

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 control orifice.

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 advancer).

**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 spark advancer).

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 advancer.