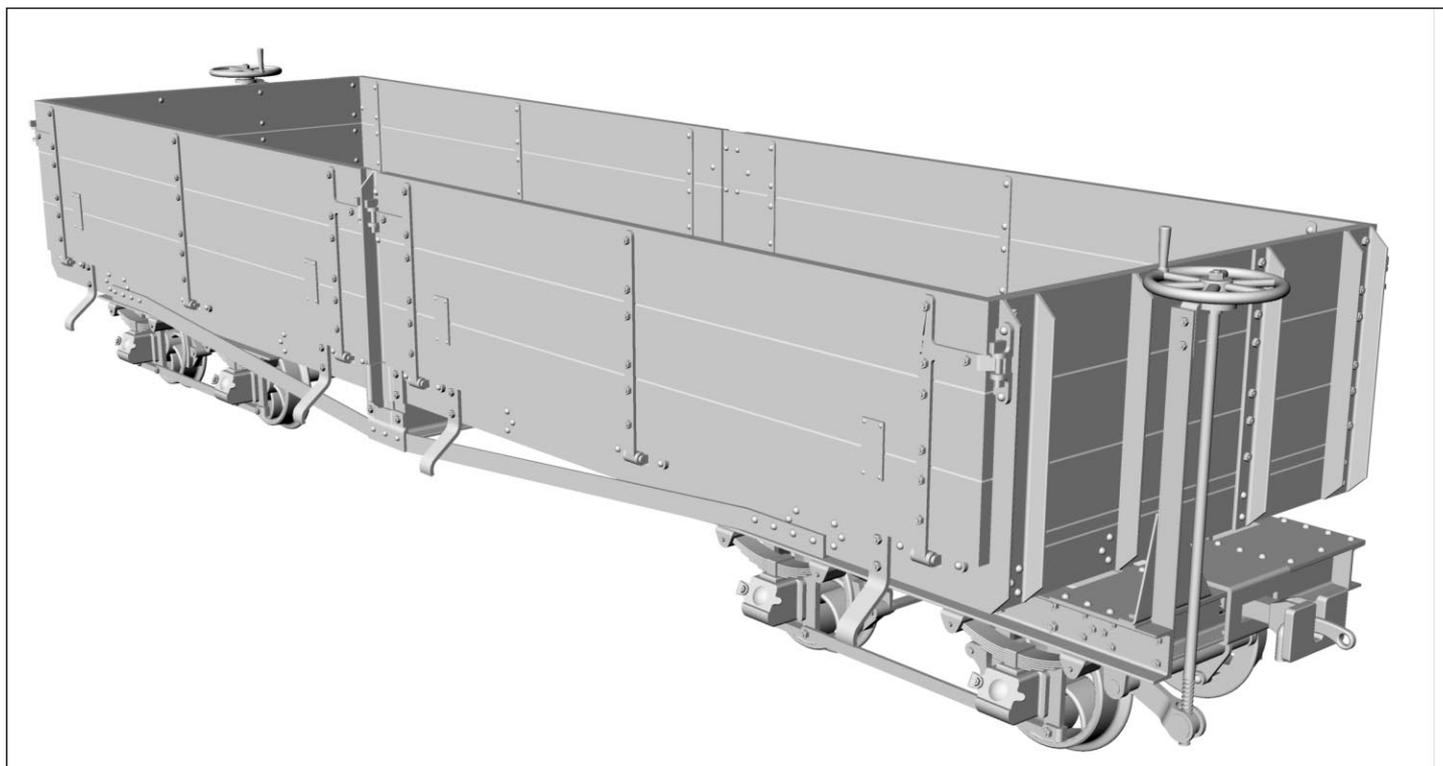


16W05

16mm Scale

War Department Light Railway D Type Wagon

Note: these instructions relate to the wagon body and how to fit the bogies. Construction of the bogies themselves is covered in a separate set of instructions enclosed with the kit.



INTRODUCTION

Prototype Information

The War Department Light Railways formed a vital link in the supply chain for the British Army in France and Belgium during the Great War of 1914-1918 (often referred to as the First World War). Indeed without them, the War could not have been conducted in the way it was. However, they are often overlooked, or even completely ignored by military historians, perhaps because of their relatively benign role - their equipment was designed for carrying supplies, not for killing the enemy!

The French and German governments had been building and stocking up on equipment for their strategic light railways since the end of the Franco-Prussian War towards the end of the 19th century. Both had chosen to standardise on a track gauge of 60cm (approximately 2 feet). The British military authorities, used light railways at various establishments, but were ill-prepared when the Great War started, and had a lot of catching up to do very rapidly. It was only at this stage that they decided to adopt the same track gauge as the French for their light railways (having previously thought that the British "Colonial" gauge of 2ft-6in would be more suitable). British locomotive builders were not able to cope with demand, partly because of their "hand-made" manufacturing techniques, and partly because much capacity had been taken over for weapon and munition making. Hence the need for

the well-know American-built Baldwin 4–6–0 tank locos. British rolling stock builders were in a better position, and virtually all the wagons used by the WDLR were British built.

Once standardised designs started to appear, the first wagon types were designated class A (small 4 wheelers), B (larger 4 wheelers) and C (small bogie vehicles). There were numerous variations within each class, such as removable or drop-down sides or ends, and it soon became clear that even more standardisation was needed, and the class D bogie wagons started to appear in very large numbers from numerous builders, including Robert Hudson and the Gloucester Wagon Co. Variations were kept to a minimum, to ensure parts could be swapped around to keep the trains moving in circumstances where damage was frequent.

Other classes of wagon were introduced, including the types E and F, with dropped centre floors ("well" wagons), the type H tank wagons, and Ambulance and Workshop enclosed vans.

After the War, many of these wagons survived to be used on industrial and public narrow gauge railways. Perhaps the best known examples were the Ashover Light Railway, the Festiniog and Welsh Highland Railways, and even the potato farms which supplied Smith's Crisps. Robert Hudson were still offering this design of bogie wagon in their 1957 catalogue, but it is thought unlikely that any were supplied as late as that.

MODEL INFORMATION

This kit will enable you to build an accurate replica of probably the most common type of wagons used by the War Department Light Railways. Construction of the body is largely from detailed injection moulded polystyrene components, with only the vulnerable door bangers provided as lost wax brass castings.

Tools Needed

The following tools are needed, most of which will already be in the toolkit of the average modeller.

Piercing Saw or Nippers	for removing lost wax castings from their sprues
"Stanley" type knife	for removing polystyrene items from the moulding sprues.
Assortment of small files	for finishing removal of pips, tabs, and general cleaning up
Cyanoacrylate (Loctite Superglue or similar)	for fixing door bangers into the solebars
Slater's MekPak (or similar)	For assembly of polystyrene components Also needs a fine brush for application.
Glass Fibre Pencil OR Abrasive Rubber Block	For cleaning cast brass parts prior to glueing and prior to painting.

Removing plastic parts from the Sprues

Cut through the joining tabs with a sharp knife or nippers, away from item required, removing the remains of the tab afterwards with the knife and finishing with a file. Do not try to break or snap the tabs, as this usually results in breaking away part of the item you need!

Cleaning up Lost Wax Castings

Remove pieces from the sprue with a piercing saw or nippers and finish off with a fine file. Remove any blemishes with a file and finish with a quick polish with a glass fibre brush. Parts may need straightening, which can be achieved easily by gently bending between your fingers.

Painting and Finishing

Nobody knows what colour these wagons were painted during the Great War. The most likely colour was Admiralty Grey (use Great Western Railway wagon grey), but it is possible that some were painted in Army Bronze Green (use GWR loco colour, but matt not glossy). Whatever colour they were painted when new, it would not have lasted long, due to intensive wear and tear and hurried repairs made in the field of War.

The secret of good model painting is preparation. Make sure that all parts are thoroughly clean,

dry and free of any grease. Metal parts should be cleaned with the glass fibre brush as the slight scratching helps the paint to key. Everything should be washed with a mildly abrasive kitchen cream cleaner, such as Cif (ex Jif). Use an old toothbrush to work into the corners and crevices. When it is clean, rinse in clean water. Once thoroughly clean and dry do not handle the model except with surgical gloves or tissue paper/kitchen roll. Leave to dry, at least overnight, before applying the primer. Cover with a clean cardboard box or similar to prevent dust settling.

To prime the plastic parts of the body only needs a light mist coat from a car aerosol spray, but brass should be primed more thoroughly. In fact, an etching primer is best and this is available from good model suppliers. Read the manufacturer's recommendations on the minimum drying time. If you are going to follow a car aerosol spray primer with the same maker's top coat, ten minutes may be sufficient. However, with many paints you will find that at least 24 hours should elapse before the top coat is applied.

Lettering was applied to these wagons when new, but many photographs show that this soon disappeared as a result of repairs "in the field". Suitable WD Transfers are available from Blackham Transfers; they also produce transfers for the Ashover Light Railway lettering.

The final job (optional) after painting is to give everything a coat of rust, dust, dirt and grime! There are now several very good books available on the subject should you wish to go further.

Phoenix Precision Paints Ltd., PO Box 8238, Chelmsford, Essex, CM1 7WY

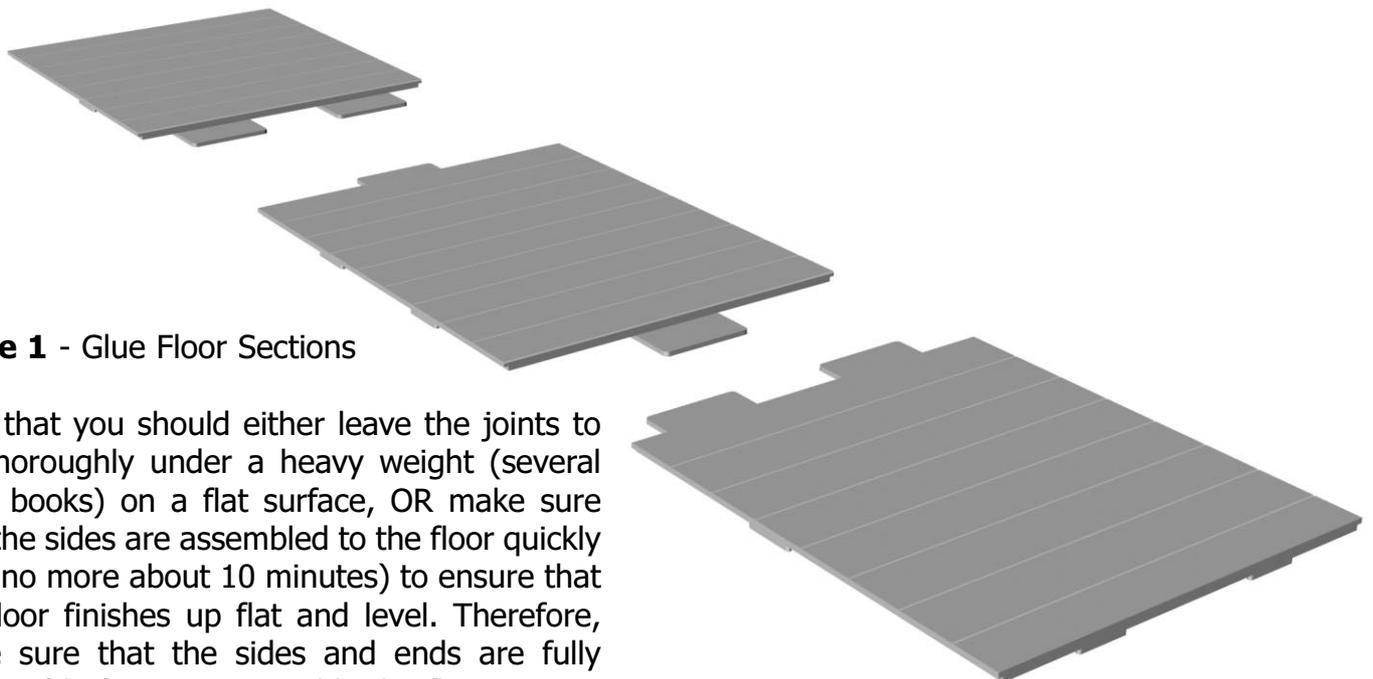
Blackham Transfers, 9 Benar View, Blaenau Ffestiniog, Gwynedd, LL41 3UT

ASSEMBLY INSTRUCTIONS

To avoid tedious repetition, it will be assumed in each sub-section that the parts have been removed from the moulding or casting sprue, etc., that tabs, moulding pips, etc., have been removed and preliminary cleaning done ready for glueing. In these instruction, "glueing" means using MekPak for plastic-to-plastic, or using Epoxy(or "Superglue", if you wish) for plastic-to-brass.

As already mentioned, these instructions only describe the construction of the wagon body; the construction of the bogies is contained in a separate document.

There are a few places where minor modifications are needed to the parts supplied, which we have found on the course of trial building. These include opening out holes and "shaving" a little bit off a part to make it fit easier. These are noted at the appropriate stage, and are no more difficult to do than the removal and cleaning up of feed tags which has to be done anyway.

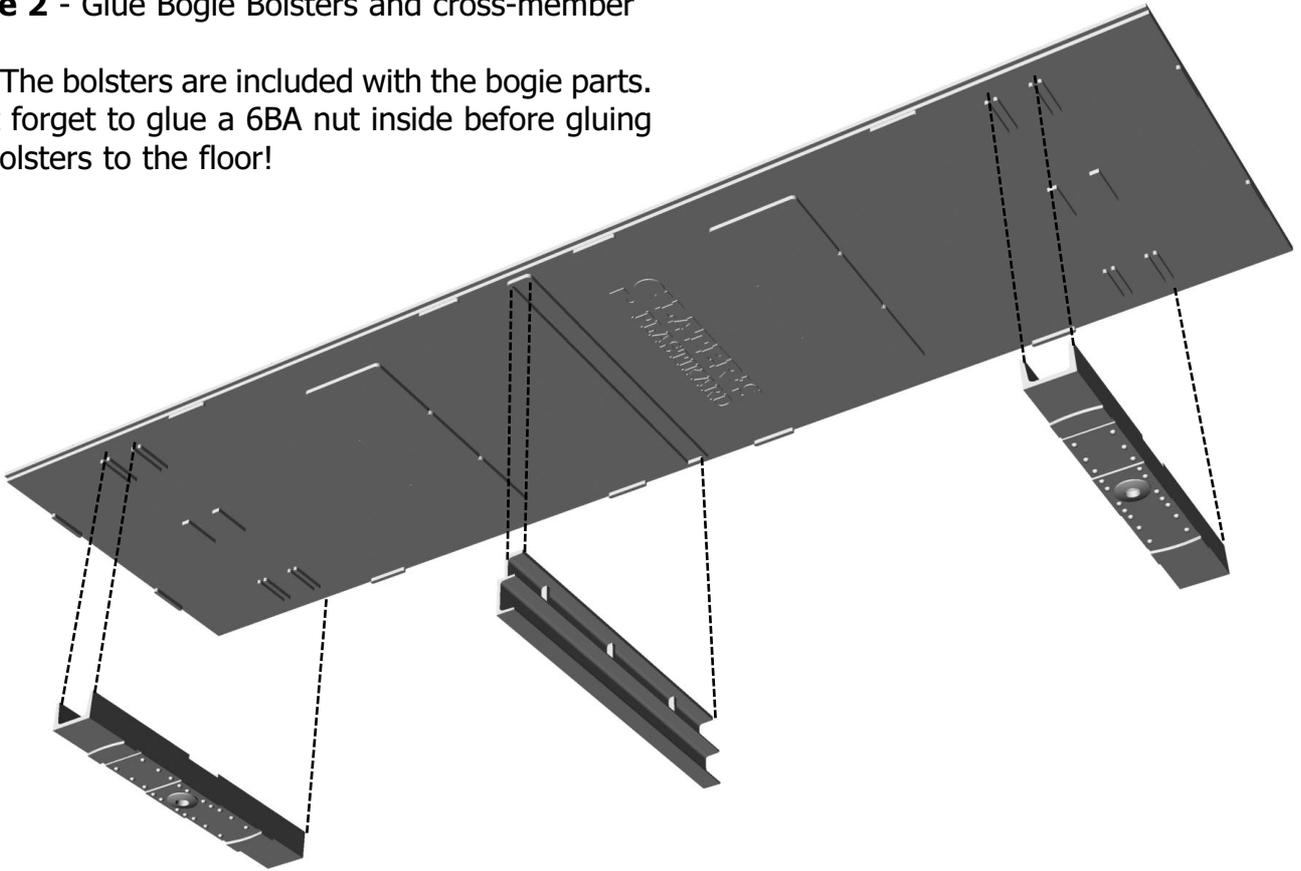


Stage 1 - Glue Floor Sections

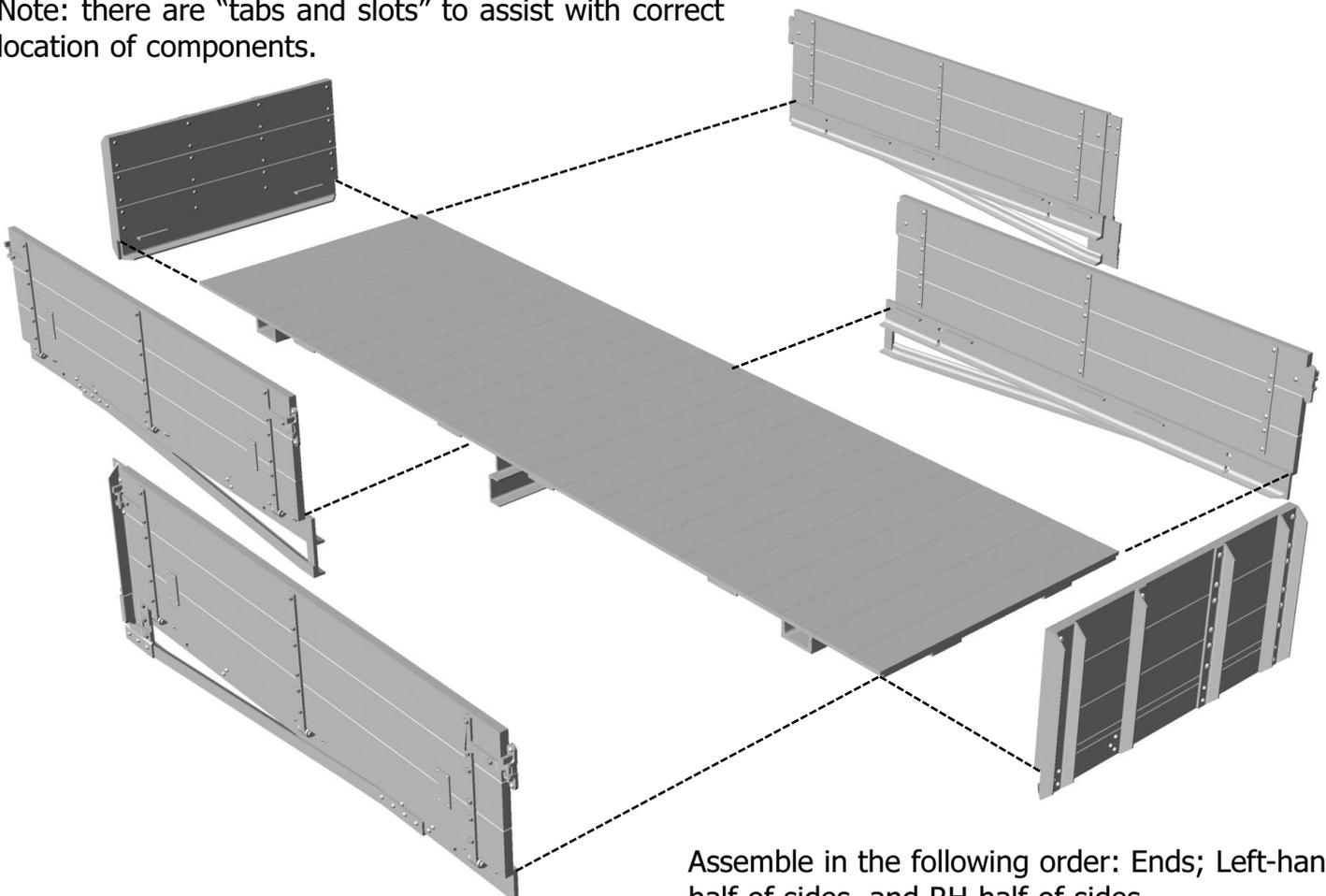
Note that you should either leave the joints to set thoroughly under a heavy weight (several large books) on a flat surface, OR make sure that the sides are assembled to the floor quickly (say, no more about 10 minutes) to ensure that the floor finishes up flat and level. Therefore, make sure that the sides and ends are fully prepared before you assemble the floor.

Stage 2 - Glue Bogie Bolsters and cross-member

Note The bolsters are included with the bogie parts.
Don't forget to glue a 6BA nut inside before gluing the bolsters to the floor!

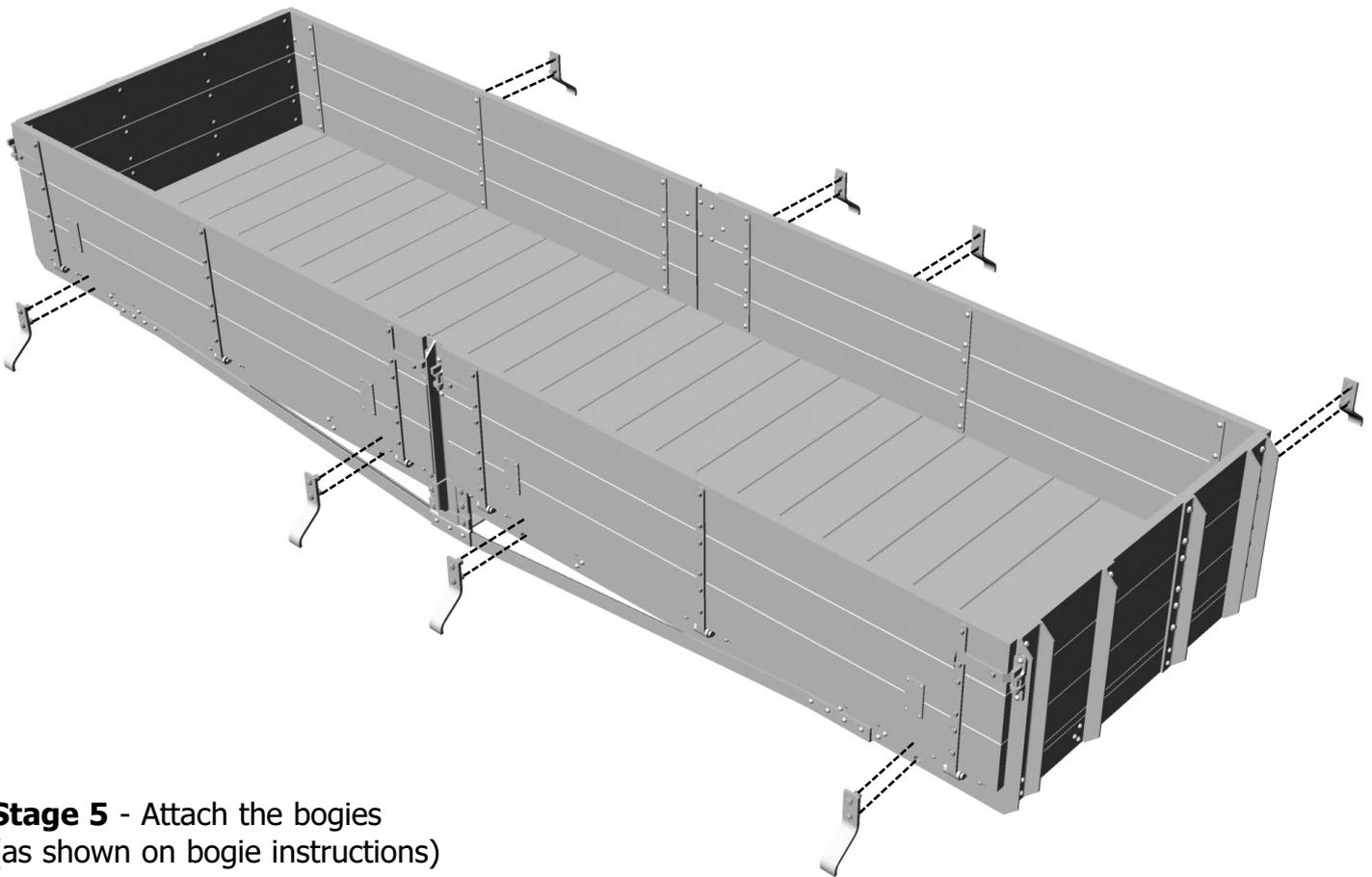
**Stage 3 - Glue Sides and ends**

Note: there are "tabs and slots" to assist with correct location of components.



Assemble in the following order: Ends; Left-hand half of sides, and RH half of sides

Stage 4 - Assemble Door Bangers



Stage 5 - Attach the bogies
(as shown on bogie instructions)

Parts List

Ref. 16W05: WDLR D Class Bogie Wagon

This kit includes parts for the body and parts for two bogies. The list of parts for the bogies and details of their construction are included in the bogie Instruction (16B01).

Part No.	Description	No Per kit
16B01	Pair of Bogies	1
Plastic Mouldings		
16W0501	Wagon End	2
16W0502	Right Half Side	2
16W0503	Left Half Side	2
16W0504	Centre Floor Section	1
16W0505	End Floor Section	2
16W0506	Centre Cross Member	1
Brass Castings		
16W0510	Door Bangers (8 items on sprue).....	1
Other Parts		
-	Instructions	1