

The 2mm Scale Association
2-314 Functional W-Irons
To Suit Chivers Finelines N Gauge Wagon Kits & Other Plastic Underframes.

This etch has been designed to allow Association wheelsets on 12.25mm axles to be fitted to Chivers Finelines N gauge wagon kits whilst still retaining the plastic underframe detail. This provides a useful alternative to replacement wheelsets on axles around 15mm long as it gives you very free running in brass top hat bearings. The bearings are sold in packs of 50 under part number 2-041.

1. *It is advisable to construct these functional W-Irons before constructing the plastic Chivers underframe kit, as this will allow you build-in sufficient clearances as you assemble the plastic underframe.*
2. Without removing it from the etch, carefully ream out the axle bearing holes with a broach to just accept turned brass top hat bearings (part ref 2-041).
3. Solder in the bearings, ensuring they are properly seated in the half etched recesses.
4. Carefully file the thin projecting ends of the top hat bearings back flush with the etch. The coned bearing recess is very shallow so you will not break through to it.
5. Remove from the fret and fold axleguards down to 90 degrees.
6. Fold down strengthening ribs to 90 degrees. If using 7mm diameter wheels it will be necessary to shorten these ribs by 1.5mm at each end. This can be achieved by snipping out with cutters or by filing.
7. Test fit wheels and check for free running.
8. It is a good idea to chemically blacken the assembled unit with Carr's Metalblack / Birchwood Casey Gun Blue or similar.

The etch was designed to suit the first Chivers kit (BR Tube wagon) and has two 'wings' at each end of the baseplate which locate into the moulded plastic brake unit marks. If you prefer these may be snipped off flush at 45 degrees across each corner.

Some Chivers kits have location ribs for the plastic brake units. These will prevent the W-Iron units seating down correctly and must be carefully pared away with a craft knife. Only remove the portion where the W-Iron baseplate will locate – leave the outer ends to maintain brake unit location. The plastic brake shoe unit may need trimming to fit over the w-iron baseplate.

The width between inside faces of the plastic solebars varies from kit to kit. Usually some reduction in the plastic W-Iron thickness is required. This is easily achieved with a few strokes of a needle file. Keep offering up the solebars to the wagon until the etched W-Irons are a snug hit, then glue in position. The functional W-Irons may be secured in place with epoxy or cyano adhesive.