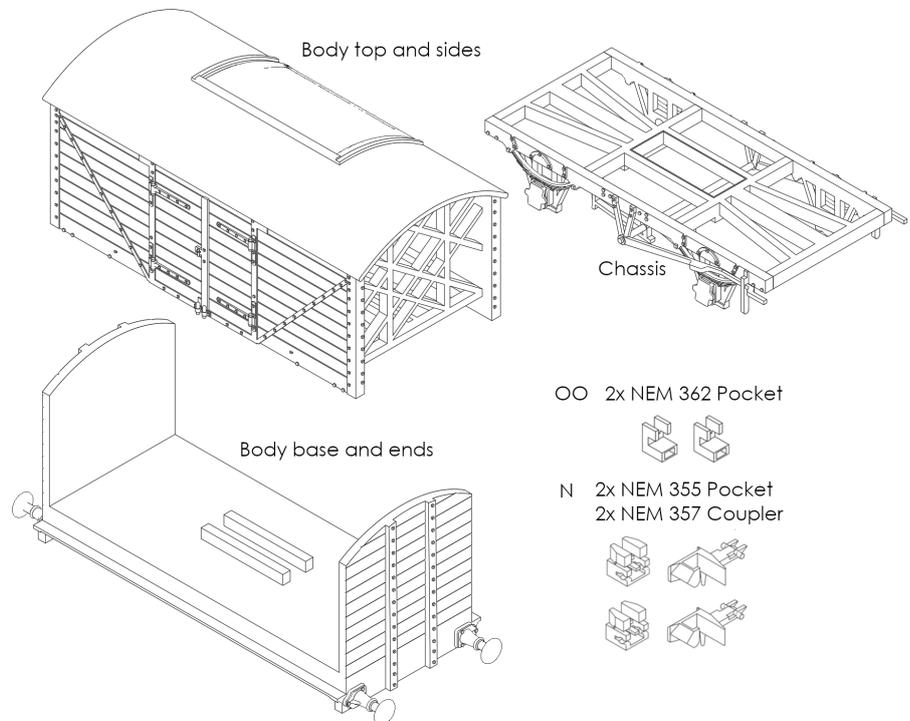


L&Y Diagram 3 Covered Goods

Kit contents

- Wagon chassis
- Wagon base and ends
- Wagon top and sides
- 2x NEM coupler pockets
- 2x Dummy couplers (OO only)
- 2x Coupler heads (N only)



General Notes

Keep the parts of the model out of direct sunlight while unpainted. The resin used for the body and chassis in particular is susceptible to UV degradation and will become brittle.

Cyanoacrylate superglue works well to attach parts. Plastic glues will not work on these models.

Assembly instructions

1. Neaten body and chassis if required

The production process for the shell can leave a number of small lumps or spots on the model. While we do our best to neaten the model before packaging, some may be missed. As such the model may need some gentle sanding with fine sand paper or a fine file to remove the lumps. A craft knife can also be used to trim parts.

Light sanding at the interfaces between the parts can help to improve the fit.

Be mindful of some of the delicate details around the buffers and brake rigging – make sure not to use these to hold or support the model.

2. Attach the two body parts

The two wagon body parts slot together, with a slot and peg to secure them. Some fine sanding may be required to get a perfect fit, usually around the bottom interface and at the top of the wagon ends. The end faces should sit back flush against the interior bracing once assembled.

If you wish to add weight to the wagon, insert it into the hollow space in the top part. Once you are happy with the fit, glue these parts together.

3. Attach body and chassis

As with the two body parts, the body and chassis fit together with a peg and slot system. **The brake lever faces to the right on the canvas flap side. With a right-hand brake chassis, the Morton brake hanger (the larger, curved one) is also on the canvas flap side.**

4. Decorate

The model can be painted with standard modelling acrylics. We recommend spraying the model parts with a primer before painting. Detailed livery suggestions are given on subsequent pages. Transfers will need to be sourced separately.

Avoid getting paint into the axle bearing slots, as this will prevent wheels running freely.

5. Attach couplers (optional)

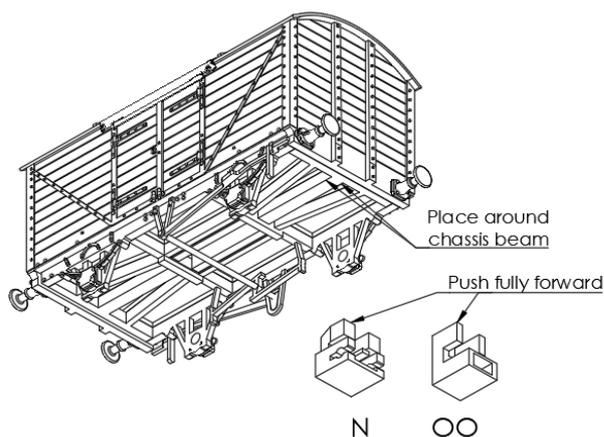
Coupler options vary by scale:

OO/4mm – NEM 362 coupler pockets are provided, as well as a slot in the chassis to accept a 3 link coupling hook. If using a coupling hook, the chassis should be modified to suit your desired arrangement. Dummy couplers are provided to cover the slot if not needed.

TT – NEM 355 coupler pockets.

N scale – NEM 355 coupler pockets, accepting the widely used NEM 356/357 "Rapido" style couplers.

The NEM coupler pockets attach to the underside of the wagon, slotting around the central chassis beam. The pocket should be pushed up against the end of the wagon to ensure the correct positioning of the coupler.



6. Insert axles (not supplied)

The kits accept standard pinpoint axles, 14.3mm point to point in N, and 26mm in OO. Axles of these dimensions are also available for EM and P4 scales. These wagons were fitted with 8-spoke wheels with a 950mm diameter, equivalent to 6.4mm dia. in N and 12.5mm dia. in OO.

The axleboxes should be gently pulled apart to slot axles in. Excessive force may result in damage.

If there is some resistance to the axle's rotation, apply gentle pressure to the axleboxes and rotate the axle back and forth. Be careful not to damage the brake rigging while doing this.

Historical notes

The L&Y's diagram 3 wagons were the standard design of "covered goods" wagon or van between the late 1870s and 1904. The majority of covered goods wagons were built in the last decade of that period as these wagons gained popularity. The LMS received approximately 3,500 diagram 3 wagons at the grouping, accounting for 1% of its wagon fleet.

This model is based on drawing 3466, with 2,330 wagons being built to this design between 1897 and 1904. The model can also represent the 570 wagons built to drawing 3003 between 1894 and 1896, which differed only in terms of the drawbar arrangements. Earlier designs under diagram 3 featured a slightly lower roof profile, with approximately 1,100 being built to that design.

While a number survived into LMS use, the majority had been scrapped by the 1930s, due to the availability of larger, more modern wagons built by the L&Y and LMS. However, a few wagons survived as private owner wagons until the 1970s, particularly with chocolate manufacturers such as Cadbury's. One example can be found preserved at the Chasewater Railway.

Most wagons were built with same-end brakes; only the final order 50 were built with right-hand brakes. However, some were later retrofitted, and a handful were modified with vacuum brakes.

Further details and many photographs can be found in **Lancashire and Yorkshire Wagons, Volumes 1 and 2, N. Coates, Wild Swan Publications**. Volume 1 contains details on liveries and lettering for L&Y wagons. Volume 2 contains a comprehensive section on covered goods wagons.

Liveries and lettering

These L&Y wagons survived through to LMS ownership, and can therefore be painted in liveries appropriate to both companies. Known wagon numbers range from 3814 to 30846. Many diagram 3 wagons were in the upper end of this range, from 23000 upwards. The LMS incremented numbers by 130,000, and so L&Y 29863 would become LMS 159863. Tare weights ranged from 6 . 0 . 1 to 6 . 4 . 1, expressed as "<tons> . <cwt> . <quarters>".

The notes below describe the standards for new wagons, but existing wagons were only repainted in a piecemeal fashion. L&Y liveries existed until at least 1928.

L&Y – ca. 1870s to 1902/3

It is believed that the woodwork on L&Y wagons was left unpainted. All ironwork on the body was painted black. Markings on the wagon consisted of only:

- The company's illiterate symbol, an equilateral triangle inside a circle. Two symbols on each side of the wagon, painted in white.
- A 15" x 6 ¾" number plate on the solebar, consisting of three lines of text, reading "Lancashire & / <Number> / Yorkshire Ry".

From ca. 1892, the tare weight was added, e.g. "6 . 0 . 1", painted in white on the solebar.

L&Y – 1902/03 onwards

Dark grey was adopted in 1902 for both the woodwork and ironwork, and black for ironwork below the solebar. The shade of grey used was lighter at later dates.

The canvas flaps are believed to have been a much darker shade of grey than the main part of the main roof canvas covering when new. With weathering, the darker grey tended to fade, and photographs show a wide range of shades for both parts of the roof.

Large "L Y" initials replaced the illiterate symbol in 1903, painted in white on planks 4, 5 and 6 (counting from the bottom) between the diagonal bracing and the doors.

Wagon numbers were also added, on the highest full plank on each side. On the ends, the number was between the end stanchions, on the third plank down (one plank above the side number).

LMS – pre 1936

LMS livery was similar to the L&Y livery, with grey bodywork and black for the underframe. Lettering was typically as follows, all in white paint:

- The initials "LMS", in painted across the wagon doors, on planks 5 and 6 (counting from the bottom).
- The wagon number painted on the left hand side of the body, and a new LMS-style number plate on the solebar. Numbers were now omitted from the wagon ends.
- Tare weight in the same style as the L&Y, moved up to the body.

Example liveries. Lettering and labelling were highly variable.

