	Name					
1.	Remove engines from create					
	Install exhaust, air filter housing and add oil					
	Remove spark plug and check compression with gauge					
	Set choke to OFF, set throttle to 1/2					
	Pull the engine over with 4 quick pulls and recorded your reading]	psi.			
2.	install the test fuel tank and test run engane					
		Fail	symptoms			
	Be sure it runs with the choke off					
	Check low speed idle					
	Check high speed idle		<u> </u>			
	Verify that it holds a steady speed with no surging or rough runni	ing				
3.	Remove valve cover and set engine to Top Dead Center (TDC) check valve lash with Feeler Gauge, have instructor verify your findings Gearance should be .004-006 intake and .006008 exhaust Gearance (before) Gearance (after, if adjuster)					
	Intake valve lash					
	Exhaust valve lash Recheck compression you adjusted the valves					
	Pull the engine over with 4-5 quick pulls and recorded your readi	ng	psi.			

Disassembly of the lower end

1. Measure the bore and stroke of this engine

Calculate displacement

Bore2 x stroke x .7854 x number of cylinders

To convert, OD/61.02 = liters

Bore_____

Stroke_____

Displacement _____ in cubic inches

- 2. Remove any small items bolted to the block.
- 3. Measure crank shaft end play with the dial indicator

record your reading_____ inches

4. Remove flywheel; use an impact gun to get the nut off. Have .004 (__)-2.998Q 0 0 7Td () Tj ET Q 0 0 612 792 re

6.	Measure	crankshaft
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Rod journal _____

Main bearing journal, flywheel side _____

Main bearing journal, output side _____

7. Measure oil clearance of the rod on the crank

Plastigage reading_____

8. Remove wrist pin and measure Pin hole in piston

Pin hole in connecting rod

Measure wrist pin dia

Calculate dearances

Piston to pin_____

Rod to pin _____

9. Measure camshaft intake

exhaust

Base circle_____ Base circle_____

Lobe lift_____ Lobe lift_____

10. Measure cylinder bore with T-gauge in 3 places top to bottom on the thrust surface then 3 more at 90 degrees.

Тор	Тор					
Middle	Middle					
Bottom	Bottom					
11. Measure piston Skirt ½ inch above the bottom of skirt						
12. Calculate piston to cylinder wall clea	arance smallest bore measurement Minus Piston skirt measurement Gearance					
 13. Reassemble the bottom end. Have your instruct inspect the cam timing before you install the cover. 14. Install the cylinder head and adjust the valves. 15. With the valve cover removed and the engine set to Top Dead Center (TDC) check valve lash with Feeler Gauge, have instructor verify your findings Clearance should be .004-006 intake and .006008 exhaust						
16 Install the earburgton muffler and a	other external components test fuel tank and test rup					

- 16. Install the carburetor, muffler and other external components test fuel tank and test run engine.
- 17. The magneto must be set to .009-.012 clearance. Have you instructor assist and inspect

	Pass	Fail	symptoms
Be sure it runs with the choke off			
Check low speed idle			

Check high speed idle

Verify that it holds a steady speed with no surging or rough running

Write down the Torque specs for the bolts

6mm

8mm

10mm



