

TROUBLESHOOTING

TIP: _____

The following troubleshooting does not cover all the possible causes of trouble. It should be helpful, however, as a guide to troubleshooting. Refer to the relative procedure in this manual for check, adjustment and replacement of parts.

STARTING FAILURE/HARD STARTING

FUEL SYSTEM

Fuel tank

- Empty
- Clogged fuel tank breather hoses
- Deteriorated or contaminated fuel

Fuel pump

- Faulty fuel pump
- Faulty fuel injection system relay

Throttle body

- Deteriorated or contaminated fuel
- Sucked-in air

Air filter

- Clogged air filter element

ELECTRICAL SYSTEM

Spark plug

- Improper plug gap
- Worn electrodes
- Wire between terminals broken
- Improper heat range
- Faulty Spark plug cap

Ignition coil

- Broken or shorted primary/secondary
- Faulty spark plug lead
- Broken body

Ignition system

- Faulty ECU
- Faulty crankshaft position sensor
- Broken AC magneto rotor woodruff key

Switches and wiring

- Faulty main switch
- Broken or shorted wiring
- Faulty gear position switch
- Faulty brake light switch

Starting system

- Faulty starter motor
- Faulty starter relay
- Faulty starter clutch

Battery

- Faulty battery

Fuse(s)

- Blown, damaged or incorrect fuse
- Improperly installed fuse



COMPRESSION SYSTEM

Cylinder and cylinder head

- Loose spark plug
- Loose cylinder head or cylinder
- Broken cylinder head gasket
- Broken cylinder gasket
- Worn, damaged or seized cylinder

Valves, camshaft and crankshaft

- Improperly sealed valve
- Improperly contacted valve and valve seat
- Improper valve timing
- Broken valve spring
- Seized camshaft
- Seized crankshaft

Piston and piston rings

- Improperly installed piston ring
- Worn, fatigued or broken piston ring
- Seized piston ring
- Seized or damaged piston

Crankcase and crankshaft

- Improperly seated crankcase
- Seized crankshaft

Valve train

- Improperly adjusted valve clearance
- Improperly adjusted valve timing

POOR IDLE SPEED PERFORMANCE

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Throttle body

- Damaged or loose throttle body joint
- Improper throttle cable play
- Flooded throttle body

Electrical system

- Faulty spark plug
- Faulty ECU
- Faulty crankshaft position sensor
- Faulty ignition coil

Valve train

- Improperly adjusted valve clearance

Air filter

- Clogged air filter element

POOR MEDIUM AND HIGH-SPEED PERFORMANCE

POOR MEDIUM AND HIGH-SPEED PERFORMANCE

Refer to "STARTING FAILURE/HARD STARTING" and "POOR IDLE SPEED PERFORMANCE".

Fuel pump

- Faulty fuel pump

Air filter

- Clogged air filter element

FAULTY DRIVE TRAIN

The following conditions may indicate damaged shaft driv components:

Symptoms	Possible Causes
<ol style="list-style-type: none"> 1. A pronounced hesitation or "jerky" movement during acceleration, deceleration, or sustained speed, (This must not be confused with engine surging or transmission characteristics.) 2. A "rollong rumble" noticeable at low speed; a high-potched whine; a "clunk" from a shaft drive component or area. 3. A locked-up condition of the shaft drive mechanism, no power transmitted form the enging to the fornt and/or rear wheels. 	<ol style="list-style-type: none"> A. Bearing damage. B. Improper gear lash. C. Gear tooth damage. D. Broken drive shaft. E. Broken gear teeth. F. Seizure due to lack of lubrication. G. Small foreign Obiects lodged between the moving parts.

FAULTY GEAR SHIFTING

HARD SHIFTING

Refer to "FAULTY CLUTCH PERFORMANCE".

SHIFT LEVER DOES NOT MOVE

Shift drum, shift forks

- Groove jammed with impurities
- Seized shift fork
- Bent shift fork guide bar

Transmission

- Seized transmission gear
- Jammed impurities
- Incorrectly assembled transmission

Shift guide

- Broken shift guide

JUMPS OUT OF GEAR

Shift forks

- Worn shift fork

Shift drum

- Improper thrust play
- Worn shift drum groove

Transmission

- Worn gear dog

FAULTY CLUTCH PERFORMANCE

ENGINE OPERATES BUT VEHICLE WILL NOT MOVE

V-belt

- Bent, damaged or worn V-belt
- V-belt slips

Transmission

- Damaged transmission gears

Primary pulley cam and primary pulley slider

- Damaged or worn primary pulley cam
- Damaged or worn primary pulley slider

CLUTCH SLIPPING

Clutch spring

- Damaged, loose or worn clutch shoe spring

Primary sliding sheave

- Seized primary sliding sheave

Clutch shoe

- Damaged or worn clutch shoe

POOR STARTING PERFORMANCE

V-belt

- V-belt slips
- Oil or grease on the V-belt

Clutch shoe

- Bent, damaged or worn clutch shoe

Primary sliding sheave

- Faulty operation
- Worn pin groove
- Worn pin

POOR SPEED PERFORMANCE

V-belt

- Oil or grease on the V-belt

Primary pulley weight

- Faulty operation
- Worn primary pulley weight

Primary fixed sheave

- Worn primary fixed sheave

Primary sliding sheave

- Worn primary sliding sheave

Secondary fixed sheave

- Worn Secondary fixed sheave

Secondary sliding sheave

- Worn Secondary sliding sheave

OVERHEATING

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Ignition system

- Improper spark plug gap
- Improper spark plug heat range
- Faulty ECU

Fuel system

- Faulty throttle body
- Damaged or loose throttle body joint
- Clogged air filter element

Compression system

- Heavy carbon build-up

Engine oil

- Improper oil level
- Improper oil viscosity
- Inferior oil quality

Brake

- Brake drag

Cooling system

- Low coolant level
- Clogged or damaged radiator
- Damaged or faulty water pump
- Faulty fan motor
- Faulty coolant temperature sensor
- Disconnect circuit breaker connector

OVERCOOLING

COOLING SYSTEM

Thermostat

- Thermostat stays open

FAULTY BRAKE

FOOR BRAKING EFFECT

Disc brake

- Worn brake pads
- Worn disc
- Air in brake fluid
- Leaking brake fluid
- Faulty master cylinder kit cup
- Faulty caliper kit seal
- Loose union bolt
- Broken brake hose and pipe
- Oily or greasy disc/brake pads
- Improper brake fluid level

SHOCK ABSORBER MALFUNCTION

MALFUNCTION

- Bent or damaged damper rod
- Damaged oil seal lip
- Fatigued shock absorber spring

UNSTABLE HANDLING

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Steering wheel

- Improperly installed or bent

Steering

- Incorrect toe-in
- Bent steering shaft
- Improperly installed steering shaft
- Damaged bearing or bearing race
- Bent tie-rods
- Deformed steering knuckles

Tires

- Uneven tire pressures on both sides
- Incorrect tire pressure
- Uneven tire wear

Wheels

- Deformed wheel
- Loose bearing
- Bent or loose wheel axle
- Excessive wheel runout

Frame

- Bent
- Damaged frame

LIGHTING SYSTEM

HEADLIGHT DOES NOT COME ON

- Improper bulb
- Too many electric accessories
- Hard charging (broken stator coil and/or faulty rectifier/regulator)
- Incorrect connection
- Improperly grounded
- Poor contacts (main or light switch)
- Bulb life expired

BULB BURNT OUT

- Improper bulb
- Faulty battery
- Faulty rectifier/regulator
- Improperly grounded
- Faulty main and/or light switch
- Bulb life expired