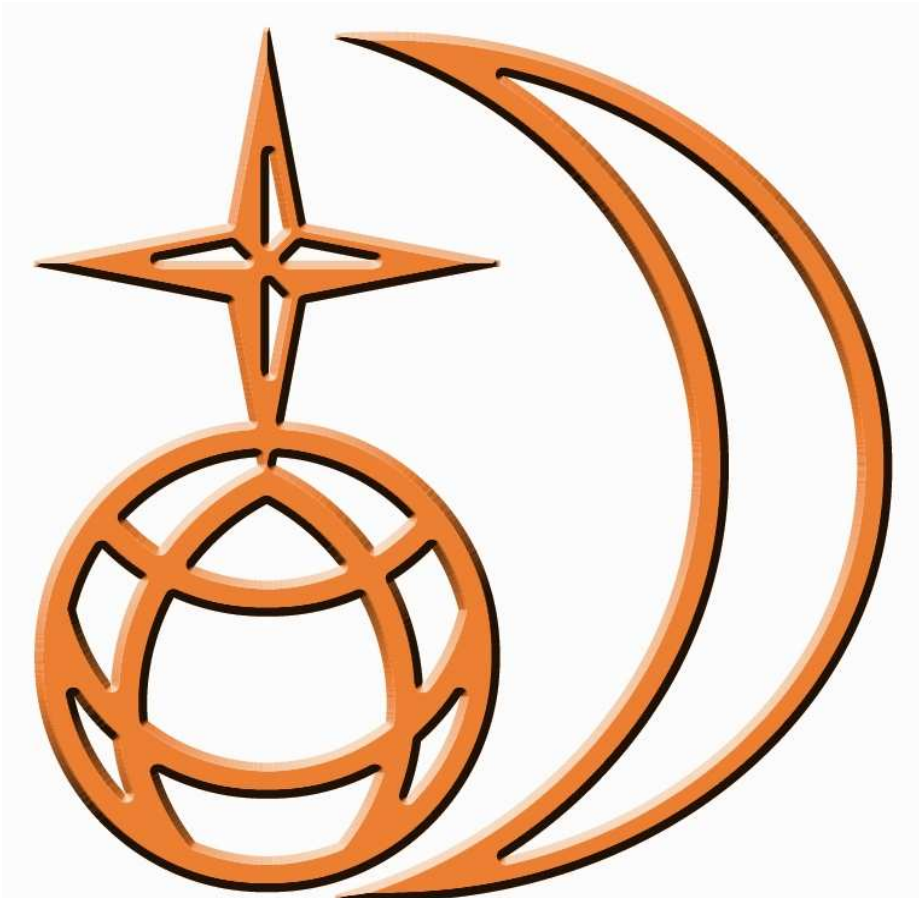


China • Xingyue Group

（Xingyueshen）Brand

XYKD260-1

GO-KART **Repair Manual**

China • Xingyue Group Shanghai Xingyue Power Machinery Co., Ltd

Foreword

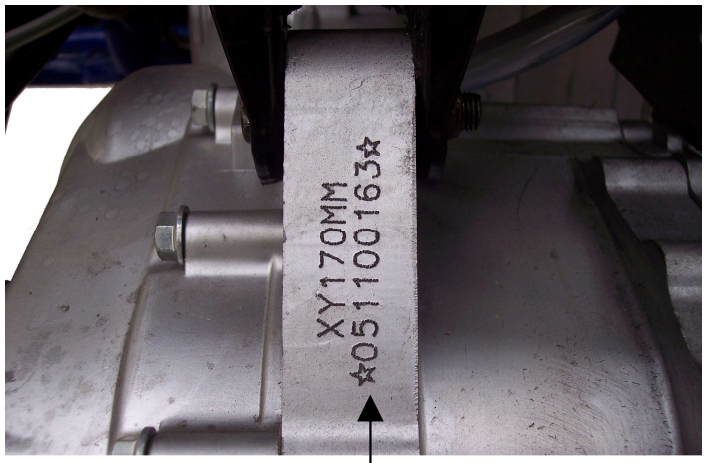
To enable users and repairing personnel of Xingyue products to better understand maintenance, adjustment and repair technologies of XYKD260-1GO-KART under the brand of Xingyue, we have specially prepared this manual, which is intended to be used by users who have purchased XYKD260-3GO-KART and repair personnel for the purpose of technical guidance only.

All information, charts, various data and performance indicators contained in this manual are latest product data. Shanghai Xingyue Power Machinery Co., Ltd reserves the right to modify the manual at any time without notice. Any part of the manual belongs to Shanghai Xingyue Power Machinery Co., Ltd and shall not be reproduced by any institution or individual with prior written consent of the Company.

Table of Contents

One. Machine number imprinting location

Frame number imprinting location



Engine number imprinting location

Two. Main technical parameters

DIMENSIONS

Overall Length ····· 2470mm
Overall Width ····· 1570mm
Overall Height ····· 1535mm
Wheelbase····· 1870mm
Front Track ····· 1345mm
Rear Track ····· 1250mm
Ground Clearance ····· 200mm

ENGINE

Type ·····Water cooled, 4-stoke.
Engine capacity ·····260cc
Bore × Stroke ····· 70mm×66.8mm
Displacement ·····257cm³
Corrected compression ratio ····· 9：1
Max out put power ·····11kw/7000rpm
Max Torque ····· 17Nm/5000N.m/r/min
Starting ·····Electric
Ignition ····· C.D.I
Lubrication ····· Pressure/splash
Transmission ····· Automatic C.V.T system
Spark plug ·····DPR5EA-9（NGK）
Plug gap ····· 0.6-0.8mm
Fuel type ····· RQ90(lead-less)
Lubricate oil ·····SAE15W-40/SF

CAPACITIES

Maximum load ·····Dual seat /200Kg
Fuel tank ·····9.5L
Engine oil ·····1180mL
Starting ····· <10s
Climbing ·····20º-25°
Battery ····· 12V 14Ah
Head Light ·····12V 35W
Tail Light ····· 12V 21W/5W
Fuse ····· 10A
Brake Track ····· 7m@30KM/h
Top speed ·····70KM/h (as per customer requirements or limitations)

CHASSIS

Front, Rear brake ·····Hydraulic disc, left foot control
Front tyre ····· AT21X8-10
Rear tyre ·····AT22X11-10
Front Suspension ····· Independent dual A arm.
Rear Suspension ·····Independent rocker /dual wet oil damping
Restraint System ····· dual 5 point safety belt

Final Drive ····· Shaft drive

TIRE PRESSURE

Front ····· 150kPa
Rear ····· 150kPa

WEIGHT

Net Weight ····· 355 kg
G、W ····· 380 kg

Three. Standard torque value

Number	Parts tightened	XYKD260-1	
		Screw diameter（mm）	Tightening torque（N.m）
1	Cylinder head exhaust pipe fastening nut	8	20-26
2	Plug	10	18-20
3	Front hub and front steering knuckle fastening nut	14	80-100
4	Rear hub and constant speed steering knuckle fastening nut	18	120-140
5	Steering knuckle fastening bolt	8	20-26
6	Steer platen bolt	8	20-26
7	Drag link ball stud and steering knuckle connection arm fastening nut	10	50-60
8	Rear wheel and rear hub fastening nut, front wheel and front hub fastening nut	10	50-60
9	Left and right front wheel lower rocker and frame fastening bolt	10	50-60
10	Brake cylinder, parking brake and front steering knuckle horn connection	8	20-26
11	Drag rod adjustment locking nut	10	30-40
12	Exhaust pipe and engine rear pylon (engine) connection bolt	8	20-26
13	Front shock absorber fastening bolt	10	30-40
14	Rear shock absorber fastening bolt	12	50-60
15	Rear rocker arm and frame connection bolt	16	110-130
16	Engine rear lug and engine rear pylon fastening bolt	10	30-40
17	Engine front lug and engine front pylon connecting bolt	10	30-40
18	Rear brake disc and rear hub fastening bolt	8	30-40
19	Front brake disc and front hub fastening bolt	6	20-26

Four. Lubricant and lubrication drawing

1. Engine part

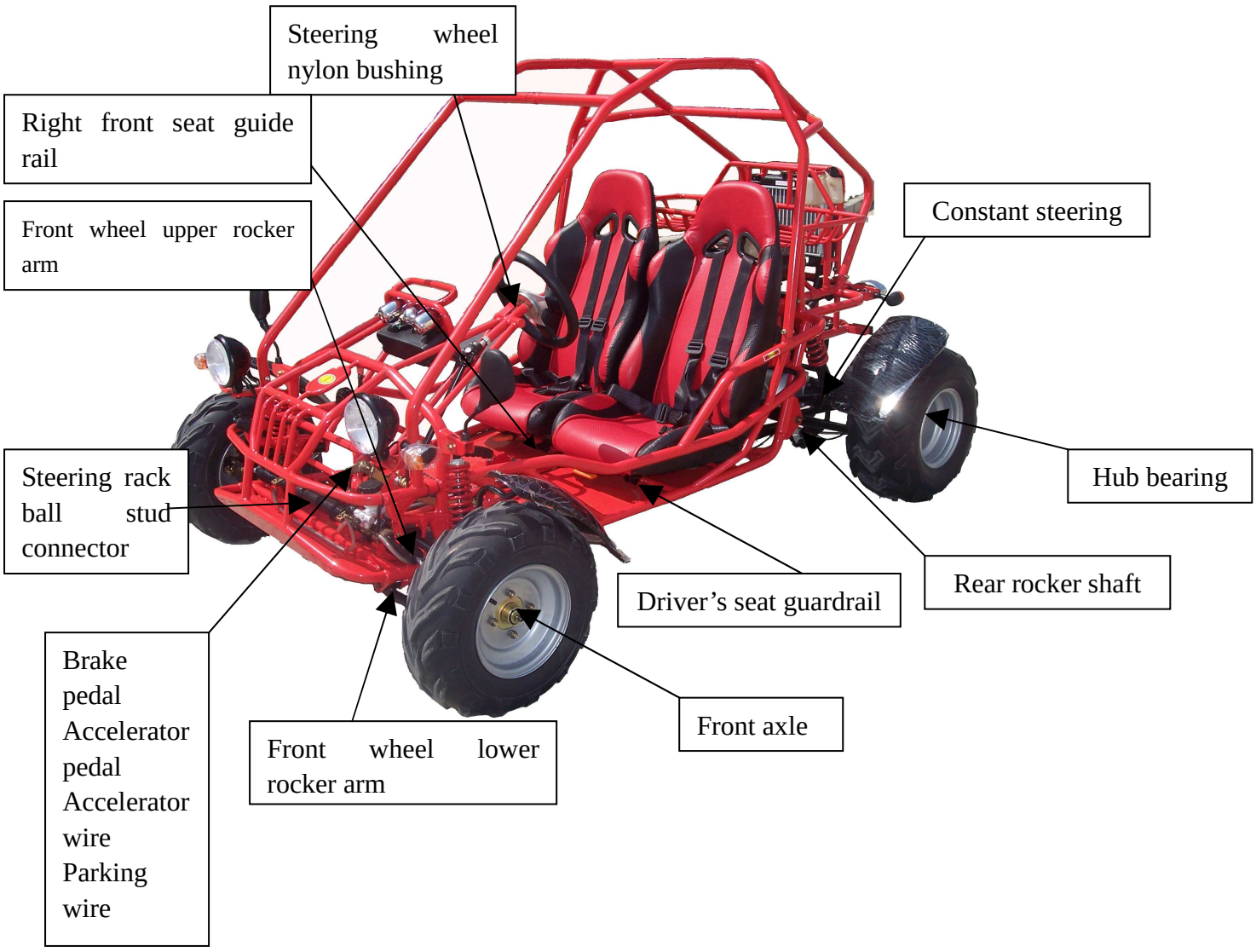
Used where	Description	Remark
Crank case	15W/40SF designated	Full capacity: 1.0L
Gear box	15W/40SF designated	Full capacity:0. 22L
Clutch driven surface and mobile driven surface	Li-based grease ZL-3H（SY 1413）	4.5~5.0g

2. Vehicle body part

Grease the parts shown in the figure below:

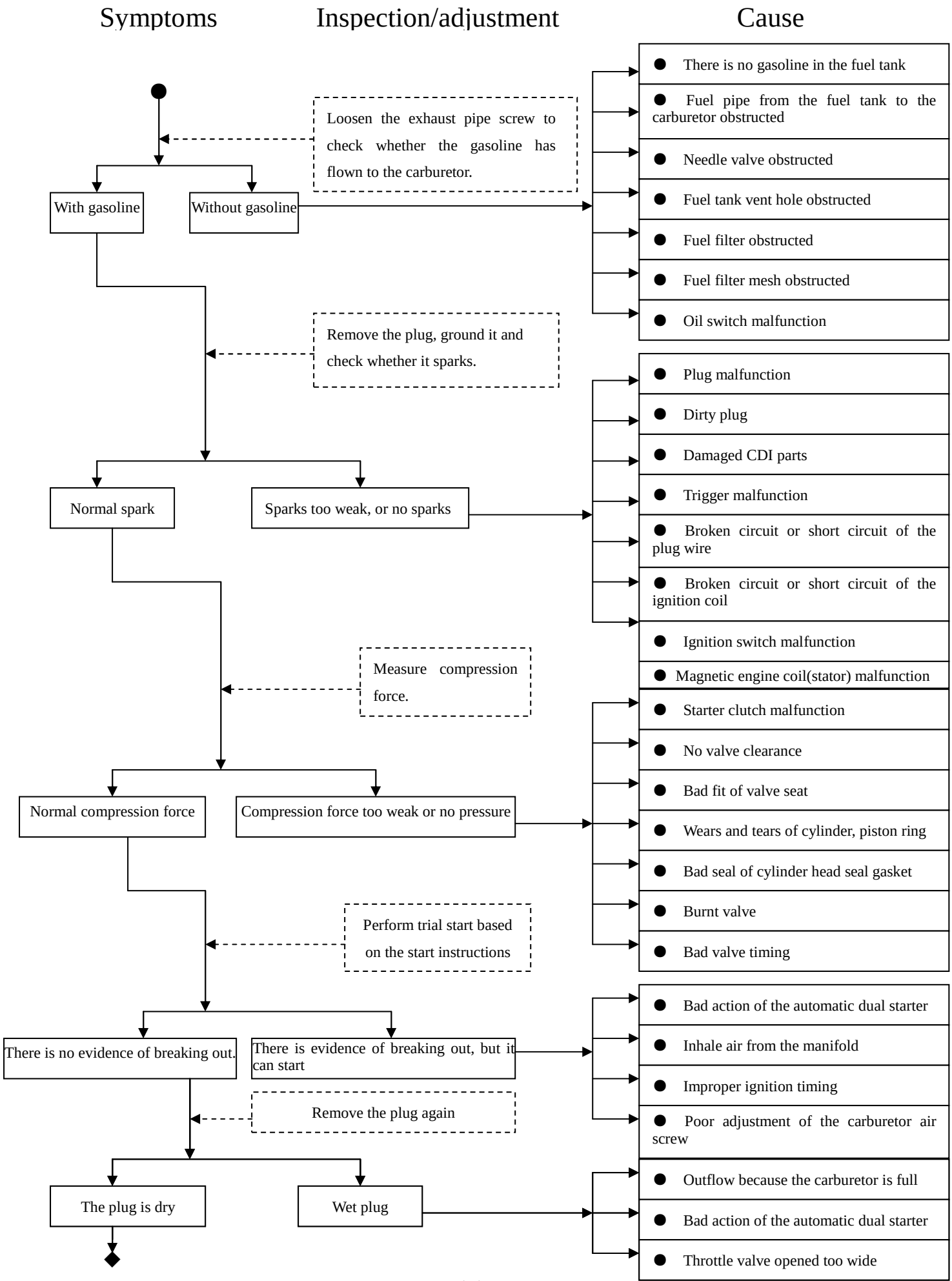
For parts that have no special requirements for grease, please use multi-purpose grease.

Oiling or greasing of other movable parts that are not indicated here may prevent occurrence of abnormal sound and improve durability.

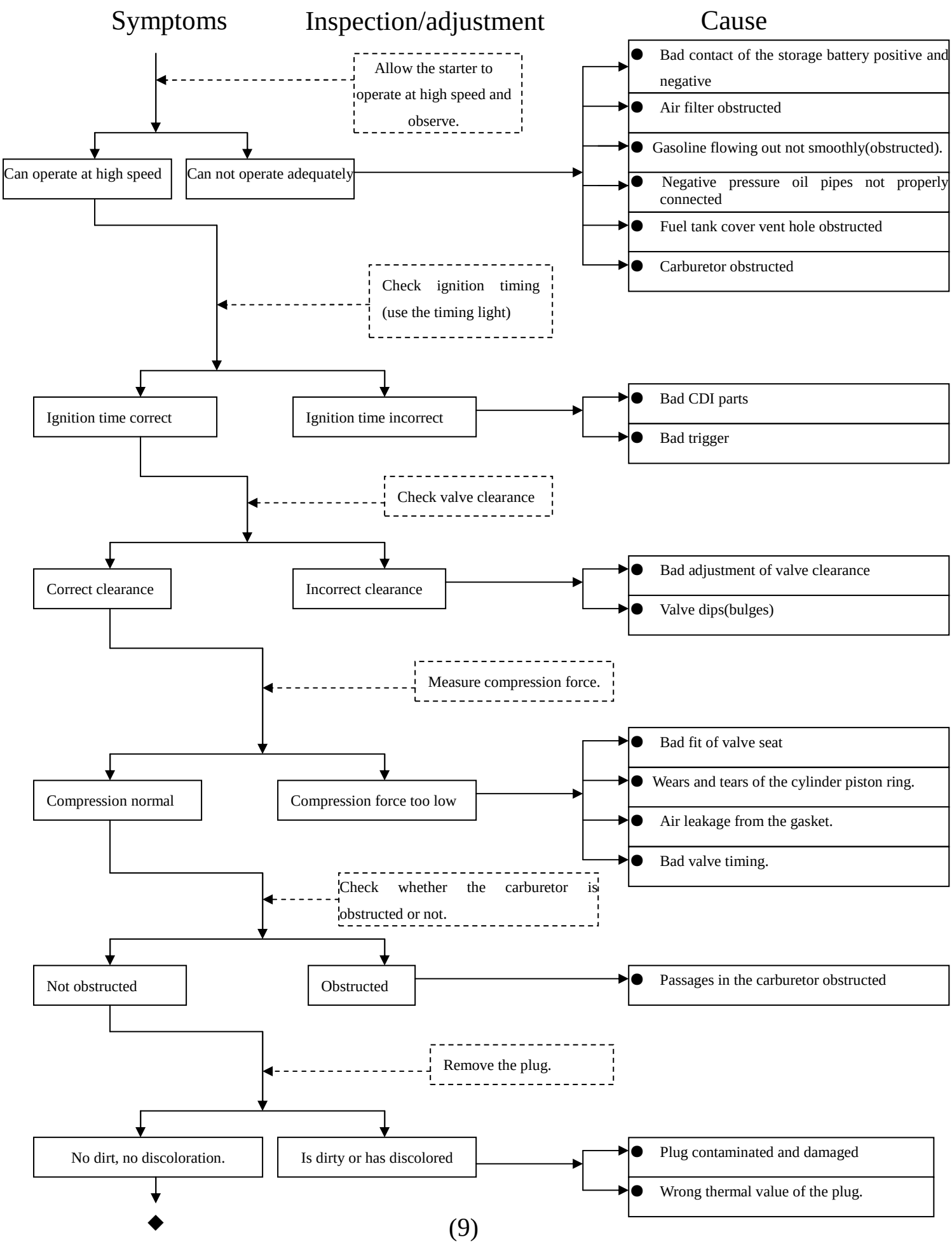


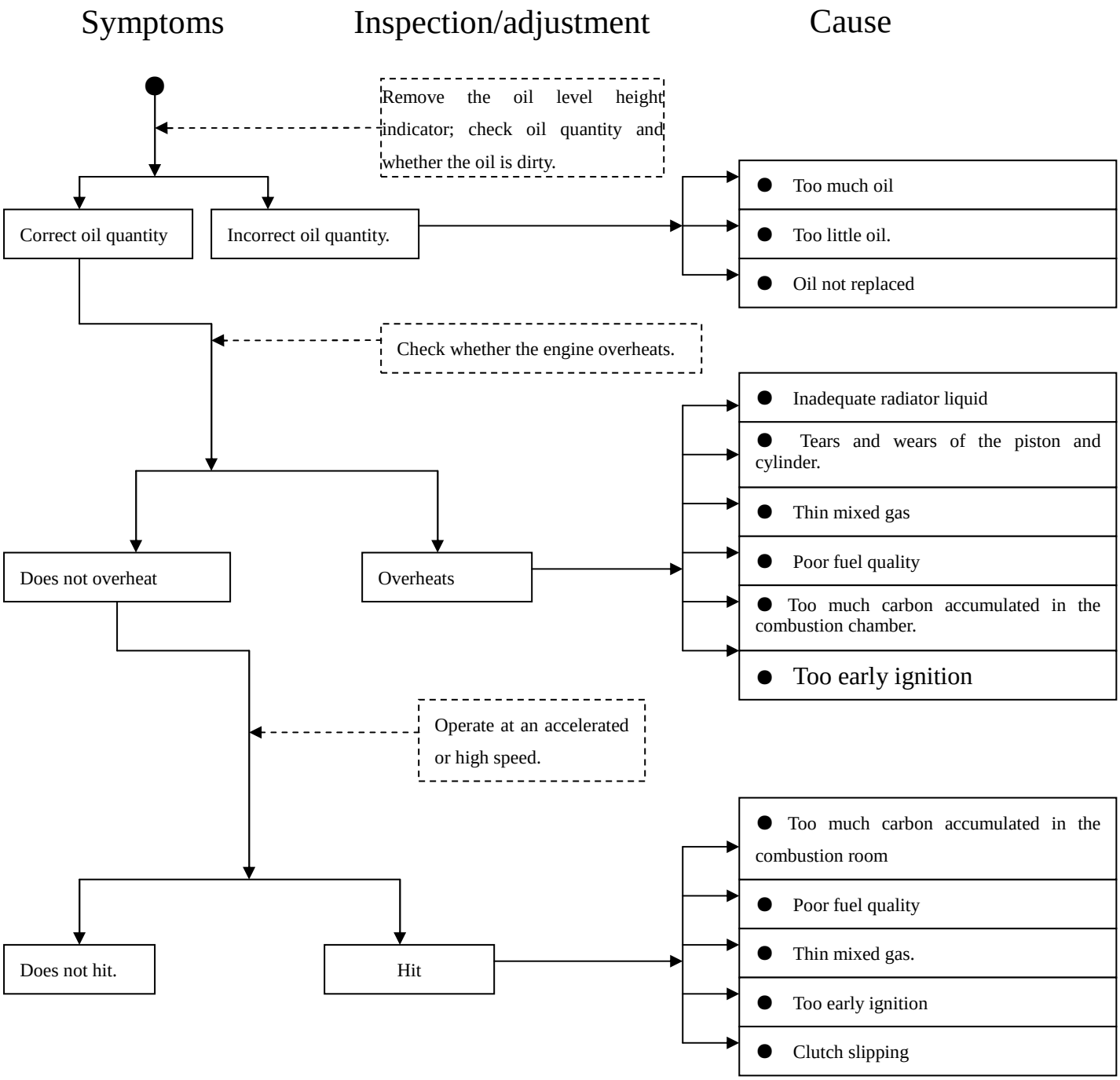
Five. Troubleshooting

1. Unable to start or difficult to start

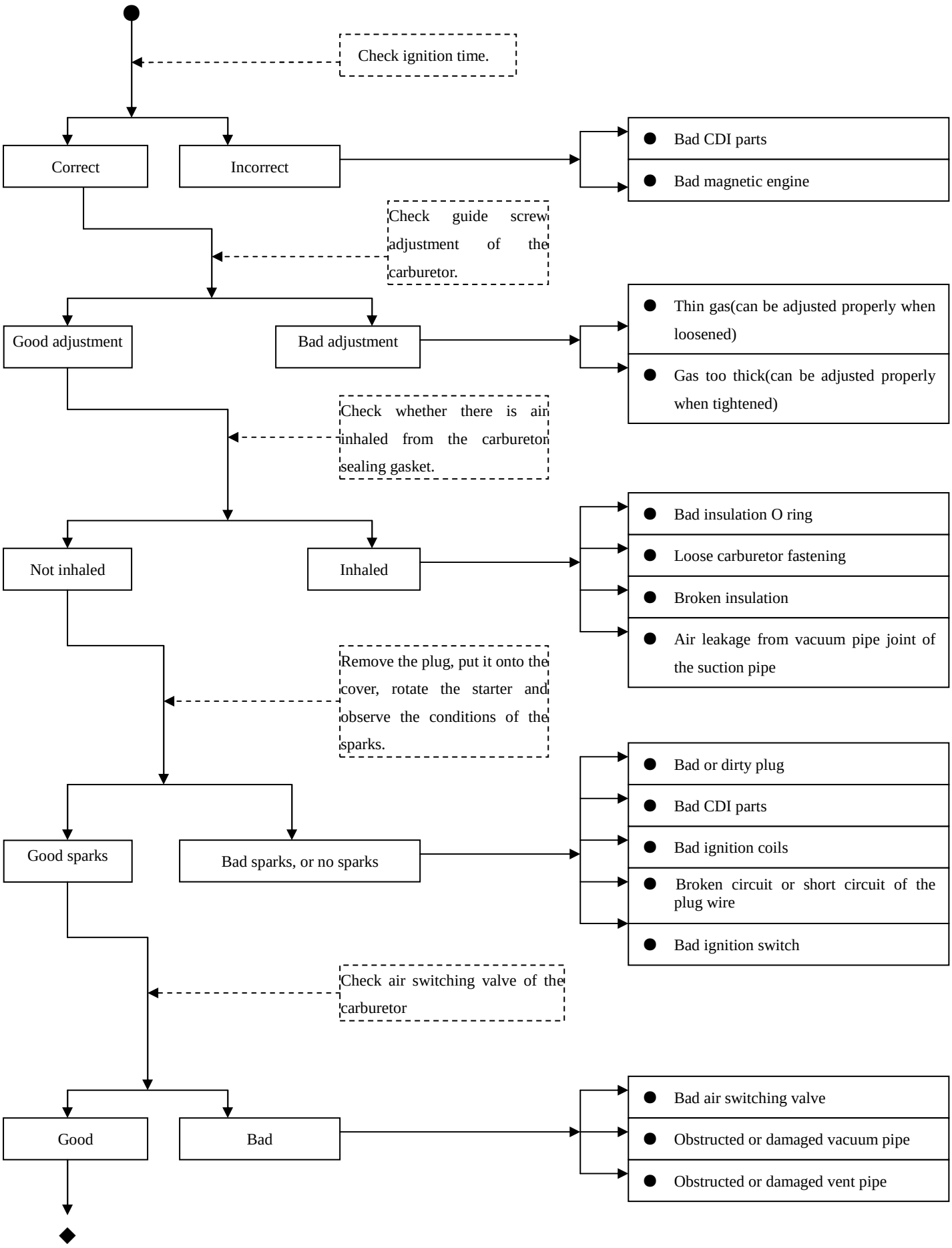


2、Powerless within high speed range and the vehicle speed does not increase.

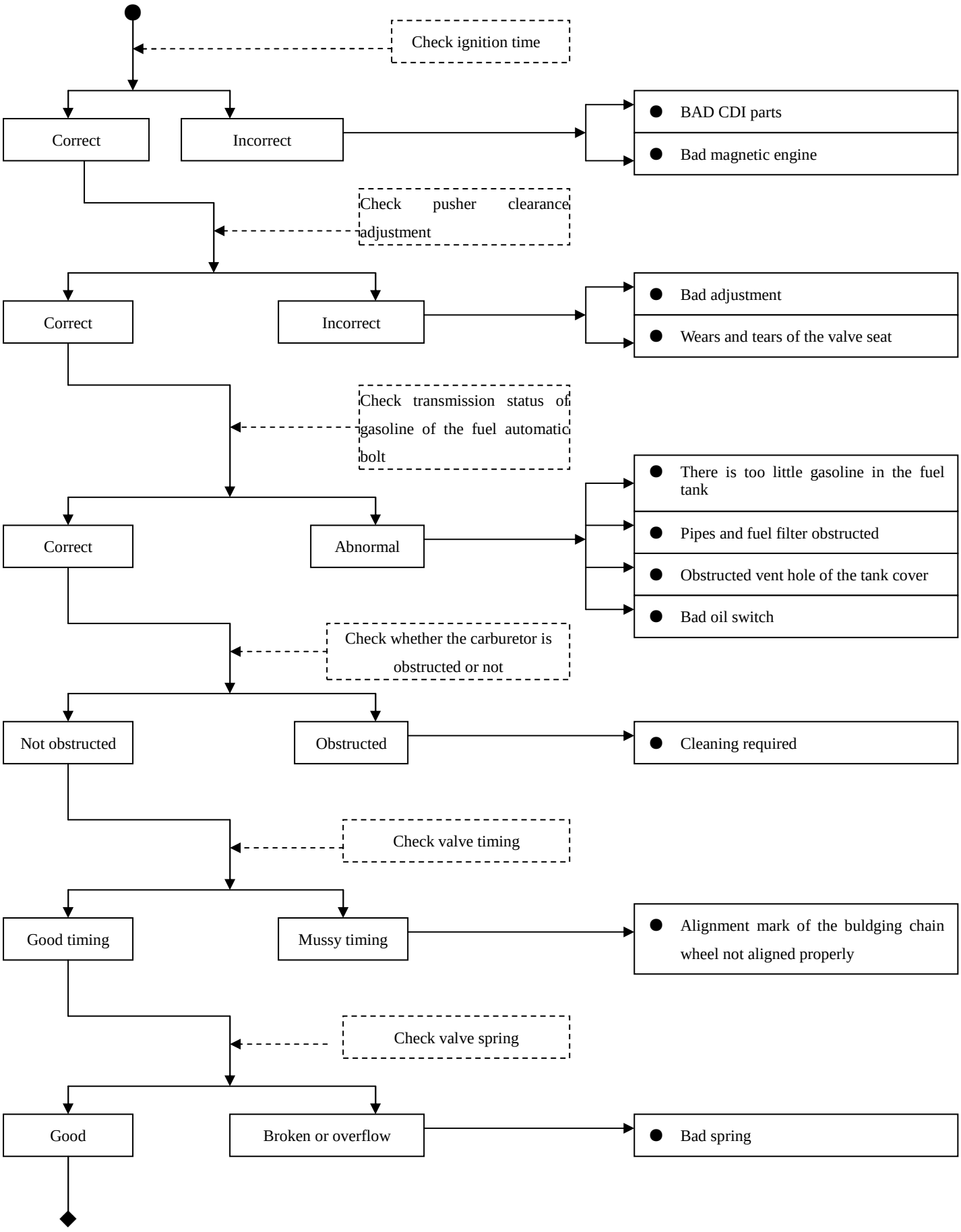



Symptoms
Inspection/adjustment
Cause
Remove the oil level height indicator; check oil quantity and whether the oil is dirty.
Correct oil quantity
Incorrect oil quantity.
Too much oil
Too little oil.
Oil not replaced
Check whether the engine overheats.
Does not overheat
Overheats
Inadequate radiator liquid
Tears and wears of the piston and cylinder.
Thin mixed gas
Poor fuel quality
Too much carbon accumulated in the combustion chamber.
Too early ignition
Operate at an accelerated or high speed.
Does not hit.
Hit
Too much carbon accumulated in the combustion room
Poor fuel quality
Thin mixed gas.
Too early ignition
Clutch slipping

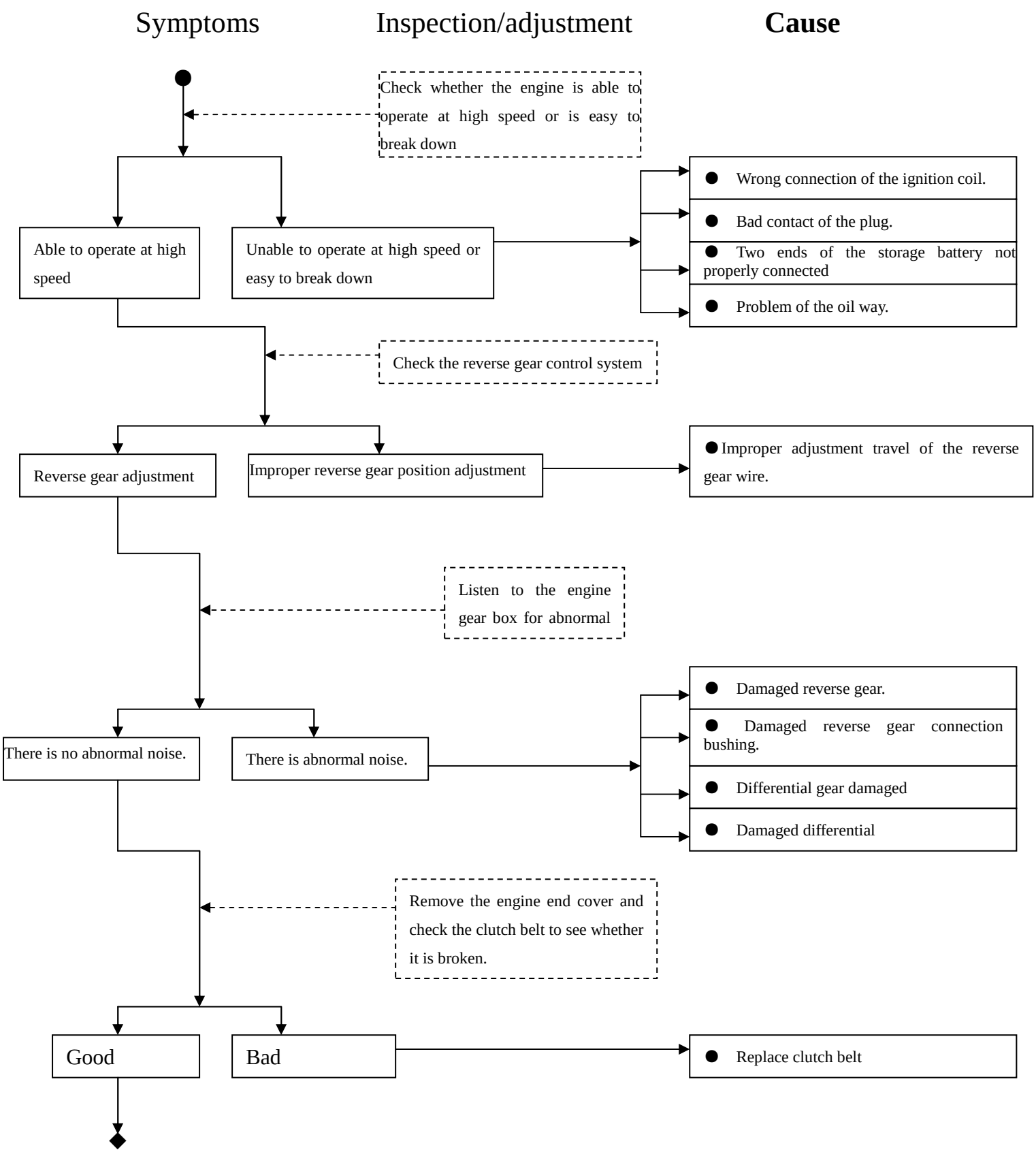
3、Abormal operation of engine speed(mostly low speed and idle speed)



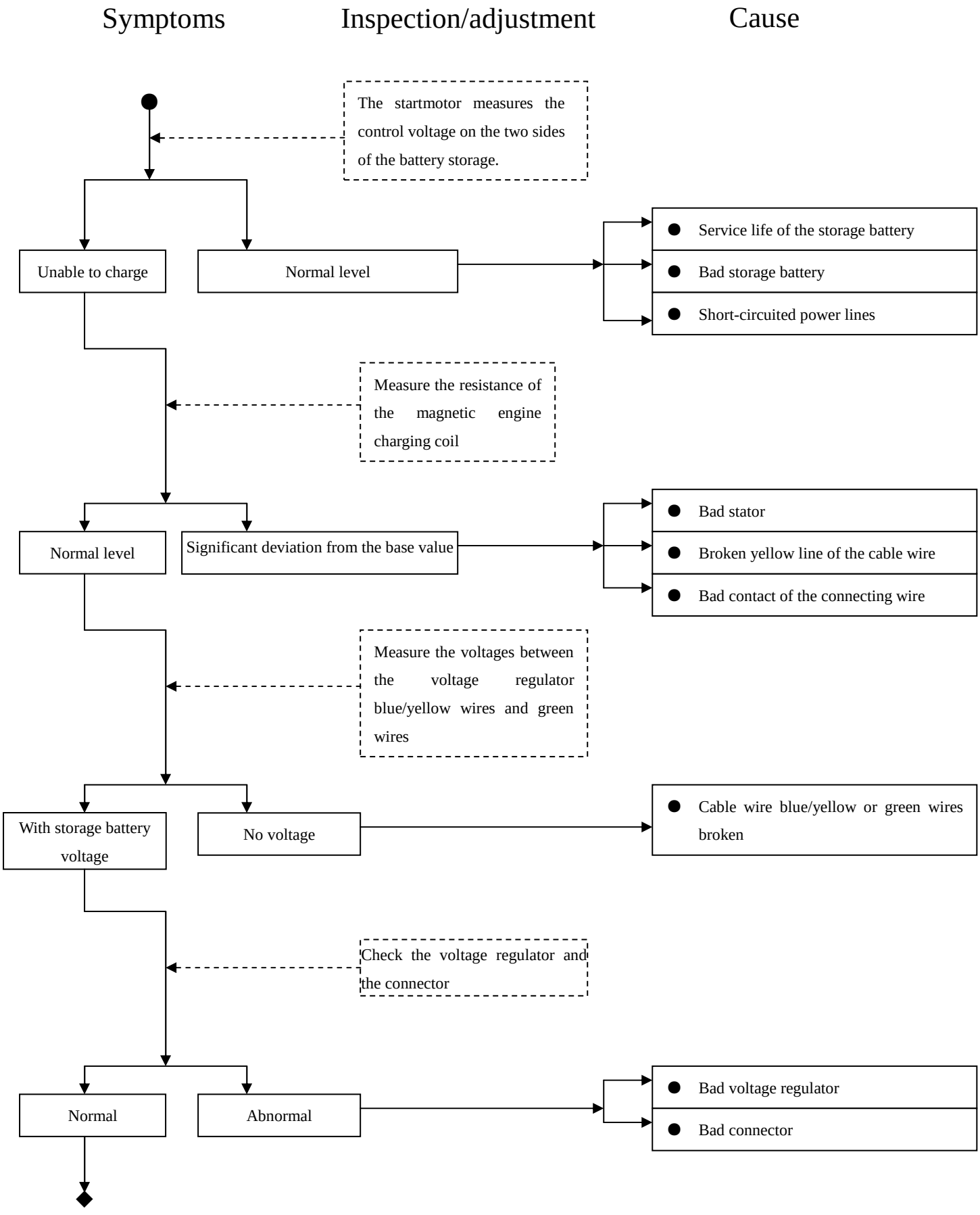
4、Abormal operation of engine speed(mostly high speed)



5、The vehicle speed can increase, but the vehicle can not start.



6、Poor charging



Six. Inspection. Adjustment

1. Regular inspection and services

The repair & maintenance interval shown in the table below is based on normal driving Environments. In environments of excessive dusts, more frequent maintenance is required.

Item	The first week	Monthly	Quarterly	Yearly
Tyre pressure brake performance, screw tightness	I	I		
Air filter		C	C	I
Carburetor	I	A		C
Plug			A、C	
Timing chain tension		A	A	
Valve clearance		A、C	C	
Brake system		A		
Brake liquid			I	
4-stroke lubricant		I	R	
Chassis		C、I	L	
Fuel switch /fuel tank				C
Battery	I		I	
Gear oil		R		

The meanings of the symbols in the table are as follows:

A: Adjust C: Clean I: Inspect, clean or replace when necessary L: Lubricate R: Replace

The vehicles shall be maintained regularly at the specified repair time. Prior to maintenance, the vehicle shall be thoroughly cleaned.

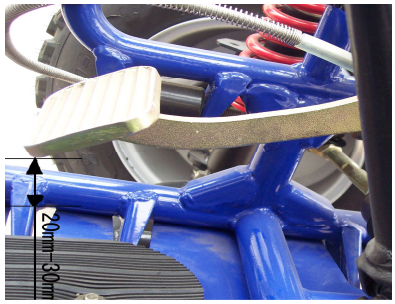
It is preferable that the vehicle be maintained and repaired at the specialized repair shop. If a user has special tools, spare parts for repairing and repairing capabilities, he/she may repair by him/herself.

2. Adjustment of specific items

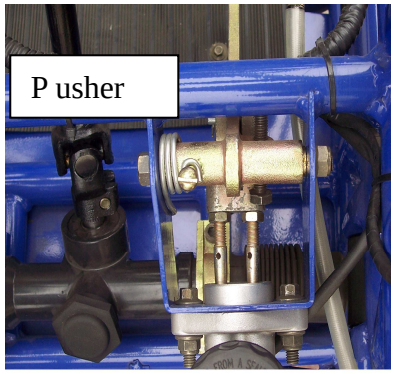
1) Brake system

Check the free travel of the brake pedal.

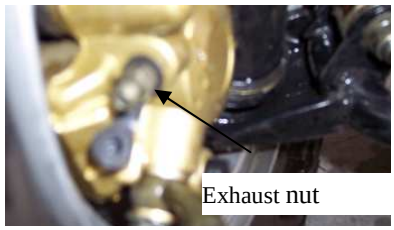
Free travel: 20~30mm



When the free travel is outside the specified range, the requirement may be met by adjusting the pusher on the pusher installation base.

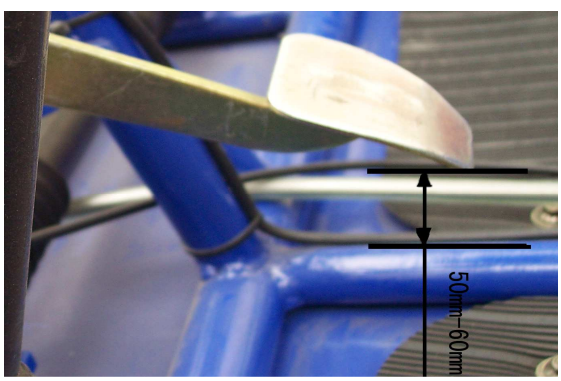


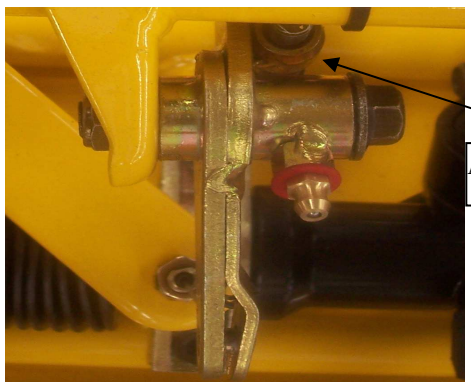
When air enters the brake cylinder piston or the brake oil pipe, resulting in brake failure, it is necessary to discharge the air in the brake in the following manner: first step on the brake pedal with foot, loosen the exhaust screw of the brake cylinder, open the brake cylinder oil cup, screw up the exhaust screw until there is no brake liquid and air outflowing, release the accelerator pedal and repeat the procedures until there is no air outflowing.



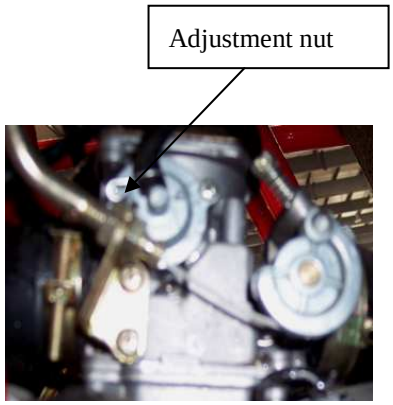
Note: when discharging the air, make sure there is sufficient

2）. Accelerator operation system

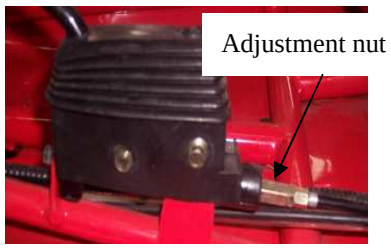




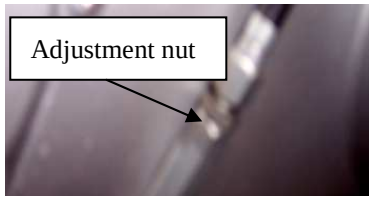
Check the free travel of the accelerator pedal : 30~40mm.
When the free travel is outside the specified range, the requirement may be met by adjusting the adjustment nut or checking whether the accelerator pedal stopper is correct or not.

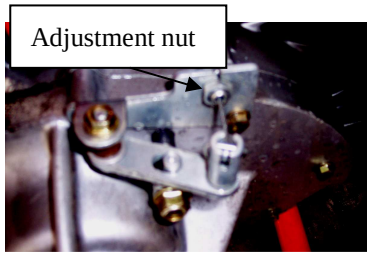


3）. Reverse gear operation system



Since the reverse gear wire may deform or the reverse gear wire travel is not properly adjusted after the vehicle is driven for a period of time, which may result in absence of reverse gear or the forward gear, it is necessary to adjust the adjustment nut on the reverse gear wire.

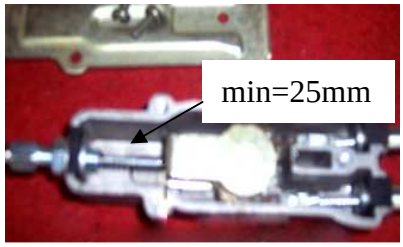


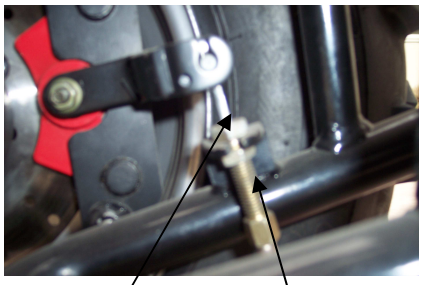


4）. Parking operation system

When the vehicle is found to be unable to park on a slope of a degree ≤18°， for the safety of your vehicle and you, please inspect the parking system immediately.

First loosen the adjustment nut at the front end of the parking wire to leave the wire in a fully relaxed sate, and then properly adjust the parking brake wire adjustment nut on the real wheel to ensure that the minimum wire travel in the junction box is 25mm and the minimum exposed travel of the parking brake is 15mm. After adjustment, release the parking brake and there shall be no resistance generated by the parking brake





5）. Wheel

Check the air pressure of the tyre with air pressure gauge

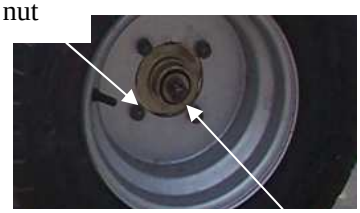
Note:air pressure of the tyre shall be checked after the

Specified tyre specification and air pressure.

	Tyre specification	Air pressure
Front wheel	AT21X8-10	150kPa
Rear wheel	AT22X11-10	150kPa

Fully metal hexagon flange surface locking nut

Check whether the Front and rear axle fastening nut and front and rear fastening nut have become loose; if yes, tighten them to the specified torque.



Front and rear axle fastening nut

6）. Shock absorbing system

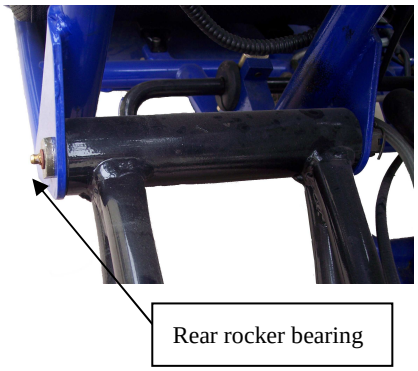
Step on the head of the vehicle, compress the front shock absorbing system up and down multiple times to check its action and check the front shock absorber for oil leakage and the parts for damages, loosening and abnormal noise.

Step on the tail of the vehicle, compress the rear shock absorbing system up and down multiple times to check its action and check the rear shock absorber for oil leakage and the parts for damages, loosening and abnormal noise.

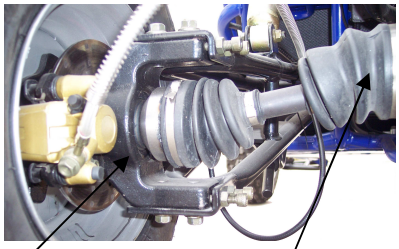
7）. Rear drive system

Check operating status of the constant steering knuckle: whether there is sticking or the bushing is broken, etc.

Whether upward and downward movement of the rear rocker arm is normal: whether the rear rocker arm is not tightened, lubricant is applied, the bearing is damaged; if yes, adjust or replace them.



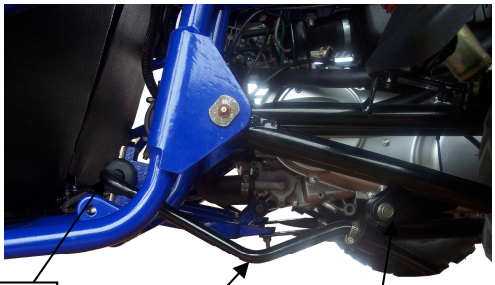
Whether the horn matches the hub properly. No significant sway is permitted and the hub bearing shall be replaced if there is any significant sway.



8）. Stabilizer bar

Check whether the stabilizer bar upper bushing and lower bushing installed on the stabilizer bar are broken or have come off.

Operating surface of the bushing in contact with the stabilizer bar must be lubricated with lubricants frequently



9）. Electrical system

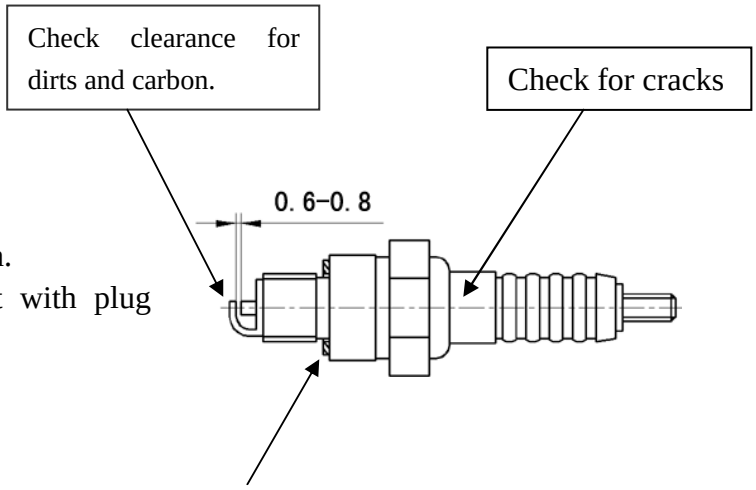
Status of plug

Check the status of the plug.

Remove the plug.

Check the plug for damages, dirts and carbon.

In case of any dirts and carbon, clean it with plug cleaner or steel wire brush.



Plug

Clearance of the plug shall be adjusted to be between 0.6mm～0.8mm。

Caution: when installing the plug, first hold it tight and then screw it up with the plug socket.

Ignition timing

Note: since the CDI system is utilized, there is no need to adjust the igniting time. In case of mussy ignition time, it is necessary to check the ignition system.

Remove the timing hood

Confirm ignition timing with timing light.

At idle speed（1500±100rpm）, it is normal if it matches the alignment mark “F” well

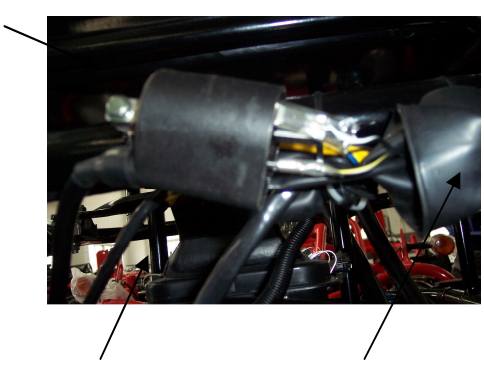
Function of the ignition advance angle system.

When the function of ignition advance angle system is identical to that of inspection ignition timing, install the timing light.

Then, accelerate the speed of the engine. If at the speed of 7500～8000rpm, the alignment mark matches the preset mark well, the function of the advance angle system is normal

Replacement

Remove the ignition coil bushing.
Remove the ignition coil connector.
Remove the plug cap.
Remove the bolt and then the ignition coil.
Upon installation, follow the order opposite to removal.



Inspection

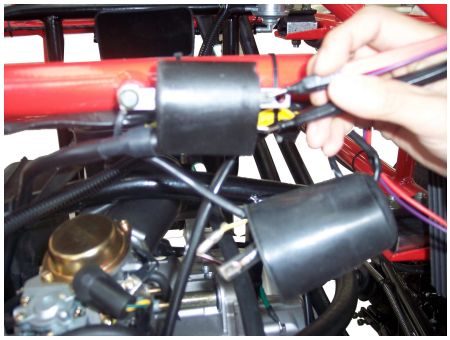
Note: the inspection can only serve as a rough reference. Performance relating to ignition coils shall be checked with CDI detector and be judged.

Resistance inspection

Remove the ignition coil bushing.

Remove the ignition coil side connector and measure the resistance between the ends of the measuring coils.

Standard value: 0.1Ω-0.2Ω(20° C)

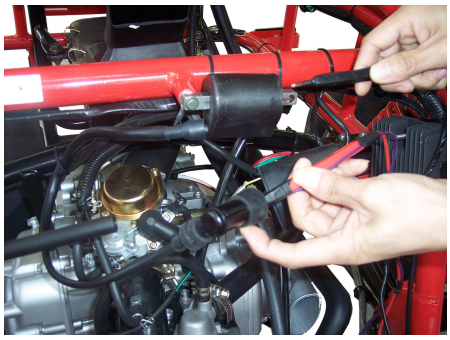


Remove the cap from the plug, and measure the resistance of the secondary coil with the plug cap assembled.

Standard value: 7.3～11KΩ（20° C）

If there is wide difference between the resistance value and the standard value, it is required to remove the plug cap from the high voltage wire of the ignition coil and the measure the resistance at the secondary coil side.

Standard value:3.6～4.6KΩ（20° C）



Storage battery

Installation and removal

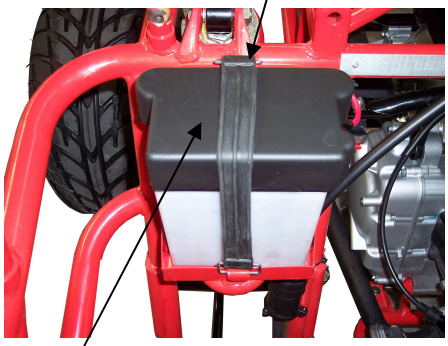
Remove the storage battery fastening belt.

Remove the storage battery cap.

First remove the negative pole(－) cable and the remove positive pole(+) cable.

Remove the storage battery.

Upon installation, follow the order opposite to removal.

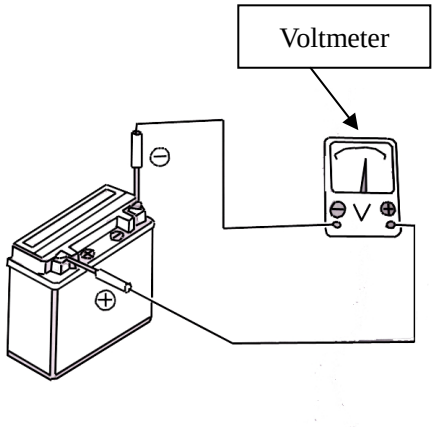


Inspection of charging status (open voltage)

Measure the voltage of the storage battery.

In case of adequate charging: 13.0-13.2V

In case of inadequate charging: below 12.3V

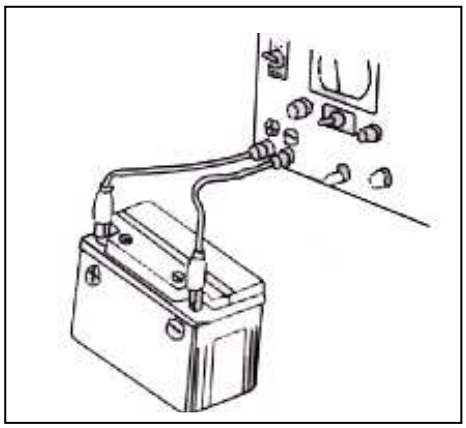


Note: when checking the charging status, the digital voltmeter must be used. digital voltmeter:07411—0020000.

Charging

Remove the storage battery.

Connection method: connect the positive pole(+) of the charger to the positive pole(+) of the storage battery, and the negative pole(－) of the charger to the negative pole(－) of the storage battery(—).



Caution: there shall be no smoking or flames around the storage battery.

Switching on and off of the charging must be performed through the switch of the charger. If switching on or off at the joint, there may be the danger of sparks and explosion.

Caution: charging must be done based on current and time indicated on the storage battery. Unless under emergency situations, do not performed rapid charging of the storage batterv.

Note: To measure voltage after charging, it must be done 30 minutes later.

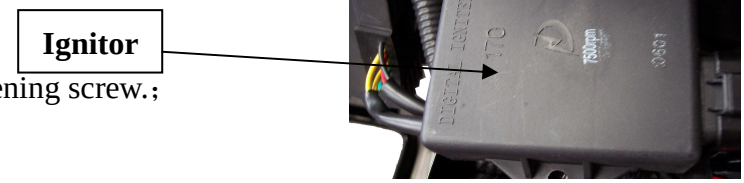
Charging current	Standard	1.4A
Charging current	Standard	13 hours
Open voltage upon completion of charging		More than12.5V

Ignitor

Inspection

Remove the electrical appliance cap fastening screw.;

Remove the electrical appliance cap

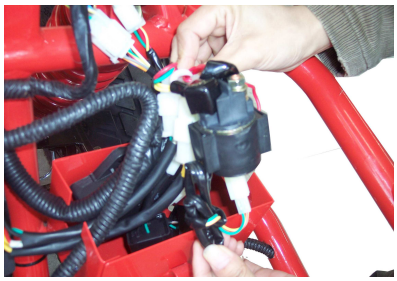


Item		Measuring parts	Standard value
Ignition switch		Black /white—green	The ignition switch continues when off.
Magnetic engine coil		Black/red—green	50—350Ω（20℃）
Trigger		Green /white—blue/yellow	50—170Ω（20℃）
Ignition coil	Primary coil	Black /yellow—green	3.6—4.6kΩ
	Secondary coil plug cap	Black/yellow—plug cap	7.3—11kΩ

If the above checks are satisfactory, it is necessary to check the igniter with igniter detector.

Detector Check the ignitor.

Start relay



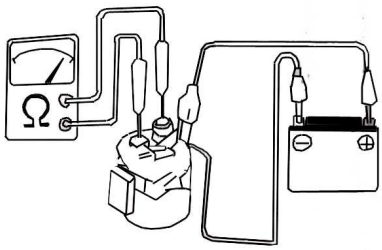
Remove the storage battery fastening belt

Remove the electrical appliance cap.

Start the ignition switch; if the sound of click is heard, the primary coil is normal.

Remove the storage battery negative pole(—) cable from the storage battery. Remove the connection of the storage battery positive pole (+) cable and the start cable from the start relay.

Remove the start relay connector and the remove the start electrical appliance. Connect the positive pole(+) of the 12V storage battery to the yellow/red end of the start relay and its negative pole(—) to the green end.

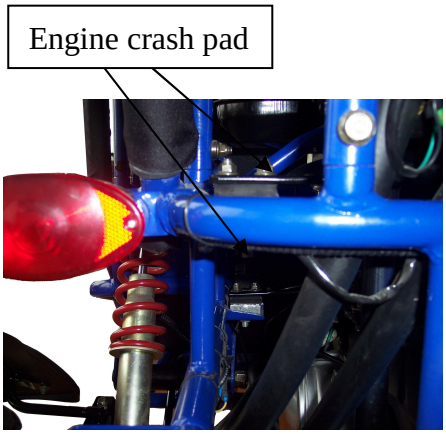


Caution: care shall be taken to avoid short-circuit

Make sure that the ends of the start relay cable can be on only when the storage battery is connected at the end.

If it has been kept in a on state, or there is no connection even if the storage battery is connected, replace the start relay.

10）. Engine buffer fastening structure



The engine hoisting structure of this vehicle is connected entirely using buffer rubber pad to reduce vibration of the entire vehicle. Once significant vibration is identified by the user during use of the vehicle, it is necessary to check the buffering connections of the engine hoisting. The buffer pads shall be free of damages and shall be replaced in case of damage.

11）Engine

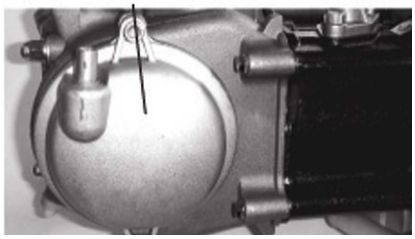
Inlet valve

Adjustment of valve clearance.
Chain timing adjustment
Remove the inlet valve cover.
Remove the exhaust valve cover.

Exhaust valve

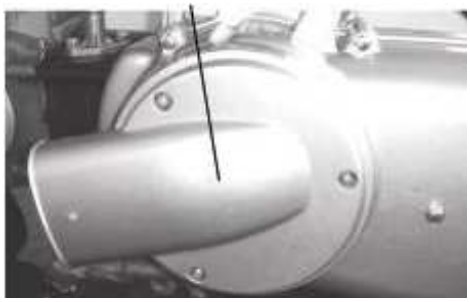
Cylinder head left cover

Remove the cylinder left cover part



Left crank shaft cover air inlet

Remove the left cover air inlet



Remove the timing plug.

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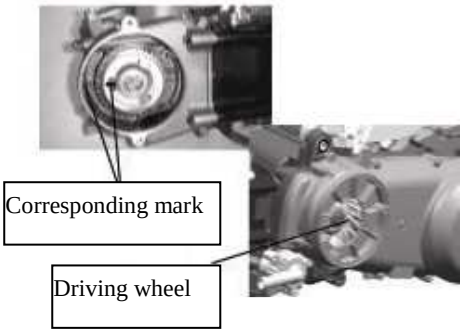
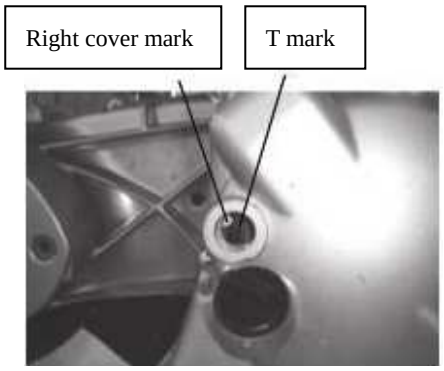
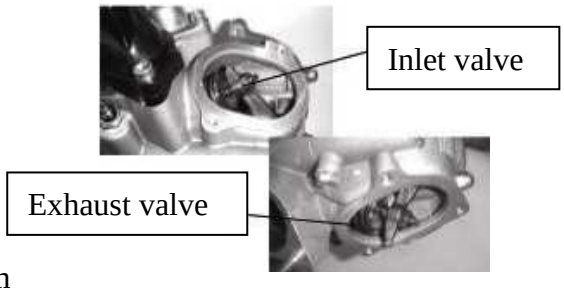
Timing plug

Rotate the driving wheel clockwise so that the the mark of the chain wheel corresponds to the cylinder head mark.



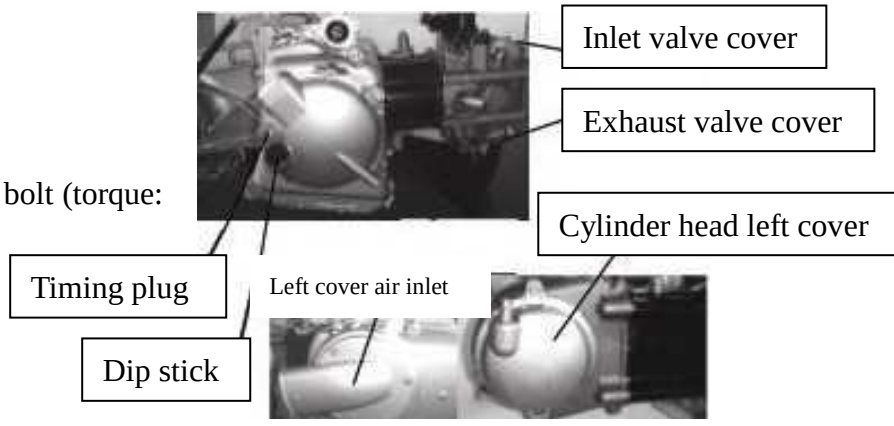
Check whether the time mark ‘T” corresponds to the right cover mark.





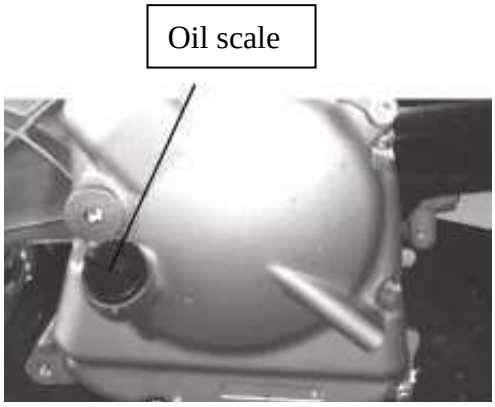
Adjustment valve of the inlet and exhaust valve: 0.05-0.08mm

Assemble the removed parts in turn: M6 bolt (torque: 8-12N.m) and M5 bolt (torque: 6-8N.m).



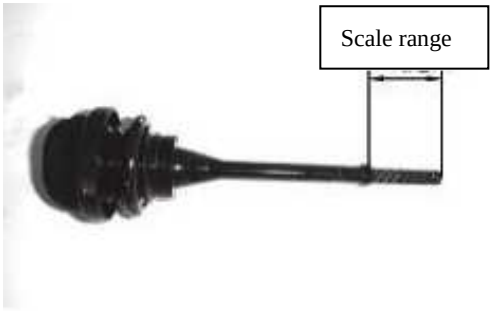
Inspection of crank box oil

Remove the dip stick.



Note: when checking the oil level, the engine shall be placed flat. Warm up the engine for 2-3 minutes, stop engine operation and then check the oil quantity 2—3 minutes.

Wipe the dipstick position with clean tissue, insert it into the crank box to at least the lowest scale (keep the vehicle in the relative horizontal position), replace the oil (1.2L) of oil grade of 15W/40SF.

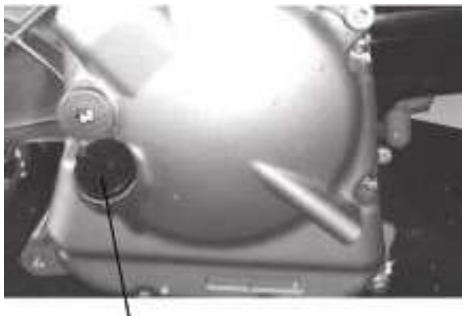


Remove the oil inlet plug

Keep the vehicle in the relative horizontal position

Keep the oil quantity at the horizontal position of oil drain hole (keep the vehicle in the relative horizontal position), replace with 0.8 L of oil whose grade is 85W-140.

Install the oil scale.



Dip stick

Install the oil inlet plug
Torque: 12-16N.m

Oil inlet plug

Carburetor idle speed adjustment

Note: Idle speed adjustment shall be made when the engine is warmed up. Adjustment after carburetor inspection shall be made after adjustment of the airscrew.

Carburetor idle speed screw

After warming up the engine, switch off the brake, connect the speed meter

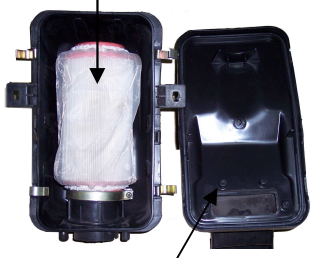
adjust the idle speed screw of the Carburetor, adjust the speed to the specified idle speed: 1700±100rpm. If the idle speed is not stable, it is necessary to adjust the airscrew

Replacement of filter core of the air filter cover.

Remove the air filter cover, remove the filter core and check it for dirts or damages.

If there is only dust but not damages, the user can continue to use the filter core by removing dusts on it.

Filter core of the air filter



Air filter cover

The ideal cleaning time is: every month or 500km.

If it is very dirty or any damage is identified, replace it.

The ideal replacing time is: every year or 5000km。

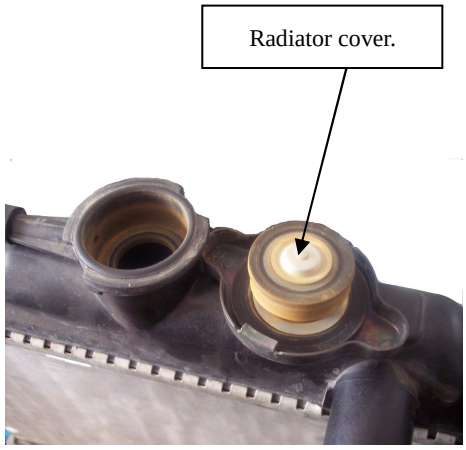
If the vehicle travels in extreme conditions, replace the filter as soon as possible.

Caution: since the filter paper of the filter core contains oil (viscous); it cannot clean with air.

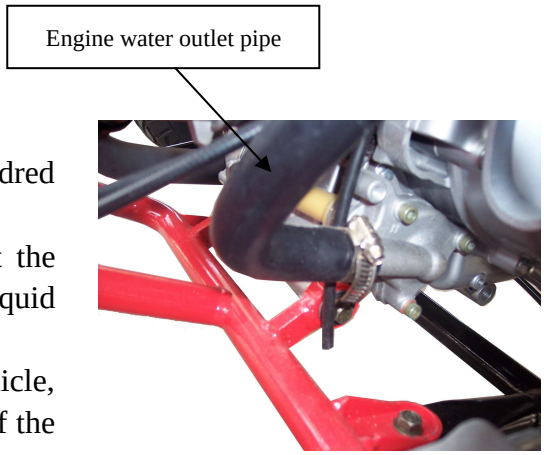
12) Cooling system

Replacement of radiator liquid

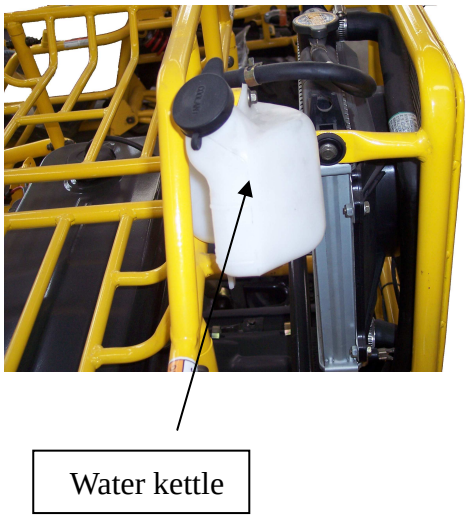
Caution: the radiator cover can be removed only when it can be certain that the radiator liquid has been adequately cooled.



Remove the radiator cover and remove the engine water outlet pipe to discharge all liquid in the radiator.
Assemble the engine water outlet pipe and tighten the clamp.
Inject the radiator liquid until the the liquid reaches the edge of the inject inlet.



Exhaust in accordance with the following instructions:
①Start the vehicle and drive it at high speed 2 hundred meters on flat roads.
②Stop the vehicle to confirm whether the bubble at the injection inlet disappears and the water level of the liquid surface is stable.
③After shutting down the starting system of the vehicle, inject radiator liquid until the liquid reaches the edge of the injection inlet.
④Assemble the radiator cover.
⑤Make sure that water level in the water kettle is not lower than the scale performance check

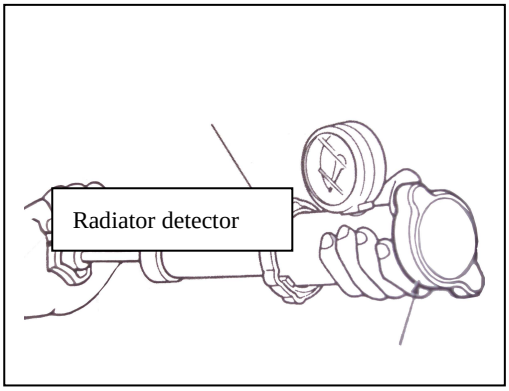


Check of radiator cover.

Caution: the radiator cover can be removed only when it can be certain that the radiator liquid has been adequately cooled

Assemble the cover on the radiator detector; increase the pressure of the pump. It is ok if the pressure can be maintained with the normal pressure range for 6 seconds.

Note: first apply water to the sealing surface before assembling the cover to the detector.



Radiator cover valve pressure: **73.5-103Kpa**

Radiator pressurizing detection

Install the radiator detector on the radiator, increase the pressure of the pump and confirm whether the pressure can be maintained with the specified pressure range for 6 seconds.

Specified range: **73.5-103Kpa**

Radiator cover

Caution: do not increase the pressure to be higher than the specified pressure as this may cause damages to the radiator and the connections.

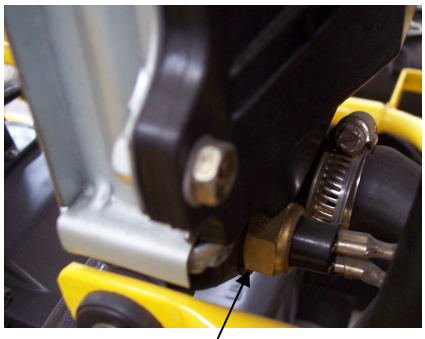
Temperature control switch

Removal of the temperature control switch.

Drain of the radiator liquid.

Remove the connections on the temperature control switch.

Remove the temperature control switch



Temperature control switch

Note: when the temperature sensor is around 88 ° C, the fan may be turned on automatically. If the fan is not turned on when the temperature is reached, check it in a timely manner