

## MIDLAND RAILWAY JOHNSON 6-WHEEL 3,250g TENDER

These tenders were built in large numbers together with others of varying water capacity. During their life some were fitted with water pickup apparatus and another variation incorporated a vertical coal plate. The rails on this type being terminated at this plate.

Both of these variations can be built into this model as parts are provided.

### CONSTRUCTION

Handrail holes in parts 6 and 28 should be drilled out using a no.76 (0.5mm) drill. The same size holes should be drilled in the brake pull rods and brake hangers.

Two 12BA nuts should be soldered to the top surface of the footplate item 1, over the holes etched into this component. The top of this being the side with half etch line on.

Steps 8 & 9 can now be fixed into the half etch areas on parts 2 & 3.

Lay footplate face down on a level surface — the front of the footplate is the end with the curved section. Parts 2 & 3 can then be soldered into position with the step end towards the front and the tabs locating into the small cutouts in the footplate.

Front drag beam 32 is now fixed with cut out to the footplate and tabs on items 2 & 3 locating into the slots of this beam. File these tabs flush after soldering.

Fix rear buffer beam up against side frames (buffer holes nearest the running rail) - position central and solder.

Remove parts from middle of parts 4 & 5 and solder 4 & 5 to the inside of sides proper (6 & 7). Leave a small gap at the bottom and back of these sides - redrill the two small handrail holes to take them through both layers.

Curve the top of these sides outwards and do the same to tender rear 29 - try using the handle of needle files or similar item to help with this. I found it actually easier to curve these out more than was needed as it makes for easier fitting in the end - they can always be coaxed back into the proper position.

Place one side on a flat surface with curved top overhanging this surface and solder back of tender body to the inside of the side.

Tin surfaces of parts 24 & 25 and solder together - the decision should now be made as to if you require your model to be fitted with a vertical coal plate or left as originally built. If being left as original fit strip 27 to top of coal plate 24/25 and trim to same length. This strip is fitted with the two small holes towards the rear of the tender.

Solder coal plate to front of reinforcing strip inside of the side proper - use the side with the back already fitted to it. Solder other tank side to back panel only and fix body unit to footplate by locating into the half etch lines - when happy with fit solder second side to the front coal plate.

Plastikard is supplied for the tender top but for a stronger job a piece of brass sheet can be used. I find it easier to use three sections rather than try to bend into an S shape.

If building as the modified version, part 28 should now be bent into an L shape and strip 26 soldered to the top and trimmed flush with the ends. This can then be fixed to the top of coal plate 24/25.

Bend curved tender top back to its proper shape and solder into position.

Fit coal rails 10/11 if as original or 22 if modified type being built. Half etched vertical rails face to the outside.

I found it easier to leave the rails flat, solder in position and then bend up vertical.

Bend up toolbox 17 if doing the modified type and fix central to ledge on part 28.

Bend and fit handrails to top of toolbox and tender sides.

Bend hand levers per exploded drawing and fix through either 27 or 28.

Photographs suggest that at some stage in their life it was found necessary to fit a pair of tank vents and if you wish to fit these holes should be drilled at 23mm centres, 39.5 to rear of the front coal plate. Do not fit these until the very last as they would be very prone to breakage.

Tank filler should be fixed centrally 7mm from back with item 20 on top.

Coal plate 13 is fitted 14.5mm from back but if building a tender fitted with water pickup then the square dome should first be fitted just in front of the filler and item 13 trimmed into two and fixed each side.

Item 15 is fitted to the inside of the left hand side of tender (facing the front) 12mm up from the footplate.

Fit item 14 to right hand side or another part 15 if building with water pickup.

If footplate needs to be raised to bring level with the engine then two heights of spacers 12 are supplied and these are soldered into the half etch lines on part 16. Fix this assembly to the footplate and coal plate.

Fit side pockets to front of coal plate - see drawing.

Fix handrails through items 14 and 15 and shape handles as per drawing for handbrake and water pickup.

Part 19 is fixed to front of toolbox 17 when used.

On the original version a toolbox was fitted in a variety of positions at front of the tender.

Part 33, a sort of fire tool support, appears to have been used on tenders modified with the vertical plate and is situated with point facing up and leg facing left-hand side of the body with leg fitted to the left hand tank vent.

Fit sprung buffers and vacuum pipe to buffer beam.

Fix axleboxes to outside frames and axlebox covers of choice to box.

## TENDER CHASSIS

Drill holes No.76 for brake rigging.

Carefully file the axlebox cutouts to allow the hornframe to be a nice easy fit into same and when happy with this solder horn frames into position flush with outside of mainframe.

Finish assembling hornblocks per instructions in pack.

Two widths of spacers are supplied - the shorter being for 00 and the longer used for EM and P4.

Secure the spacers beneath the tender body using short 12BA screws trapping a piece of paper between the spacer and the footplate.

Solder frames to these ensuring that they are upright and in line with each other.

Remove assembly from body. Pass lengths of wire through holes in frames and solder into position with a section protruding from each side of frame.

Fit wheels into frames.

Fit brake hangers/shoes to hanger wires protruding from frames - secure so that they are in line with wheels treads. Trim any excess wire off.

Brake pull rods are fitted between the wheels with lengths of wire passed through one brake hanger, both pull rods and into the other side hanger.

MIDLAND RAILWAY  
JOHNSON 6-WHL TENDERS

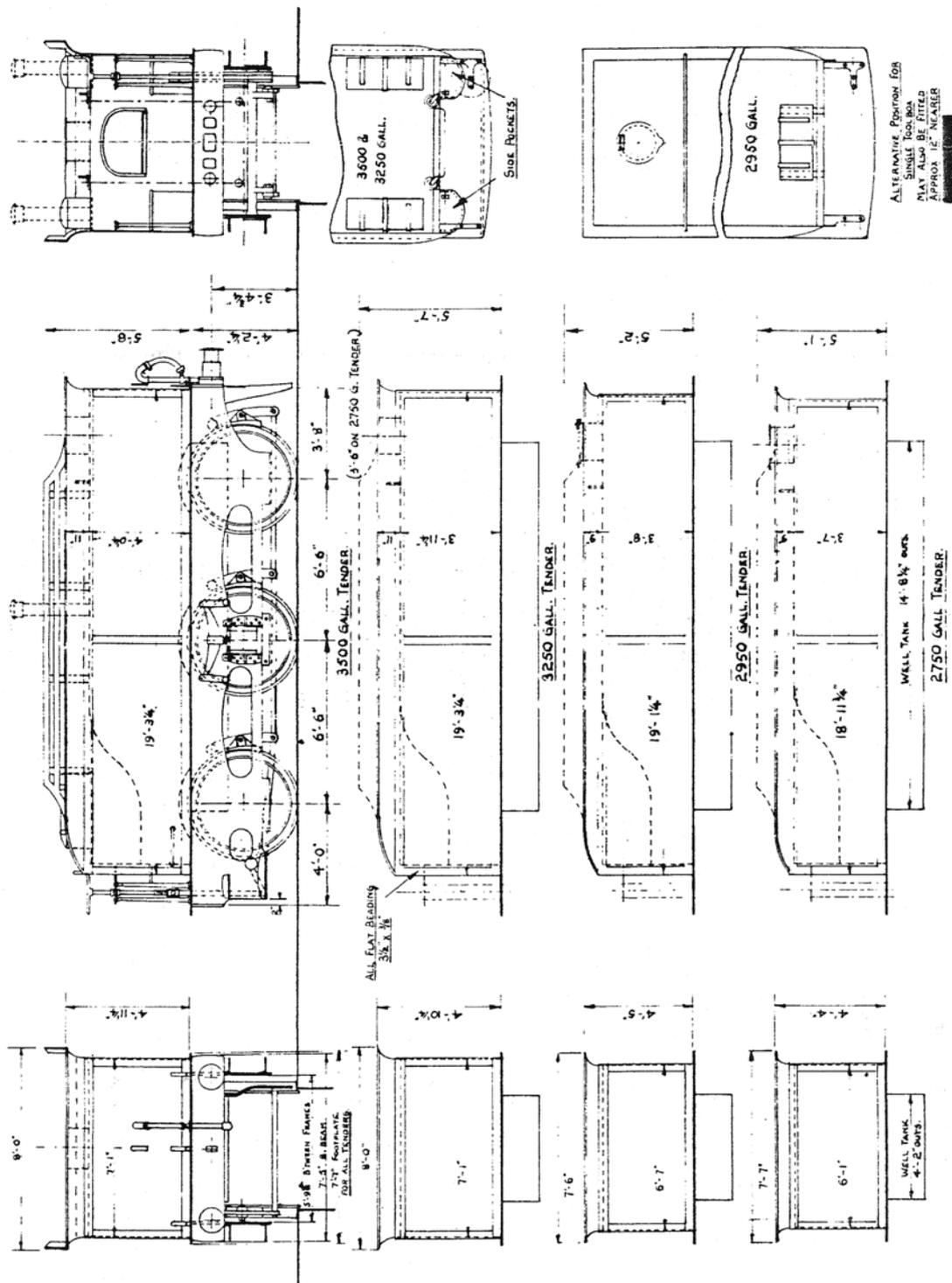
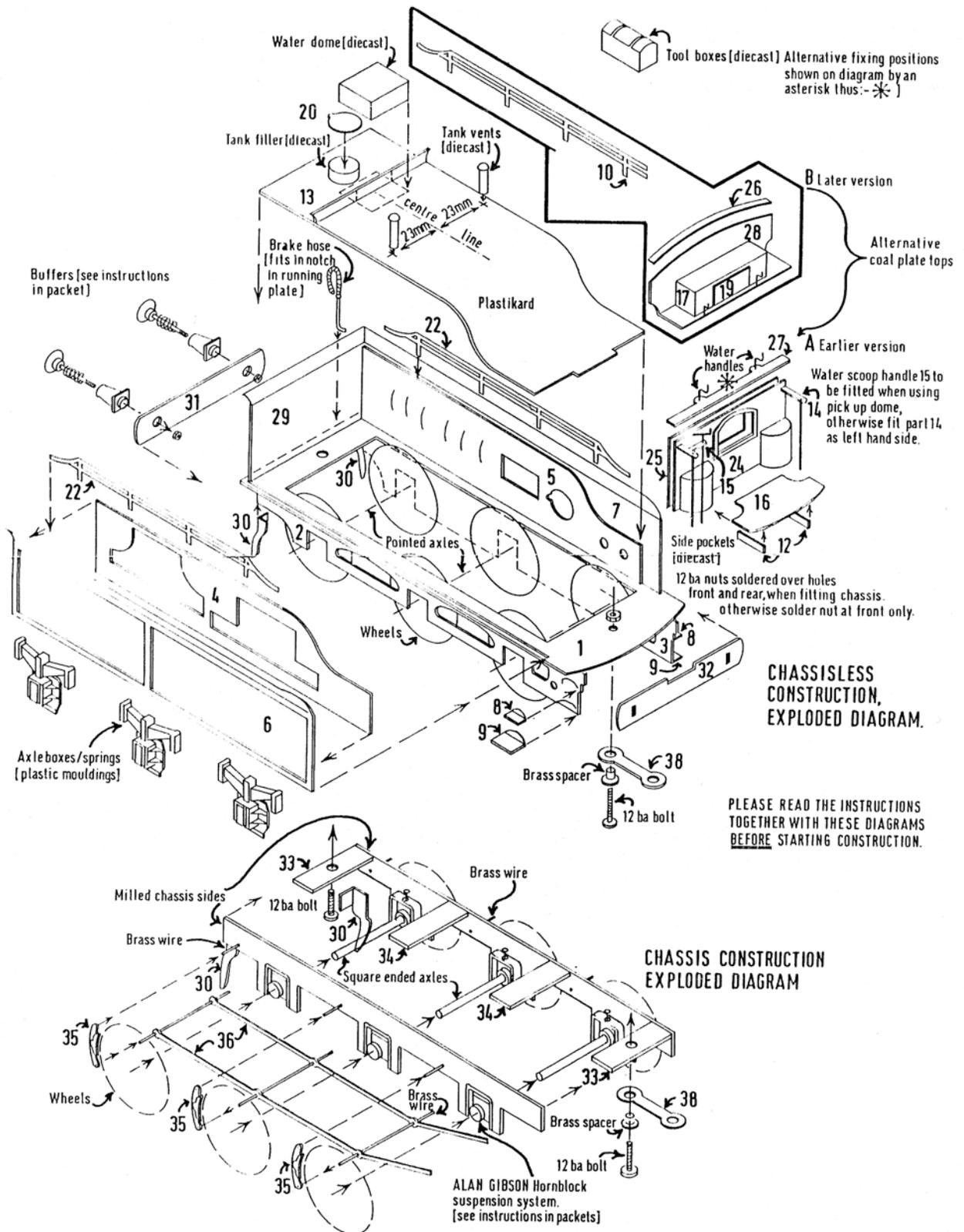


Fig. 14. Four Midland railway tenders of 3,500, 3,250, 2,950 and 2,750 gallon capacity are depicted in this drawing. However, we believe that those to 2,950 gallon capacity did not, in some instances, have the bottom beading on the side and the ends. (Drawings: K. C. Woodhead)

JOHNSON 3,250 GALLON TENDER



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