

M-15k Brake Arrangement Diagram

The M-15K had a complex brake arrangement, as illustrated by this schematic of the levers.

Note: This Diagram is posted in the File Section under Freight Car Brake Info on the Steam Era Freight Car Yahoo Group. Courtesy of Robert Witt

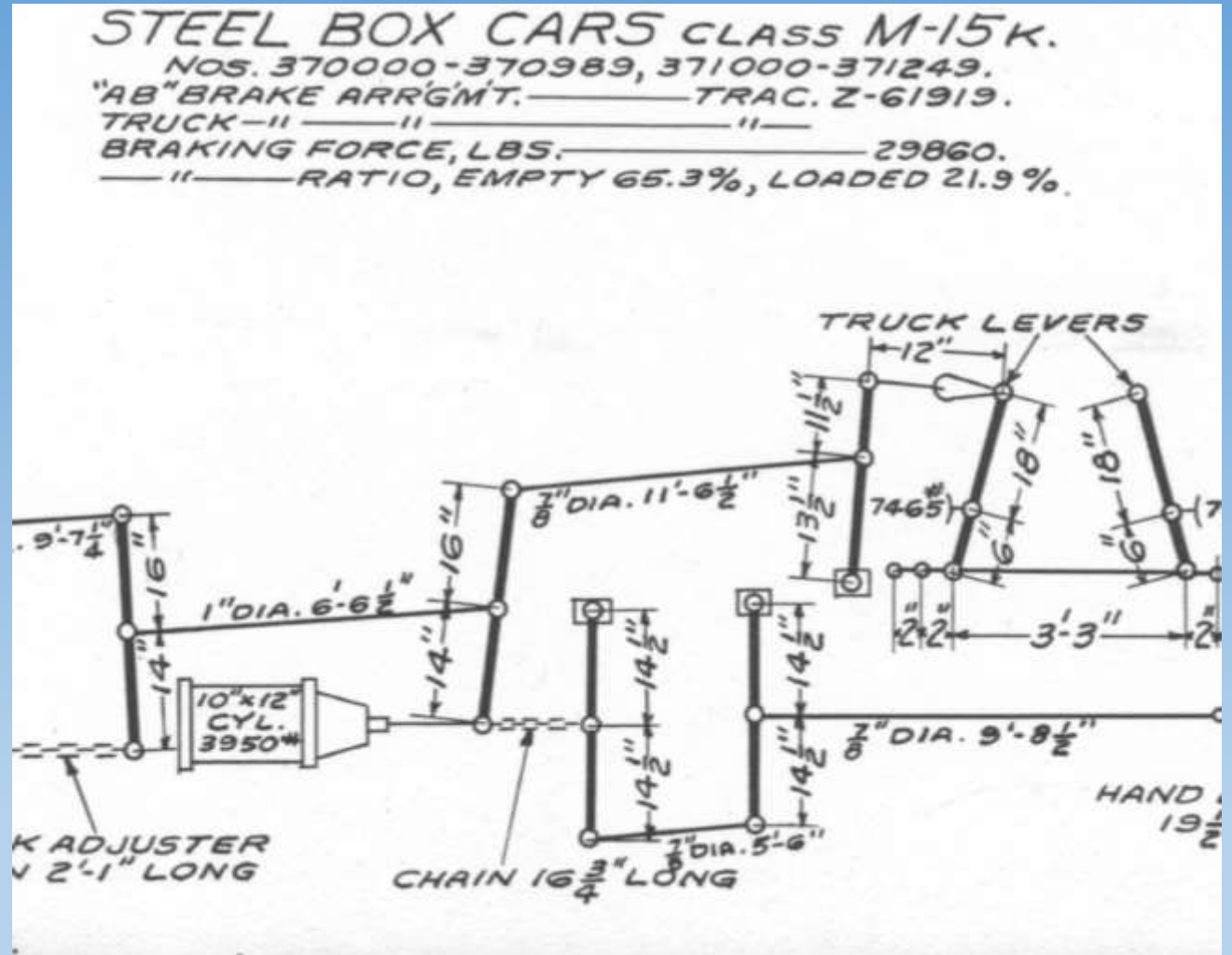
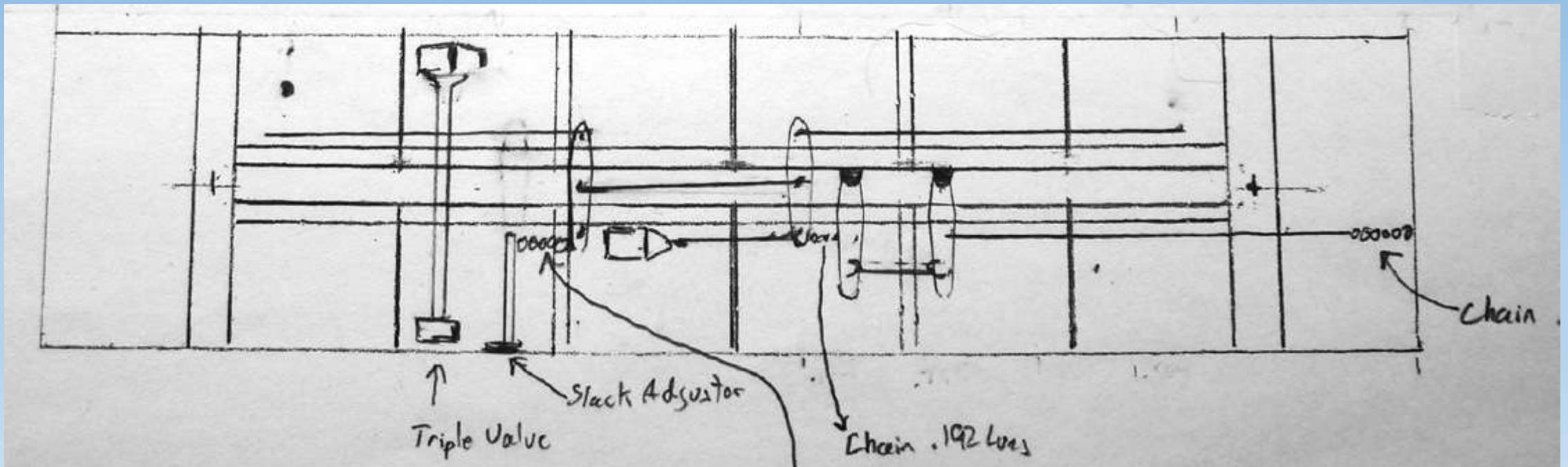


Diagram Courtesy of Robert Witt

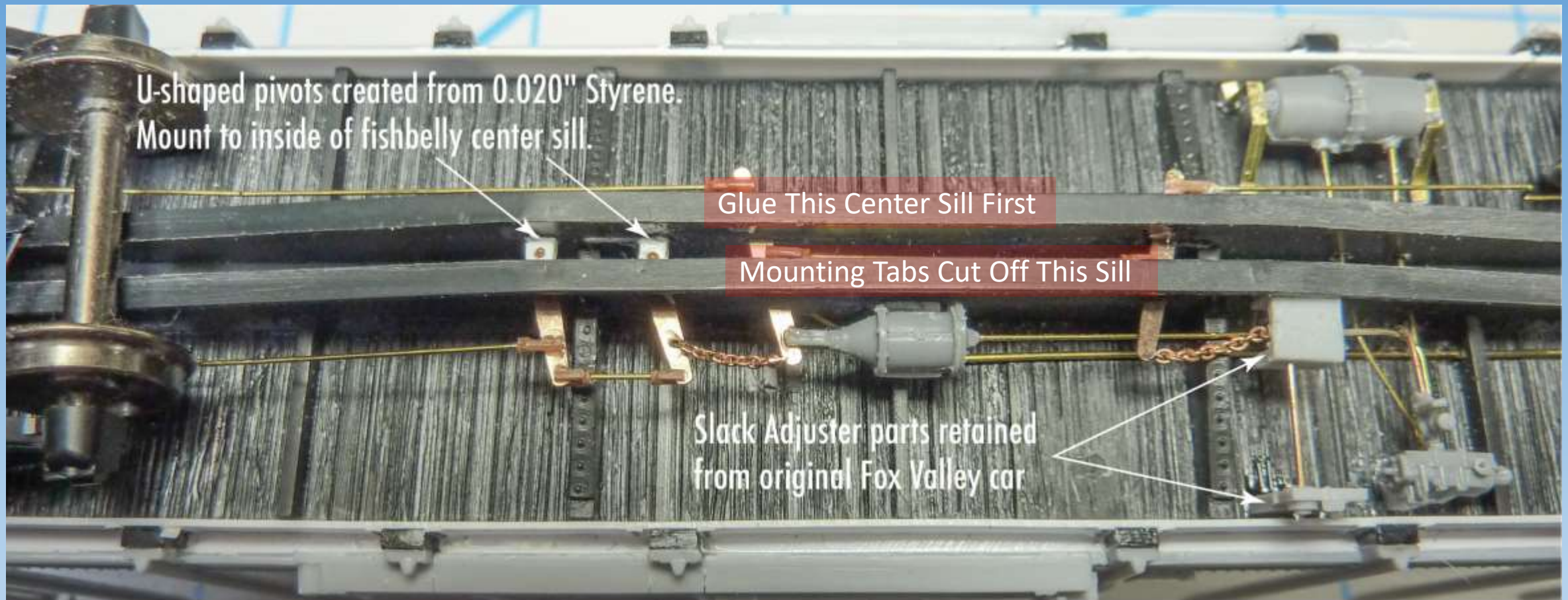
Drawing of Brake Arrangement to fit Accurail underframe

Based upon the brake arrangement diagram, I drew a working diagram of the layout of items and how to fit them in.

View From Top Down



Modeling the Underframe

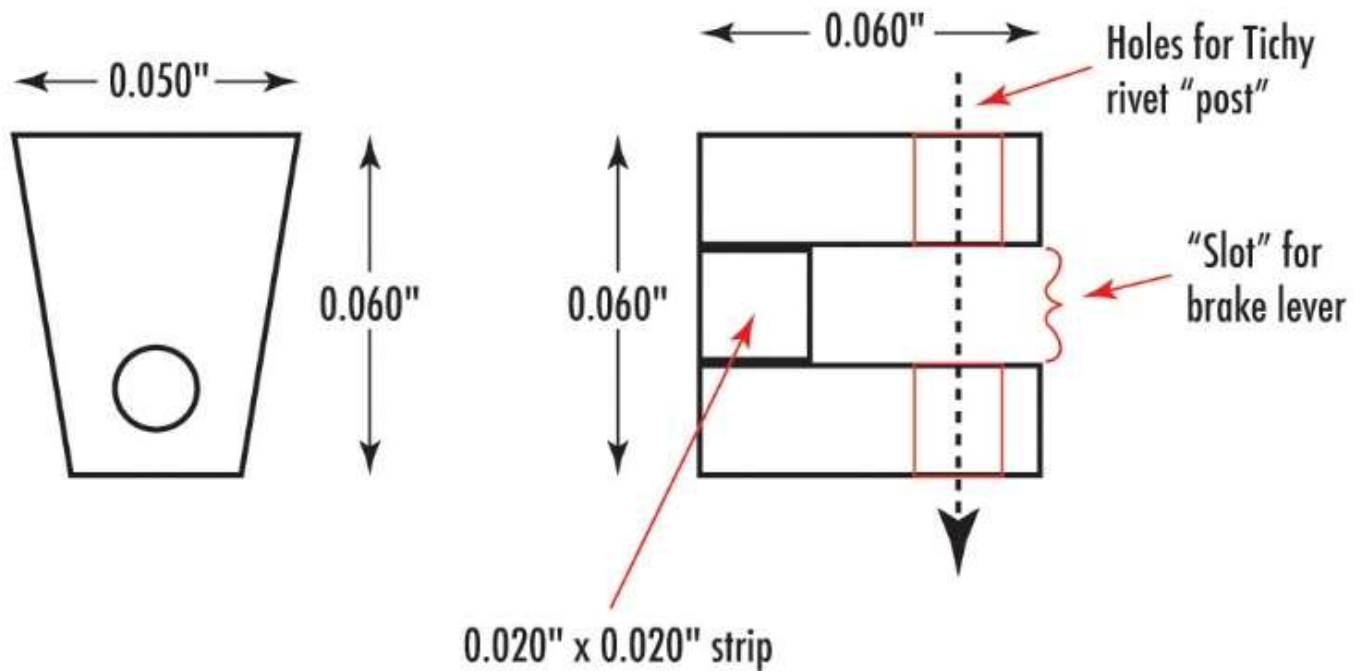


To model the underframe I made a couple of pivots that mounted between the fishbelly center sills. I created two u-shaped pivots from styrene and mounted them to the inside faces of the center sill on the same side as the brake reservoirs. Using the measurements from my drawing, I marked the location of the components to ensure everything would fit. I first located the AB valve, reservoirs and slack adjuster, checking that they aligned properly for the brake levers and piping. Tichy brake components were used as well as Yarmouth Models etched brake levers where applicable.

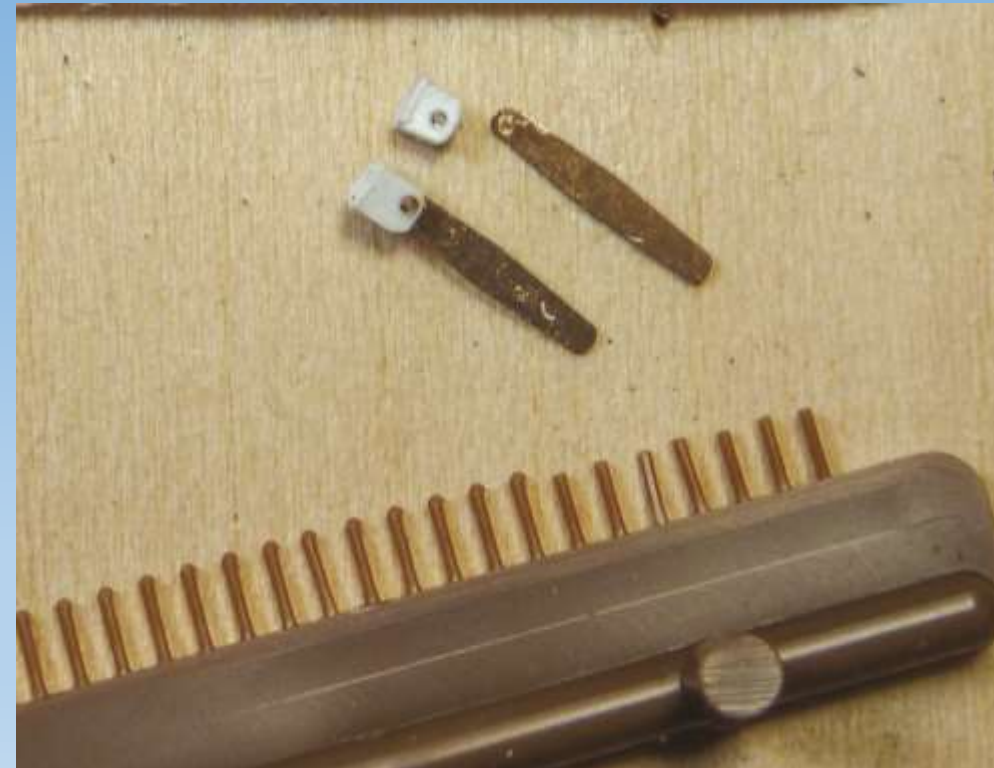
Making the Brake Clevis Pivots

Why Styrene & Not Brass

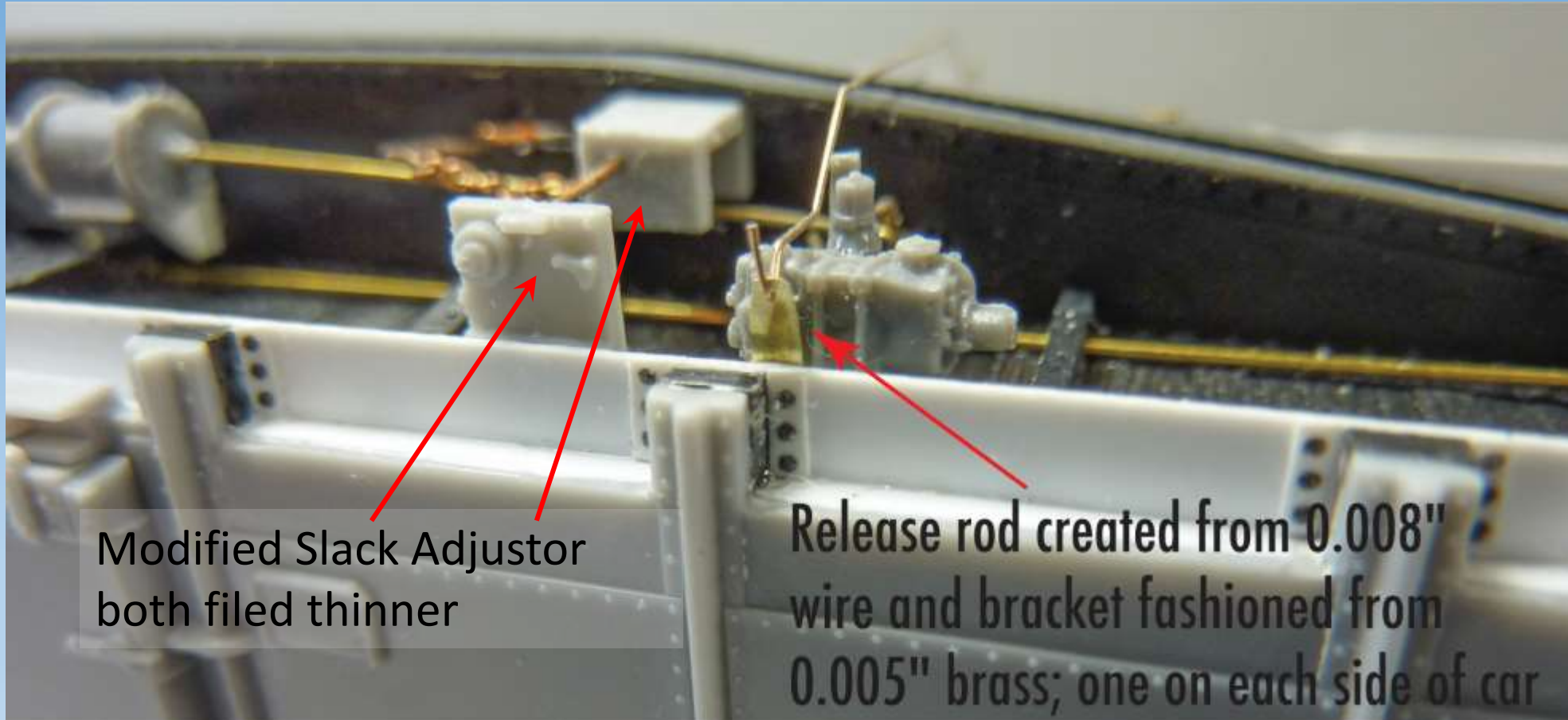
This sketch illustrates the brake lever pivots created from 0.020" styrene (or thinner brass if one chooses) as shown in the photo at the bottom of the previous page.



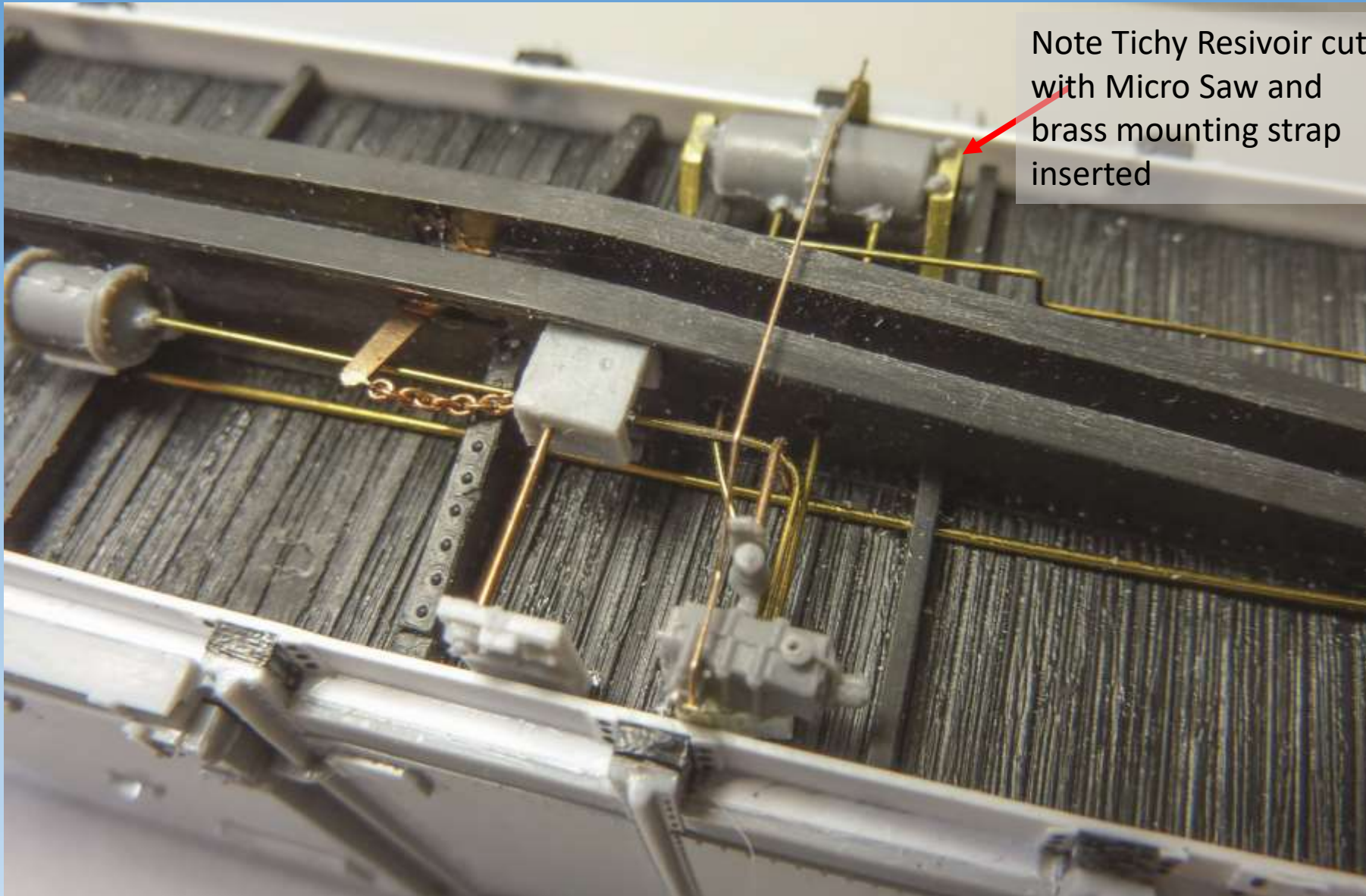
Two brake lever pivots with Yarmouth levers drilled to accept Tichy .020 rivets



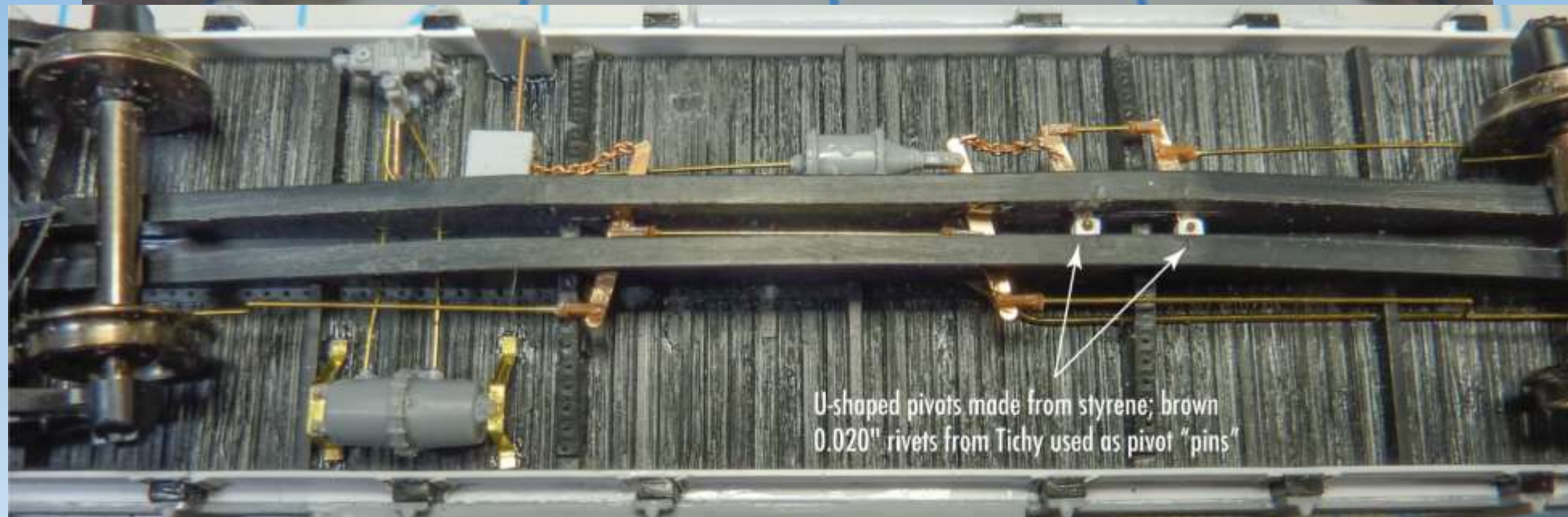
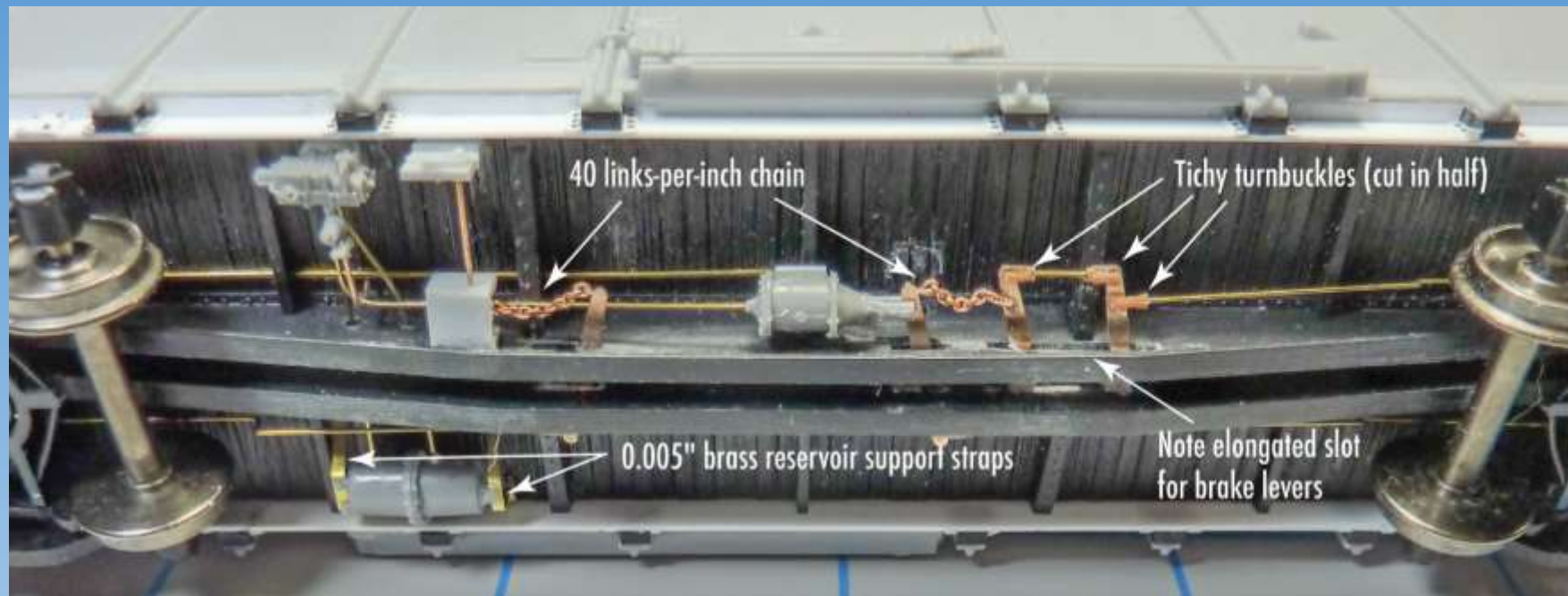
Release Rod Mounting Details & Slack Adjustor



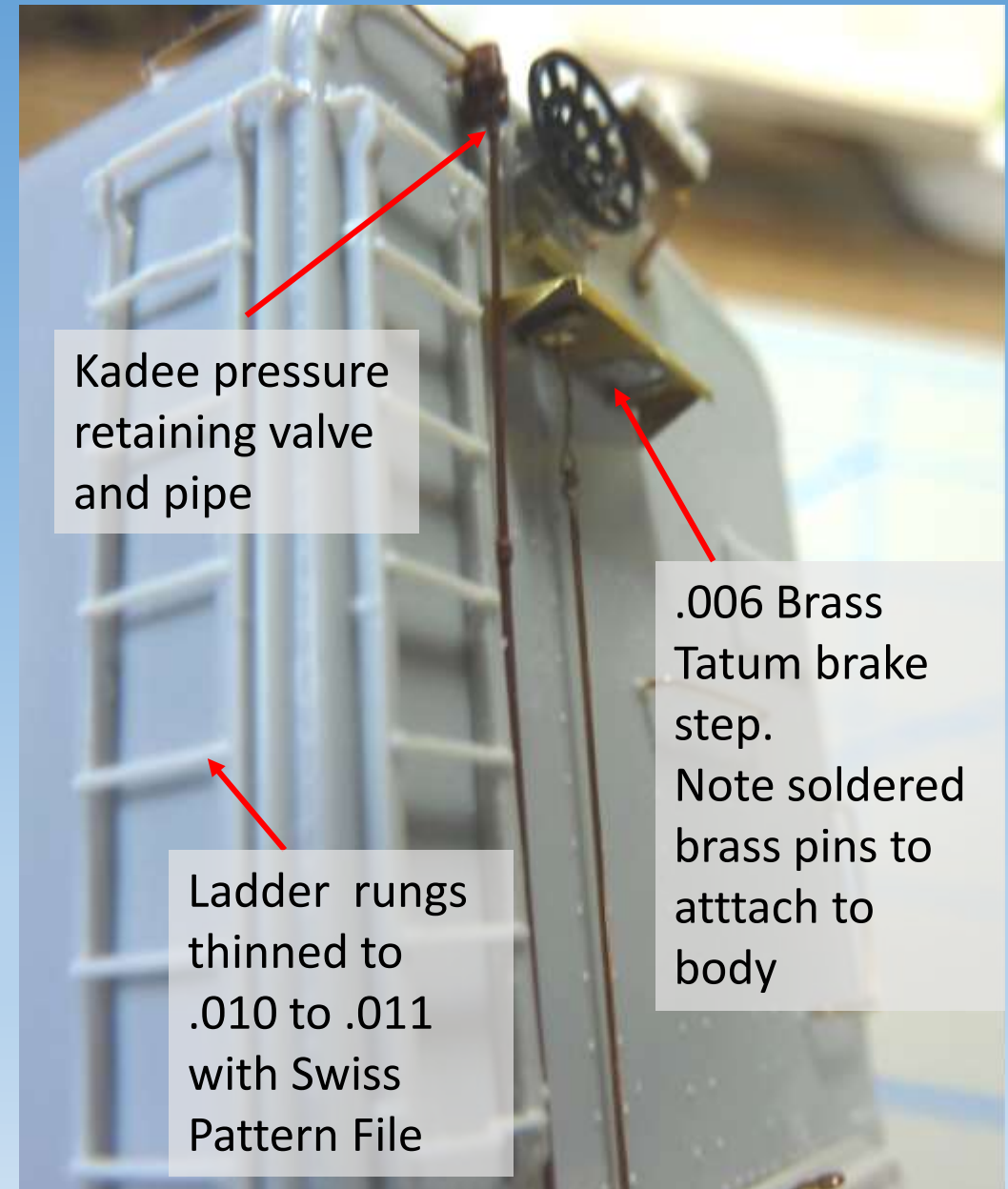
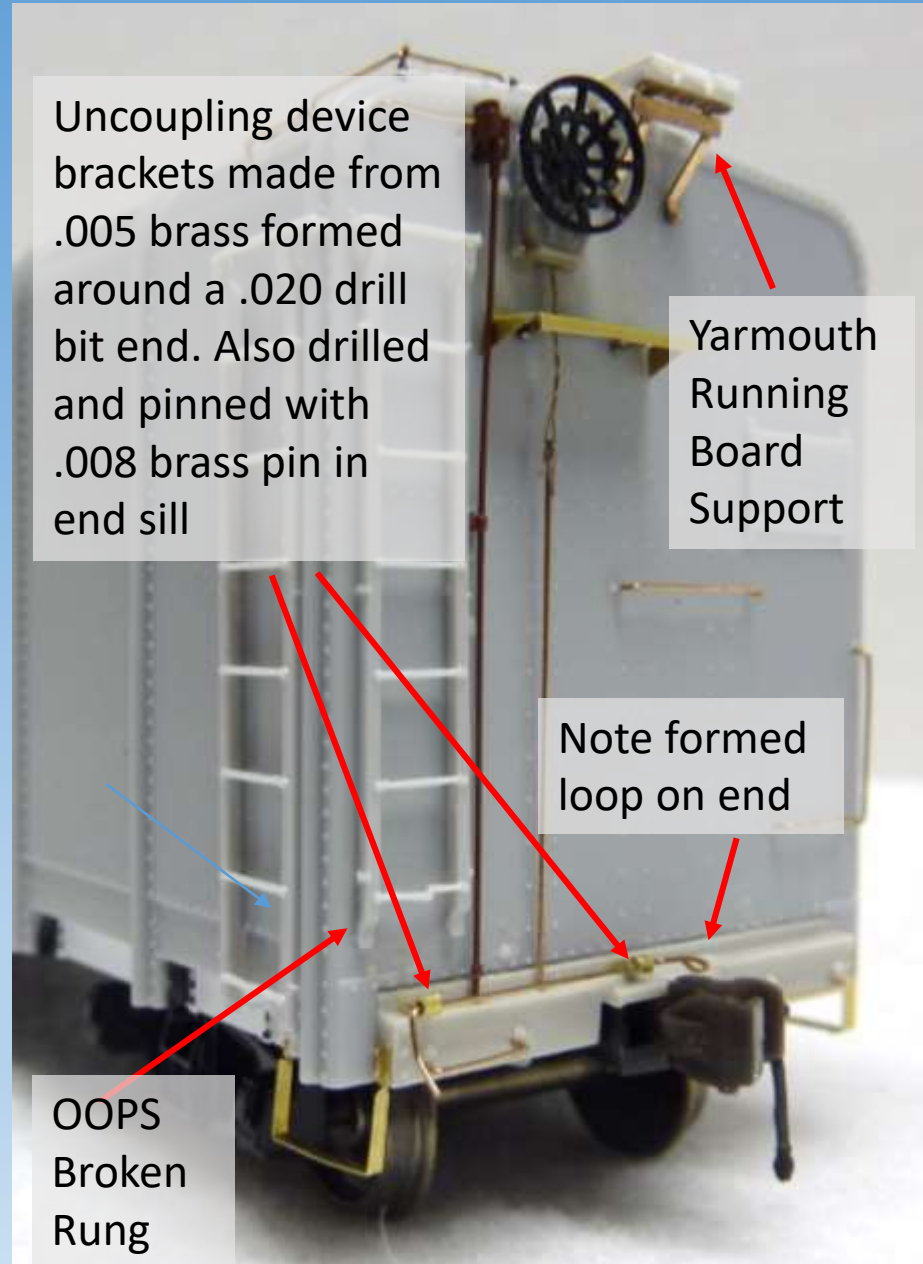
Brake Detail Closeup



Note Tichy Resivior cut
with Micro Saw and
brass mounting strap
inserted



Modeling the Brake Step & B End Details

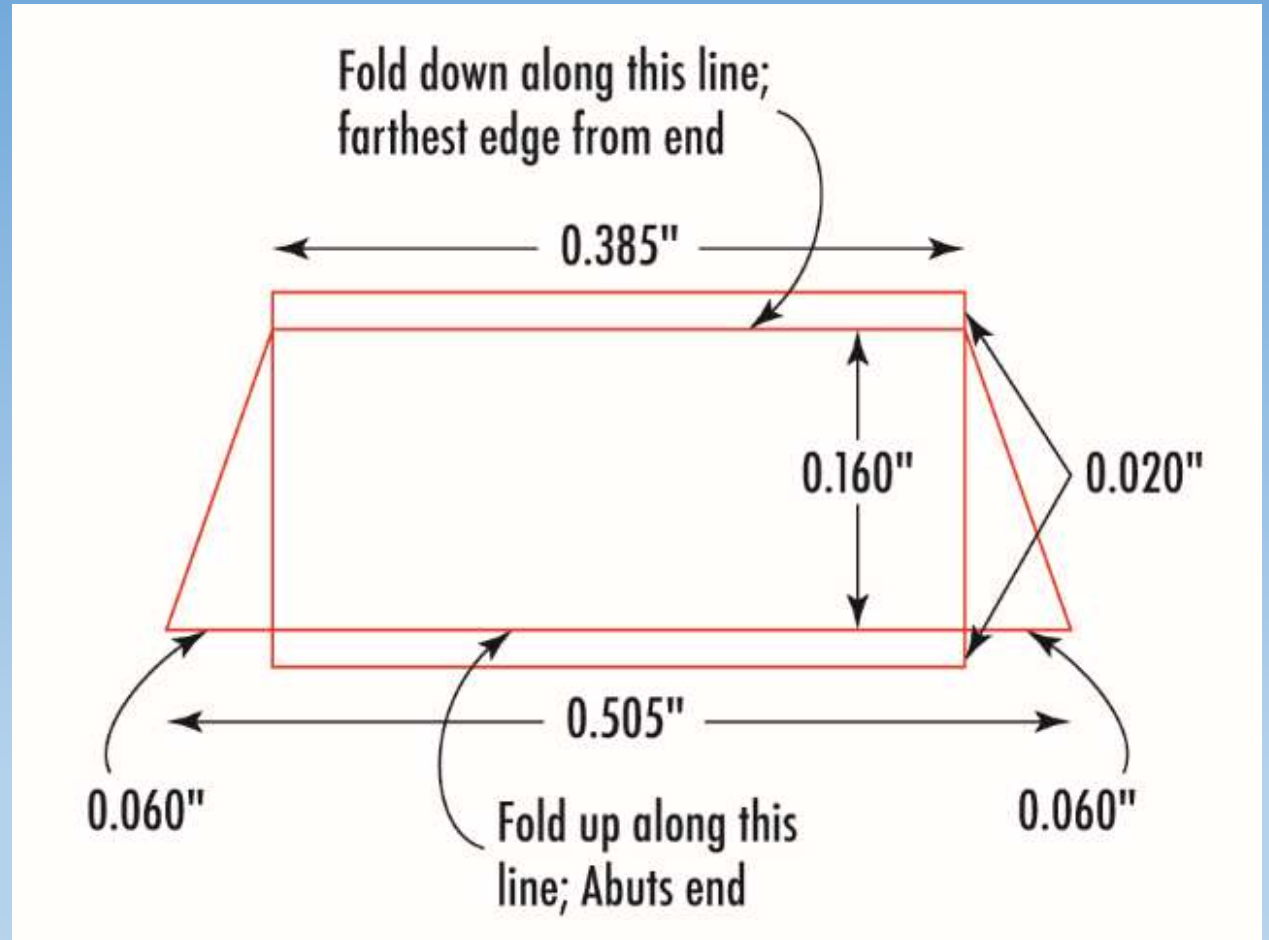


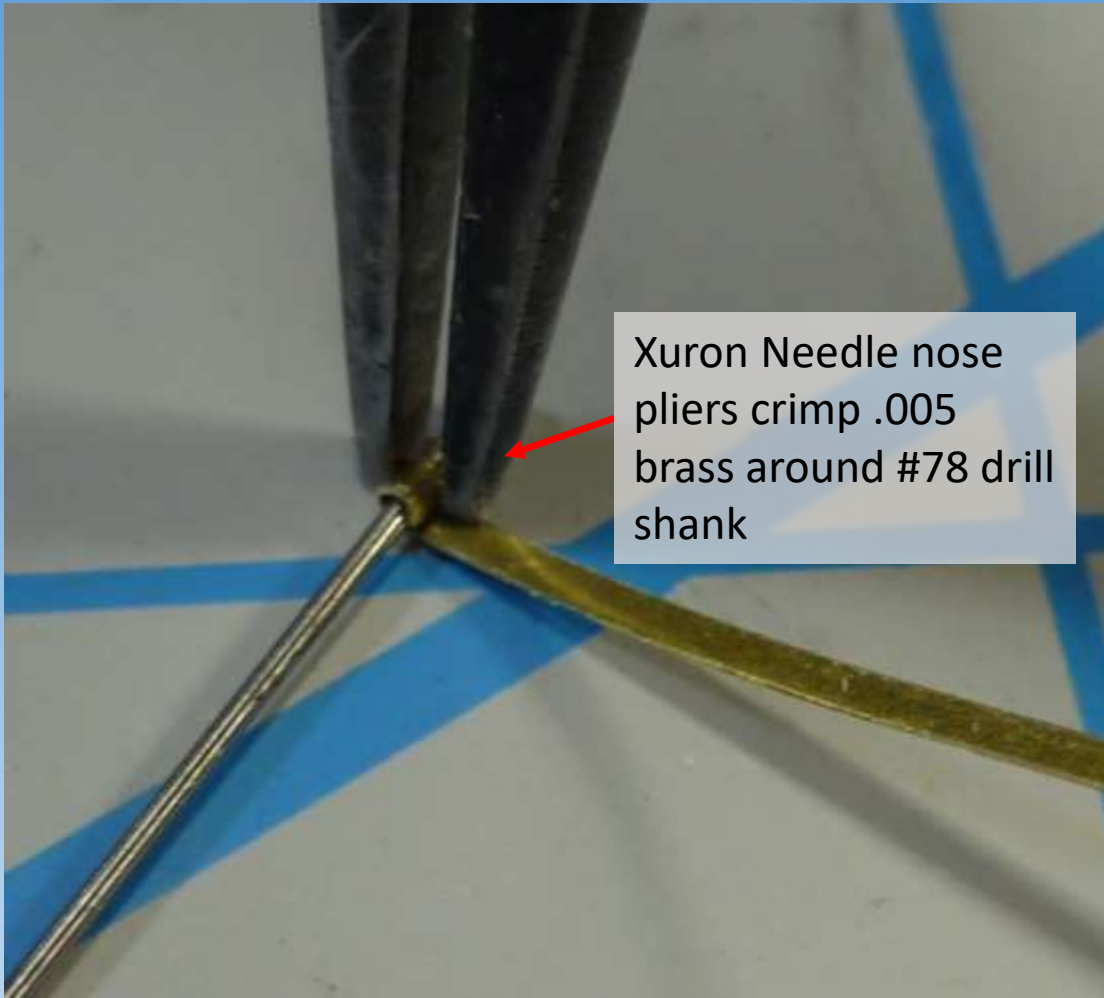
Brake Step Dimensions

I used two .010 brass pins that I flattened the ends to solder to the under side of the brake step. Holes were drilled into the car end for secure mounting of step.

You will also need to make a cutout for the brake chain.

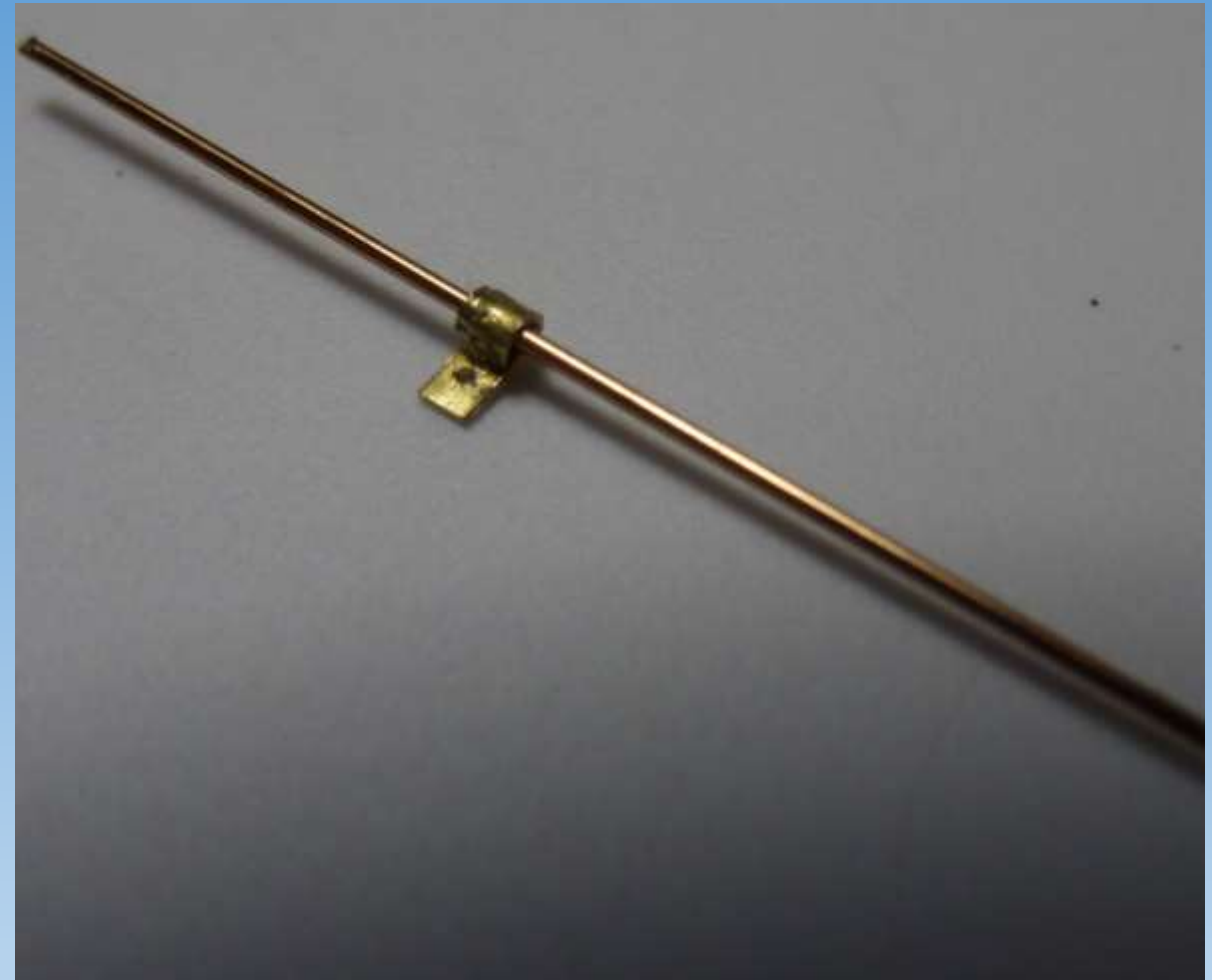
Note the photo show the use of a Photo Etched Scale chain that was replaced with 40 link per inch Aline chain. Later photos of finished model shows this change.



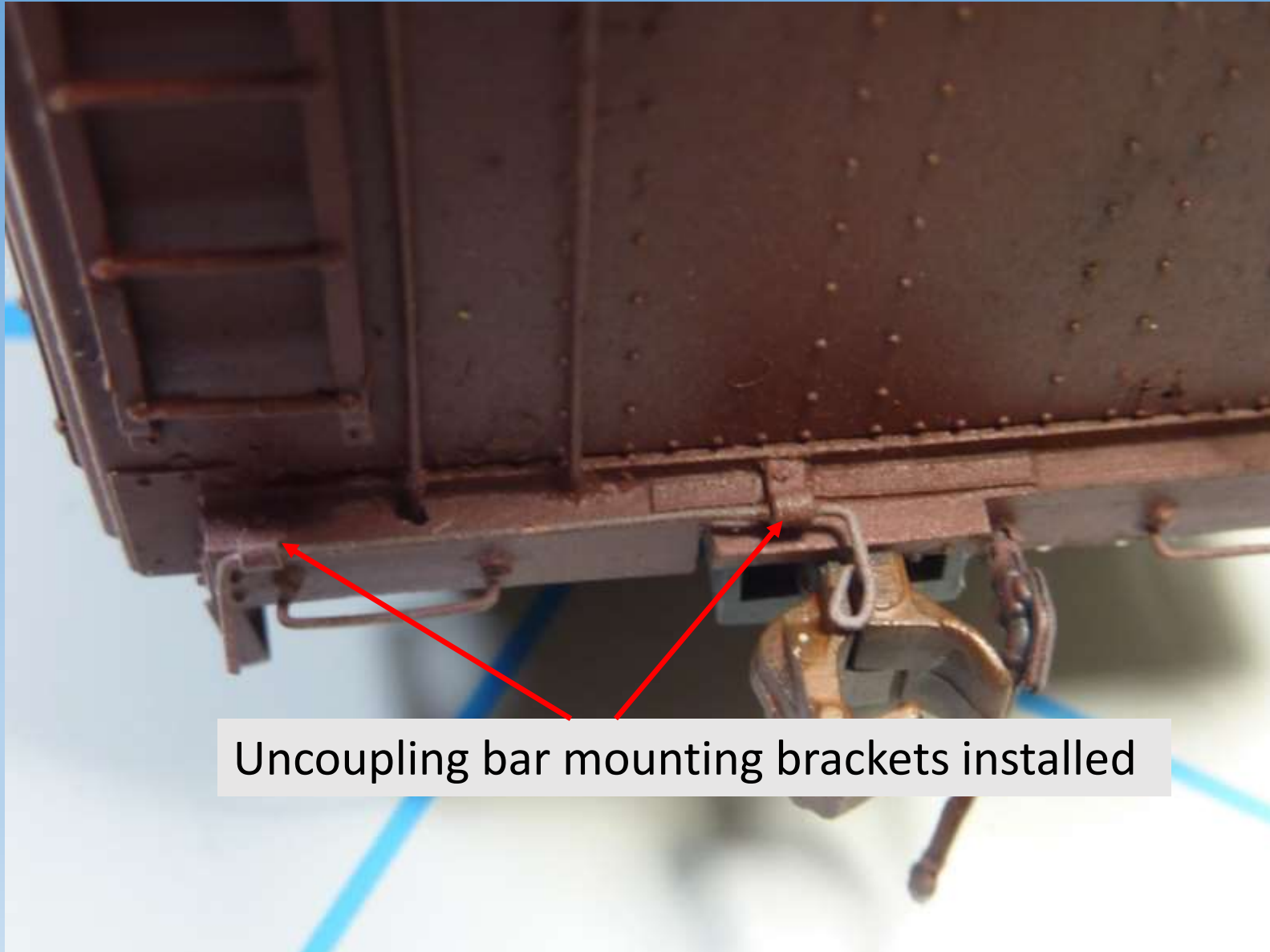


Xuron Needle nose
pliers crimp .005
brass around #78 drill
shank

Forming a .005 brass strip around
a #78 drill bit shank to make
bracket

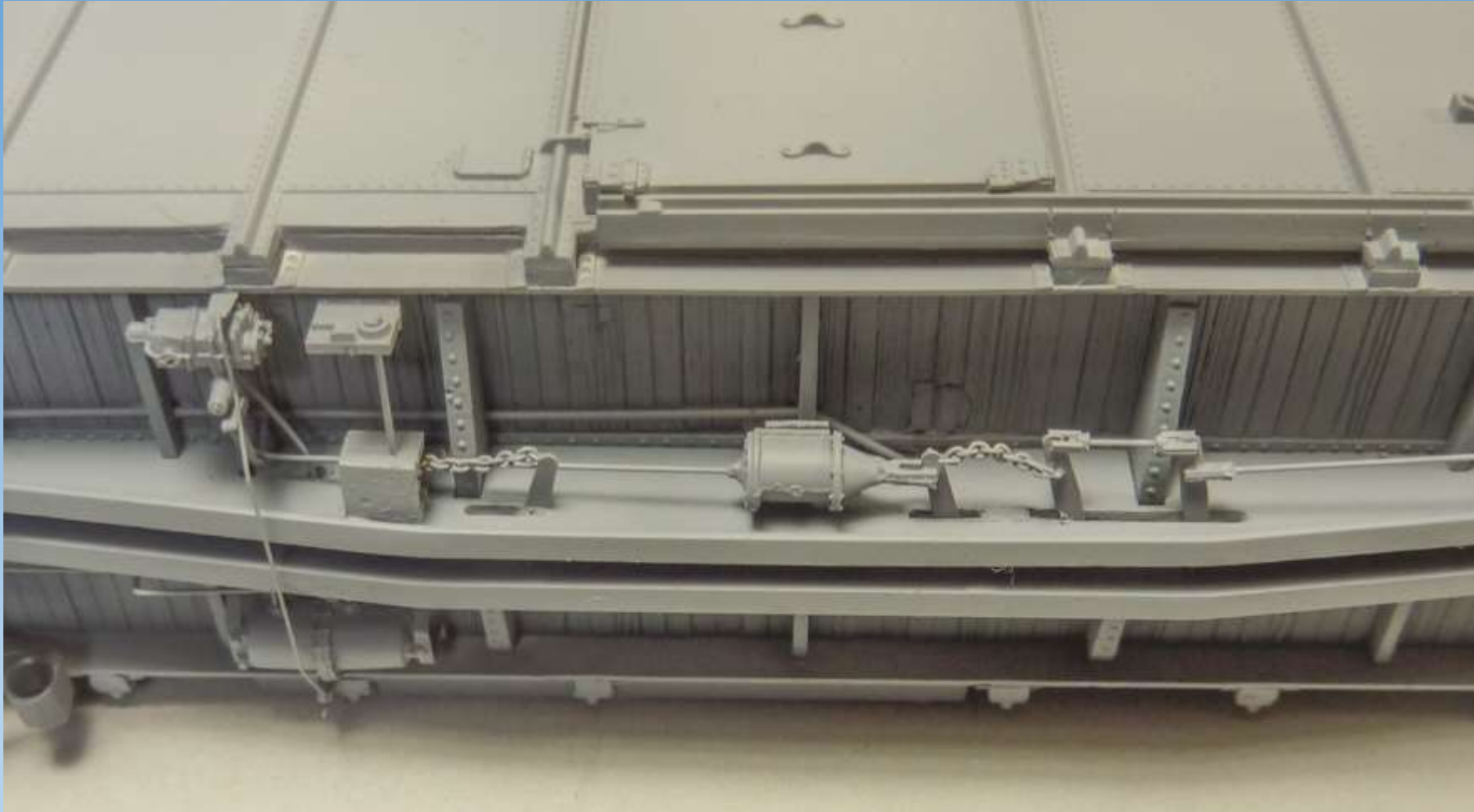


Finished uncoupling lever bracket
with a .009 mounting hole



Uncoupling bar mounting brackets installed

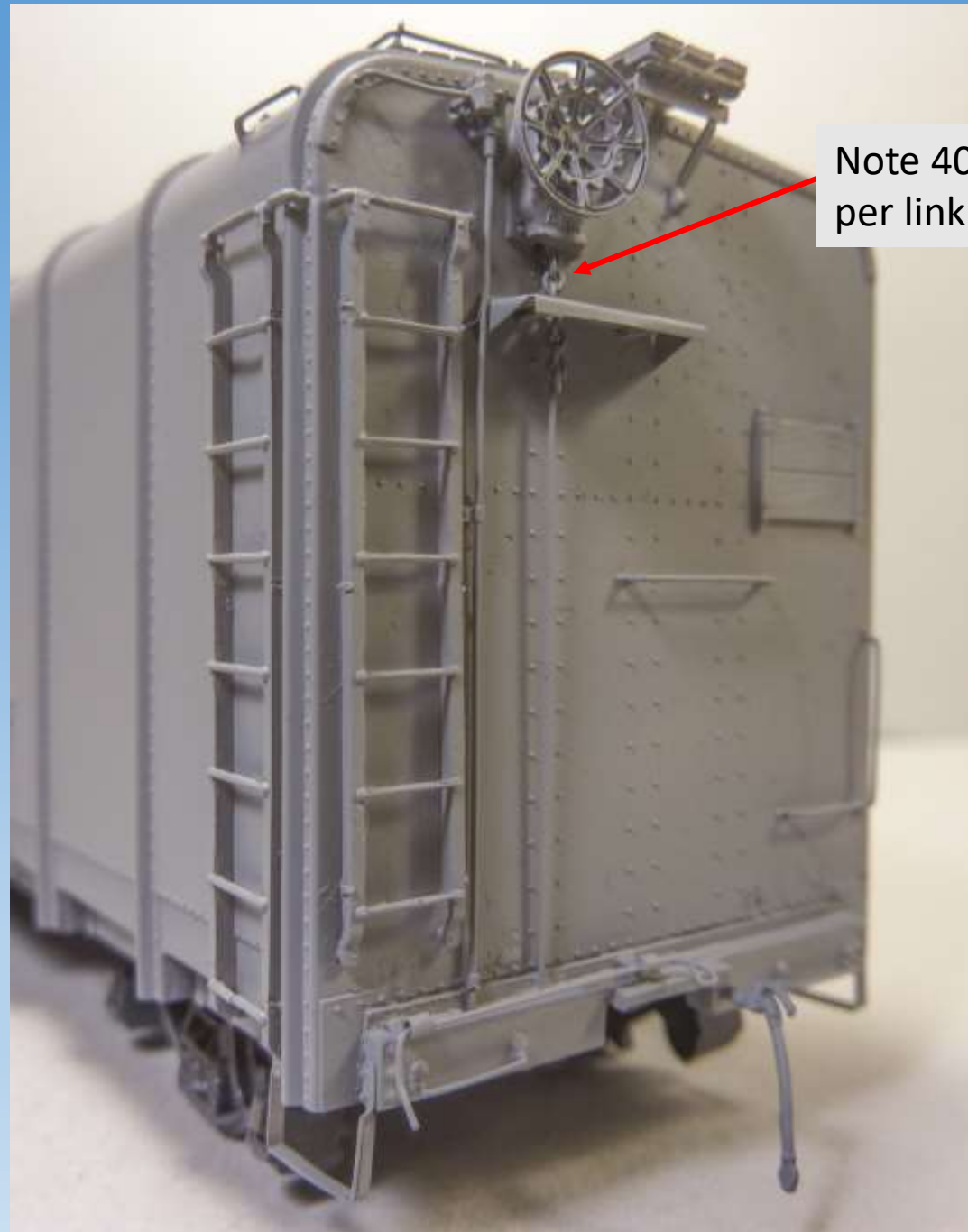
Primed Model Photo Gallery











Note 40 inch
per link chain

Molders Decals and Paint / Windsor Newton Oils & Pan Pastels



Painted Model with Modelers Decals and Paint acrylic paint





Weathered Model Photos













B & O

370853

CAPY 80000

L.D.L.M.T. 90600

L.T. WT. 45400

BW-3-60

3/7/16
18

33 Truck





The End

