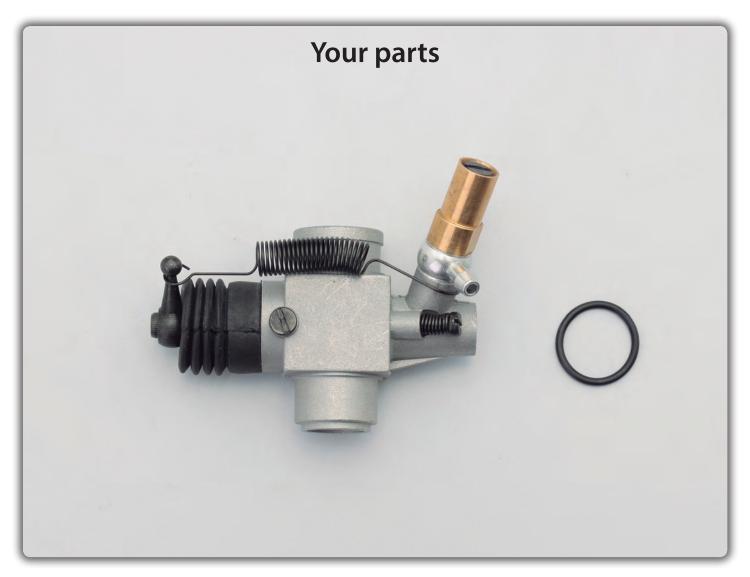


Stage 61

Installing the carburettor



Carburettor O-ring

Tools and materials

Cross wrench (Stage 8) Crankcase assembly (Stage 60) Plastic bag



Place the O-ring over the cylindrical projection of the carburettor.



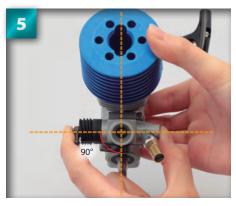
Push down so that the ring sits around the base of the opening.



Holding the crankcase assembly in one hand, lower the carburettor into the carburettor mount of the crankcase. Make sure the fixed carburetor shaft (circled) that will hold the part in place is positioned so that its curved indent is matching the inside corner of the mount. This way the carburetor will fit snugly into the mount.



Gently push the carburettor into the mount. Twist it from side to side gently to help it in if it is stiff.



Adjust the carburettor so that it sits at a 90 degree angle to the crankshaft and crankcase.



Using the hole marked '8' on the cross wrench, fit over the carburettor nut.



Turn the cross wrench until the nut tightens enough so that the wrench stops turning freely, then stop so as not to overtighten it.

Assembled parts

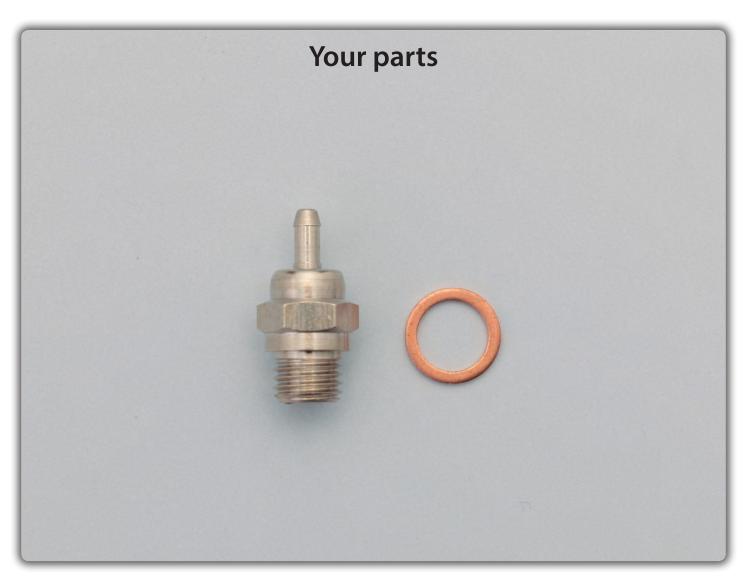
This stage is now complete. The carburettor is very delicate, so store away safely in a sealed plastic bag until next time.





Stage 62

Installing the glow plug



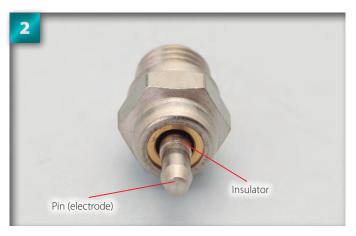
Glow plug Gasket

> **Tools and** materials

Cross wrench (Stage 8) Crankcase assembly (Stage 61)



Carefully remove the glow plug and gasket from the packaging.



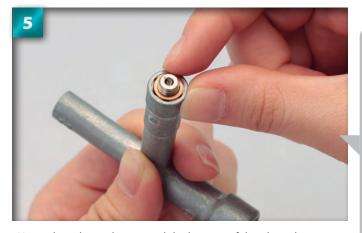
Familiarise yourself with the glow plug. The side photographed is the top, and highlighted are the pin (electrode) and the insulator, the whitish rim near the main body of the glow plug.



This is the glow plug from the bottom side that will attach to the combustion chamber of the crankcase. Inside you will see the filament coil. This will conduct the power of the glow plug.



Carefully place the top of the glow plug into the hole marked '8' on the cross wrench.



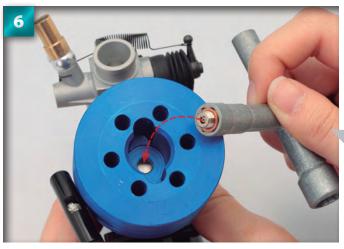
Next, place the gasket around the bottom of the glow plug.

Tip!

The gasket looks similar to a washer, but its role is different. The gasket's job is to fill the gap between airtight parts, such as between the carburettor and the crankcase, and as such is made of a soft metal that can be squashed down to fill the gaps completely. In the case of gaskets, the rounded and flat sides have no impact on the part's use, and are just left over from the die casting process used to make them.







Making sure that the gasket doesn't fall off, lower the glow plug into the central hole in the cylinder head.





Once the glow plug is in perfectly straight, tighten it into place by turning the wrench.



Make sure that your assembly looks like this.

Assembled parts

Store away safely in a sealed plastic bag until next time.





Stage 63

Installing the flywheel



Flywheel wrench Flywheel Tapered collet Pilot shaft

Tools and materials

Cross wrench (Stage 8) Crankcase assembly (Stage 62) Vinyl tape

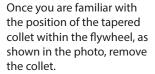




Take a look at the tapered collet. The top rim is narrow and the bottom wide.



Place the tapered collet, narrow side first, into the hole in the centre of the flywheel, from the side that does not have pins in it.





Slide the wide rim (bottom) of the tapered collet over the tip of the crankshaft.





Push the collet along the shaft. The collet should rest against the bearing. It does not matter where the split in the collet is situated.



Next, place the flywheel, flat side first, over the shaft and collet so that it will fit as it did in Step 3.



Push the flywheel firmly into place.



Line up the threaded portion of the pilot shaft with the tip of the crankshaft.



Tighten the pilot shaft as far as you can by hand only.





Line up the flywheel wrench with the pilot shaft and the pins in the flywheel.



Press the flywheel wrench firmly against the surface of the flywheel. It is important that there is no gap between the wrench and the surface, as this may lead to the pins being bent.



Keep holding the flywheel in place, and put the arm of the cross wrench marked '10' over the pilot shaft.



To secure the parts, turn the flywheel wrench anticlockwise and the cross wrench clockwise. This will push the flywheel further over the tapered collet so that it'bites' and fastens to the pilot shaft.



A good deal of power is required to tighten the flywheel, so if turning the flywheel wrench is hurting your hands, you may want to wrap the handle in some vinyl or electrical tape to soften it.



Make sure there is a gap of around 0.3mm between the flywheel and the crankcase, as this is essential to prevent friction during the engine's operation.



Assembled parts



This stage is now complete. Do not loosen the flywheel as this is difficult and needs to be done with a specialist tool to prevent damaging the parts. Store the assembly in a sealed plastic bag.