GENERAL INFORMATION

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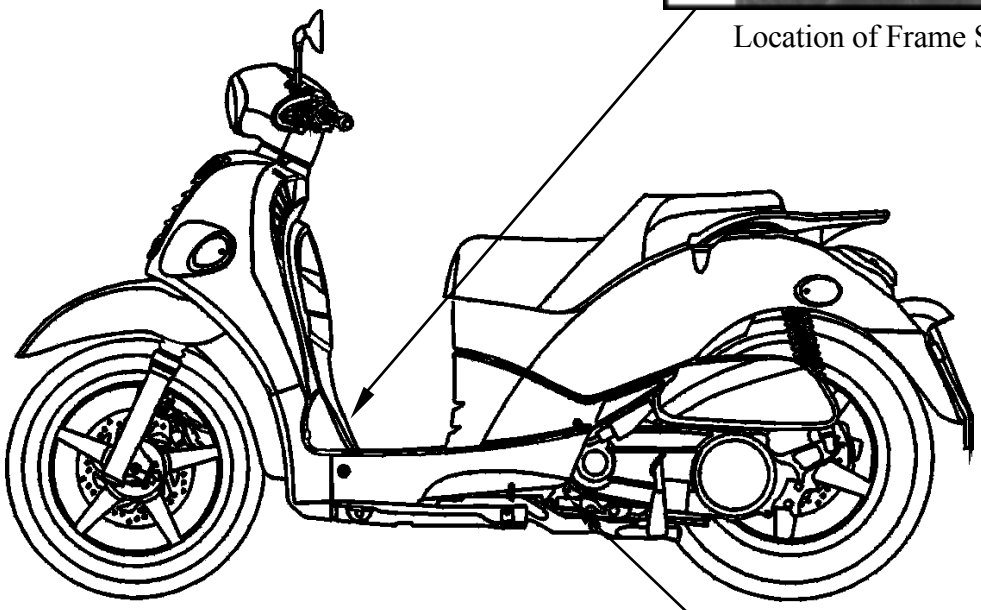
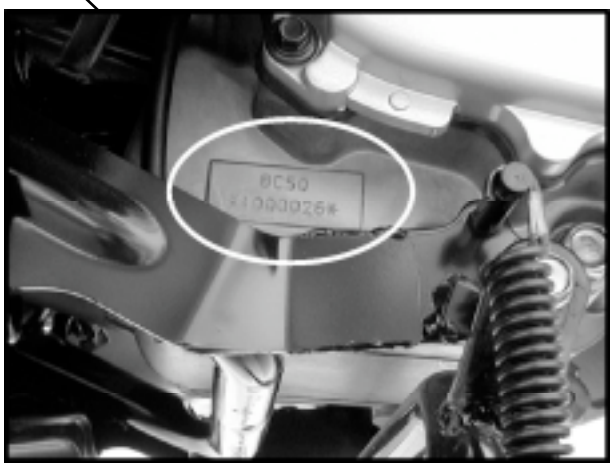
SERIAL NUMBER

Location of Frame Serial Number





Location of Engine Serial Number

1. GENERAL INFORMATION

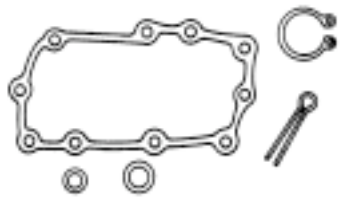
SPECIFICATIONS

Name & Model No.			BC50AA
Motorcycle Name & Type			PEOPLE 250
Overall length			2219mm
Overall width			742mm
Overall height			1145mm
Wheel base			1515mm
Engine type			Water cooled 4-stroke, OHC engine
Displacement			249.1cc
Fuel Used			92# nonleaded gasoline
1 person (55kg) weight (kg)	Front wheel		86
	Rear wheel		127
	Total		213
2 person (110kg) weight(kg)	Front wheel		93
	Rear wheel		175
	Total		268
Tires	Front wheel		110/70-16 52P
	Rear wheel		140/70-16 65P
Ground clearance			145mm
Perform-ance	Braking distance (m)		4.0m/30km/hr
	Min. turning radius		2180mm
Engine	Starting system		Starting motor
	Type		Gasoline, 4-stroke
	Cylinder arrangement		Single cylinder
	Combustion chamber type		Semi-sphere
	Valve arrangement		O.H.C.
	Bore x stroke (mm)		72.7 x 60
	Compression ratio		10.3:1
	Compression pressure (kg/cm_)		15±2
	Max. output (kw/rpm)		13.93/7000
	Max. torque (kg.m/rpm)		2.0/5500
	Port timing	Intake	BTDC -8°
			ABDC 42°
		Exhaust	BBDC 33°
			ATDC 1°
	Valve clearance (cold)	Intake	0.1
		Exhaust	0.1
	Idle speed (rpm)		1700±100rpm
	Lubrication System	Lubrication type	Forced pressure & Wet sump
		Oil pump type	Inner/outer rotor type
		Oil filter type	Full-flow filtration
		Oil capacity	1.1 liters

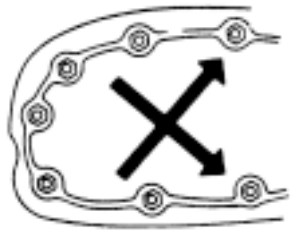
Fuel System	Air cleaner type & No			Paper element, wet
	Fuel capacity			8.0 liters
	Carburetor	Type		CVK
		Piston dia.		30
		Venturi dia.		30 equivalent
		Throttle type		Butterfly type
Electrical	Ignition System	Type		CDI
		Ignition timing		Repeatedly
		Contact breaker		Non-contact point type
		Spark plug		NGK DPR7EA-9
		Spark plug gap		0.7mm
	Battery	Capacity		12V10AH
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	0.83~2.2
			Final	8.72
Moving Device	Front Axle	Caster angle		27°
		Connecting rod		
	Tire pressure (kgf/cm_)		Front	1.75
			Rear	2.0
	Turning angle		Left	45°
			Right	45°
Brake system type			Front	Disk brake
			Rear	Disk brake
Damping Device	Suspension type		Front	Telescope
			Rear	Double swing
	Shock absorber type		Front	Telescope
			Rear	Double swing
Frame type				Under bone

SERVICE PRECAUTIONS

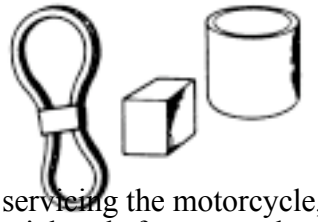
■ Make sure to install new gaskets, O-rings, circlips, cotter pins, etc. when reassembling.



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



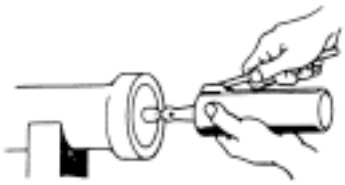
■ Use genuine parts and lubricants.



■ 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.

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

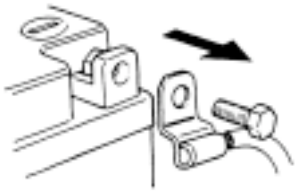


■ After reassembly, check all parts for proper tightening and operation.

■ 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.



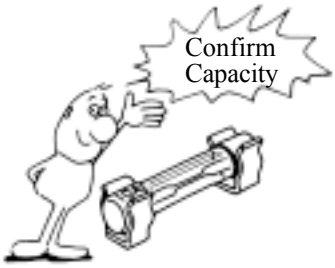
■ After operation, check all connecting points, fasteners, and lines for proper connection and installation.

■ When connecting the battery, the positive (+) terminal must be connected first.

■ After connection, apply grease to the battery terminals.

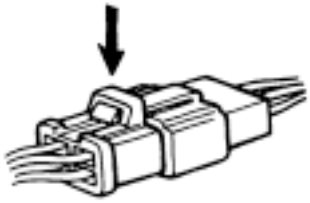
■ Terminal caps shall be installed securely.

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



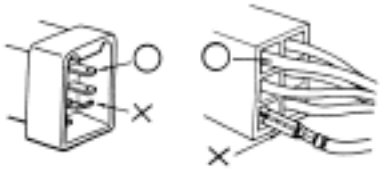
■ After operation, terminal caps shall be installed securely.

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



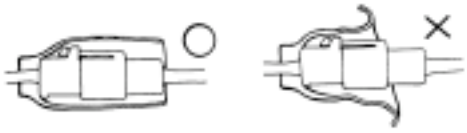
■ Hold the connector body when connecting or disconnecting it.
■ Do not pull the connector wire.

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



■ 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.

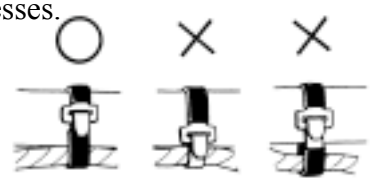
■ Before connecting a terminal, check for damaged terminal cover or loose negative terminal.



■ 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.

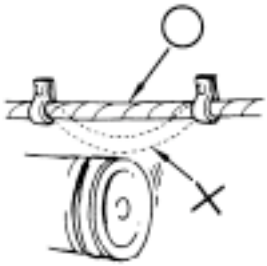
■ Secure wire harnesses to the frame with their respective wire bands at the designated locations.
Tighten the bands so that only the insulated surfaces contact the wire harnesses.



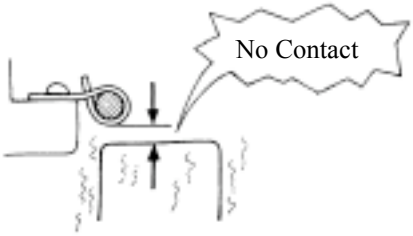
■ After clamping, check each wire to make sure it is secure.

■ Do not squeeze wires against the weld or its clamp.

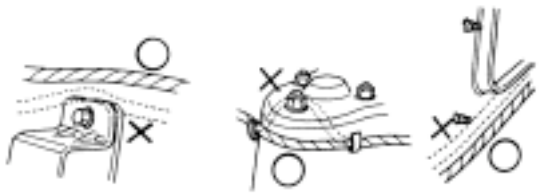
■ After clamping, check each harness to make sure that it is not interfering with any moving or sliding parts.



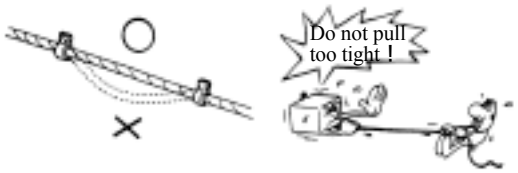
■ When fixing the wire harnesses, do not make it contact the parts which will generate high heat.



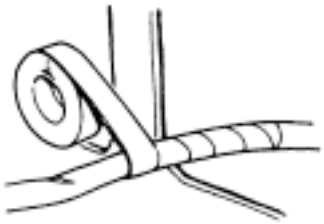
■ Route wire harnesses to avoid sharp edges or corners. Avoid the projected ends of bolts and screws.
■ Route wire harnesses passing through the side of bolts and screws. Avoid the projected ends of bolts and screws.



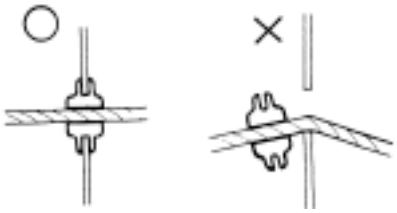
■ Route harnesses so they are neither pulled tight nor have excessive slack.



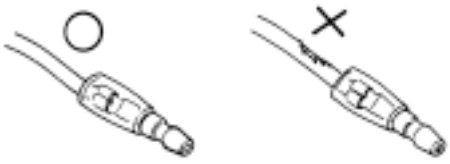
■ Protect wires and harnesses with electrical tape or tube if they contact a sharp edge or corner.



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

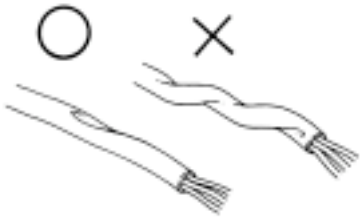


■ Do not break the sheath of wire.
■ If a wire or harness is with a broken sheath, repair by wrapping it with protective tape or replace it.



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

■ 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.

■ 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

TORQUE VALUES

STANDARD TORQUE VALUES

Item	Torque (N-m)	Item	Torque (N-m)
5mm bolt, nut	4.5_ 6	5mm screw	3.5_ 5
6mm bolt, nut	8_ 12	6mm screw, SH bolt	7_ 11
8mm bolt, nut	18_ 25	6mm flange bolt, nut	10_ 14
10mm bolt, nut	30_ 40	8mm flange bolt, nut	24_ 30
12mm bolt, nut	50_ 60	10mm flange bolt, nut	35_ 45

Torque specifications listed below are for important fasteners.

ENGINE

Item	Q'ty	Thread dia.(mm)	Torque (N-m)	Remarks
Cylinder head bolt A	2	8	8.9	Double end bolt
Cylinder head bolt B	2	8	8.9	Double end bolt
Oil filter screen cap	1	30	12.7	Apply oil to threads
Cylinder head cap nut	4	8	24.5	
Valve adjusting lock nut	2	5	8.8	
Cam chain tensioner slipper bolt	1	6	8.8	
Oil bolt	1	12	14.7	
Clutch outer nut	1	12	53.9	
Clutch drive plate nut	1	12	53.9	
Flywheel nut	1	14	58.8	
Oil pump bolt	2	5	3.9	
Cylinder head cover bolt	4	6	11.8	
Spark plug	1	10	17.2	
Cam chain tensioner bolt	1	6	11.8	
Water pump impeller	1	8	11.8	
Drive face nut	1	12	93	
Transmission case cover bolt	9	8	20	
Gear oil check bolt	1	8	10	

FRAME

Item	Q'ty	Thread dia.(mm)	Torque (N-m)	Remarks
Steering stem lock nut	1	10	40_ 50	
Front axle	1	14	29_ 35	
Rear axle nut	1	16	110_ 130	
Rear shock absorber upper bolt	2	10	35_ 45	
Rear shock absorber lower bolt	2	10	35_ 45	
Front shock absorber lock bolt	4	8	29_ 35	
Engine hanger bolt (frame side)	2	12	45_ 55	
Engine hanger bolt (ENG. side)	1	10	45_ 55	
Front caliper holder bolt	2	8	29_ 35	
Rear caliper holder bolt	2	8	29_ 35	
Master cylinder holder bolt	4	6	10_ 14	
Exhaust muffler pipe nut	2	8	18_ 22	
Exhaust muffler bolt	3	8	32_ 38	
Rear fork bolt	2	8	29_ 35	

SPECIAL TOOLS

Tool Name	Tool No.	Remarks	Ref. Page
Clutch spring compressor	E034	Clutch disassembly	
Bearing puller 10,12,15,18mm	E037	Bearing removal	
Valve spring compressor	E040	Valve removal	
Oil seal & bearing installer	E014	Oil seal & bearing install	
Tappet adjuster	E036	Tappet adjustment	
Flywheel puller	E003	A.C. generator flywheel removal	
Universal holder	E017	Holding clutch for removal	
Flywheel holder	E021	A.C. generator flywheel holding	
Lock nut socket wrench	F002	Steering stem removal or install	
Float level gauge		Carburetor fuel level check	

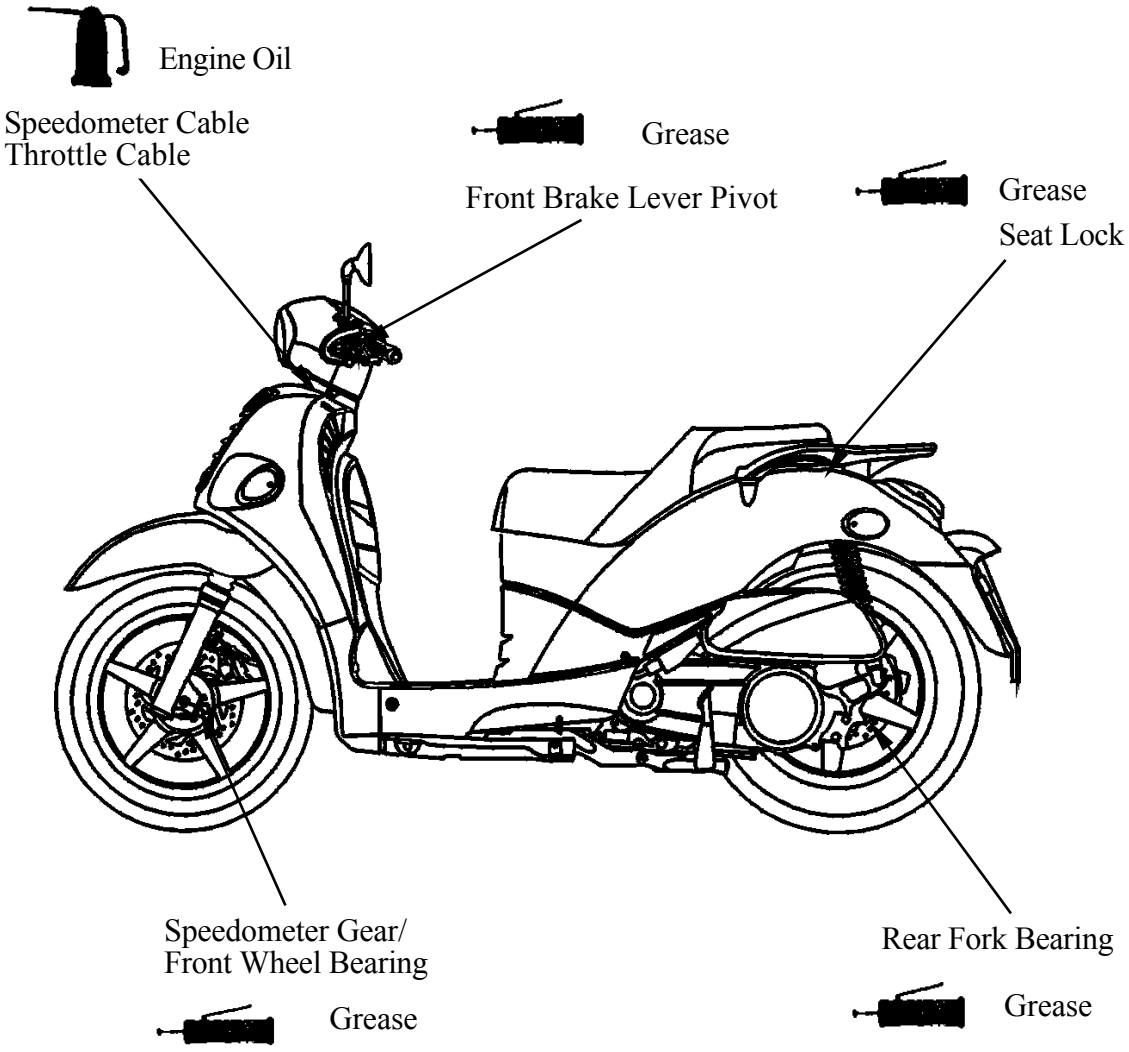
LUBRICATION POINTS

ENGINE

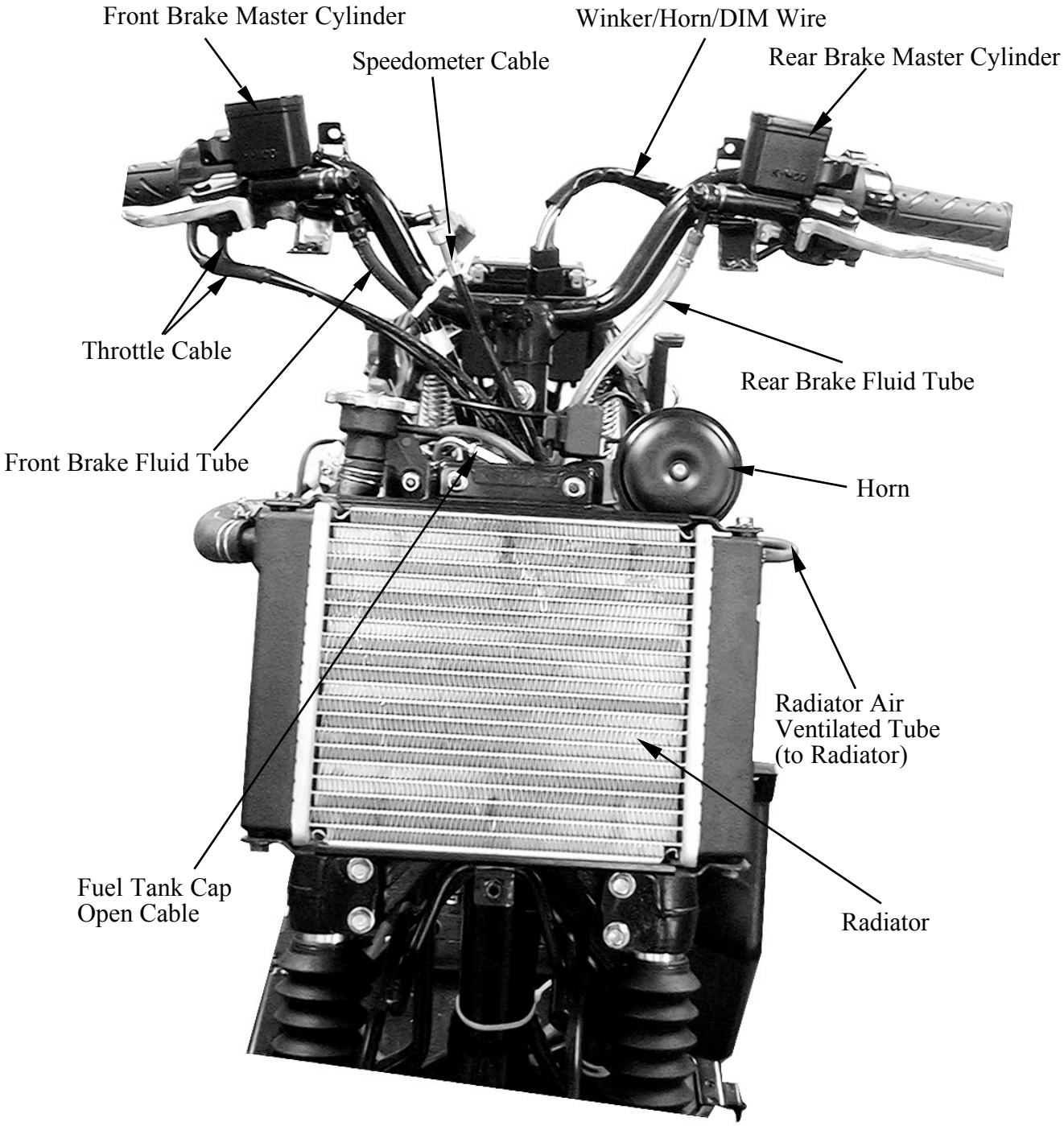
Lubrication Points	Lubricant
Valve guide/valve stem movable part Camshaft protruding surface Valve rocker arm friction surface Camshaft drive chain Cylinder lock bolt and nut Piston surroundings and piston ring grooves Piston pin surroundings Cylinder inside wall Connecting rod/piston pin hole Connecting rod big end Crankshaft Cranksahft one-way clutch movable part Oil pump drive chain Starter reduction gear engaging part Countershaft gear engaging part Final gear engaging part Bearing movable part O-ring face Oil seal lip	•Genuine KYMCO Engine Oil (SAE15W-40) •API SE, SF or SG Egnine Oil
Starter idle gear Friction spring movable part/shaft movable part Shaft movable grooved part Starter spindle movable part	High-temperature resistant grease
Starter one-way clutch threads	Thread locking agent
A.C. generator connector Transmission case breather tubee	Adhesive

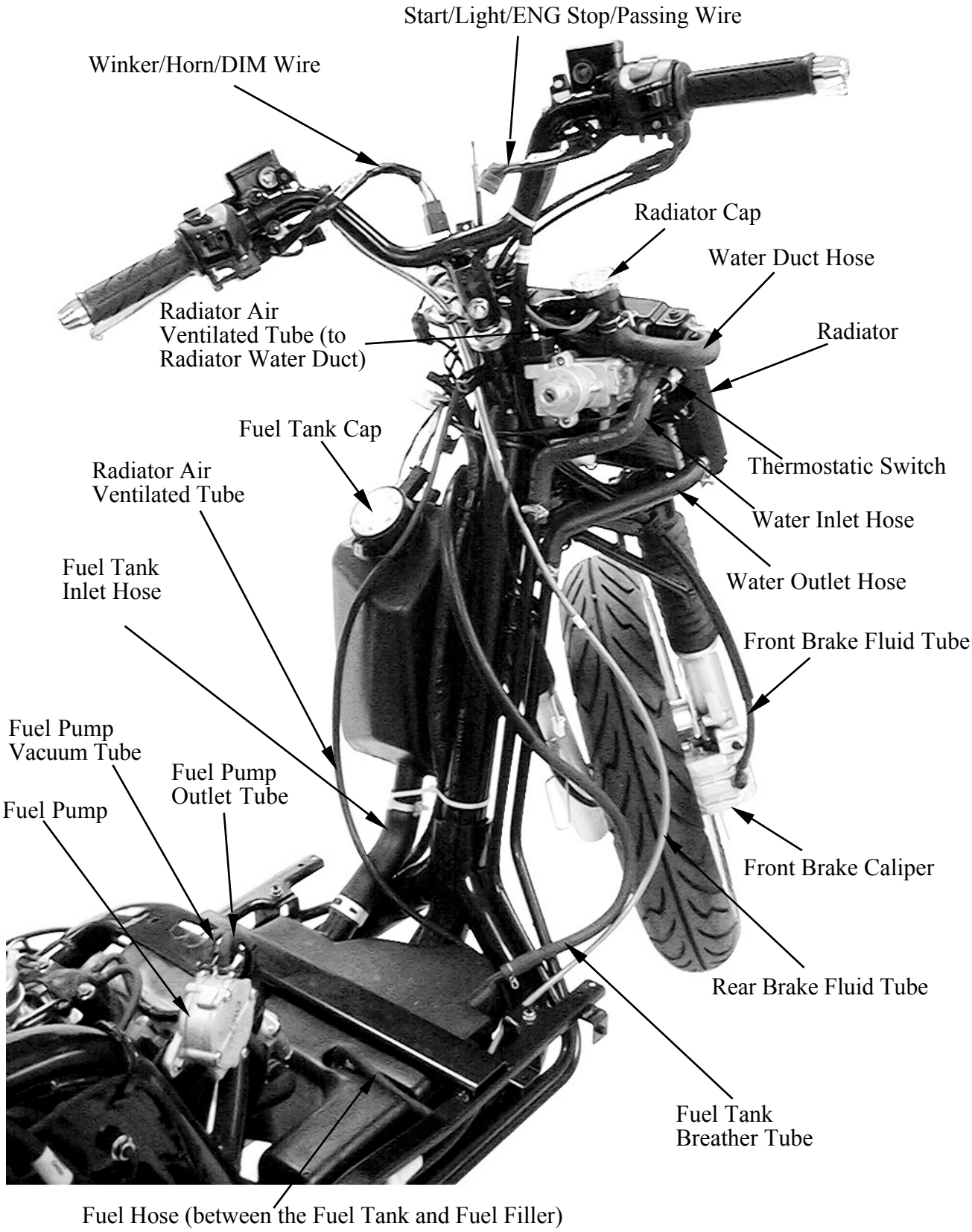
FRAME

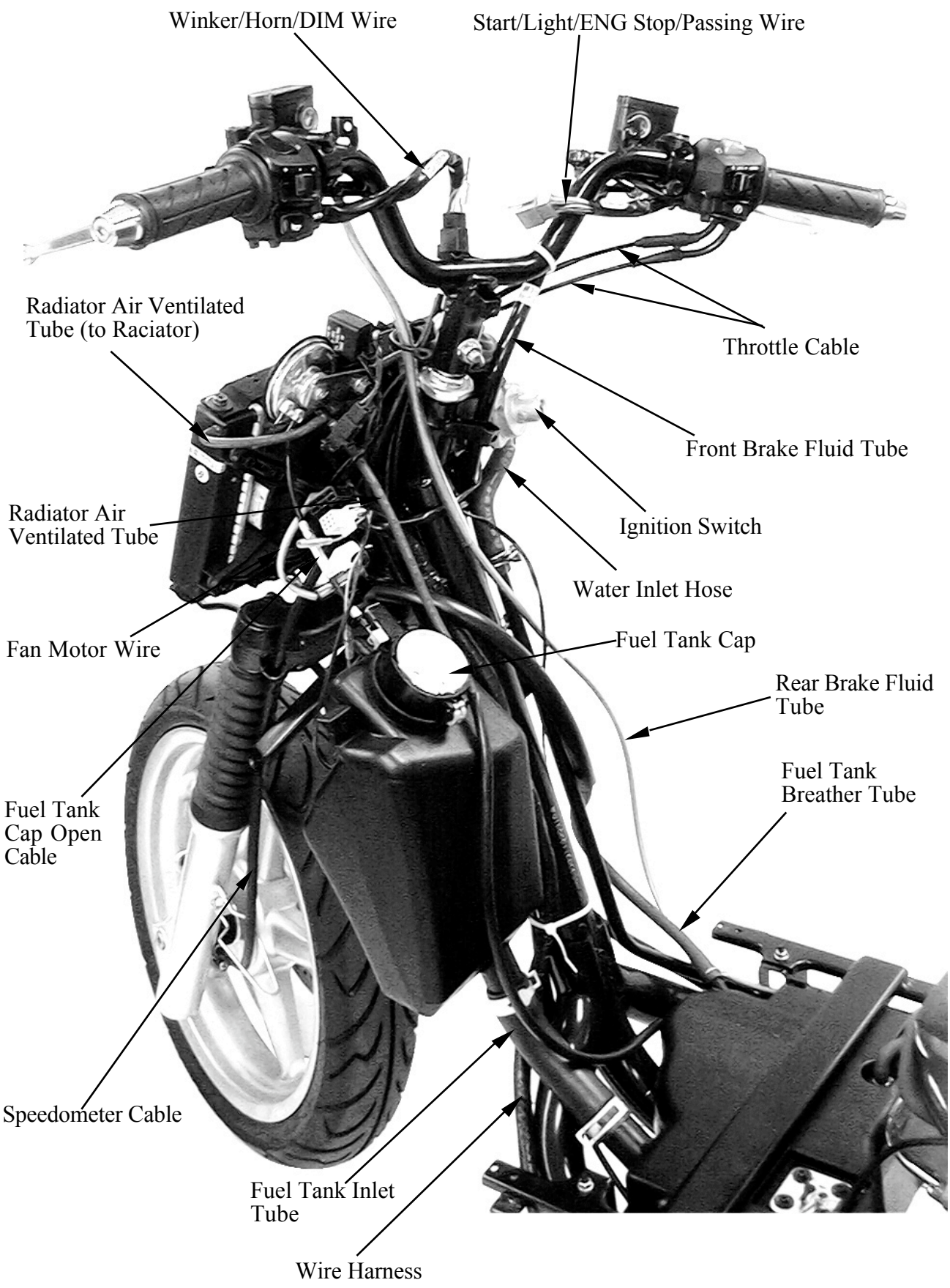
The following is the lubrication points for the frame.
Use general purpose grease for parts not listed.
Apply clean engine oil or grease to cables and movable parts not specified. This will avoid abnormal noise and rise the durability of the motorcycle.

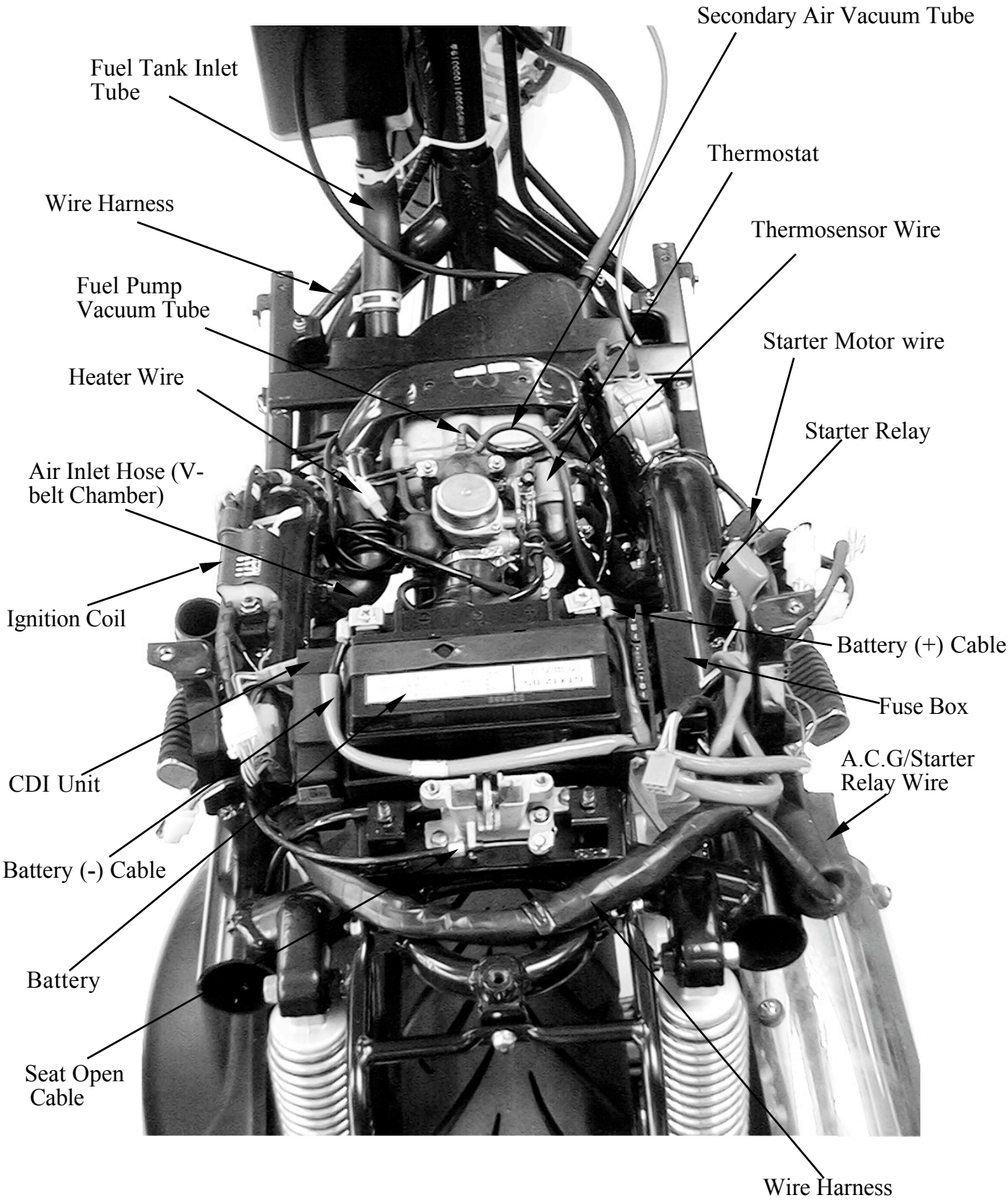


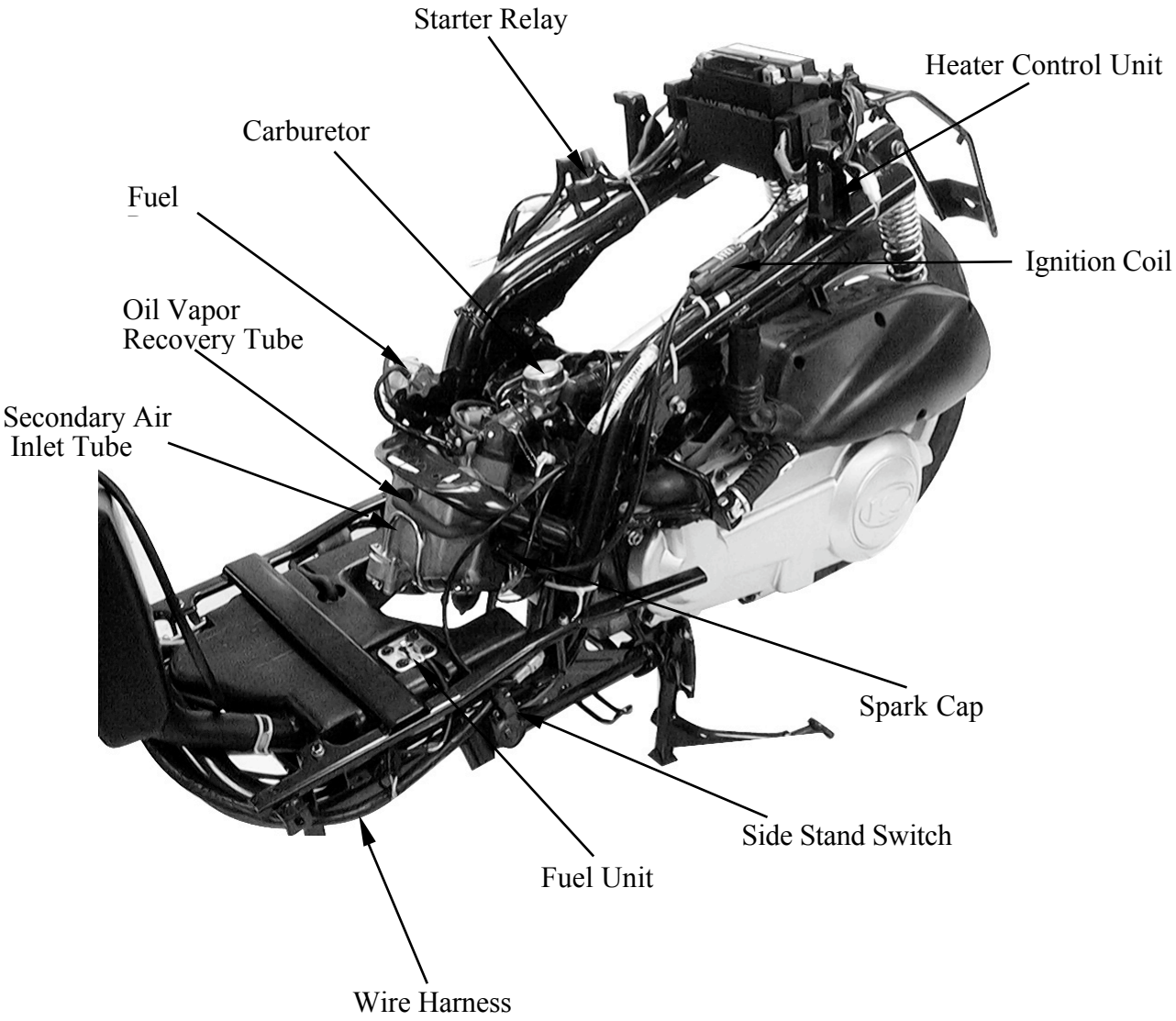
CABLE & HARNESS ROUTING

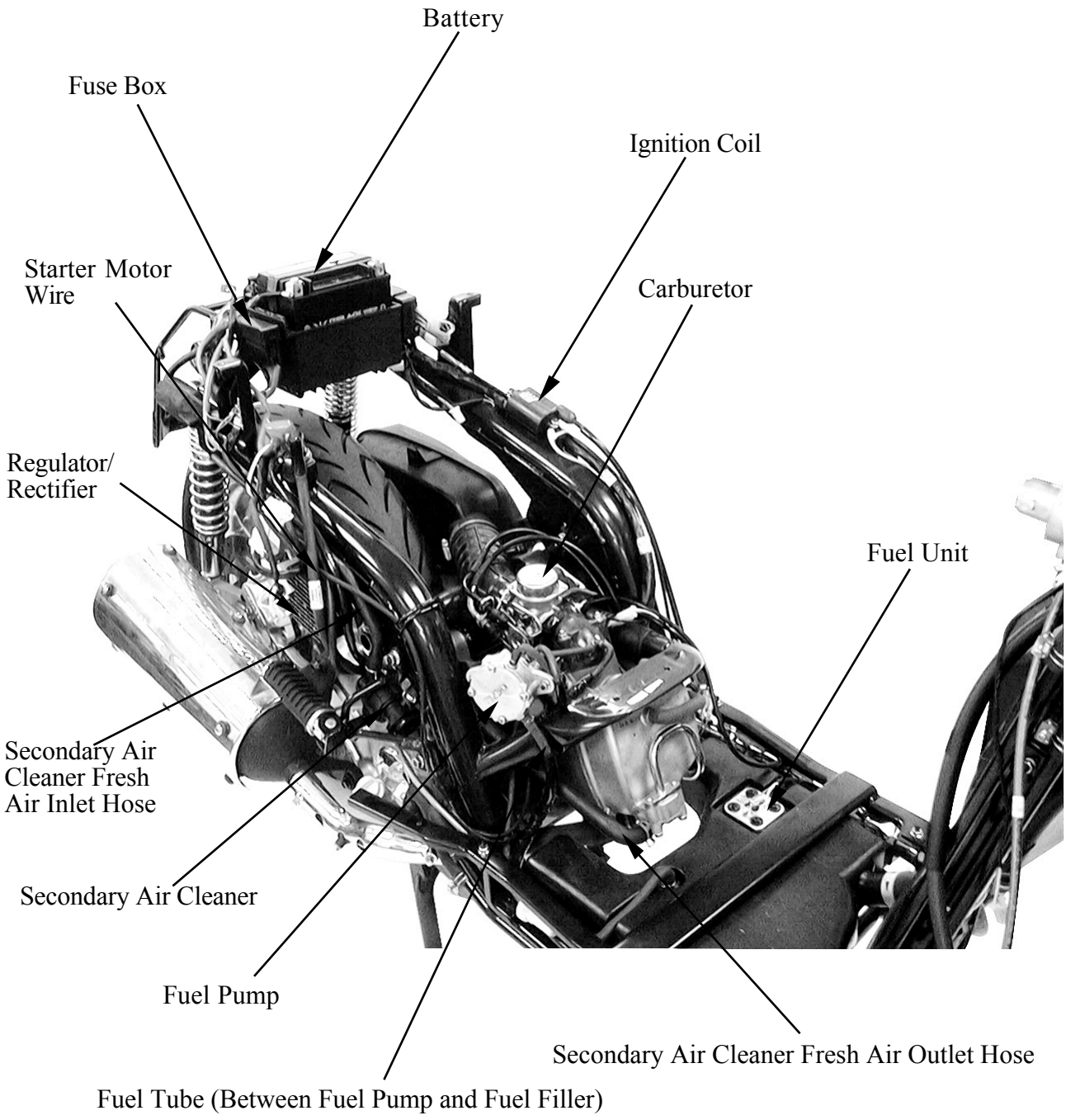


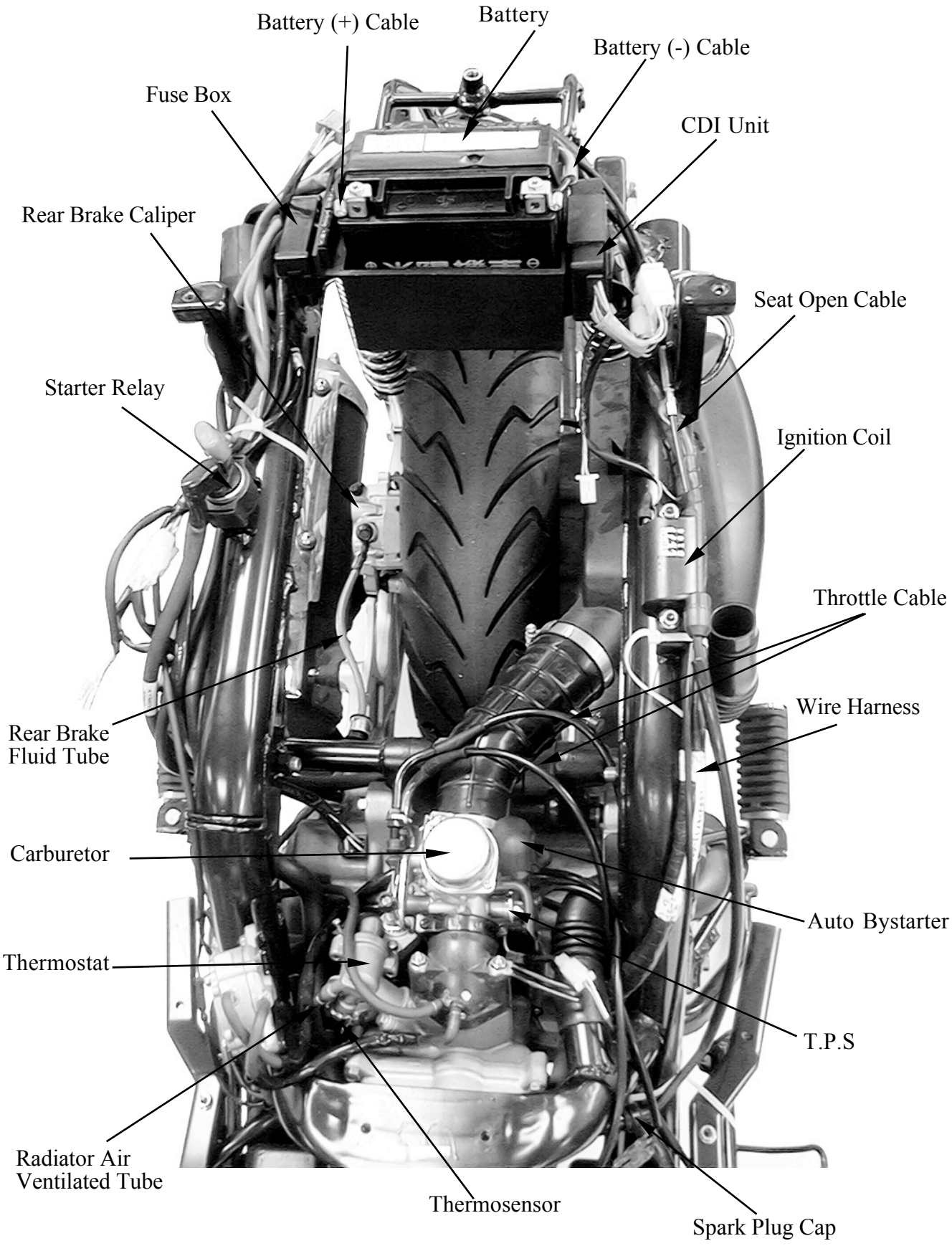

Start/Light/ENG Stop/Passing Wire
Winker/Horn/DIM Wire
Radiator Cap
Water Duct Hose
Radiator Air
Ventilated Tube (to
Radiator Water Duct)
Radiator
Fuel Tank Cap
Thermostatic Switch
Radiator Air
Ventilated Tube
Water Inlet Hose
Fuel Tank
Inlet Hose
Water Outlet Hose
Front Brake Fluid Tube
Fuel Pump
Vacuum Tube
Fuel Pump
Outlet Tube
Fuel Pump
Front Brake Caliper
Rear Brake Fluid Tube
Fuel Tank
Breather Tube
Fuel Hose (between the Fuel Tank and Fuel Filler)


Winker/Horn/DIM Wire
Start/Light/ENG Stop/Passing Wire
Radiator Air Ventilated Tube (to Raciator)
Throttle Cable
Front Brake Fluid Tube
Ignition Switch
Radiator Air Ventilated Tube
Water Inlet Hose
Fan Motor Wire
Fuel Tank Cap
Rear Brake Fluid Tube
Fuel Tank Breather Tube
Fuel Tank Cap Open Cable
Speedometer Cable
Fuel Tank Inlet Tube
Wire Harness

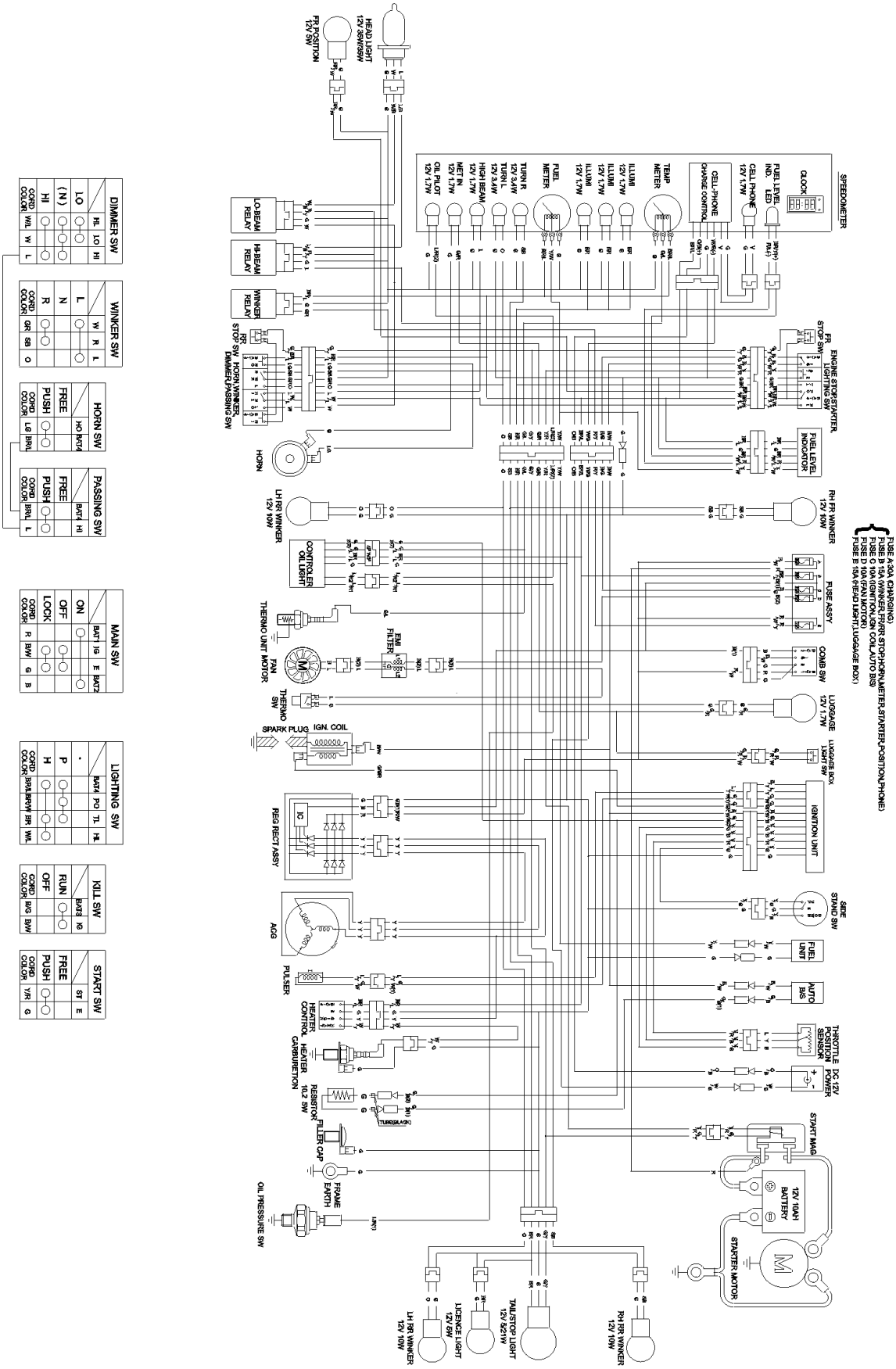

Secondary Air Vacuum Tube
Fuel Tank Inlet Tube
Thermostat
Wire Harness
Thermosensor Wire
Fuel Pump Vacuum Tube
Starter Motor wire
Heater Wire
Starter Relay
Air Inlet Hose (V-belt Chamber)
Ignition Coil
Battery (+) Cable
Fuse Box
A.C.G/Starter Relay Wire
CDI Unit
Battery (-) Cable
Battery
Seat Open Cable
Wire Harness


Starter Relay
Heater Control Unit
Carburetor
Fuel
Ignition Coil
Oil Vapor
Recovery Tube
Secondary Air
Inlet Tube
Spark Cap
Side Stand Switch
Fuel Unit
Wire Harness


Battery
Fuse Box
Ignition Coil
Starter Motor Wire
Carburetor
Regulator/ Rectifier
Fuel Unit
Secondary Air Cleaner Fresh Air Inlet Hose
Secondary Air Cleaner
Fuel Pump
Secondary Air Cleaner Fresh Air Outlet Hose
Fuel Tube (Between Fuel Pump and Fuel Filler)

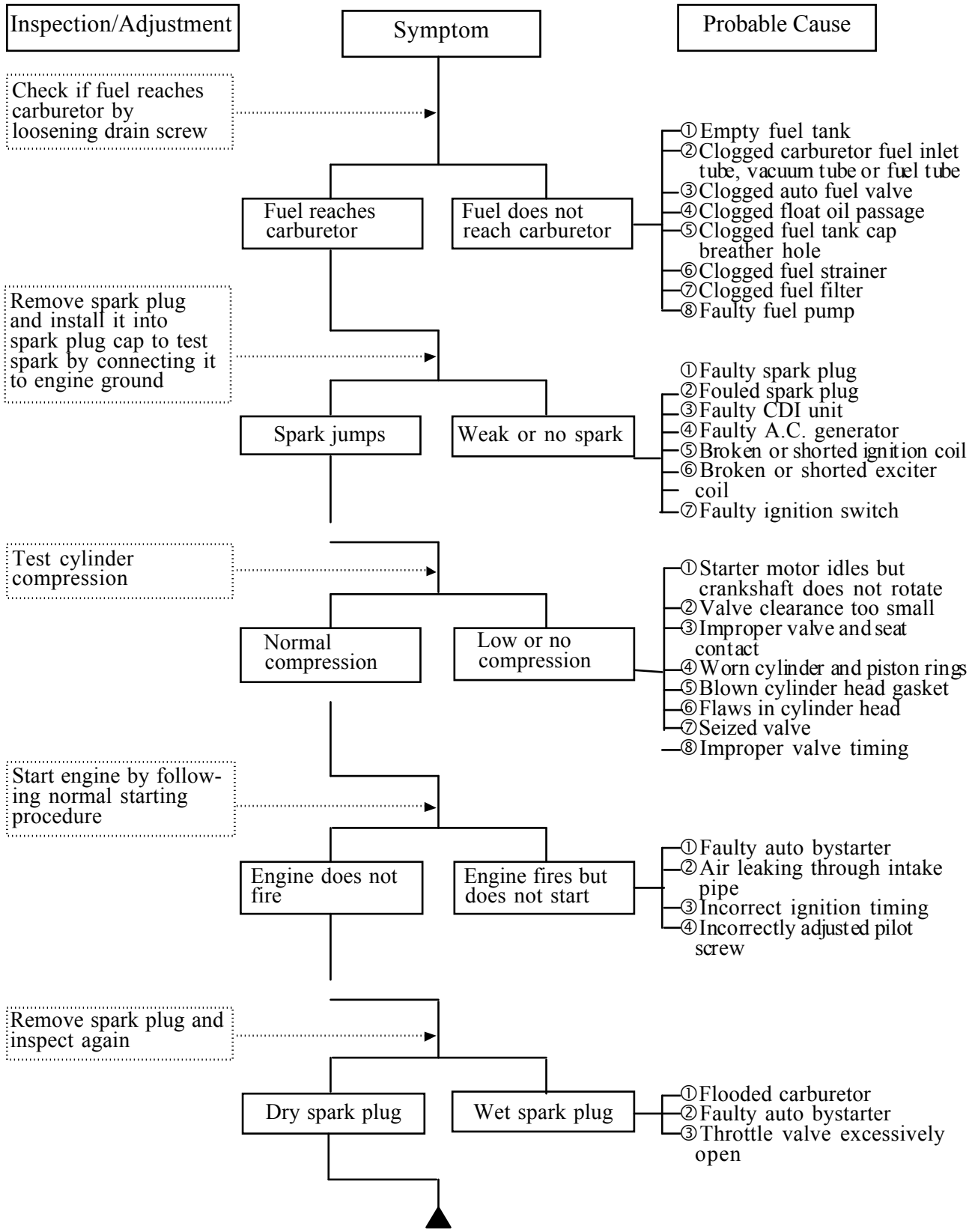

Battery (+) Cable
Battery
Battery (-) Cable
Fuse Box
CDI Unit
Rear Brake Caliper
Seat Open Cable
Starter Relay
Ignition Coil
Throttle Cable
Rear Brake
Fluid Tube
Wire Harness
Carburetor
Auto Bystarter
Thermostat
T.P.S
Radiator Air
Ventilated Tube
Thermosensor
Spark Plug Cap

WIRING DIAGRAM

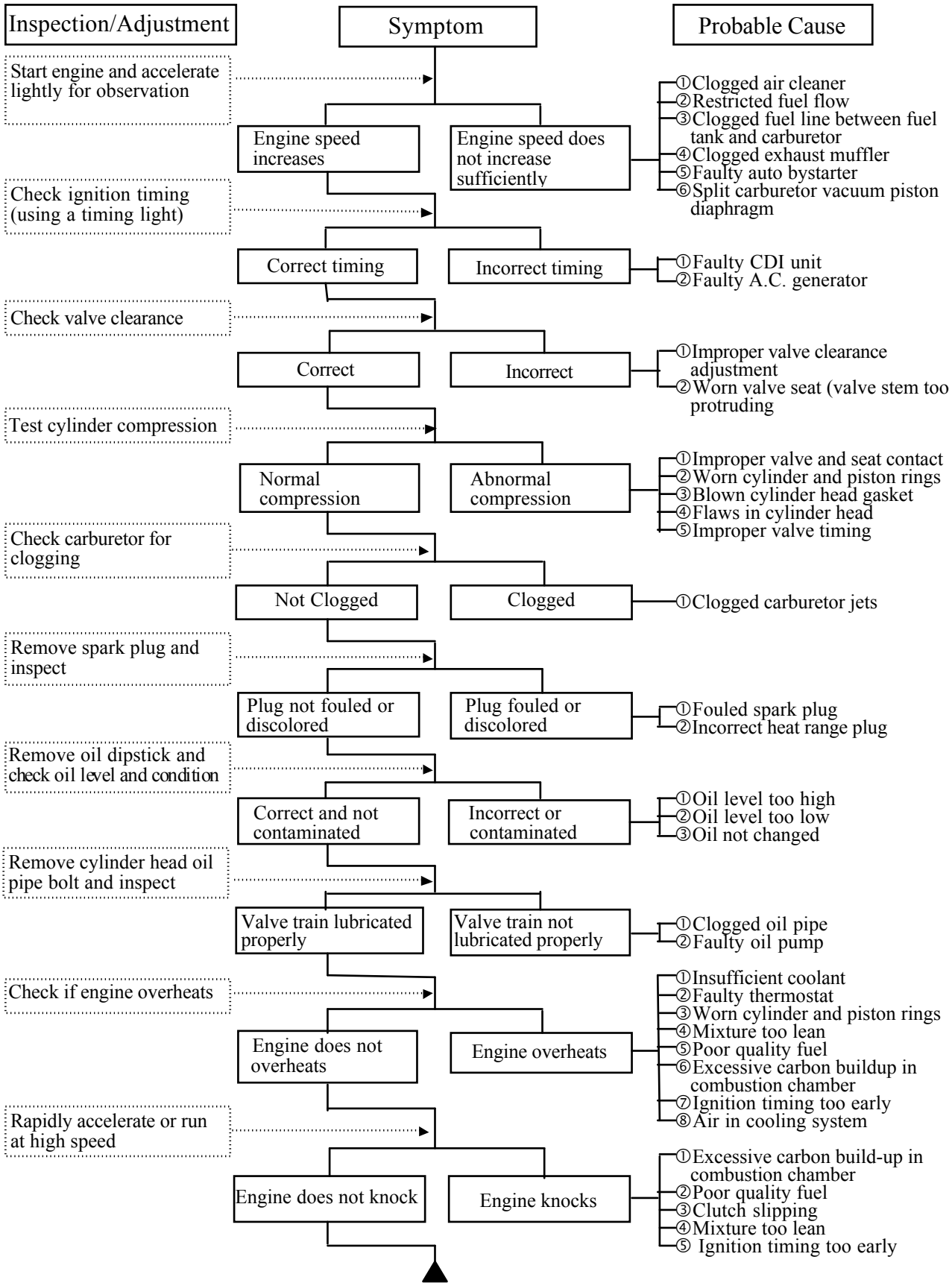


TROUBLESHOOTING

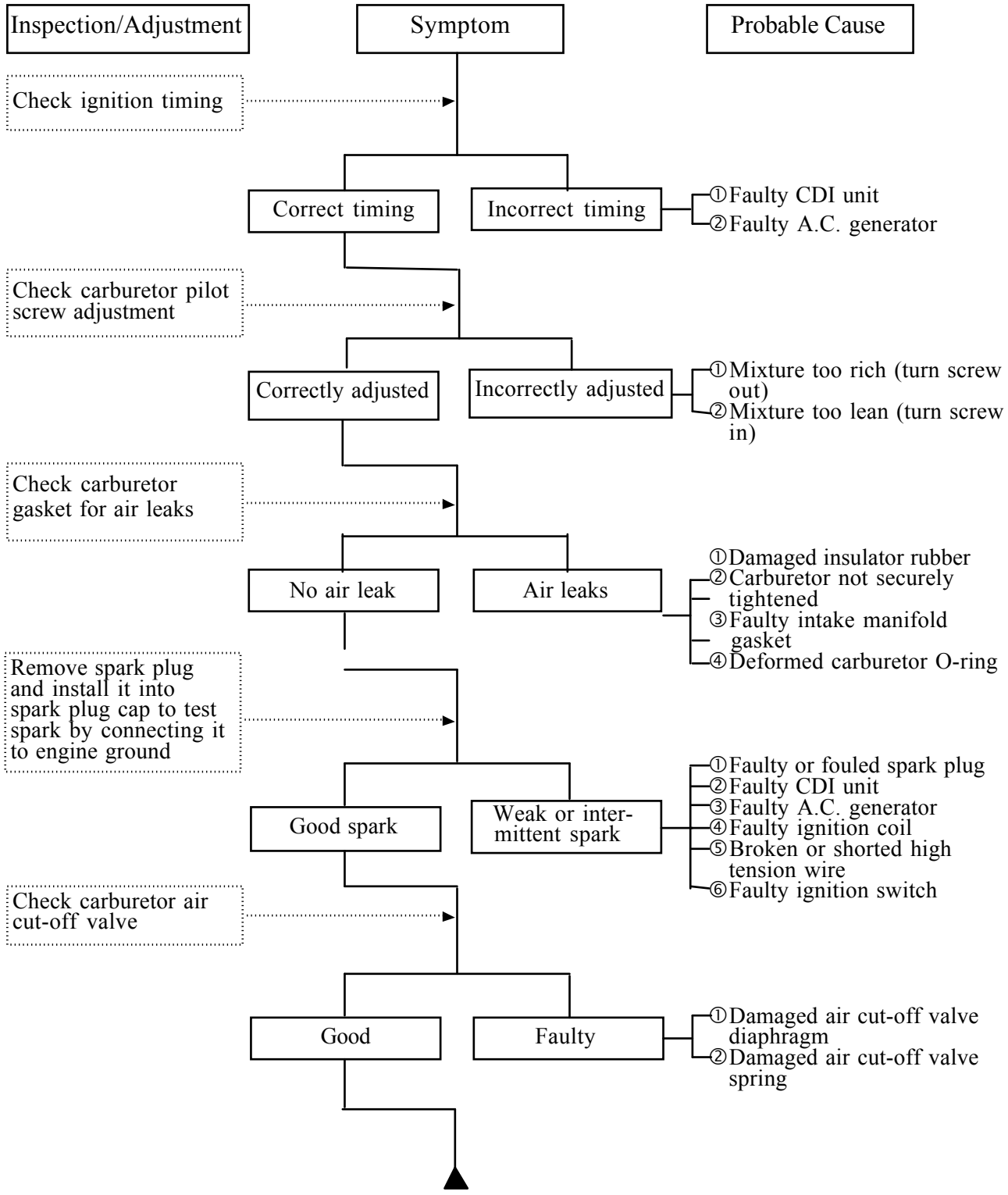
ENGINE WILL NOT START OR IS HARD TO START



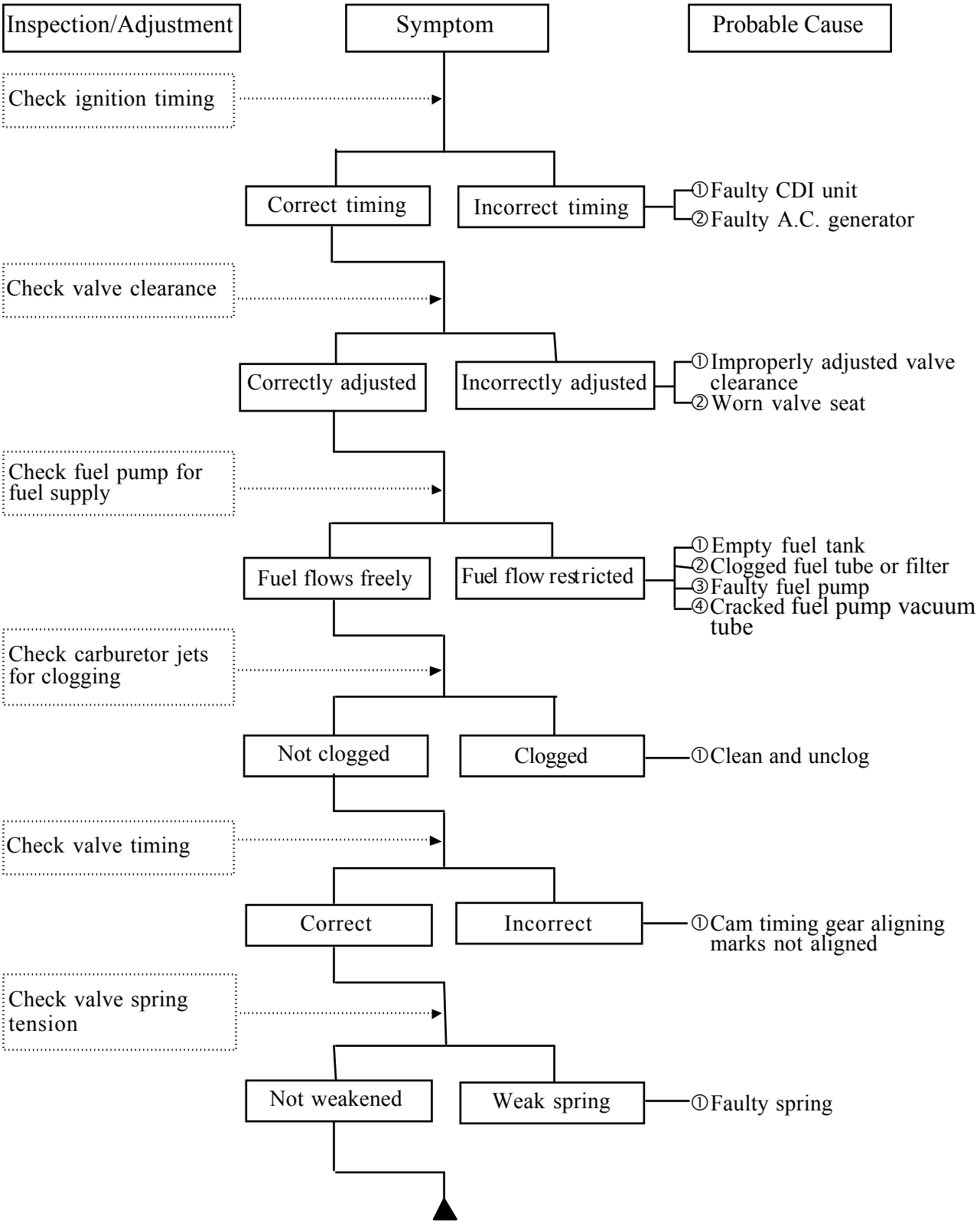
ENGINE LACKS POWER



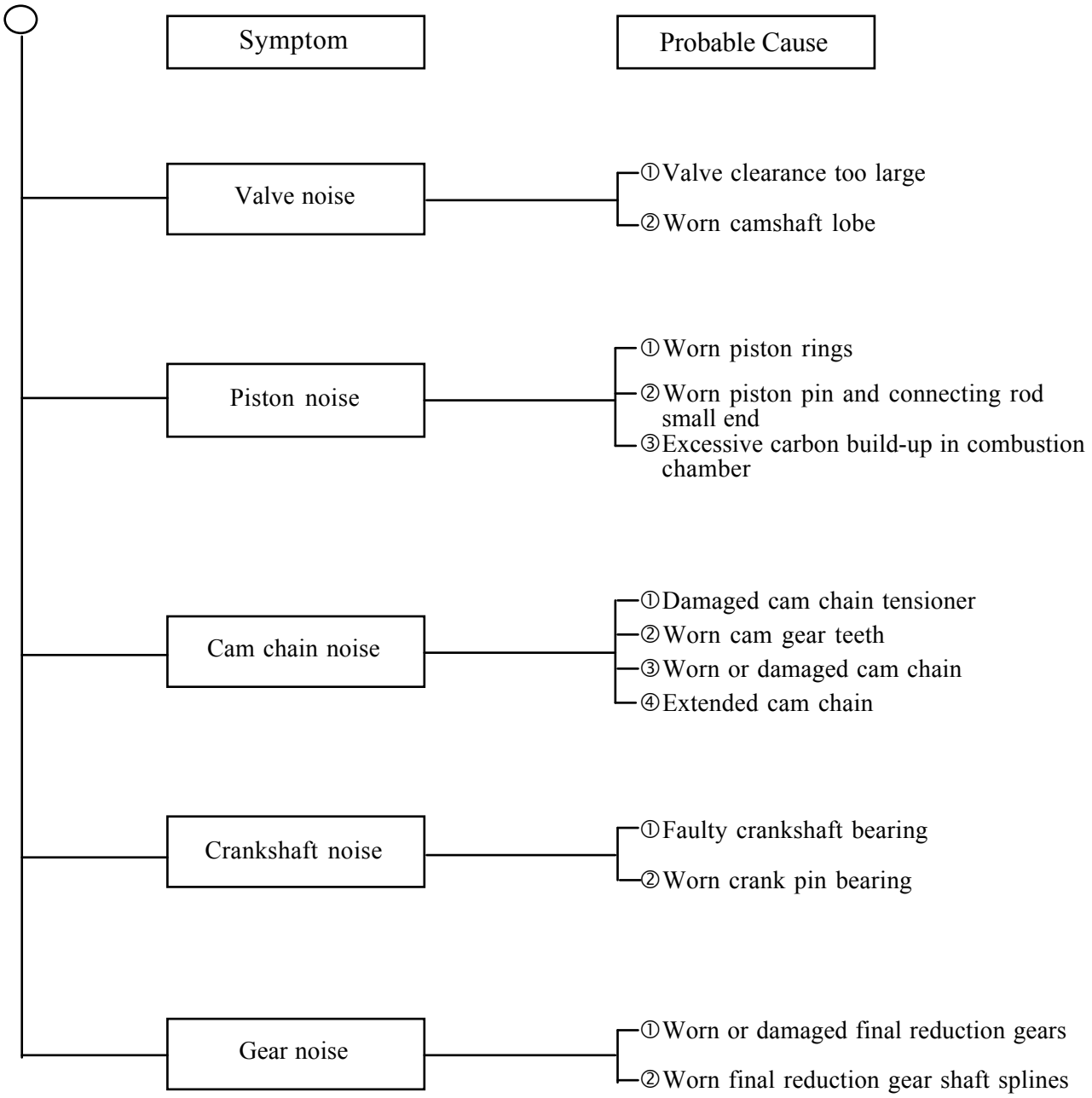
POOR PERFORMANCE (ESPECIALLY AT IDLE AND LOW SPEEDS)



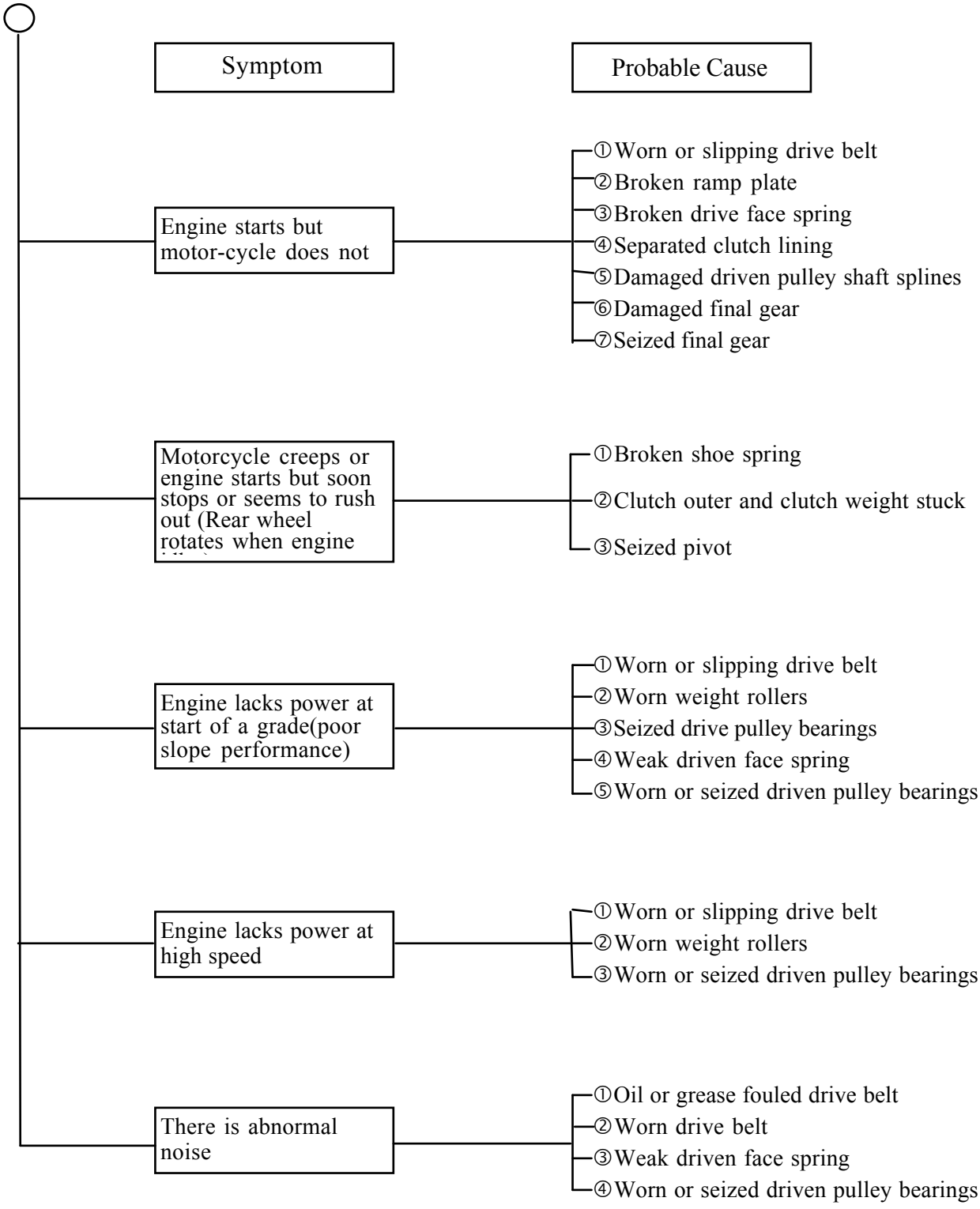
POOR PERFORMANCE (AT HIGH SPEED)



ENGINE NOISE

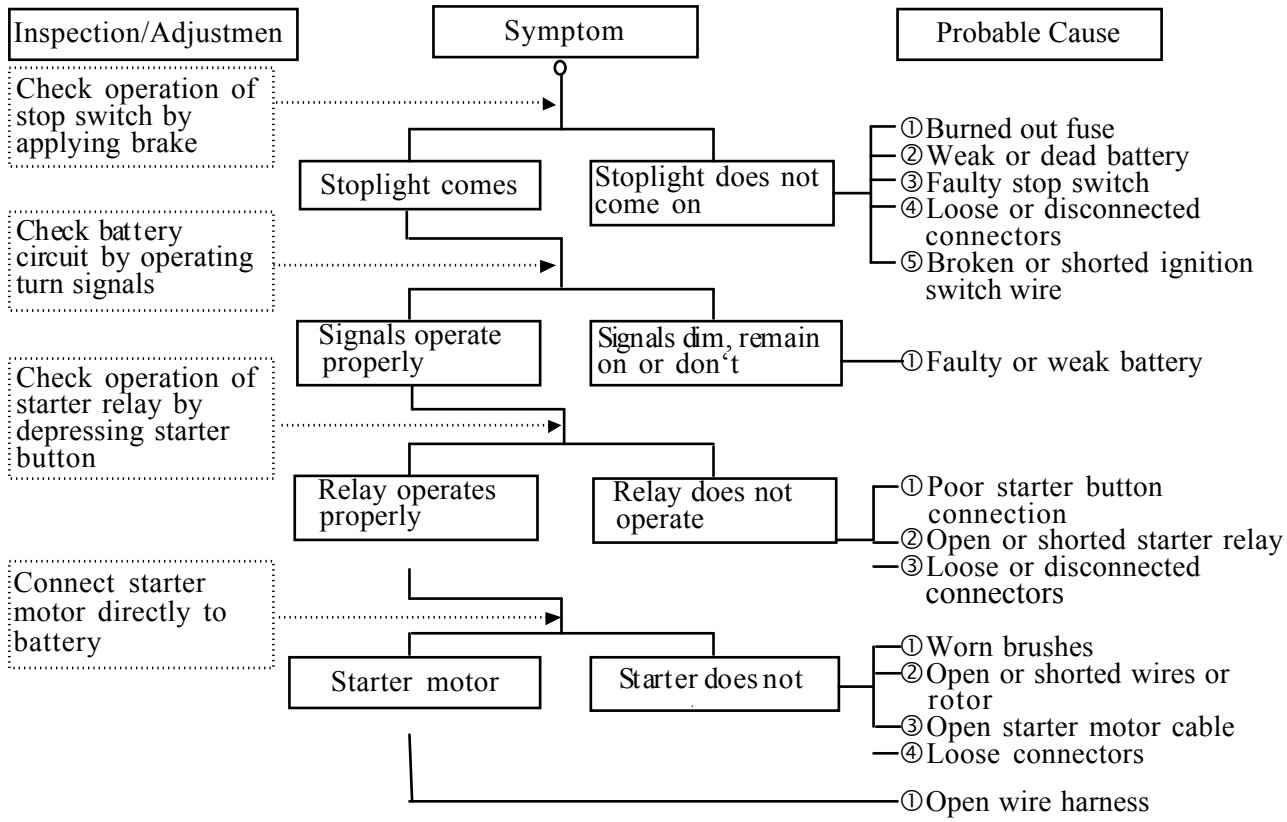


CLUTCH, DRIVE AND DRIVEN PULLEYS

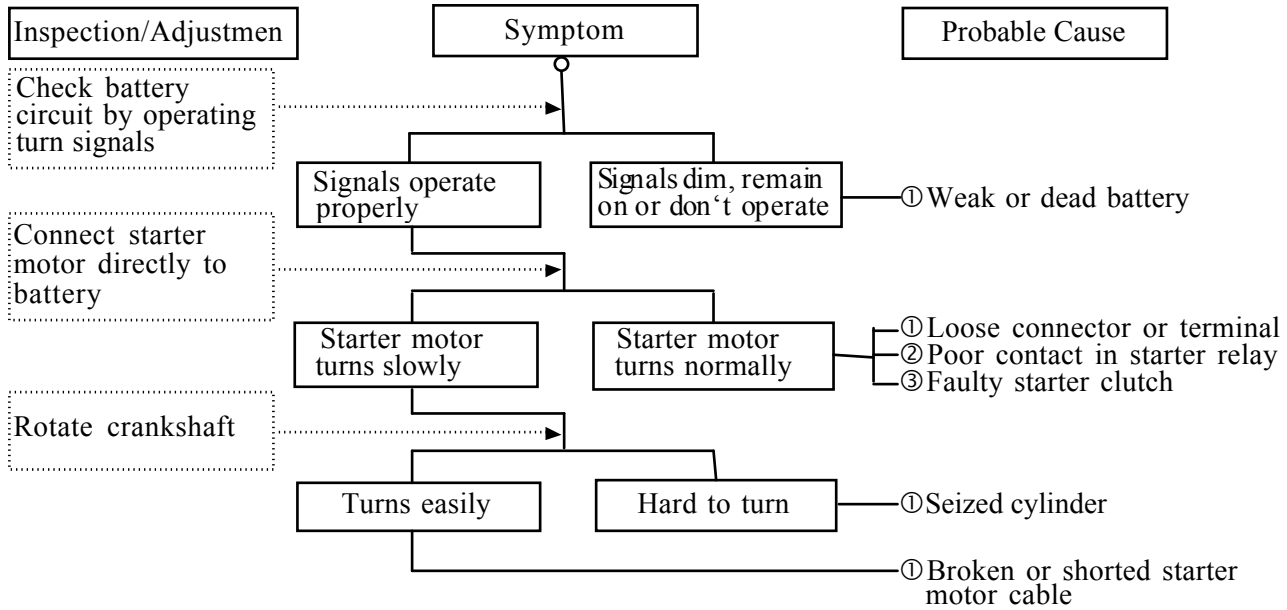


STARTER MOTOR

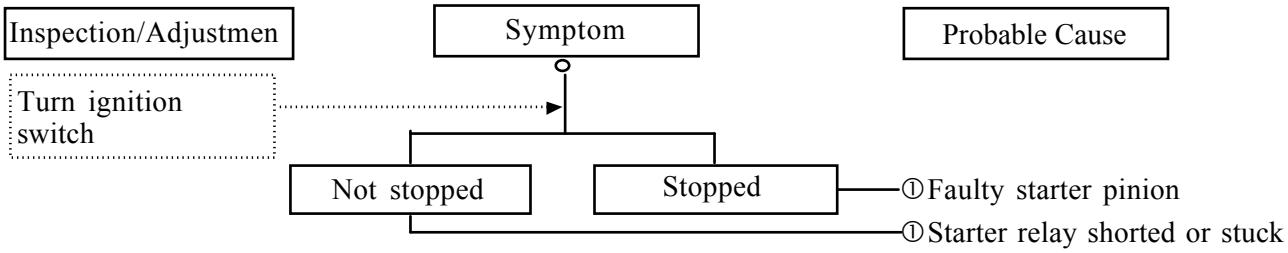
1. Starter motor won't turn



2. Starter motor turns slowly or idles

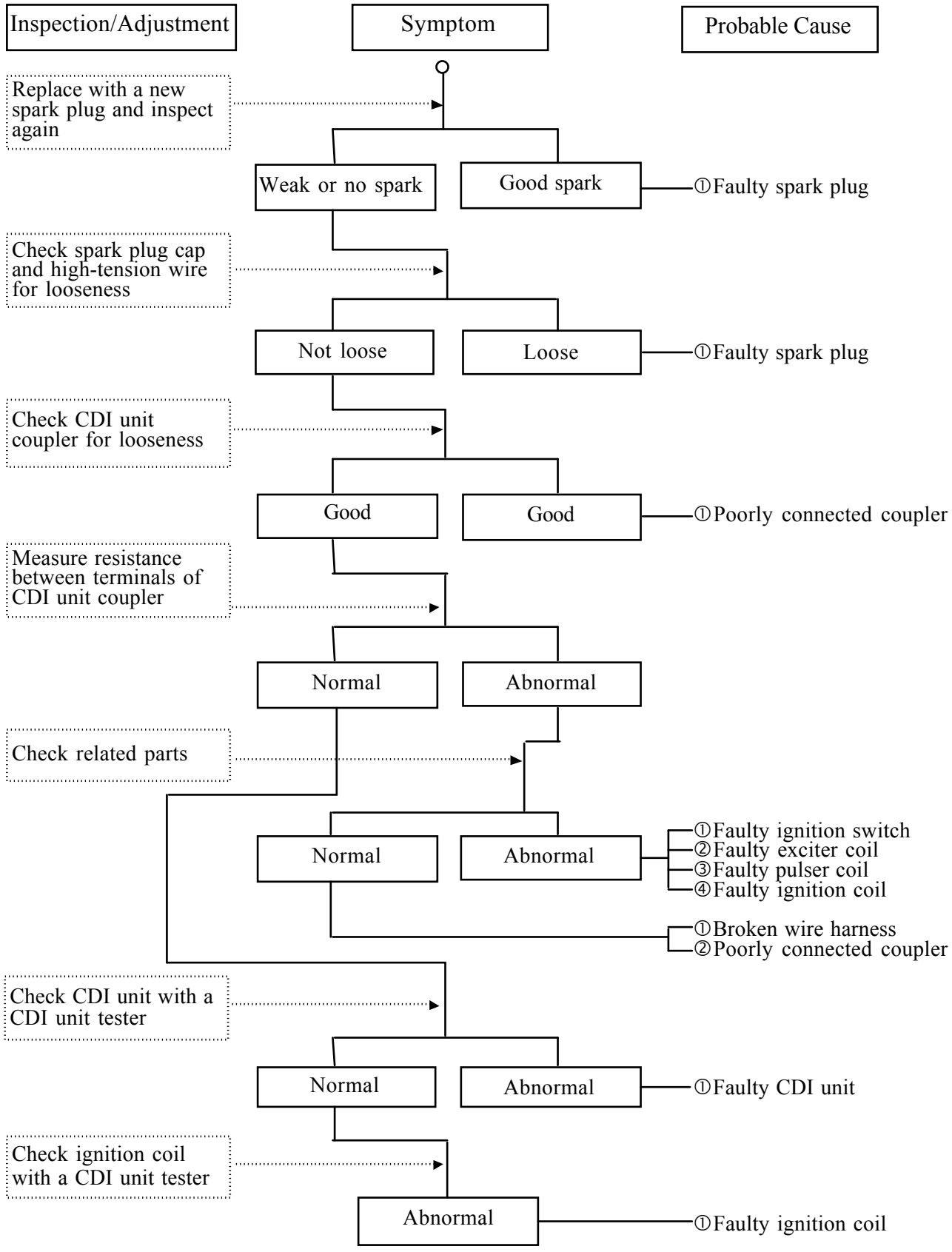


3. Starter motor does not stop turning



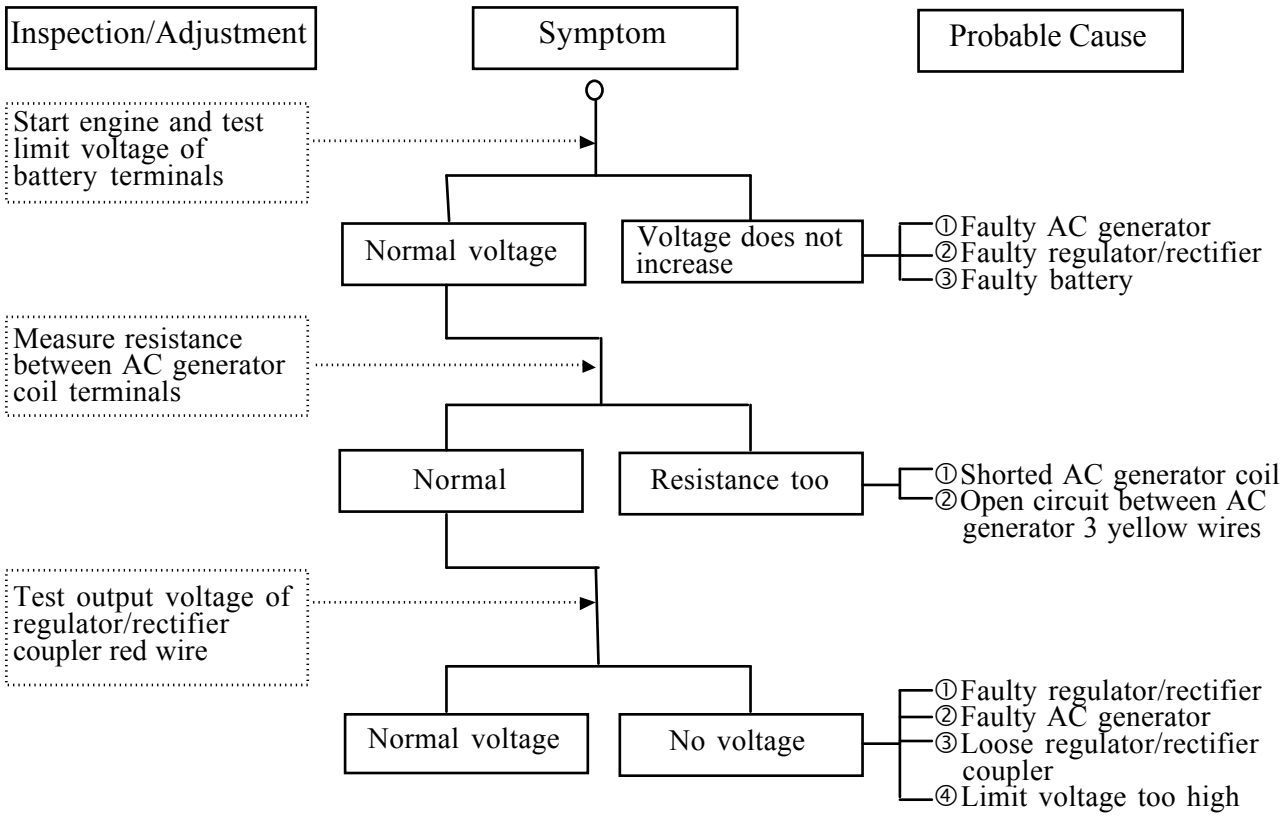
closed

NO SPARK AT SPARK PLUG

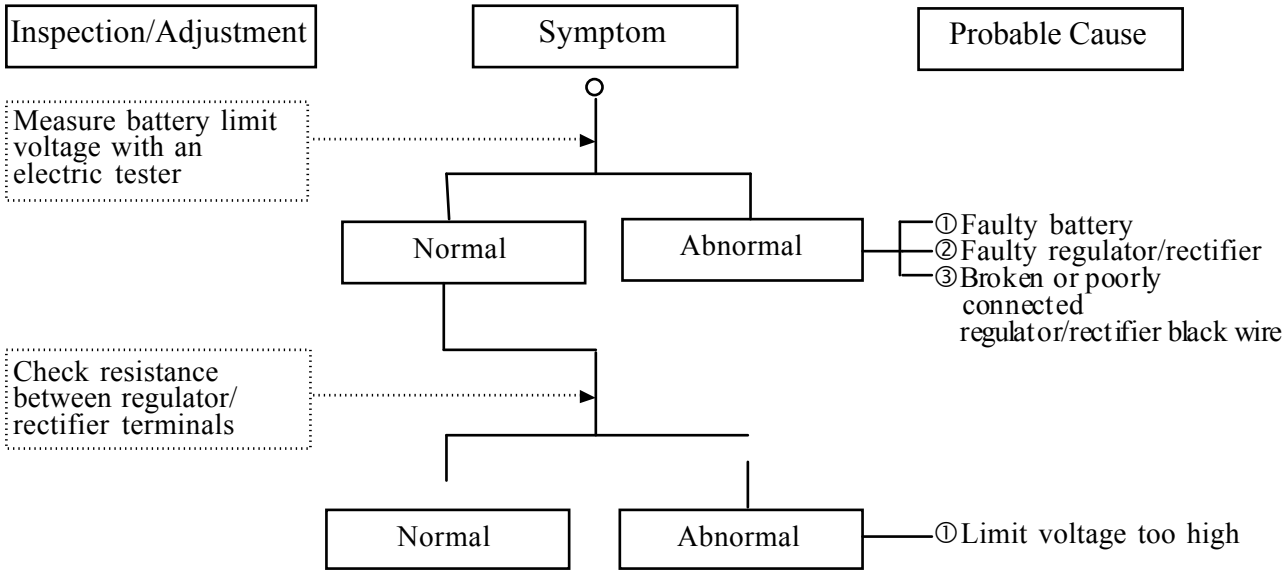


POOR CHARGING (BATTERY OVER DISCHARGING OR OVERCHARGING)

Undercharging

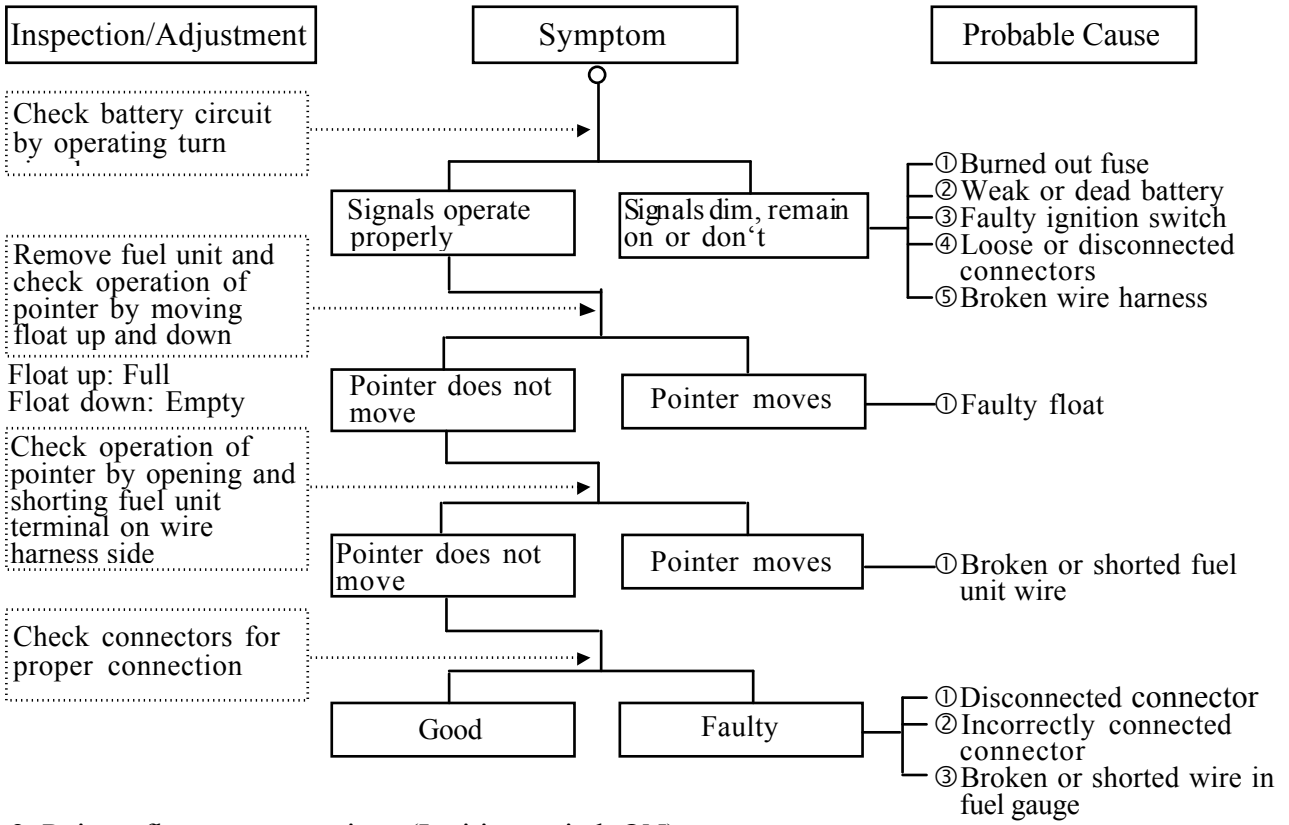


Overcharging

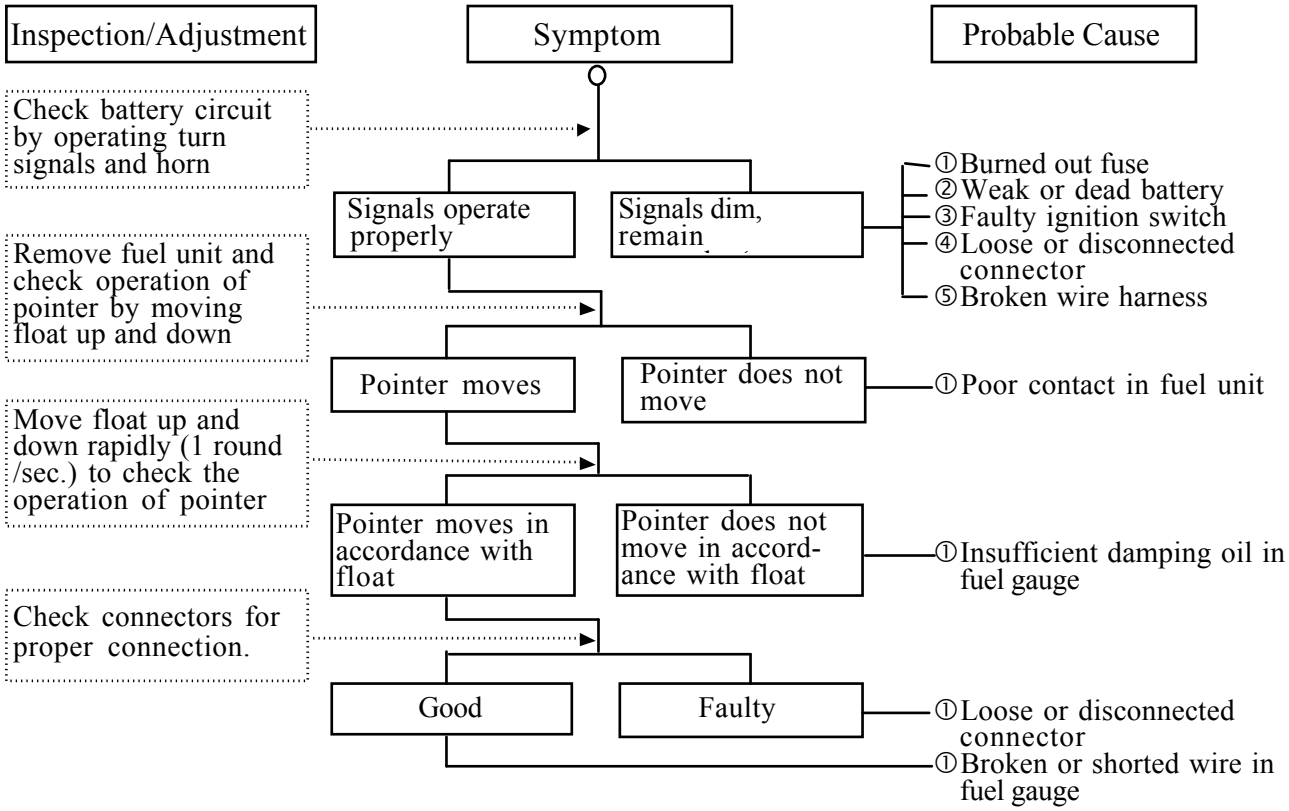


FUEL GAUGE

1. Pointer does not register correctly (Ignition switch ON)



2. Pointer fluctuates or swings (Ignition switch ON)



STEERING HANDLEBAR DOES NOT TRACK STRAIGHT

Symptom	Probable Cause
	(Front and rear tire pressures are normal)
Steering is heavy	①Steering stem nut too tight ②Broken steering steel balls
Front or rear wheel is wobbling	①Excessive wheel bearing play ②Bent rim ③Loose axle nut
Steering handlebar pulls to one side	①Misaligned front and rear wheels ②Bent front fork

POOR SUSPENSION PERFORMANCE

Symptom	Probable Cause
	(Front and rear tire pressures are normal)
Suspension is too soft	①Weak shock spring ②Excessive load ③Shock damper oil leaking
Suspension is too hard	①Bent fork tube or shock rod
Suspension is noisy	①Fork tube and slider binding ②Fork spring and slider binding ③Damaged shock stopper rubber ④Loose steering stem nut

POOR BRAKE PERFORMANCE

Symptom	Probable Cause
Soft brake lever	①Worn brake linings ②Foreign matter on brake linings ③Rough brake drum contacting area
Hard brake lever	①Worn brake linings ②Foreign matter on brake linings ③Rough brake drum contacting area
Hard to brake	①Worn brake linings ②Worn brake cam contacting area on
Poor brake	①Worn brake linings ②Foreign matter on brake linings
Brake squeaks	①Sluggish or elongated brake cables ②Brake shoes improperly contact ③Water and mud in brake system ④Oil or grease on brake linings