



Another year of **TRIUMPH**



"It is a far cry from my original Triumph 'Speed Twin' of twenty years ago to the sleek twins and sporting lightweights described in this latest catalogue, but having been more than intimately connected with every Triumph development in the ensuing period, I know that this fine new range will further enhance the reputation enjoyed by Triumph throughout the world."

Edward Turner, M.I.Mech.E.,
Managing Director of Triumph and the
Automotive Group of The Birmingham
Small Arms Co. Ltd.

"Another year of Triumph" is the title of this catalogue and we present our latest range of models with confidence. Tested, tried, proved, every one of them, from the lively little Cub to the supreme performer of all, the 'Bonneville 120'.

Each one has benefited from a further twelve months' constant search for improvement in details large and small. Improved materials, ultra modern techniques of manufacture, harsher testing, all enhance the quality which the Triumph name signifies to the motorcyclist of real experience, some of whom we have invited to comment on the models described in this catalogue.

Whatsoever your need on two wheels, Triumph can meet it, with the right performance, at the right price and with the assurance of lasting satisfaction.

TRIUMPH

*the best motorcycle
in the world*



More than 250 police and government organisations throughout the world use Triumph motorcycles, and cities like London and Paris have large fleets in daily use. Here President Kennedy of the United States has a Triumph escort during a visit to London.

P R E S S O P I N I O N S

TIGER CUB	"Motor Cycling"	"Impresses even a seasoned tester with its outstandingly good all-round performance and value."
SPORTS CUB	"Motorcycle Mechanics"	"Can be snicked round corners faster than almost anything I have ridden."
TWENTY-ONE	"Motorcycle News"	"Good to look at and good to ride. It has that 'just right' appearance."
SPEED TWIN	"Cycle" (U.S.A.)	"Lived up to Triumph's traditional reputation for easy starting and ultra-smooth performance."
TIGER 100	"Motor Cycling"	"Can be used for everyday work without losing either its tune or its looks."
THUNDERBIRD	"The Motor Cycle"	"Silky power and plenty of it, the brakes are excellent and the model certainly has eye-appeal."
TROPHY	"The Motor Cycle"	"Combines tractability and unobtrusiveness with sheer zip and stamina."
BONNEVILLE 120	"Sunderland Echo"	"No question at all about who produces the world's best in really high performance, large capacity twins."



"An ideal fast light sports 500"

says **JOHN GILES**



This sleek new "Tiger 100" offers high performance with light weight and great ease of handling. Ultra modern unit construction engine/gearbox with alloy head, special camshafts and high compression pistons. A model designed for the sportsman.

famous Triumph trials and scrambles star, winner of the 1961 Experts Grand National and countless events in U.K. and on the Continent. Gold Medal winner in 1961 International Six Days Trial riding a Tiger 100S. Member of British Trophy Team.



TIGER 100

500 c.c.

T100S/S

Patent Nos. 475860, 723073, 684685

This model can be supplied without the small rear enclosure panels if required.

Full technical specification inside back pages

"High performance roadsters as modern as the hour"

says **JIM ALVES**



The most coveted "350" on the road today, the Triumph "Twenty-one" provides a crisp performance with the highest possible degree of silence and refinement. Unit construction engine-gearbox and very adequate mudguarding front and rear make this an easy-to-clean and a clean-to-ride machine.



—for ten years one of our best known competition riders. Always Triumph mounted, he rode for Britain on numerous occasions and was manager of the British Trophy Team in the 1961 I.S.D.T. is also a Triumph Dealer.

Twenty one

350 c.c. 3TA

Full technical specification inside back pages

**SPEED
TWIN**

500 c.c.

5TA

The famous "Speed Twin" in its rich ruby red finish is similar in most details to the "Twenty-one" but enjoys the enhanced power output of a 500 c.c. engine. A smooth running model with many attractive features which will appeal to the discriminating and experienced rider.



*"We had a wonderful ride on the 120
to win the Thruxton 500 mile race"*

say **JOHN HOLDER** and **TONY GODFREY**



Bonneville 120

Patent Nos. 475860, 469635, 684695

650 c.c.

T120

For sheer performance the Triumph "Bonneville 120" is without equal as a standard production fully equipped road going motorcycle. This is proved by the spectacular results of the Thruxton International 500 Mile Race where this model swept the board. Two carburetters, special camshafts, alloy head, duplex frame and many other features make the Bonneville the choice of the really experienced rider who can use the power with skill and discretion.





"Unequalled for smooth effortless power"

says

JESS THOMAS

—Skilled American ace who holds the "fastest ever" A.M.A. certified record speed of 214.47 m.p.h. with a 650 c.c. streamlined Triumph.

The Triumph "Thunderbird" is an ideal fast solo mount and excels where a heavy sidecar is used. 34 B.H.P. alloy head engine, 4 gallon tank and generous mud-guarding make this the first choice of the man who rides fast and far and demands performance with the minimum of attention.



This model is available without the rear enclosure if required, in which case the top tank panel is finished in Kingfisher Blue.


Thunderbird 650 c.c. 6T

Patent Nos. 475860, 469635, 684685

Full technical specification inside back pages

ENGINEERING

1

2

3

Techniques of manufacture are constantly changing and to maintain the high standard of quality and accuracy which has been synonymous with the Triumph name for more than sixty years, the Triumph engineering staff conducts a ceaseless campaign to improve and perfect its methods. Illustrated here are some familiar components in course of manufacture on machines which work to incredibly close limits to ensure the superb quality and high finish which is a Triumph tradition.

1. Cylinder barrels of the twin cylinder engines have a controlled surface finish after this final machining process.

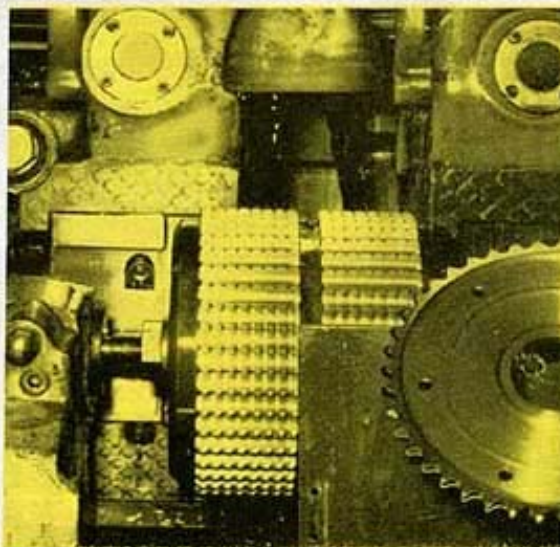
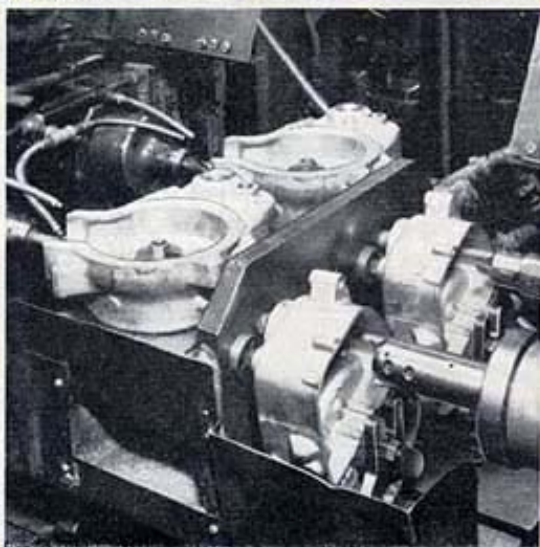
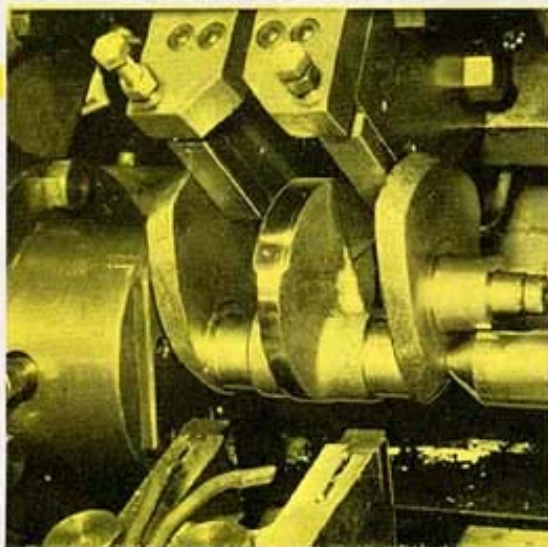
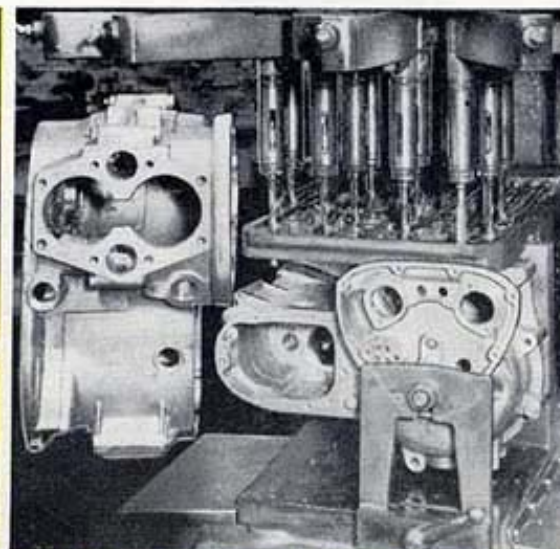
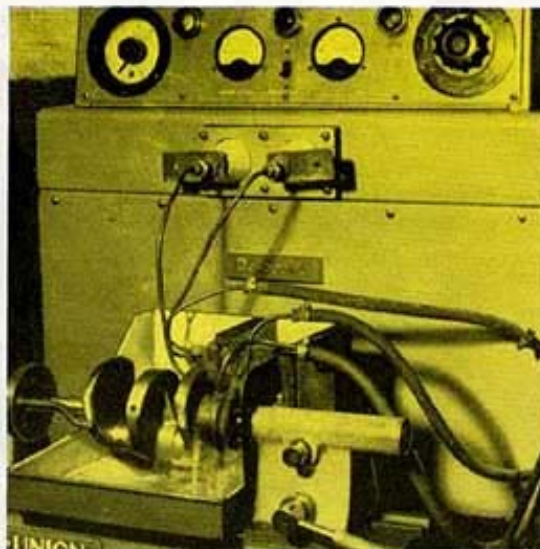
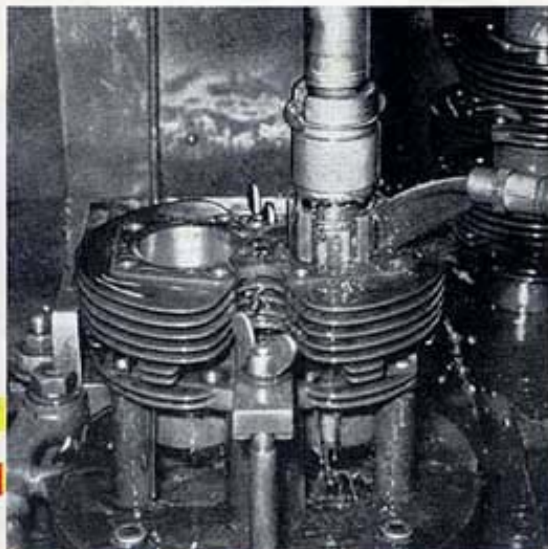
2. It takes exactly seven seconds by electronic means to harden the surface of the crankshaft bearing journal. A new technique developed exclusively by Triumph.

3. Multi-drilling bolt holes on a "C" range crankcase. Initial boring and counterboring of the eight bolt holes are carried out independently.

4. A crank turning lathe for roughing and finishing bob weight journals. The two operations are carried out automatically, enabling one operator to control a number of machines.

5. Four boring operations are done simultaneously on four "Tiger Cub" crankcases. This involves initial roughing out and final boring of the main gearbox bearing and distributor housings to close tolerances.

6. The teeth of clutch chain wheels are formed by this gear cutter. Sixteen blanks are placed in position and the teeth are automatically shaped by a high speed cutting tool.



4

5

6

EXCELLENCE

"A fast and rugged machine"
says **BUD EKINS**



—famous American cross-country star who has scored most of his innumerable successes in major U.S. events on Triumph Trophy models.



Full technical specification inside back pages

TROPHY **650** c.c. **TR6S/S**

Patent Nos. 475860, 469635, 684685

This fine sporting motorcycle is a firm favourite throughout the world and its specification includes every refinement demanded by the enthusiast. 40 B.H.P. engine, 2 into 1 exhaust, heavy duty competition type forks, duplex frame, rubber mounted fuel tanks and many other items which ensure success under the most arduous conditions.

"The Tiger Cub is a winner
all the way" says **ROGER VANDERBECKEN**

Trials and Scramble Champion of Belgium,
a great Triumph rider and enthusiast who
competes in all the leading events on the
Continent.



**TIGER
CUB**

200 c.c. T20

Easily the most popular 200 c.c.
lightweight today. For value, economy and
safe, easy handling, there is nothing to
equal the four-stroke O.H.V. "Tiger
Cub." First choice of the rider who
wants "real motorcycling" at lowest cost.

**SPORTS
CUB**

200 c.c. T20S/S

Patent Nos. 723073, 684685

Exhilarating to ride on the road and
readily adapted to most forms of
competition, the "Sports Cub" has
earned an enviable reputation for
speed, reliability and superb handling
in tough events like the Belgian
Lamborelle Trial and the Scottish
Six Days. This is the model for the
man who wants to get to the top
quickly.

Flat sports type handlebar available if required.



S P E C I F I C A T I



O.H.V. "Tiger Cub" engine with alloy head and unit four speed gearbox.

Hinged twinseat on twin cylinder models.



"A" RANGE MODELS 200 cc

ENGINE. High-performance single cylinder o.h.v. with die-cast alloy cylinder head. Inclined valves. "H" section connecting rod with plain big-end. Dry sump lubrication. Efficient barrel type silencer. Air cleaner.

FOUR SPEED GEARBOX. In unit with engine. Multiplate clutch with cork sheet linings and rubber torsion shock absorber. Positive stop footchange. Duplex primary chain.

FORKS. Triumph telescopic type giving comfortable ride and accurate steering. Heavy duty competition type on T20S/S.

FRAME. Strong loop type frame. Swinging fork rear suspension with hydraulic damping. Provision for anti-theft lock.

BRAKES. Very efficient smooth-acting brakes with large diameter drums and finger adjustment.

WHEELS. Triumph design with plated spokes and rims. Efficient mudguards front and rear. Stylish rear enclosure panels. (T20 only.)

FUEL TANKS. All-steel welded petrol tank, chrome motif. Ample capacity oil tank. Quick release caps and accessible filters.

ELECTRICAL EQUIPMENT. A.C./D.C. lighting-ignition system with crankshaft-mounted alternator and emergency start circuit. Powerful head and rear lamps.

TOOLBOX. All steel with kit of good quality tools and inflator.

NACELLE T20 only (Patent No. 647570). Neat streamlined shell encloses headlamp, instruments and switch-gear and includes a gear position indicator.

SPEEDOMETER. Smiths 80 m.p.h. (140 Km.p.h.) speedometer.

OTHER DETAILS. Finish: T20 Silver grey/flare. T20S/S Silver grey/burgundy. Smooth action twistgrip, rubber knee grips. "Vynide" covered cushioned twinseat.

EXTRAS. Pillion footrests. Prop stand. Steering lock.

"C" RANGE MODELS 350/500 cc

ENGINE. Advanced design vertical twin cylinder o.h.v. with two camshafts driven by gears. Pushrod operated overhead valves in a light alloy cylinder head. High duty iron cylinder block. Dry sump lubrication with plunger type pump. Steel connecting rods with plain bearing big-ends. A.C./D.C. lighting-ignition system with crankshaft mounted alternator and emergency start circuit. Oil pressure indicator. Silent Duplex primary chain in polished aluminium oil-bath with tensioner. Efficient air cleaner.

GEARBOX. Four speed with positive stop foot operation and gear position indicator, built in unit with engine. Heavy duty shafts and gears of hardened nickel-chrome steel, multiplate clutch with cork sheet linings and rubber torsion shock absorber.

FUEL TANKS. All steel welded petrol tank with parcel grid and chrome motif. Oil tank undertwinseat. Quick release filler caps. Provision for reserve.

FRAME. Heavy duty brazed cradle type frame with swinging fork rear suspension, hydraulically damped. "Easylift" centre stand.

NACELLE (3TA, 5TA only) Integral with top of forks enclosing headlamp unit, 120 m.p.h. (180 Km.p.h.) speedometer, ammeter and switchgear.

BRAKES. Full width front hub heavily finned, incorporating powerful 7 in. brake. Fully floating shoes, finger adjustment front and rear.

WHEELS AND MUDGUARDS. Triumph design wheels with plated rims and spokes. Stylish rear enclosure on 3TA and 5TA which incorporates provision for mounting panniers.

LIGHTING EQUIPMENT. Powerful 7 in. headlamp has a combined reflector/front lens assembly, "pre-focus" bulb and adjustable rim. Wide angle rear/stop light with integral reflex reflector.

TWINSEAT ASSEMBLY. Cushioned seat, covered in waterproof black and grey "Vynide". Seat is hinged and when lifted reveals the air cleaner, 12 a.h. battery, coil, rectifier, oil tank and filter, and tools.

HANDLEBAR. Chrome-plated bar with smooth action twistgrip adjustable for friction. Integral dipswitch/horn button. Adjustable plated levers with built-in cable adjusters.

FINISH. 3TA: Shell blue sheen with black frame. 5TA: Ruby red. T100S/S Kingfisher blue and silver.

EXTRAS. Pillion footrests. Prop stand. Quickly detachable rear wheel.



Easily detachable tank on "B" range twins.



Fully floating brake shoe assembly for maximum braking power.

ONS

TECHNICAL DATA

"B" RANGE MODELS

650 cc

ENGINE. 650 c.c. o.h.v. vertical twin with two gear driven camshafts. Light alloy cylinder head, cast-iron barrel, high compression pistons, large bore carburettor. Splayed port head with two carburettors on T120. One-piece forged crankshaft with bolt-on central flywheel. "H" section RR56 alloy connecting rods with plain bearing big-ends. Dry sump lubrication with plunger type pump and pressure indicator. Gear driven magneto with auto control. "Thunderbird" (6T) has A.C./D.C. lighting-ignition system with emergency start circuit. Oil bath primary chaincase. Air cleaner (not T120).

GEARBOX. Triumph design and manufacture. Shafts and gears of hardened nickel and nickel-chrome steel. Needle roller layshaft bearings. Positive stop footchange. Multiplate clutch with indestructible cork sheet linings and rubber torsion shock absorber. Accessible filler and level plugs and dual gearbox adjusters.

FRAME. Brazed cradle type frame with twin front down tubes and swinging fork suspension, hydraulically damped and adjustable for varying loads. "Easylift" centre stand. Provision for anti-theft lock. Front wheel stand.

FORKS. Triumph design telescopic pattern with hydraulic two-way damping and steering damper.

FUEL TANK. Large capacity all-steel welded petrol tank mounted on rubber and easily detached. Quick release fillers. Provision for reserve. Plated parcel grid.

NACELLE. 6T only (Patent No. 647670) Triumph design integral with top of forks enclosing headlamp, instruments and switchgear.

BRAKES. Front: Full width finned hub, with 8 in. diameter brake. Rear: 7 in. diameter with drum integral with sprocket. Fully floating shoes.

WHEELS AND MUDGUARDS. Triumph design wheels with plated spokes and rims. Stylish rear enclosure on 6T only.

LIGHTING EQUIPMENT. Lucas alternator crankshaft mounted. 12 a.h. battery, powerful headlamp (quickly detachable where nacelle not fitted) with combined reflector/front lens assembly, "pre-focus" bulb and adjustable rim. Wide angle rear/stop light with combined reflector.

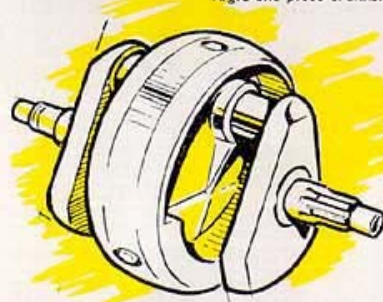
SPEEDOMETER. Smiths 120 m.p.h. (180 Km.p.h.) chronometric type with r.p.m. scale and trip recorder. (140 m.p.h. 240 Km.p.h. on Bonneville 120.)

HANDLEBAR. Chromium-plated with smooth action twistgrip and adjustable friction control. Integral horn push. Adjustable plated clutch and brake levers with built-in cable adjusters.

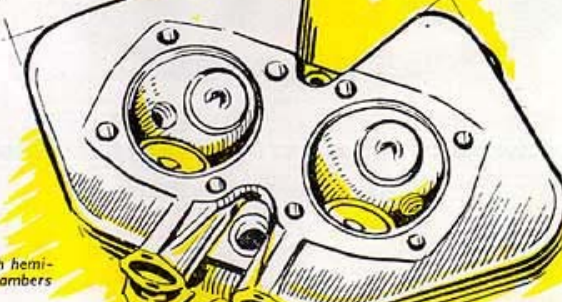
EXTRAS. Prop stand all models. Pillion footrests all models. Quickly detachable rear wheel. (Wheel can be removed leaving brake, chain, etc. undisturbed.) Steering lock all models.

MODEL	Tiger Cub (T20)	Sports Cub (T20S/S)	Twenty-one (3TA)	Speed Twin (5TA)	Tiger 100 (T100S/S)	Thunderbird (6T)	Trophy (TR6S/S)	Bonneville 120 (T120)
Engine Type	O.H.V.	O.H.V.	O.H.V.	O.H.V.	O.H.V.	O.H.V.	O.H.V.	O.H.V.
Number of Cylinders	2	2	2	2	2	2	2	2
Bore/Stroke, mm.	63 x 64	63 x 64	58.25 x 65.5	69 x 65.5	69 x 65.5	71 x 82	71 x 82	71 x 82
Bore/Stroke, ins.	2.48 x 2.52	2.48 x 2.52	2.3 x 2.6	2.72 x 2.6	2.72 x 2.6	2.79 x 3.23	2.79 x 3.23	2.79 x 3.23
Capacity, cu. cms.	199	199	348	490	490	649	649	649
Capacity, cu. ins.	12	12	21.3	29.8	29.8	40	40	40
Compression ratio	7:1	9:1	7.5:1	7:1	9:1	7.5:1	8.5:1	8.5:1
B.H.P. and R.P.M.	10@6,000	14.5@6,500	18.5@6,500	27@6,500	34@7,000	34@6,300	40@6,500	46@6,500
Engine Sprocket Teeth—Solo	19	19	26	26	26	22	21	21
Sidecar	—	—	—	—	—	20	19	19
Clutch Sprocket Teeth	48	48	58	58	58	43	43	43
Gearbox Sprocket Teeth	17	17	18	19	18	18	18	18
Rear Sprocket Teeth	46	48	43	43	43	43	43	43
R.P.M. 10 M.P.H. Top Gear	985	960	742	702	713	625	638	638
Gear Ratios—Top	6.84	7.13	5.33	5.05	5.33	Solo 4.67 S/C 5.12	Solo 4.88 S/C 5.40	Solo 4.83 S/C 5.40
" " —Third	9.04	8.56	6.32	6.0	6.34	5.55 6.1	5.81 6.42	5.81 6.42
" " —Second	14.05	13.37	9.37	8.88	9.37	7.88 8.7	8.25 9.13	8.25 9.13
" " —First	20.40	19.8	12.96	12.28	12.96	11.4 12.5	11.92 13.2	11.92 13.2
Carburettor—Make	Amal	Amal	Amal	Amal	Amal	Amal	Amal	Twin Amal
Carburettor—Type	32/1	376/272	375/32	375/35	376/273	376/285	376/40	376/257
Front Chain Size	$\frac{1}{2}$ " Duplex	$\frac{1}{2}$ " Duplex	$\frac{1}{2}$ " Duplex	$\frac{1}{2}$ " Duplex	$\frac{1}{2}$ " Duplex	$\frac{1}{2}$ " x .305"	$\frac{1}{2}$ " x .305"	$\frac{1}{2}$ " x .305"
Rear Chain Size	$\frac{1}{2}$ " x .205"	$\frac{1}{2}$ " x .205"	$\frac{1}{2}$ " x $\frac{1}{2}$ "	$\frac{1}{2}$ " x $\frac{1}{2}$ "	$\frac{1}{2}$ " x $\frac{1}{2}$ "	$\frac{1}{2}$ " x $\frac{1}{2}$ "	$\frac{1}{2}$ " x $\frac{1}{2}$ "	$\frac{1}{2}$ " x $\frac{1}{2}$ "
Tyres—Front, ins.	3.25 x 17	3.00 x 19	3.25 x 17	3.25 x 17	3.25 x 19	3.25 x 18	3.25 x 19	3.25 x 19
" —Rear, ins.	3.25 x 17	3.50 x 18	3.50 x 17	3.50 x 17	3.50 x 18	3.50 x 18	4.00 x 18	4.00 x 18
Brake Diameter—ins. (cms.)	5 $\frac{1}{2}$ " (13.97)	5 $\frac{1}{2}$ " (13.97)	7" (17.78)	7" (17.78)	7" (17.78)	8" F (20.32) 7" R (17.78)	8" F (20.32) 7" R (17.78)	8" F (20.32) 7" R (17.78)
Finish	Flame/Silver Grey	Burgundy Red/Silver Grey	Shell Blue/Sheen	Ruby Red	Kingfisher Blue/Silver	Black/Silver	Burgundy Red/Silver	Flame/Silver
Seat Height—ins.	29"	30"	29 $\frac{1}{2}$ "	29 $\frac{1}{2}$ "	30"	30"	30 $\frac{1}{2}$ "	30 $\frac{1}{2}$ "
" —cms.	(73.7)	(76.2)	(74.5)	(74.5)	(76.2)	(76.2)	(77.5)	(77.5)
Wheelbase—ins.	49"	49"	52 $\frac{1}{2}$ "	54 $\frac{1}{2}$ "	53 $\frac{1}{2}$ "	54 $\frac{1}{2}$ "	55 $\frac{1}{2}$ "	55 $\frac{1}{2}$ "
" —cms.	(124.5)	(124.5)	(134)	(134)	(136)	(139)	(140.3)	(140.3)
Length—ins.	77"	77"	81"	81"	82 $\frac{1}{2}$ "	83 $\frac{1}{2}$ "	86 $\frac{1}{2}$ "	86 $\frac{1}{2}$ "
" —cms.	(195.5)	(195.5)	(206)	(206)	(209)	(212)	(219)	(219)
Width—ins.	25"	25"	26"	26"	25"	28 $\frac{1}{2}$ "	28 $\frac{1}{2}$ "	28 $\frac{1}{2}$ "
" —cms.	(63.5)	(63.5)	(66)	(66)	(63.5)	(72)	(72)	(72)
Clearance—ins.	5"	6"	5"	5"	7 $\frac{1}{2}$ "	5"	5"	5"
" —cms.	(12.7)	(15.2)	(12.7)	(12.7)	(19)	(12.7)	(12.7)	(12.7)
Weight—lbs.	215	223	340	341	336	371	383	390
" —kilos	(94)	(101)	(154.5)	(155)	(152.8)	(168.6)	(174.1)	(177)
Petrol—Galls.	3	2 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	4	3	3
" —Litres	(13.5)	(11.9)	(16)	(16)	(16)	(18)	(13.5)	(13.5)
Oil—Pints	2 $\frac{1}{2}$	2 $\frac{1}{2}$	5	5	5	5	5	5
" —Litres	(1.55)	(1.55)	(2.8)	(2.8)	(2.8)	(2.8)	(2.8)	(2.8)

Rigid one-piece crankshaft with bolt-on flywheel.



Alloy cylinder head with hemispherical combustion chambers ("B" range twins).



TRIUMPH

the best motorcycle
in the world



THRUXTON 500 MILE RACE

Outright winner of this arduous International Race for standard production motorcycles was a Triumph "Bonneville" ridden by Tony Godfrey and John Holder. Above is a fine view of Holder at speed on the winning machine. Other "Bonnevilles" filled 2nd, 4th, 5th and 6th places in the multicylinder class.

TRIUMPH

TRIUMPH ENGINEERING COMPANY LIMITED • MERIDEN WORKS • ALLESLEY • COVENTRY • ENGLAND

Telegrams "Trusty Coventry"

Telephone Coventry 20221

GUARANTEE

In this Guarantee the word "machine" refers to the motor cycle, scooter, motor-cycle combination or sidecar, as the case may be, purchased by the Purchaser.

We will supply, free of charge, a new part in exchange for, or, if we consider repair sufficient, will repair free of charge any part proved within six months of the date of purchase of any new machine (three months overseas), or within three months of its renewal or repair in the case of a part already renewed or repaired, to be defective by reason of our faulty workmanship or materials. We do not undertake to bear the cost of fitting such new or repaired part or accessory. Any part considered to be defective must be sent to our Works, carriage paid, accompanied by the following information:—

- (a) Name of purchaser and his address.
- (b) Date of purchase of machine.
- (c) Name of dealer from whom the purchase was made.
- (d) Engine number and model.

This Guarantee shall not extend to defects or damage appearing after misuse, neglect, abnormal stress or strain, or the incorporation or affixing of unsuitable attachments or parts and in particular:—

- (a) Hiring out.
- (b) Racing and Competitions.
- (c) Adaptation or alteration of any part or parts after leaving our Works.
- (d) The attaching of a sidecar in a manner not approved by us or to an unsuitable motorcycle.

This Guarantee shall not extend to machines whose trade mark, name or manufacturing number has been altered or removed, or in which has been used any part not supplied or approved by us, or to tyres, saddles, chains, speedometers, revolution counters and electrical equipment or to parts supplied to the order of the Purchaser and different from our standard specification.

Our liability and that of our dealer who sells the machine, shall be limited to that set out in this Guarantee, and no other claims including claims for consequential damage or injury to person or property, shall be admissible.

All other conditions and warranties statutory or otherwise and whether express or implied are hereby excluded and no guarantee other than that expressly herein contained applies to the machine to which this Guarantee relates or any accessory or part thereof.

We reserve the right to modify or deviate from the Published Specification without notice.