



Tri-ang Replacement Bogie

Coupler Mounting

If you have ordered the optional coupler mounting, then before installing the bogie, fit the coupler to the mount using the supplied short 2mm screws. The coupler is attached below the mount.

Side Frames

If you have purchased side frames for the bogie, this is the time to attach them. There are two polystyrene pick-up bolsters that extend out each side of the bogie for attaching the side frames.

Carefully position the side frames, one at a time and use a small amount of Superglue to tack them in place. Only glue the side frames to the plastic bolsters, do not attach them elsewhere. Once the Superglue is holding, then use a full strength epoxy adhesive, such as Araldite, to glue them securely in position. The Superglue should only be used to tack them in place, do not rely on it to hold the frames permanently, as it will not hold over time.

Other Fittings

Other items, such as additional pickups, or replacement wheels should be fitted before fitting the bogie.

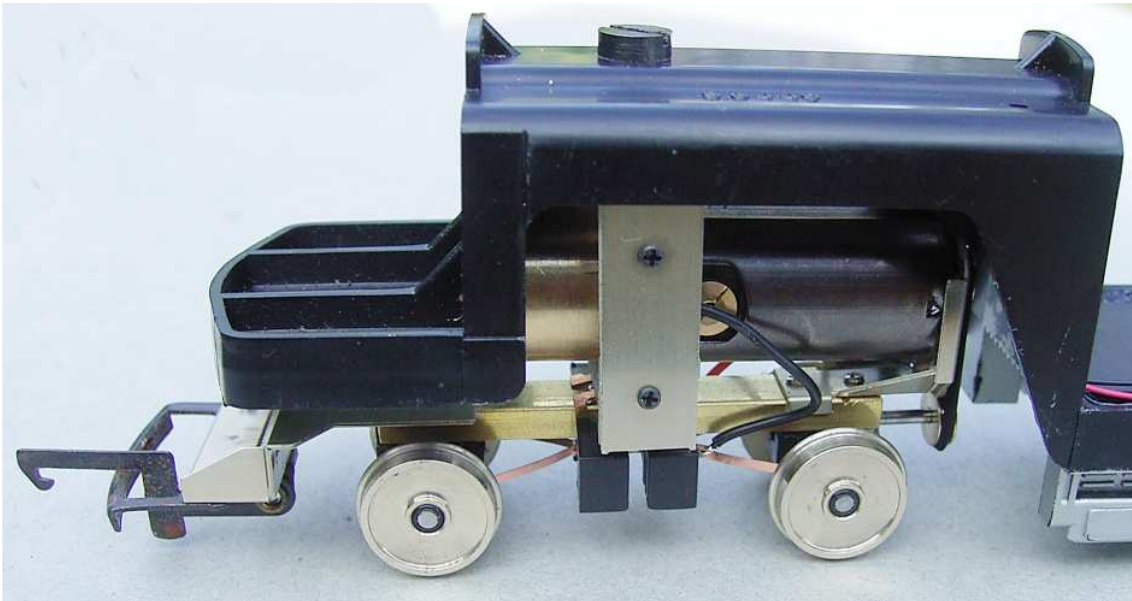
Fitting the Replacement Bogie

The Hollywood Foundry replacement bogie is designed to be attached in exactly the same way as the original Tri-ang bogie, using the same Tri-ang screw.

However the replacement bogie does not rotate around the fixing screw like the original did. Instead, it rotates via a spring tensioned mount down at the bottom of the mounting frame. This method cures the problem where the original bogie tries to 'wheelstand' under load, thus losing traction.

Align the mounting frame in the model, attach the Tri-ang screw, and fasten it tightly, making sure the frame is at right angles across the model. The belt drive end of the bogie should face the rear of the model.

The following photo shows the bogie mounted in the frame of a Blue Pullman power car:



Attaching Pick Up Leads

The leads from pick-ups on the rear bogie should be connected such that the leads go to the same side of the model. If the pick-ups were fitted according to instructions, the red lead should be on the right side of the model when viewed from the driver's perspective. The leads can be soldered directly to the solder tags on the motor of the bogie. In the photo above, the leads can just be seen to the bottom right of the photo, on their way to the bogie.

DCC Considerations

Any DCC decoder selected for this model should have a peak current rating of 1 ampere minimum. The leads from the pick-ups will need to be isolated and connected to the leads on the decoder. If the decoder uses NMRA standard colour coding of the wires, then the red leads on the model connect to the red lead on the decoder, and black pick-up leads go to the black lead on the decoder.

The orange lead from the decoder should go to the motor terminal that previously had the red leads attached, i.e. the right hand side of the motor when viewed from the driver's perspective.

The grey lead from the decoder attaches to the left side motor tag.

Adhesion

Adhesion is the ability of the power bogie to transmit power to the rails. It is primarily a function of the weight on the wheels and the amount of grip the wheels have to the rail.

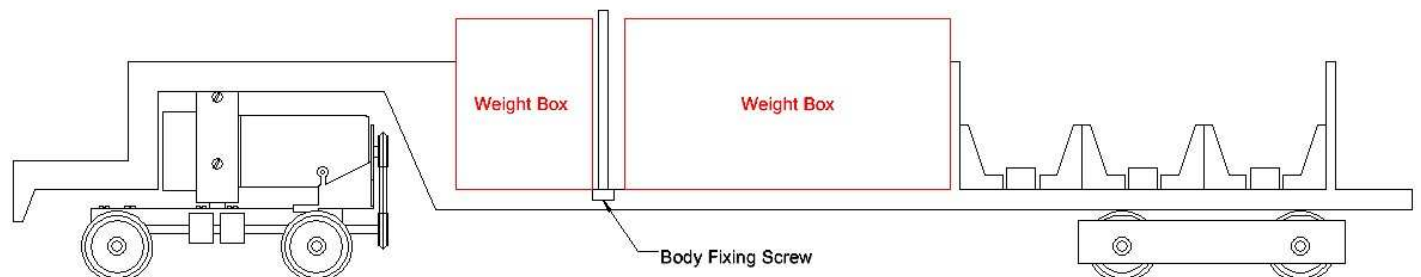
The original Tri-ang bogie actually had quite good adhesion qualities, due to the knurled surface of the wheels. But that same knurled surface was excellent at gathering dirt and other nasty crud. The accumulated dirt eventually causing poor running and slippage.

The replacement bogie has solid nickel silver wheels which are less prone to picking up dirt and are also made to a finer profile, the NMRA Recommended Practice RP25, with a wheel width of 110 or 2.75mm. These wheels will track through modern points far more reliably than the old ones.

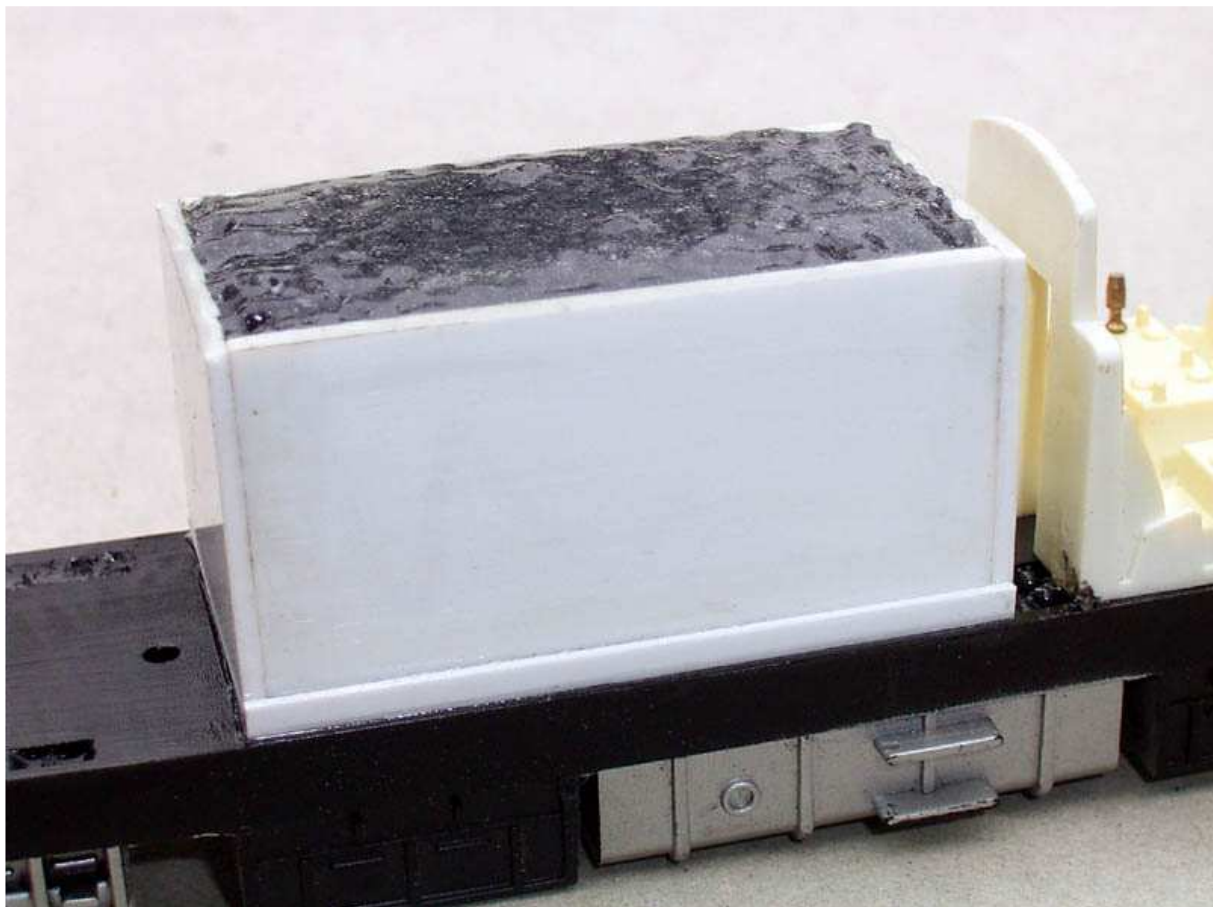
However, to pull a reasonable load, the adhesion needs to be increased, and the best way to do this is by adding weight to the model.

Because the Tri-ang models usually power only one of the bogies, the other bogie is simply carrying the weight. As a result, any weight that is added to the model needs to be as close to the power bogie as possible. Any weight that is [placed over the rear non-powered bogie is really wasted, as it does not contribute to the tractive effort and only increases drag, thus slowing the model.

Unfortunately, because of the construction of the Blue Pullman frame, the only available space is in the middle of the model. The solution is to make up two weight boxes as shown in the following diagram. These can be made from polystyrene sheet of around 1mm thickness, made 28mm wide and 25mm high, with an open top. Fill these boxes with lead shot and then dribble Araldite over the top of the shot to seal it. Don't forget to allow space between the boxes for the body fixing screw.



The following photograph shows a single weight box fitted to a Blue Pullman model



Further improvements to the 'roll-ability' and running of a Blue Pullman train can be obtained by exchanging the original wheel-sets for new nickel silver sets available separately from Hollywood Foundry. It is also worth considering using the prototypical practice of a power car at each end of the train for better performance.