5522 Models

Finescale components

LM 319 – LMS Standard Plain Corridor Coach Ends – Period 2

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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. The designs and methods of construction fell into three different periods, although there were naturally overlaps at the start and end of each phase.

These coach ends are from Period 2 of coach construction. This lasted from roughly 1930 to 1932. The coach ends were built with steel panelling which gave a plain appearance compared to the planked ends of Period 1. There were changes in the type and layout of the fittings on the coach ends from those later used in Period 3. Coach ends from other 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 oxidisation 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 part of the gangway connection from the outer coach end. This contains a bonus in the form of an LMS Upper Quadrant signal arm. It's better than wasting the space on the fret, and we hope that you find a use for it.
2. Remove the inner end and outer end from the fret. Clean up the attachment tabs with a fine file. Be particularly careful with the outer end as the metal is half-etched and easy to distort if you are heavy-handed.
3. On the reverse of the outer end i.e. the side that faces in towards 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.
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. 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.
7. 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 between them 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.
8. 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.

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.1 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 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 for more information.

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For further information about the 5522 Models range please:

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