

# PARKSIDE DUNDAS

## Instruction Sheet

## PS35 GREAT WESTERN RAILWAY 12 TON MOTOR CAR VAN (G43)

### Preparation

Basic items required are craft knife, tweezers, light flat file, round rat tail file, pliers, 1/32" drill, liquid plastic cement, 'super glue' and paints. Parts 23, 26, 27, 37, 38, and 39 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

Assemble body. Attach one end (2) to floor (3). Note that floor rests immediately above buffer beam. Then attach both sides (1) and remaining end (2). Attach roof (5). Add door catches (23) to the holes in sides, drilling out holes with a 1/32" drill. (This stage can be left to last to avoid damage to the door catches in building).

Assemble chassis. Add solebars (11) to slots on underside of floor (3). They will require to be flexed in. Make sure that they fit snugly. Attach chassis members moulding (4) between ends (2) and solebar backs (11) with angled edges downwards. Assemble axle boxes by cementing the front (9) to its base plate (10). Use a bearing cup (7) to line both up. Push bearing cups (7) into axle box backs (8), insert into 'W' irons (6) and fit wheels in, checking that they turn freely. Note that for both parts (8) and (9) the correct way up is with the axle hole in the bottom half of the moulding.

Put a drop of 'super glue' on the end of each bearing cup (7) and add the axle box front assembly (9/10). Alternatively cement the axle box front assembly (9/10) onto the back (8). 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.

Brake Gear. Add the Vee hangers (12 & 13) to the back of the solebars (11) at their centre points. Note that the two Vee hangers are marked 'X' and 'Y'. For simplicity the two sides of the wagon will be called either 'X' or 'Y' corresponding to its Vee hanger. Slip the safety loops (15) onto both sets of brake shoes (14) and attach these assemblies to the cross members under the floor with the brake shoes in line with the wheels. Use the diagram for the correct alignment of the brake gear. Cement the brake lever guides (16) and brake levers (17) and (18) into place. The 'cam' brake lever (17) should be on the same side of the wagon (the X side) as the 'cam' Vee hanger (12).

Take vacuum cylinder (29) and add trunnions (30) to either side. The thicker part of the trunnions should rest on the lip of the cylinder. This will give the correct height for the cylinder. Attach underneath floor (3) with trunnions against longitudinal chassis member (4) and solebar (11), lined up with the circle engraved on underside of floor on 'Y' side of wagon. Slip the short lever (31) onto a length of the thick plastic rod for the cross shaft (19). Fit the crossshaft between the backs of the brake gear centres and cement the thin end of the lever against the shaft of the brake cylinder.

Assemble buffers. Choose the four buffer castings (27) from the middle of the sprue and attach the buffer ring (26) to the end of each casting. Slide the spring (25) onto the shaft (24) and secure with the 12ba nut (28). 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 coupling chains (20) using an Instanter link (35 GWR type / 36 BR type) as the middle link. Attach these to eye hole of each coupling hook (21). Insert it through buffer beam, slide on spring (22) and bend out ends to retain spring. Although the Instanter link is plastic it is designed to resist a greater force than needed to fully compress the coupling hook spring.

Add the lamp irons (32) to the ends (2) as indicated. Attach the vacuum pipes (33) onto the buffer beams using super glue after first bending their tails up to 'disappear' behind the buffer beam. Attach the door fittings - door hinges (37), drop door supports (38) and end door catches (39) as shown in the diagram. Finally make up the two end door 'D' handles (40) from the brass wire. These can be formed by bending the wire in a 'U' shape half round a 2mm or 5/64" drill and glueing into place in the holes provided. These holes may be deepened using a 0.5mm drill.

### Painting and Lettering

GWR. Body including underframes, buffer castings and running gear; GWR wagon grey (Railmatch 604). Roof; white.

BR. Body; brown (323). Roof; aluminium grey. Solebar, buffer beam and running gear; black. From the early 1960's, when the body shade altered to 235, buffer beams began to take the body colour as well. Six pointed white stars were painted on the solebars to show the position of the vacuum brake release cord. Refer to drawings for GWR and BR lettering styles.

Use the 'WARTIME' size lettering for vehicles as built by the GWR.

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. Some transfers are for use on other models.

## Historical

100 Motor Car Vans - telegraphic code MOGO - were built between 1946 and 1947 for goods train services. Thus MOGO - MOtor car GOods. They were similar to the 250 vehicles with planked sides, of diagram G31 built from 1933 to 1936. It may seem strange that motor car vans were being built during what is regarded now as a time of austerity, but in 1946 the GWR would be justified in planning for a post war consumer boom. It was not until 1947 that shortages on the home market really set in. The design was simply the then standard V36 goods van with added end doors and internal securing points. These vans could also be used for ordinary goods traffic as required. The main traffic was the delivery of new cars from such points as Morris Cowley. Interestingly they do not carry 'Return to' brandings as their movements were individually controlled and receiving stations got forwarding instructions for them after unloading. Most of the MOGOs lasted in use until the late 1960's when the pattern of car traffic by rail had altered to bulk deliveries to central distribution depots served by trains of bogie vehicles.

Number series: 65736 – 48, 50 – 78, 80 – 4, 7, 9, 91 – 816, 18 – 38, 40 – 42.

After Nationalisation in 1948, these numbers took a 'W' prefix.

Reference; A History of GWR Goods Wagons, Atkins, Beard, Hyde and Tourret, David and Charles.

Freight Wagons and Loads on the GWR, J H Russell, OPC.

*Instanter Couplings. These were adopted by the GWR to replace screw couplings on vacuum fitted goods stock. In the late 1950's they were taken up by BR, who used a flatter cross section coupling than the GWR style. The Instanter was lighter, cheaper and easier to use than the conventional screw coupling. The diagram shows the two positions of the coupling. The long position was used if the vacuum brake was not connected and the short position if it was in use. Note that for model railway purposes the 'short' position may draw the wagons too close together for running safely through tight track work.*