



**Catalogue No. 10. 40p**



# Introduction

This catalogue is a guide to the equipment and parts that we sell. All our equipment and parts are thoroughly tested before we offer them for sale. All materials used are of the highest quality and are tested to an extremely high standard. THIS IS YOUR SAFEGUARD!

ALF HAGON PRODUCTS are the recognised leaders in grass track, speedway and drag racing — featuring the most extensive range of products for these motor cycle sports.

ALF HAGON has contributed an enormous number of major achievements to the world of grass track, speedway and drag racing — which has helped tremendously in the development and production of our equipment.

But we are not content to rest on our laurels and will continue to explore and develop new products for the future. You can be assured that when you buy our products you get the very best in quality, performance, reliability and service. We are proud of our reputation for value, perfection and honesty.

## EXPORT

We can send goods to any part of the world — either by Post or Shipping Agents, by Air or Sea. Items up to 44lb (20 kilos) can be sent by Post. In many countries we can send goods C.O.D., but in some countries there is no C.O.D. service available, in which case please send CASH WITH ORDER, PLUS POSTAGE.

We can offer on parcels over 44lb (Complete Machines etc.) part C.O.D. i.e. Send only the money for the goods required and all Freight Charges are sent forward for you to pay on collection. PRICES QUOTED DO NOT INCLUDE POSTAGE.

When ordering please state:—

- A Make, Model, Year and CC of machine.
- B Your name and address, including postal code (if any).
- C Catalogue reference, size and colour, where applicable.

ADDRESS FOR ALL CORRESPONDENCE:—

**ALF HAGON PRODUCTS  
350/352 HIGH ROAD, LEYTON,  
LONDON E.10 6QQ  
ENGLAND**

Telephone: **01-539-8416 & 01-556-9200**

## POSTAL SPARES SERVICE

THE WORLDS BEST! GRASS TRACK, SPEEDWAY, SPRINTING.

CASH ON DELIVERY BY RETURN POST IS OUR SPECIALITY. GOODS WEIGHING UP TO 44lb CAN BE SENT BY G.P.O. TO YOUR DOOR C.O.D. MAXIMUM IS £50 — BUT WE CAN SEND ANY NUMBER OF SEPARATE PARCELS. CHARGES AT G.P.O. RATE.

PARCELS OVER 44lb IN WEIGHT CAN BE SENT BY B.R.S. WHO ALSO HAVE A C.O.D. SERVICE. CHARGES AT B.R.S. RATE.

Open from 9 till 1 and 2 till 6 MONDAY to FRIDAY. 9 till 1 SATURDAY.

The nearest underground station is LEYTON which is on the Central Line. On leaving the station turn right, we are approximately 400 yards along on the right-hand side.

By road we are approximately 3 miles from the Blackwall Tunnel, 2 miles from the A406 North Circular Road.





The Rowing Brothers en-route to another win on their Hagon moto cross outfit, proving yet again the extraordinary versatility of our production team.

This catalogue shows most of the parts normally held in stock by us and available over the counter, or by return post.

In addition to these items are the specialised design and construction facilities of our workshop; the engine modification, building and tuning services of our engine shop; and the general expertise from our years of experience that can help you with your machine. Let us know your requirements, we will help all we can.

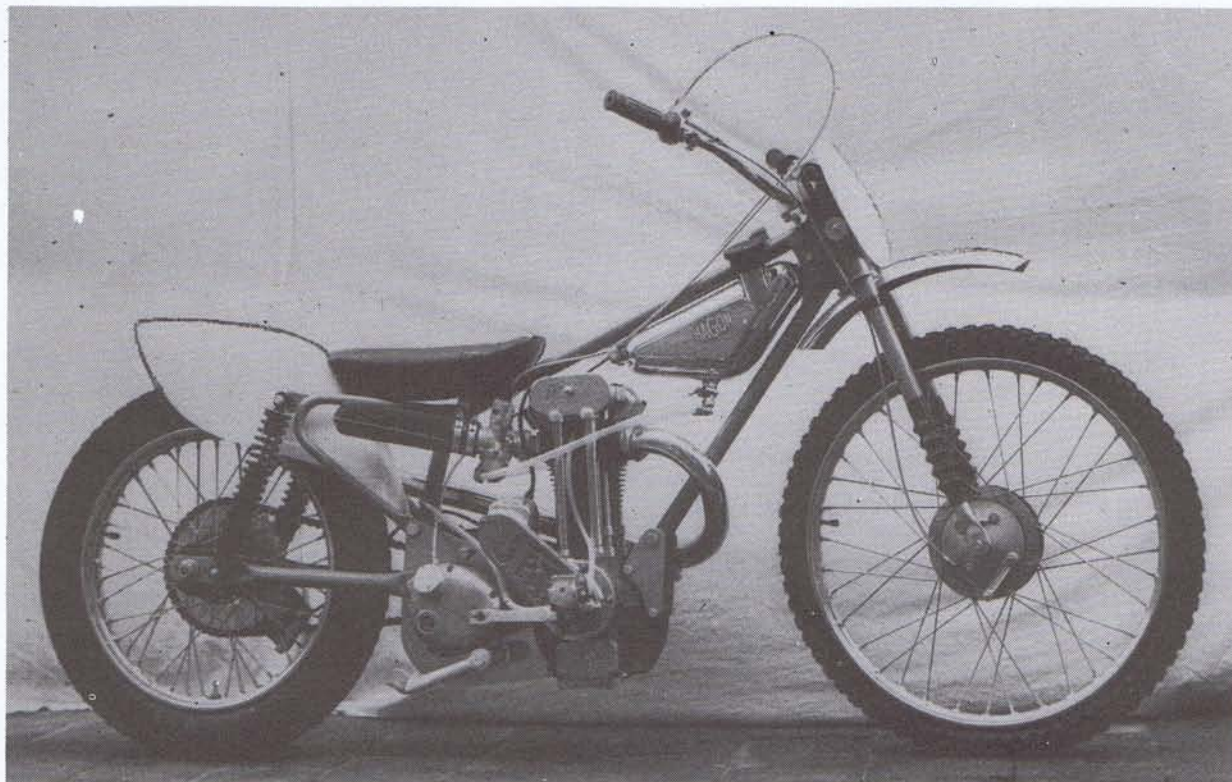
VALVE RE-FACING  
VALVE SEAT CUTTING  
INSERTING  
HELICOILING  
PORT ENLARGING

RE-BORING & HONING  
RE-SLEEVEING  
FLYWHEEL ALIGNMENT  
ALLOY & MAGNESIUM  
WELDING

MAGNETO REPAIRS



# Hagon Sandracer Mk II

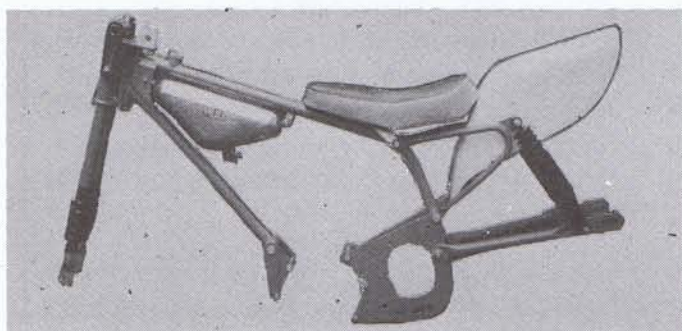


Undoubtedly the most successful track racing machine available today. The SANDRACER was built for the long, fast Continental tracks, but is equally successful on the short Home circuits.

The design of the SANDRACER enables the use of 19" or 22" rear wheels.

**SPECIFICATION.** Wheelbase 54" to 56" according to choice of engine, gearbox, and rear wheel. Head angle 69°, Seat height 29", Wheels — Front 23", Rear 19" or 22".

**HAGON SANDRACER** As shown but without engine, transmission and brakes. When ordering state which gearbox you will be using. For JAP and JAWA engines. REF. 1.



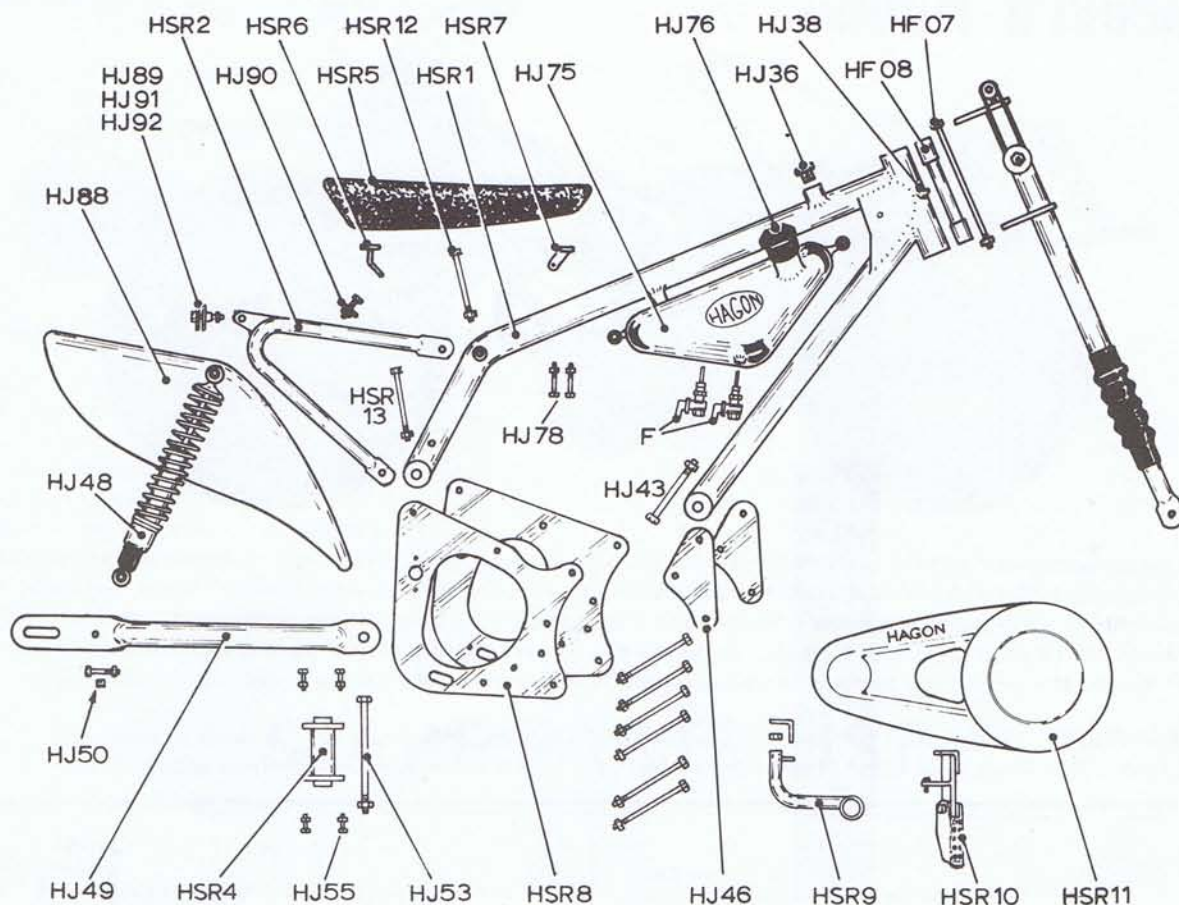
## HAGON SANDRACER KIT (As shown but not assembled)

Comprising — Main diamond frame, Sub-frame, Swinging arm, Pivot, Girling Units, High tensile bolts, Fibreglass rear mudguard, Seat with brackets, Fuel tank complete with taps and fixing bolts, Forks complete with spindle and head bolt, Engine and Gearbox plates (state which gearbox you will be using). For JAP and JAWA engines. REF. 2.

## HAGON SANDRACER FRAME ASSEMBLY.

Comprising — Main diamond frame, Sub-frame, Dural engine plates, Swinging arm, Pivot, Girling units, Nuts and bolts etc. REF. 3.



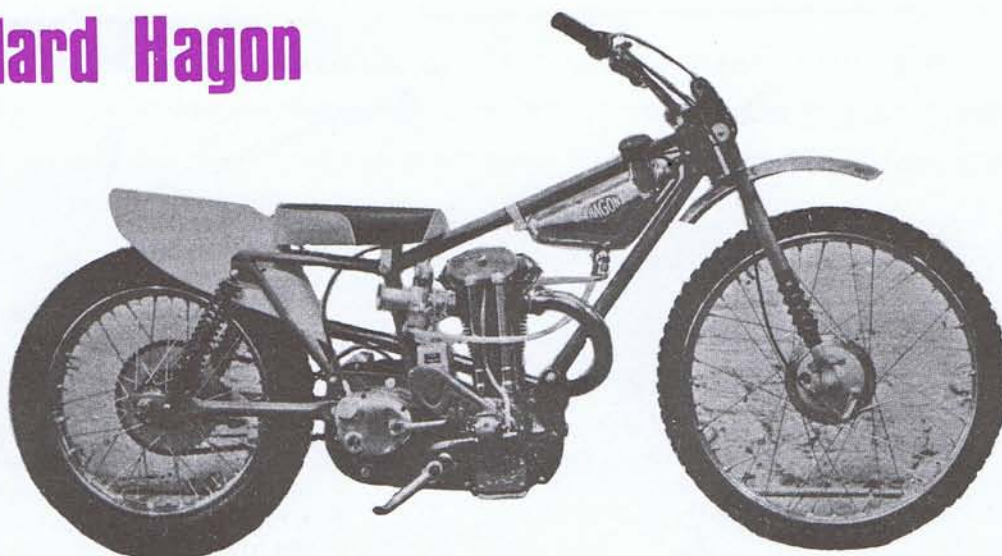


## SANDRACER MK II PARTS LIST

HSR 1	Main Diamond Frame with Filler	1	HJ 78	Tank Fixing Nut & Bolt	2
HJ 36	Frame Oil Tank Filler Plug	1	F	Tank Tap with Filter	2
HJ 38	Steering Head Grease Nipple	1	HJ 80	Tank Tap Washer	2
HSR 13	Frame to Engine Plate Fixing Nut & Bolt (Rear)	1	HSR 11	Chain Guard	1
HSR 2	Sub Frame	1	HSR 14	Chain Guard Fixing Bracket Front	1
HSR 12	Sub Frame Fixing Nut & Bolt (Top)	1	HSR 15	Chain Guard Fixing Bracket Rear	1
HSR 8	Engine Plates, Rear	Pair		Handlebars	1
HJ 46	Engine Plate, Front	2	HSR 5	Seat	1
HJ 43	Front Engine Plate Nut & Bolt	1	HSR 6	Seat Bracket Rear	1
HJ 48	Girling Units	Pair	HSR 7	Seat Bracket Front	1
HJ 49	Swinging Arm	1	HJ 88	Rear Guard	1
HJ 50	Rear Unit Fixing Bolt, Spacer & Nut	2	HJ 89	Rear Guard 3/8" Nut & Bolt	1
HSR 4	Swinging Arm Pivot, with Bushes	1	HJ 90	Rear Guard 1/4" Nut, Bolt & Washer	1
HJ 52	Swinging Arm Bushes (1.012 QD)	2	HJ 91	Rear Guard Spacers	2
HJ 53	Swinging Arm Pivot Nut, Bolt & Washer	1	HJ 92	Rear Guard Washers	2
HJ 55	Swinging Arm Pivot Nuts & Bolts	4	HJ 93A	Front Guard, Alloy	1 or
HSR 10	Footrest assembly complete	1	HJ 93B	Front Guard, Fibreglass	1
HSR 9	Rear Brake Assembly, complete	1	HJ 94	Front Number Plate	1
HJ 75	Fuel Tank with Cap & Bushes	1			
HJ 76	Tank Cap	1			

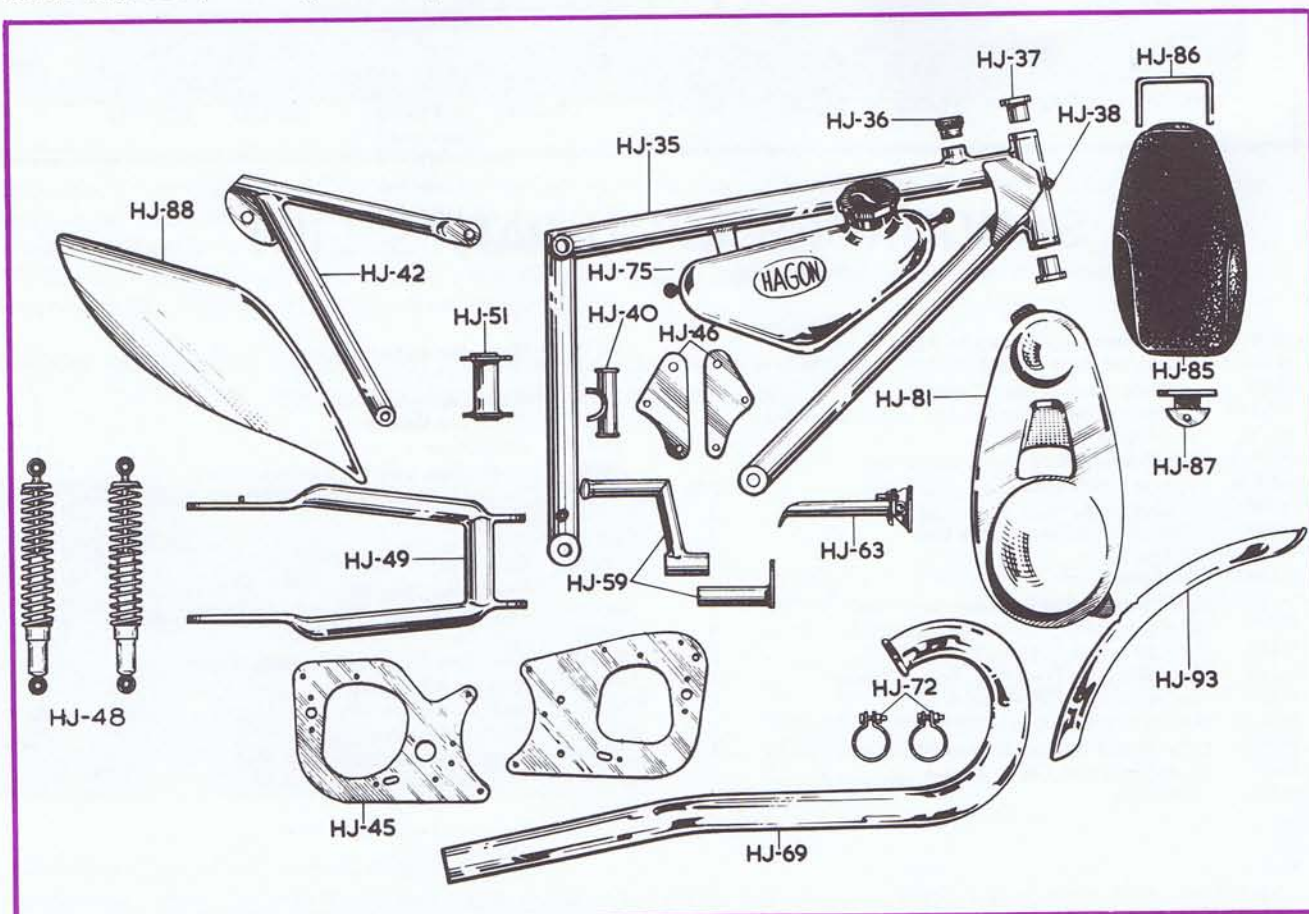


# Standard Hagon



Hagon grass-track machines, have been developed for this very popular sport in our well equipped, modern works in London. Since their introduction in 1956 no changes have been found necessary to the basic design, but many improvements in detail have been made — resulting in a completely functional, clean-cut machine — proven over the years to be the most successful formula. Added to this success is versatility, as parts are available to enable the use of virtually any engine and gearbox combination whilst still retaining the excellent qualities of the original.

**SPECIFICATION:** Weight, with fuel and oil (Standard JAP) 215 lbs. Wheelbase 57", Ground clearance 5", Saddle height 29", Head angle 69°. Chrome 5 pint fuel tank. Oil in main frame. Blue stoved enamel finish.





# Standard Hagon



**STANDARD HAGON COMPLETE** (less engine)

Complete with AMC or Albion gearbox, Chains, Chaincase, Exhaust pipe, Footrests, Cables, etc. To suit JAP engine. It takes only one hour approximately to fit engine etc. and you are ready to race. REF. 1

Special assemblies available to suit most other engines including JAWA, AMC, BSA Goldstar. Optional extras include — Alloy rims, Fibreglass front mudguard, Speedway type air cleaner, Long seat, Dirt shield, Disc rear brake.



**STANDARD HAGON FRAME ASSEMBLY**

Comprising — Main diamond frame, Sub-frame, Swinging arm, Pivot, Loose lug, Head bushes, Girling units, High tensile bolts, Engine and Gearbox plates (state which gearbox you will be using). For JAP engine. REF. 2

Special assemblies available to suit most other engines including JAWA, AMC, BSA Goldstar, TRIUMPH Twin. REF. 3

## SPARE PARTS LIST

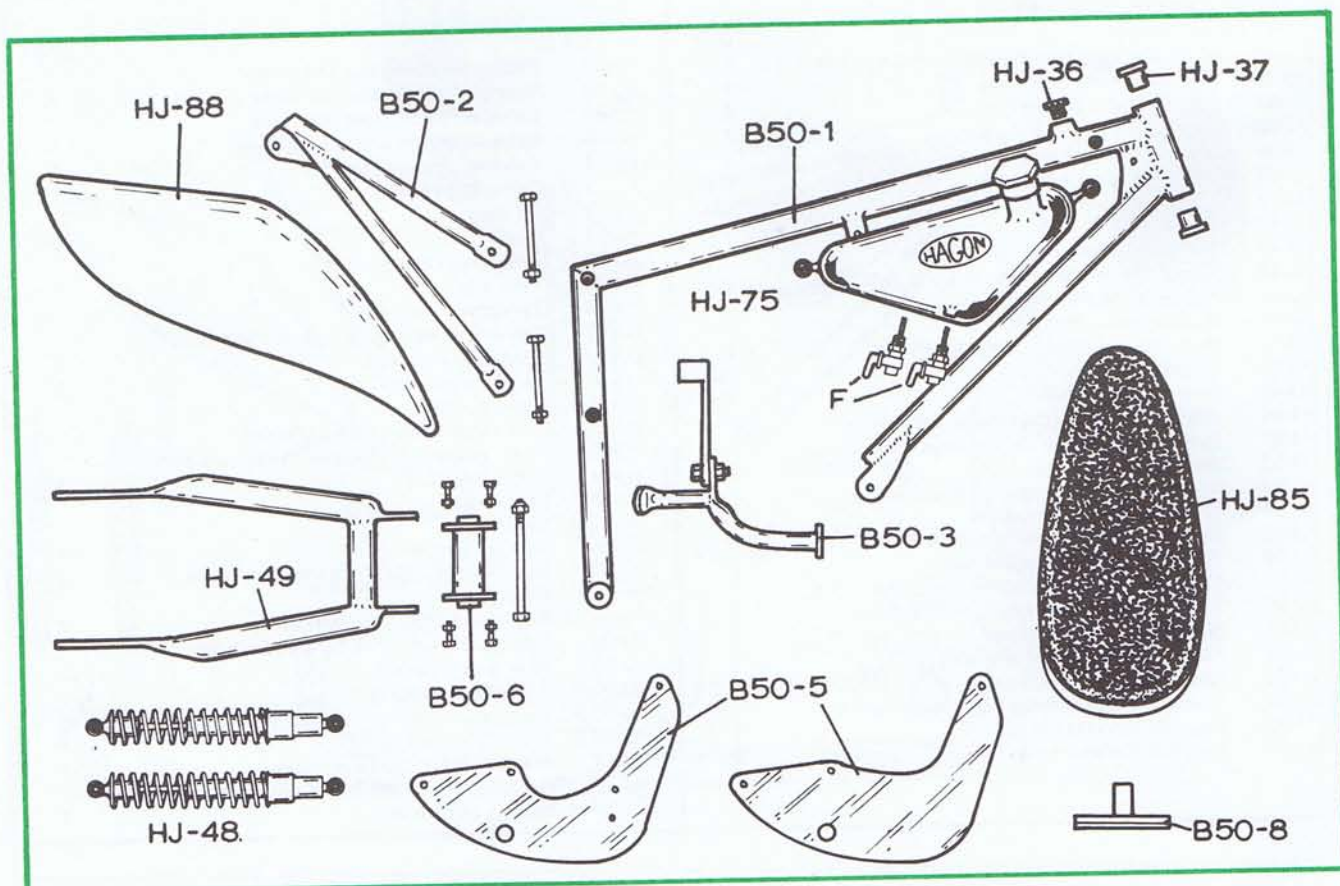
PART No.	QTY	PART No.	QTY
HJ-35 Main diamond frame (with bushes and filler)	1	HJ-67 Chain case fixing nut and washer	1
HJ-36 Frame oil tank filler plug	1	HJ-68 Rear brake assembly, complete	1
HJ-37 Steering head bushes	2	HJ-69 Exhaust Pipe — cross over type	1
HJ-38 Steering head grease nipple	1	HJ-70 Exhaust pipe — bracket front	1
HJ-39 Frame to engine plate nut and bolt (rear)	1	HJ-71 Exhaust pipe bracket rear	1
HJ-40 Diamond loose lug	1	HJ-72 Exhaust pipe clip	2
HJ-41 Loose lug nut and bolt	1	HJ-73 Oil pipe	1
HJ-42 Sub frame	1	HJ-74 Fuel Pipe	2
HJ-43 Sub frame top fixing nut and bolt	1	HJ-75 Tank with cap and bushes	1
HJ-44 Sub frame bottom fixing nut and bolt	1	HJ-76 Tank cap	1
HJ-45 Engine plate, rear (set)		HJ-77 Tank strap and bolt	1
HJ-46 Engine plates, front	2	HJ-78 Tank front mounting lock nut and bolt	1
HJ-47 Front engine plate nut and bolt	1	HJ-79 Tank taps with filter	2
HJ-48 Girling legs, less covers	Pair	HJ-80 Tank tap washers	2
HJ-49 Swinging arm	1	HJ-81 Chain guard	1
HJ-50 Rear units fixing bolt, spacer and nut	2	HJ-82 Chain guard front fixing bracket	1
HJ-51 Swinging arm pivot with bushes	1	HJ-83 Chain guard rear spacer with nut and bolt	1
HJ-52 Swinging arm bushes	2	HJ-84 Handlebars 7/8"	1
HJ-53 Swinging arm pivot nut, bolt and washer	1	HJ-85 A Seat short	
HJ-54 Swinging arm pivot spacers	2	HJ-85 B Seat long	
HJ-55 Swinging arm pivot nuts and bolts (No. 4)	4	HJ-86 Seat bracket, front	1
HJ-58 Gear box fixing, nuts and bolts	2	HJ-87 Seat bracket, rear	1
HJ-59 Footrest, offside, swinging, complete	1	HJ-88 Rear guard	1
HJ-60 Footrest, offside, swinging section only	1	HJ-89 Rear guard 3/8", nut and bolt	2
HJ-61 Footrest, offside, hanger	1	HJ-90 Rear guard 1/4", nut, bolt and washer	1
HJ-62 Footrest, offside, nut and bolt	1	HJ-91 Rear guard spacers	2
HJ-63 Nearside footrest, complete	1	HJ-92 Rear guard washers	2
HJ-64 Nearside footrest hinge bracket only	1	HJ-93 A Front alloy guard	1
HJ-65 Nearside footrest blade	1	HJ-93 B Front fibreglass guard	1
HJ-66 Nearside footrest hinged pivot nut and bolt	1	HJ-94 Front number plate complete	1
		HJ-95 Front number plate less clips black/yellow, green or blue and white	1



# Hagon B50



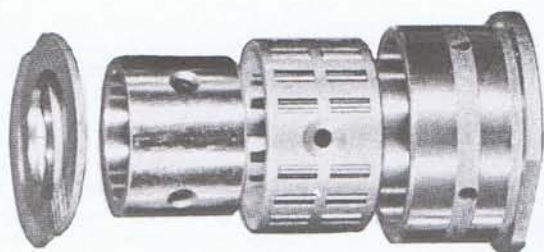
The Hagon B50 will accept wide lug BSA 250 and 500 cc Units. Engine Plates also available for C15 and B25 narrow lug engines. Oil in Main Frame (return system) Blue Stoved Enamel Finish.





# Tuning Parts BSA

## TIMING SIDE NEEDLE ROLLER CONVERSION



Needs no fitting or special tools.  
Fits straight in.

REF. 1.

## HAGON "High Lift" C.15/B.40 Special Cam. REF. 4



Inlet	Opens :- 51° BTDC	STATE WHEN ORDERING DISTRIBUTOR OR LATE TYPE ENGINE
	Closes :- 68° ABDC	
Exhaust	Opens :- 78° BBDC	
	Closes :- 38° ATDC	

### Cam Lift

Inlet :- -367"  
Exhaust :- -340"

### Valve Lift

Inlet :- -380"  
Exhaust :- -357"

## C15/B40 FLYWHEELS

Fitted with Roller Big End Assembly — trued and ready to use.

Exchange Service -

REF. 2.



C15/B40 Alloy Cam Gear  
Saves Weight

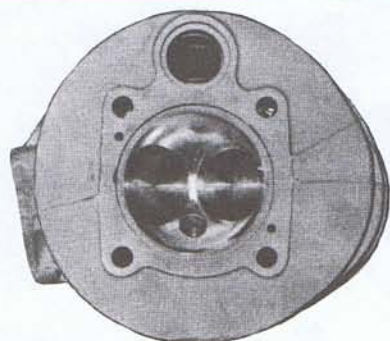
REF. 5.



C15/250 Decoke Set.  
REF. 6.

C15/250 Engine Set.  
REF. 7.

Head gasket only. REF. 8.



The BSA Cylinder Head Conversion consists of opening the inlet port to 1 1/8" fitting a larger inlet valve, recutting the valve seats — New Exhaust Valve — and two bronze valve guides. Sandblast cleaned.

EXCHANGE SERVICE

REF. 3.



Final Drive Sprockets 16T,  
C15/B40 Barracuda/Victor  
1/2" Pitch

REF. 9.

## BARRACUDA PARTS



Inlet Valve	REF. 10.
Exhaust Valve	REF. 11.
Bronze Guides	REF. 12.
Alloy Pushrods	REF. 13.



High Compression Piston for Barracuda  
CR 13/1

REF. 14

10-1 C15 Piston  
Std. 20 30 40 60 o's

REF. 15.



C15/B40  
Finned Alloy Rocker Feed  
REF. 16



# Hagon BSA

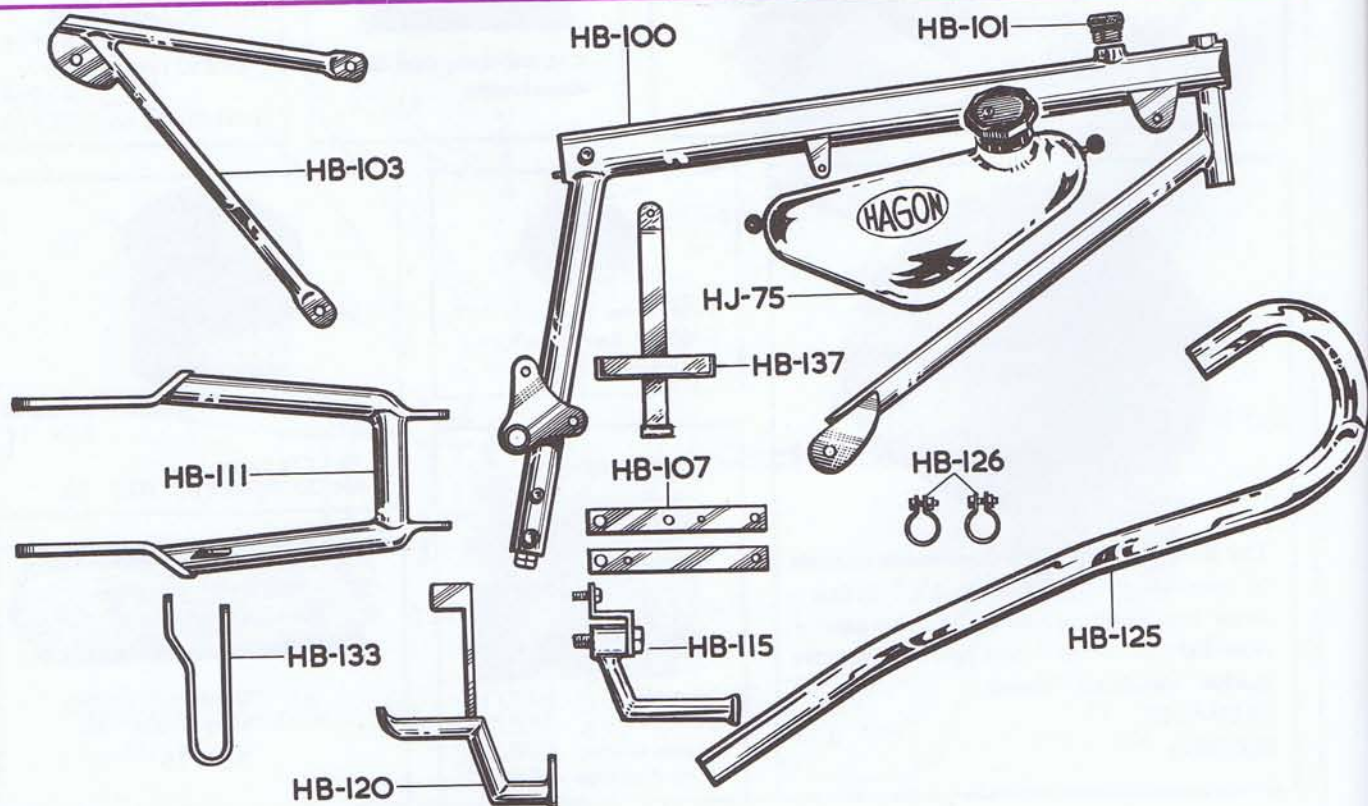
C15. B40. VICTOR & BARRACUDA



## SPECIFICATION

Built from the best quality materials, this machine can be adapted to accommodate most unit construction engines.

Weight (with fuel and oil) 195 lbs. Wheelbase 54", Head angle 69°, Oil in frame return system holding 2½ pints. High tensile 7/8" handlebars. High level cross over exhaust pipe. Interchangeable rear wheel sprockets, Chrome rims. 19" rear wheel, 21/23" front wheel, Standard fitting on all models. Fibreglass rear mudguard valanced for numbers. Right-hand swinging footrest. Accommodation for battery. Blue stoved enamel finish.





# LIST OF PARTS

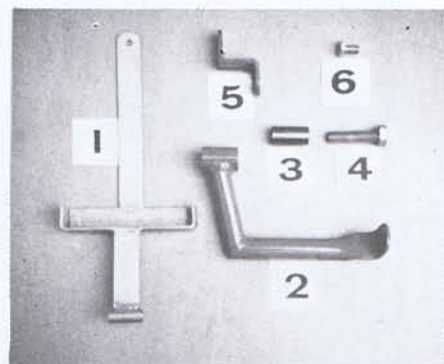
PART No.	QTY		
HB-100	1	Main diamond frame (S/A brushes)	
HB-101	1	Frame oil tank filler plug	
HB-102	1	Frame oil tank drain plug	
HB-103	1	Sub frame	
HB-104	1	Sub frame spacer	
HB-105	1	Sub frame spacer nut and bolt	
HB-106	1	Sub frame top fixing nut and bolt	
HB-107	2	Engine rails	
HB-108	1	Engine rail rear frame bolt	
HB-109	1	Engine rail engine nut and bolt	
HB-110	2	Girling legs — adjustable	
HJ-50	2	Rear units fixing bolts and nuts	
HB-111	1	Swinging arm	
HB-112	2	Swinging arm bushes	
HB-114	1	Swinging arm pivot nut and bolt	
HB-115	1	Footrest offside complete (new type)	
HB-120	1	Footrest nearside with brake pedal complete	
HB-121	1	Footrest nearside	
HB-122	1	Footrest nearside fixing bolt	
HB-123	1	Rear brake pedal	
HB-124	1	Rear brake pedal pivot nut and bolt	
HB-125	1	Exhaust pipe — cross over type	
HB-126	2	Exhaust pipe clips	
HB-127	2	Exhaust pipe brackets	
C 15		Rear chain (124 rollers)	
C 15		Rear brake cable	
C 15		Rear brake cable stop	
HB-128	1	Fuel pipe	
HB-129	1	Oil feed pipe	
HB-130	1	Oil return pipe	
HJ-75	1	Tank with cap (5 pints)	
HJ-76	1	Tank cap	
HJ-79	1	Tank tap with filter	
HJ-80	1	Tank tap washer	
HB-131	1	Tank tap plug	
HB-132	2	Tank fixing lock nuts and bolts	
HB-133	1	Rear chain guide	
HB-134	1	Rear chain guide nut and bolt	
HJ-84	1	Handlebars 7/8" (T 45)	
HJ-85 A	1	Seat (short)	
HJ-85 B	1	Seat (long)	
HB-135	1	Seat bracket, front	
HB-136	1	Seat bracket, rear	
HJ-88	1	Rear guard	
HJ-89	2	Rear guard 3/8", nut and bolt	
HJ-90	1	Rear guard 1/4", nut and bolt	
HJ-91	2	Rear guard spacers	
HJ-92	2	Rear guard washers	
HJ-93 A	1	Front alloy guard	
HJ-93 B	1	Front fibreglass guard	
HB-137	1	Battery carrier (new type)	
HJ-94	1	Front number plate, complete	
HJ-95	1	Front plate less clips black/yellow/green or blue and white	



THE HAGON BSA, Comes absolutely complete, less only the engine. All cables, chain, exhaust pipe etc. C15 type frame will also take B40 Victor and Barracuda. WHEN ORDERING PLEASE STATE WHICH ENGINE YOU WILL BE FITTING.

REF. 8.

THE HAGON BSA FRAME ASSEMBLY, Comprising — Main diamond frame, Sub-frame, Swinging arm, Engine rails, Girling units, Nuts and bolts. REF. 9.



New BSA BATTERY CARRIER fits under seat a must for BARRACUDA for carb. clearance REF. 1.

New C15 Right hand footrest

- 2 Footrest
- 3 Hinge spacer
- 4 Hinge spacer bolt
- 5 Fixing bracket
- 6 Fixing bracket bolt

Footrest Assembly complete

REF. 7.



# Hagon Bultaco



Now available the winning combination of Hagon and Bultaco. Giving you the very best in handling and power complete ready to race machine fitted with the latest Bultaco Track Racing Engine and silenced expansion chamber.

REF. 1.



Hagon Stroker frames are also available for most engine units including AJS, Husqvarna, CZ, Maico, Montesa, Suzuki, Honda, Greeves, etc. etc., shown above is the Hagon Yamaha.



# Borrani Alloy Rims

## SPECIALISED WHEELBUILDING SERVICE

### BORRANI ALLOY RIMS (Depressed)

Undrilled 16", 17", 18" and 19"  
WM3 extra  
Undrilled 20" and 21"  
Undrilled 22" and 23"  
Drilling Extra  
Chrome Steel Rims 16 to 19  
Chrome Steel Rims 21, 22, 23

### PRICE LIST REFERENCE

1
2
3
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11
12
13
14
15
16



### BORRANI RIMS

16" to 23"  
WMO to WM3  
36 and 40 Hole in stock.  
Also WM4 18" 36 or 40 Hole.  
WM5 16" 40 Hole.

REF. 17

### BORRANI MOTOCROSS ALLOY RIMS

18" WM3 36 or 40 Hole  
21" WM1 36 or 40 Hole

REF. 18

### WHEEL BUILDING (Inc. Spokes & Rim)

With Borrani 23" and 22"  
With Borrani Alloy Rim 20" and 21"  
With Borrani Alloy Rim (16", 17", 18" and 19")  
WM3 Rims - Extra

### WHEEL BUILDING (Inc. Spokes)

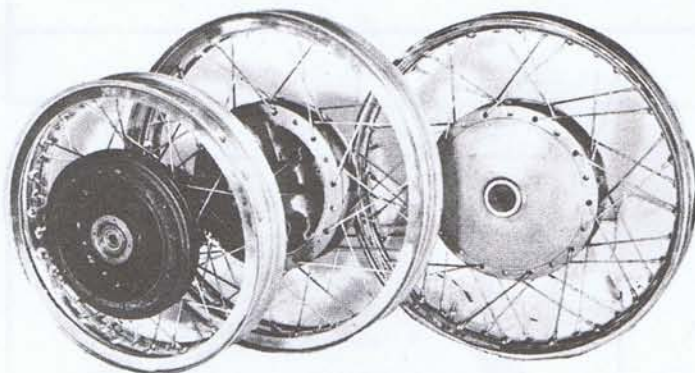
With Steel Chrome 21", 22", 23" Rims  
With Steel Chrome 19", 18", 17", 16" Rims

Wheel Build (Inc. Spokes)  
(Customers own Rim and Hub)  
Brake Drum Skimming  
Postage and Packing per Wheel Boxed (less Tyre)

### RIM WIDTHS

WM5 4"	WM4 3 1/2"	WM3 3"	WM2 2 1/2"	WM1 2 1/4"	WMO 2"
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Please remember to state width when ordering

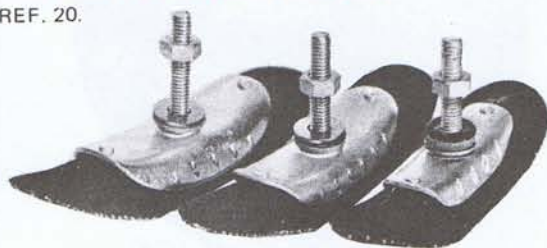


### SPOKE KEY

REF. 19.

### SECURITY BOLTS WM3 WM2 WM1

REF. 20.



### RIM TAPES

20" - 21" REF. 21  
18" - 19" REF. 22

### SANDBLASTING!

WHY NOT HAVE YOUR ALLOY HUB SAND-BLASTED BEFORE WE BUILD YOUR WHEEL YOUR HUB WILL LOOK LIKE NEW



Dunlop  
Wheel  
Balancing  
Weights

### Self-Adhesive

1/2 oz.	(14 grammes)
3/4 oz.	(21 grammes)
1 oz.	(28 grammes)

WE SPECIALIZE IN ALL FORMS OF WHEEL BUILDING AND REPAIRING - FROM ROAD USE TO WORLD RECORDS. YOU CAN RELY ON OUR SERVICE WITH CONFIDENCE.

WHEELBUILDING IS A SPECIALIST JOB - SO DON'T TAKE CHANCES.

BRING YOUR WHEELS TO US!



# Hubs

## HAGON

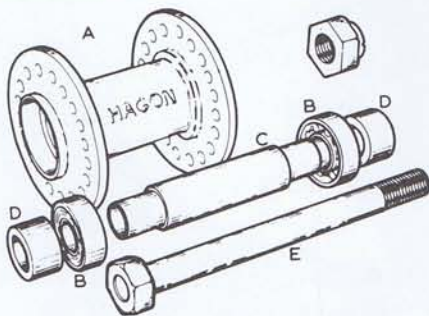
The Hagon Conical Hub is made from Highly Polished Aluminium Alloy and features a powerful progressive action 110 mm brake, sealed bearings for long trouble free service, knock out spindle, cast-in cable stop, 40 spoke holes.

REF. 1.



### HAGON MAGNESIUM FRONT HUB

REF. 2.

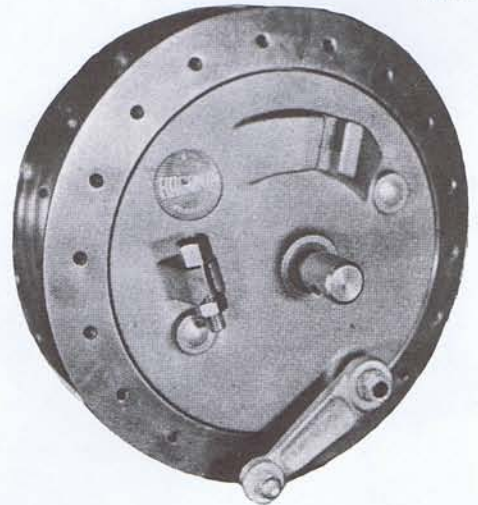


**SPECIFICATION:** The Hagon Magnesium Front Hub is made from die cast Electron 'C' and is heat treated, crack tested, and chromated. Spindle size 12mm. 36 spoke holes. The sealed bearings are 15mm bore. The centre spacer locates inside the bearing, enabling a larger spindle to be fitted by boring out the centre spacer.

- A — Magnesium Hub, with bearings and centre spacer.
  - B — Bearings, double rubber sealed. Needs no lubrication.
  - C — Dural centre spacer, 12mm bore.
  - D — Push-on dural spacers, will not fall out when wheel is removed.
  - E — 12mm Spindle and nut.
- ALSO AVAILABLE WITH 1/2" SPINDLE.

### HAGON FRONT HUB

REF. 3.

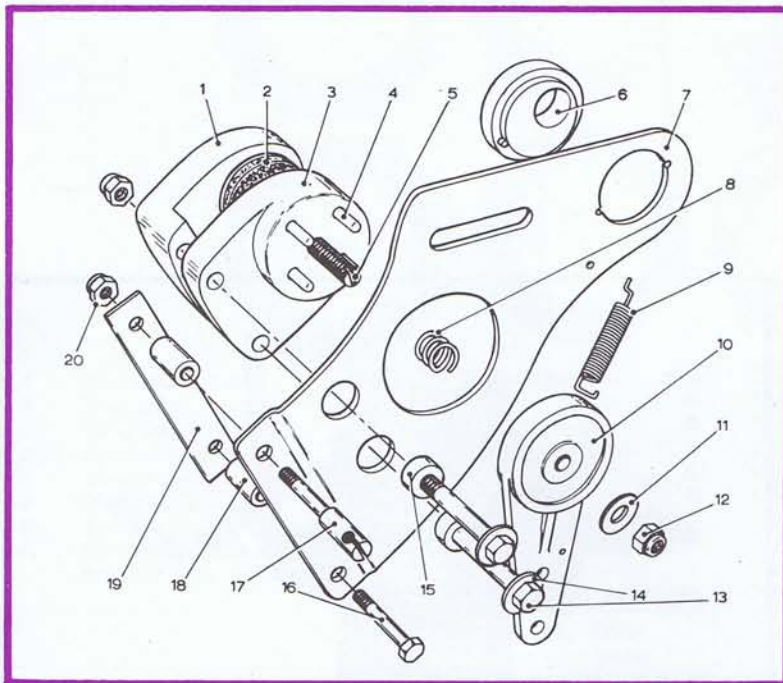


**POWERFUL. 135mm HUB**  
Weight: 4½lb., 36 Hole: 12mm K.O. Spindle  
Ideal for G.T. Sprint, Trials etc.



# Hagon Disc Brake

The new HAGON disc brake assembly incorporating the 'Talon' unit. Simple in design and effective in operation this disc brake is equally suitable for Grass Track, Scrambles, Trials and Sprinting. Easily affixed using Wheel Spindle and Damper fixing point and does not affect wheel removal. The pressure unit 'floats' on the backplate to ensure effective operation. A simple built-in adjustment enables use with sprockets from 46 to 49 and 50 to 52 tooth (5/8" pitch chain). Inbuilt chain guide. Pads available for steel or alloy sprockets. Available for right hand or left hand mounting, specify when ordering.



## HAGON DISC BRAKE

Complete Assembly REF. 21

- |      |   |
|------|---|
| Ref. |   |
| 1    | Body, inner.  |
| 2    | Pad, 2 off  |
| 3    | Body, outer   |
| 4    | Driving pins, 4 off                                     |
| 5    | Tension adjuster stud                                   |
| 6    | Chain wheel adjustment adaptor                          |
| 7    | Backplate (left hand or right hand)                     |
| 8    | Spring  |
| 9    | Spring  |
| 10   | Cam, left hand (Clockwise) or right hand. (Anti-Clock). |
| 11   | Washer  |
| 12   | Locknut   |
| 13   | Bolt, 2 off. With nut                                   |
| 14   | Washer, 2 off.  |
| 15   | Spacer, 2 off   |
| 16   | Bolt  |
| 17   | Special bolt, cable adaptor.                            |
| 18   | Spacer, 2 off.  |
| 19   | Chain guide   |
| 20   | Locknut, 2 off  |

## HAGON MAGNESIUM REAR HUB

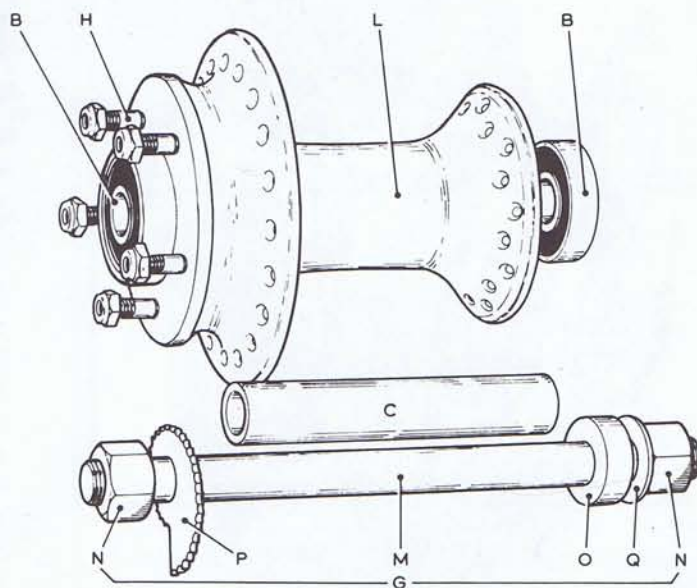
Made from Die Cast Electron  
17mm Spindle  
40 Spoke Holes  
Sealed Bearings

Complete Assembly Ref. 22

- |   |                                  |
|---|----------------------------------|
| B | 17mm bearings                    |
| C | Hardened distance piece          |
| G | 17mm spindle assembly (as shown) |
| H | 5/16" BSF STUDS                  |
| L | Magnesium hub, Complete          |

### SPINDLE ASSEMBLY

- |   |                         |
|---|-------------------------|
| M | Spindle only 17mm Steel |
| N | Alloy 17mm Nuts         |
| O | Alloy Spacer            |
| P | Snail Cam — 17mm        |
| Q | Washers 17mm            |





# Gear Boxes

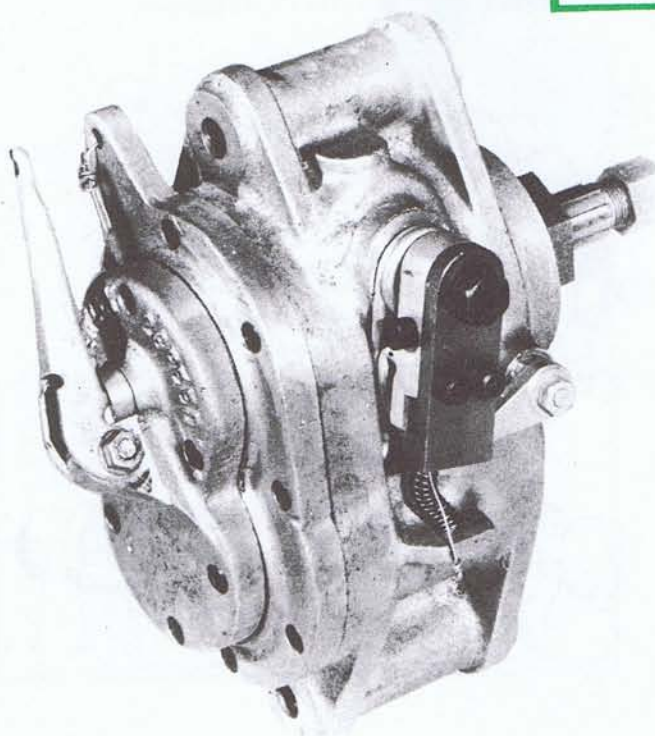
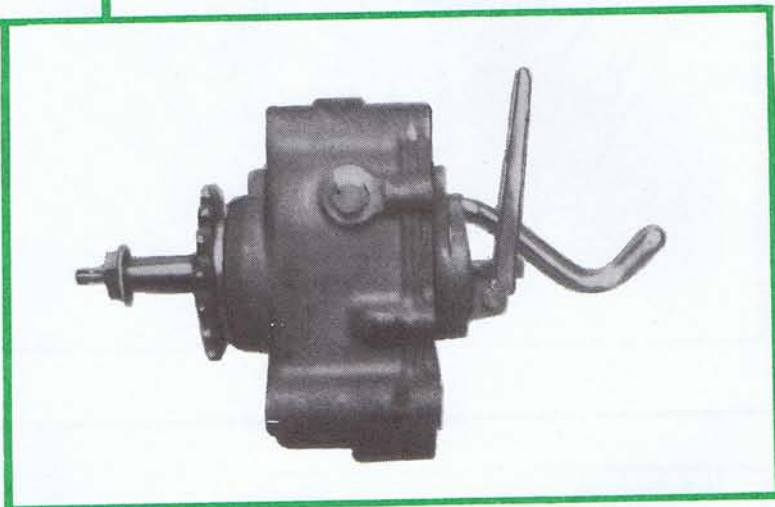


New Racing Type Norton —  
Amc 3 plate clutch, one piece hub  
available with or without shaft location  
shoulder

REF. 1

The JAWA 2 Speed Box  
this lightweight 2 speed Gearbox is  
suitable for all types of Track event.  
It will fit into most Speedway and  
Grass Track Machines.  
Complete with 16T sprocket and  
gearlever.

REF. 2



## Bewley 2-Speed box

The Bewley 2 Speed Gearbox is available in  
two forms, Foot change and Semi-Automatic. The  
Gear Box comes with a 14t or 16t Final drive  
sprocket and a spare set of ratios for different size tracks.  
1.44 for tracks 800 to 1000 metres and 1.22 for tracks  
up to 800 metres.

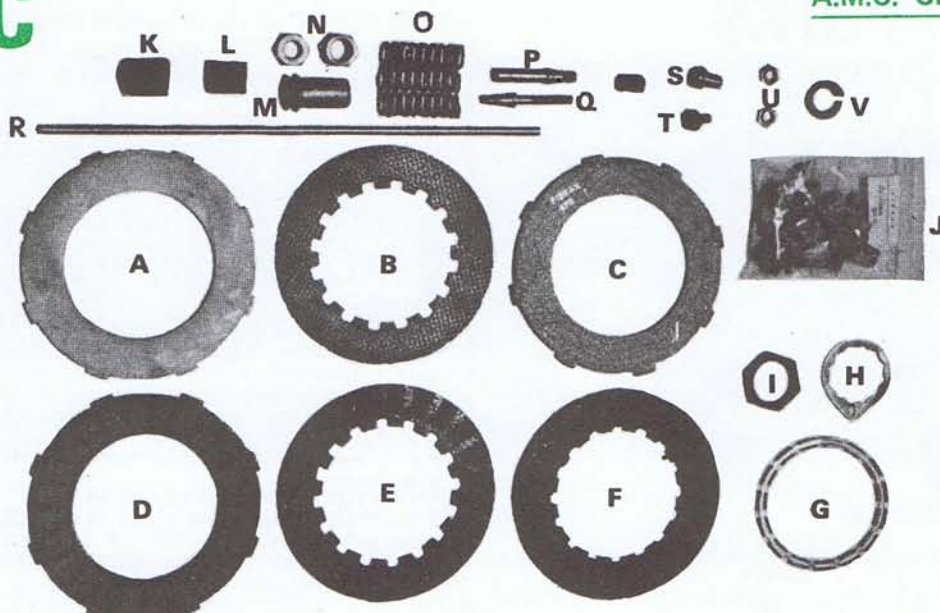
The Gear Ratios can be changed in minutes simply by  
removing the end cover and changing the gears. Foot  
Change 1st = Up, 2nd = Down, Automatic 1st = Up,  
2nd = is then obtained by releasing a lever on the handle-  
bar, this enables the Rider to change gear coming out  
of a bend, while standing on the footrest. This would  
normally be impossible on a standard box.

A.M.C. Clutch will fit Gearbox — without alteration,  
Special adaptor for JAWA clutch also available. Send  
for Technical List.

Automatic Ref. 3

Manual Ref. 4





A	Steel plate dimpled	J	Thick inserts for chain	Q	Clutch stud		NOT SHOWN
B	Steel plate		wheel	R	Clutch. Push rods (7/32")	W	Alloy pressure plate
C	Solid fibre	K	Clutch rubber large	S	Spring adjuster	W1	Steel pressure plate
D	Bonded plate	L	Clutch rubber small	T	Spring Adjuster	X	Clutch hub — Splined
E	Bonded plate	M	Clutch spring cups	S1	Clutch Adjuster	X1	Clutch rollers
F	Solid fibre plate	N	Main shaft nut	U	Clutch stud nuts	Y	Clutch spider
G	Clutch cage	N1	Clutch adjuster lock nut	V	Mainshaft washer	Z	Recon. clutches
H	Sprocket nut lock washer	O	Extra strong springs			AA	Bonded back plate
I	Sprocket nut	P	Clutch stud			AB	Steel back plate

### EXCHANGE SERVICE

Chain Wheel  
Clutch plates  
Bonded back plate

REF. 1.  
REF. 2.  
REF. 3.

### TRANSMISSION

A.M.C. Gearbox/Engine Plate Assembly for Sandracer or Standard Hagon, consisting of:

Engine Plates rear	REF. 4.
Pivot	REF. 5.
Pivot Screws (4 off)	REF. 6.
Gear Box Bolts (2 off)	REF. 7.
Gear Box Spacers (2 off)	REF. 8.
Gear Box Top Tube Spacer	REF. 9.
Gear Box Adjuster Cam	REF. 10.
Clutch Nut Spacer	REF. 11.
Completely Reconditioned Gear Box and Clutch with Gear Lever and 14T or 16T Final Drive Sprocket	REF. 12.
The Complete Assembly as shown better than new but at half the price (Complete)	REF. 13.



YOUR OWN A.M.C. GEARBOX MODIFIED TO FIT, GRASS TRACK OR DRAG BIKE, MILL LUGS ON MAIN CASE, SUPPLY 2 ALLOY SPACERS, TOP FIXING TUBE SPACER, SHORTEN SLEEVE GEAR AND MAIN SHAFT, SUPPLY CLUTCH NUT SPACER.

(EXCHANGE SERVICE)

REF. 14.



### PARTS

14T and 16T	
5/8" x 1/4" Sprockets	REF. 15.
Small Bearing	REF. 16.
Large Bearing	REF. 17.
Inner Gasket	REF. 18.
Outer Gasket	REF. 19.
Gear Lever	REF. 20.
Thick Wire Spring	REF. 21.
Thin Wire Spring	REF. 22.



### DURAL CLUTCH SPRING CUP.

1 1/4" for 3 Plate	REF. 23.
1 1/2" for 4 Plate	REF. 24.

**IMPORTANT!** CABLE END FLOAT IS NOT PUSHROD END FLOAT, CHECK CLUTCH PUSHROD ARM FOR CLEARANCE.



# Hagon Forks



FORKS LESS  
DAMPER  
REF. 5.

**GRASS TRACK VERSION.** Overall length of 28". Distance between crowns 6". Will accept up to 23" wheel. Distance between fork blades 4½". Movement 4". Weight 12¼ lbs. Suspension by rubber with hydraulic damper. Lubrication by grease nipples. Finish, Blue stoved enamel and Cadmium plated fittings. Supplied complete with handlebar clamps, and damper.

**DRAG RACING VERSION.** Basically the same as Grass Track version but with Overall length reduced to 24½", Movement limited to 2", Weight 10½ lbs. Will accept 19" wheel.

Available as follows:

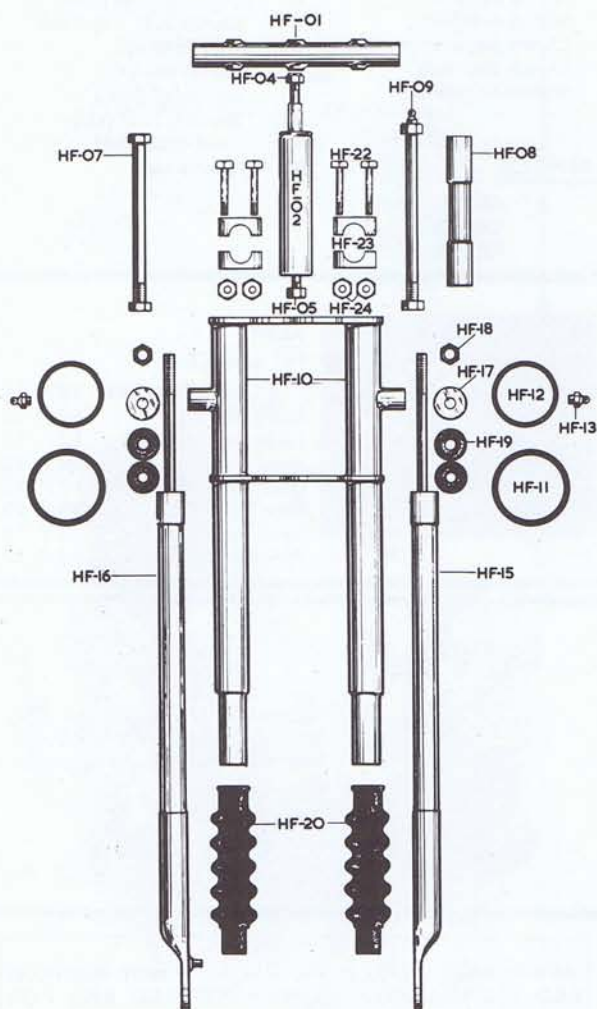
- |   |    |      |
|---|----|------|
| STANDARD with brake anchor pin for Hagon Alloy Hub                      | 1. | REF. |
| STANDARD less brake anchor pin  | 2. |      |
| Both include head bolt, spindle, damper and handlebar clamps.           |    |      |
| DRAGSTER with brake anchor pin for Hagon Alloy Hub                      | 3. |      |
| DRAGSTER less brake anchor pin  | 4. |      |
| Both include head bolt, spindle, damper, and 1¼" chrome split clip-ons. |    |      |

WHEN FITTING FORKS TO FRAME ENSURE THAT SPINDLE BOLT IS TIGHT OTHERWISE HOLE IN FORK CROWN WILL BECOME WORN. IN THE EVENT OF DAMAGE RETURN 'H' PIECE AND BOTH INNER LEGS TO WORKS FOR REPAIR.

The hardened Head Spindle is available in sizes:—

STANDARD = 0.867", + 1 = 0.874", + 2 = 0.881" HF-08

MAINTENANCE. Before lubricating it is essential to remove rubber bands and 'bottom' the forks, then apply 4–6 strokes of grease gun, containing engine oil DO NOT USE GREASE.



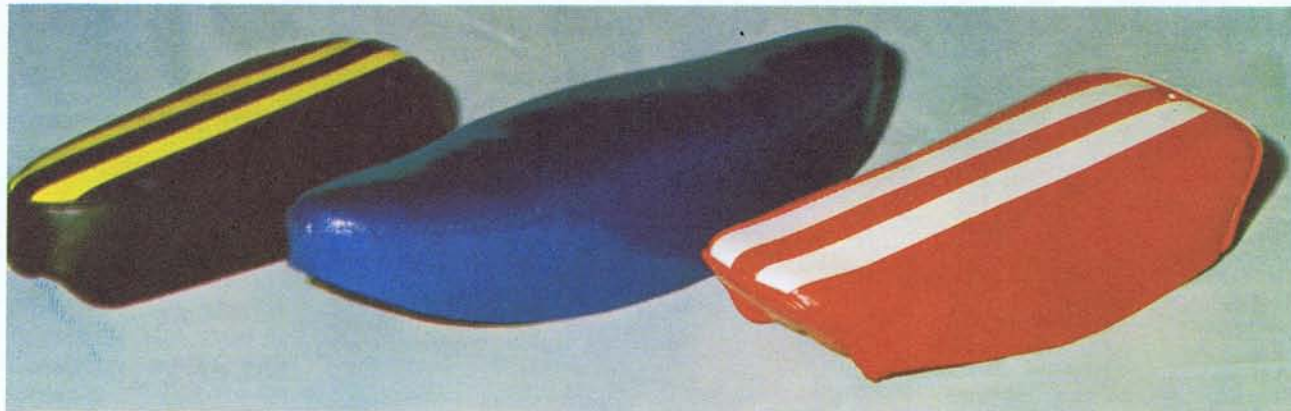
## PARTS LIST

Part No.	Description	Qty.
HF-Q1	Top piece	1
HF-02	Damper unit complete	1
HF-04	Damper top locking nut	1
HF-05	Damper bottom nut	1
HF-07	Head spindle nut and bolt; JAP	1
HF-08	Head spindle drilled; and hardened	1
HF-09	Head spindle nut, bolt and nipple	1
HF-10	Main fork 'H' piece	1
HF-11	Rubber bands outer (Large)	2
HF-12	Rubber bands inner (small)	2
HF-13	Grease nipples	2
HF-15	Inner leg, plain	1
HF-16	Inner leg with brake anchor pin	1
HF-17	Inner leg knurled nut	2
HF-18	Inner leg locking nuts	2
HF-19	Inner leg rubber buffers, top and bottom	4
HF-20	Gaiters	2
HF-22	Bolts	4
HF-23	Clamps	4
HF-24	Locknot	4
HF-25	Dural handlebar clamps non-slip complete set 7/8" or 1"	4

Continued development has led to some dimensional alterations to the fork legs (HF16 and HF15) top piece (HF01) and locknuts (HF18) All other parts remain unchanged the knurled nuts (HF17) are no longer used. The new type fork legs, top piece and locknuts must be fitted as a set.



# Seats

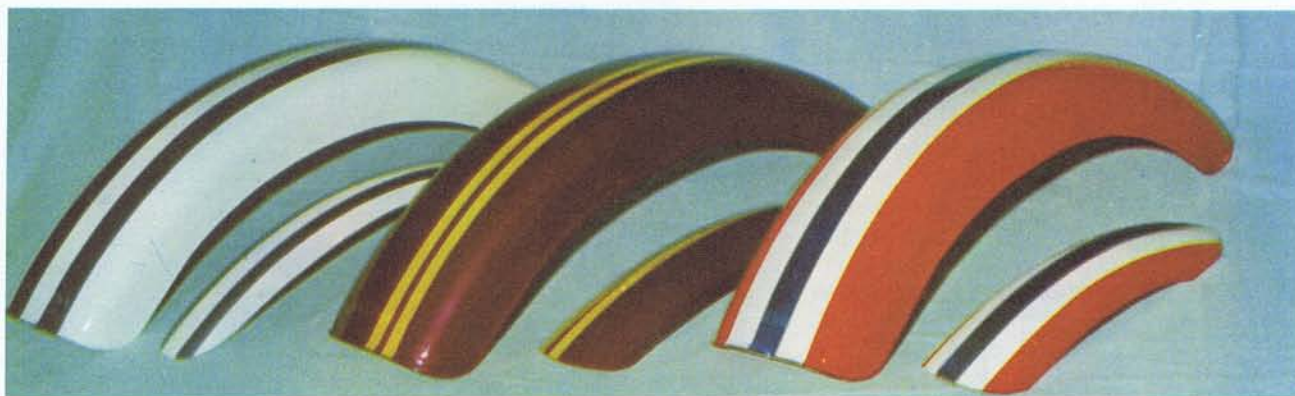


**SHORT SPEEDWAY REF. 1**

**HAGON COLOUR SEATS**  
**LONG SPEEDWAY REF. 2**

**GRASS TRACK REF. 3**

Available in the following colour combinations Blue with White stripe, Black/White, Red/White, Black/Orange, Blue/Orange, Black/Yellow, Also Red, Blue, White or Green Stardust. All have a strong metal base with tough vinyl cover. All come complete with fixing bolts.



**SPEEDWAY MUDGUARDS**

These matching front and rear fibre-glass mudguard sets are available in many colours and designs. To fit all Speedway machines.  
**PER PAIR REF. 4**



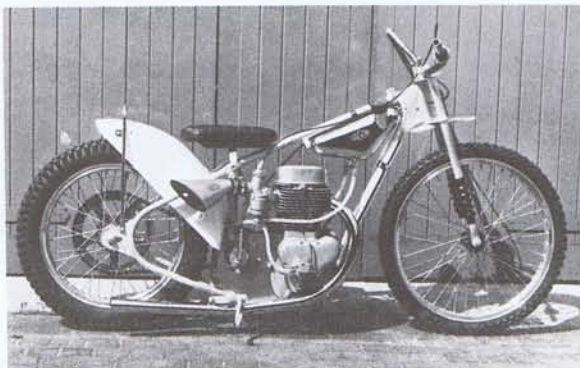
**HAGON COLOUR DIRT EXCLUDER SETS** for Hagon or Jawa Speedway machines. Matching fork and Clutch lever covers in Red White Orange Blue or Yellow. All with contrasting stripes with or without Hagon Decal.  
**REF. 5**



# Hagon Speedway

## SPECIFICATION

Wheel Base 52"  
Ground Clearance 4"  
Weight 180lb  
Saddle Height 28"  
Fuel Capacity 5 pints  
Oil Capacity 1 pints  
Suitable for JAWA and JAP engines.  
All parts are jig built to ensure interchangeability of replacement parts.  
Finished in HAGON blue, hammer grey stove enamel or cadmium plate.  
23" front wheel and 19" rear wheel, chrome steel rims or alloy rims, magnesium hubs.

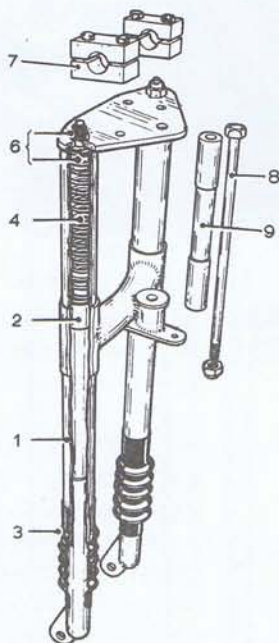


KEEP ON TOP  
AT  
THE HAGON SHOP

## SPEEDWAY FORKS

### SPECIFICATION.

2" movement with internal springs,  
4½" between fork blades.  
Finish — Stoved enamel blue, hammer grey or Cadmium plate. Will fit any make of machine.

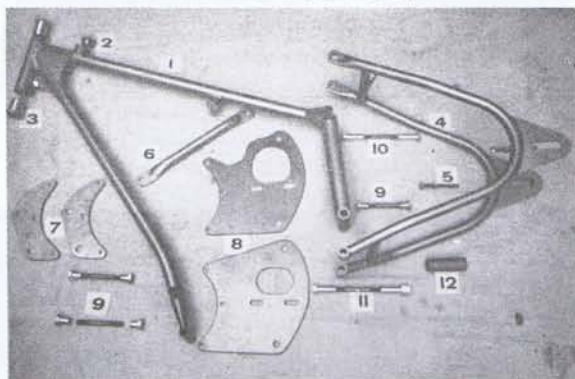


- 1 Fork H piece
- 2 Inner legs
- 3 Gaiters
- 4 Springs
- 6 Spring top retainer and nut
- 7 Handle bar clamps 7/8" or 1"
- 8 Head nut and bolt
- Complete forks
- 9 Hardened head spindle (Extra)  
STD = .867 +1 = .874 +2 = .881

## SPEEDWAY FRAME

### MOST PARTS INTERCHANGEABLE WITH JAWA

- 1 Frame Diamond with oil filler cap and head bushes
- 2 Oil filler cap
- 3 Head bushes HJ37  
We can supply head bushes for JAWA forks
- 4 Rear end with chain adjusters
- 5 Chain adjusters nut and bolt
- 6 Engine stay short-JAWA long-JAP grey only
- 7 Front engine plates JAWA or JAP (pair)
- 8 Rear engine plates JAWA or JAP (pair)  
JAP rear plates state JAWA or ROTRAX counter shaft
- 9 Engine plate short sleeve nut and 4" stud (as photo)  
Also for rear top engine plate bolt
- 10 Seat long sleeve nuts and 4" stud
- 11 Footrest sleeve nuts and 4½" stud  
(1) Long nut (1) Long nut with thick head
- 12 Footrest bolt spacer  
Sleeve nuts  
Sleeve nut studs  
FRAME KIT COMPLETE (AS PHOTO)



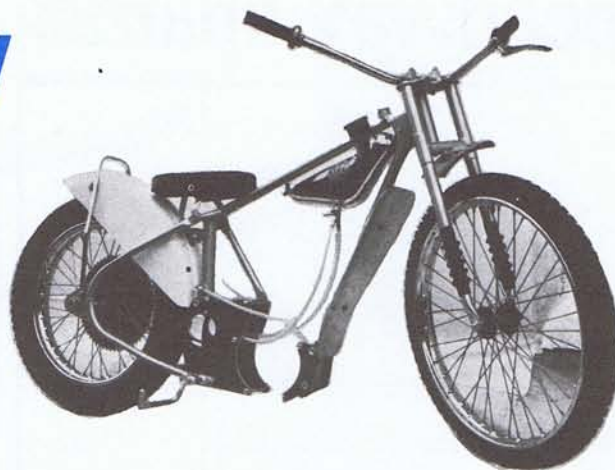
### FRAME AND FORKS





# Hagon Speedway

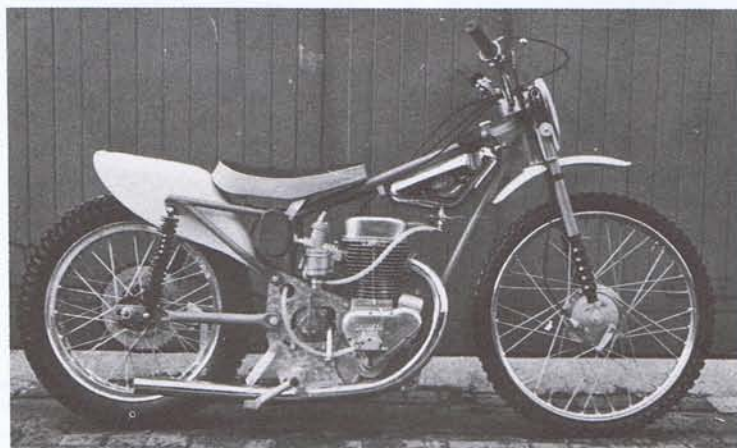
SPEEDWAY MACHINE Complete as shown REF. 1.  
Comprising — Frame and forks, Handlebars  $\frac{7}{8}$ " T45,  
Q/A Twistgrip, Clutch lever, Alloy front guard,  
23" front wheel (Magnesium Hub, Steel rim), 23"  
Barum front tyre and tube, Alloy dirt shield,  
Chrome fuel tank with 2 taps, 3 Oil and fuel pipes,  
Short seat with brackets, Fibreglass rear mudguard,  
Chrome lifting handle, Footrest, 19" Rear wheel  
(Magnesium Hub, Steel rim), Rear spindle assembly,  
Dural sprocket (35T to 62T) 19" Dunlop or Barum  
rear tyre, 19" Barum tube with offset valve.



SPEEDWAY MACHINE Complete as above but also fitted with Chain, Cables, Exhaust Pipe and Clips

REF. 2.

## **NEW** THE SPEEDWAY SPRINGER



THE NEW HAGON SPEEDWAY SPRINGER  
Pictured right is the new HAGON SPEEDWAY  
SPRINGER, fitted with JAWA engine and  
2-speed gearbox. This machine will take JAWA  
or JAP engines and most gearboxes. The com-  
plete machine as shown, less only engine

and gearbox REF. 3.

Frame assembly only REF. 4.

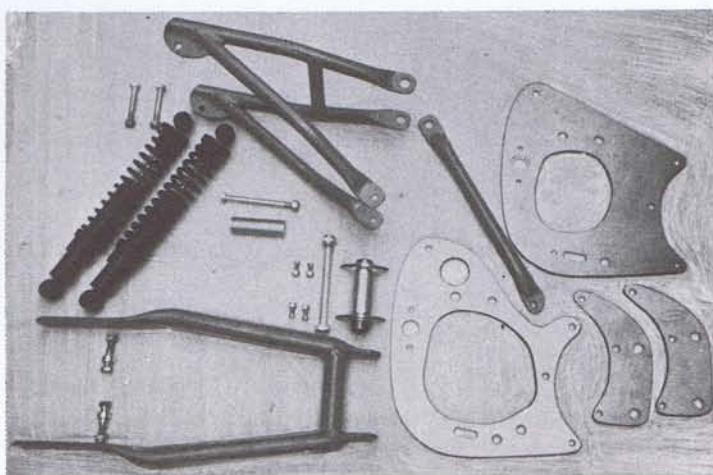
**WHEN ORDERING SPECIFY ENGINE AND  
GEARBOX TO BE USED.**

### SPRINGER CONVERSION KIT

Convert your HAGON or JAWA speedway  
machine to a very competitive Track Racer  
using our conversion kit. Simply bolts  
straight on in place of existing rear end.

**WHEN ORDERING SPECIFY ENGINE AND  
GEARBOX AND WHETHER 19" or 22"  
REAR WHEEL USED.**

REF. 5

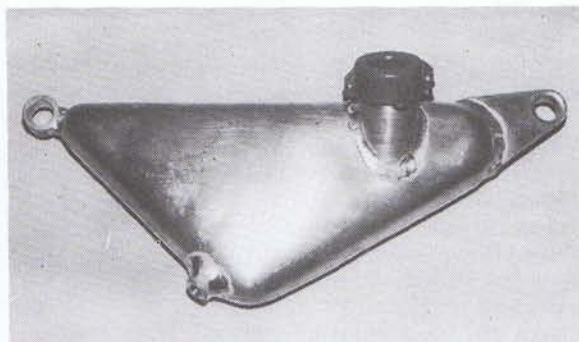




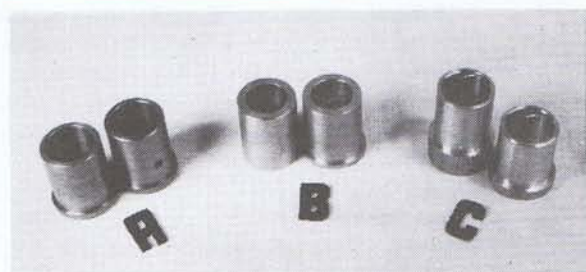
# Speedway spares



CHAINGUARD for Jawa Speedway Bikes  
available in plated steel (REF. 1) or Polished Dural  
(REF. 2) comes complete with rubber mounting.



ALLOY FUEL TANK FOR JAWA SPEEDWAY  
Machines, Screw on Cap, Two Fuel Outlets  
For 10mm JAWA TAPS REF. 3  
For 1/4" ENGLISH TAPS REF. 4



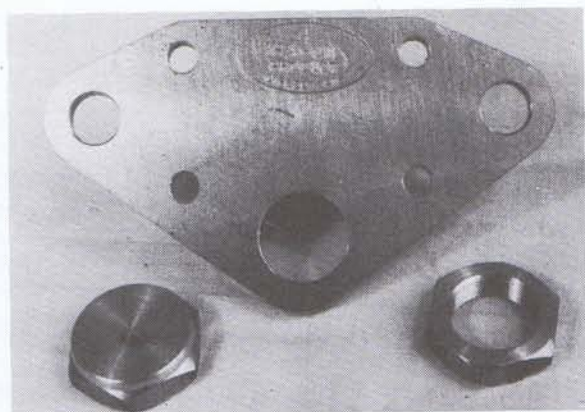
## STEERING HEAD BUSHES

- |    |                       |        |      |
|----|-----------------------|--------|------|
| A. | Jawa Fork Jawa Frame  | REF. 5 | Pair |
| B. | Hagon Fork Jawa Frame | REF. 6 | Pair |
| C. | Jawa Fork Hagon Frame | REF. 7 | Pair |

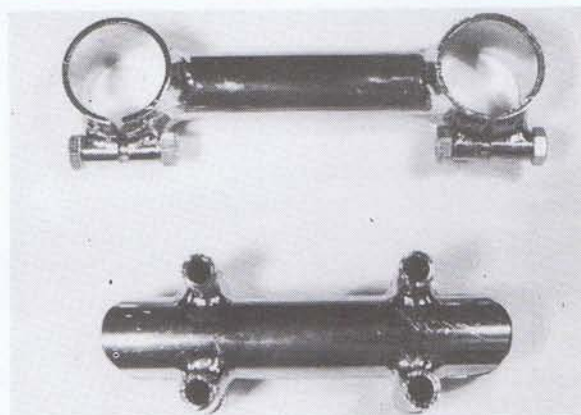


## DURAL HANDLEBARS

- |                            |        |
|----------------------------|--------|
| IVAN MAUGER PATTERN (7/8") | REF. 8 |
| HAGON PATTERN (7/8")       | REF. 9 |



- |                                     |         |
|-------------------------------------|---------|
| DURAL JAWA FORK CROWN               | REF. 10 |
| DURAL STEERING PIVOT NUT (Right)    | REF. 11 |
| DURAL STEERING PIVOT LOCKNUT (Left) | REF. 12 |



- |  |         |
|--|---------|
| JAWA FORK BRACE CHROME PLATED MAKE<br>FORKS VERY RIGID                       | REF. 13 |
| TUBE TYPE HANDLEBAR CLAMPS RECOM-<br>MENDED FOR DURAL BARS. BRIGHT<br>CHROME | REF. 14 |



# GT & Speedway spares



## SPEEDWAY BIKE COVER

Extra strong waterproof  
canvas, two strap fixing  
Yellow, Green, Blue

REF. 1



BRACKET ASSEMBLY with  
BENT STAY to enable fitting of twin  
SS1 float chambers to JAWA

REF. 2



ENGINE PLATES REF. 3  
Fit JAP Engine to JAWA frame



ROTRAX Seat — Black  
3 bolt fixing

REF. 4



## BIKE STANDS

Alloy Stand (ESO)

REF. 5

Steel Stand (JAP)

REF. 6



## HANDLEBARS MADE TO PATTERN

7/8" or 1" Steel or Dural

REF. 7



ROTRAX Countershaft  
ROTRAX Clutch

REF. 8

REF. 9.



JAWA Countershaft  
JAWA Clutch

REF. 10.

REF. 11



Speedway  
Exhaust  
Pipe Bracket  
REF. 12



Chrome  
Lifting  
Handle  
REF. 13



Workshop Engine Stand  
For JAP or JAWA

REF. 14.



New Tube Type  
Speedway Foot Rest  
2 Bolt Fixing

REF. 15.



ROTRAX Fuel Tank Chrome  
4-pint with cap

REF. 16



ROTRAX Chrome  
Oil Tank with Cap

REF. 17



Aircleaner Complete with  
Gauze, Hose and Clips —

REF. 18



Pivoting Safety Footrest. Spring  
loaded Two Bolt Fixing.

REF. 19.



Fibreglass Rear Mudguard  
Colours — white — blue —  
yellow — red.

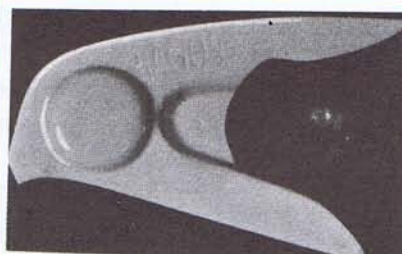
REF. 20



# Accessories



JAP White Fibreglass  
Engine Cover — REF. 1



New Short Fibre Glass Chaincase for  
Speedway or Grass  
White, Blue, Red, Yellow. REF. 2



White Fibreglass Chaincase cutaway  
or full REF. 3



White Fibreglass Dirtshield including  
Fixing Bracket REF. 4



New Full Chaincase  
White Fibreglass REF. 5



Fibre Glass No. Plates REF. 6  
Self Adhesive Backgrounds REF. 7  
All Colours  
Nos. Black or White REF. 8



1 1/4" Split Clip-ons for  
Hagon Forks REF. 9

## RENOLDS CHAIN



1/2" x 5/16" REF. 10  
5/8" x 1/4" REF. 11  
5/8" x 3/8" REF. 12  
Spring Link REF. 13  
Cranked Link REF. 14



MONZA CAPS  
2" REF. 15  
2 1/2" REF. 16



7/8" LEVERS - Ball ended  
Steel REF. 17 Alloy REF. 18



ALLOY MUDGUARDS  
Front 4" REF. 19  
Rear 5" REF. 20



SINGLE PULL  
7/8" Q/A grip  
REF. 21



SINGLE PULL  
1" very Q/A  
grip REF. 22



All alloy superfast twist  
grip 1 1/2" pull with only  
80° twist. REF. 23



SINGLE PULL  
7/8" Nylon grip  
Q/A REF. 24



TWIN PULL  
7/8" Q/A grip  
REF. 25



CONTROL CABLES  
Nylon lined Anti friction.  
Universal fitting  
Front Brake  
Throttle  
Clutch REF. 26



# GT & Speedway spares



Alloy Dirt Shield with 2 clip fixing REF. 1  
Alloy Front Mudguard, walled edge. REF. 2



Chrome  
Dirt Shield  
with Clamps REF. 3



**RUBBER MOUNTED, 5 PINT  
CHROME FUEL TANK.** Complete  
with cap and Rubber bushes both ends REF. 4.  
Rubber Tank cap REF. 5  
Rubber mounting bushes REF. 6  
Steel bush liner REF. 7  
Fuel tap with filter REF. 8  
Fuel tap fibre washer REF. 9



Blue and Grey Long Seat —  
4 stud fixing. REF. 10

## DURAL H/Bar Clamps

Clamps  
 $\frac{7}{8}$  or 1"

REF. 11

Ex. Clips  
All Sizes  
up to 2"

REF. 12

## EXHAUST PIPE CLIPS

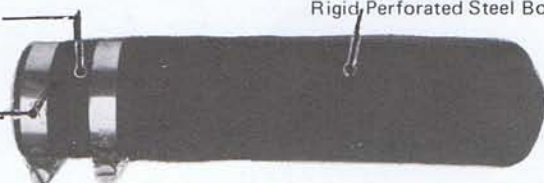


ENGINE PLATES, JAP, Long front  
3 hole pick up REF. 13

Flexible Rubber  
Mounting Tube

Replaceable Foam Sheath Over  
Rigid Perforated Steel Body

Clip Fixing  
To 2"  
Bellmouth



REF. 14

**FOAMY FILTER.** The latest in air filters, perforated 20G steel liner giving 50% free area foam sponge sheath. Fits over 2" bellmouth.

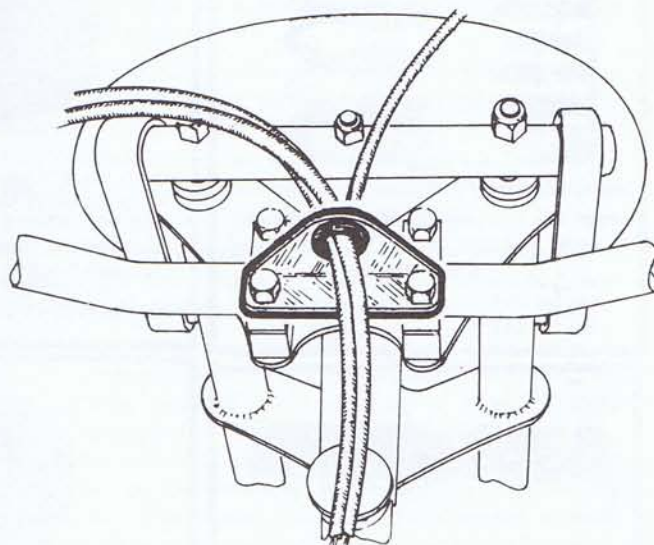
The foam can be washed over and over again without impairing its filtration qualities. It can be cleaned by normal washing and wringing out, by reverse flushing with water or by cleaning with a vacuum. Hot water and detergent will readily remove entrapped particles (and oil, where this has been used to give additional efficiency). It can be wrung dry after washing and will be ready within minutes for continued use.



Universal Chain Guide  
1 1/4" Split clamp  
fixing — REF. 15



**DURAL TIMING DISC.** REF. 16  
7" diameter. A must for serious engine work.

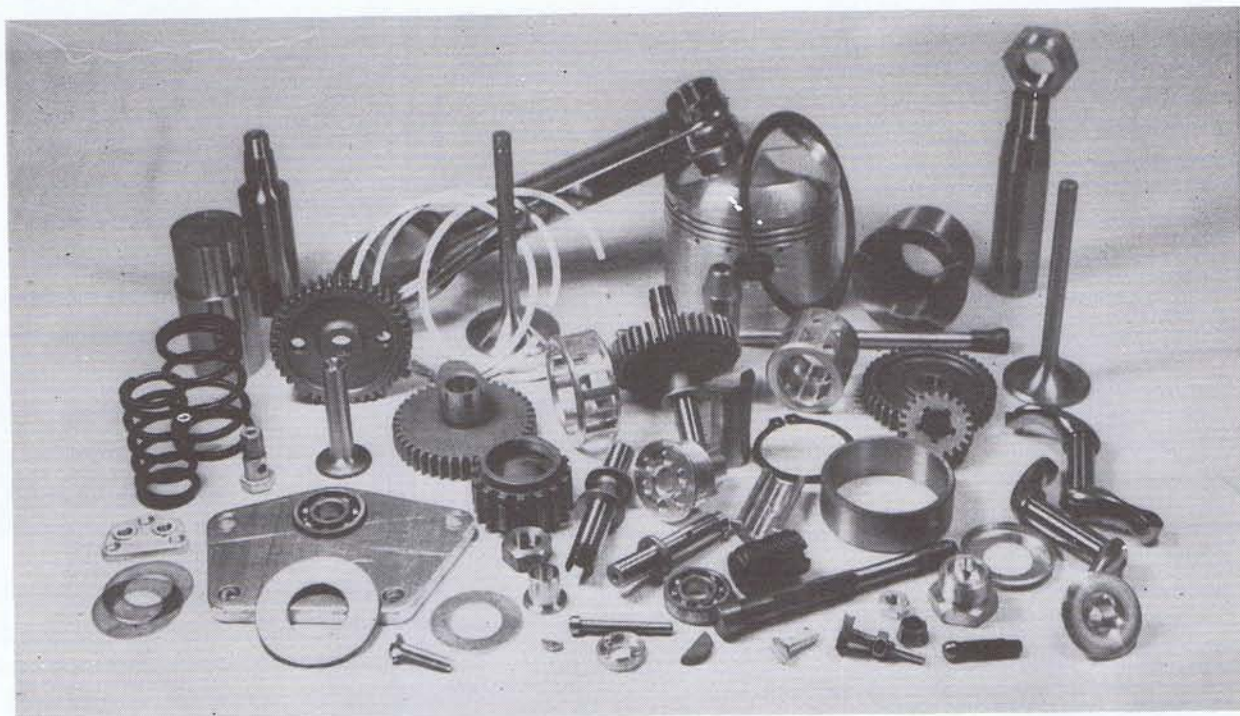


**THE HAGON CABLE TIDY** REF. 17.  
Prevents Breakage and Accident



# Jap and Jawa Parts

We hold large stocks of replacement parts for both JAP and JAWA engines including pistons, Conrods, Big End Bearings, Valves, Valve Guides, Main Bearings, Cams etc. We also stock Clutch and Counter Shaft Parts for JAWA and ROTRAX.



Just some of our replacement JAWA Parts.

## HAGON VALVE SPRINGS

For JAP or JAWA  
AS USED ON OUR 206 m.p.h. JAP



Specially made from Swedish wire—gives longer life and valve control at high r.p.m.

**NON PROGRESSIVELY WOUND**  
2 inners 2 outers

Set for JAP	REF. 1
Set for JAWA	REF. 2



## PISTONS

Mahle MkIII Piston for 500cc JAP.  
Valve cutaways for big cam. Std + 10 + 20 + 40

REF. 3

JAWA Piston (Hepolite) with Rings and Gudgeon Pin. Std. + 10 + 20 + 30

REF. 4

Rings Only

REF. 5



## JAP VALVES & GUIDES

Thin Head Ex. Valve

REF. 6

Inlet Valve

REF. 7

Bronze Valve Guides

REF. 8



ALLOY PUSHRODS for JAP

REF. 9



Needle Roller Conversion for JAP  
Camshaft bushes.

REF. 10

(Old Bushes need boring to suit)



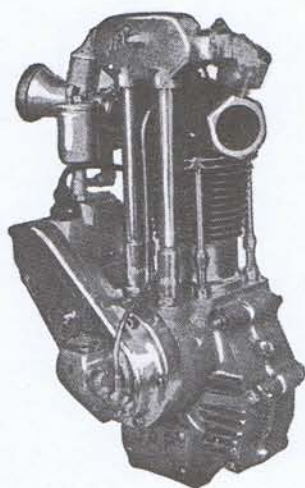
JAWA EXHAUST  
NUT

Available in  
Standard,  
+ 5 + 10 + 15  
REF. 11



# The Mighty JAP

POWER HOUSE 500 cc J.A.P. SPEEDWAY ENGINE (TYPE 4B)



## Tuning Tips. by ALF HAGON

### FITS AND CLEARANCES

MAGNETO IGNITION ADVANCE: 35° before TDC (15 : 1 Comp. ratio).

PISTON CLEARANCE: .006" at bottom of skirt on thrust faces (at right-angles to gudgeon pin).

PISTON RING GAP: .008" (minimum).

TAPPET CLEARANCE: .002" (engine warm).

MAGNETO CONTACT BREAKER POINTS: .012".

END FLOAT OF CON ROD BETWEEN FLYWHEELS: .010" to .020".

END FLOAT OF FLYWHEELS IN CRANKCASE: .010" to .020".

END FLOAT OF CAMWHEEL: .003".

END FLOAT OF CAM LEVERS: .003".

END FLOAT OF ROCKER LEVERS: .002".

STANDARD VALVE TIMING: (Camwheel Part No. 18989)

	opens	closes
Exhaust	65° before BDC.	34° after TDC.
Inlet	44° before TDC.	62° after BDC.

### SPECIAL CAMWHEEL (Part No. 23154)

Exhaust	80° before BDC.	50° after TDC.
Inlet	60° before TDC.	80° after BDC.

Due to increased overlap on this Cam, care must be exercised to ensure that there is sufficient mechanical clearance between valve heads and piston crown.

It is not recommended that this Cam be used if the valve head diameters are greater than standard.

BORE: 80 mm.

STROKE: 99 mm.

CAPACITY: 497 cc.

COMPRESSION RATIO: 15 : 1

WEIGHT: Nett 58lb.; Magneto 4lb.; Carburettor 2lb.

CARBURETTOR: AMAL type 932. 12½" downdraught.

OIL PUMP: PILGRIM Duplex B.1.

SPARKING PLUG: LODGE R49, R50 or R51 (½" reach).

FUEL: METHANOL (Methyl Alcohol CH<sub>3</sub>OH).

OIL: Castor Base ("R") ENGINE SPROCKETS 15T to 26T

A RACING JAP is an incredibly simple engine, and is no trouble to work on.

Both steel and dural con-rods are available for JAP engines. There is no preference.

When reassembling, the con rod should have a side float between the flywheels of .010" minimum. When the flywheels have had several crankpins fitted the tapers 'sink' causing the wheels to 'nip' the con rod and this is remedied by fitting an oversize crankpin, this oversize is in length between tapers (not diameter). There are two oversizes, Part No. 11453/1 ( 1/32" longer between tapers) and 11453/2 ( 1/16" longer between tapers). The flywheel assembly must be accurately trued between centres after assembly and the crankpin nuts properly tightened.

Like the crankpin, bearing housings are also available in oversizes and when refitting, after replacement, thrust washers should be fitted to provide the flywheel assembly with an end-float of 10 to 20 thou.

Both the crankpin and timing-side mainshaft rely entirely upon their tapers for alignment in the flywheels. Make sure that the mating oil-holes align during fitting. The driveside mainshaft is tapered and keyed.

Both valve and ignition timing on JAP engines is critical. Always use a degree timing disc with a dial gauge to note valve movement.

Before timing the cam, pinion backlash MUST be determined and should be 1°. For this purpose Timing Pinions, - 6 Std + 6 + 10 are available.

Reface the valves and valve seats every time the engine is dismantled. This is the secret of the JAP - no power should be lost through bad valve seatings.

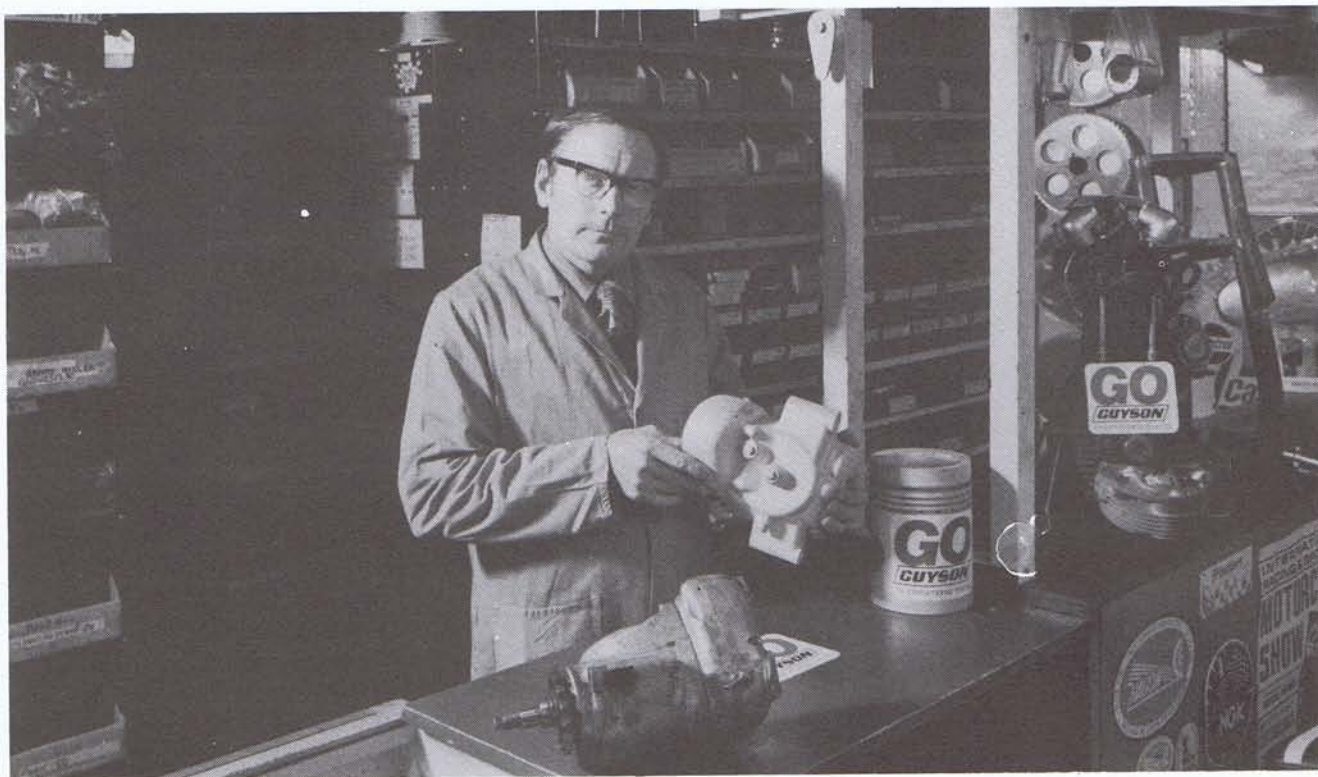
When assembling, always fit the push-rods first without the cover tubes. Then spin the rods to check that they are straight.

### OIL PUMP

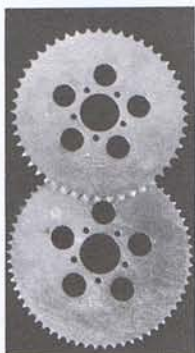
Actually two pumps, one supplies the big-end via the oil tube and this is the one furthest away from the engine, controlled by the front adjuster and it should always be set to give the maximum flow. The inner pump, controlled by the rearward facing adjuster supplies the rocker box this should be adjusted to supply a small quantity (one drop every five seconds when ticking over).



# Bead Blasting



Bead Blasting is a revolutionary new way to clean metal components, the cleanliness and uniformity of finish is far in excess of any other method in use, both oil retention and gas flow are improved by the peening action of the microscopic glass beads used in this process, because the beads are not sharp or irregular in shape. No metal is removed and a satin finish is achieved without the surface being scratched. Perfect for heads, cylinder barrels, crankcases, pistons, rocker boxes, cases, covers etc. Quotations on request.



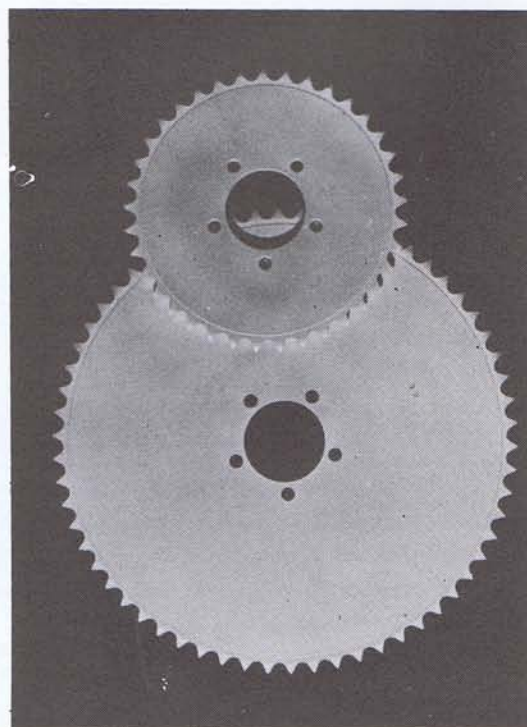
**SPROCKETS.** We stock a wide range of sprockets for JAP, JAWA and Tiger Cub. Sprockets normally held in stock as follows:—

## ENGINE SPROCKETS

to fit JAP and JAWA  
15T to 20T REF. 1.  
21T to 26T REF. 2.

## REAR WHEEL SPROCKETS

SIZE	DURAL	REF
1/2" x 5/16"	56.58.60.62.64.T (CUB)	3
5/8" x 1/4"	35 to 49T	4
5/8" x 1/4"	50 to 62.T	5
5/8" x 1/4"	55 to 62T	6
SIZE	STEEL	REF
1/2" x 5/16"	58.60.62.64.T	7
5/8" x 1/4"	47 to 51.T	8





# Gear Ratio Charts

42T CLUTCH

		REAR WHEEL SPROCKET						
A	B	56	57	58	59	60	61	62
17	14	9.99	10.04	10.23	10.42	10.61	10.8	10.92
18	14	9.30	9.50	9.67	9.83	10.00	10.20	10.32
19	14	8.81	9.00	9.16	9.32	9.47	9.60	9.74
20	14	8.39	8.55	8.70	8.85	9.00	9.14	9.30
21	14	8.00	8.14	8.29	8.43	8.57	8.70	8.82
22	14	7.62	7.77	7.91	8.05	8.18	8.30	8.48
23	14	7.30	7.42	7.57	7.69	7.81	7.95	8.09
17	15	9.23	9.39	9.56	9.71	9.89	10.04	10.22
18	15	8.70	8.87	9.02	9.18	9.33	9.50	9.66
19	15	8.28	8.40	8.55	8.69	8.84	9.00	9.15
20	15	7.85	7.98	8.12	8.26	8.40	8.55	8.72
21	15	7.48	7.60	7.73	7.88	8.00	8.13	8.30
22	15	7.13	7.28	7.40	7.50	7.62	7.77	7.91
23	15	6.82	6.95	7.08	7.20	7.30	7.42	7.58
17	16	8.67	8.80	8.95	9.11	9.26	9.40	9.60
18	16	8.18	8.31	8.46	8.60	8.75	8.89	9.15
19	16	7.73	7.88	8.01	8.15	8.29	8.41	8.58
20	16	7.38	7.49	7.62	7.75	7.90	8.01	8.18
21	16	7.00	7.14	7.26	7.40	7.50	7.62	7.78
22	16	6.70	6.80	6.93	7.05	7.16	7.29	7.42
23	16	6.40	6.51	6.62	6.75	6.87	6.98	7.10

Column A = No of teeth on Engine Sprocket

Column B = No of teeth on Countershaft Sprocket

COMPRESSION RATIO CHART 500 cc.

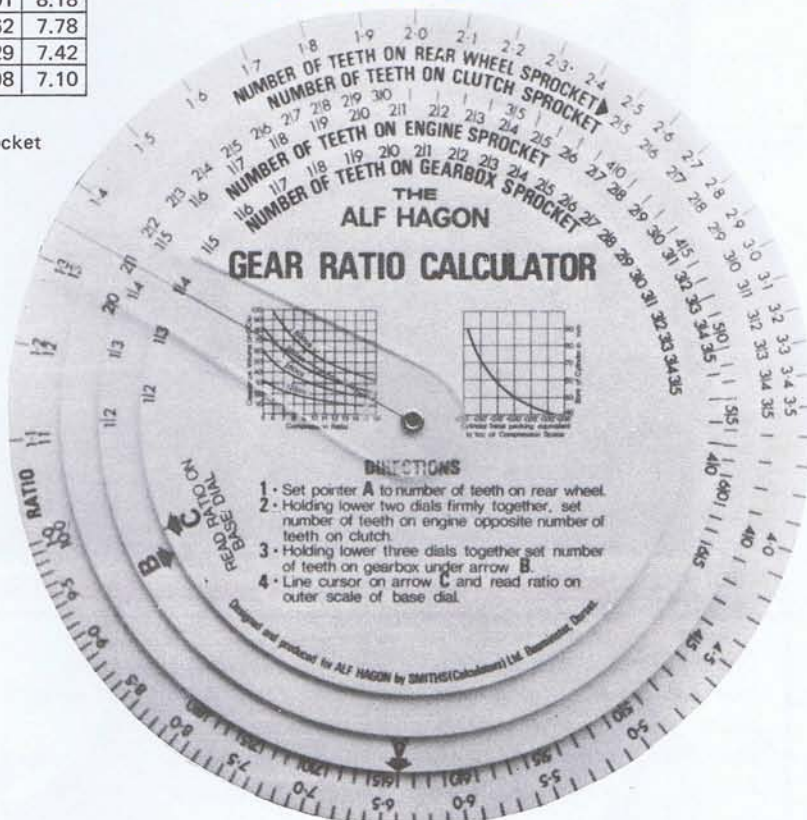
HEAD cc.	RATIO
30	17.6
31	17.1
32	16.6
33	16.1
34	15.7
35	15.3
36	14.9
37	14.5
38	14.1
39	13.8
40	13.5
41	13.2
42	12.9
43	12.6
44	12.3
45	12.1
46	11.8
47	11.6
48	11.4
49	11.2
50	11.0
51	10.8
52	10.6
53	10.4
54	10.2
55	10.0
56	9.9
57	9.8
58	9.6
59	9.4
60	9.3

JAWA SPEEDWAY RATIOS

ENGINE SPROCKET	REAR WHEEL SPROCKET						
	56	57	58	59	60	61	62
15	10.26	10.44	10.63	10.81	10.99	11.18	11.36
16	9.62	9.79	9.96	10.14	10.31	10.48	10.65
17	9.05	9.21	9.38	9.54	9.70	9.86	10.02
18	8.55	8.70	8.85	9.01	9.16	9.31	9.47
19	8.10	8.25	8.40	8.55	8.70	8.84	8.98
20	7.71	7.86	7.98	8.12	8.27	8.42	8.52
21	7.25	7.48	7.60	7.72	7.86	8.00	8.12
22	7.00	7.12	7.25	7.38	7.51	7.64	7.76
23	6.70	6.81	6.94	7.07	7.19	7.32	7.42
24	6.41	6.53	6.64	6.75	6.87	6.98	7.10
25	6.16	6.27	6.38	6.49	6.60	6.71	6.82

ABOVE BASED ON 44T CLUTCH SPROCKET AND 16T COUNTERSHAFT SPROCKET

## THE HAGON CALCULATOR



This GEAR RATIO/RPM/MPH/SPEED calculator is the product of knowledge we have gained over the years and enables rapid conversion of SPROCKET SIZES to GEAR RATIO and of GEAR RATIO to RPM to SPEED.

It also incorporates CUBIC INCH to CUBIC CENTIMETRES and MPH to KPH conversion charts, conversion of head capacity to compression ratio, and effect of alteration to length of barrel on compression ratio, equally suitable for Road racing - Drag - Grass Track - Trials - Scrambles - Karting - Cars etc. Will settle all sorts of arguments in seconds.

REF.



# Clothing



One piece racing leathers made from supple hardwearing hides, double thickness at all contact points, and fully lined. Available in most colours with contrasting stripes on sleeves. State Chest and Height when ordering.

REF. 1

Junior Mechanics Overalls elasticated at ankle and wrist, three pockets, warm and practical in blue, red or orange with contrasting trim.

State Age when ordering.  
For ages 3 to 14 years.

REF. 2

Junior one piece racing leathers. Double thickness contact points, fully lined, black with coloured sleeves.

REF. 3

Coloured Suits made with your own colour scheme, fully padded as shown above.

REF. 4



# Clothing



**EVEROAK MAXMASTER HELMET.**  
for maximum protection. With replaceable  
clear plastic visor. REF. 1



**EVEROAK (Grand Prix) A.C.U.  
B.S.I.** The best you can buy.  
As used by ALF. REF. 2



ACU approved B.S.I. G500  
Knight Bright Red. All Sizes.  
REF. 3



**PEAKS, BLACK and WHITE.** P.V.C.  
Snap-on by press studs. Fits most  
helmets. REF. 4



REF. 5  
**DUCKBILL type Peak**  
Black or White 3 Stud Fitting



**ANTI-MIST GOGGLES.** Crushproof.  
(200 m.p.h. tested). REF. 6  
Spare plain or tinted lenses. REF. 7



**New FLICKER PEAK**  
3 stud fitting REF. 8  
Spare lens REF. 9  
Spare lens covers (Pkt 5) REF. 10



**FULL FACE MASK** complete cover-up  
protection against chippings, cinders, mud.  
Ideal for all forms of rough riding. Cham-  
ois lined, Designed to fit inside or  
outside helmet, and secured by two  
strong elastic straps. Available in all  
colours. REF. 11



**FACE MASK / GOGGLE**  
Combined good protection and  
visibility REF. 12  
Spare Lens Plain or tinted REF. 13



**HAGON T Shirt**  
L, M, S & 28" (Junior) REF. 14



**LEATHER FACE MASK**  
Strong elastic strap, soft lining  
REF. 15



**LEATHER CHIN MASK**  
Soft lining. REF. 16



# Clothing



REF. 1

**WHITE PLASTIC CHINGUARD**  
Complete with press studs and screws.



**THROTTLE GUARDS** Available in all colours.  
REF. 2



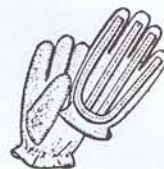
**WRIST STRAPS** REF. 3  
Strong leather, helps give wrist support



Steel Shoe made to order  
Completely Colmonoyed base  
(Send boot) REF. 4



**RACING BODY BELT.** REF. 5  
As used by many star riders.  
Quick fastening, Fully adjustable.  
Colours — Black, Brown or Blue.



**ALF HAGON  
STONE  
STOPPING  
LEATHER  
RACING  
GLOVES**

with protective rubber strips  
Small, medium  
large.

REF. 6.



For Steel Shoes

REF. 7



New Wide Elastic  
Body Belt, Quick fastening. REF. 8



**BODY BELT.** REF. 9  
Canvas belt 9" wide. 4 straps. Sizes  
28" to 38".

## OVERALLS

With pockets,  
elasticated cuffs  
and ankle grips.  
Colours: Blue,  
Black, Green, Red,  
Sizes: S, M, L.  
REF. 10



## HAGON LEATHERS

Two piece, fully  
lined, padded, two  
pockets, brass zips.  
Black only. Sizes:  
S, M, L, Extra  
Large. REF. 11



## RACING LEATHERS

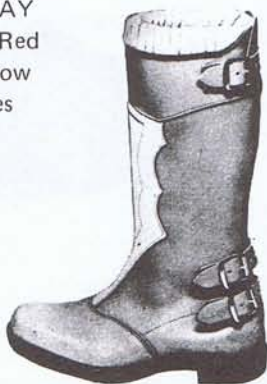
Large — Medium — Small.  
Fully Lined. Brass zips.  
Pocket — reinforced.

(Fantastic Value)  
(Black)

REF. 12



**SPEEDWAY  
BOOTS, Red  
with Yellow  
trim. Sizes  
6 to 11.  
REF. 13**



REF. 14

**MIKE HAILWOOD BOOT** — Unlined,  
ideal for grass, speedway, sprinting, road  
and road racing. Black only.



REF. 15

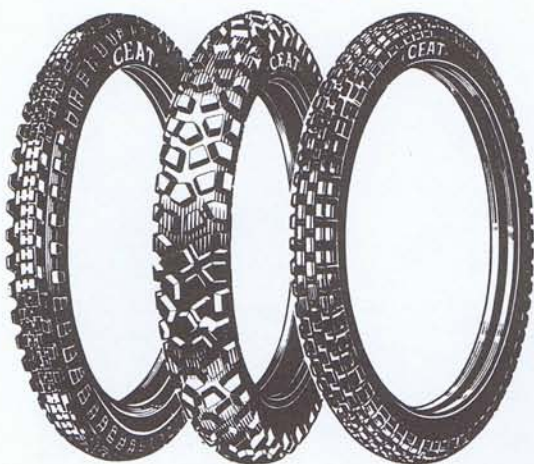
**FRANK BOOT**  
Good quality long leather boots.  
Zip back. Unlined.



# TYRES

TRY US FOR YOUR COMPETITION TYRES, MOST SIZES IN STOCK

## CEAT



Motocross  
CRP 14  
325/350 x 16

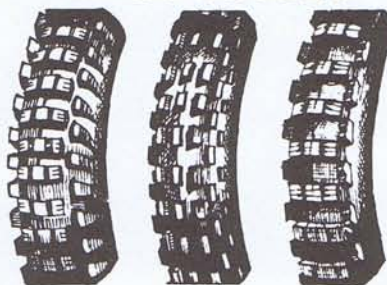
Motocross  
MCR  
250 x 17  
300 x 17  
250 x 19

Motocross  
CRA 12  
250 x 19

**Continental**

300 x 19" GS6 REAR  
350 x 19" GS6 REAR

## Barum



350 x 19  
REAR  
TYRE  
Soft  
rubber  
tread for  
maximum  
grip.

275 x 23  
FRONT  
TYRE  
The most  
popular  
front tyre  
for Speed-  
way or  
Grass.

275 x 22  
REAR TYRE  
for  
Maximum  
traction.

Also  
350 x 18 250 x 21

## DUNLOP



Dunlop Sports K86,  
460 x 18"

SLICK KR76 KR6



**DRAGSTER**

DUNLOP FRONT  
KR6 - 200 x 18  
KR76 - 250 x 18  
REAR TYRE  
Avon Slick 400 x 18

## M & H DRAGSTER SLICKS

4.00 x 18.00 321 Comp.

Above recommended for all un-blown and blown machines of 750 cc upwards.

4.00 x 18.00 322 Comp.

Above recommended for un-blown machines of under 750 cc or blown machines using slider clutch.

4.00 x 18.00 325 Comp. (hard comp.)

Above recommended for smokey runs. — Unsuitable for high powered machines.

## FUEL & OIL

### METHANOL

Sold loose by the gallon. Also in 5 gallon container.

### NITROMETHANE

Sold loose in multiples of 1 pint.

PLEASE BRING YOUR OWN CONTAINERS.

### CASTROL R40

Stocked in 1 quart and 1 gallon cans.

### CASTROL GREASE

1 lb. tins.

### CASTROL TT

1 PT flask



# Junior

HAGON JUNIOR MACHINES are purpose built to meet the young riders needs, and in addition to the models shown we can make any special Junior machine to your specifications. Each one is built with care and perfection. All Hagon Junior machines are fitted with safety chainguards and footrests.



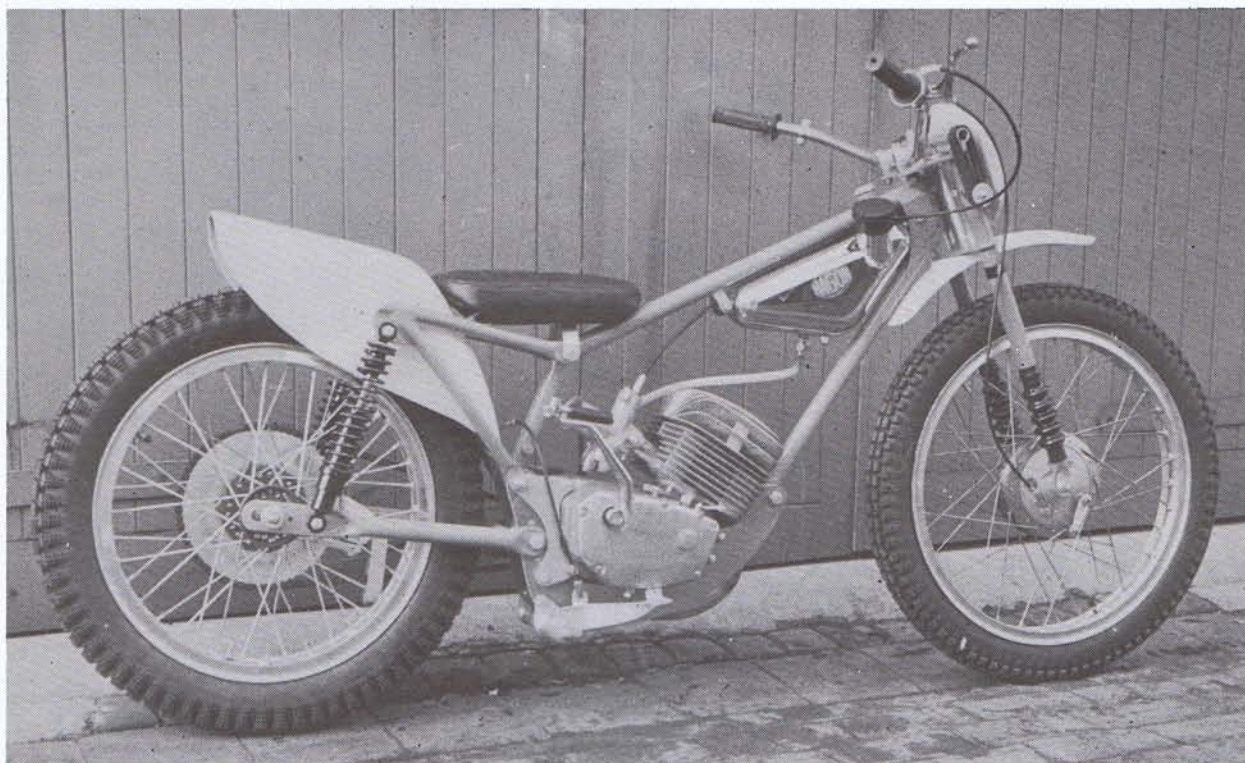
THE HAGON JAWA 90cc is designed for the Younger Grass Track Rider being both lightweight and easy to handle. The five speed transmission provides a low first gear for initially learning to ride together with a high top gear for serious racing. A rotary inlet valve allows port timing for maximum performance while still retaining low speed power and easy starting. Height reducers can be fitted which are simply removed when the rider grows. Complete machine as shown.

REF. 1

As well as machines and parts, we stock a complete range of Junior Clothing:— Boots, steel shoes, leathers, gloves, helmets, etc. See our clothing section.



# Junior



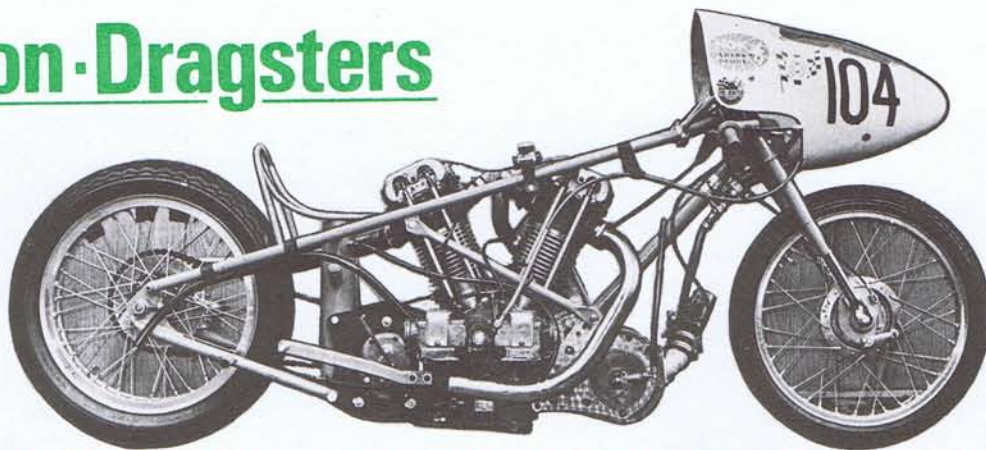
THE HAGON PUCH 125 cc Made for the Intermediate age group this model uses the powerful Puch Competition Engine Unit, with electronic ignition, dykes piston and radial cyl head. Complete Machine as shown. REF. 1

We build successful SCRAMBLERS too. Shown here is Kelvin Tatum's Championship Winning Hagon Honda 90.



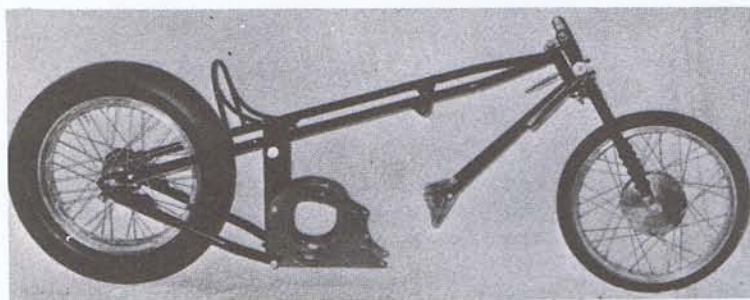


# Hagon·Dragsters



## THE FAMOUS 1260 cc HAGON JAP DRAGSTER, IN ITS 206 m.p.h. TRIM

**HAGON JAP REPLICA.** A Replica frame assembly of the Famous 1260cc HAGON JAP, is now available to suit most engines. **FEATURING** Twin Top Tubes from Steering head to Rear Wheel Spindle ensuring maximum rigidity under acceleration. Oil tank in seat tube — Alloy screwed filler plug — delivery and return oil system with breather and drain plug incorporated — Dural Engine Plates. T45 Tube. High tensile nuts and bolts. Stove enamel finish.



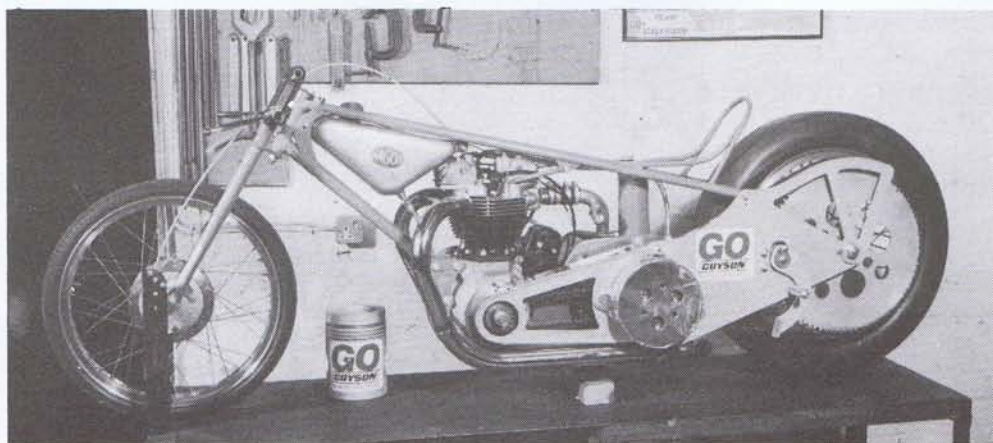
**COMPLETE  
REPLICA FRAME  
ASSEMBLY  
AS SHOWN.  
REF. 1.**



**REPLICA  
FRAME ONLY  
WITHOUT  
TUBE SEAT  
REF. 2.**

### COMPONENTS

Frame Assembly with Tube Seat	REF 3.
Forks with Clip-ons etc.	4.
Front Wheel 18" Alloy Rim	
Campagnolo Hub Brake	5.
Front Wheel 18" Alloy Rim	
Mag Hub — No Brake	6.
Rear Wheel 18" Alloy Rim	
Mag Hub	7.
Rear Wheel Spindle 17mm	
Incorporating Footrest	8.
Alloy Nuts	9.
Spacers (Chain Adjuster)	10.
Spacer (Long)	11.
Caliper Bracket (Drag)	12.
Brake Pedal and Link	13.
Gear Change Pedal & Link	14.



Our new Experimental Dragbike built to test and develop new ideas and techniques.

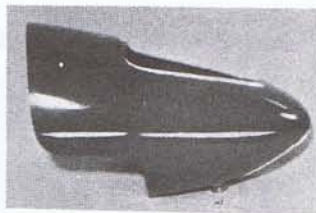


## DRAGSTER PARTS & ACCESSORIES

### HAGON NOSE CONE

The finishing touch to your Drag Bike.  
Can be used as just a Small fairing or  
Fuel tank can be fitted in the nose  
giving correct fuel surge. Weight only  
3 lbs. Colours White/Blue/Yellow/Black  
/Red/Green.

Supplied less fittings and screen REF.1.  
Perspex screen only REF.2.



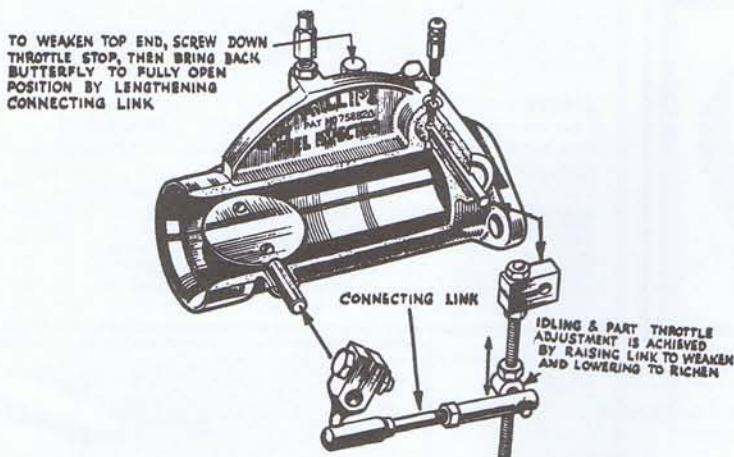
**NOSE CONE TANK**  
5 pint capacity, weight  
1½ lbs. Alloy screwed  
filler, ¼" gas feed and  
vent unions.

REF. 3.



# Wal Phillips Fuel Injection

AS USED ON OUR  
200 M.P.H.  
DRAG BIKE



All units up to 1¼" have flanges with 2" centre stud holes  
Note: -5½ inches clearance between Intake manifold and  
nearest obstruction (usually the frame) is necessary to  
accept injectors up to 1¼ inch bore. 6½ inches for units  
1¾ inch and larger.

1in, 1¼ in, 1½ in, 1¾ in, 1½" ..... REF. 4.

1¾ in, 1½ in, 1½ in. .... REF. 5.

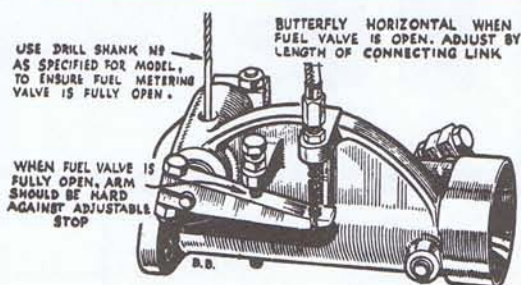
1½ in. .... REF. 6.

2in. to 3in. To order only ..... REF. 7.

Full tuning instructions are supplied with every instrument.

Special dope jets

REF. 8



# Shorrock Supercharger Supercharging

Is the quickest, simplest and surest way of extracting more power  
from small capacity engines.

Atmospheric tuning for performance, that is, by the use of modified  
carburation, cylinder head, camshafts, etc., usually produces increased  
power at the cost of increased engine R.P.M. and loss of bottom  
end power. Shorrock supercharger installations on the other hand  
can produce up to 50% more power without substantially increased  
r.p.m. as well as vastly improved bottom end performance, and  
torque, throughout the normal rev. range.

C.75B for engine capacities ranging from 850 - 1200 cc REF. 9

C.142B for engines from 1200 - 2000 cc. REF. 10.

Pressure Release Valve and Stud REF. 11.

Pulleys (alloy) Twin V section 2" to 5" REF. 12.

Belts (A26 to A39) REF. 13.

Rubber hose 1¾" to 2¼" REF. 14.

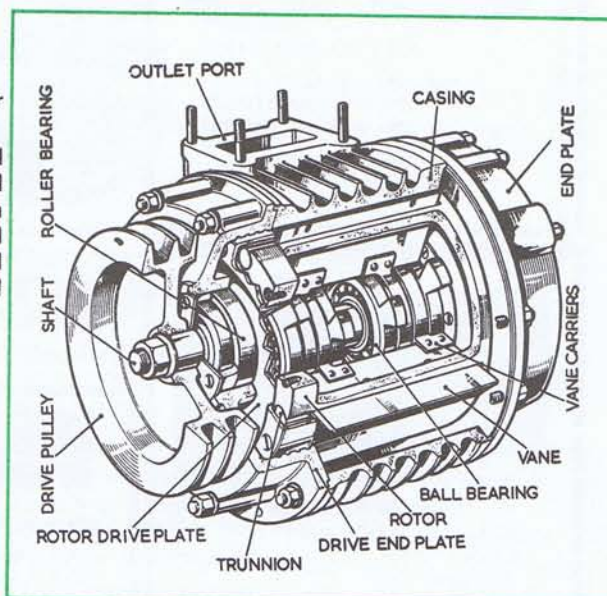
Hose Clips (½" to 2½") REF. 15.

Shorrock's Booklet REF. 16.

Supercharging Cars & Motor cycles

by M. Brierley

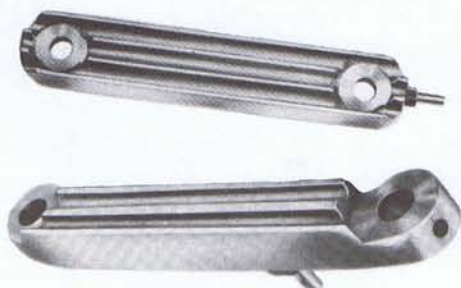
REF. 17.



The rotation of the blower can be reversed by dismantling  
and turning the centre section through 180°.



# Tuning Parts Triumph



ROCKER FEEDS — FINNED POLISHED ALLOY.  
OS14 Triumph oil feed Pre Unit 500cc and 650cc. REF. 1.  
OS19 Triumph 1963 onwards 650cc. REF. 2.



DURAL ROCKER  
BUTTONS (plain &  
offset)  
Both plain and offset  
buttons are one third of  
the weight of the original  
component. The offset  
button gives approximately  
0.020" extra valve lift.  
Plain REF. 3. Offset REF.4.



TRIUMPH 650 cc 11/1 PISTONS  
Std + 10 + 20 + 40 + 60 REF. 6.



MORGO HEAVY DUTY  
Power Equipment

TRIUMPH 750 cc Conversion Kit  
Comprising Heavy Duty Iron  
Cylinder, Pistons and Head Gasket.  
REF. 7

State High (11.1) or Low (9.1)  
Compression when Ordering.



TRIUMPH Main Bearings  
Ball REF. 14.  
Lipped Roller REF. 15.  
Triumph Alloy REF. 17.  
Mag Gear



DURAL PUSH RODS  
TRI 650 & 500 Twin 32B REF. 18.  
BSA 250 RANGE 32L REF. 19.  
BARRACUDA 32E REF. 20.

## Triumph 750 Zip Kit



### SPECIFICATION

Cast from heat treated alloy, is 10lb lighter than standard iron barrel. Pistons are die cast and have 2" cutaway to enable oversize valves to be fitted.  
Standard PISTON size 2.975" + 10+20+40+60 oversize available. Compression ratio 9.5 to 1 or with thin head gasket 10.5 to 1. Pistons are only slightly heavier than STD therefore crankshaft does not need rebalancing. Fits all 650 Triumph engines providing 9 stud head is fitted. REF. 5.



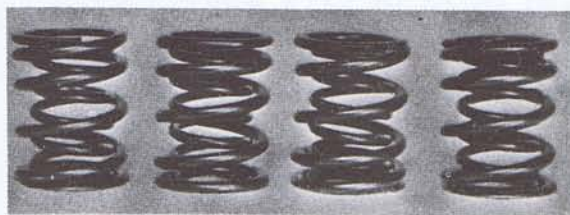
TRIUMPH 650 High Performance Parts.  
Valves, Inlet, REF. 9. Exhaust REF. 10.  
Bronze Guides, Inlet REF. 11.  
Exhaust, REF. 12. Nimonic Exhaust  
Valve. REF. 13.



ALLEN SCREW SETS  
Triumph Twins Primary Case REF. 21.  
Triumph Twins Timing Case REF. 22.  
BSA Primary Case REF. 23.  
BSA C 15 Timing Case. REF. 24.



# Tuning Parts Triumph



All material is special aircraft quality wire which is drawn oversize and then ground to the proper size for winding.

Each spring is then pressure checked for load. Tolerances are held to plus or minus 2½%.

## FREE LENGTH 1 1/16" TYPE "A" SPRING

LENGTH	POUNDS	LENGTH	POUNDS
1 3/8	65	1 1/16	150
1 7/16	80	1 1/8	170
1 1/4	96	1 5/16	190
1 3/16	115	7/8	220
1 1/8	130	1 3/16	COIL BOUND.

## Instructions for installation of type "A" spring

These outer springs are progressively wound and it is very important that they are installed in the correct manner.

Place the end of the large spring with the tight coils next to the cylinder head. The inner spring is placed inside the outer.

**CAUTION:** When valve is on the seat, the overall length of the outer spring should be 1 5/16". The inner spring should be .090 less than the outer. If the length is greater than stated, pack to the recommended length.

In some cases top and bottom valve spring collars will have to be turned to suit springs. O.D. of outer spring 1 1/4".

SET FOR TWINS  
SET FOR SINGLES

REF. 1.  
REF. 2.

## TRIUMPH ALLOY TIMING GEARS



Set of 3 (Unit)  
Set of 4

REF. 4.  
REF. 5.

## TRIUMPH FINNED SUMP PLATE



This finned sump plate is manufactured from high strength alloy, finned for effective cooling. Incorporates a magnetic drain plug.

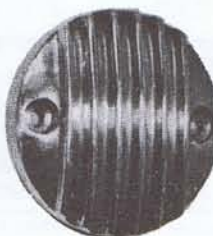
To suit all pre unit construction Triumph models.  
REF. 6.

## 14mm BLANKING OFF PLUGS



These components are used for blanking off the original sparking plug hole when central plugs have been fitted, 3/4" reach. Manufactured from high tensile Dural with broached hole for Allen key to facilitate easy fitting.

REF. 3.



## FINNED ALLOY CONTACT BREAKER COVER

Highly polished alloy casting. For Triumph or BSA. Gives a finishing touch to the machine.  
REF. 7.

# SIDECARS-BLOW & GO

Why not supercharge your grass track outfit? Increase of power up to 50%. Most parts from stock. As a guide to those of you wanting to 'Blow' we suggest the following set-up as a starting point, as the majority of outfits are Triumph powered a Triumph 650 is used for this example — but the same basically applies to most engines.

We recommend a Shorrock CB75 driven by twin V belts at approximately engine speed. Racing type cams HAGON or E 3134 will give good results, the overlap helps keep pistons and exhaust valves cool. Standard 9 stud valve sizes will be adequate, larger exhaust valves may be fitted. Use about 8 to 1 pistons, mag. timing standard 38 to 40, the ignition system must be 100% ok to cope with the higher cylinder pressures. Fit a 'blow off' valve between blower and cylinder head — this prevents damage to the blower in the even of engine backfire when starting. Make the manifold as simple as possible. Slide carburettors CANNOT be used as slides will not shut under suction. We find that Wal Phillips fuel injectors give good results.



# GIRLING Suspension Units

OFFICIAL  
DISTRIBUTORS

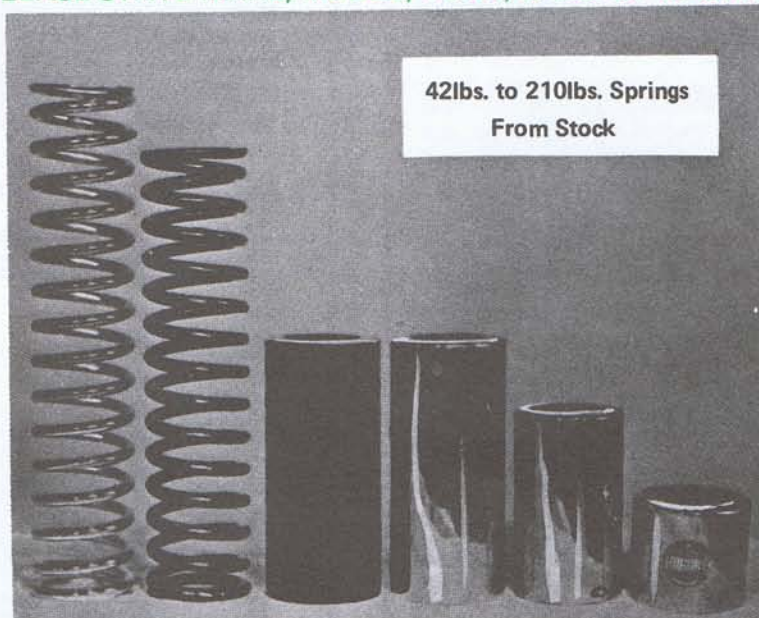
## HIGH PERFORMANCE UNITS AVAILABLE FOR PRACTICALLY EVERY MACHINE

WHETHER ITS FOR ROAD, TRACK, SOLO OR COMB. GIVE US A TRY AND YOU WON'T GO WRONG.

PLEASE STATE MAKE, MODEL, YEAR, & C.C. OF MACHINE



SPECIAL Racing  
TYPE UNITS (Balanced)  
Chrome multi rate  
springs short chrome  
top cover REF. 1.



42lbs. to 210lbs. Springs  
From Stock

Chrome Springs REF. 2. Standard Spring REF. 3. Standard Top Covers REF. 4. Chrome Top Covers REF. 5. Chrome Bottom REF. 6. Short Top Chrome Cover REF. 7.



Standard Girling  
REF. 8.



Alloy Circlips (4) REF. 9.  
Steel Circlips (4) REF. 10.



Steering Damper REF. 11.  
Fully Extended 11 1/2"  
Compressed 7 1/2"



Bushes REF. 12.  
5/16" 3/8" 7/16" 1/2"  
10mm and 12mm  
Length from 3/4" to 1.1/8"



Chrome Adjuster  
Spanner, Fits old and  
new type units.  
REF. 13.



Dampers (adjustable)  
(Sold in pairs)  
10.9 to 15.9  
REF. 14.

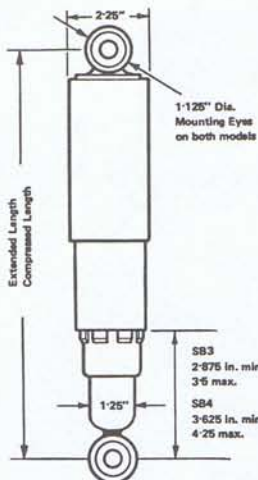
GIRLING SUSPENSION UNITS assembled to your requirements. This service is unique, you tell us your problem, and we will help you to solve it.

All we need is a few basic facts

- |                              |                           |
|------------------------------|---------------------------|
| A Weight of Machine          | B Length of Unit required |
| C On what type of machine    | D Solo or comb.           |
| E Bush Sizes, top and bottom | F Weight of rider/s       |

Units range from 10.9 to 15.9 and we can supply springs from 42lb up to 210lbs—





#### GIRLING SPRING COMPRESSOR

Steel Construction, Chrome Plated, makes fitting Springs safe and easy. REF. 1

# Spring Identification

## Suspension Springs in order of Spring Rate

Part No.	Colour		Rate lb/in.	Length when fitted	Load
	Primary	Secondary			
64539002	White	Yellow	42	9.4	18
9054/64	White	Blue	45	8.0	35
9054/90	Yellow	Blue	54	9.4	20
9054/317	Yellow	Yellow	75	8.0	40
64545134†	Yellow	Yellow	75	8.0	40
9054/66	Yellow	Green	78	9.4	23
9054/103	Yellow	Red	80	7.5	23
9054/59	Yellow	White	88	8.4	28
64545350†	Yellow	Orange	88	8.4	96
9054/94	Green	White	90	9.4	27
64543735†	Green	White	90	9.4	27
9054/58	Green	Yellow	90	8.0	27
64541820*	Green	Orange	60/90	8.1	100
64541788*	Green	Purple	60/90	8.0	60
64543819	Green	Red	96	8.1	27
9054/280	Green	Green	100	8.4	28
64543708†	Green	Green	100	8.4	28
64540470	Yellow	Tan	100	5.7	45
64543553†	Yellow	Tan	100	5.7	45
9054/53	Green	Blue	100	7.4	30
64541530*	Green	Pink	70/100	8.4	70
64543626†	Green	Pink	70/100	8.4	70
64544754	Pink	Purple	110	8.4	45
9054/277	Red	Red	110	8.0	35
9054/88	Red	White	110	9.4	28
64544235†	Red	White	110	9.4	28
64532786	Red	Blue	110	8.4	45
9054/312	Red	Pink	110	7.8	25
64543817	Red	Green	120	7.5	63
64544621†	Red	Yellow	126	8.4	50
64539963	Red	Orange	132	8.0	62
64543764†	Red	Orange	132	8.0	62
64543818	Blue	Yellow	145	8.0	28
64544234†	Blue	Yellow	145	8.0	28
64543820	Blue	Red	150	8.4	73
9054/165	Blue	Green	160	7.0	42
64540471	Blue	White	195	9.4	35
64541653	Blue	Orange	210	8.8	35

\* Twin Rate Spring

† Chrome only

A system of colour markings for the identification of suspension springs has been devised, and it consists of three splashes of paint applied to the coils of the springs in the manner shown in the illustration. The colour combination together with the list, provides the key to the part number and spring rate.

The two outer colours are the same and called the 'primary' colour and the inner is the 'secondary' colour.

All the springs listed are for the adjustable unit (B type).

A range of Chrome springs are available



# Carburettors

When ordering parts for concentric carburettors please state the illustration no. of the item required.



## FLOAT BOWL

1. Standard. 0.125" Feed Hole
2. Standard, with drain plug.
3. Standard, with 'High Flow' slot.
4. Standard, with drain and slot.
5. High Pressure. 0.062" Feed Hole. For use with fuel pump.
6. Special HIGH FLOW, as shown 0.156" Feed Hole
7. Dural needle for item 6.

## AMAL CONCENTRIC CARBURETTORS NO AIR SLIDE OR VENTURI

### 900 SERIES

928 - 28 mm  
930 - 30 mm 2" Flange Centres  
932 - 32 mm

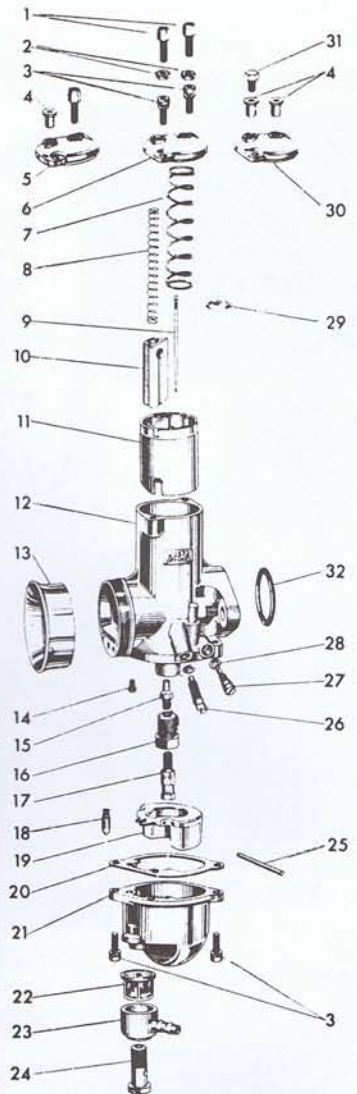
### 1000 SERIES

1034 - 34 mm  
1036 - 36 mm 65mm Flange Centres  
1038 - 38 mm

All available modified for METHANOL.

REF. 8.

REF. 9.



36mm Concentric Carb.  
Conversion for JAWA  
Engine. REF. 11



Screw-on Filtered  
Belmouth. Polished  
Alloy. For 600 Range  
REF. 12  
For 900 Range REF. 13



FLANGE ADAPTOR  
1 3/8" O.D. 2" Centres.  
30mm and 32 mm. REF. 14

## CONCENTRIC CARB. SETTINGS

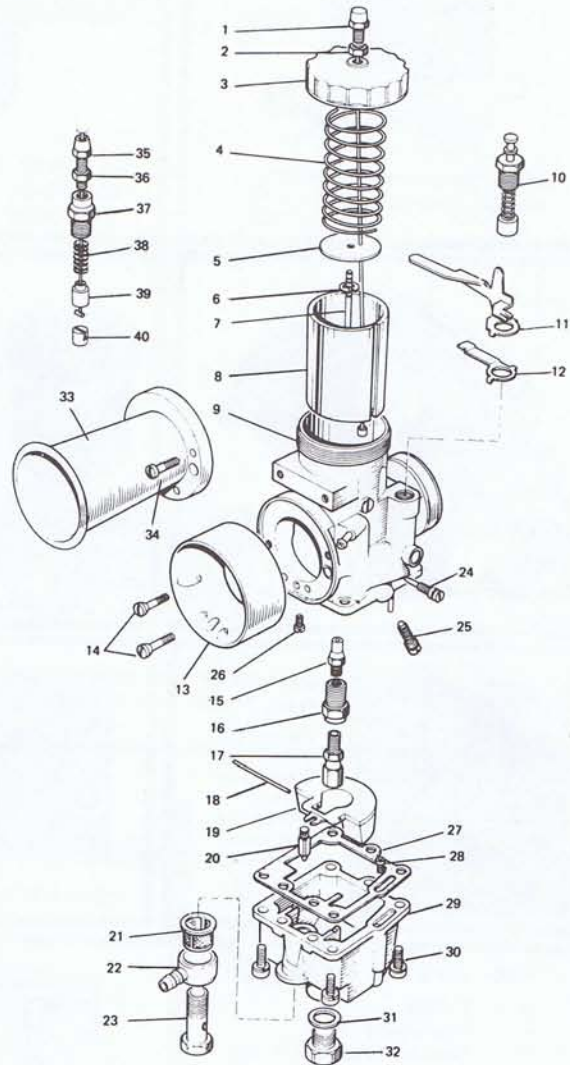
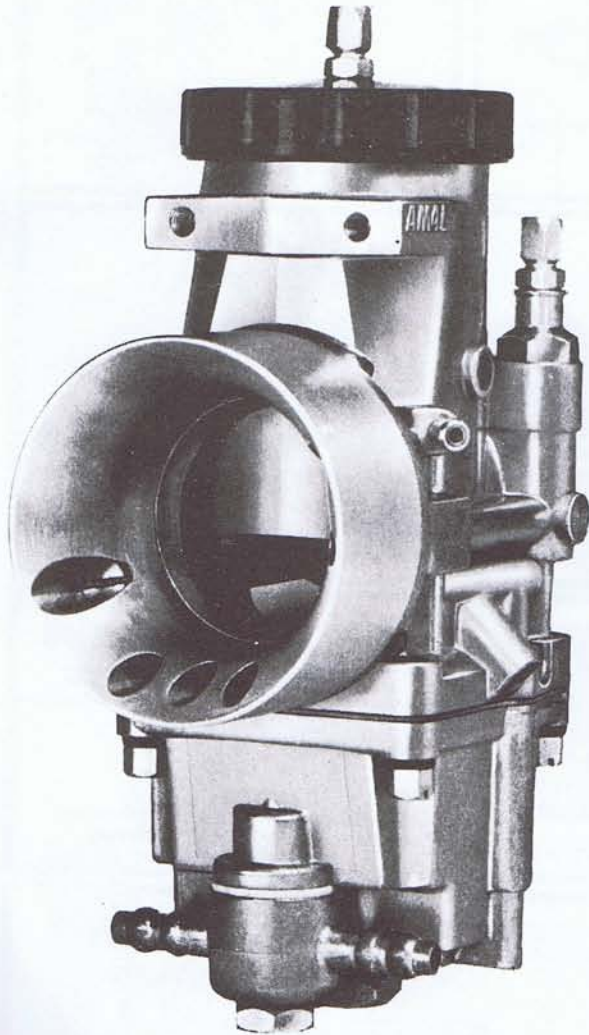
	J E T S			P E T R O L S E T T I N G S	
	MAIN	NEEDLE	PILOT	SLIDES No. 2, 2½, 3, 3½, 4, 4½, 5.	
<b>SETTINGS FOR ROAD USE</b> Most 250 Four Stroke Single Cylinder Machines and 500 Twins with one or two carburettors  Most 350 Four Stroke Single Cylinder Machines and 650 Twins with one or two carburettors  Most 500 Four Stroke Single Cylinder Machines	200	106	25	Always start with slide needle in middle position. Slide cutaway affects pick-up. BLACK SMOKE FROM EXHAUST = TOO RICH REMEDY: Fit slide with more cutaway. SPITTING BACK THROUGH CARB. = TOO WEAK REMEDY: Fit slide with less cutaway.	
<b>SETTING FOR METHANOL</b> Most 250 Four Stroke Single Cylinder Machines and 500 Twins with one or two Carburettors  Most 350 Four Stroke Single Cylinder Machines and 650 Twins with one or two carburettors  Most 500 Four Stroke Single Cylinder Machines	460	120	25	<b>METHANOL SETTINGS</b> Always start with special tapered slide needle (Z) in middle position. Slide cutaway affects pick-up. Eight stroking denotes - TOO RICH REMEDY: Fit slide with more cutaway. Bad pick-up denotes - TOO WEAK REMEDY: Fit slide with less cutaway. On machines with return oil system, fuel in the oil denotes - EITHER - too big a main jet or slide too rich. If the engine overheats - Main or needle jet is too small. Pilot air screw - Screw in Fully - then back off ¼ of a turn. Always use the copper gauze filter in the fuel feed banjo.	
<b>PLEASE NOTE * FOR METHANOL IT IS MOST ESSENTIAL THAT YOU FIT OUR MODIFIED FLOAT CHAMBER BOWL AND FEED BOLT.</b>				<b>LET US SUPPLY AND SET YOUR NEW 900 &amp; 1000 CONCENTRIC</b>	



# Carburettors

## MARK 2 AMAL CONCENTRIC CARBURETTORS

Made from precision aluminium alloy die castings the Mk. 2 Amal Concentric is designed for flexible mounting, to isolate vibration. Available in three body sizes with ten bore diameters from 22 to 40 mm. We can supply carburettors with petrol or alcohol settings.



Please state illustration numbers when ordering spares.

Series		
2600	22, 24 or 26 mm	REF. 1
Series		
290	28, 30, 32 or 34 mm	REF. 2
Series		
2000	36, 38, or 40 mm	REF. 3

Please state Make and Model CC and Fuel Used when ordering.

### FLANGE ADAPTORS

to fit the Mk. 2 Carb. without loss of performance, a flange adaptor of the correct size must be used. State bore size when ordering.

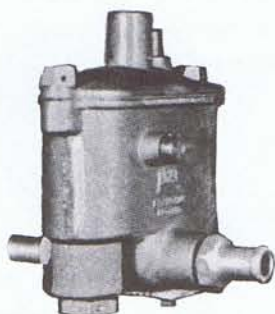
REF. 4

Rubber hosing, Jubilee Clips etc. always in stock.



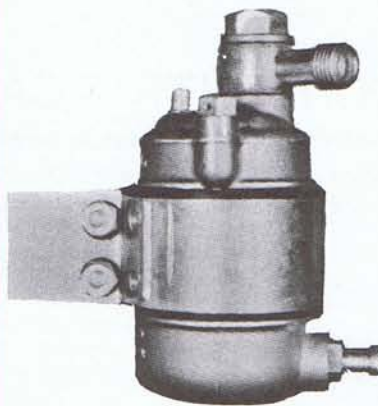


# Carburettors



AMAL Matchbox Remote Float  
Very slim twin outlet

REF. 1.



DELLORTO Remote Float Chamber

SS1 large REF. 2.  
SS2 small REF. 3.



REF. 4

AMAL VELOCITY STACK for  
improved performance on concentric  
carbs. Series 600 or 900 or 1000



ALLOY MANIFOLD SPACER

SIZES: 1", 1 1/16", 1 1/8", 1 3/16", 1 1/4"  
Complete with long studs & nuts. 2"  
centres

REF. 5.



BELL MOUTHS

A. Steel (Chrome)

REF. 6.

B. Alloy

REF. 7.

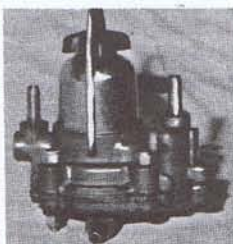
C. Short Alloy for Air Filter

REF. 8.



MANIFOLD

For fitting big carbs on small heads  
or small carbs on big heads. 65mm  
to 2" Stud centres. 32mm bore. REF. 9.



DELLORTO  
FUEL PUMP

Vacuum Oper-  
ated from Crankcase —  
all that is  
needed is a  
pipe from  
Crankcase  
to Pump.  
REF. 10.



CONCENTRIC GASKET SET REF. 11.

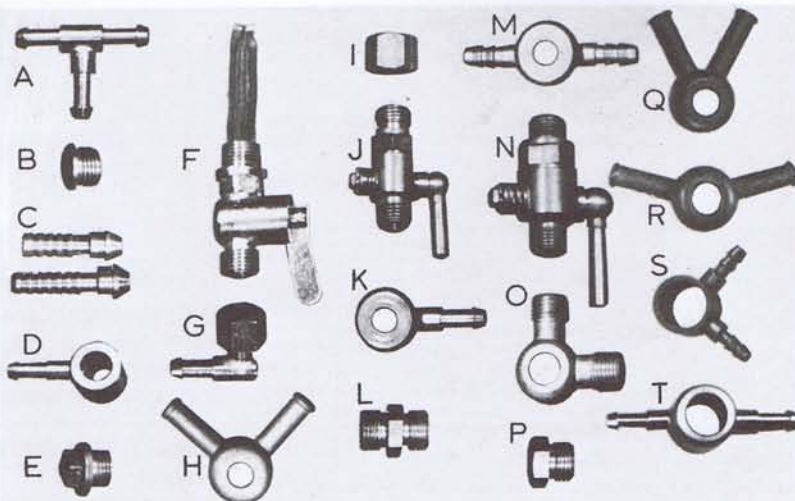


FUEL LINE FILTER

Essential for small engines, prevent un-  
necessary jet blockages. Fits straight  
into fuel line, adjustable angle. REF. 12.

## FUEL TAPS AND CONNECTORS

- A T Piece
- B Pipe Union
- C Ferrules, Brass and Alloy.
- D Banjo.
- E Plug.
- F Tap
- G 90° Connector
- H Twin Feed 90°
- I Nut, Brass or Alloy
- J Tap
- K Single Feed
- L Double End Union
- M Twin Feed 180°
- N Tap
- O Twin Feed 90°, screwed
- P Male nut.
- Q Twin Feed 60°
- R Twin Feed 150°
- S Twin Feed 90° DELLORTO
- T Twin Feed 180° DELLORTO





# Racing Plugs



We hold a wide range of racing, sports and 'warm-up' plugs by NGK, LODGE and CHAMPION.



Vibration Proof 6V. Battery. Guaranteed REF. 1



6V Sports Coil. Oil filled or Standard REF. 2



High Tension Lead REF. 3  
Black or White P.V.C.



REF. 4  
Champion and Lodge rubber plug covers.

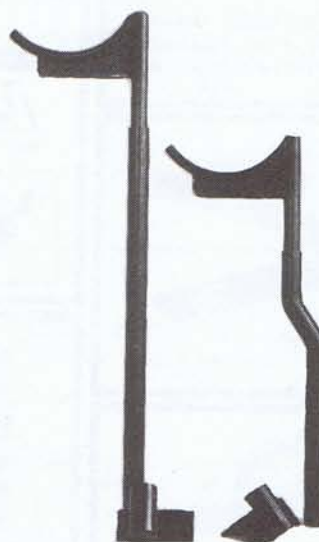
## RACING PLUG CONVERSION CHART

Thread Size	Heat Range	NGK	Champion	Lodge
14mm x 12.5mm Reach Short Reach	Hot (Soft)	B-8HN(P)	L62R	R-47
			L60R	R-49
		B-9HN(P)	L58R	R-50
			L57R	R-51
14mm x 18.0mm Reach Long Reach	Cold (Hard)	B-10HN(P)	L54R	
		B-11HN(P)		R-53
	Hot (Soft)	B-8EN(P)	N62R	RL47
			N60R	
10mm Short Reach		B-85EN(P)		RL49
		B-9EN(P)	N57R	RL50
		B-95EN(P)		
		B-10EN(P)	N54R	RL51
10mm Long Reach	Cold (Hard)	B-105EN(P)		
			N52R	RL53
	Hot (Soft)	C-10H	G59R	10R-49
		C-12H	G56R	10R-50
	Cold (Hard)	C-13H	G54R	10R-51
		C-14H		
	Hot (Soft)			10RL 49
				10RL 50
	Cold (Hard)			10RL 51

This conversion chart is intended only as a guide.



Bike tie down straps very strong 2" Nylon with Quick Action fastener, just pull to tighten, lift to release. 10ft. long. Black. REF. 6



Bike Carriers.  
These strong carriers are of welded steel construction, detachable for storage in boot when not in use. As shown. REF. 7

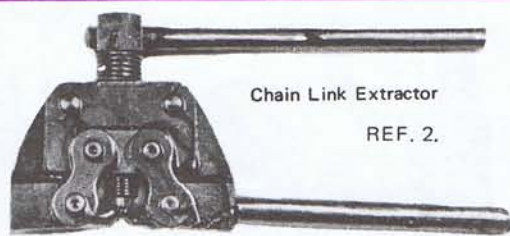


# Tools

ALL TOOLS ARE OF GOOD QUALITY



O.H.V. Valve Spring  
Compressor  
REF. 1.



Chain Link Extractor  
REF. 2.



Burette — (Glass) 50cc.  
REF. 3.



Tyre Gauge  
6lb. to 50lb.  
REF. 4.



Plastic Mallet REF. 5.



CYL HEAD HOLDING TOOL REF. 6.



VALVE GRINDING TOOL REF. 8.



JAP EX NUT SPANNER REF. 9.



JAP Eng Nut Spanner  
REF. 10.



Tappet  
Spanner  
REF. 11.



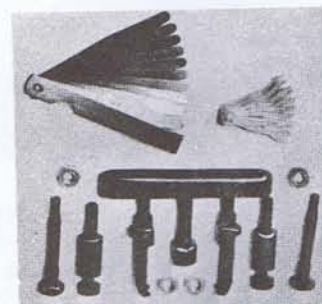
ADJUSTABLE 'C' WRENCH. Chrome.  
Will fit JAWA Exhaust nut, Fuel and  
Oil caps. DELLORTO carburettor, etc.  
REF. 12.



Jet Key  
&  
Phillips  
Screwdriver  
Tool  
REF. 13.



Champion  
Plug  
Tools  
REF. 14.



FEELER Gauge REF. 15  
MAG. Spanners REF. 16  
UNIVERSAL Puller Set REF. 17



CIRCLIP PLIERS  
Combined Internal  
and External  
REF. 18.

**LOCTITE\***  
TRADE MARK



We recommend  
and use  
**LOCTITE**

REF. 19



PLASTIC INSULATION TAPE

Large (Black only)  
Small Yellow, blue  
red, and green. REF. 20.



PISTON RING CLAMP  
60mm REF. 21. 85mm REF. 22.



A special matt black  
coating gives good  
heat dissipation.  
Aerosols REF. 23.

NEW CHAIN  
LUBE  
AEROSOL  
REF. 24



HERMETITE GASKET  
JOINTING CEMENT REF. 25  
Green — SETTING  
Red — NON-SETTING  
Gold — MULTI-PURPOSE.



# Tools



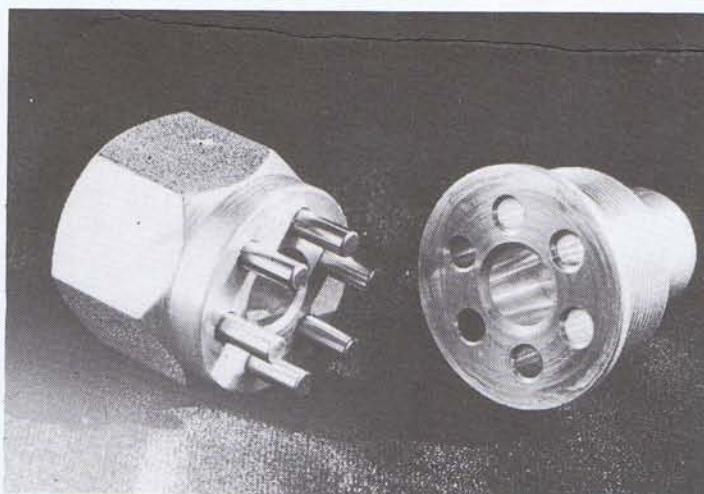
CLUTCH ADJUSTER TOOL  
Suitable for JAWA BSA NORTON etc. REF. 1



Sturdy JAWA CYLINDER BOLT SPANNER  
REF. 2



JAWA CYLINDER  
BOLT EXTRACTOR  
REF. 3



JAWA CAM FOLLOWER GUIDE TOOL  
precision made to remove without damage  
and replace tight and secure. REF. 4



SPROCKET BODY  
EXTRACTOR  
JAWA REF. 5  
JAP REF. 6

## ENGINE PLATES



Cut to your pattern in DURAL or STEEL,  
Engine Turned if required. Drawing or Pattern  
MUST be supplied.

**HIGH TENSILE DURAL PLATE** Stocked in 1/16", 1/8", 3/16",  
1/4", 5/16", and 3/8" thickness.

**DURAL ROD** Stocked in 1/2", 5/8", 3/4", 7/8", 1", 1 1/8", 1 1/4", 1 3/8",  
1 1/2", and 2" diameter.

**STEEL TUBING** We hold in stock an extensive range of Cold Drawn Mild  
Steel, 531 and T45 tubing. Diameters: 3/8", 1/2", 5/8", 3/4", 7/8", 1", 1 1/8",  
1 1/4", 1 3/8", 1 1/2", 1 3/4", 2", 2 1/2", and 3" in various guages from 18G to 10G.  
Prices on application.

**BRAZING RODS, FLUX, HIGH TENSILE BOLTS, NUTS,  
SELF-LOCKING NUTS.**





CLOTH BADGE. Ideal for Leathers, Blazers, Overalls etc. REF. 1.



REF. 3.



REF. 4.



LAPEL BADGE. Pin-on. REF. 2.



REF. 5.



SELF-ADHESIVE PLASTIC BADGE. REF. 6.  
AS ABOVE BUT 180 x 270 mm REF. 7