

## **INTRODUCTION.**

Contained in this file are written instructions to assemble and complete the Tiny Schenectady Model Works 0-6-4 Mason Bogie kit. Please note that this is NOT a professionally designed kit, but rather a passion project and be subject to flaws and fitment issues in the way a professional kit may not. Please familiarize yourself with these instructions before purchasing your Chassis. It should also be understood that this model has been resized to fit to the unique shape of the Bachmann Chassis and within the tight loading gauge of my layout and does NOT represent a specific Mason prototype—but rather stands as a plausible “What-If” model, largely inspired from the South Park Bogies.

### **Preparing Your Chassis.**

The appropriate chassis for this project is the current release of the Bachmann USRA 0-6-0. This shell *may* fit the older chassis, but it is not guaranteed. To prepare your chassis, first remove the original shell. The tops of the steam chests must be clipped off to fit the kits steam chest. Clip the the top of them off parallel to the height of the weight in where it meets the steam chest—taking care to not damage with the valve gear and stems that *will* be reused. Snip off the baker radius gear as shown in the pictures to better align your model with Walscheart valve gear as typically used on Mason Bogies. If so you choose, you can remove the valve gear entirely to represent Stephenson’s gear which

*some* Bogies were equipped with, but take note that the model is NOT designed with such a modification in mind. Next—grind off the molded on air tanks and air compressor and snip off the power reverse cylinder. After that is done, your chassis is prepared UNLESS you plan to fit your model with DCC, though I'd recommend against this as the chassis is a poor candidate to receive it—though it *is* possible as seen on my example.

### **Painting and Prep.**

Prepare the model as you would any other 3D printed model. You may choose to sand and fill it to reduce layer lines. I used the handrail stanchions from a rivarossi 4-4-0 for my stanchions which put them at the perfect height to tuck under the bell mount. All accessory holes use a 1/32nd bit, and all wire holes use a number 18 bit. Mounting holes for all are included in the print. The shortest length Tichy grab irons are used for the cab handrails, and Tichy stirrups are used for the cab stirrups. I recommend fully painting and decal-ing the parts as individual pieces, with all of the boiler fixtures staying as one piece—save for the bell which should be assembled later due to its fragility. The steamchests unmodified will interfere with the travel of the piston rod as it stands, so they must either be clipped vertically at the front to clear them, or have a hole drilled to allow them to travel through. I modeled them in their entirety so the solution can be left in your hands.

## Final assembly

Once your model is painted and decaled, you can begin final assembly. The steam chests will accept a Precision scale 31329 for the lubricators. Rough up the stock steam chest with a hobby knife, and then the inside of the kit steam chest. They can then be attached with PVA glue or epoxy, but a flexible adhesive is strongly recommended. Attach the tender tank to the frame/firebox assembly, then line it up as straight as possible with the chassis. You can either drill a hole in it and replace the stock screw at the bottom of the chassis with an extended one, or epoxy the assembly in place. I then recommend attaching the boiler assembly to its slot on the cab with a flexible but robust glue such as PVA in case the model ever needs to be taken apart for maintenance. Once both are dry, slather the smokebox course of the chassis block in adhesive and fit the boiler assembly over the Chassis block, keeping it straight while aligning the cab with its imprint on the frame assembly. The pilot will sag if it is glued on as it stands, so be sure to line it up carefully and support it with a shim under it—preferably while the model sits on rails as to make up for the flange height. A section of wire should be placed between the reverser rockers on the bell and the valve stems, then painted to match the valve gear. Finally, fit the trailing truck joint first to the trailing truck, and then to the frame assembly with the provided hole. Stock screws from the 0-6-0's general assembly and Tender can be used, but will need to be turned and ground down. This can

easily be done in a drill chuck with a file. Fit the truck with and microtrains axel with 36" wheels, and a microtrains 1015 coupler box into the coupler pocket slot on the truck. Finally, screw the truck into the frame, and your Mason Bogie is complete. Enjoy!

### **Extra tips and tricks:**

For your paint, you may want to do a green as seen on my example if your model represents a Bogie of the late 70's. I used Vallejo Camouflage Olive Green as a base color, and I think it turned out nicely. I cannot in good faith release the decals I made for them as they're direct edits of the work of David Fletcher. However, I do order my decals through Fusion Scale Graphics if you're in need of a supplier. Masons of the mid seventies are suspected to have been done in a brown/lake color, as seen on the DSP&P's Tenmile. Of course, this goes for as-built bogies. There are fantastic references for rebuilt and repainted bogies found in David Fletcher's catalog of models, and precision scale makes alternate cabs for Bogies that may also fit this model with some modifications. This bogie could also be modified to accept the diamond stack from my Porter if you're looking for some variation. The coal bunker extension is also intended solely to hide extra DCC components, so you may elect to not affix it to your example and fit an etched coal guard to truly invoke the spirit of the DSP&P bogies.