

Cornish Slate Wagon

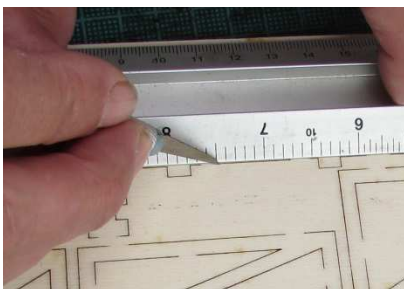
This model is based on the flat wagons used by the Cornish Slate quarrying industry to transport cut slates from the cutting sheds.



General Assembly Instructions

Do take time to read through the instructions and understand how the parts fit together before reaching for the glue pot. Where ever possible parts have been designed to be symmetrical but occasionally parts have to be left or right handed so take care to follow the instructions carefully at these points.

Most parts are attached to their frets by small sections of half cuts. To remove parts either cut through the remaining material from the front with a thin sharp blade (e.g. a scalpel) on a cutting mat or turn the whole fret over and with the aid of a steel ruler aligned with the pieces side, cut lightly with a knife to break through the remaining wood.



DO NOT simply try and twist the parts out of the fret, there is a risk that the part may tear. The laser cutting process will leave a degree of edge discolouration. If you plan to leave you model unpainted now is the time to lightly sand the edges to remove this discolouration.

Gluing

Wood and MDF parts may be glued with PVA wood glue, Cyanoacrylate adhesive (super-glue) or epoxy resin (Araldite). Beware of very cheap glues, their joints may fail! If you do use a “super-glue”, go for one which takes a few seconds to set rather than an instant “grab” one. This will give you a few seconds to adjust the parts position before it is too late.

Metal parts (e.g. coupling hooks) are best fixed with Cyano/super glue.

Painting

This is very much a matter of personal choice. As poplar plywood is used for the body, leaving the model mostly unpainted can be very attractive however if you plan to run your trains in all weathers, some form of protection (especially on the MDF parts) will be needed; a couple of coats of acrylic matt varnish from a “rattle can” is an easy way of achieving this.

Suggest Colour Scheme

Stain the three body parts before gluing together. With a cloth, lightly smear on wood dye bought from your DIY store. Go slowly as the very pale wood absorbs the colour quickly. Alternatively to achieve the silver grey look of weathered wood, stain with a very weak mix of black India ink in surgical spirit applied with a small paint brush.

The chassis can be treated and protected with exterior wood stain. Small tins in a variety of colours are available from your DIY chain store. Apply two to three coats with a small paint brush until you have an even colouring.

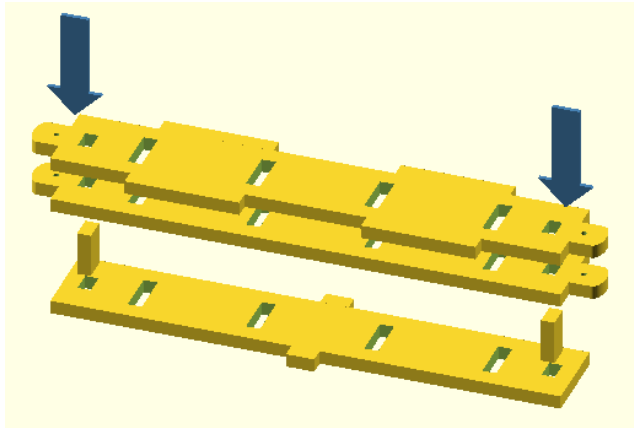
Tools

The following tools will be required:

- A sharp modelling knife or scalpel
- 1.5 mm and 4mm drill bits
- A small file, sand paper or an emery board “nail file”

The following tools are recommended

- A cutting matt
- A small steel ruler
- Some small clamps, bulldog clips or rubber bands
- A round section “needle file”
- A metal working vice with smooth jaws or a wood working vice



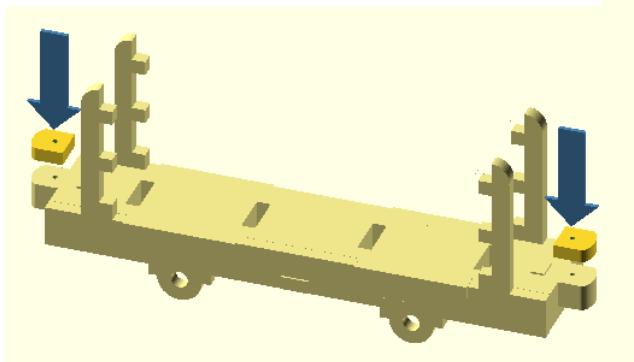
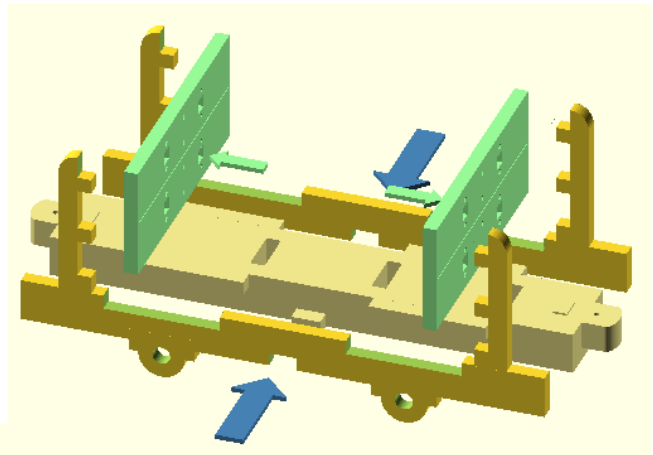
Step 1

PVA wood glue is recommended for these 2 steps or if want to use a super-glue DON'T use an "instant grab type". Glue the 3 "chassis plates" together using the small rectangular locating pegs at each end. Note the sequence of centre tabbed, no tabbed and end tabbed plates. Make sure the parts are squeezed together properly. Wipe out any glue that oozes into the holes.

Step 2

Glue the two sole bars onto the sides. Temporarily clip the body ends on to the uprights to ensure the sole bars are aligned perfectly. The parts should fit together snugly but if necessary clamp the sides to the plates while the glue dries.

Once the glue is dry, lightly file the ends of the locating tabs to remove any remaining edge discolouration.

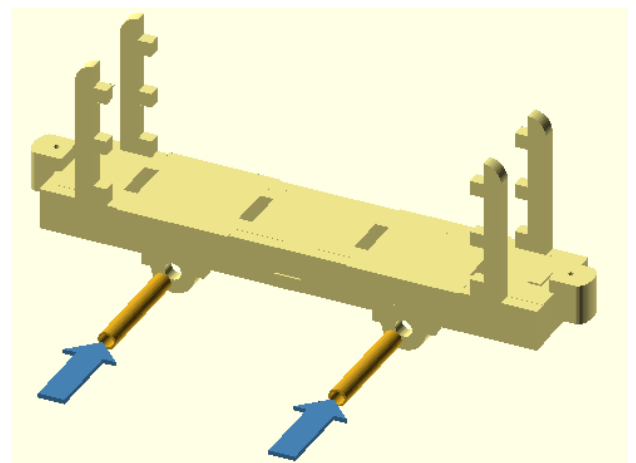


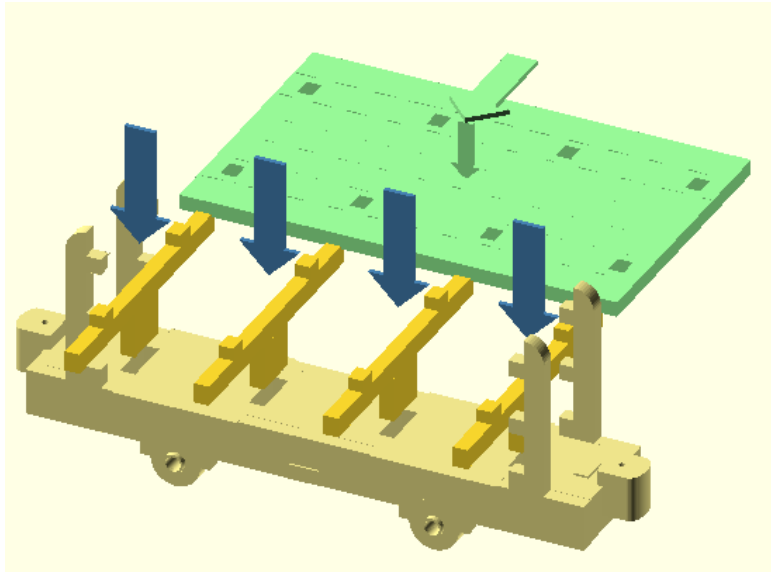
Step 3

Glue the two dumb buffer extension pieces to the top of the chassis

Step 4

Slide the 2 brass bearing tubes into their pedestals, the holes might need easing by "twiddling" a 4mm twist drill through the holes with your fingers. Align the tubes so that they project out about 1 mm each side (don't be tempted to file them flush). Once you are happy with the position fix in place with a few drops of super glue on the inside of the pedestals.





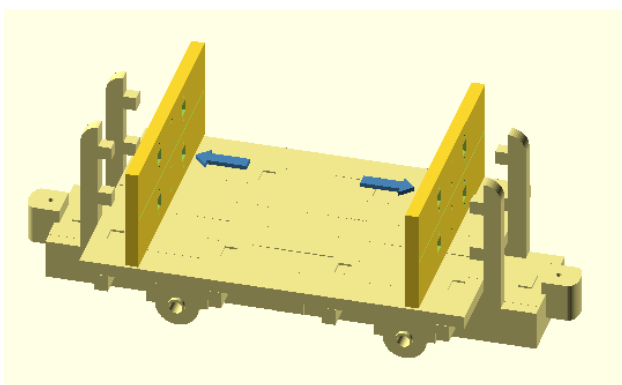
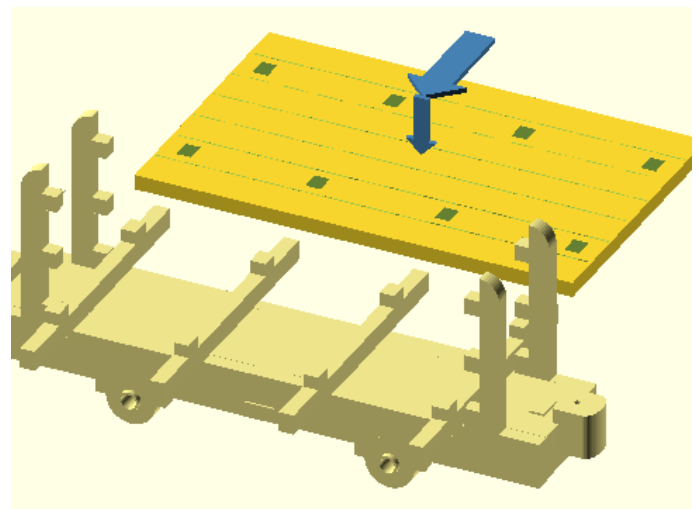
Step 5

Now glue the 4 cross members into their chassis slots. Temporarily fit (i.e. don't glue) the body floor onto the locating lugs on the cross members to ensure the cross members are aligned perfectly.

Now's a good time to paint the completed chassis!

Step 6

Once the paint/stain is dry glue the body floor to the cross members

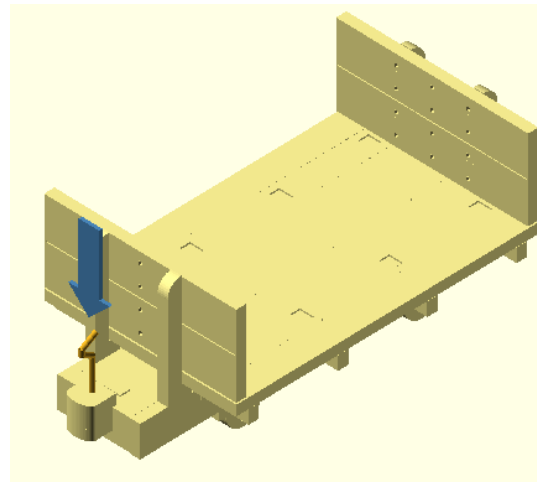


Step 7

Glue the body ends to the uprights,

Step 8

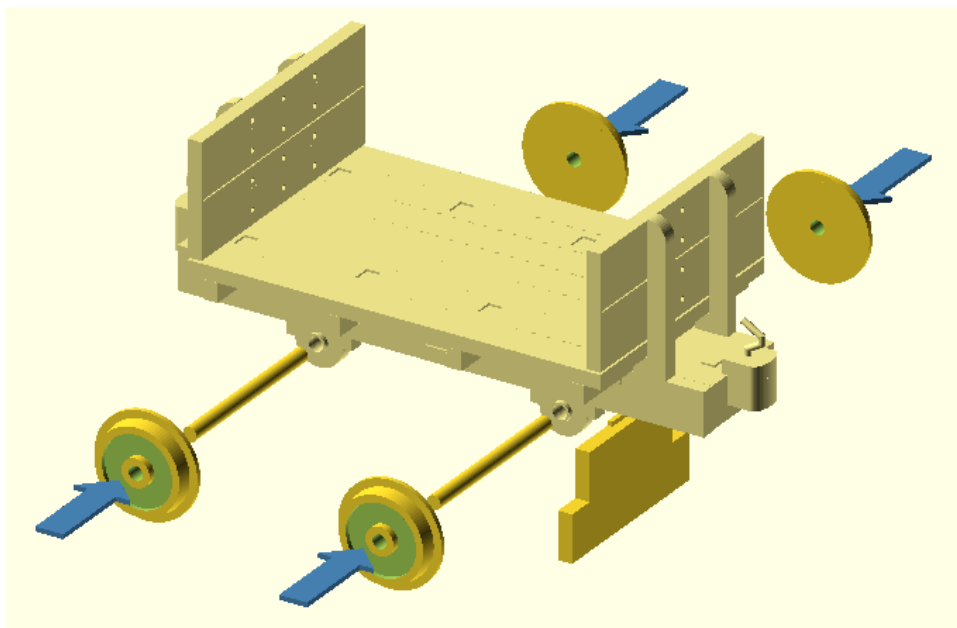
Super glue a coupling hook into the hole in the dumb buffer. (You will probably have to clean out the hole first by “twiddling” a 1.5 mm twist drill through it). Repeat for the other end



Step 9

Finally push one wheel onto an axle, pass the axle through a bearing tube in the chassis and fit another wheel to the other end. Gently squeeze the two wheels together in smooth jawed vice until the “back to back” distance is 28 mm. NB a back to back gauge is provided in the kit to help get this right.

Repeat for other axle



Job Done!