

PARKSIDE DUNDAS

Instruction Sheet

PS16 LNER 20 TON LOCO COAL WAGON (Diag 77)

Preparation

Basic items required are craft knife, tweezers, light flat file, round rat tail file, pliers, scribe or similar tool, liquid plastic cement, 'super glue' and paints. 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 coupling chains (**13**). Attach these to eyehole of each coupling hook (**12**). Insert each through buffer beams on the ends (**2**), slide on spring (**14**) and bend out ends to retain spring.

Assemble body. Attach one end (**2**) to one floor (**3**). Note that floor rests immediately above the buffer beam. Then attach both sides (**1**) and the remaining end (**2**). The corner plates on the sides overlap those of the ends.

Assemble chassis. Cement axlebox covers (**30**) onto the axlebox fronts (**29**). 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**) into place behind the solebars (**16**) at their middle point. The small Vee hanger (**19**) is fitted immediately to its right on one side only to the right of the large Vee hanger (**18**) (see diagram) behind the four rivets on the solebar. 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 & 30**). Alternatively cement the axle box front (**29 & 30**) 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 (**3**) 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 cranked (**21**) brake levers. Gently bend the levers outwards from their pivots and inwards again nearer their mid points so that the brake lever guides rest square on the sole bars. Take the plastic rod for the cross shaft (**25**) and thread it through the brake shoe mouldings (**23**) centre cranks and cut to fit between the inner faces of the large Vee hangers (**18**). Clear holes for rod with 3/64" drill if needed. Fit the brake levers, with cranked lever (**21**) attached to Vee hangers (**18**) and (**19**). For this lever the small crank at its left hand end should have its bend further increased so that it pivots behind the large Vee hanger (**18**). Brake lever (**20**) is fixed direct to the large Vee hanger (**18**) on the other side of the wagon.

Assemble buffers. Attach the buffer rings (**9**) to the end of each buffer body (**10**). Slide the spring (**11**) onto the shaft (**7**) and secure with the 12ba nut (**11**). 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.

Finally with the brass wire provided make two staple shapes, 51mm long and with arms 3mm long for the end hand rails (**5**).

Painting and Lettering

During the LNER period these wagons were painted with grey bodies and black chassis and running gear. The grey colour of the end stanchions was carried down from the body and over the buffer beams. Works photographs show the wagons painted a lighter shade of grey than what is normally accepted for LNER grey. Humbrol 64 is a close match. With BR ownership much the same painting scheme was followed, although it is assumed that in at least some cases the bufferbeam would be painted wagon grey (Railmatch 322) along with the body. In many cases planking would be unpainted as replaced. BR lettering was done onto a black panel. A plain black transfer is included for this.

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

The railway companies commonly used these own wagons to carry locomotive coal to their engine sheds. These were not part of the 'revenue fleet' and were distinctively lettered as to their purpose. The LNER used several 20 ton capacity designs. Our model represents a batch turned out in the 1930's. The cupboard design would be very useful for unloading onto coaling stage platforms. But they could also be used at the larger mechanical coaling plants. These wagons became part of the general mineral wagons fleet in the 1950's and survived into the middle 1960's.

Number series: 163379 –163503, 168155 – 279, 178720 – 9008, 184926 – 5036, 208563 – 208861, 230968 – 1272, 271105 – 271304, 274355 – 554, 291689 –292088, 308 – 680. Under BR ownership an 'E' prefix was applied eg. E163379.

References; Pictorial record of LNER Wagons, Peter Tatlow.

A selection of some of the other mineral wagons in our range -

BR Standard 16 Ton Mineral Wagon (Diag. 1/108) - ref PS30
 BR (ex MoWT) 16 Ton Mineral Wagon (Diag. 1/100) – ref PS31
 BR (ex SNCF) 16 Ton Mineral Wagon (Diag. 1/112) – ref PS32
 Private Owner Steel Chassis 13 Ton Mineral Wagon – ref PS33
 BR 21 Ton Mineral Wagon (Diag. 1/107) - ref PS15
 BR 24.5 Ton Mineral Wagon – ref PS25

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