

# 5522 Models

## Finescale components

### LM 312 – LMS Standard Planked Corridor Coach Ends – Period I

Thank you for your purchase from 5522 Models.

#### **Prototype notes**

After the Grouping of the British railways in 1923, the London Midland and Scottish Railway embarked on the production of a standardised range of coaching stock. This used mass production techniques and standardised components to produce a range of vehicles.

These coach ends are from Period I of coach construction. This lasted from 1923 to roughly 1930. The coach ends were built with wooden matchboard panelling. This was replaced from 1930 onwards with steel panelling. Other coach ends from later LMS periods can be found in the 5522 Models range.

#### **Kit contents**

This kit contains components to make a pair of coach ends. These may be used to:

- produce finished vehicles when used together with other coach components from the 5522 range
- be an aid to the scratchbuilding of rolling stock
- enhance suitable Ready-To-Run coaches with additional detail.

#### **Assembly instructions**

Before assembly of any etched brass parts, they should be thoroughly clean. This means that they are physically clean as well as chemically clean. Etched brass often has the remains of the etch resist used in the production process on its surface. Additionally, there may be oxidation of the surface that starts naturally as soon as the metal is cleaned. Neither of these cause harm to the kit. To prepare the surface for soldering, I recommend that you clean it physically with a fibreglass “scratch” brush.

The usual convention of folding tabs towards the half-etched line is followed, unless explicitly stated otherwise.

1. Remove the inner end and outer end from the fret. Clean up the attachment tabs with a fine file.
2. On the reverse of the outer end i.e. the side that faces in to the coach, you will find a series of half etched dots. Using a slightly blunt point, or a riveting tool, press these through to make representations of the bolt heads used to secure the steps, lamp-irons and coupling hook plate to the end of the coach.
3. Fold outwards the three tabs in the corridor connection space. These can be used to assist in locating a corridor connection correctly on the coach end.
4. Turning to the inner end, fold outwards the lamp-irons, alarm indicator mounts and steps. Do not form the final shape of the lamp-iron yet: leave them as long straight strips.
5. Bend inwards the two tabs on either side of the end, and the two tabs that are above the buffer beam. These tabs will make fixing points for the sides and the floor of the coach.
6. Very carefully bend inwards the two tabs in the buffer beam. Bend them until they have passed through 180° and reach down below the bottom edge of the buffer beam. These form the mounting points for the brake and steam heating hoses. The two tabs are delicate because of the 180° bend. If they break off, re-attach them with a touch of solder. A spot of solder can also be useful to strengthen them and hold them in place against future handling.
7. Now carefully place the outer end over the inner end so that the various parts that have been folded out pass through their respective slots. It is easiest to start with the two lamp-irons, then work your way up the steps from the bottom, to finish with the topmost tabs.
8. Solder the inner and outer ends together to form a single piece. This can be done by your preferred method. However it is sufficiently strong to laminate the pieces by flooding the gap with flux and introducing solder around the edge. The various gaps in the inner end left by the folded down tabs can also be used to introduce solder to the middle of the ends. In particular, filling up the hole left by the folding down of the lamp-irons will help significantly in strengthening these more fragile parts. To help to hold the inner and outer ends together whilst they are being soldered you can use either miniature clothes pegs or self-closing tweezers.
9. The last step is to bend the lamp-irons into their final shape. This is not an equilateral “L” shape in its dimensions. You should aim to make the upright part approximately 2.5mm in length. An accurate way to make the bottom bend is to hold a metal strip around 0.8mm thick against the lamp-iron and bend it over this. A 4mm scale flangeway gauge has been found to be ideal.

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### **Painting**

The number of liveries that these coaches wore during their lives is too great to cover here, and I recommend that you refer to the reference books listed below, or the work of the LMS Society.

In preparation for painting, the finished piece should be thoroughly cleaned to remove all traces of fluxes and other loose debris. In order to aid the adhesion of paint, preparation with a thin coat of self-etch primer is recommended to form an undercoat to the final finish.

### **Further information**

“Historic Carriage Drawings in 4mm Scale. Vol.I LMS & LNER” – David Jenkinson & Nick Campling. Ian Allan, 1969

“Historic Carriage Drawings. Volume two: LMS and constituents” – David Jenkinson. Pendragon, 1998

The Scalefour Society. For all modellers interested in a finescale approach. The Scalefour Society promotes the use in 4mm scale modelling of prototype dimensions for the track gauge and wheel profile. See [www.scalefour.org](http://www.scalefour.org) for more information.

The LMS Society. The LMS Society was founded with the aim of recording as much accurate and original information as possible about the London Midland and Scottish Railway, including information about the working of the LMS and studies of the LMS infrastructure. See [www.lmssociety.org.uk](http://www.lmssociety.org.uk) for more information.

### **5522 Models**

For further information about the 5522 Models range please:

- visit our website at [www.5522models.co.uk](http://www.5522models.co.uk) or
- email [info@5522models.co.uk](mailto:info@5522models.co.uk) or
- write to:

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We welcome any comments or feedback on our current or future models.