

# AJS Motorcycles for 1937

## AJS MOTORCYCLES

Proprietors - - Matchless Motorcycles (Colliers) Ltd.

PLUMSTEAD ROAD

LONDON, S.E.18

Telephone: WOOLWICH 1010. Telegrams: "ICANHOPIT-WOL-LONDON"

Codes: A.B.C. 5th Edition. A.B.C. 6th Edition. Bentleys.

Cables: "ICANHOPIT-LONDON"

*All Previous Lists Cancelled.*

All prices and specifications are subject to alteration without notice and all motorcycles and/or sidecars, together with equipment, are sold subject to the limited guarantee printed on the inside back cover of this catalogue.



## General Specification . . .

# Models 37/12, 37/22, 37/16 & 37/26

This general specification gives full details of the 1937 A.J.S. Models illustrated on pages 4, 5, 6, and 7 of this catalogue.

**ENGINE.** Of A.J.S. design and manufacture throughout, combining high power output with silence in operation, complete reliability and great durability. These engines are of the overhead valve type, the model 37/12 and 37/16 being fitted with single-port cylinder head and the model 37/22 and 37/26 with two-port cylinder head.

The cylinders and cylinder heads are of extremely up-to-date design with large streamline shape ovate cooling fins. The overhead valve-rocker gear is of new design and is flood-lubricated with oil supplied from the main engine oil pump. The rockers operate enclosed valves with pedestal mounted screened valve springs, so that all moving parts are completely enclosed. The rocker box is fitted with a handsome finned cover, giving easy access to the valve clearance adjustment.

Other features of these engines include "Lo-ex" alloy pistons, twin camshaft timing gear running in oil-bath. Roller big-end bearings, exceptionally stiff flywheel and crankshaft assembly, etc., etc.

37/12 and 37/22. Bore, 62.5 mm. Stroke 80 mm. Capacity 246 c.c.  
37/16 and 37/26. Bore, 69.0 mm. Stroke 93 mm. Capacity 347 c.c.

**LUBRICATION.** Engine lubrication is provided by a full dry-sump system operated by a sturdy rotating plunger pump driven direct from the crankshaft. One end of this pump draws oil from the oil tank and forces it to all working parts of the engine, while the other end withdraws excess oil from the crankcase sump and returns it to the oil tank. The pump plunger is the only moving part in the whole system. All oil passes through a pressure type fabric oil filter which removes all impurities from the oil. The filter can easily be removed for cleaning.

**GEARBOX.** Provides four-speeds with carefully chosen ratios. The clutch is designed to give very sweet engagement and is provided with a very accessible adjustment. Entirely enclosed automatic stop foot gear change is incorporated. Hand gear change cannot be supplied.  
Gear ratios : 37/12 and 37/22—6.17, 8.62, 11.1, 18.3 to 1.  
Gear ratios : 37/16 and 37/26—5.52, 7.73, 9.88, 16.4 to 1.

**TRANSMISSION.** By chain throughout. Front chain completely enclosed in pressed steel oil-bath chaincase of A.J.S. patent design with combined filling hole and oil level indicator. Rear chain is adequately protected by an effective guard with large back panel.

**CARBURETTER.** "Amal" two-lever semi-automatic carburetter, with twist-grip control for throttle.

**EXHAUST SYSTEM.** On the 37/22 and 37/26 models large diameter twin exhaust systems fitted with tubular silencers. Single large diameter exhaust system fitted to models 37/12 and 37/16.

**FRAME.** Sturdy duplex loop frame designed to provide exceptional torsional and lateral rigidity, so ensuring perfect steering properties on bad roads. Self-centring head bearings. Forged rear fork-ends. Single front down tube.

**SPRING FORKS.** New pattern locked-link fork girder assembly, designed to give maximum lateral rigidity. Double anchor plate pattern adjustable fork dampers fitted on left-hand side.

**PETROL TANK.** New deep contour petrol tank giving greatly improved appearance and increased capacity (three gallons). The tank top carries a flush-fitting instrument panel containing the electric lighting switch, ammeter, and on the models 37/22 and 37/26 a detachable inspection lamp. There is provision for fitting an eight-day clock if desired. The tanks on models 37/12 and 37/16 are finished in usual A.J.S. black and gold. On models 37/22 and 37/26 the tanks are chromium plated with black panels and gold lines in the design familiar on A.J.S. "de luxe" models. Handsome new large-area knee-grips.

**OIL TANK.** Pressed steel oil tank, welded throughout, carried on substantial brackets below saddle. Fitted with large quick-action filler-cap. Capacity four pints.

**HANDLEBARS.** Carried on sports pattern adjustable trailing links giving infinite adjustment for position and angle, thus ensuring to a



rider of any stature a comfortable riding position. All controls are adjustable for position.

**SADDLE.** "Lycett Aero" flexible top saddle, with semi-roll back. Three-point mounting.

**TYRES.** 26 in. x 3.25 in. studded cord tyres on both wheels.

**BRAKES.** Internal expanding front and rear, fitted with hand adjusters, dust and water excluders. Cooling fins fitted to front brake drum. Improved rear brake drum and rear sprocket cast in one piece in chromium alloy. Both brakes very smooth and progressive in action. Quickly-detachable brake connections.

**WHEELS.** Wheel rims heavily chromium-plated, black centred with gold lines. Adjustable taper roller bearings to both wheels.

**STANDS.** Easily-operated centre-stand with separate tubular stand for front wheel.

**MUDGUARDS.** Improved dome section. Back portion of rear mudguard is detachable to facilitate wheel removal or tyre repairs.

**ELECTRICAL EQUIPMENT.** Models 37/12 and 37/16, six-volt electric lighting and coil ignition system. Thirty-watt dynamo rigidly mounted on engine plates and driven by roller chain enclosed in main oil-bath chaincase. Contact breaker built into engine timing-case. Large head-lamp with parking-light with dipping switch on handlebar. Extra large battery carried on special platform beneath saddle. Electric horn.

Models 37/22 and models 37/26 as described above except that ignition is by separate magneto carried in a protected position in front of the cylinder and driven by roller chain enclosed in cast aluminium chaincase, formed integral with timing-case cover.

All models incorporate constant voltage control for the dynamo, thus ensuring perfect regulation of battery charging.

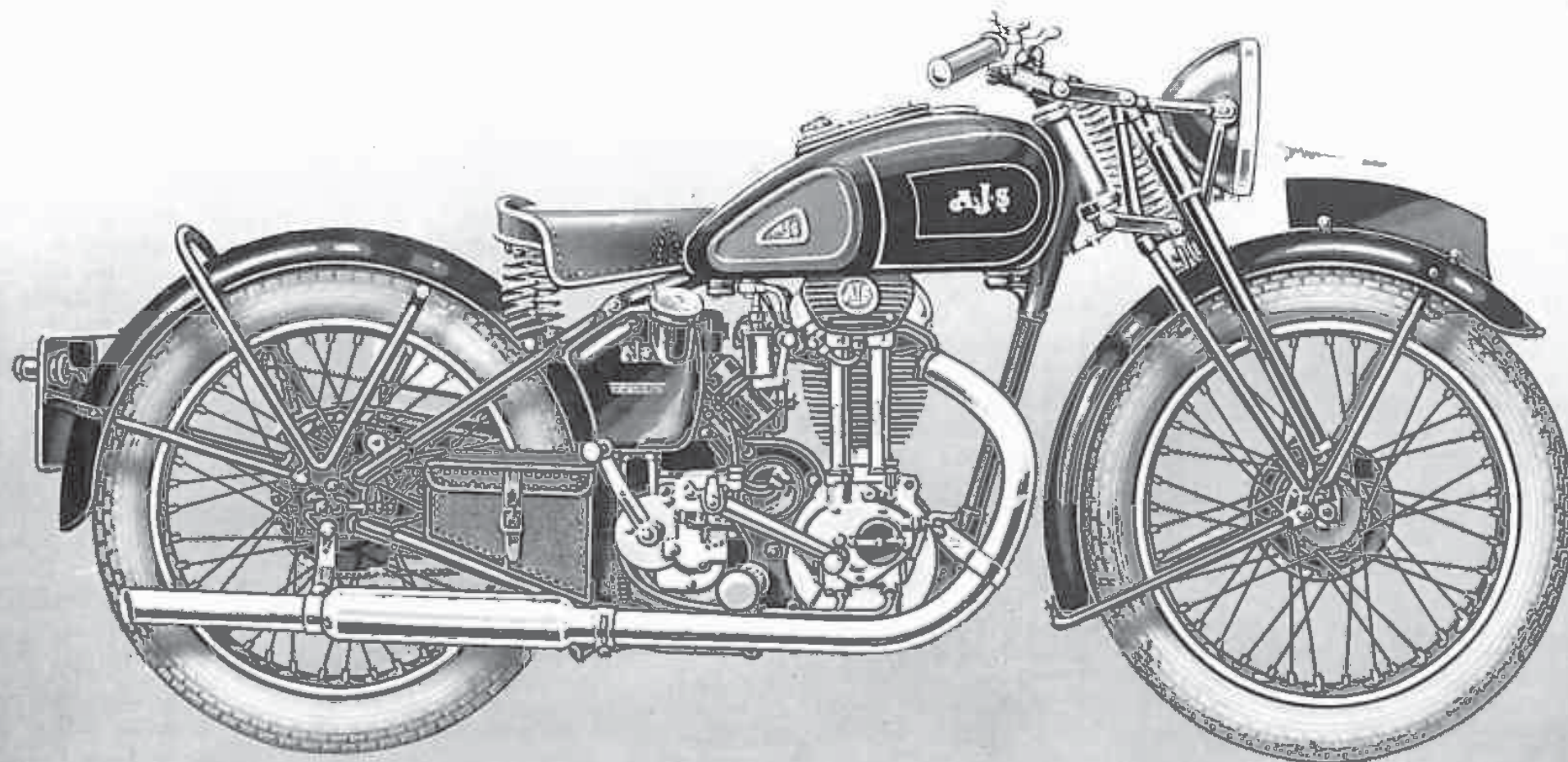
**EQUIPMENT.** Full kit of tools, grease gun, and tyre inflator.

## *Special Note...*

All these models can be fitted with either high or low exhaust pipes. The illustrations on the following pages show examples of both types of exhaust systems. It is essential that when ordering, customers specify whether high or low exhaust pipes are required; if this is not specified we supply as the illustration of the corresponding model.





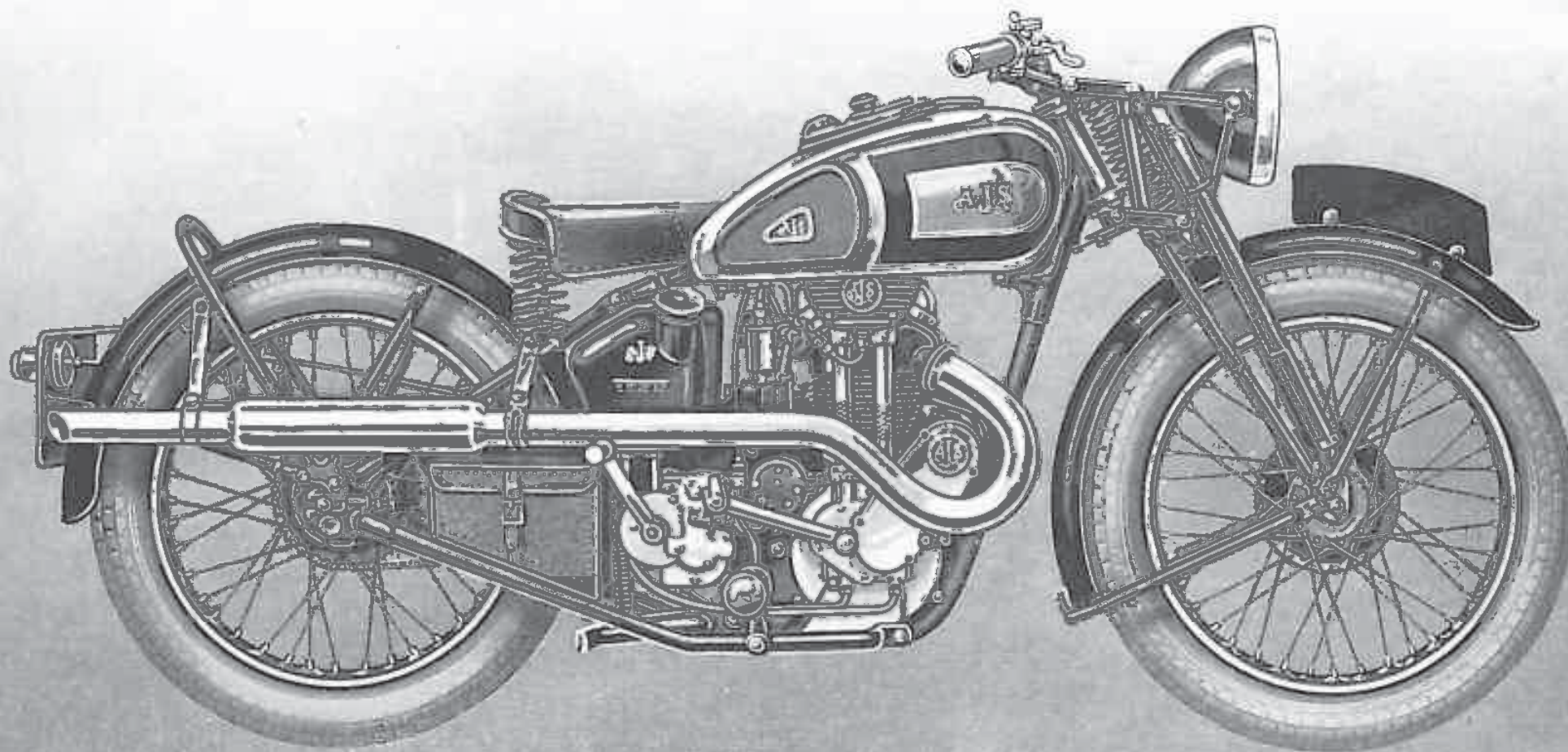


**AJS**

*Model 37/12*

2.46 h.p. Single-port O.H.V. (for full specification see pages 2 and 3)

PRICE  
**40** GNS



**AJS**

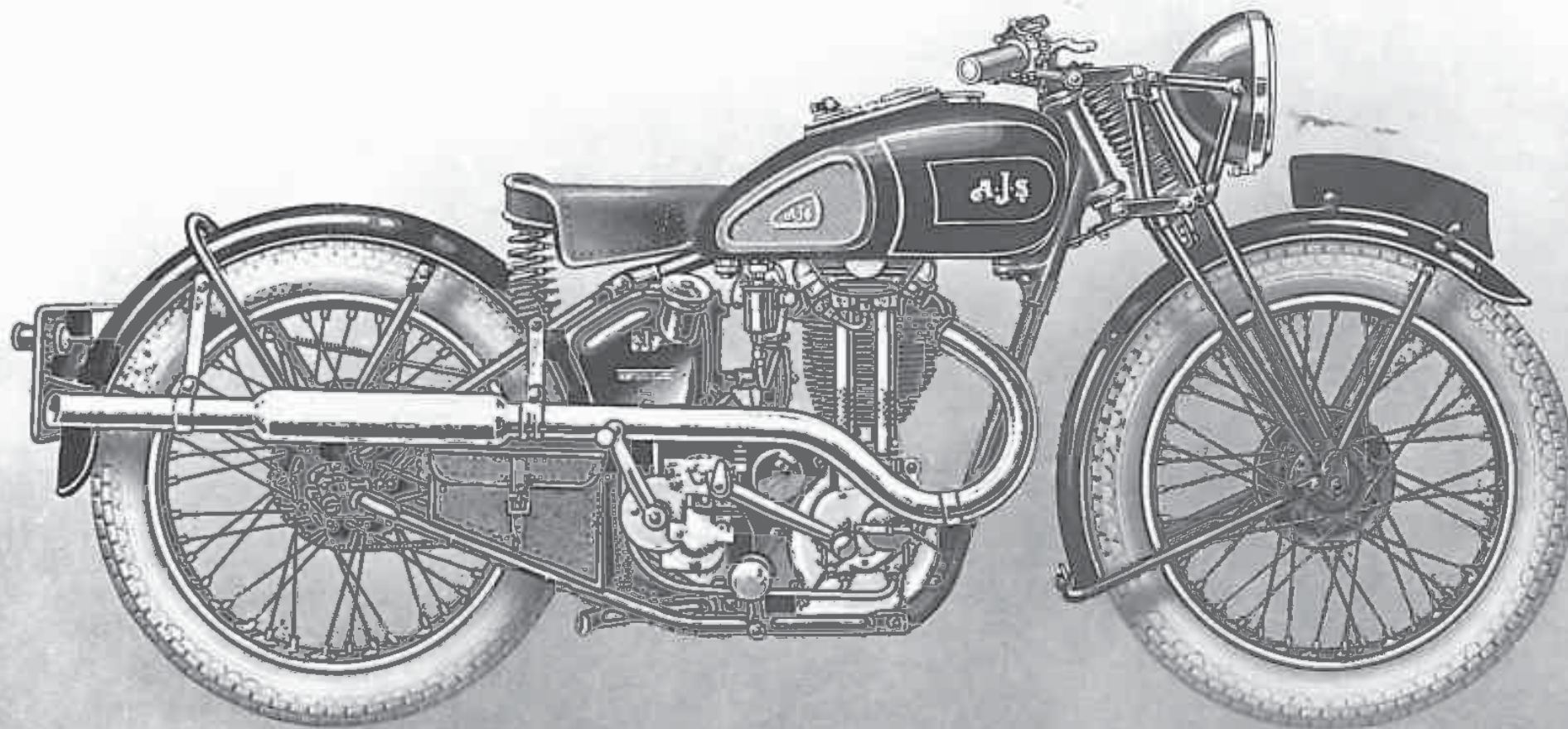
*Model 37/22*

PAGE 5

2.46 h.p. Two-port O.H.V. (for full specification see pages 2 and 3)

PRICE  
**45** GNS





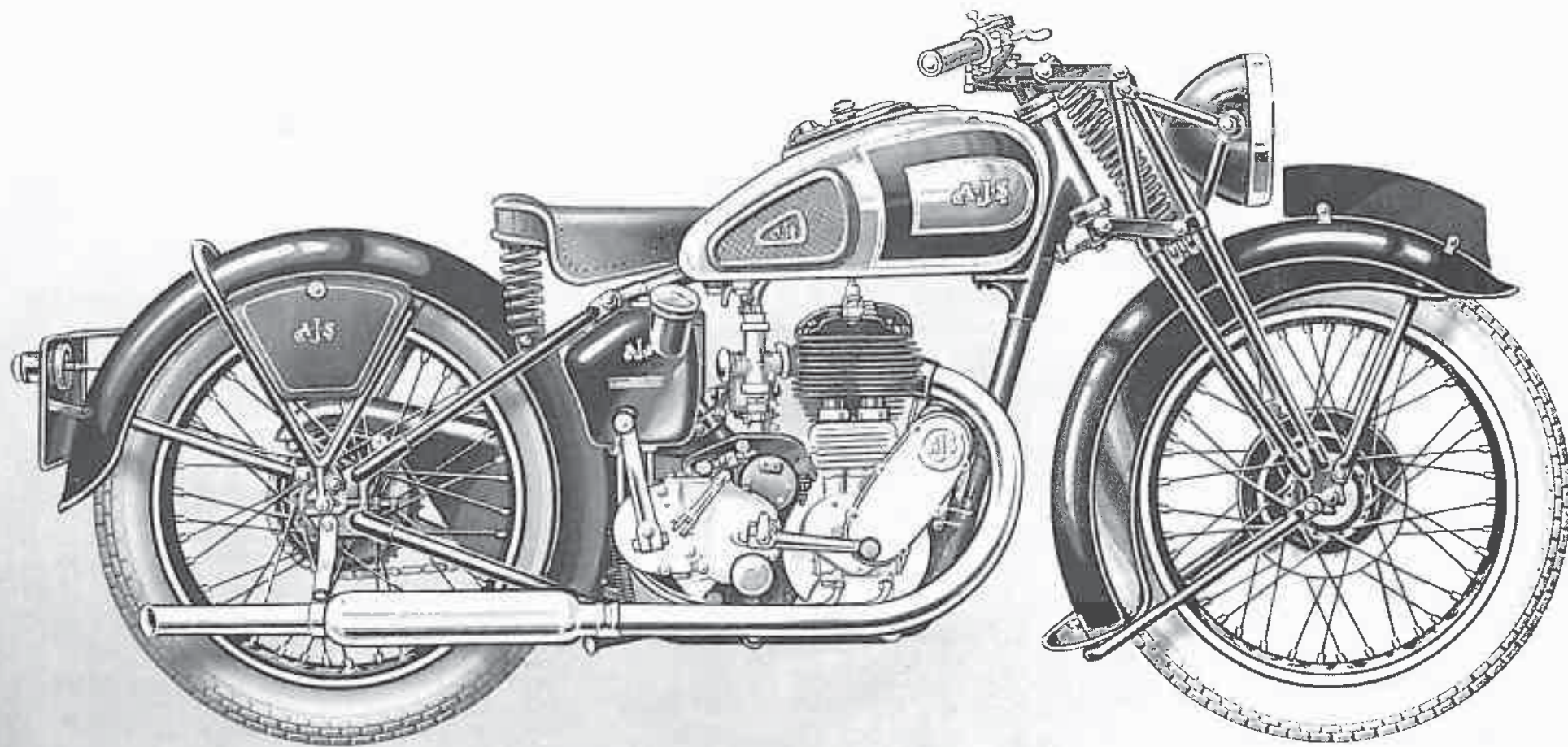
**AJS**

*Model 37/16*

PAGE 6

3.47 h.p. Single-port O.H.V (for full specification see pages 2 and 3)

PRICE  
**43** GNS



**AJS**

*Model 37/9*

4.98 h.p. Side Valve (for full specification of this Model see page 8)

PRICE  
**52** GNS



# Special Competition Models . . .

## Models **37/22T**, **37/26T** & **37/18T**

These models are specially designed throughout for competition work and incorporate all those features which have been found valuable for reliability trials, scrambles, etc. The general specifications are similar to the standard models 37/22, 37/26, and 37/18, but the following special features are incorporated :—

Single-port cylinder heads.

Ignition by separate magneto, and separate dynamo lighting system.

Special shallow section mudguards, chromium plated.

Bolted-up rear stand and single arm spring-return prop stand instead of usual spring-up centre stand.

Crankcase shield to protect crankcase on rough surfaces.

Adjustable saddle spring mounting.

Special competition ratio heavyweight gearbox.

Specially tuned engine with polished cylinder head and ports.

Quickly detachable rear wheel with 27 in. x 4 in. competition tyre ; 27 in. x 2.75 in. competition tyre on front wheel of model 37/18T ; 26 in. x 3 in. competition tyre on front wheels of models 37/22T and 37/26T.

Large mudguard clearance on front and rear wheels.

Gear ratios :

Model 37/22T—6.6, 9.9, 13.5, 21.0

Model 37/26T—6.1, 9.25, 12.5, 19.5

Model 37/18T—5.14, 7.8, 11.5, 16.4

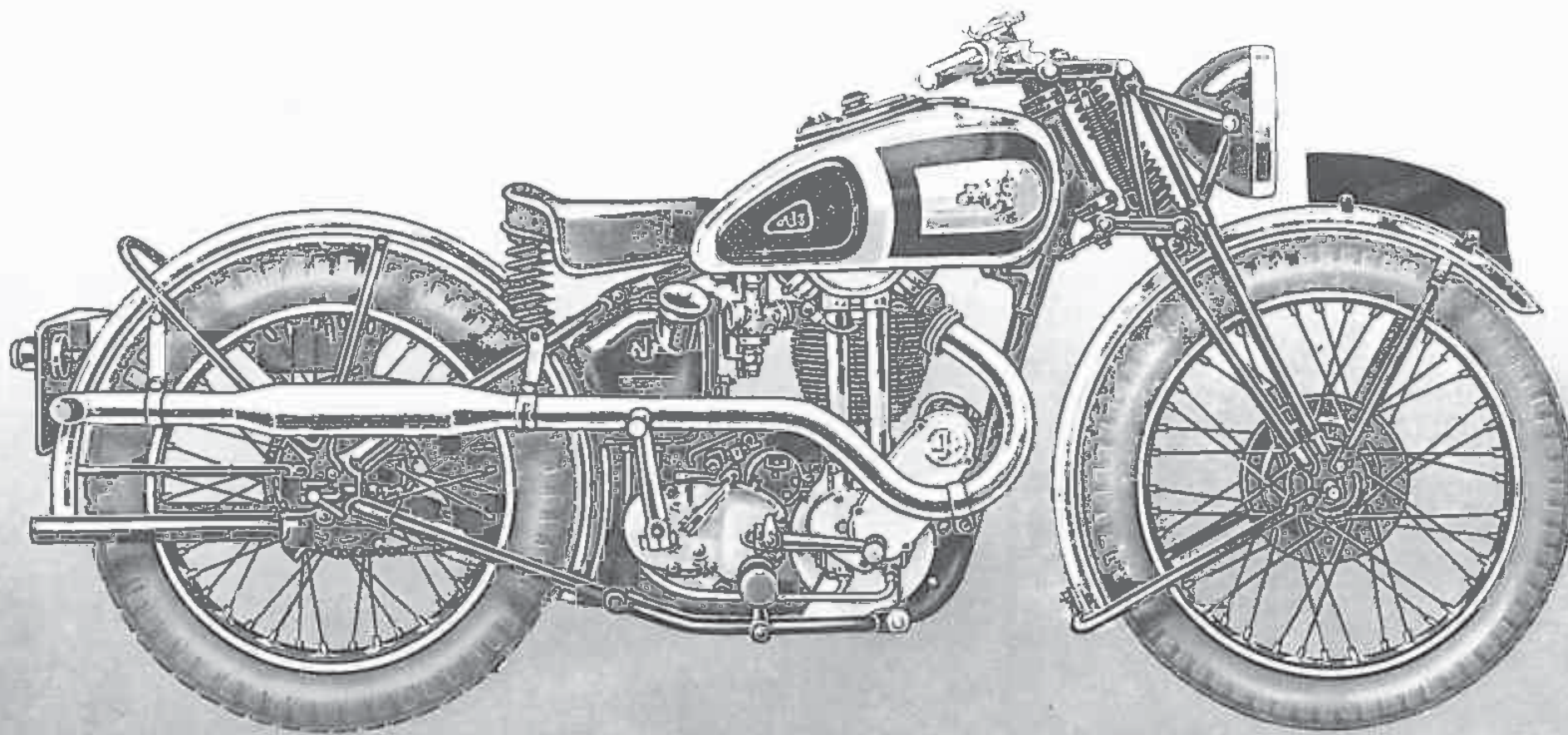
All models fitted with high exhaust pipes only.

On facing page is illustrated Model 37/18T. The two other Models are generally similar in appearance, but it should be noted that only the Model 37/18T is fitted with the checkspring front fork.

### Prices: ~

MODEL 37/22T	2.46 h.p.	....	....	<b>51</b> GNS.
MODEL 37/26T	3.47 h.p.	....	....	<b>54</b> GNS.
MODEL 37/18T	4.98 h.p.	....	....	<b>63</b> GNS.





**AJS**

*Model 37/18T*

4.98 h.p. Competition Model

PRICE  
**63** GNS

## General Specification . . .

# 9.9 h.p. Big Twin Models 37/2 & 37/2A

The specification below gives full details of the latest models of the famous A.J.S. twin which is now available in English and Export forms as illustrated on pages 15 and 16 of this catalogue.

**ENGINE.** New design high efficiency 50 degree twin cylinder 9.9 h.p. engine with super-power detachable cylinder heads, and air-flow cylinders incorporating dwarf tappet chests with valve springs carried in insulated steel thimbles, preventing the transmission of heat from the engine to the valve springs. Anti-slap lightweight "Lo-ex" alloy pistons. Improved roller bearing big end bearings giving exceptionally long life to this important part. Very stiff crankshaft assembly with crankshaft mounted on two journal ball bearings on driving side and flood lubricated bronze bearing on timing side. Tappets and valve gear totally enclosed and lubricated. Timing gear submerged in oil. Magneto chain running in cast-aluminium case. Bore 85.5 mm. Stroke 85.5 mm. Capacity 990 c.c.

**LUBRICATION.** Full dry-sump system with pressure-type fabric oil filter, as described on page 2.

**GEARBOX.** Four-speed pivot-mounted heavy-weight gearbox to A.J.S. design. On model 37/2 built-in positive stop foot gear change is incorporated. On model 37/2A gear change is by convenient hand lever on left-hand side of petrol tank.

Gear ratios :  
Solo—4.46, 5.62, 7.0, 11.9 to one.  
Sidecar—4.9, 6.1, 7.69, 13.08 to one.

**CLUTCH.** Multi-plate heavy duty clutch with finger operated cable adjuster on model 37/2, which has clutch control by lever on left handlebar. Model 37/2A, clutch controlled by pedal at front end of left-side footboard.

**FRAME.** Full cradle-type with integral front engine lug. Extra large diameter chain stays and back fork stays. Rear portion of frame of extra width to allow ample clearance for large section tyres. This frame possesses great torsional rigidity and is designed to stand up to the heaviest sidecar loads for commercial or passenger work.

**SPRING FORKS.** Extra heavy locked-link girder-type forks, with duplex plate friction dampers, controlled by convenient knob on left side. Duplex-plate steering damper controlled by knob above handlebars.

**BRAKES.** Internal expanding front and rear. Front 7 in. diameter, rear 7½ in. diameter. Both drums made from special chromium-iron alloy ; front drum fitted with large cooling fins. Both brakes incorporate dust and water excluders and finger adjustment. Front brake controlled by lever on right handlebar. On model 37/2 rear brake controlled by pedal on left side, on model 37/2A rear brake controlled by ratchet pedal at front end of right-side footboard.

**CARBURETTER.** "Amal" semi-automatic two-lever, with twist-grip throttle control and large "Amal" air filter.

**REAR CARRIER.** Welded tubular steel, with quickly detachable top. Two pannier tool-bags provided.

**TANK.** Chromium plated petrol tank with usual A.J.S. black and gold finish. Flush-fitting instrument panel mounted on top of tank,

containing lighting switch, ammeter, detachable inspection lamp, and provision for clock. Capacity, four gallons three pints. Separate oil tank mounted under saddle with accessible filler-cap. Capacity, five pints.

**TRANSMISSION.** By chain throughout, with the front chain running in A.J.S. patent oil-bath chaincase. Rear chain protected by effective guard with large back plate.

**WHEELS.** Well-known patent A.J.S. quickly detachable and interchangeable wheels, front and rear. Extra heavy 19 in. x 3 in. 14-gauge rims, with 6-gauge spokes, giving enormous strength. Wheel rims chromium plated with black centres and gold lines.

**TYRES.** Heavy duty 27 in. x 4 in. cord tyres.

**MUDGUARDS.** Deeply valanced front mud-guard of wide section, with centre rib. Extra wide rear guard with centre rib, with back portion hinged to ensure easy wheel removal.

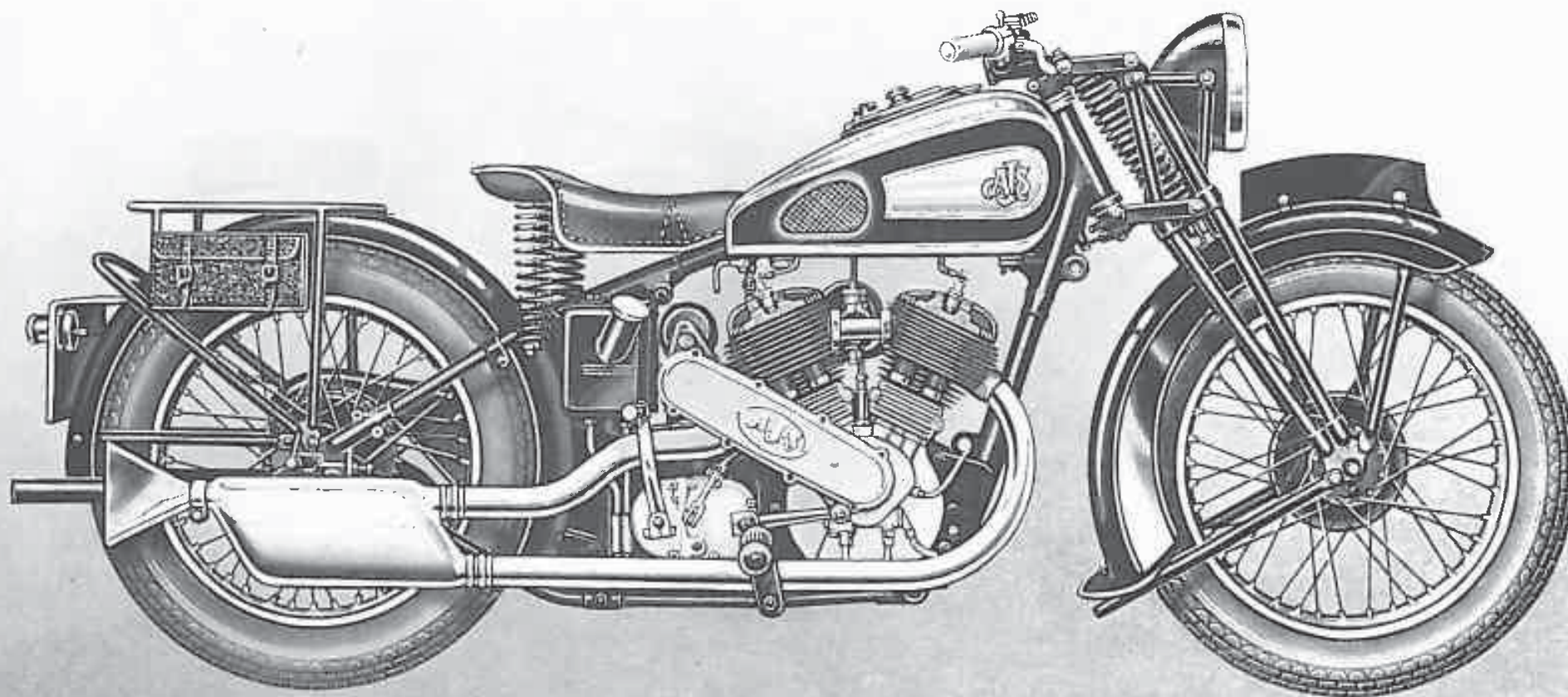
**HANDLEBARS.** Model 37/2 fitted with semi-sports handlebars, carried on trailing links, and with adjustable controls. Model 37/2A fitted with long comfortable touring handlebars.

**SADDLE.** Large pan-seat with three-point suspension and exceptionally long springs at the rear, affording great comfort.

**ELECTRICAL EQUIPMENT.** Lucas mag-dyno electric lighting set, with constant voltage control. Electric horn.

**EQUIPMENT.** Full kit of tools, grease gun, and tyre inflator.



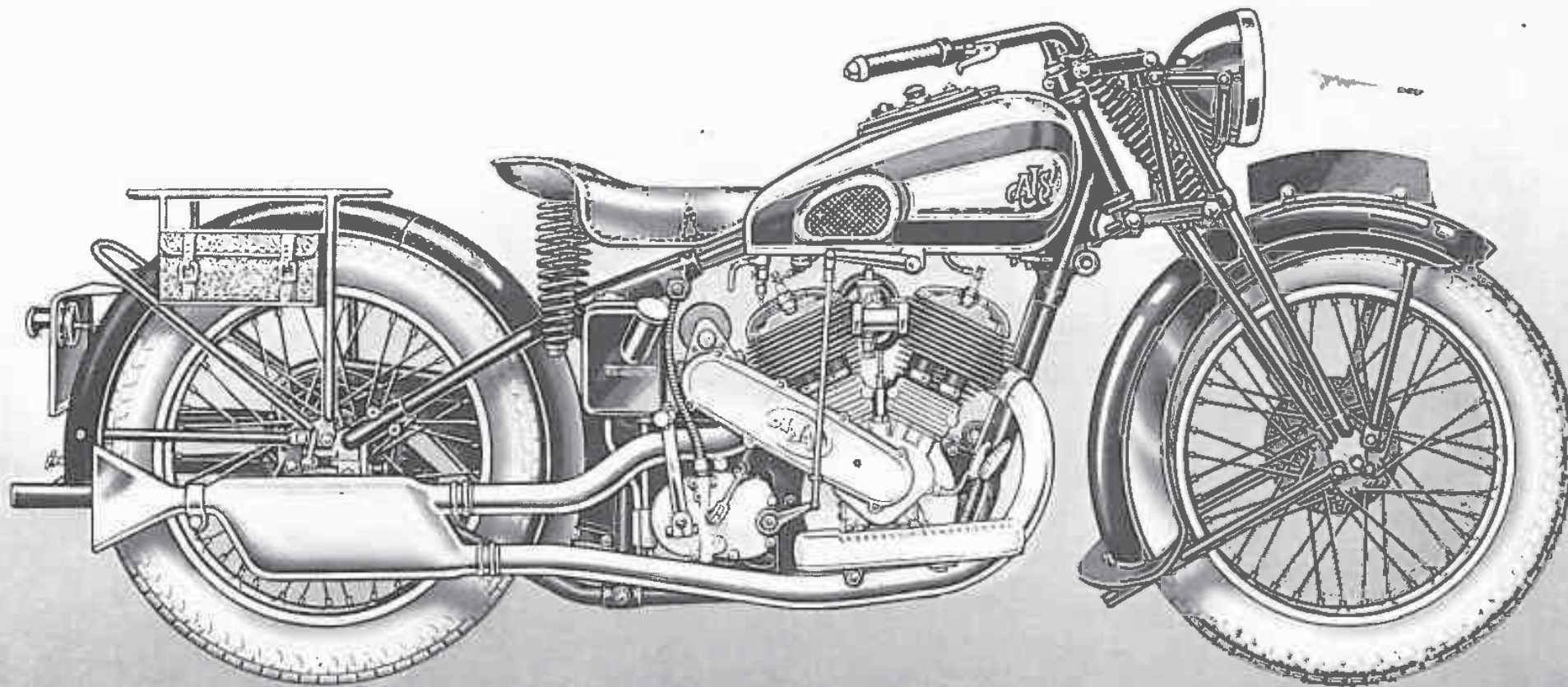


*English Model 37/2*

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9.9 h.p. Side Valve Twin (for full specification of this Model see page 14)

PRICE  
**73** GNS



**AJS**

*Export Model 37/2A*

9.9 h.p. Side Valve Twin (for full specification of this Model see page 14)

PRICE  
**73** GNS



# Equipment

SMITH'S NON-TRIP SPEEDOMETER	...	...	...	...	£2 0 0
SMITH'S TRIP SPEEDOMETER	...	...	...	...	£2 5 0
CHROMIUM-PLATED TANK ON MODELS 37/12, 37/18	...	...	...	...	£1 0 0
LUGGAGE CARRIER ON ALL MODELS (except 37/2 and 37/2A)	12	6			

28 in. x 3.50 in. TYRES ON MODELS 18, 8, 9, 12, 22, 16, and 28	...	...	...	...	10 0
SMITH'S 8-DAY CLOCK IN INSTRUMENT PANEL	...	...	...	...	£1 10 0
PILLION SEAT	...	...	...	...	12 6
PILLION FOOTRESTS...	...	...	...	...	7 6
LUCAS STOP LIGHT	...	...	...	...	5 0

# Guarantee

**We do not appoint agents for the sale on our behalf of our Motorcycles and other goods, but we assign to Motorcycle Dealers areas in which we supply to such Dealers exclusively for the 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.**

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 part 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 manufacturer.

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 specifications supplied with our motorcycles, motorcycle combinations, sidecars or otherwise.



