

Thompson D.358 BZ

Contents

1 x Nickel silver etched floor
1 x Brass fret containing the body and overlays
1 x Plastic roof moulding (*may be slightly damaged one end - use the good end*)
8 x Brass bearing cups (two are spares)
1 x White metal vacuum cylinder
1 x Dynamo
1 x Set of moulded roof ventilators
4 x Brass buffers
Glazing
Wire

If ordered as the full kit

2 x Peco couplings
3 x Axles with 7mm wheels

The Prototype

Eighty of these six wheel vans were introduced in 1950, in a very similar style to the Thompson bogie coaches being built at the same time. They were the last six wheeled coaches built for British Rail. Although built to passenger standards they were banned from passenger services in 1959 but continued to see service in other trains until the mid 1970s. Most were scrapped by 1976 with a last few hanging on until 1980.

The vehicles were numbered from E70647E to E70726E, the trailing E indicating that they were not standard British Rail stock and thus should be returned to the Eastern region for repairs.

When introduced they were painted all over crimson livery with yellow numbering, black ends and grey roof. They do not appear to have been lined in this livery. Repaints after 1957 were maroon and lining seems to have become standard on these vehicles with the maroon livery. The ends also became maroon from 1962 as spray painting processes were adopted. After the standardisation of rail blue they were gradually repainted into BR plain blue. It is advisable to check photographs as many vans did not receive all the liveries and there appear to be lining variations.

Several were preserved for their underframes. Due to the poor quality timber used in the body framing only one complete van, E70654E, survives in preservation. It can be found on the Great Central Railway where it was restored.

Construction

The kit is designed so that the chassis and body can be built separately both to aid construction and to assist in painting the model. Construction can be divided into four parts - the chassis, the body, the roof, and the final assembly.

The Chassis

Begin with the nickel silver underframe, remove any burrs and tabs. Take three of the top hat bearings and place them on a flat surface with the 'rim' of the hat on the bottom. With the fold lines facing **upwards** (and steps on the bottom left) place the nickel silver chassis etch over the bearings which will fit into the holes. Superglue (superglue paste is easiest) or solder the bearings into place taking care not to get too much excess glue around them. Once you are sure they are set and are going nowhere else, repeat the exercise on the other side.

The brass fret contains three overlays to build up each side of the chassis with detail. Each overlay has a correct way around, check the steps align and that the slots in the other two layers align with the slots in the nickel silver chassis. Make sure you understand which way the parts go and the order before assembling

The first has axle boxes, springs and steps on it and can be glued or soldered in place using the bearings as locating pins. *If you are glueing the bearings do not then solder the overlays as this will both crack the glue and give off dangerous fumes.* The second overlay has axle boxes on it but no steps and slots over the axle boxes. The final one fits over the top and aligns with the top of the overlays and the slot. The raised 'bar' of the overlay goes to the bottom of the vehicle - that is facing the outside of the assembly.

Repeat this exercise with the other side of the chassis.

Expert: If you plan to fit wire brake rod details then drill out the V hangar on each side to take your wire before folding up the floor.

Now fold the chassis along the fold lines with the fold lines **outward**. As you fold it down the tabs on the sides of the chassis will stick up. This is intentional, do not try and fold the tabs down too. Get the folds to about 90° and then lay it on a flat surface to check it is level. Look along it and adjust any misalignments.

Fold the steps on each side outwards and solder or glue firmly on the back. You'll see the step has a small tab that slots inwards into the nickel silver chassis. It is important this is well secured as the step is otherwise weak and vulnerable.

Test fit the wheels. These should be held in place by the bearings, adjust the axle box distances a spot if necessary until the wheels fit into place and spin freely. At this point check the wheels lie level and test push the chassis around some track.

When you are happy remove the wheels. Take the footboards from the brass etch and fit them into the slots on each side one at a time. Solder or glue the footboards in place taking care they stick out at about right angles from the sides.

Take the four buffers and put the buffers down on a hard flat surface. Remove the two buffer beams from the etch, clean them up and slip each over a pair of buffers. Once it all appears fairly level glue or solder into place. If you are gluing them leave the glue plenty of time to set so the buffers glue into place level.

Once set glue or solder the buffer beams to the ends of the chassis taking care they are level with the chassis and do not stick above the chassis top.

Body

The body is formed of a single main fold up etch and a set of detail overlays. The folds go on the inside of the body. Fold the sides up curving them as you go (see the ends for a guide the intended final profile). A good way to do this is with the edge of a metal ruler both to make the fold and then to scrape upwards to give the tumbleunder (curve) to the bottom of the coach sides. Bend up the ends and adjust as needed. Once the parts are in the correct position they can soldered or glued (soldering here is strongly recommended). Run a suitable brass flux down both sides of the corners and solder the joins. If you have the parts in position they should stay put without needing to be further held in place during soldering. Hold the joins up to the light to check for any gaps.

Two overlays are provided for the ends, these glue over the fold up ends to provide the detail relief such as the lamp irons. Experts may wish to further detail the lamp irons and/or run the jumper wires on the coach end.

A set of ventilator etches are provided including several spares as they are fiddly. These glue over the rectangular vent markings in the doors. Novice builders may wish to leave them off.

Roof

The kit is provided with a plastic roof moulding which needs to be trimmed down to size, fitted with ventilators and have the rainstrips adjusted. It is unfortunately not commercially practical to produce mouldings for each exact roof type.

Take the supplied roof moulding and remove the rain strips from it. This can be done with a sharp blade (away from your fingers) and/or fine wet and dry paper. Don't worry about any small marks, paint will hide many small sins.

Using a set square or similar trim and cut one end of the roof at right angles somewhere after the thin end section of the roof. Square this off carefully and clean it up. Trim the roof slightly over size to fit over the body with the roof hanging slightly over each end. Allow a bit extra for squaring up the end.

When the roof is squared up use the template in the instructions to drill 1mm holes in the roof for the ventilators and fit the ventilators (you may find 1.2mm holes easier, or to drill 1mm holes and then spin a drill in the top of the hole to give a small 1.2mm depression. This bit takes time to do well but the roof is very visible on small scale models so take time and care. When the ventilator is in place glue from below taking care not to let glue leak through the hole and mark the roof. Thankfully the vehicles only have four ventilators. Optionally fit rainstrips using either very fine wire or microstrip as per the template.

Test fit the roof. You will notice that it doesn't quite fit down over the body. File away the ends of the roof tabs that fit between the body sides so that it can sit down over the ends. Next thin the roof to a more realistic looking thickness by scraping away at it with a blade or by filing it until the roof fits down nicely onto the etch.

Novice tip: Alternatively you can trim the roof to just fit within the etched ends. This doesn't produce such a nice look but can be much easier.

Painting

At this point it pays to think about painting the main parts assembled so far. The chassis can be primed and sprayed black, the body can be primed and sprayed either rail blue, maroon or crimson and the roof sprayed grey. It is possible to use car paints for this and there are a variety of suggested matches on the internet such as at:

<http://www.rafkinlossmrc.co.uk/info.html>

Assembly

The body has four slots in it for the four tabs in the chassis. The body slots over the chassis and then slides across to lock into place. You may find you need to slip a sharp blade under the tabs and open them out slightly initially. Keep this slight - the body should lock into place firmly. If you prefer to simply slot the tabs through and solder then turn the chassis 180° and the tabs will line up so you can do this instead.

The Remainder

Fold up the two battery boxes and fit them according to the diagram with the overlay glued on the front. If you are glueing these the best way I have found is to fold them up and simply fill the resulting box with glue then leave it to set before fitting.

Fit the dynamo where marked on the diagram. Optionally fit the extra V hangar where marked and the vacuum cylinder with a bit of packing (a couple of small squares of card or similar). If you wish to fit wire then drill the V hangar out first and fit wire between the two hangars. Drill into the vacuum cylinder and fit an L shaped piece into that joining the other wire. Glue into place. *Do not solder near white metal parts, they will melt with normal solder.*

Note: if you fit the extra V hangar and fine wire detailing you will not be able to slide the vehicle back apart from the chassis.

Complete any painting work and refit the wheels.

Couplings

The kit is provided with a pair of Peco couplings. Assemble the coupling to the Peco instructions and then fit to the underframe of the wagon. If you have 9" curves on the layout then you may need to file the upper front of the coupling mount away before fitting (so that the buffer beam takes its place and the coupler is slightly further forward)

Handrails

The body has fine hole marks in it for handrails. There are two ways to do this. The expert way is to use fine wire and fold it into U shapes to go between the relevant holes (see diagram). These then fit through and can be glued from the other side.

For novices you can get almost as good a result by glueing fine microstrip over the body between the relevant holes, and indeed this is no different to the moulded rails found on much ready-to-run rolling stock. A spot of silver paint will highlight them nicely.

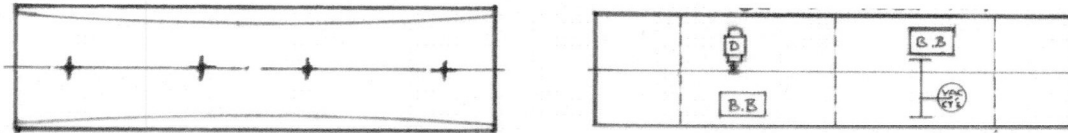
Brakes

The kit intentionally does not include brake etches as they are very hard to line up and particularly tricky on a six wheel vehicle which relies upon the flexibility of the wheels in the bearings and the slack in the track to handle curves. Brake detailing etches are available from the 2mm scale association. If you are fitting these remember that only the four outer wheels are braked.

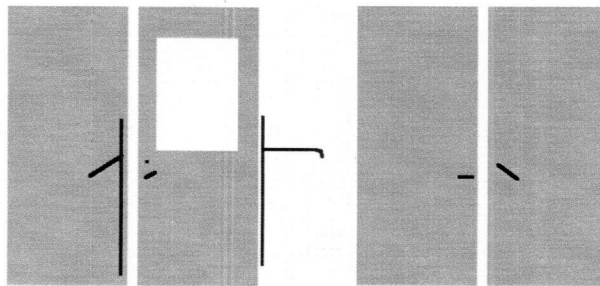
Building For Fine Scale

It should be possible to build the kit with 2mm SA wheels. How well it will handle curves is another question, and we would welcome feedback on this. It may be necessary with 2fs and with very sharp curves on N to mount the middle axle a different way so it may move more freely. We would welcome feedback on this from anyone who tries it.

Diagrams



Roof layout and underframe fittings - both diagrams are viewed from above



Left and right door arrangements for both sides of the vehicle. Use the tiny guide holes in the etch and open out as needed to fit your handrail wire if fitting wire rails.