

7. In case the engine does not pop or only pops weakly, it means the priming mixture is too lean. Close the throttle valve only a bit, and pull the choke rod once more. Then the slit becomes narrower and you can get stronger suction. Repeat "Priming flip". And more rich mixture will be supplied. Then, the engine will start soon.

## ✱ RUNNING

1. After your engine starts, open the throttle valve fully, and adjust the needle valve slowly to the best running position. But it is very important to run the engine always with a slightly rich mixture to get the best performance.
2. Close the throttle valve slowly and check the idling. The reasonable idling speed of R120-4C is 2,500 ~ 3,000 r.p.m.. Usually, R120-4C prefers rather rich mixture at idling. Control the idling mixture with the idling mixture adjusting screw. When you want richer mixture, close this screw 1/2 or 1/4 turn at one time, seeing the result carefully.
3. Try hi-lo and lo-hi operation several times, and make sure that the engine has no tendency to stop.
4. In the medium speed range between full throttle and idling, the engine runs steadily with the slightly rich mixture fed by the ENYA GC type carburetor.

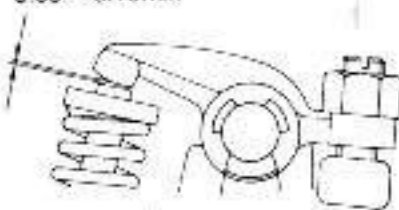
## ✱ BREAK IN

Break in your R120-4C about 1/2 hour. During this period the engine running is sometimes unsmooth and unsteady. But as you continue the breaking in, the engine running will become smoother and more powerful. Usually, it will take 1 ~ 2 hours for the engine to reach its peak in power and smoothness.

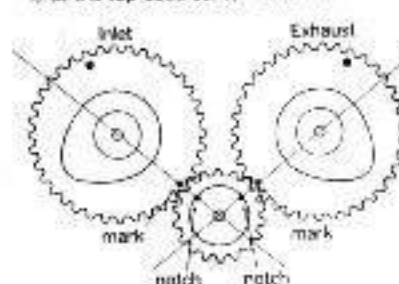
## ✱ ADJUSTMENT OF THE VALVE CLEARANCES

The normal valve clearances of ENYA R120-4C are 0.05 ~ 0.10 mm when the engine is cold. It is recommended to make the first adjustment of valve clearances after first 1/2 ~ 1 hour of running with the special wrench and driver enclosed in the box. And it is also recommended to check the clearances sometimes after every 2 ~ 3 hours of running. It is important that the adjustment is to be made when the engine is cold. (The valve clearances become wider when the engine is hot because of the expansion of cylinder block).

Valve clearance  
0.05 ~ 0.10mm



☞ The following figure shows the correct positions of timing gears when the piston is at the top dead center. (Back view)



## ✱ MATTERS THAT DEMANDS SPECIAL ATTENTION

1. The disassembling and assembling of ENYA R120-4C is not so difficult. But do it carefully.
2. When you assemble the timing gear box, put the piston at the top dead center, and then combine the notches of gear shafts and the marks of cam shafts as shown in the sketch. The standard timing of valves are as follows.

Inlet valve	open	30° B.T.D.C.
"	close	70° A.B.D.C.
Exhaust valve	open	70° B.B.D.C.
"	close	30° A.T.D.C.

3. When you assemble the engine, proper lubrication on all the parts are recommended.

## ✱ MAINTENANCE

1. Do not screw up the cylinder head of R120-4C too tightly to avoid the deformation of cylinder liner.
2. It is usually needless to supply any oil to the inner mechanism, because the oil contained in fuel lubricates all of the inner parts.

## ✱ PARTS LIST ✱

No. in drawing	Name of part	Qty.	Part No.
1	Cylinder head	1	R1204C01
2 ~ 3	Crank case (with ball bearing)	1 set	R1204C03
2	Crank case	1	R1204C03A
3	Ball bearing	1	11CX03B
4 ~ 6	Cylinder liner & piston assembly	1 set	R1204C04
4	Cylinder liner	1	R1204C04A
5	Piston	1	1204C04B
6	Piston ring	1	1204C04C
7	Connecting rod	1	R1204C05
8	Piston pin	1	1204C06
9	Piston pin stop ring	2	1204C61
10 ~ 12	Front housing (with ball bearing)	1 set	R1204C07
10	Front housing	1	R1204C07A
11	Ball bearing A	1	R1204C07B
12	Ball bearing B	1	R1204C07C
13	Crank shaft	1	R1204C08
14	Ball bearing retaining C ring	1	R1204C62
15	Drive washer	1	R1204C10
16	Hollow screw (3 x 10)	2	1204C11
17	Propeller washer	1	R1204C12
18	Conical spring washer	2	R1204C13
19	Propeller nut	1	R1204C14
20	Front housing setting screw (4 x 14)	4	60X15C
21	Gasket of front housing	1	R1204C16
22	Cylinder head setting screw (4 x 18)	4	904C15A
23	Inlet valve	1	R1204C711
24	Exhaust valve	1	R1204C71E
25	Valve spring	2	R1204C72
26	Valve spring washer	2	R1204C73
27	Valve cotter	4	354C74
28	Valve locker arm	2	464C75
29	Valve locker screw	2	354C76
30	Valve locker screw locking nut	2	354C77
31	Locker shaft	1	R1204C78
32	E ring	2	354C80
33	Locker shaft setting screw (4 x 45)	1	R1204C19B
34	Cylinder head cover	1	904C65
35	Cylinder head cover setting screw (2.6 x 15)	2	904C66
36	Timing gear shaft	1	R1204C81
37 ~ 38	Timing gear box (with ball bearing)	1 set	R1204C82
37	Timing gear box	1	R1204C82A
38	Gear box bearing	1	904C82B
39	Inlet & exhaust camshaft	2	R1204C84
40	Tapet	2	R1204C86
41	Push rod	2	R1204C87
42	Push rod tube	2	R1204C68
43	O ring for push rod tube (P.6)	4	354C40M
44	Gear box setting screw (3 x 15)	4	354C19A
45	Gasket of gear box	1	R1204C90
46	Breathing nipple	1	093W03C
47 ~ 68	Carburetor assembly	1 set	R1204C40
47	Carburetor body	1	R1204C40A