



# TAYLOR RC

35cc v2 Operating Instructions

## **TAYLOR 35 USER MANUAL AND IMPORTANT INFO**

**Congratulations, and thank you for purchasing your new TAYLOR engine.**

This is a high-performance, two-stroke engine which produces multiple times the power of a standard large-scale, RC car/buggy engine. Please be prepared for the insane increase from your RC! Drive with care while you are getting used to this.

We strongly recommend fitting a remote kill switch to your engine, as should be the practice with all large-scale cars. All normal 1/5-scale kill switches work properly with this engine; it is also supplied with a standard kill button.

### **Important Safety Note:**

*Because of the performance potential of this engine in a vehicle, such as the HPI Baja, it is necessary to operate the vehicle in a suitable, controlled environment. It should not be operated in a public space where people are engaged in other activities, such as a public park. Do not operate in an area where there are children playing, near pets or other animals. Do not operate on a public highway.*

*Loss of control of such a vehicle could result in serious injury to another person, family pet, or other animal.*

*Be aware that the engine silencing is minimal, so do not run the engine in an area where this could cause a nuisance. You and those around you should always use ear protection during operation.*

*Please note: All of the manufacturer's safety instructions for the operation of the vehicle in which the engine is fitted must be followed.*

### **Fuel Safety Guidelines**

**Fuel is highly flammable. Never operate the vehicle near open flames. Do not smoke while handling fuel. Always operate the vehicle in a well-ventilated area. Model car engines produce carbon monoxide fumes.**

### **Hot Engine surfaces**

**DO NOT** at any time when running or within 30 minutes of running touch any metal surfaces on the engine. Only the pull start handle, carburetor, and stop buttons can be considered safe to touch when hot.

# Engine Fitment

Your new TAYLOR 35 Billet RC Engine is pretty widely universal to most gas 5th scale RC Cars. For compatibility, [check our website](#).

The 35 will work with all 5th scale exhaust systems safely and make good power, so it acts as a direct swap for any stock Zenoah/CY/KM/Rovan/30N/Fuelie, etc., engine. For ultimate performance, look out for a TAYLOR brand exhaust system to suit your vehicle; these, of course, were designed hand in hand with our test engines.

The supplied billet clutch housing has a thin shim temporarily attached to the face for shipping. This shim allows you to fit it to cars such as the HPI Baja or Kraken Vekta, etc., where a full-depth clutch housing is needed. Or simply remove the shim and keep it safe if fitting to cars like the Losi 5T/5B, etc., where a short clutch housing is needed.

## Engine Starting/Break-in Procedure

### **First Time Engine Starting.**

When starting for the first time following engine installation, it will be necessary to draw the fuel from the fuel tank up to the carburetor. Prime the carb several times until you can see the fuel passing into the carb from the line so you know the carb is full. (via primer bulb on the top of the carb)

Next turn on the choke (if you have one) and pull the engine at full speed once to draw fuel in. After this turn off the choke and open the throttle to 5-10%, and go for starting, 2-3 pulls should be enough if you have choked and primed the engine properly.

If you are using a carb which does not feature a choke, that's fine, simply repeat the above method but instead of using the choke lever, use your hand to block the air intake for first pull to act as an effective choke method. You will not need to do this too hard or more than once as the choking effect will be large.

### **Engine Break-In.**

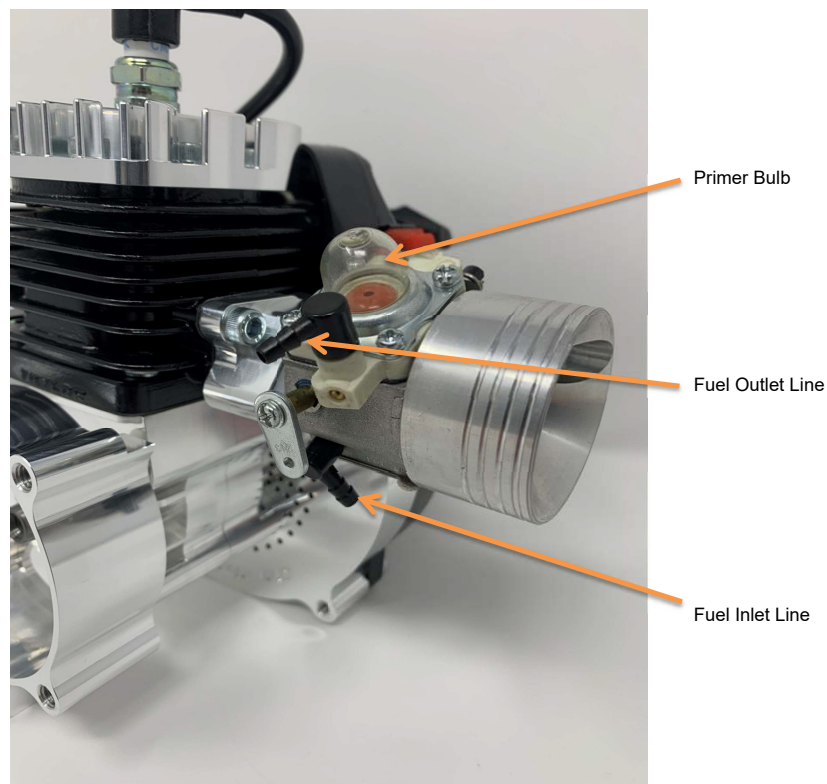
After starting the engine make sure it is fully up to operating temperature before driving the vehicle.

For initial break in during the first 5mins, allow the engine to idle with intermittent blips of the throttle.

For the 2-3 tanks of fuel operate the vehicle in a mechanically sympathetic manner with a nice rich safe tune so that there is lots of fuel/oil mix going through the motor to lubricate it while tight and new

As long as you run your new engine with a rich tune, your going to struggle to hurt it. It's a very reliable lump.

From this point on you can dial in the tune and let her true potential be unleashed as the motor loosens up!



## Walbro Carburetor Info and Settings

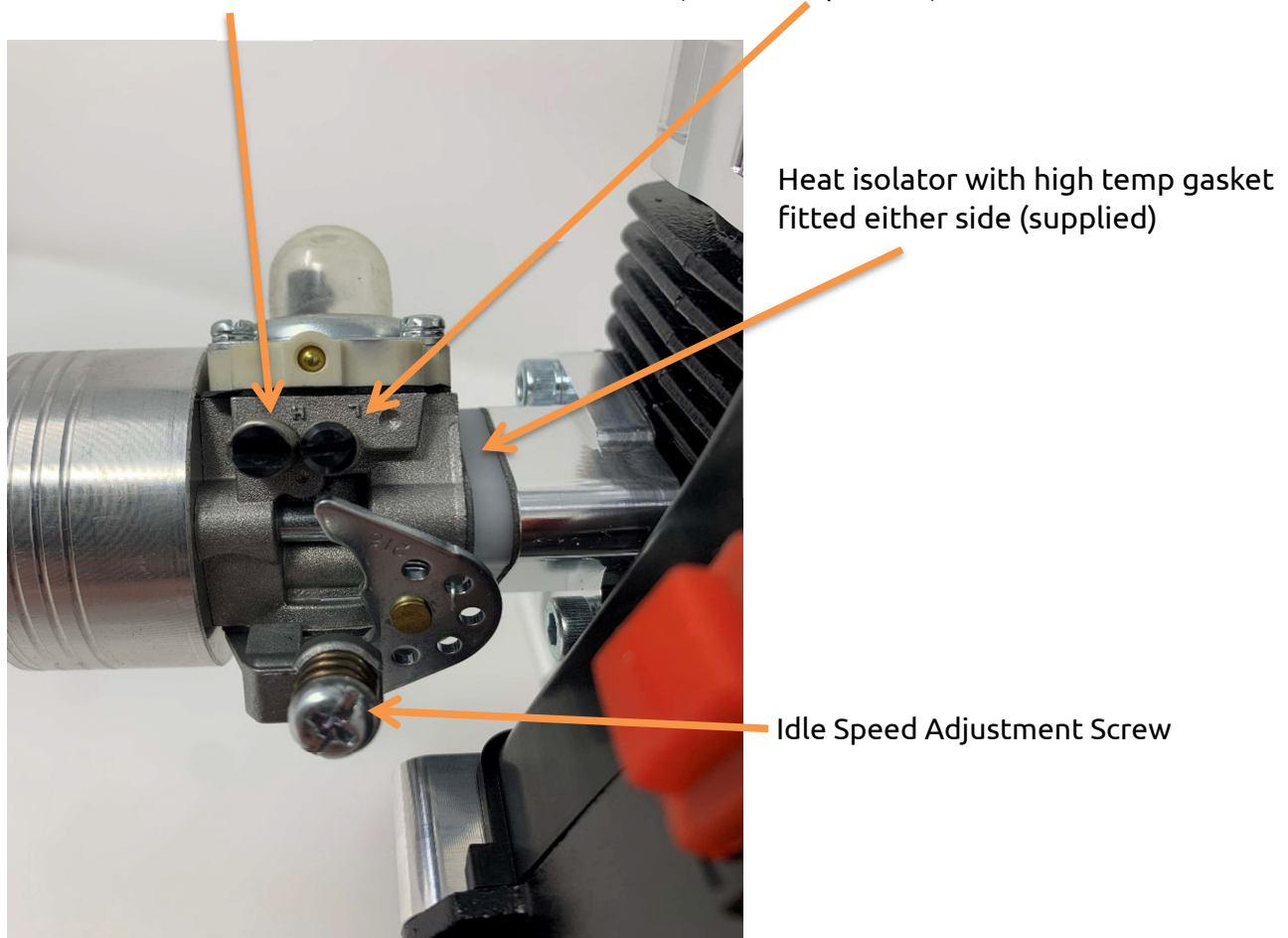
When fitting your chosen carb to the 35, make sure to fit the heat isolator with gaskets (supplied) either side of it between the carb and the manifold (see photo for correct fitment). Take your time to use the correct length bolts for each different intake/stack on the market so that its secure.

Make sure you complete the run in of the engine on a rich setting before considering leaning it out for optimal performance. Please remember your climate and altitude could result in the requirement for different settings, so as with any two stroke, start with caution and care.

### FACTORY SETTINGS (Baseline for both Reed and Piston Port)

HIGH Speed mixture adjustment screw  
WT990 = Base setting is 1 5/8 turns out  
1107 MOD= Base setting is 2 turns out  
WT1257 = Base setting 2 1/8 turns out

LOW Speed mixture adjustment screw  
WT990 = Base setting is 1 1/8 turns out  
1107 MOD= Base setting is 1 3/8 turns out  
WT1257 = Base setting 1 3/8 to 1 1/2 turns out  
(weather dependent)



The base settings of the mixture screws may need some adjustment to suit your local atmospheric conditions e.g. temperature, humidity. If so adjustments should be made 1/16 of a turn at a time, with a test run after each adjustment.

## CLUTCH FITMENT AND INFO

The TAYLOR 35 and billet housing/shim supplied will work with all clutch and carriers on the market, but if your looking for the ultimate setup be sure to run either Blackbone or Vertigo clutch bells/gears plus a TAYLOR Billet carrier to suit your car (where available)

All 54mm clutches on the market will fit to your new engine, however with the extreme performance of the TAYLOR 35, we advise that you use a sintered steel clutch and high quality spring. For a strong launch I would consider a Blackbone 9.5K clutch or the 8500 RPM clutch for smoother engagement

A CY clutch backplate is an ideal setup to keep the costs down but we also offer a 54mm cooling backplate for anyone who bashes really hard and wants to ensure low clutch temperatures

With powerful engines its important to ensure proper clutch ventilation, although the housing supplied is well designed for cooling, we recommend also using a vented carrier. If you're running a steel clutch you don't need to worry about dirt or sand getting in anyway!

## Clutch Removal

All normal clutch removal tools for Zenoah engines will work perfectly on the TAYLOR 35

Tools are available on the market called "piston stoppers" which are screwed into the spark plug hole and stop engine rotation by physically stopping the piston from moving in the cylinder. The only stopper that is allowed for use is the Taylor RC piston stopper with plastic tip. **TAY2067**



## **Fuel, Oil and Maintenance Recommendations**

To ensure that you get the maximum enjoyment from this product and a good service life, TAYLOR recommends that you take a little time to clean the engine and vehicle after use. It is easy to spot a little problem such as a loose bolt on an engine mount before it becomes a much bigger problem!

**It is absolutely essential** that only the best quality fully synthetic two-stroke oil is used. **We recommend Putoline RS959 or Motul 800 oil but there are lots of great products on the market.**

This must be mixed at a **fuel/oil ratio of 25:1**. Only good quality **91+ Octane must be used** to prevent the possibility of detonation or seizure.

Taylor Coil Air Gap Working Range: 0.3-0.9mm, ideal setting is 0.35-0.4mm, use a [Zenoah air gap tool](#).

A minimum of a dual stage air filter is very important for protecting your engine, we use [RAM Air](#) and the [DT1 Filters](#). Proper oiling through the layers of foam is just as if not more important than the filter itself to protect in dusty conditions. Regular cleaning and re-oiling is required to keep air filtration at its best. The use of a water resistant Outerwears protective element is recommended for filtering out large debris.

Please ensure that your fuel equipment, and fuel system of the vehicle is kept in a clean condition. Dirt can play havoc with carburetors leading to much frustration and little fun. Please make sure your vehicle in-tank fuel filter is in good working order.

A full range of replacement service parts is available to keep your small block powerhouse in top condition. You can view those on our website [HERE](#).

If you are unsure about carrying out a rebuild, we are more than happy to do it for you for a small charge plus parts.

Please contact your dealer for advice, or service, if you are in any doubt.



## Gearing Recommendations

With the increased power output of the Taylor 35 Engine you will have higher specific output over factory engines and tuned engines. To take advantage of this you can adjust the gearing to get the most performance from your engine. We suggest the following as a base starting point for some of the most popular models. Make adjustments based on tire size, etc.

- Losi 5IVE-T 1.0/Rovan LT/30N DTT etc: 21T pinion with 58T spur
- Losi 5IVE-T 2.0/30N DTT V2: 23T pinion with 62T spur (using Fonzie spacers)
- HPI/Rovan Baja 5B: 19/55 Blackbone gears (using Blackbone bell)
- Kraken VEKTA: 20/21 gearing
- Kraken VESLA: stock ratio works well as car is geared high
- MCD Offroad: 23T pinion with 64T spur
- MCD Onroad: 24T pinion with 60T spur

