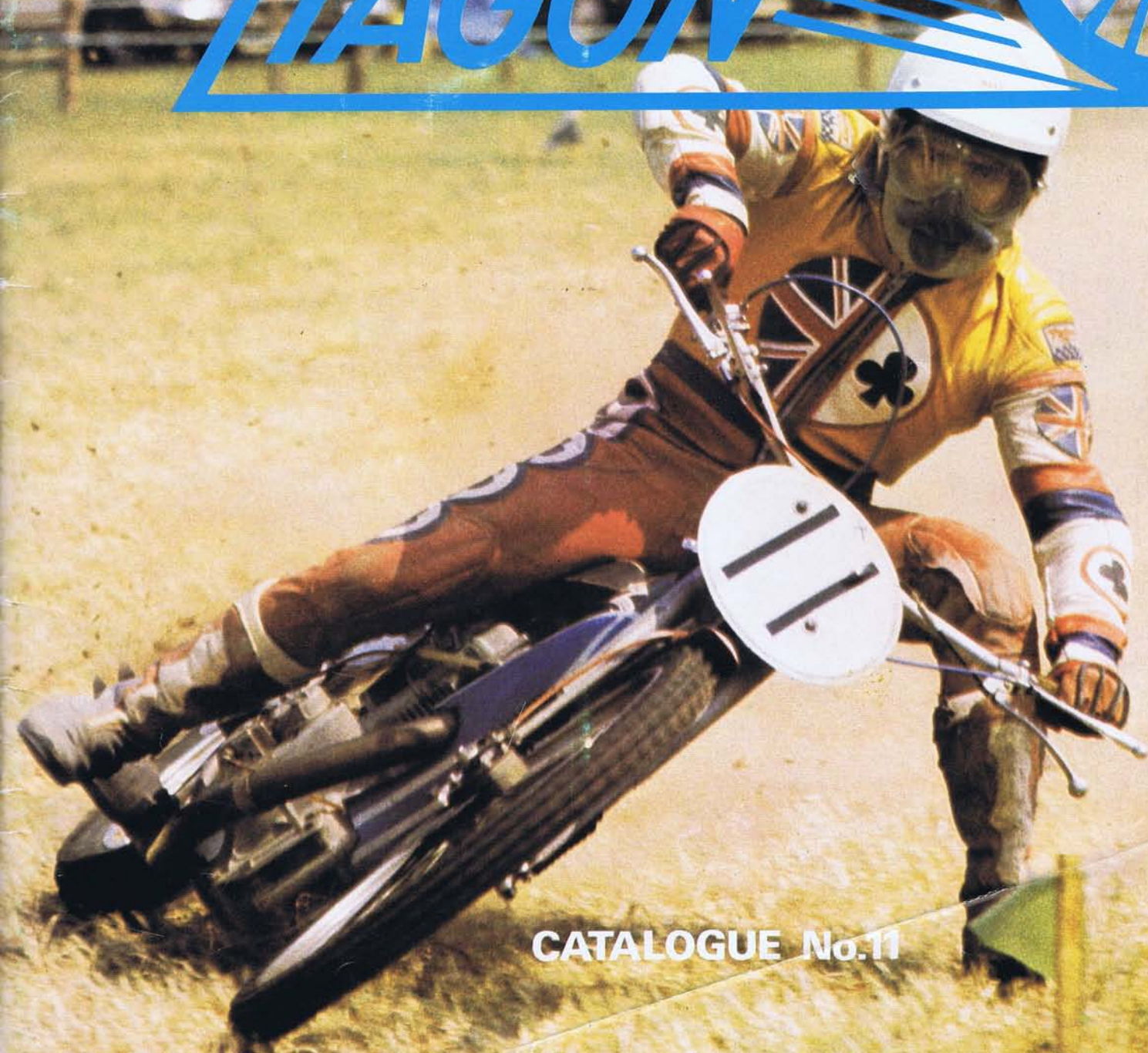
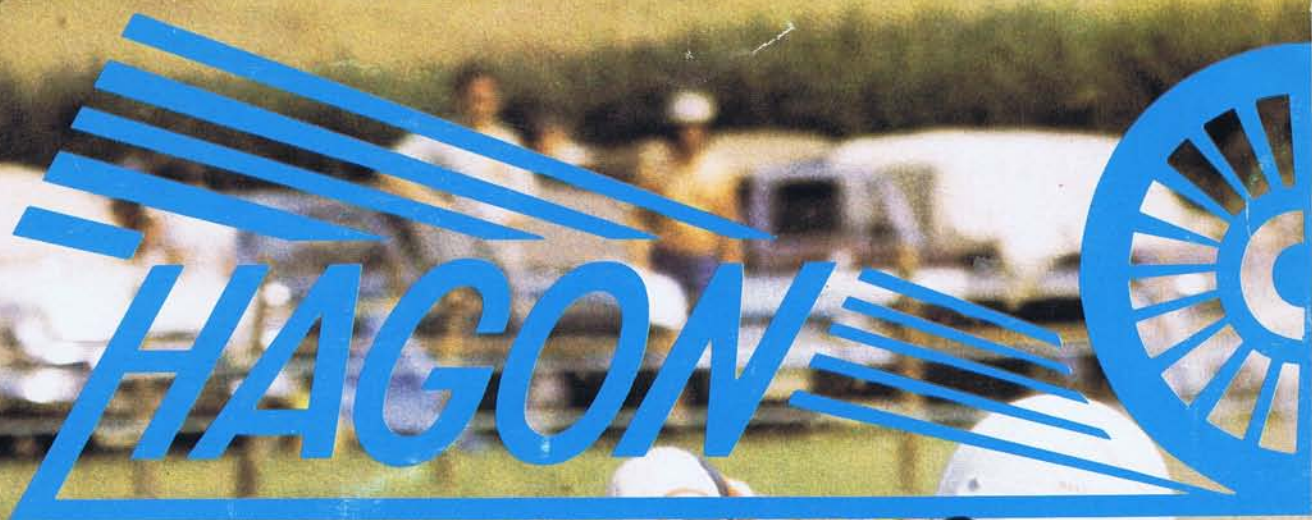


# HAGON



CATALOGUE No.11



# Index

HAGON SANDRACER MK 2	4,5.	GIRLING	34,35.
HAGON LIGHTWEIGHT SANDRACER	6,7.	GLOVES	31.
HAGON B50/CCM	8.	GRASSTRACK ACCESSORIES	16 to 21.
HAGON STROKERS	9.	HANDLEBARS	19.
HAGON JUNIOR	10,11.	HANDLEBAR CLAMPS	16.
HAGON SPEEDWAY	12.	HANDLEBAR LEVERS	19.
HAGON SPEEDWAY SPRINGER	13.	HELMETS	32.
HAGON SIDECAR GRASSTRACK	22.	HUBS	38,39.
HAGON SIDECAR MOTO-CROSS	23.	IGNITION COILS	50.
AIR FILTERS	17,48.	JAP ENGINES	26.
AIR FORKS	14.	JAP PARTS	28.
AMAL CARBURETTORS	48.	JAP TOOLS	47.
BACK PROTECTORS	31.	JAWA ENGINE PARTS	27,28.
BADGES	33.	JAWA COUNTERSHAFT/CLUTCH PARTS	46,47.
BATTERIES	50.	JUNIOR LEATHERS	30.
BEWLEY GEARBOX	37.	KNEE PROTECTORS	31.
BIKE CARRIERS	21.	LEATHERS	30.
BODY BELTS	31.	LOCTITE	46.
BOOTS	31.	MORGO EQUIPMENT	45.
BRAKES	38,39.	MUDGUARDS	20,24.
BURRETTES	47.	NORTON CLUTCH	36.
CABLES	19.	NORTON GEARBOX	37.
CABLE TIDY	21.	POLISH	46.
CARBURETTORS	48,49.	PLUGS	50.
CHAIN	44.	RACING NUMBERS	21.
CHAINGUARDS	16,18.	RIM BANDS	41.
CHAIN GUIDES	21.	SEATS	17,20.
CHAIN LINK TOOL	47.	SPEEDWAY BIKE COVERS	20.
CHAIN LUBE	46.	SPOILERS	18,20.
CIRCLIP PLIERS	47.	SPOKE KEY	41.
COLMONOY	31.	SPROCKETS	44.
CONTROLS	19.	STANDS	17.
DAG	46.	STEEL SHOE	31.
DECALS	33.	STEERING HEAD BUSHES	16.
DIRTSHIELDS	18.	TAPE	46.
ENGINE COVERS	18.	TIE DOWN STRAPS	21.
ENGINE STANDS	28.	TIMING DISC	21.
EXHAUST BRACKETS	16.	TOOLS	46,47.
EXHAUST PIPES	17.	T-SHIRTS	31.
FACE MASK/GOGGLES	32.	TYRES AND TUBES	42,43.
FORKS	14,15.	TYRE GUAGES	41.
FORK BRACE	16.	TYRE SECURITY BOLTS	41.
FORK CROWN	16.	TWIST GRIPS	19.
FORK COVER SETS	20.	UNIVERSAL PULLER SETS	47.
FLICKER PEAK	32.	VALVE SPRINGS	45.
FUEL FITTINGS	48,49.	VALVE SPRING COMPRESSOR	47.
FUEL AND OIL	49.	WHEEL BUILDING	41.
FUEL TANKS	16.	WHEEL HUBS	38,39.
GEAR RATIO CALCULATOR	29.	WHEEL RIMS	40.
GEAR RATIO CHARTS	29.	WHEELS MAGNESIUM	24.
		YAMAHA ENGINE CONVERSIONS	25.

## Postal Service

Fast Cash on Delivery service by telephone or by return post is our speciality. Parcels weighing up to 20 Kilos (44lb) can be sent by GPO to your door. We can send any number of separate parcels and even complete machines can be sent in kit form. Charges at GPO rates. Parcels over 20 Kilos in weight can be sent by BRS or Securicor.

## Export

We can send goods to any part of the world, either by post or shipping agents, by air or surface. Items up to 20 Kilos (44lb) can be sent by post. In many countries we can send goods COD., but where no COD service is available please send cash with order, plus postage. Prices quoted do not include postage.

### CONDITIONS OF SALE

**SPECIFICATIONS.** In order that we may continually probe the future, to increase the performance of our products, we must reserve the right to vary specifications.

**PRICES.** Whilst we make every attempt to keep price lists current, inevitably some prices must vary, all goods will be charged at prices ruling at time of despatch.

**GUARANTEE.** ALL products used in racing applications are considered expendable and we reserve the right to refuse any claims made on such items. We will, however, evaluate any claim individually and sympathetically.





*Dear Friends,*

*It is with great pleasure that we offer, for your approval, our new catalogue. We feel sure you will agree that this is the most comprehensive range of motorcycle racing machines, accessories and specialities available anywhere.*

*Changing technology, and our continuous search for improved performance, is a constant factor in everything we produce, so if you require any item not shown in this catalogue please write or call, we will probably have what you require.*

*Our staff have a vast range of experience in motorcycle competitions of every type, and look forward to being of service with any information or assistance you require. We are always pleased to help you.*

*You CAN be assured that when you buy Hagon you get the very best in service, quality, reliability and performance.*



#### **ALF HAGON PRODUCTS**

350/2 HIGH ROAD, LEYTON  
LONDON E10 6QQ  
ENGLAND

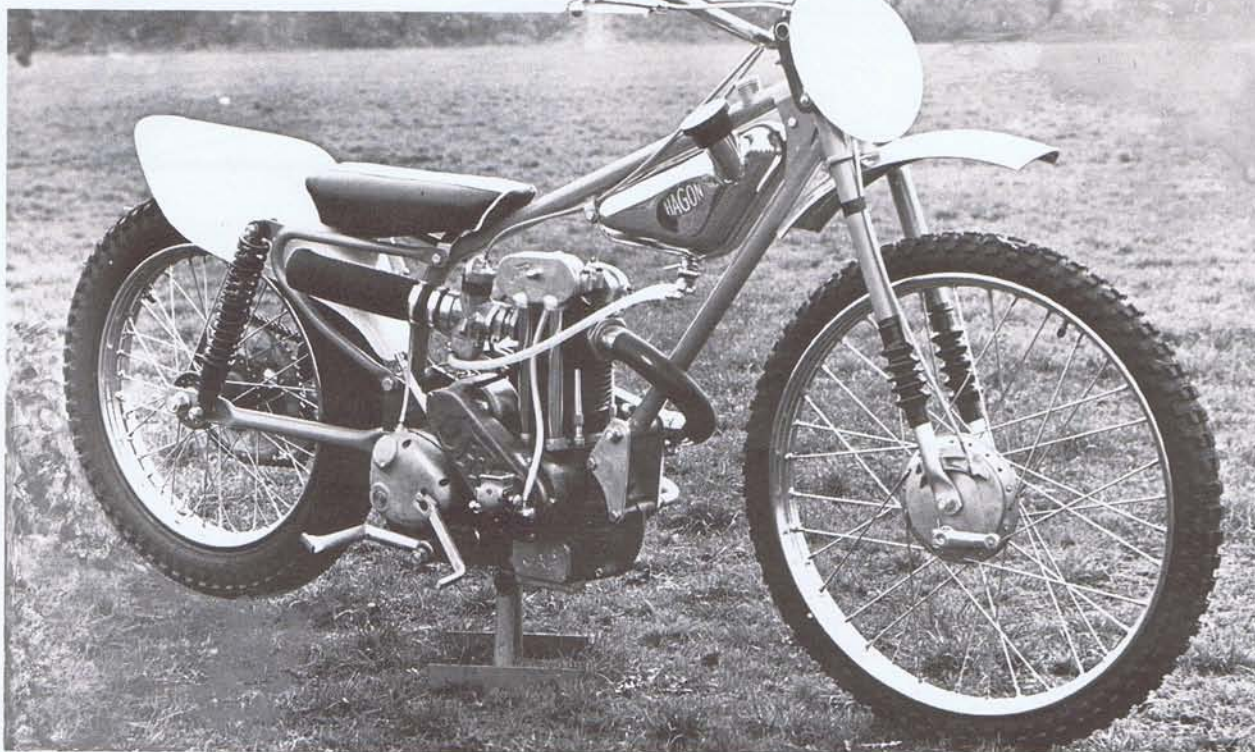
#### **TELEPHONE:**

01-539 8416  
01-556 9200  
01-556 4447

**PLEASE QUOTE PAGE AND REFERENCE NUMBER WHEN ORDERING.**



# Hagon Sandracer MK II



The most successful track racing machine ever. The Hagon Sandracer has won more races and championships than any other machine. Equally suitable for long or short tracks.

The secret of our success is the Sandracer's low weight (a genuine 89 kilos (195lbs) including JAP engine, Norton 4 speed gearbox and clutch), and strength. The product of 14 years development, technology and engineering technique. You will not find this same weight/strength ratio in any other make of machine, no matter how similar it looks.

**Don't take our word for it...Weigh them!**

## SPECIFICATIONS

Wheelbase	137 — 142cm	54" — 56"
Seat Height	74cm	29"
Head Angle	70°	
Weight	89 Kgs	195lbs
Front Wheel		23"
Rear Wheel		19" or 22"
Ground Clearance	13cm	5"
Front Suspension Travel	10cm	4"
Rear Suspension Travel	9cm	3½"
Fuel Capacity	3 Litres	(5 Pints)
Oil Capacity	.6 Litres	(1 Pint)

Available for most engine/gearbox combinations, the Hagon Sandracer is supplied in the following forms:—

As shown, but without engine, transmission or brakes

REF. 1 386-70

As shown, less engine only, with disc rear brake, conical front brake, reconditioned Norton gearbox and clutch, all chains, cables, fuel pipes, engine bolts and exhaust pipe supplied

REF. 2

To give you the maximum enjoyment and success, we will gladly assemble your Sandracer to your exact specifications, so when ordering please state the fullest possible details.



Comprising — Main diamond frame, Sub-frame, Swinging arm, Pivot, Girdling 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.

## Parts List

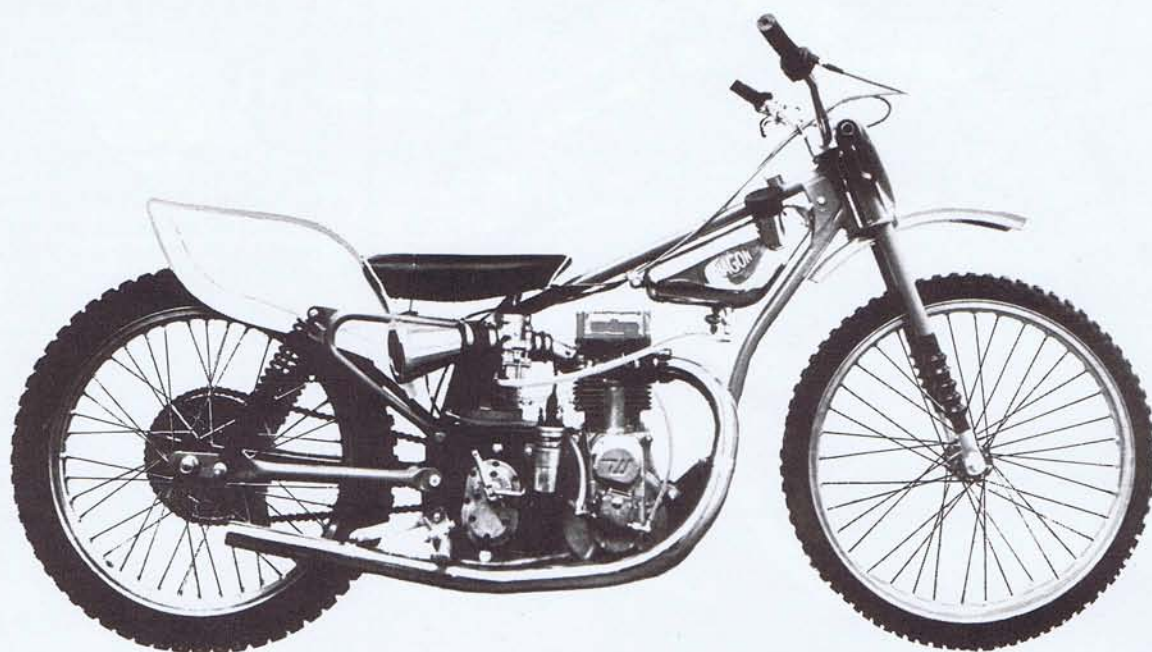


Comprising – Main diamond frame,  
Sub-frame, Dural engine plates,  
Swinging arm, Pivot, Girling units,  
Nuts and bolts, etc.

A side view of a motorcycle chassis, showing the frame, seat, and rear suspension components. The frame is made of metal and features a large, curved fuel tank with the 'YAMAHA' logo. The seat is a simple, curved, light-colored saddle. The rear suspension consists of a swingarm with a large, circular cutout, connected to a shock absorber. The front fork and handlebars are also visible. The entire assembly is shown against a plain white background.



# Ultra Lightweight Long Track Sandracer



On long smooth, fast tracks weight becomes a most prominent factor in machine design and our knowledge and experience of building ultra-lightweight machines is unrivaled. We are proud that the World's leading long track riders acknowledge Hagon frames as the lightest possible. Consistent with reliability and performance. Egon Muller, Ivan Mauger, Ole Olsen and Peter Collins all use Lightweight Hagon longtrack frames.

Although similar in appearance every main component is appreciably lighter than its standard sandracer counterpart. This together with great attention to detail and the use of aircraft materials throughout its construction ensure the very low weight and consistent reliability necessary to win the last three World longtrack Championships.

## SPECIFICATION:

Main frame components	45 ton TENSILE AIRCRAFT quality tubing, bronze welded, fully jig built for complete interchangeability.
Forks:	Two way damped, pivoting on alloy spindle.
Wheels:	Akront flangeless alloy rims, magnesium hubs, lightweight spokes, high tensile spindles, sealed bearings, alloy sprocket, alloy chainguide.
Rear suspension:	Girling gas shocks.
Controls:	Alloy handlebar, alloy clamps, high impact plastic controls, nylon lined control cables, and high impact plastic number plate. Alloy fuel tank, alloy fuel taps, alloy fuel fittings, alloy motor plates, alloy chainguard. Fibreglass mudguards, alloy aero nuts and high tensile bolts.

In addition to our Ultra-lightweight Sandracer we also produce Ultra-lightweight frames and forks which are interchangeable with standard long track Jawa components, and used by the most successful Jawa works riders.



THE LONG TRACK SANDRACER will accept almost any engine / gearbox combination, or unit construction engine.

COMPLETE LONG TRACK SANDRACER, less only engine and transmission.

REF. 1

#### ULTRA-LIGHTWEIGHT LONG TRACK SANDRACER KIT

Comprising lightweight frame diamond , subframe, swinging arm, pivot, Girling units, high tensile bolts, alloy aero nuts, fibreglass rear mudguard, seat with brackets, alloy fuel tank complete with alloy taps and fixing bolts. Lightweight forks complete with alloy spindle and head bolt. Alloy engine and gearbox plates (state which engine and gearbox you will be using).

REF. 2

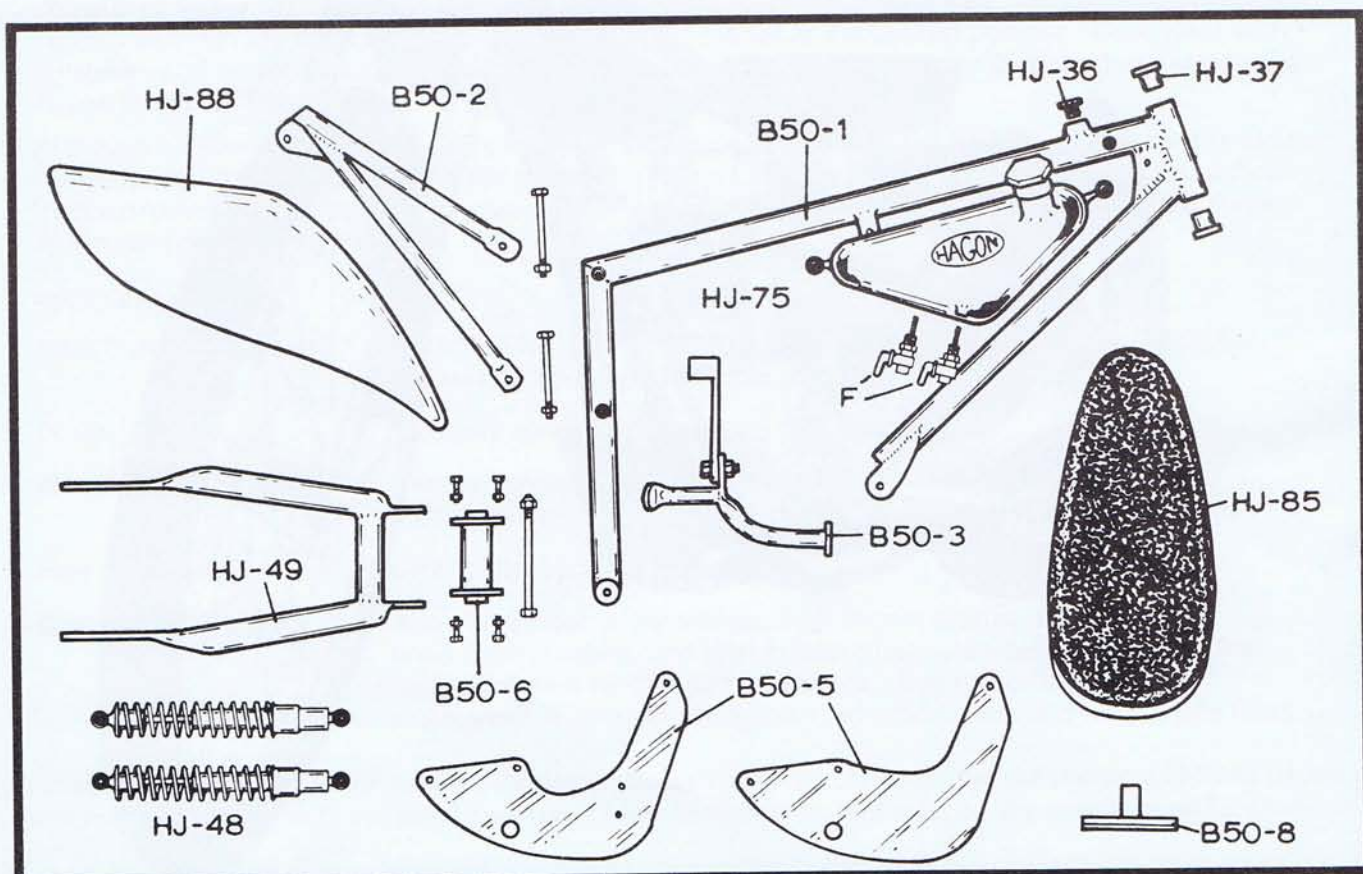




# Hagon B50/CCM

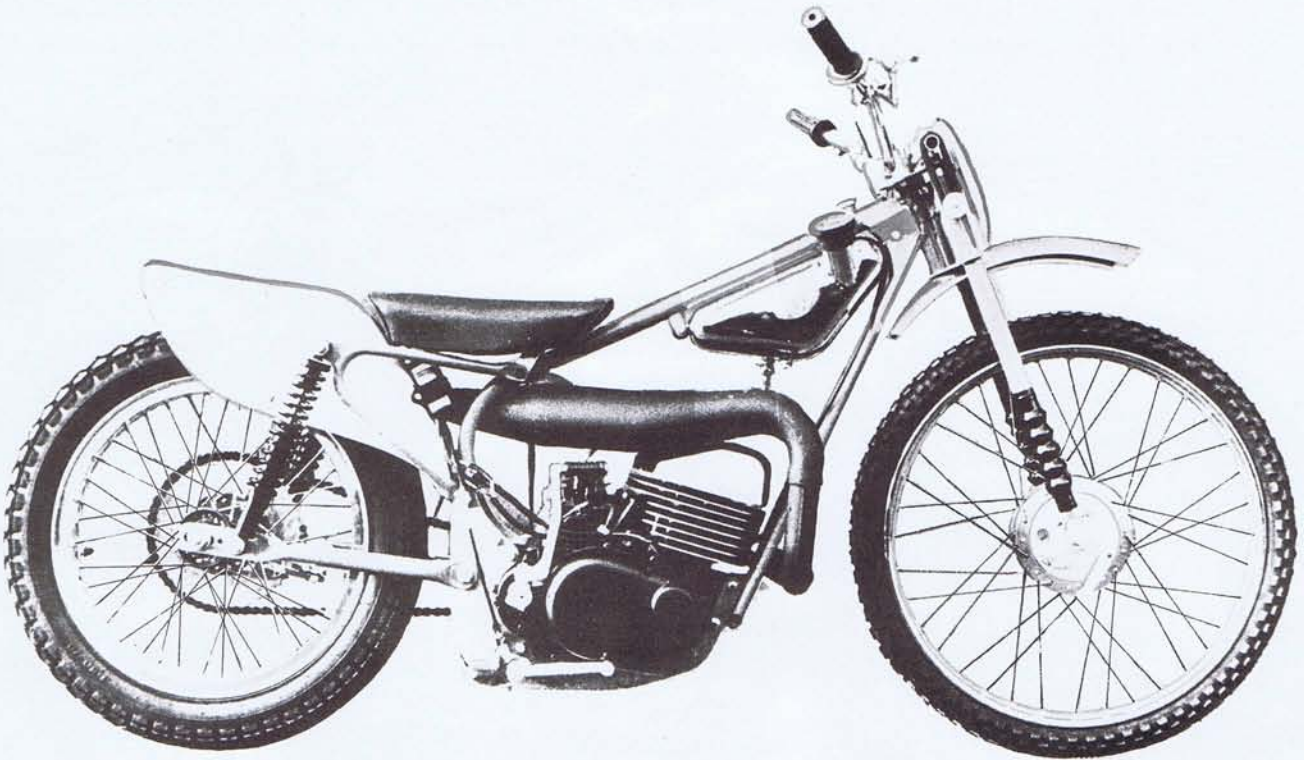


The Hagon B50 will accept wide lug CCM, BSA 250 and 500cc Units. Engine Plates also available for C15 and B25 narrow lug engines. Oil in Main Frame (return system) Blue Stoved Enamel Finish.  
HAGON B50/CCM COMPLETE LESS ONLY ENGINE AND EXHAUST REF 1.





# Hagon Strokers



In the field of stroker construction our experience and success is unrivalled. The superior handling characteristics of Hagon frames really prove vital when you have to control the surging power stroker engines produce.

Hagon frames are available for most racing two-stroke engines, including Bultaco, Husqvarna, Montesa, Maico, Yamaha, Suzuki, Greeves, etc., etc.

**HAGON STROKER** less only engine and exhaust. (All cables, fuel pipes, engine bolts and chain supplied).

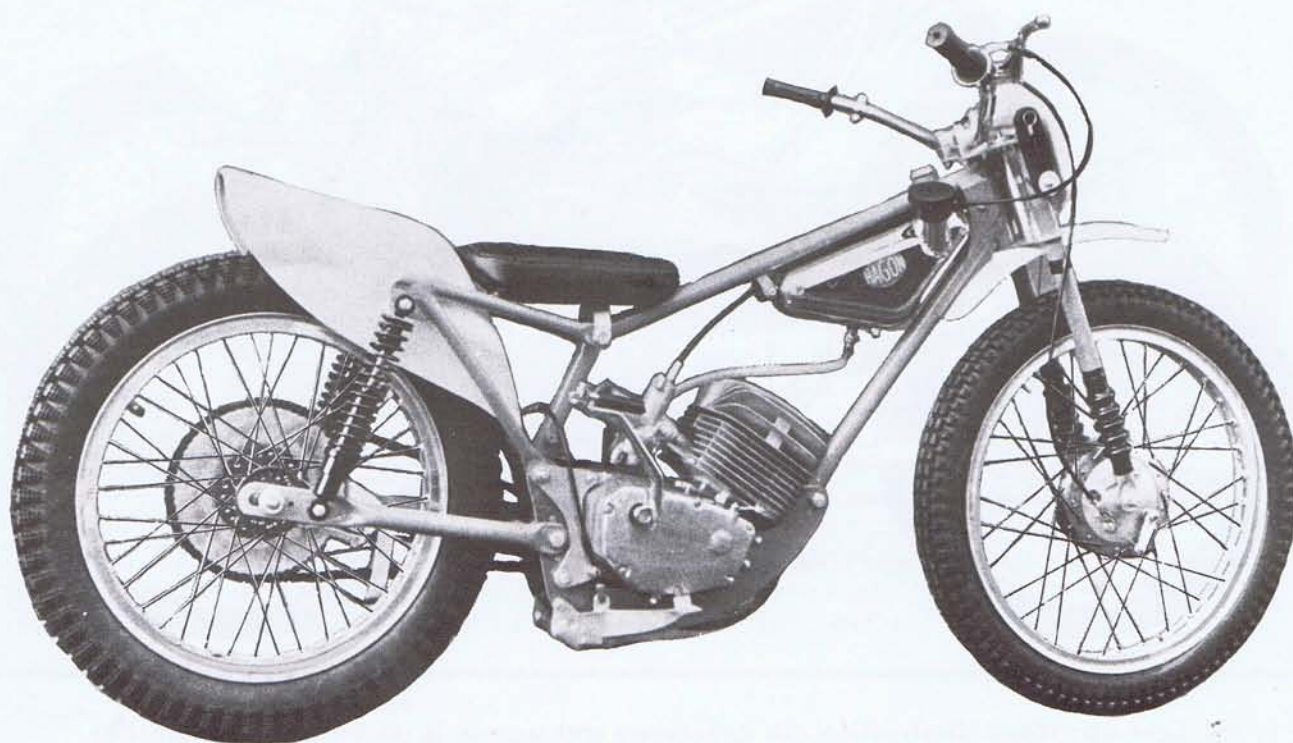
REF. 1





# Hagon Junior Grass Track

Hagon schoolboy grass track machines are built to the same high standards of performance and durability as our larger models, with detailed attention to maintain perfect handling throughout the vast range of frame and engine sizes available.



## Hagon Puch 125cc

The Hagon Puch schoolboy grass track machine has been produced for the intermediate age group and features the powerful Puch 125cc racing engine unit.

**SPECIFICATION:** Engine 125cc, 4 speed gearbox, electronic ignition,  
Dykes type piston, radial cylinder head,

Wheelbase 135 – 140cm (53" – 55")

Steering head angle 70°

Rear wheel 17", 18", 19" or 22"

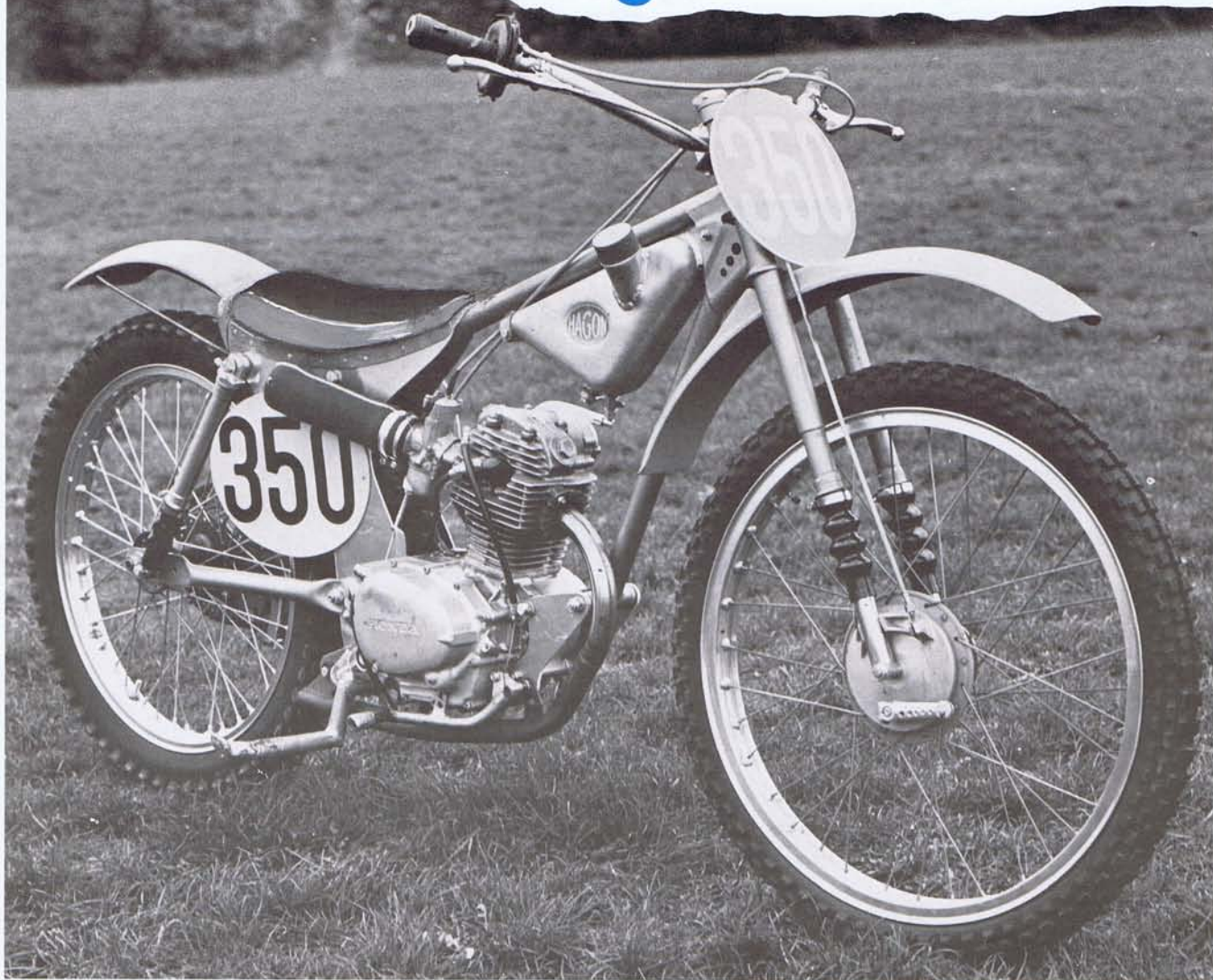
Front wheel 19", 21" or 23"

Complete Machine, as shown.

REF. 1



# Hagon Honda Junior



Hagon frames are available for Honda 100cc and 125cc engines, with a range of wheel sizes and seat heights to suit any age rider.

Complete machine, less only engine unit and exhaust      REF. 1

HAGON 198cc POWER CONVERSIONS for Honda 125cc single cylinder OHC engines.

By modifying your own components, we can increase the capacity of your Honda 125cc engine to a full 198cc. Suitable for petrol or methanol fuel.

## 198cc CONVERSION

Re-sphere cylinder head, enlarge ports, fit larger valves, fit racing valve springs and racing camshaft. Bore cylinder barrel, fit big bore cylinder liner, supply high compression piston, copper head gasket, alloy spacer plate, longer cylinder studs and dowels. Bore crankcase mouth. Increase crankshaft stroke, re-balance flywheels, and supply long cam chain.      REF. 2

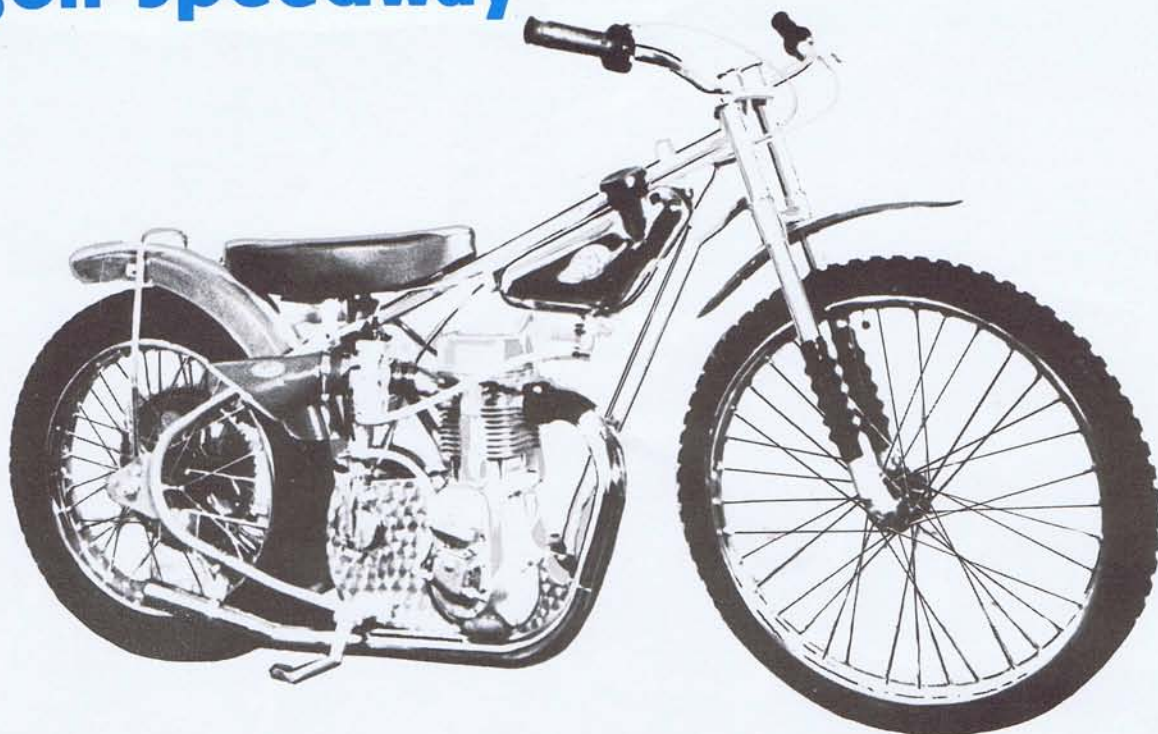
## COMPLETE 198cc RE-BUILD

We can convert and re-build your complete engine unit in our engine workshop. We also remove the kickstarter mechanism, and first gear pinions to save weight, and beadblast the whole unit.      REF. 3

(Note: Any worn stock Honda parts will be replaced, at extra cost).



# Hagon Speedway

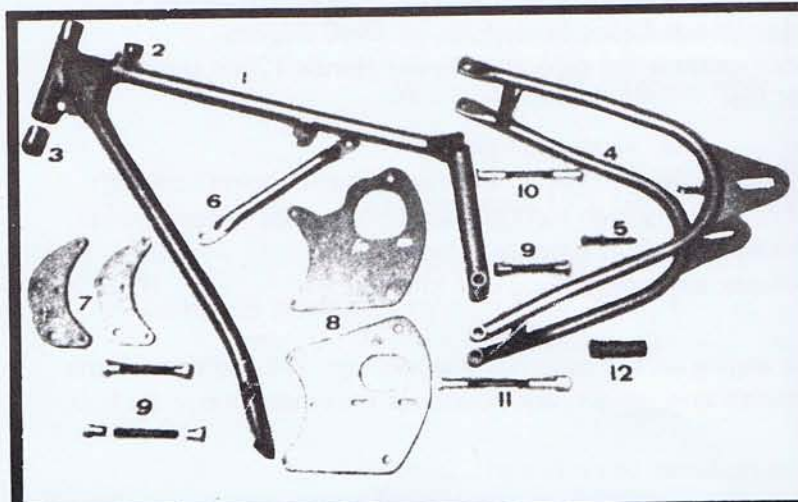


Alf Hagon's long international speedway career provided the background of competition experience for the design of the Hagon speedway frame, and many Jawa 'Works' riders replace original frames with Hagon components, which are lighter, stronger and more durable.

The Hagon speedway frame is equally suitable for Jawa, Weslake and JAP engines. Most components are fully interchangeable with Jawa.

Wheelbase	132cm (52")
Ground clearance	10cm (4")
Weight (with Weslake engine)	77Kgs. (170 lbs)
Fuel capacity	3 Litres (5 Pints)
Oil capacity	.6 Litre (1 Pint)
Steering head angle	72°
Seat height	71cm (28")

Complete machine, as shown, less only engine and transmission. REF. 13



## SPEEDWAY HAGON FRAME ASSEMBLY MOST PARTS INTERCHANGEABLE WITH JAWA

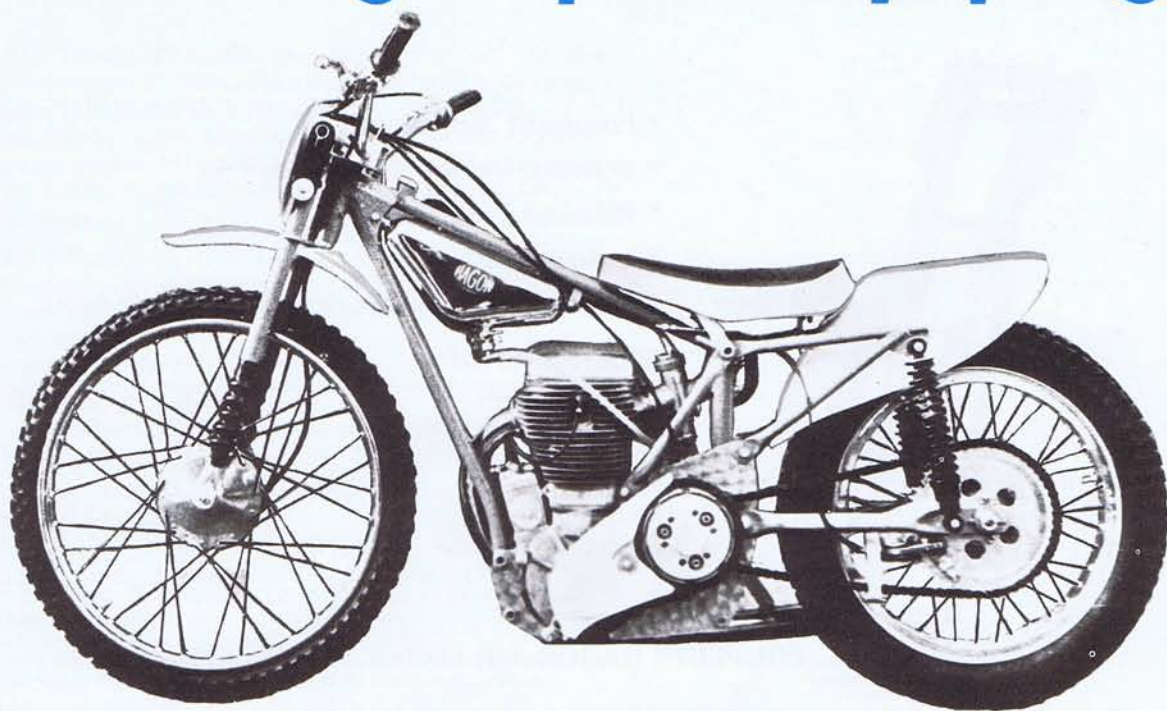
1. Frame Diamond with oil filler cap and head bushes
2. Oil filler cap
3. Head bushes HJ37  
We can supply head bushes for JAWA forks
4. Rear end with chain adjusters
5. Chain adjusters nut and bolt
6. Engine stay short- JAWA long-JAP grey only
7. Front engine plates JAWA or JAP (pair)
8. Rear engine 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 4 1/2" stud  
(1) Long nut (1) Long nut with thick head
12. Footrest bolt spacer  
Sleeve nuts  
Sleeve nut studs

FRAME KIT COMPLETE (AS PHOTO)

REF. 14



# Hagon Speedway Springer



The Hagon speedway springer is a grass track machine with speedway geometry, resulting in a highly manoeuvrable compact machine, equally competitive on long or short tracks.

Suitable for Jawa, JAP or Weslake engines, with Bewley, Jawa, Drott or Norton gearboxes.

## SPECIFICATION:—

Wheelbase	132cm (52")
Steering head angle	72°
Ground clearance	12cm (4.6")
Seat height	71cm (28")
Weight	88.5 Kgs, (195 lbs)
Fuel capacity	3 Litres (5 pints)
Oil capacity	.6 Litre (1 pint)

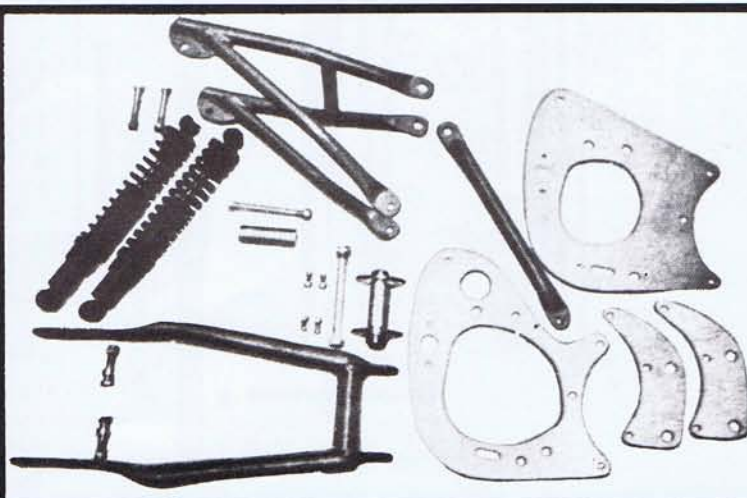
Hagon Speedway Springer complete,  
less only engine and transmission  
REF. 1

## 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.

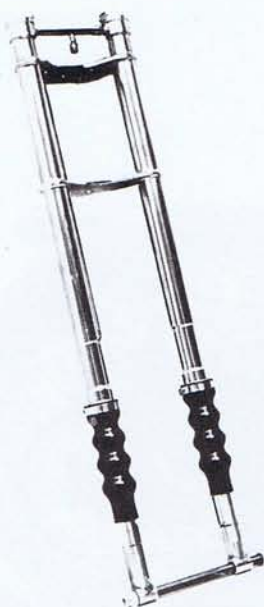
WHEN ORDERING SPECIFY ENGINE AND GEARBOX AND WHETHER 19" OR 22" REAR WHEEL USED.

REF. 2





# Hagon Air Forks



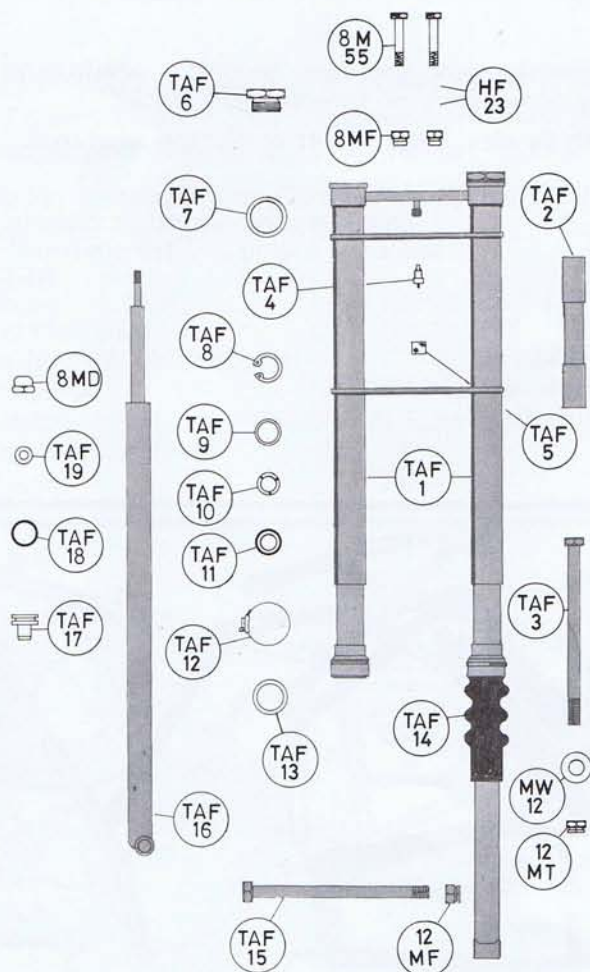
- \* Pneumatic Suspension
- \* Constant Volume 2-Way Damping
- \* Balanced Fork Pressure
- \* Lightweight
- \* Can be fitted to most Grass/Long Track Bikes

## SPECIFICATION:-

Overall Length	73.4cm (2'4 7/8")
Distance between crowns	15.2cm (6")
Distance between legs	11.4cm (4 1/2")
Weight	4.25kg. (
Movement	12.1cm (4 3/4")
Spindle Diameter	12mm

COMPLETE HAGON AIR FORKS

REF. 1



## PARTS LIST

PART No	DESCRIPTION	Qty
TAF 1	Fork 'H' Piece	1
TAF 2	Steering Spindle	1
TAF 3	Steering Spindle Bolt	1
TAF 4	Air Valve Core	1
TAF 5	Air Valve Cap	1
TAF 6	Top Cap	2
TAF 7	Top Cap Sealing Washer	2
TAF 8	Damping Valve Circlip	4
TAF 9	Damping Valve Seating	2
TAF 10	Damping Valve	2
TAF 11	Damping Valve Housing	2
TAF 12	Gaiter Clip	2
TAF 13	Lower Seal	2
TAF 14	Gaiter	2
TAF 15	Wheel Spindle	1
TAF 16	Fork Leg	2
TAF 17	Piston	2
TAF 18	Piston 'O' Ring	2
TAF 19	Piston Sealing Washer	2
HF 23	Handlebar Clamp	4
8M 55	Handlebar Clamp Bolts	4
8MD	Nut	2
8MF	Nut	4
12MF	Nut	1
12MT	Nut	1
12MW	Washer	1



# Hagon Forks

**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 12¾ 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                      | REF. 1. |
| 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.

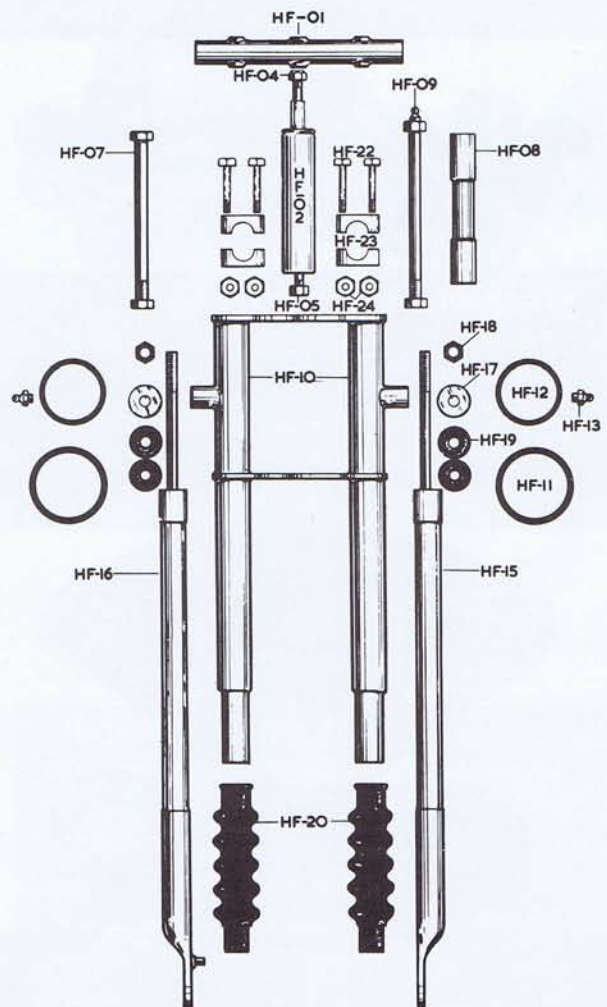
## PARTS LIST

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	Locknut	4
HF-25	Dural handlebar clamps non-slip complete set 7/8" or 1"	

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.

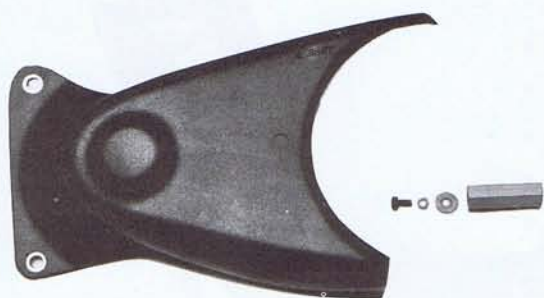


FORKS LESS DAMPER  
REF. 5.





# Speedway Specialities



## JAWA CHAINGUARD

Manufactured from high impact plastic this chainguard fits all Jawa speedway machines and covers both chain runs. Quickly removed for sprocket changes. Available in grey or black

REF. 1

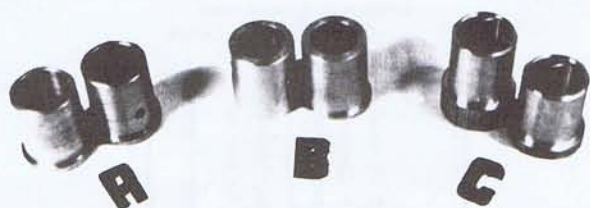


## JAWA ALLOY FUEL TANK

Twin fuel outlets. Plastic cap available for

10mm Jawa Taps  
1/4" BSP English Taps

REF. 2  
REF. 3



## STEERING HEAD BUSHES

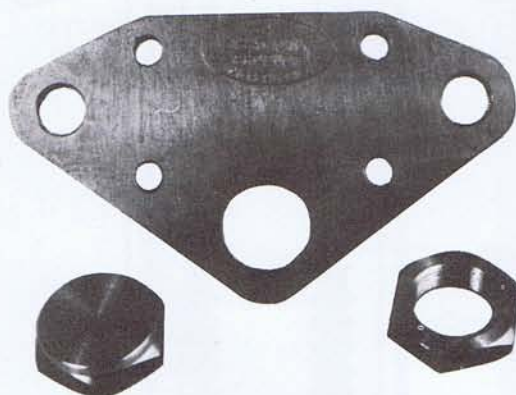
Type A	For standard Jawa	REF. 4
Type B	For Hagon forks on Jawa frame	REF. 5
Type C	For Jawa forks on Hagon frame	REF. 6



## JAWA FORK BRACE

Prevents fork flex.  
Chrome-plated

REF. 7



Alloy Jawa Fork Crown	REF. 8
Alloy Steering Pivot Nut	REF. 9
Alloy Steering Pivot Locknut	REF. 10



## SAFETY HANDLEBAR CLAMPS

This chrome-plated clamp assembly greatly reduces the risk of handlebar fracture, especially recommended for alloy handlebars.

REF. 11



## EXHAUST PIPE BRACKET

Fits Jawa or Jap pipes

REF. 12



# Accessories



## GRASS TRACK SEAT

Four stud fixing

Blue/grey

REF. 1

Spare Seat Cover

REF. 2



## BIKE STANDS

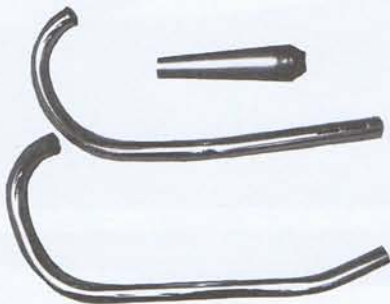
Strong Welded Construction

For Jawa

REF. 3

for Jap

REF. 4



## POLISHED CHROME EXHAUSTS

For speedway or grasstrack

Jawa

REF. 5

Jap

REF. 6

## LONG TRACK MEGAPHONE

Welded Dural

REF. 7



## SPEEDWAY AIR FILTER

Complete with hose and clips

Suitable for Jawa or Jap

2" Bellmouths

REF. 8



## FOAM FILTER

Spun alloy. Washable foam element. Available for

45mm Bellmouths

REF. 9

65mm Bellmouths

REF. 10



## HAGON FOAM FILTER

Flexible rubber replaceable foam sheath mounting tube over rigid steel body

50% Free area

Special non cellular foam

Fully sewn seams

Fits over 2" Bellmouth

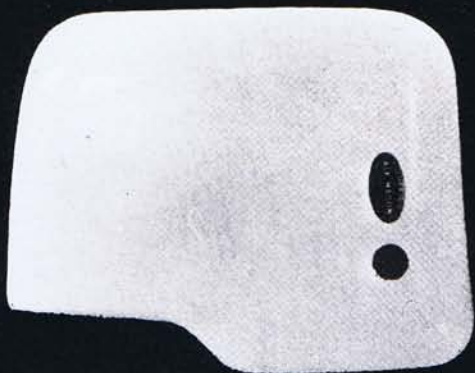
The Foam can be washed

HAGON FOAM FILTER REF. 11

REPLACEMENT FOAM REF. 12



# Accessories



## JAP ENGINE COVER

Fibreglass — White, Blue, Red or Yellow.

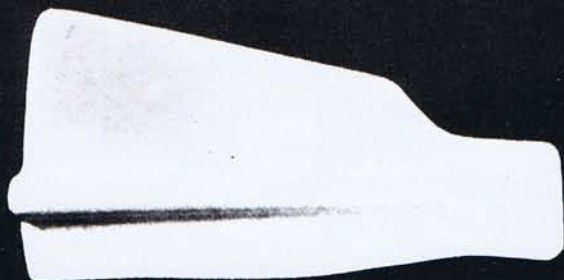
REF. 1



## JAWA ENGINE COVER

Fibreglass for Speedway or Grass Track  
White, Blue, Red or Yellow.

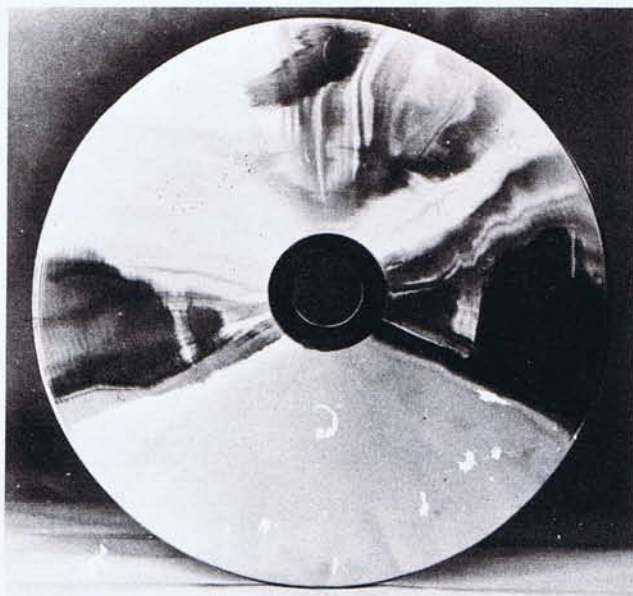
REF. 2



## FIBREGLASS DIRT SHIELD

Brilliant White Fibreglass  
Supplied complete with brackets and fixing bolts.

REF. 3



## AEROFOIL SPOILER

Available for 19" or 22" Wheels.  
Spun Alloy.

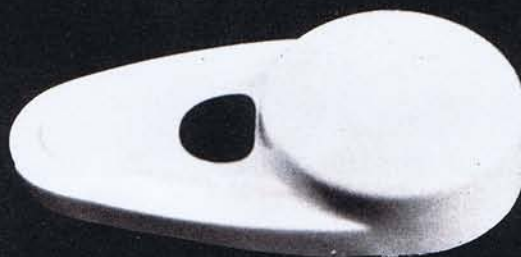
Supplied complete with mounting straps.

19"

REF. 4

22"

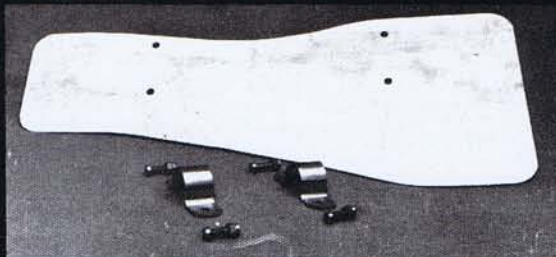
REF. 5



## FULL CHAINCASE

White Fibreglass

REF. 6



## ALLOY DIRT SHIELD

With fixing brackets and bolts.

REF. 7





## HANDLEBAR LEVERS

Chrome plated. Ball ended  
7/8" fitting R.H. or L.H.

REF. 1



## NYLON HANDLEBAR LEVERS

Lightweight. Unbrakeable.  
7/8" fitting fingertip cable  
adjustment

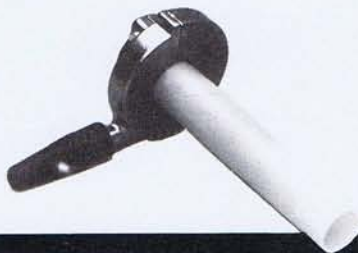
REF. 2



## NYLON O.A. TWIST GRIP

7/8" fitting

REF. 3



## SUPER FAST TWIST GRIP

7/8" fitting. Nylon rotor  
alloy drum. Very quick

REF. 4



## DURAL HANDLEBARS

Ivan Mauger Pattern (7/8")  
Hagon Speedway (7/8")

REF. 5

REF. 6



## HIGH TENSILE STEEL HANDLEBAR

Hagon grass track pattern. T45 Tubing.

REF. 7



## NYLON LINED CONTROL CABLES

Front brake	Universal	REF. 8
Throttle	Universal	REF. 9
"	Dellorto	REF. 10
"	Amal MkI	REF. 11
"	Amal MkII	REF. 12
Clutch	Universal	REF. 13
"	Norton	REF. 14
"	Jawa (English lever)	REF. 15
"	Jawa (Jawa lever)	REF. 16
Rear brake	(Foot operated)	REF. 17
" " "	(Hand operated)	REF. 18



## SNAP ON LEVER COVERS

Complete protection for lever and  
cable. Pair

REF. 19



# Accessories



## SPEEDWAY MUDGUARDS

Matching pairs of Mudguards available in a wide range of colours and designs. To fit all Speedway Machines.

REF. 1



## AEROFOIL SPOILER

Fibre-glass Rear Wheel Spoiler Many colours and designs For 19" Wheels REF. 2  
For 22" Wheels REF. 3

## FORK COVER SETS

With matching Clutch Lever Covers.  
For Jawa or Hagon Speedway Machines.  
Red, white, orange, blue, yellow or black.  
All with contrasting stripes with or without Hagon decal.

REF. 4



## SHORT SPEEDWAY SEAT

REF. 5



## LONG SPEEDWAY SEAT

REF. 6



## GRASS TRACK SEAT

REF. 7

All the above seats are available in a range of colours and contrasting stripes.



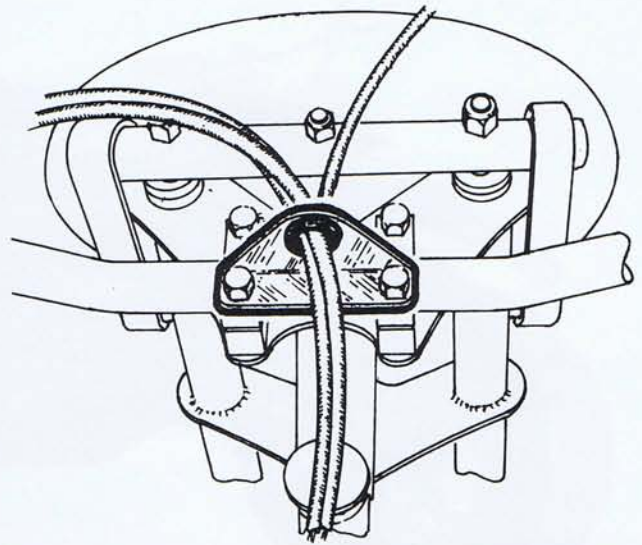
## SPEEDWAY BIKE COVER

Extra strong. Waterproof.  
Blue/White. Yellow/Black. Green/Yellow.  
Yellow/Black. Red/Yellow.

REF. 8

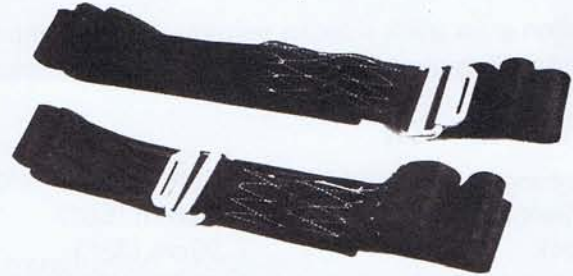


# Accessories



## HAGON CABLE TIDY

Prevents breakage and accident. REF. 4



## TIE DOWN STRAPS

Very strong 2" wide nylon straps with quick action buckles. Just pull to tighten-lift to release 10ft. long black

REF. 5

# 350

## RACING PLATES AND NUMBERS

9" x 11" Oval plastic plates — white blue yellow green

REF. 6

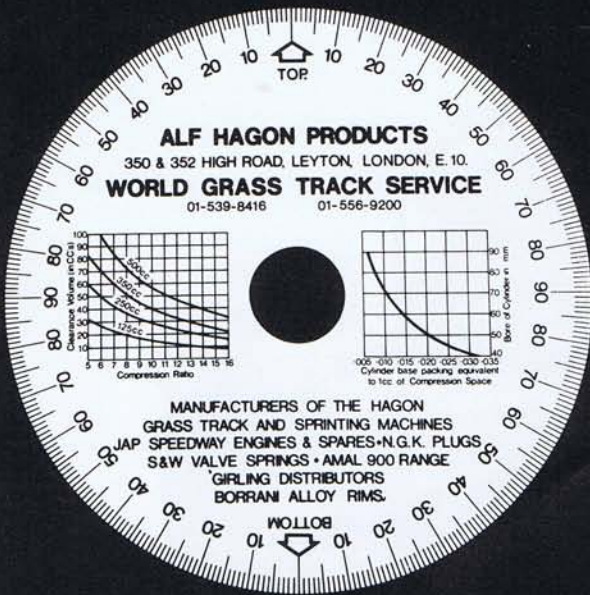
Self-adhesive backgrounds

9" x 11" All colours

REF. 7

Self-adhesive numerals — white or black

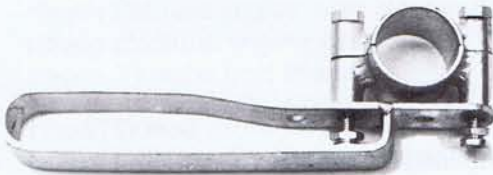
REF. 8



## ALLOY TIMING DISC

7" Diameter. Tough. Accurate and easy to use with etched calibrations — a must for serious engine work.

REF. 1



## UNIVERSAL CHAIN GUIDE

1 1/4" Split Clamp fitting. Keeps chains on sprockets.

REF. 2



## BIKE CARRIER BRACKETS

Welded steel construction detachable for storage in boot when not in use.

REF. 3



# Hagon Grass Track Sidecar



Hagon grass track sidecars employ the alloy monocoque construction principle perfected in our World Championship winning moto-cross sidecars.

## SPECIFICATION

Steering head angle	60°	Front suspension travel	8cm (3")
Wheelbase	165cm (65")	Rear suspension travel	10cm (4")
Track	97cm (38")	Sidecar suspension travel	8cm (3")
Weight (with Yamaha engine)	180Kg. (396lbs.)	Fuel capacity	6.8 litres (1½gall.)
Seat height	61cm (24")	Front tyre	350 x 19
Front brake disc	23cm (9" dia.)	Rear tyre	500 or 550 x 18
Rear brake disc	23cm (9" dia.)	Sidecar tyre	300 x 16

Complete Hagon Grass Track Sidecars (Less engine and transmission) are available to accept:—

Hagon Norton engine with Norton gearbox	REF. 1
Hagon Weslake engine with Norton gearbox	REF. 2
Hagon Yamaha unit engine	REF. 3

The above machine is supplied with wire spoked wheels.

Seven spoke magnesium wheels and rear disc brake are available as an optional extra	REF. 4
---	--------

Hagon Chassis kits (Complete machine less engine, transmission, wheels and disc brake) To accept:—

Norton engine with Norton gearbox	REF. 5
Weslake engine with Norton gearbox	REF. 6
Yamaha unit engine	REF. 7

Yamaha 650cc, 725cc and 844cc Engines are available — prices upon application.



# Hagon Moto-Cross Sidecar



Hagon moto-cross sidecars (Less engine and transmission) are available for the following:—

Hagon Norton engine with Norton gearbox  
Hagon Weslake engine with Norton gearbox  
Hagon Hedlund engine with Norton gearbox  
Hagon Yamaha unit engine

REF 1  
REF 2  
REF 3  
REF 4

Hagon sidecar moto-cross machines are also available with magnesium seven spoke wheel and rear disc brake as optional extra

REF 5

Hagon chassis kits (Complete machine less engine, transmission, wheels and disc brake) to accept the following:—

Norton engine with Norton gearbox  
Weslake engine with Norton gearbox  
Hedlund engine with Norton gearbox  
Yamaha unit engine

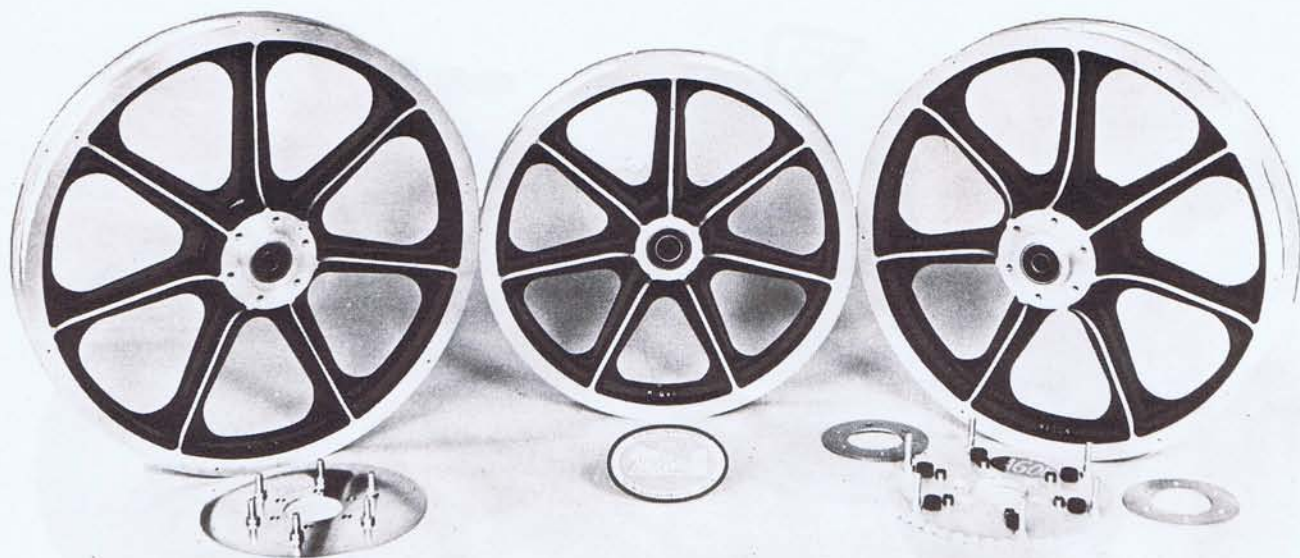
REF 6  
REF 7  
REF 8  
REF 9

## SPECIFICATION

Steering head angle	62°
Wheelbase	157.5cm (62")
Track	106.7cm (42")
Weight (less engine unit)	111Kgs (245 lb)
Ground clearance	220mm (8½")
Seat height	81.3cm (32")
Front tyre	350 x 19"
Rear tyre	500 x 18" or 550 x 18"
Sidecar tyre	300 x 16"
Front suspension travel	155mm (6")
Rear suspension travel	185mm (7¼")
Sidecar suspension travel	115mm (4½")
Fuel tank capacity	10.8 Litres (2 gallons 3 pints)
Oil tank capacity	2.85 Litres (5 pints)
Front brake	240mm (9½") Disc
Rear brake	138mm (5½") Drum or 240mm (9½") Disc



# Hagon Magnesium Wheels



## 19" WM 2 REF. 1

Bearings 17mm  
Weight 4½ Kgs.

## 16" WM 2 REF. 2

Bearings 25mm  
Weight 3 Kgs.

## 18" WM 3 REF. 3

Bearings 17mm  
Weight 5½ Kgs.

Our seven spoke, lightweight, high impact wheels are cast from close grain magnesium alloy, heat treated and cromated.

Designed for the most arduous racing conditions and proven in sidecar moto-cross and grass track racing.

19", 18" and 16" wheels are available and can be supplied with sprocket and brake disc fittings to suit many applications. Additionally our workshop can machine magnesium wheels to your own specifications, or drawings, if required.

# Preston Petty Unbreakable Guards



## "MUDER" Front Guard

Suitable for 19" – 21" Wheels  
Integral Mounting, no bracket required.

REF. 4

## "BAJA" Front Guard

Ideal for muddy grass tracks.

REF. 5

## "BIG MUDER" Rear Guard

5 7/8" Wide – 30 3/4" Long

REF. 6

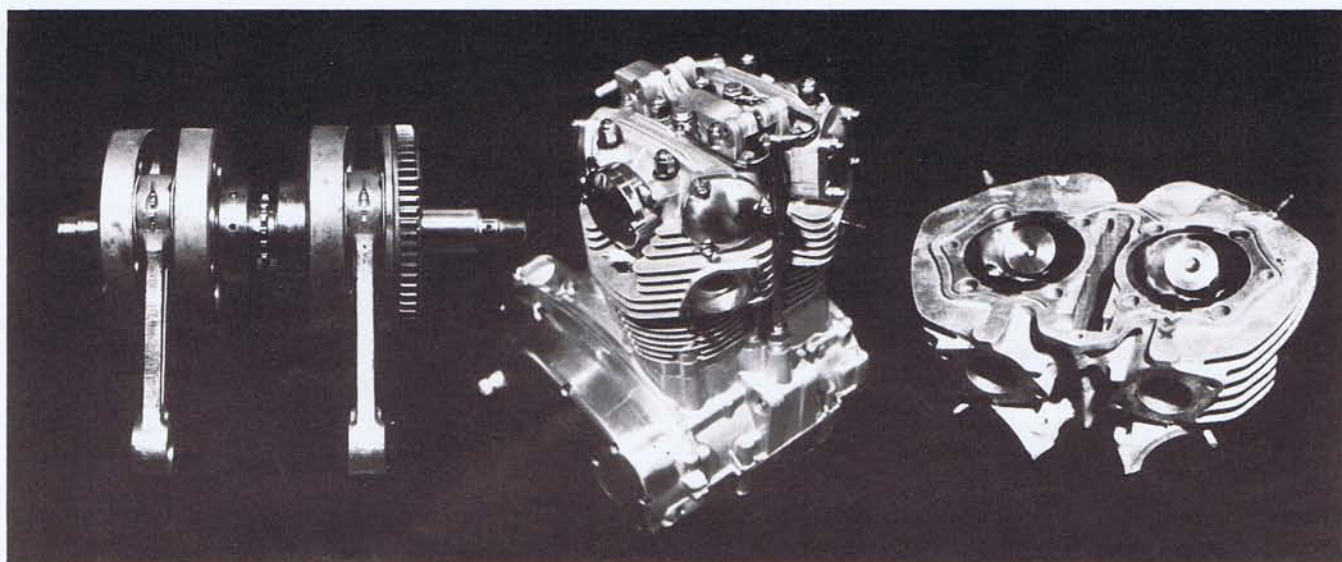
## Standard Rear Guard

5 3/4" Wide – 27 3/4" Long

REF. 7



# YAMAHA Engine Conversions



Our engine workshops have now produced the following modifications to increase the performance of the YAMAHA 650cc engine.

## 725cc CONVERSION

By fitting special 79mm pistons, and overboring the standard cylinder barrel, we can increase the power and performance of your Yamaha.

Price includes pistons and cylinder boring

REF. 1

Oversize pistons available (79.5mm) 1 pair

REF. 2

## 844cc CONVERSION

By fitting special 80mm forged pistons and cylinder liners, and increasing the stroke by crankshaft modifications\*, we can achieve a true capacity of 844cc, with ideal bore/stroke ratios giving a powerful, smooth, free revving, high torque engine.

Customers cylinder, bored and fitted with oversize liners and pistons supplied

REF. 3

Oversize pistons available:- STD 80mm

80mm + .010" 80mm + .020" 80mm + .040"

REF. 4

Crankshaft modified to stroke. (Any worn or new parts required are chargeable extra).

REF. 5

The cylinder head modification uses larger 44mm inlet and 38mm exhaust valves with special chrome stems. The combustion chamber is re-shaped to hemispherical proportions.

Cylinder head modification, including parts

REF. 6

Inlet valves (each)

REF. 7

Exhaust valves (each)

REF. 8

Valve top spring cap (each)

REF. 9

Valve cotter (pair)

REF. 10

## \* PLEASE NOTE:—

Late type crankshafts with 20mm diameter gudgeon pins can only be converted by fitting earlier type, short connecting rods with 22mm diameter gudgeon pin holes, and also the earlier type crankpins big end bearings and thrust washers. These parts are chargeable extra.

Total 844cc conversion (i.e. Head, cylinder and crank modification complete)

REF. 11



# The Mighty JAP Racing Engines

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

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 10°. 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.

## FITS AND CLEARANCES

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).

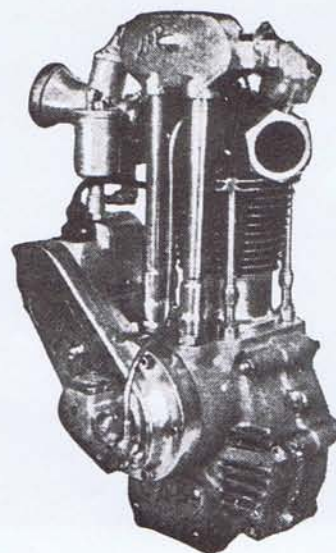
MAGNETO CONTACT BREAKER POINTS: .012".

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

END FLOAT OF CAM WHEEL: .003".

END FLOAT OF CAM LEVERS: .003".

END FLOAT OF ROCKER LEVERS: .002".



## 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 and should be adjusted to supply a small quantity (one drop every five seconds when ticking over).

## 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.

	TYPE 4B
Bore	80mm
Stroke	99mm
Capacity	497cc
Compression Ratio	15:1
Carburettor	AMAL 932
Magneto Advance	34°
Weight Nett	28.5 Kgs (63lbs.)
	REF. 1

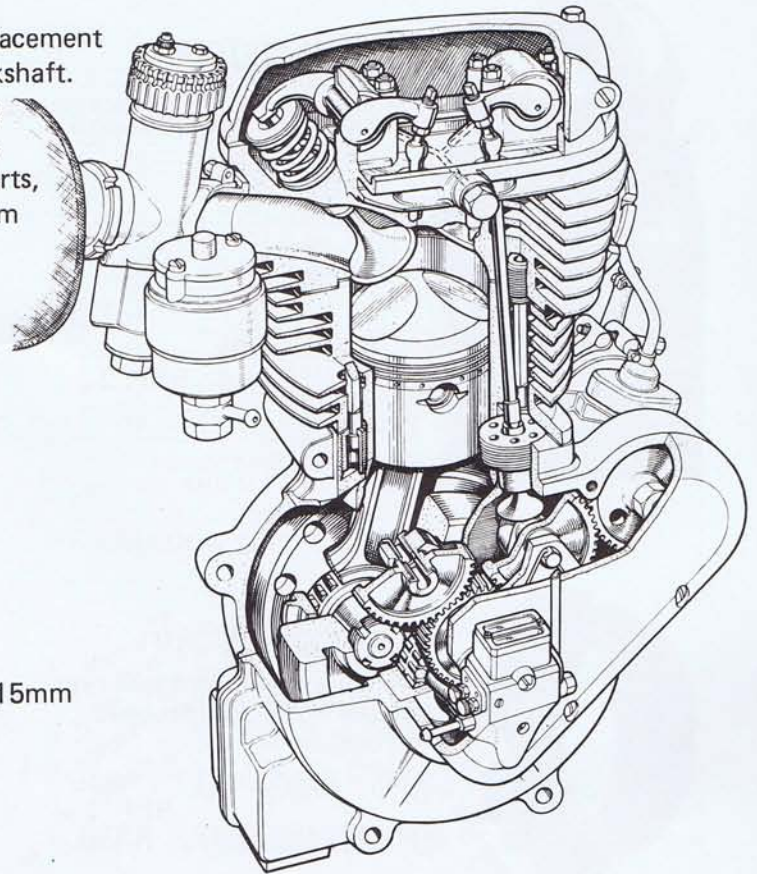
	TYPE 84S	350
Bore	84mm	74mm
Stroke	90mm	80mm
Capacity	499cc	344mm
Compression Ratio	14:1	15:1
Carburettor	AMAL 1034	930
Magneto Advance	40°	34°
Weight Nett	27 Kgs. (59lbs.)	27 Kgs. (59lbs.)
	REF. 2	REF. 3

OFFICIAL JAP ENGINE AND SPARE PART DISTRIBUTORS



# JAWA Speedway

We hold large stocks of Jawa engine spares and replacement parts, from the smallest screw to an exchange crankshaft. We also specialise in valve seat replacements, fitting cylinder liners, reboring, big end replacement, etc., etc. Additionally, we manufacture many special parts, i.e.: Oversize main bearing liners, big end liners, cam follower guides and exhaust nuts, that are not obtainable elsewhere.



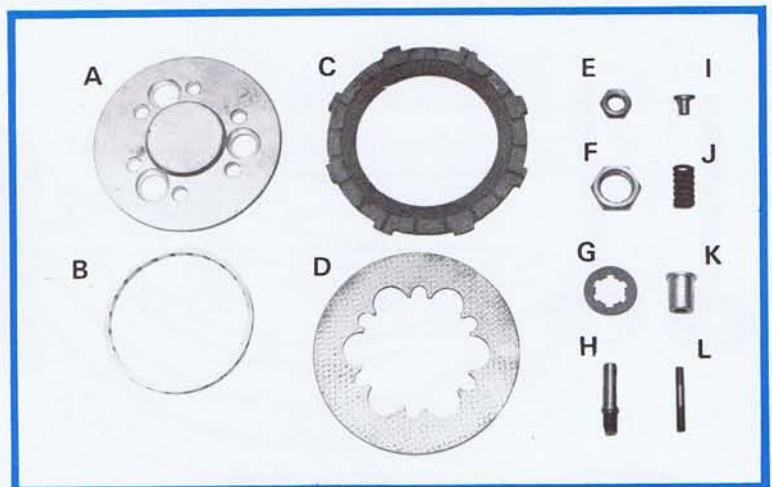
## SPECIFICATION

Bore (standard)	88mm
Re-bore sizes	88.25mm, 88.5mm, 88.75mm
Stroke	81.7mm
Volume	497cc
Compression ratio	14:1
Tappet clearance	Inlet .1mm, Exhaust .15mm
Spark plug	Lodge RL49 or RL50
Magneto Points gap	.3—.45mm
Ignition advance	42°



## JAWA COUNTERSHAFT

Supplied complete with sprocket and clutch nut  
REF. 1



## JAWA CLUTCH

A Pressure plate	REF. 2	G Lockwasher	REF. 8
B Clutch Bearing	REF. 3	H Drive Stud	REF. 9
C Friction Plate	REF. 4	I Spring Adjuster	REF. 10
D Steel Plate	REF. 5	J Spring	REF. 11
E Clutch Nut Small	REF. 6	K Spring Cup	REF. 12
F Clutch Nut Large	REF. 7	L Spring Stud	REF. 13

(for countershaft)





### JAWA PISTONS (Hepolite)

Complete with rings and gudgeon pin.

STD  
+ .25mm  
+ .5mm  
+ .75mm

REF. 1

Ring set only

REF. 2



### JAP PISTONS

Mahle Pistons for 500cc 4B and 84s. Also 350cc Jap.

All complete with rings and gudgeon pin.

4B STD, +.010, +.020, +.040  
REF. 3

84s STD, +.010, +.020  
REF. 4

350cc STD, +.010, +.020  
REF. 5

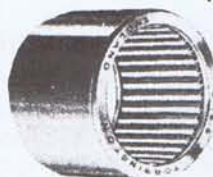
Ring sets only REF. 6



### JAWA EXHAUST NUT

Available in standard and over-size for worn cylinder head threads.

STD, +.005", +.010", +.015"  
REF. 7



### NEEDLE ROLLER CONVERSION FOR JAP CAMSHAFT BUSHES (Old bushes need boring to suit)

REF. 8



### JAWA AND JAP VALVES

Replacement valves manufactured from alloy steel to fine limits.

Jawa Inlet REF. 9  
Jawa Exhaust REF.10  
Jap Inlet REF.11  
Jap Exhaust REF.12



### JAWA AND JAP VALVE GUIDES

Phosphorus Bronze.  
Guaranteed concentric.

Jawa Inlet REF.13  
Jawa Exhaust REF.14  
Jap Inlet REF.15  
Jap Exhaust REF.16

Oversize guides are available for all the above extra REF.17

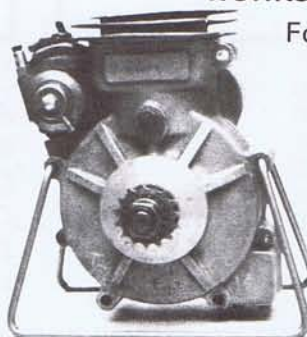


### JAP 84S PISTONS

Special forged pistons for long track and sustained high speed use.

20mm Piston Pin  
STD 84mm,  
84+.25mm  
84+ .5mm  
84+.75mm  
85mm

REF.18



### WORKSHOP ENGINE STANDS

For Jap, Jawa, or Weslake.

PAIR REF.19



# 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

## JAWA SPEEDWAY RATIOS

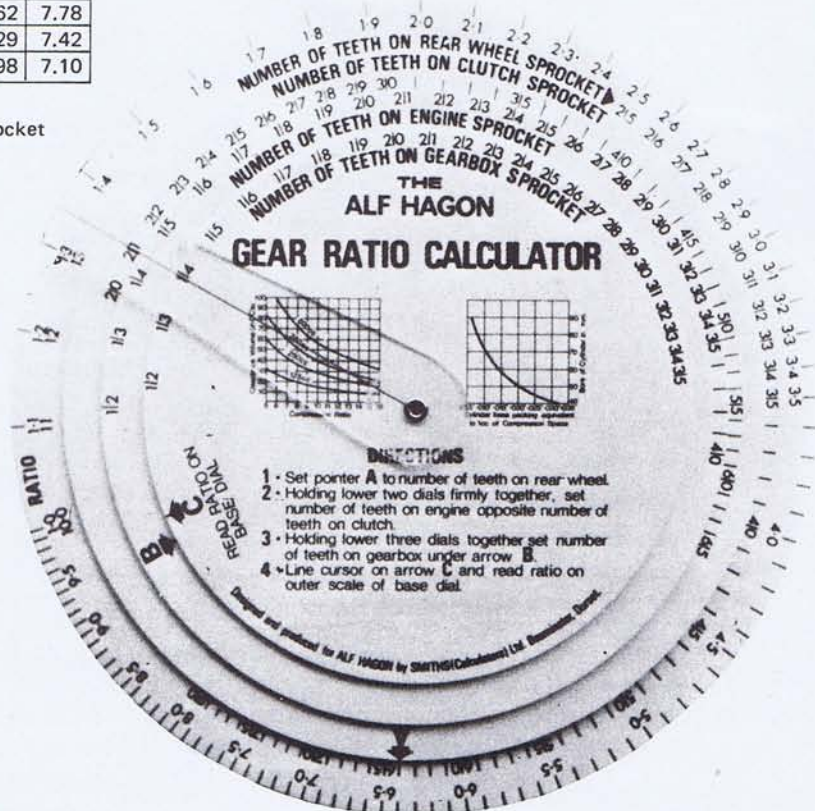
ENGINE SPROCKET	REAR WHEEL SPROCKET							
	56	57	58	59	60	61	62	
15	10.26	10.44	10.63	10.81	10.99	11.18	11.36	
16	9.62	9.79	9.96	10.14	10.31	10.48	10.65	
17	9.05	9.21	9.38	9.54	9.70	9.86	10.02	
18	8.55	8.70	8.85	9.01	9.16	9.31	9.47	
19	8.10	8.25	8.40	8.55	8.70	8.84	8.98	
20	7.71	7.86	7.98	8.12	8.27	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

## HAGON CALCULATOR

### 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



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.1



# Hagon Racewear



## GRASS/SPEEDWAY SUIT

The most supple hardwearing hides available are used in manufacturing Hagon brand leathers. Double thickness leather and fully padded at all contact points.

Special strong Lining  
Guaranteed zips

Sizes: 36" — 44" Chest REF. 1

Available in popular colours and colour combinations, or individual patterns quickly made to measure and design  
REF. 2

## JUNIOR SUIT

Made with the same skill and craftsmanship as our adult suits. Our years of experience in Junior Race Wear enables us to supply garments with ample growth allowance and supreme protection

Size: 28" — 34" Chest REF. 3

In addition to stock sizes and colours, Hagon brand leathers can be supplied made to measure with your own design and colours.  
REF. 4





### ASHMAN SPEEDWAY BOOTS

Available in Red and Yellow, or Blue and White. Sizes 5 – 12

REF. 1



### HAGON/ASHMAN SILVER SHOE

Nickle plated steel construction.

Fully colmonoy coated sole to fit Size 5 – 12  
Ashman Speedway Boots.

REF. 2

Custom made steel shoes can be made to fit any boot. Each one fully colmonoy coated. REF. 3



### COLMONOY

Hard surfacing alloy for steel shoes. Hard wearing.  
Approx. 2 sticks will re-coat a steel shoe.

Per Stick

REF. 4

Per 500 grammes

REF. 5



### ELASTIC BODY BELT

Complete support. Black.  
Quick fasteners.  
State waist size when ordering.

REF. 6



### RACING GLOVES

Black or coloured leather with rubber protection strips on back.  
Junior and adult sizes.

REF. 7



### BACK PROTECTOR

Hard foam plastic helps protect back and spine from injury, yet can be worn under close-fitting leathers. REF. 8



### HAGON TEE-SHIRT

Junior and adult.  
Small, Medium & Large.

REF. 9



### SHIN & KNEE GUARDS

High impact plastic.  
Can be worn inside or over leathers.

REF.10



### JUNIOR BOOTS

Champion Grasstrack or Motocross

Blue/Yellow

Sizes: 1, 2 and 3

REF.11



# Helmets



## EVEROAK MAXMASTER

Produced by the world's leading helmet makers.  
For maximum protection.  
Replaceable Visor.  
Can be used with goggles.  
Size 1 — 4 White

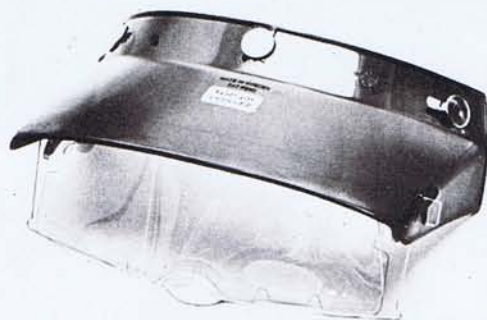
REF. 1



## EVEROAK GRANDPRIX

The very best Helmet you can buy.  
The ultimate in safety. Suitable for  
use with all types of goggles and  
spectacles.  
Size 1 — 4 White

REF. 2



## FLICKER PEAK

High impact plastic peak with flip-up lens. For use with normal goggles.  
A quick head movement flips up lens if it becomes obscured by mud or dust.  
Supplied with 5 tear-offs.  
Spare tear-offs (5-pack)  
Spare flip screen

REF. 3  
REF. 4  
(REF. 5)



## FACE MASK GOGGLE

Combined protection and vision.  
Spare lens plain or tinted.

REF. 6  
REF. 7



## BARIFALDI MASK

Face Mask/Goggles with tear-offs  
Red/White or Blue/White.  
Spare lenses plain or tinted  
Spare tear-offs

REF. 8  
REF. 9  
REF.10



# Badges



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



REF. 2



REF. 3

SELF-ADHESIVE FLEXIBLE METAL BADGES.

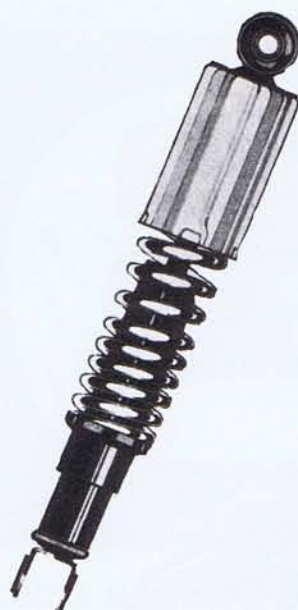


SELF-ADHESIVE PLASTIC BADGE. REF. 4.

AS ABOVE BUT 180 x 270 mm REF. 5



# Girling Suspension Units



**TWIN TUBE  
HONDA**

PAIR REF. 1



**LONG STROKE  
GAS SHOCK**

PAIR REF. 2



**STANDARD  
TWIN TUBE**

PAIR REF. 3



**SHORT STROKE  
GAS SHOCK**

PAIR REF. 4

## GIRLING TWIN TUBE STANDARD UNITS

Supplied in balanced pairs and very versatile with such a wide range of component parts precise suspension is always achieved for every type of machine.

**DAMPERS** — Soft, medium and hard

Damping rates in each length.

Lengths available 10.9", 11.4", 11.9", 12.4"

12.9", 13.4", 13.9". Balance Pairs

REF. 5



**SPRINGS** — A range of 30 spring rates from 42lb/in to 210lb/in and a choice of black enamel or polished chrome.

Black Springs

REF. 6

Chrome Springs

REF. 7



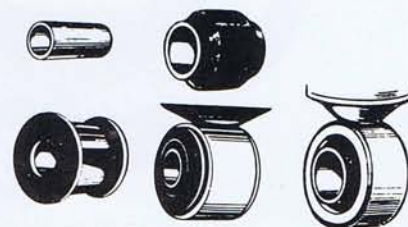
## MOUNTING BUSHES

20 different end mounting bushes for 5/16" to 1/2" and 8mm to 16mm

Diameter Fixing Bolts

REF. 8

Special yoke end fitting are available for most Honda models.



**GIRLING UNITS ASSEMBLED TO YOUR REQUIREMENTS**



# Girling Gas Shocks

DESIGNED FOR COMPETITION USE, GAS SHOCKS COVER A WIDE RANGE OF APPLICATIONS AND BY ASSEMBLING THE CORRECT SHOCK ABSORBERS, SPRINGS AND MOUNTING BUSHES TOGETHER, WE CAN SUPPLY EXACTLY THE CORRECT GAS SHOCKS FOR YOUR MACHINE.

## DAMPING RATES

SOFT MEDIUM OR HARD

## UNIT LENGTHS (Extended)

11.8", 12.8", 13.00", 13.4".

## MOUNTING BUSHES

8, 10, 12, 14, 16mm

5/16", 3/8", 7/16", 1/2",

## SPRINGS

MONO RATE 42lb/in to 210lb/in

MULTI RATE 60/90lb/in or 70/100lb/in

TWIN RATE 53/75lb/in to 96/210lb/in

LONG STROKE 65lb/in to 125lb/in

## COMPLETE GAS SHOCKS

WITH MONORATE SPRINGS PAIR REF 1

WITH MULTIRATE SPRINGS PAIR REF 2

WITH TWIN RATE SPRINGS PAIR REF 3

WITH LONG STROKE SPRINGS PAIR REF 4

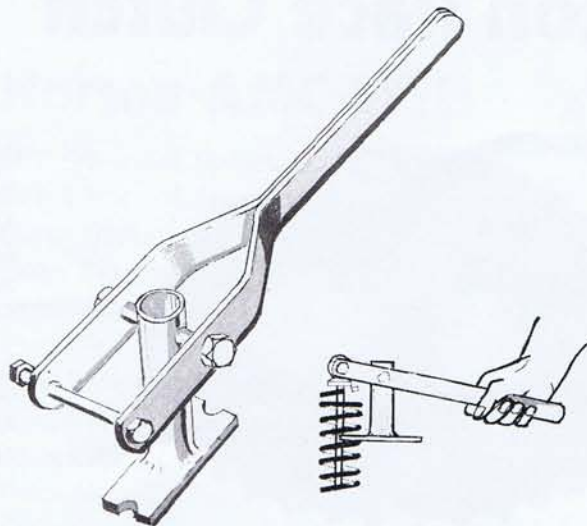


USING STANDARD GAS SHOCK PARTS, OVER 1,000,000 DIFFERENT GAS SHOCKS CAN BE ASSEMBLED — ENABLING US TO GIVE YOU PRECISE SUSPENSION FOR ANY TYPE OF USE.

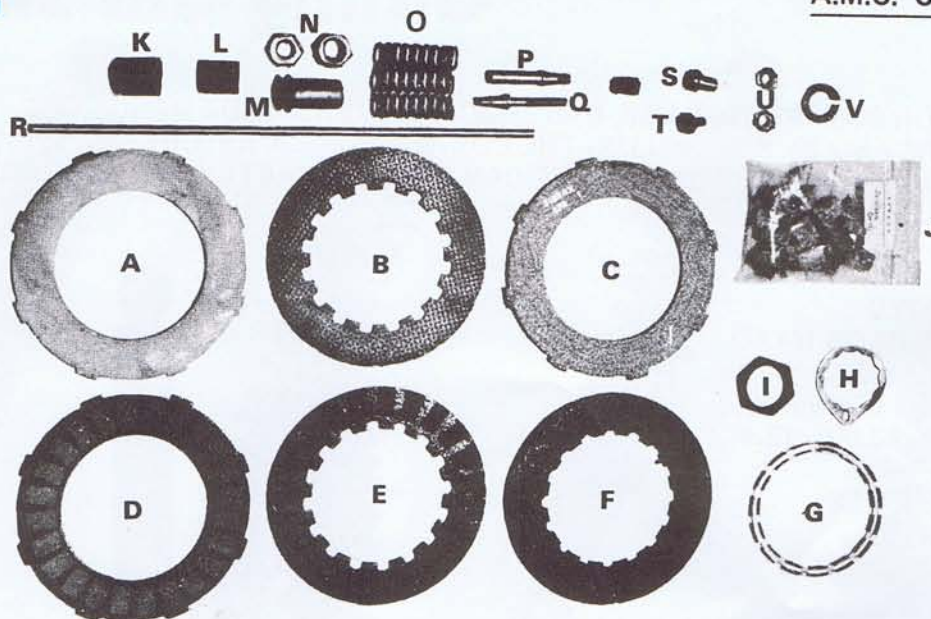
## SPRING COMPRESSOR TOOL

DESIGNED AND MANUFACTURED BY US TO FIT ALL OPEN SPRING SUSPENSION UNITS WITH SPRINGS OF RIGHT OR LEFT HAND COILS EVEN THE STRONGEST SPRINGS CAN BE FITTED EASILY AND SAFELY WITHOUT ASSISTANCE.

REF 5







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
						AC	Centre race
					EXCHANGE SERVICE		

### EXCHANGE SERVICE

Chain Wheel	REF. 1.
Clutch plates	REF. 2.
Bonded back plate	REF. 3.

## Norton Race Clutch



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

REF. 4

A Special lightweight version of the  
Hagon/Norton Clutch is available with  
Alloy Hub, Chainwheel, Backplate,  
Friction Plates, Spring Cups, Pressure  
Plate

REF. 5



## Bewley Two-Speed Gearbox

The Bewley 2 speed gearbox is available in two forms. Footchange and semi-automatic.

The semi-automatic is operated by engaging first gear manually, and when second gear is required releasing a handlebar lever, thus enabling the rider to change gear coming out of a bend whilst standing on the footrest. Manual and automatic versions are available with a choice of ratios. 1:44 for tracks of 800 to 1000 metres, or 1:2 for tracks up to 800 metres, also a choice of 14T or 16T gearbox sprocket. All Norton/AMC clutches and Hagon type Norton clutches are suitable.

Manual	REF. 1
Automatic	REF. 2

A special lightweight version is also available with magnesium casings for Automatic boxes.	REF. 3
---	--------

## Norton-AMC Gearbox

Fully re-conditioned four speed Norton/AMC gearboxes are available, modified for grass track machines. REF. 4

### Two Speed Gearbox

Re-conditioned gearboxes are also available, extensively modified, for long track use, with two gear ratios and a direct foot change mechanism fitted. The result is a lightweight, compact and very sturdy gearbox. REF. 5

## Norton-AMC Parts

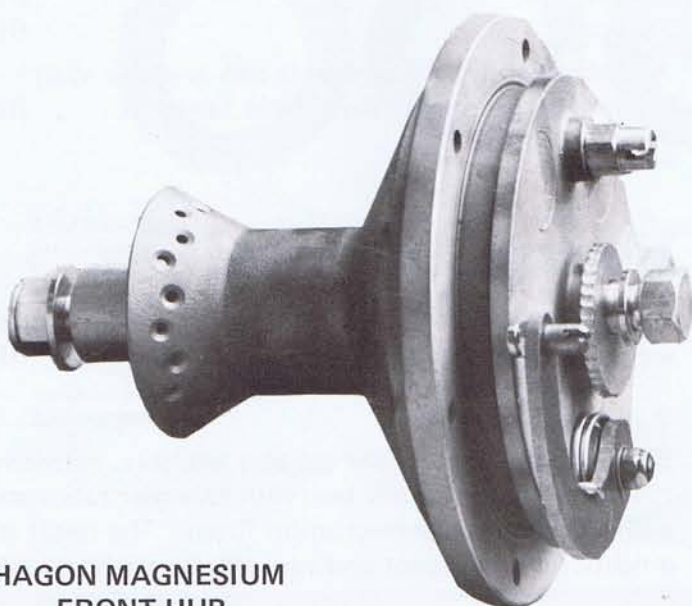
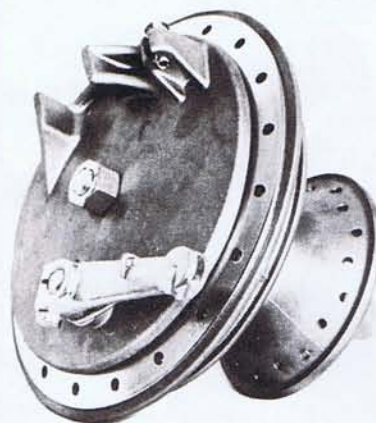
16T 5/8 x 1/4 Sprocket	REF. 6
14T 5/8 x 1/4 Sprocket	REF. 7
Outer Gasket	REF. 8
Large Bearing	REF. 9
Small Bearing	REF. 10
Thin Wire Spring	REF. 11
Gear Lever	REF. 12
Sprocket Oil Seal	REF. 13
Sprocket Nut	REF. 14
Thick Wire Spring	REF. 15
Inner Gasket	REF. 16



## HAGON CONICAL FRONT HUB

Powerful	1250mm Brake
Weight	2 Kgs
Spindle	12mm
Spoke Holes	36
Overall Width	1143mm
Die Cast Aluminium alloy with Sealed Long Life Bearings	

REF. 1



## HAGON MAGNESIUM FRONT HUB

**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.

- Magnesium Hub, with bearings and centre spacer.
- Bearings, double rubber sealed. Needs no lubrication.
- Dural centre spacer, 12mm bore.
- Push-on dural spacers, will not fall out when wheel is removed.
- 12mm Spindle and nut.

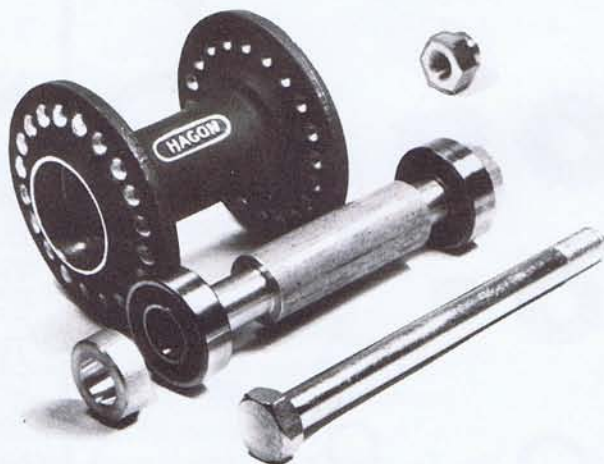
Weight 370 grams. Also available with 1/2" Spindle.

REF. 3

## HAGON CONICAL REAR HUB

Brake	1365mm
Weight	3 Kgs
Spindle	15mm
Spoke Holes	40
Overall Width	1700mm
Sprocket Sizes Available	
5/8" x 1/4"	46, 47, 48, 49, 50, 51, 52, 53, 54, Teeth
5/8" x 3/8"	49, 51, Teeth
1/2" x 5/16"	56, 58, 60, 62, 64, Teeth

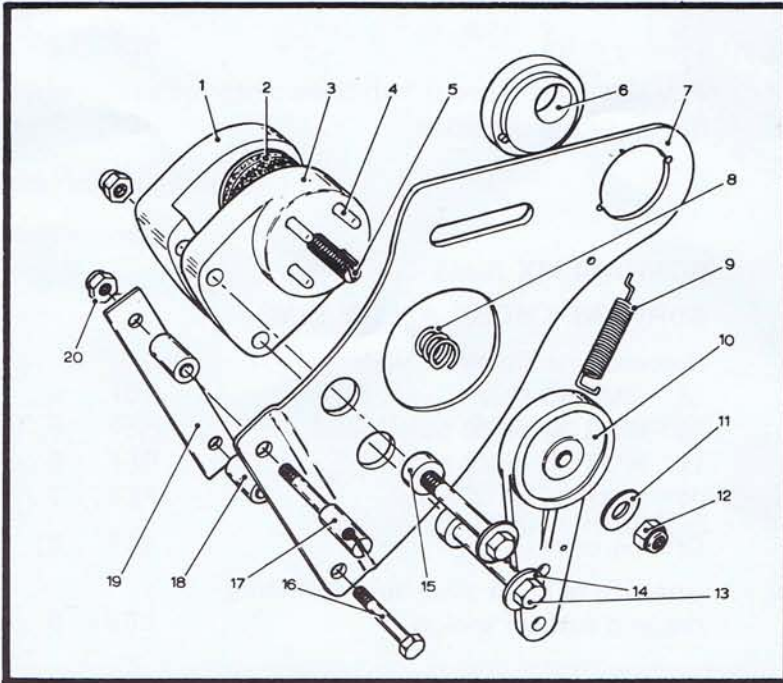
REF. 2





# 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

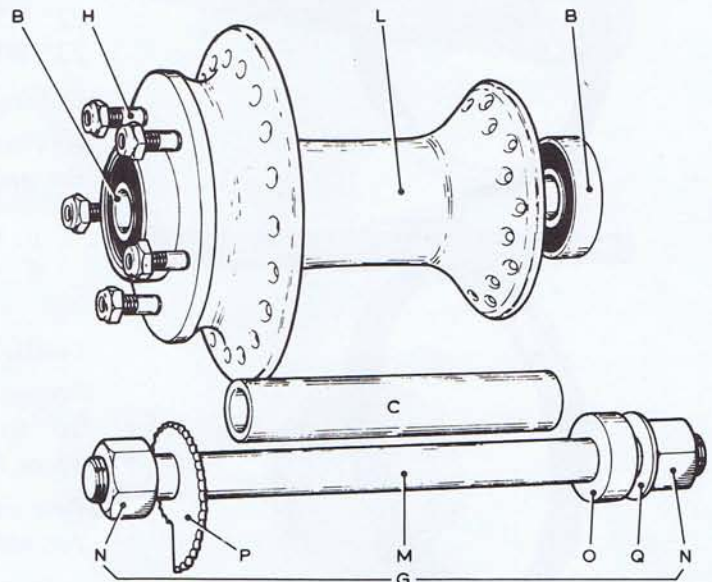
Made from Die Cast Electron  
17mm Spindle  
40 Spoke Holes  
Sealed Bearings

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





Please state size of tyre to be fitted and number of spoke holes when ordering.



## BORRANI 'RECORD' ALLOY RIMS

Depressed, available in every size.

16" to 23" WMO to WM3

36 or 40 spoke holes

REF. 1

Drilling extra

REF. 2

Any size built to your hub, including rim and rustless spokes

REF. 3



## BORRANI MX RIMS

## BORRANI 'CROSS' ALLOY RIMS

Depressed, available in sizes

16" WM5 40 hole

REF. 4

18" WM3 36 or 40 hole

REF. 5

18" WM4 36 or 40 hole

REF. 6

21" WM1 36 or 40 hole

REF. 7

Drilling extra

REF. 8

Any size built to your hub, including rim and rustless spokes

REF. 9



## AKRONT NON-VALANCED ALLOY RIMS

Depressed, available in sizes

19" WM2 36 or 40 hole

REF. 10

22" WM1 36 or 40 hole

REF. 11

23" WM1 36 or 40 hole

REF. 12

Drilling extra

REF. 13

Any size built on to your hub, including rim and rustless spokes

REF. 14



## CHROME RIMS

Depressed and drilled, available in sizes

16" to 23" WMO to WM3

36 or 40 spoke holes

REF. 15

Any size built on to your hub, including rim and rustless spokes

REF. 16



# Wheelbuilding Services

Wheelbuilding including spokes  
(customer's own rim and hub)

REF. 1

Spoke sets (36 or 40 rustless spokes  
and nipples) supplied to pattern or  
measurements

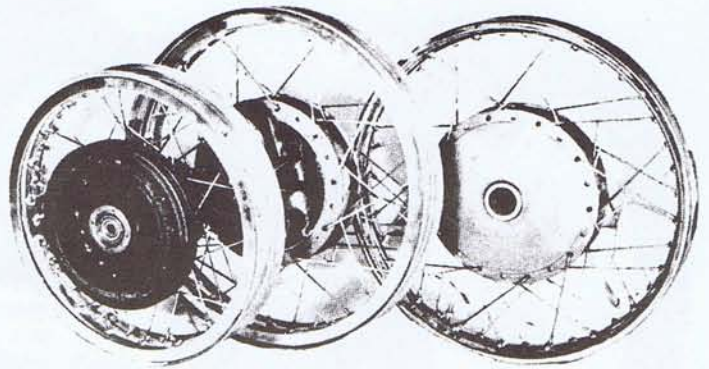
REF. 2

Postage and packing per wheel  
boxed

REF. 3

Brake drum skimming

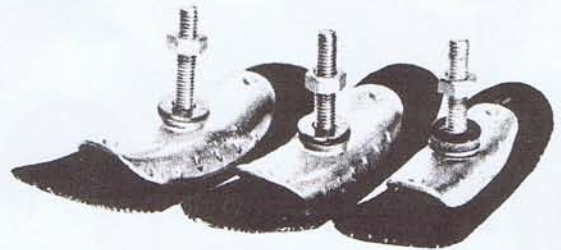
REF. 4



## SECURITY BOLTS

Dunlop security bolts

WM1, WM2, WM3 REF. 5



## RIM BANDS

Dunlop rim bands

18" and 19" REF. 6

20" and 21" REF. 7



## TYRE PRESSURE GAUGE

6-50lb sq.in. Dunlop Tyre Gauge REF. 8

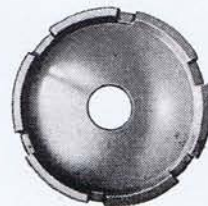
2-20lb sq.in. Dunlop Tyre Gauge REF. 9



## SPOKE KEY

Universal Type

REF. 10





# Tyres Speedway G.T. Junior



325/350 x 16  
CEAT  
GRASS TRACK  
REAR

REF.1



300 x 17  
CEAT  
GRASS TRACK  
REAR

REF.2



350 x 18  
BARUM  
GRASS TRACK  
REAR

REF.3



350 x 19  
BARUM  
SPEEDWAY  
SPECIAL  
/GRASS TRACK  
REAR

REF.4



350 x 19  
BARUM  
SPEEDWAY  
/GRASS TRACK  
REAR

REF.5



350 x 19  
DUNLOP  
SPEEDWAY  
/GRASS TRACK  
REAR

REF.6



250 x 21  
BARUM  
GRASS TRACK  
FRONT

REF.7



275 x 22  
BARUM  
LONG TRACK  
REAR

REF.8



275 x 23  
BARUM  
SPEEDWAY  
/GRASS TRACK  
FRONT

REF.9



# Tyres Moto-Cross



350 x 16  
Dunlop  
Universal  
/Sidecar  
REF. 1



500 x 18 (Wet) REF. 2  
550 x 18 (Dry) REF. 3  
Dunlop  
Sports  
K88  
Moto Cross  
Rear



350 x 19  
Dunlop  
Sports  
Moto Cross  
Front  
REF. 4

## INNER TUBES (Normal Valve)

300/325 x 16"	REF. 5
350 x 16"	REF. 6
225/250 x 17"	REF. 7
300 x 17"	REF. 8
325/350 x 17"	REF. 9
225/250 x 18"	REF. 10
275/300 x 18"	REF. 11
325/350 /360 x 18"	REF. 12
400/410 /460 x 18"	REF. 13
275/300 x 19"	REF. 14
325/350 /360 x 19"	REF. 15
400/410 x 19"	REF. 16
275/300 x 21"	REF. 17
275 x 23"	REF. 18



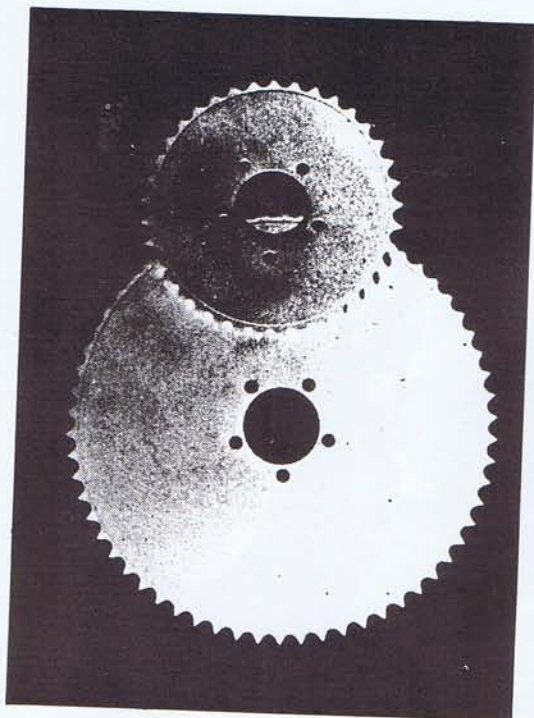
## INNER TUBES (Side Valve)

350 x 19" S.V.	REF. 19
275 x 22" S.V.	REF. 20





# 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

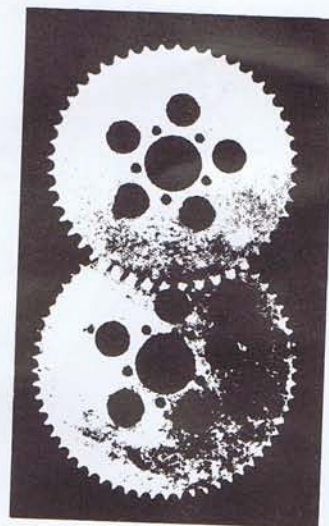
REF. 1

21T to 26T

REF. 2

## REAR WHEEL SPROCKETS

Size	ALLOY	REF
1/2" x 5/16"	56,58,60,64,64 T (Cub)	3
5/8" x 1/4"	35 to 49T	4
5/8" x 1/4"	50 to 62T SPEEDWAY JAP	5
5/8" x 1/4"	55 to 62T SPEEDWAY JAWA	6
Size	STEEL	
1/2" x 5/16"	58,60,62,64 T	MAG HUB 7
		OR
5/8" x 1/4"	47 to 51T	SPEEDWAY JAP 8



# Renold Chains

RENOLD CHAINS dominate every type of motorcycle sport. Available cut to any length. (Please state number of pitches required). Also in 25 feet coils.

RENOLD 1/2" x 5/16" CHAIN

RENOLD 5/8" x 1/4" CHAIN

RENOLD 5/8" x 3/8" CHAIN

SPRING LINK

REF. 15

PER FOOT

REF. 9

25 FT. COIL

REF. 10

PER FOOT

REF. 11

25 FT. COIL

REF. 12

PER FOOT

REF. 13

25 FT. COIL

REF. 14

CRANKED LINK

REF. 16

# Renold Grand Prix

25% STRONGER THAN OTHER CHAIN. ULTRA HEAVY DUTY.

GRAND PRIX 5/8" x 3/8" PER FOOT

REF. 17

GRAND PRIX 5/8" x 3/8" 25 FT. COIL

REF. 18

GRAND PRIX 5/8" x 3/8" SPRING LINK

REF. 19

GRAND PRIX 5/8" x 3/8" CRANKED LINK

REF. 20





# Power Equipment

## MORGO 650cc-750cc

Outstanding in design and performance the 'Morgo' conversion is made to fit any 650cc Triumph unit or pre-unit motor (9 stud head to be used on the latter). Without any alterations to any of the standard parts.

Complete kit with 11:1 pistons

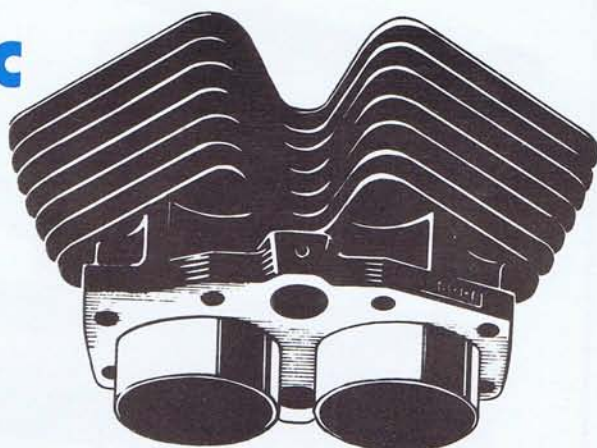
REF. 1

Complete kit with 9.5:1 pistons

REF. 2

Replacement pistons are available in  
Std. +.020", +.040", +.060",  
11:1 or 9.5:1 Compression

EACH REF. 3



## MORGO Oil Pumps

### MORGO HIGH PERFORMANCE

**OIL PUMPS** are made from the best materials, to very fine limits to give long and trouble free service. No modifications are necessary, just take off the old pump and fit the new 'Morgo'.

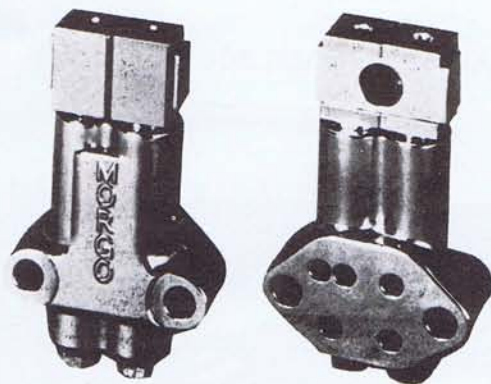
Two types are available, for unit and pre-unit motors.

Morgo pump for unit motors

REF. 4

Morgo pump for pre-unit motors

REF. 5



## S&W Valve Springs

Made from drawn and ground alloy steel wire.

These superbly engineered springs are guaranteed to outlast many sets of standard springs, and eliminate valve bounce in the most testing conditions. In some cases top and bottom valve spring collars will have to be turned to suit springs. Full fitting instructions are supplied.

Sets for Twins

REF. 6

Sets for Singles

REF. 7



## HAGON Valve Springs

For JAP or JAWA. Purpose made from Swedish wire, for longer life and high RPM valve control.

2 Inners 2 Outers

Set for JAP

REF. 8

Set for JAWA

REF. 9





# Tools



JAWA CYLINDER BOLT SPANNER  
REF. 1



JAWA CYLINDER BOLT EXTRACTOR  
REF. 2



REF. 3

JAWA CAM FOLLOWER  
GUIDE TOOL



SPROCKET BODY  
EXTRACTOR

for JAWA REF. 4  
for JAP REF. 5



DAG MATT BLACK  
COATING HEAT  
DISPERSANT REF. 6



SPRAY ON CHAIN  
LUBE  
REF. 7



SOLVOL AUTOSOL ALLOY AND  
CHROME POLISH  
REF. 8



PVC TAPE  
LARGE ROLL  
BLACK REF. 9

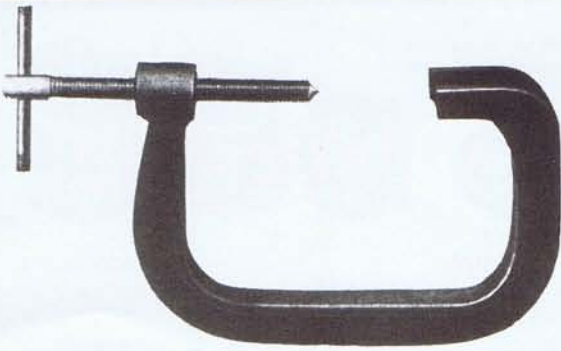


SUPER STRONG  
RACER TAPE FOR  
MAJOR JOBS  
JUMBO ROLLS  
REF. 10



REF. 11

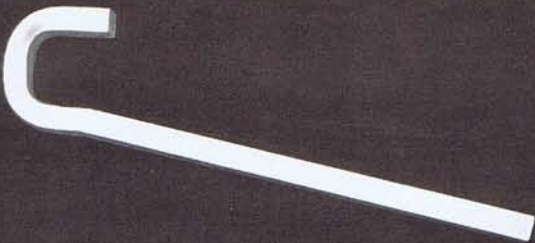




**OHV VALVE SPRING COMPRESSOR**  
REF. 1



**BURETTE**  
For measuring cylinder volumes and  
compression ratios.  
REF. 2



**JAP EXHAUST NUT SPANNER.**  
REF. 3



**JAP ENGINE NUT  
SPANNER**  
REF. 4



**TAPPET  
SPANNER**  
REF. 5



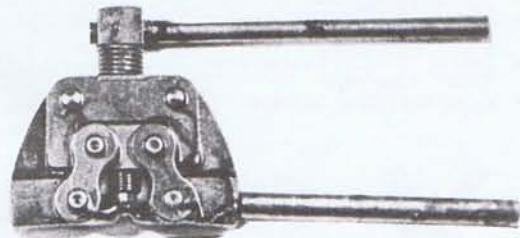
**ADJUSTABLE 'C' WRENCH**  
For JAWA exhaust nut, fuel and  
oil caps.  
REF. 6



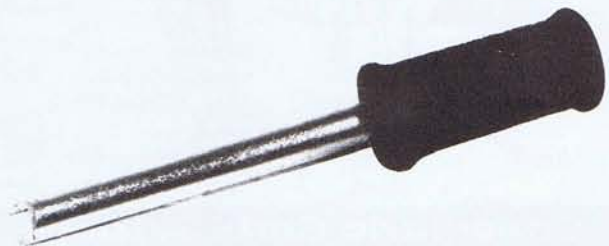
**PISTON RING CLAMP**  
60 mm REF. 7  
85 mm REF. 8



**UNIVERSAL PULLER SET**  
REF. 9



**CHAIN LINK EXTRACTOR**  
REF. 10



**CLUTCH ADJUSTER TOOL**  
Suitable for JAWA, NORTON, BSA, etc.  
REF. 11

**LIGHTNING**



**CIRCLIP PLIERS**  
Combined internal and  
external.

REF. 12

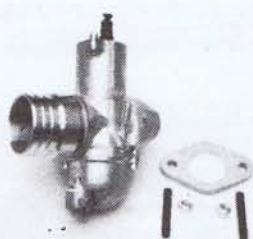


# Carburettors

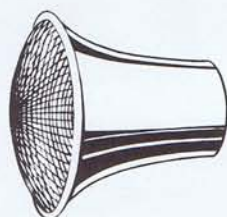


## FLOAT BOWL

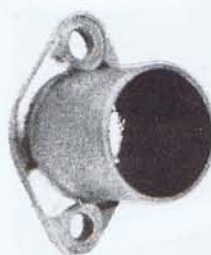
1. Standard. 0.125" Feed Hole
2. Standard, with drain plug.
3. Standard, with 'High Flow' slot.
4. Standard, with drain and slot.
5. High Pressure. 0.062" Feed Hole. For use with fuel pump.
6. Special HIGH FLOW, as shown 0.156" Feed Hole
7. Dural needle for item 6.



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



Screw-on Filtered  
Bellmouth. 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

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

## AMAL CONCENTRIC CARBURETTORS NO AIR SLIDE OR VENTURI

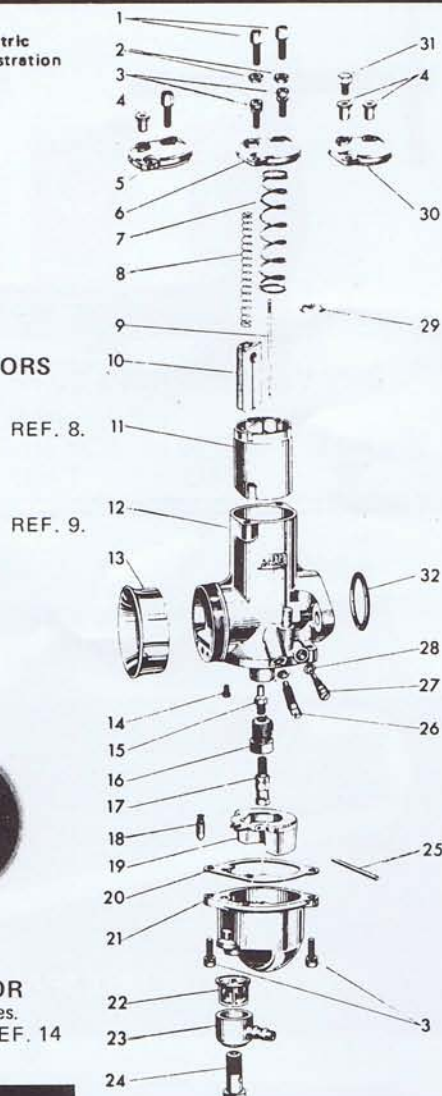
### 900 SERIES

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.



## Concentric Carb. Settings

### SETTINGS FOR ROAD USE

Most 250 Four Stroke Single  
Cylinder machines and 500  
Twins with one or two  
carburetors

Most 350 Four Stroke Single  
Cylinder Machines and 650  
Twins with one or two  
carburetors

Most 500 Four Stroke Single  
Cylinder Machines

### J E T S

MAIN NEEDLE PILOT

Main jets may need increasing  
slightly depending on cams,  
ports, pistons, etc.

200 106 25

200 106 25

280 107 25

### SETTING FOR METHANOL

Most 250 Four Stroke Single  
Cylinder Machines and 500  
Twins with one or two  
Carburetors

Most 350 Four Stroke Single  
Cylinder Machines and 650  
Twins with one or two  
Carburetors

Most 500 Four Stroke Single  
Cylinder Machines

460 120 25

500 120 25

600 120 25

### PETROL SETTINGS SLIDES No. 2, 2½, 3, 3½, 4, 4½, 5.

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.

ADJUST PILOT AIR SCREW IN CONJUNCTION WITH THE  
SLOW RUNNING SCREW TO OBTAIN SMOOTH TICKOVER.

### METHANOL SETTINGS

Always start with special tapered slide needle (2) 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 machine 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 too small.

Pilot air screw - Screw in Fully - then back off ¾ of a turn.

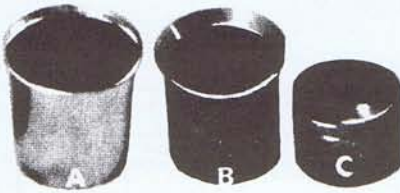
Always use the copper gauze filter in the fuel feed banjo.

PLEASE NOTE \* FOR METHANOL IT IS MOST ESSENTIAL THAT  
YOU FIT OUR MODIFIED FLOAT CHAMBER BOWL AND FEED BOLT.

LET US SUPPLY AND SET YOUR  
NEW 900 & 1000 CONCENTRIC



# Carburettors



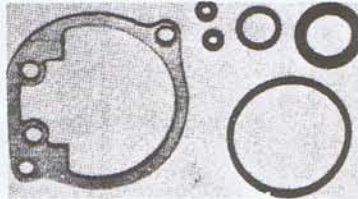
## BELL MOUTHS

- A. Steel (Chrome) REF. 1.  
B. Alloy REF. 2.  
C. Short Alloy for Air Filter REF. 3.



## MANIFOLD

For fitting big carbs on small heads or small carbs on big heads. 65mm to 2" Stud centres. 32mm bore. REF. 4.

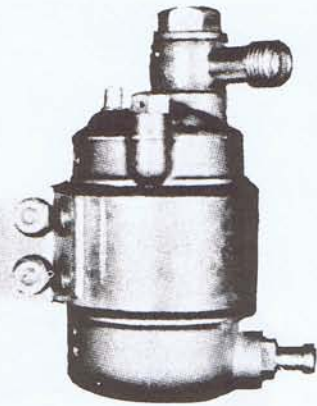


CONCENTRIC GASKET SET REF. 5



## FUEL LINE FILTER

Essential for small engines, prevent unnecessary jet blockages. Fits straight into fuel line, adjustable angle. REF. 6.

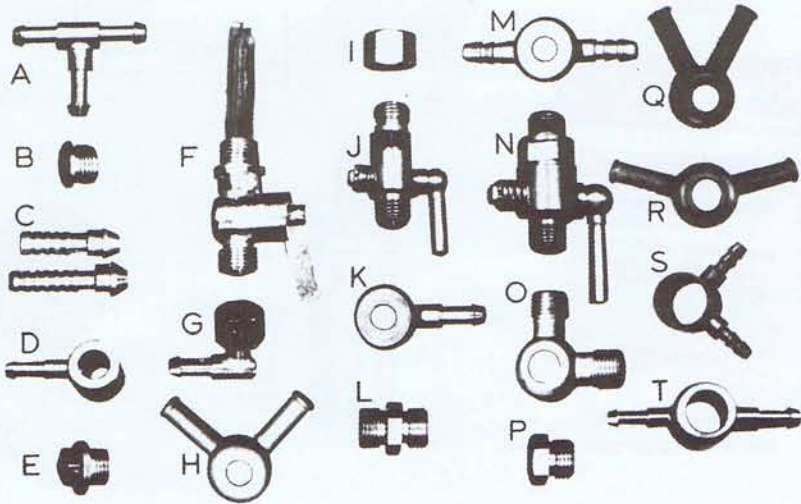


## DELLORTO Remote Float Chamber

- SS1 large REF. 7  
SS2 small REF. 8.

## 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



# Fuel and Oil

Castrol "R" 40	1 Litre Tin	REF. 9
Castrol "R" 40	5 Litre Tin	REF. 10
Castrol M	1 Litre Tin	REF. 11
Castrol Fork Oil	568ml Dispenser	REF. 12
Castrol LM (High Melting Point) Grease	500 g Tin	REF. 13
Bell-Ray Racing 2 Stroke Oil	1 U.S. Pint	REF. 14
Bell-Ray Racing 4 Stroke Oil	1 U.S. Pint	REF. 15
Methanol	5 Litres	REF. 16
Methanol	25 Litres	REF. 17
Nitromethane	1 Litre	REF. 18
Nitromethane	5 Litres	REF. 19

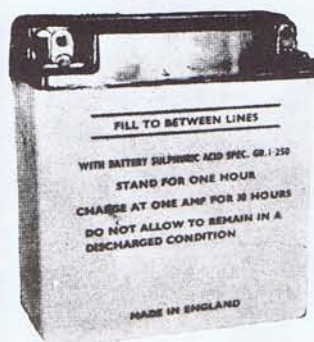
PLEASE NOTE: Fuel and oil are available to callers only



# 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 Coil, Oil filled REF. 2  
12V Coil, REF. 3



1 METRE REF. 4  
High Tension Lead  
Black or White P.V.C.



REF. 5  
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
	↑	B-9HN(P)	L60R	R-49
	↓	B-10HN(P)	L58R	R-50
	Cold (Hard)	B-11HN(P)	L57R	R-51
14mm x 18.0mm Reach Long Reach	Hot (Soft)	B-8EN(P)	N62R	RL47
	↑	B-85EN(P)	N60R	RL49
	↓	B-9EN(P)	N57R	RL50
	Cold (Hard)	B-95EN(P)	N54R	RL51
10mm Short Reach	Hot (Soft)	C-10H	G59R	10R-49
	↑	C-12H	G56R	10R-50
	↓	C-13H	G54R	10R-51
	Cold (Hard)	C-14H		
10mm Long Reach	Hot (Soft)			10RL 49
	↑			10RL 50
	↓			10RL 51
	Cold (Hard)			

This conversion chart is intended only as a guide.

## ENGINE PLATES



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

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

**ALLOY 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 gauges from 18G to 10G. Prices on application.

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



