

# PARKSIDE DUNDAS

## Instruction Sheet

## PS17 BR 12 TON PIPE WAGON (Diagram 1/462)

### Preparation

Basic items required are craft knife, tweezers, pliers, light flat and round files, liquid plastic cement and 'super glue'. Parts 9 and 10 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 the three link coupling chains (13), attach to eye hole of each coupling hook (12) and insert through buffer beams of each end (2). Slide on spring (14) and bend ends of coupling hook back over the spring to retain it.

Attach the one end (2) to the floor (3). Note that the floor sits on the ledge at the top of the buffer beam. Then attach both sides (1) and attach the other end (2). The sides (1) overlap the ends (2).

Assemble chassis. Check that the axlebox backs (27) move freely in the axleguards (28). Add solebars (16) to slots on underside of floor (3). They will require to be flexed in. Make sure that they fit snugly. Add the large centre Vee hangers (18 & 19) into place behind the solebars (16) at their middle point. Attach the chassis members moulding (15) between ends (2) and solebar backs (16) with angled edges downward. Push bearing cups (26) into axle box backs (27), insert into 'W' irons (28) and fit wheels in, checking that they turn freely. Put a drop of 'super glue' on the end of each bearing cup (26) and add the axle box front (29). Alternatively cement the axle box front (29) onto the back (27). 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. Remove the ejector pip 'X' on the brake shoe mouldings (23) and add the safety loops (24). Study the diagrams to choose the correct way round for the brake shoe mouldings for each side of the wagon. Attach to the under side of the floor (4) against the chassis members (15) and in line with the wheels. 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.

Add the brake lever guides (22) to the plain (20) and cam (21) brake levers. Gently bend the levers outwards from their pivots and inwards again nearer their mid points so that the brakes lever guides rest square on the sole bars. Take the plastic rod for the cross shaft (25) and add the operating arm (32) but leave it loose at this stage. Then thread the rod (25) through the brake shoe mouldings (23) centre cranks and cut to fit between the inner faces of the Vee hangers (18 & 19). Clear holes for rod with 3/64" drill if needed. Fit the brake levers, with cam lever (21) attached to Vee hanger (18) with its pivot sitting above the boss on the apex of the Vee hanger. Brake lever (20) is fixed direct to the Vee hanger (19) on the other side of the wagon.

The pivots (31) should be attached either side of the brake cylinder (30). The pivots should project above the cylinder by 6mm. As shown in the drawing the brake cylinder goes on the same side of the wagon as the plain brake lever (20), 11mm from the centre line of the wagon. It should rest on the brake gear moulding with one of its pivots (31) against the back of the solebar (16). The operating arm (32) previously attached to the cross shaft (25) should be cemented onto the side of the end of the piston of the brake cylinder (30).

Attach the door closers (5) as shown onto the body and solebars.

Shape the rivets on the etched parts, by pressing out the etched recesses with a compass point or similar instrument. Bend as shown in the diagram and fix into place as indicated using superglue. Spare door springs (34) are provided. Only eight are needed.

The vacuum pipes (36) and dummy connections (35) are fixed using super glue as shown. The little feed in the tab above the rivets on part (35) should be removed first.

Assemble the buffers. Take four buffer casings (10) from the middle of the sprue and attach the casings rings (9) to the end of each casing. Clean any flash from the inside of the casings gently with a small round file and check that the shafts (7) can move freely in the casings. Slide the spring (8) onto the shaft (7), insert into the casing (10) and secure with the 12ba nut. The distance from the buffer head to the base of the casing should be adjusted to 10.5mm. The buffer casings make a tight push fit into the buffer holes on the ends (2 & 3). Note that the short web on the casing should go uppermost.

### Painting and Lettering

Body, including verticals on buffer beam and top angle of door closers – brown (Railmatch 323). By 1960's whole of the bufferbeam would be painted brown. From 1964 the body colour is brown (235). Chassis and running gear black. The maintenance panel (1960's – 1970's) on the right hand lower body side has a black background. Brake lever handle - white. The ribbed portion of the vacuum pipe (36) should be a dark grey/black colour. The connectors at the end of the pipes were of a zinc alloy and may be left unpainted and allowed to tarnish. The plain portion of the pipe leading under the wagon was red.

This kit is supplied with self adhesive transfers. Ensure that the completed model is free from dust and grease. Remove the protective tissue and with a sharp knife cut lightly round the transfer required but not through the thick backing paper. Lay the transfer gently on the model, adjust to the final position and then press down firmly. Soak the tissue with water and peel off after 20 -30 seconds. Wash of gum and blot dry. Varnish if wanted. Cellulose varnish should only be air brushed on.

### Historical

These wagons were built to carry heavy iron pipes for drainage and water mains, chiefly from the large ironworks at Stanton & Staveley on the Notts Derby border. This traffic was carried throughout the BR network. With the decline in this business in the late 1960's, the wagons were used for general merchandise traffic such as palletised loads, paper bales, large packing cases etc.

830 wagons were built but there were differences in buffer and brake types. Our model represents lot number 2712 of which 350 were built in 1955 with a number series B741100 – 449. Withdrawals took place in the late 1970's and 1980's, although some survive in Departmental use.

References: British Railway Wagons, Rowland, Leopard.  
Illustrated History of BR Wagons, Bartlett etc., OPC.  
BR Wagons Vol 1, Gamble, Cheona Publications.

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