## **Tuning ALKEM HO Wood Beam Trucks**

At our Kennesaw, Georgia convention this year, I heard from some members that they did not use the ALKEM trucks because they were too wide. If these trucks are built without modification using normal HO wheelsets with long axles (such as KADEE, whose axles measure 1.015"), this may be true. However, a few modifications will result in narrow width trucks with excellent rolling qualities and appearance. The modifications I made are as follows:

1. Remove 0.072" from each side of the bolster and end beams of the bolster part, as shown in red on the following diagram.



2. Ream the axle bearing holes in the sideframes with a #39 drill bit. Insert the axle bearing into the sideframe until the front (axle side) of the bearing is flush with the sideframe and the back of the bearing protrudes from the sideframe. VERY CAREFULLY cut off the back of the bearing using a single edge razor blade so that the back of the bearing is flush with the sideframe. Glue the axle bearings into the sideframe using "Balsa USA" Thin ACC (I find that this brand works well bonding styrene or nylon to wood). After the ACC has dried for a day, file and sand the front of the sideframe to insure that the bearing is level with the sideframe . If it isn't, the journal box will not fit right. The following picture shows a sideframe laying flat in the middle. Notice the bearings do not protrude from the sideframe.



- 3. Use REBOXX, Inc. #33-1-0.950 wheels sets. These are semi-scale 33" wheelsets with axles 0.950" long.
- 4. Paint all parts after removing them from their carriers. The journal boxes are painted black and the other parts Reefer Gray. Before painting, mask the bearings with small pieces of masking tape. Dry brush rust onto the journal boxes.
- 5. Once the paint dried, glue Grandt Line #5093 nut-bolt-washer castings in the holes adjacent to the bolster hole in the sideframe using ACC. Then glue Grandt Line #5123 NBW castings to the bolster ends using ACC.
- 6. Test assemble the trucks (DO NOT GLUE) with wheelsets after the paint is dry. Once you are satisfied that the trucks roll freely with sideframes perpendicular to the bolster, Glue only **ONE** sideframe to the bolster using ACC.
- 7. I cut wood brake shoes the length of the laser cut shoe from scale 4" X 4" strip wood and glued these wood brake shoes to the laser cut shoe with white glue. After the brake shoes dried, I sanded a curved surface on the face of the shoe to match the wheel diameter. I then test fit the brake shoe assembly on the truck

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(with the wheelsets still in the test assembled unit). Once satisfied with their position, I glued the shoe assemblies in place with ACC.

- 8. I removed the wheelsets, applied small squares of tape over the sideframe bearings and applied light weathering with an airbrush.
- 9. I reassembled the trucks with wheelsets and, once you are satisfied that the trucks roll freely with sideframes perpendicular to the bolster, Glue the remaining sideframe to the bolster using ACC.
- 10. The completed truck now scales 7'0" wide and fits nicely under a 9' wide freight car.
- 11. A photo of the finished trucks appears below.



A huge THANK YOU to ALKEM for making these trucks available!