

Freight Bolster & Axel Maintenance - by K & W Railroad

A smooth running train is what every garden railroader looks for on their garden railway. This is probably the main reason many of us have a maintenance crew to keep our revenue producing railway in top shape.

These maintenance duties may be time consuming, however, they are not necessarily expensive. The following is a basic list of household items and tools you may already have available. These are the things we use:

- White lithium grease
- Alcohol 91% {get a spray head that fits the bottle}
- Cotton buds on plastic stick {paper breaks}
- Paper towels
- Dental floss NON WAX

Tools required to remove fasteners

- Tweezers {I like the curved type}
- Cradle {I use flat piece foam with center cutout}
- Little parts dishes {I use ones from fast food with plastic lid}
- Truck jig
- Syringe {don't use one with rubber plunger. use all plastic plunger}

This article deals only with solid one piece bolster side frames with molded springs. With the freight car cradled wheels up {PHOTO# 1} remove bolster mounting fastener. Check for plastic or metal washer, and place in dish marked "BOLSTER SCREW". Remove bolster. There should be one screw holding each side frame to the bolster cross bar {PHOTO# 2}.

TAKE APART

There are two options to proceed depending on coupler mounting. Photo# 2 is truck mounted coupler.

OPTION ONE

Gently spread the side frames of the rear axel {without the coupler mounting bar} until you can pull the axel out of the bearing {PHOTO# 3}. The forward axel can now be more easily removed.

OPTION TWO

If the side frames do not separate enough to pull the axel, remove only one screw holding the side frame to the bolster cross bar and place in dish marked "SIDE FRAME SCREWS". Remove only one side frame. See photo # 4. I made this truck holding fixture from one inch closed cell foam as it carves easily and keeps the truck from moving or bouncing while removing and attaching screws.

CLEANING

Cut a standard paper towel sheet into four squares {I cut five or six at a time to get twenty some sheets}. Spray sheet with alcohol and wipe bearing surfaces clean, also the axel shafts and hubs. Be liberal with alcohol. With cotton bud, clean bearing holes {may take two or more cotton buds}. {PHOTO# 5, 6 & 7 [2 pix]}.

LUBRICATING:

The white lithium grease is smooth flowing with easy clean-up. Using the grease filled syringe, fill bearing cavity to top. Do not overfill. {PHOTOs # 8 [2 pix]}

PUT BACK TOGETHER

Option one is reverse opposite of "take a part option one".

Option two can be a bit tricky. If you made the pink or blue foam jig, place each axel into the side frame with the bolster cross bar/coupler bar and the side frame screw hole facing up.

Holding the loose side frame above the mounting hub, insert the two axels into the loose side frame bearing holes and carefully slide the side frame down onto the hub. Reattach the side frame to the bolster cross bar using side frame screw. {PHOTO# 9 2 pix}

Without the jig, insert both axels into the side frame bearing holes attached to the bolster cross bar holding the wheels against the side frame with the fingers {I find this can be somewhat tricky}. Now slide the free ends of the axels onto the free side frame and down onto the mounting hub. Reattach the side frame to the bolster cross bar using side frame screw. {PHOTO # 9 [2 pix]}.

BODY MOUNTED COUPLERS

This is basically the same as truck mounted couplers without the coupler bar. About the only difference is you can pull either front or back axel without coupler bar interference.

FINISH UP

Reattach truck to bolster mounting pin using screws marked "BOLSTER SCREWS".

I usually run the truck across the table to see how it rolls. If it does not slow fast I figure it will roll well on the track.

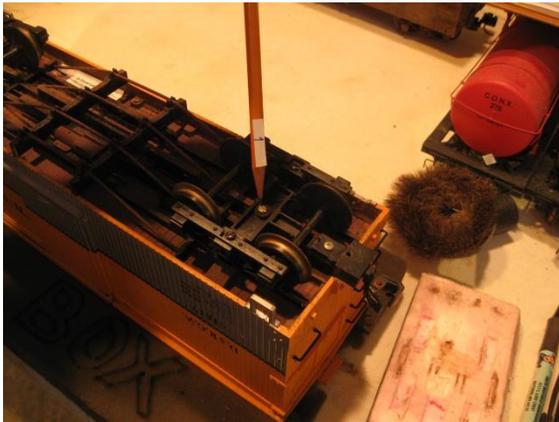


Photo 1



Photo 2



Photo 3

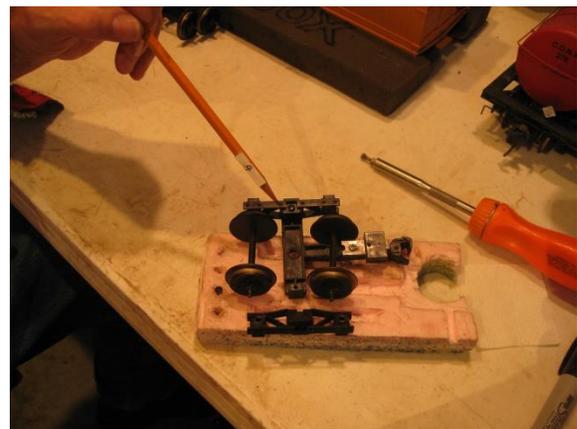


Photo 4

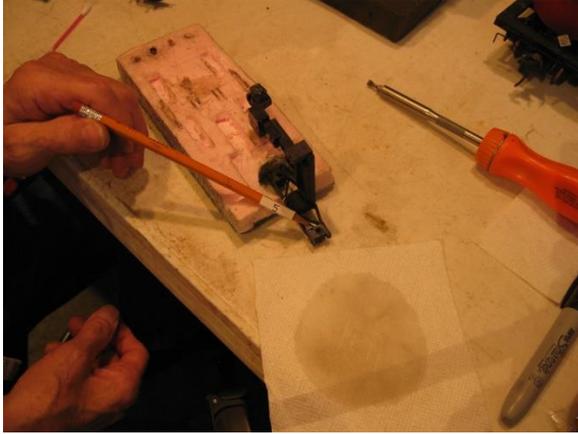


Photo 5



Photo 6



Photo 7 (before)



Photo 7 (after)



Photo 8 (before)



Photo 8 (after)



Photo 9 (align)



Photo 9 (set)