

PARKSIDE DUNDAS

Instruction Sheet

PS18 LONDON MIDLAND & SCOTTISH RAILWAY MEAT VAN (D1670)

Preparation

Basic items required are craft knife, tweezers, light flat file, pliers, 0.5mm, 3/64", 3/32" drills, liquid plastic cement, 'super glue' and paints. Parts **30** and **40** are moulded in ABS plastic. This tough material is not amenable to weaker cements but can be held by ABS cement, super glue or strong cements such as EMA Plastic Weld.

Construction

Prepare the sides. The lower vertical stanchions to the left of the door require to be shaped where they project below the bottom of the sides. Refer to the diagram and note the three stages. First file the feet of the verticals to an angle of 30 degrees. Then file the back of the verticals until they are about 0.5mm thick. Finally file a triangular 'nick' almost through the back of the vertical where it meets the bottom of the side. Very gently bend back by about 30 degrees. Cement the grills (**2**) into the sides. The left-hand grill is proud of the side and the right hand grill fits into the recess and is flush with the side. Drill out the holes for the handrails (**25 & 26**) with a 0.5mm drill. Insert the bonnet ventilators (**24**) into the ends (**3**). Assemble body. Attach one end (**3**) to floor (**4**). Note that floor rests above the buffer beam. Then attach both sides (**1**) and remaining end (**3**).

Assemble chassis. Run edge of knife up and down the axle box guides on 'W' irons (**7**) so that the axle box backs (**9**) move up and down freely. Attach the 'cam' Vee hanger (**13**) to the middle of the back of one solebar (**11**) and the 'plain' Vee hanger (**14**) on the other. Add solebars (**11**) to slots on underside of floor (**4**). They will require to be flexed in and a 'dry run' is suggested. Make sure that they fit snugly. Attach sub - chassis moulding (**5**) between ends (**3**) and solebar backs (**11**) with angled edges downward. Push bearing cups (**8**) into axle box backs (**9**), insert into 'W' irons (**7**) and fit wheels in, checking that they turn freely. Put a drop of 'super glue' on the end of each bearing cup (**8**) and add the axle box front (**10**). Alternatively carefully cement the axle box front (**10**) onto the back (**9**). In any case ensure that the assembly moves freely on the 'W' iron. This will give an element of compensation. The axle box can also of course be cemented rigid onto the 'W' iron. Make sure that the axle boxes sit evenly under the springs.

Assemble the brake gear. This wagon has brake shoes on both sides, which can be operated from either side using Morton brake gear either by the brake levers or the vacuum brake. Note that all components on each side are joined together by the through rod (**12**). Clean out the holes in these parts with a 3/64" drill (or 1.2mm) so that the plastic rod passes cleanly through. Cut off the ejector pip from the middle of the brake shoe moulding (**15**) and add the safety loops (**16**).

Attach the brake shoe assemblies (**15, 16**) to the under side of the floor (**4**) against the sub chassis (**5**) and in line with the wheels. Fix the assemblies the same way round relative to the Vee hangers (**13 & 14**) as shown in the exploded diagram. The brake shoes have a close fit with the wheels and any flash on the shoes should be cleaned off. The clearance of the brake shoe and wheel can be adjusted by adding to or removing material from the brake shoe hanger, where it contacts the chassis member. Trim of the lip from the underside of the sub chassis (**5**) where the safety loops (**16**) attach to it.

Feed the plastic rod (**12**) through Vee hangers (**13 & 14**) and the brake shoe assemblies (**15, 16**) already on the wagon. Locate the operating arm (**35**) onto the through rod (**12**) between the two Vee hangers (**13 & 14**) and leave it loose. Add the brake lever guides (**17**) to the brake levers (**18 & 19**). Gently bend the levers outwards from their pivots and inwards again nearer their mid points so that the brakes lever guides can rest square on the sole bars. Add brake lever (**19**) to the through rod (**12**) at the plain Vee hanger (**14**) and cement the brake lever guide (**17**) to the solebar. Repeat this operation for brake lever (**18**) at the 'cam' Vee hanger (**13**), except that the pivot end of the brake lever sits above the cam moulded into the Vee hanger. Cement the various pieces to the plastic rod (**12**) and cut the surplus rod from the front of each brake lever.

Attach the hangers (**37a & b**) to either side of the vacuum cylinder (**34**). Use the circle engraved on the floor to position the cylinder with the hangers next the solebar and the sub chassis. Cement the operating arm (**35**) on the through rod (**12**) to the side of the piston arm from the brake cylinder (**34**).

Assemble buffers. Choose the four buffer casings (**30**) from the middle of the sprue and cement the buffer ring (**40**) to the end of each casing. Slide the spring (**32**) onto the shaft (**31**) and secure with the 12ba nut (**33**). The buffer castings make a tight push fit into the holes on the buffer beam. Note that the short web on the casting should be uppermost.

Assemble the coupling chains (20) with three links each. Attach to eyehole of each coupling hook (21). Insert through buffer beam; slide on spring (22) and bend out ends to retain spring.

Drill out the 6 blind holes marked 'Y' on the under side of the roof (6) with a 3/32" drill. Attach the six torpedo ventilators (28) with their 'sharp' ends pointed across the vehicle, through their bases (29) onto the roof (6).

The vacuum pipes (38) and steam heater pipes (39) are fixed using superglue as shown. Before fixing place, very gently bend the tails of the castings upwards so that they just touch the floor. Cement the lamp irons (27) into place as shown in the diagram of the end.

Using the piece of plastic sheet provided, fabricate the four side angles (23), 4.5 x 1.5mm, bending 1.5mm from one end. These pieces are located at the bolts on the solebar at the centre line and 18.5mm to its right. Take the thin brass rod and cut 2 lengths each of 21mm and 12mm for the door handles (25) and (26) respectively.

Painting and Lettering

LMS. Body including solebars, headstocks and buffer castings. Grey (**Railmatch 611**) Brake and running gear; black. From 1936 bauxite (**612**) is substituted for grey. Lettering, white. Roof, white or grey.

BR. Body including headstocks, maroon; Solebar and running gear; black. Roof, aluminium grey. Lettering. See diagrams.

This kit is supplied with self-adhesive type transfers. Ensure that the painted model is free from dust and grease. Remove the protective tissue from the transfer sheet and with a sharp knife cut lightly round the transfer required, through the tissue only and not through the heavy backing paper. Lift of the transfer and lay it very gently on the model. Adjust as necessary and then press down firmly. Soak the tissue with water and leave for 20 -30 seconds before peeling of the tissue. Wash of surplus gum and dry. Varnish if wanted, but cellulose varnish should only be air brushed on.

Historical

400 vans were built at Wolverton in 1927 and 1930 to carry fresh meat traffic. The LMS served several of Britain's cattle rearing districts as well handling imported Irish meat. These vans would normally run in express freight trains but fitted with through steam heating pipes allowed them to be marshalled next to the engine on passenger trains. Although most vans were fitted with vacuum brakes, several had only through pipes. These can be represented by omitting parts **34, 35 and 37** as well as the brake shoes on the side of the wagon with the plain Vee hanger (**14**).

Number series: Gaps in the old Companies number series were used, so no large blocks are apparent. The following list is taken from R J Essery (below) 171331, 731127, 267107 (vacuum fitted); 171271 (piped). At Nationalisation in 1948, the wagon numbers took an 'M' prefix.

References: An Illustrated History of LMS Wagons Vol. 1, R J Essery.
LMS Wagon Drawings Vol 2, R J Essery, Wild Swan

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