

OWNER'S MANUAL

**READ THIS MANUAL CAREFULLY.
IT CONTAINS IMPORTANT
SAFETY INFORMATION**

Buggy—400cc



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FOREWORD

Thanks for choosing the **Buggy 400 (EEC-approved for on-road use)**. Prior to operating your **Buggy**, please read through this Owner's Manual carefully as it contains important safety and maintenance information. Failure to follow the warnings contained in this manual could lead to personal injuries or damage to the machine.

Be sure to follow the recommended maintenance schedule and service your vehicle accordingly. Preventive maintenance is extremely important to the longevity of your **Buggy**.

Beginners should drive this **Buggy** in a large open area to practice handling of it, and wear protective gear at all time when driving.

We hope you will have a pleasant experience with our products and thanks again for choosing **Buggy**.

A FEW WORDS ABOUT SAFETY

In order to keep everyone safe, you must take responsibility for the safe operation of your **Buggy**.

To help you make informed decisions about safety, we have provided the operating procedures and other information on the labels and in this manual. This information alerts you to the potential hazards that could hurt you or others.

It isn't practical or possible to warn you against all the hazards associated with operating or maintaining your **Buggy**, so you must use your own good judgement.

You will find important safety information in a variety of forms, including:

- ◆ **Safety Labels** ----- on the vehicle;
- ◆ **Safety Messages** ----- preceded by a safety alert symbol  and one of the two signal words “**WARNING**” or “**CAUTION**”

THE MEANING OF THESE SIGNAL WORDS:



----- Physical harm may result from the failure to follow the instructions described within the **WARNING** labels.



-----Damage to your **Buggy** and possible subsequent personal injuries or death could result from the failure to take proper precautions described within the **CAUTION** labels.

- ◆ **Safety Headings** ----- such as Important Safety Reminders or Important Safety Precautions.
- ◆ **Safety Sections** ----- such as **Buggy** Safety.
- ◆ **Instructions** ----- how to use your **Buggy** correctly and safely.

This entire manual is filled with important safety information---**please read it carefully.**

IMPORTANT SAFETY INFORMATION

Your **Buggy** will provide you with many years of service and pleasure providing you take responsibility for your own safety and understand the challenges you'll meet while driving. There is much that you can do to protect yourself when driving your **Buggy**. You'll find many helpful recommendations throughout this manual. The following are a few of the most important ones.

Follow the Age Recommendation

It is strongly recommended that no one under age of **16** be permitted to drive this **Buggy**.

Always Wear a Helmet

Facts have proven that helmets can significantly reduce the quantity and severity of head injuries. When you drive your **Buggy**, always wear an approved motorcycle helmet. We also recommend that you wear approved goggles, sturdy boots, durable gloves and other protective gear.

Take Time to Learn & Practice

Even if you have driven other buggies, you still should take time to become familiar with how this **Buggy** works. Practice in a safe area until you have built your skills and become accustomed to its size and weight.

Be Alert to Hazards

The terrain can present a variety of challenges when you drive. Continually “read” the terrain for unexpected turns, drop-offs, rocks, ruts and any other hazards. Always keep your speed low enough to allow time for seeing and reacting to hazards.

Drive within Your Limits

Pushing limits is another major cause of **Buggy** accidents. Never drive beyond your personal abilities or faster than conditions warrant. Remember that alcohol drugs, fatigue and inattention can significantly reduce your ability and judgement.

Don't Drink and Drive

Alcohol and driving never mix. Even one drink can reduce your ability to responding to changing conditions, and every additional drink can lengthen and worsen your reaction time.

Keeping away from Moving Parts

You should never place your hands or any other parts of your body near any moving parts of your **Buggy**. Failure to adhere to this warning will cause physical harm to your body.

Avoid Skidding or Sliding

The terrain surface can be a major factor affecting turns. Skidding or sliding a turn is more likely to occur on slippery surfaces such as snow, ice, mud and loose gravel. If you skid or slide on ice, you may lose all directional controls. To avoid skidding or sliding on slippery terrain surfaces, you should keep your speed low and drive carefully.

Load Limit

The load limit on the rear rack is 15 kg or 33 lbs.

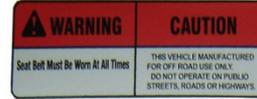
Rear Rack



Buggy 400 Owner's Manual

SAFETY LABELS

The labels should be considered permanent parts of your **Buggy**. If a label comes off or becomes difficult to read, please contact your dealer for replacements.



ARE YOU READY TO DRIVE?

Before each drive, you need to make sure that you and your **Buggy** are both prepared. This section discusses how to evaluate your driving readiness, what items you should check on your vehicle, and how to adjust your vehicle for your comfort, convenience and safety.

Before driving your **Buggy** for the first time, we urge you to:

- Carefully read this owner's manual and the labels on your vehicle;
- Make sure that you understand all the safety messages;
- Learn how to operate all the controls on your vehicle;

Before each drive, we urge you to be sure that:

- You feel well and you are in good physical and mental condition;
- You are wearing an approved motorcycle helmet (with a chin strap tightened securely), goggles and other protective gear;
- You don't have any alcohol or drugs in your system;
- You have a driver's license.

Protective clothing

For your safety, we strongly recommend that you always wear an approved motorcycle helmet, approved goggles, sturdy boots, durable gloves, long trousers and long-sleeved shirt or jacket whenever you drive. Although complete protection is not possible, wearing proper protective clothing can reduce the chances of injuries when you drive.

The following suggestion will help you choose the proper driving gear.

1. Helmets and Eye Protection

Your helmet is the most important driving gear because it offers the best protection against head injuries.

Your helmet should fit your head comfortably and securely. An open-face helmet offers some protection, but a full-face helmet offers more. Regardless of the style, always wear an approved helmet.

Always wear a face shield or a pair of goggles to protect your eyes and vision.

2. Additional Driving Gear

In addition to a helmet and eye protection, we also recommend:

- Sturdy motorcycle boots to help protect your feet, ankles and lower legs;
- Durable motorcycle gloves to help protect your hands;
- Trousers with knee and hip pads, a driving jersey with padded elbows, and a chest and shoulder protector.

 **WARNING**

- Operating this **BUGGY** without wearing an approved motorcycle helmet, eye protection, or any protective clothing increases your chances of head and/or eye injuries, and even death in the event of severe accidents.
- Always wear an approved motorcycle helmet, eye protection, a long-sleeved shirt or jacket, gloves, boots and long trousers.

Driver Training

Developing your driving skills is an on-going process. Even if you have driven other Buggies, you still need take time to become familiar with how this BUGGY works. To build your skills, practice driving this **Buggy** in a safe area. Don't drive on rough terrain until you've become accustomed to all the controls, and feel comfortable with its size and weight.

 **WARNING**

- Operating this **BUGGY** without proper instruction will increase the risk of accidents that could lead to serious injuries, or even death.

Age Recommendation

It is strongly recommended that no one under the age of 17 be permitted to operate this **Buggy**.

 **WARNING**

- A child driving a **BUGGY** that is not recommended for his/her age could lose control resulting in severe injury or death.
- Adult supervision for under 16 year olds

No Alcohol or Drugs

Even a small amount of alcohol can impair your ability to operate your Buggy safely. Likewise, drugs, even prescribed by your doctor, can be dangerous when you're operating your vehicle. Consult your doctor for assurance that it is safe to operate your vehicle after taking any kind of medication.

 **WARNING**

- Operating this **BUGGY** after consuming alcohol or drugs can seriously affect your judgement, cause you to react more slowly, affect your balance and perception, and could result in serious injuries or death.
- Never consume alcohol or drugs before or while operating your **BUGGY**.

IS YOUR VEHICLE READY TO DRIVE?

Before each drive, it is important to inspect your **Buggy**, and make sure that any problems are corrected. A pre-drive inspection is a must, not only for safety, but also because a breakdown, or even a flat tire, can be a major inconvenience.

If your vehicle has overturned or has been involved in a collision, do not drive the buggy until your dealer has made a thorough inspection. There may be damage or other problems you cannot see.

WARNING

- **Improperly maintaining your **Buggy** or failing to correct a problem before driving may cause an accident in which you could be seriously injured or even killed.**
- **Always perform a pre-drive inspection before each drive, and correct any problems.**
- **Failure to perform this pre-drive inspection may cause serious damage to your **Buggy** or personal injury.**

Pre-Drive Inspection

Please check the following items before getting in your **Buggy**:

- *Engine Oil*: Check the level and add oil if needed; check for any leaks.
- *Fuel*: Check the level and add fuel if needed, and make sure the fuel-filler cap is securely fastened; check for any leaks.
- *Tires*: Use a gauge to check the air pressure, adjust if needed; look for signs of damage, wear or abrasion.
- *Nuts, Bolts & fasteners*: Check the wheels and all the accessible parts to see if the nuts, bolts, and fasteners are correctly tightened; use a wrench to tighten them if needed.
- *Underbody & Exhaust System*: Check for any dirt, vegetation or any other debris that could cause fire hazards or interfere with the proper operation of your vehicle, and remove them.
- *Air Cleaner Housing Drain Tube*: Drain any fluids that have collected in the drain tube; if necessary, clean the tube and check the air cleaner housing.

- *Leaks & Loose Parts:* Walk around your vehicle and look for anything that appears unusual, such as a leak or a loose cable; repair or replace the concerned parts if needed.
- *Lights:* Make sure the headlights, taillights, number plate lights, brake lights and indicators etc. work properly.
- *Throttle:* Check the free play and adjust the throttle if needed; press the throttle to make sure it moves smoothly without sticking, and release it to make sure it snaps back automatically.
- *Brakes:* Press the brake pedal several times to ensure correct operation, check the brake pedal free play; make sure there is no brake fluid leakage.
- *Engine Stop Button:* When the engine is running, press and holds the Engine Stop Button for two seconds to ensure the engine stops.
- *Steering Wheel:* Turn the steering wheel to make sure it moves smoothly without sticking.
- *Cables:* Check the cable housings for wear and check the fittings for looseness; replace or tighten the concerned parts if needed.
- *Horn:* Make sure that the horn works properly.
- *Cooling System:* Check the level and add coolant if needed; check for any leaks.

SAFE DRIVING PRECAUTIONS

Keep Your Hands and Feet on the Controls

Always keep both your hands on the steering wheel, and both your feet on the foot controls when driving. It is important to maintain control of your vehicle. Removing your hands or feet from the controls can reduce your ability to control the vehicle.

WARNING

- **Removing your hands from the steering wheel, or your feet from the foot controls during operation will reduce your ability to control the Buggy, which may cause an accident in which you could be seriously injured or even killed.**
- **During operation, always keep your both hands on the steering wheel, and your both feet on the foot controls of your vehicle.**

Controlling Speed

Driving at excessively high speed increases the risk of accident. When choosing a proper speed, you need to consider the capability of your **Buggy**, terrain, visibility and other operating conditions, plus your own skills and ability.

 **WARNING**

- Operating your **Buggy** at excessively high speed increases your risk of losing control, which can result in an accident in which you could be seriously injured or even killed.
- Always drive at a speed which is correct for your vehicle, terrain, visibility and other operating conditions, plus your own skills and ability

Be Careful on Unfamiliar or Rough Terrain

Before driving in a new area, always check the terrain thoroughly. Don't drive fast on unfamiliar terrain or when the visibility is limited.

 **WARNING**

- When driving your **Buggy** on unfamiliar terrain, failure to be especially careful could cause your vehicle to go out of control or overturn.
- When operating your Buggy on unfamiliar terrain, always drive slowly, always be especially careful, and always be alert to changing terrain conditions.

Never drive past the limit of visibility. Maintain a safe distance between your vehicle and other vehicles. Always exercise caution and use extra care on rough, slippery and loose terrain.

 **WARNING**

- Failure to use extra care when operating on excessively rough, slippery or loose terrain could cause loss of traction or vehicle control, which could cause your vehicle to go out of control or overturn.
- Don't operate on excessively rough, slippery or loose terrain until you've learned and practiced the skills necessary to control your **Buggy** on such terrain.
- Always be especially cautious on these kinds of terrain.

Don't Perform Stunts

You should always operate your **Buggy** in a safe and reasonable manner. When driving, always keep all four wheels on the ground.

 **WARNING**

- Attempting wheelies, jumps, and any other stunts increases the chances of accidents, including an overturn.
- Never attempt stunts, such as wheelies or jumps.

OPERATION

Operation / Controls

Don't attempt to start or operate the engine until you've become completely familiar with the location and use of each control that is necessary to operate your **Buggy**. You must know how to stop your vehicle before starting and driving.

Throttle

The right foot pedal is the throttle that controls your vehicle speed. As the engine speed increases the clutch automatically engages and moves the vehicle forward. To reduce speed, allow the throttle to return to the idle position.

WARNING

- **Before starting the engine, check the throttle assembly to ensure that when you push the pedal all the way forward, the throttle assembly is working smoothly, and when you release the pedal, the throttle assembly returns to idle. Don't operate if the pedal or throttle linkage fails to return to the idle position.**
- **If you're unable to correct the problem through lubrication, adjustment or replacement of worn parts, please contact your dealer for assistance.**

Brake

The brake is located on the left & operates the front and rear brakes simultaneously which slows or stops the vehicle.

Control Panel

On the control panel, there are three instruments and five switches.

Instruments:

- **Ignition Switch** Pull firmly up on the park brake lever with your hand until the level tight. Set shift selector in neutral. Insert the key into key-switch, turn the key clockwise, and release the key when the engine starts. (Warning: Don't crank starter more than 5 seconds at one time)

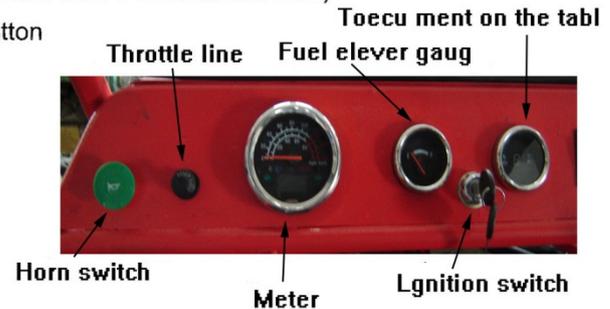
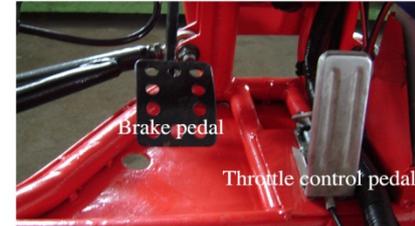
- **Horn Switch** control the horn. Press the horn button down and hold, the horn buzz.

- **Meter** Indicates the vehicle speed, lights level etc.

- **Throttle line** Control the air intake

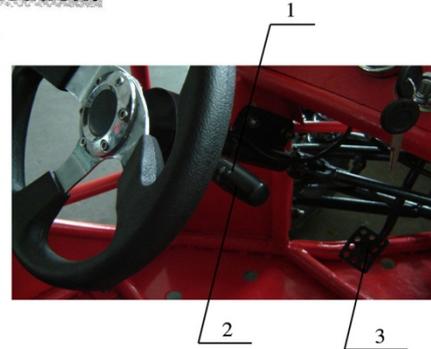
Fuel lever gauge oil

Toe comment on the table N, 1-5, R gears



Auto-Electric changed speed position application:

Button (1) is on the left handlebar switch assy which is used to rise the speed position. You can change from R、 N、 1、 2、 3、 4、 5 in turn through button (1) according to your need. Button (2) fall the speed position. You can change from 5、 4、 3、 2、 1、 N、 R in turn through button (2) according to your need. Pay more attention to grasp tightly the only for reverse lever(3), when changed from N to R. at the same time to push the button (2),and then release the only for reverse lever (3) so that the speed position is the R place.



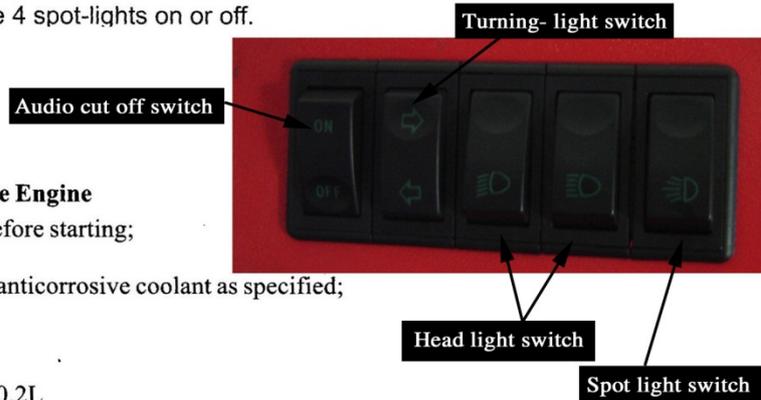
In addition, there is the foot board (be used change speed position by feet) in the tool box . you can equip the foot board on the ATV when the Auto-electric speed position can not work.

Note: There must be have a good power supply ability when you use the Auto-Electric speed position.(see **Gearshift pedal**)

Turning-light switch : control the turning-light. Press the top of button down and the right turning light work; Press the bottom of button down and the left turning light work; Set the button in neutral while moving in line.

Head light switch : control the headlight far beam or lower beam. Press the lower-beam button down and the head light work as lower beam, the far-beam button and work as far beam.

Spot light switch : control the 4 spot-lights on or off.

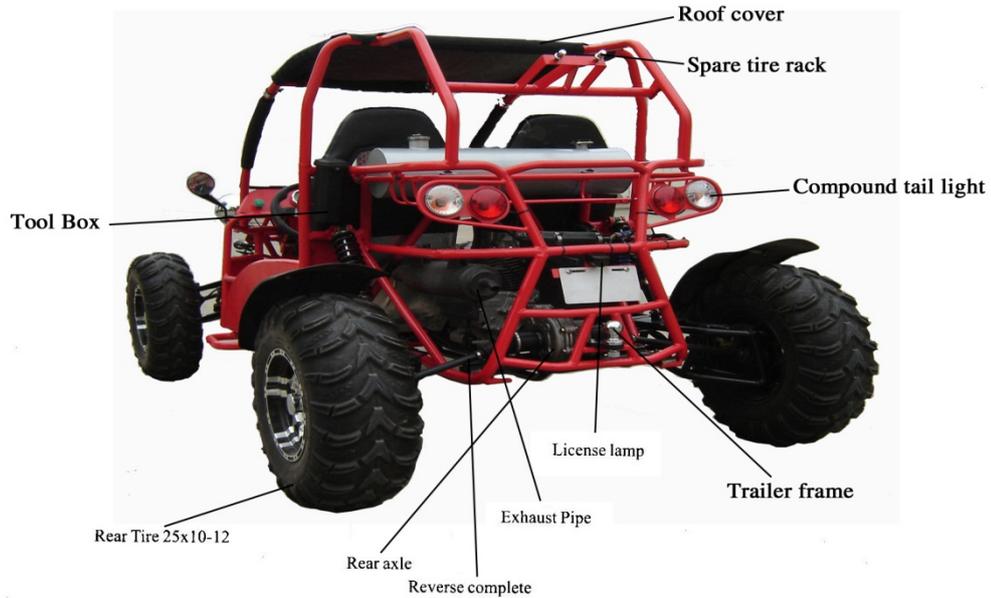


Preparation before Starting the Engine

- Check the engine fastener before starting;
- Fill with fuel, engine oil and anticorrosive coolant as specified;
 - a) Oil Capacity:
 - Crankcase: 1.3L;
 - Transmission Box: 0.2L

LOCATION OF PARTS:





Passengers

The combined maximum weight of the driver and passenger should not exceed 180kg or 400lbs.

Seat Adjustment

The seat must always be securely fastened in the position, which affords the best control of the foot pedals, steering wheel and engine stop button.

Seat adjustment steps:

- a. Pull the seat adjustment handle upward to disengage the seat slide;
- b. Move the seat to the desired position;
- c. Ensure that the seat adjustment handles snaps back into place and that the seat is locked into position.



Seat Adjuster



WARNING

- **Never operate your Buggy when the seat is not securely fastened. This could result in severe personal injury or loss of life.**
- **Before attempting to adjust the seat, ensure that the engine of your Buggy has stopped.**

Starting and Operating Instructions

- a. Before starting the engine, be sure that you are correctly seated in the vehicle with the seat belt fastened;
- b. Test your vehicle in the beginning to learn how to start, turn and stop;
- c. Operate your vehicle slowly until you become familiar with it;
- d. The turning radius of your vehicle is small, so the centrifugal force is very high when turning at high speed. Slow down to a more controllable speed to prevent your **vehicle** from rolling over.

Starting the Engine

- a. Step on the brake pedal meanwhile press the start switch to start the engine; releasethem as soon as the engine starts
- b. Warm up the engine for 2-3 minutes after starting a cold engine

Note:

- (1) Press the brake while you press start switch.to start the engine.
- (2) Do not press the start switch for more than 5 seconds at a time, if the engine does not start, wait for about 10 seconds to re-try.
- (3) In cold weather, warm up the engine for several minutes at idle speed until the operating temperature has been reached.

 **WARNING**

- **Exhaust gas is poisonous carbon monoxide. Running the engine in an enclosed environment will result in serious injury or loss of life**

Selecting gears

Reverse gears should only be selected when the vehicle is at a standstill and engine is at idle.

 **WARNING**

- **Selecting reverse gear while the vehicle is in motion will cause serious gearbox damage.**

Stopping the Engine

- (1) Release the throttle
- (2) Allow the engine revs to return to idle
- (3) Turn off the Key switch

Running-In

The running-in distance is 500miles. During this period, please follow the instructions below:

- During the first 500miles do not operate the vehicle at full throttle or maximum engine revs
- Do not put the engine under excessive load.
- Maintain your vehicle according to the service intervals, and if necessary, repair it as soon as possible;
- Always ensure an approved professional dealer services the vehicle. Failure to do so will invalidate the warranty.

The running-in progress will greatly increase the life and long term power of the engine.

OWNER MAINTENANCE

Clearing Instructions

Keep your vehicle clean. Use a clean rag to wipe off any dirt and oil from around the controls, and wipe off any spilled fuel and oil. Keep the engine clean of foreign objects and be sure that the radiator is free of debris. Does not use a pressure washer or jet wash.

Adjustment of the Front Shock Absorbers

There are five spring pre-load positions on each shock. The default position is in the middle, set by the manufacturer.

Use a "C" spanner to adjust the shock. The tension of the shock spring will increase as you turn the adjuster clockwise and decrease, as you turn anticlockwise.

Spark Plug

- Remove the spark plug and inspect the electrodes for wear and a build up of carbon.

Note: The electrodes should be kept clean and free of carbon. The presence of carbon or excess oil will greatly reduce engine performance.

If possible, check the spark plug gap (area between the electrodes) with a feeler gauge. This specification is 0.6~0.7 mm

- Before installing the spark plug, coat the threads lightly with graphite grease if possible, to ensure easy removal next time the spark plug needs inspection;
- It is advisable to replace the spark plug at least once a year to insure easy starting and good engine performance

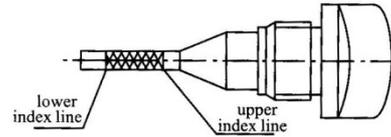
Carburetor Adjustment

Never make unnecessary adjustment. The manufacturers recommended settings are correct for most applications. An authorized professional dealer should perform any carburetor adjustment required.

Engine Oil

- Inspect the engine for any oil leaks
- Ensure the oil filler cap is clean before removal
- Check the engine oil, and add some if necessary.

Note: The oil level should be between the upper index line and the lower index line with the dipstick placed in the filler mouth. **Not screwed in**



Tires

- Check for any cracks or worn tread; replace the tire if wear exceeds recommended limits.
(Legal minimum 1.6mm)
- Check for & remove any stones or nails
- Check for punctures
- Check the tire pressures: front: 175Kpa rear: 200Kpa

Storage Instructions

In the event your vehicle isn't to be operated for periods in excess of 30 days or at the end of each driving season, prepare for storage as follows:

- Remove the battery
- Drain (or use a fuel stabilizer) all the fuel out of the fuel tank and carburetor
- Remove the spark plug; pour 25cc of clean engine oil through the spark plug hole into the cylinder crank the engine slowly to spread the oil and completely lubricate the cylinder, replace the spark plug.
- Do not save or store Fuel over winter, it will deteriorate in winter storage, and will cause poor starting and affect engine performance.



- Do not drain the fuel while the engine is hot.
- Ensure your BUGGY is outside before draining the fuel

PERIODIC SERVICE SCHEDULE

- An approved BUGGY dealer should perform all periodic services and repairs.
- The Service intervals in the following table are based upon average riding conditions. Use in unusually dusty areas will necessitate more frequent services.

Item \ Interval	First 500 miles	Minor 3000 miles	Major 6000 miles
Air filter		I,C	I,C
Fuel pipes	I		I
Fuel filter	I		R
Tire pressure / wear	I	I	I
Battery	I		I
Brakes	I	I	I
Shock absorbers	I		I
Controls	A	A	A

Continued overleaf

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Nuts, bolts & fasteners	I	I	I
Spark plug	I		R
Engine oil	R	R	R
Cooling system	I	I	I
Drive unit components		I	I
Reverse gearbox oil	R		R
Reduction gearbox oil	R		R
Filter screen	C	C	C
Lubrication of chassis parts	C,L	C,L	C,L
Carburetor	I		A
Drive chains	A,L	A,L	A,L
Electrical equipment	I	I	I
Valve clearances	A		A
Steering components	I	I	I
Wheel bearings & ball joints	I	I	I

I: Inspect, replace if necessary C: Clean A: Adjust R: Replace L: Lubricate

SPECIFICATIONS:

DIMENSIONS

Overall Length	2680 mm
Overall Width	1560 mm
Overall Height	1500 mm
Wheelbase	2030 mm
Ground Clearance	310 mm
Net Weight	410 kg

ENGINE

Model	179F
Type	Liquid cooled, Single Cylinder, 4-stroke
Engine Capacity	359cc
Bore x Stroke	72mm x 60mm
Max. Power	13.5kw or 5500rpm
Max. Torque	24N.m or 4000 rpm
Acceleration Noise Level	≤82dB (A)

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Engine(cont)

Compression Ration	8.6: 1
Idle Speed	1500 ± 100rpm
CO Emission	7.0g/km
HC Emission	1.5g/km
Fuel Type	RQ 90# or Above (Unleaded)
Engine Oil Type	SAE 15W-40/SF
Gearbox Oil Type	SAE 85W / 90
Lubrication	Pressure & Splash
Coolant	50:50 Mix distilled water Anti-corrosive Anti-freeze
Ignition	C.D.I
Starting	Electric
Spark Plug	NGK D7EA
Spark Plug Gap	0.6-0.7mm
Clutch	Automatic, Centrifugal, Dry, Shoe Type
Carburetor	CV Type
Transmission type	Automatic CVT Plus reverse

CAPACITIES

Fuel Tank	12L
Engine oil	1.3L
Reduction gearbox oil	0.2L
Reverse gearbox oil	0.3L
Coolant	1.4L

ELECTRICAL EQUIPMENT

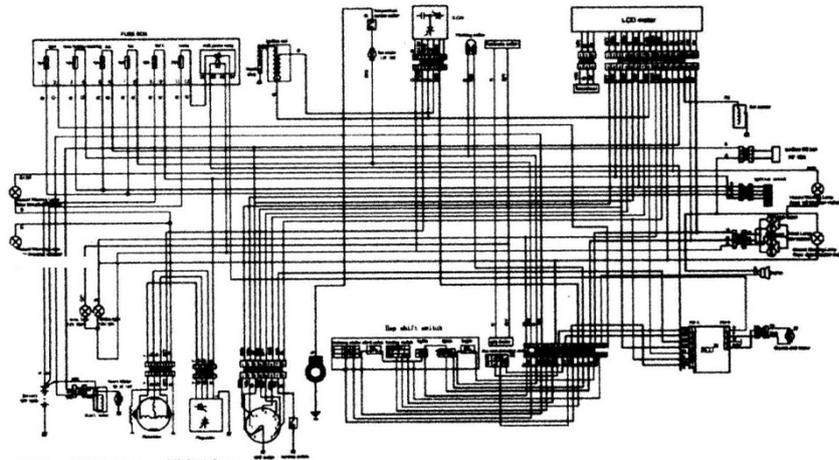
Horn	12V 3A 105dB, 93 < db(A) 112
Headlight	12V 35W/35W
Taillight	12V 5W/21W
Turning Light	12V 10W
License Light	12V 5W
Battery	12V28AH

CHASSIS

Turning Radius	3.5m
Front/Rear Brake	Hydraulic Disc,
Braking Distance	≤ 7 m@30kmph
Parking Brake	Hydraulic Disc, Hand Control
Front Tire	25 x 8-12
Rear Tire	25 x 10-12

TYRE PRESSURE

Front	175kpa
Rear	200kpa



- | | | | |
|----------|------------------|-------------------|------------------|
| B-Black | B/W-Black/White | B/G-Black/Green | |
| Br-Brown | Br/B-Brown/Black | | |
| G-Green | G/W-Green/White | G/Y-Green/Yellow | G/Br-Green/Brown |
| Gr/Gray | Gr/R-Gray/Red | | |
| W-White | W/G-White/Green | W/P-White/Purple | W/Y-White/Yellow |
| R-Red | R/G-Red/Green | R/W-Red/White | R/B-Red/Black |
| Bl-Bluen | Bl/W-Bluen | Bl/Y-Bluen/Yellow | Bl/G-Bluen/Green |
| Pk-Pink | Pk/Bl-Pink/Bluen | | |
| O-Orange | Y/R-Yellow/Red | Y/Br-Yellow/Brown | R/Br-Red/Brown |