5522 MODELS
FINESCALE COMPONENTS

Rocking W-iron mount

Thank you for your purchase from 5522 Models.

Background notes

This design was inspired by a long-standing dissatisfaction with the mounting methods of many types of W-irons used to achieve "compensated" wagon or coach suspension. The use of tabs to be twisted at an angle to secure the rocking part of the w-iron can give rise to problems of either:

(a) being too tight and not allowing sufficient freedom of movement to work effectively; or
(b) being too loose, and allowing the w-iron to move back and forth, or worse to move out of parallel with the other axle, resulting in a vehicle that derails or will not run in a straight line.

The use of an alternative pivot method solves both these problems.

Kit contents

This kit contains an etch with sufficient mounts to fit five vehicles. With each mount are four brass washers. You only need two of them to make up the mount. The other two are for your spares box, or more probably to replace sacrifices made to the Great Carpet God!

The kit also contains a length of straight rod, sufficient for the five mounts.

Assembly instructions

The mount does not have to be painted, and there is very little soldering involved. However, as with any etched brass parts, they should be thoroughly clean before they are soldered. This means that they are physically clean as well as chemically clean. Etched brass often has the remains of the etch resist used in the production process on its surface. Additionally, there may be oxidisation of the surface that starts naturally as soon as the metal is cleaned. Neither of these cause harm. To prepare the washers for soldering, I recommend that you clean them physically with a fibreglass "scratch" brush.

Etched parts can be cut from the fret using a stout sharp craft knife, a small chisel, or a pair of fine snips.

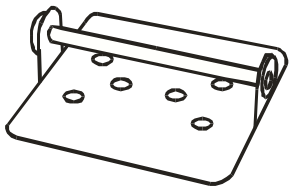
Assembly of these mounts is straightforward

1. It is a lot easier to clean the four washers for soldering whilst they are still in the fret than trying to hold them down separately with a finger whilst scrubbing at them with a fibreglass brush.
2. Remove a mount from the fret and separate the four washers. Remove all tabs, and place the washers somewhere safe. I use cheap metal eggcups from a poundshop. They are invaluable containers for various modelling tasks.
3. Prepare the mount. It is important that the rocking part of the w-iron is not soldered solid when you fix the pivot rod in place. Therefore it is advisable to use a permanent marker, soft lead pencil, or solder resist paint to coat the two tabs on either side of the mount. Coat both sides of the tab.
4. Fold the two tabs to 90° using the half-etched line on the inside of the fold. Do not use solder to reinforce the fold. A small degree of adjustment will be needed at a later stage, and the final assembly is held sufficiently rigid that these folds do not need strengthening.
5. This mount has been specifically designed for the dimensions of the Scalefour Society etched brass w-iron. This is of a width which is the same as the w-iron itself. The mount will therefore work for these w-irons and those which are narrower. In particular, the MJT make of w-irons have been identified as suitable.

   If the w-iron which you are intending to use does not have a pair of holes for a central pivot rod, then you will need to drill one on each side, on the centreline of the w-iron, before folding the sides up.
6. Make up the w-iron by folding it to shape, according to its instructions, including fitting bearings.
7. Check the supplied length of rod fits through the holes in the mount and the w-iron. It should be a running clearance, not too tight to restrict movement nor too loose as to have excessive slop. The rod supplied should be slightly over-size for both sets of holes, enabling you to open them up with a broach, drill or needle file to be a smooth fit.

8. Solder one of the etched washers onto the end of the rod. If there is any excess solder on the inside of the washer, clean it off with a file.
9. For the next stage, you may find it helpful to use paper washers to prevent the parts accidentally soldering together. I use cigarette papers. Pass the rod through the paper washer, one side of the mount, the w-iron, and then the other side of the mount. Slip another paper washer over the end, then finally an etched washer.

   Squeeze the arms of the mount together so that they hold the w-iron without it being tight, but without being able to move along the rod.
10. Solder the second washer in place, being careful not to allowed excess solder to lock the pivot solid.
11. Cut the excess length of rod off, close to the soldered washer. The w-iron and mount is now complete.



The completed mount assembly, w-iron not shown

12. You can fix the completed assembly to the vehicle by using a thick superglue or epoxy type glue. This can squeeze up through the holes in the mounting plate and help to "rivet" the plate in place. The grooves in the base of the mount will also act to lock the mount in place and keep it secure.

    My preferred method is to use a two-part epoxy glue as this allows time to adjust the mount whilst still giving a very strong bond.

    I also recommend using a suitable axle alignment jig to ensure that the axles are parallel after the glue has set. I use a Brassmasters jig, and leave the vehicle upturned overnight to ensure that the alignment is good.
13. Once the mount is secure, turn the vehicle over, admire your work and proceed to finishing the rest of it.

Further information

The Scalefour Society. For all modellers interested in a finescale approach. The Scalefour Society promotes the use in 4mm scale modelling of prototype dimensions for the track gauge and wheel profile. See www.scalefour.org for more information.

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For further information about the 5522 Models range please:

- visit our website at www.5522models.co.uk or
- email ***info@5522models.co.uk*** or
- write to:

  5522 Models
  Essex Cottage
  Redricks Lane
  Sawbridgeworth
  Hertfordshire
  CM21 0RL

We welcome any comments or feedback on our current or future models.

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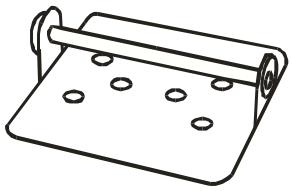

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  CM21 0RL

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