7. TROUBLE SHOOTING

It is most important that the cause of any trouble be located as soon as possible and the proper corrective action taken so that the serviceable life of the engine will be extended.

In the following table are listed the troubles, probable causes and the corrective actions.

1. MAIN ENGINE TROUBLE

Troubles	Probable causes	Corrective action
Engine will not continue running.	1. Clogged fuel cock. 2. Plugged vent hole in fuel tank cap. 3. Improper tappet clearance. 4. The carburetor to intake manifold connecting tube damaged or leaking air at the joints. 5. Improper oil level	Clean and inspect.
Engine malfunctions after warm-up.	1. Defective spark plug 2. Defective ignition coil 3. Incorrect flat level	1. Overheated spark plug, replace with plugs of correct heat range
Excessive smoke at high engine speed. (oil pumping condition)	1. Oil being pumped into the combustion chamber due to excessively worn or damaged cylinder, piston, rings and burned during combustion.	By diagnosing the noise, rebore and/or replace the parts as required.
Noise produced near the top of the engine	1. Worn piston and cylinder The clearance between the piston and cylinder is increased causing the piston skirt to slap against cylinder wall during combustion. 2. Worn connecting rod large end produces knocking 3. Tappet noise	1. Inspect and rebore cylinder and replace worn parts. 2. Replace connecting rod, large end bearing and crank pin. 3. Adjust to proper specification.
Overheating engine	1. Carbon deposit accumulation 2. Dirty or fouled spark plugs 3. Improper type spark plugs or gap 4. Insufficient lubrication to drive chain or chain tension too tight. 5. Oil level too low, poor or improper grade oil 6. Improper distributor point gap clearance, dirty, burnt 7. Excessive carbon accumulation in combustion chamber	1. Disassemble and clean 2. Clean, dry fouled plugs. Inspect carburetor if plugs continues to foul. 4. Adjust periodically, lubricate 7. Adjust periodically
Engine does not start (lack of compression)	1. Foreign object caught between valve and valve seat 2. Tappet stuck open 4. Ignition timing out of adjustment 5. Blown fuse	Reference