

W-Irons for 7mm Wheels - Assembly guidelines

What follows is a sequence of steps that are recommended to complete the assembly of a pair of w-irons for 7mm wheels. Alternative techniques are equally valid and in some instances the steps can be completed in a different order to achieve the same outcome.



Tools (recommended)

- Twist drills in 0.3mm and 1.0mm
- Small tapered reamer
- Soldering iron with solder and flux
- Small pliers / tweezers (2 off)
- Knife or etch tab chisel
- Fine files (for cleaning up tabs)

Other parts required

- 4 off top hat bearings
- Wheels of choice on 12.25mm axles*

Assembly

N.B. All the etched fold lines are on the inside of the bend. Solder construction is presumed.

1. Open up holes 0.3mm and 1.0mm whilst the fret is flat. Be gentle with the small holes because the thin parts can easily become distorted.
2. Fit the bearings with solder. The wide part rests in the half etch around the mounting hole.
3. Fold up the w-irons. Check the length with axles in place. Reinforce the inside bend with solder if desired.
4. Remove the axles and fold out the brake shoes/hangers.
5. Fold in the hangers. The top of the hanger part is designed to fit into the corner and against the side of the main part.
6. Temporarily fit the wheels and align the brake shoes both axially and transversely.
7. Remove the wheels and solder the joins.
8. Optionally fold the ends up and solder.
9. Bend the brake pull yokes according to the jig/guide provided. The bend near the middle is 90 degrees. The other is slightly less.
10. Fit two points at one end of the yoke through the small holes in the brake shoes first and solder.
11. Persuade the other end points into place and solder.
12. Check the wheels still fit well and spin freely. Adjust as required.

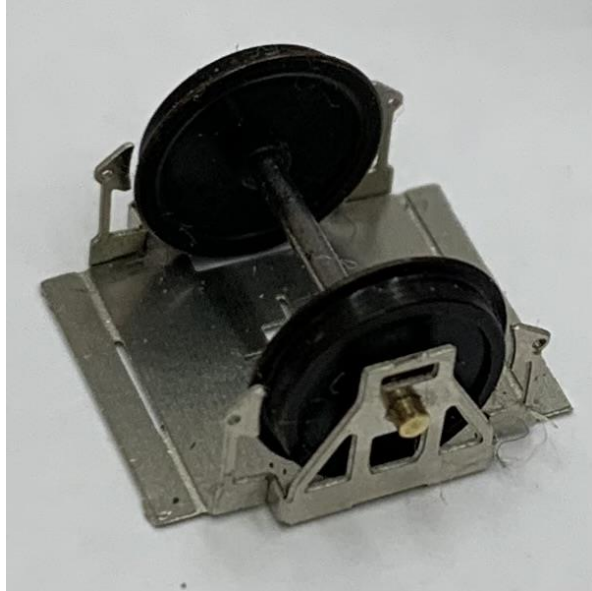
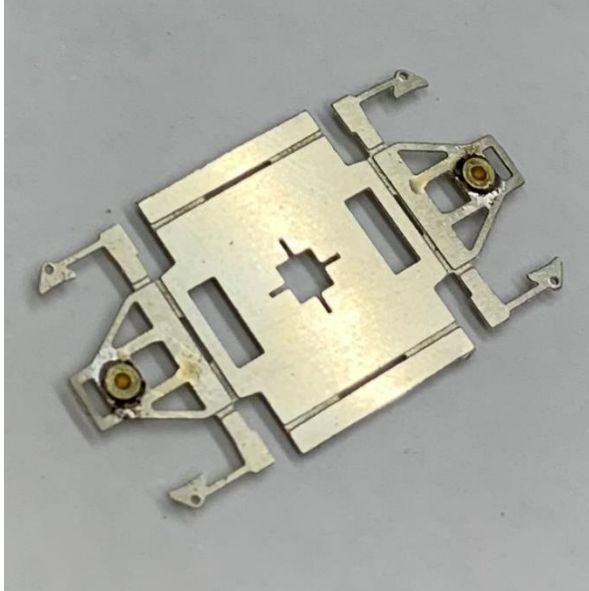
The etch frame is designed to work as a spacing jig for wheelbases in scale 6" increments. It can also be used to space a 6 wheeled chassis with additional w-iron assemblies. (In my experience a 6 wheeled chassis of this type will function reliably through sensible radius curves and B-switches without any more side play than already afforded by the small clearance found in a free running pinpoint axle and bearing cup and the track gauge, and without gauge widening.) There are also cross hairs provided on each w-iron assembly to aid alignment against marked centre lines on the underside of a vehicle body.

*The etch has been designed to suit 2FS wheel profiles. It has not been tested with the Association N Gauge profile wheels. It should work but it is possible that the openings to clear the flanges might need enlarging.

Pictures

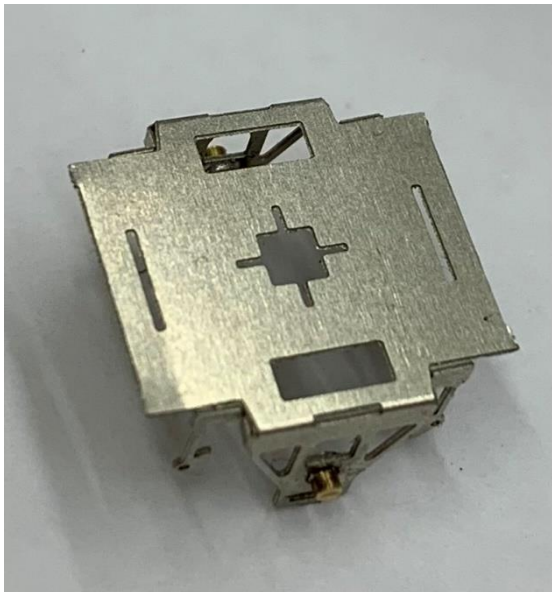
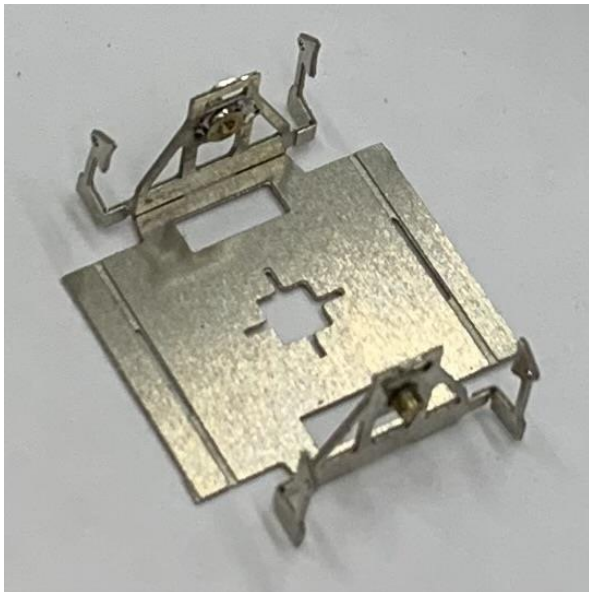
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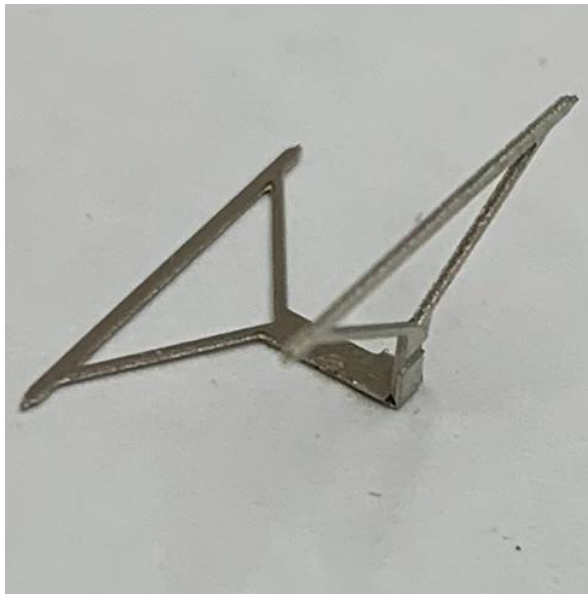
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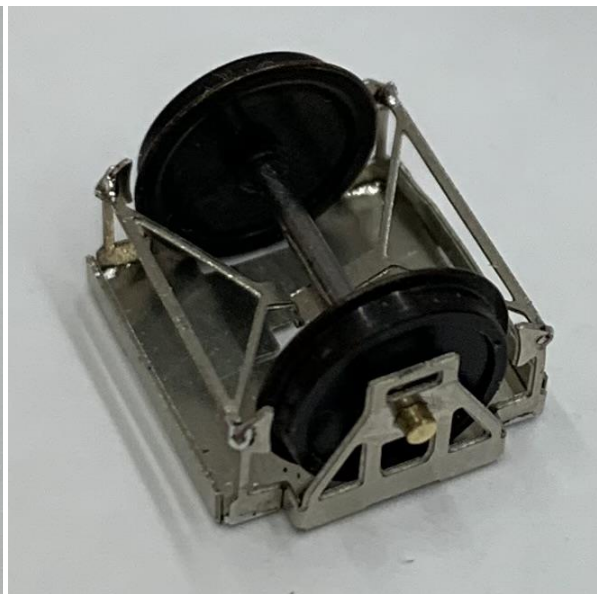
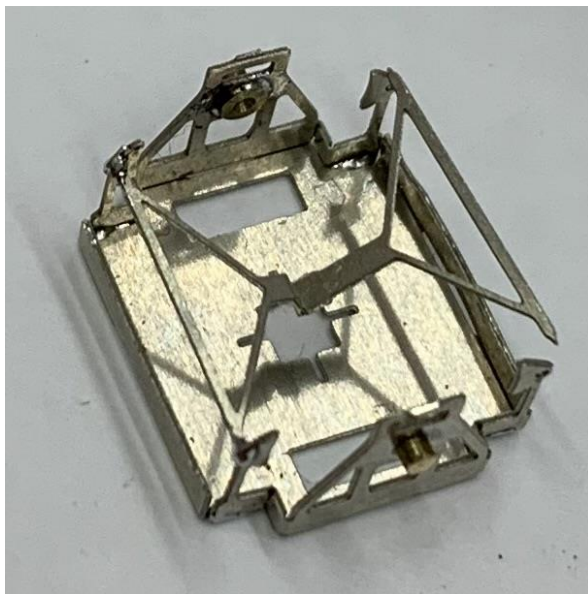
(6-8 not illustrated)

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10 & 11

12



Use of axle spacing jig. Observe orientation of brake pull yokes to match prototype.

