

10. Remove oil level gauge and check oil level

CORRECT

11. Remove cylinder head cover and inspect lubrication

VALVE TRAIN LUBRICATED PROPERLY

12. Check if engine overheats

NOT OVERHEATED

13. Accelerate or run at high speed

ENGINE DOES NOT KNOCK

OIL LEVEL INCORRECT → (1) Oil level too high
(2) Oil level too low
(3) Contaminated oil

VALVE TRAIN NOT LUBRICATED PROPERLY → (1) Clogged oil passage
(2) Clogged oil pipe

OVERHEATED → (1) Excessive carbon build-up in combustion chamber
(2) Use of improper quality of fuel
(3) Clutch slipping
(4) Fuel-air mixture too lean

ENGINE KNOCKS → (1) Worn piston and cylinder
(2) Fuel-air mixture too lean
(3) Use of improper grade of fuel
(4) Excessive carbon build-up in combustion chamber
(5) Ignition timing too advanced (Faulty CDI unit or pulse generator)

POOR PERFORMANCE AT LOW AND IDLE SPEEDS

1. Check ignition timing and valve clearance

CORRECT

2. Check carburetor pilot screw adjustment

CORRECT

3. Check if air is leaking past carburetor insulator

NOT LEAKING

4. Try spark test

GOOD SPARK

Probable Cause

INCORRECT → (1) Improper valve clearance
(2) Improper ignition timing (Faulty CDI unit or pulse generator)

INCORRECT → (1) Fuel-air mixture too lean
(2) Fuel-air mixture too rich

LEAKING → (1) Deteriorated insulator O-ring
(2) Loose carburetor

WEAK OR INTERMITTENT SPARK → (1) Faulty, carbon or wet fouled spark plug
(2) Faulty CDI unit
(3) Alternator faulty
(4) Faulty ignition coil
(5) Faulty pulse generator