

The following list of engines was taken from the 1980 IKF rule book. Unfortunately it does not include many engines from the earlier days of karting including Westbends, etc. It is however a good source of what engines were most often used in 1980.

## 80cc 100cc/200cc 125cc McCulloch

This section covers all McCulloch engines. Engines to have a single cylinder, single carburetor, single ignition, and single reed assembly. Unless otherwise specified, all parts are to be of original manufacture and stock appearing. The following engines have been homologated for these classes: 80cc McCulloch: MC-49C, MC-49E. 100cc/200cc McCulloch: MC91, MC91A, MC91B, MC91B/1, MC91MC, MC92, MC93. 125cc McCulloch: MC101A/A, MC101B, MC101D, MC101MC.

**EXTERNAL MODIFICATIONS:** External modifications which do not in any way affect a performance gain are legal.

**LEGAL ADDITIONS TO McCULLOCH ENGINES:** Legal additions shall be limited to the following: Air cleaner, clutch, muffler, rock guard, chain guard, third bearing, starter pulley, motor mount, adapter shaft, starting nut, header pipe, external extension of carburetor jet needles, extension on throttle arm, carburetor return springs, temperature gauge and tachometer. Any factory fastener may be replaced by an allen type bolt.

IKF ONLY—DIRECT DRIVE GEAR.

**WKA ROOKIE ONLY:** NOTE: 5 Inch Reed Junior must use McCulloch silencer for exhaust or Gem Part No. G1272. **No tuned pipes.** Also, the only approved clutches are: Max Torque 2 and 4 shoe models, Horstman Rev. Grip (stamped steel drum), Hartman 2-shoe clutch, and Hegar two/three-shoe clutch. **Clutch must be stock appearing. NO oil, greasing, etc., allowed. NO interchanging of clutches or parts allowed.**

**LEGAL CHANGE OF PARTS FOR 80cc ENGINES:** All parts of the McCulloch MC-49C, MC-49E are interchangeable as long as no removal or addition of material is required to interchange said parts.

**LEGAL CHANGE OF PARTS FOR 100cc/200cc ENGINES:** All parts of the McCulloch MC-91, MC-91A, MC-91B, MC-91B/1, MC-91MC, MC-92, MC-93 are interchangeable as long as no removal or addition of material is required to interchange said parts.

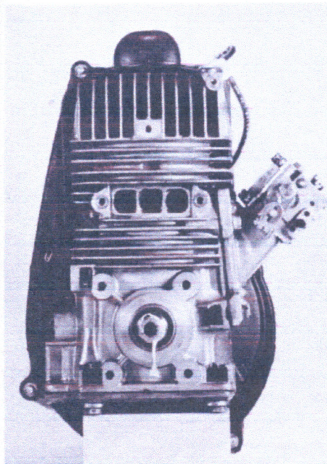
**LEGAL CHANGE OF PARTS FOR 125cc ENGINES:** All parts of the McCulloch MC-101A/A, MC-101B, MC-101D, MC101MC are interchangeable as long as no removal or addition of material is required to interchange said parts.

**METAL TREATING:** Any metal treating process which alters the stock appearance of any internal engine components is illegal unless permitted by this manual.

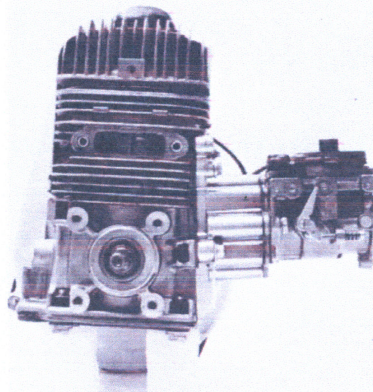
ENGINE	MAX. BORE	MAX. STROKE	MIN. STROKE
80cc McCulloch	2.165	1.380	1.370
100/200cc McCulloch	2.200	1.650	1.630
125cc McCulloch	2.330	1.845	1.830

**80/100/200/125cc McCulloch:** Determine the model number of the engine and refer to the proper cylinder layout. Using a precision drill blank of NO-GO diameter, measure the size of the ports. The narrowest portion of an irregular hole will prevent passage of the drill blank. All intake ports should be visually inspected to insure that they are round, *not* oval, oblong, or irregular in shape. The dimensions in the port diagrams are for the point where the plane of the port intersects the plane of the cylinder bore wall.

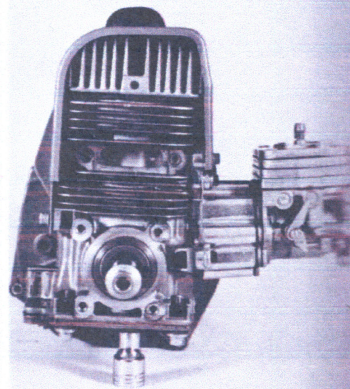
It shall be permissible to re-surface the gasket area at the exhaust ports to repair damage incurred by a loose header. Metal removal to accomplish this shall be limited to the same plane as



80cc McCulloch

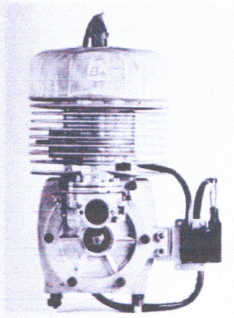


100cc/200cc McCulloch

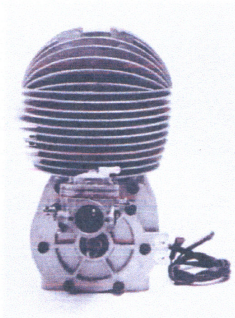


125cc McCulloch

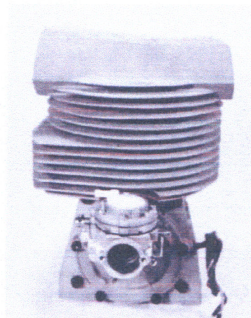
# 100cc Stock Rotary Valve/Reed Valve



BM-SS96



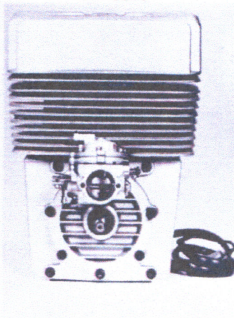
Parilla SS21



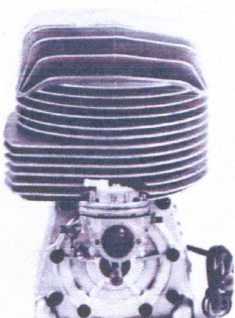
Komet K-88



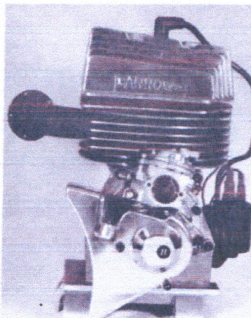
Corsair T-80



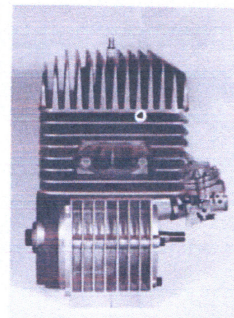
Corsair T-80A



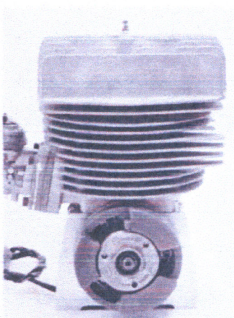
Komet K-78



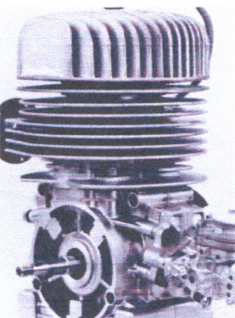
Hewland



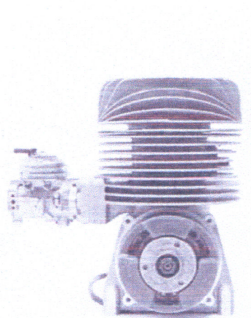
Manx



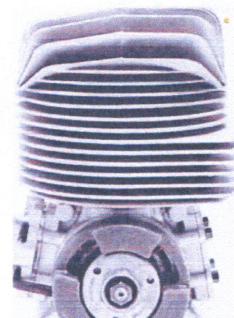
LMR100



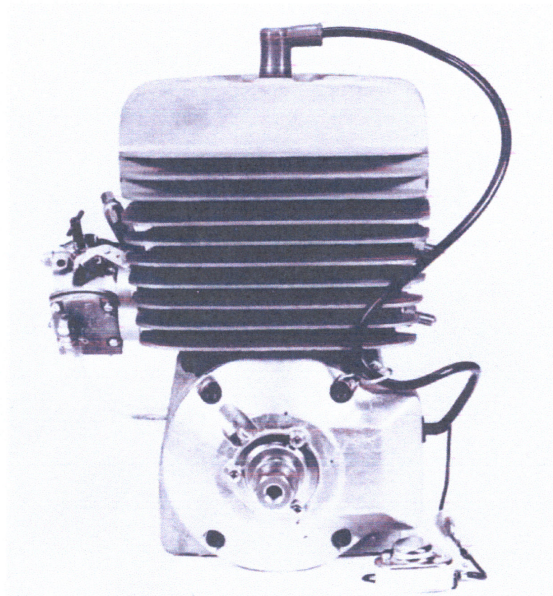
Atlas



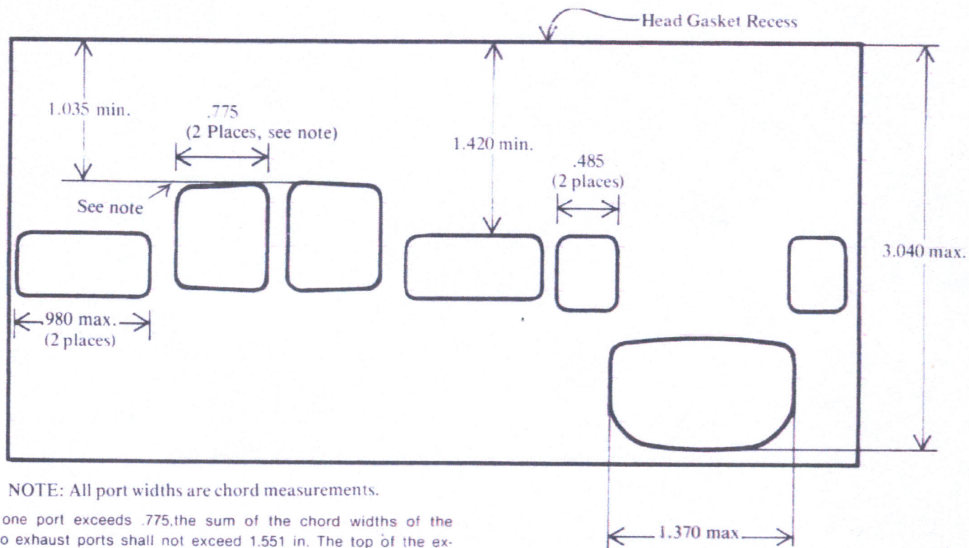
Corsair T72



Komet K55



Yamaha KT 100S



NOTE: All port widths are chord measurements.

If one port exceeds .775, the sum of the chord widths of the two exhaust ports shall not exceed 1.551 in. The top of the exhaust ports are angled, not flat.

**CYLINDER LENGTH:** Yamaha KT-100S: Measured from the base of the aluminum to the head gasket recess. The cylinder length must be 3.165-in/3.180.

**CYLINDER POSITION:** It is legal to turn the cylinder and piston

180 degrees on the Yamaha KT-100S. Matching of the transfer passages in the case and cylinder is not legal.

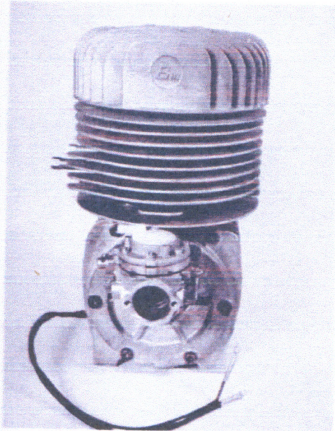
**CYLINDER BASE GASKET:** The gasket shall have a compressed thickness of: Yamaha KT-100S, .010-.020-in.

# 100cc Stock Appearing

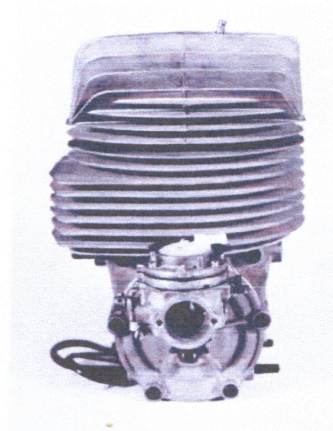
This section covers engines under 6.216 cu. in. maximum displacement. Engines to have a single cylinder and single stock carburetor. Internal modifications allowed. External modifications which do not in any way affect a performance gain are allowable. The following engines have been homologated for this class: Atlas, BM-104, BM-96TT, BM-FC, BM-SS, BM-SS96, Corsair T72, Corsair T-80, Corsair T-80A, Corsair T-81, Hewland Arrow KE-3, K78TT,

Komet K55, Komet K-77, Komet K-77TA, Komet K-78, Komet K-88, LMR 100, Manx 100S, Mc90-93, Parilla BA-13-A, Parilla BA 13-B, Parilla BA-13-C, Parilla SS-20, Parilla SS-21, Parilla SS-22, Parilla TG-14, Parilla TT-22, Saelta V18, Yamaha KT-100A, Yamaha KT-100S. Refer to other sections for other pictures.

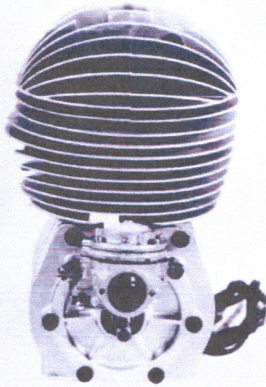
**1KF ONLY — GAS AND OIL FUEL ONLY**



*BM-104*



*Komet K-77*



*Parilla SS 20, 21 or 22*



*Yamaha KT 100A*