Compression Systems and Carburetor Troubleshooting:

TROUBLESHOOTING COMPRESSION SYSTEMS			
Problem prior to testing	Test Result	Solution	
Lack of power or starting problem	Reading is green - minimal air flow	Investigate for other (non-compression) problems	
Lack of power or starting problem	Reading is green - minimal (audible) air flow with small amount coming through the head gasket	Replace head gasket	
Lack of power or starting problem	Reading is green - all the air escaping from one component	Check that the piston is at TDC on the compression stroke, rotate 720°, lock the crankshaft, and retest. If the reading is correct, investigate the possible problem with that component.	
Lack of power or starting problem	Reading is red - all the air escaping from one component	Check that the piston is at TDC on the compression stroke, rotate 720°, lock the crankshaft, and retest. If the reading is correct, investigate the possible problem with that component.	
	Reading is red - the air escaping is	Check that the piston is at TDC on the compression stroke, lock the crankshaft, and retest. If the reading is correct, investigate the possible problems starting with the component that appeared to leak	
Lack of power or starting problem		the greatest volume of air.	

CARBURETOR PROBLEM SOLVING CHART		
Problem	Cause	Solution
Flo-Jet carburetor leaking after being transported	Float bounce	Use the fuel shutoff valve
	Fuel tank too far above carburetor causing excessive pressure at the needle valve	Lower the tank to a maximum of 45" above the carburetor
Flo-Jet carburetor leaks during operation	Loose, missing, incorrectly assembled/adjusted, or damaged parts	Correct parts problem
	Contaminated fuel	Clean system/replace fuel
	Long coast-down period	Lower engine speed to idle before shutting down
	Fuel leaking past main nozzle	Clean/replace emulsion tube/nozzle
	Loose, missing, incorrectly assembled/adjusted, or damaged parts	Correct parts problem
Engine dies at idle, runs normal at high speed-full load, but surges when running at high speed-no load	Idle passage is blocked	Clean the passage
Engine runs normal at high speed with or without load, but at idle it runs rough with a rhythmic idle	Idle air bleed is blocked	Clean air bleed
Engine runs normal at high speed and idle with no load, but at high speed under load there is a severe loss of power and the engine dies	High speed pick-up tube partially blocked	Clean obstruction
At idle, engine is running slightly fast. At high speed under load it is very rich, blowing black smoke, and top speed does not exceed 2200 rpm. At top speed with no load it is also slightly rich	High speed air bleed is partially blocked	Clean obstruction