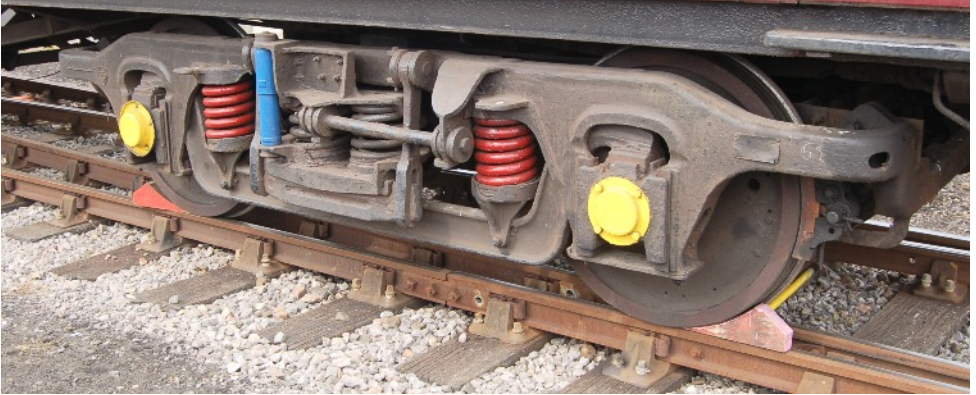


How to Fit Commonwealth Bogies to Farish Blue Riband BR Mk1 coaches

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BR Mk1 coaches were fitted with three types of bogie, the B1, the Commonwealth, or the B4. Most models produced by Farish have the B1 type. This is fine up to the late 50s, but from then on Commonwealth bogies were fitted to new stock, and sometimes as replacements for B1s when coaches were overhauled, particularly dining coaches.

The Commonwealth bogie can therefore go under any Mk1 stock other than stuff in blood & custard livery, unless it's running as modern era heritage stock. An example would be E21249 – the support coach for 60163 Tornado.

For any late steam era layouts, a good percentage of Mk1 coaches would be on Commonwealth bogies. However, although plenty of BR MK1s ran on Commonwealth bogies it's not a bogie that appears on any r-t-r models other than the Pullmans, but the bogies aren't

available separately, or interchangeable with the ordinary Mk1 coach bogies.

I decided to fit Commonwealths to some of my MK1s, using those available from Ultima/Etched Pixels. These are designed for pre-Blue Riband GF models, so are not a straight swap as the coaches have chassis rather than bogie mounted couplings. But like almost everything, they can be modified to fit the newer models.

It's possible to use the Ultima bogies pretty much unmodified, but keeping the bogie mounted couplings would involve removal of the chassis mounted ones. Do-able, but rather defeats the benefits of the chassis mount type which allow for closer coupling on straights by extending on curves. The turn limiting lug would also need to be removed from the chassis. And, modified or not, a spacer is required between the coach and bogie.

I decided to modify the Ultima bogies to make them directly swappable with the Farish originals. The big plus for me with that approach was that it didn't involve any modifications to the coach, so that it could easily be returned to

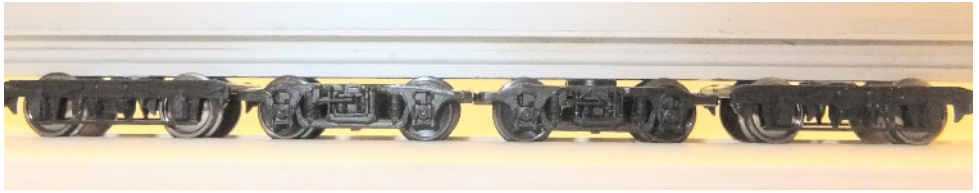
Requirements

Tools

- Knife/cutters to remove parts from sprue
- Small drill
- Square and round section needle files
- Glue
- Flat surface – e.g. small mirror

Parts

- Ultima Commonwealth bogies
- Ultima 7mm coach wheels



The original B1 bogies at each end with a straight edge showing the lower centre of the Commonwealth bogie (centre left) and the use of the head of the Ultima fixing pin (centre right) to match the heights.

its original state by re-instating the original bogies if desired.

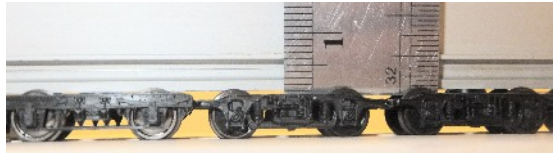
The bogies are supplied in kit form. Two sides and a bolster, plus coupling holders and pivot components. The Ultima instructions suggest using the original GF wheels, but they were written in the days of pre-Blue Riband coaches, and unfortunately the axles of the current wheels are slightly too long. However, the other suggestion is to use Ultima 7mm wheels. These have a shorter axle and fit fine.

The recommended glues for the bogies are Plastic Weld or Daywat Poly. Polystyrene cement doesn't work. I used plumbers pipe solvent as I had some to hand. Not so easy to apply with a delicate touch, so my gluing isn't pretty, but, as none of the areas to which it's applied are visible, it mattered not.

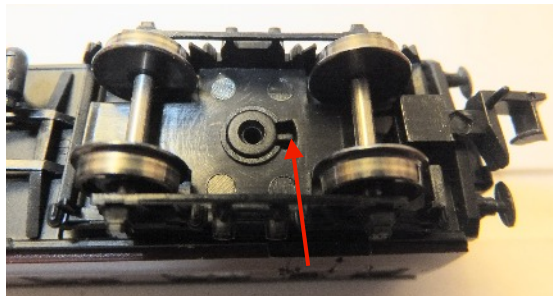
When assembled and fitted with wheels, the centre of the bolster is about 1mm lower than that of the original Farish bogie. Fortunately the head of the Ultima bogie fixing pin is about 1mm thick, and can be used as a spacer by gluing it on top of the hole in the bolster, then drilling it out.

The step by step 'how to' work is:

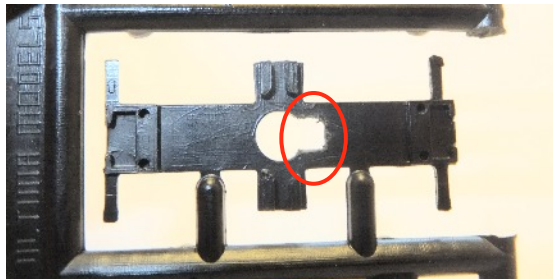
- Remove the original bogies and put to one side. Retain the original fixing pins.
- With the parts still attached to the sprue (easier to hold) use a square section needle file to make a slot for the turn limiter at the long coupling end.
- Remove the bolster from the sprue and cut off the long coupling end about 2mm behind the coupling mount. At each stage when removing pieces from the sprue always ensure all fixing flash is removed, and ensure all swarf is removed after any filing



The approximate difference in height of about 1mm.



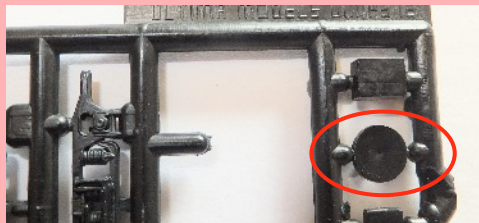
Original bogies in situ showing turn limiting lug on chassis



Slot to fit over turn limiting lug filed into Ultima bolster



Ultima bolster with coupling fitting removed, fixing pin head glued in place and cut/drilled to clear pivot and lug



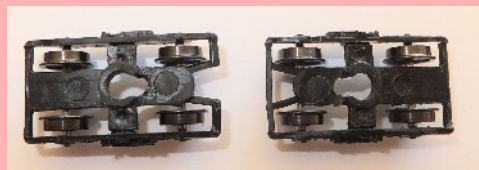
Fixing pin on kit sprue.



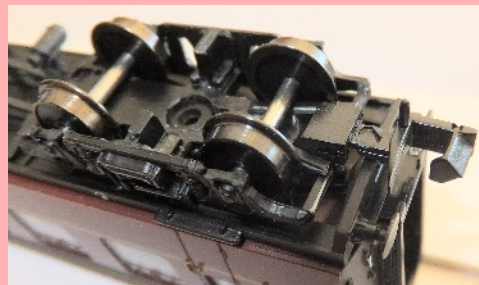
Cutting strip from top tab of sprue



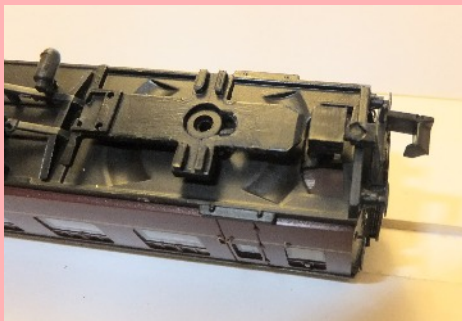
Bolster with auto-close up/open-out coupling mechanism operating strips attached



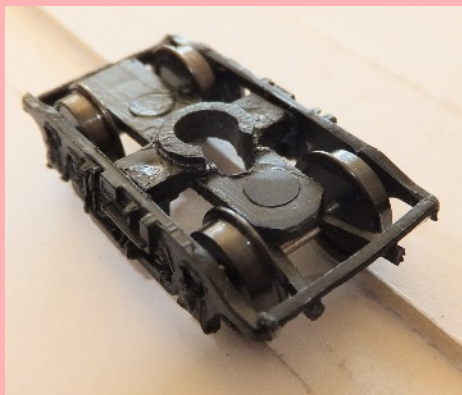
Two bogies – one with tie bar cut.



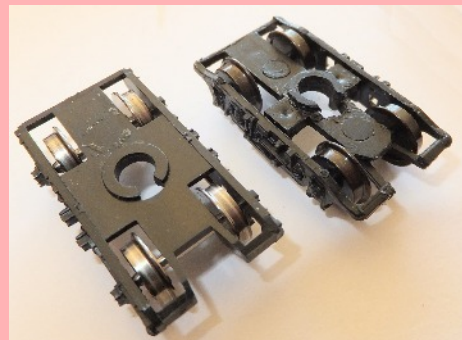
New Commonwealth bogie fitted to coach



Adapted Ultima bolster located on coach chassis



Bogie with end tie bar made from strip cut from sprue



Original and modified Commonwealth bogie

- Remove the bolster and cut the pivot fixing pin from the sprue.
- Remove the pin part from the Ultima bogie fixing pin and glue the remaining disk centrally over the pivot hole in the bolster.
- When fully dry drill a pilot hole through the disk then enlarge that hole with a round needle file to match the original in the bolster. Cut away that part of the disk over the turn restricting slot.

- Fit the bolster to the coach and check movement and clearances.
- Remove the bogie sides from the sprue. Note that they are handed.
- Assemble the bogie as per the instructions. Fit the wheels and adjust the positions of the sides to ensure they turn freely. Place the bogie on a flat surface to ensure it is square. Ultima suggest a small glass mirror. Leave to dry for at least half an hour.
- Create some 1mm (approx.) square section by removing a section of plastic strip from the label part of the sprue by cutting with large scissors.
- Use the strip to fabricate the bars which move the couplings and glue them in place, using the original bogies as a guide to their position. When the glue has dried adjust their position by bending if necessary. Cut more strip to fabricate an end tie bar, then glue it across the end of the bogie and to the coupling bars. When the glue is thoroughly dry cut away the overhanging ends of the coupling bars and the section of the end bar between them.
- Fit the bogie to the coach to check movement and clearances.
- If all is well, use the original bogie fixing pins to keep the bogies in place.

The photos below show completed new bogies fitted to coaching stock

