

# Houstoun Gate Locomotive Works Contractors Loco Assembly Instructions

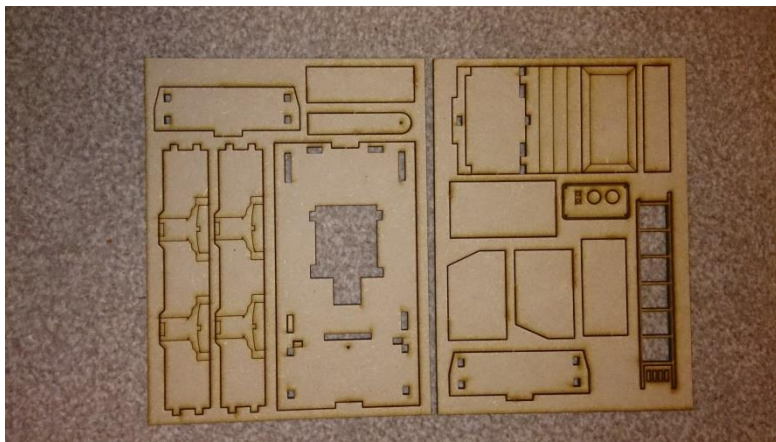
It is suggested that you read these instructions through before commencing construction as this kit is a little more complex than some of our other kits. Although not a difficult build it is vital that you build this in the sequence outlined here.

A minimum of tools are needed to assemble the kit. Sandpaper and sanding block, some strong rubber bands or weights to hold parts in place while the glue dries.

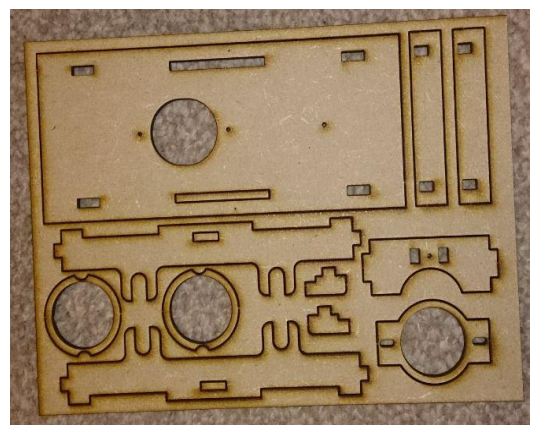
This kit requires glue and paint to complete. It can be built entirely with PVA (exterior type) or aliphatic resin. A favourite glue is Titebond 3 aliphatic. Excess glue can be wiped away with a damp rag.

MDF is not moisture proof and the model should therefore be painted or varnished before use. First apply a sealer/primer - MDF sealer, thinned PVA or grey automotive primer will all do the job. The cut edges may need more than one application of primer to seal them. Cans of automotive spray paint work well and give a good finish. If brush painting then use acrylic or enamel paint.

## Kit Contents



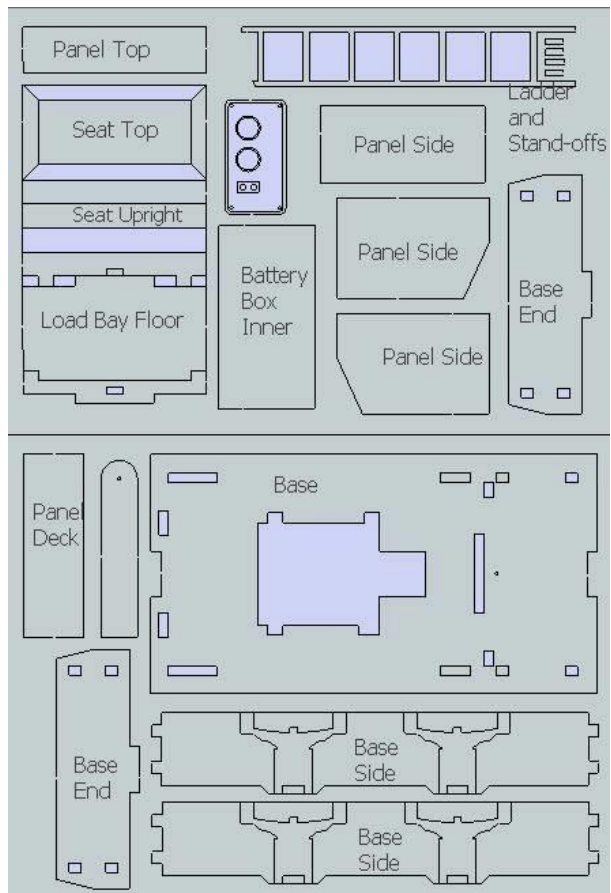
Main Chassis and 3mm body parts



Inner Chassis

Roof, Load Compartment

## Parts Description



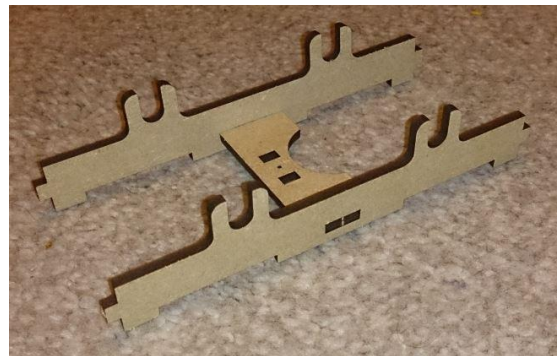
Carefully separate the parts from their sheets. Wriggling them lightly is normally enough to break the retaining tab. You can also cut the tabs with a sharp modelling knife. Sand the retaining tabs away on all parts before beginning assembly.

Glue the parts together in the sequence shown in the pictures below. It is worth trial fitting the parts of the loco together first to get an idea of how it goes together. If you intend to paint the inside of the cab then it is a good idea to do so before you add the roof or windows.

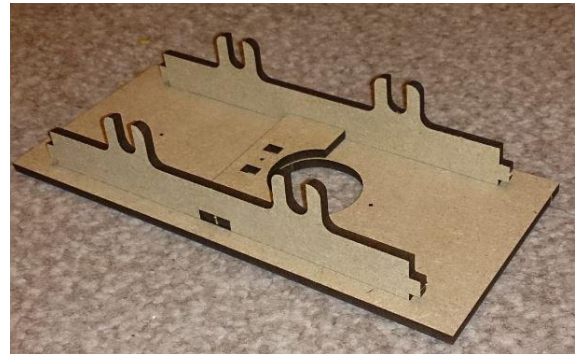
### **Inner Chassis Assembly**

Commence building with the Inner Chassis Assembly

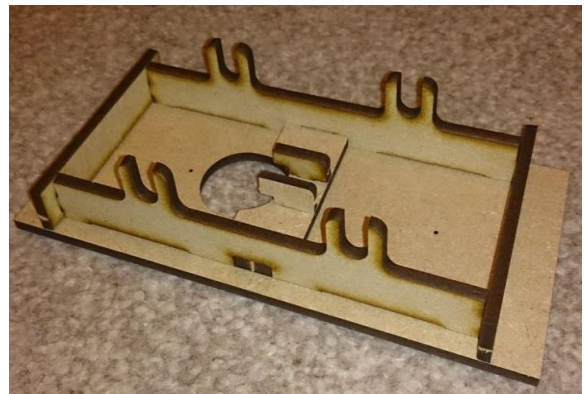
Attach the chassis cross-member to the two chassis sides



Add chassis side assembly into the chassis base

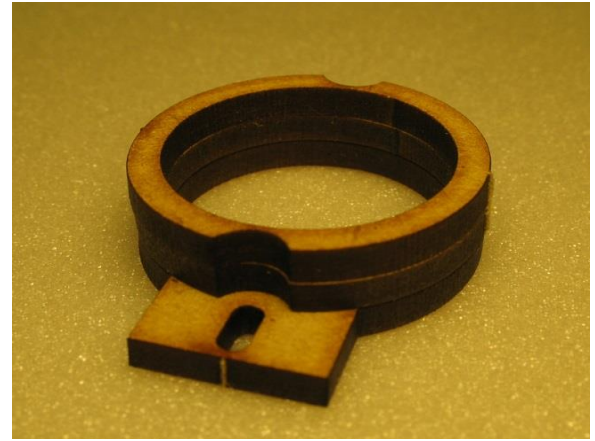


Attach the end plates and motor support lugs



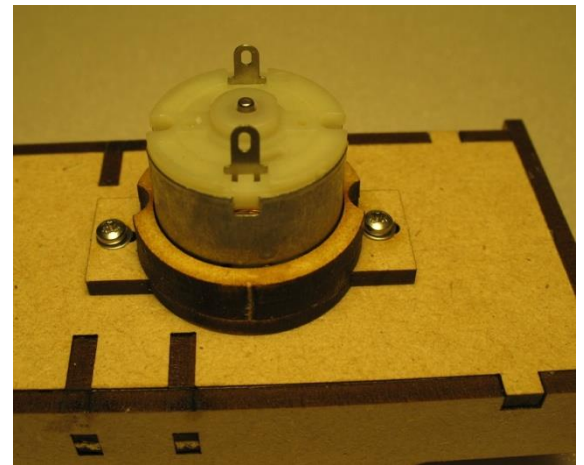
Glue the three motor holder hoops together as shown in the picture. You can use the motor to assist aligning them but remove the motor before the glue sets.

Once the glue on the motor holder is dry place the motor in the holder and insert it into the chassis so that the motor rests on the motor support lugs. The motor should now be glued to the holder. Wood glue will have sufficient grab on the motor to keep it in place. However a couple of drops of cyano glue will also do the trick. Alternatively you could use hot-melt glue if you have a glue gun. Take care not to glue the motor assembly to the chassis.



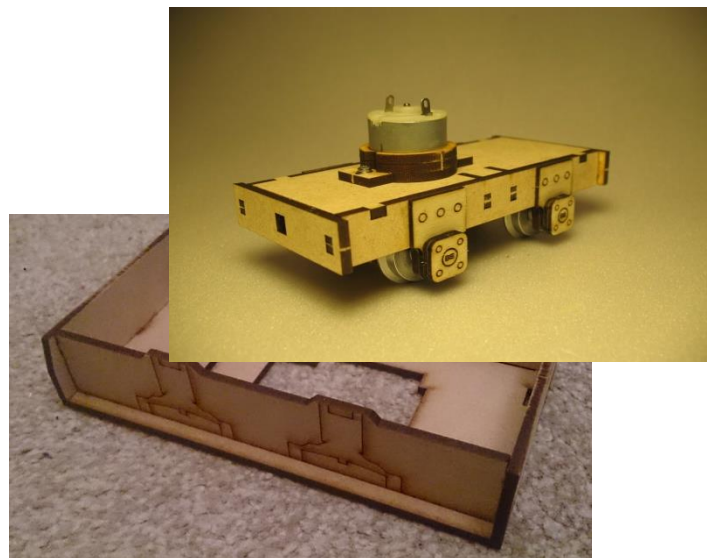
When all glue is dry it is time to secure and align the motor. Place a washer onto each self-tap screw and carefully screw the motor/holder onto the base. Don't tighten the screws fully yet. Slide the holder around until you have the perfect mesh between the worm and the spur gear. The worm must not be tight against the gear but should have a tiny gap. Now tighten the screws but be careful not to overdo it as this may damage the base.

To minimise wear ensure that the brass gear is central to the worm gear on the motor shaft when run in both directions. Adjust the on the axle if necessary until there is equal play either side. A spare worm is supplied to

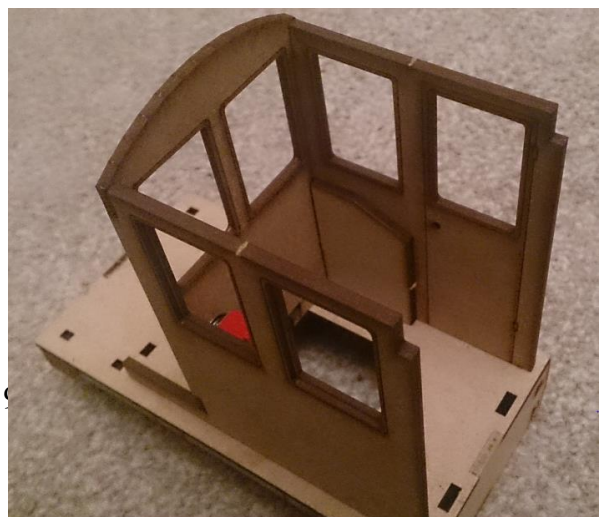
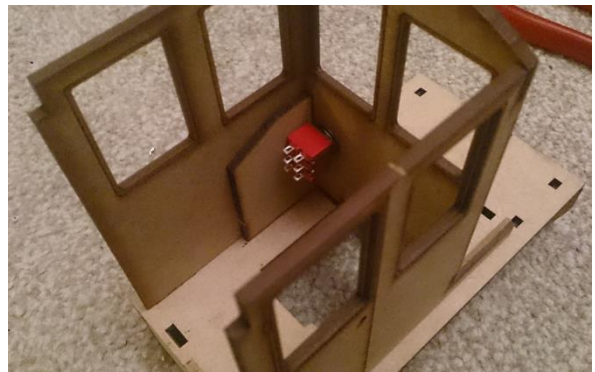
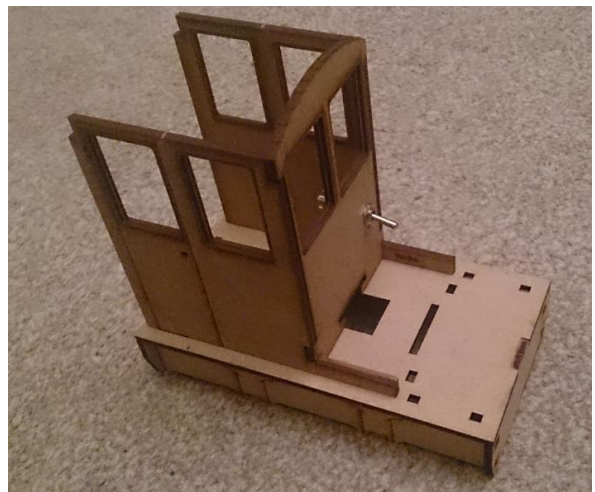
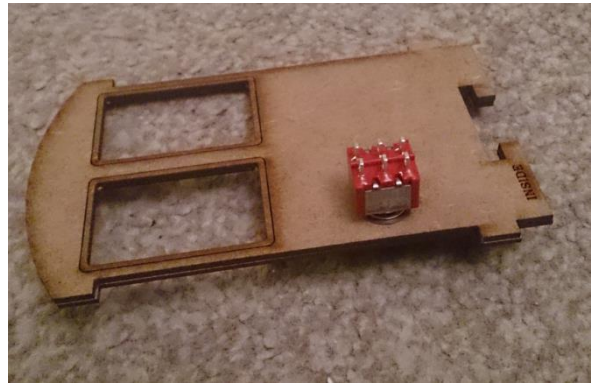


Note: The gears should not be lubricated, oil or grease tends to be pushed off the worm anyway so only serves to attract dust and dirt and nylon is self-lubricating. The chassis top-hat bearings do already contain oil but a **tiny** drop may be applied after extended running

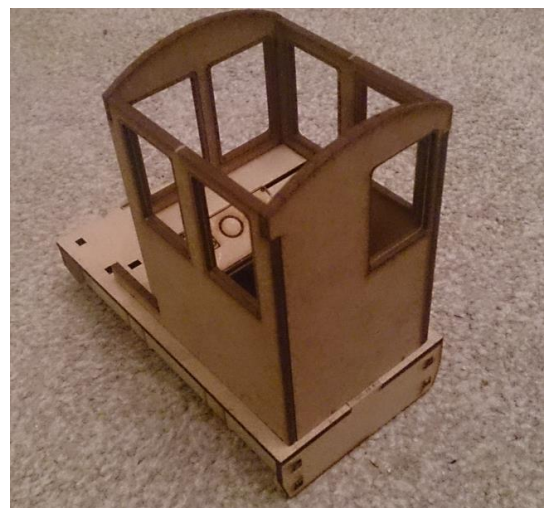
(wheels bearings and axlebox)



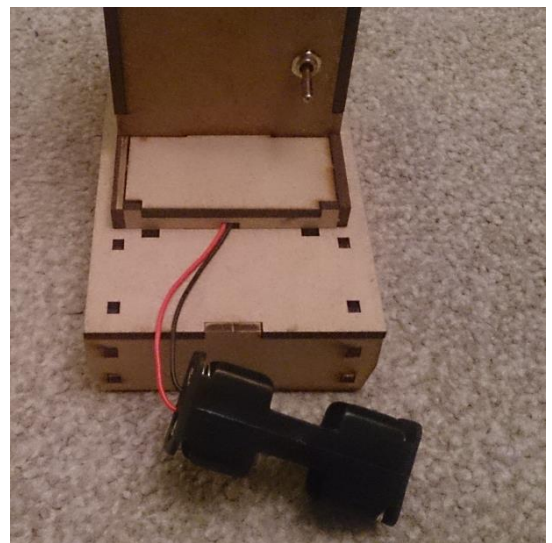
















We hope you enjoy your kit, but if you have any problem with construction email our technical help line at **[techhelp@hglw.co.uk](mailto:techhelp@hglw.co.uk)**