Please read these instructions in conjunction with the pictures on the more information page of the coach you have bought. There are some very clear pictures there showing close up detail.

Step .1.

Take your coach sides and end panels, look carefully at the joints. If there are bobbles of resin caught in the joints, they will need to be cleaned out. I find the best way to remove these is to use a ¼" chisel as a scraper. Simply drag it lightly, but tight inside the rebate. You will find it will do a perfect job of clearing out all those little bits. Wrap some wet & dry paper over a large cork sanding block. With a water and cheap washing up liquid that does not contain lanolin mix, rub the back surface of the two sides and ends to leave a smooth, flat surface. Now offer the joints up to each other to check for fitment. Please note, that the ENDS go IN BETWEEN the sides. You may find the side castings are a little too thick for a tight fitment of the ends. If this is the case, I find it best to scrape the excess resin from the sides using a rounded scalpel blade. This has proven to me to be a very effective way of removing excess resin and leaves a clean surface. Once the end joints are fitting nice and tight, number each corner 1-4 on both the side panels and end panels so you know what corner joint goes where. The next job is to remove any resin bubbles found on the inside of the window sills with your ¼" chisel. Now you will have nice fitting joints, all numbered, and clean window sills. When you are happy, simply glue the four sides together with super glue, making sure you glue the correct numbers in place.

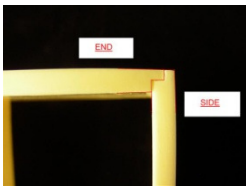


Fig 1.a

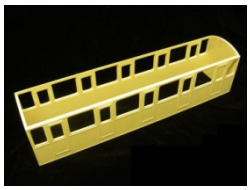
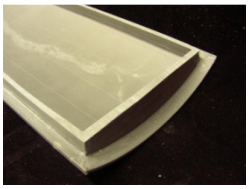


Fig 1.b

Step .2.

Remove any flash and moulding marks found on the underside of the roof. The last job on the roof is to sand the inner rim until you are happy with it. There is nothing precise about this, as it cannot be seen through the windows anyway. You're just looking for a nice clean finish.


2.b

Step .3.

Test fit the roof onto the coach body. If it does not fit first time, it will be because of the moulding lip formed during the moulding process on the top of the end panel. Simply scrape the lip off with a scalpel blade. Keep scraping until the roof fits nicely. Do not glue the roof on.

Step.4.

Due to the unstable nature of the resin casting process, I have had to allow for shrinkage of the moulds and the products. This means some parts need to be made over size so they can be, 'cut back' to fit the final article. The chassis is one such item. I have found that the chassis is typically 1mm too wide on both sides and 2mm too long on both ends. Scrape away any moulding lips on the bottom of the side and end panels of the coach sides. Offer up the chassis to the under side of the coach body and mark off what is needing to be removed. There are a few ways to remove the excess material; sand it with coarse paper on a block, wood plane it, file it, scrape it off with a scalpel, sand it off with a drum sanding disc on a dremel etc etc. Once you have the length and width right, you will now need to round the corners off the chassis just a little for a nice fit. What you are looking for is a nice fit within the coach body, not tight, not all sloppy.

Step .5.

Clean up the long coach steps, removing the thin moulding strip found on the back with a scalpel. Rub down the lower inch of the inside of the coach sides with fine wet and dry paper. You will see that there is a rebate cast into the top of the step supports. This rebate fits onto the inside of the bottom of the coach side. The top of the support is used as a stop for the floor. Offer up the step to the inside of the coach side and centre the supports under the doors. When you are happy the supports are in the right place, mark one of the end supports with a pencil on both sides. Lay the coach body on its side and glue both steps into place, one set per side. You can do the first two supports at the same time, then lightly pull the step down and put a blob of super glue where the next support will fall, and stick, so on and so on until you are left with the last two. They again, can be glued together.

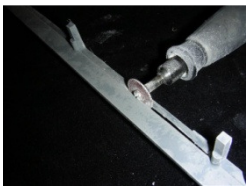


Fig 5.a

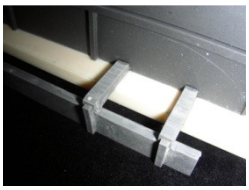


Fig 5.b

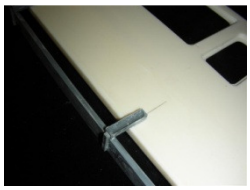


Fig 5.c

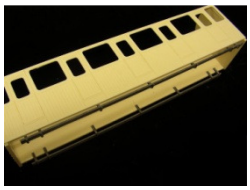


Fig 5.d

Step .6.

Put a very small blob of super glue or epoxy into the centre of the grooves on the underside of the bogies. Drop the axle with the pre-assembled brass tube bushing into this glued groove. For a, 'belt and braces' job, you may like to add a little more glue onto the top of the bushing as well? Super glue the bogie detail side frames onto the side of the bogies, making sure they are square, parallel to the floor and clear the axle stubs protruding from the wheels. Drill a 2.5mm hole into the top of the bogies for the mounting pivot.

Fig 6.a

Step.7.

On the underside of the chassis you will see a scribed line, a little like an, 'I'. Drill a 3.5mm anywhere along this line, but not outside of it. Make a deep counter sink on the top side of the chassis. You must use a 3.5mm hole, as although it is technically too big for the screw, you need the movement. Once you have drilled your hole, screw the bogies onto the chassis using the two larger screws.

You will see one bogie has a bar cast into it, the other has a small round. The bar is to keep the coach level and the round compensates for the undulating track. It is very important not to screw the bogies to tight. You should be able to have maximum bogie movement, but not all sloppy and loose.

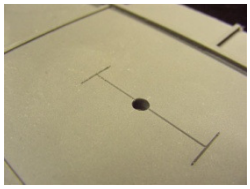


Fig 7.a

Fig 7.b

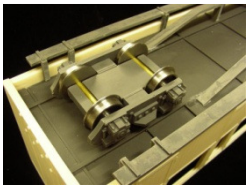


Fig 7.b

Step.7a.

If you are building the <u>SHORT</u> coach, you will find two bars moulded into the under side of the chassis where the wheels go. Glue the brass axle bearing with wheels fitted, into the axle holder. The axle holder fits inbetween the moulded bars. There is a degree of adjustability here for a longer or shorter wheel base. Glue the axle holder with wheel set fitted inbetween the bars at your chosen distance making sure the axle holder is flat to the chassis. When dry, just glue the side frame detail onto the chassis in line with the axle. Best to give a little distance, so as not to rub against the face of the wheel.

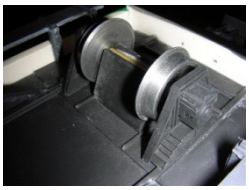


Fig 7a.a

Step.8.

Super glue the chassis stiffening bars into place on the underside of the chassis. They locate on the outside of the square section running the length of the chassis. The two vertical bars of the stiffeners will fit nicely into the corners of the middle two cross bars on the underside of the chassis.

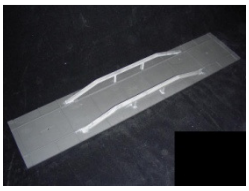


Fig 8.a

Step.9.

Glue eight seats back to back, and leave to dry on a flat surface. Place the coach body on a flat surface so it is resting on the steps. Gently sand down the upper shiny surface of the chassis with fine wet and dry paper. Drop the completed chassis into the coach body from the top. Run a line of Super glue along the bottom edge of the seats and place seats onto the top of the chassis, (now the coach floor). It is easier to do it this way, as the floor is now much higher up the coach and, you can use the windows as a guide to better align the seats within the coach interior. Allow to dry.

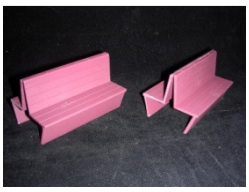


Fig 9.a

Step .10.

Lift out the finished chassis with all seating glued into place. Put a good blob of Super glue onto the tops of all the step supports. Lower the chassis back into the coach from the top and make sure the underside of the chassis is resting on the tops of all the step supports. I find it is best to rest the whole coach via the steps, on two paint spray cans, (or something like it that's close to hand) so the coach body is supported and the weight of the chassis is pushing down onto the step supports. When the chassis is glued, you may want to run a little extra Super Glue here and there around the edge of the

chassis for a little extra strength? I've never found the need to yet, but...

Step .11.

There are two very small counter sunk screws supplied in the kit. These are intended to be used to fix the roof down via the tops of the end panels. Drill a 2.5mm hole in the top of the panel and counter sink it. Follow this through with a 1.5mm pilot hole in the end of the roof.

Step.12.

Carefully look over your model and fill any small imperfections with car body filler.

Painting.

I do not recomend Halfords Acrylic paints, they never fully dry and remain very soft, so soft that even bubble wrap will damage it over night !

That's just about it.

Just the fitting of the couplings, door handles, grab rails, roof vents, people and any other fittings not supplied in this kit to fit. Once all that is done, cut out the provided clear plastic sheet and glue into the window rebates using a clear epoxy or better still, exterior PVA.

Fig p1

Fig p2

Fig p3

Fig p4

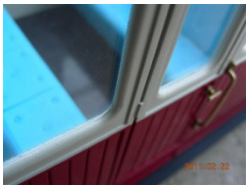


Fig p5