

**MATCHLESS**  
MODERN MOTOR CYCLES  
1952

# Specification

**ENGINE—Single Cylinder.** Both the 350 c.c. and the 500 c.c. engines have been considerably altered for the 1952 Season. The magneto is now mounted in front of the cylinder and the drive from the exhaust camwheel enclosed in a cast aluminium chaincase of clean and attractive design. This alteration permits the rapid removal of the 32-watt dynamo for inspection or maintenance purposes. The other main features of these high output O.H.V. single port engines remain unaltered, and comprise light alloy die cast cylinder head with cast in valve seats, duplex hairpin valve springs, stellite tipped valves, wire wound low clearance piston, twin camshafts, duplex plunger oil pump and full dry sump lubrication system, 3-row Duralumin caged roller big end bearing, two-piece crankpin, crankshaft supported by twin ball races on drive side and plain bronze timing side bearing, spring-loaded cam type engine shaft shock absorber, all moving parts enclosed and positively lubricated.

**CARBURETTOR.** Amal semi-automatic with twist grip throttle control and separate air lever.

**GEAR BOX.** Exceptionally robust 4-speed box of new design with hand-operated multi-plate clutch and enclosed positive stop foot operated gear change.

**FRAME.** RIGID. Duplex cradle with brazed malleable lugs and forged fork ends; integral sidecar and pillion footrest lugs, front, rear and prop stands.

**SPRING.** As above but with swinging arm rear frame, self-lubricating bronze pivot bushes, flexibly mounted oil damped Teledraulic spring units, front, prop and centre stands, integral pillion footrest lugs plus pillion rests on Model G9 only.

**BRAKES.** Extremely efficient large diameter internal expanding with cast drums and finger adjustment.

**TRANSMISSION.** Primary chain enclosed in oil bath case and rear chain protected by deep section guard.

**FORKS.** Matchless patented Teledraulic. Oil damped and self-lubricating.

**TANKS.** Of welded steel construction with quick action filler caps, twin filter petrol taps and detachable fabric oil filter.

**MUDGUARDS.** Efficient ribbed steel guards, tubular stays and clean type number plates. All spring frame models fitted with valanced rear guard.

**SADDLE.** Large spring seat with three-point mounting and full adjustment. Model G9 fitted with Matchless "Twin Seat" of Vynide covered deep section Dunlopillo.

**WHEELS.** 350 c.c. Models : 3.25 in. x 19 in. Front and Rear.  
500 c.c. Models : 3.25 in. x 19 in. Front and 3.50 in. x 19 in. Rear.  
Steel hubs with adjustable large diameter taper roller bearings and heavy gauge cadmium plated spokes.

**ELECTRICAL EQUIPMENT.** 32-watt chaindriven dynamo, large diameter headlamp with handlebar controlled dipper switch, flexibly mounted voltage control unit, two panel car type rear light.

**FINISH.** Three coats best quality stoved black enamel on Bonderised surface, chromium plated exhaust system, handlebars, filler caps, etc., polished aluminium fork sliders, wheel rims and other parts in contrasting aluminium finish, and tank handlined in aluminium and Aldwych red.

**EQUIPMENT.** Comprehensive tool kit, grease gun, tyre pump and 90-page Instruction Manual.  
(For list of Optional Equipment, see rear cover and Spares Catalogue)

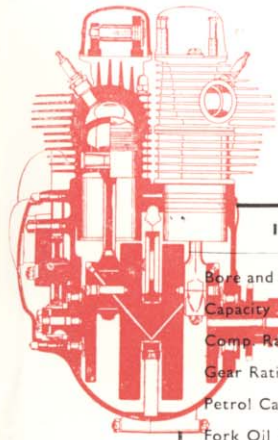
# Engine Specification Model G9

As the 500 c.c. Vertical Twin cylinder engine fitted to the Model G9 is completely different from the single cylinder units, a full technical specification is provided herewith.

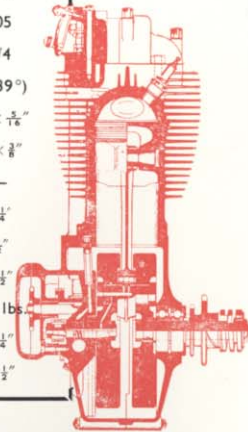
Exceptionally robust dynamically and statically balanced iron alloy 3 bearing crankshaft, large diameter roller outer main bearings with Vandervell three layer centre main and big end bearings, die cast crankcase of spherical shape, separate deeply spigotted cylinders and heavily finned light alloy cylinder heads retained by through bolts from the crankcase, overhead stellite tipped valves,

eccentric rocker spindle valve adjustment, Duralumin pushrods, twin gear-driven camshafts and gear type oil pumps evenly distributing oil to all moving parts through centre main bearing, full dry sump lubrication system, forged light alloy connecting rods, wire wound pistons, flange mounted geardriven magneto and 45-watt dynamo.

# Matchless Data



ITEM	G3 L	G3 LS	G3/LC	G3/LCS	G80	G80/S	G80/C	G80C/S	G9
Bore and Stroke ...	69 × 93 mm.	69 × 93 mm.	69 × 93 mm.	69 × 93 mm.	82.5 × 93 mm.	82.5 × 93 mm.	82.5 × 93 mm.	82.5 × 93 mm.	66 × 72.8 mm.
Capacity ...	347 c.c.	347 c.c.	347 c.c.	347 c.c.	498 c.c.	498 c.c.	498 c.c.	498 c.c.	498 c.c.
Comp. Ratio ...	6.35 : 1	6.35 : 1	6.35 : 1	6.35 : 1	5.9 : 1	5.9 : 1	5.9 : 1	5.9 : 1	7 : 1
Gear Ratio: ...	15.4, 9.9, 7.6 & 5.8 : 1	15.4, 9.9, 7.6 & 5.8 : 1	20.4, 13.6, 9.7 & 6.6 : 1	17.3, 11.2, 8.6 & 6.6 : 1	13.3, 8.5, 6.5 & 5.0 : 1	13.3, 8.5, 6.5 & 5.0 : 1	18.3, 11.8, 8.4 & 5.8 : 1	15.4, 9.9, 7.6 & 5.8 : 1	13.9, 8.9, 6.9 & 5.3 : 1
Petrol Capacity ...	3 G./13.6 L.	3 G./13.6 L.	2½ G./10.2 L.	2½ G./10.2 L.	3 G./13.6 L.	3 G./13.6 L.	2½ G./10.2 L.	2½ G./10.2 L.	3 G./13.6 L.
Fork Oil per Leg SAE 20. ...	185 c.c.	185 c.c.	185 c.c.	185 c.c.	185 c.c.	185 c.c.	185 c.c.	185 c.c.	185 c.c.
Suspension Oil per Leg SAE 20 ...	85 c.c.	85 c.c.	85 c.c.	85 c.c.	85 c.c.	85 c.c.	85 c.c.	85 c.c.	85 c.c.
Main Jet ...	150	150	150	150	180	180	180	180	180
Needle Jet ...	.105	.105	.105	.105	.105	.105	.105	.105	.105
Throttle Slide ...	6/4	6/4	6/4	6/4	29/4	29/4	29/4	29/4	6/4
Ignition Advance ...	½" (39°)	½" (39°)	½" (39°)	½" (39°)	½" (39°)	½" (39°)	½" (39°)	½" (39°)	¾" (39°)
Primary Chain ...	½" × ⅜"	½" × ⅜"	½" × ⅜"	½" × ⅜"	½" × ⅝"	½" × ⅝"	½" × ⅝"	½" × ⅝"	½" × ⅜"
Rear Chain ...	¾" × ⅜"	¾" × ⅜"	¾" × ⅜"	¾" × ⅜"	¾" × ⅜"	¾" × ⅜"	¾" × ⅜"	¾" × ⅜"	¾" × ⅜"
Dynamo Chain ...	¾" × .225	¾" × .225	¾" × .225	¾" × .225	¾" × .225	¾" × .225	¾" × .225	¾" × .225	—
Wheelbase ...	54"	55¼"	53"	55¼"	54"	55¼"	53"	55¼"	55¼"
Ground Clearance ...	5½"	5½"	6½"	6½"	5½"	5½"	6½"	6½"	5½"
Saddle Height ...	30"	31"	32½"	32½"	30"	31"	32½"	32½"	31½"
Weight ...	342 lbs.	368 lbs.	295 lbs.	321 lbs.	350 lbs.	380 lbs.	298 lbs.	324 lbs.	405 lbs.
Length ...	85"	86¼"	82"	85¼"	85"	86¼"	82"	85¼"	86¼"
Width ...	29½"	29½"	29½"	29½"	29½"	29½"	29½"	29½"	29½"



# GUARANTEE

**NOTICE.** We do not appoint agents for the sale on our behalf of our motorcycles or other goods, but we assign to Motorcycle Dealers areas in which we supply to such Dealers exclusively for re-sale in such areas. No such Dealer is authorised to transact any business, give any warranty, make any representation, or incur any liability on our behalf.

**GUARANTEE.** We give the following guarantee with our motorcycles, motorcycle combinations and sidecars, which is given in place of any implied conditions, warranties or liabilities whatsoever, statutory or otherwise, all such implied conditions, warranties and liabilities being in all cases excluded. Any statement, description, condition or representation contained in any catalogue, advertisement, leaflet or other publication shall not be construed as enlarging, varying or overriding this guarantee. In the case of machines (a) which have been used for "hiring-out" purposes or (b) any motorcycle and/or sidecar used for any dirt track, cinder track 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 (c) machines from which the trade mark, name or manufacturing number has been removed, no guarantee, condition or warranty 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 purchase, 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 motorcycle, motorcycle 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 parts in the motorcycle, motorcycle 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 motorcycles, motorcycle combinations and sidecars 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 motorcycle in such a manner as to cause damage or calculated to render the latter unsafe when ridden.
2. The use of a motorcycle or of a motorcycle 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 motorcycle by any form of attachment not provided, supplied or approved by us, or to a motorcycle which is not designed for such use.

Any motorcycle, motorcycle 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.

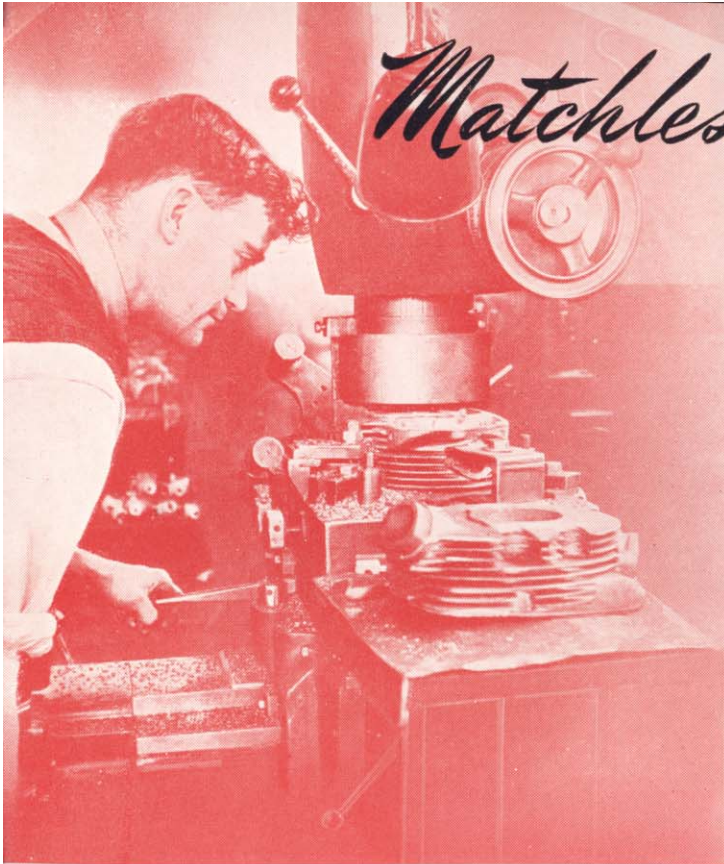
**CONDITIONS OF GUARANTEE.** If a defective part should be found in our motorcycles, motorcycle combinations or sidecars, or in any part supplied by way of exchange before referred to, it must be sent to us CARRIAGE PAID, and accompanied by an intimation from the owner that he desires to have it repaired 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 date of the purchase, or the date when the alleged defective part was exchanged as the case may be. Failing compliance with the above, such articles will lie here AT THE RISK OF THE OWNER, and this guarantee and any implied guarantee, warranty or condition shall not be enforceable.

We do not guarantee specialities such as tyres, saddles, chains, electrical equipment, lamps, etc., or any component parts supplied to the order of the Purchaser differing from standard specification, supplied with our motorcycles, motorcycle combinations, sidecars, or otherwise.

**LIST OF OPTIONAL EQUIPMENT.** Detachable Luggage Carrier. Mudguard type Pillion Seat. Pillion Footrest. Luggage Panniers. Air Cleaner.

**THE MATCHLESS FREE SERVICE SCHEME.** It is strongly recommended that owners of new Matchless Motor Cycles should avail themselves of the free Service Scheme operated by all official Dealers, full details of which are given on the Card supplied with each machine.

**NOTICE.** All prices and specifications are subject to alteration without notice, and all motorcycles and equipment are sold subject to the limited guarantee printed herein.



# Matchless Models for 1952

## FOREWORD

The 1952 range of MATCHLESS Motorcycles has been evolved with the primary object of providing high quality motor cycles incorporating the latest and most desirable features in design, at a price that can be afforded by the discriminating motor-cyclist.

The successful attainment of this objective has been greatly assisted by the installation of new machine tools permitting the adoption of improved methods of production, and the 1952 Models will undoubtedly add to the enviable reputation enjoyed by their predecessors for quality, performance, unflinching reliability and a standard of mechanical silence that can only be achieved by manufacture to the closest possible limits of accuracy.

### MATCHLESS MOTOR CYCLES

Proprietors: ASSOCIATED MOTOR CYCLES LTD.

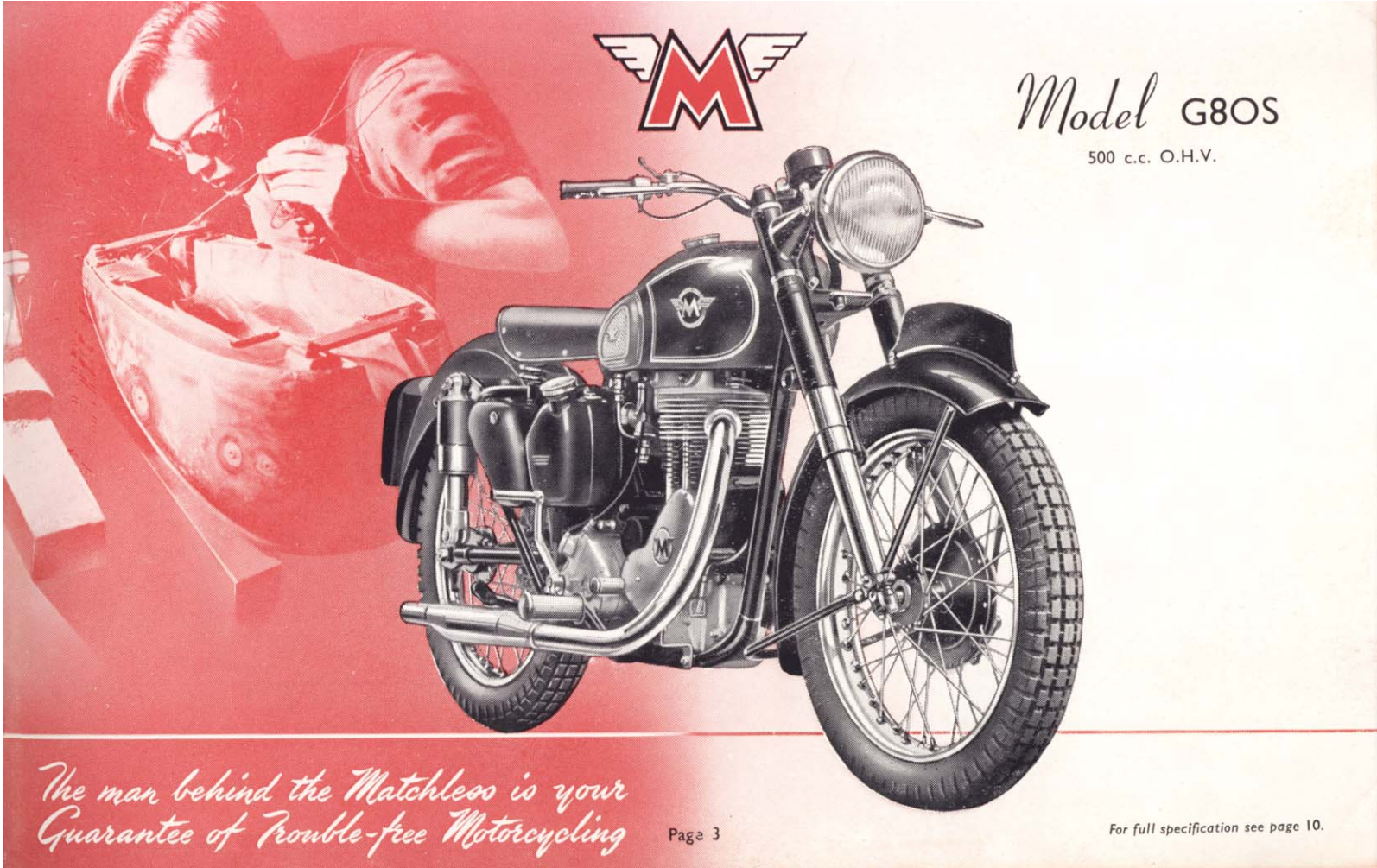
PLUMSTEAD ROAD · LONDON, S.E.18 · ENGLAND

Telephone: WOOLWICH 1223

Telegrams: MATCHLESS WOL LONDON



*The man behind the Matchless is your  
Guarantee of Trouble-free Motorcycling.* Page 2



The advertisement features a central illustration of a Matchless Model G80S motorcycle in profile, facing right. The motorcycle is detailed with a large round headlight, a fuel tank with the Matchless logo, and a dual exhaust system. To the left, a red-tinted inset shows a man wearing glasses and a dark shirt, leaning over a workbench and working on a mechanical component, possibly a cylinder head. Above the motorcycle, the Matchless logo—a stylized 'M' with wings—is prominently displayed. To the right of the logo, the text 'Model G80S' is written in a cursive font, with '500 c.c. O.H.V.' in a smaller, plain font below it. At the bottom left, a cursive slogan reads 'The man behind the Matchless is your Guarantee of Trouble-free Motorcycling'. At the bottom center, it says 'Page 3', and at the bottom right, 'For full specification see page 10.'

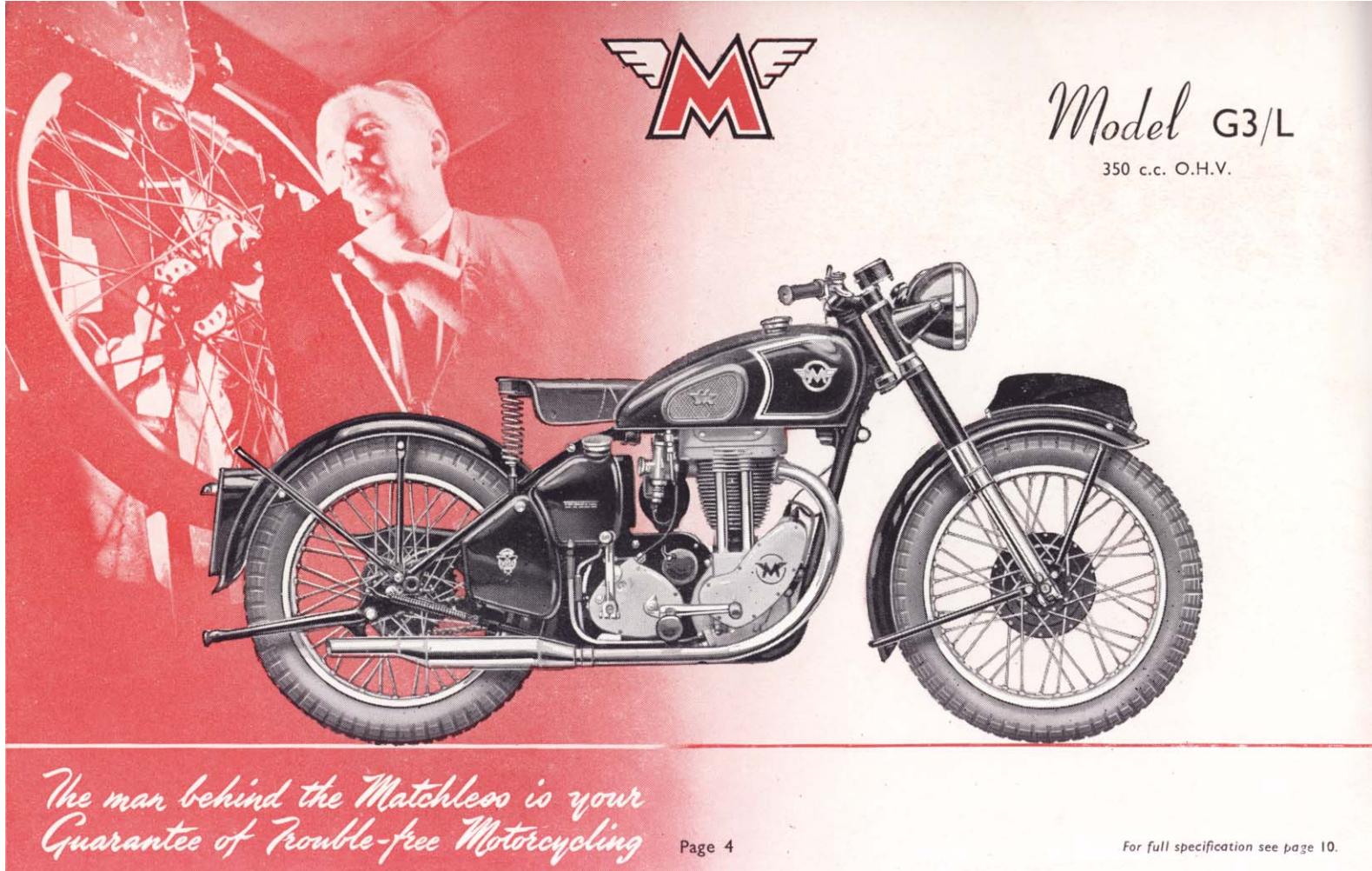
**M**

Model G80S  
500 c.c. O.H.V.

*The man behind the Matchless is your  
Guarantee of Trouble-free Motorcycling*

Page 3

For full specification see page 10.



The advertisement features a central illustration of a Matchless Model G3/L motorcycle in profile, facing right. The motorcycle is dark-colored with chrome accents on the engine, exhaust, and wheels. The Matchless 'M' logo is visible on the fuel tank and side panel. In the background, a man in a suit is shown in a red-tinted, semi-transparent overlay, appearing to be working on a motorcycle wheel. Above the motorcycle, the Matchless 'M' logo with wings is prominently displayed. To the right of the logo, the text 'Model G3/L' is written in a cursive font, with '350 c.c. O.H.V.' printed below it in a smaller, sans-serif font. At the bottom of the advertisement, a red banner contains the slogan 'The man behind the Matchless is your Guarantee of Trouble-free Motorcycling' in white cursive. The page number 'Page 4' is located at the bottom center, and 'For full specification see page 10.' is at the bottom right.

**M**

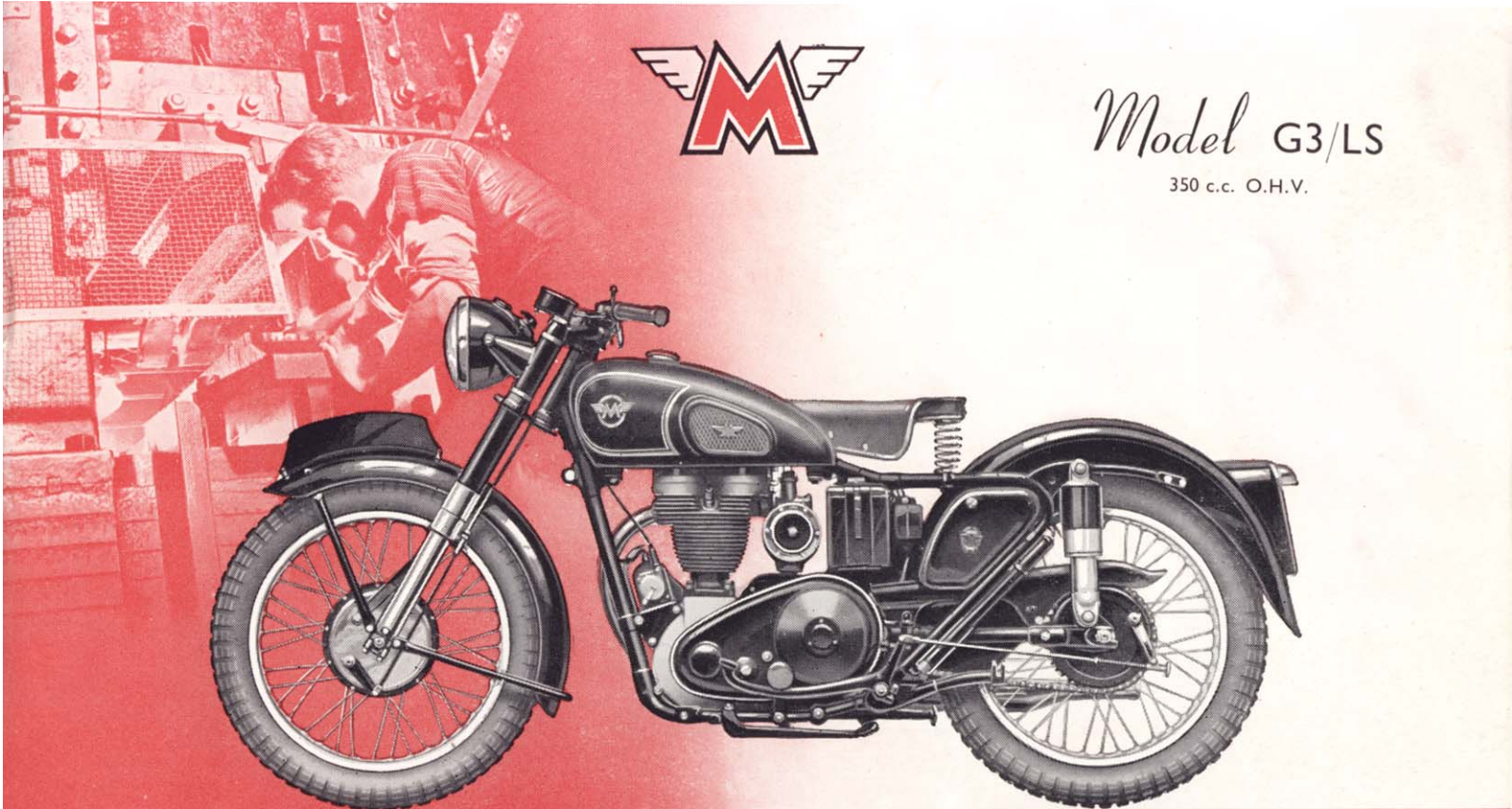
*Model G3/L*

350 c.c. O.H.V.

*The man behind the Matchless is your  
Guarantee of Trouble-free Motorcycling*

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For full specification see page 10.



**M**

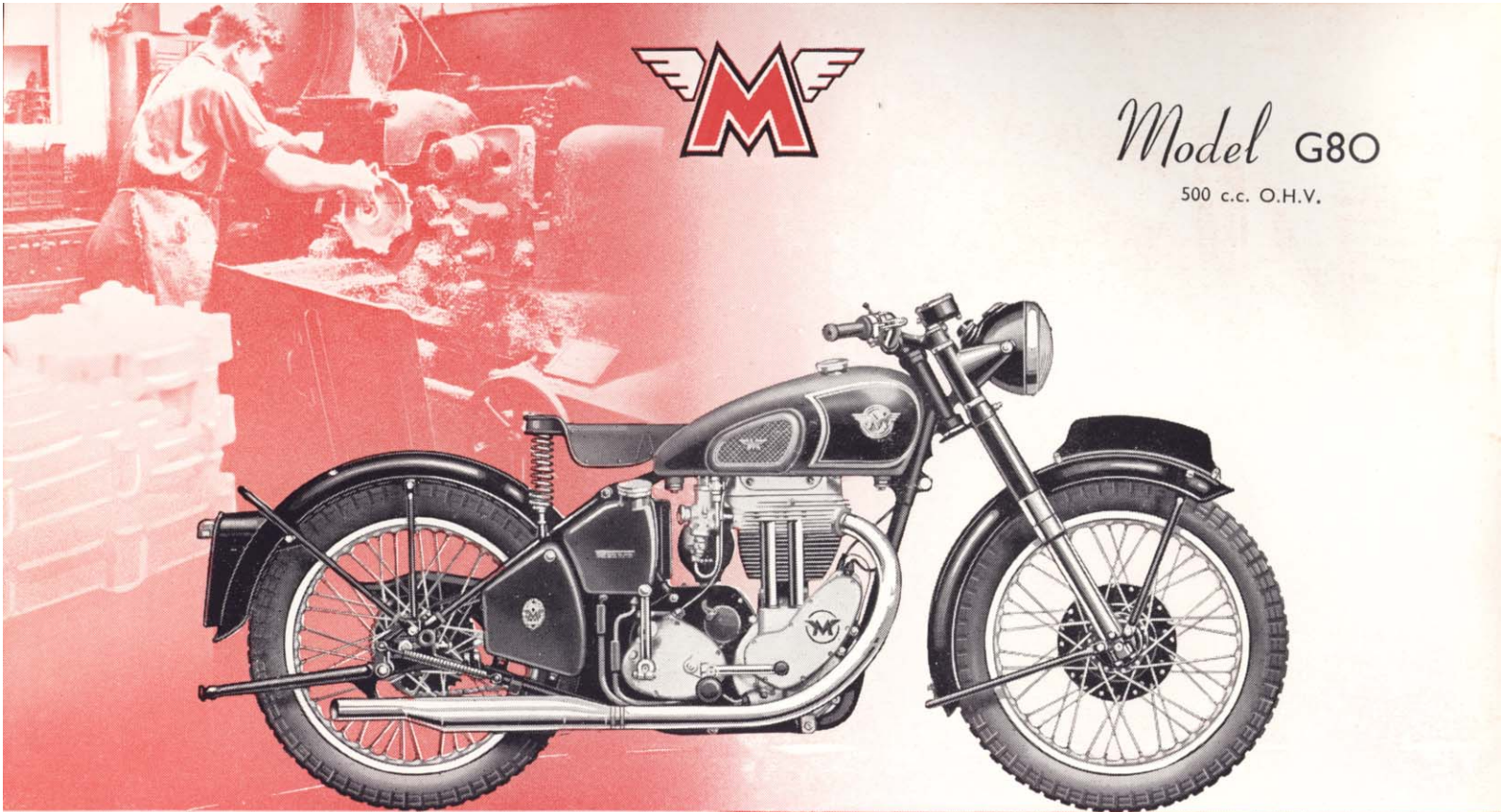
*Model G3/LS*  
350 c.c. O.H.V.

*The man behind the Matchless is your  
Guarantee of Trouble-free Motorcycling*

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For full specification see page 10.





**M**

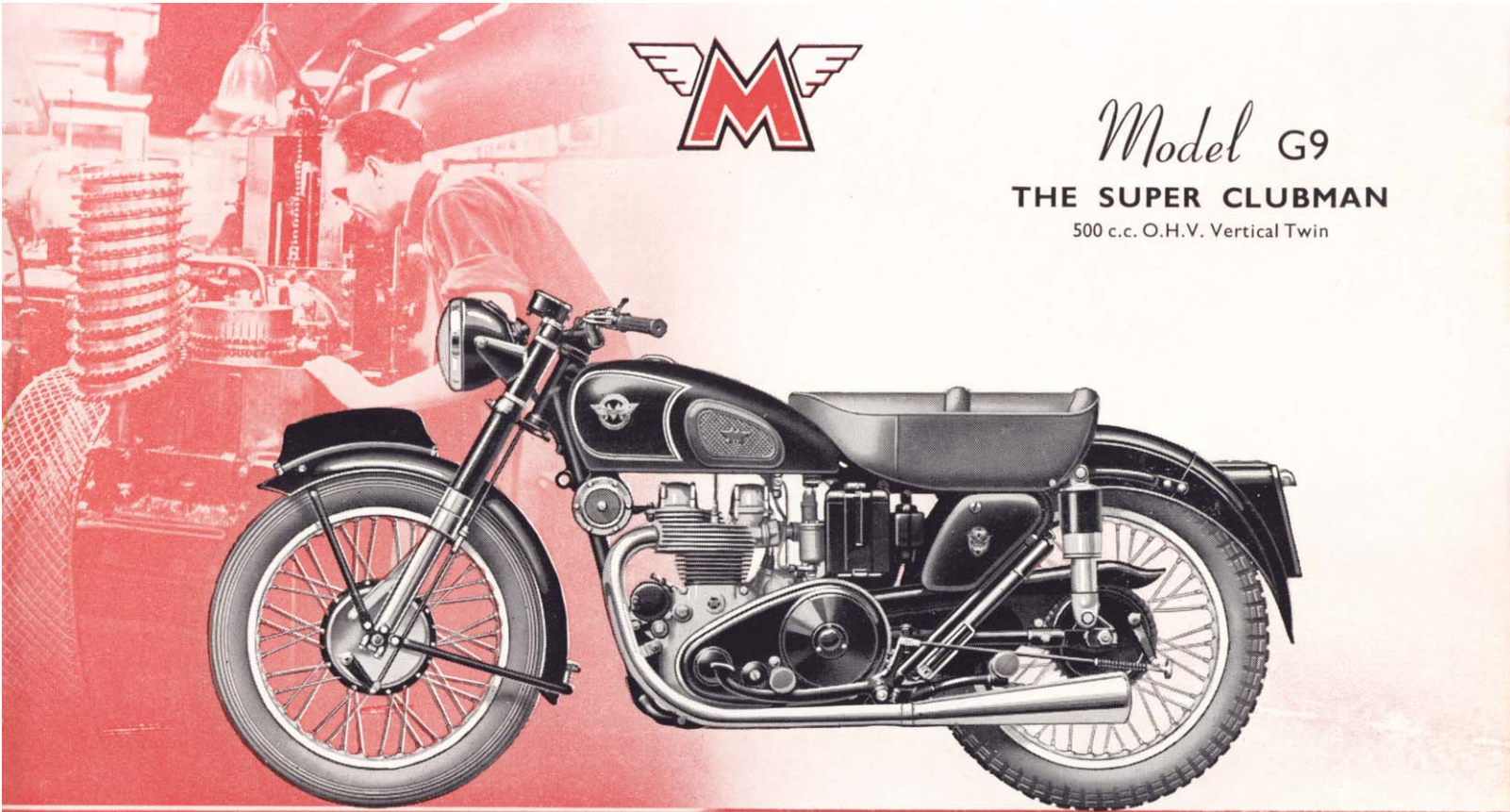
Model G80

500 c.c. O.H.V.

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Guarantee of Trouble-free Motorcycling*

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For full specification see page 10.



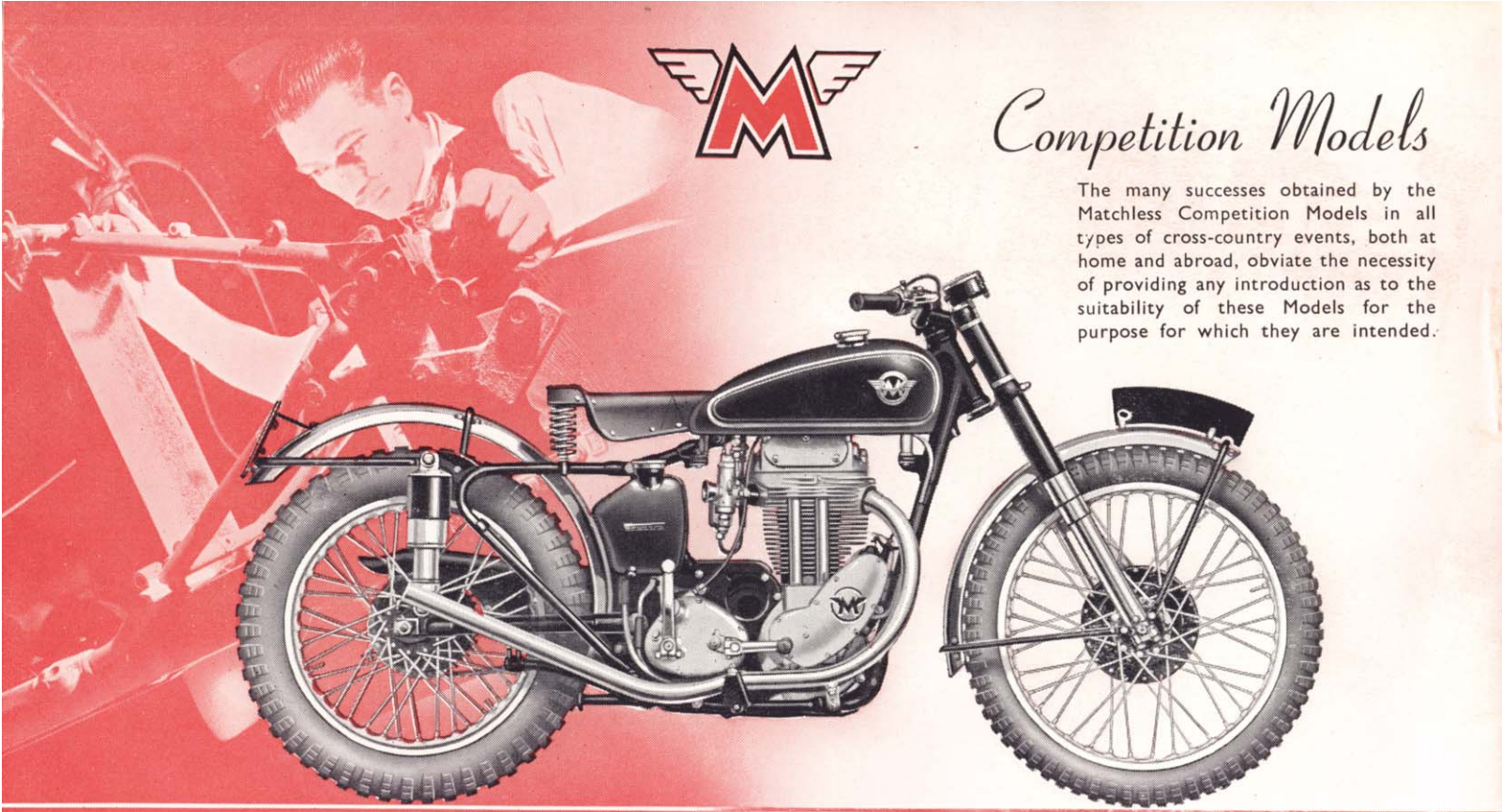
**M**

*Model G9*  
**THE SUPER CLUBMAN**  
500 c.c. O.H.V. Vertical Twin

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Guarantee of Trouble-free Motorcycling*

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For full specification see page 10.



# Competition Models

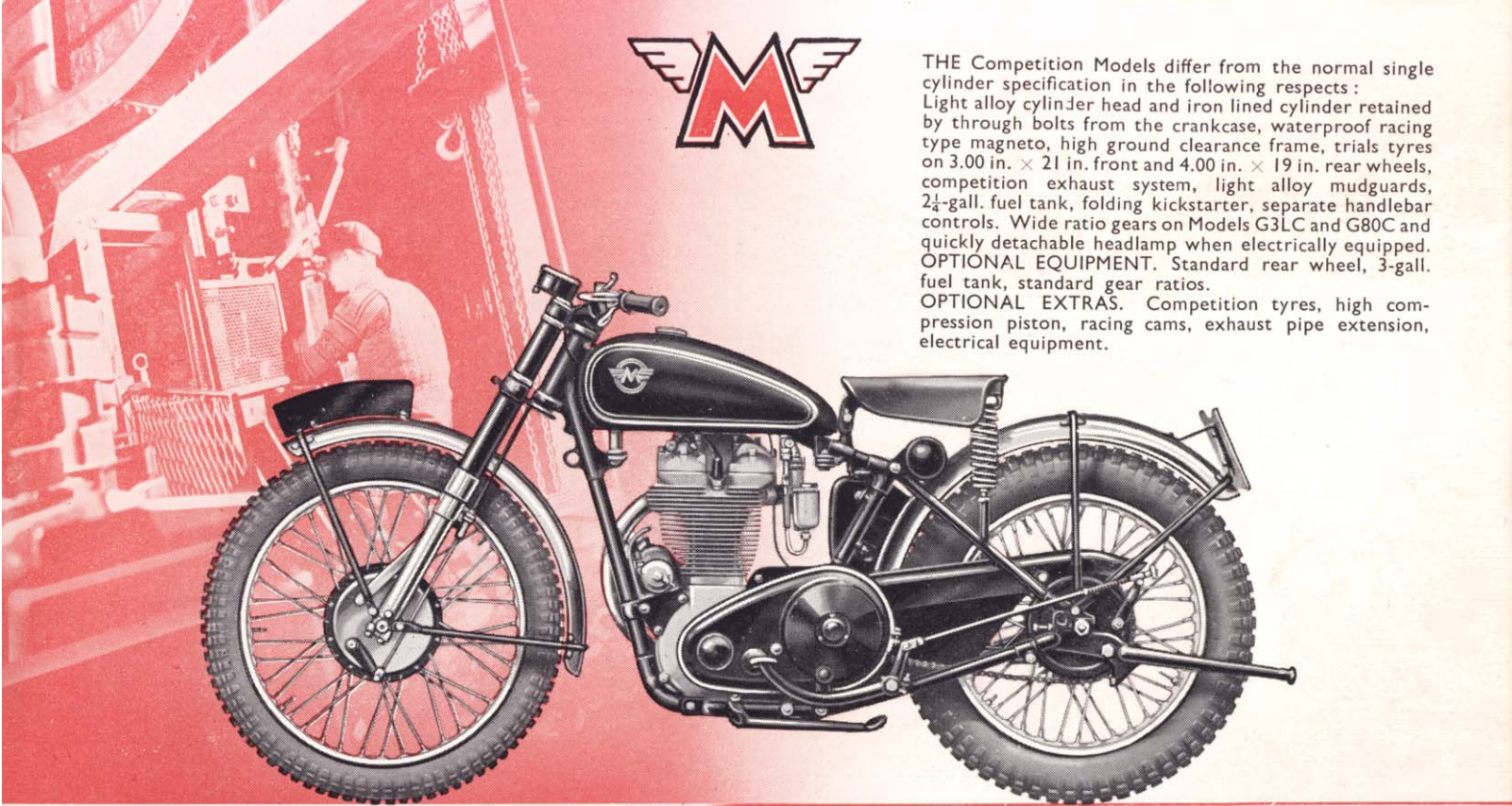
The many successes obtained by the Matchless Competition Models in all types of cross-country events, both at home and abroad, obviate the necessity of providing any introduction as to the suitability of these Models for the purpose for which they are intended.

*The man behind the Matchless is your  
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## Model G80CS

498 c.c. O.H.V.



THE Competition Models differ from the normal single cylinder specification in the following respects: Light alloy cylinder head and iron lined cylinder retained by through bolts from the crankcase, waterproof racing type magneto, high ground clearance frame, trials tyres on 3.00 in. x 21 in. front and 4.00 in. x 19 in. rear wheels, competition exhaust system, light alloy mudguards, 2 1/4-gall. fuel tank, folding kickstarter, separate handlebar controls. Wide ratio gears on Models G3LC and G80C and quickly detachable headlamp when electrically equipped. OPTIONAL EQUIPMENT. Standard rear wheel, 3-gall. fuel tank, standard gear ratios. OPTIONAL EXTRAS. Competition tyres, high compression piston, racing cams, exhaust pipe extension, electrical equipment.

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Model G3/LC

347 c.c. O.H.V.