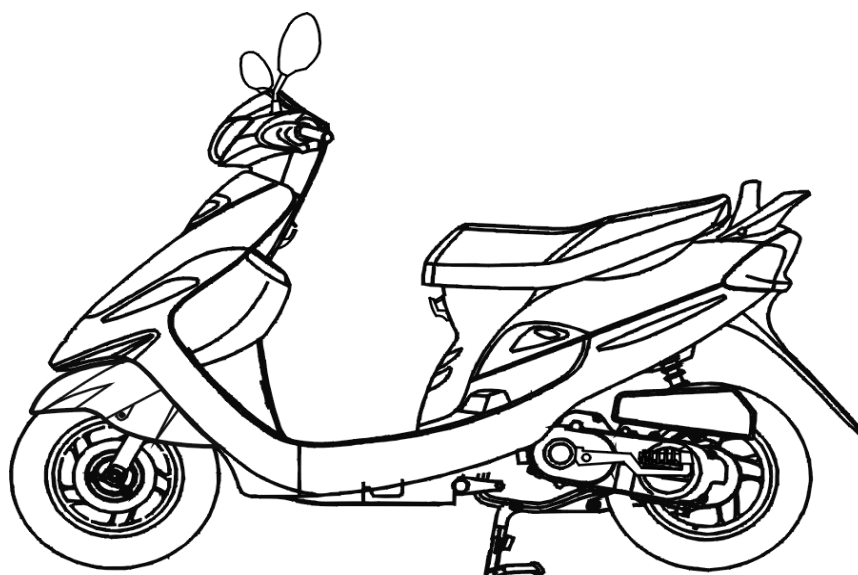


1. GENERAL INFORMATION

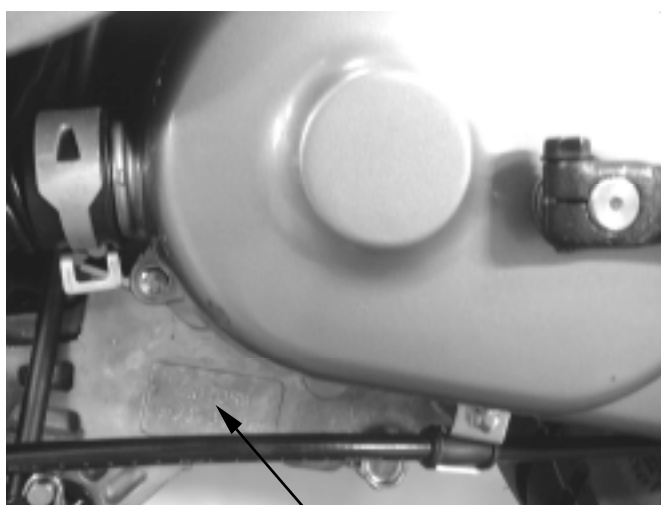
1

| | | | |
|---------------------------|------|-------------------------------|------|
| ENGINE SERIAL NUMBER..... | 1- 1 | LUBRICATION POINTS..... | 1-13 |
| SPECIFICATIONS | 1- 2 | CABLE & HARNESS ROUTING | 1-15 |
| SERVICE PRECAUTIONS | 1- 3 | WIRING DIAGRAM | 1-20 |
| TORQUE VALUES | 1-11 | TROUBLESHOOTUNG..... | 1-21 |
| SPECIAL TOOLS | 1-12 | | |

ENGINE SERIAL NUMBER



Filly LX 50



Location of Engine Serial Number

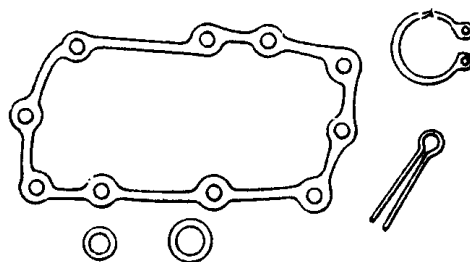
| | | |
|--|--------------|--------------------|
| | Oil capacity | 0.85 liter |
| | Cooling Type | Forced air cooling |

| | | | | | |
|--------------------|-------------------------|------------------|--------------------|----------------------------|--|
| Fuel System | Air cleaner type & No | | Paper element, wet | | |
| | Fuel capacity | | 6.1 liter | | |
| | Carburetor | Type | | CVK | |
| | | Piston dia. (mm) | | | |
| | | Venturi dia.(mm) | | □17equivalent | |
| Throttle type | | Butterfly type | | | |
| Electrical | Ignition System | Type | | CDI | |
| | | Ignition timing | | BTDC28°/4000rpm | |
| | | Contact breaker | | Non-contact point type | |
| | | Spark plug | | NGK C7HSA | |
| | | Spark plug gap | | 0.6_ 0.7mm | |
| | Battery | Capacity | | 12V4AH | |
| Power Drive System | Clutch | Type | | Dry multi-disc clutch | |
| | Transmission Gear | Type | | Non-stage transmission | |
| | | Operation | | Automatic centrifugal type | |
| | Reduction Gear | Type | | Two-stage reduction | |
| | | Reduction ratio | 1st | 0.8-3.1 | |
| | | | 2nd | 11.05 | |
| Moving Device | Front Axle | Caster angle | | 27° | |
| | | Trail length | | □ | |
| | Tire pressure (kg/cm_) | Front | 1.75 | | |
| | | Rear | 2.25 | | |
| | Turning angle | Left | 45° | | |
| | | Right | 45° | | |
| Brake system type | | Front | DISK (160mm) | | |
| | | Rear | Drum (110mm) brake | | |
| Damping Device | Suspension type | Front | TELESCOPE | | |
| | | Rear | Unit Swing | | |
| | Shock absorber distance | Front | 70 | | |
| | | Rear | 66 | | |
| Frame type | | | Under Bone | | |

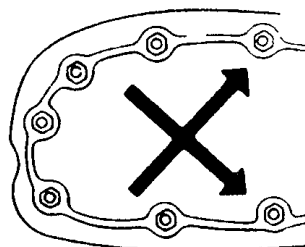
1. GENERAL INFORMATION

SERVICE PRECAUTIONS

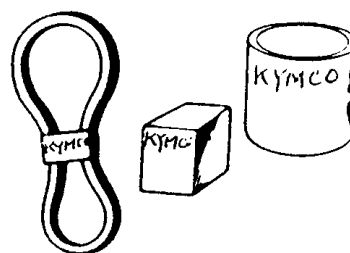
- Make sure to install new gaskets, O-rings, circlips, cotter pins, etc. when reassembling.



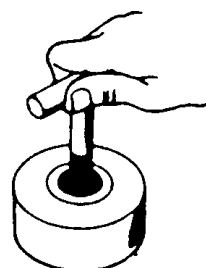
- When tightening bolts or nuts, begin with larger-diameter to smaller ones at several times, and tighten to the specified torque diagonally.



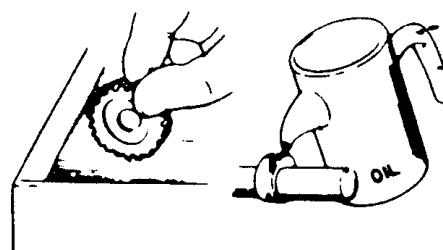
- Use genuine parts and lubricants



- When servicing the motorcycle, be sure to use special tools for removal and installation.

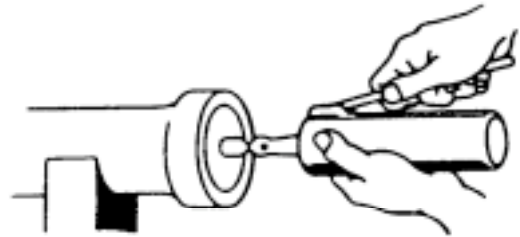


- After disassembly, clean removed parts. Lubricate sliding surfaces with engine oil before reassembly.



1. GENERAL INFORMATION

- Apply or add designated greases and lubricants to the specified lubrication points.



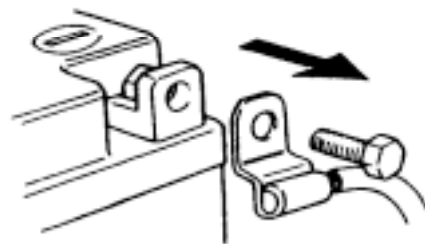
- After reassembly, check all parts for proper tightening and operation.



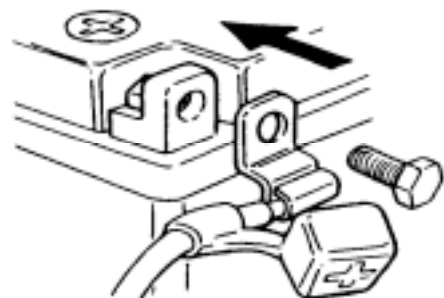
- When two persons work together, pay attention to the mutual working safety.



- Disconnect the battery negative (-) terminal before operation.
- When using a spanner or other tools, make sure not to damage the motorcycle surface.

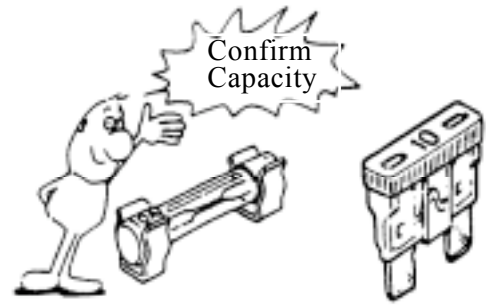


- After operation, check all connecting points, fasteners, and lines for proper connection and installation.
- When connecting the battery, the positive (+) terminal must be connected first.
- After connection, apply grease to the battery terminals.
- Terminal caps shall be installed securely.



1. GENERAL INFORMATION

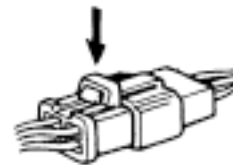
- If the fuse is burned out, find the cause and repair it. Replace it with a new one according to the specified capacity.



- After operation, terminal caps shall be installed securely.



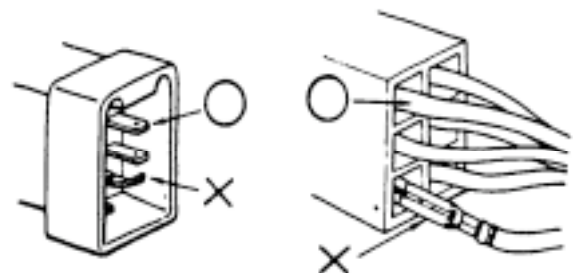
- When taking out the connector, the lock on the connector shall be released before operation.



- Hold the connector body when connecting or disconnecting it.
- Do not pull the connector wire.

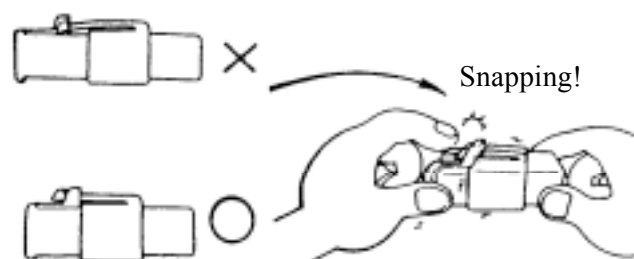


- Check if any connector terminal is bending, protruding or loose.

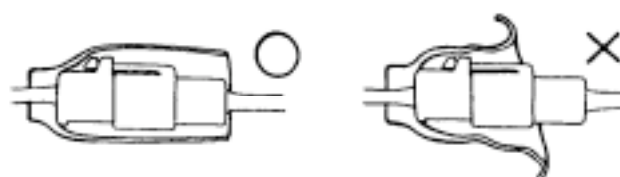


1. GENERAL INFORMATION

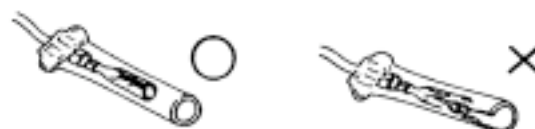
- The connector shall be inserted completely.
- If the double connector has a lock, lock it at the correct position.
- Check if there is any loose wire.



- Before connecting a terminal, check for damaged terminal cover or loose negative terminal.



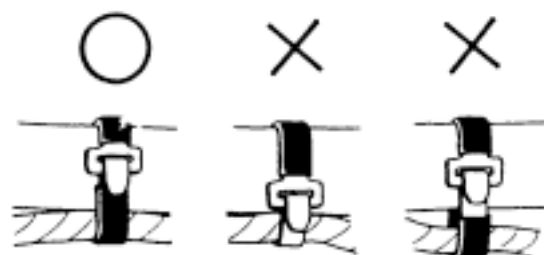
- Check the double connector cover for proper coverage and installation.



- Insert the terminal completely.
- Check the terminal cover for proper coverage.
- Do not make the terminal cover opening face up.

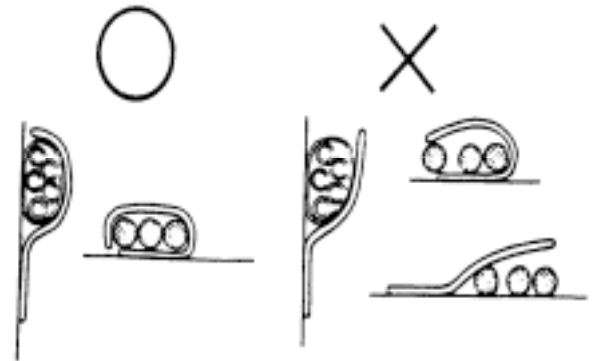


- Secure wire harnesses to the frame with their respective wire bands at the designated locations. Tighten the bands so that only the insulated surfaces contact the wire harnesses.



1. GENERAL INFORMATION

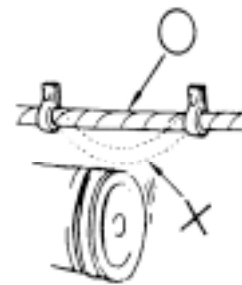
- After clamping, check each wire to make sure it is secure.



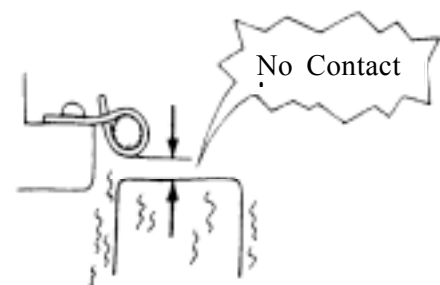
- Do not squeeze wires against the weld or its clamp



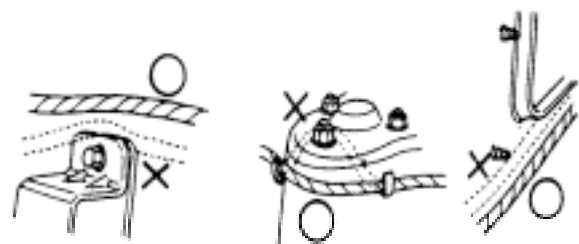
- After clamping, check each harness to make sure that it is not interfering with any moving or sliding parts.



- When fixing the wire harnesses, do not make it contact the parts which will generate high heat.

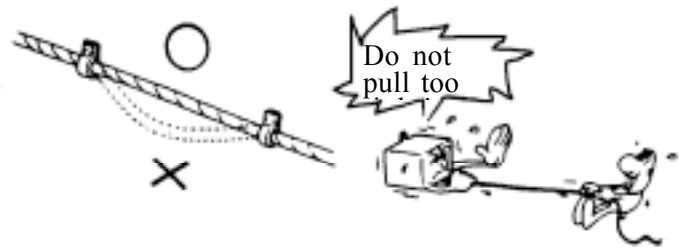


- Route wire harnesses to avoid sharp edges or corners. Avoid the projected ends of bolts and screws.
- Route wire harnesses passing through the side of bolts and screws. Avoid the projected ends of bolts and screws.

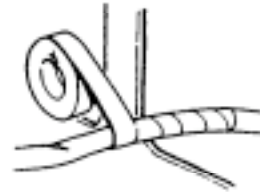


1. GENERAL INFORMATION

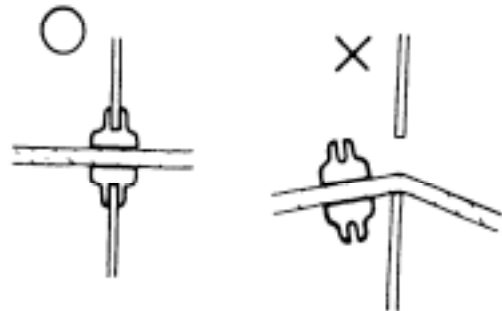
- Route harnesses so they are neither pulled tight nor have excessive slack.



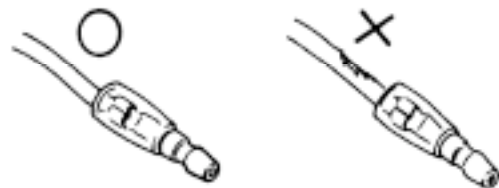
- Protect wires and harnesses with electrical tape or tube if they contact a sharp edge or corner



- When rubber protecting cover is used to protect the wire harnesses, it shall be installed securely.



- Do not break the sheath of wire.
- If a wire or harness is with a broken sheath, repair by wrapping it with protective tape or replace it.

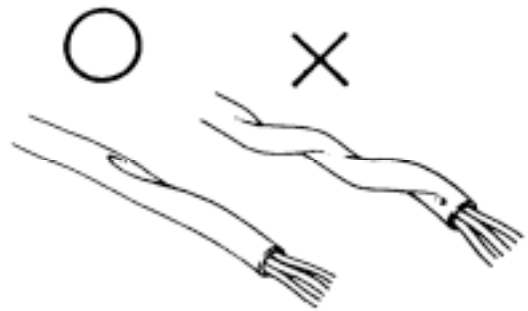


- When installing other parts, do not press or squeeze the wires.



1. GENERAL INFORMATION

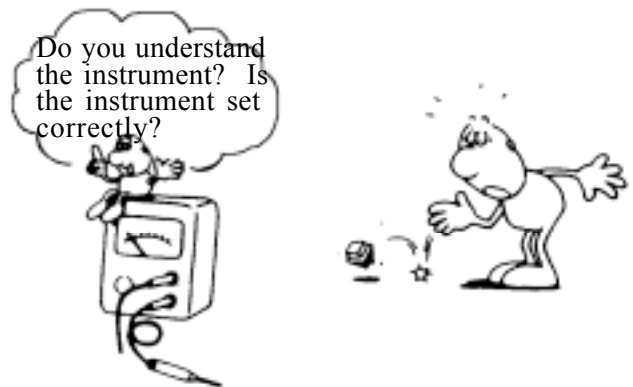
- After routing, check that the wire harnesses are not twisted or kinked.



- Wire harnesses routed along with handlebar should not be pulled tight, have excessive slack or interfere with adjacent or surrounding parts in all steering positions.



- When a testing device is used, make sure to understand the operating methods thoroughly and operate according to the operating instructions.



- Be careful not to drop any parts.



- When rust is found on a terminal, remove the rust with sand paper or equivalent before connecting.



- Do not bend or twist control cables. Damaged control cables will not operate smoothly and may stick or bind.



1. GENERAL INFORMATION

■ Symbols:

The following symbols represent the servicing methods and cautions included in this service manual.



Engine Oil

: Apply engine oil to the specified points. (Use designated engine oil for lubrication.)



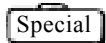
Grease

: Apply grease for lubrication.



Gear Oil

: Transmission Gear Oil (90#)



: Use special tool.



: Caution



: Warning

(⇒12-3) : Refer to page 12-3.

1. GENERAL INFORMATION

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TORQUE VALUES

STANDARD TORQUE VALUES

| Item | Torque (kg-m) | Item | Torque (kg-m) |
|----------------|---------------|-----------------------|---------------|
| 5mm bolt, nut | 0.45-0.6 | 5mm screw | 0.35-0.5 |
| 6mm bolt, nut | 0.6-1.2 | 6mm screw, SH bolt | 0.7-1.1 |
| 8mm bolt, nut | 1.8-2.5 | 6mm flange bolt, nut | 1.0-1.4 |
| 10mm bolt, nut | 3.0-4.0 | 8mm flange bolt, nut | 2.4-3.0 |
| 12mm bolt, nut | 5.0-6.0 | 10mm flange bolt, nut | 3.5-4.5 |

Torque specifications listed below are for important fasteners.

ENGINE

| Item | Q'ty | Thread dia.(mm) | Torque (kg-m) | Remarks |
|----------------------------------|------|-----------------|---------------|----------------------|
| Cylinder head bolt A | 2 | 6 | 0.7-1.1 | Double end bolt |
| Cylinder head bolt B | 4 | 6 | 0.7-1.1 | |
| Oil filter screen cap | 1 | 30 | 1.0-2.0 | Double end bolt |
| Exhaust muffler lock bolt | 2 | 6 | 0.7-1.1 | |
| Cylinder head flange nut | 4 | 7 | 1.2-1.6 | Apply oil to threads |
| Valve adjusting lock nut | 2 | 3 | 0.07-0.09 | |
| Cam chain tensioner slipper bolt | 1 | 8 | 0.4-0.7 | |
| Oil bolt | 1 | 8 | 1.1-1.5 | |
| Clutch outer nut | 1 | 10 | 3.5-4.5 | |
| Clutch drive plate nut | 1 | 28 | 5.0-6.0 | |
| Starter motor mounting bolt | 2 | 6 | 0.8-1.2 | |
| Oil pump bolt | 3 | 4 | 0.1-0.3 | |
| Drive face nut | 1 | 10 | 5.5-6.5 | |
| Spark plug | 1 | 10 | 1.0-1.4 | |
| A.C. generator stator bolt | 2 | 6 | 0.8-1.2 | |
| Cam chain tensioner bolt | 1 | 6 | 0.8-1.2 | |

FRAME

| Item | Q'ty | Thread dia.(mm) | Torque (kg-m) | Remarks |
|--------------------------------|------|-----------------|---------------|---------------------|
| Steering stem lock nut | 1 | 25.4 | 8.0-12.0 | U-nut |
| Front axle nut | 1 | 10 | 5.0-7.0 | U-nut |
| Rear axle nut | 1 | 14 | 11.0-13.0 | U-nut |
| Rear shock absorber upper bolt | 1 | 10 | 4.0-5.0 | |
| Rear shock absorber lower bolt | 1 | 8 | 2.0-3.0 | |
| Speedometer cable set screw | 1 | 5 | 0.45-0.6 | Apply locking agent |
| Rear shock absorber lock nut | 1 | 8 | 3.0-3.6 | |

1. GENERAL INFORMATION

SPECIAL TOOLS

| Tool Name | Tool No. | Remarks | Ref. Page |
|--------------------------------------|----------|---|------------------------------------|
| Bearing puller 10.12.15.1 8 mm | E037 | 10.12.15.1 8mm bearing | 10-3 10-4 12-6 |
| Bushing remover L | E032 | 11102 bush | |
| Bushing remover S | EO19 | 11203 bush rear | |
| Crankshaft bearing | E030 | 91005 radial | |
| Crankshaft protector | E029 | 13000 crankshaft | |
| Clutch spring compressor | E027 | 2301a driven pulley assy | 9-9 9-12 |
| Cushion assemble & disassemble | F004 | 52400 cushion | 13-4 |
| Flywheel holder | E017 | 31110 flywheel comp.231 0a pulley assy driven | 9-5 9-9 9-13 14-7 14-9 |
| Flywheel puller | E002 | Left hand thread | 14-7 |
| Long socket | F002 | 50306 steering | 12-21 12-22 |
| Oil seal & bearing | E014 | Oil seal & bearing | |
| Tool box | E033 | Special tools | |
| Tappet adjuster | E036 | 90012 screw | 3-5 |
| Valve spring compressor | E038 | Valve spring | 7-7 7-8 |

1. GENERAL INFORMATION

LUBRICATION POINTS

ENGINE

| Lubrication Points | Lubricant |
|--|---|
| Valve guide/valve stem movable part Cam lobes Valve rocker arm friction surface Cam chain Cylinder lock bolt and nut Piston surroundings and piston ring grooves Piston pin surroundings Cylinder inside wall Connecting rod/piston pin hole Connecting rod big end Crankshaft R/L side oil seal Starter reduction gear engaging part Countershaft gear engaging part Final gear engaging part Bearing movable part O-ring face Oil seal lip | <ul style="list-style-type: none"> •Genuine KYMCO Engine Oil (SAE15W-40) •API□SG Engine Oil |
| Starter idle gear Friction spring movable part/shaft movable part Shaft movable grooved part Kick starter spindle movable part | High-temperature resistant grease |
| A.C. generator connector Transmission case breather tube | Adhesive |

1. GENERAL INFORMATION

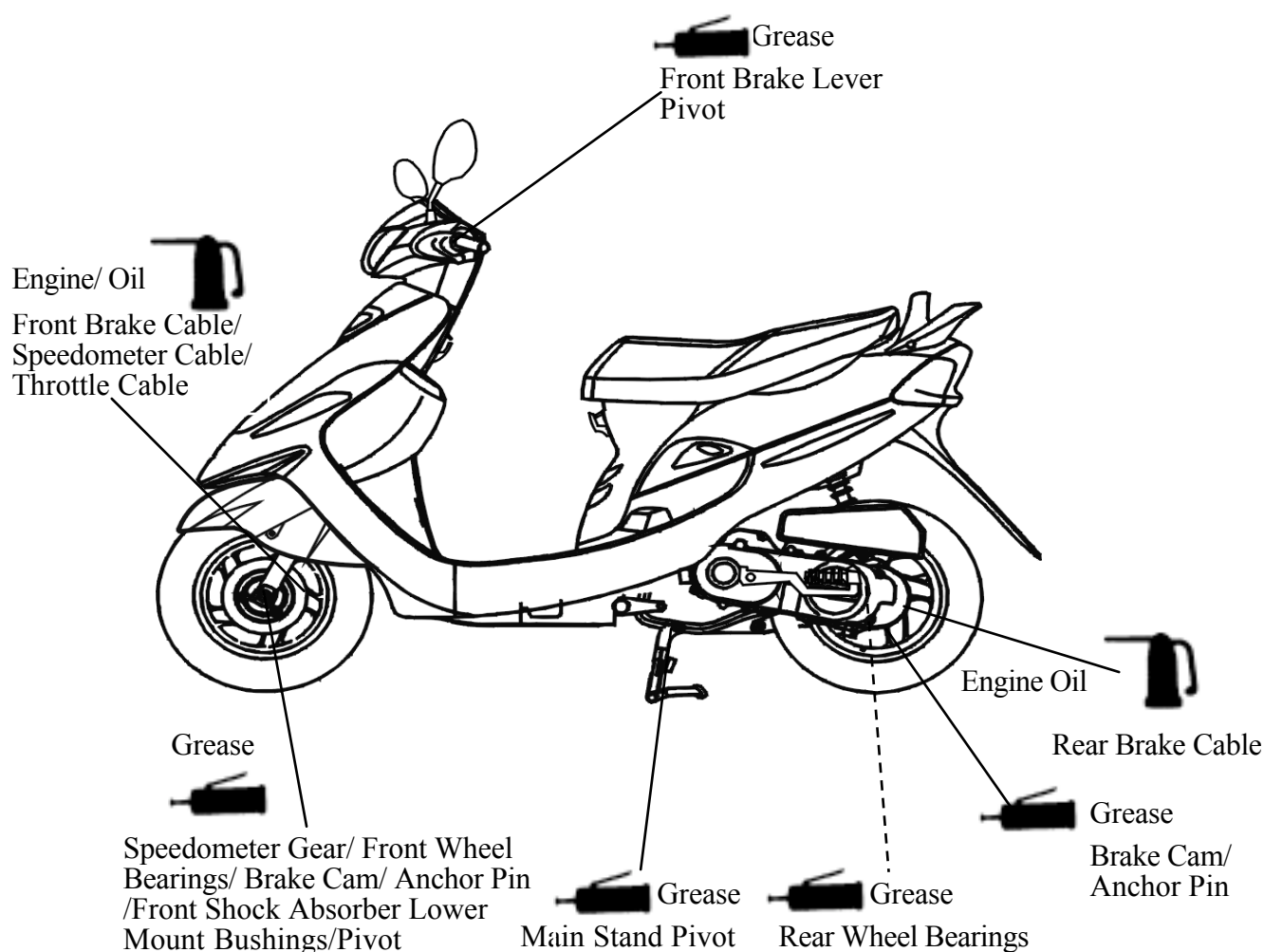
FRAME

The following is the lubrication points for the frame.

Use general purpose grease for parts not listed.

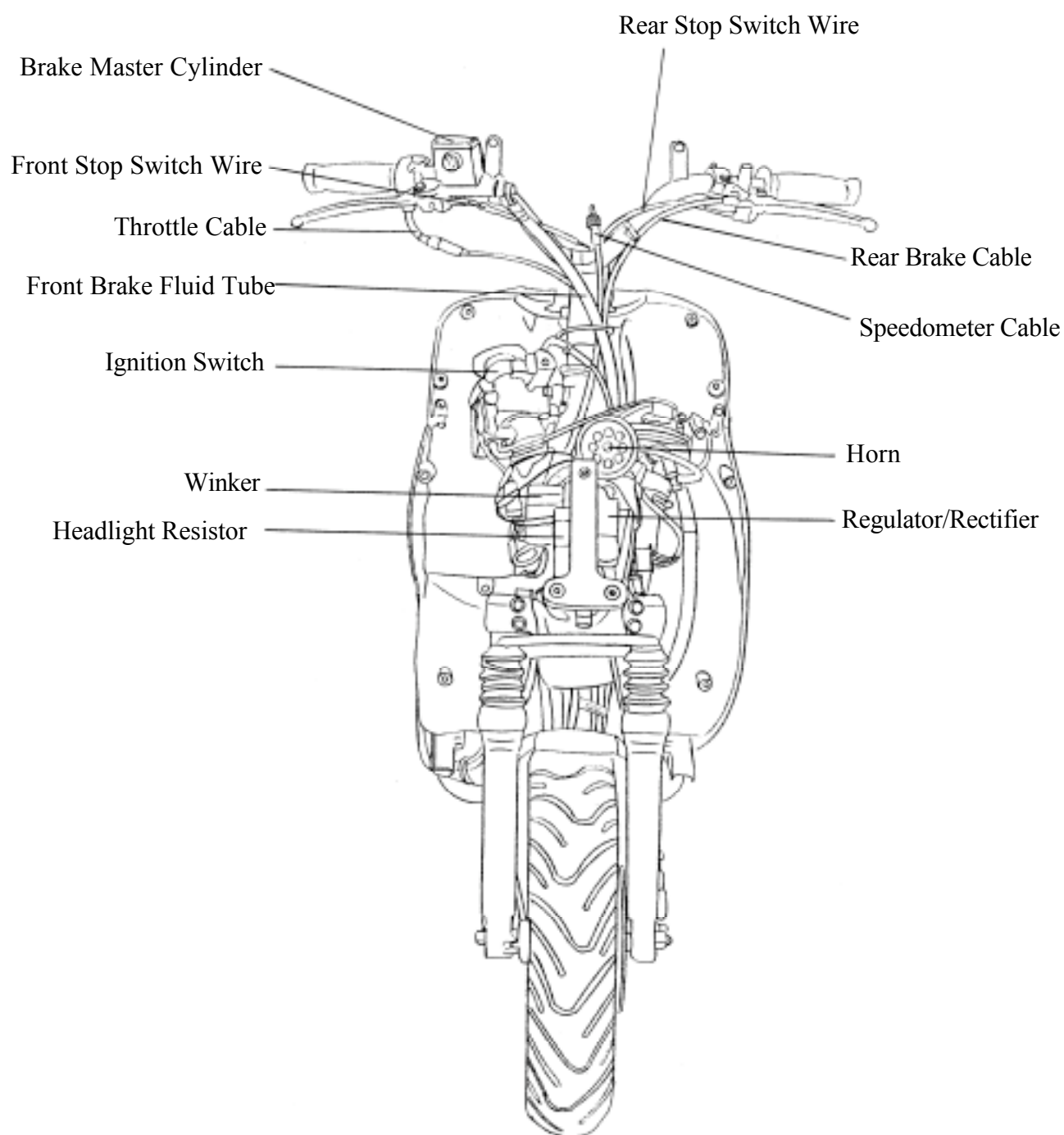
Apply clean engine oil or grease to cables and movable parts not specified.

This will avoid abnormal noise and rise the durability of the motorcycle.

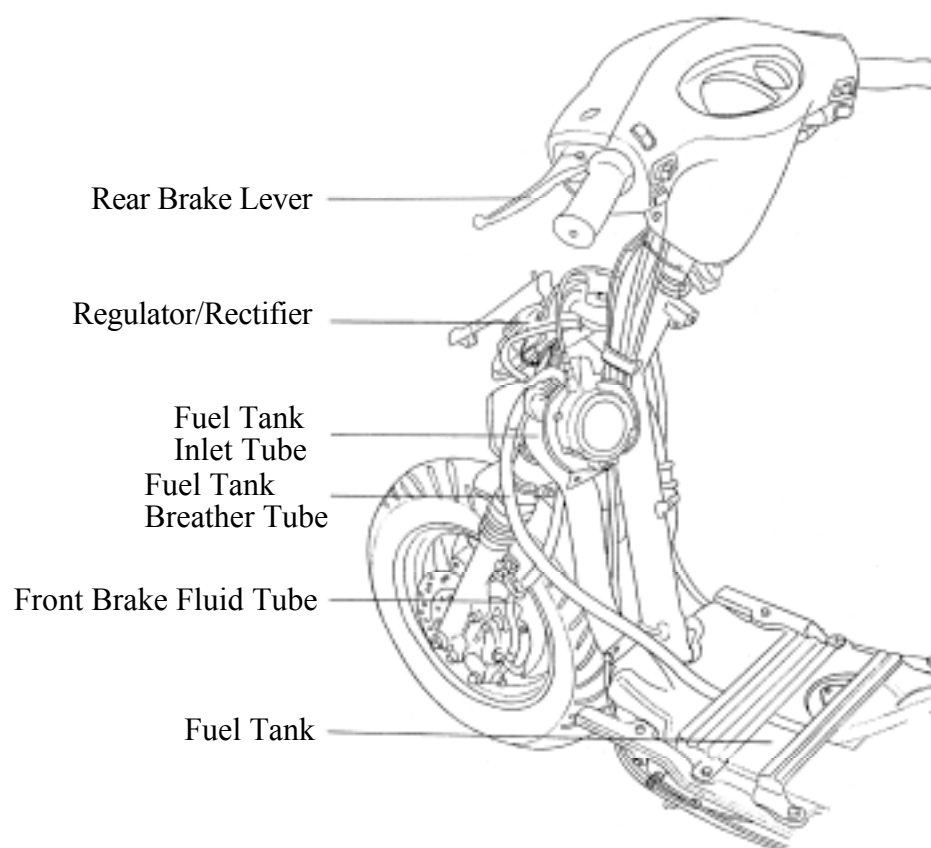
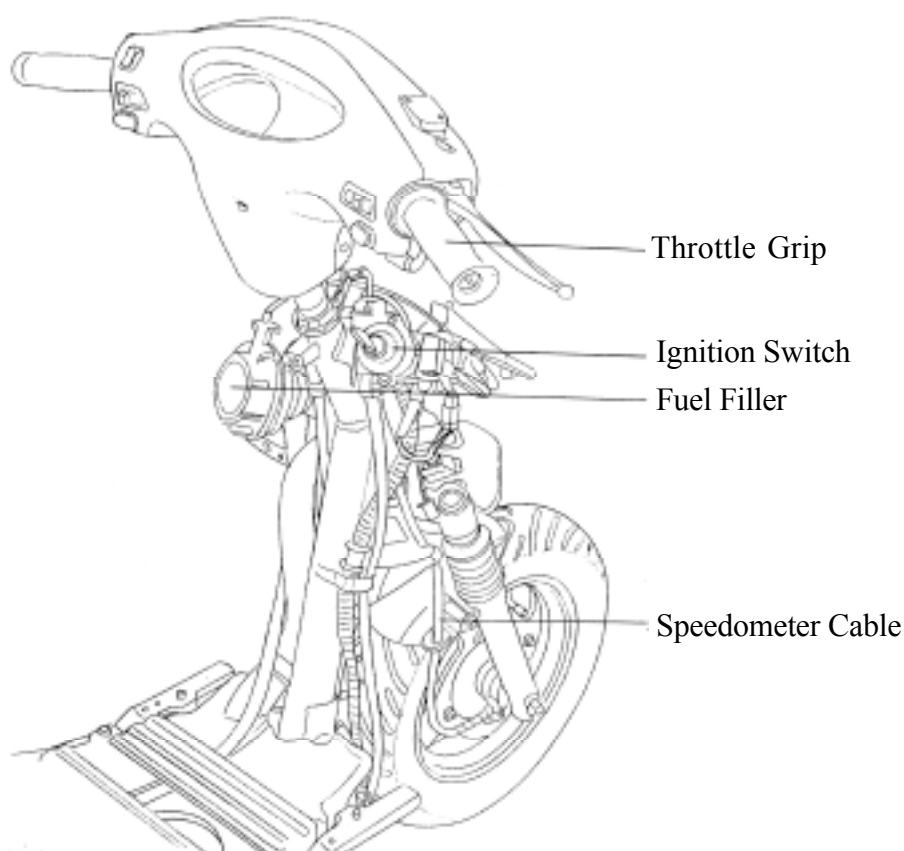


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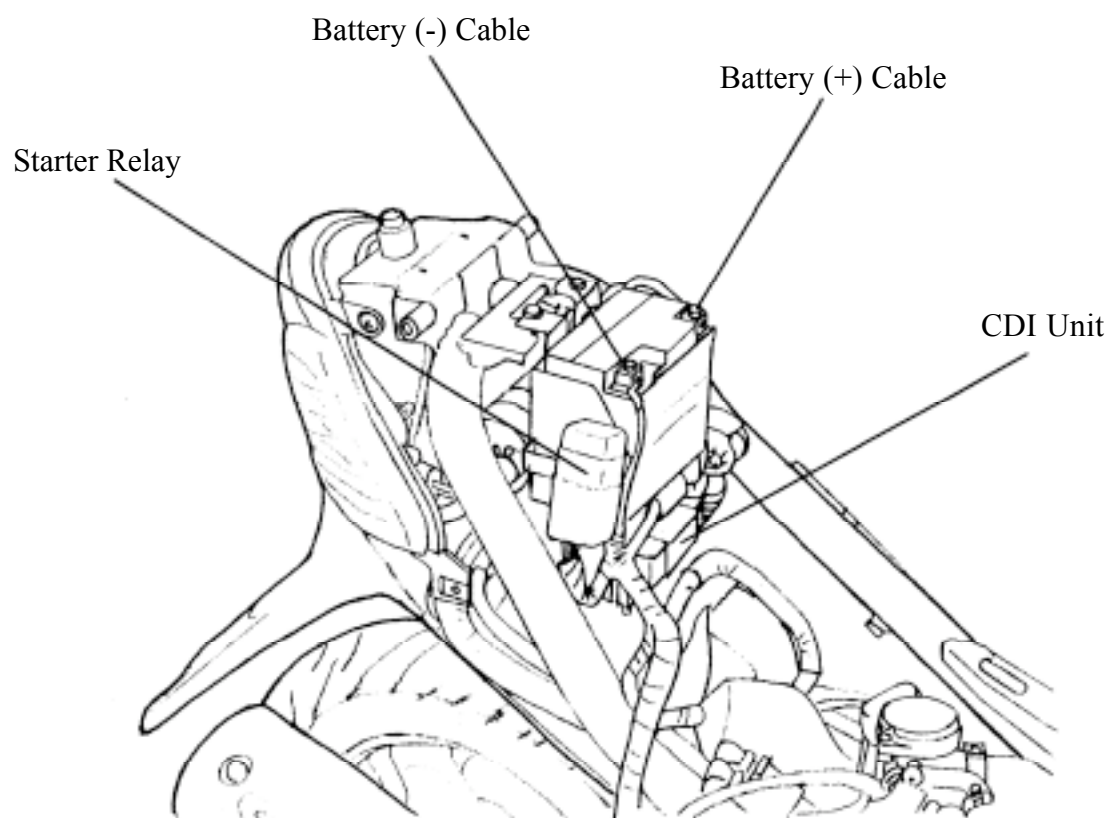
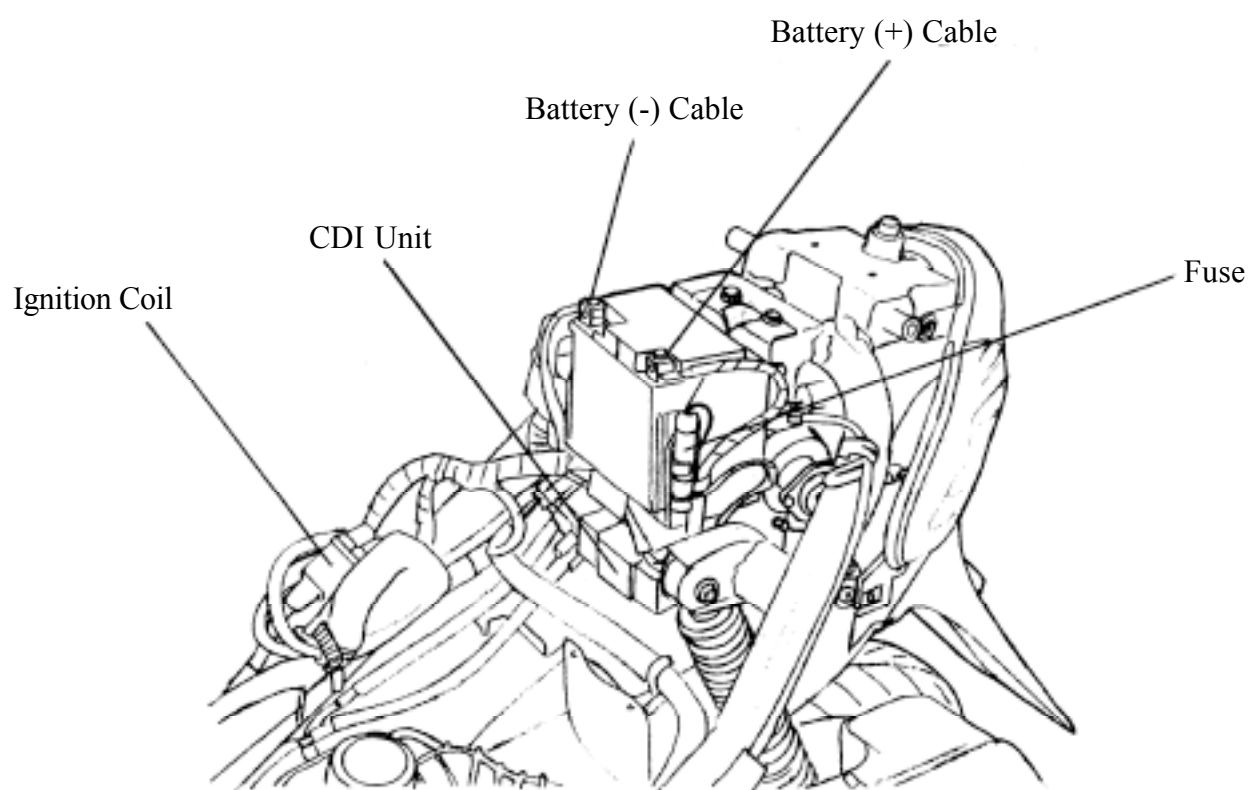
CABLE & HARNESS ROUTING



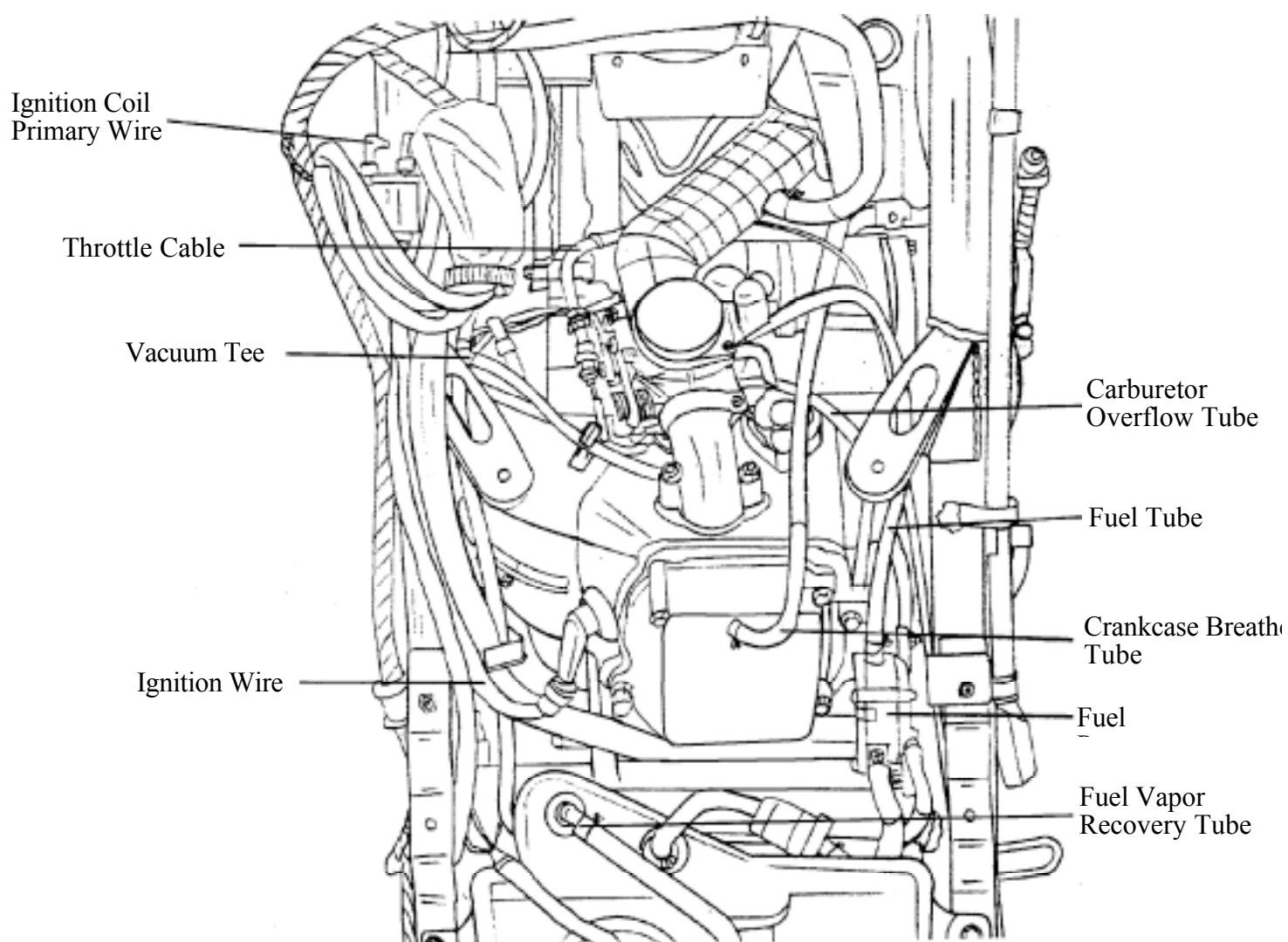
1. GENERAL INFORMATION



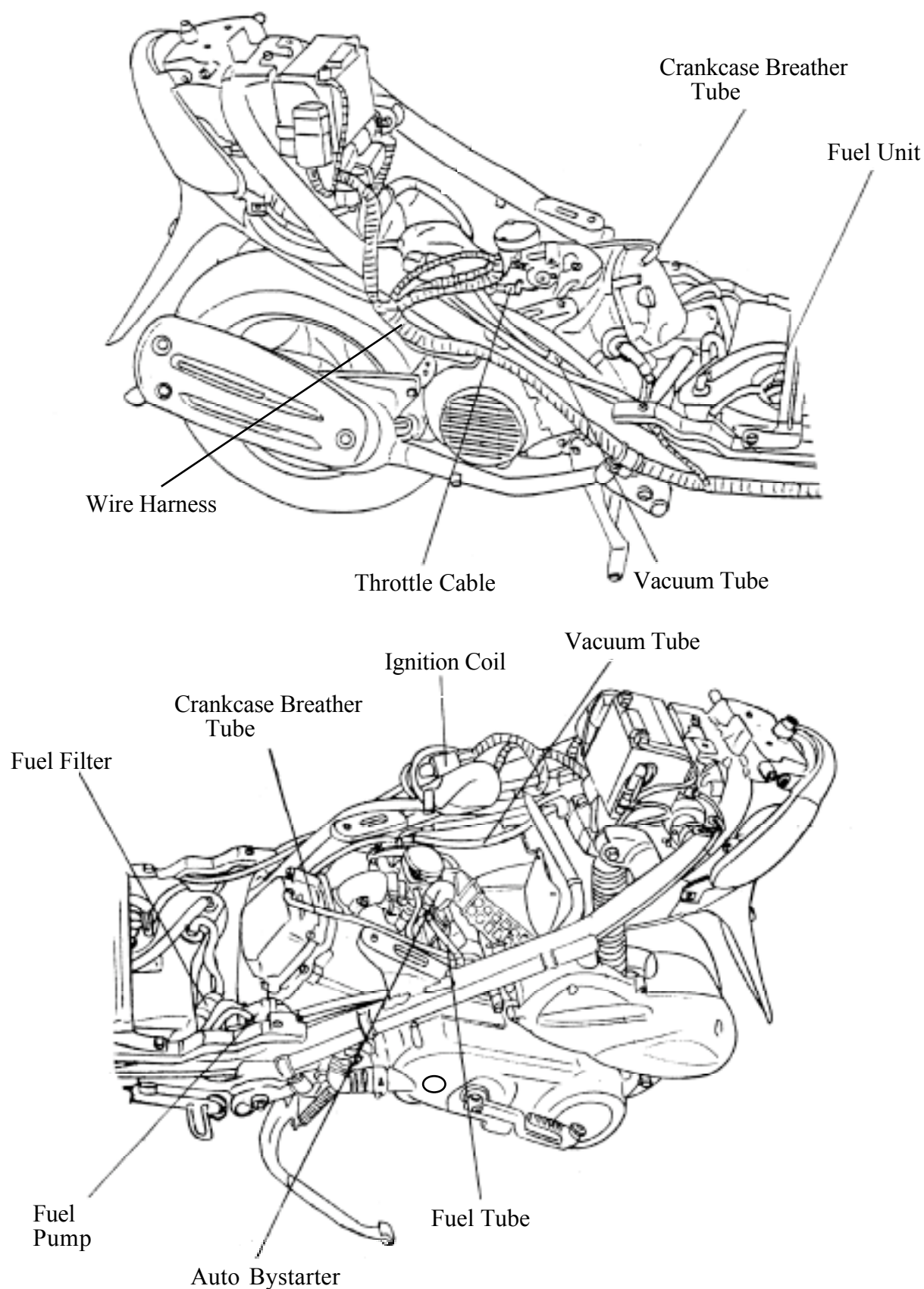
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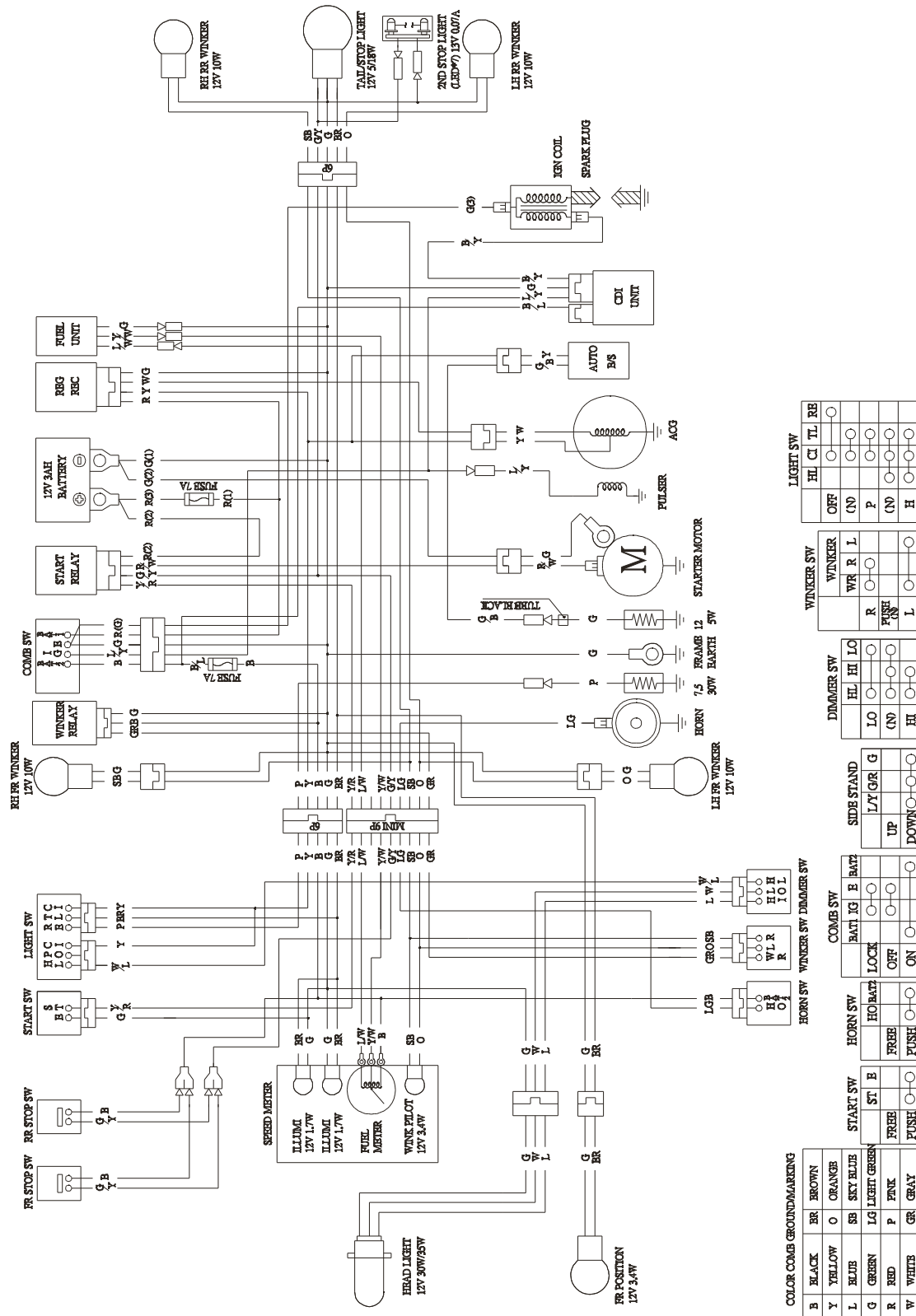
1. GENERAL INFORMATION



1. GENERAL INFORMATION



WIRING DIAGRAM

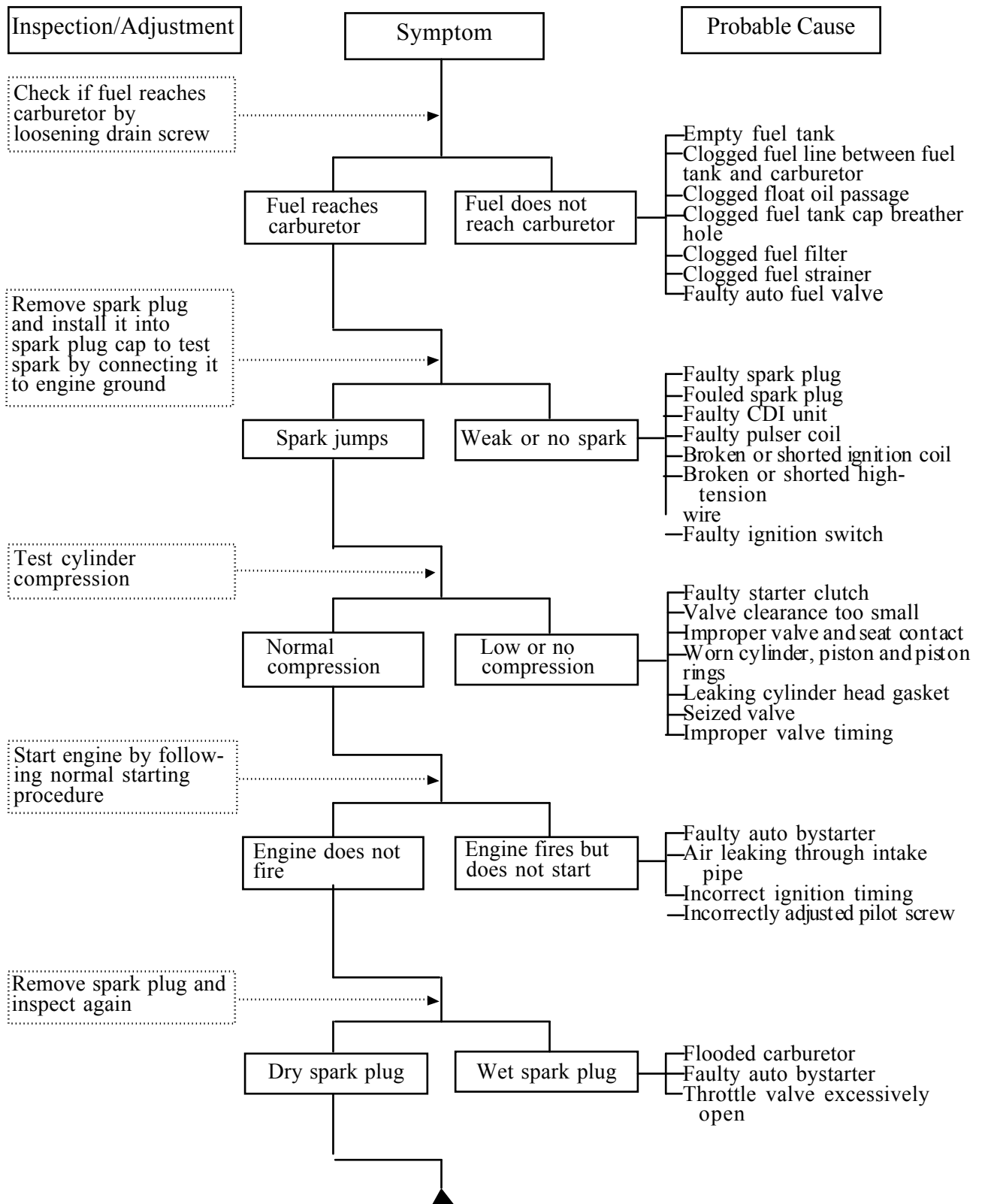


1. GENERAL INFORMATION

FILLY LX 50

TROUBLESHOOTING

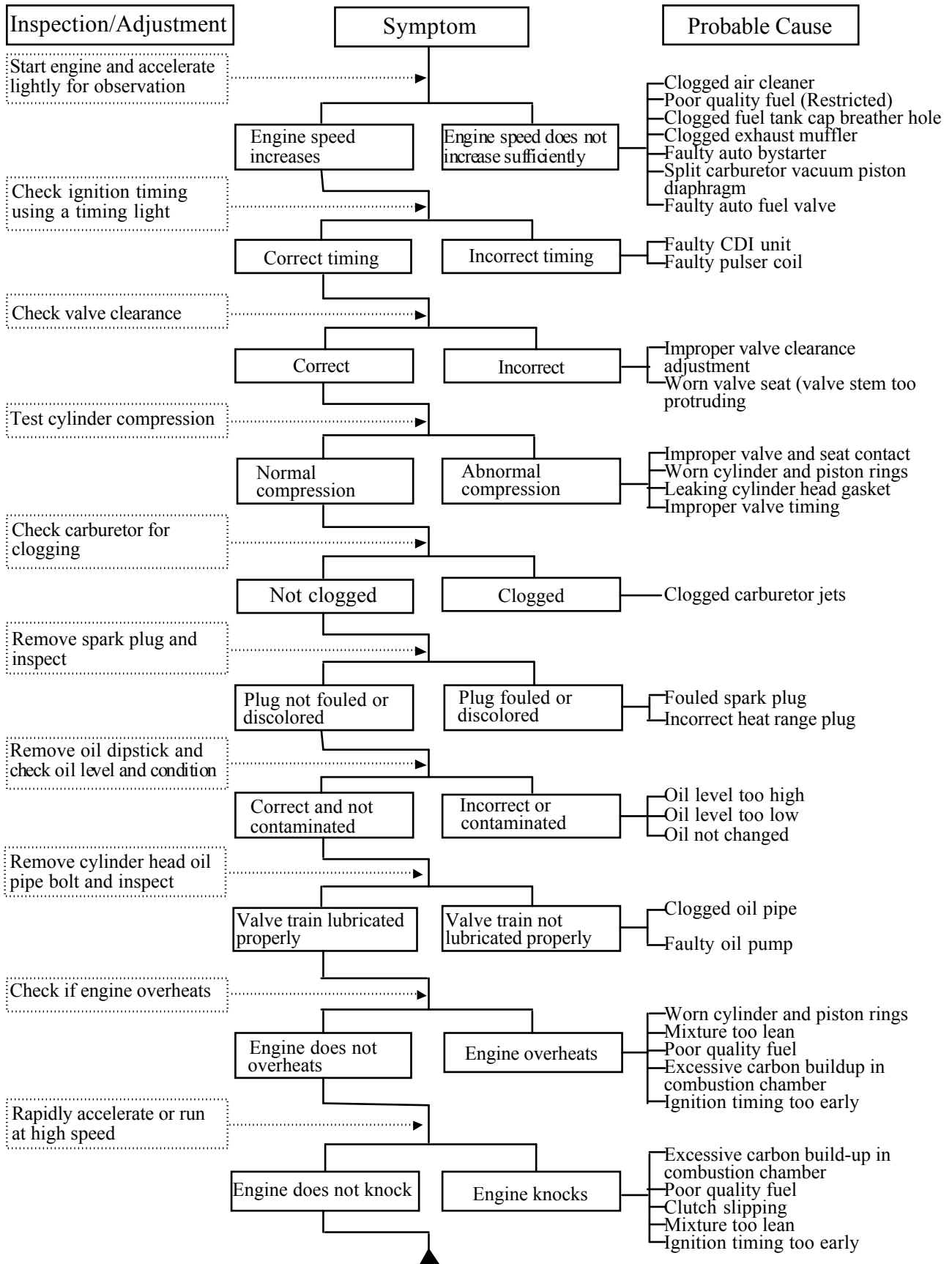
ENGINE WILL NOT START OR IS HARD TO START



1. GENERAL INFORMATION

FILLY LX 50

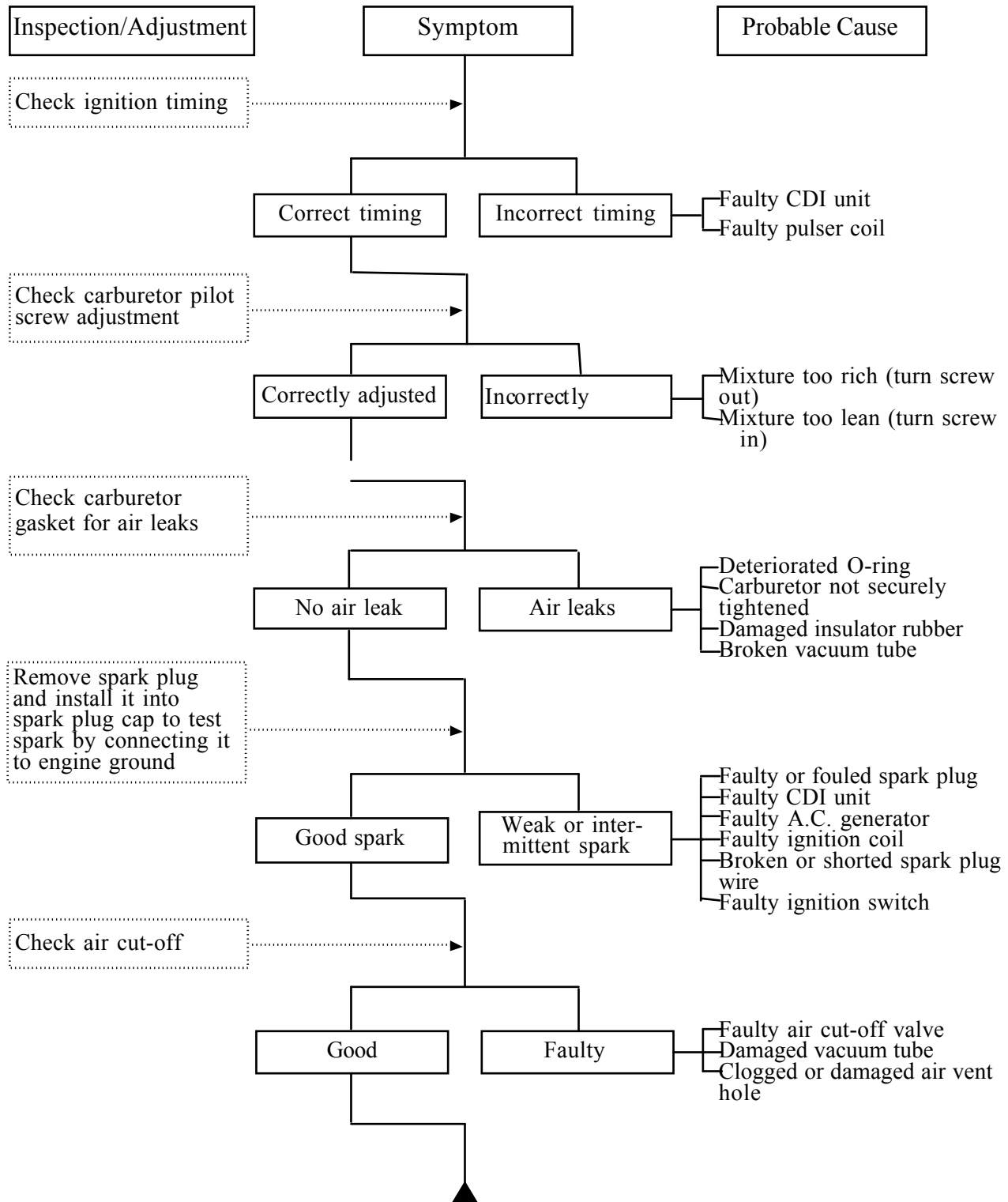
ENGINE LACKS POWER



1. GENERAL INFORMATION

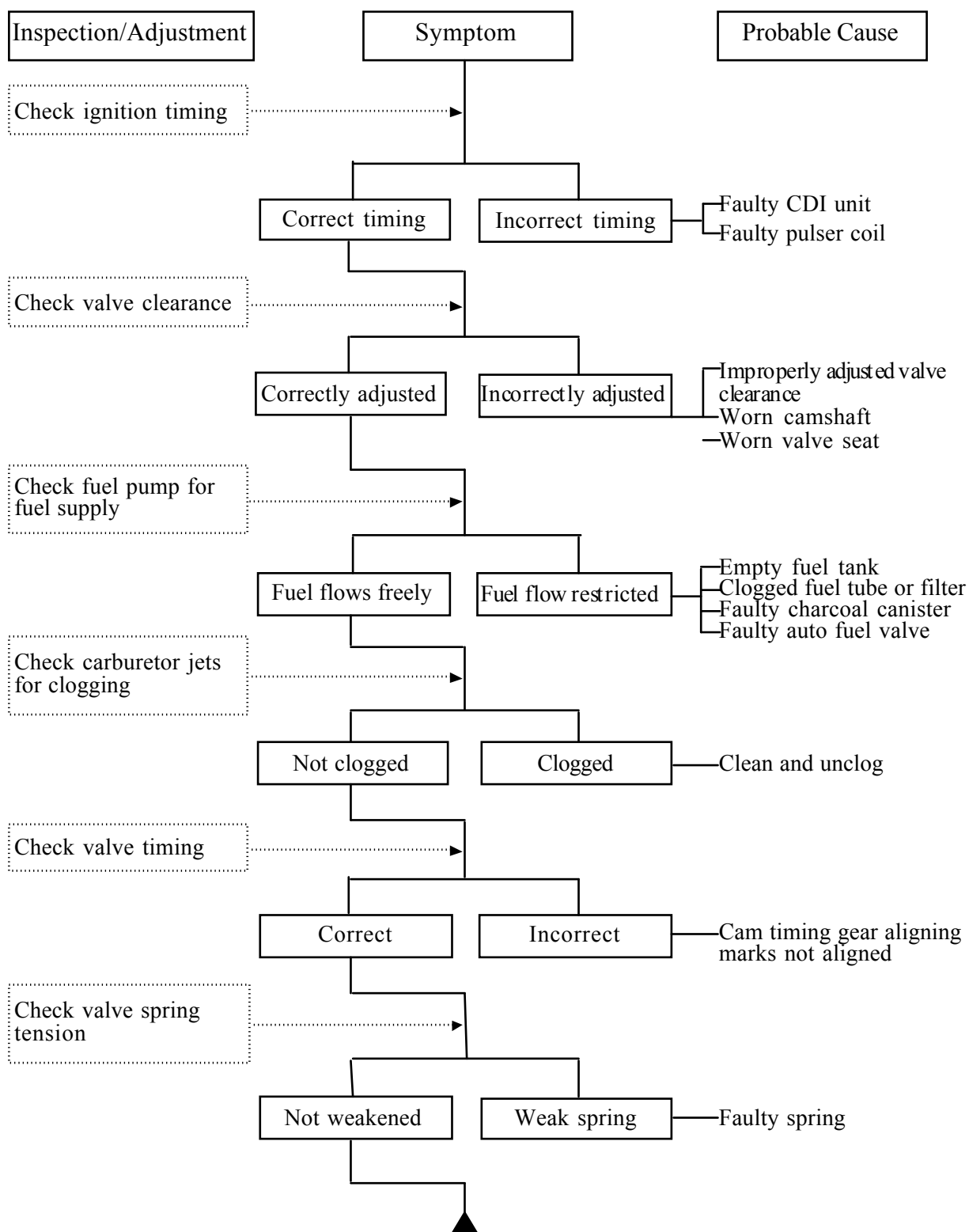
FILLY LX 50

POOR PERFORMANCE (ESPECIALLY AT IDLE AND LOW SPEEDS)



1. GENERAL INFORMATION

POOR PERFORMANCE (AT HIGH SPEED)

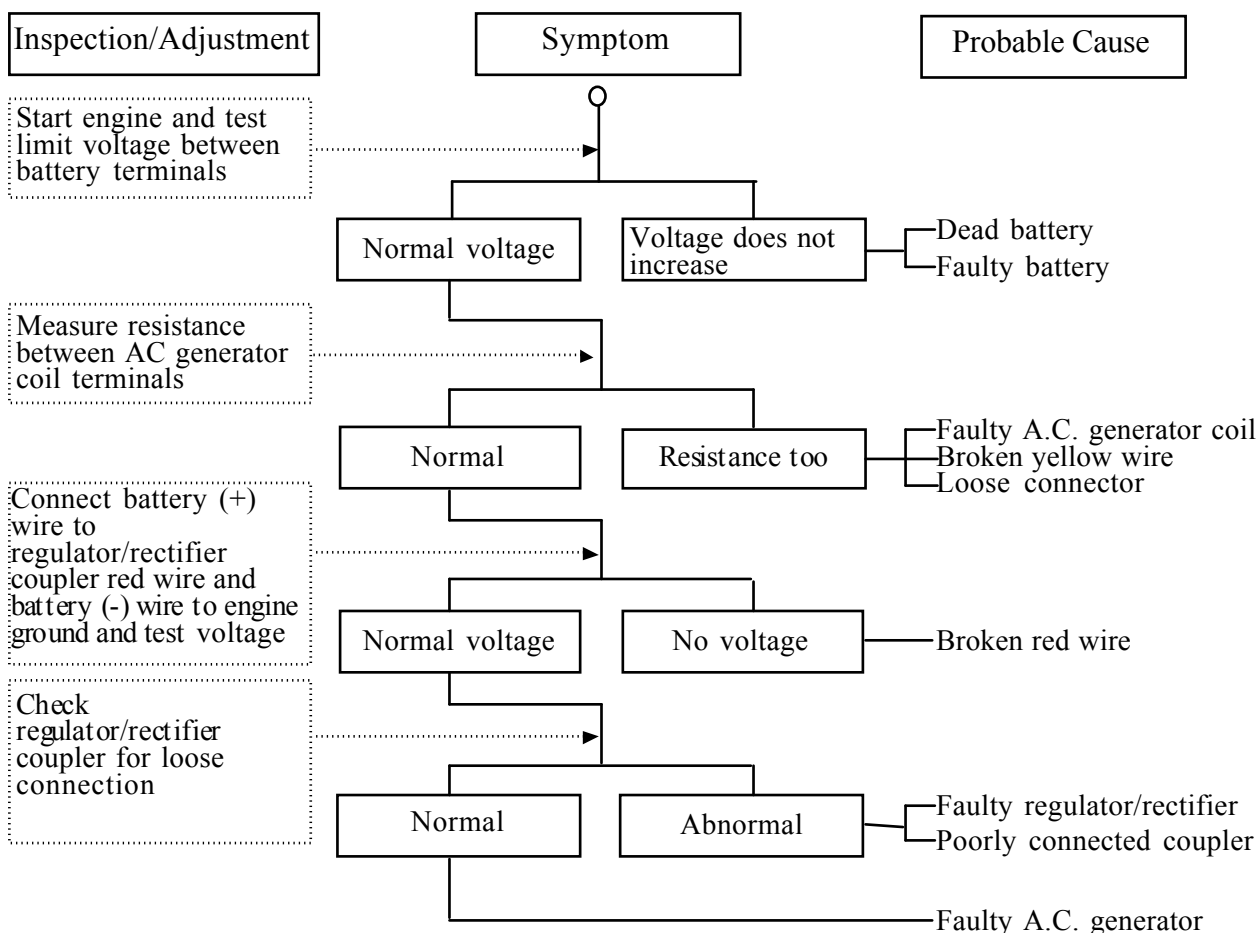


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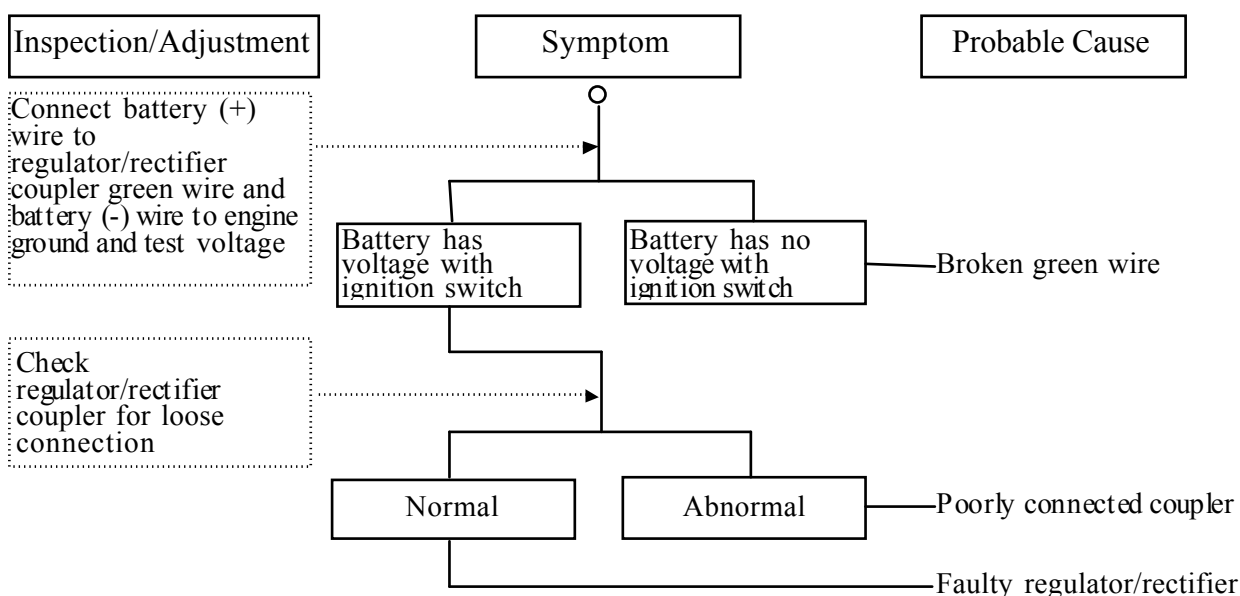
FILLY LX 50

POOR CHARGING (BATTERY OVER DISCHARGING OR OVERCHARGING)

Undercharging



Overcharging



1. GENERAL INFORMATION

FILLY LX 50

NO SPARK AT SPARK PLUG

