CONNOISSEUR MODELS

- 0 Gauge -

LNER 10 Ton Fish Van

PROTOTYPE. The LNER built large numbers of standard type Fish vans during the 1930's. This kit represents the 10 Ton, 10 foot wheelbase, vacuum brake fitted, wooden underframe version. They lasted well into British Railways days and worked all over the country. They were XP rated and so could run in local passenger trains and one or two of these vans tacked onto the rear of a coastal branch line local, to convey the days catch landed at the harbour to the junction, would be a common sight. These vans would then be attached to a passing fast freight or block fish train for rapid transit to urban fish markets.

KIT. The etched body components are designed with overlapping and interlocking joints to help assembly, which is very straightforward. The sliding doors are white metal castings. A pre-formed brass roof is supplied.

Wheels are required to complete. 3'1", 3 hole disc Wagon Wheels (Slater's Catalogue Number 7122). Available From Slater's Plastikard, Old Road, Darley Dale, Matlock, Derbyshire, DE4 2ER, Telephone 01629 734053.

Connoisseur Models, 1 Newton Cottages, Nr Weobley, Herefordshire, HR4 8QX, Telephone 01544 318263.

Please read this section carefully, especially if this is your first etched brass kit. Many modellers fight shy of working in this medium, but the basic skills are relatively easy to acquire. Once you've learned how to form and solder brass, you'll find all kinds of modelling possibilities will open up for you.

Assembling an etched kit involves exactly the same skills that a scratchbuilder uses – the only difference is that the cutting out of the parts is already done for you. Some filing and trimming will, however, be necessary from time to time. Where this is the case, I have highlighted it in the instructions.

The main skill to master is soldering and I would recommend a Weller 40 Watt soldering iron. This has a 6mm diameter, removable copper bit. The bit is shaped like a screwdriver and has a bright coating of solder (tinned). This combination of iron and bit shape is ideal for running fillet joints and has a good reserve of heat, that is necessary for soldering small parts on to large components. Note the shape and condition of a new bit, as this won't last long and will need restoring back to this condition.

It is important to keep the bit clean and in good condition as you work. Get a soldering iron stand containing a damp sponge; old oxidized solder is wiped off on this before picking up fresh solder for each joint. If you haven't made a joint for some time you may find that a hard black crust has formed on the bit. Remove this with a brass wire brush (suede brush) and then feed some multicore solder onto each side of the bit to restore a bright surface (referred to as wetting or tinning the bit). After about 8 hours use you will find the bit is in poor condition, with holes and a ragged edge. File the bit back to its original shape using a hand bastard file and then polish the surfaces on emery cloth. Coat the bit with Fluxite Soldering Paste (traditionally used by plumbers) and this will prevent the bare copper oxidizing as the iron heats up. Then feed multicore solder onto the bit to form a generous coating and leave to bubble away for a couple of minutes before wiping excess off to give a bit almost as good as new.

A smaller Antex 25 Watt iron with a 3.2mm screwdriver bit is very useful for small assemblies and detail work such as handrails, but will have insufficient heat reserve for main assembly work. The Antex has a plated iron bit, after a little use with 145° solder a grey oxide appears on the bit that will prevent you from picking up the solder. Touch the bit to some multicore solder and it will flash over the bit, wetting it so that you can continue picking up 145° solder. I have found no problems with mixing the two solders in this way.

I use 145° solder for virtually all assembly work. I prefer it in wire form but it is also produced in stick form by Carrs. I find that its lower working temperature helps to give a quick clean joint. Limiting the build up of heat in components, which may cause distortion. I find that I can hold parts together with my finger ends and make a joint before heat reaches my fingers or other etched parts drop off.

I use 60/40, tin/lead, fluxed multicore electrical solder (melting point about 190°) mainly to keep the iron bits in good condition. As it gives a slightly stronger joint than 145° I sometimes use it for small spot joints on handrail wire, lamp brackets etc, but still use extra liquid flux.

For all brass and nickel silver work I use Carrs green label liquid flux. You will soon get the feel for how much to use but more problems are caused by too little flux than too much.

Before soldering components together, thoroughly clean both surfaces along the join line with a glass fibre burnishing brush. Using your tweezers or a knife blade etc, hold the parts together in the correct position and, with an old paintbrush, run some flux along the area to be joined. Still keeping the parts correctly aligned, pick up a small quantity of solder on the tip of your iron and carry it to the joint (unlike electrical soldering, when you feed solder into the joint). Hold the iron against the joint just long enough for the solder to flash between the parts. Don't let go of the parts until the solder has cooled – this takes from five to ten seconds. To run a fillet of solder along a joint, wait until the solder flashes between the parts and then pull the molten solder along

the joint with the iron tip. Don't load the iron tip with a lot of extra solder, but work the joint in 1" lengths, bringing in small quantities of solder. Brass is a very forgiving material and if you get something out of alignment, use heat from the iron to desolder the joint before starting again. For complicated assemblies, it is a good idea to only tack solder parts together. You can then make adjustments by desoldering until you are happy with the location of parts and then solder solid.

When you need to laminate two or more layers of brass together, align the parts and carefully clamp them together, either in the vice or by holding them with miniature crocodile clips. Run flux around the edges, and then go around with the soldering iron. Clean up thoroughly afterwards.

To fit small parts and overlays on to a larger assembly, such as strapping to a wagon side, when you need to prevent finely detailed areas such as planking becoming clogged up with solder. Tin the back of the small component first, then hold in place on the model and apply flux. Carefully wipe the tip of your iron on a sponge to remove any solder from it (dry iron), and then touch it against the parts to be joined. After a few seconds you'll see molten solder bubbling from the edges. Remove the iron, still holding the parts in place, and allow the joint to cool. An alternative is to use solder paint (I would recommend Carrs 188 solder paste). As the name suggests, this is a flux and solder in one. Simply apply a thin coat of solder paint to the back of the component instead of tinning. Still apply a small amount of liquid flux before you solder the part into place.

Any surplus solder should be removed using a craft knife, I find No 10 curved scalpel blades ideal, then burnish clean with a glass fibre brush. With practice, you'll learn how to use the minimum amount of solder to do the job. Flux is corrosive so, after each soldering session, give your model a good scrub with washing up liquid or Jif. After a day or two, any remaining flux residues will show as a green film, which should be washed away.

To cut parts from the fret, use a sharp Stanley knife on a piece of hardboard or a pointed scalpel blade on a block of softwood. Remove tags and burrs with a fine file.

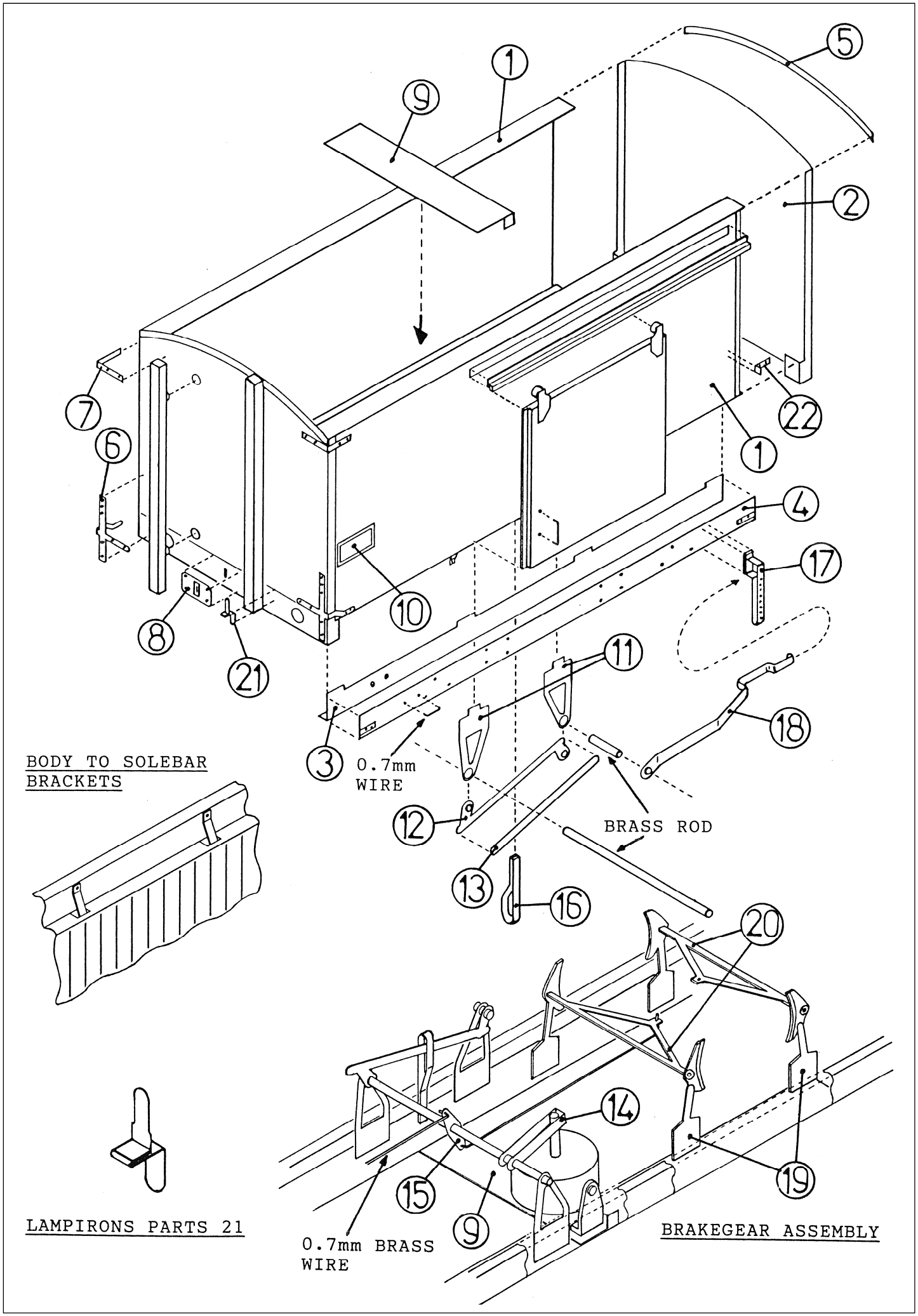
Three-dimensional parts are formed by folding. On an etched brass kit, the fold lines are normally half-etched on the inside of the fold. You'll be able to fold most parts using smooth-jawed pliers. For longer parts folding bars are desirable.

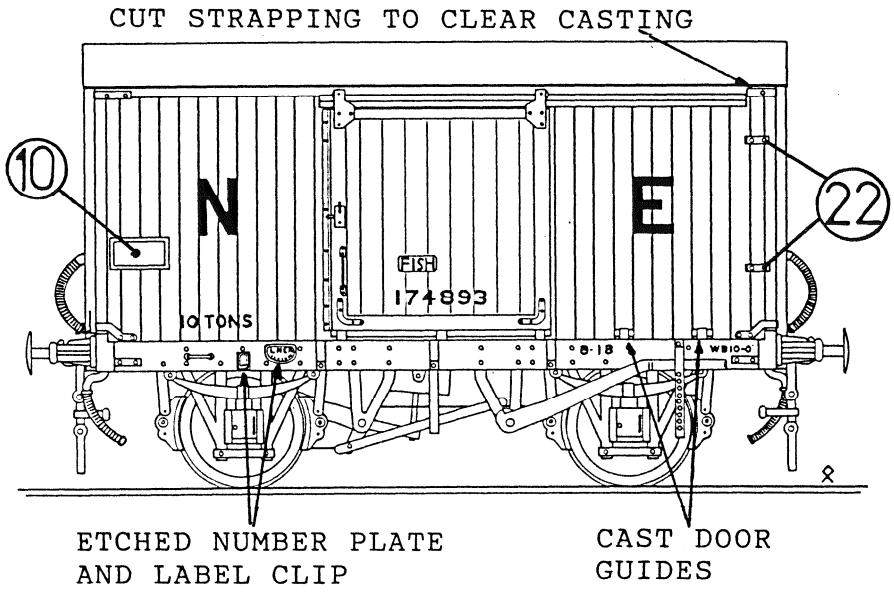
Other useful tools include a bench vice, a good pair of tweezers, a set of Swiss files (get a full set of cheap ones and then buy quality replacements for the three that you use the most), a pin vice with a selection of drills from 0.5mm to 2.1mm plus a few larger sizes that you use regularly (2.6mm for axle bearings etc), some square-nosed pliers and some very pointed-nosed ones, preferably with smooth jaws. Buy cheap tools first and duplicate the most used ones with quality.

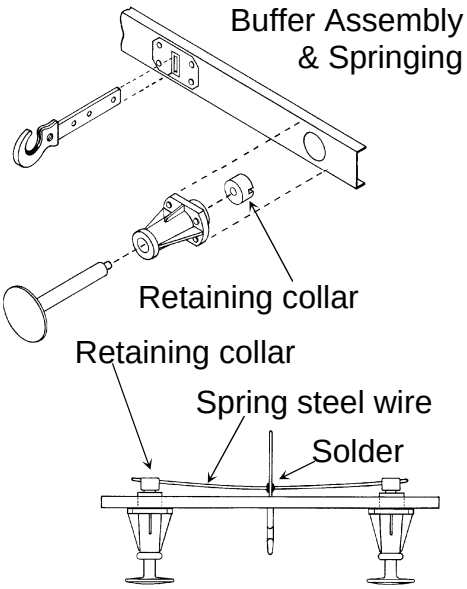
Try to complete all high-temperature soldering before attaching any of the cast whitemetal parts. These can be attached with two-part epoxy resin such as Araldite Rapid. Ensure the surfaces to be glued are clean and free of grease.

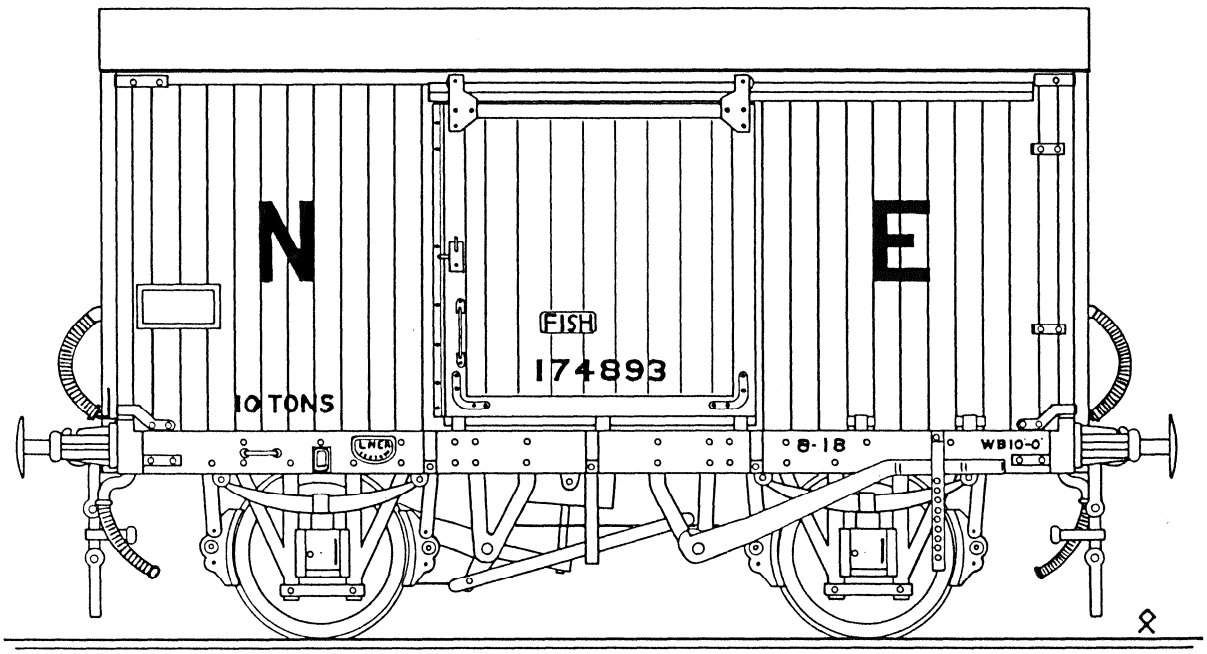
A better alternative is to solder your white metal castings using Carrs 70 degree low melt solder and Carrs red label white metal flux. The iron should be run at a much lower heat so that you do not melt the castings. I have a domestic light dimmer switch and plug socket fixed to a piece of wood, wired up with a lead and 3 amp mains plug to the input side of the dimmer switch and the output of the dimmer switch into the plug socket (remember to continue the earth). Plug your 40 Watt iron (25 Watt iron won't work) with a clean and freshly tinned bit into this and experiment with adjusting the switch until you find the range of temperature at which the solder melts, but a scrap casting does not. **Note** as the iron is running at a lower voltage it will take longer to heat up, so when you think the adjustment is correct do check a few minutes later on another scrap casting to see that it doesn't melt. Then scribe a mark on the switch knob to indicate this position.

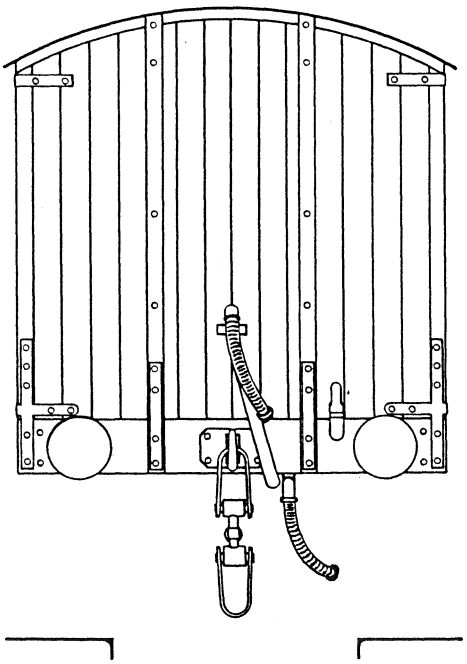
When attaching white metal fittings to brass the surface of the brass must be tinned with 145° solder, to allow the solder to grip. The surface of the casting at the joint should be burnished bright. The casting can then be soldered into place with 70° solder and fillets of solder run into any gaps with no risk of melting the casting.


BODY TO SOLEBAR BRACKETS
LAMPIRONS PARTS 21
0.7mm WIRE
BRASS ROD
0.7mm BRASS WIRE
BRAKEGEAR ASSEMBLY









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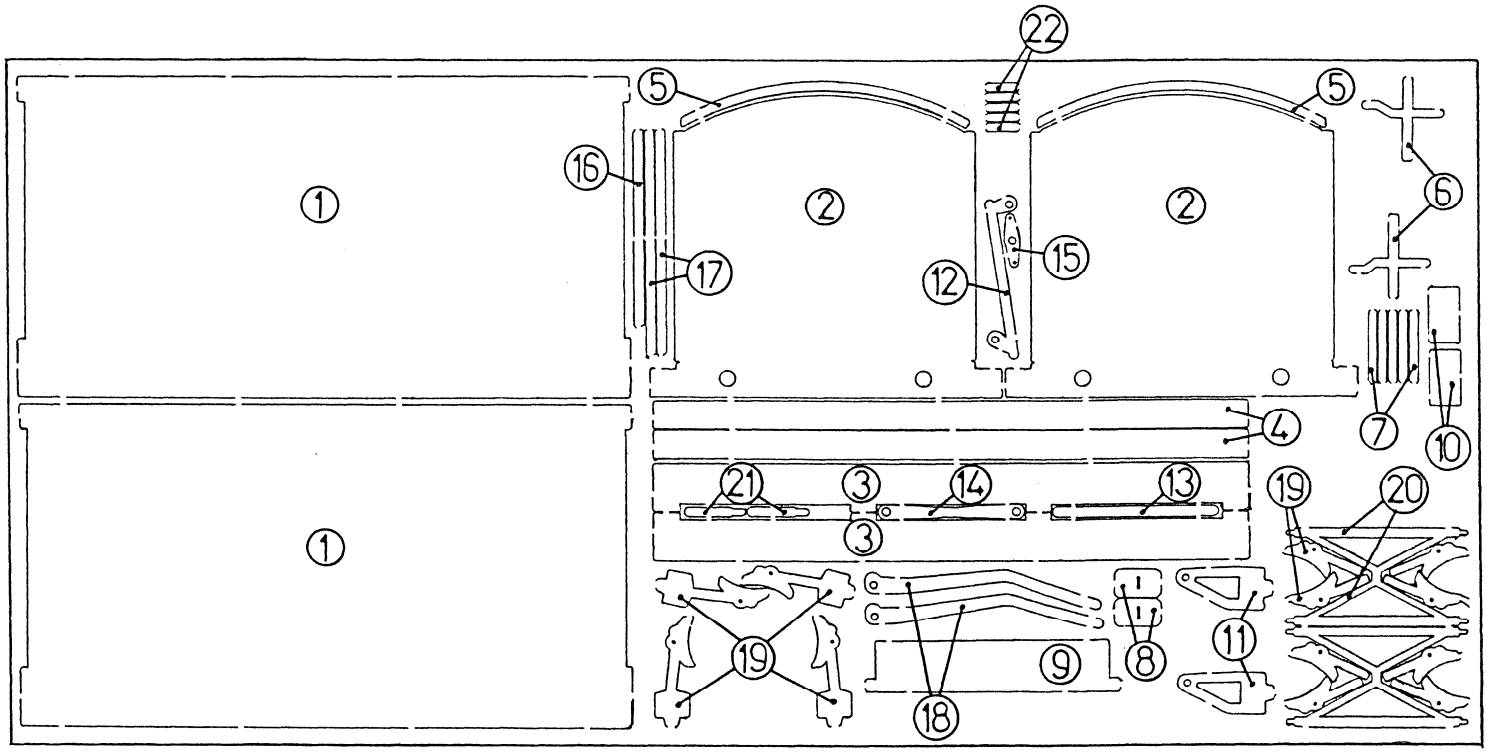
LNER Livery. Bodywork including solebars and headstocks, Red Oxide. Roof, white later grey. Running gear and buffers, black. Lettering, white, pre 1936 as drawing. Post 1936 the 'NE' was reduced to 4", placed over '10T' in 3" which in turn was above the running number in 4". All to the bottom L/H corner with 3" spaces between lines.

BR Livery. Bodywork, Bauxite. Roof, grey. Lettering, white. 10T and number preceded by E in the L/H corner, wheelbase and tare weight in the R/H corner.

Transfers for LNER & BR lettering are available from the Historical Model Railway Society, Brian Webb (*volunteer sales officer),* 8 Gilpin Green, Harpenden, Herts AL5 5NR. Send SAE for list and order form or they are stocked by some specialist retailers. These are Pressfix type and you will require sheet 12 LNER goods vehicles or sheet 25 BR revenue wagon.



SUGGESTED ASSEMBLY ORDER

1) Push out bolt head detail on the sides, parts 1, and on the three solebar to body brackets. Then fold top and bottom by 90deg. Push out bolt head detail on the ends, parts 2, and then make the side folds. You may find it useful to deepen the fold lines by running a triangular file up them. This will reduce the amount of pressure required to make the fold. Now join sides and ends together. Tack solder the bottom of the sides to the ends first. Check that everything is square and then solder the overlap joints between sides and ends. Work from bottom to top and solder about ⅓ of the joint at a time. This should prevent any distortion or bowing of the side at the joint. Check that the body is still square as you make these joints.

2) Fold solebars, parts 3, and then fit detail overlay, parts 4. There are 4 push out bolt heads on the overlay. Fit horse hook made from 0.7mm wire. Fold down body to solebar brackets and then fit solebars to body. Trim ends to give a snug fit between buffer beams. Note that bolt head detail is different for each side. This is to line up with vee hangers. Refer to drawing, This shows the side with two vee hangers. Then solder body brackets to solebar.

3) Fit parts 5, to top of ends. Then fit corner strapping, parts 6 and 7. Fit to ends first and then bend around the sides. Trim part 7 to clear cast door runner. Fit coupling plates, parts 8. Fit part 9, this rests on the bottom of the body sides and runs across the body. This will support the cast vac cylinder. Fit slate boards, parts 10.

4) Fit cast end stanchions. File the tops to clear top batten and blend in with roof curve. Fit cast door runner into etched rebate. Shorten the casting to match the etched rebate. Fit a door handle made from 0.7mm brass wire into door casting and then fit door casting to body side. Fit cast door guides.

5) Fit two vee hangers, parts 11, opposite each other. Solder parts 12 and 13 together. Pass a length of Brass rod through vee hangers. Fitting parts 12,13,14 and 15 onto the rod. Use part 12/13 to help position third vee hanger and then fit a length of Brass rod through vee hanger. Fit cast vac cylinder and supports. Fit safety loop, part 16.

6) Drill out axle bearing hole in the axleguard, with a 2.7mm drill. This hole is formed by a small rubber peg in the mould. This tends to flex as the metal flows into the mould cavity and you will probably find that the hole is not quiet square to the back of the axleguard. By putting sideways pressure on as you drill out the hole. You will be able to square it up. Use the drill in a hand held pin chuck. Clean out the casting flash between the W irons with a sharp scalpel.

Fit wheelsets into axleguards and then tack solder axleguards to solebars. Check that axles are parallel. Place on a flat surface and adjust axleguards until the wagon sits without rocking. When happy solder solid. I fit the axle bearing into the hole with a blob of Evostick. As it takes a little time to set. You can make adjustments and then leave the wagon on a flat surface for the glue to set.

7) Fold up and fit to solebars the brake pin guide, parts 17. The bottom bend is a curve. There is an etched mark to locate the centre of the bend. I make this curved bend using a pair of round nosed pliers and then gently squeeze the bend tighter with flat nosed pliers. Form up and fit brake levers, parts 18.

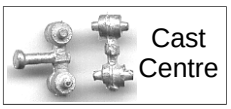
Solder together the two parts of the brake hangers, parts 19. Then fit into slots on the underside of the body. Fit them so that the brake blocks are just clear of the wheels. Spring brake yokes, parts 20, between brakes and then fit linkage made from 0.7mm Brass wire.

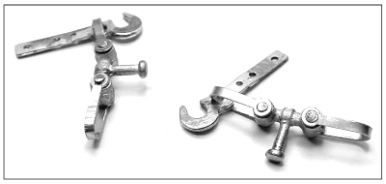
8) Open out holes in buffer beam to take buffer body. Then drill out buffer body to take head and spindle. Hold buffer body between finger and thumb. Drill out from each end with the drill mounted in a hand held pin chuck. Put a bit of spit on the end of the drill. This will help to stop it wondering and breaking through the side of the buffer. Pass spindle through buffer body and then fit collar to end of spindle. Fit buffer into buffer beam.

Make up screw coupling as shown and then pass hook through buffer beam. Fit spring wire. Fold up and fit door stops, parts 22. Fit cast vacuum and steam heat pipes.

Fit roof. I have rolled the roof in my rolling bars but you may find that a little work with finger and thumb is required to get the curve even.

Prototype References. A Pictorial Record of LNER Wagons, Peter Tatlow, OPC, ISBN 0-92888-92-7, Page 46.





If you enjoy building this kit and are satisfied with the quality, I would be most grateful if you could recommend it to your friends and fellow modellers. Although my kits are not perfect, I try to put a lot of time and effort into producing them. If I can get extra sales of a kit through customer's personal recommendation and I find that word of mouth is the best form of advertising. This will help me to put extra time and money into developing the next kit. Hopefully this will give me more satisfied customer to recommend my kits to their friends.

If you are not happy with this kit then please tell me. Hopefully I will then be able to help and sort out any problem.

Jim McGeown

London & North Eastern Railway 10 Ton Fish Van