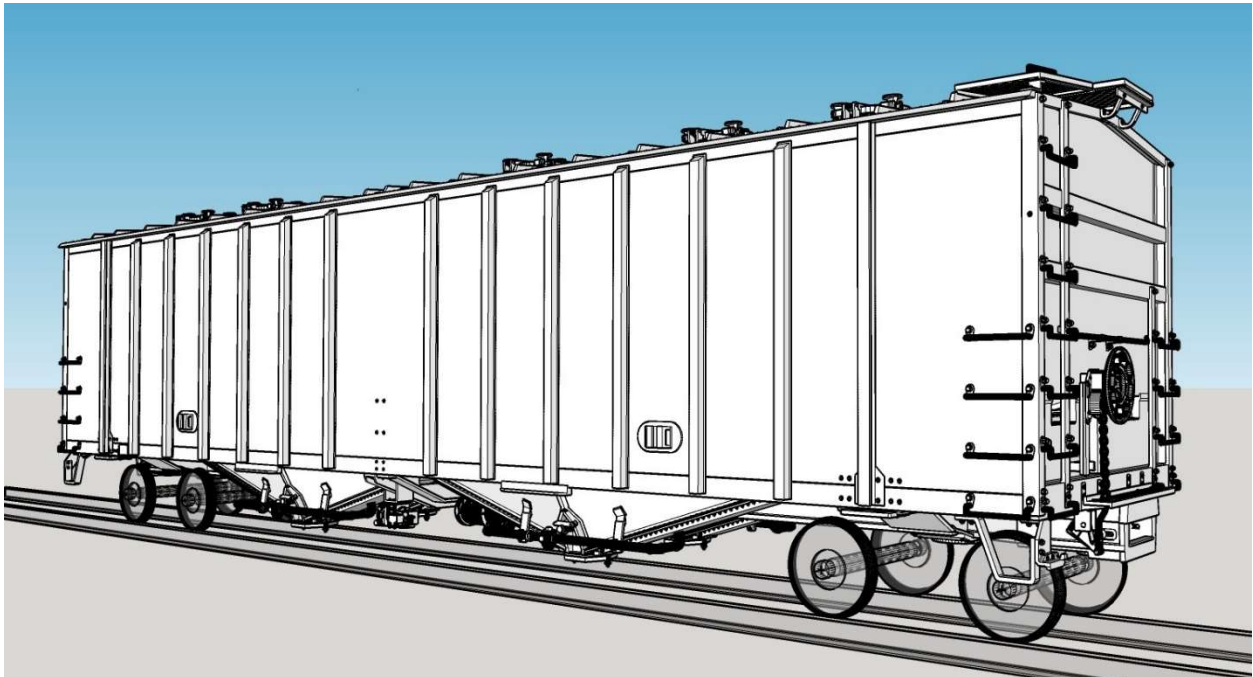




AMERICAN GENERAL 4180 AIR SLIDE



Assembly Instructions

General

The General American 4180 Airslide covered hoppers were manufactured from 1963 through 1980. This model represents cars made from 1970 – 1980.

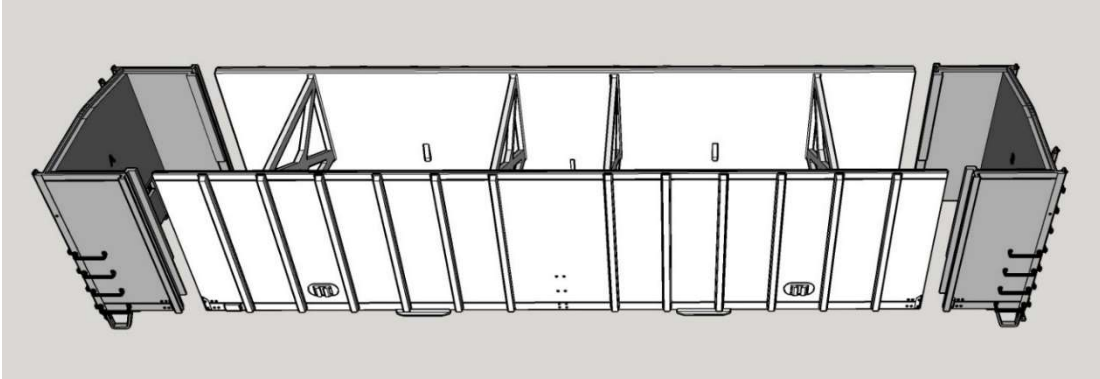
Some of the parts will have artifacts from the printing process where the supports were removed. These may look like lumps or other imperfections. They can be sanded smooth with sandpaper sticks and/or gentle fiberglass abrasion brushes. The plastic surfaces can be smoothed to remove the visible texture using a small stiff fiberglass abrading brush. Many of the surface imperfections will disappear after priming and painting.

Do not force parts to fit because you are likely to break them when doing so. Gently test fit parts before installing and make sure A-end and B-end components are installed on their respective ends. The letters 'A' and 'B' are embossed on parts where A and B ends matter during assembly. If possible, test the glue

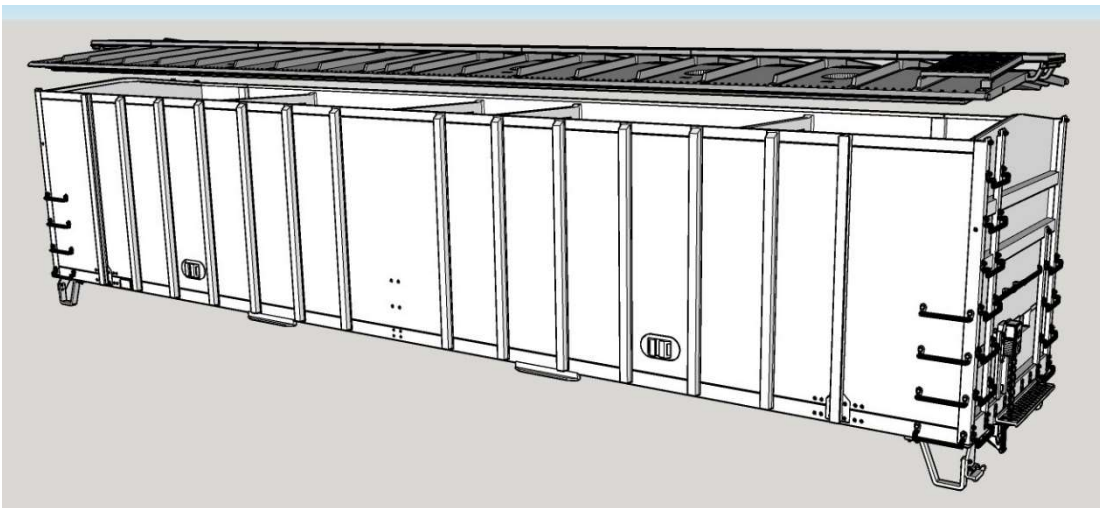
you intend to use before starting. 3D Central recommends using Bondic UV glue, but other glues also work.

Body Assembly

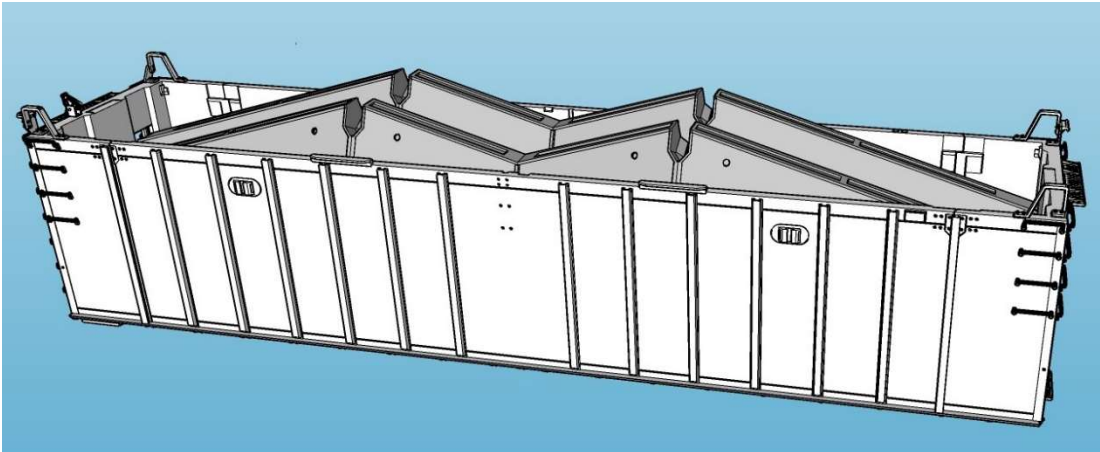
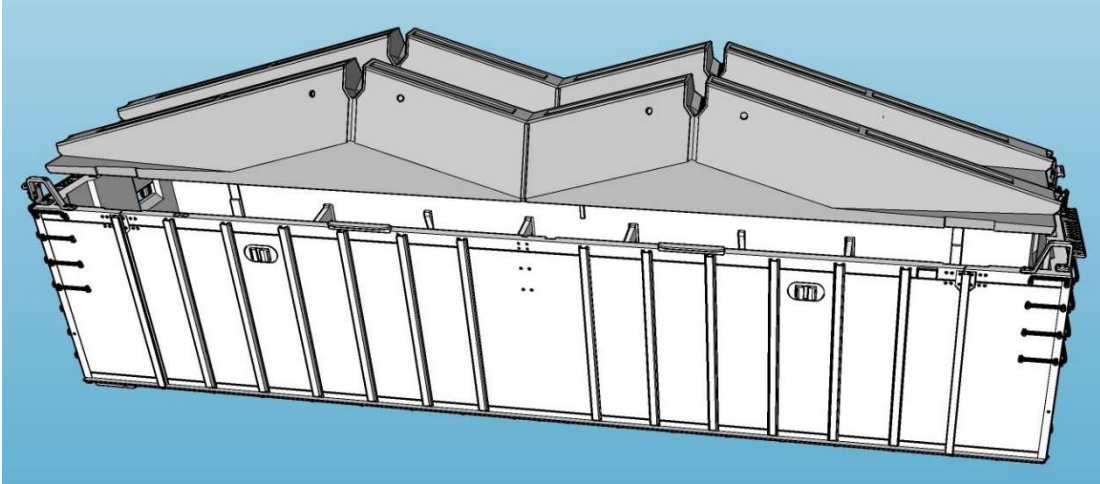
1. Glue the car ends to the center section of the car.
 - Make sure the A end is attached to the A end of center section and the B end to the B end.
 - There are embossed letters identifying A and B ends.



2. Attach the roof.
 - The fit may be somewhat snug so take care not to damage the ladder standards at the car ends.

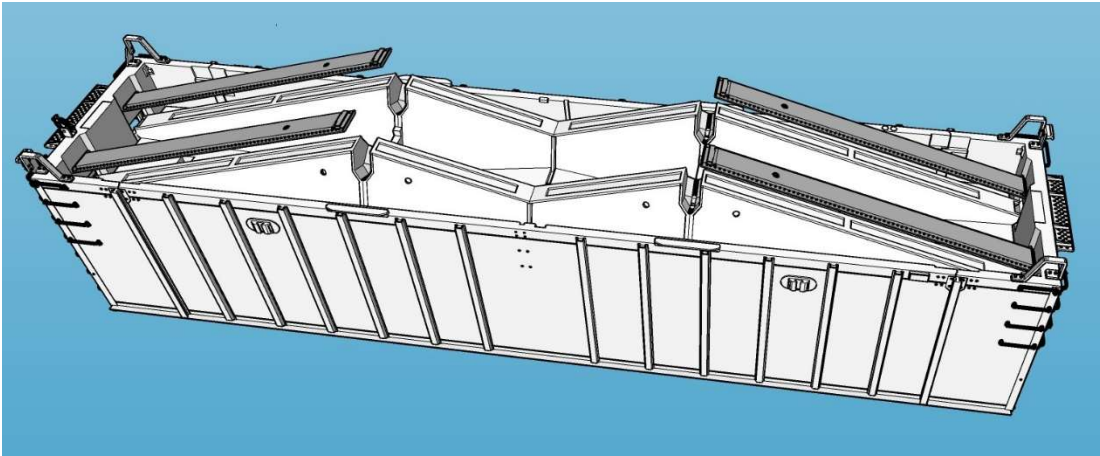


3. Glue to floor to the body.
- If desired, add weights inside the hoppers before installing the floor
 - The top of the floor is recessed well above the bottom of the body sides. Apply glue to the protruding studs inside of the body.
 - Because the floor is shorter than the inside length of the car make sure it is centered before the glue sets
 - Fins extend out from the end of the hopper bays. Do not damage while test fitting and glueing.



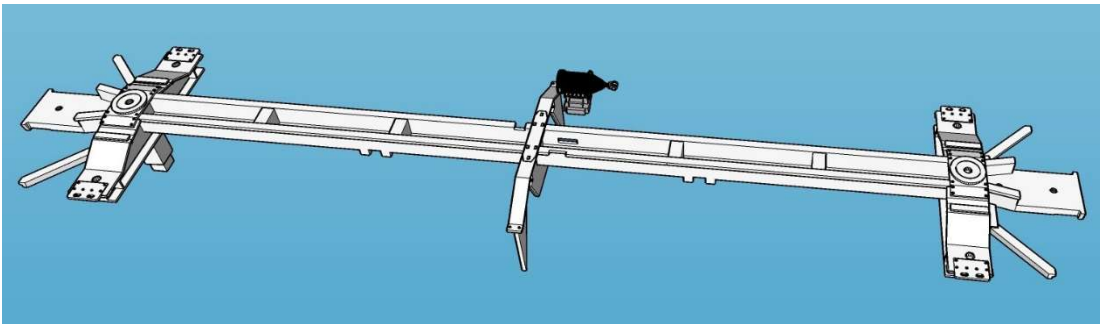
- Optional: Paint the bottom and inside of the car body before proceeding to the next steps.

4. Install the long bolt plates on bottom of the hoppers.
 - The slightly askew folded plate is at the low end of the hopper.
 - Make sure the plate does not extend into the gap between the hoppers.

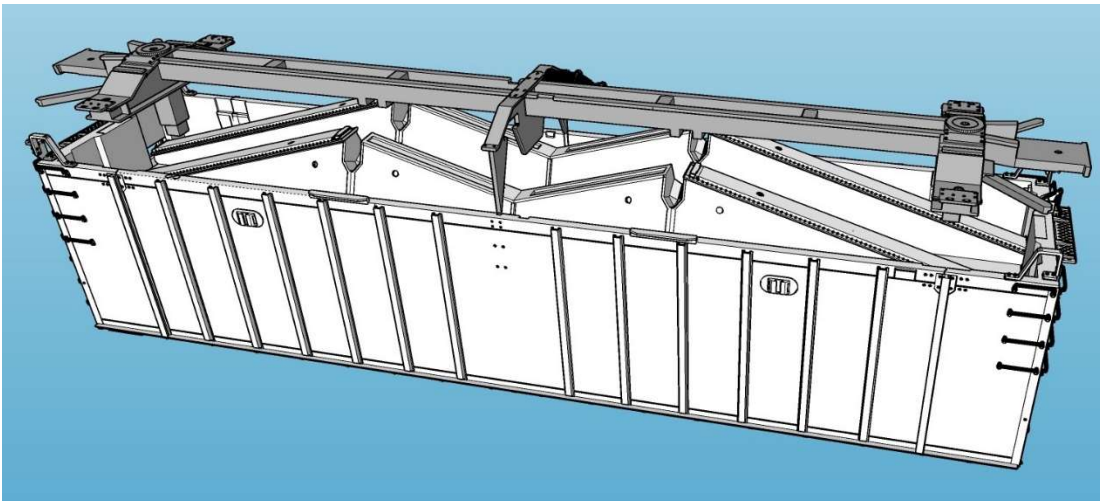


Center Beam

5. Install the air cylinder in the hole in the side of the center beam.
 - The cylinder points to the B end.

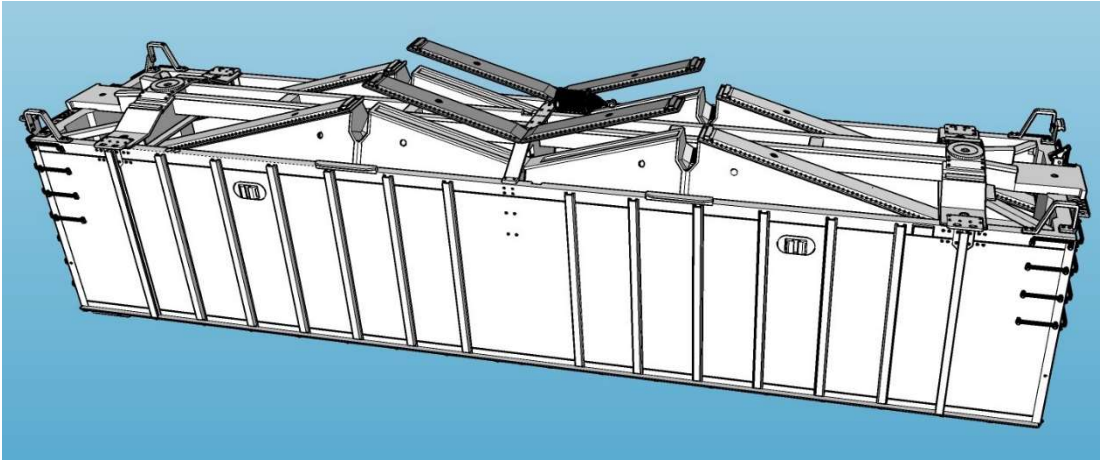


6. Install the center beam - make sure the A and B ends are oriented correctly.
 - The ends of the center beam are identified with embossed letters.
 - Align and guide the center cross plate into the slots.
 - Nest the bolsters into their body recesses and studs over bolsters into holes in the floor.

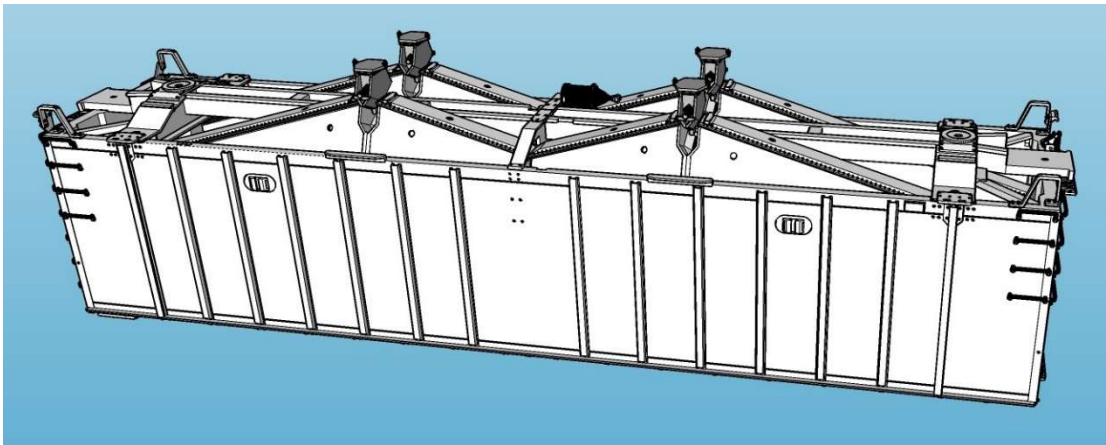


Underbody Details

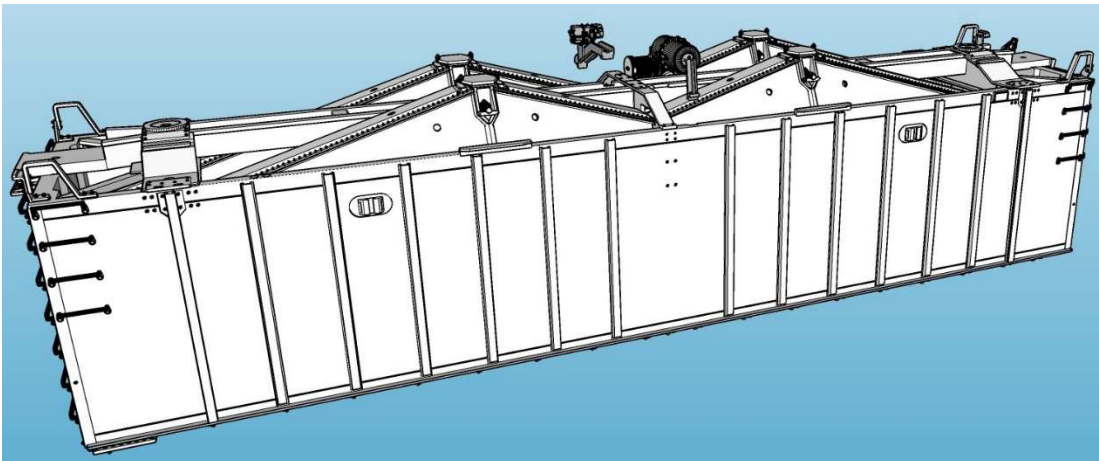
7. Install the short bolt plates on bottom of the hoppers.
 - The slightly askew folded plate is at the low end of the hopper.
 - Make sure the plate does not extend into the gap between the hoppers



8. Install the discharge thingies in the gap between the hoppers with the long pipe with the bar over its top facing out.



9. Install the reservoir tank and triple valve in the slots in the center beam and car side.

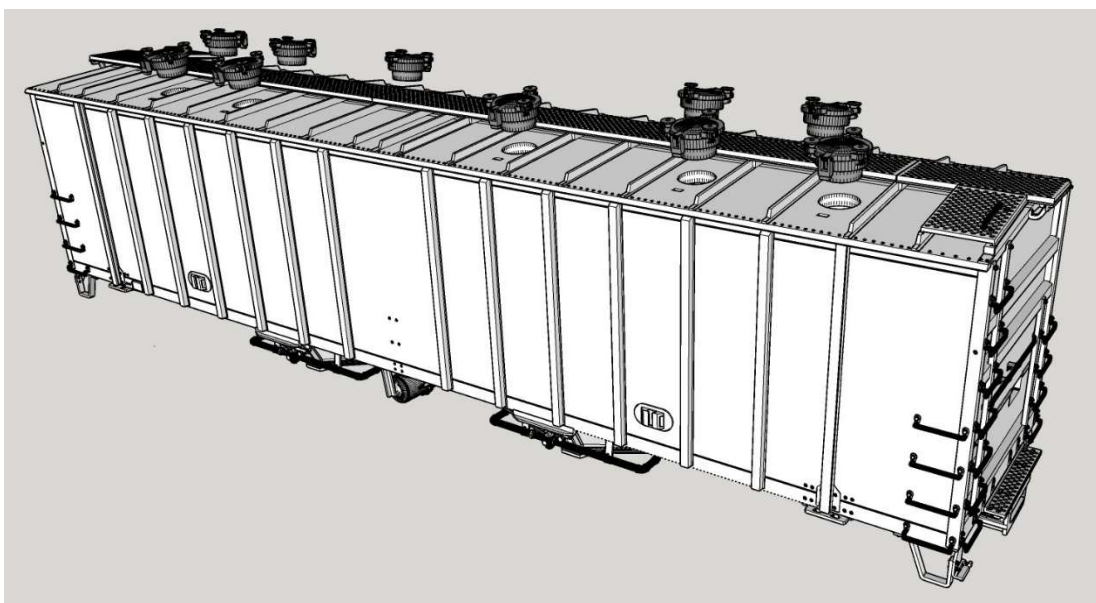


10. Install the pipes by inserting them in the four holes (1 in each the two plates and 2 in the hopper sides)

- Glue the hanging support to the hopper sides first
- Glue the pipe ends into the bolt plates.



11. Install the roof hatches.

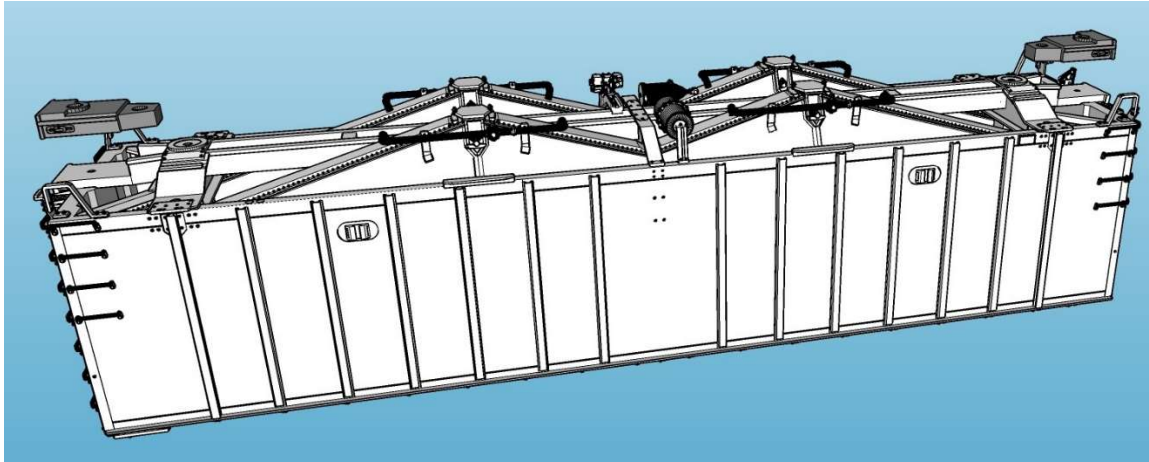


12. Install the brake wheel

Draft Gear and Trucks

13. Tap the holes in the pads at the end of the center beam with a 00-80 tap.

- Use 3/16" and 1/4" 00-80 flat head screws to fasten the draft gear box to the pads after fitting a Kadee 802, 803 or 808 coupler and centering spring into the box.



14. Tap the holes for the trucks with a 2-56 tap. Install 100 ton trucks with 36" wheels.

- If using trucks with 33" wheels add shim washer(s) thickness of 0.023 inches. Using Kadee #208 (red 0.015" thick) and #209 (gray 0.010" thick) will work.