

Owner's Manual

Parts Manual



READ THIS MANUAL CAREFULLY,
IT CONTAINS IMPORTANT SAFETY INFORMATION.

GTS150

Dune Buggy

**MINIMUM
RECOMMENDED
OPERATOR AGE: 16**



FOR OFF-ROAD USE ONLY

This vehicle is designed and manufactured for off-road use only.

USA only:

It does not conform to Federal Motor Vehicle Safety Standards, and in regards to operation on public streets, roads, or highways is illegal.

Hammerhead Off-Road Warranty Policy

Limited Warranty for Dune Buggies Only

Should warranty service be required on your unit during the warranty period, please contact your nearest authorized dealer for repairs.

IMPORTANT!

ALL UNITS MUST BE REGISTERED WITHIN 14 DAYS OF PURCHASE OR WARRANTY IS VOID. To register your product a copy of the Warranty Registration Card, Buyer Safety Agreement, and sales receipt must be forwarded to Hammerhead Off-Road. Your dealer, with your assistance, will complete and forward these items to Hammerhead Off-Road. A copy of the Warranty Registration Card and Buyer Safety Agreement is attached. It is your responsibility to confirm with your dealer within 14 days of purchase that your product has been registered. If you are unable to confirm with your dealer within 14 days of purchase that your product has been registered please contact Hammerhead Off-Road within 14 days of purchase or your warranty will be void.

GENERAL WARRANTY POLICY

Labor Warranty is covered for the first 90 days (THREE MONTHS) from the end consumer's date of purchase. Most parts covered under your warranty, except for the frame and engine, are covered for 30 or 90 days. Not all parts are covered. Contact your dealer for details or questions about a specific part. Warranty Parts are covered according to the schedule below from the end consumer's date of purchase. **All warranty paperwork must be received within 14 days of repair.**

WARRANTY PARTS COVERAGE

Warranty starts from the date of purchase by end consumer:

FRAME:	1 year
ENGINE:	180 days
CARBURETOR:	90 days
MUFFLER:	90 days
A-ARM, SPINDLES, AXLES:	90 days
ELECTRONICS:	90 days
BATTERY:	30 days
SPEAKERS:	30 days
SPEEDOMETER:	30 days
TIRES & WHEELS:	30 days
FENDERS:	30 days
BRAKES:	30 days
CLUTCH:	30 days
SEATS:	30 days

WHAT PARTS ARE NOT COVERED?

GENERAL EXCLUSION: The warranty does not cover consumable and normal wear and tear items such as, but not limited to, throttle cables, brake cables, chains, bikini tops, fasteners, air filters, brake pads, tires, oil changes, and/or problems occurring due to a lack of scheduled maintenance or consumer abuse. Modification to the vehicle, including the use of performance parts or non-original parts, will void the warranty in its entirety, unless express written approval stating that the warranty will not be voided is obtained from Hammerhead. Defective parts are

subject to recall by Hammerhead Off-Road upon failure and are required to be held by the dealer for 30 days from the time of the initial repair date.

The warranty does not cover damage or faults caused by misuse, negligence, alterations, accidents or any abnormal use including the use of non genuine parts, renting or leasing, competition or racing. This warranty does not cover loss of use of the unit or loss of time, or inconvenience.

NOTICE: All warranties are voided if the vehicle has been altered for use in racing or competition, rented, used under abnormal conditions, or subject to abuse, misuse, neglect or improper maintenance. Hammerhead Off-Road is not liable for any damage claim or liability claim, personal or otherwise resulting from operation of the vehicle in any way. All warranty parts will be shipped using UPS or Fed Ex ground ONLY. If the warranty part needs to be shipped 2nd day air or shipped overnight, the ordering dealership will be responsible for all shipping fees.

NOTICE: Hammerhead Off-Road reserves the right to change product specifications, designs, and standard equipment without notice and without incurring obligation. These vehicles are not designed or manufactured for racing or use on rental tracks, public streets, public roads, highways, paved surfaces, or right-of-ways. Always wear an approved helmet and eye protection when riding. Always secure loose clothing and long hair. Always utilize seatbelts. Please read the operators manual before usage and go over the Buyer Safety Agreement.

FAQ's:

1. FOR WHAT REASONS CAN MY WARRANTY CLAIM BE DISPUTED OR DENIED?

Warranty can be denied because of an out of warranty date, the unit was not a Hammerhead Off-Road unit or the Warranty Registration Card was not submitted to Hammerhead Off-Road within 14 days of purchase. The warranty does not apply to any part, which in opinion of seller was defective because of improper maintenance, improper assembly, alterations, abuse, negligence, or accident. The warranty does not cover loss of use of the seller vehicle, loss of time, inconvenience, or any other consequential damage which includes, but is not limited to, loss or damage to person or property or any expense of returning any damaged units to the seller, distributor, or its authorized dealer. Also, see above.

2. DOES HAMMERHEAD OFF-ROAD OFFER AN EXTENDED WARRANTY?

No, Hammerhead Off-Road does not offer any type of extended warranty.

3. IS MY KART STILL UNDER WARRANTY IF I HAVE OWNED IT FOR 1 YEAR BUT PUT ONLY 6 HOURS OF DRIVING TIME ON IT?

Warranty is based on the exact date of purchase, not based on how many hours it has been used.



Hammerhead Off-Road Warranty Registration Form

Registration Terms & Conditions:

In order to activate the warranty, please follow the instructions below:

- 1) Make a copy of the Bill of Sale
- 2) Make a copy of Pre-Delivery Checklist
- 3) Make a copy of Buyer-Safety Agreement
- 4) Fill out warranty card and send with all above documents to:

Hammerhead Off-Road

Attn: Warranty Registration
1200 Lakeside Parkway Ste. 325
Flower Mound, TX 75028

Or, Fax to 214-513-1738

Or, ON-LINE at www.hammerheadoffroad.com under dealer's only section

Hammerhead Off-Road Warranty Registration Card	
(Must be sent in with a copy of sales receipt and Buyers Safety Agreement)	
VIN# _____	Model: _____
Dealer Name: _____	
Dealer Address: _____	
City: _____	State: _____ Zip: _____
Customer Name: _____	
Customer Address: _____	
Customer City: _____	State: _____
Customer Phone: _____	Email: _____
Date of Purchase: _____	
I Certify that all information provided is true and correct to the best of my knowledge. I understand the exceptions and limitations of the warranty coverage.	
Customer Signature: _____	Date: _____

Hammerhead Buyers Safety Agreement (1/2)

- _____ Always read the owner's manual carefully before riding and follow the operating procedures described in the owner's manual.
- _____ Pay close attention to all warnings contained in the manual and on all labels.
- _____ These vehicles are designed for riders of ages 5 through 8 for 50cc, 9 through 15 for 80cc, 16 and older for 150cc, 18 and older for 250cc, 400cc, 500cc.
- _____ Both the parent and the child must fully understand everything in the owners manual before riding.
- _____ Always wear a helmet, face shield, boots, gloves, and protective clothing while riding.
- _____ Beginners should receive training from a certified instructor.
- _____ It is illegal to ride this vehicle on public roads or highways.
- _____ Do not allow your child to ride without supervision.
- _____ Do not ride under the influence of drugs or alcohol. They can affect your judgment and slow your reaction time.
- _____ Always maintain a safe distance between your vehicle and vehicles around you.
- _____ Never ride this vehicle unless it has been properly adjusted and maintained.
- _____ Never run the engine in closed areas. The exhaust gas contains poisonous carbon monoxide.
- _____ Do not touch any part of the engine, muffler, or the exhaust system during or immediately after operation of the vehicle.
- _____ Always check for obstacles before operating in a new area.
- _____ It is highly recommended that this vehicle should not be driven at night or during dark periods
- _____ Never attempt to operate over large obstacles, such as large rocks, or fallen trees.
Always follow proper procedures when operating over obstacles as described in this manual.

Hammerhead Buyers Safety Agreement (2/2)

- _____ Always be careful when skidding or sliding. On extremely slippery surfaces such as ice, go slow and be very cautious in order to reduce the chance of skidding or sliding out of control.
- _____ Never do wheelies, jumps or any stunts.
- _____ Never operate the vehicle in fast flowing water. Remember that wet brakes may reduce your stopping ability. Test your brakes after leaving the water. If necessary, apply those several times to let friction dry out the linings.
- _____ Always use the size and type of tires specified in this manual. Always maintain proper tire pressure as described in this manual.
- _____ All modifications to this vehicle should be made by a qualified mechanic. Modification to the vehicle, including the use of performance parts or non-original parts, will void the warranty in its entirety, unless express written approval stating that the warranty will not be voided is obtained from Hammerhead.
- _____ When transporting the machine in another vehicle, be sure that it is kept upright and that the fuel cock is in the "off" position. Otherwise, fuel may leak out of the carburetor or the fuel tank.
- _____ Always follow the break-in-period as described in the owner's manual. Not following the break-in period will void the engine warranty.
- _____ Always clean the air filter as described in the owner's manual. Improper maintenance of the air filter will void the engine warranty.

Failure to follow all warnings and unsupervised or irresponsible operation can cause serious injury or death. **By initialing each item on the above checklist, I have indicated my complete understanding of these points, and I acknowledge my responsibilities regarding the contents. I also agree to explain the points on this checklist to anyone besides myself who will be operating the vehicle now and/or in the future.**

Dealer's Signature

Buyer's Signature

Print Store Name

Print Buyer's Name

Date

Date

VIN Number

Model

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PARTS MANUAL

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Thank you for purchasing our dune buggy. We hope you will enjoy it. Before you start to operate the Dune 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 can result in serious injuries or death.

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

Beginners should seek instructions from your dealer or qualified instructors before and during initial use of the dune buggy. It is also recommended to practice in a large open area and familiar with operations of this dune buggy.

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

A FEW WORDS ABOUT SAFETY


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

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

It is not practical or possible to warn you about all hazards associated with operating or maintaining a Dune Buggy. You must use your own good judgment.

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

Safety Labels – On the Dune Buggy.

Safety Messages – Preceded by a safety alert symbol  and one of two signal words: **WARNING**, or **CAUTION**.

These signal words mean:



Physical harm may result from failure to adhere to the instructions that are described within the **WARNING** labels.

Safety Headings – such as Important Safety Reminders or Important Safety Precautions.

Safety Section – such as Dune Buggy Safety.

Instructions – how to use this Dune Buggy correctly and safely.

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

IMPORTANT SAFETY INFORMATION

Your Dune Buggy will provide you with many years of service and pleasure. Providing you take responsibility for your own safety and understand the challenges you can meet while driving.

There is much that you can do to protect yourself while operating your dune buggy. You'll find many helpful recommendations throughout this manual. The following are a few that we consider most important.

Follow the Age Recommendation

Adult Supervision should be present for all people under the age of 16.

Always Wear a Helmet

It's a proven fact: helmets significantly reduce the number and severity of head injuries. Always wear an approved motorcycle helmet. We also recommend that you wear eye protection, sturdy boots, gloves, and other protective gear.

Drive Off-Road Only

Your Dune Buggy is designed and manufactured for off-road use only. The tires are not made for pavement, and the Dune Buggy does not have turn signals and other features required for use on public roads. If you need to cross a paved or public road, get off and walk your Dune Buggy across.

Take Time to Learn & Practice

Even if you have driven other Dune Buggies, take time to become familiar with how this Dune Buggy works and handles. Practice in a safe area until you build your skills and get accustomed to this Dune Buggy's size and weight.

Because many accidents involve inexperienced or untrained drivers, we urge all drivers to take a training course approved by the Dune Buggy Safety Institute. Check with your dealer for more information on training courses.

Be Alert for Off-Road Hazards

The terrain can present a variety of challenges when you drive off-road. Continually "read" the terrain for unexpected turns, drop-offs, rocks, ruts, and other hazards. Always keep your speed low enough to allow time to see and react to hazards.

IMPORTANT SAFETY INFORMATION

Drive within Your Limits

Pushing limits is another major cause of Dune 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 to make good judgments and drive safely.

Don't Drink and drive

Alcohol and driving don't mix. Even one drink can reduce your ability to respond to changing conditions, and your reaction time gets worse with every additional drink. So don't drink and drive, and don't let your friends drink and drive either.

Do not operate this Dune Buggy at night.

Dark vision can greatly reduce a driver's visibility and judgment. So driving at night is dangerous and can increase the possibility for an accident.

Never run your Dune Buggy indoors.

The exhaust from the engine contains a tasteless, odorless and poisonous gas called carbon monoxide.

Keep away from moving parts of the Dune Buggy

The operator of the **Dune Buggy** should never place their hands or other parts of their body near any moving part of the **Dune Buggy**. Failure to adhere to this warning will cause physical harm to your body.

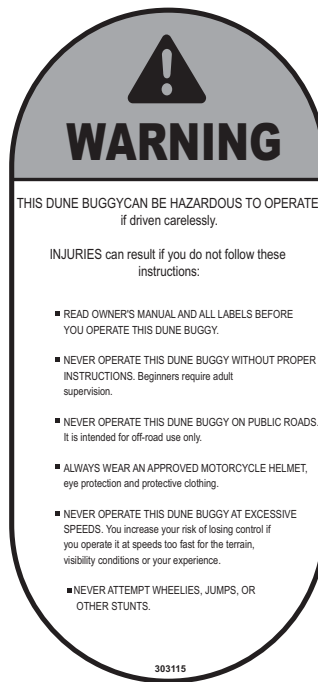
Skidding or Sliding

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

SAFETY LABELS

This section presents some of the most important information and recommendations to help you drive your **Dune Buggy** safely. Please take a few moments to read these pages.

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



ARE YOU READY TO DRIVE ?

Before each drive, you need to make sure that you and your dune buggy are both ready to drive. To help get you prepared, this section discusses how to evaluate your driving readiness, what items you should check on your dune buggy, and adjustments to make for your comfort, convenience, or safety.

Before you drive your dune buggy for the first time, we urge you to:

- Read this owner's manual and the labels on your dune buggy carefully.
- Make sure you understand all the safety messages.
- Know how to operate all the controls.

Before each drive, be sure:

- You wear your seat belt at all times while driving your dune buggy.
- You feel well and are in good physical and mental condition.
- You are wearing an approved motorcycle helmet (with chin strap tightened securely), eye protection, and other protective clothing.
- You don't have any alcohol or drugs in your system.

Protective Apparel

For your safety, we strongly recommend that you always wear an D.O.T. approved motorcycle helmet, eye protection, boots, gloves, long pants, and long-sleeved shirt or jacket whenever you drive.

Although complete protection is not possible, wearing proper gear can reduce the chance of injury should you have an accident.

The following suggestions will help you choose the proper protective gear.

Helmets and Eyes Protection

Your helmet is your most important piece of protective gear because it offers the best protection against head injuries. A 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, look for a D.O.T. (Department of Transportation) sticker on any helmet you buy. Always wear a face shield or goggles to protect your eyes and help your vision.

WARNING

Operating this dune buggy without wearing an approved motorcycle helmet, eye protection, and protective clothing could increase your chances of head and/or eye injury, and the possibility of death in the event of a severe accident.

Always wear an approved motorcycle helmet that fits properly and wear eye protection (goggles or face shield), gloves, boots, long-sleeved shirt or jacket and long pants.

ARE YOU READY TO DRIVE ?

Additional Driving Gear

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

- Sturdy off-road motorcycle boots to help protect your feet, ankles, and lower legs.
- Off-road motorcycle gloves to help protect your hands.
- Driving pants with knee and hip pads, a driving jersey with padded elbows, and a chest/shoulder protector.

Driver Training

Developing your driving skill is an on-going process. Even if you have driven other dune buggies, before take time to become familiar with how this dune buggy works and handles. Practice driving the dune buggy in a safe area to develop your skills. Do not drive on rough terrain until you get accustomed to the dune buggy's controls, and feel comfortable with its size and weight.

WARNING

Operating this dune buggy without your seat belt could cause you to be thrown from the dune buggy, causing serious injury or death.

No Alcohol or Drugs

Alcohol, drugs and dune buggies don't mix. Even a small amount of alcohol can impair your ability to operate a dune buggy safely. Likewise, drugs-even if prescribed by a physician-can be dangerous while operating a dune buggy. Consult your doctor to be sure it is safe to operate a dune buggy after taking medication.

WARNING

Operating this dune buggy after consuming alcohol or drugs can seriously affect your judgment, cause you to react more slowly, affect your balance and perception, and could result in serious injury or death.

Never consume alcohol or drugs before or while operating this dune buggy.

IS YOUR DUNE BUGGY READY TO DRIVE?

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

If your dune buggy has overturned or has been involved in a collision, do not drive it until your dune buggy has been inspected by your dealer. There may be damage or other problems that you can not see.

WARNING

Improperly maintaining this dune buggy or failing to correct a problem before driving can cause a crash in which you can be seriously hurt or killed.

Always perform a pre-drive inspection before every drive and correct any problems.

SAFE DRIVING PRECAUTIONS

Off-Road Use Only

Your dune buggy and its tires are designed and manufactured for off-road use only, not for use on paved surfaces. Driving on paved surfaces can affect the dune buggy handling and control. You should not drive your dune buggy on paved surfaces.

WARNING

Operating this dune buggy on paved surfaces may seriously affect handling and control of the dune buggy, and may cause the dune buggy to go out of control.

Never operate the dune buggy on any paved surfaces, including pavements, driveways, car parks and streets.

When driving off-road, also remember to always obey local off-road driving laws and regulations. Obtain permission to drive on private property. Avoid posted areas and obey "no trespassing" signs.

You should never drive your dune buggy on public streets, roads or highways, even if they are not paved. Drivers of dune buggies may have difficulty seeing and avoiding you, which could lead to a collision. In many states it is illegal to operate dune buggies on public streets, roads and highways.

WARNING

Operating this dune buggy on public streets, roads or highways could cause a collision with another vehicle. Never operate this dune buggy on any public streets, roads or highways, whether they are dirt, gravel or paved surfaces.

Keep Hands and Feet on Controls

When driving your dune buggies, always keep both hands on the steering wheel and both feet on the foot controls. It is important to maintain your balance and to control the Dune Buggy. Removing hands or feet away from the controls can reduce your ability to react and control the dune buggy.

WARNING

Removing your hands from the steering wheel or feet from the foot controls during operation can reduce your ability to control the dune buggy or could cause you to lose your balance and fall off the dune buggy.

Always keep both hands on the steering wheel and both feet on the foot controls of your dune buggy during operation.

Control Speed

Driving at excessive speed increases the chances of an accident. In choosing an appropriate speed, you need to consider the capability of your dune buggy, the terrain, visibility and other operating conditions, plus your own skill and experience.

WARNING

Operating this dune buggy at excessive speeds increases your chances of losing control of the dune buggy, which can result in an accident.

Always drive at a speed that is appropriate for your dune buggy, the terrain, visibility and other operating conditions, and your experience.

SAFE DRIVING PRECAUTIONS

Use Dune Buggy 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 visibility is limited (it's sometimes difficult to see obstructions like hidden rocks, bumps, or holes in time to react).

WARNING

Failure to use extra care when operating this dune buggy on unfamiliar terrain could result in the dune buggy overturning or going out of control.

Go slowly and be extra careful when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating the dune buggy.

Never drive past the limit of visibility. Maintain a safe distance between your dune buggy and other off-road 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 result in an accident, including an overturn.

Do not operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the dune buggy on such terrain. Always be especially cautious on these kinds of terrain.

Do Not Perform Stunts

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

WARNING

Attempting wheelies, jumps, and other stunts increases the chance of an accident, including an overturn.

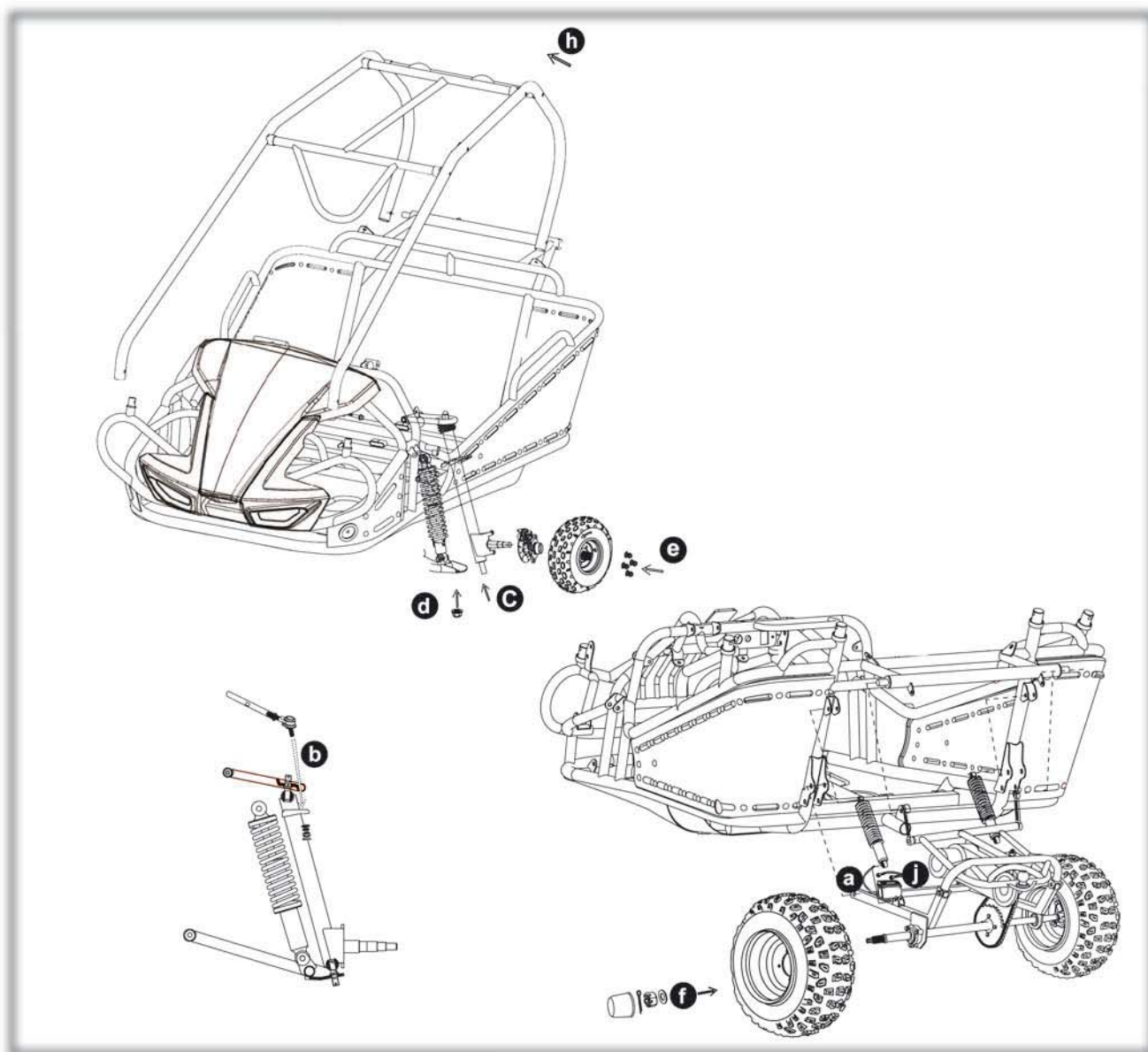
Never attempt stunts, such as wheelies or jumps. Don't try to show off.

Radiator Indicator Lamp

During the driving, you should always keep close contact with this red indicator lamp. This indicator lamp will tell you when your engine coolant system is getting too hot. To keep from causing any damage, you should stop the dune buggy and turn the key off. Check if there is any leak. At this time do not open the radiator cap, allow your coolant system and engine to cool down before opening the radiator cap.

If you find the coolant completely gone, you should check if the radiator, hoses or engine has such leaks.

- a. Install RR. Shocks and tighten the nuts.
- b. Install Ball Head, Tie Rod, tighten the Castle Nut and insert the cotter Pin.
- c. Install Dust Seals, align the Ball Head Bolt, Knuckle Support to the square hole on the Lower A-Arm.
- d. Install Flange Nut and tighten it (> 88.9 foot lbs).
- e. Install Front Tires and tighten the nuts.
- f. Install Rear Tires, tighten the nuts, insert cotter Pin and put on the Rubber Cover.
- g. Raise the C.B.C. bar as the picture shows.
- h. Install C.B.C. bar RR., put on R-Washer.
- j. Check all nuts and bolts, wiring, cables, fuel line, switches and tire pressure.
- k. Fill battery with Acid and charge, check and fill the engine with the recommended oil.
- l. Fill fuel tank with Unleaded Gasoline, and turn on the ignition switch to start the engine.



SPECIFICATIONS

DIMENSIONS

Overall Length -----	85 in. (2160mm)
Overall Width -----	53 in. (1346mm)
Overall Height -----	57.4 in. (1458mm)
Wheelbase -----	59 in. (1500mm)
Front Track -----	45.7 in. (1160mm)
Rear Track -----	39.4 in. (1000 mm)
Ground Clearance -----	6.7 in. (170mm)

ENGINE

Type -----	Forced air-cooled. 4-Stroke
Engine capacity -----	150cc
Bore / Stroke -----	57.4mm x 57.8mm
Displacement -----	149.6cm ³
Corrected compression ratio -----	9.2:1
Carburator -----	KF,CB24J
Output Power -----	7.4Kw/7500rpm
Maximum Torque -----	13/5500 foot lbs/r/min
Starting -----	Electric
Ignition -----	C.D.I.
Lubrication -----	Force & Splash
Transmission -----	Automatic (C.V.T system)
Spark plug -----	C7HSA(NGK)
Plug gap -----	0.6-0.7mm
Fuel Type -----	RQ90 (unleaded)
Lubricate oil -----	SAE-10W/40

CAPACITIES

Maximum load-----	Double Seats/400lbs
Fuel tank -----	1.75 Gal
Engine oil -----	30 Oz
Starting -----	<5s
Climbing -----	20 -25
Battery -----	12V 10Ah
Head Light -----	12V 35W/35W
Tail Light -----	12V 21W/5W
Fuse -----	10A

SPECIFICATIONS

Brake Track ----- < 7 m@20miles/h
Top speed ----- 30 miles/h(or limited as customers require)

CHASSIS

Front, Rear brake ----- Hydraulic disc, left foot control
Front tire ----- 20 x 7-8
Rear tire ----- 22 x 10 -10
Front Suspension ----- Independent Dual A-Arm
Rear Suspension ----- Swing Arm/Double Oil Damped Shock
Restraint System ----- Dual 4-point Harness
Final Drive Chain ----- (KMC) O-Ring Chain

TIRE PRESSURE

Front -----147kPa 1.5kg/cm² 21.3psi
Rear -----196kPa 2.0kg/cm² 28.4psi

WEIGHT

Net Weight ----- 465 lbs


A. Operation controls

WARNING - Do not attempt to start or operate the engine until completely familiar with the location and use of each control necessary to operate this vehicle. The operator must know how to stop this machine before starting and driving it.

a. Throttle

The right foot pedal is the throttle that controls the Kart speed. As the engine speed increased above idle, the clutch automatically engages and moves the vehicle forward. To disengage the clutch at any time, allow the throttle to return to the idle position.

(See Fig. 1)



WARNING

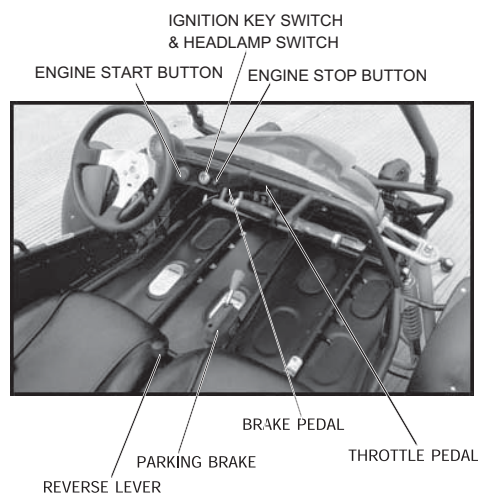
Each time prior to starting the engine, check the throttle assembly to ensure that when the pedal is pushed all the way forward the assembly is working smoothly and returns to idle when released. Do not operate if pedal or engine throttle linkage fail to return to idle. If unable to correct the problem through lubrication, adjustment or replacement of worn parts, contact your dealer for assistance.

b. Brake

The brake is located on the left side of the kart (See Fig.1). Applying pressure to the pedal draws the brake caliper around the brake pump at the rear wheel and slows or stops the kart.

c. Start engine

First, insert the key into the key-switch, turn the key clockwise to “ON” position. Secondly, push the “Engine Start Button”, (the illuminate button) in for 5 seconds to start the engine. If the engine does not start, release the button for 5 seconds and try again. Once the engine starts, let it warm up for 5 minutes or until the engine idles at the normal speed (1500-1700 RPM) before operation.



d. Engine stop button

Important-stop button test.

Before driving this vehicle, test the Engine Stop Button to assure that it is operating properly. With the engine running, push and hold the Engine Stop Button for two seconds for the engine to shut down.

Figure 1

OPERATION

B. Pre-Drive Inspection



WARNING

Perform this pre-drive inspection everyday before driving vehicle. If not performed, serious damage to the vehicle or personal injury may result.

- a. Check for Engine Oil Level. Check for leaks, add oil if required.
- b. Check for Fuel Level. Add fuel as necessary and do not overfill. Check for leaks.
- c. Check for Brakes. Depress the rear brake pedal several times, then check for proper brake pedal freeplay. Make sure there is no brake fluid leakage. Adjust if necessary.
- d. Check Tires. Check tires condition and pressure. The pressure on both Front and Rear tire is 5 and 8 lbs respectively.
- e. Check Drive Chain. Check for drive chain's condition and tension. Lubricate if necessary.
- f. Check Throttle. Check for smooth operation. Assure throttle "snaps" back to idle.
- g. Check Engine Stop Button. Perform engine stop button test. Repair as necessary.
- h. Check all Nuts, Bolts, and fasteners. Check wheels to see that all axle nuts and lug nuts are tightened properly. Check and tighten as necessary all other fasteners to specified condition.
- i. Check C.B.C Bar. Ensure all protective C.B.C bars are in place before operating the Kart.
- j. Check Brake Light. Check for proper operation.
- k. Check Wheels. Check for tightness of wheel nuts and axle nuts; check that axle nuts are secured by cotter pins.
- l. Check Steering. Check for free operation for any unusual looseness in any area.



CAUTION

Always follow rules for safe operation and wear a helmet.

Component locations

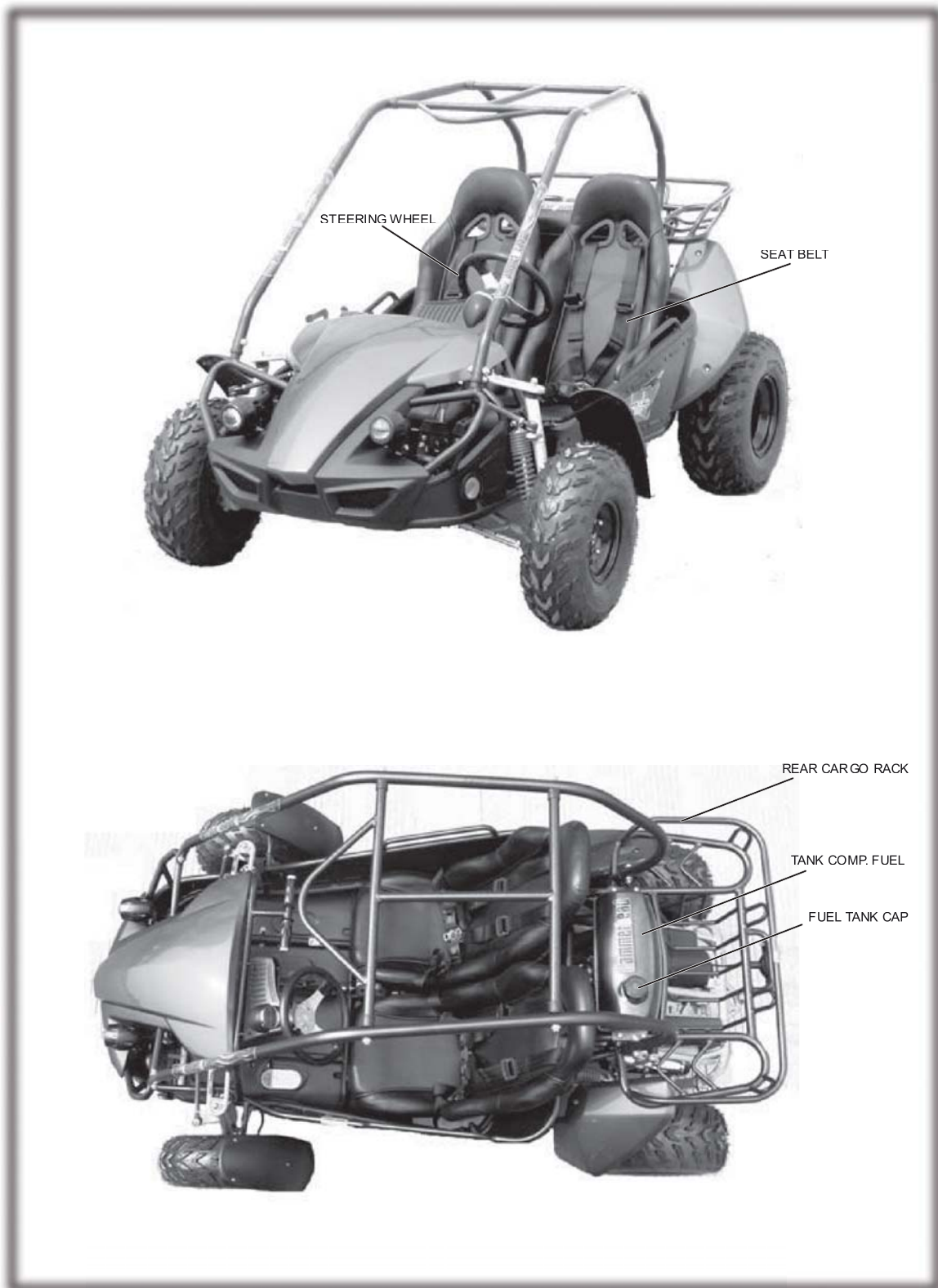


Figure 2

OPERATION

C. Passengers

The dune buggy allows for two riders only. Combine maximum weight of driver and the passenger should not exceed 180kg or 400lbs.

D. Seat Adjustment

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

- Pull seat adjustment handle upward to disengage seat slide.
- Move seat to desired position.
- Be sure seat adjustment handle snaps back into place and that seat is locked into position.

Figure 3

WARNING

Before attempting to adjust the seat, ensure that dune buggy engine is stopped.

WARNING

Never operate this Dune Buggy when the provided seat is not securely fastened, to do so could result in a strong possibility of severe personal injury or loss of life. Before attempting to adjust the seat, ensure the dune buggy engine is stopped.

E. Reverse Adjustment

a. Push forward the reverse lever to the "D" position so that the unit can move forward, pull back the lever to "R" so that the unit can move backward. (See Fig.4)

b. When reverse lever is in the drive position, there need to be 1/2 inch of freeplay in the reverse level. If the adjustment is not correct, then loosen the lock nut #2, then adjust lock nut #1 to the proper amount of freeplay.

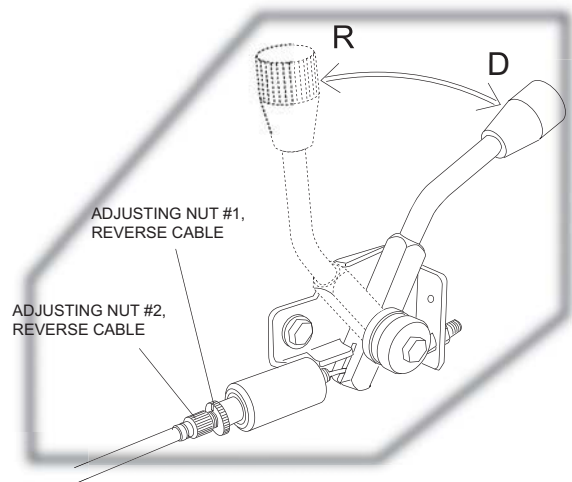


Figure 4

Always stop the dune buggy before changing gears.

OPERATION/SERVICE INSTRUCTIONS

F. Starting And Operating Instructions

- a. Before starting the engine, be sure that the driver is seated properly in the Dune Buggy with the seat belt.
- b. Testing the Dune Buggy in an open space at the beginning to learn how to start, turn and stop.
- c. Operate the Dune Buggy slowly until you are familiar with it.
- d. The turning radius of this Dune Buggy is small and agile, so the centrifugal force is very high when turning at high speed. Slow down to a more controllable speed when turning to prevent the Dune Buggy from rolling over.
- e. To prevent dune buggy from rolling over, be sure to only turn the dune buggy at a slow more controllable speed. Heel on the ramp of the main board when turning. (See Fig.5) Keep your leg rely on the foot pedal, you can feel the dune buggy is stable because of the gravity is adjusted and won't roll over.

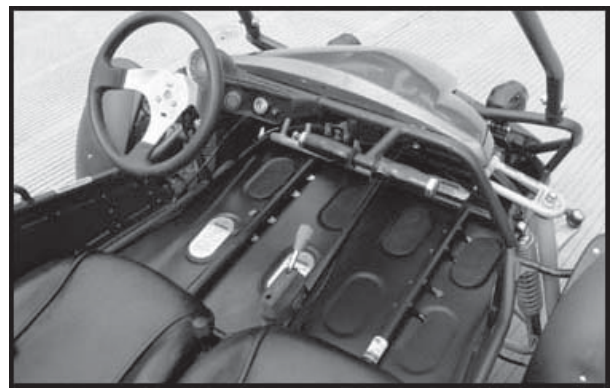


Figure 5

SERVICE INSTRUCTIONS

A. Service Air Cleaner

Service air cleaner every 20 hours

NOTE: Service more often under dusty conditions.

- a. Remove cleaner cover
- b. Remove air cleaner element 2 (See Fig.6)
- c. Fill the non-flammable cleaning agent into a basin and dip the element in it.
- d. Dry it after cleaning.

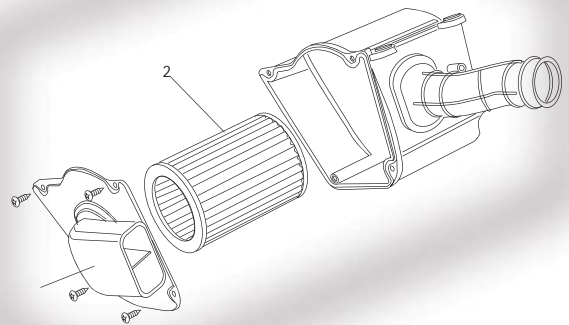


Figure 6

SERVICE INSTRUCTIONS

B. Engine Lubrication

You must change the oil in the crankcase after the first 5 hours of operating of your new engine (See Fig. 7) and after 10 hours of use thereafter. That will insure proper lubrication of internal parts and prevent costly repairs due to excessive wear.



**WARNING**

Used Oil Must Be disposed of at a proper collection Center

- a. Remove drain plug located on the right rear side of engine. Tip dune buggy backwards slightly by blocking up the front end and drain oil into suitable container.
- b. Remove and clean Oil Screen.
- c. Replace drain plug and tighten securely. Place dune buggy in a level position.
- d. Refill crankcase (approximately 1 1/4 pint) to top of filler neck with SAE 10W40 oil. Use same grade of oil as used originally.
- e. Check oil level before each use of dune buggy or after each 10 hours of operation. Add oil to bring up to proper level. Do not mix various grades of oil.

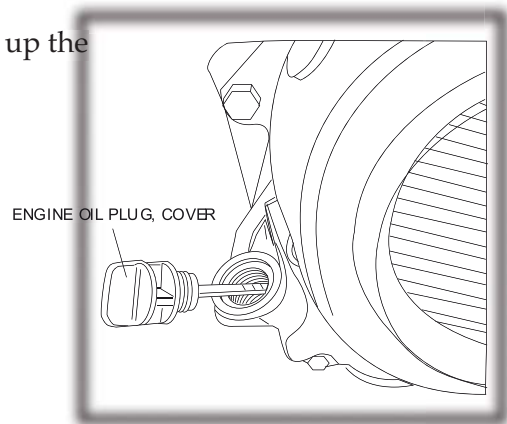


Figure 7

C. Spark Plug

- a. Remove the spark plug and inspect it each time you change the oil. (Use a spark plug wrench) The electrodes should be kept clean and free of carbon. The presence of carbon or excess oil will greatly reduce proper engine performance. If possible, check the spark plug gap (area between electrodes) using a wire feeler gauge. This specification is 0.6~0.7mm.
- b. Before installing spark plug coat threads lightly with graphite grease if possible, to ensure easy removal next time the spark plug needs inspection.
- c. It is advisable to replace the spark plug at least once a year to insure easy starting and good engine performance.

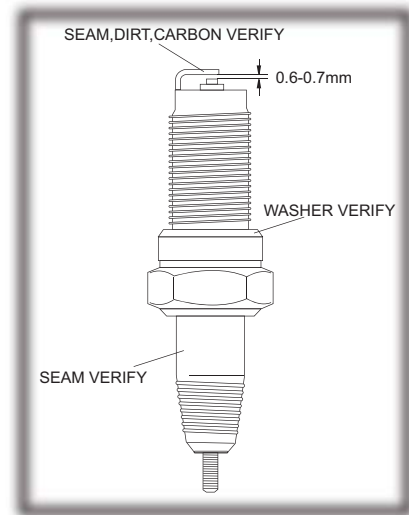


Figure 8

E. Cleaning Instructions

Keep your dune buggy clean. With a clean rag, wipe off any dirt and oil from around controls. Wipe off any spilled fuel and oil. Keep the engine clean of foreign objects, and be sure to check that air intake fan is free of debris for proper cooling.

F. Dune Buggy Lubrication

Lubricate vehicle every 90 days of use. Lubrication should be done sooner, if dune buggy is used everyday.

G. Chain Lubrication

To increase chain life, it should be lubricated with a spray on type chain lubricant. (See Fig. 10)

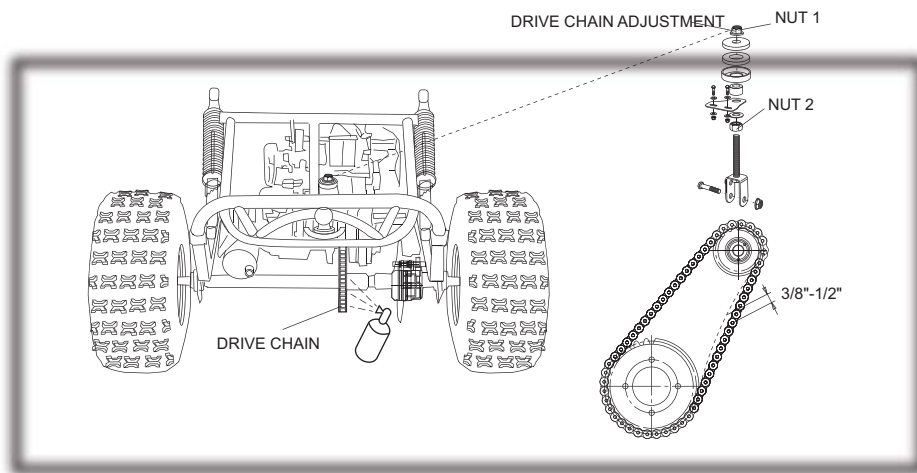


Figure 10

SERVICE INSTRUCTIONS

H. Chain Adjustment

Check the chain adjustment after first two hours of use. Readjust if it has more than 1/2" flex.

- a. Loosen Nut #1
- b. Adjust Nut #2. Turn Nut #2 clockwise in 1/2 turn increments, then turn nut #1 until tight.

Follow this procedure until chain is at proper tension (See Fig. 10).

- c. Repeat the above two steps until chain is adjusted to desired fit.

I. Adjustment of Front And Rear Shock

There are five adjustable positions on each shock. The default position is in the middle set by manufacturer (See Fig. 11)

Use a round nut wrench as you adjust the shock, the tension of shock spring will increase as you screw to left, decrease as you screw to right. Adjust according to the weight of the riders.

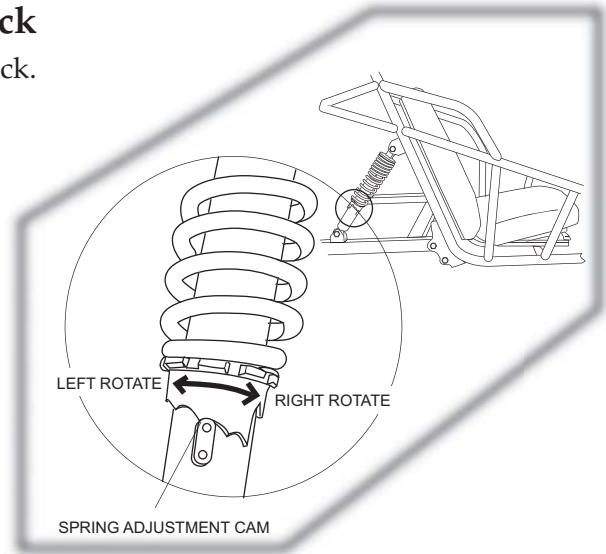


Figure 11

J. Storage Instruction

In the event your dune buggy is not to be operated for a period in excess of 30 days or at the end of each driving season prepare for storage as follows:

- a. Drain fuel tank and carburetor by allowing engine to run out of fuel, and use a fuel stabilizer.
- b. Lubricate engine cylinder by removing the air cleaner, then spray engine fogging oil through the carburetor until motor dies.
- c. Do not save or store gasoline over winter. Using old gasoline, which has deteriorated from storage, will cause hard starting and affect engine performance.



WARNING

Do not drain fuel while engine is hot. Be sure to move Dune Buggy outside before draining fuel.

A. Front Wheel Replacement

Do not disassemble the castle nuts when you replace the front wheels.

It is only necessary to remove the 4 lug nuts to remove the wheel. (See Fig. 12)

Tighten the nuts after replacing the wheels.

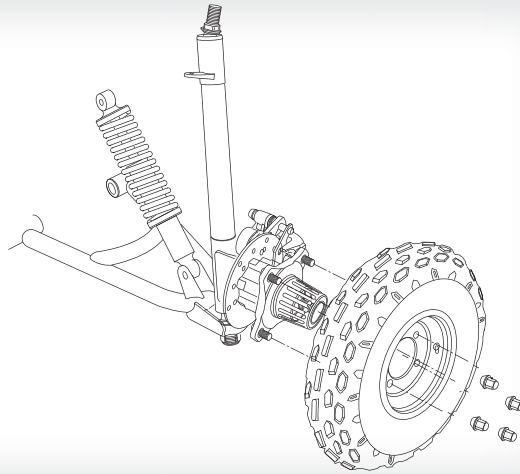


Figure 12

B. Rear Wheel Replacement

Do not disassemble the castle nuts when you replace the rear wheels and hub assembly.

Remove the cotter pin and then 24mm nut. Then slide off wheel and hub assembly.

It is only necessary to remove the 4 lug nuts to remove the wheel by itself. (See Fig.13)

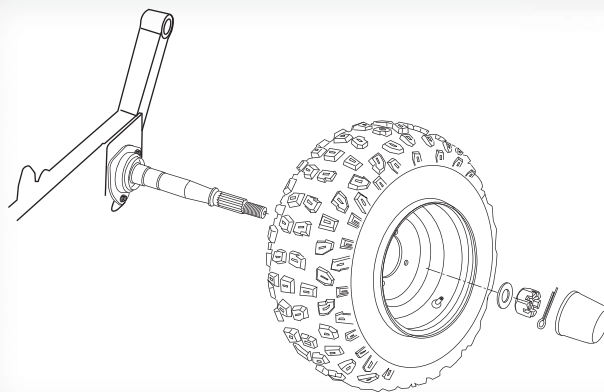


Figure 13

C. Front Wheel Alignment

a. The front wheels should be “toe-in” from 1/8” to 1/4”. To check for alignment, measure distance A and B between the centerline (CL) of the wheels. The proper toe-in dimension A should be 1/8” – 1/4” greater than dimension B.

b. To adjust the alignments, loosen the lock nuts on both sides of Front Tie Rods. To make Dimension B smaller, turn the rod to left. Adjust the rod to right direction to make Dimension B larger. After adjusting to the desired length, tighten the lock nut against the rod end. Recheck the dimensions for proper alignment.

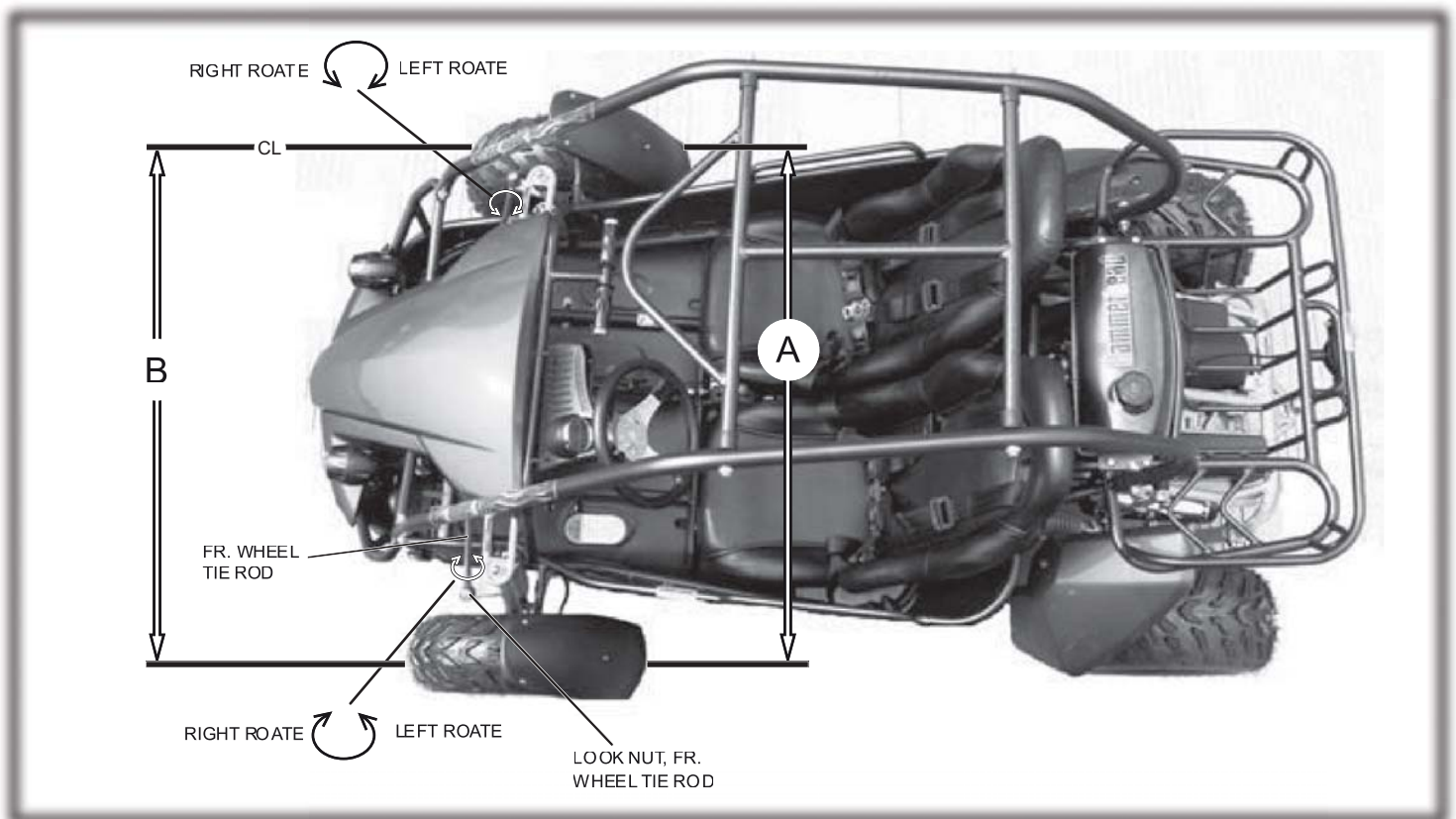


Figure 14

PERIODICAL CHECK AND SERVICES

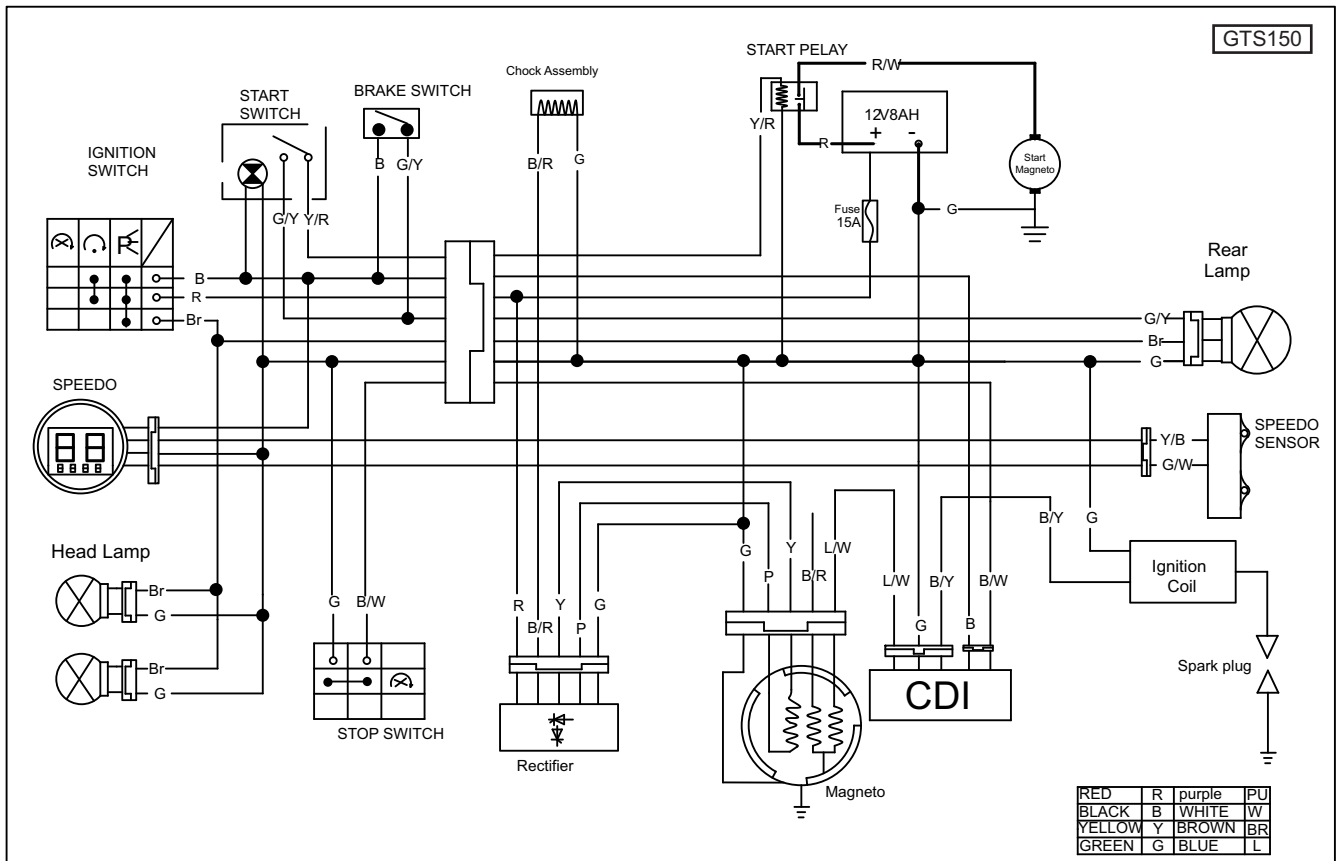
The maintenance intervals in the following table are based upon average driving conditions.

Driving in unusually dusty areas, require more frequent servicing.

Items \ Time of service	Initial service (first week)	Monthly	Quarterly	Yearly
Tire pressure/wear	I	I		
Brake performance	I	I		
Tightness of screws	I	I		
Air cleaner			C	I
Carburetor	I	A		C
Spark plug			C, A	
Drive chain	I	I	C, A, L	
Brake oil			I	
Replace gearbox oil		I	R	
Chassis		C, I	L	
Fuel switch/fuel tank		I		C
Battery			I	
Valve clearance of engine			A	

A: adjust **C:** clean **I:** inspect, clean or replace if necessary. **L:** lubricate **R:** replace

WIRING DIAGRAM



**Geason Enterprises, LLC dba Geason Powersports
Emission Control System Warranty Statement**

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The U.S. Environmental Protection Agency and **Geason Enterprises, LLC dba Geason Powersports** (hereinafter "**Geason Powersports**") are pleased to explain the emission control system warranty on your 2012 Off-Road ATV. New off-road motor vehicles must be designed, built and equipped to meet U.S. EPA Federal anti-smog standards. Geason Powersports must warrant the emission control system on your vehicle for 5,000 km, or at least 30 months, whichever comes first, provided that there has been no abuse, neglect or improper maintenance of your vehicle. This ATV was designed to meet the emission standards for 10,000 km, or five years, whichever comes first.

Your emission control system may include parts such as the carburetor or fuel injection system, the ignition system, catalytic converter and engine computer, if it is equipped. Also included may be hoses, belts, connectors and other emission-related assemblies.

Where a warrantable condition exists, Geason Powersports will repair your vehicle at no cost to you, including diagnosis, parts and labor.

If an emission-related part on your vehicle is defective, the part will be repaired or replaced by Geason Powersports. This is your emission control system DEFECTS WARRANTY.

NOTICE! Use of any Geason Powersports vehicle in any type of competitive event completely and absolutely voids this and all other warranties offered by Geason Powersports.

OWNER'S WARRANTY RESPONSIBILITIES

As the vehicle owner, you are responsible for the performance of the required maintenance listed in your owner's manual. Geason Powersports recommend that you retain all receipts covering maintenance on your vehicle, but Geason Powersports cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

You are responsible for presenting your vehicle to the Geason Powersports dealer as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

As the vehicle owner, you should be aware that Geason Powersports may deny your warranty coverage if your vehicle or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

If you use your vehicle in any type of competitive event, this warranty is immediately and completely void.

If you have any questions regarding your warranty rights and responsibilities, you should contact Geason Enterprises, LLC dba Geason Powersports, 1200 Lakeside Parkway #325, Flower Mound, TX 75028, Phone: 214-513-1700 or the U.S. Environmental Protection Agency, 2000 Traverwood Drive, Ann Arbor, MI 48105.



**Geason Enterprises, LLC dba Geason Powersports
Limited Warranty on Emission Control System**

YOUR WARRANTY RIGHTS AND OBLIGATIONS

Geason Enterprises, LLC dba Geason Powersports (hereinafter "Geason Powersports") warrants that each new 2012 and later Geason Powersports off-road vehicle:

- A. is designed, built and equipped so as to conform at the time of initial retail purchase with all applicable regulations of the United States Environmental Protection Agency, and;
- B. is free from defects in material and workmanship which cause such vehicle to fail to conform to applicable regulations of the United States Environmental Protection Agency for the periods specified above.
- I. **Coverage.** Warranty defects shall be remedied during customary business hours at any authorized Geason Powersports dealer located within the United States of America in compliance with the Clean Air Act and applicable regulations of the United States Environmental Protection Agency. Any part or parts replaced under this warranty shall become the property of Geason Powersports.
- II. **Limitations** This Emission Control System Warranty shall not cover any of the following:
 - A. Repair or replacement as a result of
 - (1) accident,
 - (2) misuse,
 - (3) repairs improperly performed or replacements improperly installed,
 - (4) use of replacement parts or accessories not conforming to specifications set forth by Geason Powersports, which adversely affect performance and/or
 - (5) use in competitive racing or related events.
 - B. Inspections, replacement of parts and other services and adjustments required for required maintenance.
 - C. Any vehicle equipped with an odometer or hour meter on which the odometer mileage or hour meter reading has been changed so that actual mileage cannot be readily determined.
- III. **Limited Liability**
 - A. The liability of Geason Powersports under this Emission Control System Warranty is limited solely to the remedying of defects in material or workmanship by an authorized Geason Powersports dealer at its place of business during customary business hours. This warranty does not cover inconvenience or loss of use of the vehicle or transportation of the vehicle to or from the Geason Powersports. Geason Powersports shall not be liable for any other expenses, loss or damage, whether direct, incidental, consequential or exemplary arising in connection with the sale or use of or inability to use the Geason Powersports vehicle for any purpose. Some states do not allow the exclusion or limitation of any incidental or consequential damages, so the above limitations may not apply to you.



**Geason Enterprises, LLC dba Geason Powersports
Limited Warranty on Emission Control System**

- B. No express emission control system warranty is given by Geason Powersports, except as specifically set forth herein. Any emission control system warranty implied by law, including any warranty of mechanability or fitness for a particular purpose, is limited to the express emission control system warranty terms stated in this warranty. The foregoing statements of warranty are exclusive and in lieu of all other remedies. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

- C. No dealer is authorized to modify this Limited Emission Control System Warranty issued by Geason Powersports.

IV. LEGAL RIGHTS. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

V. This warranty is in addition to the Geason Powersports limited vehicle warranty.

VI. ADDITIONAL INFORMATION. Any replacement part that is equivalent in performance and durability may be used in the performance of any maintenance or repairs. However, Geason Powersports are not liable for these parts. The owner is responsible for the performance of all required maintenance. Such maintenance may be performed at a service establishment or by any individual. The warranty period begins on the date the ATV is delivered to an ultimate purchaser.

**Geason Enterprises, LLC
dba Geason Powersports
1200 Lakeside Parkway #325
Flower Mound, TX 75028
Phone: 214-513-1700
Fax: 214-513-1711**

