

Instructions for the assembly of 500 G.W.R. Signal Box OO gauge

HISTORICAL NOTES

This kit is an exact scale model of the signal box at Highley on the Severn Valley Railway which has been preserved in original condition.

It is the only box remaining of three which were built in 1883 for the G.W.R. by McKenzie - Holland of Worcester. The other two boxes were at Arley and Hampton Loade, being essentially to the same design and layout.

BEFORE YOU BEGIN ASSEMBLY

Please read through the instructions and study all the drawings very carefully.

You will need a sharp craft knife, tweezers and a liquid cement (apply sparingly with a fine brush).

Take care when removing parts from the runners. These should be CUT off as needed, small parts may be damaged if twisted or broken off.

The parts are supplied in pre-coloured plastic and can be assembled to provide a satisfactory model without painting.

However for those modellers wishing to paint the model, it is suggested that the individual parts of the cabin, window frames, wood panelling and door are painted in detail before proceeding with assembly.

ASSEMBLY

Assembly is broken down into 3 stages - base, cabin and roof.

These can be glued together as one structure or kept as separate units to allow access to interior for later detailing.

This kit contains the following parts.

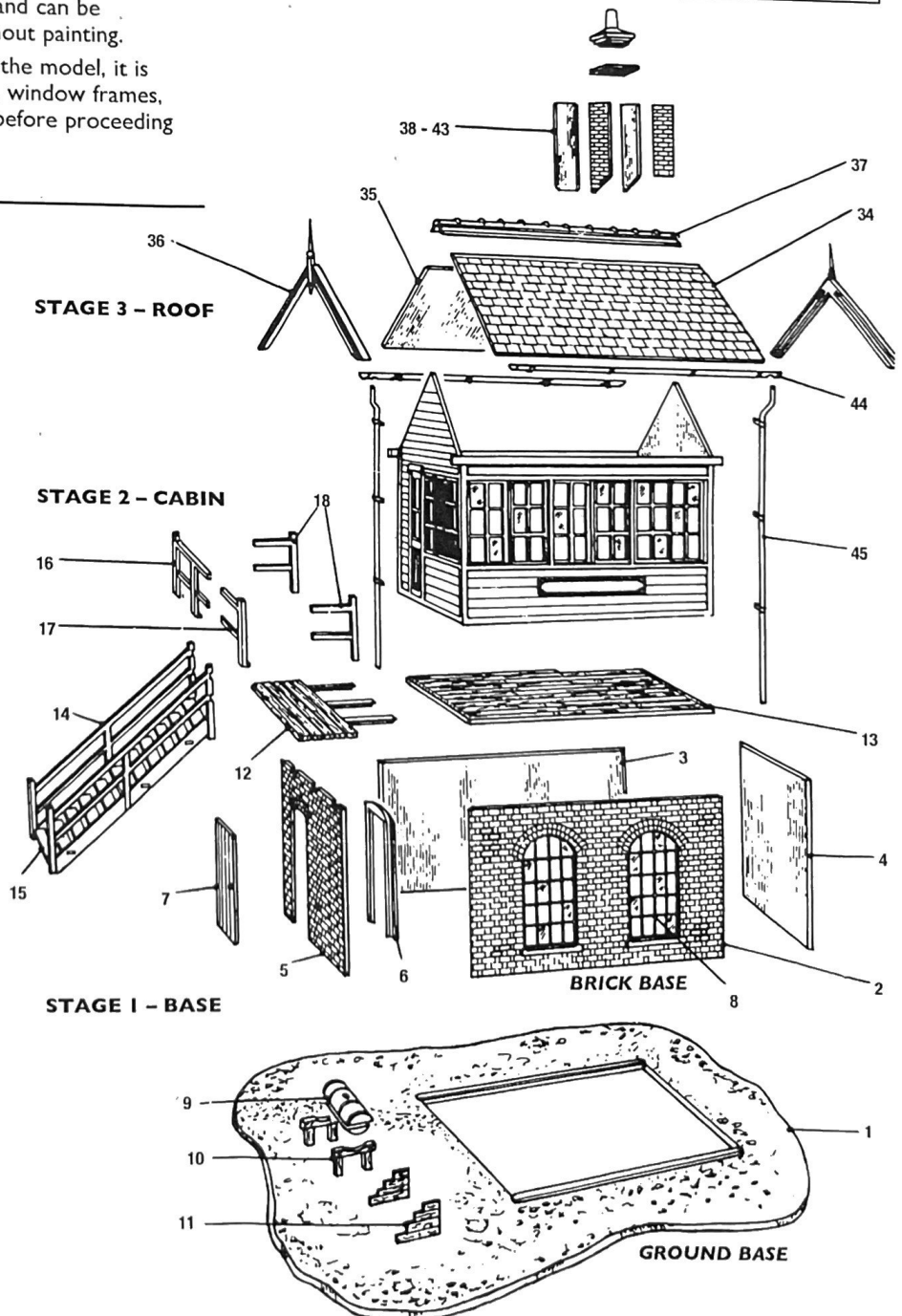
- 1 sprue containing floor parts.
- 1 sprue containing wooden wall parts.
- 1 sprue containing brick wall parts.
- 1 sprue containing roof parts, ridge tiles, gutters and downpipes.
- 1 sprue containing steps, gable ends, handrails and doorframe.
- 1 sprue containing ground base, oil barrel and coal bunker.
- 1 card containing interior.
- 1 sheet of clear plastic for cabin windows.
- 1 sheet of clear plastic with printed panes for lower windows.
- 1 sheet of waterslide transfers.
- 1 sprue containing chimney parts.
- 1 sprue containing windows.
- 1 sprue containing window frames.

STAGE I - The Base.

1. Remove sprue containing oil barrel, stand and coal bunker from ground base (1).
 2. Make up brick base, front (2), back (3) and sides (4) & (5) noting position of windows and end door (5).
Paint brickwork at this stage if desired.
 3. Fit door frame (6) and door (7) trimming bottom of frame to level of base.
Fit windows (8) at rear of opening and glue base to ground on locations provided.
 4. Make up oil barrel (9) & (10) and coal bunker (11) and fix in position.
 5. Fit balcony (12) into notches on side wall (5) ensuring that the top of the brackets are flush with the top of the wall.
 6. Fit cabin floor (13) noting position of cut away at rear.
 7. Make up staircase (14). This is best done by fixing the top and bottom steps (15) in position first and supporting the work to make sure it remains square whilst the glue is setting. When fully set hard, fit remaining steps.
 8. Fit front handrails (16) & (17) to balcony (12) noting fit into notches provided.
Fit staircase to handrail, lining up with notches in staircase newel posts. Ensure that the assembly so far is square and set and fit handrails (18) to line up with front.
- Base is now complete and may be painted as required.

STAGE 3 - ROOF

STAGE 2 - CABIN



GROUND BASE

STAGE 2 - The Cabin.

Each of the four panels comprising the cabin should be built up individually using the diagrams shown to identify separate parts.

Windows are of two types. Type 19 are recessed and fitted from the inside. Type 20 are fitted from the front. Follow diagrams to fit windows in correct positions in frames.

The windows are marked on the sprue with a T indicating the top – the lower window frame being slightly larger than the upper two.

Timber frames should be carefully identified with the diagrams before cutting from sprue to ensure that runners and joining pips are removed correctly.

1. FRONT. Make up front panel (21), (22) & (23). Boards are fitted from the back, take care to ensure that planking laps in right direction.
2. Fit rear-mounted window frames (19) with projecting mullions facing outwards. These are supported on the projecting edge of the planking. Note correct positions on plan.
3. Fit front-mounted window frames (20) in remaining opening.
4. ENDS. Make up both end panels (24), (25) & (26) and (27) & (28) in a similar way, fitting door (29) & (30) after windows are in position.
5. REAR. Fit rear planking (31) into frame (32) and allow to set before adding the brick panel (33) which should line up with the bottom edge of the timber frame.
6. Complete any detail painting and fit glazing to all windows using the dimensions shown on the diagram.
7. Complete cabin assembly by glueing the four walls together. Make sure the corner mitres fit together cleanly. Stand cabin on a flat surface during assembly to ensure that all is square.

Cabin is now complete and remaining painting can be done.

Interior detail is provided. Cut out walls and position accordingly using P.V.A. adhesive. Locate cabin over ground base and glue in position if required.

STAGE 3 - The Roof.

1. Fit roof panels (34) & (35) into slots in gable ends (36) ensuring that panel with recess for chimney is at rear.
2. Fit ridge tile (37).
3. Make up chimney stack (38 - 43) and fit in position adjusting fit to roof to ensure the chimney is vertical.
4. If roof is to be glued down, it is best to do this before fitting gutters (44) and downpipes (45). Otherwise the gutters and downpipes should be fitted to the cabin walls, to allow the roof to be lifted off.

Assembly is now complete and any remaining painting and detailing can be undertaken.

PAINTING NOTES

Painting scheme for G.W.R. signal boxes from about 1900 was:-

LIGHT STONE	Woodwork above floor level and door panels.
DARK STONE	The mullions, fascia and barge boards, gutters, down pipes, steps, finials, middle rails, newel posts and sills.
CHOCOLATE	Doors, rain water butts.
WHITE	Window framing.
BLACK	Hand and guard rails, miscellaneous ironwork.
Nameboard	Cast letters in white on a black background.

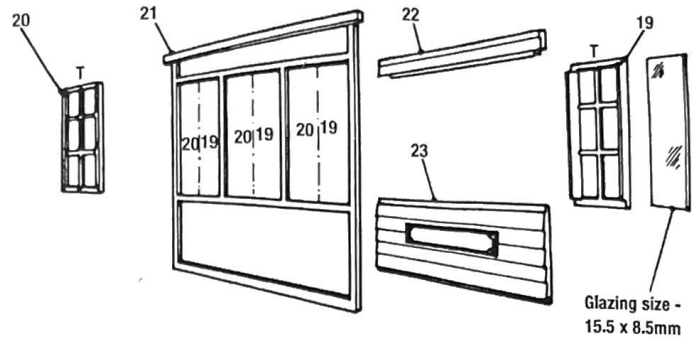
The present colour scheme of the Highley box follows the above plan with small variations as detailed below:-

CREAM/BUFF	in place of Light Stone. Also middle rails.
SLATE GREY	Doors, gutters, downpipes and finials.

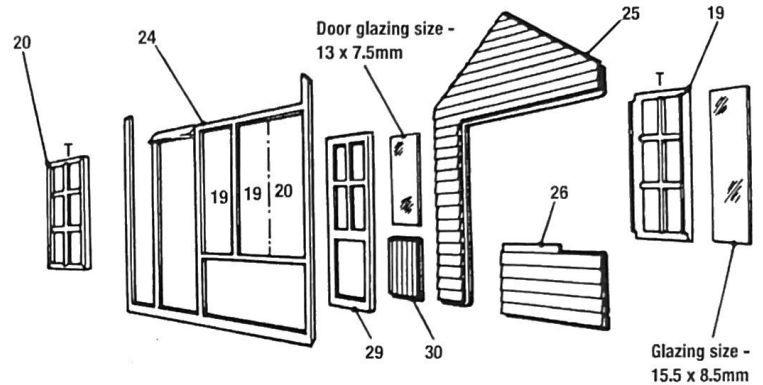
Water-slide transfers are provided for the box. Dip the required letters in warm water for 30 seconds. Position using tweezers and carefully remove backing sheet. Adjust as necessary and press down firmly.

See the colour illustrations on the box lid.

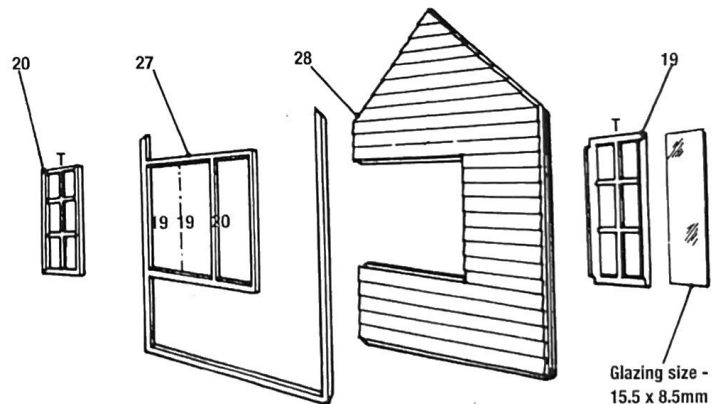
FRONT CABIN PANEL



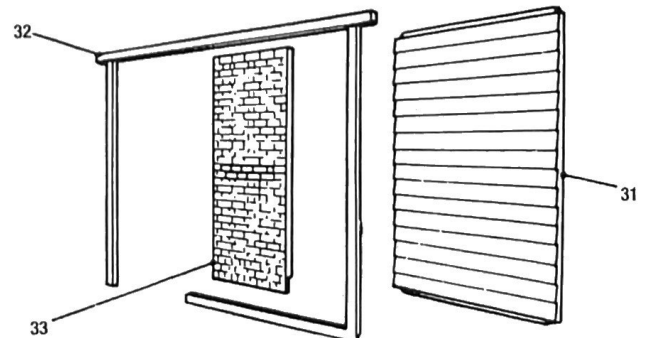
LEFT HAND SIDE PANEL



RIGHT HAND SIDE PANEL



REAR CABIN PANEL



GUARANTEE

This product is guaranteed in accordance with the high quality for which Ratio is world renowned. Should you require any further information you are invited to write to the address below, quoting the packing reference number on the left.

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