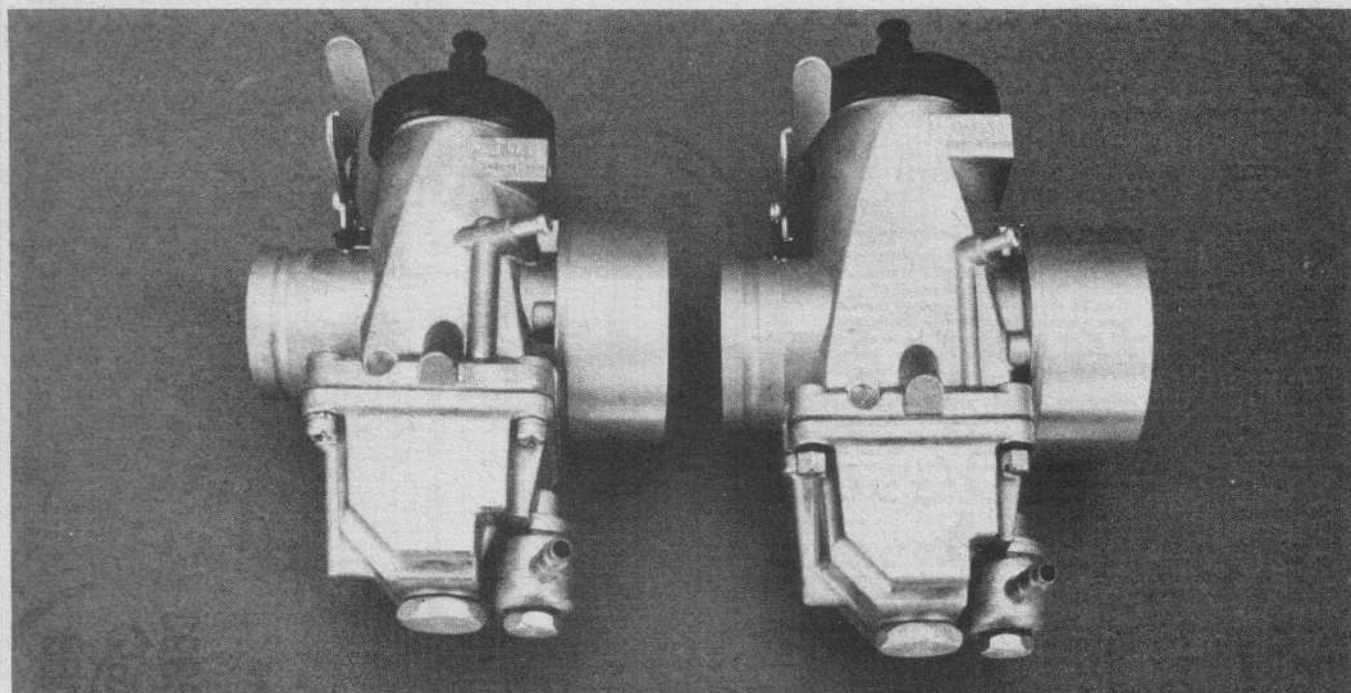


# Amal Mark II Technical Manual



New Mark II carb. Right side, 38mm. Left, 30mm.

EVEN THOUGH THE Mark II is a breakthrough, it still has to be tuned the same way as the Concentric, or even the stately Monobloc. Refer to these sections for tuning procedures and jetting specifications. The same jets are used throughout, so you don't have to throw away your box of old jets. The only new jets you'll need, will be the new high speed air bleeds, and there are only three of these. •

Series numbers in the new Mark II will be similar to the Concentric numbering system. All they've done is add a "2" in front of the basic numbers. The 2600 Series Mark II will come in 22, 24 and 26mm bore. The 2900 Series in 28, 30, 32 and 34mm, while the 2000 Series will be 36, 38 and 40 millimeters across the throat. This 40 should be a highly sought after number.

Probably the single biggest change to the Mark II (other than spiffy looks) is the first ever "two pilot" system. Now

the tuner has a choice of not only what pilot jet to use, but *where* he can put it. It can be located near the front or the back of the carb, depending on the need of the motor. Two stroke motors (with poor pressure drops at very low rpm) will benefit from a location closest to the venturi. The pilot hole that isn't being used is simply blocked off. Naturally, standard pilot jets are used.

Other features of the Mark II include the following, in no particular order:

1. Plastic cap, so you don't have to fart around with screws.
2. 5 position needle, for finer tuning without changing the needle.
3. Thicker slide. That should eliminate the breakage problem of the past.
4. Cold start jet for choke. Uses a standard pilot jet. (larger)
5. A high flow bell that increases flow.
6. Removable high speed air bleed

jets for finer tuning.

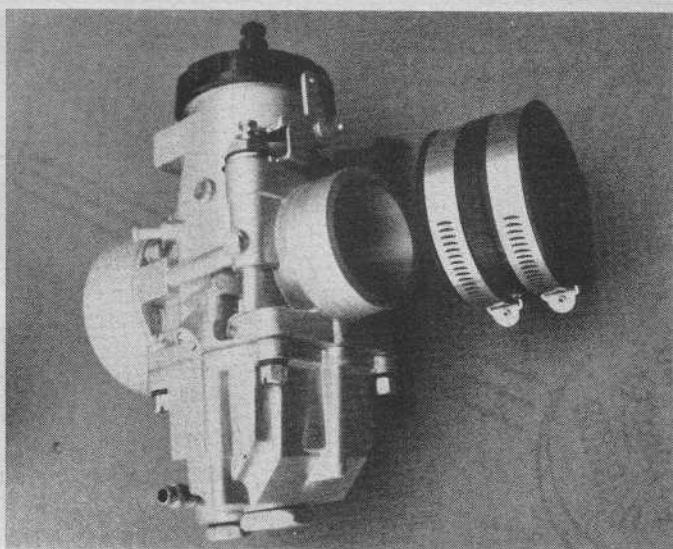
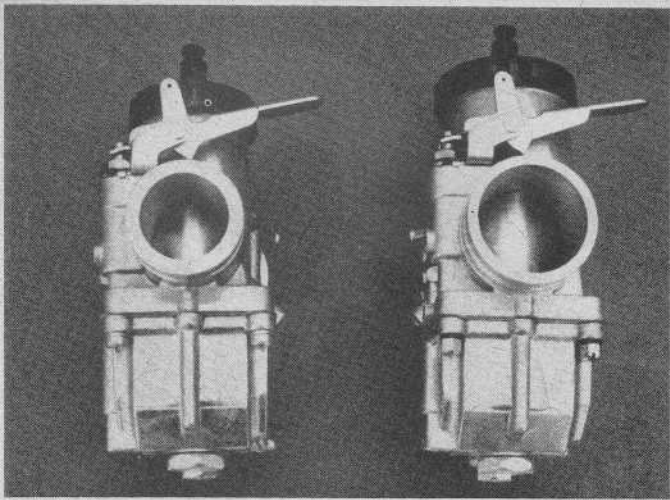
7. Choice of floats. (But, you've had this all along and didn't know it)

8. A stabilizer bar and mounting holes for multi-cylinder bikes. Keeps the carbs locked in line.

9. Two float tubes vented high up for cleaner carbs. If there is any leakage, it won't dribble all over the motor like in days of old.

10. Lighter weight. The new carb is aluminum and weighs 1¾ pounds, while the Concentric weighed 2¼ pounds.

Other than the above reasons, the whole carb looks like it was made much more carefully than Amals of old. We're going to be trying some of them soon and checking results on the dyno and on the track. We'll keep you posted. Oh yes, they'll be coming as standard equipment on several bikes, including Bultaco and Montesa. •



All Mark II carbs will be rubber mounted for protection against frothing from vibration.

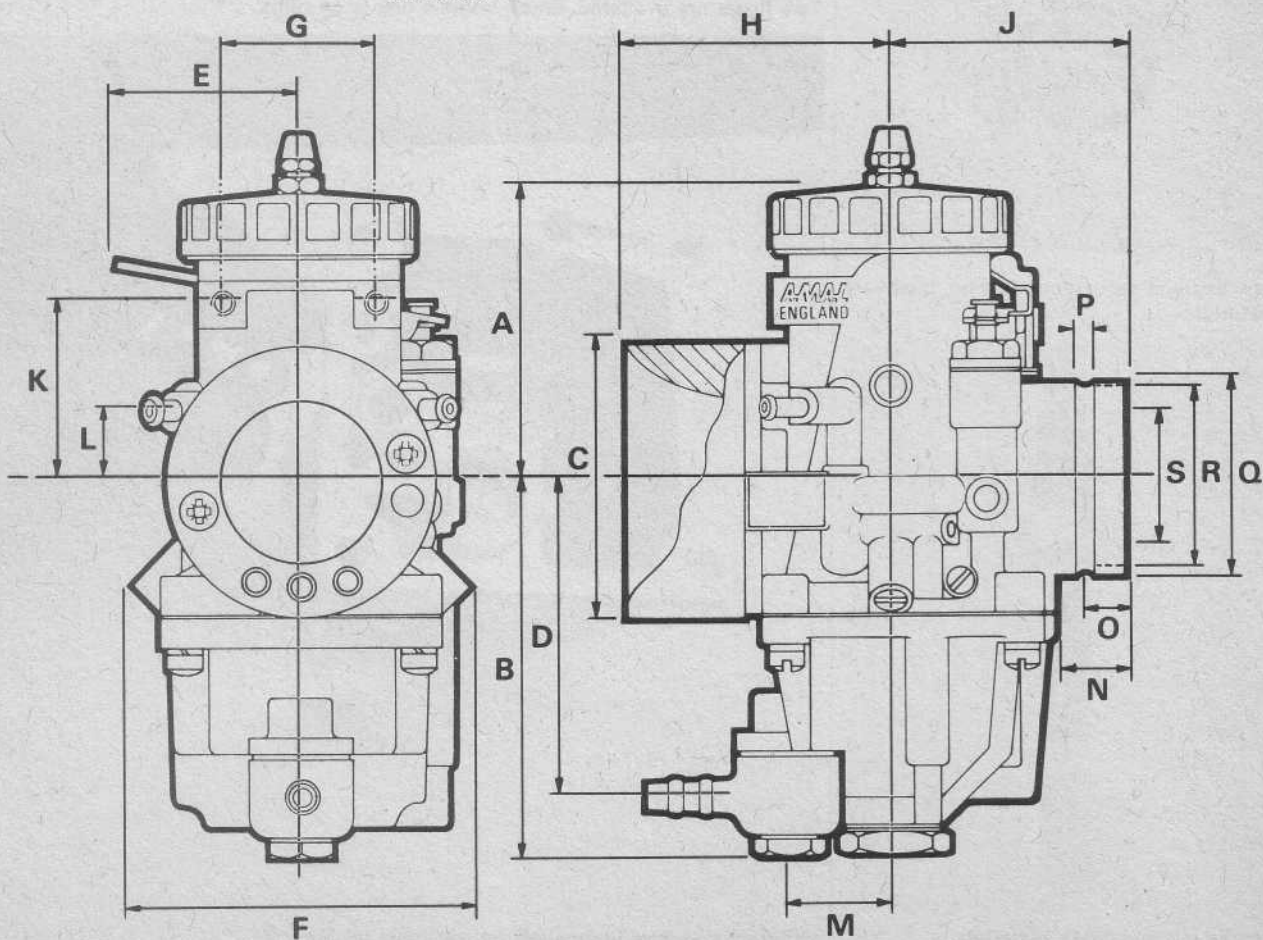
## Dimensions

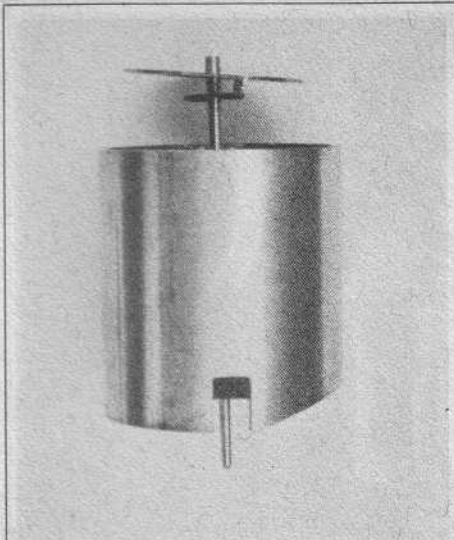
		A	B	C*	D	E	F	G†	H	J
Series 2600	mm	60	75	52	62	40	66	27	53.5	49.5
Series 2900	mm	62	79.5	58	66.5	40	72.5	32	56	49.5
Series 2000	mm	72	82	62	69	40	75.5	38	58.5	49.5
		K	L	M	N	O	P	Q*	R*	S‡
Series 2600	mm	33	19.5	22.5	15	10	4	35	33	22, 24 or 26
Series 2900	mm	38	15	22.5	15	8	4	40	38	28, 30, 32 or 34
Series 2000	mm	48	15	22.5	15	8	4	45	43	36, 38 or 40

\* Diameter

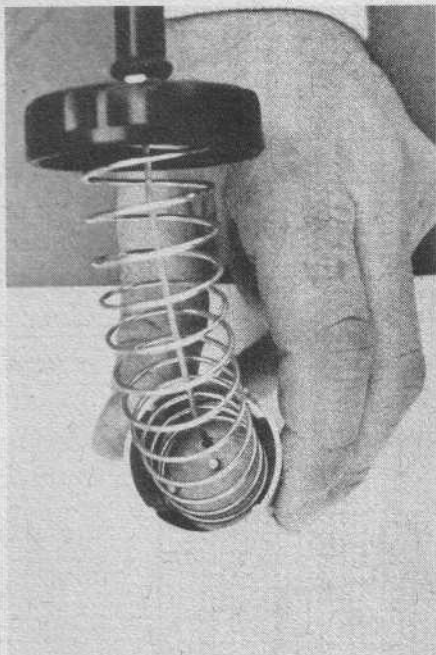
† Two holes, tapped M6-6H (Series 2600: M5-6H)

‡ Bore diameter

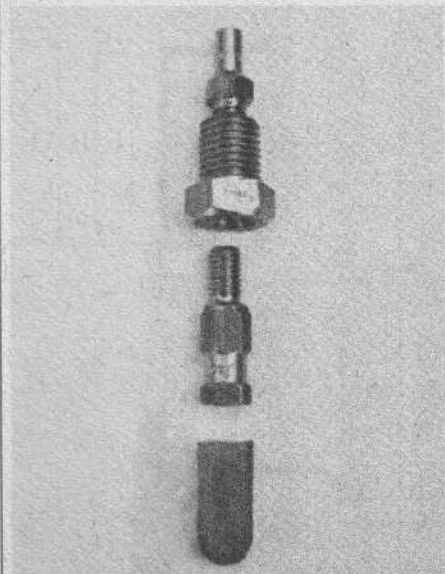




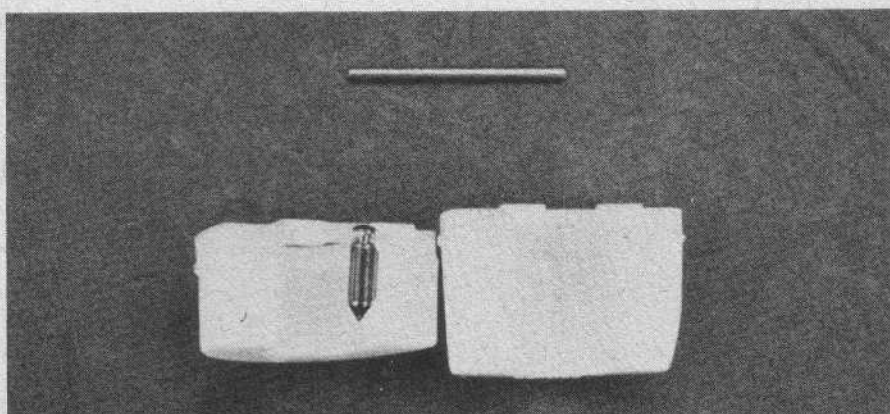
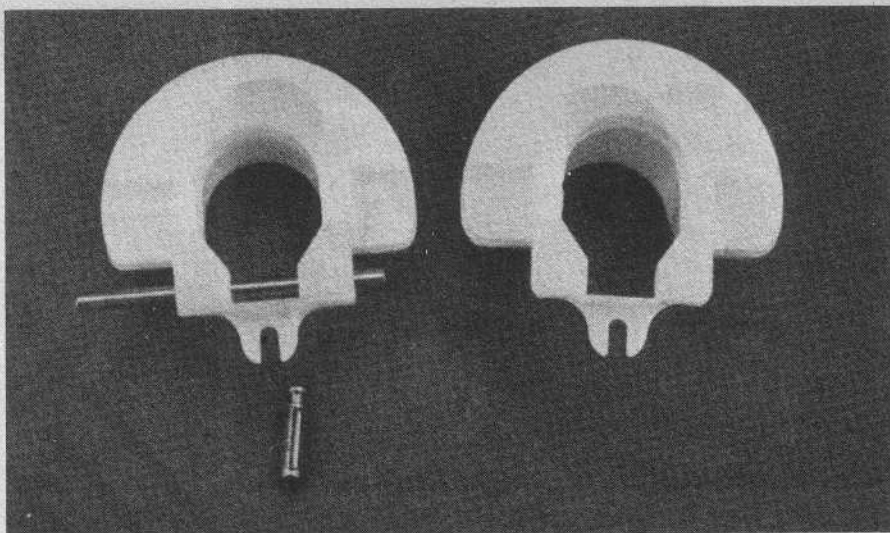
Needle, clip and slide from 36mm carb.



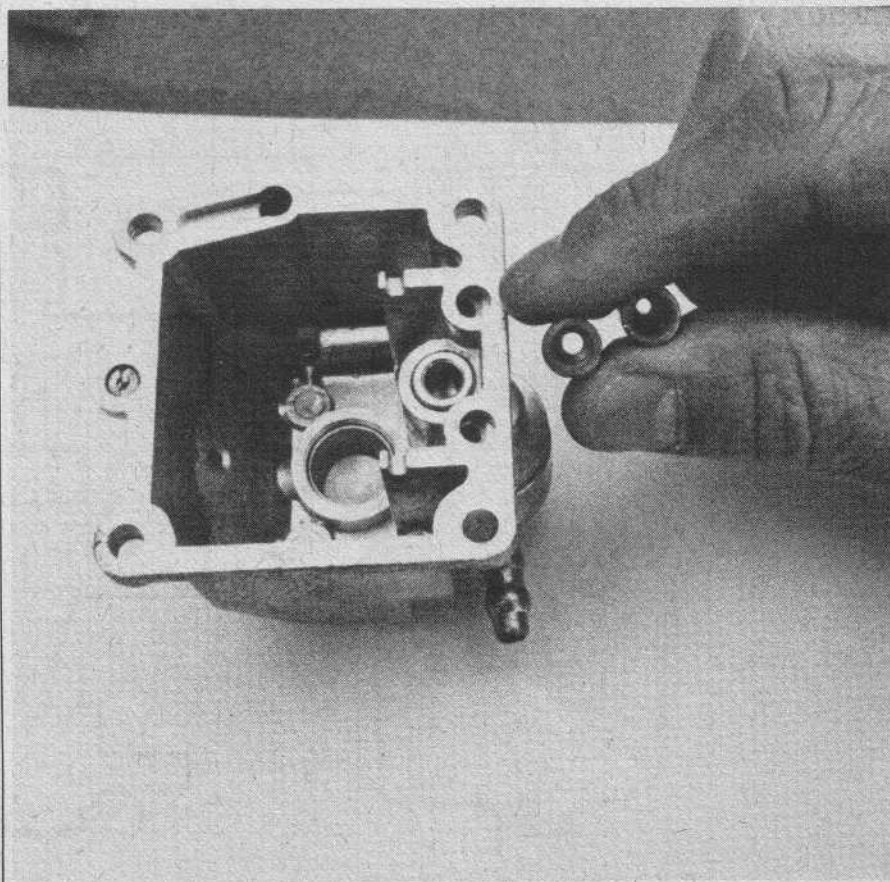
New cap and spring/clip combo look very Mikuni-ish.



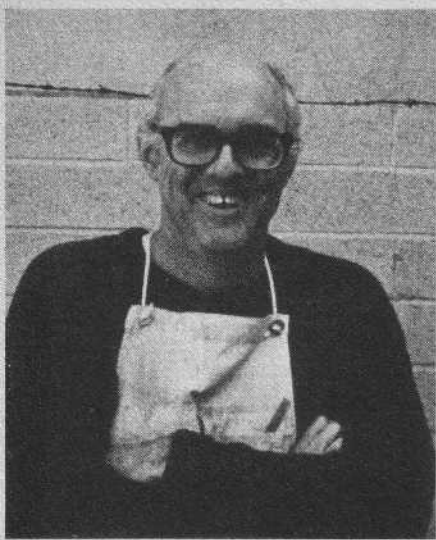
Needle jet, jet holder, main jet and screen—in order.



Two floats are available. Small volume one is on right.



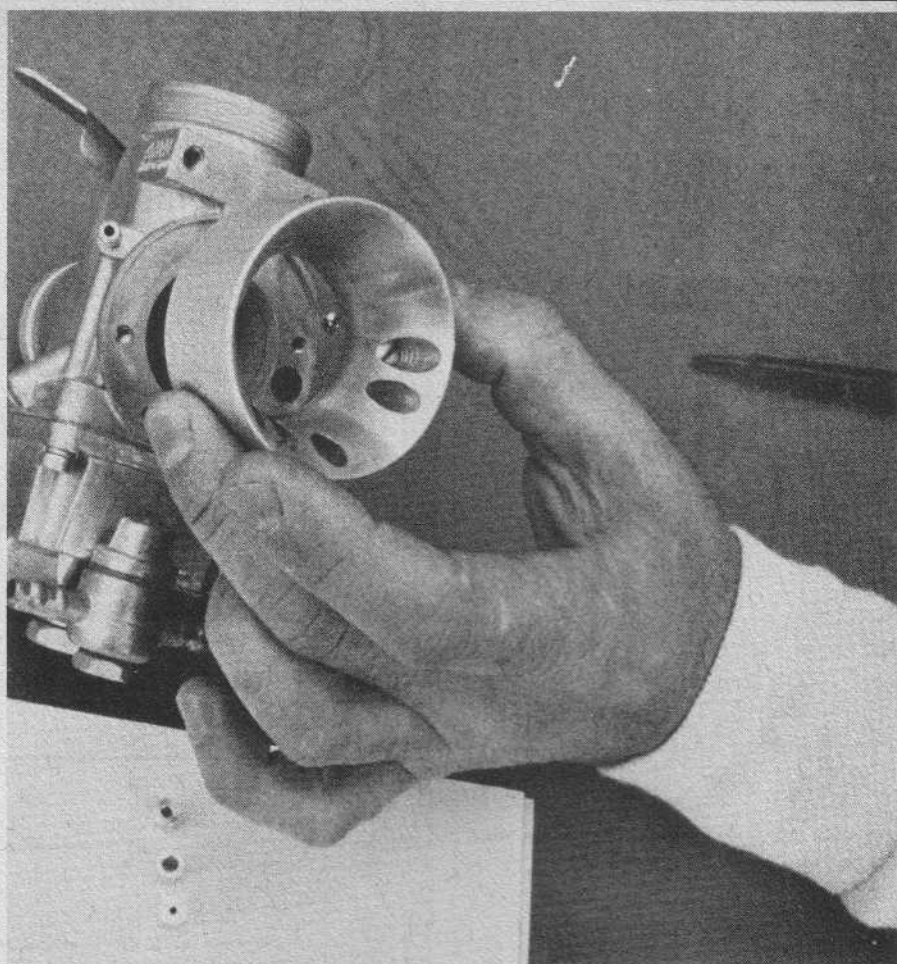
Different size flow fittings will be available for Mark II.



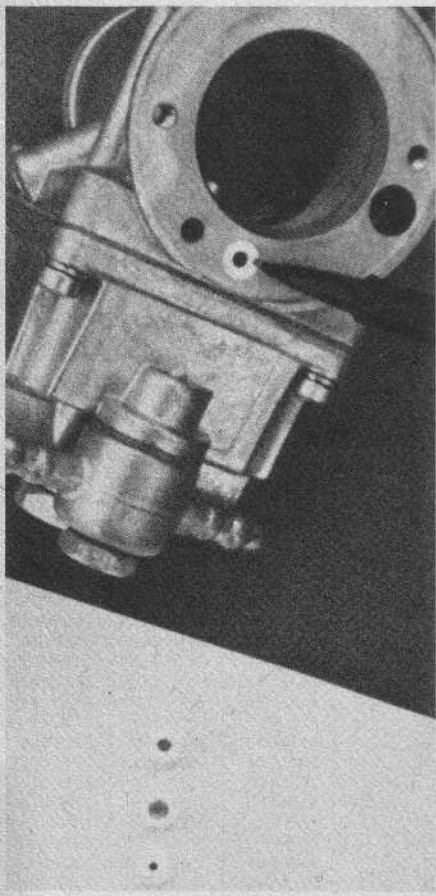
Norm.



Jerry.



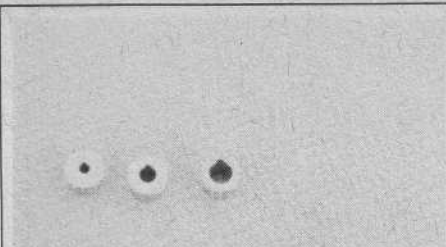
New bell holds the high speed air bleeds in place.



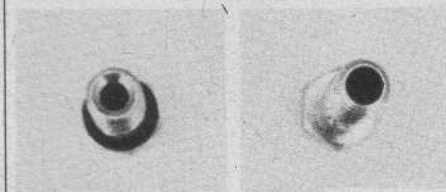
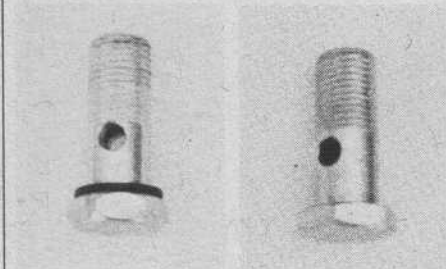
Removable high speed air bleeds.



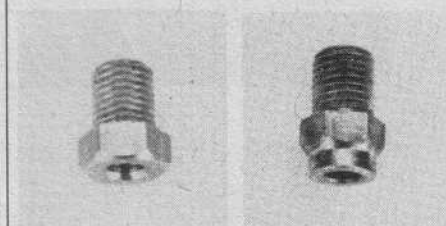
Burak-Bye offers this racing bell as an accessory for the Mark II as well as the Concentric.



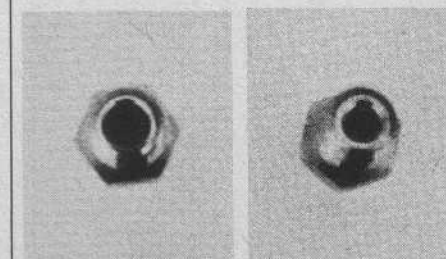
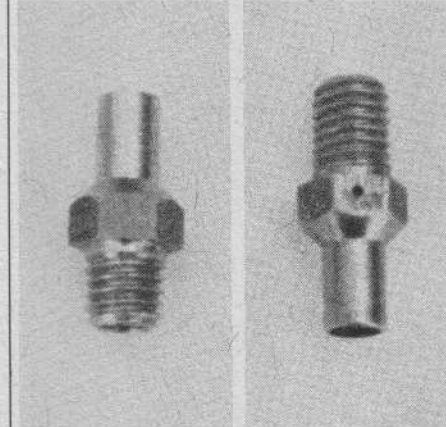
High speed air bleeds. Richest on the left, leanest on the right.



Old style small flow banjo fittings are on the left. High flow one is at right.



Two stroke main jet holder on left; four stroke on right.



Two stroke needle jet on left; four strokes on right.

0	—	50	PLUS	AND	MINUS	3/4 CC
55	—	150	*	*	*	1 3/4 CC
160	—	600	*	*	*	3 CC
620	—	1000	*	*	*	5 CC
1100	—	1500	*	*	*	7 1/2 CC
1600	—	2000	*	*	*	7 1/2 CC

* 0	—	50	IN	2 1/2 CC INCREMENTS
55	—	150	IN	5 CC
160	—	600	IN	10 CC
620	—	1000	IN	20 CC
1100	—	2000	IN	100 CC

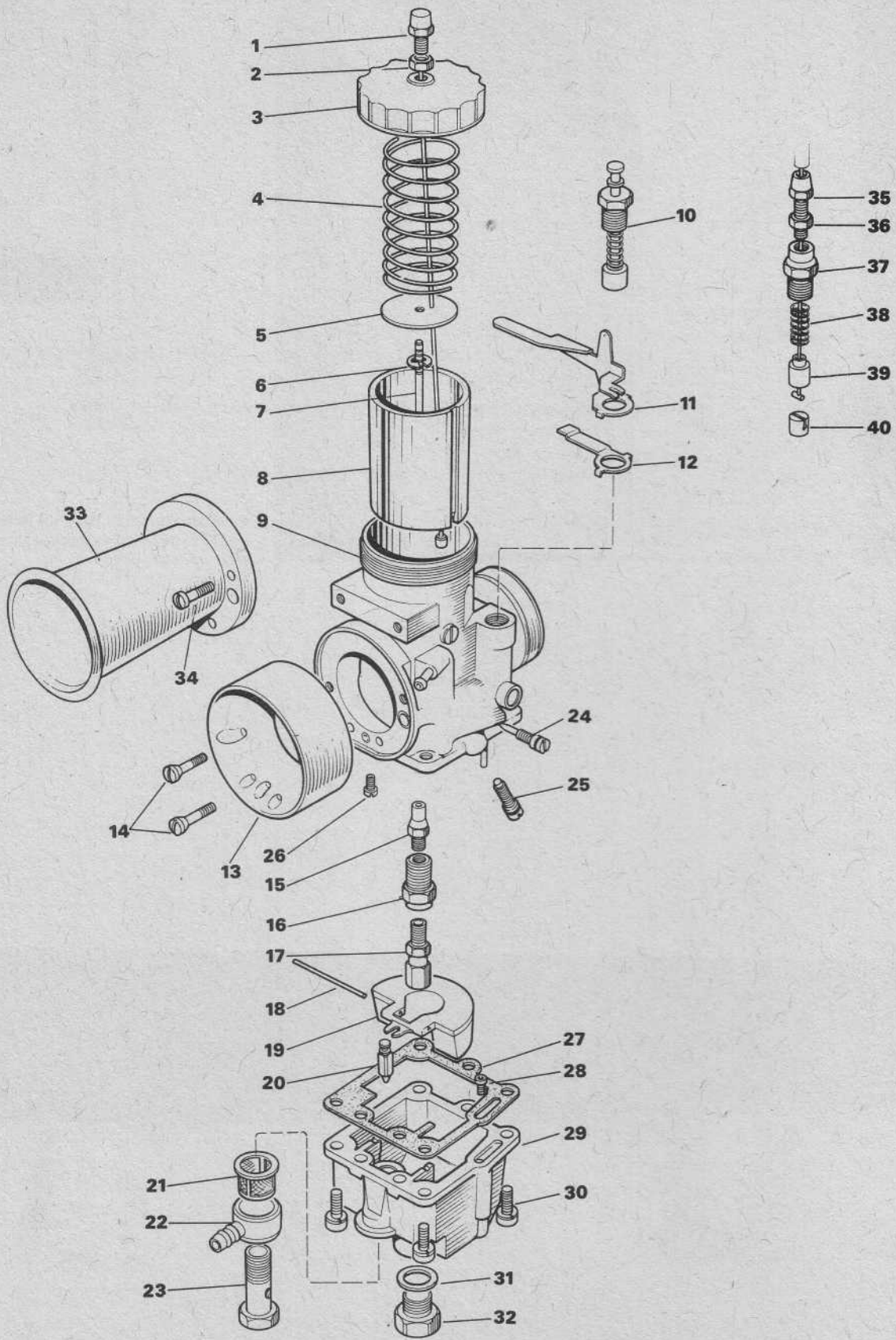
\* NOTE: FOR EXAMPLE 22 1/2 CC. JET WILL BE MARKED 22 BUT CALIBRATED BETWEEN 22 1/2 ± 3/4 CC.

New line of jets is bench flowed for markings.

### Service Parts for Mark 2 Amal Concentric Carburetors

Key to illustration	Component	Carburetor Series 2600	Carburetor Series 2900	Carburetor Series 2000
1	Cable adjuster	4/035	4/035	4/035
2	Cable-adjuster locknut	5/077	5/077	5/077
3	Mixing-chamber top (standard)	2622/064	2928/064	2036/064
Not shown	Cable ferrule for use with mid-cable adjuster	6/132A	6/132A	6/132A
Not shown	Mixing-chamber top for ferrule	2622/120	2928/120	2036/120
4	Throttle-slide spring	2622/061	2928/061	2036/061
5	Needle retaining disc	2622/071	2928/071	2036/071
6	Needle clip	2622/067	2622/067	2622/067
7	Throttle needle (paired with 2-cycle needle jet below)	2622/063	2928/063	2036/063
7	Throttle needle (paired with 4-cycle needle jet below)	2622/124	2622/124	2622/124
7	Throttle needle (for alcohol only)	2622/125	2928/125	2036/125
8	Throttle slide (specify cutaway)	2622/060	2928/060	2036/060
9	Carburetor body assembly	*	*	*
10	Cold start plunger assembly (lever operated)	2622/079	2622/079	2622/079
11	Cold start lever and bracket assembly	2622/075	2622/075	2622/075
12	Cold start click spring	2622/087	2622/087	2622/087
13	Air intake adaptor	2622/062	2928/062	2036/062
14	Air intake adaptor securing screws	2622/073	2622/073	2622/073
15	Needle jet (preferred for 2-cycle engines)	622/079	2928/079	622/079
15	Needle jet (preferred for 4-cycle engines)	622/122	2928/122	622/122
15	Needle jet (for alcohol only)	622/100	2928/100	622/100
16	Jet Holder	622/128	622/128	622/128
17	Main jet (specify size)	376/100	376/100	376/100
18	Float spindle	2622/069	2622/069	2622/069
19	Float (standard)	622/069	622/069	622/069
19	Float	622/196	622/196	622/196
20	Float needle	622/149	622/149	622/149
21	Filter	376/093	376/093	376/093
21	Filter (for alcohol only)	376/093B	376/093B	376/093B
22	Banjo, single, push-on (1/4 in. inside diameter tubing)	376/097	376/097	376/097
22	Banjo, single, threaded 1/4 in. BSP (3/8 in. tubing)	376/090	376/090	376/090
22	Banjo, single, push-on (3/8 in. tubing)	376/130	376/130	376/130
22	Banjo, double, 90°, push-on (3/8 in. tubing)	376/135	376/135	376/135
22	Banjo, double, 150°, push-on (3/8 in. tubing)	376/139	376/139	376/139
22	Banjo, double, 55°, push-on (3/8 in. tubing)	376/410	376/410	376/410
22	Banjo, double, 180°, push-on (1/4 in. tubing)	376/419	376/419	376/419
Not shown	Banjo washer (for alcohol only)	14/175	14/175	14/175
23	Banjo bolt	622/078	622/078	622/078
24	Pilot-air adjusting-screw assembly	2622/128	2622/128	2622/128
25	Throttle-stop adjusting-screw assembly	2622/129	2622/129	1222/129
26	Pilot jet	124/026	124/026	124/026
27	Float bowl washer	2622/070	2622/070	2622/070
28	Cold start jet	124/026	124/026	124/026
29	Float bowl — 0-10 in. seating (2.5 mm)	2622/055	2622/055	2622/055
29	Float bowl — 0-062 in. seating (1.6 mm)	2622/056	2622/056	2622/056
29	Float bowl — 0-125 in. seating (3.2 mm)	2622/057	2622/057	2622/057
29	Float bowl — 0-156 in. seating (4.0 mm)	2622/058	2622/058	2622/058
30	Float-bowl securing screws	622/086	622/086	622/086
31	Float-bowl drain-plug washer	2622/066	2622/066	2622/066
32	Float-bowl drain-plug	2622/065	2622/065	2622/065
33	Velocity stack	2622/126	2928/126	2036/126
34	Velocity stack securing screws	2036/073	2036/073	2036/073
35	Adjuster	4/035	4/035	4/035
36	Adjuster locknut	5/077	5/077	5/077
37	Screw	2622/091	2622/091	2622/091
38	Spring	2622/084	2622/084	2622/084
39	Plunger cap	2622/092	2622/092	2622/092
40	Plunger assembly	2622/094	2622/094	2622/094

Alternative cable-operated cold start

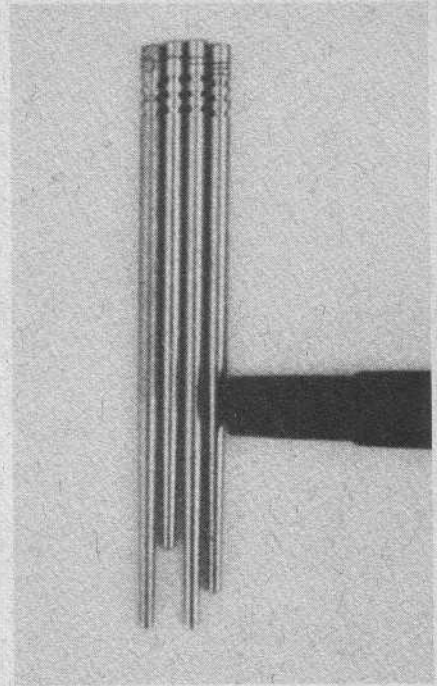


THROTTLE NEEDLE MARKINGS

PART NO.	MARKING	PART NO.	MARKING
4/000	4	622/000	Y
5/005	5	622/024	2 V GROOVES X SPANISH
6/005	6	622/025	3 V GROOVES
22-075	22	922/000	Z
105/118	2N	1031/000	O
310/007	GP	1031/009	P
310/023	SGP	222/104	4 V GROOVES
310/020	SPD	410/007	R
310/116	SGP		
310/108	SGP		
310/105	SGP		
310/502	TT2		
3971 TT	10		
SPAIN GP	D1		
303/013	A		
370/013	E		
375/003	B		
375/105	B2		
370/003	C		
370/000	C1		
370/110	CC		
300/003	D		
300/000	D2		
622/003	U SPANISH 1 V GROOVE		

SEE OVER

Needle markings chart.  
Needles are marked with grooves.



Four stroke spray tube on left, part no. 622/074. Two stroker on right, part no. 622/075.

