

Instructions for BR 20 Ton Brake Van kit.  
Cabin.

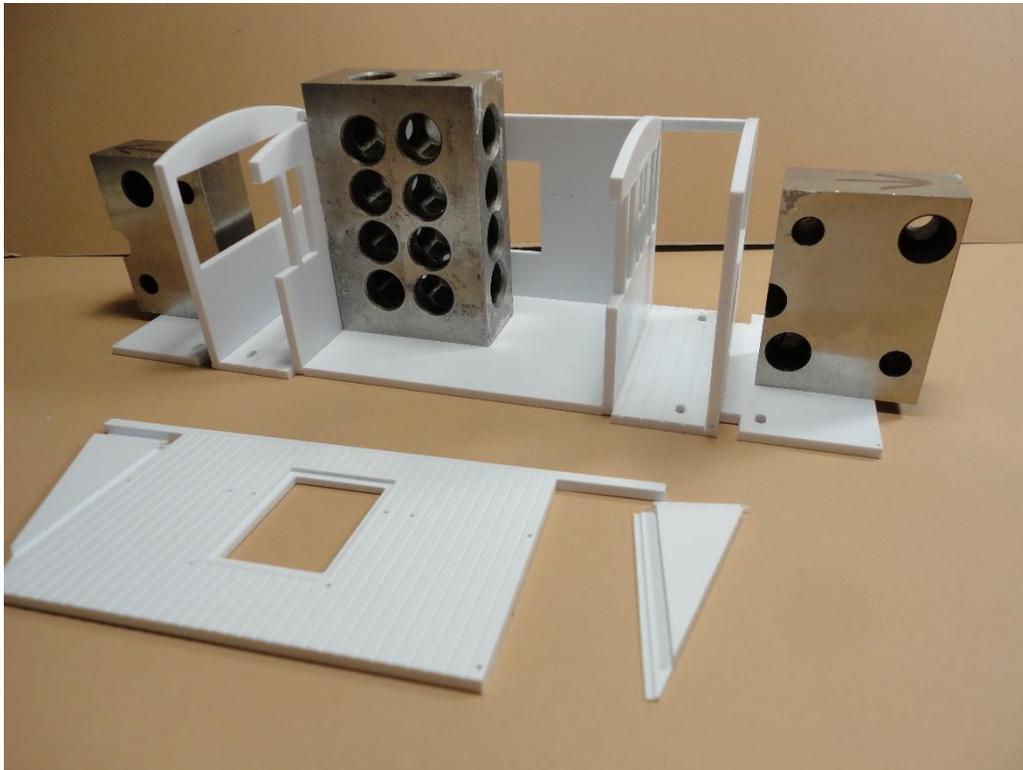
With a craft knife, cut a slight chamfer around the elongated holes on the under-side of the floor where the W irons fit (slots on the top side, go from side to side).

Place the floor on a flat surface with the slots for the cabin end wall and veranda, face side up.

Place a veranda end in the outer slot and square up with a block pushing the veranda hard against the outer edge of the slot (the slots are cut wider to accommodate the varying thickness of the material). With a very small brush apply just a small amount of liquid solvent to the joint. It will be drawn into the joint by capillary action. We recommend any Methylene Chloride based product. Continue to glue in the other cabin end and the veranda ends in their slots.

Cut off the triangular protection parts from either end of the bodysides and clean up the edges with a small file.

Glue the sides in place flush with the flat surface and square to the cabin and veranda ends. (Photo 1.) Leave the assembly with weight on the floor for at least 2 hours for the glue to set. Glue the duckets to the cabin sides, windows upper most.



## Underframe.

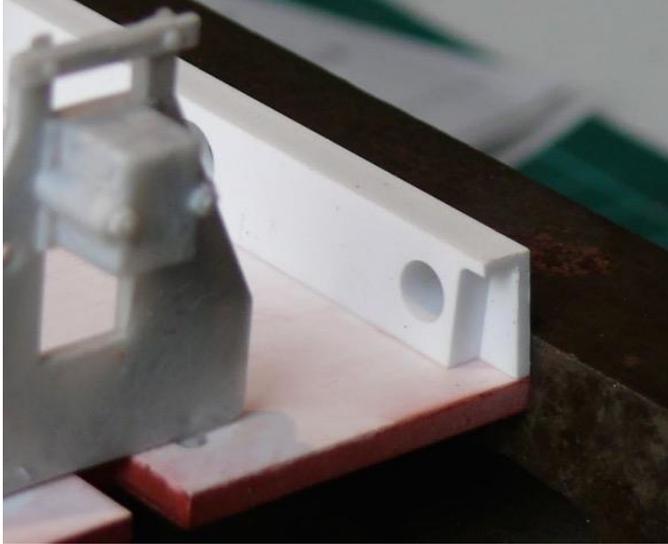
Remove the small sprue pip from the top edge of the 'W' iron and press the 'W' iron into the under side of the floor. The locating dogs are a tight fit in the slots so if needed, file off a little bit at a time until a good fit is made. The dogs will go right through the floor and protrude through the other side. When square, glue one side in place then mount the wheels and glue in the other side, making sure the wheels run freely.. Turn the model over and run glue over the protruding dogs. When dry, file flush to the floor. The flat concrete weights come in two parts. Glue the larger concrete weight to the verandah floor with the rebate facing up and the notches against the verandah end. Glue the small weight on top to fit.

To assemble the sprung buffers, glue buffer rings to the buffer bodies, (mount ring on a toothpick or similar to help hold them in place while gluing). When thoroughly set, carefully hand, twist a 1/8" drill into the holes, but not all the way through. This is to allow extra clearance for the springs on the buffer shanks. Slide springs over shanks and fit into buffer. Test that it slides in and out without sticking, then run the 2mm nut up the threaded end to complete. Glue the complete unit into the buffer beam, with the flats on the buffer housings parallel to beam.

Glue the coupling hook plate into the hole in the buffer beam ensuring the slot for the hook is vertical.

Open the third chain link and insert it into the small hole just behind the hook. Slide hook into the buffer beam and add spring and retain with opened out split pin.

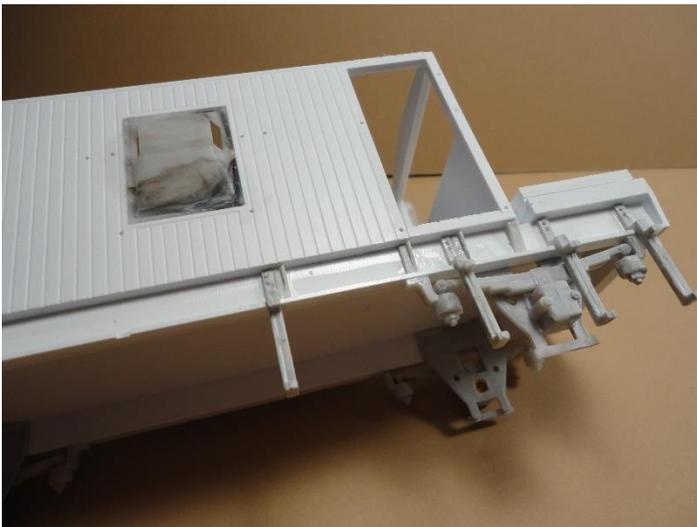
Glue the buffer beams to the under-side of the floor flush with the end and sides.  
(Photo 2.)



Glue the sole bars to the bottom of the floor against the 'W' irons and line up with the buffer beams. "L" shape down.

Glue the axle springs to the underside of the sole bars central to the axle boxes. Remove the brakes from the sprue and glue in place behind the sole bars in line with the wheel rims. Make sure there is enough wheel clearance for free running.

With a small file carefully remove any flash or mismatch from the foot board stirrups. Check for fit, then glue in place fitting into the slots on the sole bars. Make sure they are square both ways. Do not rush. Let the glue set before moving to the next stirrup.  
(Photo 3.)



Remove the angle brackets and straps from the sprue and glue in place on the sole bar, widest part up. The angle brackets fit where there is a dot on the sole bar, some next to the foot board stirrups. The straps fit in line with the verandah end on the sole bar.

(Photo 3.)

Glue on the running board, square to the ends of the floor. Bottom running board has cut outs to clear the axle boxes.

Glue the lamp irons on the verandah corner posts in the small pre drilled hole provided. Attach the other 2 lamp irons in the small pre drilled hole in the middle of the veranda ends.

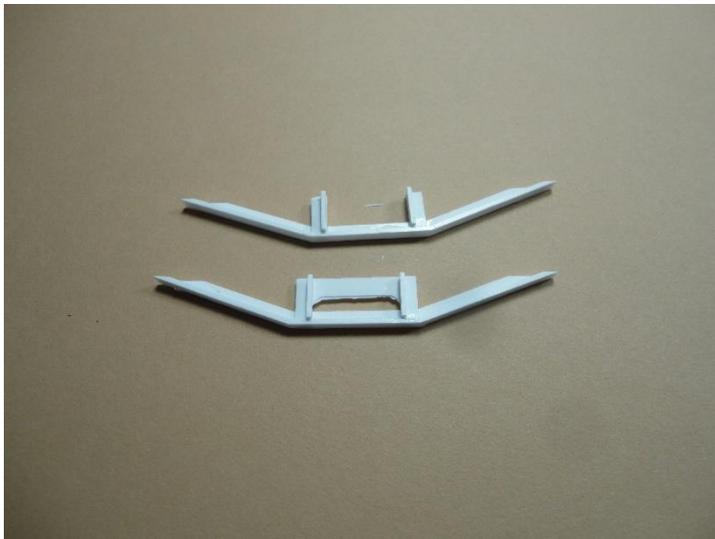
**Note:**

**A correction has been made in placing the pips on the lamp irons.**

**File off the bottom pips so the lamp irons locate on the top pips only!**

Cut off the flash around the truss bars and queen posts, but not the thin bridging piece between the short queen posts, this is to help hold the posts vertical and correctly spaced during gluing, they will be removed later. Lay the truss bars flat. Support the queen posts with a grab handle and glue the free ends of the queen posts to the inside of the truss bars. When the glue has dried, cut out the bridge between the queen posts.

(Photo 4.)



Glue the assembly to the sole bars at an equal distance between the 'W' irons. Glue in all the hand rails, you may have to square up the bends using a pair of pliers. If the holes in the concrete ends don't match with the floor, run a small drill through the hole.

Wash the model with detergent and rinse well to remove any residue from manufacturing.

After painting, glue in the glazing strips to the inside of the cabin ends avoiding getting glue on the windows where it will show.

Glue in the vents to the roof and also the chimney. Note: fix the chimney vertically with the moulded flashing following the curve of the roof.

Glue the rain strips to the roof following the pattern marked. Glue on the roof assembly. We recommend adding weight to the model for better running performance.

#### Liveries.

As a general guide the bodies of Vacuum braked (and through piped) vans, were painted Bauxite. Unfitted (hand braked) vans were painted Grey. The body colour extended to the sides and ends of the metal tray that contained the concrete weight, but the concrete was unpainted. Buffer beams and under frames were black. Roofs were dark grey. Handrails, grabs and lamp brackets were white. Numbers were located on the bottom left side of the body.

