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All dates shown in **U.S. Month/day/year** format.

Except where noted, all engine and frame numbers will be the same for an individual motorcycle.

Except where shown, production dates for a given model year run from September of the previous year to the August of the current model year.

Where no engine or frame number is shown against specification change assume it was from the year introduction's date and numbers.

#### 1938

Nov 1937-Oct 1938

Engine: Early models 8T then 8-5T.

Frame: TH

Model 5T Speed Twin.

**Engine:** Valve timing IVO 21° BTC, IVC 75° ABC. EVO 21° ATC, EVC 21° ATC.

Cylinder barrel to crankcase retained by six studs and nuts. Rocker box oil feed taken from timing cover threaded plug, later models fitted with oil volume control taking the form of a coarse threaded stud screwed into a threaded tube. Altering the depth of the stud in the tube allowed volume of oil regulation.

**Petrol Tank:** A 3 1/4 Imperial gallon steel tank had an integral panel recess with a Bakelite panel carrying oil gauge, ammeter, light switch and a wanderer removable lamp. A hinged filler cap

with threaded crossbar was specified and Ewarts push-pull fuel taps were fitted.

Oil Tank: A 6 Imperial pint steel tank with an aluminum screwed filler cap was fitted.

**Wheels:** Front 20" with a WM2 rim. Rear 19" with a WM2 rim. Brakes: Front and rear 7" diameter. Front anchor plate aluminum alloy. Rear steel pressing.

<u>Mudguards:</u> Front the front fixing stay loop was riveted direct to the mudguard blade. The bottom stay doubled as a front stand aiding wheel removal. Side lifting handles were fitted bolted up to the mounting stays.

**Exhaust:** Two 1 3/4" o.d. dia. separate down pipes terminated into two separate parallel tubular silencers.

**Electrical:** A Lucas MN2 magdyno supplied H.T. ignition and charging. The dynamo was a Lucas E3HM 6 volt regulated by a Lucas MCR14 voltage control box. <u>Headlamp</u> was a Lucas D142F 8" diameter chrome plated a fluted domed glass featured. A Lucas MT110 tail lamp and a Lucas HF934 Altette horn with a chrome- plated rim were specified.

<u>Handlebars and controls:</u> 1" diameter swaged down to fit the Triumph twist grip which featured a spring loaded plunger contacting the serrated spool of the twist grip sleeve. Clutch and brake levers were of the solid cast type by Amal.

**Speedometer:** This was of Smiths manufacture 120mph chronometric.

Saddle: A deluxe spring seta of Lycett or Terry manufacture was specified.

**Toolbox:** A triangular shaped box with a hinged lid retained by a threaded lever headed bolt.

<u>Carburetor:</u> Amal type 276 of 15/16" bore with bell mouth inlet. The float chamber was mounted to the left to clear the magdyno.

<u>Note</u>: Attempts at dating should be based upon frame numbers as engines were fitted at random during assembly, whereas frames were numbered in sequence on production line.

#### 1939

Nov 1938 to Oct 1939 Engine: 9-5T, 9-T100.

Frame: TF.

Models: 5T, T100

New model: Tiger Hundred introduced.

**Engine:** Valve timing modified — IVO 26 1/2" BTC, IVC 69 1/2° ABC. EVO 61 1/2° BBC, EVC 35 1/2° ATC.

The cylinder barrel to crankcase fixing was modified from a six stud to eight studs. The oil feed to the rockers was modified by fitting of an adjustable restrictor in the form of a coarse thread screw at the timing cover take off point. Pistons in the T100 were a forged slipper type with a C.R. of 7.75:1. The oil pressure release valve was redesigned to a piston type replacing the previous ball valve.

**Transmission:** The transmission shock absorber cam profile was modified to give smoother operation. The primary outer cover shock absorber bulge was streamlined to give better appearance. A rear chain oiler was added being adjustable via a spring loaded taper thread screw at the rear of the chaincase. For economy reasons a 23-tooth engine sprocket replaced the previous 22-tooth one.

**Petrol Tank:** The Bakelite switch panel was changed to steel and given a crackle black finish.

**Oil Tank:** T100 only, 8 imperial pints with hinged flip open filler cap.

**Exhaust:** As 1938 but T100 silencers were "cocktail" shaker shape with the ends detachable to leave open megaphones.

**Electrical**: A flat headlamp glass replaced the previous domed type.

<u>Carburetor:</u> 5T as 1938, T100 1" bore diameter with braided metal fuel pipes and twin push-pull petcocks.

**Number Plate:** A chromed die cast surround was added to the front number plate.

<u>Tank Motifs:</u> The petrol tank motifs were redesigned changing from embossed type to die cast in relief.

**Optional Extras:** Bronze alloy cylinder head, prop stand, speedometer with 5" diameter dial, quickly detachable rear wheel, speedometer — Smiths with dial showing engine revolutions.

# 1940

**Engine:** 40-5T/T100

Frame: TF

**Models:** 5T - T100

Note only a small quantity of 5T/T100 produced before the factory was destroyed in the Coventry Blitz on November 14th and 15th, 1940 by Luftwaffe bombers.

**Engine:** The oil pressure release valve was redesigned to a piston type replacing the previous ball valve. T100 skirted pistons replaced slipper type. The C.R. remained 7.75:1.

**Transmission**: For economy reasons a 23-tooth engine sprocket replaced the previous 22-tooth one.

**Frame:** The steering head angle was revised to increase the trail aimed to give better stability at high speed.

**Forks:** The main central spring was weakened and supplementary tension springs added each side aimed to give a more responsive action around the static load position.

**Petrol Tank:** capacity increased to 4 Imp. Gallons. Threaded bosses in the tank side secured the knee grip rubbers.

**Tool Box:** A round knob replaced he screwed lever retaining the toolbox lid.

**Optional Extras:** As 1938 valance front and rear mudguards. 5T black finish as alternative to Amaranth Red.

# 1945/46

May 1945 to Oct 1946

Engine: 45 5T, T100 72000 to 80000. 1946 5T, T100 80001 to

90000.

Frame: 45 TF 501 to TF 5000, 1946 TF 5001 to TF 9777.

Models: 5T, T100.

**Engine:** Redesigned crankcase to accommodate the front mounted dynamo and rear mounted magneto. The rocker box external drainpipes were deleted replaced by internal drillings through the cylinder barrel and head for oil draining. The compression ratio was lowered to 6.5:1 to accommodate the poor 72-octane fuel (May only apply to UK and Rest of World (R.O.W.) machines). The rocker feed was modified deleting the take off from the timing cover in favor of a "T" junction in the oil return pipe (Integral on the oil tank return pipe stub). The engine breather was redesigned with a rotary valve driven off the inlet camshaft replacing the disc type clack valve situated above the left hand main bearing.

**Gearbox:** A gear change lever with a spoon shaped end had the Triumph logo stamped in it. The previous rubber was deleted

due to supply problems (rubber from Malaysia). The main shaft 2nd gear to main shaft 4th gear driving dogs was reduced to provide easier shifting engagement.

**Transmission:** The 22 tooth engine sprocket was reinstated.

**Frame:** A redesigned top steering bearing featured a cup replaced the previous cone type to suit telescopic forks.

**Front Forks:** Triumph designed telescopic hydraulically dampened forks with internal springs. The upper covers featured an integral brackets to mount the headlamp.

<u>Oil Tank:</u> Please note a few early 5T models were fitted with the T100 8 Imp pint tank before reverting to the 6-pint screw cap pattern. Oil tanks for all models featured the oil feed to the rockers welded to the return pipe stub.

**Brakes:** A redesigned front brake of 7" diameter with a pressed steel brake drum and brazed on spoke flange. The single leading shoe assembly was carried on a polished alloy anchor plate.

**Wheels:** A 19" diameter WM2 rim replaced the previous 20" on the front and the rear remained at 19" with a WM2 rim.

<u>Mudguards:</u> A redesigned mudguard to suit the telescopic forks. The center stay was redesigned and riveted to the mudguard.

**Exhaust:** The T100 was commonised with the 5T by featuring parallel cylindrical silencers with axial inlet and outlets.

**Electrical:** A 6-volt negative earth Lucas E3H-RD dynamo with a Lucas MR-1-4 voltage control unit clamped to the frame tube under the saddle.

**Ignition**: By a BTH K2C or Lucas K2F fitted with an automatic centrifugal ignition advance and retard.

The headlamp diameter was reduced to 7" and the shell pressings were painted to match the bike color on the 5T, but was chrome plated on the T100.

**Speedometer:** The speedo drive location moved from the front wheel to the rear wheel via Smiths drive gearbox mounted on the rear wheel hub. A Smiths S464/3/L speedometer with rev dia. was specified (120mph).

**Handlebars:** The 1" handlebars continued with the patented Triumph twist grip throttle. The bars being clamped directly to the top lug. Engine kill button and dipswitch were fitted in the right hand side with the horn button push on the left.

**Toolbox:** A chrome plated knurled knob retained the hinged lid. **Carburetor:** The handlebar mounted choke control was deleted being replaced by a spring-loaded plunger located on the top of the mixing chamber body cap. A 90° metal elbow was added to the throttle cable to allow better routing from the twist grip exit. **Listed Extras:** Pillion Seat, pillion footrests and speedometer.

### **1947**

Engine: 47-5T, T100 90001 to 10,000 (no dates but stamped 47 year)

Frame: TF 9778 10/7/1946 to TF15000 9/4/1947

Model: 5T, T100

**Carburetor:** The float chamber was relocated to the left side of the mixing chamber entailing the use of a new mixing chamber. Having the pilot screw and throttle stop adjuster on the right side. Amal No. 76/132M with the complete carburetor number Amal 276BN/1AT 15/16" bore for 5T and 1" bore for T100.

#### **Extras:**

A prop stand was offered, fitting to the lower frame tube under the primary chain case. Other options included: Pillion footrests, Pillion seat and Speedometer.

#### 1948

Engine: 8-5T, T100 88227 to 102160 (fig. 8 indicates year).

Frame: TF15001 9/4/1947 to TF25000 10/19/1948

Models: 5T, T100, GP, 3T.

Note the engine number No 88227 fitted for 1948, yet 1947 was up to 90001 shows how engines were fitted at random but year stamp 47 or 48 should identify.

**Engine:** No change.

**Gearbox:** From TF15069 (9/8/1947) the gearbox sprocket was modified by incorporating a toothed ring to drive a right angle speedometer gearbox, which bolted to the main gearbox casing. Initially only applying when the spring wheel was specified. From TF19577 4/5/1948 it became standard fitting in all models. The foot change lever reverted to the pre 1945 type with the rubber having the Triumph logo molded in.

**Frame:** The rear frame was modified by having a pressed welded bridge piece under the saddle to accept the new rear mudguard fitting from TF17790 (1/23/1948).

**Forks:** The steering damper knob was reduced in diameter and the material changed from ebonite to aluminum alloy with the Triumph logo cast in. From TF15530 (10/1/1947).

**Wheels:** The spring wheel rear suspension was fitted from TF15069 (9/8/1947) when specified as original (later termed MK1).

Mudguards: The front mudguard was modified by having two detachable front stays from TF16227 (10/5/1947) replacing the

single loop riveted on type. The rear mudguard was a new design being wider and deeper. It was detachable from the frame bridge under the saddle. 4 separate bolted on the side stays supported the guard to the frame from TF17790 (1/23/1948).

**Rear number plate:** The top portion of the number plate fixing was reshaped to provide a handhold whilst using the rear stand as the prior side handles had been deleted.

<u>Front Number Plate:</u> This was modified whereby the chrome beading became an integral part with the plate.

<u>Carburetor:</u> The throttle valve was changed to a  $6/3 \ 1/2 \ (3 \ 1/2)$  cutaway.

**Electrical:** a dome shape type replaced the flat glass in the headlamp. Spark plug caps were fitted as standard equipment.

**Extras:** Spring wheel

As 1947.

#### 1949

**Engine:** 9-102167 to 9-113386 (no date code- year noted by figure 9)

Frame: TF25001 10-19-1948 to TF33615 10/6/1949.

Models: 5T, T100, TR5, GP, 3T.

Frame: TR5 TC11001T (10/14/1948) to TC13107T

(9/27/1949)

**Engine:** A twin-lipped roller bearing (RM10LL) replaced the ball journal bearing on the timing side crankshaft. The pressure release valve featured an oil pressure indicator button. Pistons giving C.R. 7.0:1 5T, 7.75:1 T100 and 6.0:1 TR5 specified.

**Frame:** The foot brake pedal rubber was deleted replaced by a ridged footpad.

**Forks:** The top part of the forks was completely redesigned having a nacelle unit carrying the headlamp and instruments. As originally introduced the nacelle lower covers were aluminum castings, which were replaced by steel pressings from TF25825 (11/30/1948). A new top lug located the handlebar with U bolts and the bottom lug featured two threaded bosses to carry the horn bracket.

**Petrol Tank:** The switch panel recess was deleted replaced by the tank having a plain top with four insert-threaded bosses to carry a small chrome plated five-bar luggage rack. The filler cap still featured the bar and hinged flip up type.

<u>Oil Tank:</u> A six Imperial Pint tank with threaded aluminum alloy filler cap was specified for all models except the G.P.

<u>Air Filters:</u> A Vokes rectangular filter was fitted between the oil tank and the battery carrier, which was dog, legged to provide room for it.

**Electrical:** A 60 watt Lucas E3L-LI-0 replaced the previous 45-watt dynamo along with a Lucas MCR-21 Regulator from TF29130 (4/4/1949). The tail lamp feed wire was rerouted through the inside if the rear mudguard. The engine kill button was relocated in the top nacelle, as was the Lucas ammeter and Lucas light switch. The Lucas horn HF1441 Altete was housed inside the nacelle covers.

**Speedometer:** A revised Smith instrument with a new bezel for fitting into the nacelle top and extended trip rewind control S467/19/l 5T and T100, S491/3 TR5 (plain black and white dial TR5 only).

**Handlebar:** A revised handlebar shape was required with the new nacelle. The twist grip spring loaded plunger was deleted and replaced by a conventional slipper type adjusted by an

external knurled chrome plated knob. The horn push button was screwed into a threaded hole in the handlebar on the left hand side and the dipper switch was fitted to the front brake-clamping bracket via a chromed housing.

**Toolbox:** The threaded lid retaining fixing was replaced by a push and twist Dzuz fastener.

<u>Carburetor:</u> The plunger choke control operated fro the carburetor top was replaced by a conventional slide and cable Amal number 276/DK/1AT. The choke control lever was situated on the left chain stay under the saddle. This choke control lever was painted black for all models except the TR5, which was chromed, and handlebar mounted.

**Extras:** As 1947 and 1948 plus the luggage rack.

**1950** 

**Engine:** 1001N to 16160N (10/17/1949) to (11/03/1950) **Frame:** 1001N to 16160N (10/17/1949) to (11/3/1950)

Models: 5T, 6T, T100, TR5, G.P.

For the 1950 season engine and frame carried identical numbers (except the G.P.). Also the year identifying prefix was discontinued and a letter N suffix added.

**Engine:** The pre-war external rocker drain pipes were introduced as the larger 71 mm bore of the 6T could not accommodate the internal ones. The change applied to all models. The oil pump feed plunger was increased to give 20% greater flow. Connecting rods were redesigned with through bolts to hold the end caps replacing fixed studs and split pin nuts as previous. The crankcase for the 6T was as 5T but redesigned to provide wider barrel to crankcase studs.

<u>Gearbox</u>: The gearbox was completely redesigned and identified by a speedo drive connection at the front of the inner **cover**.

<u>Transmission:</u> The clutch sprocket now features a pressed in hardened bearing ring.

**Frame:** A sump shield was added t the TR5 model from 3027N (12/7/1949).

<u>Petrol Tank:</u> 5T, 6T, T1-- these models tanks were painted mono color and carried horizontal styling bands. The TR5 and G.P. were as 1949.

Oil Tank: From 13960N (9/18/1950) a chromed push and twist Ceandnes filler cap was specified for 5T, 6T, T100 and TR5.

Wheels: From 7493N (4/7/1950) a MKII spring wheel was fitted featuring large 3 1/2" diameter journal ball bearing replacing the cup and cone type. The MKII identified by the ribbed right hand cover plate.

**Extras:** As 1949 plus the Triumph Twin sear was offered on all models except TR5, G.P and 3T.

Note: The 6T color (Thunder Blue) was made a shade lighter of Blue from 6/16/1950.

**Speedometer:** 6T Smiths S467/43/L - rev. dial 120mph.

#### 1951

Engine: 101NA to 15808NA (11/2/1950) to (11/10/1951) Frame: 101NA to 15808NA (11/2/1950) to (11/10/1951)

Model: 5T, 6T, T100, TR5.

Suffix NA letters added to engine/frame numbers.

**Engine:** The T100 and TR5 featured a die cast close finned barrel and cylinder head. Valve sizes increased to 1 7/16" inlet head diameter and exhaust remained a 1 5/16". Dural pushrods

with capped ends and aluminum tappet blocks were also fitted to the T100 and TR5.

All models were fitted with a heavier crankshaft and a revised balance factor of 64% and were fitted from 902NA

(11/21/1950). Cam wheels modified incorporating three key ways from 101NA. Stellite tipped cam followers were specified from 10345NA (6-26-1951). Taper-faced compression rings specified from 3918NA (2/6/1951).

**Gearbox:** a hexagon head rocker box cap replaced the knurled edge filler cap.

**Transmission:** To accommodate an extra steel and cork plate the clutch basket and clutch center were increased in depth on T100 and 6T only.

**Frame:** T100 only the rear frame was fitted with additional forged lugs for fitting of rear footrests when speed kit was used. All models had a forged lug brazed to the lower left hand frame tube to take a prop stand.

**Wheel:** The front brake drum was redesigned. It now featured a cast iron Mehenite drum with integral spoke flange replacing the pressed steel fabricated type.

**Forks:** TR5 only. Top and bottom yokes modified to provide increased trail.

<u>Petrol Tank:</u> T100 only. Twin taper levers pattern taps were specified. From 111NA (11/3/1950). A Ceandnes push and twist filler cap was fitted.

**Exhaust System:** "L" shaped brackets added bolting the front exhaust pipes to the front engine fixing studs requiring new exhaust pipes incorporation welded on tags.

**Electrical:** A Lucas K2F magneto was introduced to complement the B.T.H. T100 and TR5 featured manual control

ignition advance and retard via a handlebar mounted lever. The tail lamp was redesigned; cone shaped to give larger lens area Lucas 53216A Type was now specified.

**Speedometer:** The dial was recalibrated to bring the 30 to 70 mph section to the top of the speedometer to give better visibility. Smiths S467/99/L 5T and T100 S467/107/L 6T were specified. 120 mph.

**Saddle and Twin Seat:** The Triumph Twin seat became a standard fitting on the T100 being optional extra on other models except TR5.

**Tool Box:** The T100 only relocated from lower rear frame tube fixing to the upper frame tube fixing reposition to clear the rear set footrest lugs.

<u>Carburetor:</u> 6T only the 1" bore mixing chamber body was replaced by a 1 1/16" bore to improve performance (This change was not publicized).

\_Extras:\_Spring wheel.

Note: TR5, T100 race kit (not a factory installed fitment) only owner or dealer to fit. Supplied as a box set.

### 1952

**Engine and Frame:** 15809 NA to 25000 NA (11/10/1951) to (2/26/1952).

Then:

No-Suffix 25001 to 32303 (2/26/1952) to (8/28/1952)

**Model:** 5T, 6T, T100, TR5.

**Engine:** T100 only: compression ratio increased by piston change to give 8.0:1 raised from 7.7:1 CR. Oil pump check valve plugs castellated to give better oil flow.

**Frame:** 5T, 6T, T100 a redesigned front frame with a forged lug forming and "eye" in the seat tube to provide a straight entry

from carburetor to air filter. TR5 the steering head angle modified to give more trail. The rear brake pad was reduced in size and now carried a pinnacled finish.

**Forks:** 5T, 6T T100 The upper covers and nacelle top were redesigned to accept a 7" Lucas headlight plus a small Lucas pilot light below the headlight. Fork springs were shortened by 3/4" so that upper covers shrouded seal holders when motorcycles was in static position (E.T. complained that the bright metal seal holder broke the eye line look of the motorcycle.)

Petrol Tank: A revised method of manufacture where left and right hand deep drawn pressing were joined and welded down the center deleting the bottom seams, which had been troublesome. The bridge pipe connections Left and Right side of the tank was deleted and blanking plug fitted to the right tank boss with a plunger (Ewarts) main/reserve tap fitted to the left tank boss on 5T and 6T. T100 and TR5 remaining with twin lever taps. All models now featured p.v.c. translucent fuel pipesferrule ended.

Oil Tank: Not TR5. A revised lower fixing was featured adding a welded on tag, which now bolted to the rear mudguard lower piece replacing the threaded integral boss and frame clip. The vent pipe was routed it exit at the rear of the primary chaincase via a steel Bundy pipe with rubber connections either ended.

Brakes: The rear brake drum and sprocket was now integral

casting replacing the separate bolt on sprocket.

<u>Air Filter:</u> Not TR5. A Vokes "D" shaped filter was fitted between the battery carrier and the frame tube. The battery carrier reverted back to the 1949 straight-backed pattern.

**Electrical:** From 18706NA a positive earth system was used. The nacelle headlight featured a Lucas MCF 700 7" pre-focus sealed beam unit with a separate Lucas 517 Pilot lamp fitted to the upper fork covers.

**Saddle:** Barrel shaped springs was specified to give multi-rate movement replacing the parallel type.

**Carburetor:** 6T only for UK and R.O.W. a S.U. MC2 constant vacuum carburetor was fitted. U.S. models retained the Amal type 276 of 1 1/16" choke diameter. Metal braided fuel pipes specified on T100C.

Note: Due to a nickel shortage some of the following items normally chrome plated were cadmium plated: Push rod cover tubes, rocker feed spindle dome nuts, exhaust pipe finned clips, kick starter pedal, foot change lever, clutch push rod pivot lever. The problem also affected the following: 5T handlebars, wheel rim - painted Amaranth Red. 6T handlebars, wheel rims painted thunder Blue. TR5 Wheel rims, petrol tank painted silver sheen. T100 no change.

### <u>1953</u>

Engine and Frame: 32304 to 44821 (8/29/1952) to (9/15/1953).

Model: 5T, 6T, T100, T100C, TR5.

**Engine:** Not T100C.

Redesigned camshafts with quieting ramps were specified from 37560 (2/16/1953). A star wheel was stamped alongside the engine number for identification. These camshafts E3275 require .010 in. rocker-valve clearance.

<u>5T only</u> A redesigned crankcase and timing cover deleting the dyno drive was specified from 33868 - (10/14/1952) (alternating charging). <u>All models</u> Crankshaft thread for shock

absorber sleeve nut deleted from 32304 - (9/2/1952). Now parallel shaft with internal thread to take a threaded stud and nut.

**Gearbox:** A steel camplate replaced the previous alloy one from 42654 - (5/6/1953) giving better wear properties.

**Transmission:** The five/six plate clutch assembly was made common for all models. The engine crankshaft spring and cam shock absorber was deleted and replaced by a four-paddle clutch center with rubber inserts from 32304 - (9/2/1952). <u>5T only</u> New primary inner and outer cases specified to house the alternator and stator from 33868 - (10/14/1952).

**Frame:** 5T and 6T the "P" clip fixing the top of the toolbox to the frame tube was deleted — refer to Toolbox. All models: The prop stand foot piece was extended to exit around the exhaust pipe for easier operation.

<u>Oil tank</u>: T100C only. An 8 imp pint capacity oil tank with a "flip up" hinged filler cap was specified.

**Exhaust:** 5T only. The left hand exhaust pipe was modified to incorporate a dog bend to clear the alternator chaincase.

**Tool box:** 5T and 6T only, the tool box "P" clip, fixing the top of the toolbox to the frame tube, was deleted and replaced by the rear face of the tool box being bolted up to the lower section of the rear mudguard.

**Rear Number Plate:** Redesigned to accept the new Lucas oblong rear lamp.

**Electrical:** The new Lucas 525 - 53269A Diacon plastic stop/lamp was featured along with a Lucas stop switch mounted on a small triangular shape plate attached to the pillion footrest frame lug. The switch operated via a spring

connected to a clip on the brake rod. Spark plugs were incorporated radio suppressors.

5T only: only coil ignition. A Lucas Q6 6 volt coil fed a Lucas DKx2A distributor. The battery was charged by a Lucas RM12 55 watt A.C. alternator rectified to D.C. by a flat Westinghouse rectifier fitted beneath the saddle. From 35317 (12/12/1952) a MKII version was introduced to simplify the wiring system. From 40294 (5-6-1953) a resistor was added to the rectifier unit to avoid battery over charge. Two Lucas switches were located in the nacelle controlling lights and ignition along with a 2" diameter Lucas ammeter. 5T coil ignition from 33868 - (10/14/1952).

# 1954

**Engine and Frame:** 44822 to 56151 (9/14/1953) to (7/22/1954).

**Model:** 5T, 6T, T100, T100C, T110, TR5.

Engine: Redesigned crankshaft with larger diameter crankpins (1.6235 in. to 1.6240 in.) with connecting rods to suit and larger timing side ball bearing (1.125 in. x 2.812 in. x 0.812 in. MS11) and crankcase journal and crankcase modified to accept it. Introduced at 44822 - (9/15/1953). Balanced to 52%. 6T models from 44822 specified alternator type crankcase. Note: The 5T only had the MS11 bearing fitted to engine 54946 to 54985 (40 engines). The rest of the 1954 seasons 5Ts were to 1953 specification. The T100C only 9 built to 1953 specification 47029 to 47037 - (11/17/1953). T100C 47691 to 47692 built for Daytona (12/10/1953).

**Gearbox:** The inner cover clutch cable abutment cast in lug angle changed on 5T, 6T, TR5 to communize with T100/T110 swing arm models.

**Frame:** From 47038 - (11/18/1953) the T100/T110 featured a swing arm rear suspension controlled by Girling units featuring spring load variation via a cam on the lower spring retainer.

**Forks:** The crown and stem stanchion pinch bolt were increased to 3/8 in. diameter from 5/16 in. to improve rigidity.

Oil tank/battery box: T100/T110 Oil and of a 6 pint capacity combined with the battery box to form a styled unit and housing the air filter - T100 and T110 only.

**Brakes:** A completely new 8" front brake was introduced on the T100 and T110 featuring a brake drum with a scalloped spoke flange. The polished alloy anchor plate featured an air scoop protected with a chromed wire mesh cover.

Wheels: T100 and T110 as above, other models as previous. Rear T100 and T110 redesigned with 20mm x 47mm x 14mm ball journal bearings and increased diameter wheel spindle. A Q.D. wheel condition was offered where by the splined hub/drum could be separated leaving the brake and sprocket in situ.

**Mudguards:** T100 and T110 rear mudguards featured welded in side valances.

**Exhaust:** The 6T left hand exhaust pipe was made common with the 1953 5T. The TR5 silencer changed to a teardrop shape - it was parallel sided. 5T and 6T silencers changed to barrel shape to commonize with the T100 and T110 - were parallel sided. **Electrical:** The 6T featured coil ignition as 1953 5T with modifications. A Lucas 12° distributor 40449A type DKX2A, the RM12 alternator replaced by RM14, a Lucas rectifier replaced the Westinghouse it featured a four plate 4 1/2 diameter unit. 5T and 6T a single Lucas PRS8 combined ignition and lightning switch replaced the previous two separate switches. A new

heavy-duty voltage control box unit was fitted from #45593 (10/07/1953) (Lucas RB107).

Note: Between December 1953 and March 1954 approximately 150 T110s were built with rigid frames and sprung hub rear suspension. They were exported to USA, Australia, France and Sweden. No other details or why are available.

Two T100 47691 and 47692 built for Daytona on (12/10/1953) (may have been swinging arm models, or the last of the old rigid frame type. (No specific details available).

Last TR5 rigid frame built 52969 May 5, 1954 Last 5T rigid frame built 55493 July 8, 1954 Last 6T rigid frame built 55593 July 7, 1954

# 1955

**Engine and Frame:** #56153 to 70929 July 22, 1954 to August 26, 1955.

Model 5T, 6T, T100, T100C, T110, TR5

**Engine:** TR5 Sports camshafts (E3325 T110 type) and pistons giving 8.0:1 CR. upped the power to 33 BHP @ 6500 rpm. All other engine components as T100, all models fitted stronger taper bore gudgeon pins and chromed second compression pistons rings. Cross head posi-drive type screws retained all the outer covers from 59160 October 14, 1954. A final design sludge tube was fitted in the crankshaft at 56563 July 24, 1954. <u>5T only:</u> Engines 70076 to 70089 July 20, 1954 were fitted with 6T crankcases and modified cylinder barrels having wider spaced base flange fixing holes from 2" to 2 1/4" centers on the outer four.

**Frame:** All models now feature pivoting fork rear suspension. A forged sidecar-fixing lug was added to the bottom of the seat tube. The fabricated tubular legs of the center stand, which were prone to twisting and bending, were replaced by forgings with "roll on" shaped feet. A forged lug was added to the pivot fork to take the bolted on rear brake torque stay replacing the slot and peg, as previous.

**Forks:** TR5 only, heavy-duty main springs of 20" length and 0.168" wire diameter were specified.

<u>Petrol Tank:</u> TR5 only, the tank capacity was increased to 3 Imperial gallons with the usual two half pressing joined down the center and now retained by four bolt fixing, shaped steel plates screwed to tank bosses provided fitting for the rubber knee grips.

**Brakes:** Front — as 1954

Rear — Threaded stud added to anchor plate to secure tubular torque stay.

**Wheel:** TR5 only, rear wheel diameter reduced to 18" WM3x18" rim specified.

The front wheel remained at 20" with WM1x20" rim.

**Handlebar: TR5 only.** A new 1" diameter handlebar bend replaced the previous 7/8" diameter and fitted with standard Amal controls. A drilled hole was threaded on the left hand side to accept the horn push button switch. The unique alloy bodied twist grip was discontinued and replaced by the standard Triumph pattern.

**Twin seat:** 5T, 6T, T100 and T110 featured the two-level Triumph twin seat. TR5 and T100C used a narrower slimmed down twin seat similar to the 1952 T100.

**Electrical:** Magnetos, both Lucas and BTH, continued to be specified usually with automatic spark control for U.S. market. The last BTH magneto used on production was fitted at 65344 - (March 24, 1955). The T100 and TR5 specified a Lucas K2FR or K2FRC.

5T and 6T the Lucas ignition coil was relocated from above the distributor ad fitted under the seat.

All models, a new Lucas Stop/Tail lamp 564 incorporating twin integral reflectors and a rubber mounted bulb holder was specified. The Lucas stop switch 31383 operated directly on the rear brake pedal lever.

TR5 only, the Lucas HF1441 horn was retained, but relocated to the left hand side of the seat nose and mounted from the saddle spring anchorage stud.

**Speedometer:** TR5 only, a Smiths 120 mph S433/3/L (1630 rpm) with a plain black and white dial was specified.

<u>Carburetors:</u> 5T featured the new Amal Monobloc instrument of 15/16" bore diameter. 6T (for U.S. only) Amal 276 as previous.

S.U for R.O.W.

T100 Amal 276 as previous. T100C 2 x 276 1" Amals with remote float chamber. T110 Amal 389 as previous with large T.T. Type float chamber Amal 302/13. TR5 Amal 276 1" bore with large T.T. type float chamber Amal 302/13.

<u>Tool Box and Battery Box:</u> Tool box lid "Dzus" fastener was replaced by threaded slot head screw.

**Rear Mudguard TR5 only:** A steel mudguard of a plain "D" section was specified.

# 1956

Engine and Frame 70930 to 82797 (8/28/1955) to (7/5/1956) Then:

0101 to 0943 (7/5/1956) to (8/29/1956)

Models: 5T, 6T, T100, T110, TR5, TR5R, TR6.

**Engine:** From 71071 aluminum alloy cylinder head replaced by cast iron on T110 (8/30/1955).

From 72028 - (9/23/1955) the inlet camshaft featured only one breather hole aimed at reducing splatter from the breather tube. From 70930 (8/28/1955) heavier connecting rods with Vandervell shell bearings were fitted. To maintain the 50% balance factor 595-gram balance weights were required. T100 only, from 70930 the height of the cylinder barrel spigot to the cylinder head was reduced from 3/16" to 1/8" with matching reduction in the cylinder head. Only used as paired items (8/28/1955). Aimed at reducing liner cracking.

<u>Transmission:</u> Neo-Lignite pads bonded to plain plates replaced the cork inserts on the clutch drive friction plates.

**Frame:** Modified steering head lug casting machined to make top and bottom bearing cup diameters identical both taking 20 off 1/4" diameter ball bearings. The new head lug featured threaded bosses allowing adjustment of the steering lock.

<u>Petrol Tank:</u> A chromed center styling band was added to cover the central weld that joined the pressed halves together. The luggage grid center bar was deleted. A modified rear tank mounting incorporating rubber insulation was specified, reducing tank leakage instances.

**Wheels:** The painted and lined wheel rim centers were dispensed with now being plain chrome.

**Electrical:** Pilot light relocated into the sealed beam headlight unit. A chrome grille was fitted to the previous pilot light

location. A combined Lucas horn push / dipswitch was fitted to the clutch lever clamping bracket. 5T and 6T wiring harness was sheathed in a 1mm plastic sleeve. The Lucas ignition coil was relocated above the distributor.

**Handlebar:** The drilled/threaded hole for the horn push button was deleted.

<u>Carburetor:</u> All models except UK 6T featured Amal Monobloc carburetors and from 71634 - (9/13/1955) an "O" ring was fitted into a machined groove in the carburetor flange.

Note: Early 1956 T110 and TR6 may have been fitted with the Amal 289 1 1/16" diameter carburetor and large T.T. type float chamber - no change information available.

#### 1956 TR5R:

**Engine/frame:** TR5 76113 to TR5 76224 - (1/7/1956) to (4/24/1956). The TR5R was a U.S. market only model. It was fitted with a "red seal" engine: i.e. 9:0 to 1 compression ratio, 1 1/8" cam followers, bronze valve guides, interference valve springs, Lucas race magneto, twin Amal 276 carburetors. Price \$947.

# **1957**

Engine and Frame: 0945 to 011110 8/29/1956 to 9/18/1957 Models: 5T, 6T, T100, T100R, T110, TR5, TR6.

**Engine:** TR6, T110 redesigned cylinder head with reduced combustion hemispheres to reduce cracking. Piston crowns modified to suit. Valve diameters changed to inlet 1 1/2" (was 1 9/16"), exhaust 1 11/32" (was 1 7/16"). Single keyway camshaft pinions fitted.

TR5, TR6 timing cover incorporating tachometer drive offered as optional extra along with a Smiths RC1307/01 tachometer head.

The T100R model featured a splay port twin carburetor cylinder head. E3134 camshafts, 1 1/8" radius followers and 9:0 to 1-compression ratio pistons.

<u>Gearbox</u>: The high gear bush was extended into the primary chaincase through the sliding plate - any seepage was directed into the primary chaincase.

**Frame:** From 09382 (7/9/1957) the patented Triumph easy-lift center stand was fitted. The Girling suspension units now featured metalastic bushes at upper and lower ends. The swinging arm left hand spindle fork was drilled to mount the new chain guard fixing. This new chain guard pivoted at the front fixing and was independently bolted up at the rear. It also covered more of the rear sprocket to avoid oil splatter from the chain.

**Forks:** The bottom sliders now featured bolt on wheel spindle retaining caps and brazed on lugs replaced loose clips for mudguard and brake anchor plate fixings.

<u>Petrol Tank:</u> The tank was modified to accept the new "Mouth Organ" style badges. Clear plastic petrol pipe was specified on all models.

**Brakes:** 5T, 6T, TR5 models featured a 7" diameter full width front hub and chrome styling cover with a single raised concentric ring.

T100, T110, TR6 models featured an 8" diameter single drum bolted to a separate hub and the alloy brake anchor plate as previous.

Wheels: 5T, 6T, TR5 were fitted with 8/10 gage butted spokes on the front wheel. All models were fitted with 8/10 gage butted spokes on the rear wheel. A new front wheel spindle was required to match the new front fork clamping arrangement.

<u>Mudguards:</u> TR5, TR6 the long front mudguard fixing stay was replaced by a shorter one attached to the brazed on lugs halfway up the fork sliders.

<u>Controls:</u> TR5, TR6 ball end brake and clutch levers were specified. The front brake cable abutment was relocated to the brazed lug on the right hand fork slider on all models.

**Electrical:** TR6 from 04364 (1/1/1957) Lucas red label magneto was specified.

#### Note:

To special order a number of TR5R models were factory built for the U.S. market as follows:

TR5R 04638 (1/16/1957), 010359 (8/30/1957) 08171 to 08181 (5/3/1957) with splayed port twin carb cylinder head. E3134 camshafts, 1 1/8 "R" followers, 9:0 to 1 pistons and 376 1" bore Amal Monoblocs.

TR5R as above, but with 276 Amals and remote float chamber 04635, 04636, 04637 (1/16/1957), 05409 (2/1301957)
TR5 as above, but with a single carb cylinder head and 376 Amal Monobloc 05882 (2/26/1957), 08182 to 08191 (5/24/1957). Optional extra tachometer kit with Smith RC1307/01 instrument.

# 1958

Engine and Frame: 011116 to 020075 (9/20/1957) to (8/28/1958).

Models: 5T, 6T, T100, T100R, T110, TR5, TR6.

**Engine:** Drive side crankcase modified to accept an oil seal fitted between crankcase and engine sprocket, the nose of which was round to suit.

**Gearbox:** Auto control of clutch via foot change pedal introduced "slick shift". Inner and outer gearbox covers modified with the outer cover having a chromed tin cover for push rod adjustment. Clutch cable abutment relocated to primary chain adjuster draw bolt. A thick rubber sleeve was fitted to the kick-starter axle between kick-start lever and outer cover to obviate oil seepage.

**Frame:** The frame head lug forging incorporated provision for fitting a Neiman lock.

**Forks:** The steering stem was slotted to accept the Neiman lock. Nacelle top cover modified to provide to grommet holes to provide a better run for the clutch and brake cables. The bottom fork sliders were modified whereby the brazed on mudguard mounting lugs moved to the slider centerline and had milled flats for location. A flanged steering stem adjuster nut was specified on the TR5 and TR6 to prevent fork crown movement under extreme conditions. The front brake cable abutment was relocated to the bottom of the right hand fork slider.

<u>Oil Tank:</u> The filler cap was moved further inboard to prevent fouling riders leg during kick starting.

**Brakes:** A full width 8" diameter front brake was specified for the T100, T110, and TR6 with 8/10 gage butted spokes. A fluted chrome hub trim was featured for both 7" and 8" diameter hubs replacing the concentric ring pattern of the 7" hub.

<u>Mudguards:</u> Not TR5 or TR6. A new valance front mudguard was fitted deleting the two front stays and having a slotted center stay. A redesigned rear mudguard, deleting the welded in

side valances, being manufactured by a deep drawn pressing was now specified.

<u>Handlebars:</u> The clutch and brake control levers were now fitted with knurled cable adjusters.

**Exhaust:** T100R only was fitted with reduced 1 1/2" twin down pipes.

### **Note:**

5T Speed Twin model discontinued. Last civilian production one was 020074 on (8/28/1958).

## 1959

Engine and Frame: 020076 to 029363 (8/28/1958) to (9/2/1959).

Models: 6T, T100, T110, TR5, TR6, T120.

**Engine:** One piece-forged crankshaft with bolt on flywheel 2 1/4" wide used a 50% balance factor. A mid-season modification increased the interference fit of the flywheel by 0.0025" to overcome flywheel retaining bolt failure.

T120: The 8.5:1 C.R. pistons had crown thickness increased twice. First at 021505 and again at 024242 to prevent sunken/holed crowns.

**Gearbox:** The inner cover featured an inbuilt oil level indicator by removal of a threaded plug. An induction hardened gear control camplate was specified from 023941 (2/3/1959). T120 only. An additional primary chain adjuster was fitted from 02311 to the left hand side.

TR5 and TR6 only Oil Tank. A froth tower was featured on these two models from 020883 (10/8/1958).

**Exhaust:** 1 1/2" diameter exhaust down pipes was specified on T120. Standard 1 3/4" exhaust down pipes was optional on the TR6.

**Seat:** T120 only. Both the narrow TR6 twin seat and the T110 two level seats were specified, usually the narrow seat accompanied the low handlebars.

**Electrical:** Dynamo models specified a Lucas 37725H voltage control regulator from 024137 (2/17/1959).

**Handle Bars:** T120 only. When the T110 style twin seat was specified standard U.K. and U.S. high bars were usually fitted and shorter dropped handlebars were used with the TR5/TR6 seat.

**T120 color:** A late season color change saw the Tangerine and Pearl Grey replaced by Azure Blue and Pearl Grey due to fading of the Tangerine.

#### Note:

The 63mm x 80mm alloy engine (T100, T100R, TR5) was discontinued after 029362 (9/2/1959), but not before a few Daytona TR5A/D specification models were built featuring Delta twin carburetor cylinder heads, E3134 camshafts, 1 1/8 "R" followers, 9.0:1 C.R., tachometer timing covers and Smith tachometer head and a Lucas K2FR Competition magneto for ignition. The numbers to this spec - 022278 to 022303 (11/7/1958) to (12/3/1958).

TR5 022304 to 022340 fitted with standard cylinder head, other wise as above specification (single Monobloc carburetor).

TR5 025714 to 025726 standard specification, but featured E3134 camshaft and K2FR Competition magneto.

The last TR5 built was 025729 on (9/11/1959).

The last pre-unit with single front down tube frame was a 6T built (9/2/1959) number 6T 029362.

### **1960**

Engine and Frame 029364 to 030419 (9/3/1959) to (9/28/1959).

Then:

D101 to D7711 (10/22/1959) to (7/21/1960)

Models: 6T, T110, T120, TR6 TR6A, TR6B

Note: The first 325 T120 and TR6 1960 models carried the old series engine and frame numbers on Duplex frames.

**Engine:** All models featured alternator type crankcase as the dynamo was dispensed with. The oil pump body changed from a brass forging to aluminum from D1564 (11/29/1959). The majority of TR6 machines for the U.S. were built with E3134 inlet camshafts and E3325 exhausts and E3610 pistons specified.

**Transmission:** A 22-tooth engine sprocket replaced the prior 24. Alternator type primary chaincase specified for all models. **Frame:** Redesigned frame featured twin front down tubes with a single top tank tube. The rear bolt on frame was also redesigned and the oil tank and battery box attachment points modified.

Forks: Redesigned added guide tubes inside the internal fork springs to prevent springs buckling. Top and bottom fork yokes redesigned for compatibility with new frame. New top and lower covers required on nacelle models, to suit new fork yokes. Petrol Tank: A single long longitudinal stainless steel tensioned strap secured a redesigned tank. All other fittings as 1959.

Oil Tank: Revised fitting brackets to suit new frame. The filler cap on the 6T and T110 was reduced in diameter to fit inside frame tubes.

**Brakes:** 6T 7" full width hub retained. All other models fitted with "8" full width hub. Both fitted with chrome plated styling

hub cover having two radial raised ribs. The rear brake drum incorporated in its casting a 43 tooth sprocket replacing the 46 teeth one requiring the engine sprocket change.

**Wheels:** 6T and T110 feathered 18" diameter WM2x18 rims front and rear.

T120 featured 19" diameter WM2x19 front and rear. TR6 featured 19"/18" diameter WM2x19 front and WM3x18 rear.

<u>Mudguards:</u> 6T and T110 a deeply valance styled front mudguard was specified with full enclosure of the rear wheel. T120 and TR6 sports type mudguards specified front and rear. <u>Exhaust:</u> 6T, T110, T120 and TR6A featured two separate down pipes terminating into two-barrel shape silencers.

TR6B featured two separate high level pipes one each side with leg shields having Chevron piercing. The pipes terminated into small teardrop silencers.

TR6 retained to into one Siamese pipes over primary chaincase into small teardrop silencer.

**Electrical:** A Lucas 6SA D shaped stop switch was attached to the frame and operated direct onto the foot brake lever. T120 and TR6 headlamp shell carried the ammeter only with the light switch fitted below the front of the twin seat in a small housing. **Speedometer:** Smith SC5301/109

**Twin Seat:** 6T and T110 featured a hinged seat retained closed by a spring-loaded plunger with a detachable chrome knob. T120 and TR6 redesigned to suit the new frame (not hinged). **Carburetor:** T120 twin Amal Monobloc mixing chambers of 1 1/16" diameter with remote Amal float bowl 14/24 suspended from engine torque stay bracket via threaded rod and rubber mounting bush.

# 1961

Engine and Frame: D7712 to D15788 (9/1/1960) to (8/23/1961).

Models 6T, T110, T12R, T120C, TR6R, TR6C.

**Engine:** From D9259 alloy cylinder head specified on 6T (10/5/1960). From D8858 cast in pillars added to alloy cylinder head tying fins together to prevent engine noise (9/27/1960). From D9259 Sports camshaft (E3325) cam lobe height from base circle 1.102/1.111" fitted to 6Tand the "spoke wheel" stamping mark on the crankcase was deleted.

6T from D11193 (12/29/1960) and T110 from D12214 (2/27/1961) redesigned camshafts fitted (E4220) cam lobe height 1.123"/1.131" along with shortened valve springs (E4221 and E4222) and thicker bottom cups. TR6R and C the E3134 inlet camshaft was specified as standard. From D14438 (6/26/1961) the crankshaft featured straight-sided web and a revised flywheel 2 11/32" wide replacing the earlier 2 1/4". The balance factor changed to 71% using 540-gram weights. The oil pressure release valve was fitted with an "0" ring seal on the plunger shaft to obviate oil seepage.

**Gearbox:** M11121 Torrington needle roller bearings 11/16" x 7/8" x 3/4" were specified for both ends of the lay shaft. Bronze thrust washers were added to control the lay shaft end float. A folding kick-starter pedal was specified on all models.

**Frame:** A secondary top tube was added to stiffen the head lug area and the steering head angle changed from 67° to 65° (This modification may apply to some late 1960 models as no specific details available.)

**Oil Tank:** Revised attachment to frame via rubber bushes to eliminate bracket failure.

**Brakes:** Brake shoes modified to give a fully floating condition on front and rear wheels.

Wheels: Rear 18" diameter WM3x18 rim

**Electrical:** All Lucas K2F and K2FC magnetos fitted with automatic ignition advance for U.S. market.

**Speedometer:** Smiths SC5301/26.

<u>Carburetor:</u> T120 the "chopped" Amal Monoblocs and remote float was replaced with 1 1/16" bore diameter Monoblocs fitted with No 4 cutaway slides.

## 1962

Engine and Frame: D15789 to D20308 (10/12/1961) to (7/31/1962).

Models: 6T, T120R, T120C, TR6R, TR6C, TR6SS.

**Engine:** Balance factor finalized at 85% with the crankshaft featuring pear shaped bob weights from D17043 (1/15/1962). From D17552 (2/19/1962) a cast iron oil pump body replaced the alloy bodied one.

**Gearbox:** Slick shift auto clutch foot control discontinued on all models.

**Frame:** 6T only Girling suspension units with 12.4" between centers replaced 12.9" ones.

Oil Tank: Fully rubber insulated top and bottom. 6T commonised with TR6 (U.S. only).

**Petrol Tank:** Petrol taps redesigned with flat plate levers and designated one reserve tap and one main.

<u>Mudguards:</u> 6T only — rear full enclosure discontinued but valanced mudguard retained. Rear mudguard as T120 (U.S. only).

**Battery Box:** 6T made common with TR6 (U.S. only).

**Exhaust:** 6T and TR6R Siamese two into one down swept under timing cover and gearbox termination into a large cylindrical silencer. TR6R alternative two 1 1/2" down pipes as T120R. **Electrical:** T120R, TR6R and TR6C quickly detachable wiring (3/15/1962). Rectifier 49072 2DS506 and alternator assembly RM19 specified from D18419 (3/15/1962).

This completes the pre-unit models with the last produced being TR6SS number D20308 on (7/31/1962).

**Note:** Where no engine/frame number is shown against specification change assume it was from the year introduction date and numbers.

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