

FR6 – Bogie Steps for Dapol Class 121 v1.0

This etch provides steps that are missing from the bogies on the Dapol Class 121.

These have been designed to be as narrow as possible given that the Dapol bogie is already quite wide, but even so adding these may result in the bogies fouling platform edges and the like if they are close to the loading gauge.

For beginners, general instructions on building these kits can be found in a separate document. For experts, or if you don't like reading instructions and just want to know the suggested order, you can simply **follow the text in bold** and dip into the detail where necessary.

Assembling the etch

The etch contains six sets of steps. One pair of steps goes at the outer end of each bogie, and the remaining two go at the inner end of the bogie under the guard's compartment. Each set of steps comprises two steps joined by what we will call two connecting strips. The top step has a locating pin attached. Due to the difficulty of accurately drilling two locating holes in the Dapol bogie, we decided to use just one locating pin and to align it by eye whilst the (slow setting) glue dries.

All **half-etched fold lines are on the inside** of the fold.

1. **Remove one set of steps from the sheet** by cutting through the tabs that join the steps to the fret, then file away the remains of the tabs.
2. **Apply solder cream** to the fold lines between the steps and the connecting strips.
3. Hold the top step in a pair of pliers and whilst carefully holding the remaining pieces, **bend the top step** 90 degrees taking care to ensure that the locating pin is not bent during the process.
4. Hold the connecting strips in the pliers and **bend the bottom step** 90 degrees.
5. Take some time to **ensure that the steps are parallel and the entire assembly is square**.
6. **Solder the joints** by applying an RSU probe or soldering iron to the rear of the fold lines where you previously applied the solder cream.



Fitting the Steps

7. **Clean and paint the steps**. If you prefer you can paint the steps and bogie together at the end.
8. **Remove the bogie side frames** by unclipping them at the coupling end. It is sometimes easier to remove the entire bogie first by simply pulling it away from the body.



9. Using a 0.4mm drill in a pin chuck, **drill holes for the steps** in the bogies where the bogie frame narrows to a "V". Remember that one bogie has a pair of steps each end and the other only has steps at the outer (coupling) end.

10. Hold the step assembly in a pair of tweezers and **apply glue to the locating pin and to the backs of the connecting strips**. We recommend using a slow setting glue such as Araldite or Serious Glue.

11. **Insert the locating pin into the pre-drilled hole** in the bogie and use the tweezers to align the steps. Make sure it remains in position as the glue dries.

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Change History

V1.0 – Initial release