

# AMAL

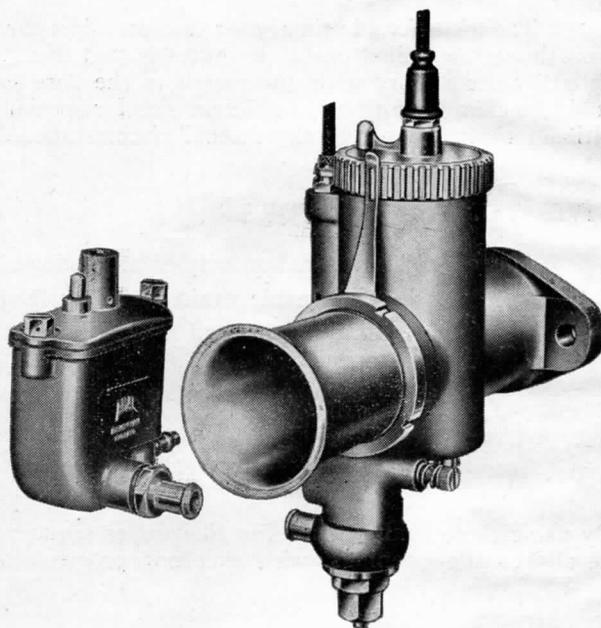
May, 1964.

LIST No. 115/1 (Issue No. 3)

## GP2 CARBURETTORS

THE CARBURETTER OF RECORDS AND SUCCESSES

FOR USE WITH ALL GRADES  
OF RACING FUELS.



*GUARANTEE.—The Company take all possible reasonable care in the manufacture and the quality of their products. Purchasers are informed that, any part proved to be defective in manufacture or quality, and returned to the works within six months of its purchase new, will be replaced. The Company must respectfully point out however, that its responsibility and that of its agents, stockists and dealers, is limited to this Guarantee, and that they cannot, under any circumstances, be held responsible for any loss or for any contingent or resulting liability arising through any defect. These conditions of sale and use also apply when the Company's products form part of the original equipment of machines purchased new.*

1,000/5/64. W.

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BIRMINGHAM."

# THE GRAND PRIX CARBURETTER

## features

### UNOBSTRUCTED BORE

for maximum power at peak R.P.M.

Because the metering needle does not pass through the choke of the Carburetter, the only restriction to flow through the Carburetter when the throttle valve is fully open, is a small one caused by the protrusion of the spray tube, and this is overcome by a slight swell in the choke at this point. A taper returns the bore to its nominal diameter on the engine side of the throttle valve.

### SHORT MIXTURE TRACT

for rapid acceleration

Although the needle does not obstruct the choke, it is positioned within the throttle valve diameter, and this results in a very short tract for the mixture to traverse from the needle jet to the choke. The benefit of this is felt in rapid and consistent acceleration throughout the range, and where megaphone exhausts are used an additional advantage is cleaner entry onto the megaphone at lower R.P.M. than with previous types of racing Carburetters.

### PRIMARY AIR JET

for accurate depression control

The quantity of primary air that atomises the fuel issuing from the needle jet, is controlled by making it pass through a drilled bush. Its effect is that of a depression control for the main jet, and while the air jet as fitted by the factory with due regard to the bore size of the Carburetter would normally be left unaltered, it could be changed for one of different size for special purpose tuning. It may, therefore, be regarded as an additional tuning factor in exceptional circumstances.

### FIVE TUNING FACTORS

for accurate tuning throughout the range

The established Amal principles are followed by incorporating :—

- Easily changeable **main jet** controlling the fuel supply at full throttle ;
- changeable **needle and needle jet** and adjustable **needle position** for control at smaller throttle openings ;
- changeable **throttle valve** of which the amount of cutaway controls the mixture at still smaller throttle openings ;
- Pilot Air Adjusting Screw** for controlling the mixture strength for idling. The fuel being supplied by a pilot jet.

By using these tuning factors in the proper sequence, it is possible to obtain clean and consistent carburation at all throttle openings, with excellent progression throughout.

### FLOAT CHAMBERS

to ensure adequate fuel supply

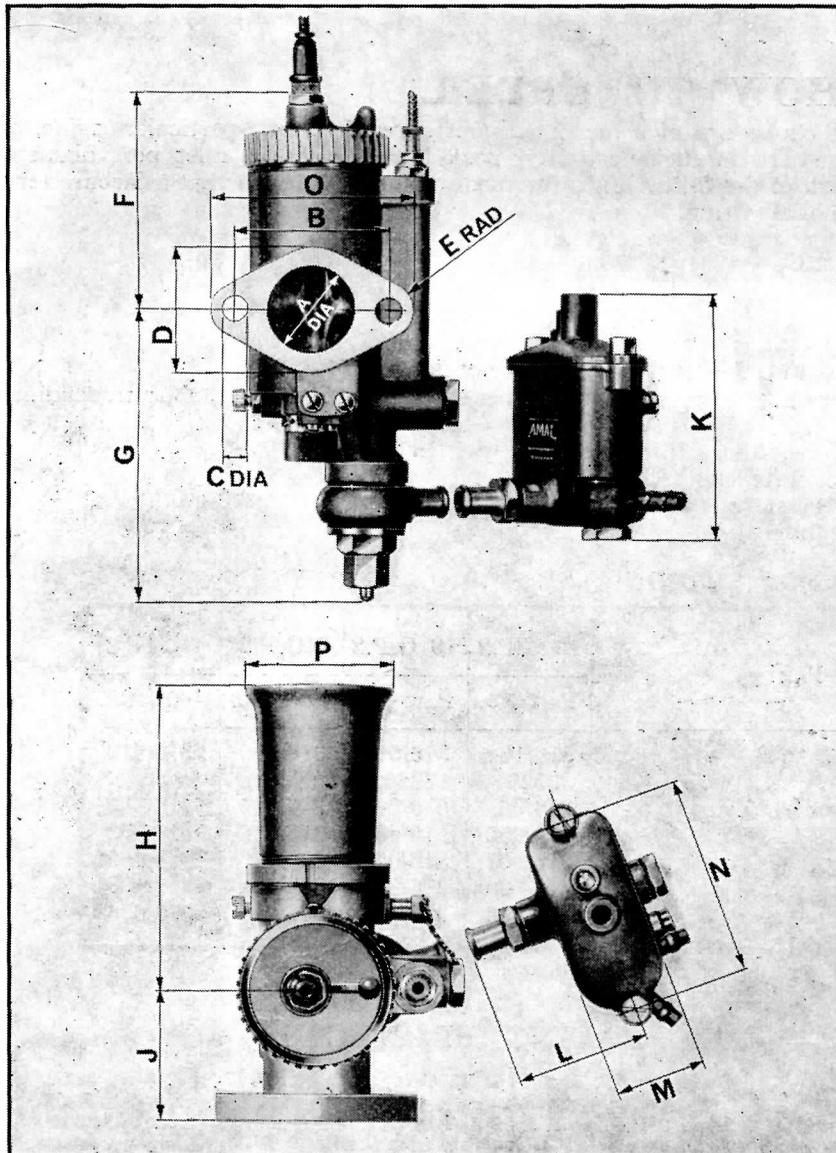
The float chamber recommended and normally fitted to the current GP2 carburetter is a remotely mounted type 510 and is of bottom feed design incorporating a lever type operated float.

If a rigid float chamber is required our type 302 which is attached to the mixing chamber in the orthodox manner can be supplied. The float chamber can either be upright, or cranked at the angle of the induction port of the engine in question. It is, therefore, necessary when ordering a carburetter incorporating a solid mounted float chamber to state the angle of the induction port.

FOR OPERATION AND TUNING INSTRUCTIONS, SEE LIST No. 115/3.

FOR SPARE PARTS SEE LIST No. 115/2.

## DIMENSIONS AND SPECIFICATIONS.



### MATERIAL.

Light metal Mixing Chamber and Float Chamber Bodies.

### FINISH.

Bodies sprayed with durable and attractive metallic lacquer. Mixing Chamber Cap, plated and polished.

### LOCKING DEVICES.

Spring blade lock to engage with serrations in Mixing Chamber Cap. Banjo Bolt, Jet Base Nut, Choke Adaptor Holding Screws, Float Chamber Cover, Fixing Screws and Float Hinge Spindle Head are drilled for lock wires.

ALTERNATIVE CLIP FITTING	
15GP	1 1/8" to 1 1/4"
10GP	1 1/4" to 1 3/8"
5GP	1 9/16" to 1 11/16"
3GP	—

TYPE	AVAILABLE CROSS BORES A DIA.	B	C	D	E	F	G	H	J	K	L	M	N	O	P
15G.P.	ins. 7/8, 15/16, 1, 1 1/16*	2 ins.	ins. 1 1/32	ins. 1 5/8	ins. 3/8	ins. 2 1/4	ins. 3 7/8	ins. 3 3/32	ins. 1 1/4 or 2 1/2	ins. 3 11/32	ins. 1 3/4	ins. 1 7/32	ins. 2 23/32	ins. 2 5/8	ins. 1 7/8
10G.P.	1 1/16, 1 3/32, 1 1/8, 1 5/32, 1 3/16, 1 7/32*	2 ins. or 65 mm.	1 1/32	1 5/8	3/8	2 15/16	3 15/16	3 23/32	1 3/4 or 2 1/2	3 11/32	1 3/4	1 7/32	2 23/32	2 5/8	2
5G.P.	1 7/32, 1 1/4, 1 9/32, 1 5/16, 1 11/32, 1 3/8*	65 mm.	1 1/32	2 1/16	17/32	3 7/32	4 1/32	3 23/32	1 3/4 or 2 1/2	3 11/32	1 3/4	1 7/32	2 23/32	3 11/32	2 1/8
3G.P.	1 3/8, 1 13/32, 1 7/16, 1 1/2*	65 mm.	1 1/32	2 1/16	17/32	3 3/8	4 7/32	3 31/32	2	3 11/32	1 3/4	1 7/32	2 23/32	3 11/32	2 1/4

\*Straight-through Bore with no swell.



LIST No. 115/1

## HOW TO ORDER.

When deciding on the correct choke size of a racing carburetter required for a particular engine, the main controlling factors to be considered are the engine capacity, peak R.P.M. and the inlet port diameter. Therefore when ordering, **give as much of the following information as possible**, so that a carburetter of correct size can be supplied with a suitable setting.

Make and capacity of engine.

Inlet Port diameter.

Peak R.P.M.

Compression Ratio.

Fuel to be used.

Dimension required from Mixing Chamber centre-line to face of flange ( $1\frac{3}{4}$ " or  $2\frac{1}{2}$ ").

Whether remote or rigid float chamber required. If rigid, then state angle of inclination up to maximum of 20°, or Vertical.

Whether single or double Banjo required. If double, state whether 90° or 180°.

Whether cables required. If so, state lengths.

Whether controls required. If so, state type and handlebar diameter.

Whether any tuning spares required.

### G.P. TUNING SPARES.

DESCRIPTION OF PART	15 G.P.2	10 G.P.2	5 G.P.2	3 G.P.2
	Part No.	Part No.	Part No.	Part No.
Throttle Valves, cutaway 3 to 8 ... ..	316/104	316/010	316/020	316/413
Main Jets ... ..	3326	3326	3326	3326
Needle Jets, .107", .109", or .125" dia. ... ..	316/065	316/065	316/065	316/065
Air Jets, .10", or .125" dia. ... ..	316/052	316/052	316/052	316/052
Metering Needles, Standard ... ..	316/007	316/007	316/146	316/465
Metering Needles, Weak ... ..	316/030	316/030	316/029	316/408
Pilot Jets ... ..	376/076	376/076	376/076	376/076

For full range of Spare Parts, see List No. 115/2.

### OTHER RACING PRODUCTS.

	Type No.
Positive Stop Racing Twist Grip, $\frac{7}{8}$ ", Short	Type 10 G.P. and Type 15 G.P. .. .. 364/1
Positive Stop Racing Twist Grip, $\frac{7}{8}$ ", Long	" " " " " " .. .. 364/3
Positive Stop Racing Twist Grip, $\frac{7}{8}$ ", Short	Type 3 G.P. and Type 5 G.P. .. .. 364/2
Positive Stop Racing Twist Grip, $\frac{7}{8}$ ", Long	" " " " " " .. .. 364/4
Positive Stop Racing Twist Grip, Double Rotor, $\frac{7}{8}$ ", Short	" " " " " " .. .. 313/2
Positive Stop Racing Twist Grip, Double Rotor, $\frac{7}{8}$ ", Long	" " " " " " .. .. 313/1
Dummy Grips to match, $\frac{7}{8}$ ", Short	.. .. 16/069
Dummy Grips to match, $\frac{7}{8}$ ", Long	.. .. 16/074
Dummy Grips to match, 1", Short	.. .. 16/040
Dummy Grips to match, 1", Long	.. .. 16/039
Single Lever Air Control, opening inwards on R.H. Bar, $\frac{7}{8}$ "	.. .. 12/161
Single Lever Air Control, opening inwards on R.H. Bar, 1"	.. .. 12/163
Single Lever Magneto Control, opening inwards on L.H. Bar, $\frac{7}{8}$ "	.. .. 12/171
Single Lever Magneto Control, opening inwards on L.H. Bar, 1"	.. .. 12/173
Light Alloy Racing Control Lever with Self Locking Fingertip Adjuster Front Brake or Clutch suitable for $\frac{7}{8}$ " or 1" Dia. Bars	} .. .. 509
Junction Box for operating two cables from one control	.. .. 244/104
Mid-way Cable Adjuster	.. .. 3792/3/4
Throttle or Air Cable	

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