



RT Models

# 4mm scale 00/EM/P4 Chaldron wagon kit

## History

The Chaldron wagon dates back to the 1700's when they originally had wooden wheels and hauled by horses on wooden wagon ways. From then, there has been a few variants.

The variant depicted by this kit is for the Londonderry/Seaham harbour 4 ton version which dates from around 1867 and lasted at Seaham harbour till the 1970's. The colour was black with writing in white.

There are numerous examples preserved at the Beamish open air museum.

## Instructions

*Note; for the wagon to run on 00 gauge track, the sides of the ends (C2) will need filing down during construction for the wheels to fit within the wagon sides.*

Take the white metal castings and clean these of flash and mould feeds, beware NOT to file off the representations of the nuts on the tops of the wagon sides and ends. Now do a dry run so you are familiar where everything goes.

Once you are satisfied, it's now time to turn to construction. First drill the 4 dimples on top of C3 the chassis and the outer 2 on the side with a 0.5mm drill bit. Do this for at least 3mm into the chassis for the outer side holes, the others do not need to be as deep though.

Now take the C4 axle boxes and carefully glue these into the locating bases with araldite, if possible use a spare 2mm axle to help line them up. If needed, drill the axle holes with a 2mm drill.

Note the axle box holes are elongated to allow up and down movement of the wheel sets over irregular track work.

Leave these to harden.

Depending on your gauge, the ends of the axle boxes may need filing down. Check this with either a spare wheel set or a back to back gauge.

File the axle ends as close to wheels as possible.

Once this is done, place the wheels in and set these to your required back to back gauge and standard. Use E7 the axle washers to minimise the side play.

The wheels are critical for the next step.

Temporarily put the body together with parts of C1 & C2 and place them onto the chassis to check it goes on without touching the wheels.

If it does foul the wheels you will need to file the ends of C2 to the required width. Once you are satisfied that the wheels won't touch the body, glue the body together making sure it sits square.

Once the body has dried, glue this to C3 the chassis.

Now glue C6 the body batter plates to the required places as indicated on the diagram, note that one is not required on the right hand side of the braked side.

They may require trimming to fit onto the ends, especially if you have reduced the width of the wagon for your gauge.

Now glue C5 the couplings onto the ends.

Remove parts E8 from the etch and curve round the ends as illustrated in Fig 4.

Now glue these to the sides of the C3 the chassis as illustrated in Fig 1 with the curved ends facing towards the ends of the wagon.

Carefully remove E2 & E3 the etched brake gear from the fret. Place a piece of brass wire into the 2 top holes and the central one and solder the 2 layers together without flooding between them.

Now trim the wires to the required length and insert the brake gear into C3 the chassis.

From the rear insert E1 the brake bracket onto the central wire and glue this in place, only one of these is needed but if you wish you can use another to beef it up..

Now assemble the 2 half's of the brake lever guides by joining two of parts E5 together.

Take E4 the brake lever and insert through E5 the brake and place the pivoted end through the wire in the centre of the brakes.

Check the position of E5 the brake lever guides and using the diagram as a guide, drill 2 holes 0.5mm diameter to secure the wires in place.

Now glue E5 the brake lever guide into place and solder the end of the the brake lver onto the brakes central pivot.

Now glue E6 the drop door catches onto C3 the chassis on the non-braked side using the diagram as a guide.

Once finished, scrub the wagon with an old tooth brush and cream cleaner. Rinse off and allow to dry before painting. Make sure none of the paint gets inside the bearings.

Recommended painting is with Humbrol matt black.

The lettering could be recreated with Letraset rub on transfers or general waterslide transfers from fox transfers.

When finished, it is recommended in oiling the bearings with a small amount of oil to reduce both wear and resistance on the wagon.

### Wagon Etch

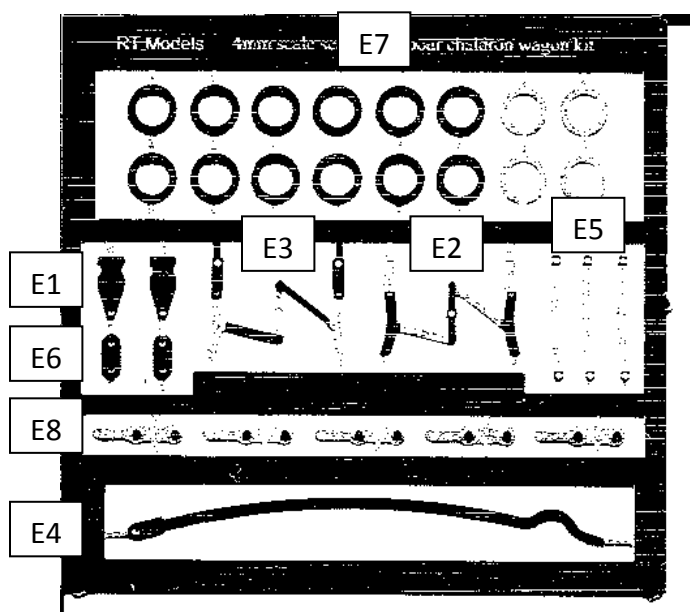


Fig1. Diagram of wagon  
(Not to scale)

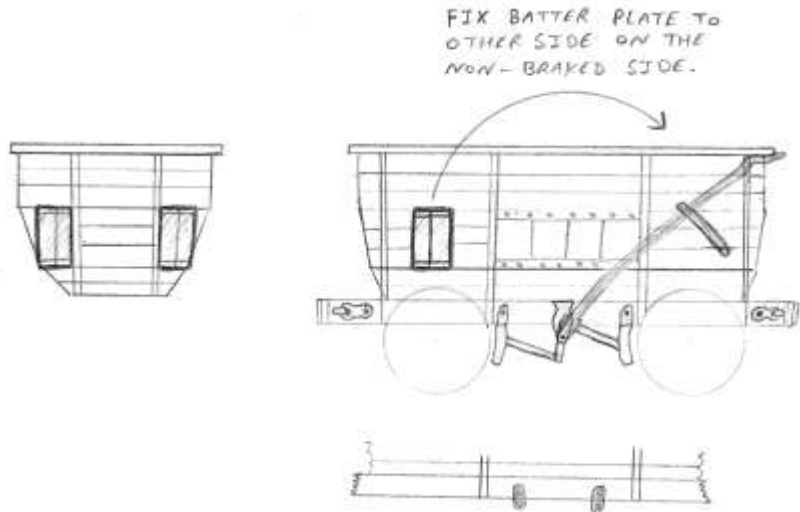


Fig2. Diagram of basic wagon assembly

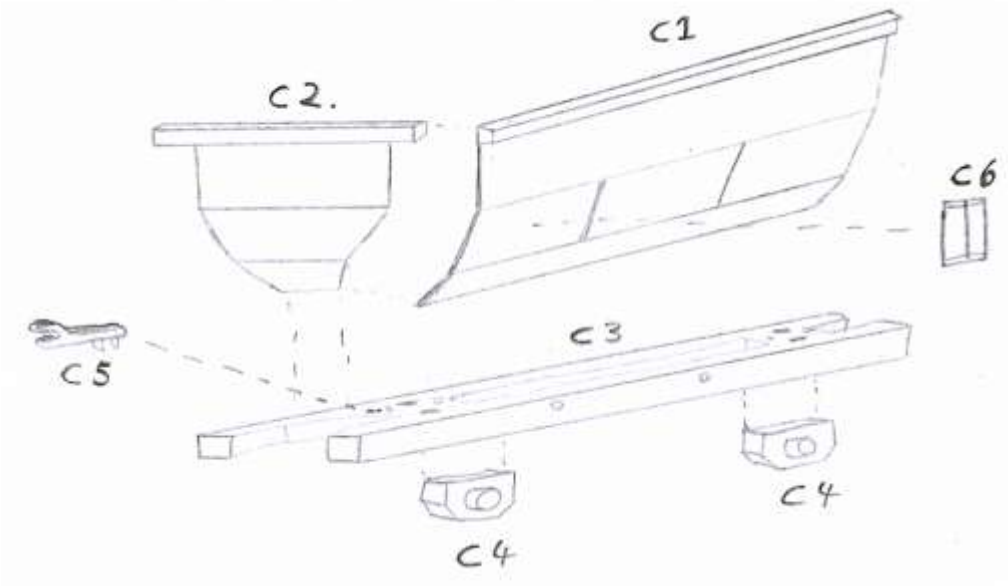


Fig3. Diagram of brake gear assembly

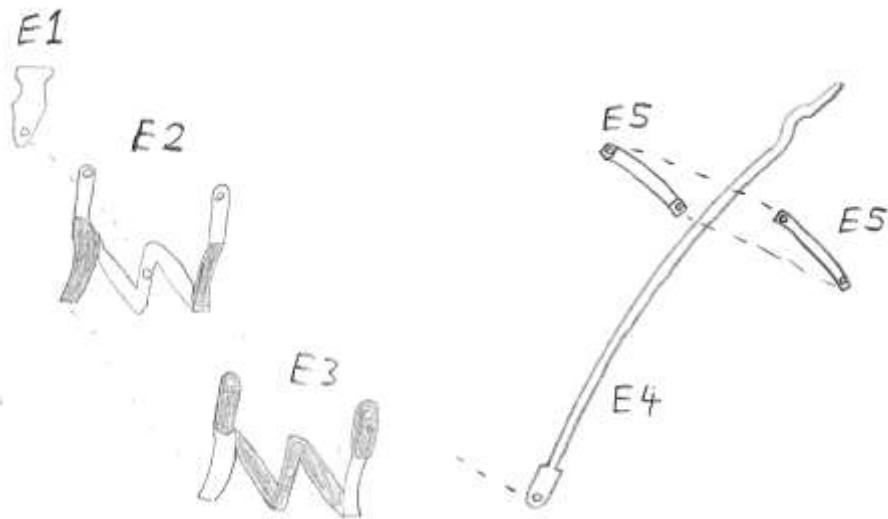
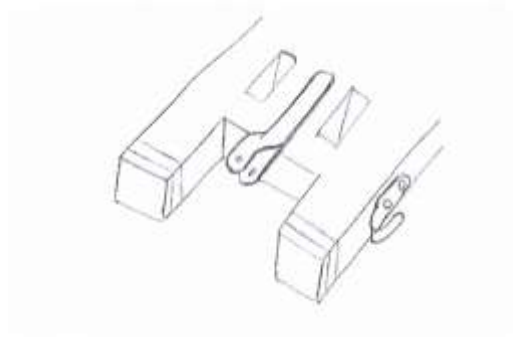


Fig4. Diagram of wagon coupling



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