

TRIUMPH



THE BEST MOTORCYCLE IN THE WORLD



TRIUMPH SETS A NEW WORLD SPEED RECORD AT 224 M.P.H.

(Subject to confirmation by F.I.M.F.)

On the 5th September, 1962, at the Bonneville Salt Flats, Utah, a new motorcycle world speed record of 224.57 m.p.h. (360 k.p.h.) for the flying kilo was achieved by a 650 c.c. TRIUMPH streamliner ridden by Bill Johnson of California.

The engine used was a standard production type 650 c.c. Triumph twin as used in the Bonneville 120 model—a striking testimony to the quality and performance of this engine.

The Best—Always!

In choosing Triumph, today's rider buys the best of today—backed by more than half a century of the highest quality engineering experience. Wherever motorcycles are used Triumph is a household name—known and respected throughout the world for *performance, quality and satisfaction* . . .

PERFORMANCE which produces the kind of power necessary to set a new world motorcycle speed record of over 224 miles per hour (360 k.p.h.)

QUALITY which is recognised by more than 250 police and official bodies throughout the world who use Triumph for their arduous duties.

SATISFACTION known to all Triumph owners who use their machines to get the best that motorcycling can offer.

The Triumph range described in this catalogue will meet every two wheeled requirement and every model embodies notable engineering advances which will ensure the greatest possible fun and satisfaction from the greatest of all sports—*motorcycling*.



A true high performance lightweight, the Sports Cub offers crisp four-stroke acceleration and economy with first class handling and suspension. The heavy duty competition type forks and sports handlebars complete a specification which will appeal to the lightweight enthusiast.



NOT ILLUSTRATED

TS20 Cub Scrambler

Special competition models built to the identical specification of the models used by factory riders.

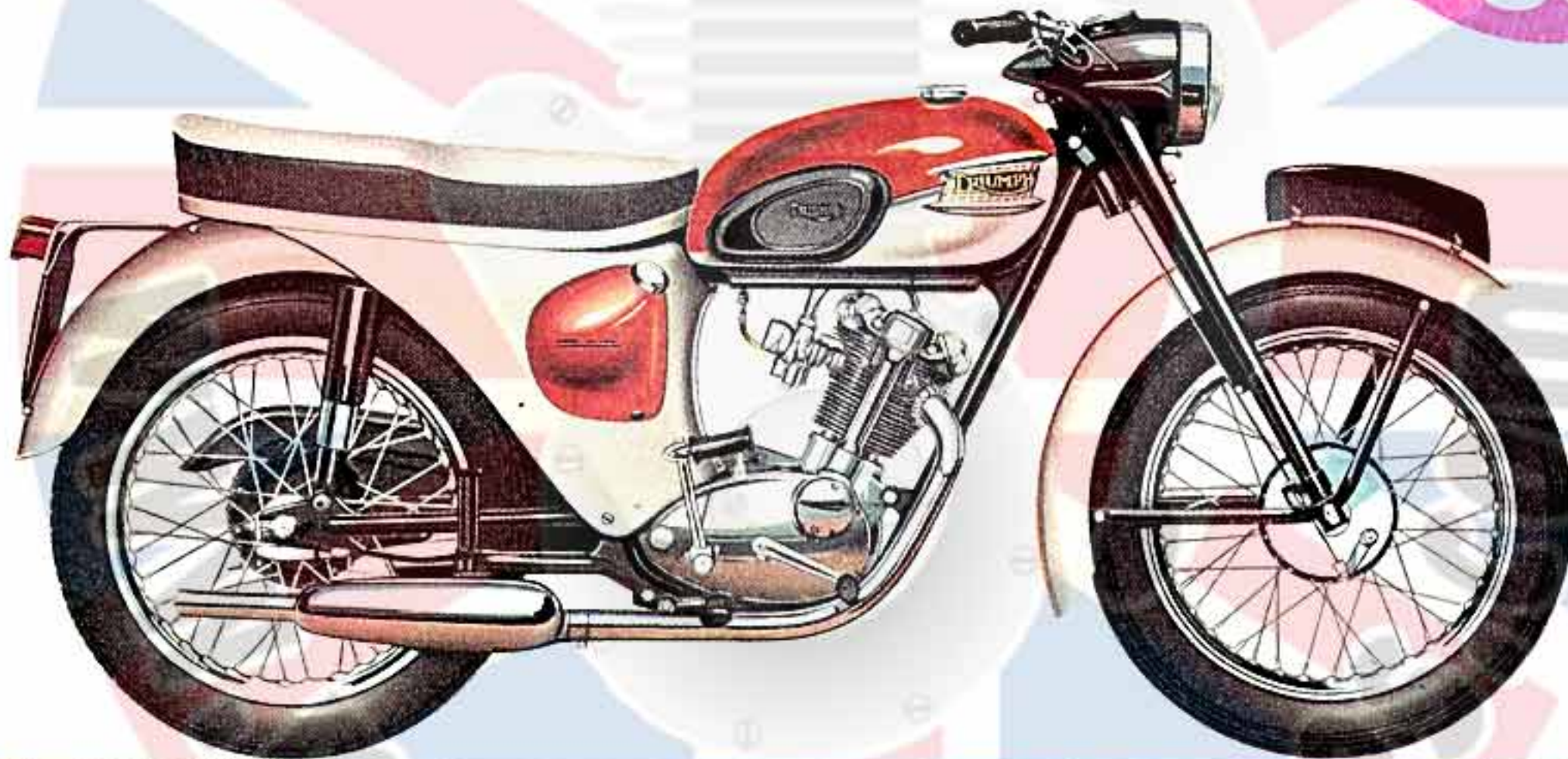
TR20 Trials Cub

Full details on request.

The remarkable Triumph Tiger Cub, now in its ninth year of non-stop production, is still first choice of the man who must have a lightweight with all the best features of a large motorcycle—four-stroke O.H.V. engine for power with economy, four-speed unit gearbox, hydraulically controlled rear suspension. Clean modern lines yet low in first cost and lowest in running costs.

**TIGER
CUB**

**200
CC**



Motorcycle to the Rescue

In a recent smallpox emergency in Great Britain, hundreds of volunteer motorcyclists like this one here, rushed precious vaccine to where it was urgently needed.

The neat instrument layout on the nacelle of the Tiger Cub. Switches have socket connections and the speedometer is of the latest type incorporating anti-vibration mountings.



Motorcycle for Sport

Trials riding is only one of the many fine sports to be enjoyed on a motorcycle.

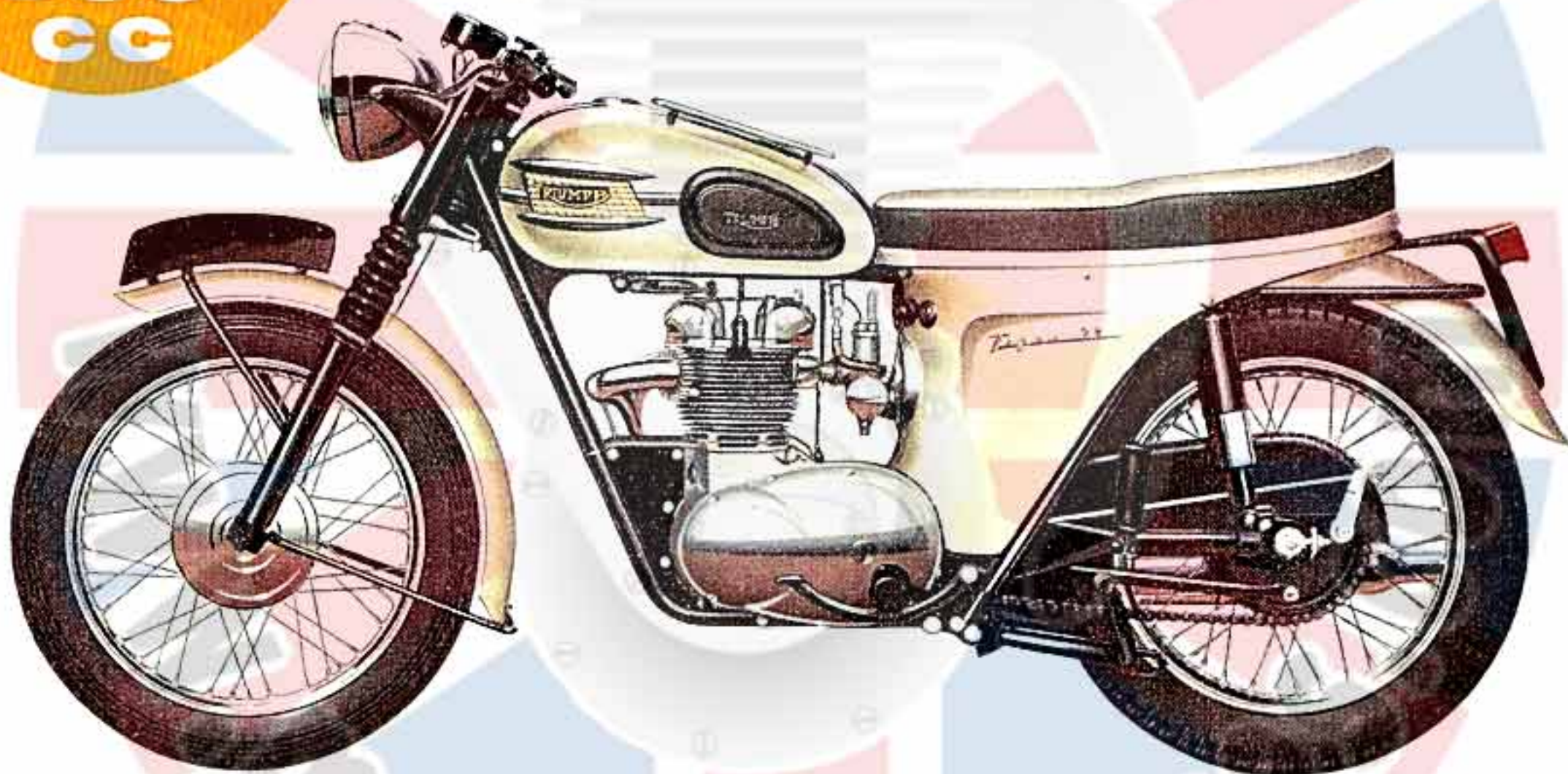


TIGER

90

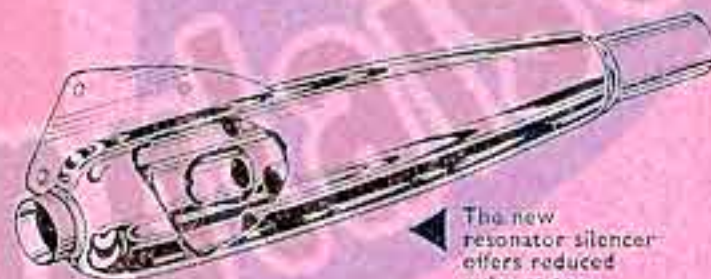
**350
CC**

An entirely new sports 350 c.c. twin with a specification similar to the well-known 500 c.c. model Tiger 100. With a brilliant performance, smooth, fast and easy to handle, this interesting addition to the Triumph range will undoubtedly prove a popular model with the rider who prefers a 350 and can appreciate the "plus" performance of this new model.



Motorcycles on Parade

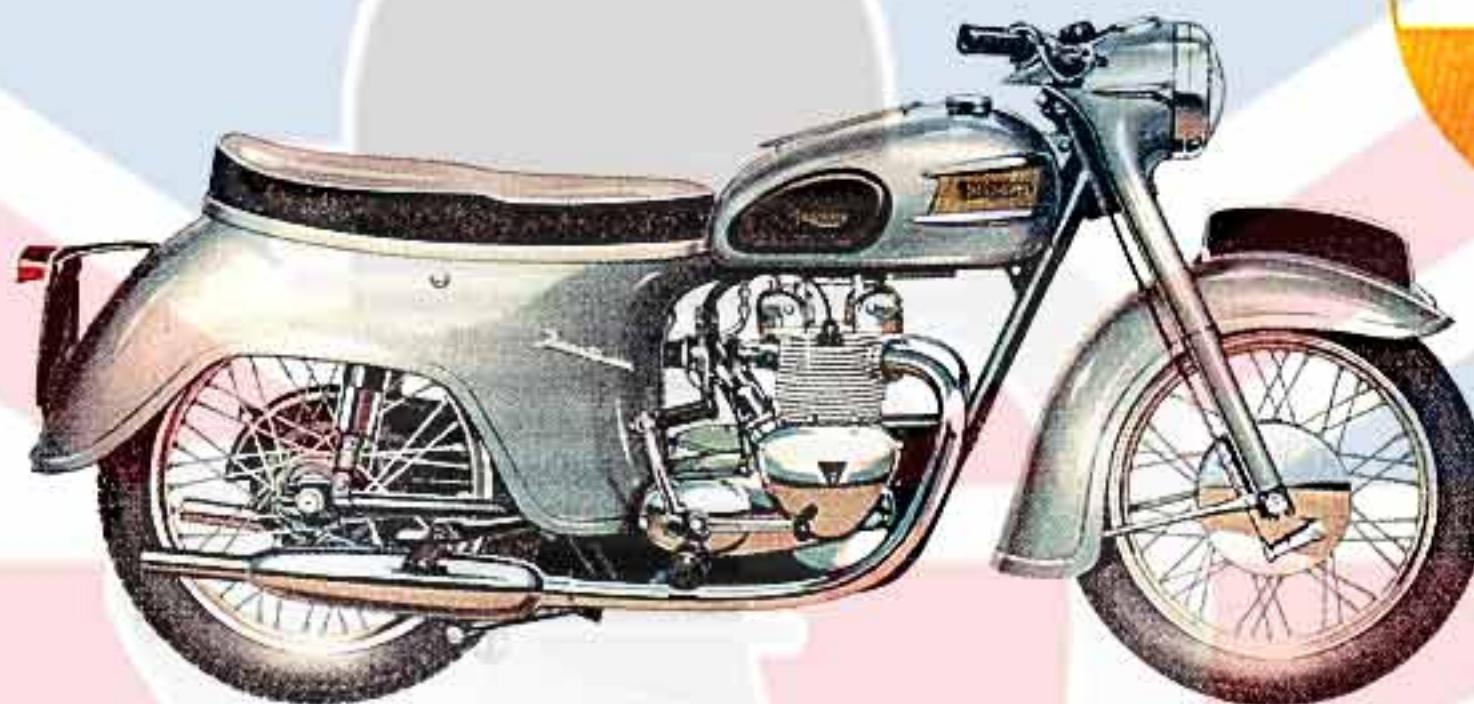
The Triumph Owners Motor Cycle Club, one of the largest one-make clubs, stages the great "Triumph Rally" at the factory. Thousands of enthusiastic Triumph owners attend.



The new resonator silencer offers reduced exhaust tone without affecting performance. On T90, T100 S/S and all '650's.

Unique in many respects, the 350 c.c. Triumph Twenty-one has retained its immense popularity for many years. Quiet, smooth running and completely reliable, it is the perfect sports tourer, solo or two-up. The engine is lively and responsive, the gear-change light and positive, and every detail of control and equipment first class.

★ SMOOTH ★ SILENT ★ CLEAN



Twenty-one

**350
CC**



▲ Raising the twin seat on the Twenty-one or Speed Twin reveals the electrical equipment, battery coil, etc., the oil tank and the tools.

Identical in all details of its specification to the Twenty-one, the 500 c.c. Speed Twin enjoys the advantage of additional power and liveliness provided by the 500 c.c. engine. Clean modern design enhances the refinement and tireless performance of this famous sporting roadster.



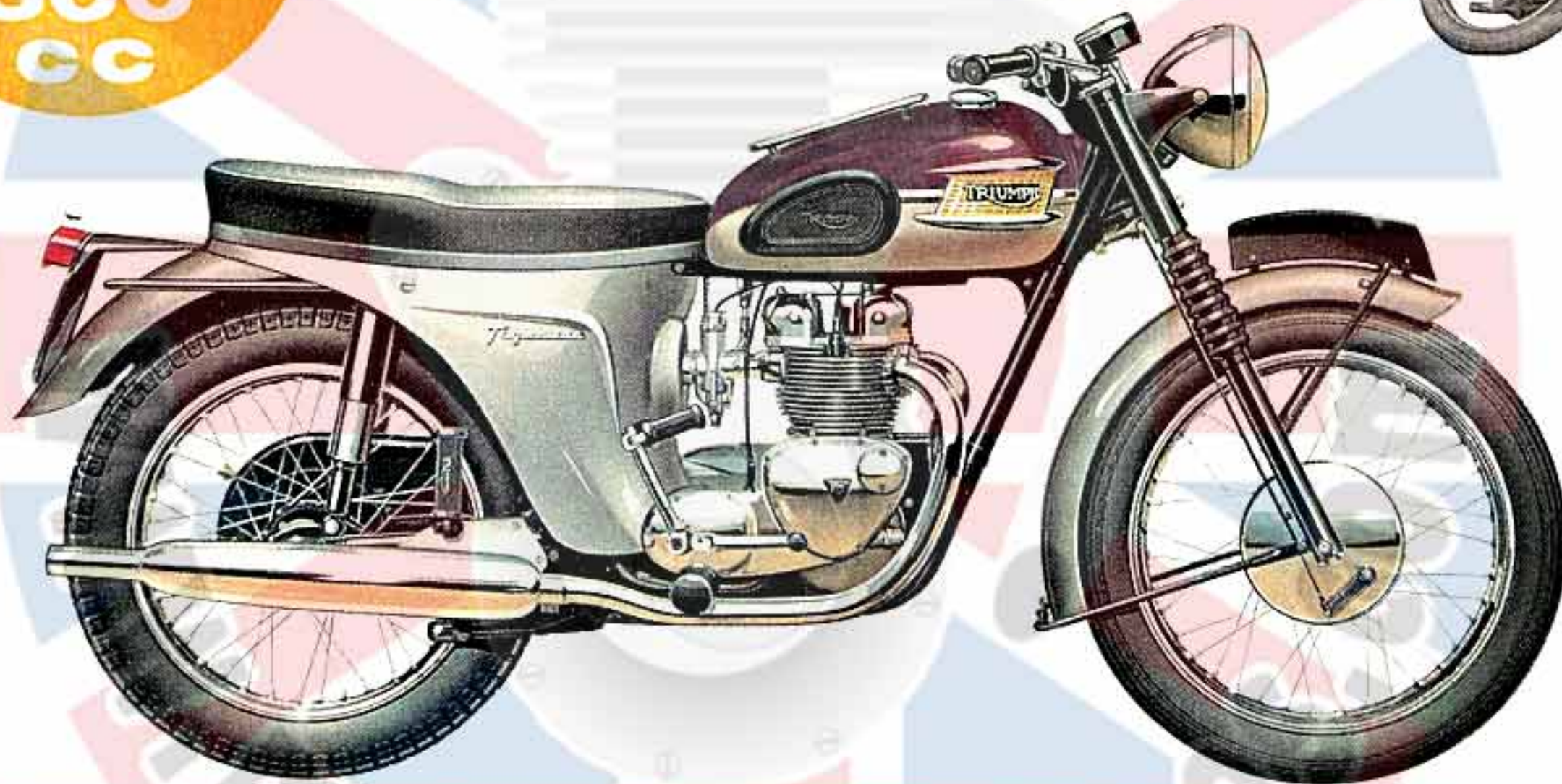
**SPEED
TWIN**

**500
CC**

TIGER
100

500
CC

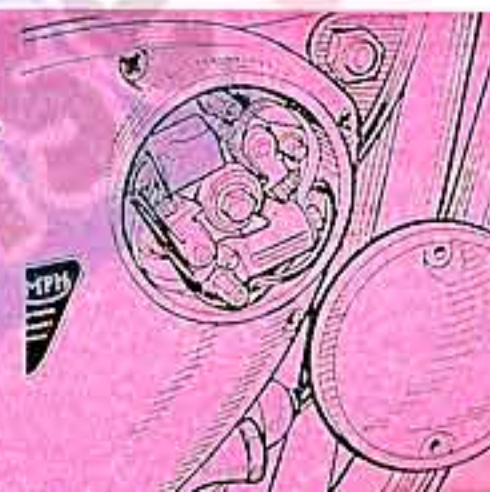
Designed down to the last detail for the sporting rider who demands the highest performance with light weight and ease of handling—the 500 c.c. Tiger 100 has proved its worth in many tough competitive events. Winner of the classic 1962 Daytona 200 mile race in the United States at record speed and gold medal winner in the 1961 and 1962 International Six Days' Trials.



◀ **The Winner!**

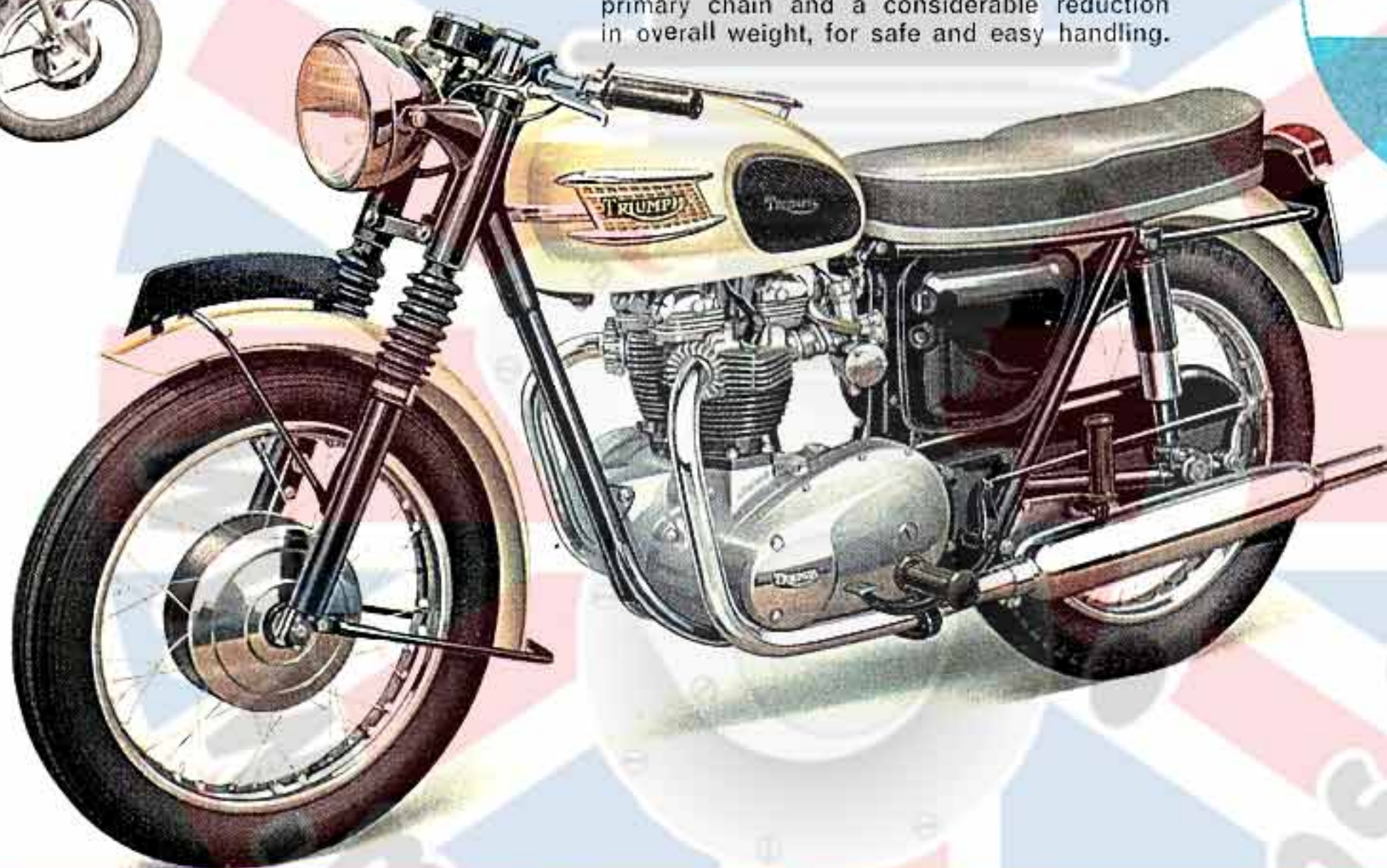
And if it is silverware you want, what better way of collecting it than on a Triumph!

▶ New double contact breaker unit fitted neatly in the timing cover and driven off the camshaft.





Offering the ultimate in road performance, the famous 650 c.c. Bonneville 120 is the choice of the really skilful and experienced rider. Specification includes new unit construction twin carburetter engine, completely new frame, new twin coil ignition system, duplex primary chain and a considerable reduction in overall weight, for safe and easy handling.



New frame on all 650's. The swinging arm runs on large diameter bronze bushes and is rigidly mounted at the back of the engine unit as well as at the seat tube.



Motorcycle on Duty

More than 250 police and official bodies throughout the world use Triumph—proof of Triumph performance and dependability.



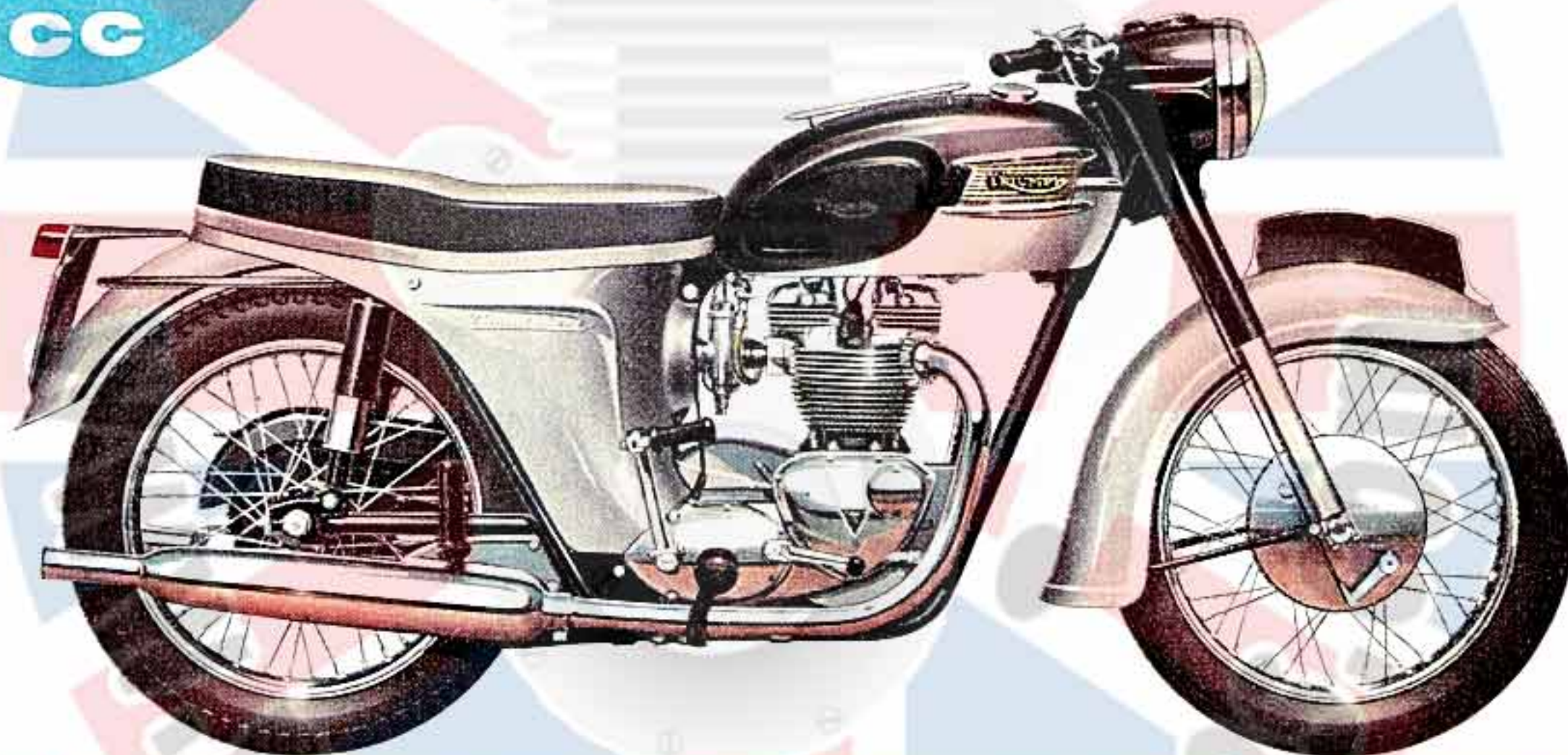
Motorcycle at Speed

Don Burnette on his Tiger 100, winner of the 1962 Daytona International 200 mile race at record speed.





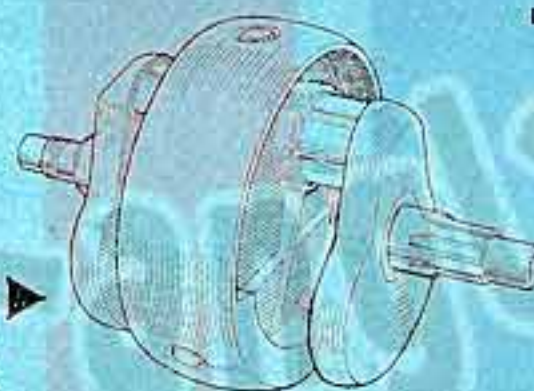
Probably the best known Triumph of all, the 650 c.c. Thunderbird, now comes with a greatly improved specification. New unit construction engine with twin coil ignition, new frame of improved design, new sports type rear enclosure, twin exhausts with highly efficient resonator silencers, and greatly reduced weight. The ideal fast solo or sidecar mount.



Where they are made

Club life is a great feature of motor-cycling and visits to the Triumph factory by clubs are always well supported.

One piece forged alloy steel crankshaft with shrunk and bolted on flywheel.



Round the World—

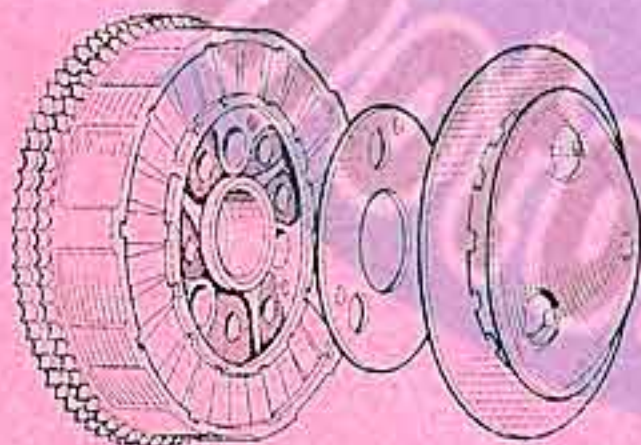
—on two wheels! Triumph reliability pays off on marathon trips of this kind.



A model with an unequalled sporting reputation in all parts of the world, the new 650 c.c. Trophy embodies all of the improved specification details common to the 650 c.c. range, the new engine gearbox unit, twin coil ignition, new frame, etc. The reduced weight will undoubtedly appeal particularly to the sporting rider for its contribution to easy handling.

TROPHY

650
CC



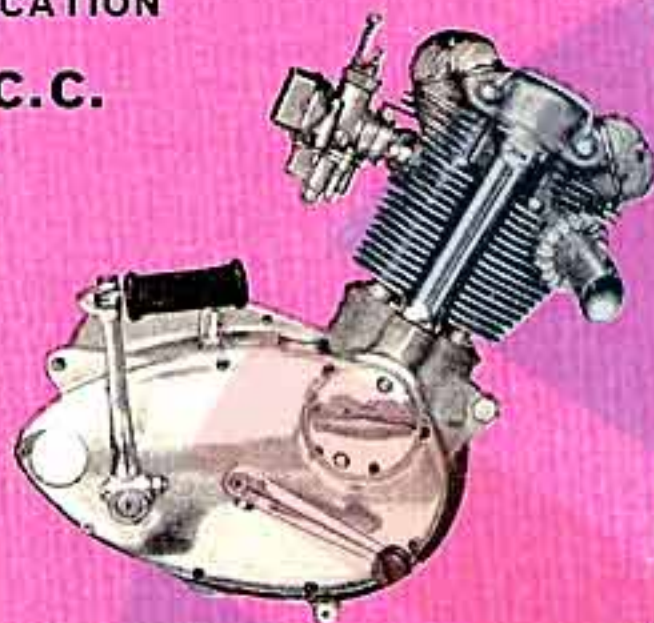
▲ New clutch fitted to all 650 c.c. models employs a three-vane shock absorber which gives greater angular movement resulting in smoother transmission.

▶ **Going Foreign**
Touring abroad has a special charm when you meet up with enthusiasts from other lands.



SPECIFICATION

200 c.c.
RANGE



ENGINE. High-performance single cylinder o.h.v. with die-cast alloy cylinder head and finned rocker box caps 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/H.

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. Contact breaker mounted in timing cover. Powerful head and rear lamps.

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

NACELLE. T20 only (Patent No. 647670). Neat streamlined shell encloses headlamp, instruments and socket connected switchgear.

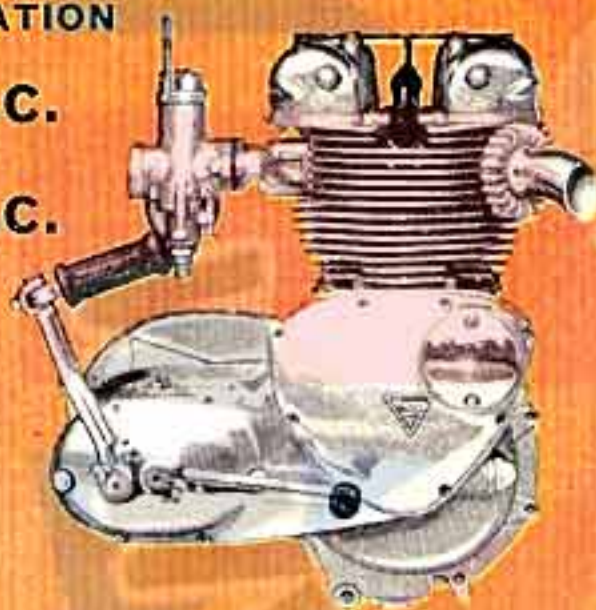
SPEEDOMETER. Smiths 80 m.p.h. (140 Km.p.h.) speedometer with anti-vibration mountings.

OTHER DETAILS. Finish T20 Flame/Silver Grey. T20S/H Burgundy Red/Silver Grey. Smooth action twistgrip, rubber knee grips. "Vynide" covered cushioned twinseat.

EXTRAS. Pillion footrests. Prop stand. Steering lock. Tachometer (T20 S/H).

SPECIFICATION

350 c.c.
500 c.c.
RANGE



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. Twin contact breaker unit mounted in timing cover (T90 and T100S/S only). Silent Duplex primary chain in polished aluminium oil-bath with tensioner. Air cleaner.

GEARBOX. Four speed with positive stop foot operation 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. Oil tank under twinseat. Provision for reserve.

FRAME. Heavy duty brazed cradle type frame with swinging fork rear suspension, hydraulically damped "Easy lift" 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.

WHEELS AND MUDGUARDS. Triumph design wheels with plated rims and spokes. Stylish rear enclosure on 3TA and 5TA which incorporates provision for mounting panniers. Sports semi rear enclosure on T90 and T100S/S.

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

TWINSEAT ASSEMBLY. Cushioned seat, covered in waterproof black grey "Vynide". Seat is hinged and covers the 12 a.h. battery, rectifier, oil tank and filler, and tools.

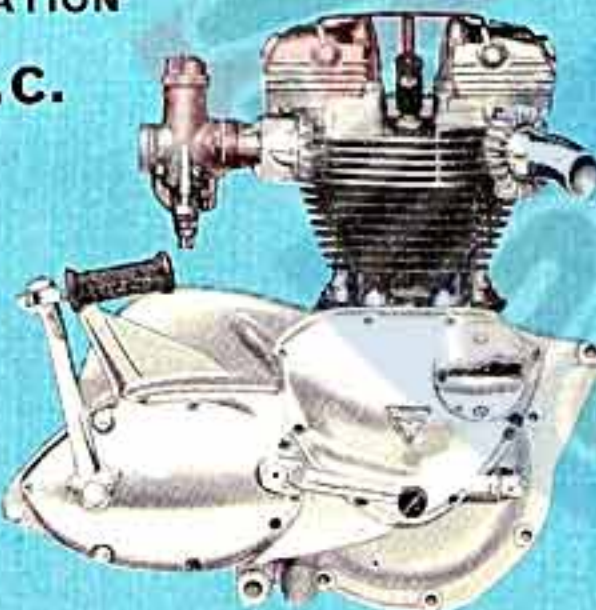
HANDLEBAR. Chrome-plated bar with smooth action twistgrip adjustable for friction. Integral dipswitch/horn button. Adjustable levers with built-in cable adjusters.

FINISH. 3TA: Shell Blue Sheen or Silver Bronze. T90: Alaskan White. 5TA: Ruby Red. T100S/S: Regal Purple and Silver.

EXTRAS. Pillion footrests. Prop stand. Quickly detachable rear wheel. Steering lock. Tachometer (T90-T100 S/S).

SPECIFICATION

650 c.c.
RANGE



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. Finned rocker boxes. 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. Twin coil ignition. Oil bath primary chaincase. Air cleaner (not T120).

GEARBOX. Built in unit with engine. 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.

FRAME. Brazed cradle type frame with single large diameter front down tube and swinging fork suspension, hydraulically damped and adjustable for varying loads, "Easy lift" centre stand. Provision for anti-theft lock. Front wheel stand.

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

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

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

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

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

LIGHTING EQUIPMENT. Lucas alternator crankshaft mounted. 12 a.h. battery, powerful headlamp (quickly detachable when 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 levers with built-in cable adjusters.

FINISH. 6T: Black/Silver. TR6: Regal Purple/Silver. T120: Alaskan White.

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

TECHNICAL DATA

MODEL	Tiger Cub (T20)	Sports Cub (T20S/H)	Twenty-one (3TA)	Tiger 90 (T90)	Speed Twin (STA)	Tiger 100 (T100S/S)	Thunderbird (6T)	Trophy (TR6)	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.	O.H.V.
Number of Cylinders	1	1	2	2	2	2	2	2	2
Bore/Stroke, mm.	63 x 64	63 x 64	58.25 x 65.5	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	2.29 x 2.58	2.29 x 2.58	2.72 x 2.58	2.72 x 2.58	2.79 x 3.23	2.79 x 3.23	2.79 x 3.23
Capacity, cu. cms.	199	199	349	349	490	490	649	649	649
Capacity, cu. ins.	12.2	12.2	21.2	21.2	30	30	40	40	40
Compression ratio	7:1	9:1	7.5:1	9:1	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 @ 7,500	27 @ 6,500	34 @ 7,000	34 @ 6,300	40 @ 6,500	46 @ 6,500
Engine Sprocket Teeth—Solo	19	19	26	26	26	26	29	29	29
Clutch Sprocket Teeth	48	48	58	58	58	58	58	58	58
Gearbox Sprocket Teeth	17	17	18	17	19	18	20	19	19
Sidcar (G/Box Sprocket)	—	—	—	—	—	—	18	17	17
Rear Sprocket Teeth	46	48	43	46	43	46	46	46	46
R.P.M. 10 M.P.H. Top Gear	985	960	742	810	702	763	616	630	648
Gear Ratios—Top	6.84	7.13	5.33	6.04	5.05	5.70	Solo 4.60 S/C 5.11	Solo 4.84 S/C 5.41	Solo 4.84 S/C 5.41
" " —Third	9.04	8.56	6.32	7.15	6.0	6.75	5.47 6.08	5.76 6.44	5.76 6.44
" " —Second	14.05	13.37	9.37	9.80	8.88	9.26	7.77 8.64	8.17 9.15	8.17 9.15
" " —First	20.40	19.8	12.96	14.67	12.28	13.86	11.43 12.48	11.81 13.40	11.81 13.40
Carburettor—Make	Amal	Amal	Amal	Amal	Amal	Amal	Amal	Amal	Twin Amal
Carburettor—Type	32/1	376/272	375/62	376/300	375/35	376/273	376/285	376/40	376/286-287
Front Chain Size	1" x .225" x .25" Duplex	1" x .225" x .25" Duplex	1" x .225" x .25" Duplex	1" x .225" x .25" Duplex	1" x .225" x .25" Duplex	1" x .225" x .25" Duplex	1" x .225" x .25" Duplex	1" x .225" x .25" Duplex	1" x .225" x .25" Duplex
Rear Chain Size	1" x .205" x .335"	1" x .205" x .335"	1" x 1" x .40"	1" x 1" x .40"	1" x 1" x .40"	1" x 1" x .40"	1" x 1" x .40"	1" x 1"	1" x 1"
Dunlop Tyres—Front, ins.	3.25 x 17	3.00 x 19	3.25 x 17	3.25 x 18	3.25 x 17	3.25 x 18	3.25 x 18	3.25 x 19	3.25 x 18
" " —Rear, ins.	3.25 x 17	3.50 x 18	3.50 x 17	3.50 x 18	3.50 x 17	3.50 x 18	3.50 x 18	4.00 x 18	3.50 x 18
Brake Diameter—ins. (cms.)	5 1/2" (13.97)	5 1/2" (13.97)	7" (17.78)	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 or Silver/Bronze	Alaskan White	Ruby Red	Regal Purple/Silver	Black Silver	Regal Purple/Silver	Alaskan White
Seat Height—ins. (cms.)	29" (73.7)	30" (76.2)	29 1/2" (74.5)	30" (76.2)	29 1/2" (74.5)	30" (76.2)	30" (76.2)	30 1/2" (77.5)	30 1/2" (77.5)
Wheelbase—ins. (cms.)	49" (124.5)	50" (124.5)	52 1/2" (134)	53 1/2" (136)	52 1/2" (134)	53 1/2" (136)	55" (139.6)	55 1/2" (141)	55" (139.6)
Length—ins. (cms.)	77" (195.5)	78 1/2" (199.3)	81" (206)	82 1/2" (209)	81" (206)	84 1/2" (213.9)	84" (213.5)	84 1/2" (214.5)	84" (213.5)
Width—ins. (cms.)	25" (63.5)	26" (66)	27" (68.5)	26 1/2" (67.3)	27" (68.5)	26 1/2" (67.3)	27 1/2" (70)	27" (68.5)	27" (68.5)
Clearance—ins. (cms.)	5" (12.7)	8 1/2" (21)	5" (12.7)	7.5" (19)	5" (12.7)	7.5" (19)	5" (12.7)	5" (12.7)	5" (12.7)
Weight—lbs. (kilos)	215 (94)	223 (101)	340 (154.6)	336 (152.8)	341 (155)	336 (152.8)	369 (167)	363 (165)	363 (165)
Petrol—Galls. (Litres)	3 (13.5)	3 (13.5)	3 (13.5)	3 (13.5)	3 (13.5)	3 (13.5)	4 (18)	4 (18)	4 (18)
Oil—Pints (Litres)	2 1/2 (1.55)	2 1/2 (1.55)	5 (2.8)	5 (2.8)	5 (2.8)	5 (2.8)	5 (2.8)	5 (2.8)	5 (2.8)

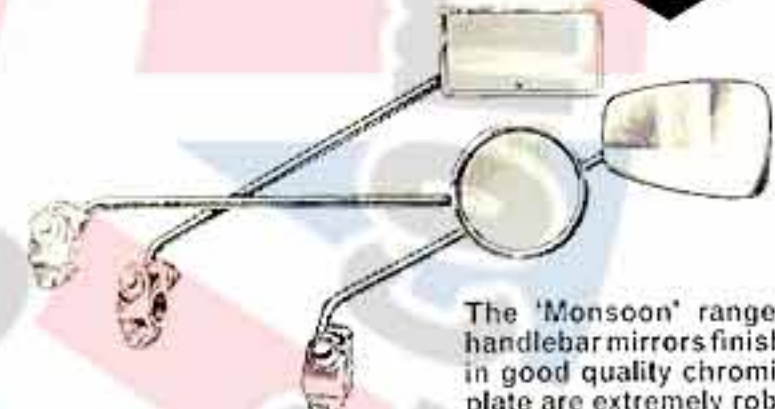
Details of high performance equipment for certain models published separately



The double curvature 'TRI-POINT' windscreen is easily adjustable for rake and height and has shock resistant fittings.

ACCESSORIES FOR YOUR TRIUMPH

A selection of accessories specially designed for Triumph motorcycles is illustrated on this page. Details of the complete range are obtainable from your nearest Dealer. Look for the M.P.C. sign for tailor-made Triumph accessories.



The 'Monsoon' range of handlebar mirrors finished in good quality chromium plate are extremely robust and durable.



Available in a variety of self-coloured finishes the Gazelle MK II comprises a fibre glass fairing complete with double curvature screen.

THERE IS NOTHING QUITE LIKE IT!

Motorcycling is a wonderful, healthy open air sport of absorbing interest. It gives you a wide experience of peoples and places at home and abroad—to the mechanically minded it is a constant joy and to those who revel in the fierce battle of competition, it provides a wide range of activities—road racing, trials riding, scrambling, etc., etc.

To the newcomer to motorcycling thrilled at the purchase of his first powered vehicle, we say, learn all you can about the new model, treat it with respect and maintain it in good condition and you will have an asset which will make your life fuller and more enjoyable in every way.

Above all, learn to ride it skilfully and be proud of your skill when you have acquired it. Don't learn "the hard way", get expert training right from the start. Your dealer will help you—there is probably a training class in your locality where first class tuition can be obtained for a very modest cost. Always ride with care and consideration for others and you will get the maximum enjoyment from the finest sport of all.

GUARANTEE

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

In this Guarantee the word "machine" refers to the motorcycle, 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.

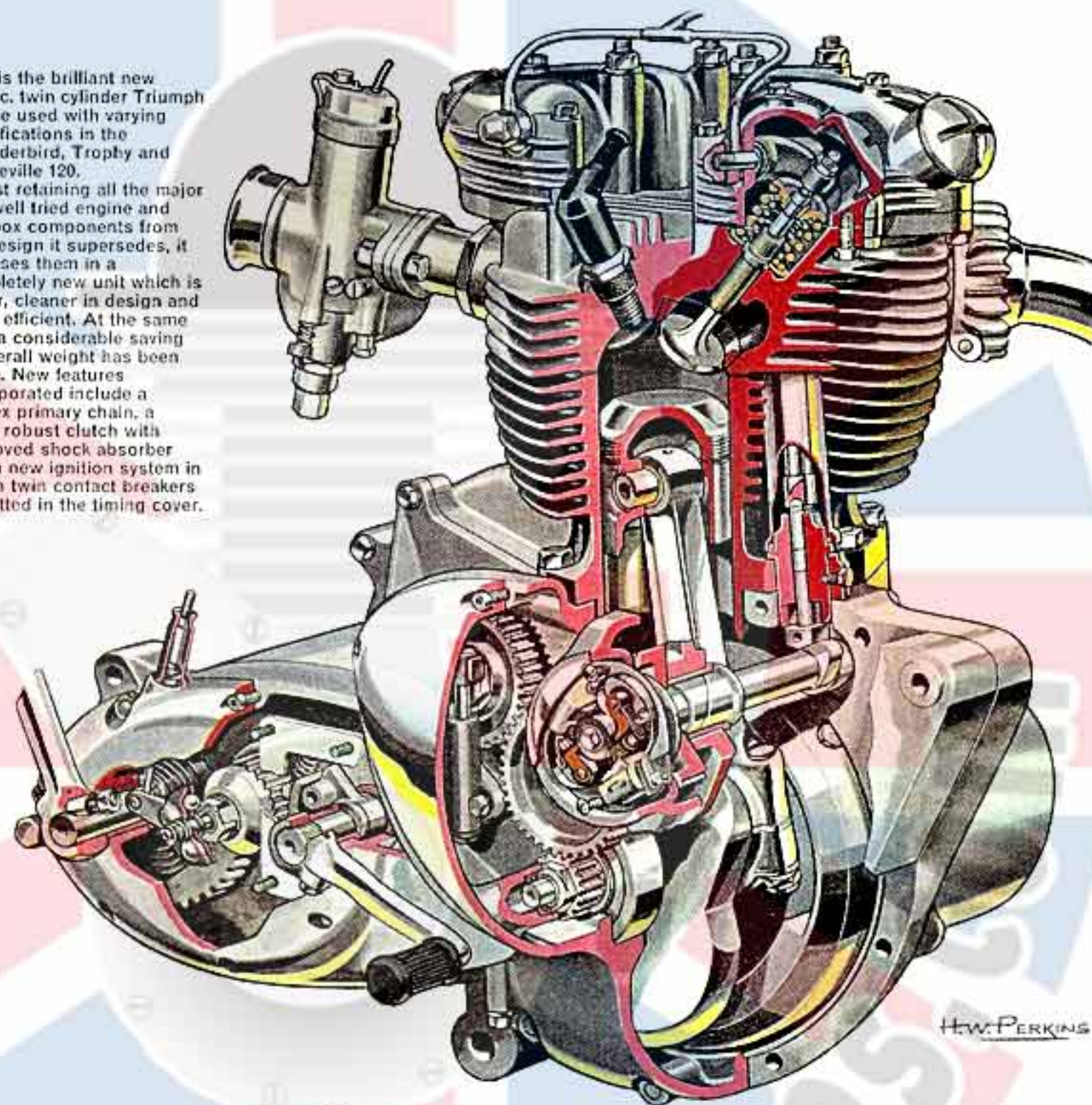
This Guarantee shall not extend to machines whose trade mark, name or manufacturing number has been altered or removed, or in which has been used any part not supplied or approved by us, or to tyres, saddles, chains, speedometers, revolution counters and electrical equipment or to parts supplied to the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

This is the brilliant new 650 c.c. twin cylinder Triumph engine used with varying specifications in the Thunderbird, Trophy and Bonneville 120.

Whilst retaining all the major and well tried engine and gearbox components from the design it supersedes, it encloses them in a completely new unit which is stiffer, cleaner in design and more efficient. At the same time a considerable saving in overall weight has been made. New features incorporated include a duplex primary chain, a more robust clutch with improved shock absorber and a new ignition system in which twin contact breakers are fitted in the timing cover.



TRIUMPH

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

Telegrams "Trusty Coventry"

Telephone Coventry 20221