

009 Wagon Kit Braked Continental Vee Tipper

Nigel Lawton 009

9mm gauge



<http://www.geocities.com/nigellawton009/VeeTipper.html>

Design Copyright Nigel Lawton 2001 & 2002
This is not a toy but a scale model and is not suitable for children



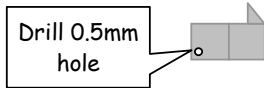
Each Braked Continental Vee Tipper truck kit is made up from the following parts:-

- A) 1 x Vee skip resin casting.
- B) 1 x left half-chassis whitmetal castings.
- C) 1 x right half-chassis whitmetal castings.
- D) 2 x skip support cradle whitmetal castings
- E) 2 x 5.1mm 9mm gauge wheelsets.
- F) 6 x 30mm lengths of coupling loop /brake gear wire.
- G) 1 x brake column/handle/handwheel etch
- H) 1 x brake platform/blocks resin castings set

Whitmetal is toxic and should not be ingested
or used in areas where food is prepared.

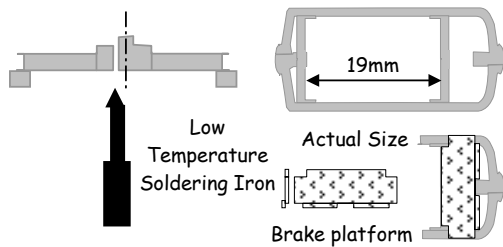
Please read all the instructions before starting to assemble the kit. The quality of the finished item will be improved by observing the notes included in these instructions.

The cleaning up of most of the chassis should be left until the two halves are assembled as the unassembled castings are quite fragile. The only areas you need to clean up before assembly are the edges of the half-couplings which are where the two half-chassis are joined. Use a small flat file to remove any roughness being careful to keep all surfaces square. Next drill out the coupler pivot holes with a 0.5mm drill in the locations shown.



The two half chassis

are best joined with lowmelt solder but superglue can be used. I suggest clamping the soldering iron in a vice or '3rd hand' and having pre-tinned the chassis parts both on the couplers assemble them over the soldering iron as this allows them to be carefully mated to give the best alignment of the frame. The assembled chassis can be compared with the actual size plan shown here.



Check and if necessary adjust the alignment and overall dimensions - just place your assembled frame onto the plan. Clean up both the inside corners of the frame at the non-rounded end and the ends of the cradle castings which join to the frame. Fit one cradle to the frame at the non-rounded end square and vertical to the frame and as close to the end as possible. Solder in place underneath using speed and a heat-shunt if necessary to prevent the frame halves from becoming de-soldered. Crocodile clips make good heat-shunts. Clean up an area of the inside of the frame 18-20mm from the first cradle and fit the second cradle so it's square and vertical so that the space between the two is 19mm. The resin cast Vee skip can be used as a template for this and with careful application of a small elastic band or tape can be used as a jig to hold the second cradle in place whilst it is soldered

Next remove the brake platform from its sprue and trim and file away the sprue connection points and any flash with reference to the diagram provided. Offer this up to the frame on the rounded end between the second cradle and the coupler. If there is minor mismatch file the platform and coupler to fit but if this amounts to as much as 0.5mm you should check the position of your cradles and adjust if necessary.

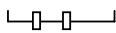
The wheels should now be fitted by carefully bending the frames and slipping the wheels in.

Continued on next page.....

At this point you have a decision about whether or not you want to include brake shoes and connecting rods, these may be considered too 'fiddly' for some and their concealed position makes their omission a relatively minor compromise. However if you decide to join the 'I'm crazy enough to put brakegear on a skip' club you need to remove the four brake shoes from the sprue, clean up and drill a 0.5mm hole in each one where shown.



Cut a 18mm length of the wire provided and bend a 1.5mm length at one end at 90°. Thread two of the brake shoes onto the wire through their 0.5mm holes. Bend a 1.5mm section at the other end of the wire at 90° in line with the other end. You should now have an assembly something like this. Make another exactly the same.



Fitting the brake shoe/connecting rod assemblies is achieved by slotting one bent end of the wire through the slot in the brake hanger from within the frame and then slotting the opposite side in. Then you turn the wire so the bent ends are facing downwards and very carefully bend the ends back so they are pointing back into the centre of the frame below each hanger.

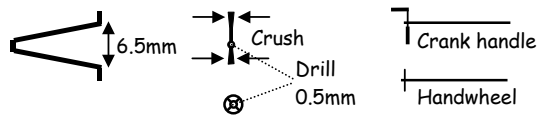
Position each brake shoe so that it is in line with its associated wheel and fix in place on the wire with a small amount of superglue. The two connecting rods are linked to the brake platform with a third piece of wire 25mm long bent as shown (actual size).



Bend the link wire around each brake rod and superglue the free end to the base of the brake platform.

Non-members of the 'I'm crazy enough to put brakegear on a skip' rejoin here.

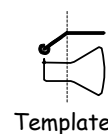
The next part of the assembly is the brake column. This is made up of very fine etched parts which need careful handling and should be bent ONCE only otherwise they may break. If you do need to significantly re-bend first anneal the part by heating to red hot in a gas flame and quenching in cold water. Carefully remove the main brake column etch from the fret with a sharp knife cutting onto a hardwood surface. Carefully bend to the shape shown along the areas of half-etch.



Two brake actuator options are available, a handwheel and a crank handle, the latter being more prototypical. Remove the selected part from the fret as described above. The handwheel need only to have its central hole cleared with a 0.5mm drill. The crank handle needs more preparation, as well as clearing the central hole you should crush the two flared ends of the handle side to side with flat bladed pliers until they are almost parallel giving them a more square cross-section. You can tin them with solder or just work them with pliers to make the two ends closer to a round cross-section. Bend up the longer end as shown. Cut a 15mm length of the wire provided and either solder or superglue the chosen actuator to one end fitting the wire through the hole and protruding 0.5mm. Feed the other end of the wire through the hole in the brake column and superglue in place with the actuator 4mm above the top of the column. The brake column mounts between the brake platform lower step and the end of the frame, offer up, check the fit of all four tabs, adjust if needed then superglue in place. The column should lean slightly away from the skip.

Clean up the solder joints with a small file and fill any cracks particularly on the couplers with solder or filler. Painting is best done at this stage.

Bend up and fit the coupler loops using the wire and template provided.



Blacken them with an indelible black marker. Alternatively you can use most proprietary coupler loops.

Remove any flash and sprue from the Vee skip part of the truck. This can be superglued in place. If you want to improve the appearance of the support brackets you can drill out the round sections at each end with a 0.5mm drill. The skip can be assembled to the chassis in either normal or tipped positions.

