

## GT17-Pro 2-Stroke RC Gasoline Engines

### Owner's Operating Instruction Manual

#### Dear customer:

Thank you for purchasing our NGH GT17 gasoline engine. Professional GT17 engine has been developed by NGH engineers to offer all hobbyists gasoline engine. You will be delighted with fuel economy, reliability and power of your GT17. We hope that you will enjoy with your new engine, and have many fun and safe flying experiences with its use.

#### Safety Instruction and WARNINGS!

Please read the instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.

GT17 engine is NGH R&D manufacturing precision products. It must be operated with caution and common sense and requires some basic mechanical ability. This product is not intended for use by children without direct adult supervision. Don't attempt disassembly, use with incompatible components or augment product in any way without the approval of our company. It is to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

#### Age Recommendation: RC engine is not a toy! Not for children under 15 years.

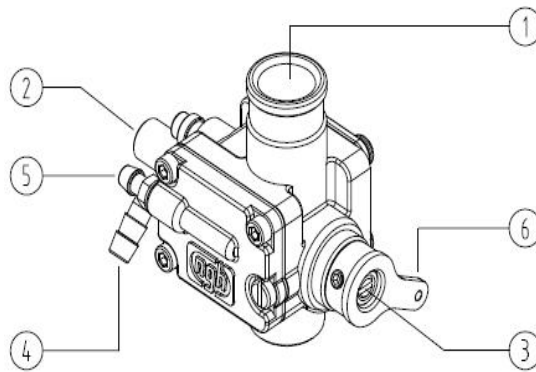
The engine is designed for use on a model radio control airplane. If it is used for any purpose, we cannot be responsible for its reliability of safety.

- NGH or their dealers aren't responsible for any loss, injury or damage resulting from the miss-use of RC engine.
- Keep away from the rotating propeller area while operating the engine.
- Do not wear loose clothing near the engine or the propeller.
- Do not operate the engine near loose material such as dirt, gravel, ropes, sand, etc.
- Always run your model engine in a well-ventilated area. Model engines produce possibly harmful carbon monoxide fumes.
- Always ensure that the propeller is securely attached to the engine shaft and all retaining fasteners are tightened properly before each flight.
- Always stand clear of and behind the propeller, ensure the face and body are far away from the propeller blade after trajectory. Never allow anyone, to be in front of or to the sides of the propeller when starting or running the engine.
- Always ensure that small parts in the children can't touch place to prevent children from swallowing parts;
- Always check the propeller nut tightening.
- Gasoline is extremely flammable. Be careful of any sparks from electrical contacts such as fuel pumps, battery charger, etc.
- Allow your engine stop and cool before touching or fueling. The running engine of the surface temperature is high, easy to cause burns and other personal injury.
- Be sure to check whether there are loose bolts before flying. When install a muffler, the muffler in the threads of the screw into the engine exhaust, until twist fixed, it is recommended to use screw glue.
- Ensure the engine and muffler in aircraft fairing environment with cold air, make sure the engine cooling.

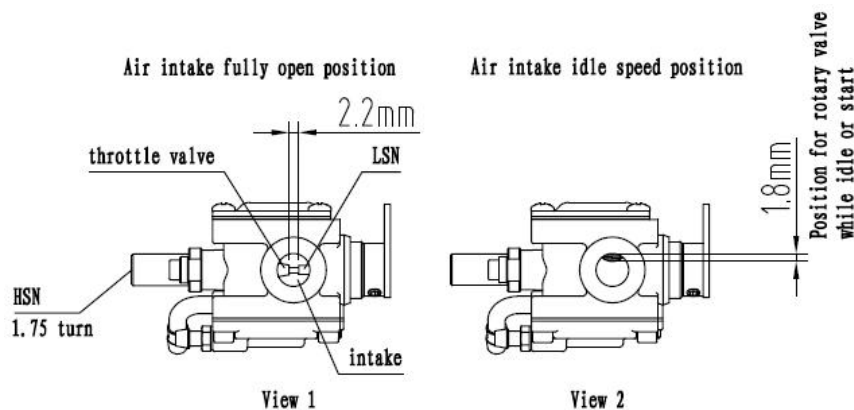
#### Product Specifications:

Type: 2 Cycle Air Cooled Gasoline Engine (Only used for fixed-wing aircraft model)	
Volume: 16.91cc	Bore: 29
Stroke: 25.6mm	Carburetor: NGH 20G-Pro Carburetor
Mix Output: 1.98HP@9500RPM	RPM Range: 1700-9500RPM
Ignition: NGH automatic advancing angle ignition (RoHS and CE Certified; Rcexl Manufactured)	
Ignition Power: DC 6V -14.4V 1000mAH	Spark plug type: 1/4 - 32
Fuel: Standard 92 octane gasoline + FD 2-stroke oil	Mixing ratio: gasoline : oil = 25:1
Recommended propeller: 15x10、16x8、16x10、17x8 (Two blades)	Weight: engine 630g、ignition 100g、 muffler 120g

## Carburetor setup, adjust:



- ①—Air inlet;      ②—High speed needle(HSN);      ③—Low speed needle(LSN);      ④—Inlet nozzle;  
 ⑤—Suction nozzle;      ⑥—Throttle control arm



## Carburetor initial setup:

High speed needle: Completely closed before exiting 1.75 turns; Low speed needle: According the initial setup factory ;  
 Idling start time the air inlet: According the “View 2”

## Starting the engine:

1. According the engine connection method, install the engine on RC airplane and lock propellers.  
 Made the carburetor initial setup and connect the spark plug, electronic igniter and sensors, put the fuel into the oil tank, connect the power and radio control equipment.
2. Will power off the electronic igniter at this time, make the carburetor inlet port in a fully closed position. Through the motor starter rapidly rotating propeller engine make the fuel in the tank inhalation of carburetor, please pay attention to the suction of fuel should not be too much, otherwise will drown the spark plug, the engine start difficult.
3. Please open the carburetor throttle air inlet, power on the electronic igniter, then start the engine using the motor starter, the engine will begin to work, the fans will adjust the carburetor according to your own need. According to the above steps to adjust the carburetor adjustment.

**Warning:** Make sure all bystanders, especially children, at least 30 feet away from rotating engine.

## Engine Break-in:

Please use the high quality synthetic oils, gasoline and machine oil’s mixing ratio is 25:1. NGH is recommended to use smaller size propellers at first break-in and follow-up about 10 times in flight. Keep medium speed running for 15 minutes (no more than 4000rpm) after started engine, then high speed running (7000 rpm) for 3 minutes, again medium speed running for 5 minutes, high speed running for 3 minutes, reciprocating 3-5 times complete break-in. Breaking in engine carefully will increase its life. Please make sure the engine got the complete break-in before you use the larger load propeller.

## Engine cooling:

If your engine is installed in the fairing, there must be air entering to cool the engine and ensure enough air flowing in the faring. Reference data: Outlet area should be 3-5 times than the entrance area to ensure adequate cooling.

## Engine Failure Removal:

If the engine is difficult to start, idle speed and high speed unstable. Please check: whether the electric circuit and oil line of engine is trouble, whether the engine leaks air, whether the electronic ignition works or its power supply is adequate, whether the spark plug flame out. If necessary, replace with a new spark plug.

### **Engine Maintenance:**

To reduce the fuel consumption, extend engine' s life, please adjust the engine' s highest speed and make engine run in the output maximum speed of 90% once the gas pedal full opened. If the load is large ( Propeller' s diameter and screw pitch are big ), the fuel must be adequate. If the load is small, the speed will be high while the fuel consumption will be less; Please make sure to empty the carburetor after each flight, otherwise it' ll cause the rubber of carburetor aging to affect the engine performance; Please clean the carbon deposition on the spark plug and keep the gap from 0.5mm to 0.6mm between the electrodes; If it' s difficult to start the engine, idle speed unstable or when high speed operation flameout, please replace the spark plugs; Please clean the engine surface after used each time, it can make the engine get better cooling; The carburetor may be blocked seriously if you use different brands or types of lubricating oil together, you need select a better fuel filter; If the engine low speed work for a long time, can lead to spark plug carbon deposition; Regularly check the fuel system, make sure do not leak fuel, do not leak air.

### **Engine Guarantee:**

If the NGH engine has performance defects caused by the defects of process, material and manufacturing, we certify that: Change for free within one year and Guarantee within two years since the date you purchased. Please note the guarantee is only for the original purchaser, not including: Normal wear for engine; damage caused by the failure of maintenance; damage for engine over speed operation caused by using small propeller; Bearing rust; Crash; Use inappropriate fuel; Damage caused by foreign bodies; Damage caused by unreasonable installation or operating environment; Damage caused by improper dismantle; Damage caused by any modification.

**The instructions are only for reference and are subject to change without notice.**

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