# scale components

## 1006 BR(S) MLV - Class 419/913 Motor Luggage Van Etched Overlays for 1 Vehicle

### INSTRUCTIONS

Manufactured by: Dart Castings, 17 Hurst Close, Staplehurst, Tonbridge, Kent, TN12 OBX *www.dartcastings.com* 



Scale Model for Adult Collectors Made in England

#### **Using The Sides**

Please read the instructions and familiarise yourself with the parts and options before bending, gluing or soldering anything.

While originally intended as overlays to convert proprietary (rtr) Mk.1 coaches these etched sides can be used as the basis of scratch built models using components from the MJT Scale Components range or from other manufacturers.

Suitable rtr donor vehicles are currently available from Hornby and Bachman and second hand from Lima, Mainline and Replica Railways. One consideration when choosing a donor vehicle is whether it is the roof or floor that is moulded with the sides; particularly if the vehicle is to be motorised. Hornby coaches, for example, have detachable floors while Lima coaches have detachable roofs. The choice is very much a matter of preference for the modeller but worthy of some thought. It is, of course, always possible and sometimes beneficial to cut out the existing floor and replace it anyway. In the case of the MLV the roof extends a little beyond the cab front and forms a distinct 'brow'. The roof will have to be 'thinned' at the ends.

The process of preparing the donor vehicle and attaching the etched sides is described in detail in various books and magazines, notably *The 4mm Coach, Part One - First Principles and Basic Projects* by Stephen Williams (Wild Swan Publications 1994, ISBN 1 874103 127) and *Model Railways Illustrated Handbook No.8 – Detailing and*  *Improving Ready to Run Coaches* by Tony Wright (Irwell Press 1996, ISBN 1 871608 52 X).

It is, however, worth outlining a few fundamentals. It is probably best to remove all the moulded detail from the coach side early on. Clearly the cosmetic sides will only attach properly to a smooth side and so it is necessary to remove all details such as door handles, hinges, etc. from the donor. This can be done with a scalpel and finished with abrasive paper to flatten the side completely and remove any paint. This does not have to be a work of art. If the scalpel slips and gouges the plastic side it will all be covered up in due course. This particular bit of brutality is best carried out while the body is still relatively strong. Later in the process, removal of plastic around the windows will weaken the structure.

Also, while the structure has not been weakened, it is probably worth removing the roof detail. It is unlikely that the roof vents on the donor will be in the correct positions and, inexplicably, several proprietary Mk.1 coaches have transverse ribs on the roof. This is incorrect for any Mk.1 coach and the MLVs were no exception. Moulded filler pipes and rainstrips are also easier replaced than retained. Replacement scalloped dome ventilators are available – MJT part 2943.

At this stage it is necessary to fit the replacement cab fronts - MJT part 1101. Precisely how this is done depends on the donor vehicle and whether the roof or floor is integral with the existing sides. Basically, however, the existing vehicle end should be cut off square with a razor saw. Apart from ensuring that the new end sits square on the end of the vehicle, it is important to confirm that the overall length is correct; there is a small rebate on the side of the MJT cab front in which the etched side can be located. The discarded plastic end can be used as a template for cutting internal partitions.

While the etched sides are still flat, and can be supported on a flat surface, it is worth checking that any etched holes will accept the door handles, grabrails etc; assuming of course that you wish to fit them. If necessary, enlarge the holes with a very small broach or a No. 80 (0.35mm) drill.

The next task is to 'roll' the tumblehome into the coach side. On the BR Mk 1 vehicles this was a (distinctive) continuous and even curve from floor to roof (solebar to cantrail). While rolling machines are available (from GW Models for example) this can be done using a length of (preferably metal) dowel – anything between about 15 and 30 mm diameter - rolled vertically across the back of the coach side while it is resting on a resilient surface; like the back of a mouse mat. This is best done in stages, a little at a time, offering the etched side to the coach body each time until an exact fit is achieved.

With the etched sides held temporarily in place on the donor vehicle the positions of the new window openings should be marked. The etched side can be used like a stencil. It is also necessary to mark the positions where the door handles and grab rails will protrude through the back of the etched sides. Small holes will need to be cut (drilled) in the plastic sides of the donor sufficient to accommodate not only the handle or grab rail itself but also the solder or glue used to hold it in place. Clearly material from the donor should be removed from behind and around the positions of the new windows such that they are not obstructed and room is left for the glazing and its fitting arrangements. Exactly how the glazing is fitted depends (again) on the donor (is the roof or floor integral with the sides?), the chosen method of attaching the glazing and how confident the modeller is when working with the weakened structure. Safest, for strength, is to retain as much or the original donor side as possible. Faster, would be to remove the whole of the side above the waist leaving a few millimetres (as much as possible) at each end and along the cantrail as location and fixing points. Obviously there are a range of intermediate alternatives. Note: the MLV has relatively few windows.

At this stage the door handles, hinges, etc. can be fitted. They should be inserted in the relevant holes and soldered or glued on the back of the side.

The sides can now be attached to the donor using a two part epoxy adhesive. If the glazing is simply to be glued this might be easier before assembly. Also, some modellers prefer to paint the sides, particularly complex or lined liveries, while they can still be laid out more or less flat. The vehicle can now be reassembled. Positions for replacement roof vents are shown on the plan and if required a replacement roof is available - MJT part 2970

#### The Class 419 MLVs

The 10 MLVs (Motor Luggage Vans) appeared in 1959 to supplement the 12 car CEP/BEP formations which ran as boat trains on the London Victoria to Dover and Folkestone Harbour routes. Not only did they provide additional luggage space, but the extra 500 HP was useful in getting these heavy trains up the steep gradient from Folkestone Harbour to the main line. Some boat trains were 14 car formations with a TLV (Trailer Luggage Van) inserted between the MLV and the rest of the train. This was basically a Full Brake (BG) with the necessary control cabling fitted. The MLV also carried traction batteries which allowed limited running off the electrified lines. Clearly these were very versatile machines and found many uses other than on the boat trains for which they were originally conceived.

The MLVs were fundamentally full length (63'6") BR Mk.1 vehicles; unlike the non-motorised BGs which were only 57' long. Traction was provided by a single Mk.4 power bogie at the 'battery box' end. Collector shoes were fitted on both bogies to minimise the potential for 'gapping'. The trailer bogie was BR Mk.3b.

Several books on the subject of southern region multiple units and the electrified network are available and much detail is contained therein. Among these are: *Southern Electric* by John Glover (Ian Allen 2001, ISBN 0 71102807 9), British Rail Fleet Survey, Part 10 Third Rail DC Electric Multiple Units by Brian Haresnape and Alec Swain (Ian Allen 1989, ISBN 0 71101760 3) and *Slam Doors on the Southern* by Michael Welch (Capital Transport 2005, ISBN 1 85414296 8).

#### Numbering

TOPS code	Vehicle No.	Introduced
	(S)68001 - (S)68010	1959/61
419	9001 - 9010	
913	931090 - 931092	1991/92
	931094 + 931096	
	931098 - 931099	

These vehicles were withdrawn from normal service on the closure of Dover Western docks station in 1991/92 and transferred to departmental service as class 913. Most were withdrawn for the second time in 1997 but 931092 survived until 2004. All but two remain in preservation.

#### Livery

Given the number of permutations of body and end colour it is recommended that reference is made to photographs of the type or actual vehicle you want to model.

These long lived vehicles were introduced during the southern region all over green era and subsequently could be seen in Rail blue, Rail blue/grey, London and South East 'jaffa cake, Network South East red white and blue and all over red with Post Office branding. When new the cab fronts were all over green, migrating to the familiar all over yellow in the 1960s.

#### To Complete the MLV You Will Need

Donor Vehicle (as discussed in text) MJT 1101 Cab Fronts for EBP, HAP, MLV, 3H (1) MJT2943 BR Scalloped Dome Ventilators (1) MJT1105 or 1106 Power Bogie Castings (1) Undeframe Details (from Southern Pride)

And You Might Consider

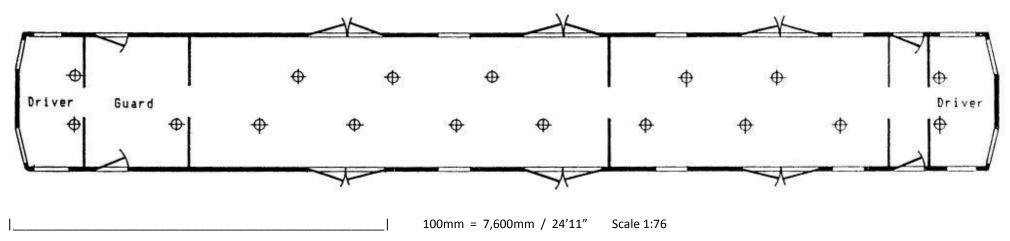
MJT2970 Aluminium Roof – BR Profile (1) MJT2223 Carriage Compensation Units (1) Kaydee No.16 working buck eye coupler to replace the casting supplied with the cab front and allow automatic coupling between units.

If using a Lima donor, adding rainstrips made from styrene strip to improve the appearance of roof.

#### **Contents of Pack**

As well as 2 sides the pack should contain a small fret with cosmetic hinges and various grabrails for the driver's and guard's doors.

Class 419 / 913 Motor Luggage Van



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