

# E-TON

## ROVER & ROVER GT

### OWNER'S MANUAL

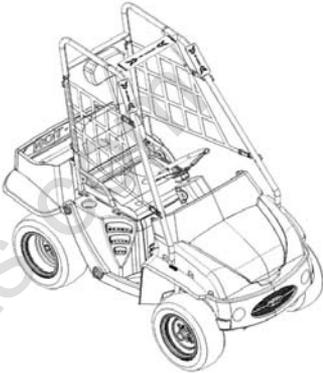
#### ROVER



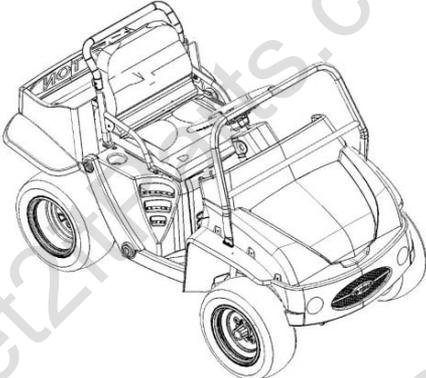
#### ROVER GT

# E-TON ROVER

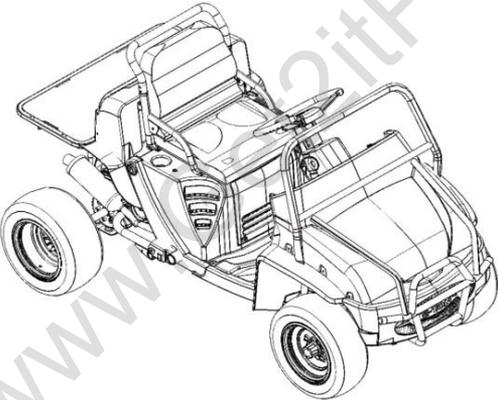
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**Rover** (Safety Nets)



**Rover** (Brush Guards)



**Rover GT**

# Important Notices

## **READ and UNDERSTAND** this owner's manual

Both the operator and the adult supervisor should completely read and understand this owner's manual before operating this vehicle. This owner's manual will instruct you in the safe operation of the vehicle.

## **NO Passengers**

This vehicle was designed for operation ONLY by the operator, (Driver). The load limit and seat configuration is designed for the operator ONLY. It is not safe to carry passengers on the vehicle.

## **ADULT Supervision and Instruction are REQUIRED.**

This vehicle MUST NOT be operated by a youth without adult supervision and instructions. Unattended operation without adult supervision could result in injuries. E-TON recommends that both the operator and the adult supervisor attend a vehicle safety instruction course.

## **ALWAYS Wear Protective Clothing**

While operating this vehicle, the driver must always wear protective clothing. Protective helmet with face shield, elbow and knee pads, long leg pants, gloves and hard soled boots. Should always be worn when operating this vehicle.

## **OFF ROAD USE ONLY**

This vehicle is designed and manufactured for off-road use only. Operation on public streets, roads or highways is illegal and very dangerous.

## **OBEY all State and local laws and regulations**

Each state and local governing agency has laws and regulations for vehicle operations. It is the owner's responsibility to know, understand and obey these laws and regulations.

## **SPEED RESTRICTION Devices**

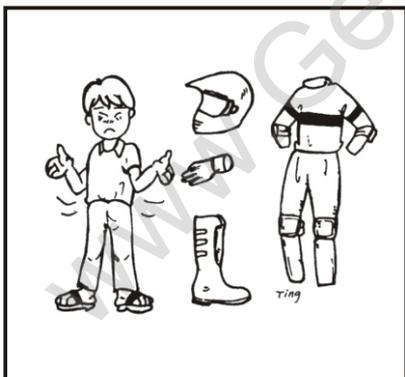
This vehicle is equipped with electronic speed limiting devices. Any attempt to change, over-ride or bypass these devices may cause dangerous operating conditions.

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## SAFETY NOTES

1. Both the adult supervisor and youth operator must fully understand everything in this manual before operating this vehicle.
  2. This vehicle was designed for the operator only. NO PASSENGERS should be allowed on this vehicle.
  3. This vehicle is designed for operation on level, obstacle free off-road areas.
  4. Riding this vehicle on public roads or highways is illegal. If it becomes necessary to cross a public road or highway, the vehicle should be pushed across using extreme caution.
  5. This vehicle **MUST NOT** be operated without adult supervision and instruction.
  6. **DO NOT** operate this vehicle while under the influence of drugs, alcohol or other medication that impairs judgment or coordination. Doing so can result in serious injury or even death.
  7. Maintain a safe distance between your vehicle and other vehicles with whom you are riding.
  8. The driver must tie the safety belt (and button the safety nets).
  9. Always use both hands for steering.
  10. Avoid wheelies and jumping. You may lose control of the machine or overturn.
11. **READ** the owner's manual carefully before riding.



12. **ALWAYS** wear a helmet, face shield, elbow & knee pads, hard-soled boots, gloves, and protective clothing while operating this vehicle.

## SAFETY NOTES

- 13. NEVER** ride this vehicle unless it has been properly maintained and adjusted. Always perform a pre-ride inspection of your vehicle. Look for wires, bolts and other fastener that may have come loose on previous rides. Inspect the drive chain, throttle and brakes for proper adjustment and operation. Check the engine oil level in the oil tank. Check fuel level and inspect for fuel leaks.  
(Remember, you can ride further in 1 hour than you can walk back in 1 day!)



- 14. WARN UP** your body with some exercises before riding. This helps to make you alert and prevent cramping and other discomfort.

- 15. LEARN TO RIDE** this vehicle properly and safely. Have an experienced rider teach you the safe operation of your vehicle. E-TON recommends you take an vehicle riding course before you first ride your vehicle.



## SAFETY NOTES

**16. NEVER REFUEL** this vehicle when hot.

Ask your adult supervisor to refuel your vehicle.

Gasoline is extremely flammable and will ignite if spilled on a hot engine or muffler. Never smoke or expose the fuel to an open flame or spark while refueling your vehicle.

Always refuel your vehicle in a safe place free of any ignition source.



**17. NEVER** run the vehicle in an enclosed area.

The exhaust gases from the engine contain CARBON MONOXIDE which can be fatal if breathed in high concentrations for an extended time.

**18. HOT!** The engine and exhaust system on your vehicle become very hot during normal operation. Touching these hot surfaces can cause severe burns.

Always assume that your unit's engine and exhaust system are HOT unless you know that they are not.



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## SAFETY NOTES

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### Additional safety tips:

- Participate in an approved the vehicle safety education training program
- Always provide responsible adult supervision for the vehicle operators younger than 18 years of age
- Don't let youngsters ride full-sized vehicles
- Follow all safety recommendations of the vehicles manufacturer
- Operate the vehicles only during daylight
- Wear a helmet with face protection at all times
- Operate only four-wheeled vehicles
- Provide a drug and alcohol free environment
- Always use the buddy system
- Avoid riding in areas where contact with automobiles might be possible
- Drive the vehicle on surfaces as recommended by the manufacturer
- Travel at speeds conducive to conditions and operator abilities
- Check on the conditions of the trails you will be traveling
- Know and understand local and state laws governing the use of the vehicles
- Permit only one operator per the vehicle
- Insist on a "perfect fit" between the vehicle and the physical, mental, and emotional maturity of the operator
- Use antenna flags and wear bright clothing to increase conspicuity.
- Use maps and compass if you are riding in an unfamiliar area.
- Make a mental note of landmarks; you may need them if you are stranded.
- If you are lost at night, do not move around. You will waste valuable fuel that you can use to ride safely in the daylight.
- Carry a first-aid pack with you.
- Carry some snacks and a water supply with you.
- Carry equipment to handle medical and mechanical emergencies.
- Your vehicle field repair kit should include the following items;
  - the manufacturer's tool kit
  - wire, tape, elastic cords,
  - possibly locking pliers
  - and a towrope.
- Pre-Ride Inspection - Inspecting the condition of your vehicle before each ride is very important to minimize the chance of injury and maximize the enjoyment of your ride. It also helps ensure long term performance of your Vehicle. Follow the owner's manual guide to inspection and maintenance of your Vehicle.
- A well maintained the vehicle will give you years of enjoyment.
- Watch out for thin ice which may be camouflaged by snow.
- Remember, you can ride further in one hour than you can walk in an entire day.

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## SERIAL NUMBER

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### Vehicle Identification Numbers



Vehicle Identification Number (VIN) is located at the right of the frame and approaches the front wheel.



Engine serial number is located on the left-hand side of the engine on the crankcase housing.

**YOUR VIN** \_\_\_\_\_

**Eng. No.** \_\_\_\_\_

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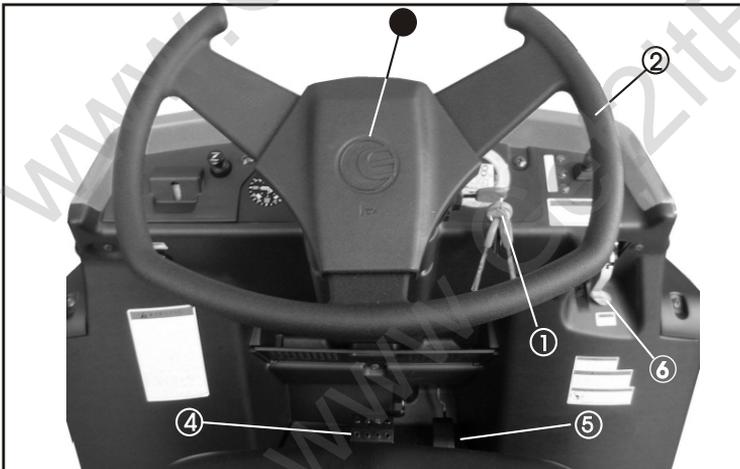
## DESCRIPTION

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### Controls, Switches & Feature Locations

#### Locations of controls and features

1. Key Switch
2. Steering Wheel
3. Horn Button
4. Brake Pedal
5. Throttle Pedal
6. Parking Brake Lever

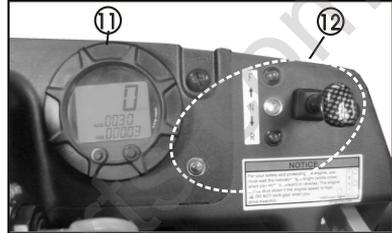
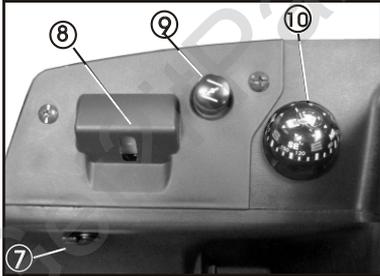


# DESCRIPTION

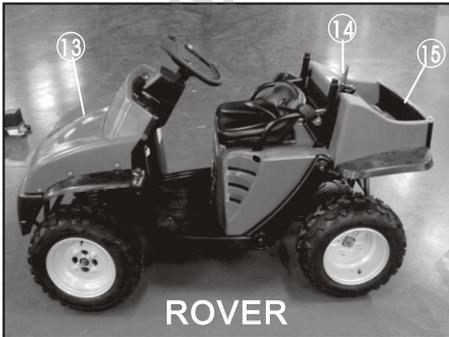
## Controls, Switches & Feature Locations

### Locations of controls and features

- 7. Auxiliary 12v DC Electrical Outlet
- 8. Brake Oil Reservoir
- 9. Manual Chocke Knob
- 10. Compass Ball (for ROVER GT)
- 11. Speedometer & Odometer Fuel Indicator Meter (for ROVER GT)
- 12. Transmission Gear Selector & Reverse Indicator Lamp



- 13. Front Cargo Box
- 14. Fuel Tank Filler And Vent tube
- 15. Rear Cargo Box



## CONTROL FEATURE

### Key Switch



- A - OFF Position - With key in off position, all switched power is off, and engine should not run.
- B - ON Position - Turn key from off to the position and all switched power circuits will be energized.
- C - START Position - Turn key to start position to start the engine. Release key after engine has started and it will automatically return to the on position.  
The engine will continue to run.

### Only For ROVER

This vehicle is equipped with a long key and a short key.  
A limited speed with Max 7 mile is controlled by the short key.  
A limited speed is controlled by the long key and (C.D.I.) with 4 different kind of speed. (9.3, 12.4, 15.5 & 18.6 mile)  
C.D.I is located in front cargo box.

**NOTE:** Your unit includes an electronic speed control (C.D.I) that is set to limit the maximum speed of the unit to the standards set by the CPSC for the age of the rider the unit was designed for.

### Manual Choke Knob



The vehicle are equipped with a manually operated carburetor choke system. This choke is operated by the knob at the left side of the dashboard. The engine choke knob is used to enrich the fuel mixture when starting the engine from a cold start. When first starting the engine, (cold start), place the knob in the full up position, (Choke closed or on) After allowing the engine to warm up for 15-20 seconds, slowly move the knob back to the normal until the engine idles down runs smooth. The knob to the full down is the normal operation position. (Choke open or off).

## CONTROL FEATURE

### Throttle Pedal



The throttle pedal is located on the under of the dashboard of the right. To operate the throttle pedal, place your sole of the right foot on the pedal and press down to increase your speed. To decrease your speed, reduce your pressure on the pedal and the spring tension will automatically reduce your speed.

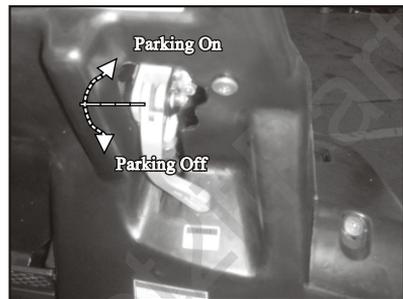
### Brake Pedal

This vehicle is equipped with dual front hydraulic disc brakes and a rear hydraulic disc brake.

The four wheel simultaneously brakes are operated by pushing the foot brake pedal.



### Parking Brake Lever



The parking brake is shown on the picture. The position of parking Off is on the full down position. Turn parking brake to the full up position is parking On.

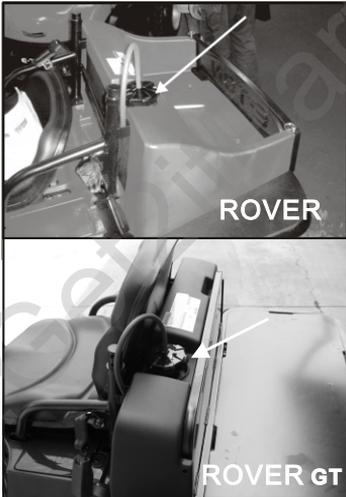
This should be engaged as a parking brake whenever the vehicle is not in operation.

## CONTROL FEATURE

### Fuel System

#### Fuel Tank

The fuel tank fill cap is located on top of the back of the seat.



The cap contains a vent to prevent a vacuum from forming in the tank as fuel is used. The vent tube must be attached to the cap and inserted in the vent tube holder hole while operating the unit.

The fuel cap vent and vent tube must be clean and clear of obstructions for the unit to operate normally. You can check the vent and vent tube by blowing air through the tube. If you can not blow through the vent tube and cap you must clean the vent and tube or replace them.

Every time you refuel your unit, check the rubber seal inside the cap for cuts, tears and dirt. Clean or replace the seal if it becomes worn or torn. The seal must be in good condition to insure a proper seal of the cap to the tank to prevent fuel spills. DO NOT allow dirt or other debris to enter the tank when refueling.

Replace the cap if damaged or if it will not seal to the tank.

Tighten the cap snugly, being careful not to

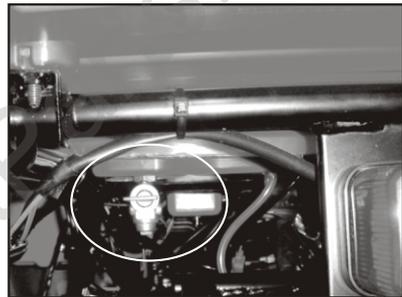
over tighten. Over tightening the cap can cause damage to the cap or seal.

The fuel tank capacity is 11 liters, 2.9gal, including a reserve of 2 liters, 0.5gal.

Use regular unleaded automobile gasoline with an octane level of 91 or higher.

**NEVER REFUEL YOUR vehicle when the engine is HOT.** Wait 30 minutes after turning off the unit before refueling. Spilling fuel on a HOT engine could cause a fire. Wipe up any fuel spills before re-starting.

#### Fuel Valve



The unit is equipped with a three way fuel valve located on the left side of the unit just below the seat.

The valve has three settings; "OFF", "ON" and "RES". With the valve in the "OFF" position fuel is held in the tank and is prevented from flowing to the carburetor. The valve should be placed in the "OFF" position whenever the unit is not being operated. Place the valve in the "ON" for normal operation of the unit.

This allows fuel to flow to the carburetor for normal operating. The "RES" position allows fuel to flow from the small reserve in the tank to allow the unit to be taken to a refueling location.

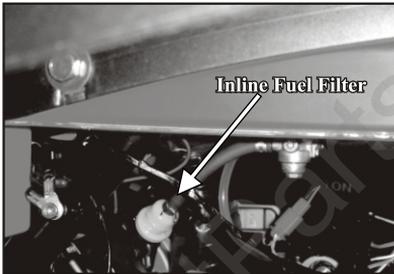
When you have to switch to the "RES" position you must refuel the unit as soon as possible.

**ALWAYS CHECK YOUR Fuel level before you start riding your vehicle.** Remember:

You can drive further in one hour on your Vehicle than you can walk in one day.

## CONTROL FEATURE

### Inline Fuel Filter



This vehicle is equipped with an inline fuel filter to prevent dirt and debris from entering the carburetor and engine.

Check the filter for dirt or damage before each ride and at each refueling. Replace the filter if dirty or damaged.

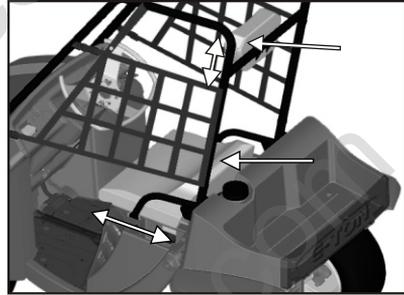
The filter should be replaced every 600 hours of operation and at the start of each season.

To replace the filter, first turn the fuel valve to the "OFF" position. Then carefully compress the wire clamp rings until the clamp is free of the fuel line. Slide each clamp away from the filter about 3/4".

Remove the filter from the fuel line by holding the line and pulling the filter. Install the new filter by inserting the filter into the fuel line. Turn the fuel valve to the "ON" position and returning the clamps to the original position. Check for leaks. Inspect the fuel lines for cuts, abrasions and deterioration. Replace fuel lines as needed.

**DO NOT** operate or start the engine if the fuel filter or lines are leaking. Leaking fuel can cause a fire.

### The Seat



You can change the position of seat and head rest to make a comfortable position of you.

To change the seat position, you need to loosen two bolts at the seat bottom right hand side.

#### Only For ROVER (CEILING)

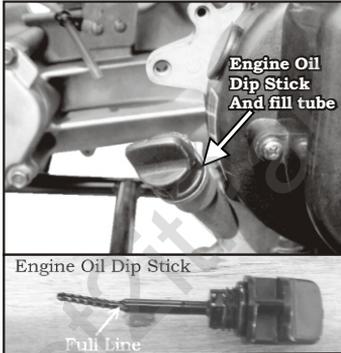
To move the head rest, you need to take out the bolts.

Move the head rest to a correct position, then tighten the bolts.

## CONTROL FEATURE

### Engine Oil

#### Checking Engine Oil Level



This vehicle uses automotive type engine oil to lubricate the engine. The engine oil dip stick is located on the right-hand side of your engine.

To check your oil level, remove the dip stick by turning the thumb hold counter clockwise until the stick has been completely disengaged from the threads. Pull the dip stick out of the crank case and check the level of the oil as Indicated on the dip stick. The engine oil is full when the oil reaches the level on the stick as Indicated in the photo above.

Always check your engine oil level with the engine off and cold. Removing the dip stick with the engine running could cause hot oil to splash from the crankcase causing severe burns.

Checking your engine oil while the engine is hot can give you a false reading; always check the oil level with a cold engine.

Your engine requires SAE 15W/40 engine oil and the crankcase capacity is 0.9 Liters / 0.9 quart.

The engine oil should be changed before the start of each riding season or every 300 hours of operation. When riding where conditions are dusty or humidity is high the engine oil should be change more frequently.

### Transmission Gear Selector



The vehicle is equipped with a transmission gear selector switch mounted on the dashboard. The switch has three positions ("R", "N", "F").

"R" = Reverse

"N" = Neutral

"F" = Forward

The selector **must be placed on "N"** to start the engine. Once the engine is started, engage the brake lever and move the selector switch to the desired direction of travel.

Always be sure the vehicle has come to a complete stop and the brake lever is fully engaged before turning the selector switch. Always pause in the "N" neutral position for a few seconds when shifting from forward to reverse or from reverse to forward, this allows the transmission time to disengage and resynchronize.

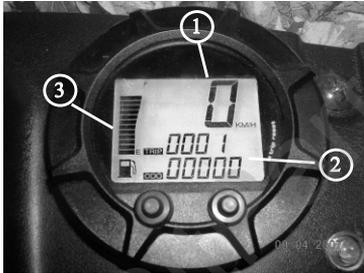
#### **NOTE!**

For your safety and protecting the engine, you must wait the indicator light bright (white color) when you shift to forward or reverse. The engine will be shut down if the engine speed is high.

**DO NOT SHIFT GEAR** when you drive downhill.

## CONTROL FEATURE

### Dashboard Indicators



It is digital LCD meter and displayed in cold light can applicable to night.

- (1) Speedometer digital follow the vehicle's speed to change digital.
- (2) Odometer digital is follow the vehicle's ride distance to change mileage .
- (3) Fuel indicator to "F" when the tank is full, and to "E" when empty. (And the ROVER Of the oil gauge flashes when 3-4 stages left.)

### Auxiliary 12v DC Electrical Outlet

Power outlet do not use high power electric equipment to avoid dead battery.

Please follow the regulation list below.

#### SUPPORTING POWER

Speed	Brake Condition	
	Brake on	Brake off
Idle	0W	19W
over 15 km/h	45W	75W

### Tires And Wheels



#### Tire & Wheel Inspection

It is important to inspect your tires and wheels for damage and wear before each riding session. Inspect each tire for cuts, tears and punctures. Inspect the wheel rim for dents and separation of the wheel from the tire bead. Replace any tire or wheel found to be damaged.

Operating your vehicle with damaged tires or wheels is dangerous.

Damaged tires or wheels can result in a sudden loss of tire pressure and control which could result in injuries.

Check your tire pressure before each riding session and at each refueling operation.

Always check the pressure when the tires are cool. Use the tire pressure gauge that came with Your vehicle to check the tire pressure.

#### Tire Pressure

Recommended tire pressure is:

Front	Min	3.2psi / 0.23kg/cm <sup>2</sup>
	Max	4.0psi / 0.28kg/cm <sup>2</sup>
Rear	Min	3.2psi / 0.23kg/cm <sup>2</sup>
	Max	4.0psi / 0.28kg/cm <sup>2</sup>

Wheel Nut torque 24-30 N/m (18-22 lb/ft)

# ROVER

<b>Engine</b>			
Type	Four cycle air cooled (EPA Compliant) SOHC		
Displacement	88.4cc		
Bore / Stroke	φ47.0 * 51.0mm		
Compression Ratio / Pressure	10.2 : 1 / 120-140psi		
Torque / BHP	6.5N ms @ 6500rpm / 4.8BHP		
EPA Approved	Meet or exceeds EPA clean air requirements and CA Green Sticker		
Spark Plug	Recommended: NGK CR7HSA/NGK or Nipendenso U22FS-U		
Electrode Gap	0.6-0.7mm or 0.023"		
Starting	Electrical starter		
<b>Transmission</b>			
Type	Automatic (C.V.T. V-Belt) with forward/reverse shift		
<b>Chassis</b>			
Overall Length-Width-Height	1766mm / 69.9" - 1020mm / 40.2" - 1675mm / 65.9"		
Wheel Base	1108mm / 43.6"		
Seat Height	700mm / 26.6"		
Dry Weight	162 kg / 356 lbs		
<b>Suspension</b>			
Front	Swing A-arm with dual Adjustable Shocks		
Rear	Swing Arm with Adjustable Shock		
<b>Brakes</b>			
Front	Dual Hydraulic Disc		
Rear	Hydraulic Disc		
<b>Tires</b>			
Front	18/7-10		
Rear	18/8-10		
Tire Pressure	Front	Min	3.2psi / 0.23kg/cm2
		Max	4.0psi / 0.28kg/cm2
	Rear	Min	3.2psi / 0.23kg/cm2
		Max	4.0psi / 0.28kg/cm2
<b>Wheels</b>			
Bolt Pattern	Front	4 x 110mm (P.C.D.)	
	Rear	4 x 110mm (P.C.D.)	
<b>Carburetor</b>			
Make/Size	SVR 22mm with Manual Choke		
Main Jet	0.95mm		
Pilot Jet	0.32mm		
Air Mixture Adjustment	Back out 1½ - 1 ¾ turns		
Idle Speed	Idle 1700 - 1900rpm		
<b>Sprockets</b>			
Front	520x12t		
Rear	520x32t		
Chain	#520		
<b>Battery</b>			
Jell Acid (Maintenance Free)	12V-4AH/AH - GTX5L		
<b>Fluids</b>			
Fuel	Type	Unleaded Gasoline 92 octane	
	Volume	11liters / 2.9gal	
Engine Oil	Type	SAE 15W-40	
	Volume	0.9liters / 0.23gal	
Transmission	Type	SAE 80W-90	
	Volume	300cc / 10.2oz	

# ROVER

Sprockets		
Front	520x12t	
Rear	520x32t	
Chain	#520	
Battery		
Jell Acid (Maintenance Free)	12V-4AH/AH - GTX5L	
Fluids		
Fuel	Type	Unleaded Gasoline 92 octane
	Volume	11liters / 2.9gal
Engine Oil	Type	SAE 15W-40
	Volume	0.9liters / 0.23gal
Transmission	Type	SAE 80W-90
	Volume	300cc / 10.2oz
Safety Features		
Speed Control	Ignition Key Speed Control (Standard)	
Remote Stop Switch	Remote Engine Stop Switch (Optional)	
Safety Catch Netting	Rider compartment Safety Netting (Standard)	
Seat Belt	Lap Belt (Standard)	
Carrying Capacity		
Maximum Rider Weight	86.2kg / 190 lbs	
Additional Features		
Rear Cargo Bed	Accessory Power Outlet	
Covered Front Storage Compartment	Foot peddle throttle and brakes controls	
Sporty Split Steering Wheel	Dash mounted Forward / Reverse Shift Knob	
Adjustable Head Rest	Optional Floor mat and bed liners	

# ROVER GT

<b>Engine</b>			
Type	Four cycle air cooled (EPA Compliant) SOHC		
Displacement	88.4cc		
Bore / Stroke	ø47.0 * 51.0mm		
Compression Ratio / Pressure	10.2 : 1 / 120-140psi		
Torque / Power	6.1N ms @ 4000rpm / 6.4Ps/8000rpm		
EPA Approved	Meet or exceeds EPA clean air requirements and CA Green Sticker		
Spark Plug	Recommended: NGK CR7HSA/NGK or Nipendenso U22FS-U		
Electrode Gap	0.6-0.7mm or 0.023"		
Starting	Electrical starter		
<b>Transmission</b>			
Type	Automatic (C.V.T. V-Belt) with forward/reverse shift		
<b>Chassis</b>			
Overall Length-Width-Height	2110mm / 83.0" - 1000mm / 39.4" - 1110mm / 43.7"		
Wheel Base	1375mm / 54.1"		
Seat Height	710mm / 28.0"		
Dry Weight	185 kg / 407.9 lbs		
<b>Suspension</b>			
Front	A-arm with dual Adjustable Shocks		
Rear	Swing Arm with Adjustable Shock		
<b>Brakes</b>			
Front	155mm Dual Hydraulic Disc		
Rear	175mm Hydraulic Disc		
<b>Tires</b>			
Front	18/7-10		
Rear	18/8-10		
Tire Pressure	Front	Min	3.2psi / 0.23kg/cm2
		Max	4.0psi / 0.28kg/cm2
	Rear	Min	3.2psi / 0.23kg/cm2
		Max	4.0psi / 0.28kg/cm2
<b>Wheels</b>			
Bolt Pattern	Front	4 x 110mm (P.C.D.)	
	Rear	4 x 110mm (P.C.D.)	
<b>Carburetor</b>			
Make/Size	SVR 22mm with Manual Choke		
Main Jet	0.95mm		
Pilot Jet	0.32mm		
Air Mixture Adjustment	Back out 1½ - 1 ¼ turns		
Idle Speed	Idle 1700 - 1900rpm		
<b>Sprockets</b>			
Front	520x12t		
Rear	520x32t		
Chain	#520		
<b>Battery</b>			
Jell Acid (Maintenance Free)	12V-5AH - GTX5L		
<b>Fluids</b>			
Fuel	Type	Unleaded Gasoline 92 octane	
	Volume	11 liters / 2.9gal	
Engine Oil	Type	SAE 15W-40	
	Volume	0.9liters / 0.23gal	
Transmission	Type	SAE 80W-90	
	Volume	300cc / 10.2oz	

# ROVER GT

## Safety Features

**Seat Belt** Lap Belt (Standard)

**Remote Stop Switch** Remote Engine Stop Switch (Optional)

## Carrying Capacity

**Maximum Rider Weight** 100kg / 200 lbs

## Additional Features

**Rear Cargo Flat Bed (Standard)** Digital dash gauge—Speedometer & Fuel Level (Standard)

**Covered Front Storage Compartment** Dash mounted F/R Shift Knob & indicator lights (Standard)

**(Standard)** Trailer Hitch & Accessory Power Outlet (Optional)

**Sporty Steering Wheel** Foot peddle throttle & brakes controls (Standard)

**Rear Cargo Basket (Optional)** Front Cargo Rack (Optional)

**Detachable Spot Light (Optional)** Carpeted floor mat (Optional)

# MAINTENANCE

## Air Filter



To maintain the highest performance from your engine and to reduce excessive wear that could cause engine failure the engine requires a continuous flow of clean air. Air is taken into the engine through an air filter to clean the air prior to mixing it with fuel and oil in the carburetor.

During normal operation the filter accumulates dirt from the air and will need to be cleaned to maintain the proper air flow. The filter should be cleaned every 30 days, more often if you ride in a dusty or dirty environment and the element should be replaced every year.

The air filter box is located on the left of the engine under the seat. It is a black rectangular box.

## To Clean The Filter

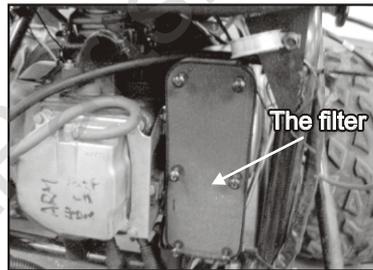
Remove head protector cover.



Remove the air filter box cover.



Remove the filter element from the air box as shown in picture.



Wash the element in a non-flammable solvent such as air-filter cleaner from your local auto parts dealer.

1. Dry the element completely before continuing.
2. Soak the element in clean engine oil until completely saturated.
3. Squeeze out the excess oil until the element does not drip any oil.
4. Allow the element to dry then reinstall the element and cover.

## MAINTENANCE

### Braking Systems

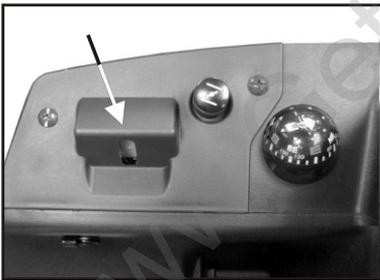
The vehicle is equipped with dual front hydraulic disc brakes and a rear hydraulic disc brake.

The four wheel simultaneously brakes are operated by pushing the foot brake pedal. Proper maintenance of the brake system is a necessary part of safe operation of your unit. The brake systems should be inspected and tested before each riding session.

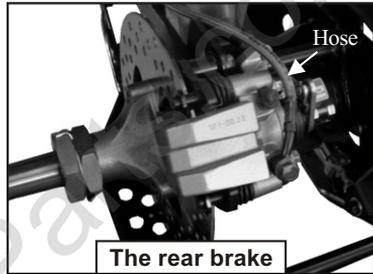
### The Brake Hoses Inspection

Visually inspect the brake hose for any signs of wear or leaks. Check the fluid level in the fluid reservoir by checking the position of cup on the left side of the dashboard.

The fluid level should fill at least  $\frac{3}{4}$  of the cup when the unit is setting on a level surface.



Test the brakes by applying pressure to the brake pedal and trying to push the unit forward. If the wheel rotates while the brakes are applied, check your fluid level and brake pads. If the brake pedal feels spongy or does not stop when squeezed, you may have air in the lines. All air must be purged from the brake lines for the disc brake to operate properly. (See purging brake lines).



After riding your unit, be sure to clean any build up of mud, sand and dirt from the brake rotor skid plate. This will protect the rotor disc from rust and corrosion.

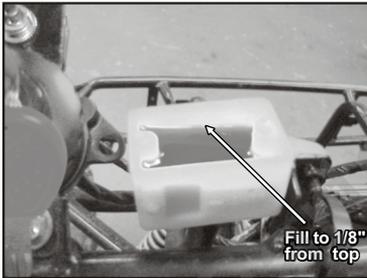
### Filling The Brake Fluid Reservoir

Remove the reservoir cover.



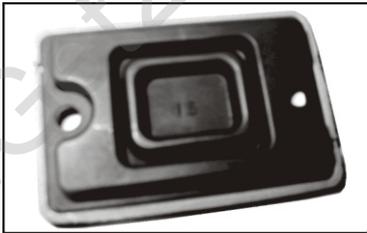
Fill the reservoir to 1/8" from top with Dot-3 SAE-J 1703 grade brake fluid.

## MAINTENANCE

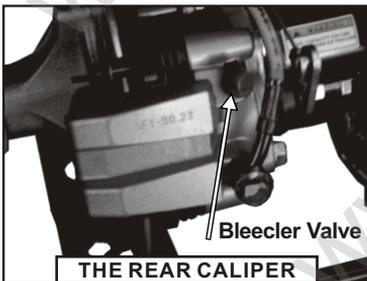
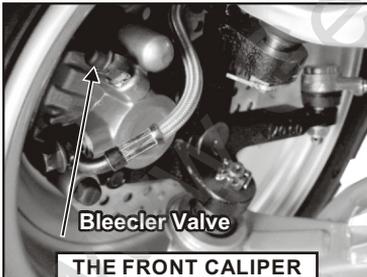


**Caution: DO NOT** Allow dirt to fall into the reservoir

Refold the cover gasket as shown in picture and replace cover.



### Purging Brake Lines



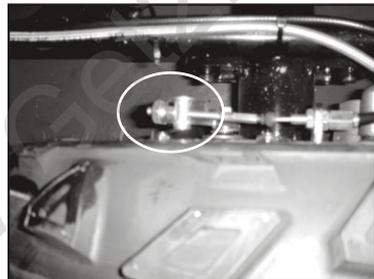
For the hydraulic brake system to operate safely, the brake system must be purged of air in the lines and reservoir.

To bleed the air will require two people to perform the following procedure.

1. Place a drain pan under the brake caliper to catch the fluid.
2. Open the bleeder valve  $\frac{1}{2}$  turn counter clockwise.
3. Squeeze the brake lever to expel air from the system.
4. While holding the brake lever, close the bleeder valve.
5. Repeat steps 2 through 4 until the brake fluid coming from the bleeder valve is a solid stream without any air, then close the valve and replace rubber protection cap.
6. Test the brake system by squeezing the lever, the lever should feel firm and stop without fading.

### Purging Brake Adjustment

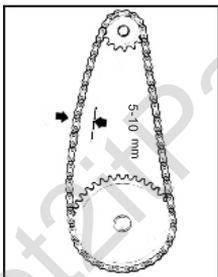
As you found out the parking brake which has been decreased its brake ability, You must adjust the parking brake, Turn the adjustment nut of the parking brake to adjust Parking Brake.



# MAINTENANCE

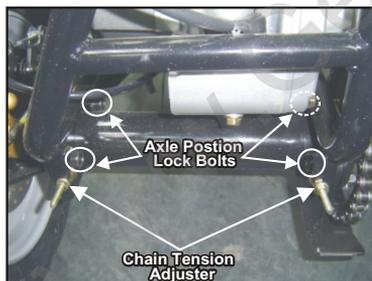
## Drive Chain

The drive chain will stretch with use and will require periodic adjustments. To check the chain tension, remove the chain guard and measure the slack.



The amount of slack in the chain should not exceed 5-10mm or 0.2" - 0.4". Inspect the drive and axle sprockets for worn, damaged or broken teeth. Replace as needed. Inspect the chain links for damaged, worn or loose rivets. Repair or replace as needed.

## Chain Slack Adjustment



Loosen the axle position lock bolts lightly and turn the chain adjuster nut to take up the excess slack in the chain. Once the chain has been adjusted to the proper tension retighten the axle position locking bolt.

The chain should be kept well lubricated to prevent excess wear and premature failure.

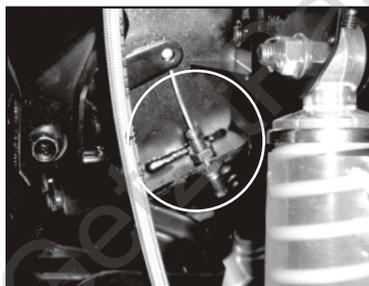
We recommend that you lubricate the chain every 15 hours of operation, or more frequently if needed, with a high quality chain lubricant.

## Throttle Pedal



The throttle pedal is located on the under of the dashboard of the right and is operated by using the sole of the right foot. The pedal is spring loaded and will return to the idle position when you remove your sole of the right foot from the pedal. To accelerate the unit, simply press the pedal down to open the throttle slide in the carburetor. To slow the unit, reduce the pressure on the pedal or remove your sole of the foot and the throttle will return to the idle position automatically.

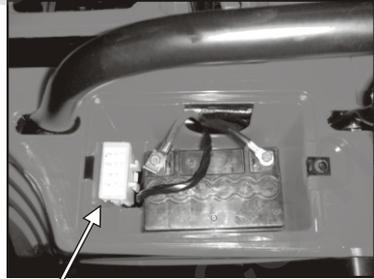
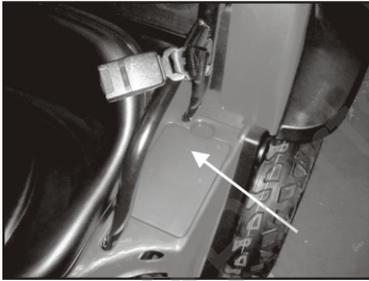
## Adjusting The Throttle



The cable should be adjusted to allow for 1/8" free travel before the throttle engages the carburetor throttle slide. To adjust the cable's free travel, loosen the locking nut of the cable adjuster, and turn the adjuster wheel until there is 1/8" free travel in the lever. Tighten the locking nut to secure the adjusting ring.

# MAINTENANCE

## Electrical Battery



The unit's battery is located the left-hand side of the seat and supplies electrical power to the unit.

The battery is a 12 volt jell acid type that contains no liquid electrolyte. The battery should be removed from the vehicle when stored for extended periods and charged before being replaced in the unit.



Amperage Rating	Color	Series Items
10A	Red	Battery
10A	Red	Battery Optional
7.5A	Brown	Power Outlet
7.5A	Brown	Power Outlet Optional

Use a trickle charger set at 12 volts to recharge the battery to full charge before replacing it in the unit.

When reinstalling the battery, be sure to connect the red cable to the positive (+) terminal and the black cable to the negative (-) terminal.

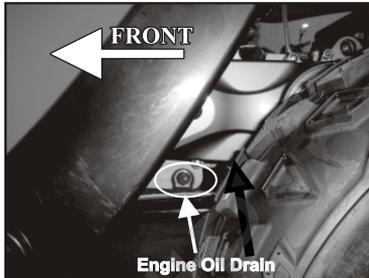
The battery should be replaced every three years or when it no longer holds a charge.

Do not expose the battery, for extended periods of time, to freezing temperatures. If the battery has been frozen it will need to be replaced. There are inline fuses on the positive protect the wiring system from over loads. If your lead of the battery to starter motor will not turn over and the battery is fully charged, check the inline fuse on the unit.

**For another's series items** of electrical units, please refer to the fuse as shown in list.

## MAINTENANCE

### Changing Engine Oil



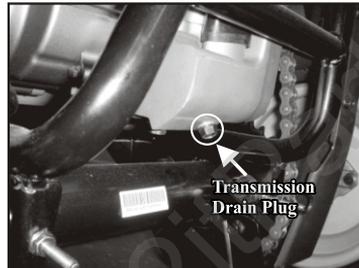
1. Place an oil catch pan under the unit directly below the engine crankcase.
2. Remove the engine oil drain plug located on the left-hand side of the engine.
3. Remove the engine oil dipstick located on the right-hand side of the engine.
4. Allow the oil to drain completely (15-30 min).
5. Reinstall the drain plug and tighten. Torque to 7-10 lbf-ft
6. Fill the crankcase with SAE 15W/40 engine oil through the dipstick hole. 0.9 liter/0.9 quart.
7. Reinstall the engine oil dipstick and finger tighten.
8. Dispose of used oil at a proper recycling station as required by law

### Changing Transmission Oil

1. Place an oil catch pan under the unit directly below the transmission box.
2. Remove the transmission box drain plug located on the bottom of the transmission box on the underside of the unit.



3. Remove the transmission box fill whole plug located on top of the transmission
4. Allow the oil to drain completely (15-30 min).



5. Reinstall the drain plug and tighten. Torque to 7-10 lbf-ft
6. Fill the transmission box with SAE 80-90 gear oil. The transmission box capacity is 300cc / 10.2oz.
7. Reinstall the fill hole plug finger tight.
8. Dispose of used oil at a proper recycling station as required by law.

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## MAINTENANCE

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### Spark Plug

Replace spark plug at the beginning of each season with a replacement plug CR7HSA / NGK.

Disconnect spark plug wire.

Clean dirt from around spark plug base with brush or air.

Remove spark plug with spark plug wrench.

Set the spark plug gap on the new plug to 0.023" Install the new plug screwing it in finger tight and then use the plug wrench to screw the plug in Another 1/2 turn.

Inspect the spark plug wire for cuts, nicks or other damage. replace as needed.

### Spark Arrestor Screen

Required maintenance and cleanout:

1. After every 100 hours of operation the muffler should be cleaned by removing the clean out bolt by using a 10mm wrench.
2. After every 60 hours of operation the Spark Arrestor has to be cleaned by loosening the retaining nut using a 10 mm socket. Using pliers turn the sleeve of the Spark Arrestor counterclockwise and pull out. Clean the screen with an exhaust cleaning solution and replace, securing it by tightening the retaining nut.
3. After every 200 hours of operation the Spark Arrestor has to be replaced by loosening the retaining nut using a 10 mm socket. Using pliers turn the sleeve of the Spark Arrestor counterclockwise and pull out.  
Replace a new Spark Arrestor and secure it by tightening the retaining nut.

# MAINTENANCE

## Maintenance Schedule

	INITIAL SERVICE (First week)	REGULAR SERVICE (Every 30 operating days)	EVERY YEAR	NOTES
Fuel Line			I	
Throttle Operation	I	I		
Air Filter system & Element	I	C	R	
Spark Plug	I	I	R	
Fuel Filter	I		R	
Carburetor Idle Speed	I	I	I	
Drive Chain	I, L	I, L		
Brake Shoe Wear		I	I	
Brake System	I	I		
Brake Fluid	I			
Nut, Bolt, Fastener	I	I		
Wheels & Wheel Nuts	I	I		
Steering System	I	I	I	
Suspension System		I	I	
C.V.T. Air Filter		C	R	
C.V.T. Drive belt			I	
Choke		I		
Spark Arrester			C	
Battery			I,C	
Waste Gas Recovery Valve		I	R	
Intake & Exhaust Valve Adj.			I	
Gear Oil			R	
Engine Oil	R			R every 20 Hours OR R every 500 Km

I = Inspect, Clean, Adjust, Lubricate or Replace as needed

C= Clean    L = Lubricate    R = Replace

**NOTE:** E-TON recommends that all maintenance and inspections be performed ONLY by a qualified and fully trained technician!

## Owners Maintenance Records

Maintenance Performed	Date	Performed By

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# OPERATION

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## Vehicle Break-In procedures

Your vehicle requires a break-In period just as with all other internal combustion engines. This period allows the engine parts to seat and wear properly without undue strain which can cause premature failure.

1. For the first two weeks of operation do not run your extended periods of time.
2. Do not operate the unit at more than 85% of maximum speed.
3. Do not over rev the engine.
4. Use light braking pressure to allow the brake pads to seat to the rotor and drums.

## Pre-Operation Inspection Procedures

**The following procedure must be performed before each operating session.**

Checking your vehicle takes only a few minutes and may save you from serious injuries and costly repairs.

1. Check engine oil level.
2. Check engine fuel level.
3. Check brake operations and brake fluid level.
4. Check tire condition and pressure.
5. Check drive chain condition and slack.
6. Check throttle operation and free play adjustment.
7. Check engine stop switch for proper operation.
8. Check steering system. Look for free and smooth operation.  
Check all fastening hardware.
9. Check all nuts, bolts and other fasteners for loose conditions.
10. Inspect unit for any broken or damaged parts.

11. Check all indicator lights and switches for proper operation.
12. Insure you are wearing proper clothing and protective gear. Helmet, Gloves pads etc.

## Starting Procedures

**The following procedure must be followed each time you start your unit.**

Park the unit on a level surface. Turn the fuel valve to the "ON" position. Place the transmission gear selector switch in The "N", Neutral, position.

Insert the key into the ignition switch and turn to the "ON" position. Set the manual choke knob to the full up position (Choke close or on)

Push the foot brake pedal and turn the parking Brake lever to "OFF" position. (Choke off or on) turn the key to the "START" position, in order to start your unit.

Your unit should start within 10 seconds of turn the key. If the unit fails to start check the following.

1. Push the foot brake pedal.
2. Transmission selector switch in the "N" position
3. Set the manual choke lever to the full left position (Choke close or on)

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## RIDING TIPS

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### Driving your vehicle

Your vehicle should only be driven in an area that is designated for this use. Insure that the area is free of obstacles and other dangers that could cause a loss of control. Check with your local authorities for any regulations regarding the use of your vehicle.

Always keep your feet on the footrests and your hands on the steering wheel while operating your vehicle. Doing so will give you the best control of the unit.

Start your vehicle by following the starting procedure above and allow the engine a few minutes to warm up before releasing the parking brake.

Start the unit by slowly increasing the throttle until the unit begins moving.

### Turning your vehicle

Learning to turn your vehicle requires you to learn to shift your weight and control the throttle to allow the rear wheels to turn properly. When making a turn, the wheels on the outside of the turn must travel a wider radius and thus a greater distance than the inside wheels of the turn. Since the rear axle does not permit a different rate of rotation, it is not enough to merely steer Your vehicle into the turn.

To turn properly, steer in the direction of the turn and lean your body to the inside of the turn while supporting your weight on the outer footrest. supporting your weight on the outer footrest. Use the throttle to maintain power through out the turn.

If you do not use this turning technique the unit will have a tendency to continue in a straight line. If this occurs, release the throttle lever to allow the unit to stop. Avoid braking or accelerating until you have regained directional control.

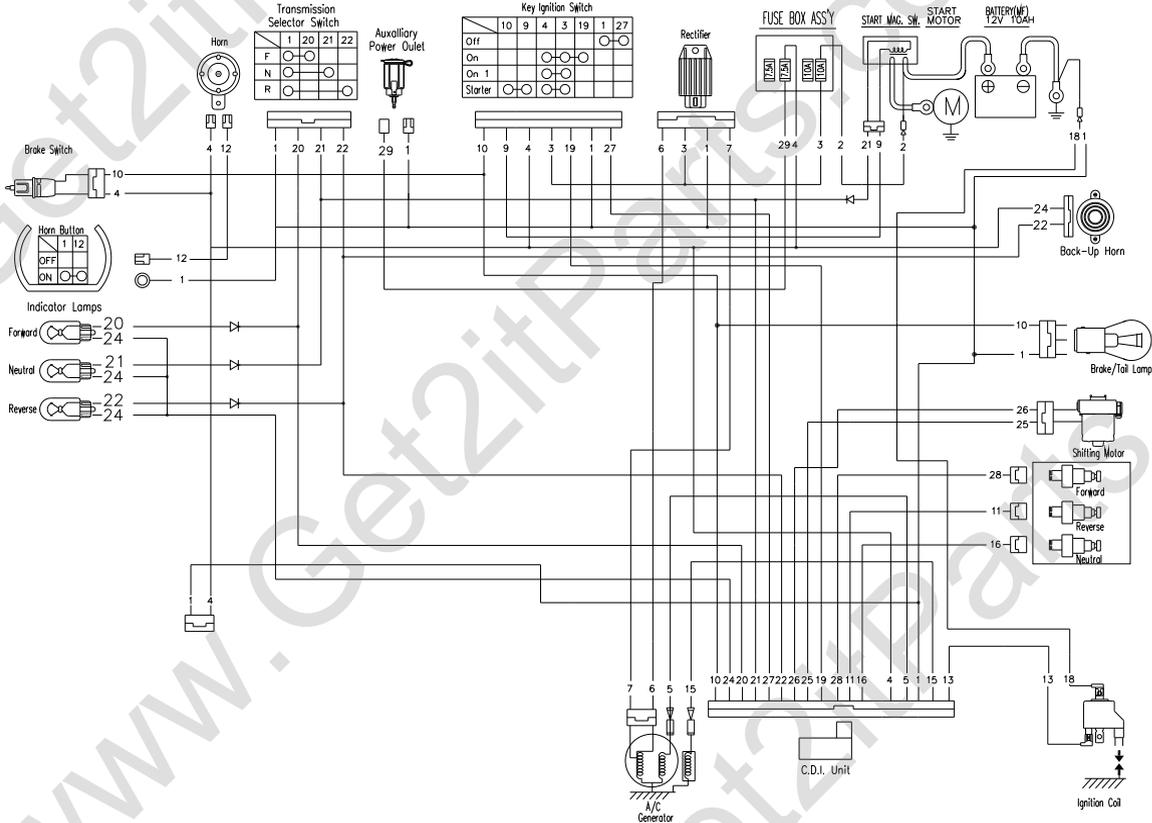
### Parking your vehicle

1. Always park your vehicle on a level surface.
2. Turn the ignition key to the "OFF" position to stop the engine.
3. Engage the parking brake locking button.
4. Turn the fuel valve to the "OFF" position.
5. Remove the ignition key to prevent unauthorized use or theft of your vehicle.

# ROVER

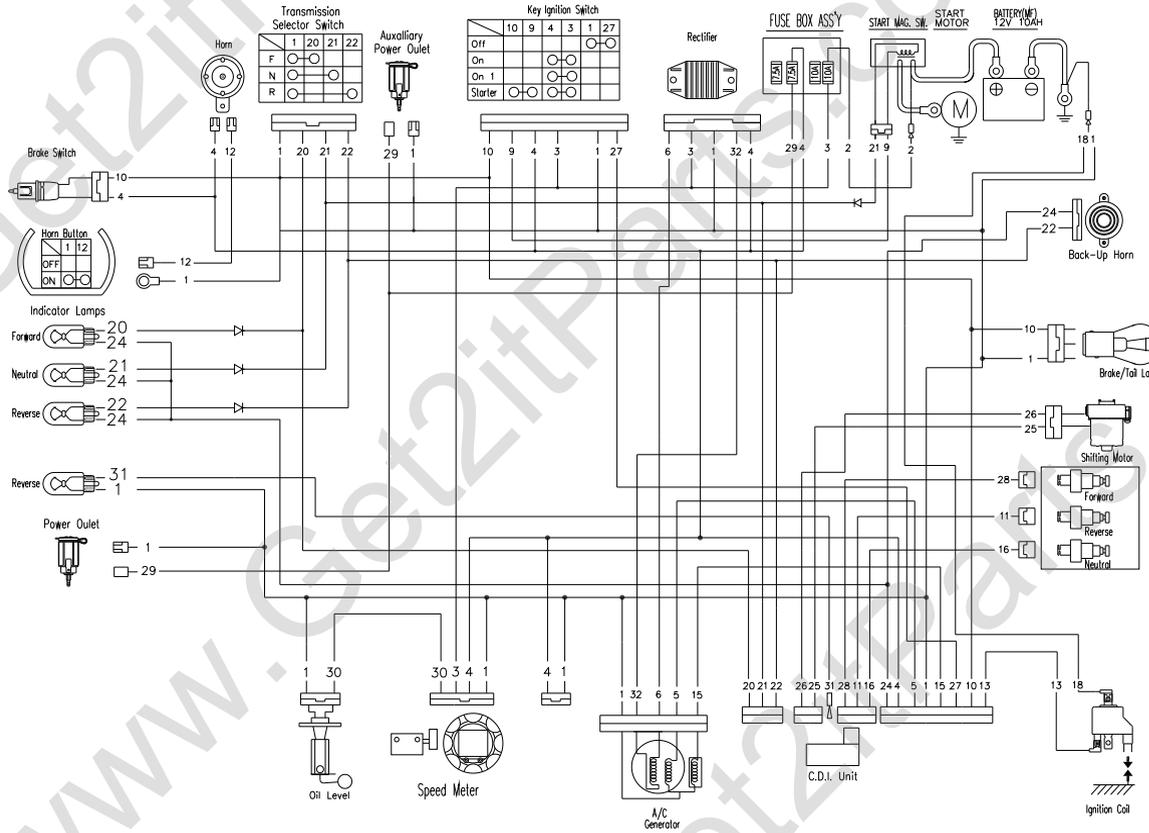
# WIRING DIAGRAM

Code	Color
1	Black
2	Red
3	Red
4	Brown
5	Black/Red
6	White/Red
7	Yellow/Red
8	Orange
9	Blue/White
10	Cyan/Yellow
11	Red/White
12	Black
13	White/Blue
14	Yellow/Black
15	Blue/Yellow
16	Black/White
17	White/Black
18	Black/Yellow
19	Cyan
20	Purple
21	Yellow
22	White
23	Brown/Yellow
24	Gray
25	Red
26	Brown/Black
27	Green/Red



# ROVER GT WIRING DIAGRAM

代號	Color
1	Black
2	Red
3	Red
4	Brown
5	Black/Red
6	White
7	Yellow/Red
8	Yellow
9	Blue/White
10	Cyan/Yellow
11	Red/White
12	Black
13	White/Blue
14	Yellow/Black
15	White/Red
16	White/Black
17	White/Red
18	Black/Yellow
19	Cyan
20	Purple
21	Yellow
22	White
23	Yellow/White
24	Gray
25	Red
26	Black
27	Blue
28	Green/White
29	Brown
30	Green
31	Orange
32	White





# ETON AMERICA, LLC.

## LIMITED VEHICLE WARRANTY

ETON America warrants all new ETON vehicles sold by authorized ETON Dealers to be free from defects in materials and workmanship, subject to the following exclusions and limitations. New vehicles sold by an authorized dealer to original retail consumers are covered by this policy for a period of six (6) months from the date of delivery. There is no mileage limitation. This warranty is given to the original retail purchaser and is non-transferrable.

Vehicles used in rental service or for certain commercial purposes are specifically excluded from this policy. (Check with your dealer for warranty application.)

Items and conditions that are specifically excluded from this warranty program are;

1. Damage caused by accidents, misuse, negligence, improper vehicle operation,
2. Any modification or alteration to any standard specifications or equipment.
3. Any repairs made by an unauthorized dealer or service firm,
4. Use of non-ETON genuine parts for repairs or alteration to standard specifications.
5. Damage caused by failure to perform factory scheduled service-maintenance.
6. Damage which occurs as a result of improper storage.
7. Damage caused by the use of improper fuel or lubricants, and/or failure to use proper oil/gas mixture on two stroke models.

The following normal wear parts are specifically excluded from warranty coverage:

- |                                  |                               |
|----------------------------------|-------------------------------|
| 1. Rubber parts                  | 8. Filters                    |
| 2. Tires                         | 9. Spark plugs                |
| 3. Belts                         | 10. Bulbs                     |
| 4. Brake linings (after 30 days) | 11. Batteries (after 30 days) |
| 5. Normal wear item              | 12. Sprockets                 |
| 6. Brake parts                   | 13. External springs          |
| 7. Cables                        | 14. Seat and hand grips.      |

Scheduled maintenance service is the responsibility of the owner during and after the warranty period. In the event of a failure or required repair, the owner should take vehicle to an authorized dealer for repair without undue delay and within a maximum of thirty, (30), days of the occurrence of the problem. All eligible warranty repairs must be made at any authorized dealer's normal place of business. Any transportation costs, or other expenses which may occur in order to obtain warranty service, are the responsibility of the owner. All eligible repairs covered under this warranty will be paid to the servicing dealer only, by ETON America, and no additional payments shall be made for authorized warranty repairs.

Dealer and/or ETON America are not responsible for loss of use, other damage or inconvenience due to warranty repairs. It is the customer/buyer's responsibility to review with the selling dealer the pre-delivery service schedule to assure machine is properly serviced prior to delivery acceptance. It is recommended that the buyer take a test ride to familiarize themselves with the machine and to make certain the unit is in proper operating condition. The dealer is responsible for checking and performing all items on the "set-up and pre-delivery checklist" prior to delivery to the customer.



# ETON AMERICA, LLC.

## LIMITED VEHICLE WARRANTY

This warranty is valid at any authorized ETON Dealer in the United States only. In the event you experience any problem obtaining prompt service, contact ETON America, customer service department for assistance. Always consult first with your selling dealer and or service personnel for assistance with any service work or repairs. In the event you have a problem obtaining service send your name, address, and vehicle identification number to Eton America for assistance.

The above stated policy is the only policy offered and backed by ETON America, and no other organization or individual is authorized to make or offer any different arrangements. Some states prohibit certain limitations or conditions or do not allow exclusions or limitations. You may be eligible for additional consideration, so check with your local dealer or appropriate state agency for assistance. Rights vary from state to state, and you may have other rights not offered in this warranty.

ETON America warrants all new vehicles comply with applicable US regulations.

**LIMITATIONS.** This Limited Vehicle Warranty shall not cover any of the following:

Repairs or replacement required as a result of (i) accident, (ii) misuse or neglect, (iii) lack of reasonable and proper maintenance, (iv) repairs improperly performed or replacement improperly installed, (v) use of replacement parts or accessories not conforming to ETON America LLC specifications which adversely affect

- 1) performance and/or durability, (vi) alterations or modifications not recommended or approved in writing by ETON America LLC, and/or (vii) use in competitive racing or related events.
- 2) Replacement of parts and other services and adjustments required for routine maintenance.
- 3) Any vehicle on which odometer mileage has been changed so that the actual mileage cannot be determined.

### LIMITED LIABILITY.

The liability of ETON America LLC under this Limited Vehicle Warranty is limited solely to the remedying of the defects in the materials or workmanship by any authorized ETON America LLC vehicle dealer at its place of business during customary business hours.

Please refer to ETON America LLC website: [www.etonamerica.com](http://www.etonamerica.com).

This warranty does not cover inconvenience or loss of use of the Scooter/moped vehicle, or transportation of the Scooter/moped vehicle to or from the ETON America LLC authorized dealer. ETON America LLC SHALL NOT BE LIABLE FOR ANY OTHER EXPENSE, LOSS OR DAMAGE, WHETHER DIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY ARISING IN CONNECTION WITH THE SALE OR USE OF OR INABILITY TO USE THE ETON America LLC SCOOTER/MOPED VEHICLE FOR ANY PURPOSE, SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

The "limited vehicle warranty" is applicable to all the E-TON ATV consumers: However for the regions outside USA & Canada one should contact with your local E-TON dealer.

ETON America, LLC. 7092 Howard Street, Unit F, Spartanburg, SC 29303



# ETON AMERICA, LLC.

## ATV LIMITED WARRANTY FEDERAL EMISSION CONTROL SYSTEMS

ETON America LLC warrants each new Scooter/moped vehicle that includes as standard equipment a taillight and a stoplight;

- a) Is designed, built and equipped so as to conform at the time of initial retail purchase with all applicable regulation of the United States Environmental Protection Agency ("US EPA") and:
- b) Is free from defects in material and workmanship which would cause such Scooter/moped vehicle to fail to conform with applicable regulations of the US EPA, for a time period of two and a half (2.5) years and, depending on the engine displacement:

This warranty period shall begin on the date the Scooter/moped vehicle is delivered to the initial retail purchaser, or on the date the Scooter/moped vehicle is placed in service as demonstrator, rental, lease, or company Scooter/moped vehicle prior to retail sale.

1) **COVERAGE.** Warranty defects shall be remedied during customary business hours at any authorized ETON America LLC Scooter/moped dealer located within the United States in compliance with the Clean Air Act and applicable regulation of the US EPA. Any part or parts replaced under this warranty shall become the property of ETON America LLC.

2) **OWNERS OBLIGATION.** The following obligations must be fulfilled by the owner to maintain the validity of the ETON America LLC Emission Control System Warranty:

- a) Owner must deliver the Scooter/moped vehicle to an authorized ETON America LLC Scooter/moped vehicle dealer or equally qualified service facility for inspection, maintenance service and adjustments according to the Periodic maintenance chart provided as part of, or supplemental to the Owner's manual. Optionally, the Owner may perform this maintenance only if it is within the scope of the Owner's technical and practical ability, keeping in mind some maintenance operations may require special tools or technical expertise beyond the scope of the average Owner. In any event, the inspection, maintenance and adjustments are to be performed at the Owner's expense.
- b) Owner must present a copy of the proof of initial retail purchase date, issued at the time of purchase to an authorized ETON America LLC Scooter/moped vehicle dealer at the time warranty repairs are performed on the Scooter/moped vehicle. You may also be required to show that you have performed the required maintenance which is related to the alleged defect, so you should have detail receipts indicating that the required periodic maintenance has been performed in accordance with the periodic maintenance chart in your Owner's manual.

3) **LIMITATIONS.** This Emission Control System Warranty shall not cover any of the following:

- a) Repairs or replacement required as a result of (i) accident, (ii) misuse or neglect, (iii) lack of reasonable and proper maintenance, (iv) repairs improperly performed or replacement improperly installed, (v) use of replacement parts or accessories not conforming to



# ETON AMERICA, LLC.

## ATV LIMITED WARRANTY

### FEDERAL EMISSION CONTROL SYSTEMS

ETON America LLC specifications which adversely affect performance and/or durability, (vi) alterations or modifications not recommended or approved in writing by ETON America LLC, and/or (vii) use in competitive racing or related events.

b) Replacement of parts and other services and adjustments required for routine maintenance.  
c) Any Scooter/moped vehicle on which odometer mileage has been changed so that the actual mileage cannot be determined.

#### 4) LIMITED LIABILITY.

a) The liability of ETON America LLC under this Emission Control System Warranty is limited solely to the remedying of the defects in the materials or workmanship by any authorized ETON America LLC Scooter/moped vehicle dealer at its place of business during customary business hours. Please refer to ETON America LLC website: [www.etonamerica.com](http://www.etonamerica.com).

This warranty does not cover inconvenience or loss of use of the Scooter/moped vehicle, or transportation of the Scooter/moped vehicle to or from the ETON America LLC authorized dealer.

ETON America LLC SHALL NOT BE LIABLE FOR ANY OTHER EXPENSE, LOSS OR DAMAGE, WHETHER DIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY ARISING IN CONNECTION WITH THE SALE OR USE OF OR INABILITY TO USE THE ETON America LLC SCOOTER/MOPED VEHICLE FOR ANY PURPOSE, SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. **ETON America LLC.**

The "limited vehicle warranty" is applicable to all the E-TON ATV consumers: However for the regions outside USA & Canada one should contact with your local E-TON dealer.

**Owner's Notes:**

www.Get2itParts.com  
www.Get2itParts.com  
www.Get2itParts.com

E-TON

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**Tel: +886-6-3840568**

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