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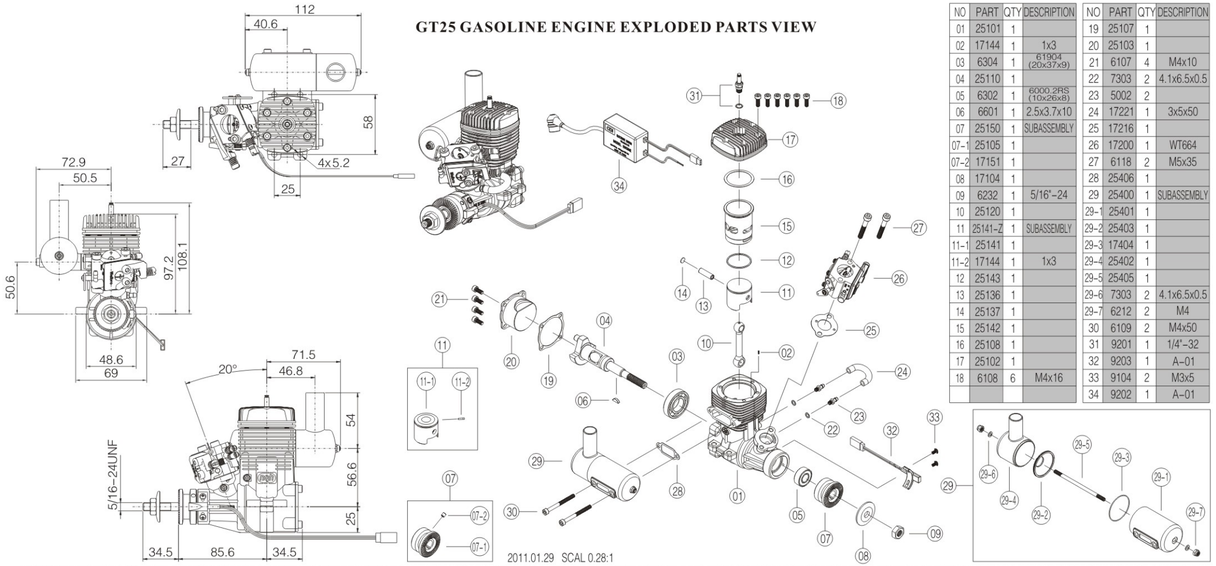
GT25 GASOLINE ENGINE EXPLODED PARTS VIEW

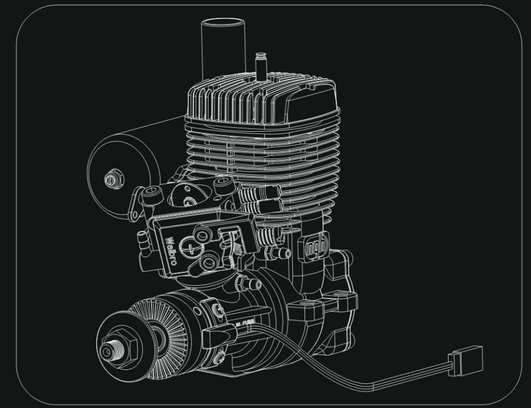


NO	PART	QTY	DESCRIPTION
01	25101	1	
02	17144	1	1x3
03	6304	1	61904 (20x37x9)
04	25110	1	
05	6302	1	6000 2RS (10x26x8)
06	6601	1	2.5x3.7x10
07	25150	1	SUBASSEMBLY
07-1	25105	1	
07-2	17151	1	
08	17104	1	
09	6232	1	5/16"-24
10	25120	1	
11	25141-Z	1	SUBASSEMBLY
11-1	25141	1	
11-2	17144	1	1x3
12	25143	1	
13	25136	1	
14	25137	1	
15	25142	1	
16	25108	1	
17	25102	1	
18	6108	6	M4x16

NO	PART	QTY	DESCRIPTION
19	25107	1	
20	25103	1	
21	6107	4	M4x10
22	7303	2	4.1x6.5x0.5
23	5002	2	
24	17221	1	3x5x50
25	17216	1	
26	17200	1	WT664
27	6118	2	M5x35
28	25406	1	
29	25400	1	SUBASSEMBLY
29-1	25401	1	
29-2	25403	1	
29-3	17404	1	
29-4	25402	1	
29-5	25405	1	
29-6	7303	2	4.1x6.5x0.5
29-7	6212	2	M4
30	6109	2	M4x50
31	9201	1	1/4"-32
32	9203	1	A-01
33	9104	2	M3x5
34	9202	1	A-01

GT25

Gasoline Engine Manual



Dear customer:

Thank you for purchasing our new NGH GT25 engine.

We hope that you will enjoy with your new engine, and have many fun and safe flying experiences with its use. In order to maintain its performance and safety when you are using it, please read carefully this manual before operating your engine and preserve it cautiously for future owners. Your new GT25 has been developed by NGH engineers to offer all modelers a new generation of small gas quality engines. You will be delighted with fuel economy, reliability and power of your new GT25. We hope so at NGH !

Specifications:

Type: 2 Cycle Air Cooled Gasoline Engine For Airplane Use Only
Displacement (cc):25cc
Bore x Stroke (mm): 33.2 x 29
Carburetor: Walbro WT series (Diaphragm & Butterfly Valve)
Maximum Output: 2.7HP@11000RPM
RPM Range:1600-11000RPM
Ignition: Auto advanced RCEXL DC-CDI (RoHS and CE Certified) with special spark plug cap.
Spark plug type: 1/4 * 32 Rcexl
Ignition Power DC 4.8 Volts (4 cell NiCad or NiMh battery)
Lubrication Oil: 2 cycle Engine Oil API TC / JASO FD or better specs. (Mobil +M2T)
Break-in fuel oil ratio: 25:1 (4%)
General use fuel: 33:1 (3%)
Recommended Propellers: 15×10, 16×8 ,16×10
Weight:840g (without Ignition)
960g complete

Safety Instructions and WARNINGS!

●Gasoline engines aren't toys! Misusing can cause serious injury

● This engine can cause severe harm to you, and/or others, if misused or these safety cautions and warnings are not observed. NGH or their dealers aren't responsible for any loss, injury or damage resulting from the miss-use of RC model engines.

●Keep away from the rotating propeller area while operating the engine.

●Do not wear loose clothing near the engine or the propeller. Do not run the engine near loose material such as dirt, gravel, cords, ropes, sand, etc. Loose material can be drawn into the turning prop causing injury or damage to you and/or others.

● Before every use, check the engine assembly, propeller and airframe carefully for loose screws and nuts.

●We strongly recommend the use of Loctite retainer on all the screws.

●Always operate the engine in an open area. Never operate indoors.

●Inspect the engine mount, bolts and firewall integrity before operating the motor.

●Always stand clear of and behind the propeller, never allow anyone, to be in front of or to the sides of the propeller when starting or running the engine.

●Anyone near the engine should wear protective eyewear, don't wear loose clothing near the engine or propeller.

●Keep spectators at least 30 feet away when operating the engine.

●Turn off the engine before making any adjustments.

●Always use the proper size propeller. Never use a damaged, modified or repaired propeller.

●Always check the propeller nut tightening.

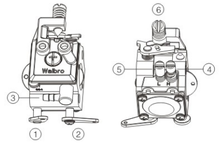
●Spinner cones must not touch the propeller.

●Gasoline is extremely flammable. Be careful of any sparks from electrical contacts such as fuel pumps, battery chargers, etc. Do not allow smoking in the area of your fuel supply or near the engine.

●Allow your engine cool before touching or fueling. A gas engine operates at hi temperature than glow engines.

Carburetor adjustment:

1.Choke Lever
2.Throttle Lever
3.Fuel inlet
4.High speed Mixture Adjustment Screw （high needle）
5.Low Speed Mixture Adjustment Screw （low needle）
6.Idle Speed Adjustment Screw



Adjustment: A general starting point is 1.5～ 2 turns out for the HIGH speed needle（4） and 1.5～2 turns out for LOW speed needle（5）.

Adjust the high needle to peak rpm. If ever the engine slows or dies while at full throttle, the high speed mixture is likely too lean.

Adjust the Low needle until you achieve a smooth idle and a reliable transition to high throttle .If the engine dies when the throttle is advanced ,the mixture is likely too lean. If the engine stumbles when the throttle is advanced the mixture is likely too rich.

Note: Do not remove the carburetor spring as the spring helps keep the carburetor butterfly valve correctly aligned. Instead, the spring tension may be relieved by unhooking the spring, but don't try to remove the spring or it will result in inconsistent operation and poor idle.

Starting the engine:

1.Close the Choke and turn off the Ignition, advance throttle to full position.

2.Briskly flip the prop through compression until fuel reaches the carburetor. It may take 5 or more flips if this is your first time to start the engine or after being stored for a long time period. Flip 3 or 4 more times to prime the engine. Do not over prime the engine or it will be difficult to start. In this case, remove the fuel inlet tube from the carburetor, remove the plug , put a soft cloth on the head of engine at spark plug hole and point the engine to the floor to drain the excess of fuel while turn the prop. Also dry the spark plug with a soft cloth.

3.Turn on the ignition and with the Choke closed and the throttle slightly above the idle position, briskly flip the prop until engine fire and then dies.

4.Open the Choke and briskly flip the prop through compression, advance the throttle to very slightly above the Idle position and your engine should start in just a few flips

Engine break-in:

Please use the best quality synthetic oil available, mixed at ratio of 25:1 or better 20:1 Use the smaller recommended propeller from the specs. Keep the engine at high idle state after starting, (not more than 3500 rpm), when the rotation speed isn't steady, slightly turn up the throttle, stop and check the engine after 15 minutes, make the engine to cool by itself. Repeat the above process until 1 hour of engine's break-in. Engine is not fully broken-in until achieved 4-6 hours of running time, but you can mount the engine on the airframe and finish the break in phase flying your airplane. Avoid long nose-up and/or full throttle periods

Remember, your engine will last longer and will be more reliable if you make a controlled and careful break-in. **DON'T MIX THE FUEL WITH LOWER OIL CONTENT THAN RECOMMENDED, YOU CAN CAUSE SERIOUS DAMAGE TO YOUR ENGINE,** and this issue will not be covered by warranty.

Please, be sure your engine is fully broken-in before use big load propellers.

Also provide an adequate cooling for your engine. If your GT25 will be mounted on airplane fitted with a cowl, make sure the openings let the air flow go though cooling fins of crankcase and head.

Maintenance of the Engine:

●Periodically, inspect the connecting rod for excessive play in rotating motion. You can feel this play at TDC with a slow turn of propeller. Send the engine to the authorized dealer or technical service to check and prevent further internal damage. This play can be caused by poor oil quality, excessive temperature operation, too big propeller, inadequate break-in, or too lean mixture.（needles too closed）.

●Clean the spark plug electrodes of carbon deposits when needed and set the gap between electrodes to 0.25～0.40 mm （max）.

●Replace the spark plug if the engine does not idle or misfires at hi-rpm.

●Clean the external surface of your engine after use. A clean engine is better cooled.

●If you mixed up different brands of engine oil and/or types, the carburetor could be seriously blocked. Also, use a good fuel filter.

●When you install the engine, tank and fuel tubes, be sure they don't touch any surface of the engine or muffler.

●Running at low speed for too long might carbonize the spark plug

●Always check the tube at fuel system, make sure there is no leakage and is firmly attached and secured.

●The internal carburetor fuel screen should be cleaned periodically also . Carefully remove the pump cover （one bolt cover）, gasket and pump membrane. The screen will be visible and can be cleaned or replaced, after careful removal with a small screwdriver. Then use a contact cleaner spray to remove all dirty particles and carefully put the screen in place again.

●Protect the spark plug wire against damages caused by cowl edge, vibrations or heat from muffler. Inspect periodically the spark plug cap. Damage in this area can cause radio glitches and/or interferences in your radio system. Always check your radio system wit the engine running as the radio manufacturers recommendations.