



Wood Valley Works

www.woodvalleyworks.co.uk

Penrhyn Coal Wagon

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Assembly Instructions

32mm Gauge only

All pieces of this kit will benefit from a light sanding with fine grade sand paper to remove any surface texture and the pips left by the breakout tabs.
It's recommended that parts are painted or stained prior to assembly.

PLEASE NOTE

This kit is made from 3mm laser cut MDF, any type of wood adhesive such as EVO-STIK resin W is suitable, glues of the SUPER-GLUE type are not suitable and should be avoided.

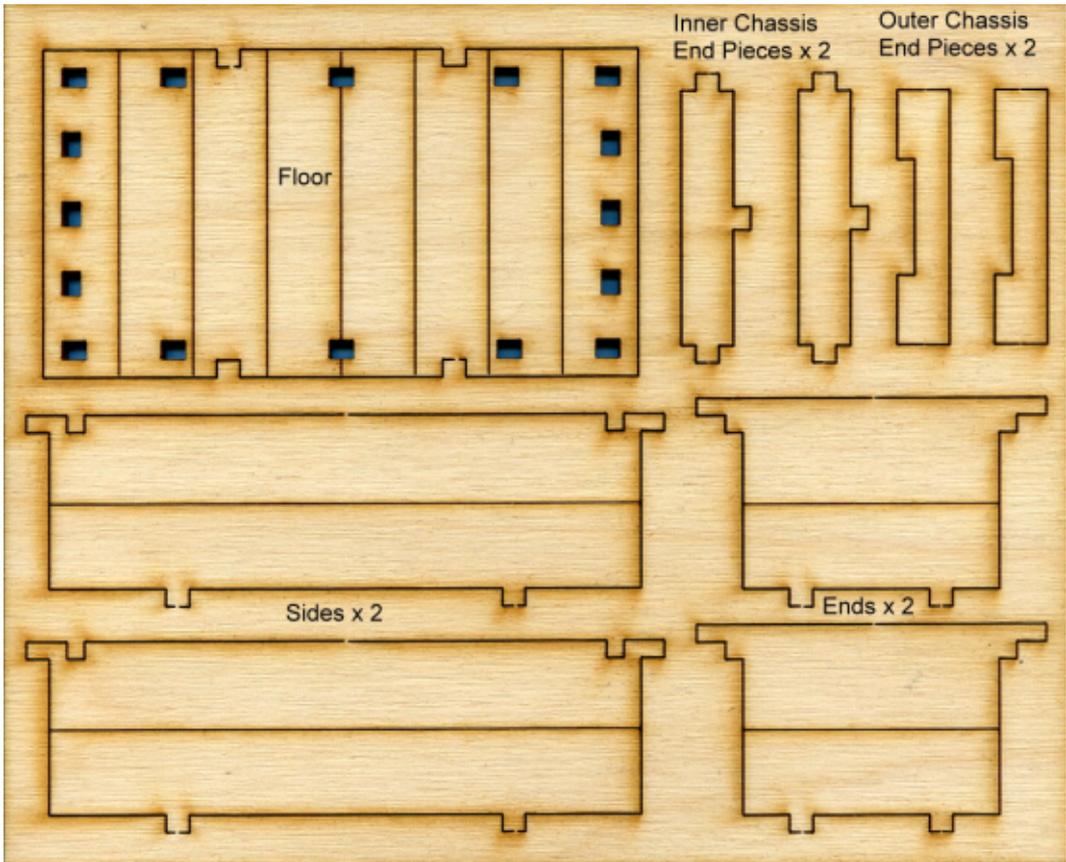
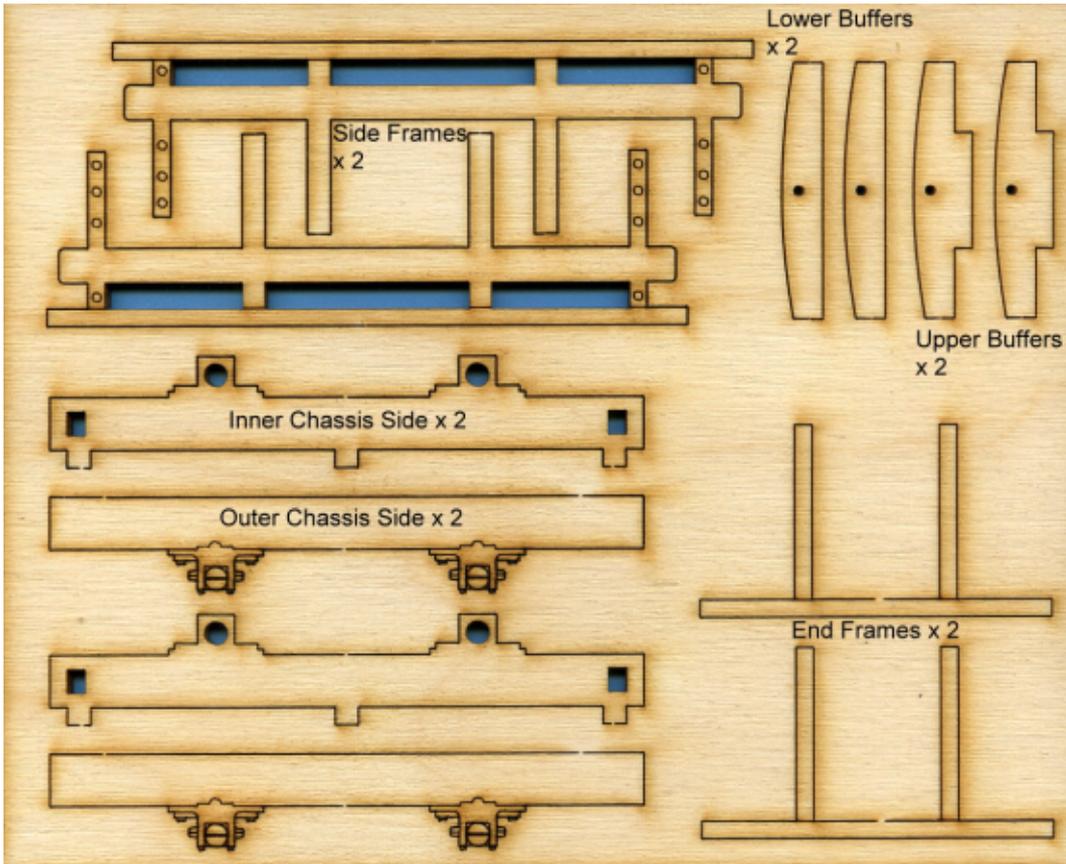
Cut the breakout tabs with a sharp modeling knife rather than snapping the parts out as this may cause damage to the wood.

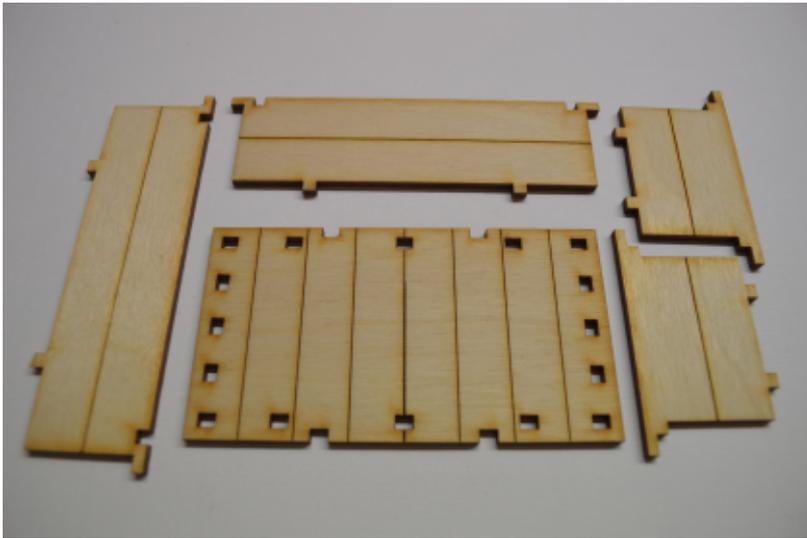
This kit is supplied with wheels, axles, bearings, coupling hooks and detailing parts.

Before you start assembly Please read through these instructions carefully and familiarize yourself with the pictures and method of assembly.

It will be necessary to have a few tools to hand such as clamps, a sharp modelers knife, snipe nose pliers and elastic bands.

Most parts can be dry assembled prior to gluing so you can familiarize yourself as to how the parts fit together.





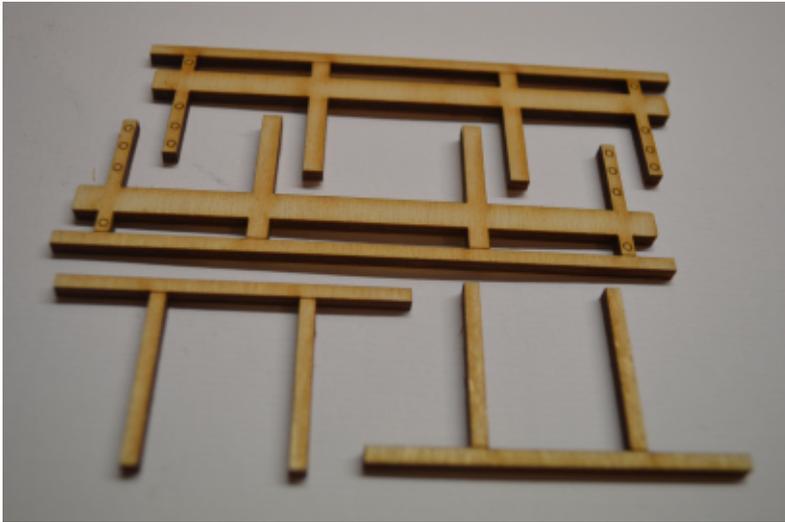
Locate the 4 parts which make up the main part of the body, these are 2 ends, 2 sides and the floor.



Fit the sides first into the locating holes in the floor, ensuring that the engraved lines are facing outwards.



Fit the ends into the locating holes in the floor and sides ensuring that the engraved lines are facing outwards.



Locate the 4 pieces that make up the frames, these are 2 end pieces and 2 side pieces.



Fit both side frames by locating the middle longer frames into the cutouts in the floor ensuring that the engraved markings are facing outwards.

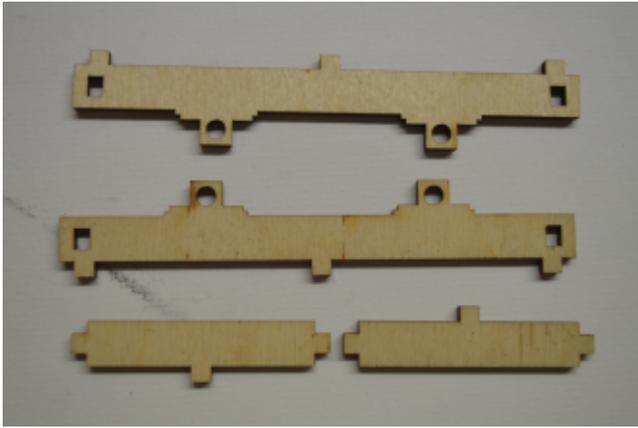


Fit both the end frames, ensuring that the engraved markings at the top of the verticals are facing outwards.



Locate the 2 side frame overlays and glue them to the side frame cross rail ensuring they are aligned correctly and that the engraved marks are facing outwards.

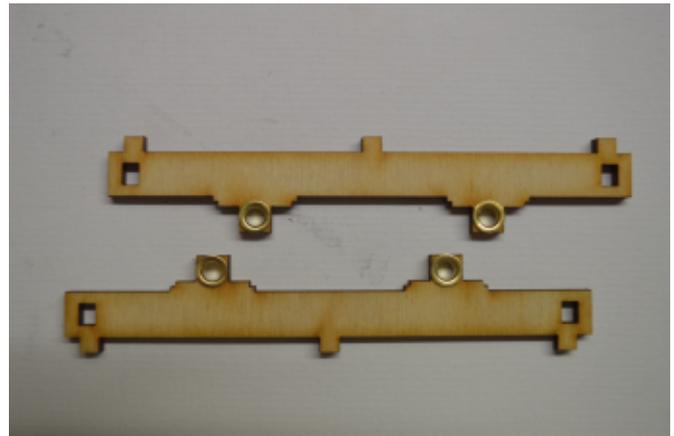




Locate the 4 parts that make up the inner chassis, these are 2 inner side pieces and 2 inner end pieces.



Locate the 4 brass bearing inserts and press them into the holes in the inner chassis side pieces.



Locate the 4 wheels and 2 axles and assemble the wheels onto the axles ensuring that the back to back spacing is 28mm with the flanges of the wheels facing inwards and an equal length of axle is protruding on either side.



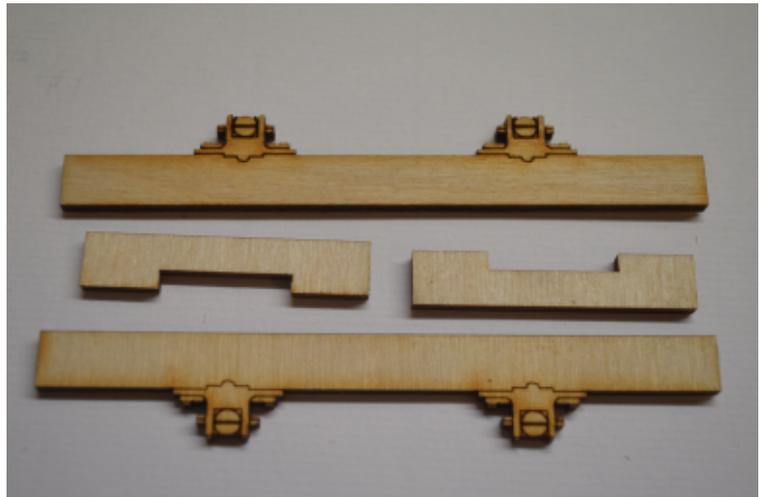
Assemble the inner chassis ensuring that the wheels are properly located into the bearings.





The inner chassis and wheels can now be fitted into the holes in the underside of the floor.

Locate the 4 parts that make up the outer chassis, these are the 2 outer sides pieces and the 2 outer end pieces.

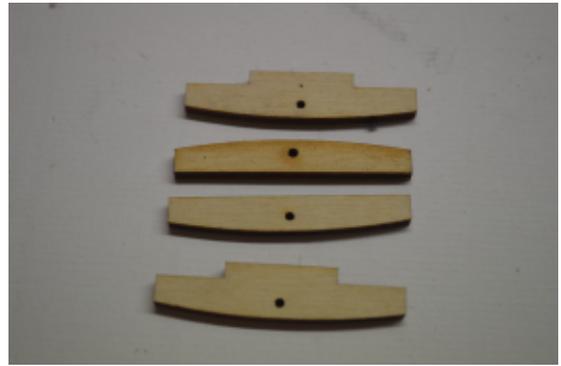


Fit the outer side piece over the inner side pieces ensuring that the engraved marks are facing outwards and that no glue is near to the ends of the axles.

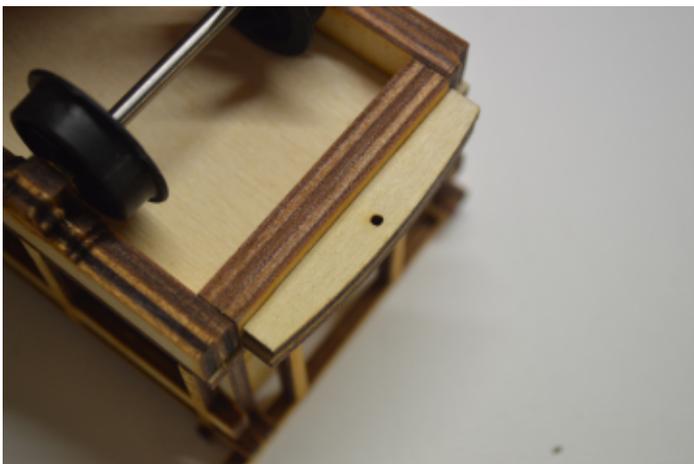
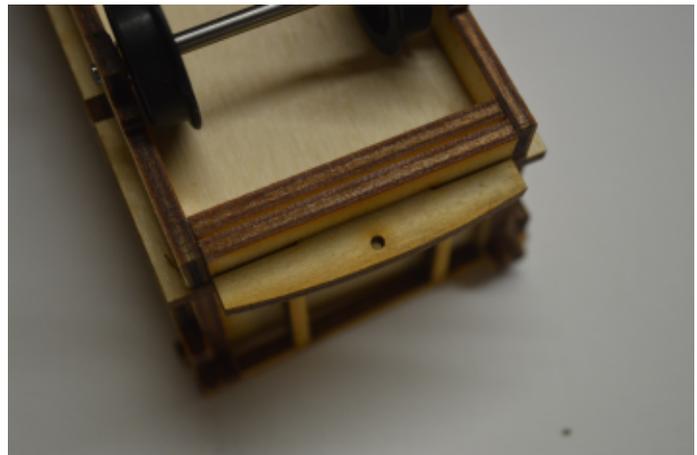
Fit the outer end pieces to the inner end pieces ensuring that the slot for the buffer beam is at the top.



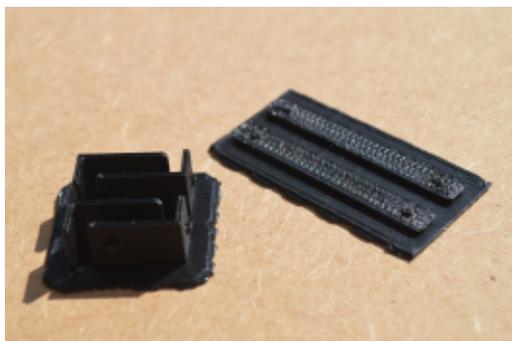
Locate the 4 parts that make up the buffer beam assemblies, these are 2 upper buffers (the ones with the tabs) and 2 lower buffers.



Fit the upper buffers into the slot in the outer chassis end piece.



Fit the lower buffer to the underside of the upper buffer ensuring that the holes through the buffers are aligned.



2 sets of 3D printed parts are supplied with the kit, these are 4 corner angles and 2 buffer irons. They can be simply snapped off their carrier pieces.

Use super glue to fit these parts, carefully bend the buffer irons to the profile of the buffer beam before fixing. These parts are ABS plastic, any print marks can be smoothed by wiping Acetone (Nail Varnish Remover) over the surface with a cotton bud.

