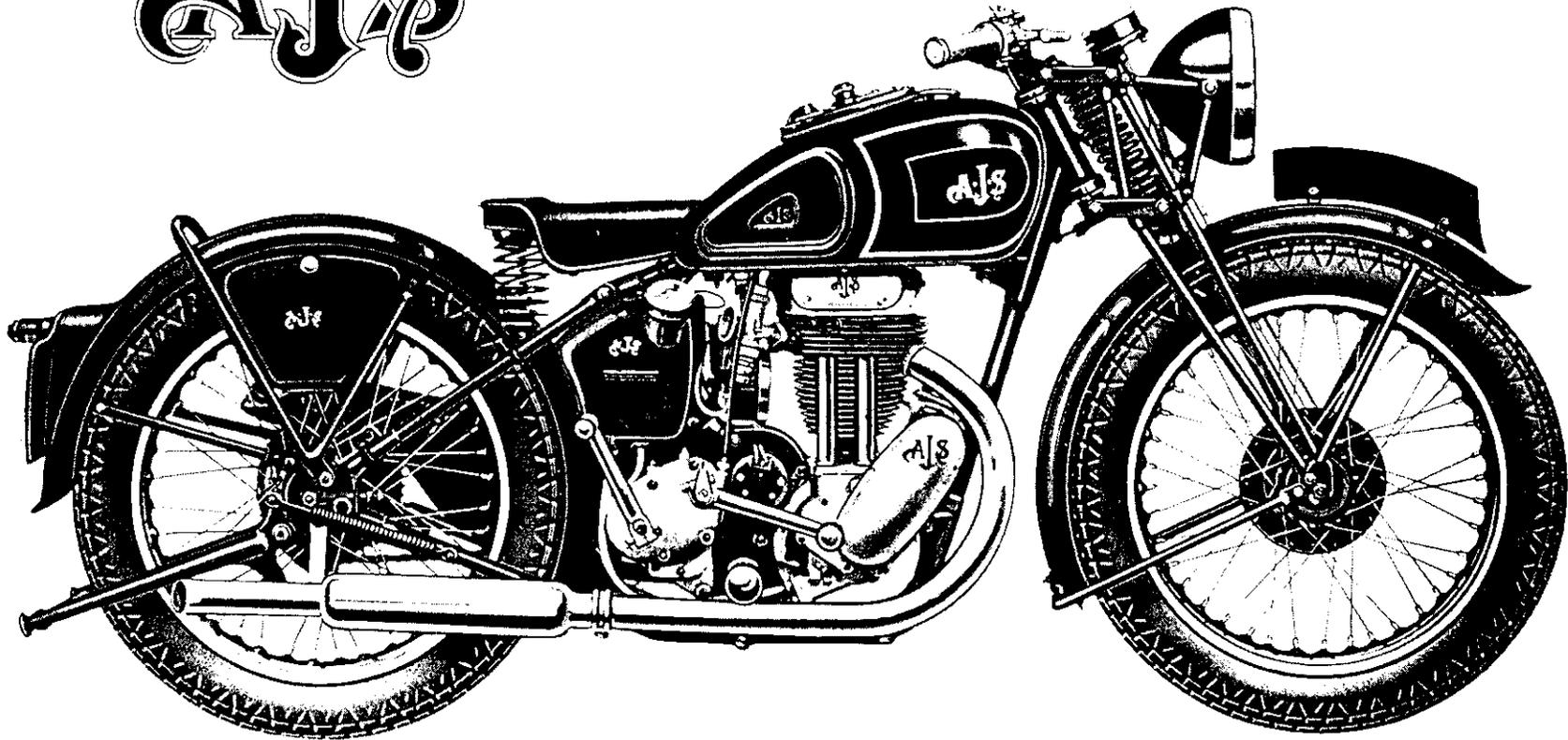


# AJS

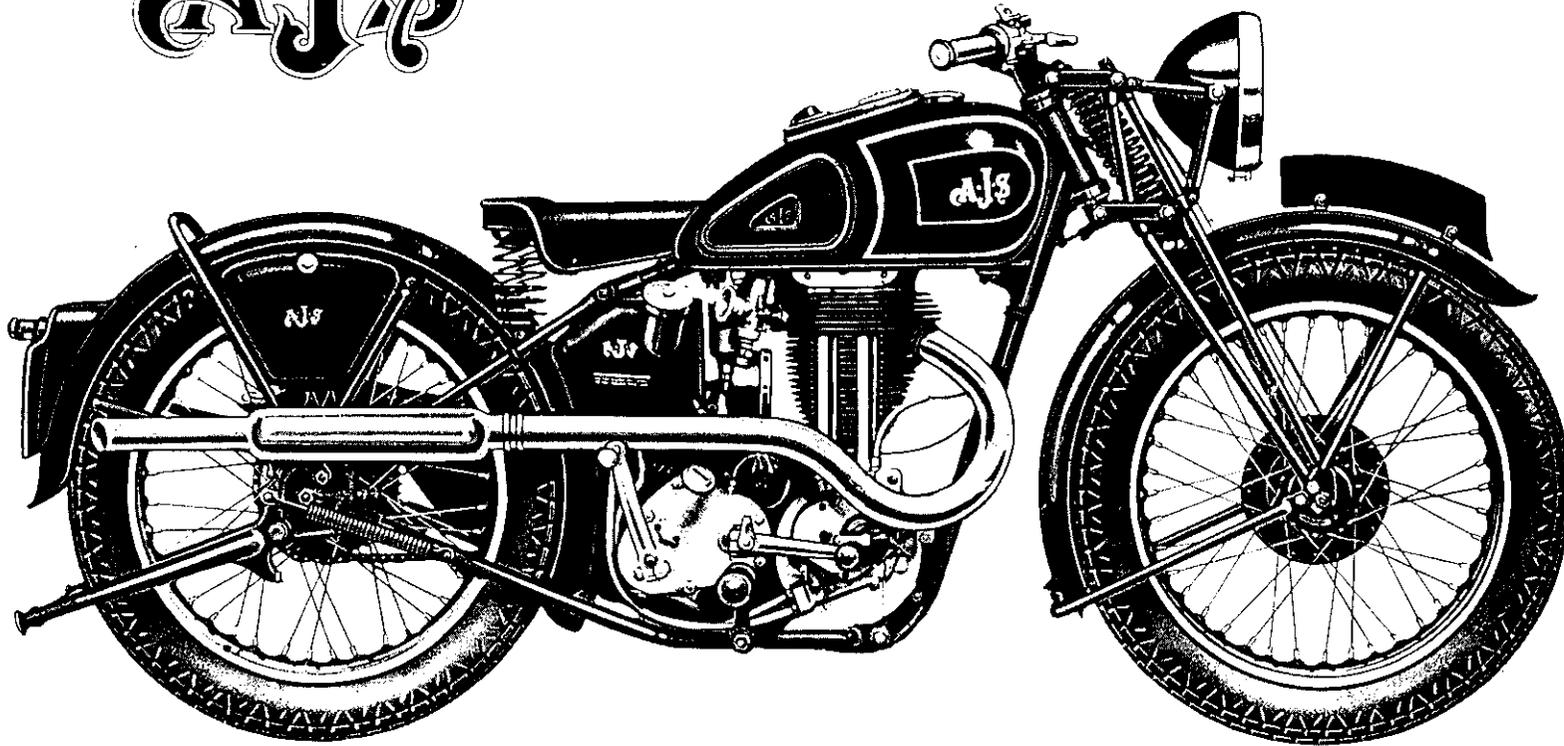


246 c.c. O.H.V. Standard Model. Magneto ignition, single-port exhaust system. Petrol tank finished in black and gold. (For full specification

*Model 39/12*  
M

PRICE **17** GNS

# AJS

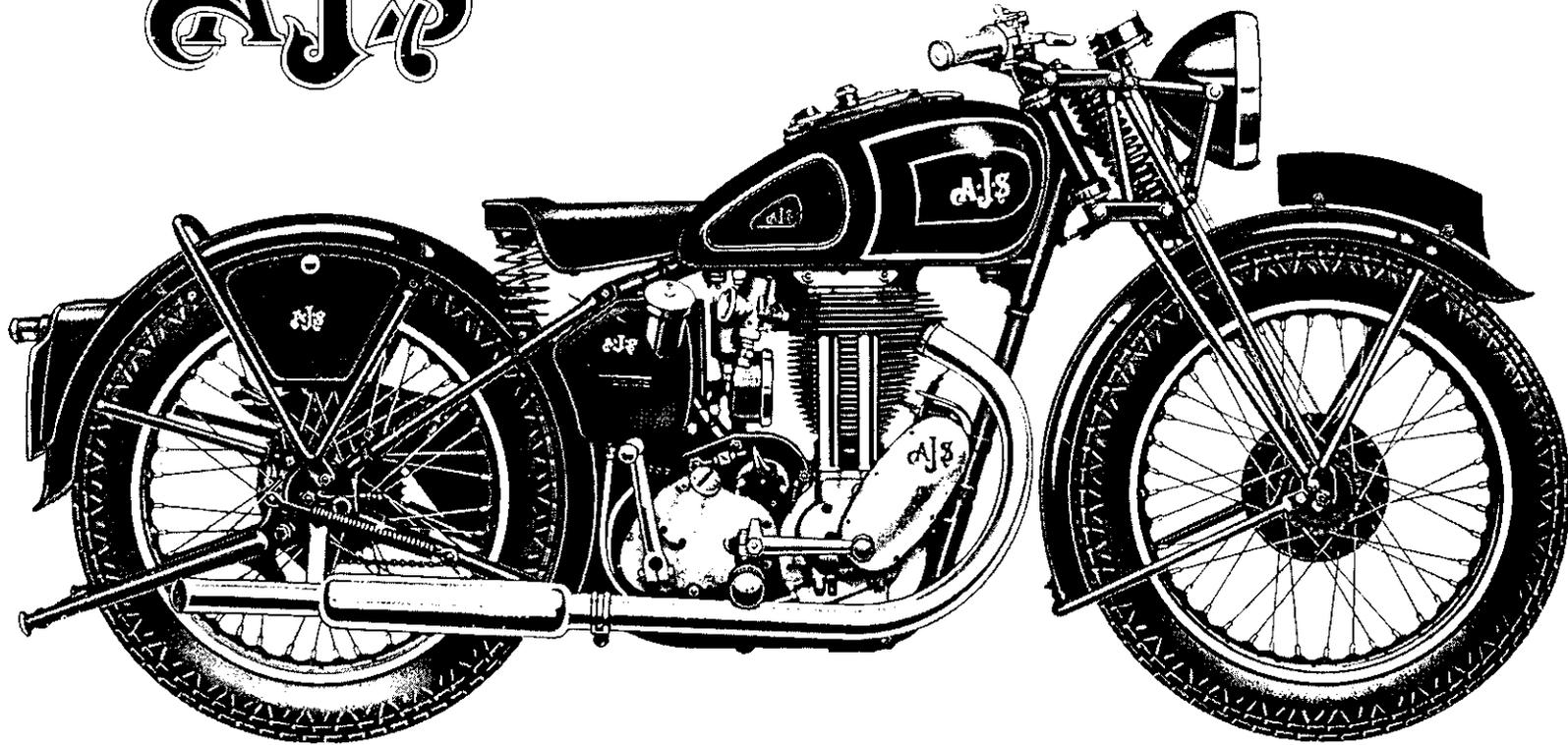


347 c.c. O.H.V. Standard Model. Coil ignition, single-port exhaust system. Petrol tank finished in black and gold. (For full specification see pages 4 and 5.)

*Model 39/16*  
**PRICE 47 GNS.**

PAGE 9

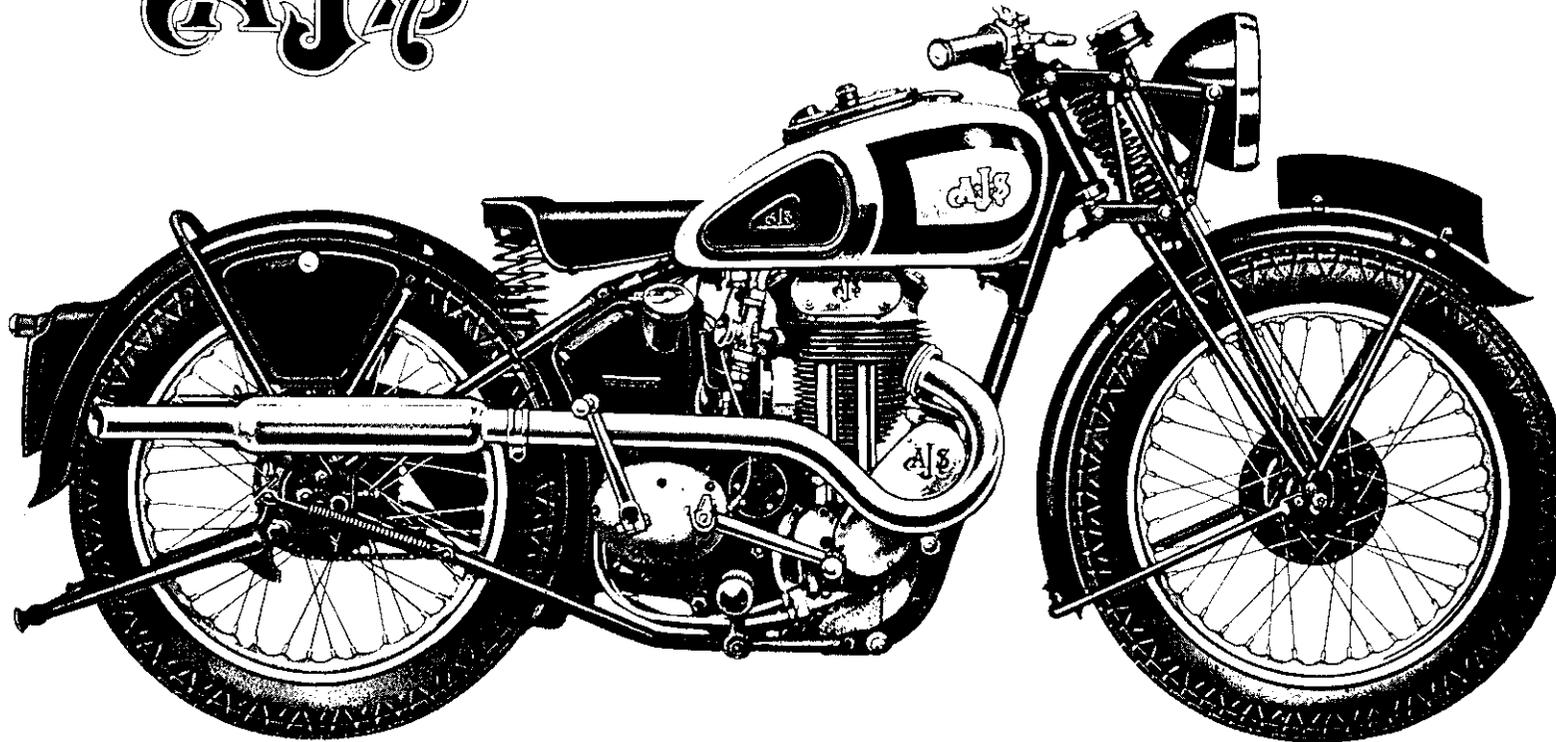
# AJS



347 c.c. O.H.V. Standard Model. Magneto ignition, single-port exhaust system. Petrol tank finished in black and gold. (For full specification see pages 4 and 5.)

*Model 39/16M*  
**PRICE 50 GNS**

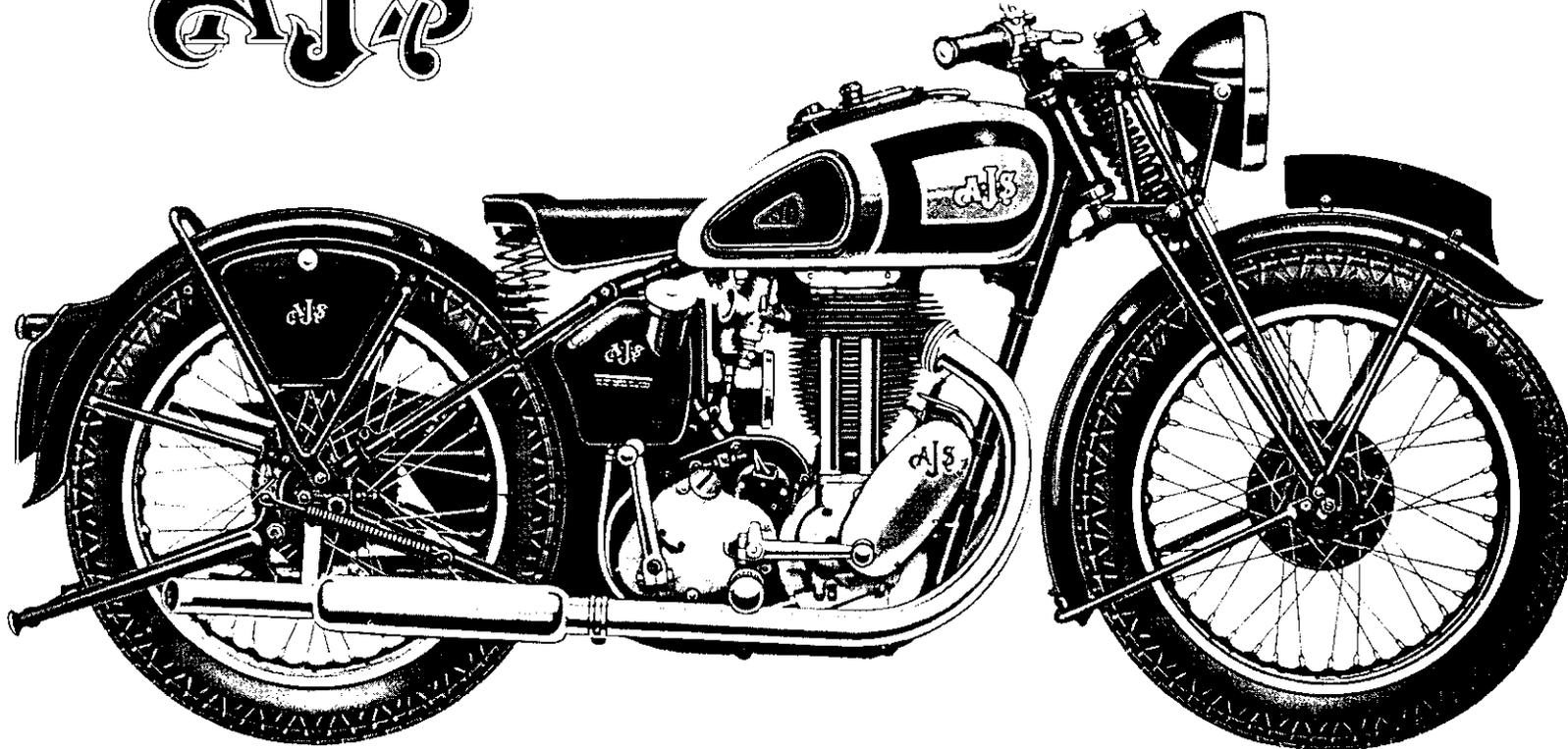
AJS



246 c.c. O.H.V. De Luxe Model. Magneto ignition, two-port exhaust system. Petrol tank chromium plated with black panels lined silver and blue. Wheel rims chromium plated with silver centres and black lines. (For full specification see pages 4 and 5.)

*Model 39/22*  
**PRICE 49 GNS.**

# AJS

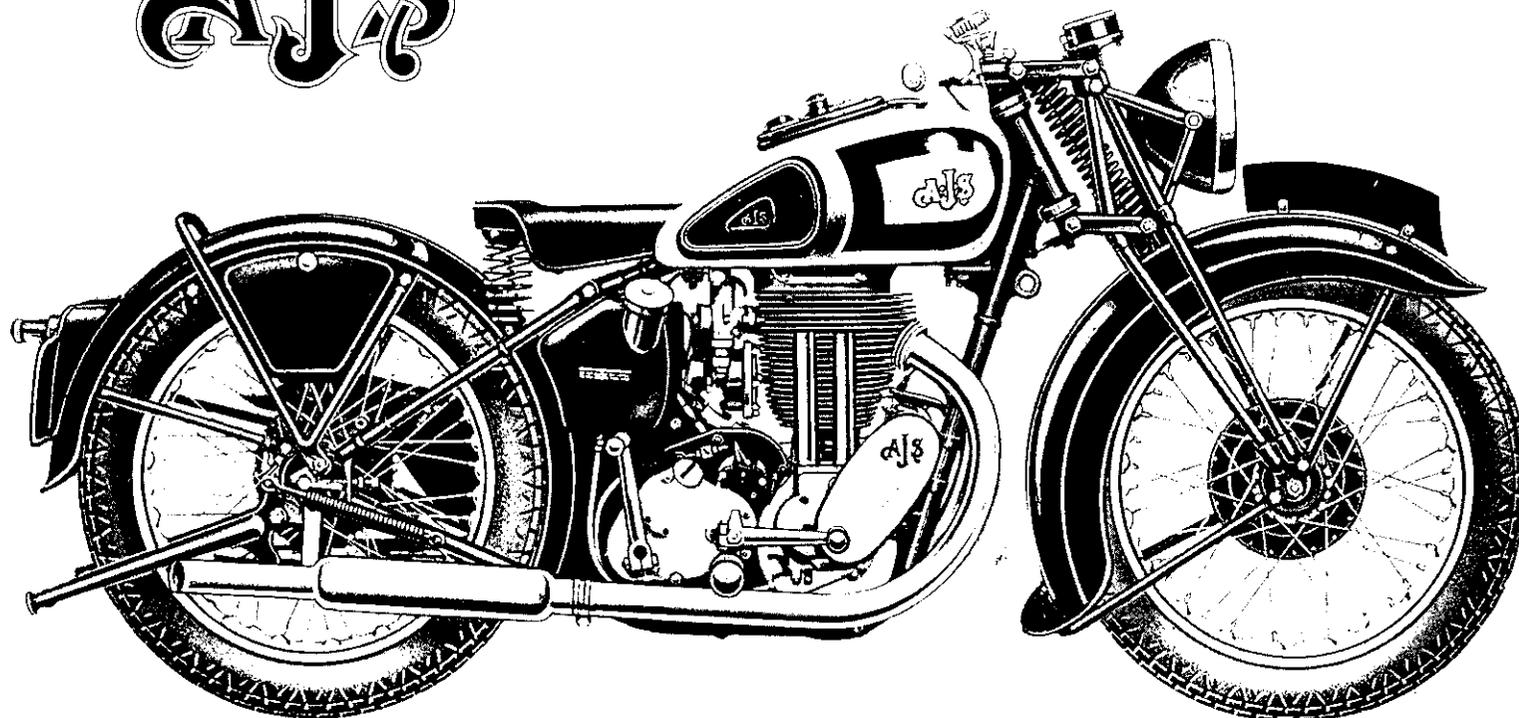


347 c.c. O.H.V. De Luxe Model. Magneto ignition, two-port exhaust system. Petrol tank chromium plated with black panels lined silver and blue. Wheel rims chromium plated with silver centres and black lines. (For full specification see pages 4 and 5.)

*Model 39/26*

**PRICE 52 GNS**

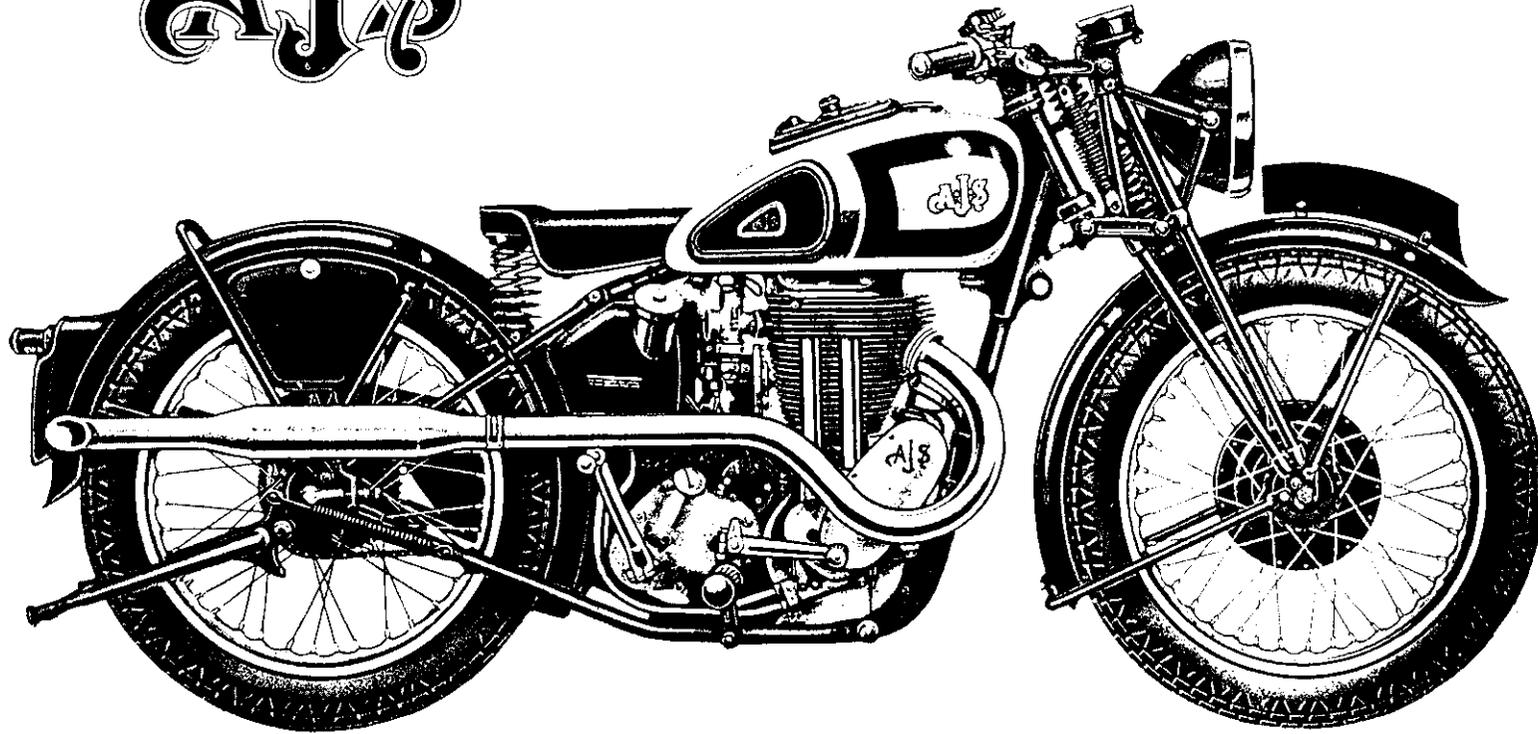
# AJS



498 c.c. O.H.V. De Luxe Model. Two-port exhaust system. Petrol tank chromium plated with black panels lined silver and blue. Wheel rims chromium plated with silver centres and black lines. Valanced mudguards. (For full specification see pages 4 and 5.)

*Model 39/8*  
**PRICE 61 GNS.**

# AJS

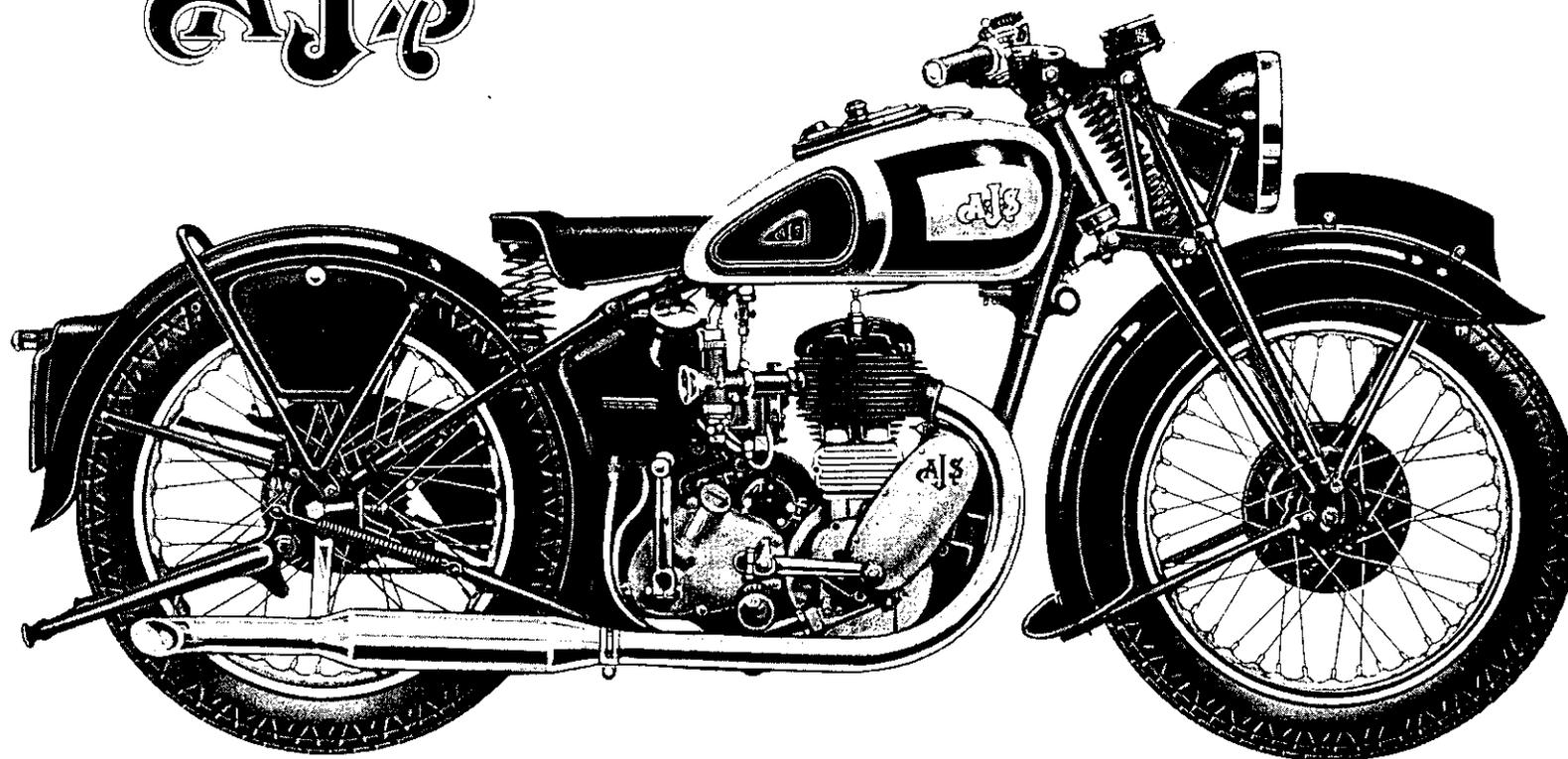


498 c.c. O.H.V. De Luxe Model. Single-port exhaust system. Petrol tank chromium plated with black panels lined silver and blue. Wheel rims chromium plated with silver centres and black lines. Sports mudguards. Check-spring front forks. (For full specification see pages 4 and 5.)

*Model 39/18*

**PRICE 61 GNS**

# AJS



498 c.c. Side Valve De Luxe Model. Petrol tank chromium plated with black panels lined silver and blue. Wheel rims chromium plated with silver centres and black lines. Valanced mudguards. (For full specification see pages 4 and 5.)

*Model 39/9*  
**PRICE 55 GNS.**

## General Specification . . .

# The A.J.S. "Silver Streak" Series Models **39/22ss, 39/26ss & 39/18ss**

Immediately upon their introduction at the beginning of the 1938 season, the A.J.S. "Silver Streak" Models became recognised as the aristocrats of the motor-cycle world. For outstanding performance coupled with highly attractive appearance, the Silver Streak series are in a class by themselves, and wherever they are seen they attract universal attention and admiration.

The general design of each model is based on the corresponding standard model, that is to say the 250 Silver Streak, Model 39 22SS, is in general mechanical design similar to the Model 39/22, and similarly with the two other models.

Each Silver Streak model however, has a specially tuned engine with polished single-port cylinder head and ports, fully chromium plated mudguards, headlamp, fork links, front and rear chaincases, oil tank, tool-box, saddle springs, etc., giving an appearance which is supreme in the motor-cycle industry. The petrol tanks are chromium plated with black panels in the usual A.J.S. de luxe design, and the A.J.S. name transfer on each side is in blue and the panels are lined in blue and silver.

Experience has proved that the quality of A.J.S. chromium plating is such that for weather-proof properties it is the equal of stove enamel, the only attention necessary to keep the chromium plating in perfect

condition being to wash it down at regular intervals with slightly soapy water. This high quality chromium plating has made it possible to take advantage of the attractive appearance of chromium in the Silver Streak models, which are definitely recognised wherever they have been seen, as the most handsome motor-cycles offered to the public.

All Silver Streak models are fitted with 26 in. x 3 in. ribbed front tyres and 26 in. x 3.50 in. studded tyres on the rear wheel.

The standard compression ratios on these models are as follows :

Model 39/22SS	...	...	...	6.7 to 1.
Model 39/26SS	...	...	...	6.6 to 1.
Model 39/18SS	...	...	...	5.9 to 1.

These models can, if desired, be supplied with alternative compression ratios, suitable either for Petrol-Benzol or Alcohol mixture, or for special racing fuel. For general use, however, the standard compression ratios are strongly recommended.

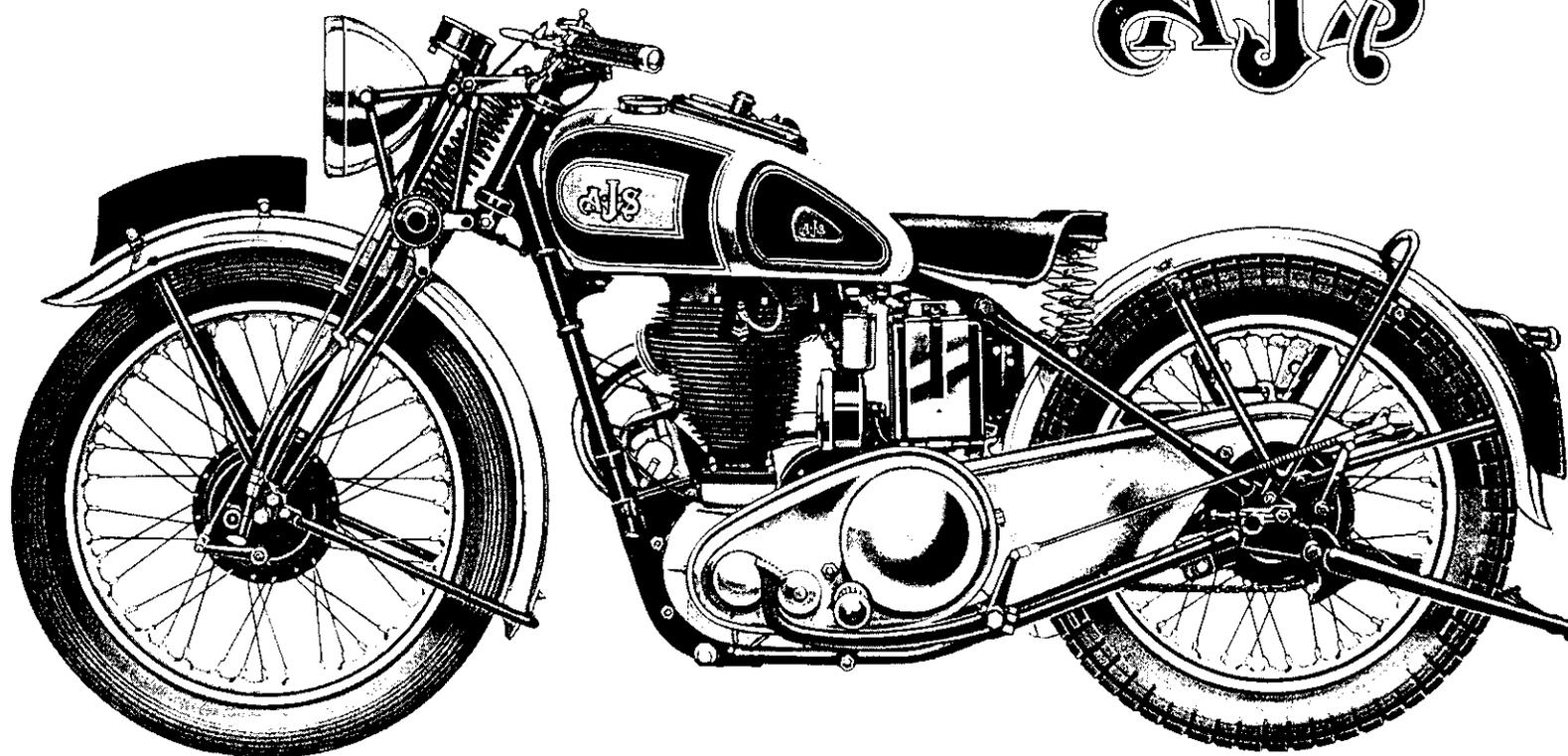
**SPECIAL NOTE.** Unless specially ordered otherwise, all Silver Streak Models are supplied with high level exhaust pipes but low exhaust pipes can be supplied if required to special order.

Unless specially ordered otherwise, all Machines are supplied with Speedometers at the extra charges shown on page 24.

## Prices:

250 SILVER STREAK	Model 39/22SS	<b>53 Gns.</b>
350 SILVER STREAK	Model 39/26SS	<b>56 Gns.</b>
500 SILVER STREAK	Model 39/18SS	<b>65 Gns.</b>





AJS

## 350 "Silver Streak"

The 250 Silver Streak and 500 Silver Streak which are not illustrated, are similar in general appearance to the Model shown above, with exception that the Model 39/18SS has check spring type front forks as illustrated on the Model 39/18 on page 14 of this catalogue.

*Model 39/26SS*

**PRICE 56 GNS.**



## A FEW 1938 SUCCESSES

ORDNANCE CUP TRIAL  
BEST SIDECAR PERFORMANCE

BAYSWATER SCRAMBLE  
BEST PERFORMANCE and " 250 "

KIDSON SCRAMBLE  
BEST " 350 " PERFORMANCE

GRAND CHALLENGE CUP  
TRIAL  
BEST " 250 " PERFORMANCE

WEYBRIDGE CUP TRIAL  
BEST PERFORMANCE

GLOUCESTER GRAND  
NATIONAL  
FIRST and SECOND—" 250 " CLASS

SIMMONS CUP TRIAL  
PREMIER AWARD

INTER-CENTRE TRIAL  
BEST SOLO PERFORMANCE

INTERNATIONAL SIX DAY'S TRIAL  
MEMBER of WINNING INTERNATIONAL TROPHY TEAM

WEST OF ENGLAND TRIAL  
BEST " 350 " and 2 FIRST-CLASS AWARDS

HUTCHINSON '100'  
FIRST " 350 " CLASS and FASTEST TIME OF THE DAY

NORTH WEST '200'  
FIRST " 350 " CLASS

BROOKLANDS GRAND PRIX  
FIRST " 350 " CLASS

BRITISH EXPERTS TRIAL  
THIRD POSITION

LEITH TWO DAY TRIAL  
BEST " 350 " PERFORMANCE

HORSHAM SCRAMBLE  
BEST " 250 " PERFORMANCE

NEATH M.C.C. SCRAMBLE  
BEST PERFORMANCE

WELLER CUP TRIAL  
BEST PERFORMANCE

BORDON CUP TRIAL  
BEST " 350 " PERFORMANCE

ELVETHAM SCRAMBLE  
BEST " 250 " PERFORMANCE

SCOTTISH EXPERTS  
BEST " 250 " PERFORMANCE

# Special Competition Models...

## Models 39/22T, 39/26T & 39/18T

For many years A.J.S. Motor Cycles have been outstandingly successful in Reliability Trials, Scrambles, and similar Competitions. The inside front and back covers of this catalogue give particulars of a few of the successes obtained by A.J.S. Motor Cycles during the 1938 season only. These successes were obtained sometimes by A.J.S. official riders, notably in the important Trials which are listed in the centre column on each of the pages concerned, but many of the other successes have been obtained by private owners riding their own A.J.S. Motor Cycles "the same as you can buy."

To assist private owners who are interested in competition work, we list our special Competition Models, which are identical with the machines which as a result of our experience extending over many years, have been developed for use of the official A.J.S. Competition riders in such events as the International Six Days' Trial and the officially supported Open Reliability Trials.

On the facing page is illustrated the 350 c.c. 39/26T Competition Model. Two other models, that is the 250 c.c. Model, 39/22T, and the 500 c.c. Model 39/18T, are similar in general appearance and specification, except for the differences mentioned below. These special Competition models incorporate the following features amongst many others designed to ensure that they are first class competition mounts.

Single-port cylinder head.

Ignition by separate magneto, and separate dynamo lighting system with switches in head-lamp.

Special small competition petrol tank two gallons capacity.

Special shallow section mudguards, chromium plated.

Single-arm spring return prop stand in addition to spring-up rear stand and usual front-stand.

Dunlop competition saddle.

Adjustable saddle spring mounting.

Heavyweight gearbox with special competition gear ratios.

Specially tuned engine with polished cylinder head and ports.

Quickly detachable rear wheel with 27 in. x 4 in. competition tyre or Dunlop Universal tyre at option.

**SPECIAL NOTE.** Unless specially ordered otherwise, all machines are supplied with speedometers at the extra charges shown on page 24.

27 in. x 2.75 in. tyre on front wheel of Model 39/18T ;  
26 in. x 3 in. tyre on front wheels of Models 39/22T  
and 39/26T. Front tyres may be either full com-  
petition type or Dunlop Universal as ordered.

Large mudguard clearance on front and rear wheels.

Gear ratios :

Model 39/22T—6.56, 10.0, 13.7, 20.8 to 1.

Model 39/26T—6.17, 9.4, 12.9, 19.5 to 1.

Model 39/18T—5.52, 8.4, 11.5, 17.5 to 1.

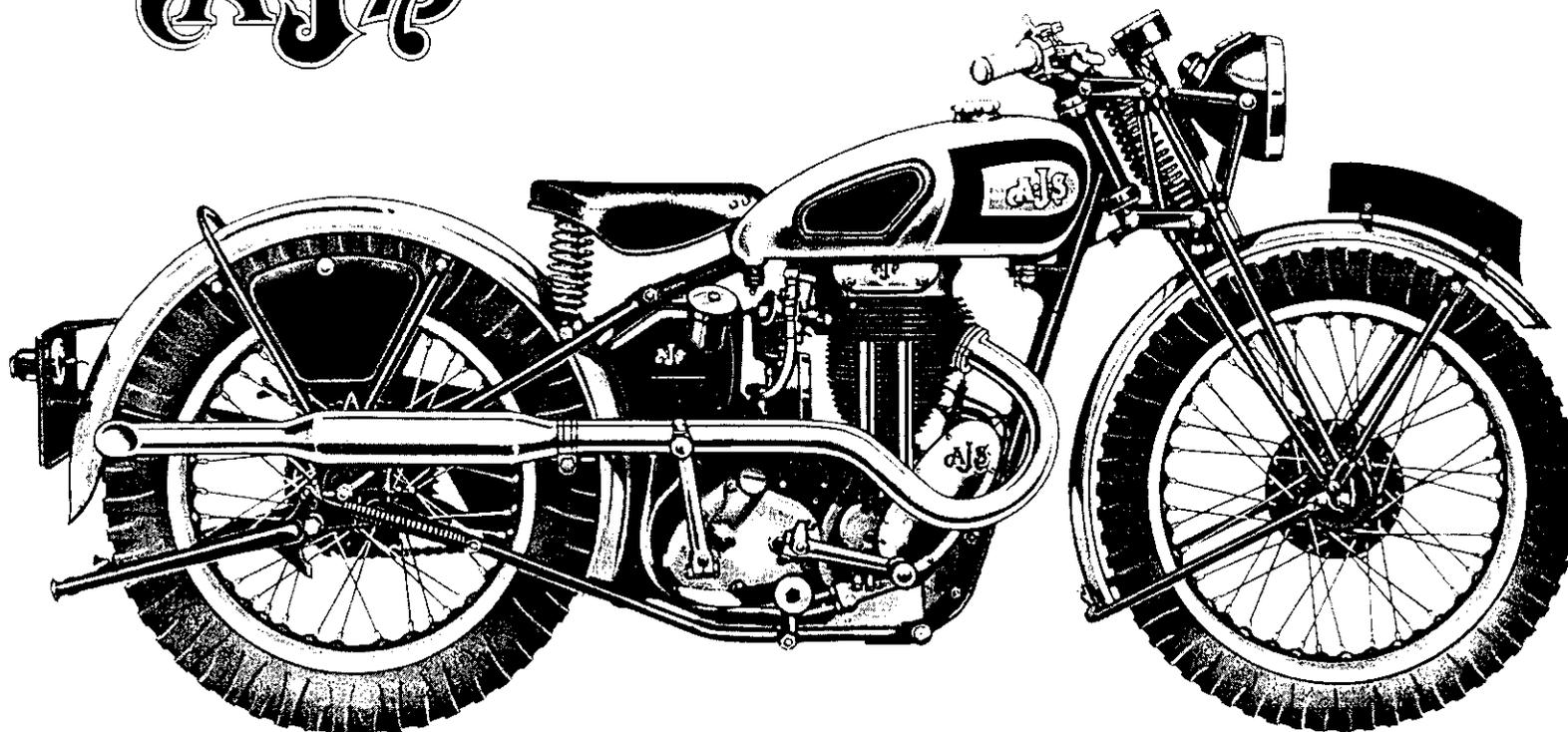
These Models can be supplied if required with special high compression ratio for Petrol-Benzol fuel, but for normal Competition work the standard compression ratio is recommended as quoted on page 16 for "Silver Streak" Models.

### Prices :

MODEL 39/22T	...	...	54 Gns.
MODEL 39/26T	...	...	57 Gns.
MODEL 39/18T	...	...	66 Gns.



# AJS



## Competition Model

Models 39 22T and 39 18T which are not illustrated, are similar in general appearance to the Model shown above, except that Model 39 18T is fitted with check spring front forks. (For full specification see page 18.)

*Model 39/26T*

**PRICE 57 GNS.**

# General Specification 990 c.c. Big Twin Models 39/2 & 39/2A

The specification below gives full details of the latest models of the famous A.J.S. Twin, which is available in English and Export forms. The illustration on page 21 is that of the Export Model.

The English Model 39/2 is fitted with semi-sports handlebars, footrests, foot gear-change and hand clutch control.

The Export Model 39/2A is fitted with upturned handlebars, rubber-covered footboards, left-hand gear-change and foot clutch control.

**ENGINE.** A.J.S. 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 4.

**GEARBOX.** Four-speed pivot-mounted heavyweight gearbox to A.J.S. design. On Model 39/2 built-in positive stop footgear change is incorporated. On Model 39/2A gear change is by convenient hand lever on left-hand side of petrol tank. Model 39/2A can be fitted with gearbox giving three forward speeds and reverse gear at extra charge shown on page 24.

Gear ratios : Solo — 4.72, 5.95, 7.4, 12.6 to 1.  
Sidecar — 4.9, 6.43, 8.12, 13.8 to 1.

**CLUTCH.** Multi-plate heavy duty large diameter clutch in separate compartment in chaincase to exclude oil from friction faces. Finger operated cable adjuster on Model 39/2 which has clutch control by lever on handlebar. On Model 39/2A 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 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. Front drum fitted with large cooling fins.

Improved type high friction brake linings front and rear. Both brakes incorporate dust and water excluders and finger adjustment. Front brake controlled by lever on right handlebar. On Model 39/2 rear brake controlled by long pedal on left side, on Model 39/2A rear brake controlled by ratchet pedal at front end of right-side footboard.

**CARBURETTOR.** "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 large pressed steel tool-boxes provided.

**TANK.** Chromium plated petrol tank with A.J.S. black and silver finish. Flush-fitting instrument panel mounted on top of tank containing lighting switch, 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. 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 completely protected by new design deep-section chain-guard with front and back panels giving almost complete enclosure. Shock-absorber on engine shaft.

**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 silver centres and black lines.

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

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

**HANDLEBARS.** Model 39/2 fitted with semi-sports handlebars, carried on trailing links, and with adjustable controls. Model 39/2A fitted with long comfortable touring handlebars.

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

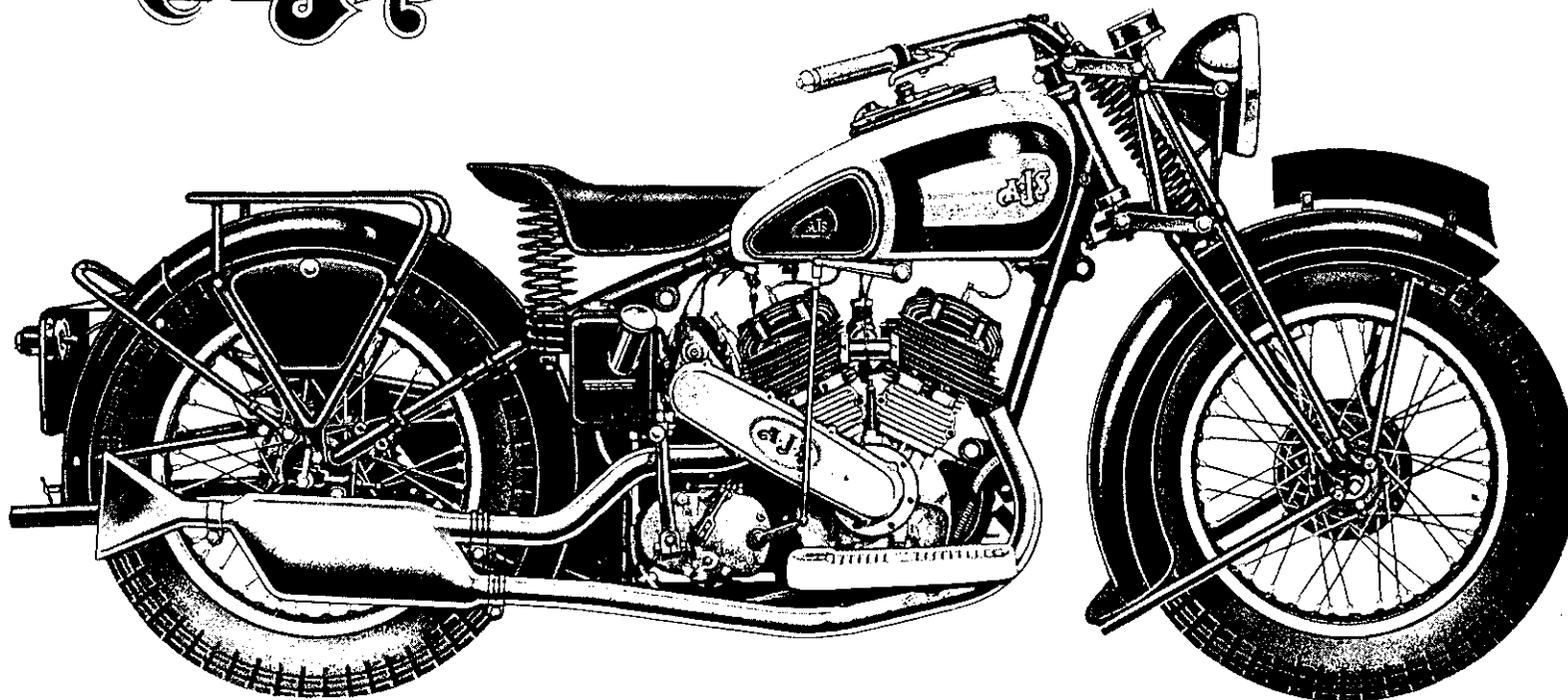
**ELECTRICAL EQUIPMENT.** Lucas Magdyno electric lighting set, with constant voltage control. Electric horn.

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

**SPECIAL NOTE.** Unless specially ordered otherwise, all machines are supplied with speedometers at the extra charge shown on page 24.

*Price:* 78 Gns.

# A.J.S.



## Big Twin—Export Model

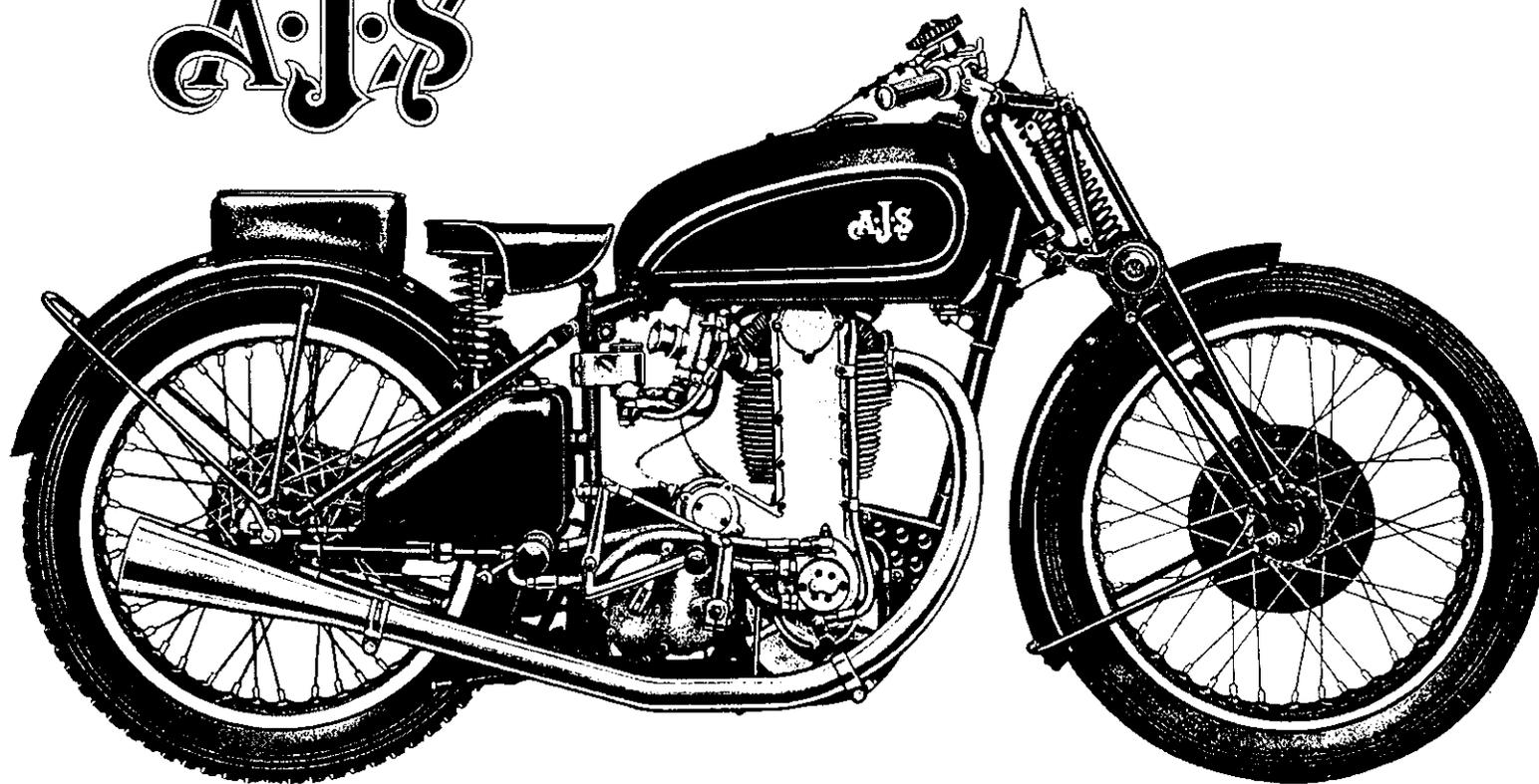
The famous A.J.S. 9.9 h.p. Big Twin is available in two forms. The Export Model illustrated above is fitted with footboards, long touring handlebars, left-hand gear-change and foot clutch control.

The ENGLISH Model 39 2 is identical in general specification, but is fitted with footrests, semi-sports Handlebars, foot gear change and handlebar clutch control.

*Model 39/2A*

**PRICE 78 GNS.**

AJS



Racing Model

346 c.c. Overhead Camshaft (full specification on facing page)

*Model 39/7R*  
**PRICE 90 GNS.**

## General Specification . . .

# Overhead Camshaft Racing Model **39/7<sub>R</sub>**

This model is offered purely for racing purposes and can be supplied only with full racing equipment. It is, so far as is commercially practicable, a replica of the actual A.J.S. racing machines which have during recent seasons put up such a remarkable display of high speed reliability in the Isle-of-Man T.T. Races, the Ulster Grand Prix, and many other important races.

Before delivery every machine is tested under racing conditions at Brooklands Racing Track and is not passed for delivery unless it has achieved a set minimum lap speed. It should be specially noted that no deviation can be made from the specification given below and that these machines cannot be supplied with electric lighting equipment.

**ENGINE.** A.J.S. high efficiency overhead camshaft dry-sump engine, identical in design to those used in the Isle-of-Man T.T. Races. The cylinder head is cast in aluminium alloy with inserted valve seats. Aluminium cylinder barrel with special alloy liner. The cast aluminium rocker-box is of the sump pattern affording ample lubrication to the camshaft chain and timing gear mechanism. The driving side mainshaft of very sturdy design running in four row bearing. Valve stems and valve guides mechanically lubricated. The piston, which is cast in special alloy, gives a compression ratio of 8.5 to 1. Capacity, 346 c.c.

**IGNITION.** B.T.H. racing magneto.

**GEARBOX.** Sturdy four-speed racing gearbox with positive stop foot change, incorporating rocking pedal gear change lever, to enable quick and easy gear change. No kickstarter.

**CLUTCH.** Multi-plate clutch of T-T pattern.

**WHEELS.** Both wheels fitted with taper roller bearings. Rear wheel is of quickly detachable type.

**BRAKES.** Heavily finned 8 in. front brake and 7 in. rear—both T-T pattern.

**TYRES.** 27 in. x 3.25 in. triple studded rear and 27 in. x 3.00 in. ribbed front.

**MUDGUARDS.** Racing pattern.

**FORKS.** Sturdy design fork girder assembly giving maximum lateral rigidity. Double lock fork spindle assembly, and double duplex integral dampers. Rebound check springs.

**HANDLEBARS.**  $\frac{3}{8}$  in. T-T pattern bars with racing levers.

**STAND.** Centre spring-up stand, quickly detachable.

**FRAME.** Semi-duplex type with triple rear fork members, ensuring absolute rigidity at high speeds. One-piece cradle engine plates carrying engine and gearbox.

**TANKS.** As used during the 1938 racing season. Petrol tank finished in usual A.J.S. black and gold. Capacity, 4 $\frac{1}{2}$  gallons. Oil tank capacity, 1 gallon.

**CARBURETTOR.** Latest "Amal" racing type with remote needle and float chamber independently mounted.

**CHAINGUARD.** Top run chainguard to front chain giving adequate protection. Special oil lead to chain.

**EXHAUST SYSTEM.** Straight through exhaust pipe, downswept pattern, with large detachable megaphone trumpet.

**STEERING DAMPER.** Andre duplex pattern.

**FOOTRESTS.** Racing type footrests mounted on rear frame, affording ideal riding position for high speed work.

**SADDLE.** Terry racing saddle and Moseley mudguard pad.

*Price:* TO STANDARD SPECIFICATION AS GIVEN ABOVE 90 Gns.

# Equipment

	£	s	d
SMITH'S NON-TRIP SPEEDOMETER, 80 m.p.h. ... ..	2	5	0
SMITH'S TRIP SPEEDOMETER, 80 m.p.h. ... ..	2	10	0
SMITH'S TRIP SPEEDOMETER, 120 m.p.h. ... ..	2	15	0
<b>NOTE.</b> —Above Speedometers have illuminated dials and are driven by enclosed gearing from the front hub.			
SMITH'S 8-DAY CLOCK, FITTED IN INSTRUMENT PANEL ...	1	10	0
CHROMIUM PLATED TANK ON STANDARD SERIES MODELS ...	1	0	0
LUGGAGE CARRIER ON ALL MODELS (except 39½ and 39 2A)	12	6	
26 in. x 3.50 in. TYRES IN PLACE OF 26 in. x 3.25 in. ...	10	0	

	£	s	d.
MUDGUARD TYPE PILLION SEAT ... ..	12	6	
PILLION FOOTRESTS, FOLDING PATTERN ... ..	12	6	
THREE-SPEED AND REVERSE GEARBOX ON MODEL 39 2A ... ..	1	0	0
SINGLE-ARM SPRING RETURN PROP STAND (included on Competition Models. Cannot be supplied for Big Twin) ... ..	12	6	
STEERING DAMPER ON STANDARD MODELS 39½, 39 12M, 39½ and 39 16M ... ..	12	6	
MAGNETO SHIELD, ON MODELS 39 12M, 39 16M ... ..	4	6	

# 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 parts 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 be 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.

# A.J.S. Motorcycles for 1939

The A.J.S. programme for 1939 is the most comprehensive which has ever been offered to the Motorcycling World by one manufacturer. Designed to cover the requirements of all types of riders, the range of models includes no fewer than five 246 c.c. models, six 347 c.c. models, five 498 c.c. models and two 990 c.c. Big Twins.

For more than twenty-five years the name A.J.S. has stood for quality Motorcycle design. That the 1939 Models will enhance that world-wide reputation is ensured by the many important refinements and new mechanical features incorporated in the new models which include the following:

**New design cylinder heads and overhead valve gear on all O.H.V. Models, giving complete enclosure and positive lubrication of all working parts including both valve guides, with complete freedom from oil leaks.**

**Improved gearboxes on 250 c.c. and 350 c.c. Models (except 39 12).**

**Incorporated pillion footrest lugs on all Models (except 39 12 and 39 16) to take A.J.S. folding pillion footrests.**

**An ingenious but practical single-arm prop stand available for all models at a small extra charge (standard on Competition models).**

**Improved silencer and exhaust pipe mountings giving greater rigidity and neater appearance.**

**Petrol tanks on all models except 250 c.c. and side-valve models, redesigned to enable the tank to be removed without interfering with the instrument panel wiring.**

**Larger flywheels and crankcases on O.H.V. 500 c.c. models to give smoother running and greater power at low speeds.**

**All brake shoes incorporate adjustable hardened steel pads to take the load of the brake expander cam and allow the full life of the friction lining to be utilised.**

**Improved speedometer mounting (except 39 12 and 39 16) giving greater rigidity and improved appearance.**

With these outstanding improvements plus a host of other refinements which cannot be tabulated here. A.J.S. Motorcycles continue to lead the world in design, while the new colour scheme, in chrome, silver and blue, on the De Luxe Models, gives an exceedingly attractive appearance which is surpassed only by the famous A.J.S. "Silver Streak" Models.

*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 Page 24 of this catalogue.

## A·J·S MOTOR CYCLES

Proprietors: Associated Motor Cycles Ltd.

PLUMSTEAD ROAD, LONDON, S.E.18

SOLE AGENTS: LITTLE & BELL

10, MARK LANE, LONDON, E.C.3



# General Technical Specification . . .

This specification applies to all single-cylinder models except the Racing Model 39 7R, but it must be read in conjunction with the list of models given on page 3, and with the special specifications given for the "Silver Streak" series on page 16 and for the "Competition" models on page 18.

Some of the outstanding mechanical features are illustrated by special drawings on pages 2 and 6, while on following pages will be found illustrations of all models.

**ENGINES.** Designed and manufactured throughout in the A.J.S. factory, A.J.S. engines give a remarkable combination of high power output with unusual mechanical silence and great durability. All overhead valve models have new design cylinder heads and overhead valve gear, giving complete enclosure and positive lubrication of all working parts including both valve guides, with complete freedom from oil leaks. The rocker box cover is easily detachable to allow of access to the valve clearance adjustment, although attention to this is, as a result of the copious lubrication provided for all the overhead valve gear parts, usually required only at very long intervals.

The side valve Model 39 9 has a car type detachable cylinder head, the valve gear is totally enclosed, and the valve springs are insulated from the heat of the cylinder.

Other features of A.J.S. engines include "Lo-ex" alloy pistons, roller bearing big ends with duralumin roller cages, exceptionally stiff fly-wheel and crankshaft assemblies, twin-camshaft timing gear running in oil-bath, etc., etc.

**ENGINE DIMENSIONS.** MODELS 39:12, 39:12M, 39:22, 39:22SS and 39:22T. Bore, 62.5 mm. ; Stroke, 80 mm. ; Capacity, 246 c.c.  
MODELS 39:16, 39:16M, 39:26, 39:26SS and 39:26T. Bore, 69 mm. ; Stroke, 93 mm. ; Capacity, 347 c.c.  
MODELS 39:8, 39:18, 39 9, 39:18SS and 39:18T. Bore, 82.5 mm. ; Stroke, 93 mm. ; Capacity, 498 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 draws 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. This filter, which is situated in the oil tank, can easily be removed for cleaning.

Oil is forced to all working parts, including the big-end bearing and the overhead rocker gear, while a constant level of oil is maintained in the timing case so that the timing gear and cams run in an oil bath.

A special feed from the pump supplies oil to three points on the wall of the cylinder, oil thus being fed direct to the piston. The design, however, is such that the feed of oil to the cylinder wall is reduced as the engine warms up, the result being that there is a considerable supply of oil on the cylinder when the engine is first started—this being the time when wear is likely to occur if there is not ample lubrication. When the engine warms up, less oil is required on the piston and this variation is automatically provided by the design, which also reduces the supply to the cylinder at high engine speeds, when a higher proportion of the total oil in circulation is passed through the big-end bearing, from whence it is thrown off by centrifugal force on to the cylinder and piston.

The operation of the lubrication system can instantly be checked by removing the oil tank filler cap, when the return feed from the pump to the tank is immediately visible.

**GEARBOX.** All models fitted with four-speed easy change gearboxes with positive stop foot gear-change and completely enclosed clutch operating gear.

Heavyweight gearboxes on all 347 c.c. and 498 c.c. models.

Gear ratios : Models 39 12, 39:12M, 39 22 and 39 22SS—6.25, 8.74, 11.2 and 18.6 to 1.

Models 39 16, 39 16M, 39 26 and 39 26SS—5.55, 7.1, 9.76 and 14.8 to 1.

Models 39 8, 39 18, 39:18SS and 39 9—5.0, 6.4, 8.8 and 13.3 to 1.

For gear ratios of Competition Models, see page 18.

**TRANSMISSION.** Front chain completely enclosed in pressed steel oil-bath chain case of A.J.S. patent design with combined filling hole and oil level indicator. Rear chain completely protected by deep-section rear chain-guard with front and back panels giving almost complete enclosure. Spring loaded cam-type shock absorber on engine shaft.

**CARBURETTOR.** "Amal" two-lever semi-automatic carburettor with twist grip control for throttle.

**FRAME.** Sturdy duplex loop frame designed to provide exceptional torsional and lateral rigidity, so ensuring perfect steering properties

# The A.J.S. Range for 1939

## STANDARD SERIES

These models are fitted with single-port exhaust systems. The petrol tanks are finished in black and gold. Wheel rims are chromium plated with black centres and gold lines.

<b>Model 39/12</b>	<b>246 c.c. O.H.V. Engine, Coil Ignition</b>	<b>.. 44 Gns.</b>
<b>Model 39/12M</b>	<b>246 c.c. O.H.V. Engine, Magneto Ignition</b>	<b>47 Gns.</b>
<b>Model 39/16</b>	<b>347 c.c. O.H.V. Engine, Coil Ignition</b>	<b>.. 47 Gns.</b>
<b>Model 39 16M</b>	<b>347 c.c. O.H.V. Engine, Magneto Ignition</b>	<b>50 Gns.</b>

## DE LUXE SERIES

These Models are all fitted with magneto ignition, effective magneto shields, and steering dampers. The petrol tanks are chromium plated with black panels lined silver and blue. Wheel rims are chromium plated with silver centres and black lines.

<b>Model 39/22</b>	<b>246 c.c. O.H.V., Two Port</b>	<b>.. .. . 49 Gns.</b>
<b>Model 39/26</b>	<b>347 c.c. O.H.V., Two Port</b>	<b>.. .. . 52 Gns.</b>
<b>Model 39 8</b>	<b>498 c.c. O.H.V., Two Port, Valanced Mudguards</b>	<b>61 Gns.</b>
<b>Model 39 18</b>	<b>498 c.c. O.H.V. Single Port, Sports Mudguards, Check Spring Front Forks</b>	<b>.. .. . 61 Gns.</b>
<b>Model 39 9</b>	<b>498 c.c. Side Valve</b>	<b>.. .. . 55 Gns.</b>

## SILVER STREAK SERIES

These models have specially-tuned engines, and the famous "Silver Streak" finish. They have single port exhaust systems and magneto ignition.

<b>Model 39 22SS</b>	<b>246 c.c. O.H.V. " 250 Silver Streak "</b>	<b>.. 53 Gns.</b>
<b>Model 39 26SS</b>	<b>347 c.c. O.H.V. " 350 Silver Streak "</b>	<b>.. 56 Gns.</b>
<b>Model 39 18SS</b>	<b>498 c.c. O.H.V. " 500 Silver Streak "</b>	<b>.. 65 Gns.</b>

## COMPETITION MODELS

These models are specially equipped for reliability trials and scrambles. Single port exhaust systems, magneto ignition.

<b>Model 39 22T</b>	<b>246 c.c. O.H.V. " Competition Model "</b>	<b>54 Gns.</b>
<b>Model 39 26T</b>	<b>347 c.c. O.H.V. " Competition Model "</b>	<b>57 Gns.</b>
<b>Model 39 18T</b>	<b>498 c.c. O.H.V. " Competition Model "</b>	<b>66 Gns.</b>

## BIG TWIN MODELS

These models are specially designed and built for heavy Sidecar work

<b>Model 39 2</b>	<b>990 c.c. Side Valve Twin " English Model "</b>	<b>78 Gns.</b>
<b>Model 39 2A</b>	<b>990 c.c. Side Valve Twin " Export Model "</b>	<b>78 Gns.</b>

## RACING MODELS

This model is designed purely for racing and is a replica of the racing machines used by official A.J.S. riders in the T.T. and similar events.

<b>Model 39 7R</b>	<b>346 c.c. Overhead Camshaft " Racing Model "</b>	<b>90 Gns.</b>
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on bad roads. Self-centring head bearings. Forged rear fork-ends with incorporated pillion footrest lugs (except 39 12 and 39 16). Single front down tube with A.J.S. special design front engine lug which continues under crankcase and so provides an effective crankcase shield.

Sidecar connection lugs on 498 c.c. models.

**STEERING DAMPER.** A duplex frictional steering damper, instantly adjustable by means of a handsome knurled knob with inset A.J.S. medallion, is provided on all "De Luxe" series and "Silver Streak" series machines and can be supplied at an extra charge of 12/6 on other models if specially ordered.

**SPRING FORKS.** Well known A.J.S. design with locked-link fork girder assembly with double anchor-plate pattern adjustable fork dampers.

**PETROL TANK.** A.J.S. deep contour petrol tank made from steel pressings and welded throughout. Capacity 3 gallons. The tank top carries a flush-fitting instrument panel containing the electric lighting switch and ammeter, and on all models except 39 12 and 39 16 there is a detachable inspection lamp which also provides illumination for the ammeter. There is provision for fitting an eight-day clock if desired. On the 350 c.c. and 500 c.c. O.H.V. models the petrol tank can be removed without interfering with the instrument panel wiring, thus simplifying the operation of decarbonising.

**OIL TANK.** Pressed steel oil tank, welded throughout, carried on substantial brackets below saddle. Fitted with large quick-action filler-cap. Capacity, 4 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.** On "Standard" series and "De Luxe" series models, 26 in. x 3.25 in. studded cord tyres on both wheels. For tyre equipment on "Silver Streak" models, see page 16, and for "Competition" models, see page 18.

**BRAKES.** Internal expanding brakes on front and rear wheels fitted with hand adjusters, dust and water excluders. Cooling-fins fitted to front brake drum. High friction brake linings front and rear. Quickly detachable brake connection. Brake shoes provided with hardened steel pads with shim adjustment to ensure use of total life of brake linings.

**WHEELS.** Built with heavy-gauge spokes on taper roller bearing hubs. Rear wheel quickly detachable on 498 c.c. models and "Competition" models.

**STANDS.** Low-lift spring-up rear stand and tubular stand for front wheel. Single-arm quick-action Prop Stand 12/6 extra. (Standard on "Competition" models.)

**ELECTRICAL EQUIPMENT.** Models 39 12 and 39 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 and dipping switch on handlebar. Extra large battery carried on special platform beneath saddle. High frequency electric horn.

All other models 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.

Magneto shield on "De Luxe" models (4/6 extra on Models 39 12M and 39 16M).

All models incorporate constant voltage control for the dynamo, thus ensuring perfect regulation of battery charging. Detachable inspection lamp on all machines except Models 39 12 and 39 16.

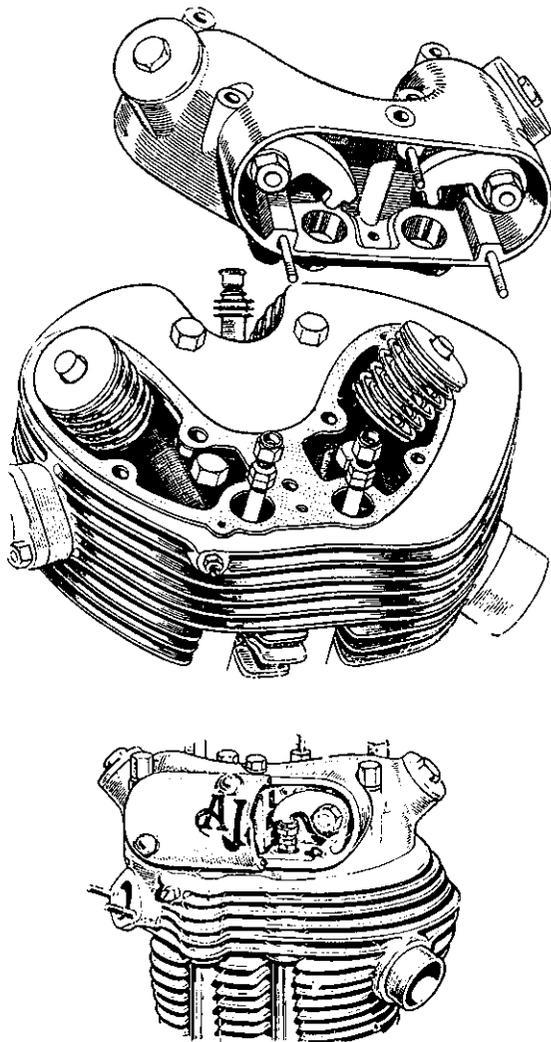
**EQUIPMENT.** Full kit of tools, grease gun, and tyre inflator.

## Special Note...

All O.H.V. models can be fitted with either high or low exhaust pipes, except the "Competition" models on which high exhaust pipes are standardised.

The illustrations on the following pages show examples of both types of exhaust system. 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.

Unless specially ordered otherwise, all machines are supplied with speedometers at the extra charge shown on page 24. The speedometer is driven from the front hub and the speedometer dial is illuminated when the lights are in use.



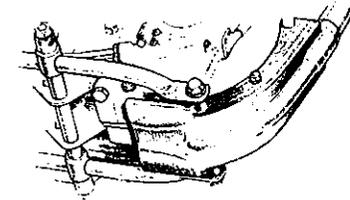
The illustration on the left shows the latest type of A.J.S. overhead valve gear, with the rocker box detached from the cylinder head to show the disposition of the valve springs and the push rods which operate the overhead valve rockers.

The lower portion of the sketch shows clearly the very generous finning provided on the cylinder head which ensures adequate cooling under the most strenuous operating conditions.

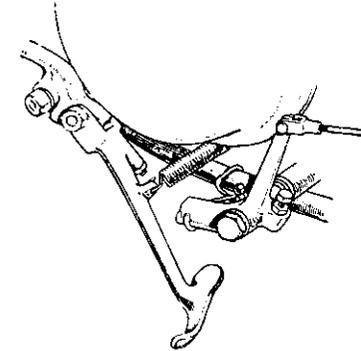
The whole of the overhead valve gear is lubricated under pressure from the main engine oil pump, and special feeds supply oil to the inlet and exhaust valve guides. The supply to the inlet valve guide is adjustable by means of the adjusting screw, which can be seen just in front of the inlet push rod. The feed to the exhaust valve is so arranged that it is bathed in a copious supply of fresh oil, which however, immediately drains away so that the oil is never in contact for long with the valve stem or guide, so preventing the oil carbonising. This is a unique feature of A.J.S. engines, which ensures for the first time in motor-cycle design, really satisfactory lubrication for both valve guides.

This illustration shows the rocker box mounted in position on the cylinder head, the inspection cover being broken away to show the easily accessible valve clearance adjustment.

This sketch shows the underside of the A.J.S. engine and particularly the extended lug which is carried right down underneath the crankcase to act as a shield, which prevents damage to the engine if the machine should be used on rocky surfaces or for cross-country work.

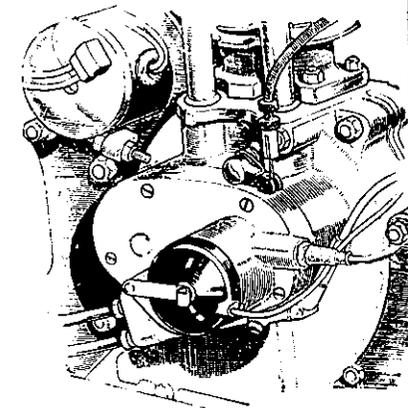


This single arm prop-stand can be fitted to any 1938 A.J.S. model except the Big Twin and Racing models, at an extra charge of 12/6. It is instantly operated by the riders' toe and enables the machine to be propped up for parking purposes without the necessity for lifting it on to the rear stand. This valuable accessory is strongly recommended to all A.J.S. owners and should be ordered with the machine.



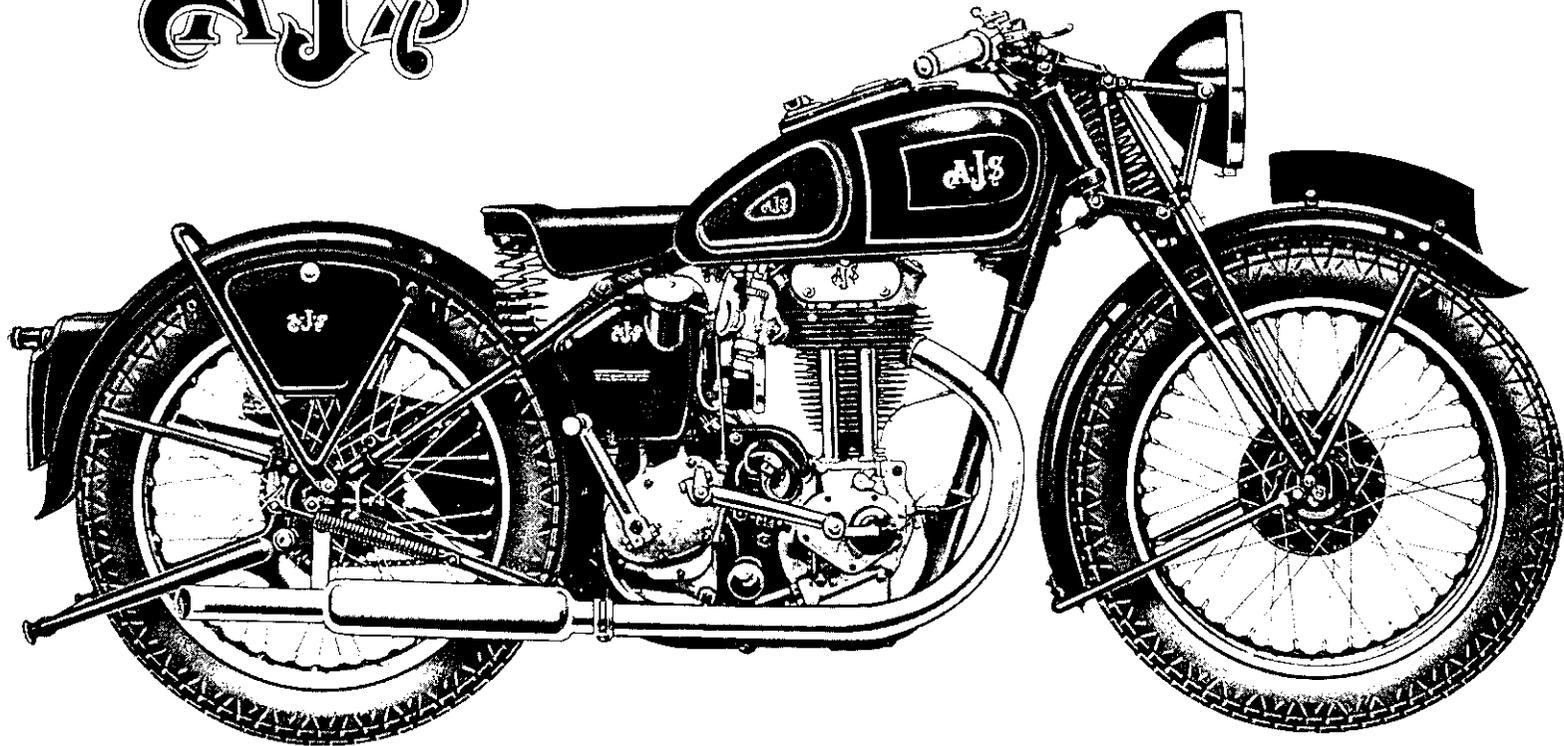
In the sketch the brake pedal has been broken away to make the illustration of the prop-stand clear.

This sketch shows the timing side of the Model 39 12 and 39 16 Engines, in which the contact breaker for the cartridge ignition system is carried in the engine timing case. The contact breaker is completely enclosed and runs at half engine speed. Also visible are the exhaust valve-lifter and the 30 watt dynamo which is carried behind the engine.



Drawings by courtesy of "THE MOTOR CYCLE" and "MOTOR CYCLING."

# AJS



246 c.c. O.H.V. Standard Model. Coil ignition, single-port exhaust system. Petrol tank finished in black and gold. (For full specification see pages 4 and 5.)

*Model 39/12*  
**PRICE 44 GNS.**