



# EDM Models

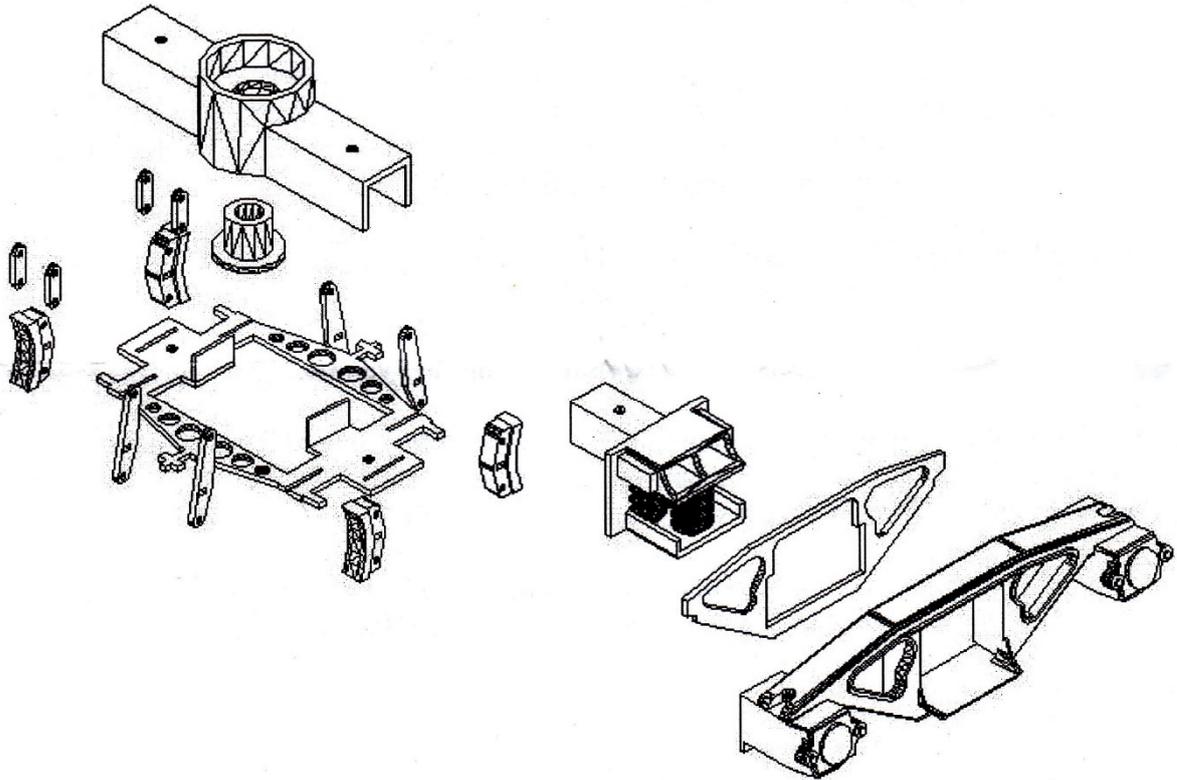
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## SAR Cast Diamond Frame ( Bettendorf) Bogie.

A kit for 0-16.5 and 0.14.

This kit is designed and manufactured by C.M.E., and marketed by EDM Models.

1. The castings are made from a high silica brass with low shrinkage. This gives clean precise castings, but must be worked with sharp tools.
2. Carefully remove all the parts from the sprue using a fret saw with 40 or 60 T.P.I blade. The closer you can remove the sprue, the less filing you will have to do.



3. Check the bogie sideframes, and clean out the axle holes with a sharp 2.1mm drill. Do not deepen the holes at this stage.
4. Ensure the bolster end fits through the etched inner sideframe, and check the fit of both parts into the cast main sideframe. Do not hold the bolster end in a vice across the flats crushing the springs, hold from the sides. When all three parts fit, solder the inner etch to the frame, clean up and then solder the bolster end.

5. The bolster needs to be shortened to suit the axles you are going to use. For the supplied Bachmann wheels, and most 16.5mm gauge axles, being 26.0mm long, the bolster should be carefully filed at each end to an overall measurement of 22.6mm.

Clean through the holes with a 0.7mm drill.

For 0-14 wheelsets with shorter axles the bolster should be shortened accordingly. When reduced to less than 22.6mm new holes will have to be drilled through the bolster and bolster end.

The bolster ends should 'rattle' in the bolster, but not too much. Each bogie side should be able to move up and down by a couple of millimetres. If the fit is too slack nip the end of the bolster in, or file down the thickness of the bolster.

Fit the etch brake hanger. For 0-14 the hanger needs to be made narrower by filing the relevant faces. There are small half etch lines to guide you. There are two tabs on the inside to align the etch. Solder together ensuring the hole remains clean. Do not fit the brake shoes or hangers at this stage.

6. Dry assemble the bogie with the wheelsets in place. The wheelsets should be a free running fit with the pin holes aligned. If they are not, gradually deepen the axle holes with the 2.1mm drill. Keep checking, you cannot go back if you drill too deep. Use the larger diameter (0.65mm) pins to locate the parts together.
7. Once the fit is good the brake blocks and hangers can be fitted. note the brake blocks are set away from the wheels in order to accommodate the compensation movement. All can be painted before final assembly. The usual colour for frames and brake gear is red oxide or black, wheels are black, some springs are yellow.
8. Fit the pins to hold everything together. the two sideframe should have a small amount of movement between them. This compensation is important to keep the long wheelbase of B and DZ wagons in contact with the railhead at all times.
9. The bogies are secured with a 10BA. x 1/4" cheese head bolt. The sleeve should be tightened down to the chassis; the bogie should be free to rotate.