex Nut |
| 2 | 1/4 Lockwasher |
| 2 | 1/4 x 3/4 OD x 5/8 length Spacer |
| 1 | 5/16-24 x 3/4 Hex Head Cap Screw |
| 1 | 5/16-24 Hex Nut |
| 1 | 5/16 Star Washer |
| 1 | 5/16 x 3/4 x 1/4 length Spacer |

Late 1966 models must use F7850 lifting handle. The bend on the left side of late 1966 lifting handles interferes with the left side rail of the Luggage Rack.

Mount the luggage rack to the frame by attaching the side rail to the holes in the frame just in front of the top shock mounts with the two 1/4-28 x 1 1/4 hex head cap screws, two 1/4-28 hex nuts, two 1/4 lockwashers and two 1/4 x 3/4 OD x 5/8 length spacers. These spacers are placed between the side rails of the luggage rack and the motorcycle frame. Remove the rear bolt of the fender clip that attaches fender to rear frame. Attach the front cross rail of the rack to the rear bolt hole of fender clip using 5/16-24 x 3/4 cap screw, 5/16 hex nut, Star washer and 5/16 x 3/4 spacer. Spacer is placed between fender clip and front cross rail.

NOTE: When fitting saddlebags to this carrier CD466/B Bracket Set must be used for "B" Range and CD466/C Bracket Set for "C" Range machine.

MOUNTING INSTRUCTIONS FOR CD466B AND CD466C SADDLE BAG MOUNTING BRACKETS

"B" Range

Attach lower front to muffler bolt. Attach upper rear to rear hole in side plate of luggage rack.

"C" Range

Attach lower front by pillion footrest bolt. Attach upper rear to rear hole in side plate of luggage rack.

Parts - Tools - Accessories Bulletin

June 19, 1967

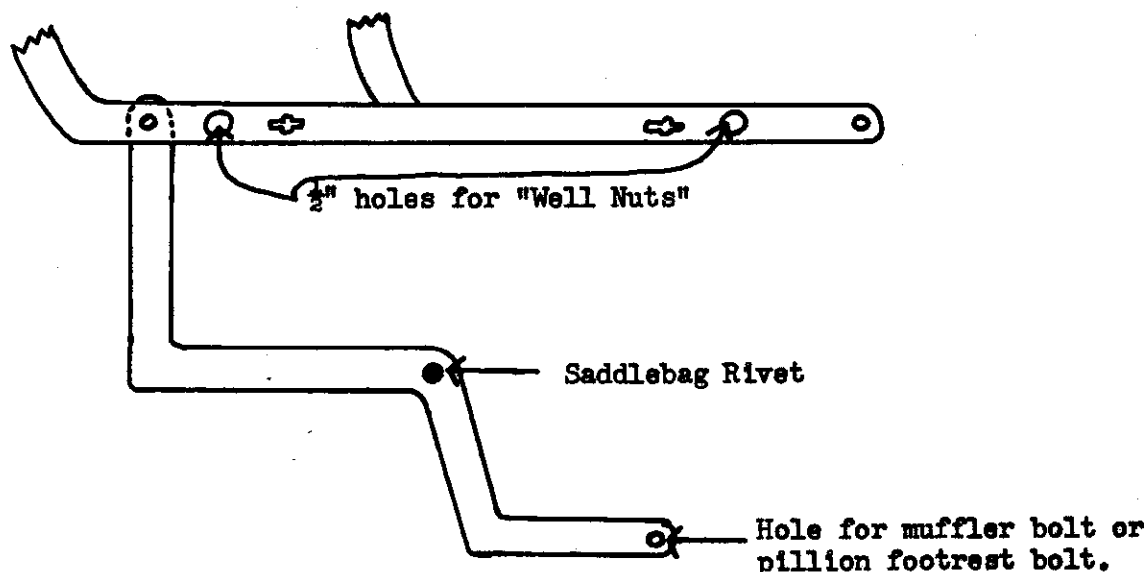
67-9P

SUBJECT: CD466B AND CD466C LOWER SADDLEBAG MOUNTS

The CD466B and CD466C Lower Saddlebag Mounts are used in conjunction with the CD464 and CD469 Combination Accessory Groups to mount CD144 or CD279 saddlebags. The CD466B mounts are used on 650cc models, and the CD466C mounts on 500cc models.

MOUNTING INSTRUCTIONS:

1. Attach the lower saddlebag mount at the upper rear using the rear support bracket bolts of the Combination Accessory Group. On 650cc models, use the muffler bolt to attach the saddlebag mount at the lower front, and on 500cc models use the Pillion Footrest Bolt (see illustration below).
2. Insert the rubber-covered "Well Nuts" supplied with the lower saddlebag mounts into the large $\frac{1}{2}$ " holes in the side rails of the Combination Accessory Group from the outside.
3. Hook one of the slots in the steel backing plate attached to the saddlebag on the rivet welded to the lower saddlebag mount and position the mounting holes in the saddlebag over the "Well Nuts".
4. Insert the 1- $\frac{1}{4}$ " machine screws through the holes from inside the bag, using the spring clips as washers for the screws. As the screws are tightened the "Well Nut" will expand behind the side rail to firmly secure the saddlebag in place.



The TRIUMPH Corporation

Parts - Tools - Accessories Bulletin

August 1, 1967

Bulletin #67-11P

SUBJECT: 200cc "A" RANGE GEARBOX CHANGES

Please make the following notations in your No.1 "A" Range Parts Catalog for 1966-'67:

<u>Page No.</u>	<u>Ref. No.</u>	<u>Notation</u>
21	7	T2449 Mainshaft fitted from engine number 3855 ("Stub Tooth")
	15	T2326 Layshaft Low Gear fitted from engine number 3855 ("Stub Tooth")
		Add note: Use T2328 Mainshaft Low Gear to up-date T1588 Mainshaft to the "Stub Tooth" condition.

The factory has made a notable mid-year change in the 200cc "A" Range gearbox. The T1095 Layshaft Low Gear has been replaced by the new T2326 Layshaft Low Gear, and the T1588 Mainshaft replaced by the new T2449 Mainshaft. Both the T2326 Layshaft Low Gear and the low gear fitted to the T2449 Mainshaft are now of the well-proven "Stub Tooth" design. The teeth on "Stub Tooth" gears are shorter, allowing the base of the gear to be thicker, thus affording greater strength for the gear and more support for the gear teeth.

The "Stub Tooth" gears cannot be used against gears of the earlier pattern, and must be installed in matching sets. For this reason, your orders for the earlier pattern T1095 Layshaft Low Gear will be filled with the new T2326 Layshaft Low Gear together with a T2328 Mainshaft Low Gear which must be pressed onto the earlier pattern mainshafts after removal of the original mainshaft low gear.

A good stock of the earlier pattern T1588 Mainshafts is on hand here, but when this stock is exhausted the new T2449 Mainshaft will be supplied. If the new T2449 Mainshaft is then fitted to models previous to engine number 3855, the original T1095 Layshaft Low Gear must be replaced also with the new T2326 Layshaft Low Gear. The two layshaft low gears are easily distinguished from one another as the T2326 has much smaller "windows" in the back side into which the layshaft third gear "dogs" engage.

For your information the T1095 Layshaft Low Gear was used in all "A" Range gearboxes from 1954 thru 1967 up to engine number 3855. The T1588 Mainshaft was used in standard and wide ratio "A" Range gearboxes from 1954 thru 1967 up to engine number 3855.

The following should be noted in your 1967 Triumph Replacement Parts Price List:

Page 35 - - T1095 change to (1) T2326 and (1) T2328

Page 37 - - T1588 can use T2449.

The TRIUMPH Corporation

Parts - Tools - Accessories Bulletin

August 2, 1967

Bulletin 67-12P

TO ALL DEALERS:

All Bell Helmet models have passed and exceeded the highest standards approval for helmets specified by the United States Standards Institute specification Z90.1-1966.

The following list of states have a compulsory helmet law and Bell helmets are approved and legal in all of them.

Alabama	Michigan	South Carolina
Indiana	Minnesota	South Dakota
Georgia	New York	Tennessee
Kansas	North Carolina	Texas
Maine	Oregon	State of Washington
Massachusetts		

New York, Michigan and perhaps some other states have two additional requirements.

1. Every approved helmet must have reflectorized material of an area at least four square inches affixed with permanent adhesive to both right and left hand side.
2. Each approved helmet must be labeled on the outside of the helmet (above the base of the rear with letters at least 1/4 inch in height) with the trade name and the appropriate model name, or model number. We have kits of material that can be added to Bell helmets so they comply with New York and Michigan helmet laws.

You can continue to order, stock and sell Bell helmets with the knowledge that they have passed all standards set up by the aforementioned states that have helmet laws in effect.

Very truly yours,

THE TRIUMPH CORPORATION

S. E. Lovell

S. E. Lovell,
Parts Manager

SEL:ib

P.S. Please advise us if your state law requires the reflectorized tape and markings as shown above for New York and Michigan.



Parts - Tools - Accessories Bulletin

August 3, 1967

Bulletin #67-13P

NEW ACCESSORY!!

The Triumph Corporation proudly announces its appointment as Eastern United States distributor for the Dunleer 'helmet-lok'.

Here's a brand-new idea in accessories that practically sells itself! In fact, the only trick to selling the 'helmet-lok' is keeping enough in stock!

The 'helmet-lok' is being nationally advertised in all the leading motorcycle publications, so be sure to order a good 'helmet-lok' stock to supply the demand. The enclosed sheet gives full particulars on the 'helmet-lok', both models of which are now in stock at The Triumph Corporation for immediate delivery.

The 'helmet-lok' is attractively packaged for display with your helmets - remember that every helmet customer is a potential 'helmet-lok' sale! Both 'helmet-lok' models list for \$4.95, and your cost on either is only \$2.97. The handy order form below is for your convenience, and may be used for your initial 'helmet' order.

THE TRIUMPH CORPORATION
TOWSON, BALTIMORE, MD. 21204

LDM:ib

GOT A HELMET AND WANNA KEEP IT? GET A 'HELMET-LOK'!

(cut here)

THE TRIUMPH CORPORATION
TOWSON, BALTIMORE, MD. 21204

Date _____

Yes, send us the following 'helmet-lok' models:

_____ Model 101 (for "full-coverage" helmets)

_____ Model 103 (for "shorty" helmets)

Ship to _____

Address, _____

City _____ State _____ Zip Code _____

By _____ Title _____

The TRIUMPH Corporation

SERVICE BULLETIN

October 23, 1967 67/14

TO ALL EASTERN TRIUMPH DEALERS:

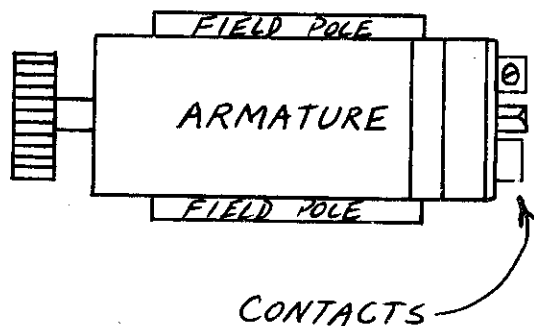
SUBJECT: A. C. Ignition (E. T.) & A. C. Lighting System - Lucas RM19 Equipment

A. C. Ignition (Energy Transfer)

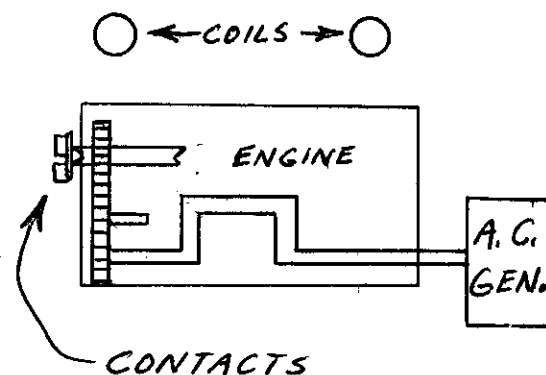
There are several important principles to remember when dealing with the A. C. ignition system:

1. A magneto is basically an A. C. Generator with a switch (the contacts) and a high tension coil connected to it.
2. On pre-1963 Triumph models, the Lucas magneto was a one-piece self-contained unit in which the contacts were directly connected to the A. C. generator part of the magneto. In the A. C. ignition system the A. C. generator part of the magneto is in the primary - i.e., the rotor and stator; and the contacts and high tension coils are respectively on the end of the exhaust camshaft and on the frame.

MAGNETO



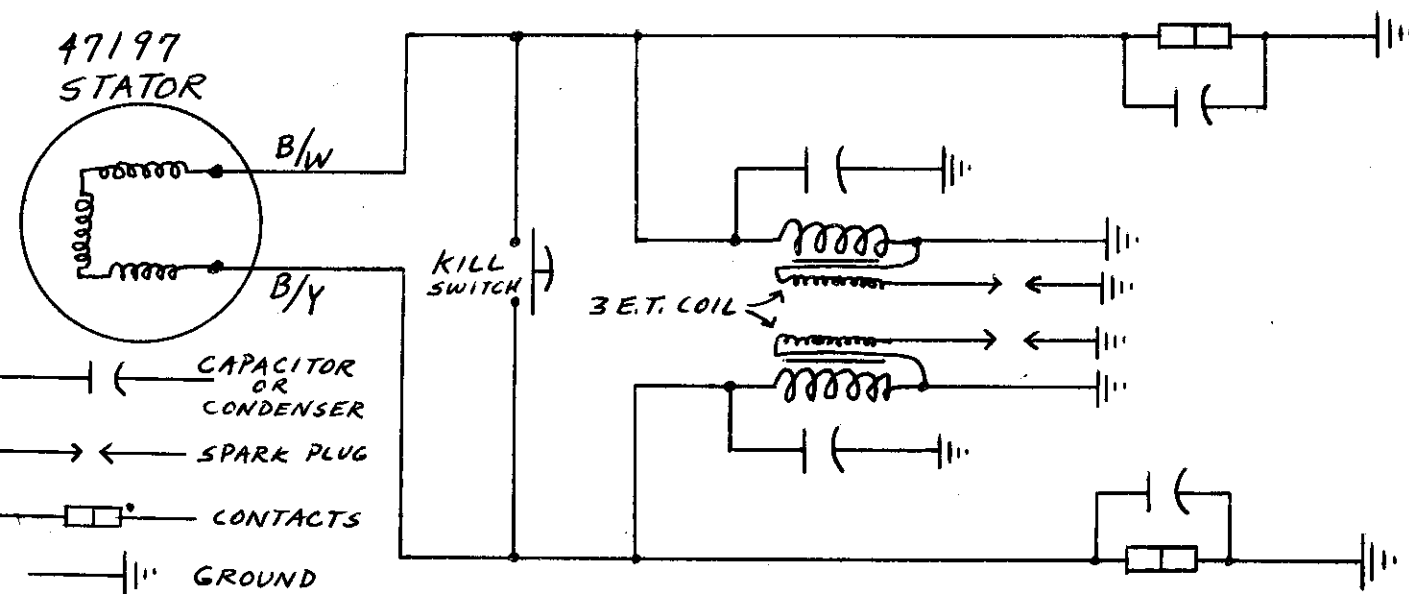
A.C. IGNITION



The point is that the relationship between the A. C. generator part of the A.C. ignition system and the contacts is variable. These parts are not directly connected in a self-contained unit as is the case with Lucas or other magnetos. By changing the relative position of the rotor and stator or the timing between the contacts and rotor/stator unit, the performance of the A.C. ignition system can be drastically altered. The manufacturer of the motorcycle and electrical system specify the relationship of these parts and it is **EXTREMELY IMPORTANT** that this relationship not be altered for proper performance of the ignition system.

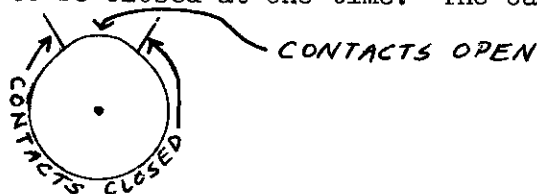
Now let us examine an A.C. ignition circuit using the latest encapsulated stator #47197 for our example:

A.C. IGNITION SCHEMATIC

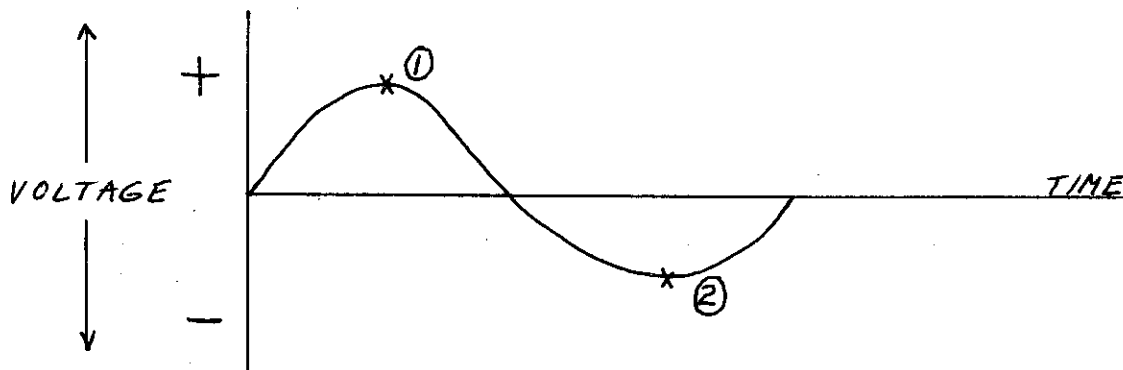


The stator windings must form a closed circuit (thru ground) in order that the rotor/stator can generate an A.C. voltage output. Remember a basic rule of electricity - electric current always takes the path of least resistance.

Bear in mind that the A.C. ignition cam has a very short "open" time and it is possible for both sets of contacts to be closed at one time. The cam is shaped approximately as shown:



When a complete path thru ground is created (both contact sets closed), an A.C. voltage is generated by the alternator (rotor/stator unit). A voltage versus time graph of this A.C. voltage output is shown below:



For maximum efficiency, the rotor/stator and the ignition contacts must be timed so that the points open very close to the point where the generated A.C. voltage is a maximum, i.e., points 1 & 2. This correct timing is assured if the rotor is timed to the engine crankshaft correctly.

There are three holes drilled in all latest rotors (#54213901) to accurately time the rotor to the stator. For optimum performance, the position in which the rotor is fitted MUST correspond with the number of degrees before top center that you wish to time the ignition at. Referring to the figures below:

"S" --- 37° B. T. D. C.
"M" --- 39° B. T. D. C.
"R" --- 41° B. T. D. C.

Looking at the A.C. Ignition schematic, the ignition system functions as follows:

With both sets of contacts closed, A.C. is generated in the stator windings. This A.C. flows thru one set of contacts, thru ground, and thru the other set of contacts back to the stator to complete the circuit. Notice that the current takes the path of least resistance (in theory) and does not flow thru the relatively high impedance primary winding of the coil when the contacts are closed.

When one cylinder's contacts open the only path thru which the current can travel to ground and complete the circuit is thru the primary winding of that cylinder's coil. With the one set of contacts open, current leaves the stator, flows thru the coil's primary winding to ground; thru ground back thru the other set of contacts and back to the stator. The current flowing in the primary of the 3 E.T. coil induces a high voltage in the secondary winding of the coil. It is this high secondary voltage that is dissipated across the spark plug gap as a spark. An important point to remember here that applies to any ignition system is that the coil will only develop as much voltage as is necessary to "fire" the spark plug. The other cylinder fires in a similar manner when its contacts open.

When the kill button is pushed, current will again take the path of least resistance and flow from the stator thru the kill button and back to the stator. In effect, the coils and contacts are short circuited and the engine will not fire.

From the above explanation, it is obvious that the contacts play a critical role in the ignition system's efficiency. Indeed, the efficiency of one cylinder's ignition depends heavily on the other cylinder's contact set! As a result of this, it is **EXTREMELY IMPORTANT** that both sets of contacts be clean and properly gapped. Current must flow thru one or both sets of contacts at all times; therefore these contacts must offer as little resistance to current flow as possible. **MAKE SURE YOUR FEELER GAUGE IS CLEAN** when gapping contacts. Also, all the wiring and connections in the ignition system must be good. There can be no frayed or pinched wires, or dirty or poorly soldered connections anywhere in the wiring.

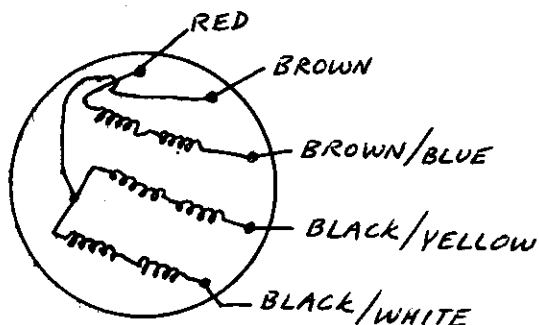
Troubleshooting A.C. Ignition is remarkably easy once you understand how the system functions. It is more involved than battery ignition troubleshooting however because you must run the engine from another ignition source while you check the alternator's (ignition winding) A.C. voltage output. Proceed as follows:

1. Be sure the rotor/stator timing (S, M, or R) corresponds with the ignition timing (37° , 39° , or 41° B.T.D.C.) you desire.
2. Check that the range of the auto-advance mechanism is the proper 5° (10 crankshaft degrees). This 5° will always be stamped on the back of the proper sleeve and action plate for A.C. ignition (#54415747). Do not try to use an auto advance mechanism with over a 5° range as the A.C. ignition system is not designed to function properly over a larger advance range.
3. Be sure that the contacts are clean and gapped properly (.016-.014"). Check that the spark plugs in the engine are clean and properly gapped (.020"). Time the contacts to open at either 37° , 39° , or 41° B.T.D.C. corresponding to the way the rotor is timed. Check that excessive runout or wobble of the ignition cam is not opening the contacts prematurely. The contacts should be closed all the way around the heel of the cam.

For normal servicing of an A.C. ignition equipped motorcycle, the above 3 steps are all you should have to do to the ignition for the engine to run properly. If the engine will not fire at all or misfires when running, you must proceed as follows:

1. Disconnect all 5 stator leads from the alternator side of the connector under the engine. Using an ohmmeter or Tricor #233 test light, check the stator for shorts or opens as follows:

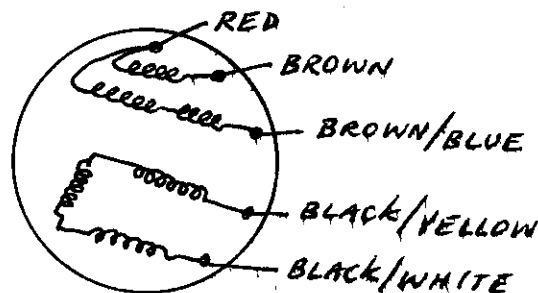
47188 STATOR



SHORTED WINDING TEST:

1. There should be no continuity between any stator lead and the metal stator frame or a good clean ground on the engine.
2. There should be no continuity between the Red or Brown/Blue lead and any of the other 3 leads (Brown, Black/Yellow, or Black/White).

47197 STATOR



SHORTED WINDING TEST:

1. There should be no continuity between any stator lead and the metal stator frame or a good clean ground on the engine.
2. There should be no continuity between a Black/Yellow or Black/White lead and any of the other 3 leads (Brown, Brown/Blue, or Red).

October 23, 1967

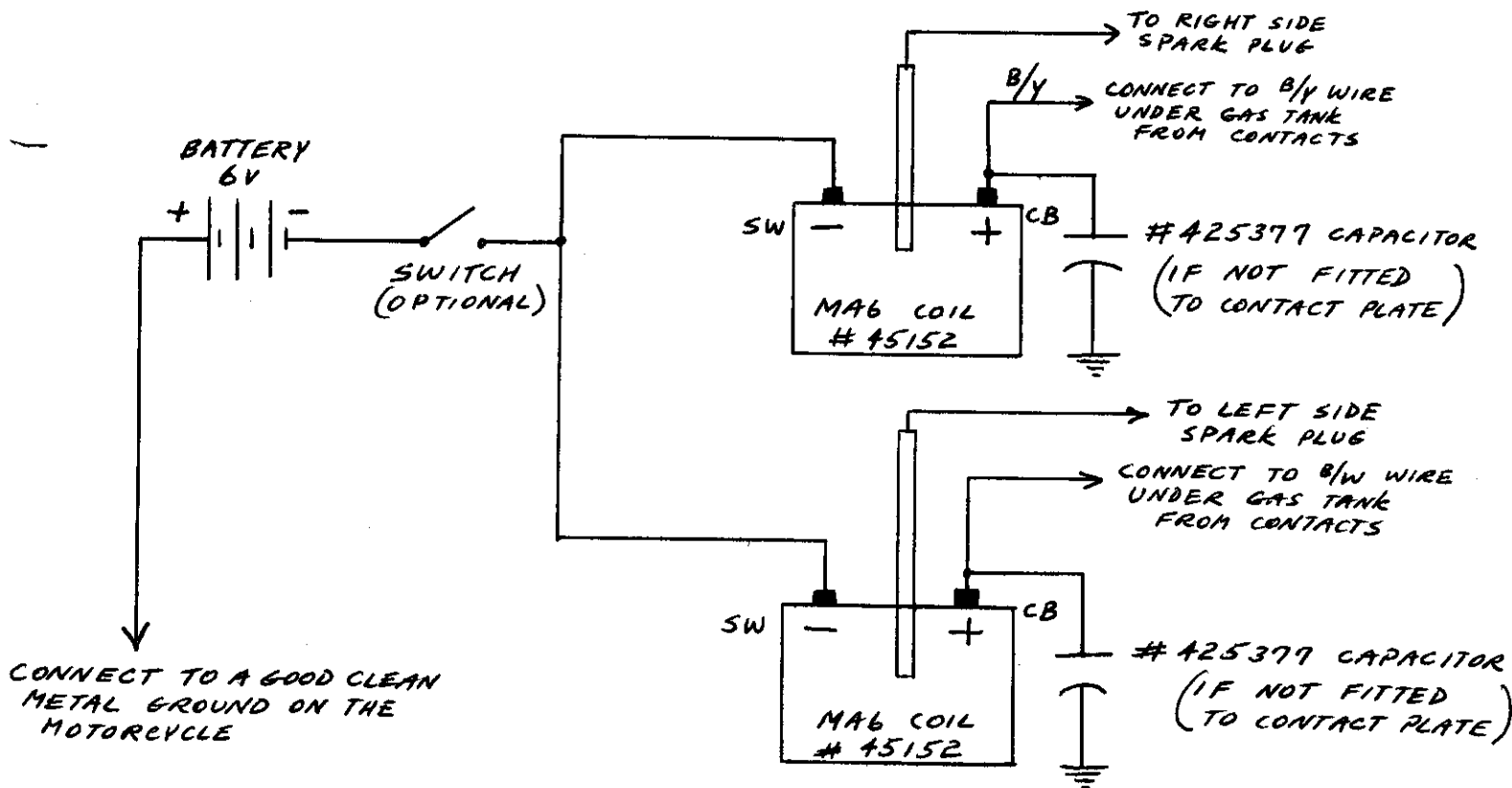
OPEN WINDING TEST:

1. There should be continuity between any combination of the Brown, Black/Yellow, or Black/White leads.
2. There should be continuity between the Red and Brown/Blue leads.

By performing the above tests, you have checked the complete stator (both ignition and lighting windings) for shorts and opens. If the stator fails any one of these tests, you must replace it before proceeding further.

It is extremely unlikely that there is anything wrong with the alternator if the stator passes the above tests. To be dead certain however, you must make the following test of the alternator's A.C. voltage output.

To perform this test, you must make up a "power pack" to run the engine on while the stator is disconnected from the ignition system. Complete instructions are to be found in the CD411 or CD446 workshop manuals; however, the simple diagram for this "power pack" is shown below. It will be easy to construct the "power pack" from this diagram.



USE 16ga WIRE

OPEN WINDING TEST:

1. There should be continuity between any combination of the Red, Brown, or Brown/Blue leads.
2. There should be continuity between the Black/Yellow and Black/White leads.

IMPORTANT -- Run the engine only long enough to make the necessary test readings with this "power pack." The MA6 ignition coils are not designed to be run with such a long dwell ignition cam as the A.C. ignition cam. The long dwell will cause excessive current in, and overheating of the primary winding of the 6V coils.

ALTERNATOR IGNITION WINDING OUTPUT TEST:

Using a Tri-Cor "750" electrical test set or an equivalent test set that MUST contain a 1 ohm at least 100 watt resistor in it, do the following:

1. Turn the voltmeter switch to A.C.
Turn the load resistor ON.
2. Connect one voltmeter lead to the Black/Yellow lead from the stator.
3. Connect the other voltmeter lead to the Black/White lead from the stator.
4. Start the engine and run it at 3000 rpm (approximately 45 mph in 4th gear). Note the A.C. voltmeter reading. For both 47188 and 47197 stators, you must have a minimum output of 2.0 volts A.C.
5. If you have a 47188 stator, change one voltmeter lead from the Black/Yellow lead to the Brown lead. The reading obtained here should also be a minimum of 2.0 volts A.C.

If you have the required readings, the stator is positively good.

If you do not have a minimum of 2.0 volts A.C., then this indicates a faulty stator, demagnetized rotor, or that the rotor is not turning with the crankshaft. It will be necessary to remove the primary cover and check the rotor at this point. If it is turning with the crankshaft and is not demagnetized, then the stator must be replaced.

With the "power pack" removed and the good stator's ignition leads (B/Y, B/W) connected back into the motorcycle's wiring system, the ignition system should perform well at this point. If it does not, then further testing will be necessary to isolate the bad coil or capacitor that is causing the problem.

There are only 3 possible troubles a capacitor can have: it can be shorted, open, or leaky. Test as follows using an ohmmeter or, for the short test, a Tri-Cor #233 test light.

CAPACITOR SHORT TEST:

There should be no continuity between the lead and metal case of the capacitor.

CAPACITOR OPEN TEST: Using only an ohmmeter

Place one ohmmeter lead against the capacitor case and connect the other ohmmeter lead to the capacitor lead. Reverse the connections and you should see the ohmmeter needle "kick" slightly as the capacitor discharges. Use the highest resistance range of your ohmmeter for this test -- i.e., R x 10K.

CAPACITOR LEAKINESS TEST:

This test can only be made with a capacitor tester. It is highly unlikely the capacitor is leaky.

COIL TESTS:

As a quick check on the coils, use an ohmmeter to determine if the primary or secondary winding is open.

1. Primary Open Test:

There should be continuity between the Lucar terminal and the bare ground wire.

2. Secondary Open Test:

There should be continuity with some resistance between the bare ground wire and the metal pin in the spark plug wire hole of the coil.

At this time it is a good idea to insert the spark plug wire back into its coil hole and check for continuity again between the plug end of the spark plug wire and the coil ground wire. If, or once you have continuity between these points, 3M or flexseal the lead to the coil.

It is improbable that the coil will pass these tests and the bike still run poorly due to ignition trouble. As a final check however, if necessary substitute a new coil if one cylinder of the engine still fires erratically.

One final possibility of trouble lies at the kill button. Remove it from the electrical system by disconnecting the B/Y and B/W wires at the connectors under the gas tank. There should be no continuity thru the switch when the button is released and continuity thru the switch when it is depressed. The battery ignition kill switch (brown button, instead of black as on the A.C. ignition models) grounds the two leads in addition to connecting them together, and can be used on the A.C. ignition system if need be.

A.C. LIGHTING SYSTEM

A.C. lighting is straightforward once the system is understood.

ALTERNATOR LIGHTING WINDING OUTPUT TEST

Again, the first thing to check is the A.C. voltage output of the stator's lighting windings. Proceed as follows using the Tri-Cor "750" test set:

1. Disconnect the lighting winding leads under the engine from the alternator side of the connector. These 2 or 3 leads are the Red, Brown on the 47197 stator, and Brown/Blue leads. (You have already checked the Brown lead on the previous alternator output test if you have the 47188 stator.)
2. Turn the voltmeter switch to A.C.
Turn the load resistor ON.

3. Connect one voltmeter lead to the Red stator lead.
4. Connect the other voltmeter lead to the Brown/Blue stator lead.
5. Start the engine and run it at 3000 rpm. On the 47197 stator, switch the voltmeter lead from the Brown/Blue to the Brown stator lead after taking the first voltage reading. You should observe the following minimum A.C. voltage readings;

Red - Brown/Blue -- 5.0 volts A.C.
(47197) Red - Brown -- 5.0 volts A.C.

If these minimum voltages are obtained, the stator's lighting winding output is O.K. Any lighting fault must lie in a short or open somewhere in the motorcycle's wiring system. By following the wiring diagrams in the workshop or owner's manuals, you can easily isolate and repair the fault.

If you have not already done so in the previous tests, check the stator for opens or shorts. Look for a non-rotating or demagnetized rotor if the stator checks O.K. If the rotor is magnetized and turning with the crankshaft and you still have no or low A.C. voltage output, the stator will have to be replaced.

GENERAL COMMENTS ON A.C. LIGHTING

Generally, two problems arise with the A.C. lighting system - either too much A.C. voltage output which blows bulbs or too little A.C. voltage output which results in dim lighting. Unfortunately, for a given load, the A.C. output of the alternator is solely dependent on engine RPM in the Lucas direct lighting system.

The most important thing to remember when working with the A.C. lighting system is to make sure that the correct wattage light bulbs are being utilized in the electrical system. These are:

6V Headlight	-- 24/24 watts Lucas #166
6V Stop & Taillight	-- 6/18 watts Lucas #384

Use of higher wattage light bulbs than these above will result in dimmer lighting throughout the engine's rpm range.

On the non-encapsulated 47188 stators, use of a higher wattage stop light than the Lucas #384 will place an additional load on the stator's ignition windings and may cause stalling or misfiring of the engine when the stop light is on. Additionally, on these 47188 stators it should be obvious that any short to ground in the stop light circuit will cause ignition trouble. The electrical advantage of the 47197 encapsulated stator is that the stop light winding is no longer connected to the ignition windings.

Faster and better service to your customer and increased profits will result from an understanding of the preceding description of the A.C. ignition and lighting systems. Study the descriptions and diagrams until the operating and testing PRINCIPLES are committed to memory.

Very truly yours,

THE TRIUMPH CORPORATION



Service Manager

Rod Coates:ib

KJ.

The TRIUMPH Corporation

Parts - Tools - Accessories Bulletin

August 4, 1967

Bulletin #67-14P

SUPPLEMENT FOR PARTS CATALOGUE NO. 5 - 1967 650cc MODELS

Enclosed with this bulletin is a supplement for your green No. 5 Parts Catalogue for 1967 650cc models. This supplement covers the new Type 900 "Concentric" Amal Carburetors as fitted to all T120R models from engine number DU59320. You should immediately order replacement parts for these carburetors if you have not already done so previously. You can expect the same items to wear on these carburetors as do on "Monobloc" carburetors, i.e. throttle slides, throttle cables, choke cables, etc. You can also expect calls for the following: cable adjusters and locknuts, screws, throttle needle clips, floats, joint washers, air screws, 'O' rings, etc. After ordering the parts, be sure to attach the supplement to your No. 5 Parts Catalogue for future reference.

"CONCENTRIC" CARBURETOR STOCK

In addition to the standard "Concentric" carburetors fitted to late 1967 T120R models, R930/9 and L930/10, we also stock the following for various applications:

R932	Right/hand Carburetor - 32mm (1 $\frac{1}{4}$ ") bore.....	\$37.50A
L932	Left/hand Carburetor - 32mm (1 $\frac{1}{4}$ ") bore.....	\$37.50A
928	Right/hand Carburetor - 28mm (1 $\frac{1}{8}$ ") bore.....	\$37.50A
930	Right/hand Carburetor - 30mm (1 $\frac{3}{16}$ ") bore.....	\$37.50A

The right/hand type "Concentric" carburetor is normally fitted to single-carburetted models, but may also be used in pairs for dual carburetted models due to the accessibility afforded by the new "Concentric" design. Parts are interchangeable throughout the entire 900 series with the exception of the carburetor bodies themselves.

NEW - HARD CHROME STEM RACING VALVES

Now in stock - valves with hard chromed stems for late 650cc models. These hard chromed stems reduce friction and wear to an absolute minimum. The stems are approximately .001" larger in diameter than the standard valves due to the hard chroming, thus offering additionally a closer fit in the valve guides and more positive valve seating. The E2904KE/CH Exhaust Valve, and EH603KE/CH Inlet Valve are interchangeable with the standard valves fitted to all 1964-'67 T120 models, and 1967 TR6 models. Both valves are made of highest quality nickel-chrome alloy steel for strength and durability. The suggested list price on either valve is \$6.50, and your cost on either is \$3.25.

CD520 "GRANTURISMO" RALLY HANDLEBAR GRIPS

These new "Granturismo" Rally handlebar grips, although similar in construction to the standard handlebar grips fitted to 1967 'B' and 'C' ranges, are in actuality a totally-new design from "Granturismo." Same highest quality construction, but in a style to really compliment the motorcycle. "Granturismo" Rally grips come packaged in pairs with their own vial of glue. These grips fit not only all current Triumph models, but most other English motorcycles as well. The suggested list price on the CD520 "Granturismo" Rally grips is \$2.50, and the dealer cost is \$1.25. You've got to see these new grips to appreciate them, so order some on your next parts order! Available in black only.

The TRIUMPH Corporation

Parts - Tools - Accessories Bulletin

August 10, 1967

Bulletin #67-16P

PARTS MANAGER'S INDEX

Enclosed with this bulletin is the factory's Parts Manager's Index covering 1967 "B" and "C" Ranges. This Index is a brand-new service from the factory, and can be most helpful in determining part usage and location on the machine. The introduction on page 2 of the Index outlines the many uses for the Index in more detail. Quantities of the Index are limited, and we are able to provide only one Index to each dealer at this time, so please do not request a replacement if your copy is lost or destroyed. If more copies of the Index are made available, you will be notified and they will be issued on a first come - first serve basis in limited amounts.

CD411 WORKSHOP MANUALS FOR UNIT CONSTRUCTION 650cc MODELS

Now arriving from the factory is the latest edition of the CD411 Workshop Manual which covers 1963-'67 650cc models. The new CD411 manual can be easily identified by its new blue-lettered cover. If you have not already received these new manuals, several should be ordered on your next parts order. Supplements to up-date previous manuals to 1967 specifications are not as yet available, so you may wish to suggest your customers purchase the new 1967 CD411 Workshop Manual. You will be notified when the amendments are available, but there is little probability of their being offered in the near future.

NEW SHOP TOOL -- CD475 STANCHION TUBE INSTALLER

This new shop tool, although similar to the Z161 tool illustrated in the CD411 Workshop Manual, is favored by most mechanics as the sliding bar (shock driver) design of the CD475 saves time and prevents damage to the top fork lug. The CD475 is inserted through the top lug, fork cover, and middle lug. The lower end of the tool is then threaded into the top of the stanchion tube. By then using the sliding bar, the stanchion can be quickly drawn upwards into position. An essential tool for assembling all Triumph forks from 1964 fitted with "outside" fork springs. \$8.40A

NEW STAHLWILLE HAND TOOLS

Dealers recently ordering hand tools will have noted we are discontinuing the English-made King Dick hand tool line and are now stocking the German-made Stahlwille line. Dealers familiar with Stahlwille tools will appreciate this change, as we consider the Stahlwille tool line to be first-rate and comparable to any domestic tools. Back-orders for King Dick tools have been and are being filled with the Stahlwille tools, and as our remaining King Dick stock is exhausted, new orders will be filled with Stahlwille tools. You may continue to use the King Dick part numbers, as listed on page 29 of your 1967 Tri-Cor Accessory Catalog, as the Stahlwille tool will automatically be substituted when the King Dick tool stock is exhausted.

The TRIUMPH Corporation

Parts - Tools - Accessories Bulletin

August 10, 1967

Bulletin #67-17P

(Supersedes Service Bulletins 62/10, 63/8, 65/2, 65/12, and Parts Bulletin 67-4P)

RE: Lucas Stators and Rotors Fitted to Triumph Motorcycles - 1954 thru 1967.

"A" RANGE

RM No.	STATOR PART No.	NUMBER OF LEADS-COILS	ROTOR PART No.	No. STAMPED ON ROTOR	MODEL	YEAR
RM13	47105	3 - 6	466124	465904	T15, T20 & T20C	54-62
RM13	47177	4 - 6	466124	465904	T20S, T20W, T20SL, T20T, T20SR, & T20SC E.T. Ign.	59-62
RM18	47161	3 - 6	54213903	54212284**	T20 (w/two piece crankcase)	62-65
RM19	47188*	5 - 6	54213901	54215824**	T20SR, T20SC, T20SM E.T. Ign. (w/two piece crankcase)	62-67

"B" RANGE

RM14	466168	3 - 6	466230	465969	5T & 6T	54-58
RM15	47127	3 - 6	423506	466177	6T	59-61
RM13/15	47171	3 - 6	423506	466177	T110, T120, TR7 & TR6	60-61
RM19	47183-	3 - 6	54213901	54215824**	T120R, TR6SR, & TR6SC	62
RM19	47131	3 - 6	54213901	54215824**	6T	62
RM19	47204	3 - 6	54213901	54215824**	6T, TR6 & T120	63-67
RM19	47188	5 - 6	54213901	54215824**	T120TT & TR6C	63-67

"C" RANGE

RM13/15	47105	3 - 6	423506	466177	3TA & 5TA	58-61
RM13/15	47149	5 - 6	54211596	54211595	1960 T100A & TR5AR E.T. Ign.	61
					up to Engine #H21122	
RM13/15	47105	3 - 6	54211596	54211595	TR5AR Battery-Coil Ign	61
					after Engine #H21122	
RM13/15	47177	4 - 6	54211596	54211595	TR5AC E.T. Ign up to	61
					Engine #H25251	
RM19	47188*	5 - 6	54213901	54215824**	T100SC E.T. Ign.	62
RM19	47204	3 - 6	54213901	54215824**	3TA, 5TA & T100SR	62-67
RM19	47188	5 - 6	54213901	54215824**	T100SC E.T. Ign	63-67

*The 47188 five lead Stator has superseded the 47173 four lead Stator previously fitted to E.T. Ignition models. In this application the black-yellow lead from the 47188 Stator must be grounded.

**54213901 rotor may be stamped either 54212006 or 54215824.

NOTE: 47197 encapsulated version of 47188 available for special applications. \$40.00A

SUPERSESSIONS

47105---supersedes---47119, 47124, 47137, 47168, 465915, 468678, & 468973
 47127---supersedes---469427
 47171---supersedes---47134 & 47178
 47177---supersedes---47138, 47165, 47166, & 47175
 47131---supersedes---47164
 47188---supersedes---47173
 54213901---supersedes---54214272 & 54215824
 47204 (Encapsulated Stator)---supersedes---47162

The TRIUMPH Corporation

Parts - Tools - Accessories Bulletin

August 10, 1967

Bulletin #67-18P

(Supersedes Parts Bulletin 66-3P)

Re: PISTONS IN STOCK AT THE TRIUMPH CORPORATION

<u>PART NO.</u>	<u>COMP. RATIO</u>	<u>MODELS FITTED</u>	<u>SIZES AVAILABLE</u>
<u>"A" RANGE</u>			
CP120	7-1	47mm 150cc T15 All	Std .020 .040
CP141	7-1	63mm 200cc T20 All	Std .010 .020 .040
CP172	9-1	63mm 200cc T20 All	Std .020 .040
ML640	10-1	63mm 200cc T20 All	Std .020 .040 .060 .070
Bare piston only. Use CD200 rings, EL750 pin, (2) EL767 clips			.080 .090

<u>"B" RANGE</u>			
CP135	8-1	63mm 500cc 48-59	Std .010 .020 .030 .040
CP161	9-1	63mm 500cc 48-59	Std .010
CP163	8-1	71mm 650cc 50-on	Std .010 .020 .030 .040
CP200	8.5-1	71mm 650cc 50-on	.010 .020 .030
CP202	11-1	71mm 650cc 50-on	.010
CP206	9-1	71mm 650cc 50-on	.010 .040
E6867	11-1	71mm 650cc 50-on	Std .010 .020 .040
E6868	9-1	71mm 650cc 50-on	Std .010 .020 .040
CD435	10-1	71mm 650cc 50-on	Std .010 .020 .030 .040
Forged slipper design by Mahle. With rings and clips - no pin (use WE203E)			

<u>"C" RANGE</u>			
EL4041	10-1	58.25mm 350cc 57-on	Std (bare piston only)
CP164	7.5-1	58.25mm 350cc 57-on	Std .010 .020 .040
CP198	10-1	58.25mm 350cc 57-on	.020 only
CP174	7-1	69mm 500cc 59-on*	Std .010 .020
CP187	9-1	69mm 500cc 59-on*	Std .030
CP187/40/SP	9-1	69mm 500cc 59-on*	Special piston with large
valve cutaways for use with thin head gasket EL015/R10, .040 oversize only.			
E6884	9.75-1	69mm 1967 T100R only	Std .010 .020 .040
E6897	9-1	69mm 500cc 59-on*	Std .010 .020 .040

NOTE: Pistons marked with asterisk () cannot be used in 1967 T100R.

(ALL PISTONS ARE COMPLETE WITH RINGS, PIN, AND CIRCLIPS UNLESS STATED OTHERWISE.)

RING SETS IN STOCK AT THE TRIUMPH CORPORATION

<u>"A" RANGE</u>							
CD200 Fits ML640 piston; and 63mm 500's	(uses two sets).	Std	.020	.040	.060	.070	.080
CD470 Fits all T20's, 61-on.	(Replaces CP150)	Std	.020	.040			

<u>"B" RANGE</u>							
CD460 Fits all 650cc twins.	(Replaces CP99)	Std	.010	.020	.030	.040	

<u>"C" RANGE</u>							
CD465 Fits all 69mm 500cc twins.	(Replaces CP175 & CP180)	Std	.010	.020	.030	.040	

NOTE: To order over-size piston or rings, combine size required with part number.

Example: E6868/20 means .020 over-size.

The **TRIUMPH** *Corporation*

Parts - Tools - Accessories Bulletin

September 6, 1967

Bulletin 67-19P

SUBJECT: New Crankshaft Locating Tool D571/2T68 for
500cc engines after H50000

We are sending one of these new tools to every dealer. All 500cc engine flywheels from engine number H50000 have two 3/16" dia. locating holes in them. One of these holes locates the crankshaft at Top Dead Center, the other at 38° before Top Dead Center.

When using this tool as a top dead center indicator be sure you engage the pin in the second hole as the crankshaft is rotated in a forward direction. Double check that the pistons are at top dead center.

Very truly yours,

THE TRIUMPH CORPORATION



S. E. Lovell,
Parts Manager

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The TRIUMPH Corporation

Parts - Tools - Accessories Bulletin

September 15, 1967

Bulletin #67-20P

(Supersedes Service Bulletins 63/7, and 65/13)

Re: Exchange Prices on Lucas Electrical Equipment

Enclose orders for exchange units in an envelope attached to the box containing the units returned for exchange. We cannot ship any exchange units unless we have already received one of the equivalent used units. We cannot issue a credit for any old units returned after we have shipped the Lucas unit at the regular price. Superseded units are acceptable for exchange against the unit superseding them.

Part No.	Description	Models	Exch. Price	Reg. Price
20035EX....	DC Generator.....	Early 500-650cc models.....	\$45.00...	\$54.00
37097EX....	Voltage regulator...	Early 500-650cc models.....	11.85...	17.15
37225EX....	Voltage regulator...	Early 500-650cc models.....	14.45...	17.90
466168EX...	Stator RML4.....	5T & 6T, '54-'58.....	24.50...	32.90
47105EX....	Stator RML3/15.....	T15, T20 & T20C, '54-'62 3TA & 5TA, '58-'61 TR5AR Battery-Coil Ignition after engine #H21122, 1961.....	16.50...	27.75
47127EX....	Stator RML5.....	6T, '59-'61.....	19.95...	31.20
47149EX....	Stator RML3/15.....	T100A & TR5AR E.T. Ignition up to engine #H21122, '60-'61.....	24.20...	33.20
47161EX....	Stator RML8.....	T20 (w/two piece crankcase), '62-'65.....	18.00...	23.65
47171EX....	Stator RML3/15.....	T110, T120, TR6, & TR7, '60-'61.....	19.15...	27.85
47177EX....	Stator RML3.....	T20S, T20W, T20SL, T20T, T20SR, and T20SC E.T. Ign., '59-'62 TR5AC E.T. Ign. up to eng.#H25251, '61....	18.00...	23.65
47181EX....	Stator RML9..... (High output)	6T, 1962.....	20.65...	29.00
47183EX....	Stator RML9..... (Low output)	T120R, TR6SR, & TR6SC, 1962.....	19.15...	27.85
47188EX....	Stator RML9.....	T20SR, T20SC, T20SM, E.T. Ign. (w/two piece crankcase), '62-'67 T100SC E.T. Ignition, '62-'67 T120TT & TR6C E.T. Ign., '63-'67.....	19.95...	31.20
47204EX....	Stator RML9..... (medium output)	T120R, TR6R, & 6T, '63-'67 3TA, 5TA, & T100SR, '62-'67.....	29.00...	42.60
423506EX...	Rotor RML3/15.....	6T, '59-'61; T110, T120, TR6 & TR7, '60-'61; 3TA & 5TA, '58-'61.....	24.45...	33.20
466124EX...	Rotor RML3.....	T15, T20, T20C, T20S, T20W, T20SL, T20T, T20SR, & T20SC '54-'62.....	18.00...	27.55
466230EX...	Rotor RML4.....	5T & 6T, '54-'58.....	27.50...	36.55
54211596EX.	Rotor RML5.....	T100A, TR5AR & TR5AC, '60-'61.....	18.55...	29.10
54213901EX.	Rotor RML9.....	T20SR, T20SC & T20SM, '62-'67 All 500-650cc models, '62-'67.....	26.45...	36.00
54213903EX.	Rotor RML8.....	T20 (w/two piece crankcase) '62-'65.....	16.00...	22.50

Above prices effective June 1, 1967. Class A discount applies to all prices shown.
All prices subject to change without notice.

The TRIUMPH Corporation

Parts - Tools - Accessories Bulletin

November 1, 1967

Bulletin #67-22P

SUBJECT: 1968 Models

PARTS. With the introduction of our 1968 models, several points need to be clarified. 1968 model parts catalogs have not as yet arrived from the factory, but are expected shortly, and will be sent out as soon as possible. Until the catalogs arrive, parts may be ordered by description. When ordering a 1968 model part, give the exact model designation (T120R, TR6R, TR6C, T100R, or T100C), the year (1968), and as accurate a description of the part required as possible. We recommend, where possible, that you give the part number of the 1967 part that the 1968 part replaces, example: if a headlamp complete is required for a 1968 T120R, you would write "T120R 1968" in the model and year columns of your parts order form, and "Headlamp Complete (replaces 59734)" in the description column. Be sure to also give us the quantity desired. Do not put a question mark or write anything in the part number column, leave this area blank so that we may write in the correct part number. Then, compare the carbon copy of your original order with the invoice to determine the correct part number for future reference. The invoice is printed in the exact same sequence as your original order, so if the first two items on your original order are 1968 parts, the first two part numbers on the invoice will be for the 1968 parts. Important note: Do not order parts for the new TR25W model at this time. Some specifications and part numbers for this model have yet to be finalized. Until such time as all specifications and part numbers are finalized, we cannot accept orders for TR25W parts. You will be notified by later bulletin when orders will be accepted.

TOOLS. Two new tools are required to service 1968 models. First is the D571/2T68 crankshaft locating tool for all 1968 "C" range models, and also late 1967 models from engine number H50000. See bulletin #67-19P for further information on this tool. Second is the CD523 auto-advance unit extractor for all 1968 "B" and "C" range models. This new tool is on the same order as the D484T extractor used on previous models but is required on 1968 model due to the new contact breaker.

ACCESSORIES. All accessories for 1967 "B" and "C" ranges will also fit the 1968 models. So, in states where safety bars are required, our CD217/67 can be used on 1968 "C" range models, and our CD216/63 can be used on 1968 "B" range models. In states where a seat rail is required, either our CD472 seat rail or CD464 Combination Accessory Group may be used on 1968 "B" and "C" range models. However, an additional part is required to fit a CD464 Combination Accessory Group to 1968 "B" or "C" range models. The additional required part is a $\frac{1}{4}$ " thick spacer used to raise the tail light assembly so that the brackets for the CD464 can be attached to the rear fender mounting bolts. The spacer is placed on the center attaching stud of the new aluminum tail light housing, between the housing and the fender. This spacer will be included with all future CD464 shipments. CD464 Combination Accessory Groups now in dealer's stocks may be fitted to 1968 "B" and "C" range models by simply substituting a number of $\frac{1}{4}$ " steel washers for the spacer.

LM:ib