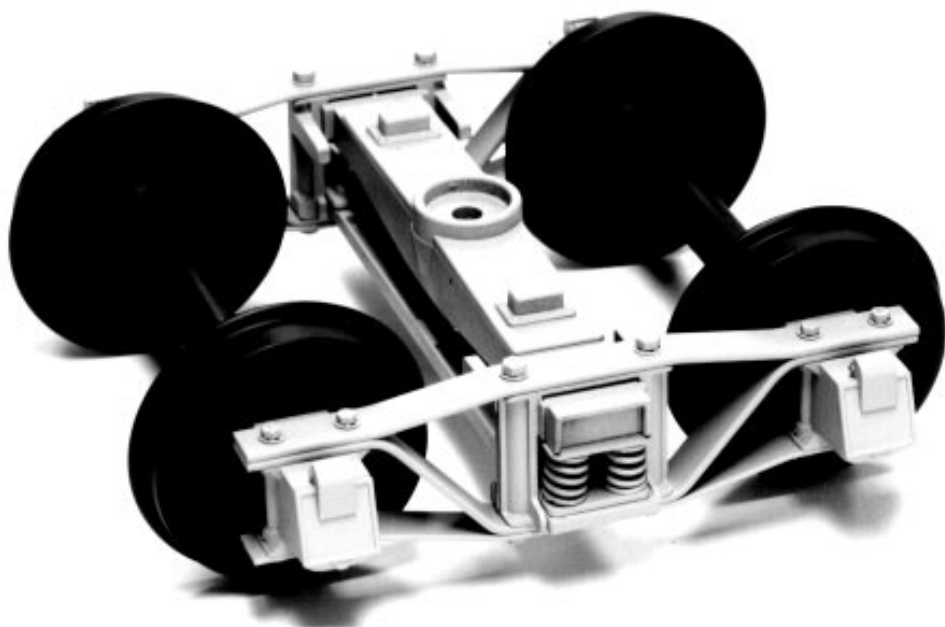


# 1" Scale Railroad Supply



## **Assembly Instructions**

### **1" Scale Arch Bar Trucks**

**Kits # 4100 and # 5100**

**Rev. A**

**1" Scale Railroad Supply P.O. Box 1931 Ferndale, WA USA 98248**

## **Instructions for Assembly of #4100 and #5100 Arch Bar Trucks**

1. File or Belt Grind all die cast parts to remove flash. File very ample clearance between the ends of the bolsters and the openings in the center columns, then round the inside top and bottom corners of the bolster where it slides in the center column so that it can 'rock' as the truck rolls along the track. If the bolster is not very free to slide up and down in the center column, then it very likely will gall and seize in the opening and may break off. Also, file the sides of the half bearings where they fit into the journal box backs for a free fit. Finally, paint parts as you desire keeping in mind that the parts may have residual parting compound or oils on them. Be sure to clean them thoroughly with mineral spirits or a strong detergent before painting !

2. Tap the holes in the journal boxes and backs with a 4-40 thread tap, then install the half bearings and the journal box backs. ( Hint : Use silicone calking to seal the edges of the journal box back to keep lubricating oils from leaking out of the journal box in operation ). Secure the journal box backs with the 4-40 x 3/16" flat head screws. Next, install the journal box lids using the 1/16" diameter lid rivets furnished. Tap the four holes in each center column with a 6-32 thread and assemble the sideframes as shown in the illustration. The ends of the arch bars can be rounded with a file to match the profile of the journal box mounting pedestals. Place a nylon thrust washer on each end of the wheelset axles and slide them into the journal boxes. Finally, install the bolsters and spring planks.

3. Select the proper spring combination using the information on the back of this instruction sheet as a guide, and construct a 'spring sandwich' using the upper and lower spring retainers to enclose the springs. Compress and insert into the opening between the bolster and the side frame. Be sure that the upper spring retainer is oriented so that the wide flange faces out.

4. Mount your trucks to your car using the 5/16" allen head shoulder bolt and steel thrust washer supplied. Your trucks are now ready to enjoy. The bearings in these journals are lubricated by placing a bit of wool waste or felt in the well of the journal box so that it touches the bottom of the axle, and then keeping it soaked with oil.

Every freight car truck kit purchased from 1" Scale Railroad Supply comes with enough springs to accomodate a wide variety of loading conditions. This is made possible by the inclusion of 20 standard springs and 4 springs for heavy loads so that the kit builder can tailor the suspension on each truck. Light springs are available (specify when ordering) to handle lightweight cars under 60 lbs gross weight. It is very important to properly spring the trucks for the specific car and anticipated loads. Springing a car too light or too heavy will limit flexibility of the truck and possibly contribute to excessive derailments, poor performance, and failure of castings due to excessive track vibration. About 1/8" of clearance between the top of the bolster and the top of the side frame openings is desireable, as this ensures that track vibration is being absorbed by the springs and not by the bolsters. Refer to the instructions on the next page for further details on truck springing.