

Prototype
Replica Model Railway Products PRMRP

Stockists of 7mm Modern Image Kits

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SG 001
Super Guv
Building Instructions

**SCALE MODEL PRODUCT FOR ADULT MODELLERS ONLY.
WHITE METAL CONTAINS LEAD - WASH HANDS AFTER USE.
MAY CONTAIN SMALL PARTS. ETCHED BRASS HAS FUNCTIONAL SHARP EDGES
- HANDLE WITH EXTREME CARE**

Thank you for purchasing this kit.

This instruction pack should provide guide for building this model given some experience of soldering and the basics of etched kit construction. Please note that the body is only basically shaped as the final profile can only be established whilst soldering the coach ends in place.

Please read all the pack before starting to build.

Drawings and photos are essential for builders to acquaint themselves with the prototype they wish to model.

For builders of modern image in 7mm, consider joining MIGO+1, the Modern Image Gauge 0/1 organisation. For more details see the MIGO+1 website at www.migo.org

Transfers are available from Fox Transfers.

Suggestion of tools that maybe required and general kit assembly

Preparation

Before any parts are cut from the etched frets, push through any rivet holes from the back of the fret. These are represented by half etched holes on the rear of the fret. The same also applies to pre-formed loco.

Forming the Etched Parts

When forming the etches, unless otherwise instructed, the fold lines are on the inside. A pair of bending bars are ideal for this job or a vice, (without serrated jaws), would suffice.

Soldering

The key word for a successfully soldered joint is cleanliness. If the parts to be joined together are clean metal surfaces and are well coated in a good flux and providing the soldering iron tip has sufficient heat, a perfect joint which is also very strong will result.

A good strong joint can be achieved with glues but it is not easy to rework. A soldered joint can be easily undone, altered, corrected etc. by just re applying some flux and heat from the soldering iron. The flux transfers the heat from the tip to the metal surfaces to be joined and stops oxidization at the joint. I allow the multi-core solder to stay molten on the joint and, when the iron is taken away, will cool to form a solid metal joint.

When undertaking any kind of soldering always hold the parts to be joined together securely and comfortably. You will learn with experience how long to hold the iron on and in turn how much pain your fingers can endure. The use of small clamps such as hair clips, mini G clamps, (not rubber bands!), a small vice, various pliers etc. will make life easier. A simple jig soldered together out of scrap metal or made from wood may also help for holding parts you find awkward to hold.

You can use the various temperature range solders to your advantage during building. Multi-core for larger pieces will give you the main structure. A solder called Carrs 145 or 177 solder is used to apply the finer etches and laminates. Finally white metal solder, Carrs 70 Red Label, is used to fix the castings on.

Remember to take care not to apply too much heat near laminates or casting you have already joined as you may disturb them.

Cleaning Up

When assembly is finished, all excess solder should be cleaned from the model. Files, small wire brushes, fibre pens and Wet & Dry paper are all useful aids when performing this task.

On your model there are joints between etches and castings that may require some filling. Car body fillers such as Isocon are ideal, (avoid flexible/elastic fillers). When any solder or filler has been cleaned up the body should be washed in warm soapy water to remove any grease or flux that would prevent paint from adhering. Some washing up liquids leave a film on models, so it is recommended that Cillit Bang is used as a second wash. This removes all films, grease etc.

Plastic window boxes sold in the big DIY stores make an ideal size container for washing your models.

Rinse the model in clean water and leave to dry naturally over night.

Keeping the body square

Always build on a level surface. The last you thing you want is for your model to derail or wobble. Use a piece of 7mm Glass the squarest material you can get. This will ensure that you stand every chance of building a square model.

Tools

- A soldering iron with range of bits from large to very fine, for example a Weller temperature controlled iron (60 watt)
- Multi core solder, Carrs "Green Label" flux aids the running of the solder#18-24"
- Steel rule
- Folding bars such as those sold by M&M Models
- Range of Swiss files
- Medium cut bench knife such as Stanley Knife or short bladed scissors for cutting out etches.
- Evo Stick/Super Glue and Epoxy
- Good quality side cutters
- Fine pliers and duck billed pliers
- Mini drill and a good range of drills

Parts List Per Coach

White Metal Parts

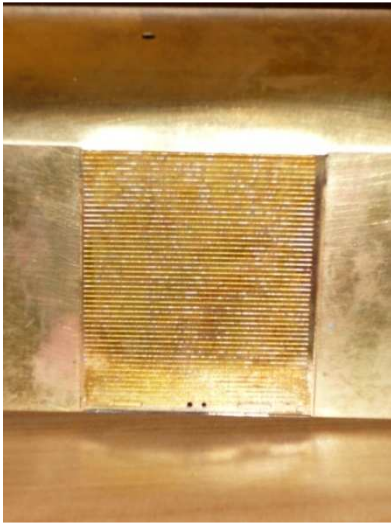
Wayoh Bogies included

Body

1. Solder the 8 body retaining nuts in position; then solder in the two dummy ends as shown. It is recommended that you start on one side and solder around the end to get the right shape for the body. You will find a half etched line on the inside of the body to accommodate these. It is worth noting that these should be offered up to the back of the line. This will give you more room between the dummy end and the resin end when it comes to glueing, ensuring you have a flush fit on the resin end and the end of the bodysides. Repeat at the other end.
2. Fit the six roller shutter doors.
3. Dry check the resin ends, they should be a snug fit. Once happy stick the resin ends using a good two part glue such as araldite
4. Fit the two strips down the length of each side of the body, these fits where the roof meets the body side. Now fit six rain strips above each roller shutter as shown.
5. Fit the roof vents in the holes provided.



Ends Soldered in Place (Note you can see two of the holes which you need to solder the chassis retaining nut to inside the body)



Bodyside doors from the outside and inside



Resin end fitted, repeat the other end



Rain Stripe and note the body strip just below which runs the length of the body.



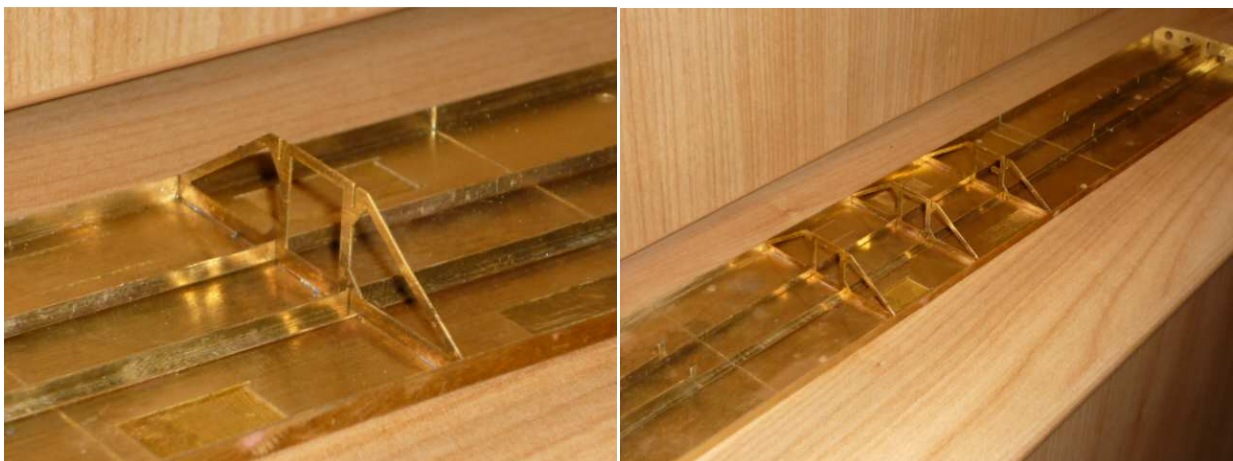
Chassis

1. Fold up the main chassis as shown
2. Fit the two inner frames as should securing by fitting the cross trusses as shown. Note that these fit in the half etched line on the underside of the chassis. Although not shown in the pictures below, the cross truss with the two brackets for the hand wheel, go in the centre. The two other similar size trusses go either side with the smaller two fitting at each end. Once these are secured, you may want to add a little more solder to the inner frames where it meets the chassis. Be sure that the chassis is square as you build.
3. Fit the Bogie pivot boxes. One to each end where indicated.
4. Fold and fit the truss rods. Please note that they fit with the 'L' facing outwards and not as shown in the picture below.
5. Fill the gaps between the Truss Rods on the Cross Trusses with the correctly lengthened fillets and also fit the fillets that fit from the Cross Trusses to the chassis sides.
6. Fit the two battery boxes, Electrics Box bracket, 2 x 'V' hangers, Hand Wheels and Tank Bracket, where indicated
7. Fold Up the air distribution cylinder brackets and fix the cylinders

8. Know fit the Air Tank, Air Distribution Valve (Cutting down as shown), Dynamo and belt, electrics box and finally the Air Distribution Cylinder and make up the Brake actuator assembly as shown.
9. Solder the bogie fixing nut through the chassis and solder from the inside.
10. Fit Buffer Shanks as shown and fit buffer heads. You may wish to substitute these for sprung buffers. Also fit the buffer beam detail. Due to the fact that different air pipe configurations were possible on the coaches, you will need to drill holes for these. Also I have fitted Kadee Couplings, so you will need to play about with the buffer beam to accept.
11. Fit the Jumper Cable castings



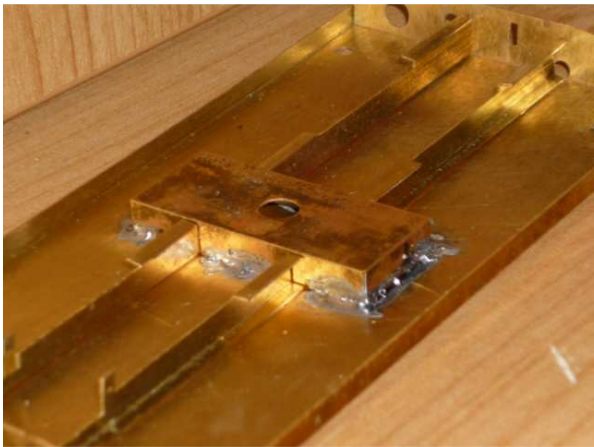
Chassis



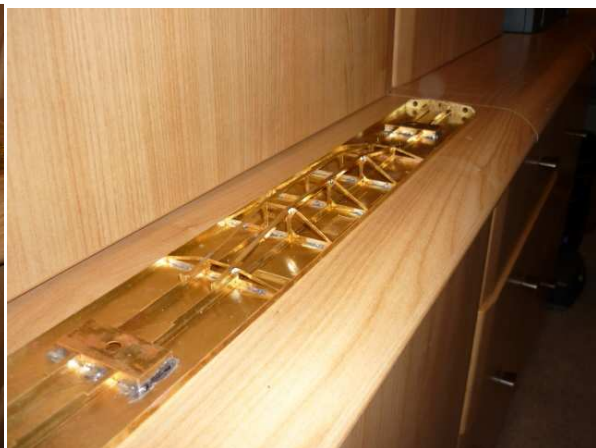
Central Girder and cross braces



Central Girder and cross braces



Bogie Pivot Box



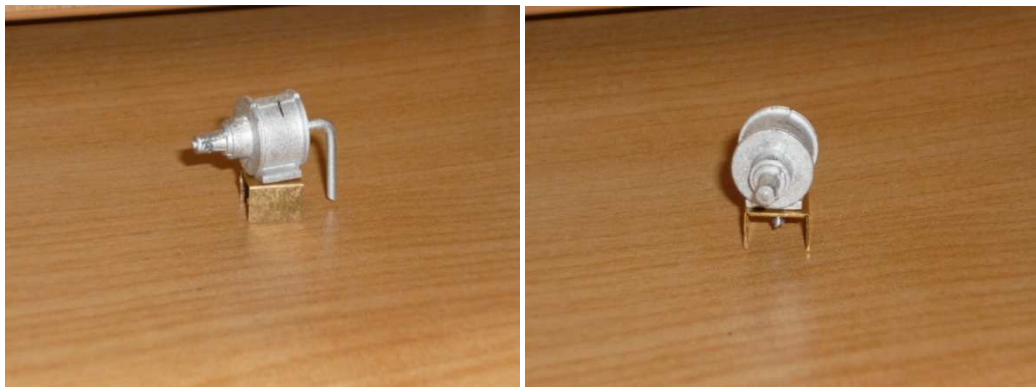
Truss Rods



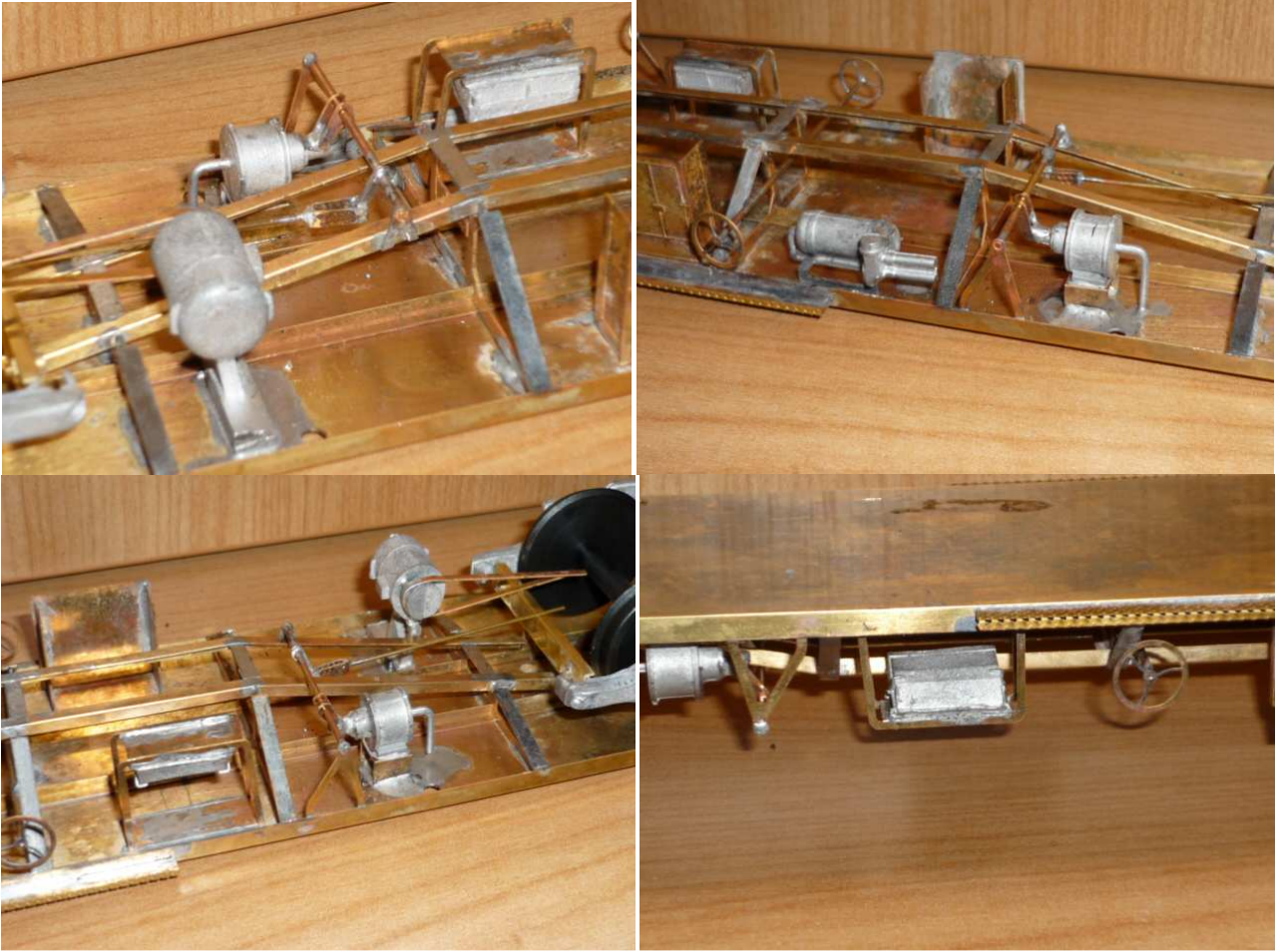
Cross Truss Fillets



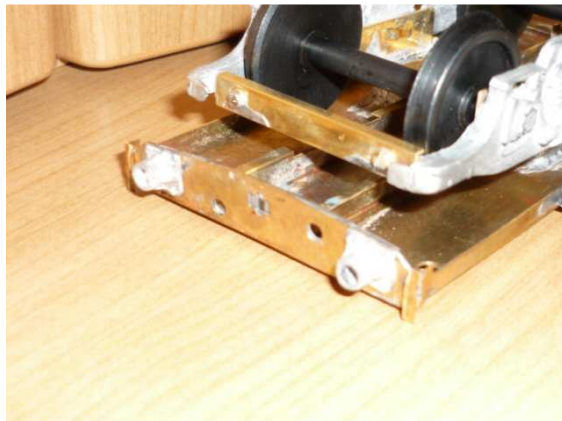
Underframe Detail



Air Distributor Cylinder



Underframe White Metal detail



Body and Chassis Completion.

1. Fit the body and chassis together, you may need to elongate the holes on the underside of the chassis to make sure that match up with the holes in the body side.
2. Fit the side steps under the roller shutter doors and then place the checker plate over the top of the steps.
3. Fold and fit the four end brackets so they fit flush against the resin body ends to finish off.
4. Fit the
5. Finish off the resin ends adding the jumper cables and brackets and Lamp Brackets. These are shown on the finished article.



Bogies

1. Wayoh bogies are supplied with this kit. Use the instructions provided and fit accordingly.

Finished Article

