



Grutter Import B.V.  
Regenboog 213  
6661 PP Elst  
The Netherlands  
mob.+31(0)643253657  
www.bigplanes.nl  
info@bigplanes.nl

**KvK:** 09222149  
**BTW:** NL8224.56.862.B01  
**ING:** 4950145  
**BIC:** INGBNL2A  
**IBAN:** NL15INGB0004950145

## **NGH GF38cc 4-stroke Gasoline Engine Instruction**

### **Dear customers:**

Thank you for purchasing new NGH GF38cc 4-stroke gasoline engine, please read this instruction carefully before your operation.

### **Specifications:**

Type: 4-stroke Air cooled Gasoline Engine for Model Airplane Use Only

Displacement: 37.97cc

Bore\*Stroke (mm): 39\*31.8

Compression ratio: 9

Carburetor: Walbro custom WT1022

RPM range: 1800-8000rpm

Spark plug type: CM-6

Break in fuel oil ratio: 25:1

General use fuel oil ratio: 35:1

Recommended propellers: 18\*10, 19\*8, 19\*10, 20\*8

Weight: 1310g

### **Safety WARNINGS:**

1. This engine isn't a toy! Misusing can cause serious injury!
2. This engine can cause severe harm to you, and/or others, if misused or there safety cautions and warnings are not observed, NGH and dealers aren't responsible for any loss, injury or damages resulting from the miss-use of RC model engines.
3. Keep away from the rotating propeller area while operating the engine.
4. Before every use, check engine assembly, propeller and airframe carefully for loose screws and nuts.
5. Turn off the engine before making any adjustments.
6. Always check propeller nut tightening.

### **Carburetor:**

1. This engine uses a Walbro custom WT1022 with a remade arm.
2. Same adjustments as usual.



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### **Lubricating:**

1. There are two nipples on Intake manifold. One pressurizes to carburetor from crankcase, and one is for lubrication from carburetor to crankcase.
2. There are two nipples on rear cover.
3. Connect the nipples with fuel tubing separately. Can be connected in any order.

### **Break-in procedure:**

This engine still uses a high precision sleeve liner, so a lengthy break in period is not necessary, however it is beneficial to follow the bench break in process below:

1. All NGH engines are tested before shipment, lubricated, and packed well.
2. For break in use 2 cycle oil at a ratio of 25:1, and general use with 35:1.
3. Break in RPM is 3000RPM.
4. Break in time is 30 minutes.
5. Break in is best performed without a using a muffler, however if noise is an issue
6. you can use the stock muffler.
7. After 10 minutes of break in de-mount the rear crankcase cover and lubricate the bearings.
8. Continue the break in and repeat step 7 after 30min.

### **Very important:**

1. Must connect lubricating nipples, in any order, with fuel tubing between rear cover and intake manifold. Insufficient lubricating will damage the engine.
2. Must use 2 cycle oil for lubricating, do not use 4 cycle oil.
3. Valve gap is at 0.03 to 0.08mm.

**Please contact your dealer or distributor with any questions.**

**Happy Flying!**

**NGH ENGINES COMPANY**

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