

CRRCpro GF55II Gasoline Engine



Thank you very much for choosing this engine. Hope it will bring you a good happy time. In order to get a good operation, please read the instruction in detail as below.

I、Parameter

Type:	Two-stroke piston valve petrol aircraft engine
Displacement(cc):	55cc(27.2ccx2)
Bore x Stroke:	34mm×30mm
Carburettor:	Walbro(Diaphragm & Butterfly Valve)
Max. Output:	5.6ps/7600rpm
RPM Range:	1600-7800rpm
Weight:	About 1780g (Engine+muffler+CDI)
Ignition power:	Auto advanced CDI(DC 4.8 Volts , 4 cell NiCad or NiMh battery)

Fuel mixture
(Ratio of gasoline and oil): 25-40 : 1

Propeller:

20X12-23X8 two-blade prop(suggest
to use 22x8 prop)

WARNING:

- 1、 This engine is specially designed for the airplane model. Please don't use for any other purpose.
- 2、 We're responsible for the replacement due to our manufacturing defect. However, we don't take charge of improper operation, unfamiliar repair work, re-build without permission or using non-original parts.
- 3、 Attention! This engine is not a toy. Any misuse may cause serious injury or even death. Please read it carefully to know how to use & operate.

II、 Notice before assembling & starting engine

- 1、 Make sure there is a specially designed and firmed engine assembling position on your model. If not, it can assemble onto the airplane to break-in.
- 2、 Fix the engine properly.
- 3、 Have adequate airflow & cooling for the engine. Supply big enough exhaust hole as to cool the engine.
- 4、 Use an approved propeller and spinner. Tighten and balance the propeller correctly, and check it from time to time.
- 5、 Mount the ignition properly and avoid overheating.
- 6、 Use suitable battery and switch which should match with your ignition.
- 7、 Use suitable fuel tank and fuel line(Tygon) for the engine.
- 8、 Use suitable fuel mixture(gas & oil) to ensure good break-in & flying.
- 9、 Ensure fuel is clean.
- 10、 Keep engine clean enough that it will not affect the heat elimination.
- 11、 Ensure the airplane model is fixed firmly, then start the engine.
- 12、 Start your engine in a perfect way.
- 13、 Adjust the carburettor correctly(Don't adjust the high/low speed needles in random if you're not 100% certain).
- 14、 Ensure that your spark plug is in good condition and is tightened

correctly.

- 15、 Make sure all the spectators are behind the propeller to avoid the accidents which caused by the propeller.
- 16、 Wear suitable clothes. Don't wear necktie, jewellery etc. in order to avoid the wrapping by running propeller.
- 17、 After engine started, please stay behind the running propeller. Don't stand in front of it or beside it.
- 18、 Don't test & start engine on a soft sand or stone place. It will damage the engine easily.
- 19、 Please operate the engine in a well-ventilated place. Otherwise, the exhaust gas will affect your health.
- 20、 Be careful to the operated engine as it is hot.

DECLARATION: We cannot control the safe operation of our products. So we're not responsible for the injuries or loss due to in-proper operation.

III、 Carburettor settings

Every engine is inspected & operated strictly before packing. The basic settings for the high and low speed needles are as follows:

High speed needle: 1.5

Low speed needle: 1.75

Please adjust the needles after sufficient break-in. Use fuel filter to avoid something into the carburettor. Wash it completely before using new fuel tank.

Carburettor settings will affect the engine's performance directly. Please set it according to its throttle response, high RPM & burning of spark plug.

IV、 Engine Start (Suggest to use starter)

If this is the first time of you to start the engine, please fill a little lubrication to the spark plug hole and turn the propeller assembly lightly to make the piston lubricated enough.

If you start by right hand, please stand left front of engine, contrariwise, please stand right front of engine.

- 1, Make sure CDI is turned off.
- 2、 Close the choking or choke air intank by hand, and turn the propeller till you feel hand have oil.
- 3、 Take turns open the electrical source of CDI, Transmitter and Receiver
- 4、 To rock the propeller till heard the combustion noise, then open the choking.
- 5、 To rock the propeller till engine starts.

V、 Engine Break-In

- 1、 Recommended fuel mixture ratio is 30:1. After break-in, the ratio can be 35:1 or even 40:1. Don't change the lubrication's brand or level frequently. Please use oil for 2-stroke engine only. Use FB level mineral oil when break-in, but not high level's synthetic oil.
- 2、 After starting, let the engine run stably with middle & low RPM. After 30 minutes, turn off the engine to check it and let it cool naturally. Repeat the above process till the break-in period is about 3 hours. Don't let the engine run in a low RPM for a long time as it will damage it.
- 3、 Don't adjust the needles in random when break-in(except idle screw).
- 4、 Now you can fly it, but please pay attention:
Don't let the engine 's RPM exceed 7000rpm
Make the engine in a good cooling environment!
Don't decrease the content of the lubrication so much!
- 5、 Finally the break-in process is finished after the engine running for more than 20 hours.

IX、 Pilots check list

- 1、 Checking before flying:
Keep the distance between engine & CDI and receiver more than 20cm.
Check the gasoline and see if the lubrication ratio is right.
Check the spark plug if it is good.

Check the pressure cap & spark plug if they touch well.

Check CDI if it's fixed tightly.

Check the ignition & canister system if are mounted firmly.

Check the engine & propeller screw if are mounted firmly.

Check the engine & airplane if are mounted firmly.

Check all the pipe or lines are connected correctly

After break-in, the ratio can be 35:1 or even 40:1. Don't change the lubrication's brand or level frequently.

2、Checking after flying:

If engine is overheating?

If spark plug burning is normal?

All bolts and nuts have looseness?

All the pipes or lines are good?

VII、Maintenance

- 1、Please clean it and put it in a dry environment if you're not going to use for a long period.
- 2、Please remove the spark plug if put the engine with inverse.
- 3、Please avoid insect, dust & water into the engine.

VIII、Problem analysis

- 1、It's necessary for us to take some time to find out the trouble, that we'll meet possibly. It's useful for using engine.
- 2、Reference to the CDI's disturbance , The engine's CDI is certificated by CE. It's impossible to disturb robot, if the disturbance comes into being, please check: the plug of electrical source line , and sensor line plug.

Check the spark plug cap & spark plug if they connect well and are amounted firmly.(it's important to make sure surface's cleaning, and the spring elasticity is good)

- 3、If engine cannot start or start difficultly, please check:
(The new engines are send before test and run, so the engine should be no peoblem)

Oil has leakage and block? The new oil tank should be cleaned before use. If you can see the oil goes ahead in the oil tube, when

you rock the prop, It shows the oil route is no problem and don't has leakage.

Circuitry and Ignition's problem? Make sure the CDI battery has the electricity, the plugs connect well, check the sensor base is broken or not .and there's no overfull oil in the head of spark plug. If you can see fire on the spark plug head, when you rock the prop(turn on the CDI electrical source) , we're sure the circuitry is no problem.

Leakage problem? Reference to the break and dis-assembled engines, Please check the airproof washer if it is good or not. check spare parts are damaged or not, If there's damaged parts please change the new one.

Engine don't have high speed or difficult speedup? if it's not because of carburettor block, basically we're sure the capacity of CDI battery is not enough. When CDI works at high speed, it need use up 0.7A current, if it's not enough, the CDI can't fire smoothly.

Please use 4 cell NiCad or NiMh battery for CDI. Make sure the Battery full of the current.

NOTE: Any problems when you're operating, please contact to us or our distributor. We'll serve you with our best.

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