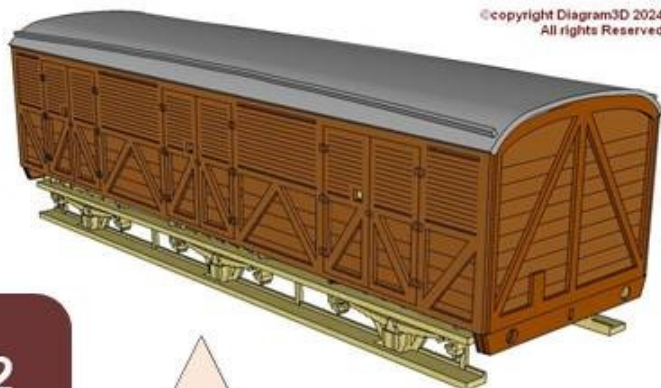




Great Western Railway (GWR)
Siphon O4 No. 1777 Kit
4mm Scale ("OO" "EM" "P4" etc.)



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Era 2

Pre-grouping

4mm Scale

3D Printed Components

GW04-1777

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Introduction

Contents of this kit

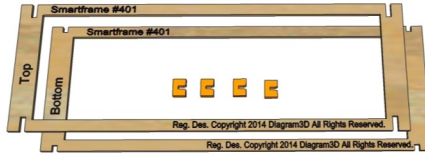
MDF Parts

SmartFrame

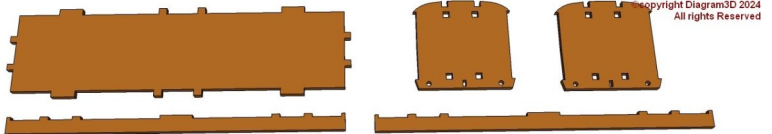
Upper and lower frame plus alignment clips.

MDF Parts

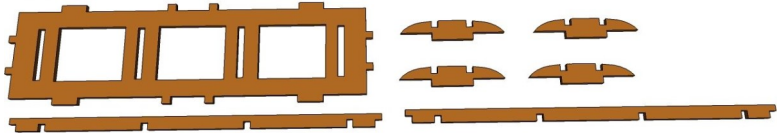
MDF parts are supplied pre-cut, partially attached to the panel which preserves their integrity and ensures that the right parts are present. Do not separate the parts until it is time to use them.



- 1x Floor
- 2 x Ends
- 2 x Solebars



- 1 x Ceiling
- 4 x Roof profiles
- 2 x Stretchers



Cardboard panels

There are four layers for the sides and ends

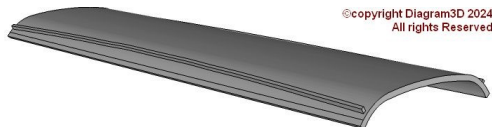
The card panels are packaged within the **SmartFrame** for protection.

The card panels are identified by the printed legend on the panels e.g. "Side 1 of 2" etc.

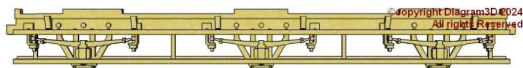
Layer	Description
Layer 1	Base layer
Layer 2	Framing, doors and ends
Layer 3	Framing, doors and ends
Layer 4	Framing, doors and ends, etched detail

3D printed Components

- 1 x Roof



- 2 x solebars



- 2x brake units





Not included

**Adhesive to attach the parts. PVA is recommended for the MDF parts.
Craft knife, Clamps, weights or other tools.
Paint and filler.
Wheels, bearings, Buffers, couplings etc.**

Intended Audience

*This kit is intended to reduce the time, complication and labour associated with the construction of a detailed model of a carriage body using accurate pre-cut layers which can be conveniently assembled in the supplied **SmartFrame** without specialist knowledge to give the same quality, or better, as traditional methods.*

This is not a complete kit of parts. The choice of underframe and other details is left to the modeller.

Hints on assembly

Separate parts by cutting the reverse side of the fret.

Pre-assemble and check parts at each stage.

Seal Cardboard components.

Video and Gallery

Separating MDF components cleanly is more easily accomplished by completing the half etched portions on the reverse of the fret rather than cutting from the front.

Do not separate components from layers until assembly is complete or instructed to do so.

At each stage, once the required components have been separated from the frets, test the assembly without glue to ensure that the parts are trimmed correctly and fit properly before final assembly with adhesive.

Allow as much time as needed for the adhesive to set.

Fill any gaps and smooth surfaces for optimal results

It is strongly advised that cardboard parts are sealed before assembly. For example, artists fixative, spray paint, varnish or even shellac can be used. Good results have been obtained using automobile primer spray. ***Visit our website for further constructional information including a video and gallery of similar models.***

The assembly steps below are strong recommendations but should not be taken as definitive or prescriptive.

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Current Documents

E&OE.

The current version of documentation for this and any other of our products can be downloaded from www.Diagram3D.com in PDF format.

Feedback

We welcome your comments and suggestions, especially images of models "in progress" or completed.

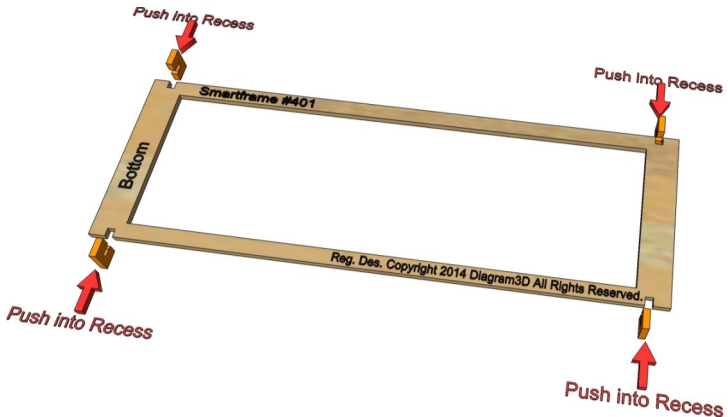


**SmartFrame
Preparation**

(Applies to all
versions of
SmartFrame)

Total preparation
and as-
sembly time
about 2
minutes.

Attach the clips to the bottom section of the **SmartFrame** as shown below:

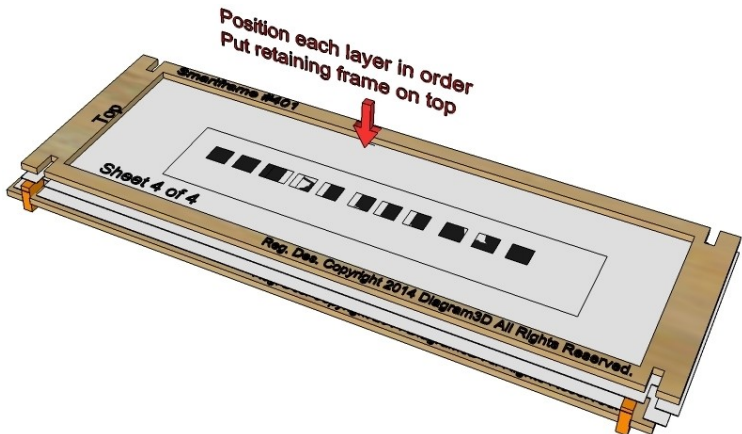


Hint: Partially insert the clips into the slots and gently press the clips into position on each side. A spare clip is provided. Avoid excessive pressure. Visit our website for further constructional information including a video and gallery of models.

SmartFrame

General Hints
on using the
SmartFrame

The following diagram illustrates how to use the **SmartFrame**:



Position the layers of the same description in ascending order on the lower frame beginning with the first layer. The layers have the legend "1 of x", "2 of x" and so on.

Hint: Do not force the individual layers into position, assemble each layer at an angle so that one side is in position and then gently position the other side into place. When in position, extra pressure can be applied with rubber bands or "bulldog clips" on the ends of the frame.



Vehicle Sides and ends

There are four layers for the sides and ends:

Layer	Description
Layer 1	Base layer
Layer 2	Framing, doors and ends
Layer 3	Framing, doors and ends
Layer 4	Framing, doors and ends, etched detail

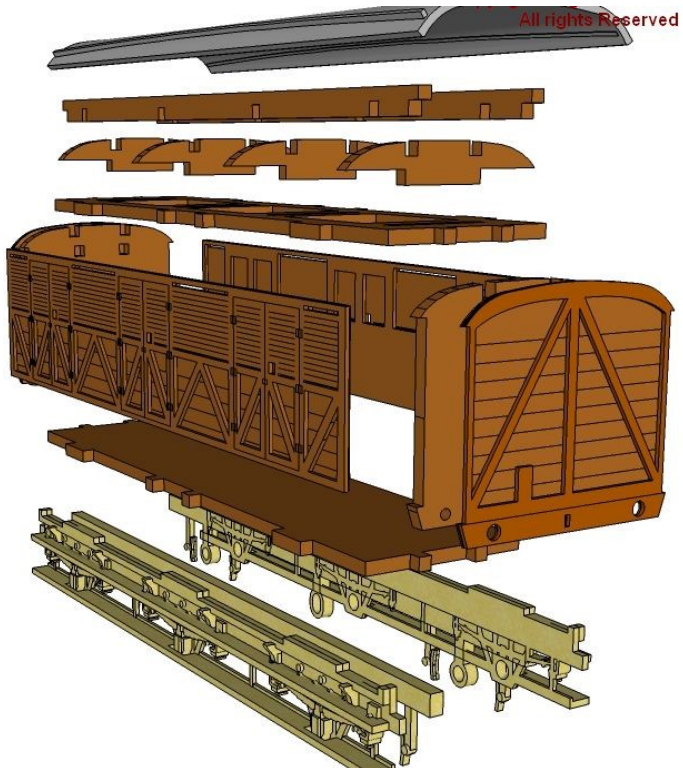
Total preparation and assembly time about minutes.

Allow sufficient time for the adhesive to dry thoroughly

Remove the MDF inserts from the *SmartFrame* and put aside. Insert the first four layers into the *SmartFrame* in order as described above.

Apply adhesive and put aside until dry. *Hint: The individual layers can be painted in advance.* When set, detach the supports and then remove any traces of the supports using a craft knife.

When thoroughly dry, detach the sides and two ends ready for assembly with the main body shell.





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Assembly Instructions
Great Western Railway Siphon "O4" Number 1777
6 Wheeled Milk or Fish van
4mm scale ("OO" "EM" or "P4")

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Body Shell

The illustration above shows the location of the various components.

Total preparation and assembly time about 15 minutes

Detach the MDF components from the MDF panels. Choose the appropriate ends and roof profiles for the version of the model being assembled. Assemble the MDF shell (floor, roof, ends and solebars) and let it dry thoroughly.

Allow sufficient time for the adhesive to dry thoroughly at each stage of assembly.

The card components can now be attached. Note that the sides locate in indentations in the MDF shell and are supported by the floor. The card ends are indented to accept the card sides.

Roof

Total preparation and assembly time about 15 minutes.

The roof is supplied as a 3D moulding. It can be attached directly to the top of the model, or alternately a detachable roof can be made using the roof formers and stretchers to form the base without attaching to the ceiling.

Allow sufficient time for the adhesive to dry thoroughly

Historical Notes

There were a number of types and variants of the GWR milk van. The vehicles were also modified over their lifetimes.

One in particular, No. 1777, was a precursor of later louvered vans and makes an interesting subject for a model. This vehicle was converted from a standard milk van (type O4).

The modified vehicle has louvered sides. In other respects it has the same features as the standard O4 type vehicle. This vehicle is described, with a drawing, in the book "Great Western Siphons" by Jack N. Slinn, Pendragon books 1986 (in association with the Historical Model Railway Society). A photograph of this vehicle is contained on page 27 of "Model Railway Journal" January/February 1986.

Livery

The early livery consisted of a brown base with a small "GWR" in white and the number on the plank second from the top on the body.

The roof would have been white lead initially, fading to various shades of grey and soot.

In later years, 1904 or thereabouts, the letters "GW" were painted in the lower triangle of the framing at each end. The gaps between the planks were filled in to allow the larger letters to be painted.

Underframe

These vehicles were carried on three axles (six wheels) with an overall wheelbase of 19 feet, or 9 feet six inches between axles. The wheels were Mansell pattern with clasp brakes on the outer axles. There were many detail differences.

Finally...

Congratulations on completing this kit. We hope you enjoyed making it as much as we did. If you enjoyed making this kit then take time to visit www.Diagram3D.com to find similar items. Our website has free downloads of historical information. Downloadable assembly instructions for all of our product

Email: info@Diagram3D.com E&OE document revised January 2024