The items that are serviceable using this Manual are followed by the page number reference in parenthesis. The items that require use of the official Honda Service Manual are followed by an asterisk (*).

ENGINE DOES NOT START OR IS HARD TO START

Operate the start button with the throttle grip in fully closed position (page 17).

CHECK — **POSSIBLE CAUSES**

1. Check the starter motor* → DOES NOT TURN
   - Loose or disconnected battery terminals (P.135)
   - Blown main fuse (P.168)
   - Weak battery (P.135, 169)
   - Faulty starter relay switch or starter motor*
   - Faulty start button*
   - Faulty clutch switch
   - Faulty CKP sensor*

   TURN ↓
2. Check the starter/ ignition relay* → INCORRECT
   - Faulty starter/ignition relay

   CORRECT ↓
3. Check the spark plug condition (P.78) → INCORRECT
   - Incorrect spark plug heat range
   - Incorrect spark plug gap
   - Dirty air cleaner element

   CORRECT ↓
4. Try spark test* → WEAK OR NO SPARK
   - Faulty spark plug (P.78)
   - Fouled spark plug (P.78)
   - Faulty ECM*
   - Broken or shorted spark plug wire
   - Faulty alternator*
   - Faulty ignition coil*
   - Faulty engine stop button*
   - Loose or disconnected ignition system wires
   - Faulty CKP sensor*
   - Faulty regulator/rectifier*

   GOOD SPARK ↓
5. Check the PGM-FI system (P.7) → INCORRECT
   - Faulty PGM-FI system (P.9)

   CORRECT ↓
6. Check the fuel pump operation and inspect the fuel flow* → INCORRECT
   - Faulty fuel pump*
   - Clogged fuel pump filter

   CORRECT ↓
7. Check the fuel injector operating sound → INCORRECT
   - Faulty PGM-FI system (P.9)
   - Faulty fuel injector

   CORRECT ↓
8. Test cylinder compression* → LOW
   - Valve clearance too small
   - Valve stuck open
   - Worn cylinder and piston ring*
   - Damaged cylinder head gasket
   - Improper valve timing*
   - Seized valve

   CORRECT ↓
9. Start by following normal starting procedure → ENGINE STARTS BUT SOON STOPS
   - Insulator leaking
   - Improper ignition timing (Faulty ECM or CKP sensor)*
   - Fast idle knob stuck open or damaged
   - Fuel contaminated

ENGINE LACKS POWER

CHECK — **POSSIBLE CAUSES**

1. Check the wheel spin smoothness → INCORRECT
   - Brake dragging
   - Worn or damaged wheel bearings
   - Bent axle shaft
   - Drive chain too tight

   CORRECT ↓
2. Check the tire pressure (P.119) → INCORRECT
   - Faulty valve core
   - Punctured tire

   CORRECT ↓
3. Check the engine speed change accordingly when clutch is engaged* → NO GOOD
   - Clutch slipping
   - Improperly adjusted clutch lever freeplay (P.73)
   - Worn clutch discs/plates (P.76)
   - Warped clutch discs/ plates (P.76)
   - Weak clutch springs*
   - Sticking clutch lifter
   - Additive in engine oil

   GOOD ↓
4. Check the engine speed increase → NO GOOD
   - Dirty air cleaner element
   - Clogged muffler
   - Fast idle knob stuck open or damaged
   - Restricted fuel fill cap breather tube
   - Restricted fuel flow

5. Check the engine knocking when accelerate or run the engine at high speed → YES
   - Worn piston and cylinder*
   - Use of poor quality fuel
   - Excessive carbon build-up in combustion chamber
   - Ignition timing too advance (Faulty ECM)*
   - Lean fuel mixture

   NO ↓
6. Check the ignition timing* → INCORRECT
   - Faulty ECM*
   - Faulty CKP sensor*

   CORRECT ↓
7. Test cylinder compression* → LOW
   - Valve clearance too small
   - Valve stuck open
   - Worn cylinder and piston ring*
   - Damaged cylinder head gasket
   - Improper valve timing*
   - Faulty decompressor system*

   CORRECT ↓
8. Check the PGM-FI system (P.7) → INCORRECT
   - Faulty PGM-FI system (P.9)

   CORRECT ↓
9. Check the fuel pump operation and inspect the fuel flow* → INCORRECT
   - Faulty fuel pump unit*
   - Clogged fuel pump filter

   CORRECT ↓
10. Check the spark plug condition (P.78) → INCORRECT
    - Incorrect spark plug
    - Incorrect spark plug gap
    - Dirty air cleaner element

    CORRECT ↓
11. Check the engine oil level and condition (P.63) → INCORRECT
    - Engine oil level too high
    - Engine oil level too low
    - Contaminated engine oil

    CORRECT ↓
12. Remove the cylinder head cover and inspect lubrication → INCORRECT
    - Faulty oil pump*
    - Faulty pressure relief valve*
    - Clogged oil passage*
    - Clogged oil strainer screen*

(cont'd)