



## Servicing your Blade “Basic Maintenance”



### [Intro](#)

**A**ny kart you purchase will require at least “basic maintenance” on a regular basis. The better the kart, the less tools you’ll need but all require regular maintenance such as; oil changes, replacing brake pads, tightening nuts & bolts, etc.

If you are handy, these are all very easy to do and only require a basic knowledge to maintain.

**W**e would like to share some tips and basic maintenance procedures to keep you rolling. These can all be done by the customer without voiding the warranty if done properly. If at any time you don’t feel comfortable with any of these procedures, drop it by our shop and we would be glad to do it for you! *We offer service contracts if you choose to go that route!* (Click the “[Service Contract](#)” Link)

**Before riding**, you should always go over all the major nuts and bolts to be sure everything is tight and check “high impact” items such as lug nuts, shocks and struts.



Give the tires a good kick!

*(We “Locktite” most nuts and bolts when we put them together but the more fun you have in your Blade, the more you need to check them! 😊)*

Here is a list of [tools](#) you will need to perform basic maintenance on your buggy.....

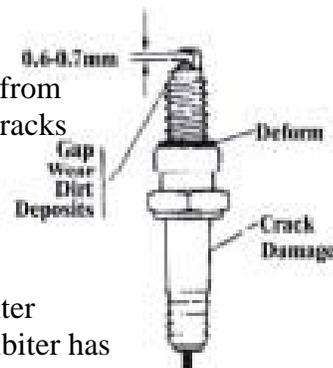
- \*Phillips Screwdriver
- \*Metric Socket set (10mm,12mm, 14mm)
- \*Pliers
- \*10X30 or 10W40 oil (Mobile 1 synth is our personal preference)
- \*Flat head Screwdriver
- \*Adjustable wrench
- \*Spark plug Socket (16mm)

## “Service FAQ”

The following is for general maintenance on your kart. BE careful, If you don't understand any instruction, please bring your kart in for service so as not to void your warranty.

### Checking [Spark Plug](#)

Clear up the carbon and dirt around the spark plug to prevent it from falling into the cylinder when removing. Check for warping or cracks in the porcelain,



### **Removal steps:**

This should only be done after the engine has cooled

If the spark plug is too tight to remove, spray some rust inhibitor or WD40 on the spark plug washer and the thread part; after the inhibitor has soaked the washer and thread part, try again.

- a. Clear up the dirt and carbon accumulation on the spark plug with a wire brush
- b. Check the spark plug gap (**It should be between 0.6 - 0.9 mm.**)
- c. If the carbon accumulation or the wear of the spark plug is too serious, replace the spark plug with a new one. **Type: NGK DPR7EA-9 For the 250cc  
NGK C7HSA FOR THE 150, 110 AND THE 150CC MODELS**

*Spark plug tip if the tip of the plug is white or grey, you are running lean. Brownish color, you are good. If it is Black or wet, you are running rich. A lot can be told but looking at the tip of your plug!*

### Adjustment of [Idle Speed](#)

- a. Start the engine and warm up for several minutes;
- b. Turn the fuel adjusting screw fully and turn back the standard 1~ 3/4 turns;
- c. Turn the fuel adjusting screw left and right slightly to adjust the throttle to 1,500rpm's, +/-100rpm
- g. Run the engine from low speed to high speed; Run the engine at the idle speed for 10~ 15 seconds to see if the idle speed is stable;
- h. If the idle speed changes, repeat steps c~f.

### [Tire Pressure](#) / Wear

Check the tire pressure before driving.

Specifications: **Front Tire: 7-9psi Rear Tire:7-9 psi**

*Tire pressure is very important for riding stability.*

Do not ride on a road surface. These tires are made for off road use. Replace tires when they become worn

### [Brake Performance](#)

- a. Always check that there is plenty of brake fluid in the reservoir;
- b. Check if the front/rear brake pads are in good condition
- c. Check the brake rotor for abnormal wear.

Always replace brake parts when they become worn

### Air Cleaner

Clean the air cleaner quarterly or more often when driving in dusty conditions.

If the air cleaner is clogged with dust, its performance will be severely decreased and/or engine damages will occur.

#### **Longevity of Air Cleaner**

- a. Clean the air cleaner every 250mi. of running or more
- b. Replace the paper air cleaner every 1,000mi,of running.
- c. Replace foam filter when necessary

#### **Paper Filter**

- a. Remove the filter from its housing;
- b. Lightly tap the filter on an object to knock out the dust and replace
- c. Replace the filter element if it is worn.

#### **Foam Filter**

- a. Remove the filter out of its steel cage;
- b. Wash the filter in non-flammable cleaning solvent;
- c. Submerge the filter in oil and squeeze it to remove excess oil;
- d. Install the filter element back into the air box.

#### **Notes:**

Make sure that the element is seated properly and no foreign material can pass by it

### Fuel Valve Lever

On some of our vehicles there is a manually operated fuel valve lever (petcock) with three positions:

- a. **"ON"** position: It's the normal operating position where the fuel flows into the carburetor;
- b. **"RES"** position: If the fuel lever is in the "ON" position and it is too low for the engine to operate, turn the fuel lever to the "RES" position to use the reserved fuel supply, and refuel as soon as possible;
- c. **"OFF"** position: It's the closing position. When the vehicle is not in use, always make sure that the petcock is in the "OFF" position

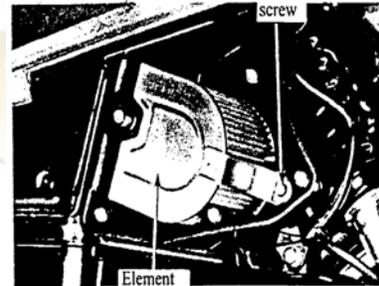
### Fuel Switch Service

- a. Periodically clean the petcock outside with grease remover and water;
- b. Check for any leaks
- c. Replace the petcock if there is any sign of leakage.

### Chassis Lubrication

Inspect and clean it monthly if necessary and lubricate it regularly.

- a. Grease the chassis bushings and bearings with some grease quarterly to make sure that they operate smoothly
- b. If it's used in extremely wet, muddy or dusty conditions, we recommend you to service it more often.



## Engine Oil Level Inspection

*Inspect the engine oil before riding and replace it monthly.*

- a. Stop the engine
- b. Keep the vehicle on the flat ground for 2-3 minutes;
- c. Remove and clean off oil level stick and stick back in to check level.

**Notes:** The Oil level stick should not be screwed in while checking level, just put in top and check. Be careful of hot engine parts

## Changing Engine Oil

*Engine should still be warm but not hot before changing oil!*

- a. Remove the drain plug from the left side bottom of the engine, and drain oil into an oil pan for disposal;
- b. Remove the large cap on the bottom left of the engine and remove the screen
  - b. Wash the screen with some cleaning solvent and put it back
- c. make sure that the O-ring is still in good condition, *replace it if necessary*
- d. Replace drain plug
- d. Refill the engine with **SAE10W/30SF** engine oil and run the engine for 5 minutes;  
*Engine oil capacity: 1.0 L (Disassembling) 0.8L (Replacing)*
- e. Check the oil level on the filler cap again without screwing it in
  - f. Screw the cap back on

## Oil Leakage

- a. There could be too much oil in the gearbox, check level
- b. The oil seal is damaged or worn.

## Replacement of Gearbox Oil

Recommendation: *before draining the final gear oil, please warm the engine for at least 10 minutes.*

Inspect the final gear oil monthly and replace it quarterly.

- a. Keep the vehicle on flat ground;
- b. Check the oil level: remove the oil level screw on the left rear engine case
- c. If the oil level parallels the oil level bolt hole, it's normal.
- d. Drain out the oil: remove the drain plug at the rear bottom of the engine case
- e. Check if the gearbox oil seal is damaged, and replace it if necessary.

**Notes:** We recommend the Mobile 85w/90 gear oil for the final drive case. However, in extreme cold weather conditions, the vehicle may become hard to start, so we advise a lighter oil, such as a 75 wt or the equivalent motorcycle transmission fluid.

## Trouble Shooting

The engine can be started, but the [vehicle won't go](#).

- The gears or shifter cable could be damaged or loose

### [Transmission Noise](#)

- The bearings or gears could be worn

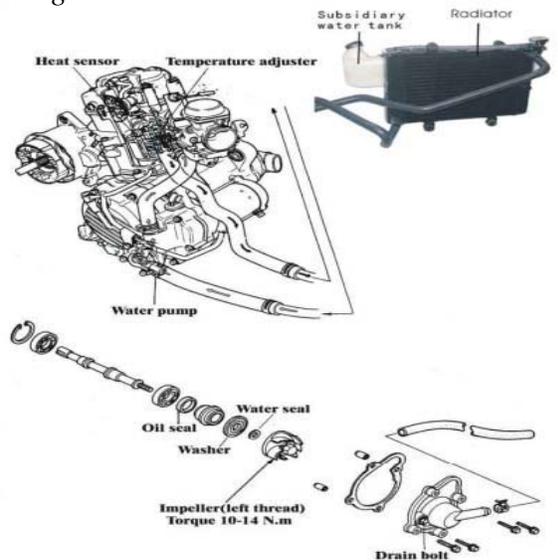
*Seek immediate attention before further damage occurs*

### [Cooling System \(FOR 250XT\)](#)

If the water temperature rises.

*These karts need periodic rests to cool down every hour or so.*

- The heat sensor of the thermometer could be faulty
- The water tank cover missing or damaged
- The temperature petcock is faulty
- The tank fluid is insufficient;
- The water pipe and water sleeve are clogged



The [Engine won't start](#).

Check that.....

- There's fuel in the fuel tank
- The fuel tube isn't clogged
- There isn't too much fuel in the fuel tank
- The air cleaner isn't clogged
- The fuel hasn't deteriorated
- The battery isn't dead?

The [engine won't run](#) stably or smoothly at idle speed.

Could be that.....

- The idle speed hasn't been adjusted properly
- The gas mixture in the carburetor is too rich
- The gas mixture in the carburetor is too lean.
  - The air cleaner is clogged
  - The fuel has deteriorated
  - The air valve isn't working
- The negative pressure tube is damaged or clogged
- The connecting pipe of the carburetor is damaged

The [engine stalls](#) when the throttle is fully open.

Could be.....

- a. The negative pressure piston film is damaged;
- b. The negative pressure tube is clogged.
- c. The gas mixture is too lean.
- d. The fuel jet is clogged
- e. The air hole of the fuel tank cover is clogged
- f. The fuel filter is clogged
- g. The fuel tube is clogged
- h. The float valve is stuck
- i. The fuel level is too low.
- j. The gas mixture is too rich
- k. The automatic choke is opened too widely
- l. The fuel level is too high
- m. The air cleaner is clogged

## **Important Info**

**Please let our certified mechanics repair your kart if you are not knowledgeable in small engine repair.**

**No smoking or fires in the working places**

**Assemble the O-rings correctly and replace them with new ones if necessary**

**Drain out the fuel in the float chamber before disassembly**

**Don't disassemble the automatic choke by yourself**

**Engine parts are hot, be careful!**

**Never attach unauthorized accessories to your Blade.**

**Always follow inspection and maintenance procedures as recommended in your manual**

**Inspect your Blade each time you use it to make sure there are no mechanical faults or problems with tires, brakes or controls.**

**Your Buggy must be in safe operating condition at all times, with sufficient oil, gas, Brake fluid and tire pressure.**

**Always turn the engine OFF when refueling.**

**DO NOT WORK ON YOUR BLADE WITH THE ENGINE RUNNING**

**Do not run the engine in an enclosed area —Carbon Monoxide CAN BE FATAL!**

**Engine oil from a recently run motor can be very hot. When draining oil for an oil change, be careful!**

**Be sure to replace fuses with ONLY the correct ones; using an incorrect fuse can cause a fire.**

**A slight spark could cause a fatal explosion. Keep a fire extinguisher nearby when working on your Blade.**

**When checking battery fluid, remember that a spark could cause the battery to explode. Switch the engine OFF and avoid sparks.**

**Check that all cables are free and working. A jammed throttle can cause an accident.**

**Excessive “play” or slippage on a chain drive can cause the chain to break which could, in turn, cause a serious accident.**

**“Grabbing,” shuddering or lack of braking ability could mean there is a serious brake problem. This must be fixed before riding or serious injury could result.**

**The high-tension wire from the CDI unit to the spark plug generates extremely high voltage and can cause a serious or fatal shock if touched with the power on.**

**Don’t touch any part of the engine or exhaust until it has cooled down.**

**Do not allow animals or children to be around an unattended ATV.**

**Keep loose clothing and long hair well out of the way of moving parts.**

**Remember:**

**No one should operate a buggy beyond his or her physical or mental limits.**

**It is your responsibility to ensure that your Blade is properly and safely ridden and maintained at all times.**

**Contact “KidNme Motorsports” about anything related to your Blade that you do not understand or need advice about.**

**KidNme Motorsports cannot be held responsible for the use of the information contained here or your lack of knowledge in applying it.**

**If you don’t know, bring it in!**

**You ride at your own risk. Be Safe and most of all,**

**Have fun!**

**KidNme Motorsports**