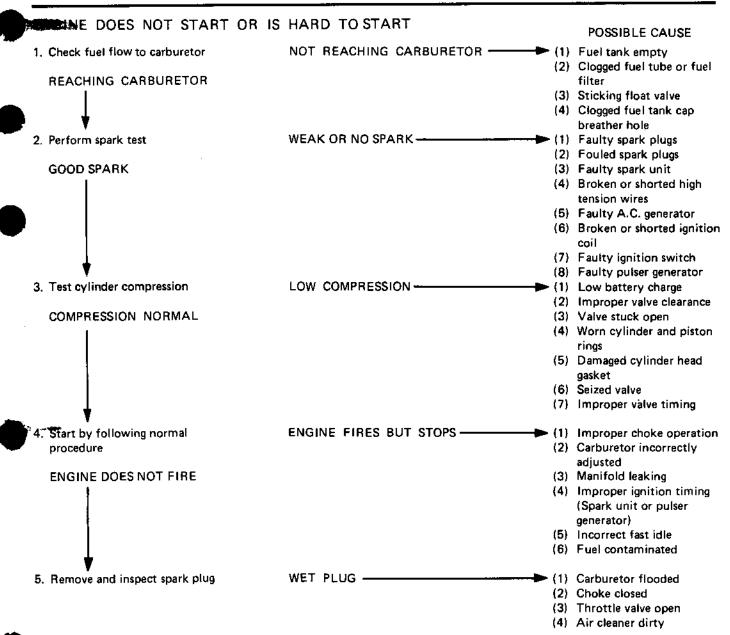
## 20. TROUBLESHOOTING 237



## **TROUBLESHOOTING**



|     | •   |                            |              |  |
|-----|---|----------------------------|--------------|--|
| 1   | ENGINE LACKS POWER  |                            |              | POSSIBLE CAUSE   |
|     | <ol> <li>Raise wheels off ground and spin<br/>by hand</li> </ol>  | WHEELS DO NOT SPIN FREELY  | <b>→</b> (1  |  |
|     | WHEEL SPINS FREELY  |                            |              | bearing Wheel bearing needs  |
|     |   |                            |              | lubrication<br>Drive chain too tight                                 |
| 2   | 2. Check tire pressure  | PRESSURE LOW               | <b>→</b> {1} | Punctured tire   |
|     | PRESSURE NORMAL   |                            | (2)          | Faulty tire valve  |
| 3   | B. Accelerate rapidly from low to second  | ENGINE SPEED CHANGED       |              | Clutch slipping  |
|     | ENGINE SPEED LOWERED WHEN CLUTCH IS RELEASED  | WHEN CLUTCH IS RELEASED    | (3)          | Worn clutch disc/plate<br>Warped clutch disc/plate                   |
| 4   | . Accelerate lightly  | ENGINE SPEED NOT INCREASED | <del></del>  | Carburetor choke closed  |
|     | ENGINE SPEED INCREASES  |                            | (2)          | Clogged air cleaner<br>Restricted fuel flow                          |
|     |   |                            |              | Clogged fuel tank breather   |
|     | <b>.</b>  |                            | (5)          | tube<br>Clogged muffler  |
| 5   | . Check ignition timing   | INCORRECT                  | <del></del>  | Faulty spark unit  |
|     | CORRECT   |                            | (2)          | Faulty pulser generator  |
|     | t to the second |                            | (3)          | Faulty ignition advancer   |
| 6.  | . Check valve clearance   | INCORRECT —                | (1)          | Improper valve adjustment  |
|     | CORRECT   |                            | (2)          | Worn valve seat  |
| 7.  | . Test cylinder compression   | TOO LOW                    |              |  |
|     | NORMAL  |                            | (2)          | Worn cylinder and piston rings                                       |
|     | <b>↓</b>  |                            | (3)<br>(4)   | Leaking head gasket<br>Improper valve timing                         |
| 8.  | Check carburetor for clogging   | CLOGGED                    | <del></del>  | Carburetor not serviced  |
|     | NOT CLOGGED   |                            |              | frequently enough  |
| 9.  | Remove spark plug   | FOULED OR DISCOLORED -     | <b>→</b> (1) | Plugs not serviced frequently  |
|     | NOT FOULED OR DISCOLORED  |                            |              | enough Spark plug with incorrect heat                                |
|     | <b></b>   |                            |              | range  |
| 11  | J.Check oil level and condition   | INCORRECT -                | <del></del>  | Oil level too high   |
|     | CORRECT   |                            |              | Oil level too low<br>Contaminated oil                                |
| 11, | Remove cylinder head cover and inspect Jubrication  | VALVE TRAIN NOT LUBRICATED |              | Clogged oil passage<br>Clogged oil control orifice                   |
|     | VALVE TRAIN LUBRICATED PROPERLY   |                            |              |  |
| 12. | Check for engine overheating  | OVERHEATING -              | <del></del>  | Excessive carbon build-up  |
|     | NOT OVERHEATING   |                            |              | in combustion chamber<br>Use of poor quality fuel<br>Clutch slipping |
| 13. | Accelerate or run at high speed   | ENGINE KNOCKS              | <del></del>  | Worn piston and cylinder   |
|     | ENGINE DOES NOT KNOCK   |                            | (2)          | Wrong type of fuel<br>Excessive carbon build-up                      |
|     |   |                            | (3)          | in combustion chamber  |
|     |   |                            |              | Ignition timing too advanced<br>(Faulty spark unit or<br>advaner)    |
|     |   |                            |              | •  |



## POOR PERFORMANCE AT LOW AND IDLE SPEEDS POSSIBLE CAUSE INCORRECT -(1) Improper valve clearance 1. Check ignition timing and valve (2) Improper ignition timing clearance (Faulty spark unit or CORRECT spark advancer) 2. Check carburetor low speed INCORRECT-See Fuel System (1) Clogged passages Section Float level incorrect circuits (2) CORRECT 3. Check for leaking manifold LEAKING -(1) Deteriorated insulator. O-ring (2) Loose carburetor 4. Perform spark test WEAK OR INTERMITTENT SPARK-🖊 (1) Faulty, carbon or wet fouled spark plug (2) Faulty spark unit GOOD SPARK (3) A.C. generator faulty (4) Faulty ignition coil (5) Faulty spark advancer POOR PERFORMANCE AT HIGH SPEED INCORRECT - (1) Improper valve clearance 1. Check ignition timing and valve clearance (2) Faulty spark unit (3) Faulty pulser generator CORRECT (4) Faulty spark advancer FUEL FLOW RESTRICTED ----(1) Lack of fuel in tank 2. Disconnect fuel tube at carburetor (2) Clogged fuel line FUEL FLOWS FREELY (3) Clogged fuel tank breather hole (4) Clogged fuel valve CLOGGED -🖚 (1) Clean 3. Remove carburetor and check for clogged jet NO CLOG 4. Check valve timing INCORRECT -(1) Cam sprocket not installed properly CORRECT WEAK-(1) Faulty spring 5. Check valve spring tension NOT WEAKENED POOR HANDLING — Check tire pressure - (1) Steering adjustment nut 1. If steering is heavy too tight (2) Damaged steering head bearings (1) Excessive wheel bearing 2. If either wheel is wobbling play (2) Distorted rim (3) Improperly installed wheel hub (4) Swing arm pivot bushing excessively worn (5) Distorted frame (6) Improper drive chain tension or adjustment (1) Improperly adjusted shock 3. If the motorcycle pulls to one side absorber (2) Front and rear wheels not aligned (3) Bent front fork (4) Bent swing arm