

Southwold Railway Luggage Van

This model is based on the four wheel luggage vans used by the Southwold Railway. The kit features 3D printed nylon details and running gear, sliding doors and quality steel wheels.

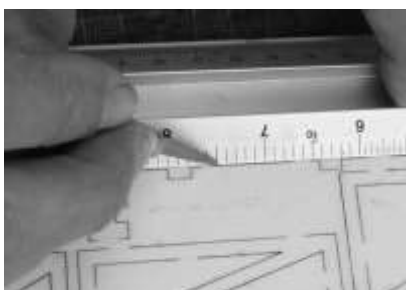


A pair of Binnie centre-buffer is include with this kit but correctly spaced pilot holes for Accucraft chopper couplings (not included) are provided in the inner buffer beams so that the modeller may fit these buffers if desired.

General Assembly Instructions

Do take time to read through the instructions and understand how the parts fit together before reaching for the glue pot.

Some 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 vary 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.

Nylon parts (e.g. the mounting lugs) are best fixed with a multi-purpose contact adhesive. The Vacume formed roof is best glued to its wooden supports with epoxy resin 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 easy way of achieving this. If you are going for a painted finish we suggest that you prime and rub down all the parts before you glue them together. Trying to rub down the plank work after you have glued the outside framing on is challenging to say the least !

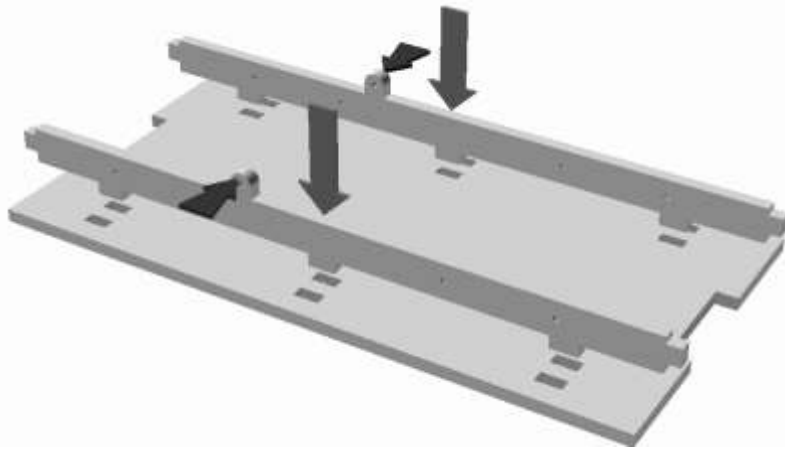
Tools

The following tools will be required:

- A sharp modelling knife or scalpel
- A cutting matt
- A 12 inch steel ruler
- A long nosed pair of pliers
- A small cross point screwdriver
- A small file, glass paper or an emery board “nail file”

The following tools are recommended

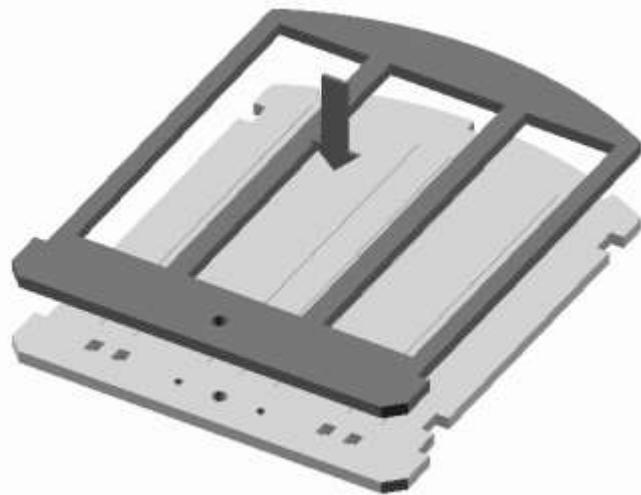
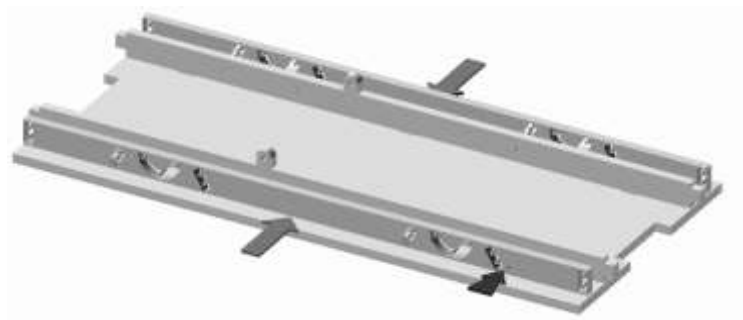
- Some small clamps, bulldog clips or rubber bands
- A round section “needle file”
- A pin or 1.5mm drill bit
- A clean “medium” tooth brush
- A 6mm spanner
- A fine tipped black permanent marker pen.



Step 1
Glue the 2 MDF inner sole-bars into the locating sockets of the MDF under floor. The inner hole sets are for 32mm gauge and the outer set for 45mm gauge. Make sure that the brake hangers are opposite each other as indicated. Make sure the parts are squeezed together properly. Wipe off any glue that oozes out of the joints.

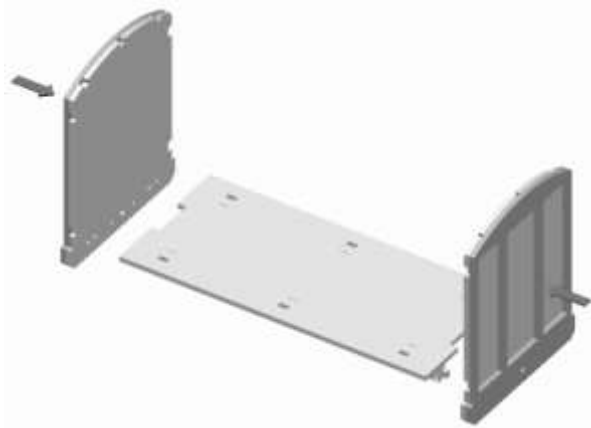
Step 2
Glue the 2 plywood outer sole bars on the outer faces of the MDF sole bars.

Note orientation of engraved reinforcement strips.



Step 3
Glue the end overlays onto the ends.

N.B. if you wish to use Accucraft chopper couplers (not supplied) now is a good time to drill through the two 2mm holes in the buffer beam

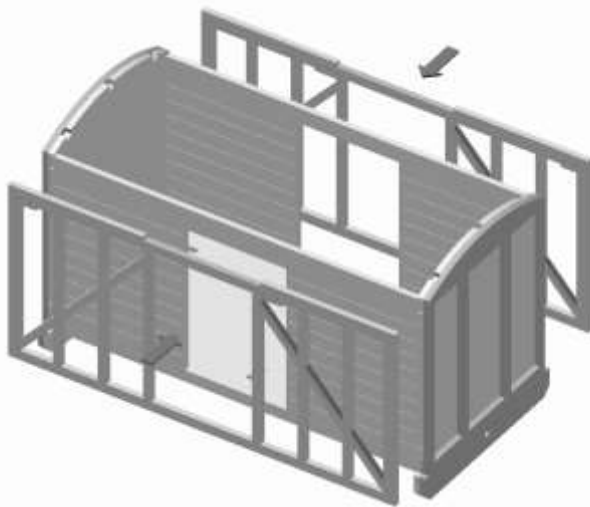
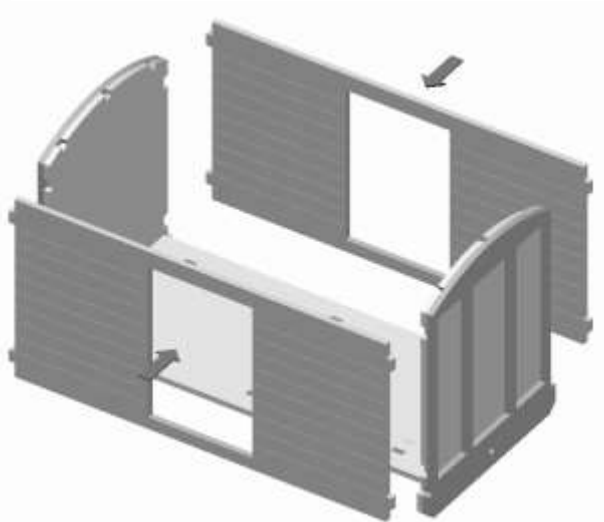


Step 4
Now glue ends onto underframe from step 2.

Step 5
Glue the two sides in place.

Note that the door "intel" (i.e the top) is deeper than the door "step" (bottom).

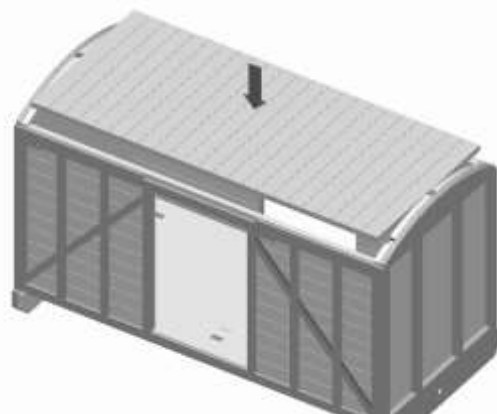
Stand the completed body on a flat surface, pass a large rubber band around it or lightly clamp and allow the glue to set



Step 6
Glue the two side overlays in place.

Note the cut out for the rain strip goes at the top and the mounting holes for the door rails go to the left.

Step 7
Glue the floor overlay (1.5 mm ply) onto the MDF floor.





Step 8

Prepare the door detail components by removing the “sprues” (the light sections in the picture) that hold the parts together with a sharp modelling knife or miniature side cutters. If necessary clean any printing dust off the “castings” with a toothbrush. “Twizzle” a 1.5 mm drill bit in the holes in the top door runners so that they slide on the supplied door rods.

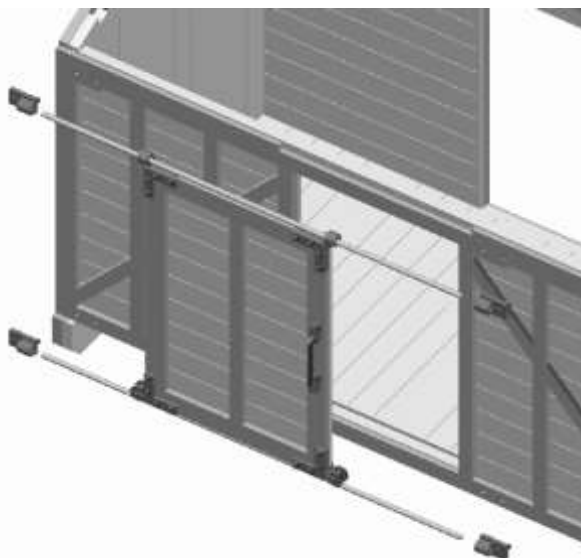
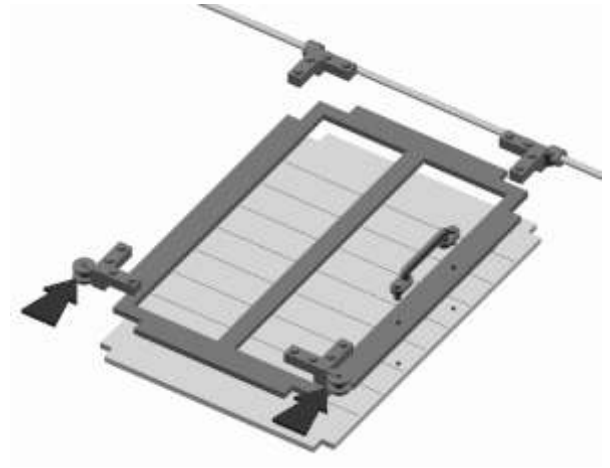
TIP. Trimming off the sprues can leave little patches of white nylon visible. This can be removed by simply “colouring in” the area with a fine tipped black permanent marker pen.

Step 9

Assemble each of the doors.

Slide the two upper door hangers onto a door rod to keep them aligned while you glue the hangers to the door **but don't get any glue into the hangers' holes**.

Note that the “wheels” on the lower hangers point to the sides, not down.



Step 10

Push the door rod ends into the rod mounting brackets. Then glue the mounting brackets into their locating holes in the van sides.

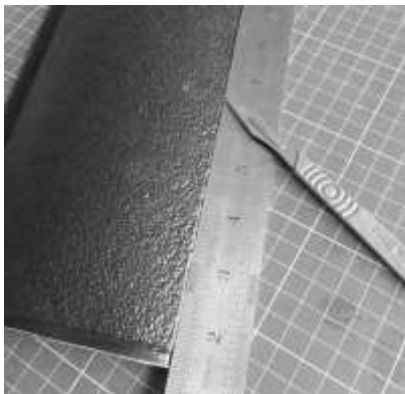
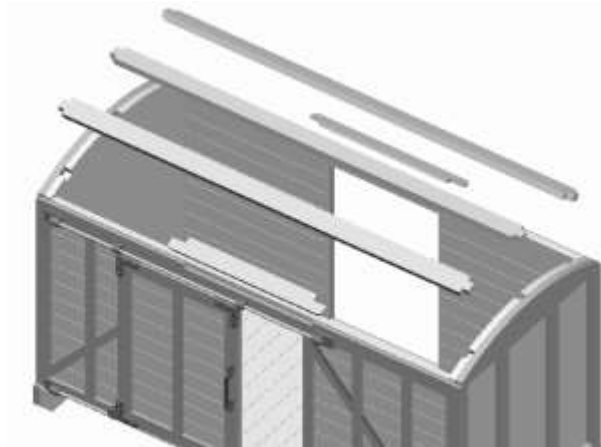
The lower hangers' “wheels” should just rest on the lower door rail.

Step 11

Glue the two “rain strips” into their cutouts above each door lintle. They should be angled down slightly but not too much as to stop the doors sliding on their runners.

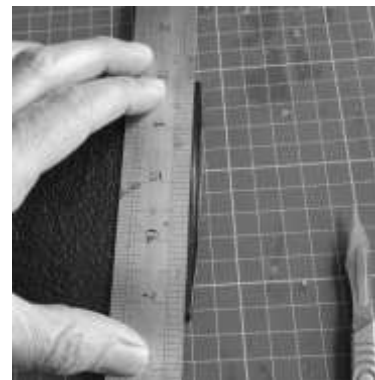
Next glue the three roof mounting strips into their sockets in the top edge of the van ends.

Let the glue set completely before attempting to glue the roof in place.



Step 12

Take the vacume formed roof and with a sharp knife and a steel rule, trim the long sides first by pushing the steel rule hard against the side of the lip and running the shark knife done the edge.



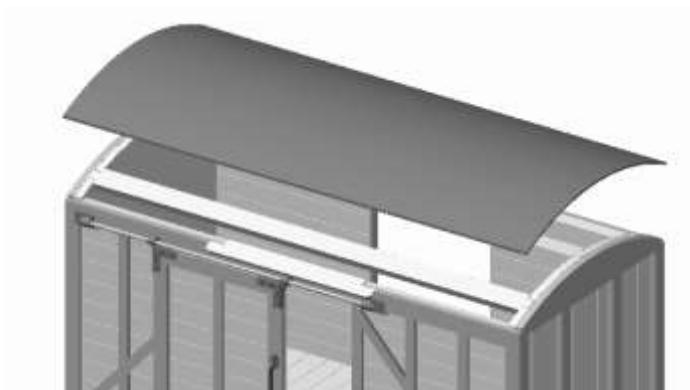
Step 13

Now trim the two short sides by placing the steel rule across the “bow” of the roof and push down so its flat on the mat and then trim with your sharp knife. Align the rule right at the end of the textured pattern against the the slight ridge to get the right roof length.

Step 15

We suggest you use epoxy resin glue for this bit:-

Now glue the roof to the van. Put plenty of glue on the three mounting strips and a thin bead around the top edges of the van sides and ends. Clean off any excess glue that oozes out. Make sure no glue gets onto the door runners. (Infact why don't you put a bit of making tape over them to make sure ☺).



Leave until the glue is set.....

Step 16

First check the axle box hole is free of printing dust. This is best done by gently “twizzling” a 2mm flat bladed screw driver or drill bit in the hole. Check that the axle journal rotates freely in the hole. Screw an axle guard onto one sole bar’s inner face. You will find a pair of correctly spaced pilot holes. Only HALF TIGHTEN the screws for now, you will need quite a bit of “play” to allow you to get the opposite axle guard fixed.



Fit the opposite axle guard to a wheel journal and then thread the opposite journal into the “semi-fixed” axle guard. Now gently manoeuvre the unfixed axle guard into position. Fasten in position with two more screws (do make sure they go into their pilot holes). Tighten up the screws on the first axle guard.

Give the wheels a flick, they should spin freely. Repeat for the other wheelset. Add a drop of light oil (e.g. 3in1) before the wagon enters service.





Step 17

Thread a brake rod (two are provided to cater for either 45mm or 32mm gauge); through a brake hanger; through the two shoes and out through the other brake hanger. The rod should be almost flush on the side where the brake ratchet's locating hole is at the "brake end" (see photo) and should protrude 6mm about the other side.

Step 18

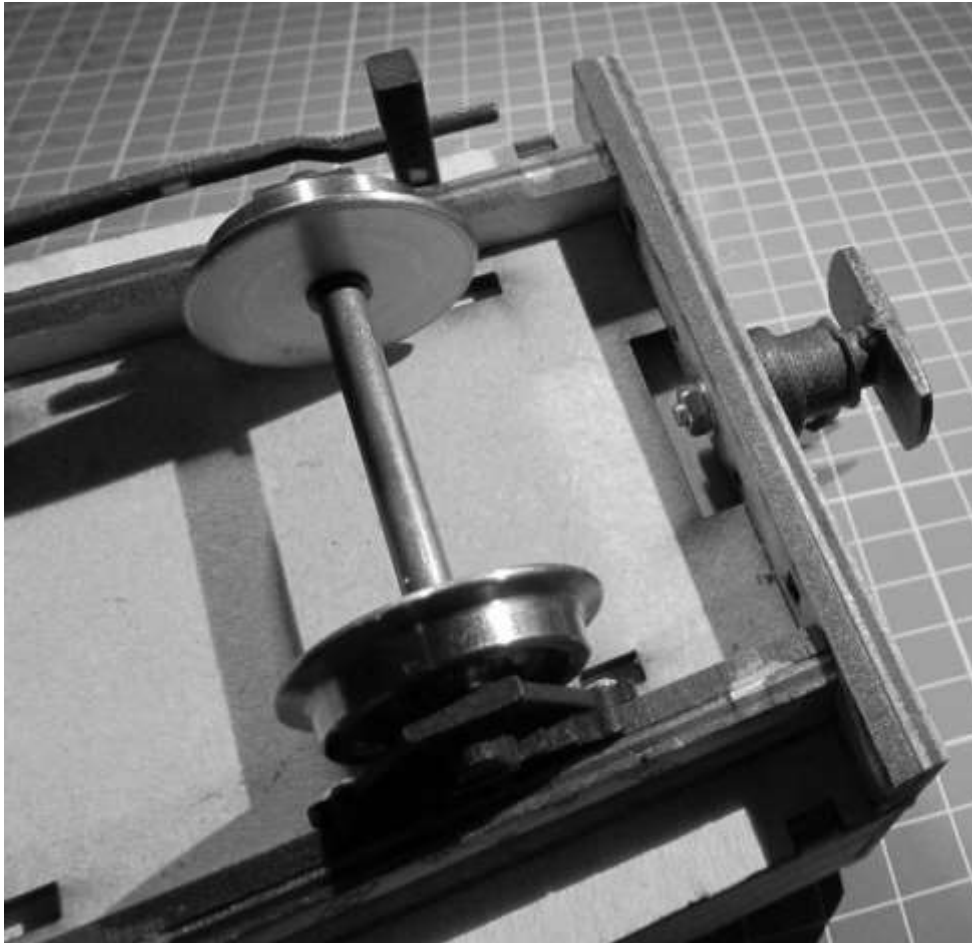
Thread the handle of the brake lever through the ratchet and push the boss onto the brake rod. Secure the ratchet onto the sole bar with a spot of glue. Twist and align the two brake shoes so they are aligned with the wheels but not touching them.



TIP A lever retaining pin can easily be made from a bent paper staple.

Step 19

Finally thread the buffer's bolt through hole in the buffer beam, add the washer and screw on the nut. Ensure that hook is pointing straight up and tighten the nut (preferably with a 6mm spanner).



Job Done!