The TRIUMPH Corporation

SERVICE BULLETIN

January 24, 1955

Service notes for Triumph Dealers to be used with Lightweight Instruction Manuals #2 & #3

Page/2----Lubrication System

All 1955 models have provision for attaching an oil pressure gauge to pressure side of the lubrication system. If operation of pump is doubtful, test by removing plug at front of crankcase and fit a pressure gauge. An automotive type pressure switch could also be installed to operate a warning indicator light.

Page 14----Maintenance of Lubrication System - Oil Tank

To prevent excessive oil transfer from oil tank to air cleaner, as a result of over-filling oil tank, connect a small rubber "overflow" hose to vent pipe on back of the oil tank and run hose down through air cleaner and below frame of machine.

Page 15----Oil Pump

When reassembling oil pump to crankcase always make certain that the paper gasket is properly located so that the holes in gasket line up with the holes in crankcase casting. All Tiger Cubs and those Terriers after #3905 are fitted with a plain bearing connecting rod. At the same time the plain bearing con rod was introduced, an oil pump with larger capacity pressure feed was fitted. This pump assembly (E3393) should always be fitted when replacing early roller bearing rod and flywheel assembly with later plain bearing type.

Page 16----Pump Body

If ball valve seats in bronze pump body are damaged, a new body should be fitted rather than attempt to recut the ball valve seats.

Page 18----Cleaning

If there is evidence of sludge or dirt in the bottom of oil tank, the tank should be removed and inside thoroughly washed with gasoline after which it should be wiped out with a clean cloth. This is the only way of removing harmful grit and metalic particles that may have settled to the bottom of tank. Thorough cleaning of tank is especially important after a machine has been used in competition.

Page 21----Rear Brake

All replacement rear brake arms are now furnished together with a mating brake cam and spindle. The square on the end of the spindle has a slight taper and the square hole in the operating arm is also tapered to fit. This arrangement insures a tighter fit between arm and spindle and whenever a new brake arm or spindle is called for, these two parts must be fitted as a pair and will be supplied under duplex part number (W1128/1131). If brake chatter or squeal is experienced, check for looseness between operating arm and spindle, also excessive clearance between spindle and brakeplate. The rear brakeplate has been improved for 1955 by increasing the diameter of sleeve welded to center of plate. The shape of the cam has also been modified and the brake anchorage pin is now threaded into the aluminum rear suspension fork. These changes in 1955 models improve the operation of the rear brake. All latest type parts are interchangable and can be fitted to earlier models.

Page 22----Primary Chain

The primary chain does not have a connecting link and this endless chain is an inexpensive replacement part (List price $3.66). Whenever a primary chain is worn so it rubs against the primary case, it is worth the small expense to fit a new one.

Page 22----Rear Chain

The term "paraffin" in paragraph 4 means kerosene. Gasoline or any cleaning solvent can be used. Whenever the machine is used "in the woods" it is important to add a piece of sheet metal to the chain guard between the chain and the rear tire to keep mud and dirt off the lower run of the chain. This simple modification will prevent a lot of trouble.

Page 27----Dismantling

It is often more convenient to leave the engine in the motorcycle frame during an engine overhaul. A unique feature of the Triumph lightweight engine design permits complete dismantling of the engine-gearbox unit without removing the crankcase from the frame. For "top end" repair such as valve, carbon and ring job proceed as follows:

1. Remove carburetor, exhaust pipe, inlet rocker cover and rocker cover stud. Before removing the four cylinder head nuts, make sure both valves are closed. Note: If four thin copper washers are fitted under these nuts, discard them and replace with four steel washers. (T825T) (The copper washers tend to distort and jam in the threads of the cylinder studs). On the Tiger Cub model, it is sometimes necessary to remove front and bottom engine mounting bolts and tilt engine forward to gain additional clearance between cylinder head and frame tube.

2. Remove cylinder head by tapping bottom of exhaust adaptor and inlet flange with plastic hammer. Do not pry against, or strike the fins of the aluminum head.

3. Remove push rod cover tube and push rods. Although push rods are interchangable, they must be positioned correctly when reassembled. Note that exhaust tappet is marked and is the one nearest to the cylinder. Note that cover tube is located by a small pin pressed in the crankcase.

4. Remove cylinder barrel by carefully rocking it while at the same time lifting upward. Do not hammer or pry against cylinder fins. If broken rings are suspected, wrap cloth around con rod below piston skirt before completely removing cylinder barrel (to prevent pieces of rings falling into crankcase).

5. Remove one wrist pin circlip and if necessary, warm piston for easy removal of wrist pin. Never drive pin out by hammering as there is always a possibility of bending the connecting rod. Mark inside of piston skirt so that it can be replaced in original position.

6. Removal of valves from cylinder head assembly: Holding cylinder head in one hand and using plastic hammer, drive each valve rocker spindle out of cylinder head. Remove rocker arms, noting position of two steel washers and one spring washer. Using a "dummy" spark plug to hold cylinder head in vise, remove valves with a "C clamp" spring compressor. Check free length of valve springs. Outer springs should be 1 5/8" long and inner spring 1 9/16" long. If length of spring is shorter by 1/8" or more, always replace. Where engine is being used with lower gearing and at higher than normal rpm, a slightly heavier inner spring, (E1777) can be fitted. To improve performance of both Terrier and Cub, it is worthwhile to carefully smooth and polish inlet port without increasing diameter beyond 3/4". It is also permissable to grind away the portion of the inlet guide that projects into the inlet port and smooth out exhaust port.

Page 38----Carbon and valve job

After removing carbon, checking valves and guides and grinding in the valves, it is important to recheck the length of outer valve spring after valves and springs are assembled to cylinder head. The actual length of the outer springs should be 1 1/4" and if it is longer due to the valve being seated further into the head, it is important to add a spacer washer under the lower valve spring cup to bring the length of the spring to the dimension given.

Page 39----Assembling the cylinder head

Before replacing rocker spindles always fit new rubber "O rings" (E3253).

Page 28----Reassembly of "top end"

When fitting new piston, check clearance in cylinder. It should be no less than .0035" measured at bottom of piston skirt.

Page 29----Push rods and cover

To insure a leak proof joint at both top and bottom of push rod cover tube the top fiber washer or sealing ring, must be replaced by a rubber "O ring", (E3243T).

Page 33----Clutch, engine sprocket and rotor

There is no tab washer fitted under the clutch to main shaft nut. Ignore instructions "bend back the clutch locking plate tab" mentioned in this paragraph. It is sometimes necessary to use a two jaw gear puller to remove engine sprocket.

Page 33----Kickstarter and footchange pedal

Note that it is necessary to remove the footshift pedal clamp screw before the pedal can be withdrawn from the splined shaft.

IMPORTANT NOTE: Always leave the removal of inner drive side cover until final operation so it will support drive side end of flywheel assembly.

Page 36----Selector forks and spindle

It is more convenient to leave the selector fork spindle in the gear case. If cylinder head, barrel and piston have been removed from engine, fit a front wheel spindle from a Triumph Twin through the wrist pin bush at small end of con rod to keep the flywheel assembly from turning while the timing pinion bolt is being tightened or loosened.

Page 37----Mainshaft, high gear and rear drive sprocket.

To prevent sprocket from turning, a short piece of drive chain can be wrapped around the sprocket and doubled back to wedge against crankcase. Use 1 5/16" U.S. socket to remove locknut.

Page 40----Crankcase

The timing side main bearing (steel sleeve lined with babbit or white metal) can be replaced by any dealer capable of overhauling the engine. Note that inside diameter of new bearing is finished to fit the timing side flywheel journal and it is not necessary to ream the bearing after it is fitted in the crankcase. It is, however, sometimes necessary to carefully remove high spots with a sharp bearing scraper. When fitting a new bearing it is important to check the crankshaft assembly for free rotation in the crankcase before assembling the pinion and cam gears.

IMPORTANT: A binding condition of the flywheel assembly in the crankcase bearings is not always caused by a tight fit between the plain bearing and the timing side journal. It may be caused by a bent drive side mainshaft or misaligned flywheel assembly. (See instructions for aligning flywheels). If the shaft is free to rotate but becomes tight when the timing pinion is fitted in the taper and drawn up with its holding bolt, carefully inspect the timing side journal for a crack which allows it to expand in the bearing when pinion is fitted tightly on its taper.

If the binding is slight and T.S. journal okay, scrape high spots from bearing. Premature wear of timing side journal is sometimes experienced when the engine is run with dirt or abrazive matter in the oil. 1955 model engines have a heat-treated timing side journal (surface hardened). Remember, excessive wear or clearance at the timing side bearing may result in loss of oil pressure to the rod. A proper fit allows free rotation of flywheel assembly without appreciable up and down play.

When installing a new ball bearing, in the gearbox, for mainshaft high gear, always fit a new felt seal (T1071). All replacement ball bearings have a "built-in" seal on each side to prevent dirt from working past the countershaft seal and into the ball bearing. For machines used in competition, a special "O ring" seal can be installed to prevent dirt from entering the high gear bush and also to eliminate oil leakage at mainshaft. Watch for special bulletin on this subject.

A new steel "Welsh plug" type blanking disc is now fitted at layshaft bush

Page 40----Timing side outer cover

No bushes are fitted in the timing side outer cover at footshift and kickstarter spindles. Before fitting this cover, it is extremely important to check the clearance between the inner surface of cover and end of clutch throwout arm or the clutch cable nipple. If end of cable or arm contacts the cover, the clutch will not be fully engaged. This is the most common cause of clutch slippage. Correct this situation by unscrewing the clutch arm pivot anchorage pin one revolution where it is threaded into the timing side inner cover. Readjust cable length and check clearance again. On 1955 models adjust screw on clutch pressure plate.

Page 41----Driving side, outer

Before installing outer cover and alternator stator, it is worthwhile to carefully wash the stator coils with gasoline and paint windings with a good insulating-type electrical paint such as red Glyptol. Also check location of stator assembly to make certain it is not rubbing on rotor.

Page 41----Driving side, inner cover

When fitting inner cover to crankcase, always check the fit between the 6" diameter pilot of the cover where it fits into the crankcase. If this joint is not completely tight, serious oil leakage is bound to occur. A rubber sealing compound should be used to eliminate oil leakage. (See service bulletin, Dec. 21, 1954).

Page 41----Flywheel assembly

When a con rod big end bearing requires replacement and a dealer does not have proper facilities for the job, it is suggested that the complete flywheel assembly be returned to The Triumph Corporation for servicing. A nominal labor charge of $3.00 is made for dismantling, cleaning, fitting new parts, checking and aligning con rod, reassembling and properly "truing up" the flywheel assembly. It is important to note that instructions on page 42 through 46 generally refer to the roller bearing con rod and flywheel assembly fitted to Terrier engines only up to and including engine #3904. Thus, when dealing with the plain bearing rod fitted to all Tiger Cubs and also Terriers after engine #3905, it is important to note the following instructions:

After dismantling flywheels and crankpin, always remove plug (E3420) (located on rim of flywheel opposite crankpin). After removing this plug, clean the "sludge trap" in flywheel and also oil passages. The drive side flywheel and mainshaft used with plain bearing con rod can only be replaced as a complete unit. (If mainshaft is bent or otherwise damaged, complete flywheel and shaft (E3360) must be replaced.

TWO IMPORTANT NOTES:

1. Improved crankpin used with plain bearing con rod. All replacement crankpins, (E3414) available since Nov. 1954, are made from highest quality nickel steel and for added strength, the fillet,or radius, at shoulders of bearing journal was increased. These improved pins are identified by a #6 stamped on one end of pin and should always be used to replace crankpins fitted to 1953 models (with plain bearing con rods) whenever flywheel assembly is dismantled for service. When fitting the improved crankpin as a replacement for early type, it is necessary to increase the "chamfer" or bevel at the edge of the hole in each flywheel. See service bulletin, Dec. 3, 1954 which is furnished with every replacement crankpin.

NOTE: The crankpin must be pressed as far as it will go into each flywheel.

2. Whenever a used crankpin is put back into service, it is important to remove the plug at the end by drilling with a #29 drill. Ream out the oil passage with a drill to remove all sludge and particles of dirt. After cleaning hole in the crankpin, a new plug (E3292) should be fitted. (This applies to both plain bearing and roller bearing type crankpins).

Page 43----Reference-Figure 19

If flywheel assembly is held by gripping timing side flywheel journal in the vise as shown in Figure 19, extreme care must be taken not to damage bearing surface. Soft jaws should be used and vise should not be overtightened as the hollow shaft could be marred or distorted.

Page 44----Assembling

Use gasoline to wash all oil or grease from the holes in both flywheels before pressing crankpin into position. (Line up oil feed hole to crankpin hole). In the absence of Z101 flywheel tool, the crankpin can be assembled to both flywheels by carefully pressing the parts together in the jaws of a vise or hydraulic press. Great care must be taken, however, to make certain that crankpin is started square with surface of flywheel and also that crankpin is pressed completely home against its shoulders on both sides of crankpin bearing. Occasionally one end or the other of crankpin will project beyond outer surface of the flywheel. Thus, if a press is used it is well to use a washer or suitable spacer against outer surface of flywheel to allow for this condition.

Page 46----Truing the assembly

A properly trued flywheel assembly, when supported on ball bearings, will show no more than .002" "run-out" with an indicator when checked on the flywheel rims or at the extreme ends of the mainshafts. After assembling flywheel in crankcase, fit drive side inner cover and before installing engine sprocket check for crankshaft "end clearance". This should be .005" to .020". (No end float will be felt after engine sprocket and rotor have been fitted and D.S. nut is tightened).

THREE IMPORTANT NOTES:

1. Terrier and Cub plain bearing type con rod assemblies prior to engine #4859 had timing side flywheels without sludge trap. When servicing these assemblies, always fit new T.S. flywheel identified by sludge trap plug screwed into flywheel rim.

2. Whenever replacing early type roller bearing rod and flywheel assembly with new plain bearing type or fitting T.S. flywheel with sludge trap as described above, always shorten the T.S. pinion gear bolt (E3181) by 9/32". Otherwise it will stop oil feed to connecting rod.

3. When truing the flywheel assembly (either roller bearing or plain bearing type) never support the assembly on centers in a truing stand similar to the type used for Harley or Indian flywheels. The alignment of the flywheels should be checked with a straight edge or better still, checked with a dial indicator while rotating the assembly on ball bearings fitted to timing side and drive side shafts. The drive side mainshaft or the timing side flywheel journal can be seriously damaged if an attempt is made to shift the flywheels by striking them when the flywheel assembly is supported on the mainshaft centers. Never do it that way. Always shift flywheels as shown in Figure 23, page 46. Flywheels of 1955 models are balanced for smooth engine operation.

Page 47----Drive side inner cover

Before assembling this cover, be sure to refer to page 5 of these notes to completely eliminate oil leakage. To get a better joint between cover and crankcase, it is well to replace the two Phillips head screws with Hex head screws (F1369). It may be necessary to reduce the thickness of the head to give additional clearance between the one screw and primary chain. On all 1955 models, an additional fixing screw has been added at this point.

Page 47----Crankcase filter

A plain washer (E3302) is fitted over scavenge pipe before assembling short spring and wire screen, or filter.

Page 47----Piston Assembly

Before fitting piston to connecting rod, it is advisable to assemble timing side pinion gear and engine sprocket and tighten mainshaft nut and T.S. bolt while flywheel assembly is being held by small end of connecting rod. See page 4 of these notes.

Page 48----Cylinder barrel

A good leak proof joint between base of cylinder barrel and crankcase can be achieved by using gasket compound rather than paper gasket.

Page 49----Timing pinion

Tighten bolt which secures the crankshaft pinion by holding flywheel assembly as described on page 4 of these notes.

Page 48----Oil pump

Make certain that oil pump paper gasket at mounting pad is correctly positioned before installing oil pump.

Page 49----Gearbox assembly

A simplified method of assembling gears in case is as follows:

1. Fit selector fork spindle in position in gearbox casting.

2. Install layshaft cluster in position.

3. Fit mainshaft thrust washer (T1090) over threaded end of mainshaft with grooved side facing outward (toward threaded end of shaft). Install complete mainshaft assembly with selector fork in position.

4. Assemble layshaft sliding gear and fork to layshaft which is already in gearbox.

5. Fit low gear and k/s parts to end of layshaft, engaging pawl of k/s shaft as shown in Figure 26, page 51. (Leave k/s shaft in half way depressed position for easy assembly of inner cover).

Note: Several improvements have been made in the k/s mechanism of 1955 models. The k/s shaft and ratchet pawl are made of high strength (heat-treated) nickel steel. As an additional precaution, a thin steel washer has been added inside the layshaft low gear to prevent k/s pawl from becoming jammed in the openings of the low gear. Also improvements have been made in gear selector camplate and footshift spindle and plunger assembly.

When servicing gearbox, it is usually unnecessary to remove the camplate locator springs (T1075 and T1205). On 1955 models, this spring is mounted above, rather than below the footchange spindle.

To eliminate oil leaks, the small oil hole at the bottom of the timing side inner cover has been relocated on the later model machines by moving it forward 2 3/16" and raising it 9/32" above the position of the original hole. This modification can be carried out by plugging the existing hole and drilling a new 3/32" diameter hole in location described above.

Page 52----Camplate spindle

It is easier to line up the selector camplate when the gears are in "low gear" position (camplate in its highest position) and is usually a simple job to move the camplate by hand in order to insert the camplate spindle.

Page 53----Timing side outer cover

Always fit E3344 gasket between inner and outer cover and make certain that the clutch throw-out arm or the cable nipple does not touch the inner surface of the cover. There should always be at least 1/16" clearance between the end of the arm and the cover to eliminate clutch slippage due to inadequate clearance between arm and clutch rod. This is an important point as clearance may be lacking even though clutch cable feels slack at handlebar control. On 1955 models, an additional adjustment has been added to the clutch pressure plate and if this adjusting screw is threaded inward it is then most important to make certain that the arm does not foul the inner surface of the timing side outer cover

Page 53----Push rod and cover tube

A small amount of grease applied to bottom ends of push rods will hold them in place in tappet sockets while assembling push rod cover tube and cylinder head. On Tiger Cub models and later model Terriers it is unnecessary to raise the cylinder barrel in order to fit the push rod cover tube. In place of the fiber washer or gasket used at the top end of the push rod cover tube, always install the special rubber "O ring" [illegible] (E3243T) which will eliminate oil leakage at both ends of cover tube.

Page 53----Drive side outer cover

Always install a gasket E3345 between inner and outer drive side covers. Also fit latest type "D shaped" rubber grommet around alternator wires to prevent oil leak at this point.

Page 53----Drain, Level and Filler plugs

After assembling an engine always add 200cc SAE30 oil to gearbox and 250cc SAE20 oil to primary chaincase. Measuring the amount of oil eliminates the necessity of checking level plugs.

Page 54----Positioning the distributor

Use a flashlight battery and bulb or the test light of Triumph Electrical Test Set for determining the exact contact opening or breaking point.

Page 55----Checking timing

After tightening the clamp bolt, always recheck ignition timing to make certain that distributor housing has not shifted.

Page 55----Valve timing

The camshaft gear on all lightweight models is only provided with one keyway rather than three as noted in this paragraph.

Page 56----Footbrake pedal

It is usually quicker to remove nut from footbrake pedal spindle and slide brake and rod assembly off spindle to clear primary case.

Page 56----Footrest, L.H.

It is only necessary to loosen footrest spindle nut and let footrest drop down out of position.

Page 57----Outer primary chaincase

When loosening or tightening the Phillips head screws used on all 1955 model Triumphs it is advisable to obtain a good set of Phillips head screw driver bits with 3/8" square drive to use with ratchet or speed handle.

Page 57----Cork Plate

Cork plates should be washed in kerosene and it is recommended to replace the standard cork plate with the new heavy duty plate with bonded facing (T1138AT). When using these new plates, it is worthwhile to fit heavier clutch springs (T1224AT). All 1955 models have a redesigned clutch assembly. There are four driving plates including the housing and sprocket, all of which are faced with a "bonded-on" composition facing similar to the material used on the heavy duty plates mentioned above.

Page 58----Sprocket

The original clutch sprocket fitted with cast iron bearing ring (T1220) has now been superseded by a new hardened sprocket (T1123) which has a bronze bearing retainer with 16 ball bearings. When servicing the clutch, always discard the early cast iron bearing ring and fit the new bronze or formica ball bearing retainer (T1264B). When installing this latest type bearing, it is well to also fit the latest clutch sprocket with hardened I.D., although in an emergency, the early type sprocket can be run for considerable mileage on the ball bearings without excessive wear.

Page 58----Pressure plate

Note that all 1955 models are fitted with a new pressure plate (T1253) which has a threaded adjustment screw and locknut for adjusting clutch clearance. This latest pressure plate is interchangable with the early type and should always be installed as a replacement.

IMPORTANT NOTE: Always check to make certain that the clutch throwout arm, (T1151) is not touching inner surface of outer timing side cover. If clutch slips when an attempt is made to kickstart an engine that has just been assembled, check for this condition by loosening the screws of the outer timing side cover at least three or four turns each. If clutch then holds under kickstart load it is certain that clutch clearance is reduced by interference between throwout arm and outer timing side cover. To correct (on latest models only) unscrew adjusting screw on pressure plate to gain sufficient clearance and make adjustment in clutch cable by lengthening the midway adjuster. If no adjusting screw has been fitted to pressure plate, it is necessary to unscrew the lever arm fulcrum pin one complete turn and again readjust clutch cable at midway adjuster.

Page 61----Dismantling clutch to mainshaft nut

No locking washer is used under this nut. If rear chain is in position and rear wheel brake is used to hold countershaft sprocket, high gear should always be engaged rather than low gear as mentioned in this paragraph. Make a simple tool using an old T1137 plain driven plate with a suitable lever of tubing or strap iron welded to this plate. With such a tool it is easy to hold clutch center in position while using a wrench to loosen or tighten mainshaft nut.

Page 62----Rubbers

It is usually found that shock absorber rubbers can be inserted in clutch center by simply pressing them in position with thumb. If, however, this cannot be done, clutch puller (Z95) can be used to hold spider and the special tool described above can be used to rotate clutch center.

Note: Some new special "high recovery" type shock absorber rubbers have recently been developed and when these become available they will supersede earlier types and should always be used for replacement. A new clutch hub spider (T1131) is fitted to all 1955 models. It is made of high strength forged steel which eliminates distortion of tapered hole. Always fit this improved spider to machines used in competition events. Drill four 3/16" diameter holes evenly spaced in clutch backplate of early models to aid lubrication of clutch sprocket bearing. Holes to be located in groove on inner face of plate as close as possible to O.D. of clutch center.

Page 60----Outer primary chaincase

Use E3345 gasket when fitting outer cover.

Page 63---Adjusting steering head races

Use a 9/16W open end wrench. It is not necessary to remove nacelle

Page 63----Fork Maintenance

On 1955 models, grease fittings have been moved from former position in headlight nacelle to bottom of lower sliding tubes near front wheel spindle. Grease applied at this point is more effective for lubricating fork bushings.

Whenever machines are used in competition such as Scrambles etc., it is well to fit rubber covers (RB1) which prevent dirt or water from entering top of sliding tubes and causing premature wear of fork bushings and stanchion tubes. On all 1955 models fork crown and stem (H828) are strengthened. When machines are used in competition, fit this new part. Before assembling forks that have been dismantled for servicing, discard steel washer, (H902) as the rubber buffer is adequate and eliminating the washer prevents metal to metal contact when the forks are bottomed under extreme loads.

Page 71----Rear suspension

Although spring compressor tool (Z100) is available from stock, it is not necessary under average conditions and no difficulty should be experienced removing the rear fork ends and springs. It is important to remove and carefully clean these parts after a machine has been used under sandy or muddy conditions such as Scrambles or Enduro events. If sand or dirt is allowed to remain in the assembly, slider and guides will wear rapidly.

Rear suspension assembly of 1955 models has been improved by lengthening the threaded end of the plunger guide rod and adding a locknut to improve frame rigidity. If these threads are loose on an early machine it is important to replace the guide rod with the latest type. Rear brake anchor pin is now threaded into the left hand aluminum fork end. On an early model, if this pin is loose in the aluminum, replace complete slider.

Page 74----Assembly

Graphite grease of the same type as used in Triumph spring hub assemblies is recommend for lubricating the rear suspension.

Page 79----Wheel

Fork leg clip (H857) which holds front brake anchor plate, is now brazed to the lower fork tube. If clip pivots around fork tube on earlier models, it may cause anchor plate to shift and rub against brake drum when brake is applied suddenly. To correct situation, braze clip in its proper position on the lower fork tube.

Page 79----Rear brake

See notes on modifications to rear brake assembly, page 2.

Page 88----Petrol tap

If this tap or shutoff valve leaks or jams and becomes difficult to operate, the trouble can be completely cured by the application of a small quantity of Fuelube #44 which can be purchased from the Parker Appliance Co., Cleveland, Ohio.

Page 90----Amal carburetor

To improve the carburetion under acceleration, it is worthwhile to increase the diameter of needle jet (reference #14, page 91) by drilling through with a #42 drill (.093"). The float chamber should be pivoted as far as possible to the rear (if it is moved forward, the level of the fuel in the jet will be lowered and a lean mixture will result).

Page 100----Engine will not run on "EMG".

Because of the automatic spark advance and consequent wide range of spark timing under running conditions, efficient operation, or full power cannot be expected when running the engine on emergency ignition. If "Emg" is used because of dead battery we suggest first switching mid green and dark green wires at junction block to boost battery charge and then switch over to "Ign" position after starting engine on "Emg".

With mid and dark green wires switched, you can expect approximately 5.0 amp. output with lights off. This booster charge will quickly build the battery up to a point where it will give satisfactory ignition.

NOTE: We DO NOT RECOMMEND operating the machine with battery removed and brown lead grounded. If a simplified wiring plan is desired for competition machines refer to service bulletin, Nov. 22, 1954.

Page 100----To increase battery charging rate.

The data given below shows average D.C. current output that can be expected from the RM13 alternator under ordinary conditions.

Std. Wiring(up to '55 models) Link between #5 & #6 NOT removed

Lights	Ignition	Output
Off	On	1.5 amp.
Pilot	On	1.1 amp.
Head	On	1.0 amp.

Std. Wiring('55 models) Link between #5 & #6 removed

Lights	Ign.	Output
Off	On	2.1 amp.
Pilot	On	1.1 amp.
Head	On	1.0 amp.

Special "Booster" wiring plan (Link removed & mid & dk. green alternator leads switched).

Lights	Ignition	Output
Off	On	5.0 amp.
Pilot	On	4.0 amp.
Head	On	1.0 amp.

Additional Improvements and modifications made to 1955 Triumph Lightweight models.

1. New center stand with forged legs.

2. New heavy gauge rocker covers and improved gaskets.

3. Longer breather fitted to timing side inner cover.

4. Improved frame with stronger lugs at rear suspension and center stand mounting.

5. A much improved wiring harness that is longer and has positive attachment at steering head lug. Also, additional length of harness has been added in nacelle with a snap connector block for disconnecting switch without removing terminal screws.

6. Increased electrical for daylight operation. (Light switch in "Off" position). Wire connector link between #5 and #6 terminals on light switch, has been removed, thus increasing output. For additional information on this subject, see service notes referring to page 100 of instruction manual.