The TRIUMPH Corporation

SERVICE BULLETIN

BULLETIN REVISED November 29, 1963 November 8, 1963

1964 "B" RANGE 650cc TWIN MODELS

BULLETIN NO. 4

SERVICE NOTES - - - USEFUL INFORMATION - FIRST DELIVERY OF 1964 MODELS

OWNER'S HANDBOOK

Although the book furnished with each 1964 looks the same as last year's book, it is a new publication and includes important information for 1964 Models.

NEW FORK ASSEMBLY (Page 6 OWNER'S HANDBOOK)

The new Forks after engine #DU5825 require 190cc oil for each fork leg. An increase of 40cc over previous Models. SAE 20 for winter and SAE 30 for summer.

To prevent entry of water and dirt into the forks, due to leakage above the rubber boot, we suggest fitting a felt seal (#T1071) between the spacer at the top of each fork spring and the fork crown (middle lug) and we are sending a pair of these seals to Dealers who receive early production Models. Our stainless steel worm clamps (Part #GS30) can be used at both ends of the rubber fork boots.

VALVE CLEARANCE

For the T120R and TR6R Models, we suggest .004" inlet and .006" exhaust clearance rather than the .002" and .004" shown in the Owner's Manual. Always check valve clearance when servicing a brand new motorcycle. Bend the tip end of a feeler gauge over at 45° and check the clearance with a gauge.

PRIMARY CHAIN OIL LEVEL

We suggest using SAE 10 in the winter and SAE 20 in the summer and recommend checking the level by removing the oil level plug at the rear of the case.

OIL TANK

Do not over-fill the oil tank, as this will cause leakage at oil tank - engine breather tube. 2-1/2 quarts of SAE 20 in winter and SAE 30 in summer is sufficient.

FOOTRESTS

Before fitting the new footrests, we suggest scraping the excess paint from the face joint to prevent loosening and movement of the footrests. The longer of the two footrests is used on the right hand side (foot shift side).

Continued . . . . . .

KICKSTART LEVER

When fitting the K/S lever, be sure to install the T1222 taper bolt from the REAR and drive this "cotter" bolt all the way home with a steel hammer before tightening the 1/4" nut. If the cotter bolt is fitted the wrong way with the nut to the rear it will interfere with the footrest when you kick the engine over.

REAR ENGINE PLATES

The Frame Lug for the Swinging Arm Spindle is fastened to both rear engine plates with 7/16" studs and nuts with lock washers. We suggest replacing these two standard 7/16" - 26 nuts and lock washers with two special nuts, part #F3771 that are made of heat treated steel and have an integral serrated washer (no lock washer is required). By fitting these special clamp nuts to the studs you will improve the stability of the S/A frame lug and this can reduce vibration and improve handling of any 1963 "B" Range Unit Construction Model. Later production 1964 machines will have these special nuts fitted on original assembly.

REAR MUDGUARD - BATTERY CARRIER

In some cases a slight interference between the bottom rear corner of the battery carrier and the top surface of the mudguard can cause a vibration noise. Lift the seat and bend the mudguard downward approx 1/8" to give clearance.

NEW IMPROVED SWITCH PANEL F5394

The new Switch Panel fitted to all 1964 "B" Range Twins has four mounting points and eliminates the trouble experienced with 1963 Panels. We recently received several hundred of this latest replacement type complete with mounting brackets and we have filled the majority of back-orders on a free-of-charge basis. Further shipments of the Improved Panels will be arriving soon and we will continue to ship free-of-charge to Dealers who send us an order with a claim tag, giving engine numbers of the 1963 machines. (no need to return the old panel) Send your order in now and replace 1963 broken Switch Panels with the latest Improved Type.

NEW AIR CLEANER FOR T120 TWIN CARBURETOR MODELS

CD361 Complete Air Cleaner Kit for T120 Twin Carburetor List Price $14.30 F

This Air Cleaner Assembly (CD361) is designed for maximum efficiency (using a paper element) with no reduction in top performance. It is standard equipment on 1964 - T120R, T120C and the Bonneville TT Special. The rubber connectors (E5268) are made to fit the 1-1/8" and 1-3/16" Type 389 Monobloc Carburetors. Two threaded steel adaptors (E4576) are furnished so that this Kit can be used for 1963 Models using 1-1/16" carburetors.

NOTE:

Price and description of CD361 Air Cleaner Kit has been corrected as of November 29, 1963.

The TRIUMPH Corporation

SERVICE BULLETIN

TO ALL EASTERN TRIUMPH DEALERS: January 17, 1964 64/1

SUBJECT: Basic Instructions for Set-Up of NEW 1964 Triumph Twin Cylinder Motorcycles

Carefully uncrate and unpack new model. Wipe off excess grease and proceed as follows:

1. FORKS - See Special Service Note below for the new 1964 Twin Model Forks.

   Remove handlebar lug from fork assembly. Place 20 balls (24 for "C" Range) in top frame cup and 20 balls (24 for "C" Range) on lower fork cone. Heavy grease will hold balls in place.

   Fit fork assembly. Fit top cone. Fit handlebar lug. Fit one stanchion tube nut to hold assembly in position.

   Fit bearing adjusting nut. Fully tighten. Then back off 1/8 turn to provide proper bearing adjustment. Tighten adjusting nut pinch bolt. Add 190 c.c. SAE #20 (winter) or SAE #30 (summer) oil to each fork leg. Tighten stanchion tube nut (using 1-1/2" U.S. socket and at least 15" leverage).

   Fit handlebar. Fit steering damper.

2. FRONT MUDGUARD AND WHEEL - Fit mudguard and center it between fork legs.

   Remove the caps from the bottom of the fork legs and check tightness of flanged bolt H1063 using 2BA socket. Scrape excess paint from inside surfaces of lower fork tube lug and adjacent cap. Fit front wheel and replace caps correctly (milled side of cap faces the wheel).

3. HEADLAMP AND CONTROLS - Tachometer normally is fitted on the left speedo on the right. Ground wire from instruments should be fastened to front tach bracket mounting bolt. Connect drive cables through tach and speedo and then carefully locate clutch and brake cables between gas tank and front frame down tube.

4. Check horn mounting bolts and rectifier ground connection. Fit Twin seat.

   Scrape excess paint from joint surface between footrests and rear engine plates. Thoroughly tighten footrest mounting bolts.

   Fit exhaust pipes and mufflers. Be sure that pipes and clips are pushed all the way up against alloy cylinder head to insure proper cooling.

1964 FORKS - IMPORTANT OPERATION TO ELIMINATE OIL LEAKS.

Before fitting the Fork Assembly to the motorcycle, loosen the middle lug pinch bolt and remove each fork leg assembly. Hold bottom end of lower fork tube in the vice, unscrew the chrome fork seal sleeve nut using Tri-Cor wrench CD367. Clean male and female threads with Tri-Cor Metal Cleaner. Use Aviation liquid Permatex on threads and reassemble. Tighten sleeve nut using CD367 wrench. To prevent water from getting into forks, add felt seal T1071, or cork-synthetic washer F4047 (oil tank cap gasket) as a seal between the top fork spring retainer and the middle fork lug.
See Blue Bulletin #4 - November 8, 1963.

In order to guarantee customer satisfaction and make certain that every Triumph performs as it should, the following suggestions are offered. Every new model sold by the dealer should be carefully checked and road tested before placing it in the customer's hands.

1. Check all accessible bolts, nuts and drain plugs. Lubricate spark plug threads before tightening plugs.

2. Service battery. Check Lucas instructions and use 1.240 Sp. G. acid.

3. Make sure oil tank is clean. For Twins use Castrol SAE #30 in Summer, SAE #20 in Winter. For Lightweights use Castrol 10W - 30 multi-viscosity oil.

4. Add proper quantity of oil to gearbox. (See handbook supplied with model) Use Castrol SAE #50 for all road models. Tri-Cor Gearlube for racing Cubs.

5. Add proper quantity of oil to primary drive. (See handbook) Use Castrol SAE #20.

6. Check primary and rear chain adjustment. (See handbook supplied with model)

7. Grease swinging arm pivot bearing (fitting on bottom).

8. Oil cable nipples and clevis pins with Wonderlube.

9. Check tire pressures. (See handbook) 20 psi front and rear.

10. Check valve clearance. We suggest .004 inlet and .006 exhaust.

11. Adjust brake, clutch controls. (See handbook)

12. We suggest raising throttle needles one notch for all models during break-in period. This provides a rich mixture for cooler running. Needles can be repositioned at 500 mile check-over as required for proper running. Remove rear tank bolt and raise tank to remove tops of T120 carburetors.

13. Fit Tri-Cor "Sparky" terminals, part #D105 in place of plastic plug terminals.

14. Adjust cables so throttle slides open evenly.

15. Road test the new model for several miles. Be sure it runs and steers properly and that all controls function as they should.

16. After road test, check the following points:
    1. Lights, horn, battery charging circuit for proper operation.
    2. All controls for need of further adjustments.
    3. Possibility of oil or gasoline leaks.
    4. Proper adjustment of primary chain.
    5. Adjust carburetors for a good idle condition.

17. Encourage customer to read riders' manual supplied with machine. He should understand proper operation of controls and "break-in" procedure.

18. Advise customer when to return for initial service check-over. Fill out warranty card and mail to The Triumph Corporation, with Battery Certificate.

The TRIUMPH Corporation

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1963 and 1964 "B" RANGE 650cc TWIN MODELS

BULLETIN NO. 5

January 17, 1964

This chart shows wire code colors and connections at the separate lighting and ignition switches. This information applies ONLY to 1963 and 1964 650cc Twin models with 6 Volt lighting systems and twin contact breaker points and dual coil ignition. This does not apply to the 1964 Thunderbird (6T) model which has 12 Volt system.

Light Switch Terminal Numbers	Color Code	Wires Connect to:
1	Red with Black tracer	Parking Lamp
2	Brown with White tracer	Ammeter Positive Terminal
3	Blue	Headlamp Dipper Switch
4	White with Green tracer	Alternator Junction Block White/Green
5	Black	Ignition Switch #18 Terminal
6	Not Used	
7	Green with Black tracer	Rectifier Top Terminal
8	Brown with Green tracer	Tail Lamp
10	Brown with White tracer	Rectifier Middle Terminal
11	Brown with Green tracer	Speedometer & Tachometer lights
Ignition Switch Terminal Numbers		
12	Not Used	
12A	Brown with White tracer	Rectifier Middle Terminal
13	White	Ignition Coils - Negative Terminals
13A	Not Used	
14	Not Used	
15	Black with White tracer	LEFT HAND Ignition Coil Positive Terminal
16	Green with Yellow tracer	Alternator Junction Block Gr/Yellow
17	Not Used	
18	Black	Lighting Switch #5 Terminal
19	Not Used	

The TRIUMPH Corporation

SERVICE BULLETIN

February 4, 1964 64/2

SUBJECT: NEW SHOP TOOLS

Four important TRI-COR Workshop Tools were shown at our 1964 Dealer's School. These are essential tools that every Triumph Dealer should have in his shop. As they become available, we will ship the following four items to every Dealer.

PART NUMBER	DESCRIPTION	LIST PRICE	DEALER NET
CD367	Fork Wrench (All 1964 Twins)	$5.58 B	$3.72

Special "Ring-Wrench" for removing and tightening the 1964 chrome plated sleeve nut and oil seal assembly fitted to the lower fork tubes (see Set-Up Bulletin 64/1 for the use of this wrench to eliminate oil leaks).

CD376	Ignition Timer Disc	$1.10 A	$ .55

A Degree Disc "segment" designed to fit the camshaft of all 1963-64 Triumph Models. Calibrated in crankshaft degrees, this disc can be left in place while adjusting the contact points and permits quick, accurate timing checks of both static and full advance conditions. Can also be used with a running engine and a Strobe-Light.

CD384	Adaptor Assembly for CD376	$1.90 A	$ .95

Kit of parts includes special washer, threaded adaptor and wing nut for fitting CD376 Ignition Timer Disc to the camshaft.

CD385	Top Center Stop	$2.60 A	$1.30

An adjustable threaded stop pin and vented body assembly to fit any engine with 14mm spark plug. With this tool, an accurate top center setting can be quickly obtained. Recommended for use with TRI-COR Ignition Timer CD376. Can also be used for setting top center with any degree disc.

* *

The following useful tools are now available from stock. Order now.

P311/TR	Gear Puller	$7.20 B	$4.80

A very handy puller complete with 5/16" and 3/8" bolts and adaptor sleeve. For removing 1963 "B" Range camshaft gears that have two 5/16"-26 tapped holes. Will also pull all Unit Construction "B" Range engine and countershaft sprockets.

#233	Burnworth Tester	$1.98 B	$1.32

A useful circuit tester self-powered with two penlight batteries. Features needle point probe, bulb and four foot lead with clip. Ideal for use with TRI-COR Ignition Timer CD376.

The TRIUMPH Corporation

SERVICE BULLETIN

February 19, 1964 64/3

TO ALL EASTERN TRIUMPH DEALERS

SUBJECT: How to use TRI-COR "Top Center" Tool and Ignition Timer Kit.

Use these tools for quickly and accurately setting ignition timing of all Triumph Models that have contact breaker points mounted on end of camshaft.

PART NUMBER	DESCRIPTION	LIST PRICE
CD385	Top Center Tool	$2.60 A
CD368	Complete Ignition Timer Kit	3.00 A

CD368 Timer Kit consists of these separate parts:

1 - CD376	Timer Disc	$1.10 A
1 - CD382	Adaptor	1.50 A
1 - CD378	Washer	.20 A
1 - CD138	Wing Nut	.20 A

1. Remove both spark plugs and contact breaker cover plate.

2. Remove contact breaker assembly holding bolt (E1545) and washer (S25-43).

3. Thread ignition timer adaptor (CD382) into the camshaft to replace the bolt and washer that you have just removed. If you are checking ignition at full retard (static timing) make sure that you fit the brass washer (CD378) with the recess toward the adaptor and away from the ignition cam.

4. Carefully tighten the adaptor body and fit plastic timer disc (CD376). Put piece of masking tape on the exhaust pipe with a mark to line up with the edge of the disc. Set disc accurately for top center as follows:

   1. Engage fourth gear and rotate engine using the rear wheel until piston is on top center WITH BOTH VALVE CLOSED. (This is important to prevent damaging inlet valve). Adjust top center (T.C.) mark on disc to line up with mark on masking tape. NOW rotate the engine forward 35°. (Do not rotate engine backwards through the inlet cycle).

   2. Fit Top Center Tool (CD385) into spark plug hole. Carefully screw adjustable pin down until it touches the piston and lock pin with lock nut. Now rotate the engine forward through bottom center (exhaust cycle) until the piston comes upwards and touches the pin. CAUTION! DO NOT rotate engine backwards as the inlet valve could strike the Top Center Tool and bend the valve. Check the reading on the disc and adjust by splitting the difference between first and second reading. Now rotate the engine backwards until the piston again touches the pin and recheck. When you have the disc adjusted so that you get the same reading on either side of top center (on exhaust stroke) you then know that top center (T.C.) reading on the degree disc is perfect.

Cont'd.....

February 19, 1964

3. Remove top center tool. Using your Burnworth Tester part #233, (See Service Bulletin No. 64/2) Take a direct reading from the timer disc when the points break and this will give yeu static timing in crankshaft degrees.

We recommend checking "FULL ADVANCE" ignition timing with the auto advance unit locked in full advance position. This can easily be done as follows:

Fit brass washer (CD378) with the recessed face toward the contact breaker cam. As you tighten the adaptor use a small screw driver in the notch at the edge of the contact breaker cam and rotate the cam clockwise (for Twin Models)* until the cam is full advanced. The cam can be locked in that position by tightening the adaptor against the brass washer (do not overtighten). This will hold the auto advance mechanism locked in full advance position. Set contact breaker points so they open at 38° before top center. (full advance) This is a good ignition timing for all models.

* For Cubs rotate cam counterclockwise.

Since the first production 1963 Models, the static timing for various Models has been changed, due to a change in the "range" of the auto advance. For this reason, it is always best to check "FULL ADVANCE" timing by following the above instructions.

If you have an automotive type ignition timing light you may also wish to use your TRI-COR Ignition Timer under running conditions. After you have mounted the timing disc and obtained top center, connect the timing light to the spark plug of the cylinder you wish to check and the corresponding set of points. Shine the light on the rotating disc and check the timing under running conditions for this cylinder. You can do this with locked spark or with the auto advance operating.

You can easily adjust the contact breaker points without removing the disc once you have set it for accurate top center. You can also adjust the timing by moving the contact breaker point plate without disturbing the disc. With a little practice you can use the TRI-COR Ignition Timer to obtain accurate degree disc timing in less than ten minutes.

Very truly yours,

THE TRIUMPH CORPORATION

Service Manager

Rod Coates:bjh

CAUTION!!. When the Top Center Tool is fitted in the spark plug hole, rotate engine CAREFULLY to avoid damage to piston or inlet valve. An over-size inlet valve could strike the tool. Never rotate engine through inlet cycle while tool is in place. If in doubt, remove inlet valve cover and make certain valve is not opening while Top Center Tool is fitted.

The TRIUMPH Corporation

SERVICE BULLETIN

1964 "B" RANGE 650cc TWIN MODELS

BULLETIN NO. 6 March 6, 1964

SERVICE NOTES ON 1964 MODELS - - - - CONTINUATION OF BULLETIN NO. 4

NEW FORK ASSEMBLY

Refer to Blue Bulletin #4, November 8th. This new fork is giving very good service. There are, however, three important points to watch for.

1. Oil leaks at threads of chrome fork seal nut. Always seal these threads when you set up a new machine (see Service Bulletin 64/1 Jan. 17th). Use your new CD367 fork nut wrench! If you have not received one of these wrenches, order one now!

2. Damage to lower portion of rubber fork boots. Watch for a condition where the bottom coils of the fork spring pinch the rubber boot. If a hole develops here your customer will not be happy. The Factory is developing a new rubber boot with a different shape to prevent this. We can now supply a new improved rubber boot complete with two clamps (CD390).

3. Latest production machines have felt seal washer (T1071) between the spacer at the top of the fork spring and the fork crown or middle lug. Add this seal to early models to prevent water from getting in at the top of the fork boot (see Blue Bulletin #4 Nov. 8th).

IGNITION TIMING

We have now sent each Dealer one Top Center Tool (CD385) and one complete Ignition Timer Kit (CD368). Refer to Service Bulletin 64/3 Feb. 19th. These tools will give you a quick method of checking and adjusting ignition timing of all 1963 and 1964 Triumph Models. Refer to Service Bulletin 64/2 for additional information.

SERVICE PROBLEM - - - - - Sticking Throttle Slides

Watch out for this trouble. We have had a few reports of distorted carburetor bodies, due to over-tightening the flange bolts. Distortion may also be caused by the groove for the "O" Ring not being deep enough to accomodate the rubber ring. Reduce the thickness of the "O" Ring by sanding it off with emery paper. You can also remove the paper washer and the hard asbestos insulator block to prevent distortion. This may be satisfactory with a Bonneville, but with the TR6 single carburetor and aluminum manifold, however, the insulation block is required between cylinder head and carburetor, especially during hot weather. This trouble has only developed since the introduction of the #389 1-1/8" carburetors fitted to 1964 - T120 and TR6 Models.

Continued.....

SERVICE PROBLEM - - - - - Sticking Throttle Slides Continued

If you experience distorted carburetor bodies under warranty, be sure to send us the carburetor body only and we will send you a free-of-charge replacement by return mail. Remember, however, DO NOT send the complete carburetor. Always remove the loose pieces and send us the body only. If you want to avoid tieing up your customer's machine, order a mixing chamber body only (part #389/002 for 1-1/8" size and part #389/004 for 1-3/16" size). We will send you the body and bill you for it and then issue you a credit on claim when you return the distorted body.

NEW ITEMS - NEW ITEMS

CD390 RUBBER FORK BOOTS FOR 1964 TWINS LIST PRICE $2.49-B each

These differ from the original equipment type and will prevent damage due to interference between the rubber boot and the bottom coils of the fork spring. Two metal clamps sent with each fork boot.

LRP/100 SPECIAL OIL IN AEROSOL CANS LIST PRICE $2.00-A

We now have this useful lubricant in stock packed six cans per case. It is a very handy material to use for many applications requiring a specialized lubricant designed to penetrate and maintain a protective film. We find it is ideal for lubricating the contact breaker cam where it fits on its shaft. You may remember seeing our demonstration of this oil at the Dealer's School.

NEW FLEX SEAL LIST PRICE $1.89-B

Same good product and same price. We now offer this popular liquid gasket compound packed three cans per case. If you order one can we will send you one case of 3 cans (minimum quantity).

JOMO "HARD-FACED" RACING CAMS LIST PRICE $30.32-C each

We can now supply from stock the following popular racing cams recommended for use in both "B" & "C" Range Triumph Twins. These cams are known as "TT Grind" for the "B" Range Twins and "Scrambles Grind" for the "C" Range Twins. Both of these cams have .313" lift measured at the cam lobe. This is the same as the genuine Factory racing cam often known as the "Q" Cam. The timing of these cams is essentially the same as the Factory racing cam with inlet opening 40° and closing 60° and exhaust opening 60° and closing 40°. These readings taken at .020" lift at the cam with racing tappets.

"B" Range 650cc Twins

PART NUMBER	DESCRIPTION
CD324/TTB	Either inlet or exhaust through 1962 Models, also Inlet only for 1963 and 1964 Models.
CD330/TTB/63	Exhaust for 1963-64 Models with double contact breaker points.

"C" Range 500cc Twins

CD326/SCC	Inlet through 1963 Models with Spiral Gear to Drive Distributor.
CD327/SCC	Exhaust through 1962 Models can also be used for Inlet in 1963 and 1964 Models (no spiral gear on this camshaft).
CD332/SCC/63	Exhaust for 1963-64 Models with double contact points.

We will issue a credit allowance of $3.00 for a used cam of the same type as ordered if it is in acceptable condition.

The TRIUMPH Corporation

SERVICE BULLETIN

June 1, 1964

1964 "B" RANGE 650cc TWIN MODELS

BULLETIN NO. 7

SUBJECT: Replacement Parts Catalog #2 for 1964 "B" Range Twins.

We list below important corrections that should be made in your book IMMEDIATELY.

This #2 Book covers 1964 Models. It can be used for 1963 Models, BUT a few parts such as forks, fenders, fender braces, carburetors, speedos, tachs, T120 cylinder head, etc., were changed from 1963 to 1964 and thus, for some 1963 parts you must refer back to your #1 Brown Parts Book (without pictures).

Page No.	Ref. No.	Corrections
6,7,8		Change cylinder bore dimension from 2.79 to 2.7953". Change 6T main jet from 230 to 270. Change tire size for T120 from 3.25x18 front to 3.25x19 and from 3.50x18 rear to 4.00x18.
9		We do not stock CP188 and CP102 valve spring carton packs. Order by individual part numbers shown.
10		Ditto for CP173 valve and CP97 valve guide carton packs.
13		Add CP201 Piston 11.2:1 C.R. for T120/TT Spec.
13		Add E5450 Engine sprocket 29T. Add E4912 Distance piece. Add E4913 Dowel. Add 54215824 Rotor. Above parts for T120/TT Spec. with E.T.Ignition.
13	35	E4819 Inlet camshaft is racing type (same grind as E3134).
13	36	E4855 Exhaust cam is a "Sports" type (same grind as E3325).
13		Add E5047 Racing exhaust camshaft (same grind as E3134).
15	13	Note that rear chain oiler can be "plugged" by fitting Blanking screw H689 in place of Jet E3885.
19	13	E3310 Inlet valve has 1-1/2" head diameter. (6T and TR6 Models)
19	14	E3927 Exhaust valve has 1-11/32" head diameter.
21	18	E4603 Inlet valve has 1-19/32" head diameter. (1964 T120)
21	19	E2904 Exhaust valve has 1-7/16" head diameter.
21		Add E3310/8KE Special over-size inlet valve 1-5/8" dia. This valve can sometimes be used when there is sufficient insert size in original head.

Page No.	Ref.No.	Corrections
		Add the following parts for T120/TT Special:
21	9	E5727 cylinder head.
21	12	E5351 left carb. adaptor.
21	13	E5352 right carb. adaptor.
		NOTE: These carburetor adaptors have 1-3/8" threads and will NOT fit 1963 and earlier T120 cylinder heads with 1-1/4" threads.
23	4	Two oil seals E4568 are fitted to timing cover. One with circlip fits end of crankshaft and retains oil pressure. Lip of this seal must face outward away from the main bearing. Lip of seal fitted behind contact breaker points must face inward toward the camshaft.
23		For T120/TT Spec. with "A.C.Ignition" add the following part numbers:

Ref.No.	Part Number	Description
11	47602	Contact Breaker Assembly
12	54441582	Condensers
13	54415473	Cam
14	54415641	Spring Set
15	425359	Weight
16	54415747	Sleeve & Action Plate
29	45149	E.T.Coil
41	F1756	Coil Bolt

23	46	Use Sparky D105T in place of D297 and D262.
27		All gears shown are Standard Ratio. For Wide Ratio and Close Ratio conditions refer to Service Bulletin Index No. 62/4 for correct part numbers.
27		Add T1227 Speedo drive blanking nut (used when speedo cable is removed).
31	14	Add alternative clutch plates T1885, T414AT and T1362AT. These "heavy duty" plates can be used in place of standard T1362.
33	13	Change E4145 to E4148 Trunnion.
33	18	Change 47164 to 47162 Medium Out-put Stator. This is the stator we recommend and is fitted to all 1963 and 1964 "B" Range Models except T120/TT Spec. The 47164 stator is a "High Out-put" type and is not recommended for general use.
		We also offer the following two additional stators that should be added:
		47183 "Low Out-put" stator. 47188 E.T.Ignition stator (T120/TT Spec.)
35	11	Change F4712 to F5786 Prop stand.
37	15	The 6T Suspension unit 64054506 is NOT fitted to T120 Models.
37	15	The TR6 Suspension unit 64054164 is fitted to the T120/R, T120/C and T120/TT Spec.
37	20	The 6T - 145# Spring SA253/5 is NOT fitted to the T120 Model.

Page No.	Ref.No.	Corrections
37	20	The 100# Spring 9054/280 is fitted to T120/R, T120/C and T120/TT Spec.
37	43	Change 31437 to 31383 Stop light switch.
37		Add part No. 64054164 damper unit only, fits all models except 6T.
38	19	Picture shown is not correct. Our current footrest rubber NF704 is the round type same as in the past.
41	1	Exhaust pipes and mufflers shown in pictures on page 40 are the down-swept condition for 1964 - 6T, T120/R and TR6/R Models. If you require up-swept pipes for TR6/C, T120/C and T120/TT Spec. be sure to order part numbers shown in U.S.A. Supplement. No change in part numbers of exhaust pipes and mufflers between 1963 and 1964.
41	14	Note that the same muffler E4949 is fitted for both right and left hand side and you can always change a right hand muffler to left hand by simply turning the bracket over and bolting it on the other way.
43	20	Felt washer T1071, or cork-synthetic washer F4047 can be used to replace H1756.
43	13	H1708 is a Special countersunk washer and should always be fitted between the handlebar eye bolt and the bonded rubber bush. The countersunk side of this washer must face upward against the shoulder of the eye bolt. This washer is furnished with every eye bolt shipped from Triumph Corp. Never install the handlebar eye bolt without fitting this special washer.
43	23	Solo fork spring H1660 can be replaced by domestic type H1660TH which is slightly stiffer than solo but not as heavy as the sidecar type.
45	14	Change 516812 to 516798 Light unit.
45	19	Change 414 to 446 Head light bulb. This is 12 volt bulb for 6T Model only.
45	23	Add part number 54336177 Nut used for mounting switch body to panel.
45	26	Add part number 180316 Nut used for mounting switch body to panel.
47	1	Add H1716 Fork assembly for TT Special Model. Refer to U.S.A. Supplement for part numbers covering fork hydraulic damper parts fitted to the T120/TT Spec. fork assembly.
47	8	Add part number H1287 Top lug assembly for T120/TT Spec. fork.
47	13	See note under page 43.
47	20	See note under page 43.

The Hydraulic damper kit fitted to all 1964 - T120/TT Spec. Models can be fitted to 1964 "B" & "C" Range Twin Models. When adding this kit order the following parts:

2	H1758A	Hydraulic damper assembly	$7.88 A each
2	H1762	Top fork tube nut	$1.76 A each

Page No.	Ref.No.	Corrections
49	1	W1399 Front wheel for 6T Model is 18" size and is NOT fitted to T120.
49	1	W1323 Front wheel assembly is 19" size fitted to all TR6 and T120 Models. When ordering front wheel, rim or spokes for T120 always order 19" size (same as TR6).
51	1	W1469 Rear wheel complete is NOT fitted to T120.
51	1	W1491 Rear wheel complete is fitted to T120. When ordering rear wheel or rim for T120 always order WM3-18 type (same as TR6).
51	31	Change W1487 to W1085 Brake cam lever.
51	33	Change W1488 to W1090 Lever return spring.
53		We suggest you cross this page out altogether to avoid a possible error in ordering quick detachable wheel parts that are never used as original equipment.
55	1-11	These eleven parts are fitted ONLY to the 6T Model which has the five gallon tank. None of these parts are fitted to TR6 and T120 Models except the Styling screws F4129.
55	12-25	All fourteen of these parts are used with the three gallon Sports gas tank F5416 and are fitted to all TR6 and T120 Models. When ordering Knee pads, Styling units, Gas tanks, etc., for Bonneville and TR6 ALWAYS make certain that you are ordering the parts that fit the small Sports gas tank F5416.
55	39	Add part numbers F3026 Screw plug to replace standard Grid screw when the package grid is removed.
59	23	Change part number F5334 to F5693 Air filter (with paper element. Fits 1-1/16" carbs.).
59	24	Change part number F4811 to F5694 Paper type element. Cross out word "felt".
59	21	Add note "F5958 Adaptor sleeve fits 1-1/8" & 1-3/16" carbs".
59	23	Change part number F5956 to F5957 Air filter. (with paper element. Fits 1-1/8" carbs.)
59	24	Change part number from F5764 to F5694 Paper type element. Cross out words "coarse felt". Add part number F4812 Adaptor sleeve (similar to F5958 (ref.#21) except this adaptor sleeve fits 1-1/16" carburetor).
63		Front fenders shown on this page will not fit 1963 or earlier Models due to change in the center bridge location to fit the 1964 forks with outside springs. If you are ordering front fenders for a 1963 "B" Range Model we suggest that you use your #1 Brown Book or #16 Blue Book for 1962.

Page No.	Ref.No.	Corrections
63	1	Change part number H1689 to H1691 Silver front fender (undrilled). This is the valenced type fitted to early 1964 - 6T Models. For later production 6T order the small front fender H1677 and braces as fitted to TR6 and T120 Models.
63	8	Change part number H1675 to H1677 Mudguard blade.
63	21	Change part number H1482 to H1678 Bottom stay. Refer to Supplement for U.S.A. Models page 3 which shows the correct numbers for Polished alloy fenders and the special bracket and bottom stay fitted to front fender of TR6/C, T120/C and T120/TT Spec. SPECIAL NOTE: When ordering Fenders and Gas Tanks ALWAYS specify the color, year and model required.
65	1	H1484 is the English handlebar and is NOT fitted to any of our "B" Range Models as original equipment, although we do stock it. American Handlebars and Controls are shown on page 67.
65	13	18/995 Front brake lever assembly (no ball end) is NOT fitted to T120.
65	22 & 32	Change part number 18/880 to 18/872T Barrel nipple.
65	23	18/996 Clutch lever assembly (no ball end) is NOT fitted to T120 Model.
67	5	Change part number D416 Front brake cable to D330T.
67	5	Change part number D417 Front brake cable to D330T.
67	16-19	Omit these four Throttle cable items. NOT fitted to U.S.A. T120.
67	16	Omit D515 Throttle cable. Cable with junction box NOT fitted to T120. Refer to U.S.A. Supplement for correct throttle cable D528T.
69	32	Change part number D527 to CD367 Fork Wrench for chrome sleeve nut.
71 & 73	1	Use the following part numbers for original equipment carburetors.

Part No.	Size	Model	Main Jet	Throttle Slide	Idle Jet
376/309	1-1/16	6T	270	#4	#25
389/97	1-1/8	TR6	310	#3½	#25
389/203	1-1/8	T120/R & C	260	#3	#20
389/95	1-3/16	T120/TT	330	#4	#25

73	47	Add E4918 Insulating block for T120/TT Spec.
73	48	Add part number E4919 Joint washer for T120/TT Spec.
75	1	Add part number 54521793 Chrome head light shell only for TR6 & T120.
75	15	Add part number 54934830 Wiring harness for T120/TT Spec.

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Page No.	Ref. No.	Corrections
75		Add 54935477 Battery lead with fuse.
75		Add 54935476 Battery lead without fuse.
75		Add CD392 American replacement fuse 30 amp. fuse size.
77	1	Omit alternative speedometers that show KPH. (Kilometers) Not available.
77	12	H1668 Bracket for single instrument only. (TR6/C, T120/C & T120TT Spec.)
77	39	H1596 Mounting Bracket for double instruments, tachometer and speedometer.
77		Add D542W Inner speedo cable 6T Model.
77		Add D543W Inner speedo cable T120 and TR6 Models.
77		Add D529W Inner tachometer cable.

- -

Add the following notations to your U.S.A. Supplement for #2 Parts Book.

Page No.	Figure	Corrections
1	8	Note that item 3 through item 14 are Wide Ratio gears fitted to 1964 TR6/C Model only. Note that item #21 covers five different gearbox sprockets from 15T through 19T. These sprockets will only fit 1964 Models which have mainshaft high gear T1912. These sprockets are NOT interchangeable with the early type gearbox sprockets fitted from 1950 through 1963 (the size of the spline on the high gear was changed for 1964). For further details and prices refer to your latest Tri-Cor Accessory Catalog, Miscellaneous page showing rocker box covers, sprockets, etc.
2	18	Item #42. The eight items beginning with #42 can be ordered as an assembly by specifying part number H1758A Hydraulic damper assembly. This damper kit was only fitted to our 1964 T120/TT Spec. Models and will NOT fit 1963 or earlier Triumph forks.
2	24	E5262 is the Double air cleaner assembly fitted as original equipment to 1964 - T120 Twin carburetor models. Order CD361 Air cleaner kit complete with all fittings and two Adaptors (E4576) to fit 1963 T120 with 1-1/16" carburetors.
3	24	Add part number 376/410 Banjo 55°. This banjo is included in CD361 Kit and is required when fitting E5262 Air cleaner assembly to a 1963 model.
4	28	Change part number D417 to D330T Front brake cable.
4	31	Change part number E4949 to E4919 Joint washer.

The TRIUMPH Corporation

SERVICE BULLETIN

June 18, 1964

1964 "B" RANGE 650cc TWIN MODELS

BULLETIN NO. 8

SUBJECT: Important Service Notes to be read by your Sales AND Service Personnel.

Electrical Problem - - - 1963-64 Twin Cylinder Models with 6 Volt Coil Ignition.

SYMPTOM: Engine starts okay and runs reasonably well at idle. As soon as you apply a load, however,(speeds in excess of 30 mph in high gear) the engine starts "bogging-down" and appears to "seize". Engine also lacks power and gives all the symptoms of running with a retard spark.

WARNING: Continued running under the above conditions can cause over-heating, piston seizure and SERIOUS ENGINE DAMAGE.

CAUSE: Battery is not in the electrical circuit due to:

1. Blown Fuse.
2. Broken battery connection.
3. Ammeter disconnected or failed. (open circuit)
4. Headlight removed without connecting battery to switch.
5. Wiring harness socket at lighting switch disconnected (fallen off).
6. Broken wire (brown/white) between ammeter and lighting switch or between lighting switch and ignition switch (brown/white).

CURE: Locate and correct the short circuit or over-load that caused fuse failure. Replace blown fuse. Never run motorcycle with open circuit (blown fuse) or with battery removed.

If you remove the ammeter be sure to connect the two ammeter wires together to prevent open circuit between battery and lighting switch.

When removing headlight for competition use, you MUST connect the brown/white and brown/blue wires together. These are the wires which are normally connected to the ammeter terminals.

Why does the removal of battery from circuit cause this electrical problem???

Refer to 6 Volt Wiring Diagram on page 33 or 34 of 1963-64 Handbook.

1. Brown/white wire from the center rectifier post to #12A terminal of the Ignition switch feeds D.C. current from Rectifier through the Ignit. switch to the Ignit. coils by the white wire from Ignit. switch to coils.

   When Ignit. is turned on, #12A term. is connected to #13 term.

2. This D.C. VOLTAGE supplied to the coils will steadily increase as engine speed increases UNLESS there is a suitable resistance (such as a battery) in the circuit. The high voltage at the coils will give a "Delayed Spark". This creates a bad running condition and the symptom of retard timing and can cause serious damage.

CD390 Rubber Fork Boots - 1964 Models

Some dealers are having difficulty fitting these rubber boots. They are larger and longer than the original type. Make sure that the first rib at the bottom of the boot does not extend below the edge of the front fender. The edge of the fender should line up with the metal clamp. If the bottom of the rubber boot is located any lower than this, the outside of the diameter of the ribs will interfer with the fender which quickly wears a hole through the boot.

If original equipment boots fail, you can obtain the replacement type free-of-charge on claim. As soon as the new type factory fork boots are available they will be sent instead of CD390 as replacements for H1645.

Lucas #54330934 Lighting Switch Knob

This black plastic lighting switch knob is furnished as a replacement with a washer and mounting screw. We suggest that you use Loctite on the threads of this screw to prevent loss of the knob. It is also important to apply Loctite to the threads of this screw when setting-up a new machine for delivery.

Exhaust Pipes 1958 through 1962 "B" Range Models - - - Correct Part Numbers

Many dealers have difficulty interpreting the pictures and part numbers of exhaust pipes shown in the Blue "B" Range Parts Book #16 on page 44 and 45. Remember that the two-in-one up-swept exhaust pipes shown in the picture are not fitted to the TR6 Models sold in U.S.A. This picture shows the English type exhaust.

We suggest that you refer to our Index Service Bulletin #60/4 of March 14, 1960. This Bulletin was revised in 1961 and shows the correct part numbers for all "B" Range exhaust pipes fitted to U.S.A. Models from 1958 through 1962.

Lucas Alternator Stators and Rotors - - - Correct Part Numbers

We suggest that you refer to Index Service Bulletins 63/7 and 63/8. These Bulletins give the correct part numbers and prices for Exchange rotors, stators and regulators and they also show the correct part numbers and descriptions of stators and rotors fitted to all Triumph Models from 1954 through 1963.

SPEEDOS

Nisonger will replace any broken glass on 1964 Magnetic Speedo and Tach for $4.00. The glass is held in place by a crimped bezel and takes a special tool by which to replace the bezel properly. Please send all instruments direct to:

Nisonger Corporation
125 Main St.
New Rochelle, New York

We can only replace or repair instruments originally fitted at the Factory to Triumph motorcycles.

Very truly yours,

THE TRIUMPH CORPORATION

Rod Coates:bjh

Service Manager

The TRIUMPH Corporation

SERVICE BULLETIN

September 1, 1964

1964 "B" RANGE 650cc TWIN MODELS

BULLETIN NO. 9

SUBJECT: Replacement Parts of Dual Twistgrip, Part No. 313/6.

The following is a complete listing of the Replacement parts of Dual Twistgrip, Part Number 313/6, fitted as standard equipment to the Bonneville T120/R, and T120/TT Special.

DESCRIPTION	QTY.	PART NO.	COST
Body Top Half	1	313/008	2.88A
Body Bottom Half	1	313/009	2.98A
Rotor & Rotor Sleeve Combined	1	313/013	3.48A
Clamp Bolts	2	4/048	.34A
Grip (Black Plastic)	1	16/070	.30A
Friction Spring	1	16/008	.06A
Spring Adjuster	1	210/007	.12A
Locknut for Spring Adj. & Rotor Stop	2	210/009	.06A
Twistgrip Stop	1	210/008	.12A
Cable Stop	2	16/011	.28A
Rotor Stop	1	210/014	.04A

This Bulletin applies to page 65, Replacement Parts Catalog #2, for 1964 "B" Range Twins, Reference Numbers 2 thru 12.

NOTE: Attach this Bulletin to Blue Service Bulletin Number 7, SUBJECT: Replacement Parts Catalog #2 for 1964 "B" Range Twins, dated June 1, 1964.

The TRIUMPH Corporation

SERVICE BULLETIN

October 30, 1964 64/4

TO ALL EASTERN TRIUMPH DEALERS

SUBJECT: Wheel Building Dimensions

The following locating dimensions should be used when respoking Triumph wheels. Front wheel dimension is the distance from outside edge of brake drum to outside edge of steel rim on that side. Rear wheel dimension is the distance from outside edge of sprocket teeth to outside edge of steel rim on that side.

	FRONT	REAR
"A" RANGE	WM1 Steel Rim 5/8" WM2 " " 7/16"	WM1 Steel Rim 1-7/32" WM2 " " 1-5/32" WM3 " " 1-1/16"

	FRONT	REAR
"B" RANGE	Full Width Hub 7" brake 3/16" " " " 8" " Minus 1/64" Early Hub 7" brake 13/16" " " 8" " 7/16" (All "B" Range Front Wheels Use WM2 Steel Rim)	WM2 Steel Rim 1-27/32" WM3 " " 1-11/16"

	FRONT	REAR
"C" RANGE	Full Width Hub 7" brake 3/16" " " " 8" " Minus 1/64" (All "C" Range Front Wheels Use WM2 Steel Rim)	WM2 Steel Rim 1-13/16" WM3 " " 1-21/32"

Very truly yours,

THE TRIUMPH CORPORATION

Rod Coates

Service Manager

Rod Coates:bjh