

206 APPENDIX

Other noise

- Connecting rod small end clearance excessive
- Connecting rod big end clearance excessive
- Piston ring(s) worn, broken, or stuck
- Piston seizure damage
- Cylinder head gasket leaking
- Exhaust pipe leaking at cylinder head connection
- Crankshaft runout excessive
- Engine mounts loose
- Crankshaft bearings worn
- Primary chain, chain guides worn
- Starter motor chain worn
- Balancer chain, chain tensioner worn
- Camshaft chain tensioner defective
- Camshaft chain, sprocket, guides worn
- Camshaft chain requires adjustment
- Balancer mechanism springs weak or broken

Abnormal Drive Train Noise

Clutch noise

- Clutch housing/friction plate clearance excessive
- Weak or damaged shock absorber spring(s)

Transmission noise

- Bearings worn
- Transmission gears worn or chipped
- Metal chips jammed in gear teeth
- Engine oil insufficient or too thin
- Kick ratchet gear not properly disengaging from kick gear

Drive chain noise

- Drive chain adjusted improperly
- Chain worn
- Rear and/or engine sprocket(s) worn
- Chain lubrication insufficient
- Rear wheel misaligned

Abnormal Frame Noise

Front fork shock absorber noise

- Oil insufficient or too thin
- Spring weak or broken

Rear shock absorber noise

- Shock absorber defective

Disc brake noise

- Pad B loose
- Pad surface glazed
- Disc warped
- Caliper seal defective
- Cylinder damaged

Other noise

- Brackets, nuts, bolts, etc. not properly mounted or tightened

Oil Pressure Indicator Light Goes On

- Engine oil pump defective
- Engine oil screen clogged
- Engine oil level too low
- Engine oil viscosity too low
- Camshaft bearings worn
- Crankshaft bearings worn
- Oil pressure indicator light switch defective
- Wiring defective
- Relief valve stuck open,

Exhaust Smokes Excessively

White smoke

- Piston oil ring worn
- Cylinder worn
- Valve oil seal damaged
- Valve guide worn
- 0 rings at the cylinder oil passage orifice are damaged
- Engine oil level too high

Black smoke

- Air cleaner clogged
- Main jet too large or fallen off
- Starter plunger stuck open
- Fuel level too high

Brown smoke

- Main jet too small
- Fuel level too low
- Carburetor intake ducts loose
- Air cleaner poorly sealed or missing

Handling and/or Stability Unsatisfactory

Handlebar hard to turn

- Steering stem locknut too tight
- Bearing balls damaged
- Race(s) dented or worn
- Steering stem lubrication inadequate
- Steering stem bent
- Tire air pressure too low

Handlebar shakes or excessively vibrates

- Tire(s) worn
- Swing arm bush and sleeve worn
- Rim(s) warped, or not balanced
- Spokes loose
- Wheel bearing(s) worn
- Handlebar clamps loose
- Steering stem head bolt and/or clamp bolt loose

Handlebar pulls to one side

- Frame bent
- Wheel misalignment
- Swing arm bent or twisted
- Steering stem bent
- Front fork shock absorber(s) bent
- Right/left front fork shock absorber oil level uneven
- Right/left rear shock absorbers unbalanced

Shock absorption unsatisfactory

- Too hard:
 - Front fork oil excessive
 - Front fork oil viscosity too high
 - Tire air pressure too high
 - Shock absorber maladjusted
 - Front fork shock absorber(s) bent
- Too soft:
 - Front fork oil insufficient and/or leaking
 - Front fork oil viscosity too low
 - Front fork, rear shock absorber spring(s) weak
 - Rear shock absorber oil leaking

Brakes Don't Hold

Disc Brake

- Air in the brake line