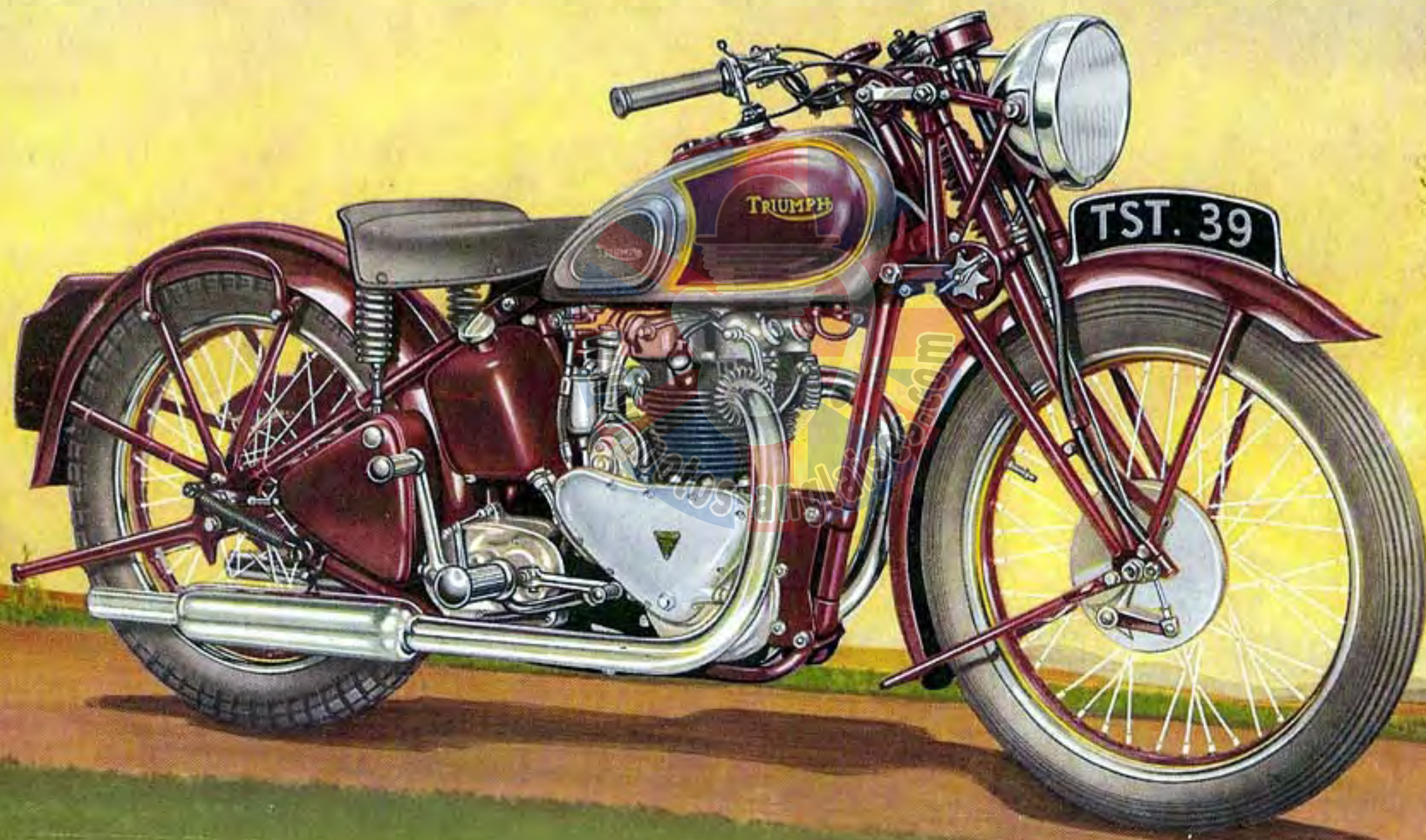


1939

TRIUMPH





Models & Prices

DE LUXE 2H 250 c.c. O.H.V.	-	£50
DE LUXE 2HC 250 c.c. O.H.V.	-	£47
DE LUXE 3H 350 c.c. O.H.V.	-	£55
DE LUXE 3S 350 c.c. S.V.	-	£52
DE LUXE 5S 500 c.c. S.V.	-	£55
DE LUXE 5H 500 c.c. O.H.V.	-	£62
DE LUXE 6S 600 c.c. S.V.	-	£60
TIGER "70" 250 c.c. O.H.V.	-	£54
TIGER "80" 350 c.c. O.H.V.	-	£60
TIGER "100" 500 c.c. O.H.V. Twin		£80
SPEED TWIN 500 c.c. O.H.V.	-	£74

Competition Specification on Tiger Models and 5H, extra £5.

Lucas Magdyno Lighting and ignition equipment standardised on all models with the exception of the 2HC, which is supplied with coil ignition equipment. Automatically compensated voltage control is used throughout the range.

Introduction

FOR 1939 Triumph continues its successful policy of offering "beautifully made" motor cycles of advanced design. The past season has been a most eventful one in the history of motor cycle development, because it has witnessed the unprecedented success of the TRIUMPH "SPEED TWIN". This model has conclusively proved the preference on the part of knowledgeable motor cyclists for the multi-cylinder machine, when a thoroughly satisfactory type became available at a moderate price.

Triumph have long held the view that for sports use the O.H.V. single of over 350 c.c. is an obsolete type, and the overwhelming endorsement of this view by the serious motor cyclist during 1938 has encouraged us to produce the multi-cylinder "TIGER 100" to replace the "TIGER 90" single. This super-tuned brother of the successful "SPEED TWIN" is a most impressive machine both in performance and appearance and will undoubtedly become a firm favourite.

There is also a new light touring 500 c.c. side-valve for the utility rider who requires moderate performance with extreme reliability at a popular price.

It is of interest that apart from such accessories as tyres and electrical equipment, Triumph motor cycles are designed and manufactured entirely "under one roof" at our Works in Coventry. Furthermore, the factory is exclusively devoted to the manufacture of motor cycles.

The foremost position Triumph holds to-day, as it did thirty years ago, is the outcome of an intensive study of the requirements of those sportsmen and enthusiasts to whom motor cycling is the breath of life.

TRIUMPH ENGINEERING CO. LTD., COVENTRY

Telephone: Coventry 60021 (7 lines).

Telegrams & Cables: "Trusty", Coventry.

Codes: A.B.C. 5th Edition, Benteleys, Marconi.

Contractors to the War Office, Government Departments, Crown Colonies, Overseas Governments and Municipal Authorities.

Specification - "Speed Twin" Model

ENGINE: Bore and stroke 63 mm. by 80 mm. 498 c.c., O.H.V., double high camshaft vertical Twin unit with deeply finned cylinder barrel. All-gear drive to camshafts and magdyno. Totally enclosed valves with accessible tappet adjustment. Designed to give sustained high power output with even slow speed torque and mechanical silence.

CONNECTING RODS: "H" Section in R.R. 56 Hyduminium Alloy, with Triumph patented big ends.

CRANKCASE AND TIMING GEAR: High tensile, aluminium alloy, crankcase of great rigidity. Polished cast aluminium timing cover incorporating oil-release valve.

CRANKSHAFT: Triumph patented with centrally disposed fly-wheel, mounted on heavy duty ball bearings. New engine shaft shock absorber incorporating modified cam contours, giving sweeter transmission, particularly at low speeds.

VALVE SPRINGS: Duplex Aero quality.

LUBRICATION: Full dry sump system, incorporating accessible plunger type pumps with positive feed to big ends and enclosed overhead valve gear. Long wear and mechanical silence. Oil gauge in instrument panel.

CARBURETTER: Amal. Triumph patented quick-action twist-grip throttle control with click action.

PETROL TANK: All-steel welded, combining shapely streamline contour with 3½-galls. capacity. Die-cast, all-metal, permanent nameplate. Flush rubber mounted instrument panel of moulded construction, carrying oil gauge, ammeter, switch and new and exclusive external panel light. Quick-opening filler cap.

OIL TANK: All-steel welded, with accessible filters, drain plug and separate vent. Capacity ½-gall.

FRAME: Brazed full cradle type, soundly constructed from tubes of finest alloy steel, combining immense strength with low weight. Large diameter tapered front down tube. Comfortable riding position with high standard of road-holding.

FRONT FORKS: Exceptionally light, but strong. Taper tube girder type incorporating rebound dampers with hand adjustment on the lower bridge.

GEARBOX AND CLUTCH: Four-speed Triumph patented design and manufacture. Gears and shafts of hardened nickel chrome

steel, finished to the highest possible standards of accuracy and precision. Patented positive stop foot change—fully enclosed. Short pedal movement giving delicacy of control with completely positive action. Large diameter multi-plate clutch with enclosed operating gear; light in operation with smooth engagement; accessible adjustment. Lubrication by engine oil.

TRANSMISSION: Primary chain running in polished cast aluminium oil-bath chain case of streamline design. Rear chain positively lubricated by feed from primary chain case.

BRAKES: Triumph 7 in. diameter brakes with special alloy detachable ribbed drums and extra wide shoes. New brake lining material giving powerful and smooth braking with long life. Finger adjustment for both brakes, with front adjuster accessible from saddle.

SADDLE: De Luxe soft top type, adjustable for height.

HANDLEBAR: New Triumph design with modified bend, resiliently mounted, eliminating fatigue and shocks, and giving great riding comfort and controllability. Control levers grouped and adjustable to suit individual requirements. Long type brake and clutch levers.

MUDGUARDS: Of adequate width with streamline section stays. Detachable tail piece to facilitate rear wheel removal. New Triumph patented front number plate with chromium edge and motif. Streamlined rear number plate (regd. design) with rear lamp mounted centrally where it is adequately protected against risk of damage.

WHEELS AND TYRES: Latest Triumph wheels with spokes of approximately equal length, taking braking and transmission stresses. Dunlop tyres. Front 26" x 3" ribbed, rear 26" x 3.50" speed universal.

TOOLBOX: Shapely all-steel construction, of large capacity, with rubber sealed lid ensuring protection against water. Complete set of good quality tools and grease gun.

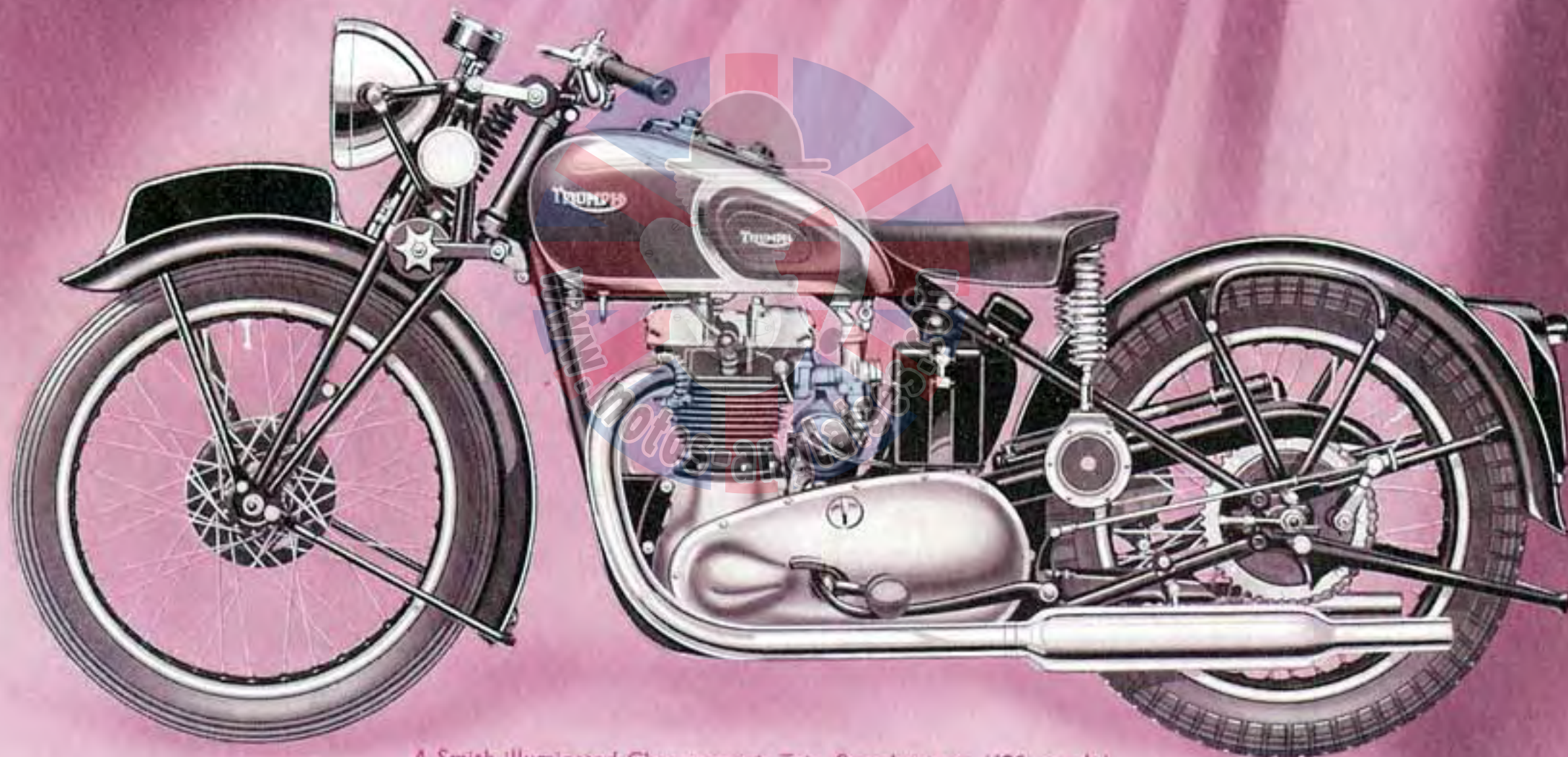
FINISH AND EQUIPMENT: Finished in Amaranth (Dark) Red. Petrol tank in chromium plate with Amaranth Red panels, lined out in Gold. New design of knee grips combining maximum comfort with security at high speeds. Spokes and rims chromium plated, with Amaranth Red centres lined out in Gold. Lucas 6-volt magdyno lighting with voltage control. Lucas 8" diameter chromium plated, anti-glare headlamp. Altette horn, chromium plated downswept exhaust pipes. All aluminium parts smooth and highly polished, and both chromium plate and enamel of the highest quality. All bolts Cadmium plated.

TRIUMPH⁶⁶ SPEED-TWIN⁹⁹

500 c.c. O.H.V.

PRICE: **£74**

*Fully equipped with Lucas Magdyno
Lighting and Electric Horn.*



A Smith Illuminated Chronometric Trip Speedometer (120 m.p.h.)
will be supplied unless otherwise ordered, £2-15-0 extra.

Specification - Tiger "100" Model

ENGINE: Double high camshaft O.H.V. Vertical Twin. Bore : 63 mm. ; Stroke : 80 mm. ; Capacity 498 cc. Special high compression alloy slipper pistons ; polished hemi-spherical combustion chambers and ports ; "H" section connecting rods in R.R. 56 Hyduminium alloy with Triumph patented big ends. Triumph patented crankshaft incorporating integral balance weights and with centrally disposed fly-wheel. All moving parts polished. Totally enclosed valve gear. Duplex Aero quality valve springs.

Dry-sump lubrication system by means of a pair of plunger type pumps with positive lead to valve gear. Separate oil tank—one gallon capacity—with large quick action filler. Cylinder head and barrel in closely grained cast iron. (Bronze cylinder head to special order, £5 extra). Crankcase, of great rigidity in high tensile aluminium alloy. Large bore Amal carburettor and induction pipe. Each engine individually tested on Heenan and Froude brake, stripped and re-assembled by skilled mechanics. Test Card signed by Chief Tester, supplied.

PETROL TANK: Of Triumph Registered design giving a capacity of four gallons and incorporating recesses in the sides for the knee grips. Metal braided flexible petrol pipes and two large bore taps fitted.

SILENCERS: Of the open megaphone type but with quickly detachable end portion incorporating baffles and tail pipe.

FRAME: Triumph cradle type with single straight down tube of tapered formation.

This new frame provides superb roadholding and steering of a quality fully in keeping with the high performance of which the engine is capable.

GENERAL: For further particulars see specification of "Speed Twin," on page 2.

FINISH:

Petrol Tank: Chromium plate with silver sheen panels lined out in blue.

Mudguards: Silver sheen with black centre strip.

Wheels: Chromium plated rims with silver sheen centres lined out in blue ; chromium plated spokes.

Frame: Finest quality black enamel.

All aluminium parts highly polished.

Illustration of Tiger "100" will be found on page 5.

Exclusive Features on page 19.

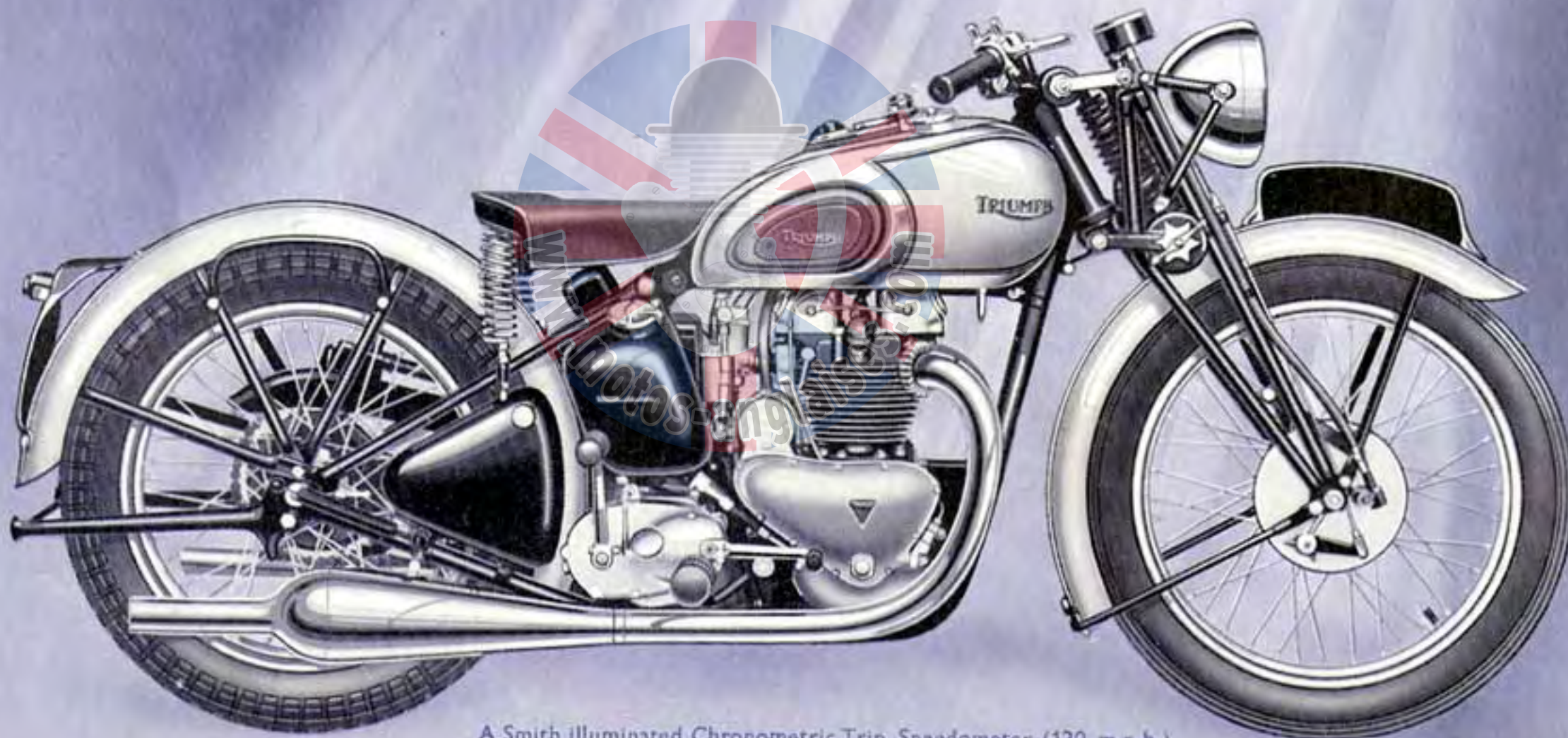
Technical Information on page 20.

TRIUMPH TIGER "100"

500 c.c. O.H.V. TWIN

PRICE: **£80**

*Fully equipped with Lucas Magdyno
Lighting and Electric Horn.*



A Smith illuminated Chronometric Trip Speedometer (120 m.p.h.)
will be supplied unless otherwise ordered, £2-15-0 extra.

Specification - Tiger "80" & "70" Models

ENGINE : Single-port O.H.V. high efficiency units of advanced design, individually tuned and Heenan and Froude brake-tested, dismantled, inspected and re-assembled by expert mechanics. Tiger "80" bore and stroke 70 mm. by 89mm. 343 c.c. Tiger "70" bore and stroke: 63 mm. by 80 mm., 249 c.c. All-gear drive to magdyno, highly finished cylinder barrel, deeply finned. Cylinder head of efficient design, highly polished to correct contours, piston of special alloy—choice of high or low compression.

CONNECTING ROD : "H" Section. Nickel chrome stamping of light stiff construction, polished all over. Large diameter double roller bearing big end.

CRANKCASE : Aluminium alloy, internally webbed and of great rigidity, with magneto platform cast integrally with timing case.

FLYWHEELS : High tensile forged steel with polished peripheries. Mainshaft mounted on large diameter ball bearings.

VALVE SPRINGS : Duplex Aero quality.

LUBRICATION : Full dry sump system, incorporating accessible plunger type pumps with positive feed to double roller bearing big end. Enclosed overhead valve gear with automatic lubrication to rockers and valve guides. Long wear and mechanical silence. Oil gauge in instrument panel.

CARBURETTER : Large bore Amal. Triumph patented quick-action twist-grip throttle control with click action.

PETROL TANK : All-steel welded, combining shapely streamline contour with 3 gallon capacity. Die-cast all-metal permanent nameplate. Flush rubber mounted instrument panel of moulded construction, carrying oil gauge, ammeter, switch and new and exclusive external panel light. Quick-opening filler cap.

OIL TANK : All-steel welded with accessible filters, drain plug and separate vent. Capacity : $\frac{1}{2}$ gallon.

FRAME : Brazed full cradle type, soundly constructed from tubes of finest alloy steel, combining great strength with low overall weight. Large diameter single down tube. Light, but positive steering, comfortable riding position and a high standard of road-holding at speed.

FRONT FORKS : Exceptionally light, but strong. Taper tube girder type incorporating rebound dampers with hand adjustment on the lower bridge.

GEARBOX : Four-speed all-Triumph design and manufacture. Gears and shafts of hardened nickel chrome steel, finished to the highest possible standards of accuracy and precision. Patented positive stop foot-change—fully enclosed. Short pedal movement ensuring delicacy of control with completely positive action. Large diameter multi-plate clutch with enclosed operating gear ; light in operation with smooth engagement ; accessible adjustment. Lubrication by engine oil.

TRANSMISSION : Primary chain running in polished cast aluminium oil-bath chain case of streamline design. Rear chain positively lubricated by feed from primary chain case.

BRAKES : Triumph 7" diameter brakes with extra wide shoes. New brake lining material giving powerful and smooth braking with long life. Finger adjustment. Front brake adjustment accessible from saddle.

SADDLE : De Luxe soft top type, adjustable for height.

HANDLEBAR : New Triumph design with modified bend, resiliently mounted, eliminating fatigue and shocks and giving great riding comfort and controllability. Control levers grouped and adjustable to suit individual requirements. Long type brake and clutch levers.

MUDGUARDS : Of adequate width with streamline section stays. Detachable tail piece to facilitate rear wheel removal. New front number plate with chromium edge and motif. Streamlined rear number plate (regd. design) with rear lamp mounted centrally above the number where it is adequately protected against risk of damage.

WHEELS AND TYRES : Latest Triumph wheels with spokes of approximately equal length, taking braking and transmission stresses. Dunlop tyres: front 26" x 3" ribbed ; rear 26" x 3.25", speed universal.

TOOLBOX : Shapely all-steel construction, of large capacity, with rubber sealed lid ensuring protection against water. Complete set of good quality tools and grease gun.

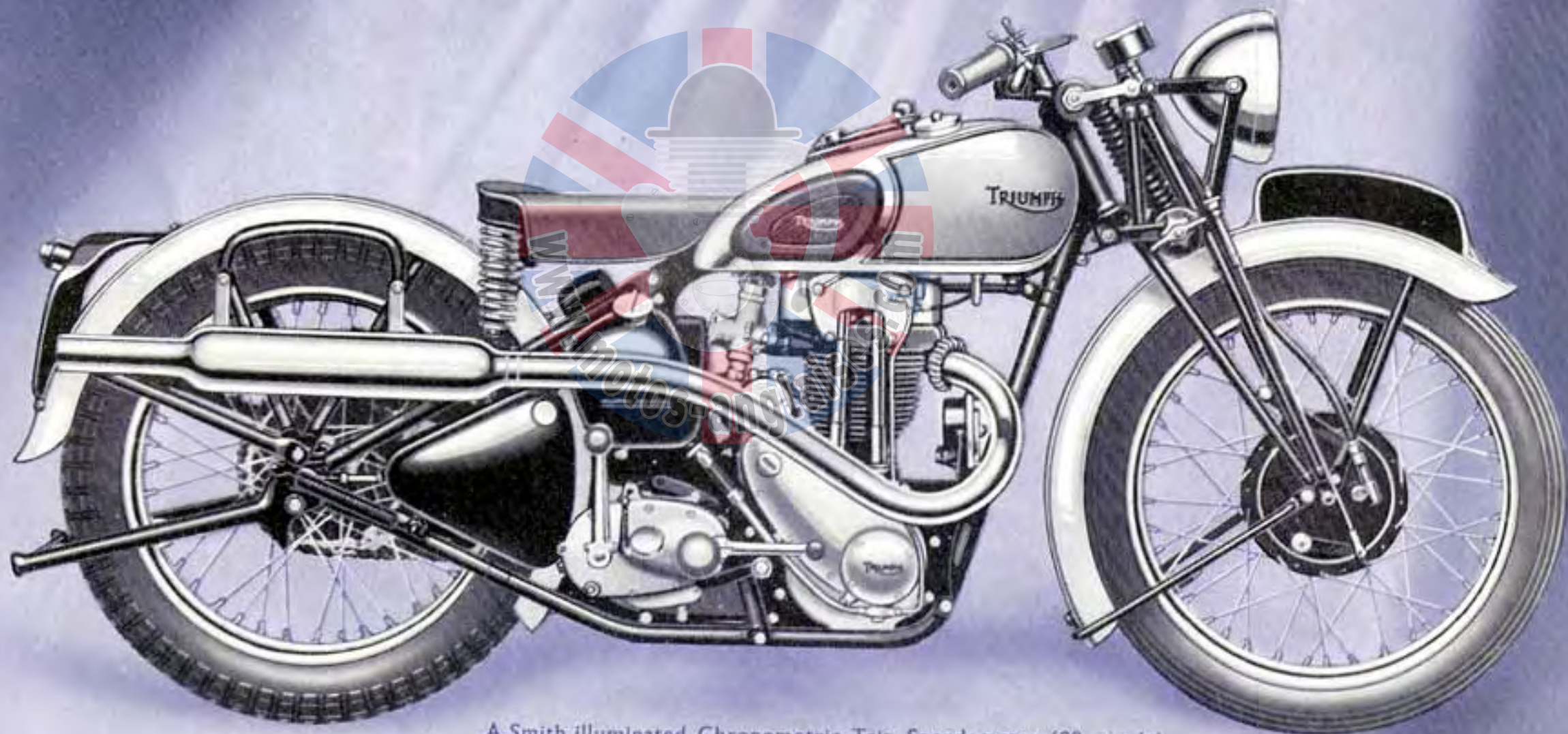
FINISH AND EQUIPMENT : Petrol tank finished in chromium plate, panelled in Silver sheen, lined out in Blue. New design of knee grips combining maximum comfort with security at high speeds. Mudguards in Silver sheen with Black centre strip, lined out in Blue. Spokes and rims chromium plated, rim centres in Silver sheen lined out in Blue. Lucas 6-volt magdyno lighting with voltage control. Lucas 8" diameter chromium plate, anti-glare headlamp. Altette horn. Chromium plated, upswept or down-swept, exhaust pipe to choice. All aluminium parts smooth and highly polished, and both chromium plate and enamel of the highest quality. All Bolts Cadmium plated.

TRIUMPH TIGER⁶⁶ 80⁹⁹

350 c.c. O.H.V.

PRICE: **£60**

*Fully equipped with Lucas Magdyno
Lighting and Electric Horn.*



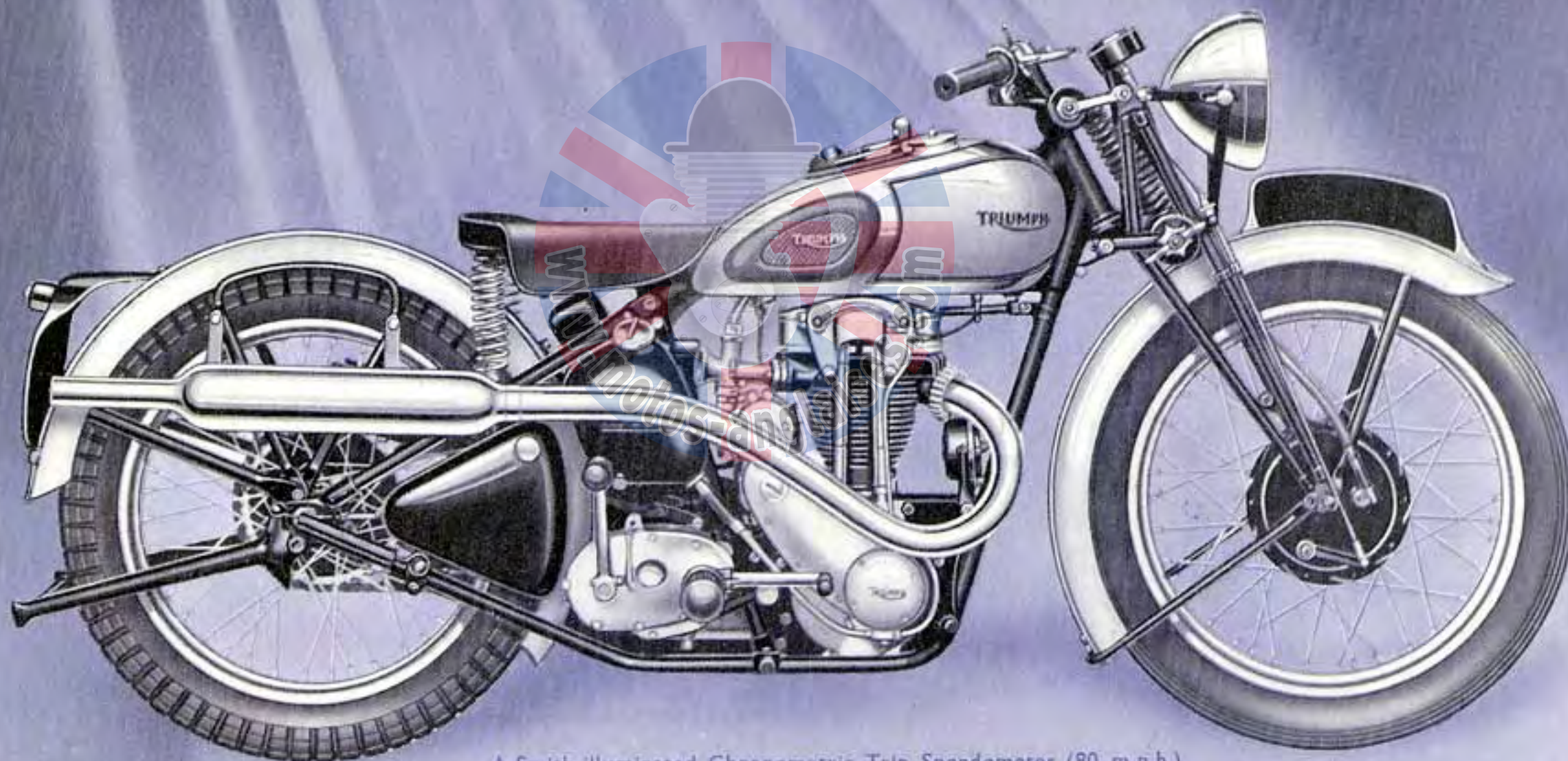
*A Smith illuminated Chronometric Trip Speedometer (80 m.p.h.)
will be supplied unless otherwise ordered, £2-10-0 extra.*

TRIUMPH TIGER⁶⁶ 70⁹⁹

250 c.c. O.H.V.

PRICE: **£54**

*Fully equipped with Lucas Magdyno
Lighting and Electric Horn.*



A Smith illuminated Chronometric Trip Speedometer (80 m.p.h.)
will be supplied unless otherwise ordered, £2-10-0 extra.

TRIUMPH

COMPETITION MODELS



TIGER "70" 63 mm. x 80 mm. (250 c.c.) O.H.V.	- - -	£59
TIGER "80" 70 mm. x 89 mm. (350 c.c.) O.H.V.	- - -	£65
TIGER "100" 63 mm. x 80 mm. (500 c.c.) O.H.V. Twin	- - -	£85
MODEL 5H 84 mm. x 89 mm. (500 c.c.) O.H.V.	- - -	£67

A Smith Chronometric Trip Speedometer will be supplied with every machine unless otherwise ordered. Tiger "100" (120 m.p.h.) £2-15-0 extra. Tiger "70", Tiger "80" and 5H Models (80 m.p.h.) £2-10-0 extra.

THE three Tigers, 250 c.c., 350 c.c., and 500 c.c., and the 500 c.c., model 5H are available to competition specification. These machines are specially prepared, and equipped with all those modifications and variations from standard which have gained Triumph so many successes in open competition, and which enable the individual rider to do justice to his own ability.

The engines are specially tuned to give off high power at low speeds and a wide ratio gearbox is fitted. Choice of ratios as table below.

Dunlop Universal tyres (front : 27 x 3 ; rear : 27 x 4) are standardised, knobby competition tyres being available on request.

Amongst the other modifications are : increased mudguard clearance ; fitment of nail catches ; stiff front fork spring ; quickly detachable headlamp ; crankcase and oil pipe shield and quickly detachable rear wheel.

GEAR RATIOS AVAILABLE

Engine Sprocket No. Teeth	Top	3rd	2nd	1st
17	6.46	9.36	14.83	19.82
18	6.1	8.84	14.00	18.7
19	5.8	8.40	13.30	17.8
20	5.5	7.96	12.62	16.88
21	5.24	7.60	12.03	16.06
22	5.00	7.25	11.48	15.35

Specification - "De Luxe" Models

ENGINE : Models 5H ; 3H ; 2H and 2HC. Single port O.H.V. deeply finned cylinder barrel and head. Piston of special low expansion aluminium alloy. All-gear drive to magdyno. Coil ignition to Model 2HC.

Models 6S ; 5S and 3S : Side valve units with quickly detachable cylinder head. Latest non-pinking internal formation to combustion chamber. All-gear drive to magdyno.

CONNECTING RODS : "H" Section. Nickel chrome stamping combining great strength with lightness. Double roller bearing big end.

CRANKCASE : Aluminium alloy heavily webbed internally, magneto platform cast integrally with timing case.

CRANKSHAFT ASSEMBLY : Crankshaft of substantial size mounted on large diameter ball bearings. High tensile forged steel flywheels.

VALVE SPRINGS : Aero quality. Duplex springs.

LUBRICATION : Full dry sump system. Valve gear fully enclosed and automatically lubricated. Plunger type oil pumps with positive feed to big end. Oil gauge in instrument panel.

CARBURETTOR : Amal Triumph patented quick-action twist-grip throttle control.

PETROL TANK : All-steel welded, combining shapely streamline contour with large capacity. Die-cast all-metal permanent nameplate. Rubber mounted instrument panel of moulded construction carrying oil gauge, ammeter, switch and new, exclusive external panel light. Petrol capacities :

Models : 6S and 5H...3½ gallons.

Models : 5S, 3H, 3S, 2H and 2HC...3 gallons.

OIL TANK : All-steel welded with accessible filters, drain plug and separate vent. Capacity : ½ gallon, all models.

FRAME : Full cradle type, with single large diameter front down tube. Soundly constructed from tubes of finest alloy steel. Great strength and torsional stiffness with low weight. Excellent weight distribution is afforded and the roadholding at speed is of the highest standard.

FRONT FORKS : Taper tube girder type, light but strong, with hand adjustable rebound dampers on lower bridge.

GEARBOX : Four-speed all-Triumph design and manufacture. Gears and shafts of hardened nickel chrome steel, finished to the highest possible standards of accuracy and precision. Patented positive

stop foot-change—fully enclosed. Short pedal movement ensuring delicacy of control with completely positive action. Large diameter multi-plate clutch with enclosed operating gear ; light in operation with smooth engagement ; accessible adjustment. Lubrication by engine oil.

TRANSMISSION : Primary chain running in polished cast aluminium oil-bath chain case of streamline design. Rear chain positively lubricated by feed from primary chain case.

BRAKES : Triumph 7" diameter brakes with extra wide shoes. New brake lining material giving powerful and smooth braking with long life. Finger adjustment. Front brake adjustment accessible from saddle.

SADDLE : De Luxe soft top type, adjustable for height.

HANDLEBAR : New Triumph design with modified bend, resiliently mounted, eliminating fatigue and shocks and giving great riding comfort and controllability. Control levers grouped and adjustable to suit individual requirements. Long type brake and clutch levers.

MUDGUARDS : "D" Section, and of adequate width. Detachable tail piece to rear guard to facilitate rear wheel removal. Streamline section stays. Valanced guards available on Models 5H, 6S ; at extra charge.

WHEELS AND TYRES : Latest Triumph wheels of improved design. Dunlop Tyres :

Models 6S, 5H, 5S, 3H and 3S : Front and rear...26" x 3.25".

Models 2H and 2HC : Front 26" x 3". Rear 26" x 3.25".

TOOLBOX : Shapely all-steel construction, of large capacity, with rubber sealed lid ensuring protection against water. Complete set of good quality tools and grease gun.

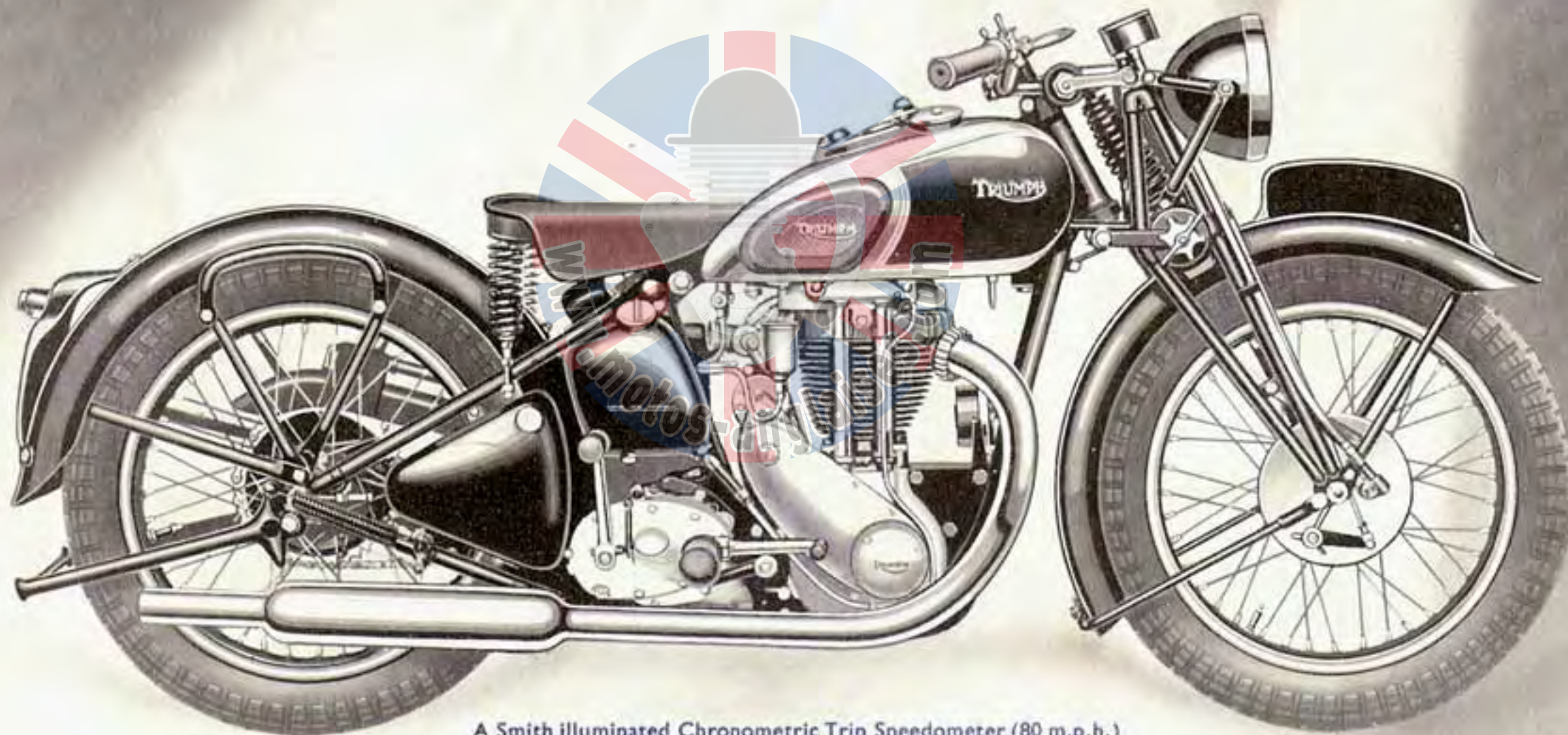
FINISH AND EQUIPMENT : Petrol Tank in chromium plate, panelled in Black, lined out in Ivory. New design of knee grips combining maximum comfort with security at high speeds. All aluminium parts highly polished. Frame, forks and mudguards finished in three coats of the highest quality black enamel. Triple Ivory lines to mudguard centres. Wheel rims chromium plated, black centres, lined out in Ivory. All bolts Cadmium plated. Lucas 6-volt magdyno lighting with voltage control, large diameter Lucas headlamp and electric horn. Lucas coil ignition equipment on 2HC Model. All aluminium parts smooth and highly polished, and both chromium plate and enamel of the highest quality.

TRIUMPH DE LUXE 5H

500 c.c. O.H.V.

PRICE: **£62**

*Fully equipped with Lucas Magdyno
lighting and Electric Horn.*



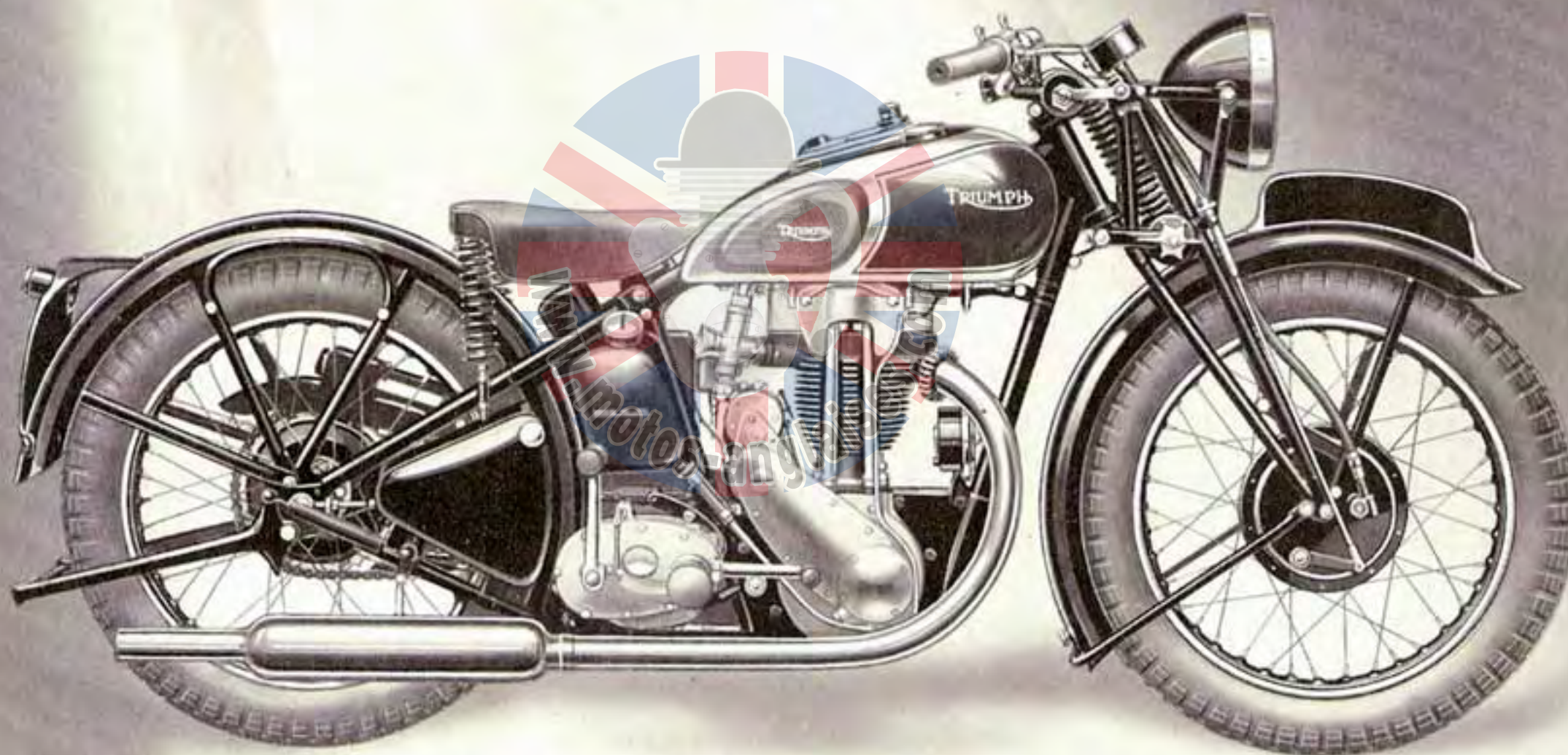
A Smith illuminated Chronometric Trip Speedometer (80 m.p.h.)
will be supplied unless otherwise ordered, £2-10-0 extra.

TRIUMPH DE LUXE '36' '39'

350 c.c. O.H.V.

PRICE: **£55**

*Fully equipped with Lucas Magdyno
lighting and Electric Horn.*



A Smith illuminated Chronometric Trip Speedometer (80 m.p.h.)
will be supplied unless otherwise ordered, £2-10-0 extra.

TRIUMPH DE LUXE

MODEL 2HC

250 c.c. O.H.V.

PRICE: **£47**

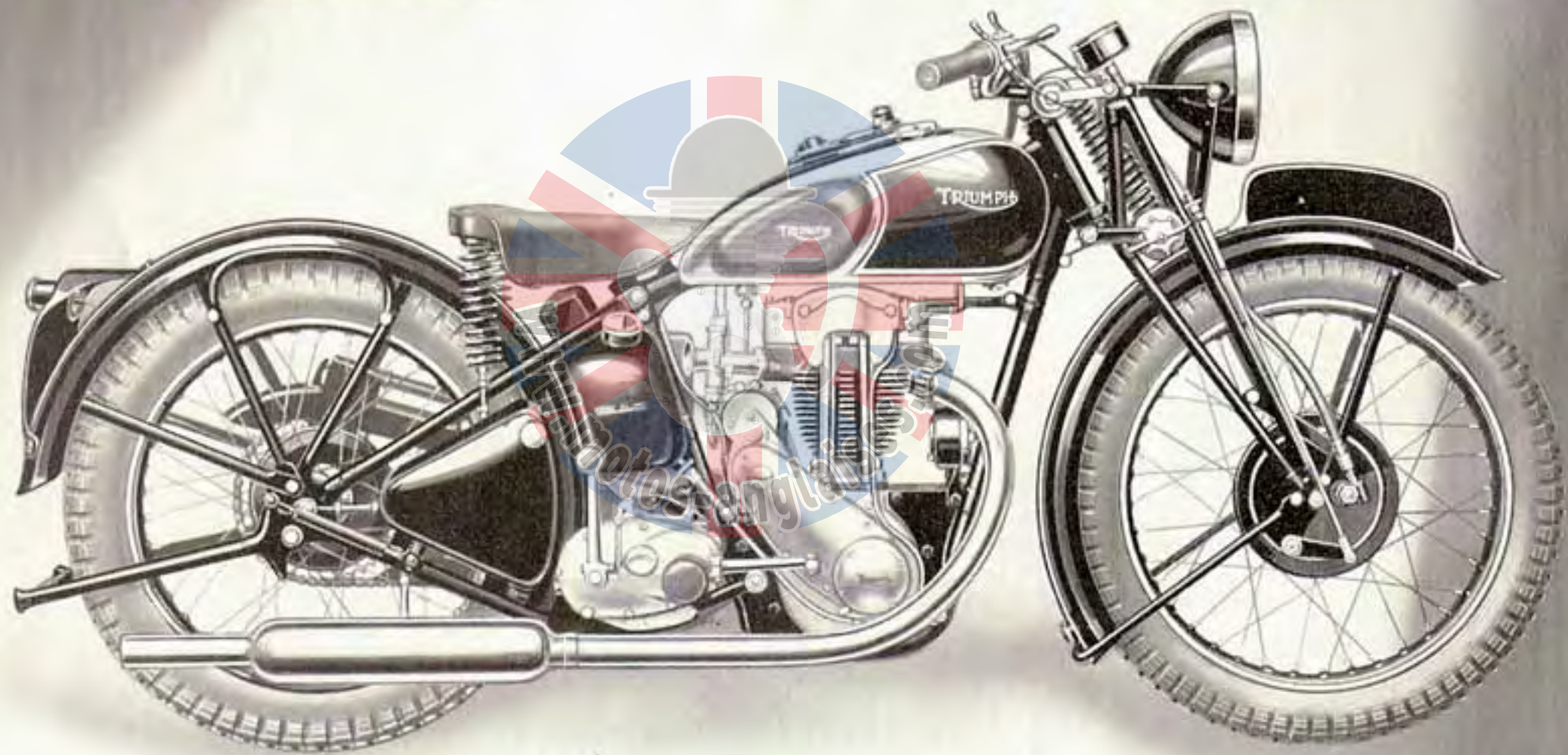
Fully equipped with Lucas Coil ignition,
Dynamo lighting and Electric Horn.

MODEL 2H

250 c.c. O.H.V.

PRICE: **£50**

Fully equipped with Lucas Magdyno
lighting and Electric Horn.



A Smith Illuminated Chronometric Trip Speedometer (80 m.p.h.)
will be supplied unless otherwise ordered, £2-10-0 extra.

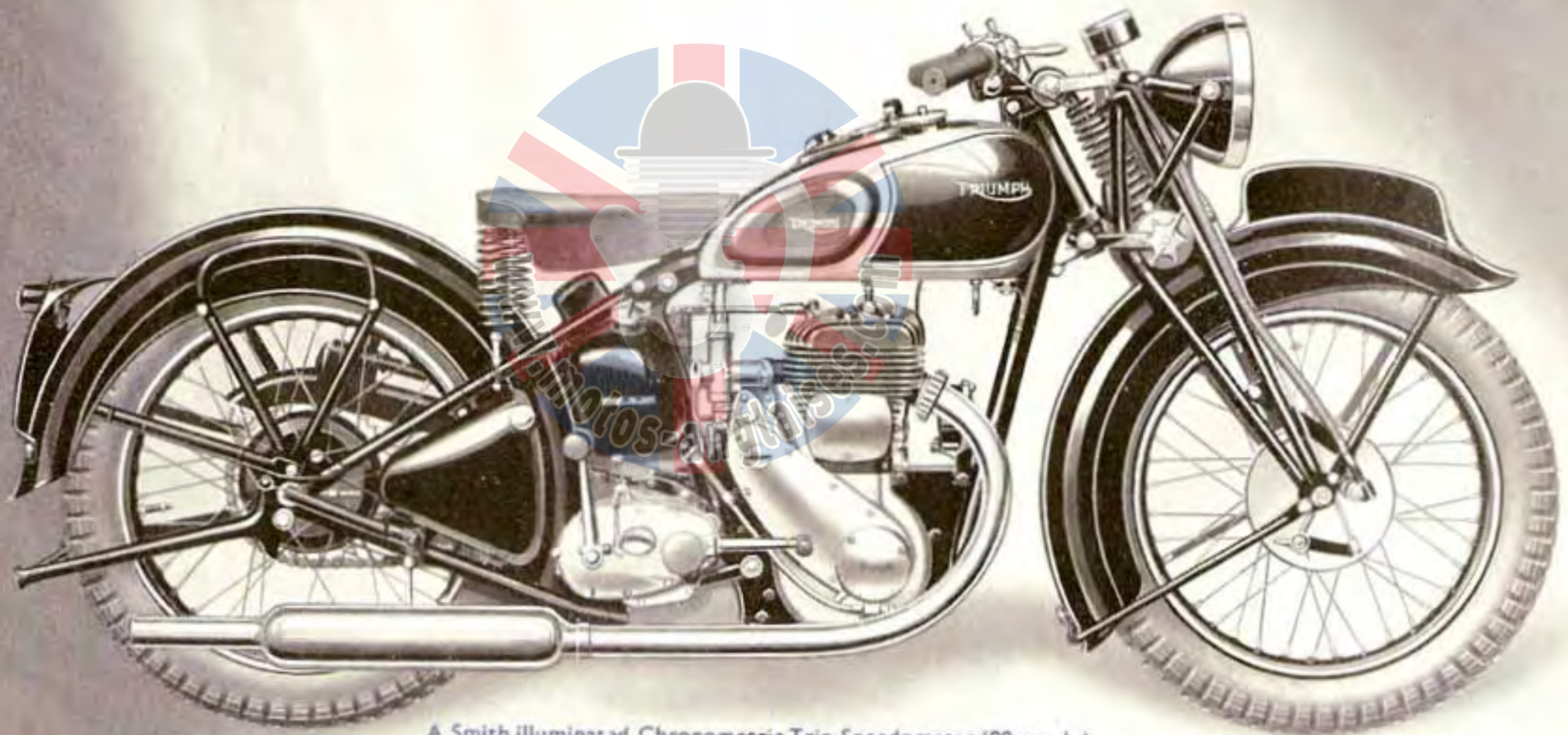
TRIUMPH⁶⁶ DE LUXE 6 S⁹⁹

600 c.c. S.V.

PRICE: **£60**

Fully equipped with Lucas Magdyno
lighting and Electric Horn.

Valanced Guards 12/6 per pair extra.



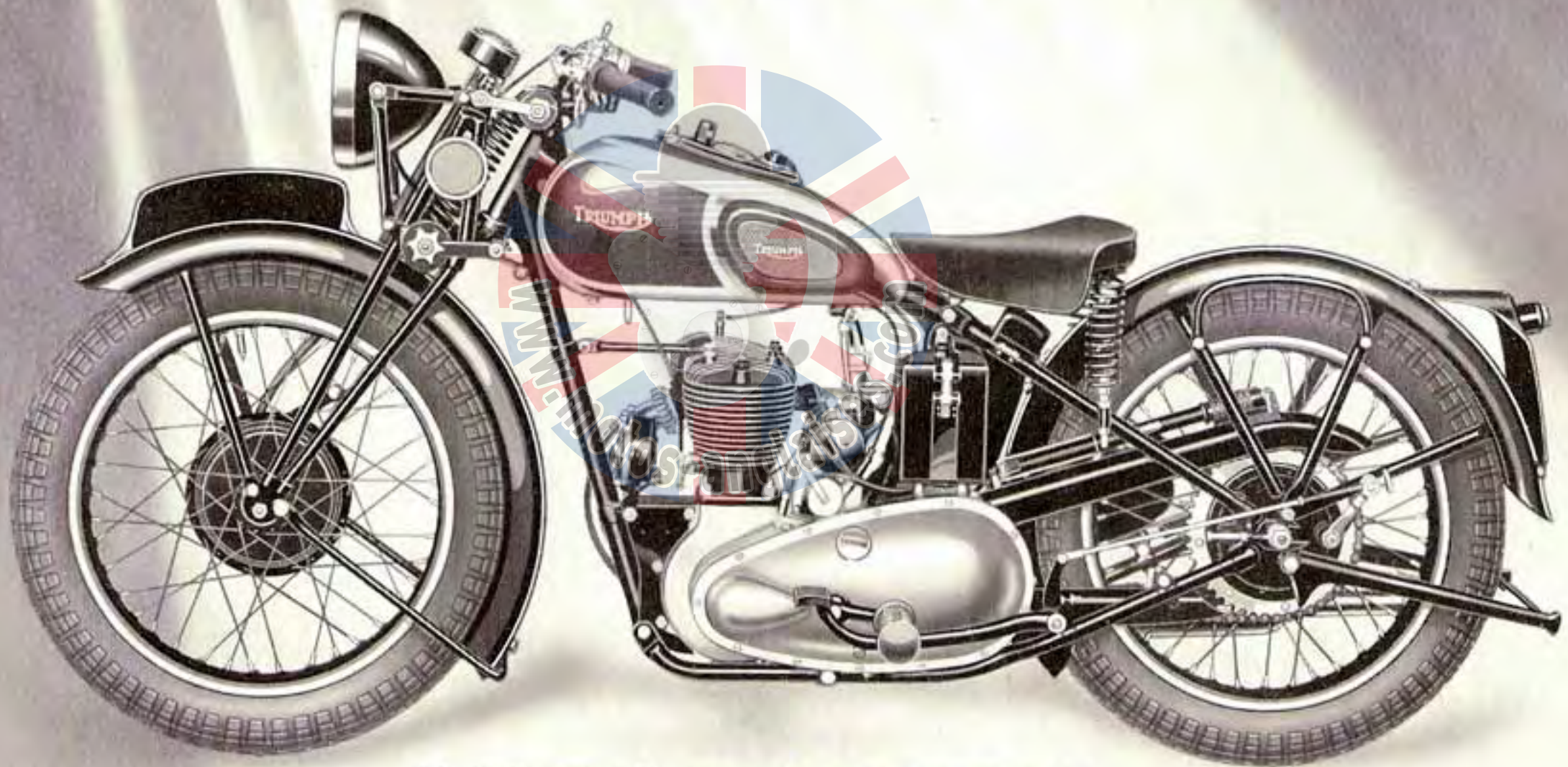
A Smith illuminated Chronometric Trip Speedometer (80 m.p.h.)
will be supplied unless otherwise ordered, £2-10-0 extra.

TRIUMPH⁶⁶ DE LUXE 3 S⁹⁹

350 c.c. S.V.

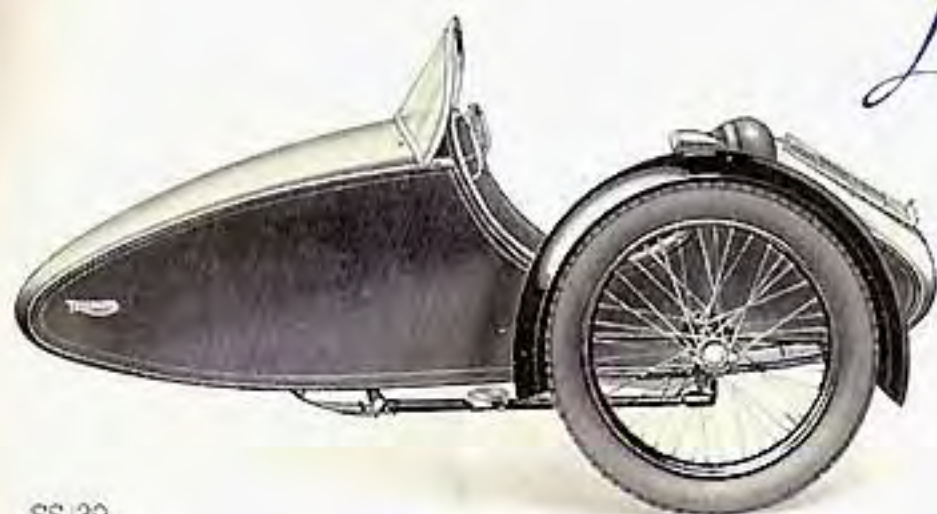
PRICE: **£52**

*Fully equipped with Lucas Magdyno
lighting and Electric Horn.*



A Smith illuminated Chronometric Trip Speedometer (80 m.p.h.)
will be supplied unless otherwise ordered, £2-10-0 extra.

Triumph Sidecars



SS/39

Model SS/39

A handsome streamlined Sports Model scientifically constructed, ensuring maximum strength. Overall length 76 in., length inside from back seat to toe 43 in., width 20 in., depth 20 in. Deeply upholstered. Sports chromium metal framed windscreen. Chromium plated hand rail, step and luggage grid. Coverall apron. Dunlop cord tyres. Colour schemes: Blue and Silver and Amaranth Red and Silver.

P R I C E
complete with Lucas electric lamp: **£23**

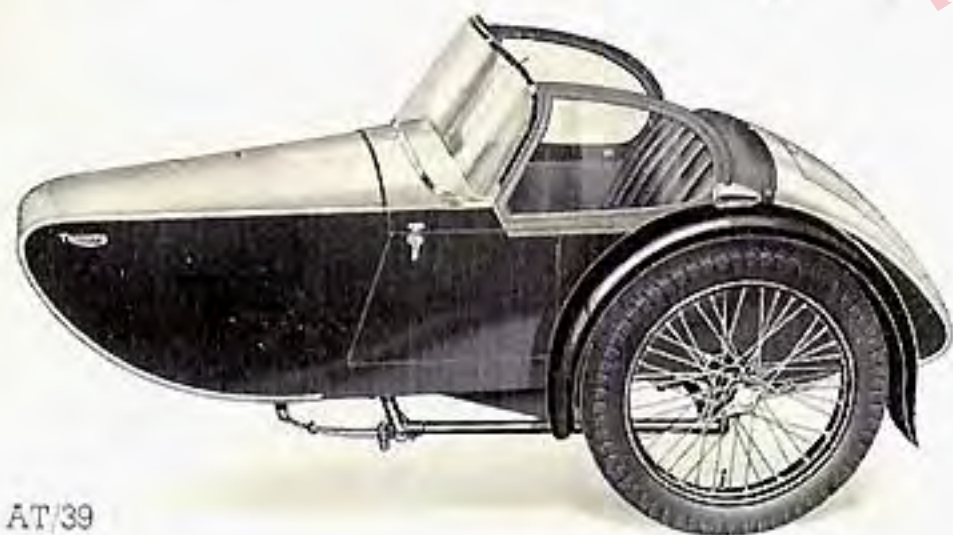


ST/39

Model ST/39

A de-luxe touring model with deep louvre from water-tight hinged scuttle to nose. Chromium metal framed windscreen and side screens, large dickey seat and quick-lift hood. Deeply upholstered and well-sprung. Colour schemes: Blue and Silver and Amaranth Red and Silver.

P R I C E
complete with Lucas electric lamp: **£24**

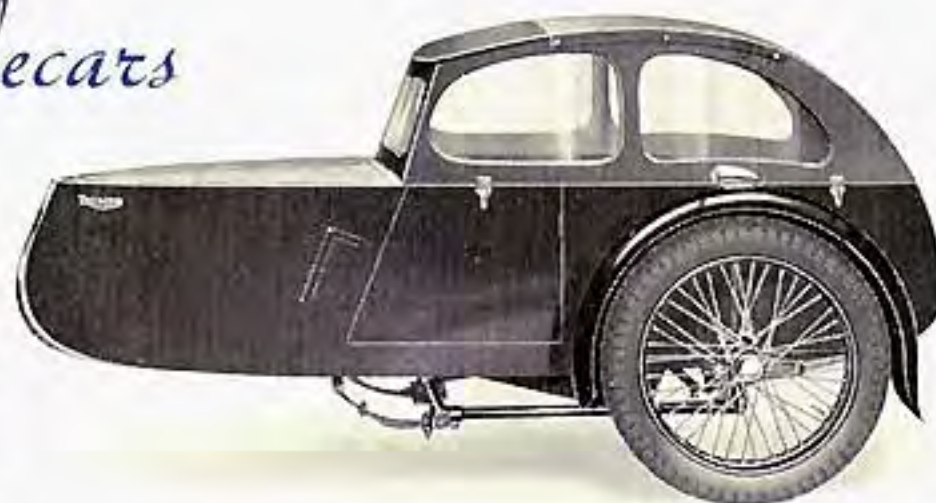


AT/39

Model AT/39

An all-weather touring model of new design. Hinged scuttle with efficient windscreen. Deeply upholstered and well-sprung. Quick-lift hood. Colour schemes: Blue and Silver and Amaranth Red and Silver.

P R I C E
complete with Lucas electric lamp: **£22**



AS/39

Model AS/39

An attractive Sun Saloon, weather-proof body with ample headroom. Ventilator in body and locker at rear. Heavy gauge celluloid windows. Best quality upholstery and deeply sprung. Colour schemes: Blue and Silver and Amaranth Red and Silver.

PRICE complete with Lucas electric lamp: **£23**

Model L/39

The specification of this model is similar to model AS/39 but without the sun roof and with a modified rear portion to the body and is offered as an alternative.

PRICE complete with Lucas electric lamp: **£20**

CHASSIS SPECIFICATION

Heavy gauge weldless tubular construction and all lugs securely brazed. Complete with self-aligning ball joints. Quarter elliptic springs and 4th point attachment.

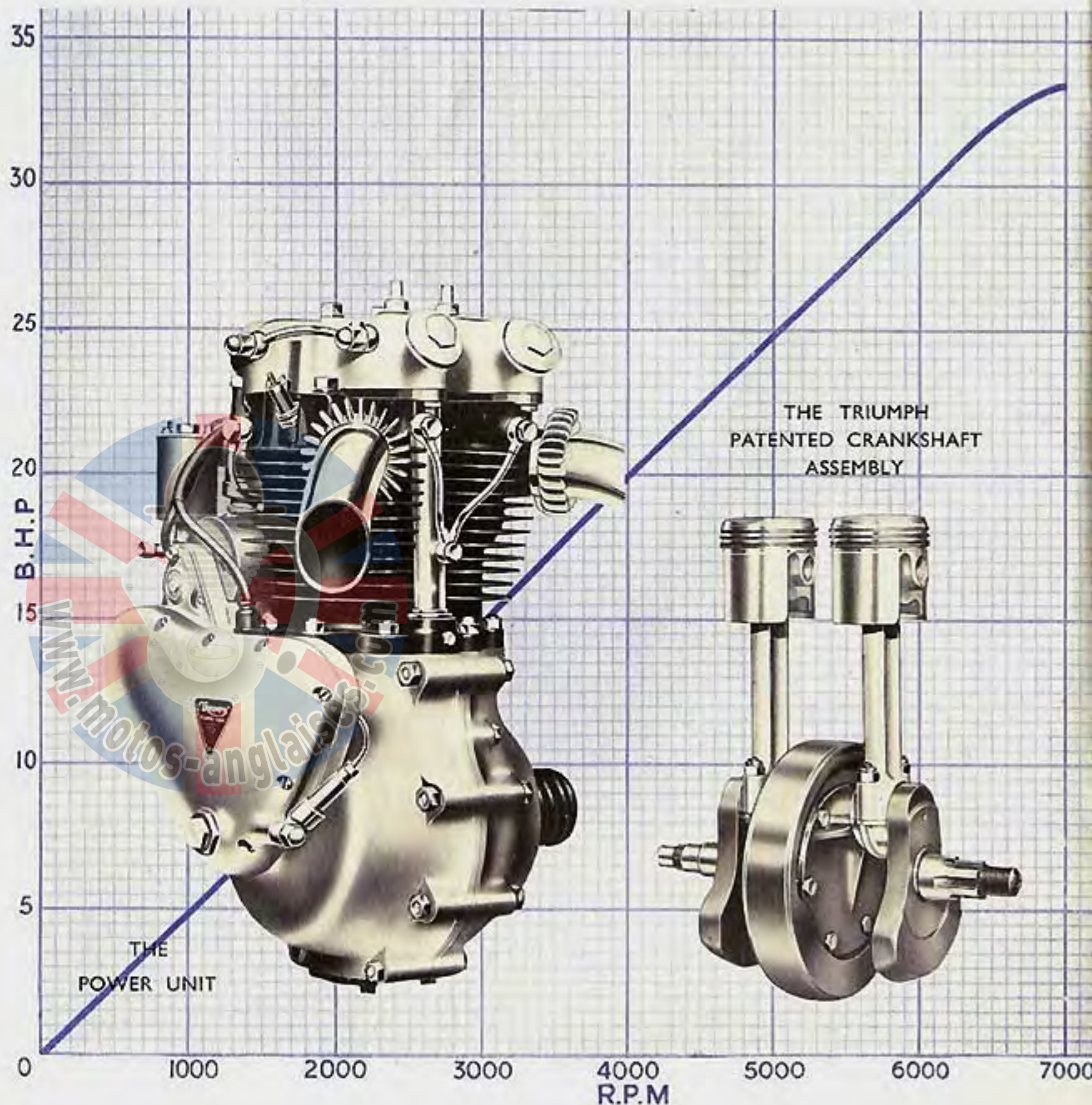
All prices include Lucas electric lamp, 4th point attachment and sidescreens where illustrated.

Tiger "100" Power Curve

BECAUSE motor cycle enthusiasts are particularly interested in the power characteristics of their engines, for 1939 it has been decided to issue with each Tiger '100' a Test Card showing the horse-power readings obtained when the engine was on the Heenan and Froude brake. It will be seen that an average engine develops nearly 34 b.h.p. at 7,000 r.p.m. and the curve characteristics clearly show that the output at low speeds also is very impressive.

Quite apart from these exceptional figures, the Triumph vertical twin engine offers many other advantages and the starting and general docility are far superior to anything obtainable from even the smoothest single.

The Tiger '100' engine has been developed from the Speed Twin. It is eminently suitable for high-speed road work and the amateur can be assured of a most creditable performance under racing conditions.



Technical Details

MODEL	Speed Twin	T.100	T80	T70	6S	5H	5S	3S	3H	2H and 2HC
Engine type ...	O.H.V. Twin	O.H.V. Twin	O.H.V.	O.H.V.	Side Valve	O.H.V.	Side Valve	Side Valve	O.H.V.	O.H.V.
Bore and Stroke ... m.m.	63 x 80	63 x 80	70 x 89	63 x 80	84 x 108	84 x 89	84 x 89	70 x 89	70 x 89	63 x 80
Cylinder Capacity ... c.c.	498	498	343	249	597	493	493	343	343	249
Compression ratio ...	7:1	7.75:1	7.5:1	7.7:1	5.6:1	6:1	5.6:1	5.3:1	6.7:1	6.92:1
B.H.P. @ R.P.M. ...	28.5 @ 6,000	33-34 @ 7000	20 @ 5,700	16 @ 5,800	18 @ 4,800	23 @ 5,000	15 @ 4,800	12 @ 4,800	17 @ 5,200	13 @ 5,200
Engine revs : Top gear @		(open megaphones)								
10 m.p.h. Solo ...	647	647	711	750	618	618	674	788	711	788
Engine Sprocket No. of teeth Solo ...	22	22	20	18	23	23	20	18	20	18
Clutch diameter ...	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
Plates: Number ...	4 Driving 5 Driven	4 Driving 5 Driven	3 Driving 4 Driven	3 Driving 4 Driven	4 Driving 5 Driven	4 Driving 5 Driven	4 Driving 5 Driven	3 Driving 4 Driven	3 Driving 4 Driven	3 Driving 4 Driven
Friction Material ...	Cork	Cork	Cork	Cork	Cork	Cork	Cork	Cork	Cork	Cork
Clutch Sprocket No. of teeth ...	43	43	43	43	43	43	43	43	43	43
Gearbox Sprocket ...	18	18	18	18	18	18	20	18	18	18
Gear ratios: Top Solo ...	5.0	5.0	5.5	6.1	4.78	4.78	4.95	6.1	5.5	6.1
" " Third " ...	6.0	6.0	6.6	7.33	5.75	5.75	5.94	7.3	6.6	7.3
" " Second " ...	8.65	8.65	9.5	10.50	8.26	8.26	8.56	10.5	9.5	10.5
" " Low " ...	12.70	12.70	14.0	15.50	12.1	12.1	12.52	15.5	14.0	15.5
" " Top Sidecar ...	5.8	5.8	—	—	5.23	5.23	—	—	—	—
" " Third " ...	6.95	6.95	—	—	6.28	6.28	—	—	—	—
" " Second " ...	10.03	10.03	—	—	9.05	9.05	—	—	—	—
" " Low " ...	14.73	14.73	—	—	13.3	13.3	—	—	—	—
Rear Wheel Sprocket No. of teeth	46	46	46	46	46	46	46	46	46	46
Rear Chain ...	$\frac{1}{8}$ " x .375"	$\frac{1}{8}$ " x .375"	$\frac{1}{8}$ " x .375"	$\frac{1}{8}$ " x .375"	$\frac{1}{8}$ " x .375"	$\frac{1}{8}$ " x .375"	$\frac{1}{8}$ " x .375"	$\frac{1}{8}$ " x .375"	$\frac{1}{8}$ " x .375"	$\frac{1}{8}$ " x .375"
" " No. of pitches	93	93	90	90	93	93	90	90	90	90
Front Chain ...	$\frac{1}{2}$ " x .305"	$\frac{1}{2}$ " x .305"	$\frac{1}{2}$ " x .305"	$\frac{1}{2}$ " x .305"	$\frac{1}{2}$ " x .305"	$\frac{1}{2}$ " x .305"	$\frac{1}{2}$ " x .305"	$\frac{1}{2}$ " x .305"	$\frac{1}{2}$ " x .305"	$\frac{1}{2}$ " x .305"
" " No. of pitches Solo	78	78	75	75	78	78	75	74	75	74
" " " Sidecar	77	77	—	—	77	77	—	—	—	—
Brake Drums, diameter and width ...	7" x $1\frac{1}{8}$ " F 7" x $1\frac{1}{8}$ " R	7" x $1\frac{1}{8}$ " F 7" x $1\frac{1}{8}$ " R	7" x 1" F 7" x $1\frac{1}{8}$ " R	7" x 1" F 7" x $1\frac{1}{8}$ " R	7" x $1\frac{1}{8}$ " F 7" x $1\frac{1}{8}$ " R	7" x $1\frac{1}{8}$ " F 7" x $1\frac{1}{8}$ " R	7" x 1" F 7" x $1\frac{1}{8}$ " R	7" x 1" F 7" x $1\frac{1}{8}$ " R	7" x 1" F 7" x $1\frac{1}{8}$ " R	7" x 1" F 7" x $1\frac{1}{8}$ " R
Tyres Dunlop:										
Ribbed to 'Tigers' and 'Speed Twin' front wheels	26"x3.00" F 26"x3.5" R	26"x3.00" F 26"x3.5" R	26"x3" F 26"x3.25" R	26"x3" F 26"x3.25" R	26"x3.25" F 26"x3.25" R	26"x3.25" F 26"x3.25" R	26"x3.25" F 26"x3.25" R	26"x3.25" F 26"x3.25" R	26"x3.25" F 26"x3.25" R	26"x3" F 26"x3.25" R
Saddle Height ...	27 $\frac{1}{2}$ "	27 $\frac{1}{2}$ "	27"	27"	27 $\frac{1}{2}$ "	27 $\frac{1}{2}$ "	27"	27"	27"	27"
Wheelbase ...	54"	54"	52 $\frac{1}{2}$ "	52 $\frac{1}{2}$ "	54"	54"	52 $\frac{1}{2}$ "	52 $\frac{1}{2}$ "	52 $\frac{1}{2}$ "	52 $\frac{1}{2}$ "
Overall length ...	84"	84"	82"	82"	84"	84"	82"	82"	82"	82"
Overall width ...	28 $\frac{1}{2}$ "	28 $\frac{1}{2}$ "	28 $\frac{1}{2}$ "	28 $\frac{1}{2}$ "	28 $\frac{1}{2}$ "	28 $\frac{1}{2}$ "	28 $\frac{1}{2}$ "	28 $\frac{1}{2}$ "	28 $\frac{1}{2}$ "	28 $\frac{1}{2}$ "
Ground Clearance ...	5"	5"	5 $\frac{1}{2}$ "	5 $\frac{1}{2}$ "	5"	5"	5 $\frac{1}{2}$ "	5 $\frac{1}{2}$ "	5 $\frac{1}{2}$ "	5 $\frac{1}{2}$ "
Weight fully equipped lbs.	360	362	320	316	356	362	322	316	322	318

PRICE LIST OF EXTRAS

Rear stop light - -	6 0
Smith Chronometric Speedometer 80 m.p.h. Trip Type - - -	2 10 0
Smith Chronometric Speedometer 120 m.p.h. Trip Type - - -	2 15 0
As above 5 in. dial - -	5 5 0

Pillion Footrests/pair -	7 6
Pillion Seat - - -	12 6
Rear Carrier - - -	7 6
26 x 3.5 Dunlop Tyres over 26" x 3.25" extra	11 0
Crankcase Shield -	10 0
Prop Stand - - -	10 0

Quickly detachable rear wheel - - -	2 0 0
Valanced Guards to 6S, 5T & 5H Models—per pair extra	12 6
'Straight through' exhaust	7 6
Extra for Pipe - - -	7 6
Bronze Head to "T. 100"	
Model extra - - -	5 0 0

Copy of Guarantee given to Triumph Dealers

WE do not appoint agents for the sale of our motor cycles or other goods. We assign to Motor Cycle Dealers who carry on business on their own account, areas in which they have the exclusive or other right to sell goods purchased by them from us. A Dealer purchasing from us or a Sub-dealer purchasing from him may assign to his purchaser the benefit of the guarantee printed below. Any such dealer is not authorised to advertise, incur any debts, or transact any business whatsoever on our account; nor is he authorised, so as to bind us, to give any warranty or make any representation or make or agree to any condition on our behalf.

We give the following guarantee with our motor cycles, motor cycle combinations and sidecars, which is given in place of any conditions, warranties or liabilities whatsoever, implied by law, implied at the place of manufacture and/or at the place of sale, all such implied conditions, warranties, and liabilities being in all cases excluded. Any statement, description, condition or representation contained in our catalogue, or in any advertisement, leaflet or other publications shall not be construed as enlarging, varying, or overriding this guarantee. In the case of machines which have been used for "hiring out" purposes, or any motor cycle and/or sidecar used for any dirt track, cinder or grass track, racing or competitions (or any competition of any kind within an enclosure for which a charge is made for admission to take part in or view the competition), or from which our trade mark or manufacturing number has been removed, no warranty or condition of any kind is given or is to be implied.

We guarantee, subject to the conditions mentioned below, that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship, but this guarantee is to extend and be in force for six months only from date of delivery and damages for which we make ourselves responsible under this guarantee are limited to the free supply of a new part in exchange for the part of the motor cycle, motor cycle combination or sidecar which may have proved defective. We do not undertake to replace or refix or bear the cost of replacing or refixing, such new part in the motor cycle, motor cycle combination or sidecar. We undertake, subject to the conditions mentioned below, to make good at any time within six months any defects in these respects. As motor cycles and motor cycle combinations are easily liable to derangement by neglect or misuse, this guarantee does not apply to defects caused by wear and tear, misuse or neglect.

The term "misuse" shall include amongst others the following acts:

1. The attaching of a sidecar to a motor cycle in a manner calculated to cause damage or to render the latter unsafe when ridden.
2. The use of a motor cycle or of a motor cycle and sidecar combined, when carrying more persons or a greater weight than that for which the machine was designed by the manufacturers.
3. The attaching of a sidecar to a motor cycle by any form of attachment not provided or supplied or approved by the manufacturers, or to a motor cycle which is not designed for such use.
4. The attaching of a sidecar by any means to a motor cycle not recommended by the manufacturers for such a purpose.
5. The alteration to the silencing system as supplied by the manufacturer, and/or the partial or complete removal of any part or parts of the silencing system.

Any motor cycle or motor cycle combination or sidecar sent to us to be plated, enamelled, or repaired will be repaired upon the following conditions, i.e., we guarantee that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship, such guarantee to extend and be in force for three months, only from the time such work shall have been executed or until the expiration of the six months above referred to, and this guarantee is in lieu and in exclusion of any common law or statute, warranty, or condition and the damages recoverable are limited to the cost of any further work which may be necessary to amend and make good the work found to be defective.

CONDITIONS OF GUARANTEE

If a defective part should be found in our motor cycles, motor cycle combinations or sidecars, or in any part supplied by way of exchange before referred to, it must be sent to us CARRIAGE PAID, and accompanied by an intimation from the sender that he desires to have it repaired or exchanged free of charge under our guarantee, and he must also furnish us at the same time with the number of the machine, the name of the Dealer from whom he purchased, and the date of purchase, or the date when the alleged defective part was exchanged as the case may be.

Failing compliance with the above, no notice will be taken of anything which may arrive, but such articles will lie here AT THE RISK OF THE SENDERS.

We guarantee only those machines which are bought either direct from us or from a Dealer, who has purchased direct from us, or from a Sub-dealer who has purchased from him, and under no other condition.

We do not guarantee the specialities of other firms such as tyres, saddles, chains, lamps, etc., nor do we guarantee any component parts supplied to the order of the purchaser differing from our standard specifications supplied with our motor cycles, motor cycle combinations, sidecars or otherwise.

TERMS OF BUSINESS

PAYMENT. In all cases where we have no ledger account, an invoice will be submitted to intending purchasers on payment of which goods will be forwarded, or approved references must be given.

INSURANCE. Motor Cycles and Sidecars, when forwarded per Passenger Train to any part of Great Britain or Northern Ireland, are consigned, unless otherwise instructed by the purchaser, at lowest rates, i.e., consignee's risk, but in order that the consignee shall be relieved of all troublesome negotiations should breakage or damage occur, all new complete machines forwarded by us in the above manner are covered by insurance against damage in transit, theft and pilferage up to 75 per cent. of the total loss, customers should, therefore, notify the Company immediately in respect of any damage or loss. It is understood that the Company only act as agents between the purchaser and the Insurance Company, and no responsibility attaches to the Company in case of non-compliance of the Insurance Company with the claim of the purchaser.

Motor Cycles and Sidecars, when forwarded per Goods Train, are consigned at Railway Company's risk, and in case of damage, all claims should be addressed to the Carriers. The above arrangement does not apply to repairs or spare parts.

We reserve the right to modify or deviate from the specifications in minor details.

All goods are sold by us subject to the limited warranty fully set out above.

Packing Crates are charged for, but are returnable.

SPARE PARTS AND REPLACEMENTS

WHEN ORDERING SPARE PARTS OR REPLACEMENTS, please specify catalogue number or code word quoted in Spare Parts Catalogue. If a Spare Parts Catalogue is not available it is advisable, if possible, to send pattern, so as to ensure the order being executed correctly. If this cannot be done, let us have the number of the machine, also the number of the engine. Catalogue of Spare Parts on application, price 1/6 (post free).

REPAIRS. Repairs are charged at net cash price in all cases. Machines or parts for repair must be forwarded carriage paid to the Works, with the sender's name attached. The despatch should be promptly advised by SEPARATE POST, and full instructions for repair enclosed, otherwise unnecessary delay and annoyance are often caused.

Customers having no account with us should not fail to send remittance with order; remittance must cover postage if goods ordered are under £1 in value.

When making enquiries respecting any part or repair, PLEASE QUOTE OUR ORDER NUMBERS IN EVERY CASE otherwise it is difficult to trace the matter.

When sending machines to our Works for repair, it is advisable to remove all spares and accessories, as we cannot be responsible if any of these are missing when the machine is returned.