

**MAC-846**  
"Cali" Coke Hopper Kit

**MAC Rail** LLC  
Model Train Products & Services



Thank you purchasing our MAC-846 "Cali" coke hopper kit. This item is specifically designed to mount on a Walthers Bethlehem 4000 Cubic Hopper or Bowser 100 ton hooper.

Based on our research of the prototype these GATX 100 ton open top hoppers were built by Freightcar America for use in petroleum coke service. The cars marked GABX 100-699 can be found currently moving coke in freight trains for P66 across North America. The lid to be mounted specifically models cars that transport coke from the P66 refinery near Santa Maria, CA to various destinations.

When designing this kit we looked at the various models on the market and found the Walthers cars to be the closest representation of the modern Freightcar America model. Given limited availability, the Bowser 100 ton would be the next best substitution.

- MAC

## STEP 1 – OPENING YOUR KIT

When opening your kit, you will find parts divided into different bags and also individually wrapped.

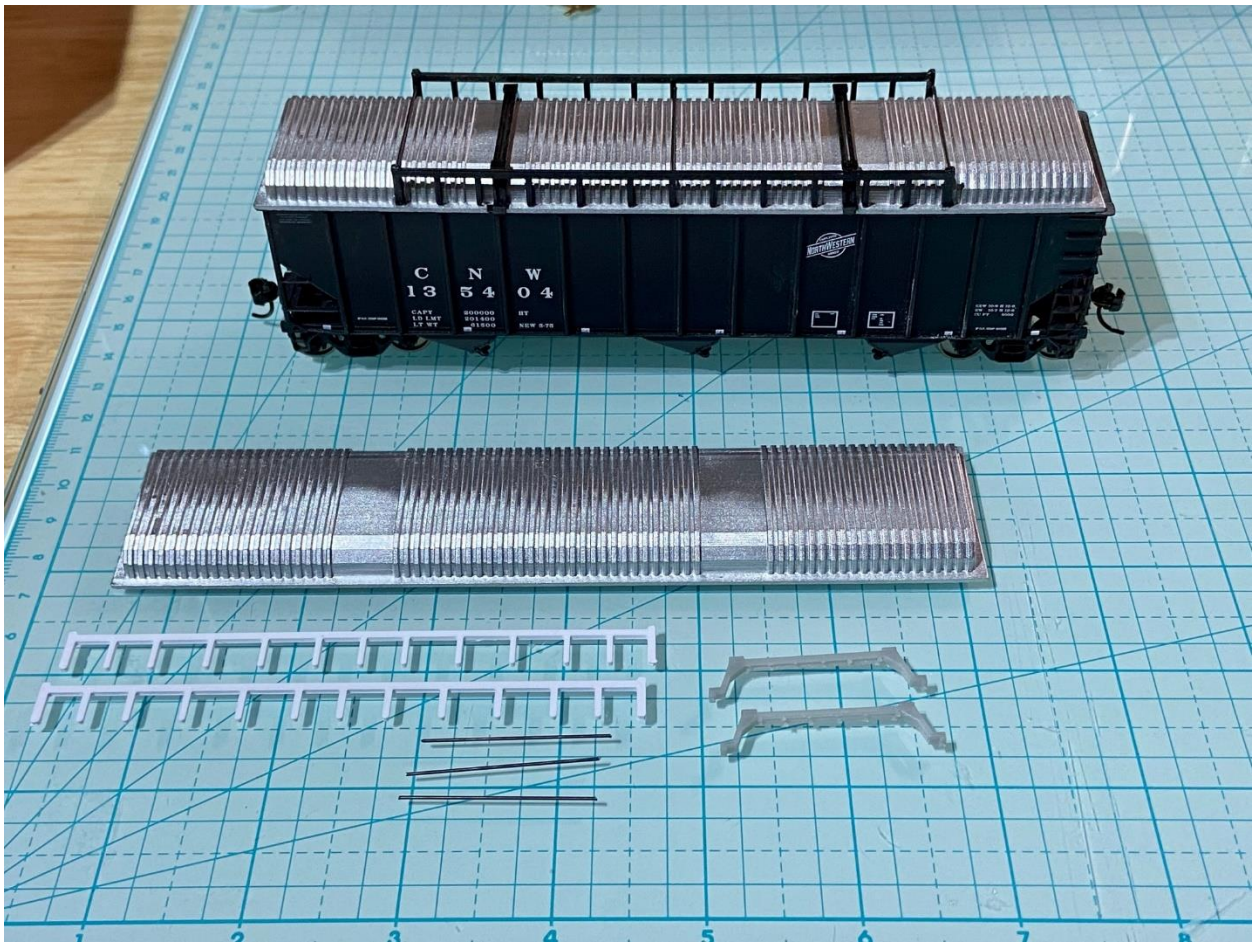
RAILCAR LID (1)

WIRE CROSS SUPPORT (3)

LID LOCK / HINGE (2)

SIDE RAILS (2)

RAILCAR DECALS (1)





## STEP 2 – PREPARE & PAINT PARTS

Some sanding will be required to remove sprues from the lid lock / hinge and side rails. Please use proper PPE for wet or dry sanding method as preferred. I found on the smaller parts it was easier to use a sanding stick and for the larger side rails a piece of sanding paper on a flat surface.

Following prototype photos paint the lid locks/hinge and side rails. Prototype photo shown below for reference have these parts painted black. The lid itself comes painted in aluminum finish ready for assembly.

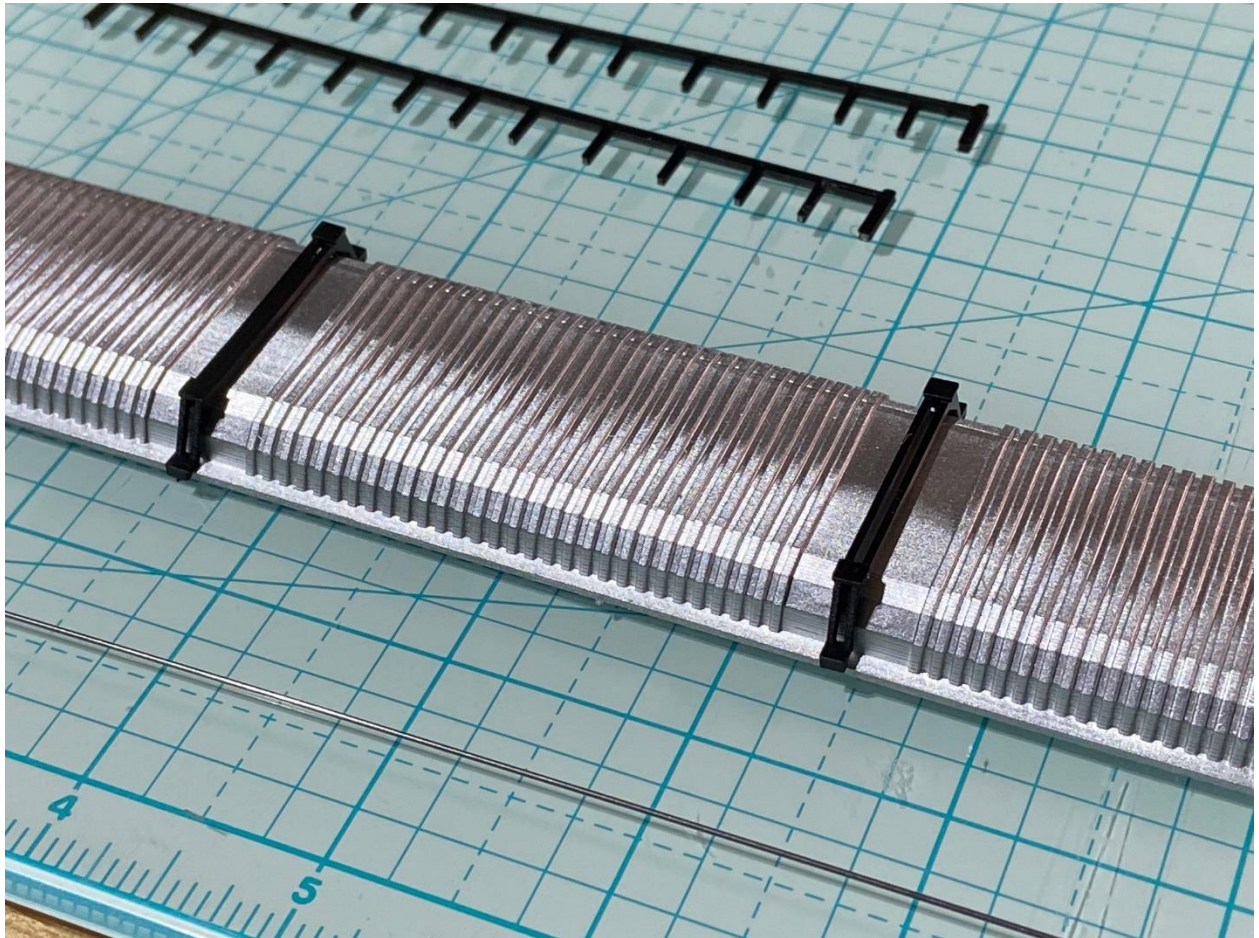
Photo used under permission of Karl Andraschko



RRPictureArchives.NET Image Contributed by Karl Andraschko

### STEP 3 – DRY FIT LOCK/HINGES

Place your Lid lock / hinges onto the lid – they should center up. Do not glue in place until the side rails are positioned and glued in. The hinges should simple rest on the lip of the lid.



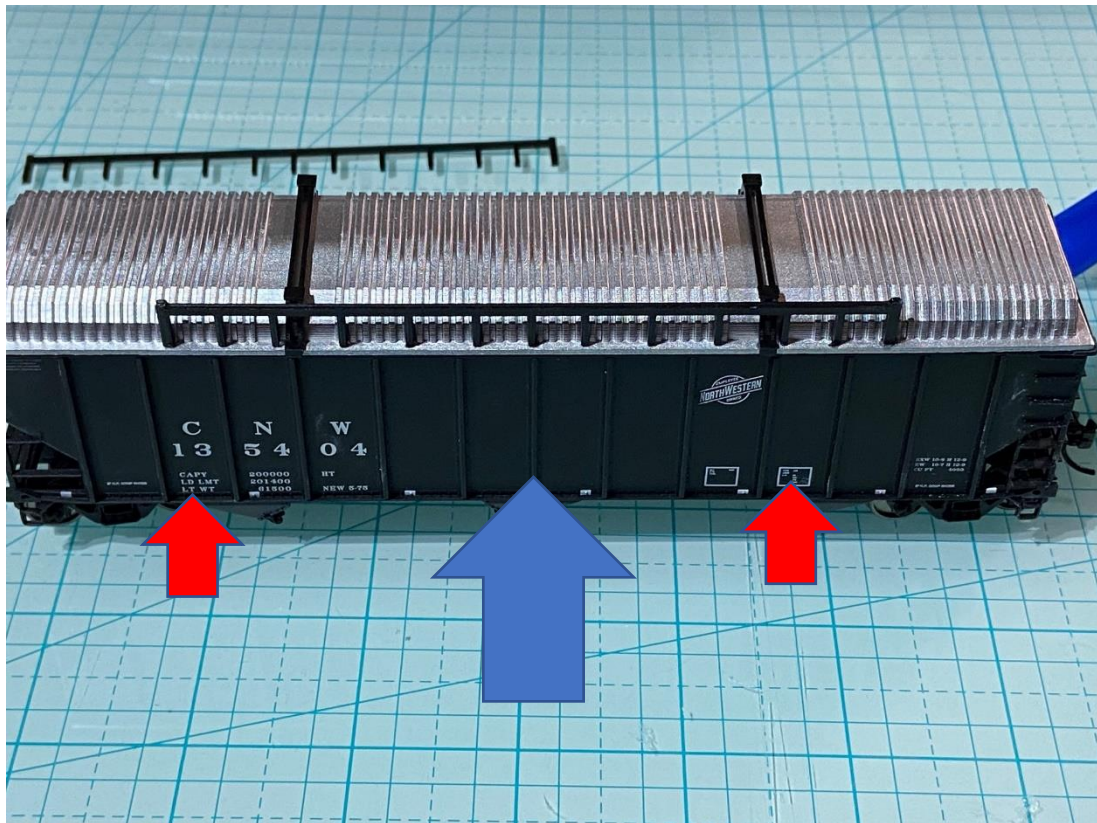


## STEP 4 – INSTALL SIDE RAIL (PART 1)

For this step I place the lid on the hopper to use the ribs for reference of the centerline and ends for the side rails. Count to the 7<sup>th</sup> leg on the side rail piece, this leg should be centered as close to the middle railcar rib which is also the 7<sup>th</sup>. (Blue Arrow)

If everything is aligned properly the two end legs of the side rail part should be about centered in between the third hopper panel from each end. (Red Arrow).

Use CA gel applied to the bottom of each leg on the side rail part. I used a toothpick to control the amount of glue being used. Be sure this side rail is vertical, if necessary use a CA accelerator or a means to keep part vertical while drying.

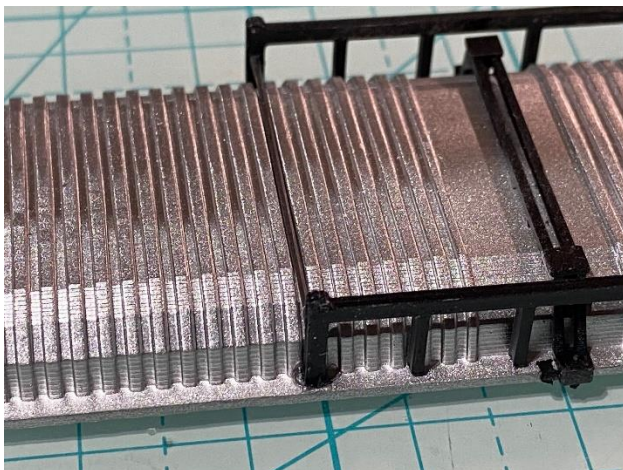
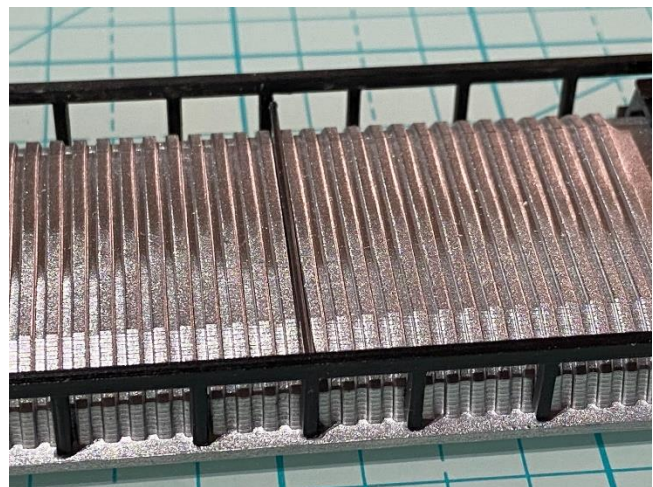
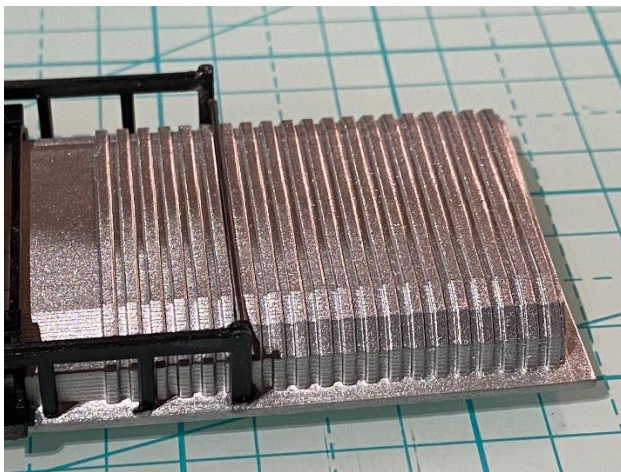


## STEP 5 – INSTALL WIRE CROSS SUPPORTS

To help with stability of the side rail just installed and before we install the last one, we will not drop in the wire cross supports. These are cut as close to the sizing needed based on the lid model, but before gluing please test fit and if necessary file down the ends for best fit.

Based on how your first side rail set was installed the each of the ends legs and middle leg should be aligned with a groove in the corrugated lid. This will allow the wire to rest into this groove and is a big help in the install.

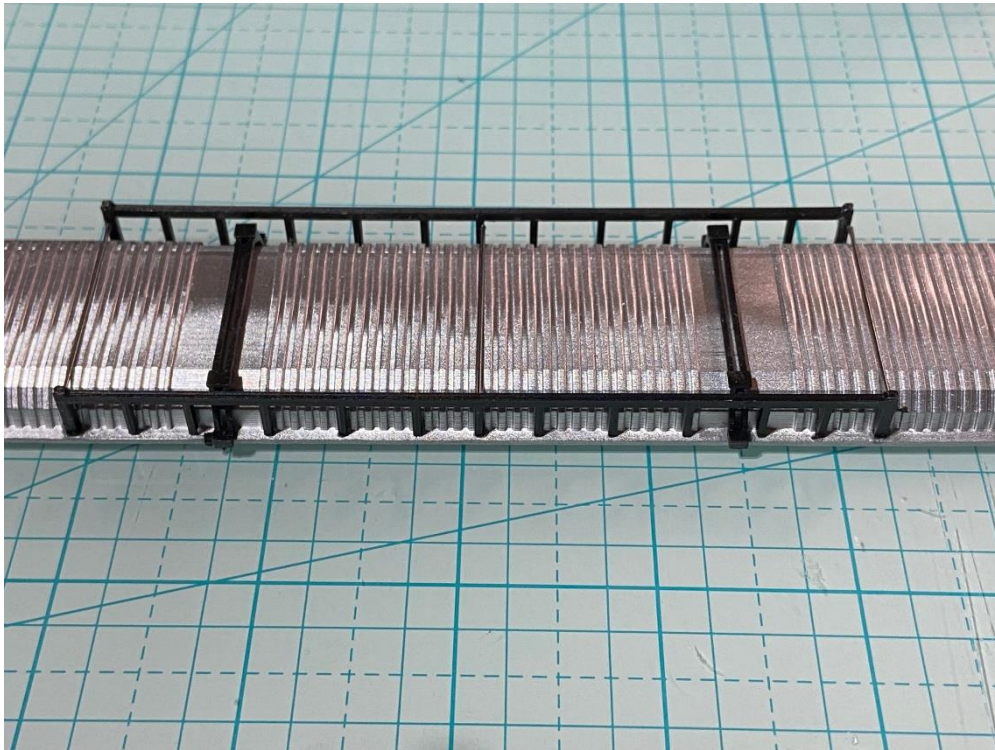
Place all three wire cross supports in place and then test fit the last side rail before gluing the wire pieces in place to the already installed side rail.





## STEP 6 – SIDE RAIL (PART 2)

With first side rail and wire cross supports installed, now install the other side rail using same alignment method described. Given the wire cross supports are in place this will provide support to keep the side rail vertical while glue is drying.



## STEP 7 – SECURE LOCK/HINGE & LID

All parts being installed and glued in place, now use a toothpick to add a little bit of CA or white glue to the underside of the lock/hinge feet that sit on the lid lip.

If railcar is decaled and ready for service, ensure the top of the railcar lip is smooth. This would require turning car over and sanding the top edge of the railcar smooth for best fit of lid.

Ensure lid is centered on car and secure in place with CA or white glue. Use painters tape to hold lid in place while drying to ensure flush fit.





## STEP 8 – DECALS

Depending on your intended model, now would be the time to glosscote the railcar and install decals of your choosing. This kit comes with the entire data set that is found on the prototype GABX marked cars and each cover. Refer to prototype photos for placement available on [rrpicturesarchive.net](http://rrpicturesarchive.net) or [flickr.com](http://flickr.com).

Decals are custom made by Circus City, please follow all their recommendations for best results.

