

# **GO ENGINE CO.LTD**

### GO ENGINES Operating Instructions

You GO Engine is a powerful racing motor, it is not a toy. If used incorrectly the power this motor produces could badly injure you, please use it carefully. The operator takes full responsibility for his/her own safety when using GO racing products.

# **Tips for your GO Engine**

#### Fuel

The most important factor with a high performance engine is using a suitable high quality fuel. Many people cut corners on fuel or just throw anything in from their local dealer.

#### Don't do it, always buy good quality named branded fuel.

We recommend that you use a fuel with 25% - 30% Nitro content and oil content of 11% +

#### Air filter's

When using a high performance race engine such as a GO engine, air filters are critical to the performance and longevity of the engine. Always use new filters; never use "cleaned" or "washed" filters (why put so much effort keeping the dirt on the outside of the filter to spread it into the inside when washing??). New filters are very cheap and easier on the wallet than a replacement engine...

Always use high quality air filter oil made especially for the job.

## Wet air filter's

One thing often overlooked when racing in the rain is the potential threat from standing water. Mud is not such a big problem to an engine (apart from the added weight to the car), but standing water is. For a few pounds you can invest in a wet weather air filter which stops the ingress of water into the engine. Water does not compress, so the usual result is a cracked crankcase or a bent/broken con rod. It's an expensive mistake that can be stopped for a small cost.

# **Glow Plug**

Recommended Go plug are NO.3, NO.4, NO.5 and NO.6, carefully fit plug finger-tight, before final tightening with the correct size plug wrench.

#### **Running in procedure**

1. Unscrew the top end mixture needle (on top of the carb, next to the air inlet) 1 - 2 turns.

Start the engine and let it idle for 2 tanks making sure that it is not getting hot. This will take an hour or so
The next stages are Boring and time consuming but will give you the best life and overall engine performance. Do not be tempted to rush this procedure. Over revving a tight new engine reduces life dramatically and puts the con rod under tremendous strain.

**4.** Run the car with the body off (for maximum cooling) with the top end needle as rich as possible with the engine still running, the car should be very slow at full throttle and blowing LOTS and LOTS of smoke out, spluttering is normal. Do this for around 10 tanks, gradually leaning the top end off over the ten tanks, avoid revving the engine high for long periods and don't drive the car on a big open space's with lots of full throttle Slowly in figure of 8's over a space of around 10-12 meter's is ideal.

After around ten tanks the engine will be nearly run in.

**5.**The first time you race/use your engine at the track try and keep long periods of high rpm to a minimum (backing off on the straight if necessary) and keep the mixture on the rich side. (Anti clockwise). As the day goes on you will feel and hear that the engine is more willing to rev and is pulling more RPM on the track. At this point you can aim for the optimum needle setting.

#### Clutch

A good starting point for the clutch is to use 1.1mm clutch springs this will enable the clutch to engage late and give a good take off. The clutch can make a huge difference to the power delivery of the engine so experiment and find what suits your style and track conditions the best.

#### **Base settings**

Base settings can be used, as a guide to where about you should have your engine needles set. These settings should be used as a guide only. Updates to carburetor, fuel, conditions, gearing, clutch and car type can all affect this dramatically.

#### A typical starting point.

Top end needle 3.25—3.5 turns out from fully in. Bottom end needle 1 turn in from flush.

#### Top end

The top end needle is positioned on top of the carburetor and next to the air intake. To copy a top end setting screw the needle all the way in (clockwise) until the needle stops **DO THIS GENTLY AND DO NOT FORCE** then unscrew by the amount of turns (anti clockwise).

#### **Bottom end**

To copy a bottom end needle setting unscrew the bottom end needle (which is positioned in the end of the carburetor) until the screw is flush with the housing, then turn in the amount listed.

### If the engine is unable to be started, please check

- 1. The battery in the glow starter is in fully charged state.
- 2. The plug is functioning correctly. Install a plug suitable for the engine.
- 3. The fuel is reaching the carburetor and entering the engine.