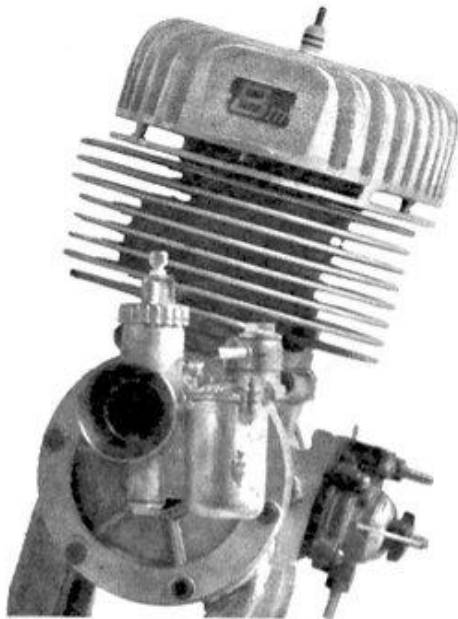




1962 year  
F 100 model



### F 100



Corsa: 54 mm.; Alesaggio: 48 mm.; Alesaggio massimo: 48,54 mm.; Cilindrata: 97,70 cc.

Questo motore si differenzia dai precedenti modelli nelle seguenti parti: **Biellismo:** a dimensioni inalterate è stata sostituita la qualità dei materiali sia della biella che dell'albero motore. I nuovi materiali presentano caratteristiche meccaniche atte a resistere agli sforzi torsionali. - **Cilindro:** il cilindro si presenta composto da una nuova lega di alluminio e conserva la canna interna cromata. A differenza del passato, la cromatura viene sottoposta ad un trattamento speciale prima dell'operazione di rettificazione finale. - **Accensione:** l'impianto di accensione è fornito, in alternativa, mediante spinterogeno oppure volano magnete.

### F 200 MONO



Corsa: 60 mm.; Alesaggio: 56 mm.; Alesaggio massimo: 65 mm.; Cilindrata: 147,8 cc.

Questo motore è di nuova creazione non ha quindi alcun riferimento o derivazione dai motori del passato. Tutti i pezzi sono di concezione originale e non possono quindi considerarsi intercambiabili con quelli di altri modelli. - **Cilindro:** in lega leggera con canna cromata. - **Pistone:** con due segmenti AT. - **Ammissione:** a distributore rotativo. - **Accensione:** in alternativa, mediante spinterogeno oppure volano magnete. E' un modello riservato alla classe 200 cc.

# TECHNICAL INFORMATION ON ALL B.M.'s

BY JOHN MILLS

Some confusion seems to occur between the different models of BM engines so to try and clear this we have prepared the table below giving the relative details of each. Externally all the FC models have a crankcase with cooling fins, all other models do not. Internally all European models have a bore and stroke of 48 mm x 25 mm giving a swept volume of 97.7 cc. Models with an iron liner are reborable to a maximum size of 48.55 mm giving a swept volume of 99.98 cc. As the list shows some models have a two-piece crankshaft—where the crankpin is forged as part of the drive side crank half, whilst the others have the three-piece assembly with the separate crankpin. The two-piece crankshaft is more expensive to produce but gives a better inlet port shape owing to the increased bevel on the inlet side crankshaft wheel.

The main differences lie in the connecting rod centres and type of piston used. The early model BMs were very similar to the Saetta and Parilla engines, but the FC110 introduced in January '69 broke new ground by having a connecting rod with centres of 110 mm and the piston having the gudgeon pin position moved 4 mm. nearer to the crown. The idea of this was to reduce the angular acceleration of the rod and piston loading. Both items

were made lighter to take advantage of this and to give more acceleration. However trouble was experienced with the piston cracking upwards from the gudgeon pin boss. To combat this the piston was modified with three reinforcement ribs above the gudgeon pin boss instead of the original one. This increased the weight of the piston slightly and together with other technical problems caused a number of connecting rod failures. The increased length of the connecting rod in the FC110 had meant a small loss in primary compression so to offset this early engines were fitted with small piston suffers cast into the mouth of the crankcase. Development, however, showed that these caused obstruction of the gas flow into the engine and the transfer ports and were therefore removed. For America a conversion on the FC110 was to fit a 104 mm. rod with the 1887 piston but this was not homologated for Europe. After a lot of experiments by the factory in 1970 the FC100 and FC106 with a new liner material, new piston, slotted rods and detail improvements were homologated for 1971/72 and the FC110 discontinued. It is possible by machining both the top and mouth of the crankcase, also the base of the cylinder, to convert the FC110 to a similar mechanical specification to the current FC100 or FC106. A warning, however, that this work requires great precision and should only be entrusted to a very competent machining shop.

Currently evaluation experiments are being carried out on three methods of five porting cylinders but so far none have shown a conclusive improvement, some engines are better whilst others are not. If, however, future experiments should prove a conclusive improvement the necessary modifications will be incorporated in production engines.

The port timings in the latest BM engines are the result of years of experimenting and experience and as a result are the best compromise for all round performance and reliability. The karter should always remember that before he decides to alter his ports to improve performance! First check that the engine is mechanically as it should be, i.e. the crankshaft is running completely true and is not nipped in the crankcase. The cylinder bore is round and true and has the correct piston skirt clearance. The piston and connecting rod are the right type as overweight and non-standard parts can upset the crankshaft balance factor and thus reduce both performance and reliability.

Think twice before using that file or rotary cutter. If you still feel compelled to have a "hack" try the rotary valve, that's easier and cheaper to replace.

Model	Introduced	Currently Available U.K.	R.A.C. Class	A.mm	B.mm	C.mm	Asso Piston Type	Remarks
F100	Jan. 65	No	Junior 100 Nat.	155	100	28	1312	Chrome Cylinder 3 Piece Crank
F100 JB	Jan. 67	No	Junior 100 Nat.	155	100	28	1887	Iron Liner 2 Piece Crank
F100 JB	Jan. 69	Yes	Junior 100 Nat.	155	100	28	1969	Iron Liner 3 Piece Crank
FC110	Jan. 69	No	100 Int.	159	110	22	1865	Iron Liner 2 Piece Crank
FC104	1970	No	—	159	104	28	1887	Iron Liner 2 Piece Crank
FC100	Jan. 71	Yes	100 Int.	155	100	28	1969	Iron Liner 2 Piece Crank
FC106	Jan. 71	Yes	100 Int.	155	106	22	1865	Iron Liner 2 Piece Crank

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ZIP Californian Roll. Chass.  
ZIP Brands Villiers  
ZIP Astronard Villiers, used  
ZIP Silverstone 72 Roll. Chass.  
Barlotti Montesa 250/4  
Barlotti Dino Villiers  
Barlotti Imp Roll. Chass.  
Barlotti Imp Parilla  
Mura Vandon



**John  
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Cars**

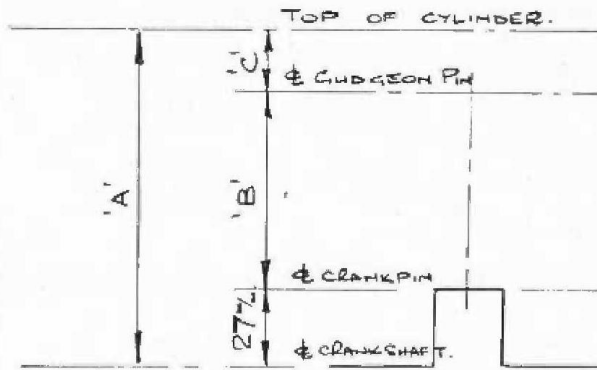
32 MONARCH PARADE  
LONDON ROAD  
MITCHAM ● SURREY  
Phone 01-540 0969

# B.M. INFORMATION

BY JOHN MILLS

Part 2

In our last issue we published an article by John Mills which threw light on the specification of the various BM models produced to date. Unfortunately for some mysterious reason we omitted a drawing from the article rendering the accompanying table valueless. We have therefore decided to repeat this and trust all is now clear with the missing illustration. Incidentally the correct bore and stroke of European model BMs is 48 m.m. x 54 m.m.



Model	Introduced	Currently Available UK	RAC Class	A.mm	B.mm	C.mm	Asso Piston Type	Remarks
F100	Jan. 65	No	Junior 100 Nat.	155	100	28	1312	Chrome Cylinder 3 Piece Crank
F100 JB	Jan. 67	No	Junior 100 Nat.	155	100	28	1887	Iron Liner 2 Piece Crank
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FC110	Jan. 69	No	100 Int.	159	110	22	1865	Iron Liner 2 Piece Crank
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FC100	Jan. 71	Yes	100 Int.	155	106	28	1969	Iron Liner 2 Piece Crank
FC106	Jan. 71	Yes	100 Int.	155	106	22	1865	Iron Liner 2 Piece Crank

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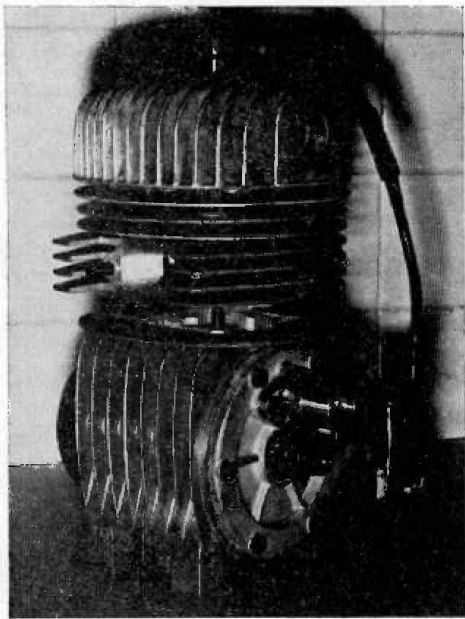
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## THE NEW B.M. FK96

Britain is a good market for BM's and accordingly the first three production engines of their new 1973 FK 96 model recently arrived at John Mills—the importer. We set off post-haste northwards, anxious to examine one of these in detail.

The basic philosophy of the new model is to combine the customary excellence of internal finish that has recently been standard on all BM's, with the fundamental dimensions, i.e. bore and stroke, of the Komet. Previously BM's have had a 54 m.m. stroke and 48 m.m. bore so the change to a 46.5 m.m. and 50.8 m.m. respectively results in a considerable difference in stroke/bore ratio so that it is now "over-square". The barrel is immediately distinguishable by a reduction in the number of fins from nine to eight and they are now set at a slightly greater pitch.

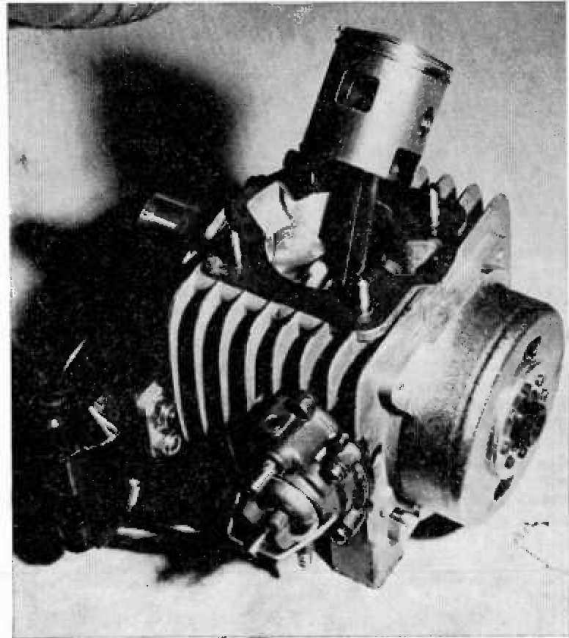
The crankcase around the flywheel area is built up to support the attachment of a clutch for the American market and there is a neat lug incorporated in the rotary valve cover to support the coil, a modification that first started around the middle of last year. The rotary valve and inlet tract appear to be as before but it is interesting to note that the 24 m.m. Del'Orto carburettor is matched to a 22 m.m. inlet stub—perhaps to improve bottom end performance.

### Normal head

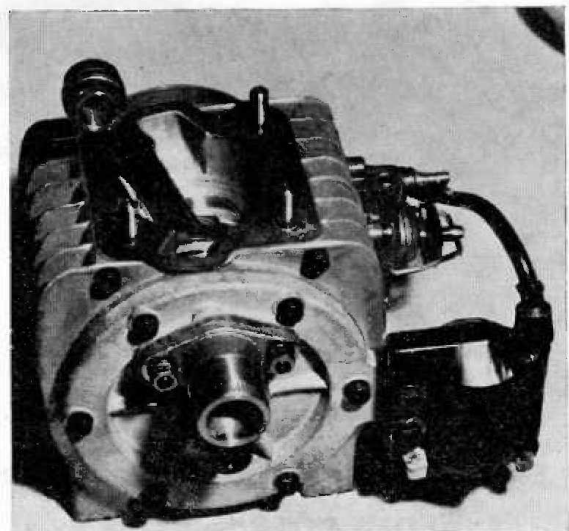
The cylinder head and combustion chamber configuration follow normal BM practice apart from a machining adjustment to accommodate the larger diameter piston. The magneto is by Dansi, these electrics having been introduced about a year ago. The crankshaft is of the cheaper to manufacture and replace three-piece type, the earlier FC model had the two-piece type. There seems to be a slightly improved chamfer on the crankshaft as a result of the shorter stroke.

The factory claimed that although the engine comes with a 5 ported barrel, the piston is without the 5th ports so that the engine can be run-in before this modification. This may be the true reason but they no doubt find it useful that their action both saves them work and could provide them with a let-out if an engine blows up and it can be shown that the piston has been incorrectly ported!

The port timings on the engine we examined are very interesting when related to that normally used. Basically the exhaust period has been extended by having a timing of 83° bbdc. Such a timing would tend to improve top end performance and it may be that



Clutch mounting bosses, beside the small diameter Dansi flywheel, can be seen. Piston is not 5 ported until after running-in.



The Dansi coil is mounted on an integral lug and is matched to the Dansi magneto. The coil has Lucar push-on tags.



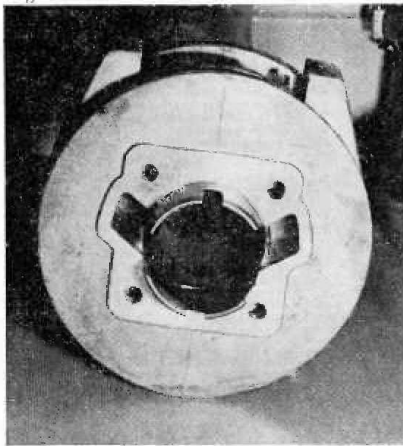
the small inlet stub diameter is to help compensate for this. The transfer and 3rd ports are set lower than usual at 58° bbdc whilst the 5th ports are higher at 61° bbdc.

#### Piston

The piston in the engine looks very like that from a Komet but has a 2 m.m. bottom ring instead of 1.5 m.m. and there is only one reinforcing rib inside it so the piston is lighter. A lightweight gudgeon pin supplied as standard.

The little end is a bushing bearing and the connecting rod is the same length as a Komet, i.e. 96 m.m., hence the engine's model number. A 100 m.m. rod length version is also available and this is known as the FK 100 in Britain.

The exhaust system is a new one for BM and is much shorter than that normally used by them or Parilla. At 22½ in. instead of the usual 23 in. it appears to be identical to an early Monza unit. The expansion box is 3½ in. diameter and terminates with a ⅝ in. outlet pipe. The end cone has been covered with a drum after



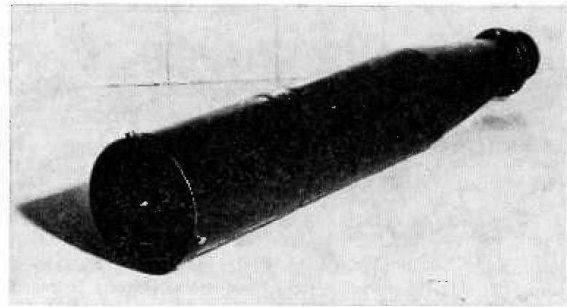
The transfer passages and all the bottom throat area is very clean and nicely flowed. The long 5th ports can be seen flanking the 3rd port.

the cone has been drilled with 30 3/16 in. holes. The space between the drum and cone has been tightly packed with a substantial quantity of glass wool and the end then capped off with a cover held by three self-tappers.

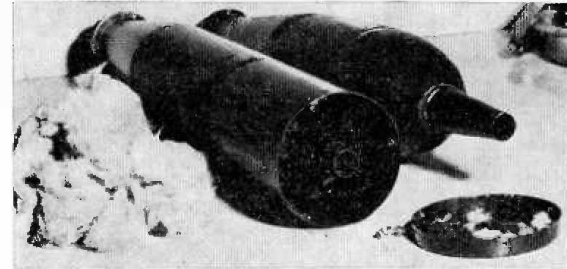
#### Better dimensions?

It will be most interesting to see what effect on actual track performances the change to Komet dimensions will have. The flow configuration internally appears to have been nicely executed and the quality of matching is excellent. The head-on clash between the two deadly rivals of BM and IAME (Komet, Parilla, Vega and Saetta) will now take place in real earnest with the struggle being settled at this year's World Championships. A good augury for the motor was the way the actual one we examined won first time out in the hands of Paul Fletcher straight-out-of-the-box. The price of both the FK 96 and FK 100 in three port trim is £110.

APRIL 1973



The new pattern silencer with flat end that comes with the BM. The short length presumably suits the new bore and stroke and revised port timing.



Perforated nose cone with glass wool packing to left. The basic expansion box appears identical to the early Monza pattern to the right.



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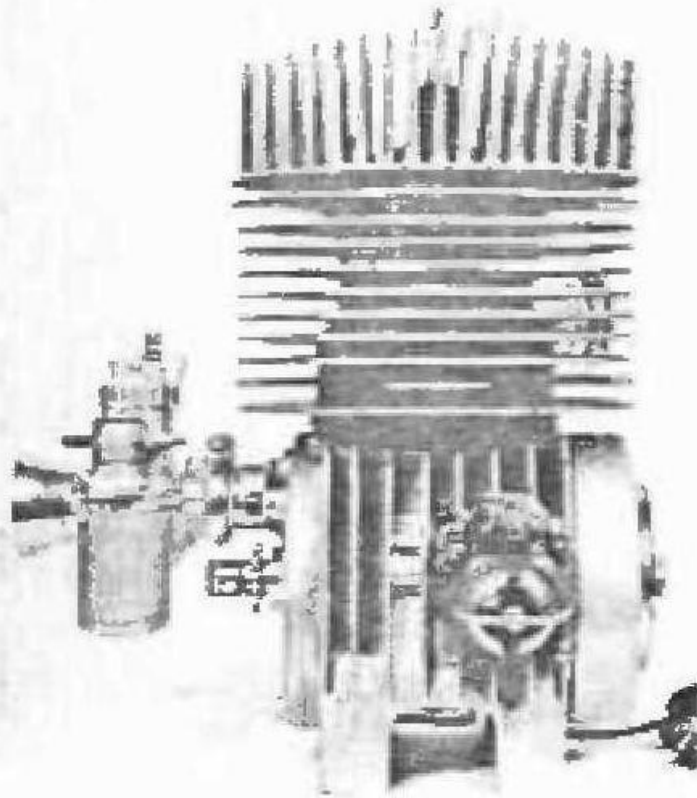
**LONDON KART CLUB TILBURY**

## B.M. FC100

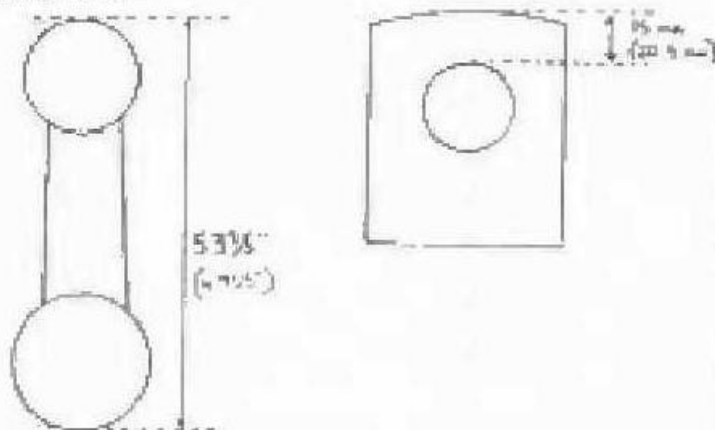
Stroke 54 mm. Bore 48 mm.

Capacity 97.7 cc.

Max. bore 1.912" = 48.565 mm.



No model B.M., other than the FC100 is allowed the 5.335" connecting rod or 15mm piston. The figures in brackets below are for the F100 JB.



Omologazione F.I.A. n°  
*Homologation F.I.A.*

Omologazione C.S.A.I. n°  
*Homologation C.N.K.*

# FEDERATION INTERNATIONALE DE L'AUTOMOBILE

COMMISSION INTERNATIONALE DU KARTING

Scheda di Omologazione **1975 - 76 - 77**  
*Fiche d'Homologation*

**MOTORE PER KART - CATEGORIA 100 cc INTERNAZIONALE**  
*Moteur pour Kart - Categorie*

Casa Costruttrice  
*Constructeur*

**BM MOTORI - PIACENZA (Italy)**

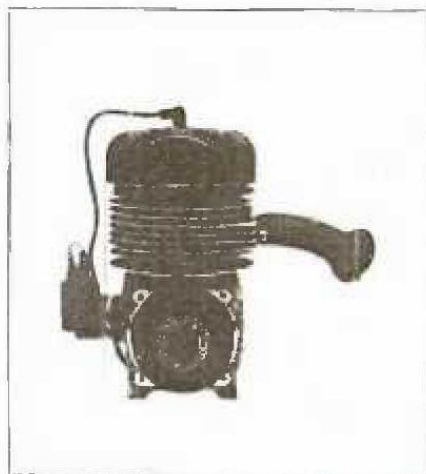
Modello  
*Modèle*

**BM FC / 52**

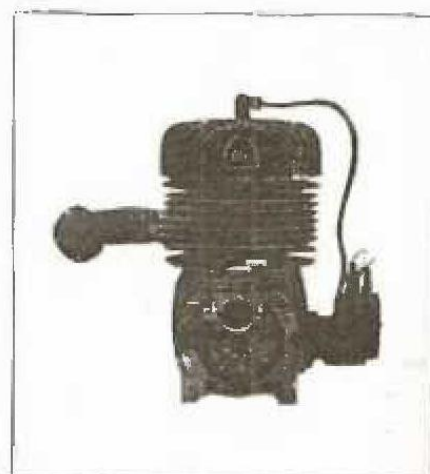
Anno inizio fabbricazione  
*Année de début de fabrication*

**1974**

L'omologazione è valida dal **1° GENNAIO 1975**  
*L'homologation est prononcée à compter du*



1. Fotografia del motore vista dal lato anteriore  
*Photo du moteur, côté avant*



2. Fotografia del motore vista dal lato opposto  
*Photo du moteur, côté opposé*

N. pagine che compongono la scheda **4**  
*Nombre de pages composant la fiche*

Timbro della C.S.A.I.  
*Cachet de l'Autorité Sportive Nationale*

Timbro della F.I.A.  
*Cachet de la F.I.A.*

Accensione: Volano Magneto - Elettronica  
 Allumage  
 Ignition

Carburatore: 1 da  $\varnothing 14$  a  $\varnothing 85$   
 Carburateur (marque, type, diamètre du diffuseur)  
 Carburettor (make, type, diameter of choke)

Ammissione: Valvola rotante  
 Admission - type  
 Inlet - type

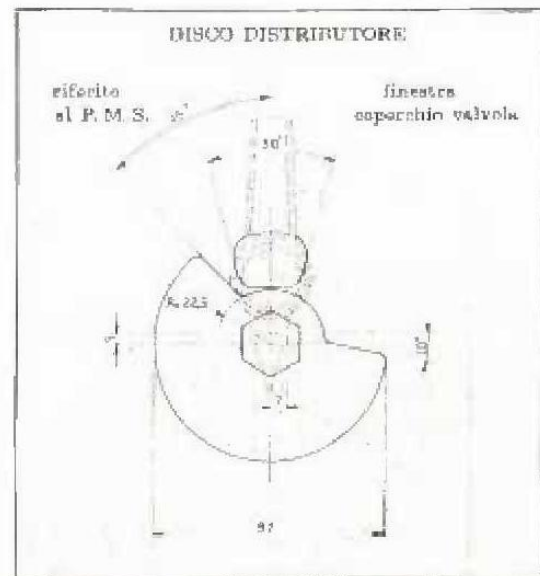
Pistone: Alluminio  
 Piston:  
 Piston:

Segmenti: n. 2  
 Segments - nombre  
 Rings - number

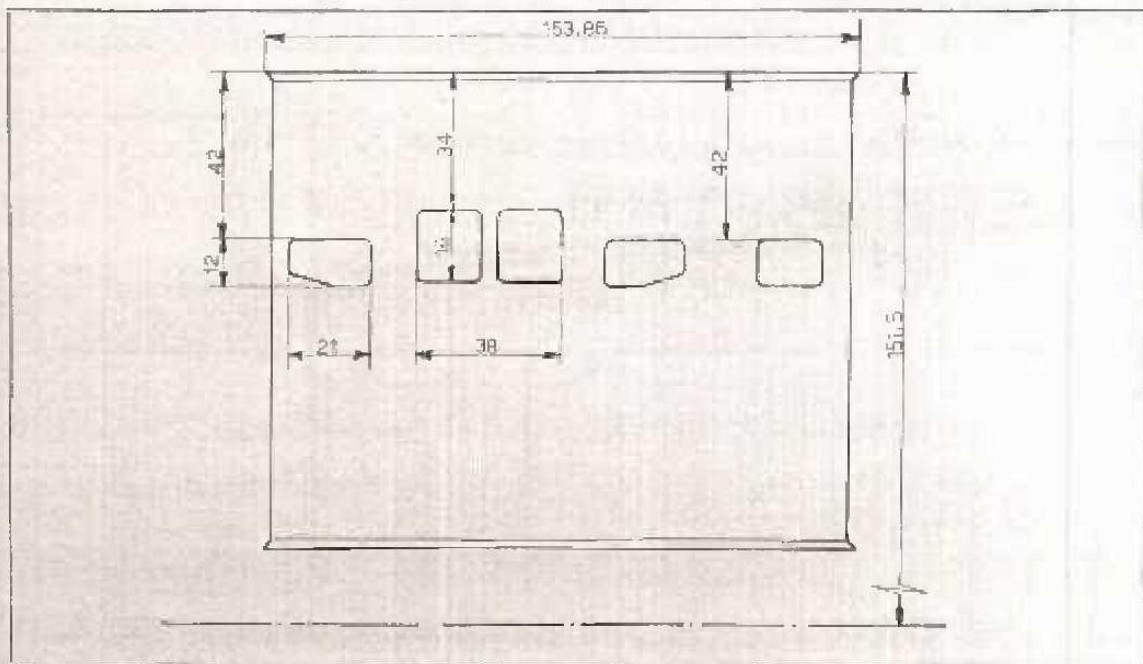
dimensioni:  $2 \times 2 \times 1$   
 dimensions  
 dimensions

Corsa mm.  $52 \pm 0,2$   
 Cilindrata

Alcoggio mm 49,0  
 Alcoggio massimo, mm. 49,40



Disegno sviluppato delle luci di scarico, di travaso e aspirazione



Cuscinetti di banco 2  
 Coussinets de palier de vilebrequin  
 Bearings - of crankshaft

tipo: a sfere  
 type

dimensioni:  $20 \times 47 \times 14$   
 dimensions

testa biella:  
 de tête de bielle  
 of connecting rod, big end

tipo: Gabbia e rulli  
 type

dimensioni:  $18 \times 24 \times 17$   
 dimensions

pie'de biella:  
 de pied de bielle  
 of connecting rod, small end

tipo: Rulli  
 type

dimensioni:  $2 \times 17,8$   
 dimensions

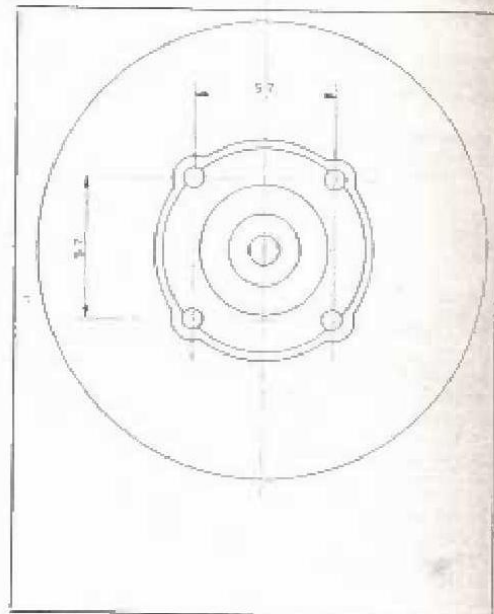
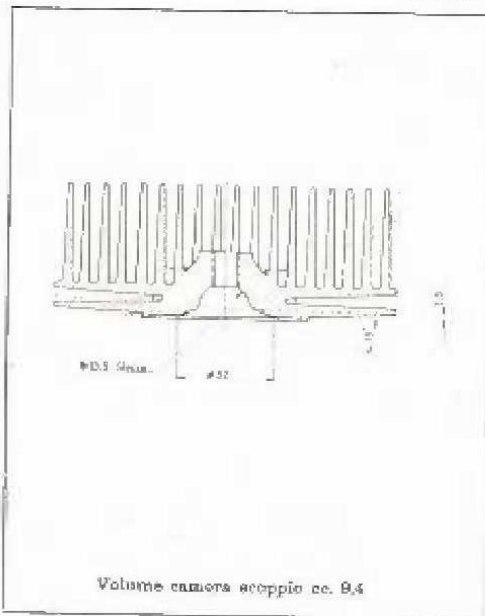
Raffreddamento: Aria  
 Refroidissement  
 Cooling

Peso del motore Kg. 11,500  
 Poids du moteur  
 Engine weight



## TESTA

Forma della camera di scoppio



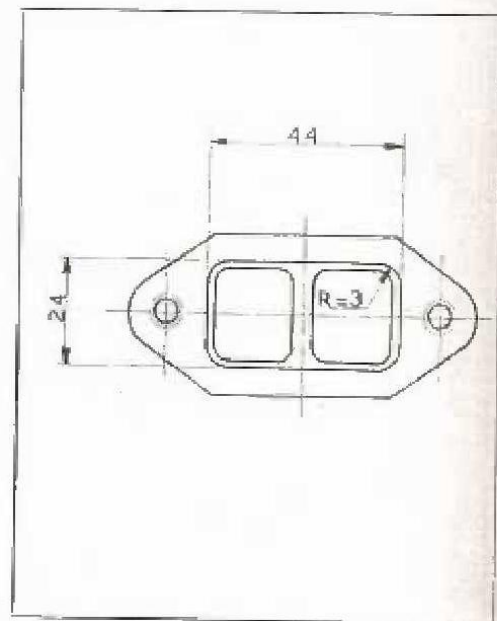
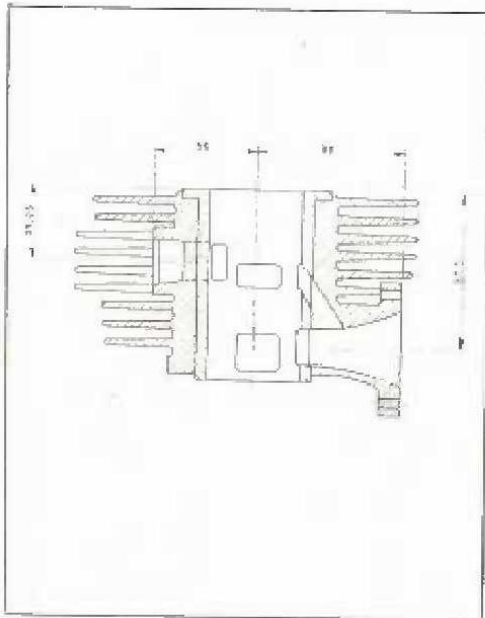
Materiale: Alluminio

Peso: Kg. 2,00

Tolleranze generali: Materiale lavorato:  $\pm 1$  mm.  
 Tolerances générales - matière usinée  
 General tolerances - machined parts

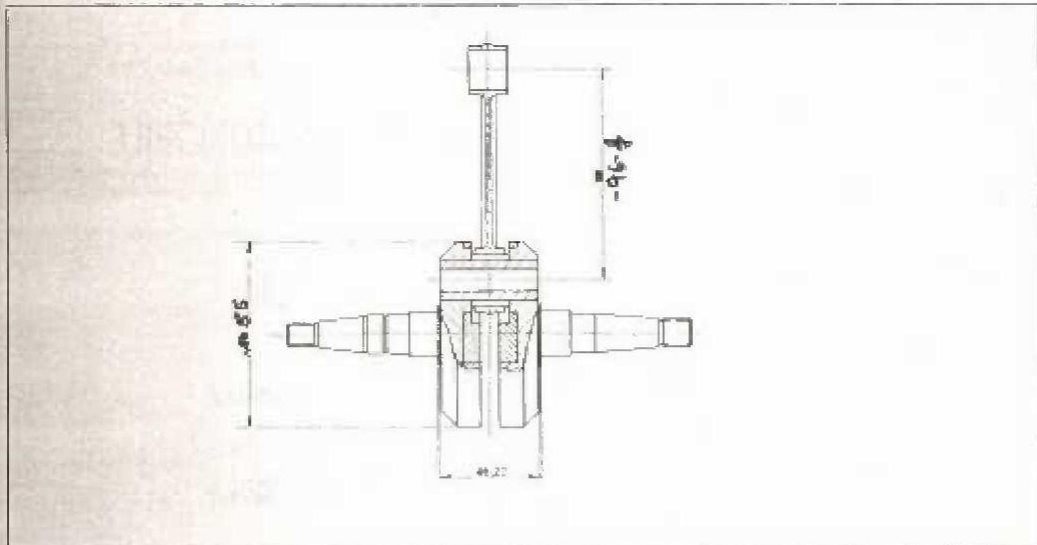
Materiale fuso:  $\pm 1\%$   
 Matière coulé  
 Casted parts

## CILINDRO



Materiale: Alluminio con stacca in ghisa

Albero motore e biella

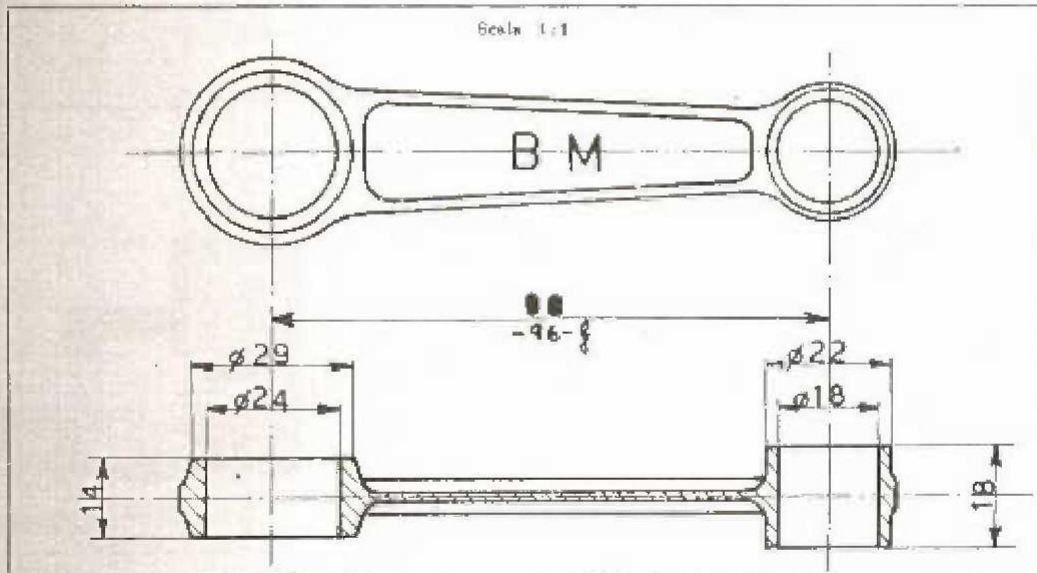


Materiale: Acciaio

Peso: Kg. 1,580

BIELLA

Scala 1:1



Materiale: Acciaio

Tolleranza 10% in meno

Peso: Grammi 100



# FEDERATION INTERNATIONALE DE L'AUTOMOBILE

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*Moteur pour Kart - Catégorie*

Casa Costruttrice  
*Constructeur*

**BM MOTORI - PIACENZA (Italy)**

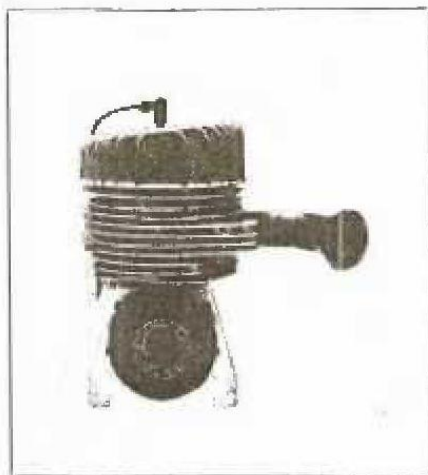
Modello  
*Modèle*

**BM | FCL**

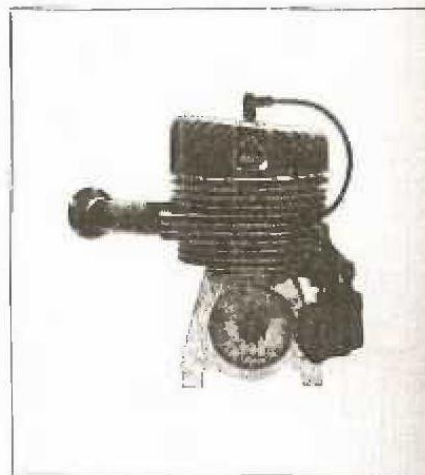
Anno inizio fabbricazione  
*Année de début de fabrication*

**1974**

L'omologazione è valida dal **1° GENNAIO 1975**  
*L'homologation est prononcée à compter du*



1. Fotografia del motore visto dal lato **■** solano  
*Photo du moteur, côté **■** rotor magnétique*



2. Fotografia del motore visto dal lato opposto  
*Photo du moteur, côté opposé*

N. pagine che compongono la scheda: **4**  
*Nombre de pages composant la fiche:*

Timbro della G.S.A.I.  
*Cachet de l'Autorité Sportive Nationale*

Timbro della F.I.A.  
*Cachet de la F.I.A.*

Accensione: **Volano Magneto - Elettronica**  
*Allumage*  
*Ignition*

Carburatore: **1 da Ø 14 a Ø 40**  
*Carbureteur (moteur: type, diamètre du diffuseur)*  
*Carburetor (mike, type, diameter of choke)*

Ammissione: **a 6 lamelle**  
*Admission - type*  
*Inlet - type*

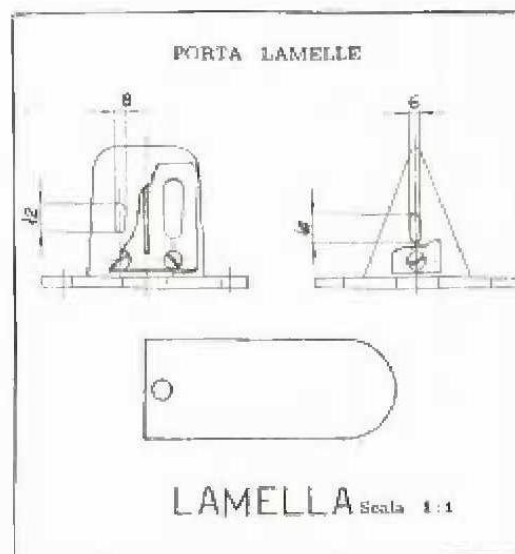
Pistone: **Alluminio**  
*Piston*  
*Piston*

Segmenti: n. 2  
*Segments - number*  
*Flaps - number*

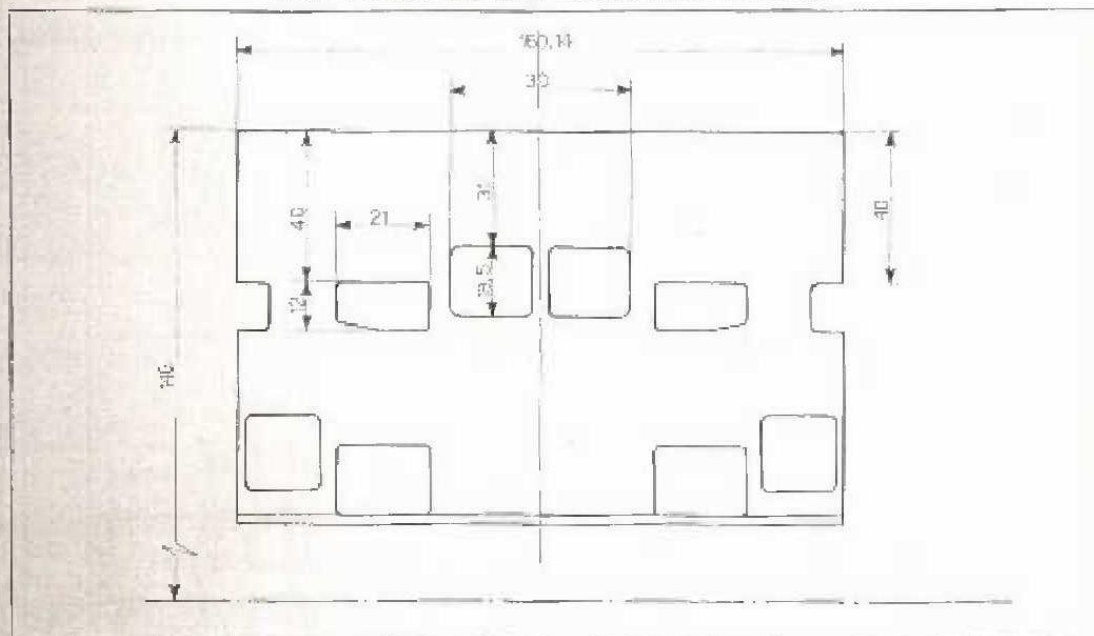
dimensioni: **2 x 2 x 1**  
*dimensions*  
*dimensions*

Corso, mm. **48,5 ± 0,2**  
*Cilindrata*

Alésaggio mm. **50,7**  
*Alésaggio massimo, mm. 51,22*



Disegno sviluppato delle luci di scarica, di travaso e aspirazione



Cuscinetti di banco: **2**  
*Cuscinetti de palari de valchetrax*  
*Bearings - of crankshaft*

tipo: **a sfere**  
*type*  
*type*

dimensioni: **20 x 47 x 14**  
*dimensions*  
*dimensions*

testa biella:  
*de tête de bielle*  
*of connecting rod, big end*

tipo: **Gabbia a rulli**  
*type*  
*type*

dimensioni: **18 x 24 x 17**  
*dimensions*  
*dimensions*

piele biella:  
*de pieds de bielle*  
*of connecting rod, small end*

tipo: **Rulli**  
*type*  
*type*

dimensioni: **2 x 17,8**  
*dimensions*  
*dimensions*

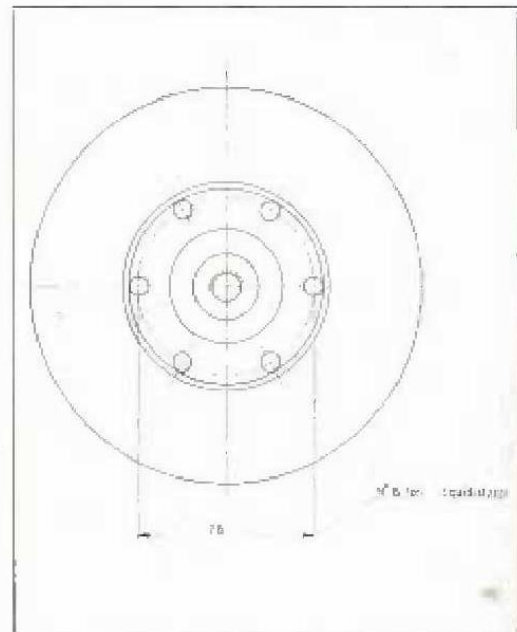
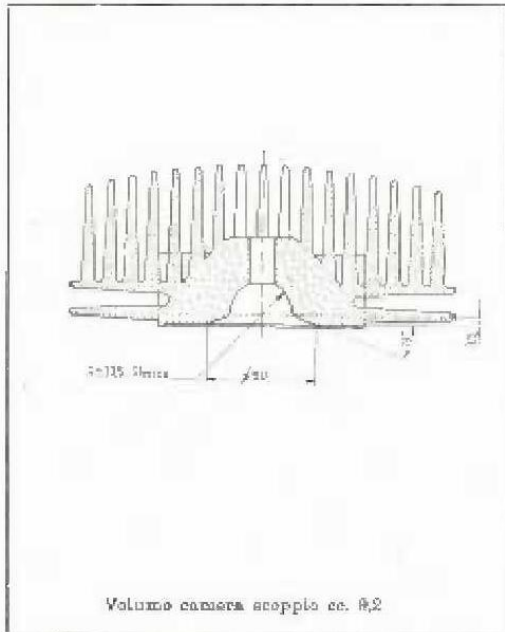
Raffreddamento: **Aria**  
*Rafraichissement*  
*Cooling*

Peso del motore: **Kg. 11,860**  
*Poids du moteur*  
*Engine weight*



## TESTA

Forma della camera di scoppio



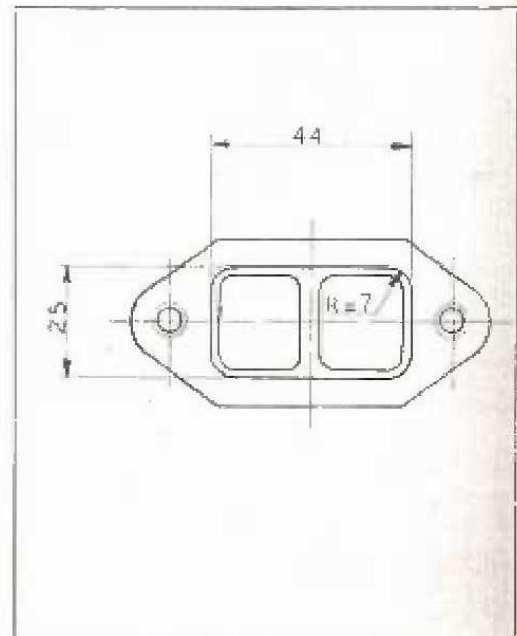
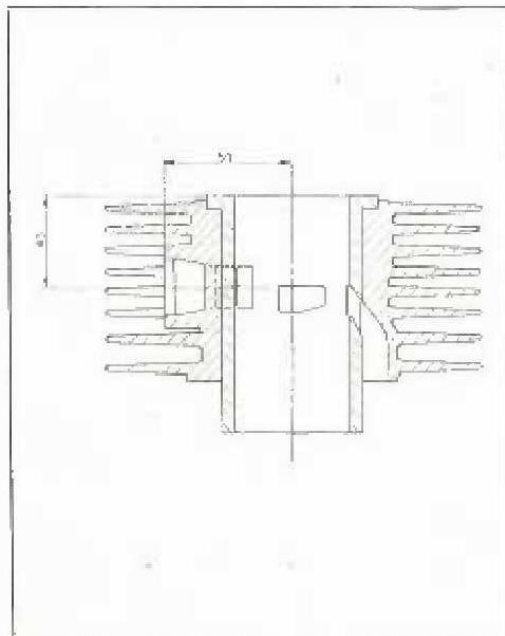
Materiale: Alluminio

Peso: Kg. 1,600

Tolleranze generali: Materiale lavorato:  $\pm 1$  mm.  
Tolerances general: material plain  
General tolerances - machined parts

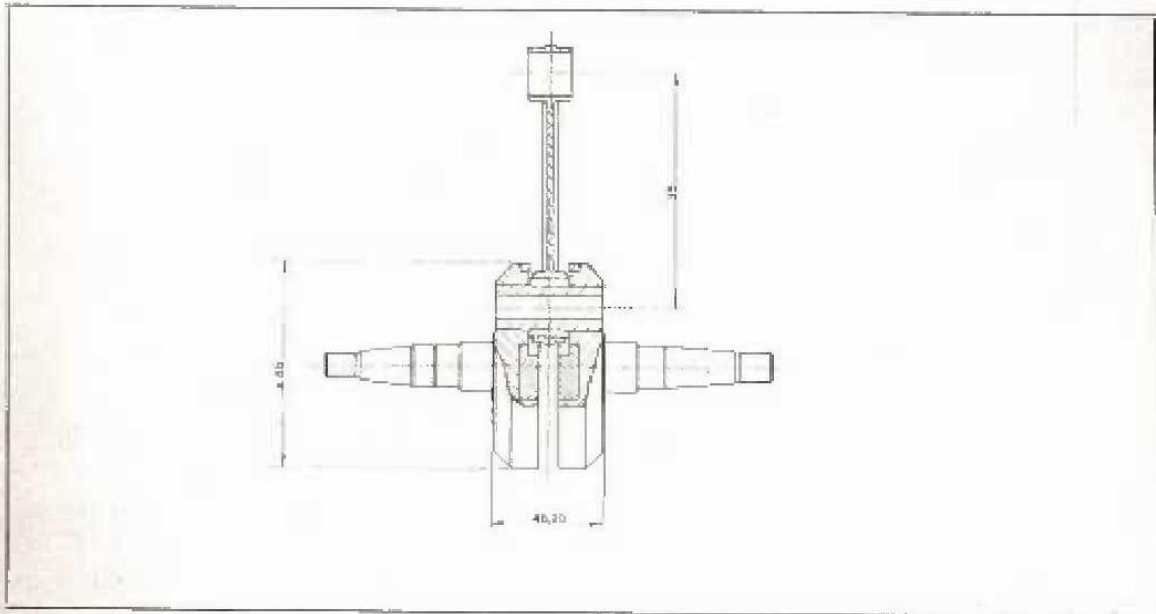
Materiale fuso:  $\pm 1\%$   
Material cast  
Casted parts

## CILINDRO



Materiale: Alluminio con canna in ghisa

Albero motore e biella

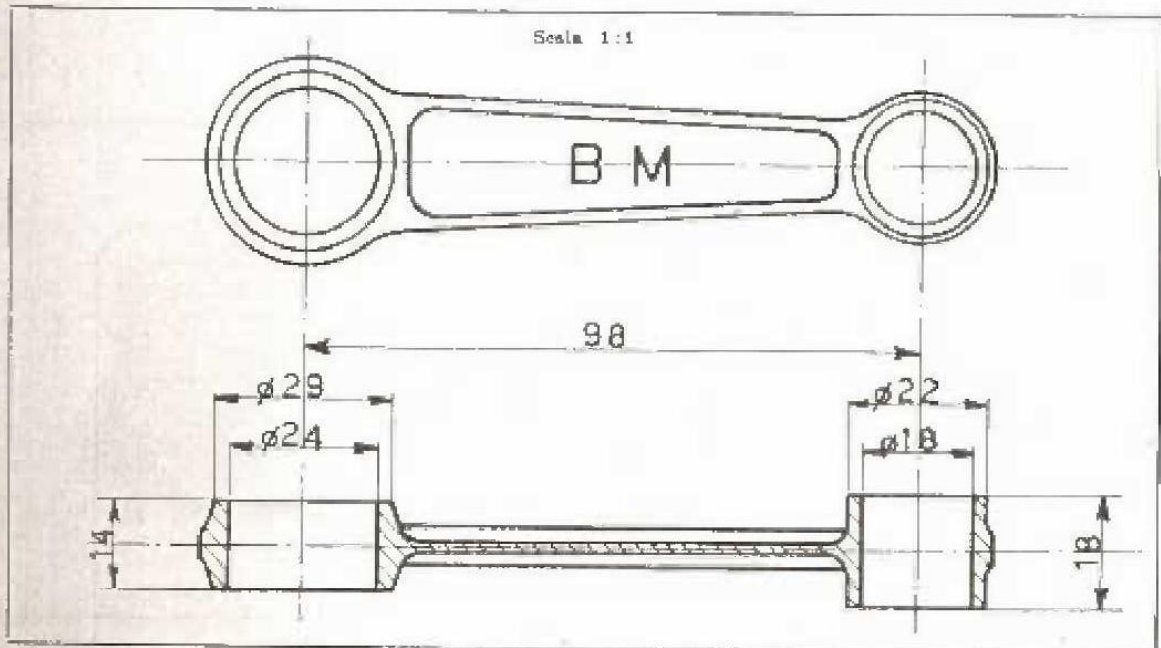


Materiale: Acciaio

Peso: Kg. 1,600

BIELLA

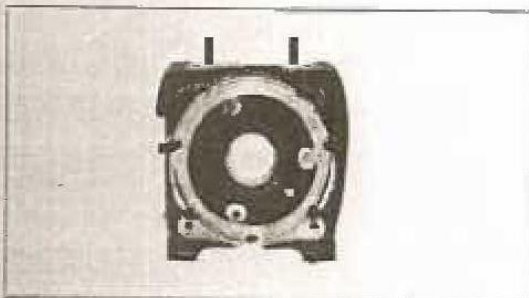
Scala 1:1

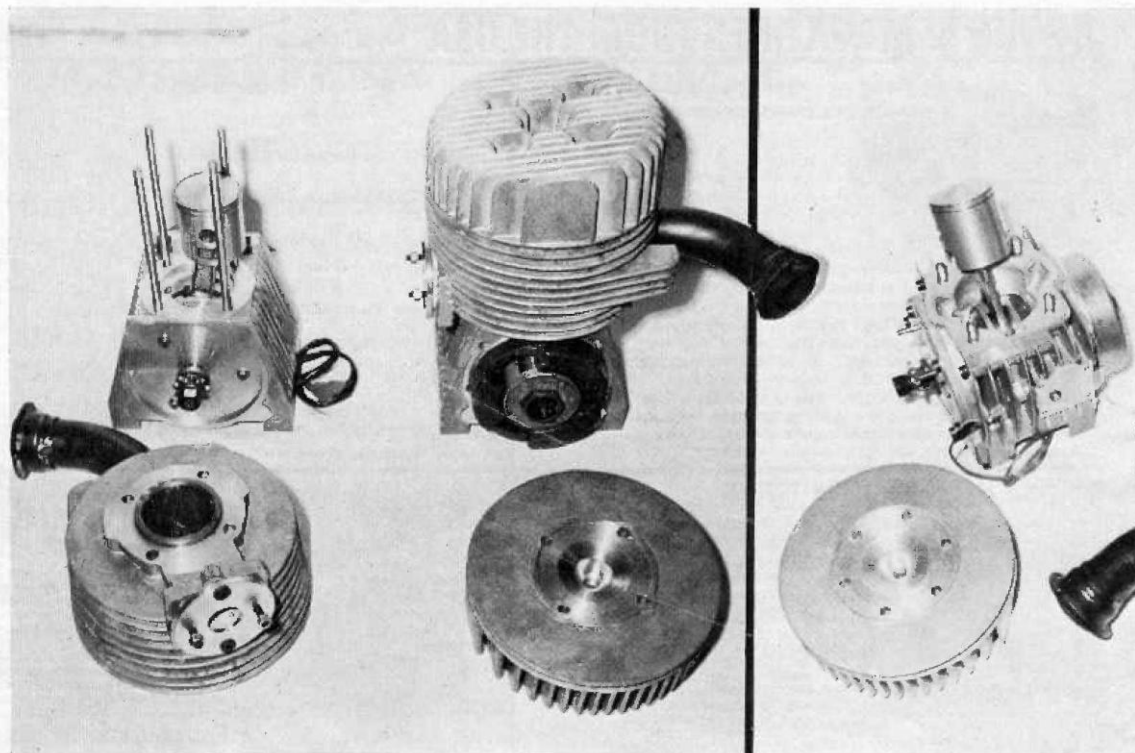


Materiale: Acciaio

Tolleranza 10% in meno

Peso: Grammi 165





▲ B.M. FCL

▲ B.M. K96/3

## THE NEW B.M.s

There is nothing quite so melancholy as an Italian who feels that the dice are loaded against him and at the moment there are some very long faces at B.M. Superficially one might imagine that this important Italian kart manufacturer had everything going for him. First started when the principal of the giant Astra concern, Camillo Bertuzzi, heavily involved with General Motors products and manufacturer of earth moving equipment and military tanks, took up 125cc with gearbox kart racing. Not surprisingly, with such superb resources behind him he quickly became involved in the tuning of his engine and eventually the construction of same.

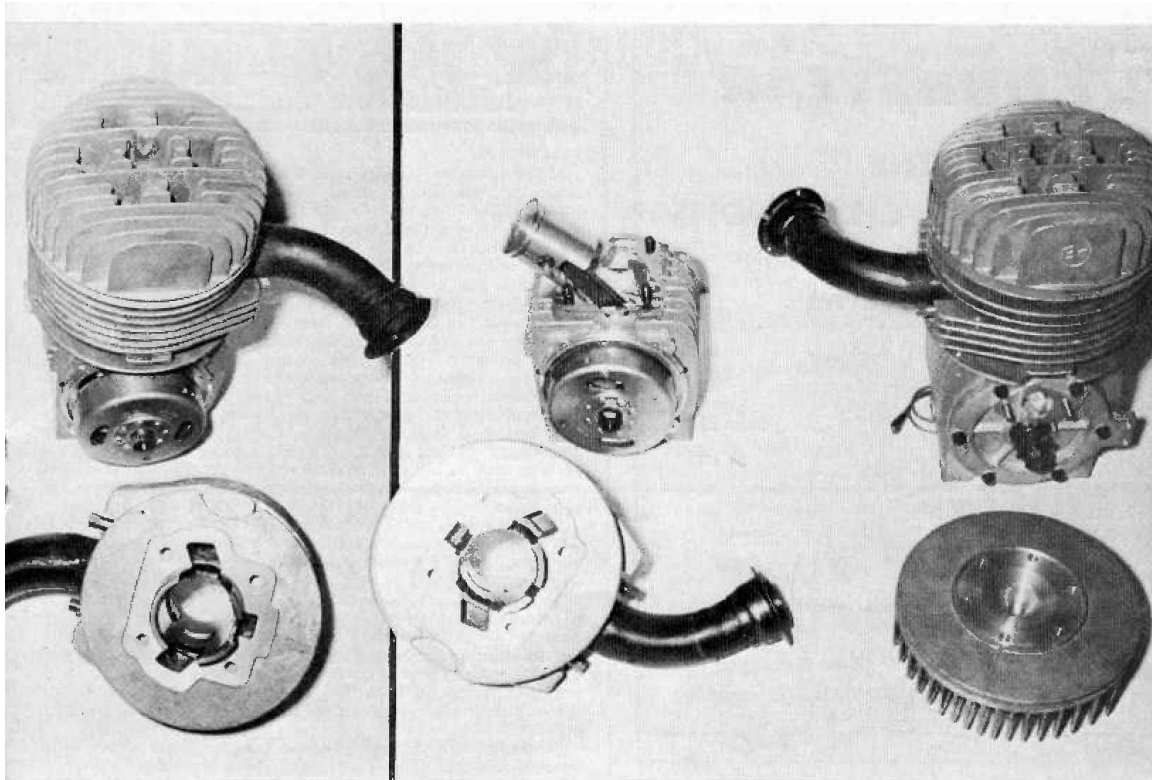
One of the tycoon's enthusiasms for the sport developed motors that were originally somewhat fragile but also extremely fast. Their hunger for success became a burning passion which led to such kamikaze efforts as the F100 GS with its infamous hand controlled additional air inlet into the cylinder. When neck-and-neck with another competitor one was meant to pull the lever so admitting extra air to weaken the mixture and get you past the opposition. Not surprisingly few competitors could be trusted with such a control.

Gradually all sorts of rumours started about B.M. — that a large shipment was returned from the U.S.A. to Europe as unsatisfactory and that these were in turn resold to our karters. Marketing the motors has always appeared unconventional with tales of Swiss business men sometimes handling the sales and even the use

of the barter system with a kart manufacturer swapping his chassis frames for engines. Spares have never been easy to obtain and there are often long periods when B.M. concessionaires report that they cannot get a reply from the factory to letters or telegrams.

Winning the World Championship in 1965 with Guido Sala and in 1968 with Tom Neilsson whetted their appetite for the big title and they have always concentrated on prestige event success rather than steady commercial practice. Their 1974 effort was conducted more like a Formula 1 crusade with the foundations being laid in two of the world's best drivers — Necchi and Gorini, backed up by young Gabbiani. The factory engaged that most revered of tuners, Franco Baroni to work on B.M. development with Augusto Fiordelisi continuing as General Manager. Special karts were made using the finest materials to ensure that the best possible use could be made of the excellent performance available. Drivers attempting to buy B.M. karts for their own use quickly found themselves faced with either figures having too many noughts on the end or a blanket of silence if they were well known campaigners of B.M.'s rivals.

Through a series of misadventures, of which the majority could be put down to bad luck, B.M. made no showing in the overall results of the World Championship and it was a very crushed and dispirited team that returned to the home factory at Piacenza, some 50 km from Milan. Other troubles were looming on the horizon which had started when the American importers of B.M., APPCO, asked them to prepare reed valve models for their market so that the popular U.S.A. reed valve class could be attacked, APPCO paid for the engine patterns but the two American controlling bodies must have got the wind of the idea for the class became AMERICAN reed and then it was tightened even further by making it specifically a McCulloch class. Mr. Rovelli senior entered the picture with a proposal for the reed valve



▲ B.M. FC52

motor to be revived, still under the B.M. name, but with his financing and possibly certain undertakings relative to his son (the current World Junior Champion). Contracts were apparently drawn up and signed only for B.M. to change their mind. We hope to enlarge on the character of Rovelli in a subsequent issue but suffice it to say that he made no attempt to enforce his rights by legal process but simply bought up most of the premises where B.M.'s were being manufactured and hired the majority of their key personnel and set them to work to produce the four models of the Sirio motor.

With the three year homologation period rapidly approaching, B.M., with no workshops and few mechanics, were in an acutely difficult position to make the prototypes and the initial 25 engines for inspection of each of the four models they intended to introduce. In the end, Dante Gabbiani, owner of a large wood-working machinery manufacturing company and father of a rapid junior driver, stepped in the breach and offered the use of his factory. No doubt some arrangement was made to ensure his son was supplied with top motors for the World Championship.

As the homologation date approached so the Italians entered their annual silly season for major strikes and in the end just managed to get three models ready by the skin of their teeth, the FCL 2C having to be withdrawn. Although the K96/3, FC52 and FCL are all unmistakably B.M. in their external appearance there are in fact considerable differences in the structural castings and a great divergence in the internal design.

#### K96/3

With a stroke of 48.5 mm (the same as the FCL) the K96/3 is based on their K96 which two years ago took up the classic stroke dimension pioneered by Komets and now used by DAP, Delta, Upton and Zip. It has a 96 mm connecting rod and the porting incorporates a third transfer passage—the first time it has been adopted by B.M. A very rare feature these days, due

to the cost of construction, is the use of a 2 piece crankshaft. The K96 had a 5 ported barrel and 3 piece crankshaft.

#### FC52

This model has a 52 mm stroke (a new figure for a B.M.) and 48.9 mm bore and has to have a longer con rod of 98 mm. The crankcases look very similar from the outside, having a slight barrel shape. There is a 3 piece crankshaft but combustion chamber, rotary valve and the use of three transfer passages follows K96/3 layout and design. The earlier FC100 had a 54 mm stroke and a two piece crank whilst the FC100/3 had a three piece crank. This is all most confusing because B.M. appear to have changed their numbering system! The /3 in FC100/3 indicated the crankshaft type whereas in the 96/3 it refers to the number of transfer passages.

#### FCL

This model has a 48.5 mm stroke and 50.7 mm bore and incorporates a Vee reed induction into the bottom of the valve and a booster port apparently fed from the inlet passage on the cylinder side of the reed. There are four reed petals on the vee, there is a 96 mm rod and a three piece crankshaft. Unlike the other two models which have two bolts securing the head to the barrel in addition to four long studs, the FCL only has the latter. The head has a flat top to the fining, which is lower to the front of the engine than at the back whilst the crankcase is also distinctly different having a very wide base supported on short stubby legs.

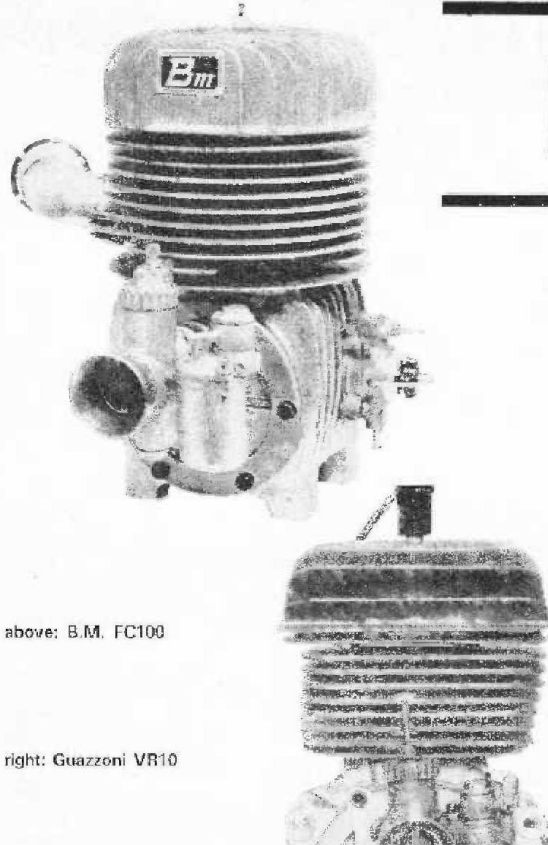
It is said that Goldstein has spent much time testing B.M. engines and karts in Italy and will spearhead the factories renewed efforts for 1975. It has also been said that the temperamental Maestro has returned to Belgium unconvinced as to the merits of continuing this relationship—only time will tell whether those solemn faces of the men at Piacenza will become jubilant at the World Championship.



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# NEW ENG

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above: B.M. FC100

right: Guazzoni VR10

The International homologation took place in January at Paris and as a result the Italian engine manufacturers arranged the announcement of their new motors, whether intended for racing in Europe or not, at around that time.

## Guazzoni

It has been a long time since we had a Guazzoni engine for karting and the new model VR10 appears to be a serious attempt at getting back amongst the competitive engines.

The stroke is 54mm and the bore 48mm, figures pioneered by the first rotary valve kart engine, the Saetta VII, but new to Guazzoni. The barrel appears to be square when viewed from above and instead of parallel head fins, like the Guazzoni VR8 etc, they are splayed radially and look very like those on the Komet K77. Carburation is by Dell'Orto MB22A and MB24 units.

## B. M.

The B. M. FC100 appears to be exactly as homologated for Britain with stroke and bore of 54mm and 48mm respectively. Interestingly enough, both the Guazzoni and the B. M. appear to weigh 25½ lbs. (11.6kg) which is 1.3 lbs. more than most other Italian engines.

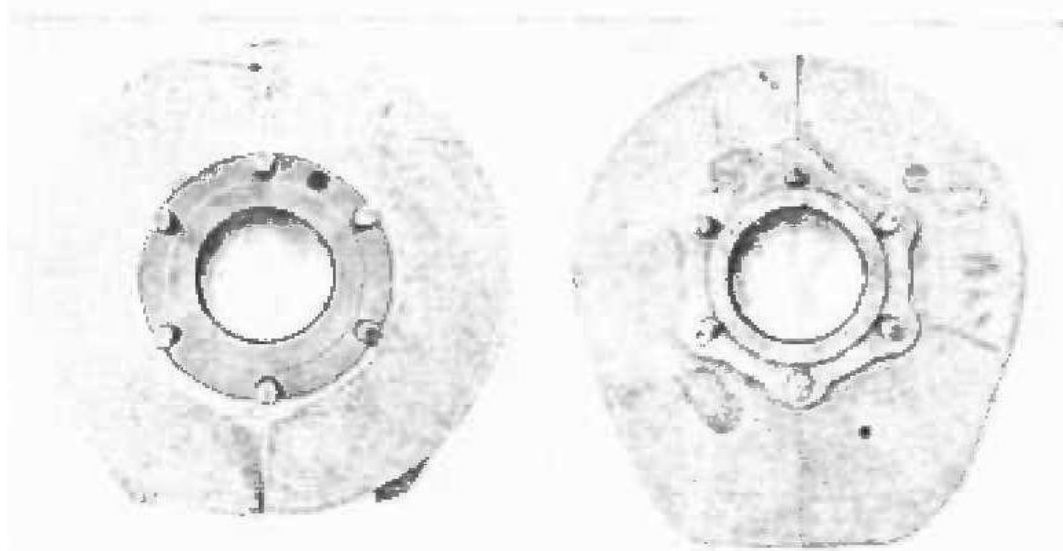
*Supplement number 3 to Part One of the*

# **KART ENGINE SPECIFICA**

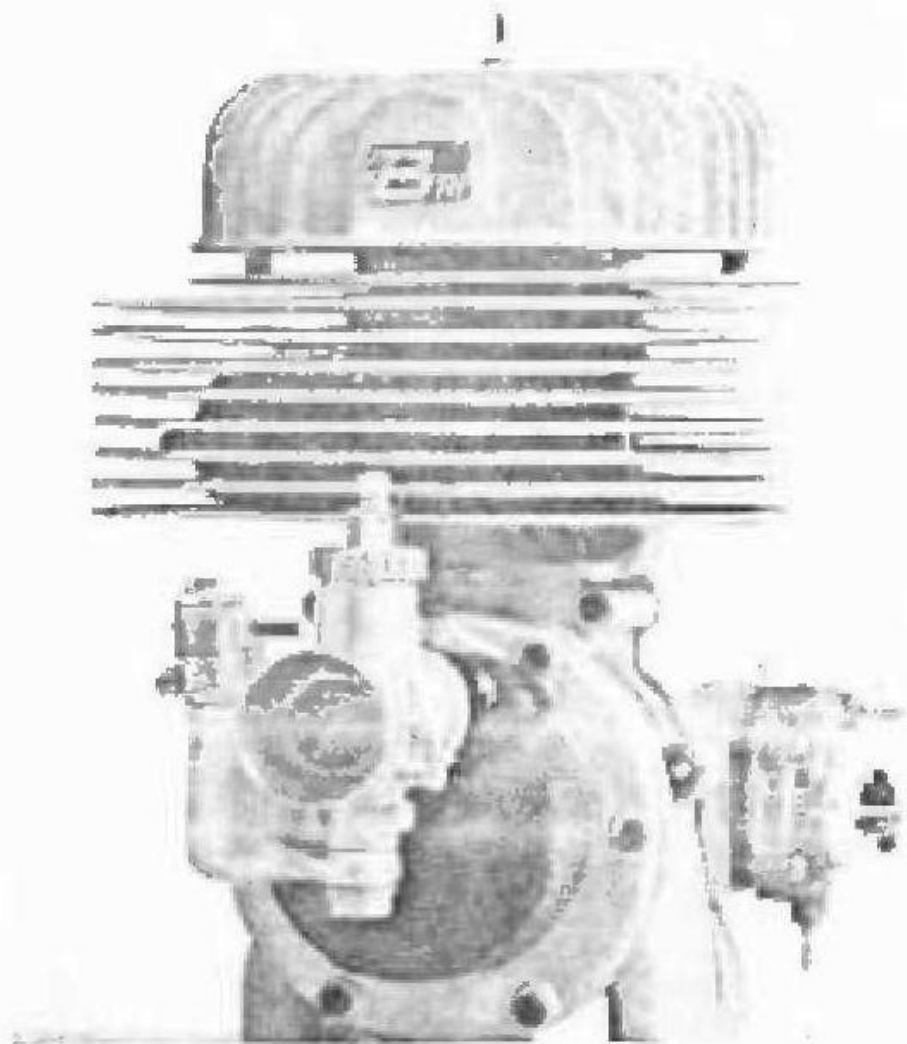
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**B.M.**

To distinguish the B.M. F100 from the B.M. F100 JB and  
B.M. F100 GS



*The difference in barrel shape when seen from above of the  
B.M. F100 (right) and the models in class 1 Super (left)*



### **BM F100**

Stroke 54 mm. Bore 48 mm. Capacity 97.7 cc.

Max. bore 1.912" = 48.565 mm.

Alternatives allowed—die cast barrel, head, crankcase and valve cover.

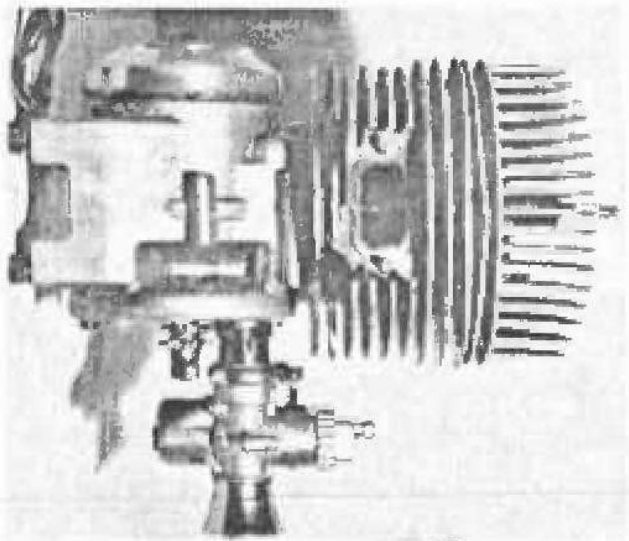
*Supplement number 2 to Part One of the*

EFFECTIVE JANUARY 1961

# KART ENGINE SPECIFICATION BOOK

## **B.M. F100 JB**

Stroke 54 mm, Bore 48 mm,  
Capacity 97.7 cc.  
Max. bore 1.912" = 48.565 mm.



## **B.M. F100 GS**

For details see  
F100JB

