

# Break-in Instructions

GRC Pocketbikes are precision engineered. It is critical to make sure all procedures are followed to maximize the performance and life of your GRC Pocketbike.

## Carburetor

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**WARNING:** You may need to change the original jet size before running the engine at its maximum rpm.

## Spark Plugs

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After the bike has been broken in, it is recommended that you change the spark plug from the stock NGK B9EG to NGK B10EG depending on the temperature. For better performance, you can also use a short NGK 105 plug.

B9EG - Best used when air temperature is lower than 15° Celsius

B10EG - Best used when air temperature is 15° Celsius and above (Note : B10EG will work if colder than 15°C)

NGK 105 - Best used for best performance on the race track

## Gas/Oil Mixture

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We suggest that you use specific oils for pocketbikes in racing or leisure categories

Break in - 30:1 non synthetic

Racing - 100% synthetic oil 50:1

GRC recommends MOTUL oil

## Engine Break In

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### Step 1 - Mixture

Make sure to use a 30:1 mix ratio during the break in period.

### Step 2 - Location

During your break in, it is best to ride the bike on a track.

### Step 3 - First Session

Allows the pocketbike several minutes to warm up before you start this process. Once the engine has had a chance to warm up, take the bike for a ride allowing the engine to never rev more than 1/3 throttle (rpm vary in each engine). Ride not more than 10 minutes then turn the pocketbike off and allow the engine to cool.

### Step 4 - Second Session

Again allow the engine a moment to warm up before you start the process. After warming, take the bike for a ride allowing the engine to never exceed more than 1/2 throttle (rpm vary in each engine). Ride no more than 10 min then turn the pocketbike off and allow the engine to again cool.

### **Step 5 - Third Session**

Again allow the engine a moment to warm up. After warming, take the bike for a ride allowing the engine to never exceed more than 3/4 throttle (rpm vary in each engine). Ride no more than 10 minutes then turn the pocketbike off and allow the engine again to cool.

### **Step 6 - Final Session**

Again, give the engine a moment to warm up. On this session it is important to take the pocketbike from stop to full throttle in a smooth and consistent acceleration allowing the engine to peek at maximum rpm and full throttle.

**WARNING:** Do not hold RPM at full throttle for long period of time until bike has been fully broken in.

Once you have peeked the engine at full throttle, let off the throttle and allow the bike to slow back down to stop. Repeat this process several times and ride no more than 10 minutes then again turn the pocketbike off and allow the engine to cool.

It is important that when you go through these sessions, the bike must ride faster and faster each session. This will help prevent the engine from having performance problems and help prolong the life duration and reliability.

## **Cooling**

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The bike is delivered with out fluids in the radiator. Fill the radiator completely by making sure all the air bubbles are out. To insure all the air bubbles are out, after filling the radiator, rotate the rear tire to allow the pump to cycle the water and release any extra air. To insure all the air bubbles are out, check the radiator level after your first ride, if needed add more fluids.

When filling the radiator, make sure you are using special cooling liquids and/or distilled water. Make sure you respect any regulations when disposing of fluids.

**WARNING!!** Before each use, verify that the water pump belt is in place!

## **Tire**

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Recommended tire pressure: Front 21 - 24 PSI / Rear 23 - 26 PSI

## **Clutch**

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" The clutch must be correctly adjusted to prevent from premature wearing. For best results use a caliper square (or small ruler) to measure the springs tension length. Its important that both springs are adjusted to the same length. Using a rev counter will help you determine the engaging point of the clutch."

**To adjust the clutch**

Put the bike on a stand so that the rear wheel is free to move  
To engage at a higher rpm, tighten the adjustments on the clutch equally  
To engage at a lower rpm, loosen the adjustments on the clutch equally

For best results have the clutch engage at the appropriate RPM

Polini Clutch: 9.000 - 9.200 RPM  
Bi-Zeta Clutch: 9.500-10.000 RPM

## Chain

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To help increase the life of your chain, it is important that you adjust the tension of the chain appropriately and always check for stiff points. Regularly grease the chain with lubrication to help prevent rust and wear, using a specially designed oil for a perfect lubrication will help.

To check whether you have the right tension, you should move the chain up and down from 2cm. That means no more than 1cm up and 1cm down.

## Nuts and Bolts

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After the first time you ride your bike, it is recommended that you check the main bolts on the bike and tighten them as needed. Bolts could vibrate loose after time and should be checked often to prevent you from losing them as well as other possible troubles.

**RACERS:** You should check your bolts after every race to insure optimum performance on the race track at all times.

## Starting the Bike

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Inside the starter is a ratchet plate made of plastic teeth which turn the engine when you pull the T-shaped Handle. To prevent damage to this ratchet plate, it is important that you pull a short amount of cord and insure you pull the cord straight back.

If you follow this advice you will prevent damage to the part. You also have an option to upgrade your ratchet plate to a Bi-Zeta reinforced kit, see your dealer for more information.

***If you have questions, call us before you do anything. Make sure to have fun!***