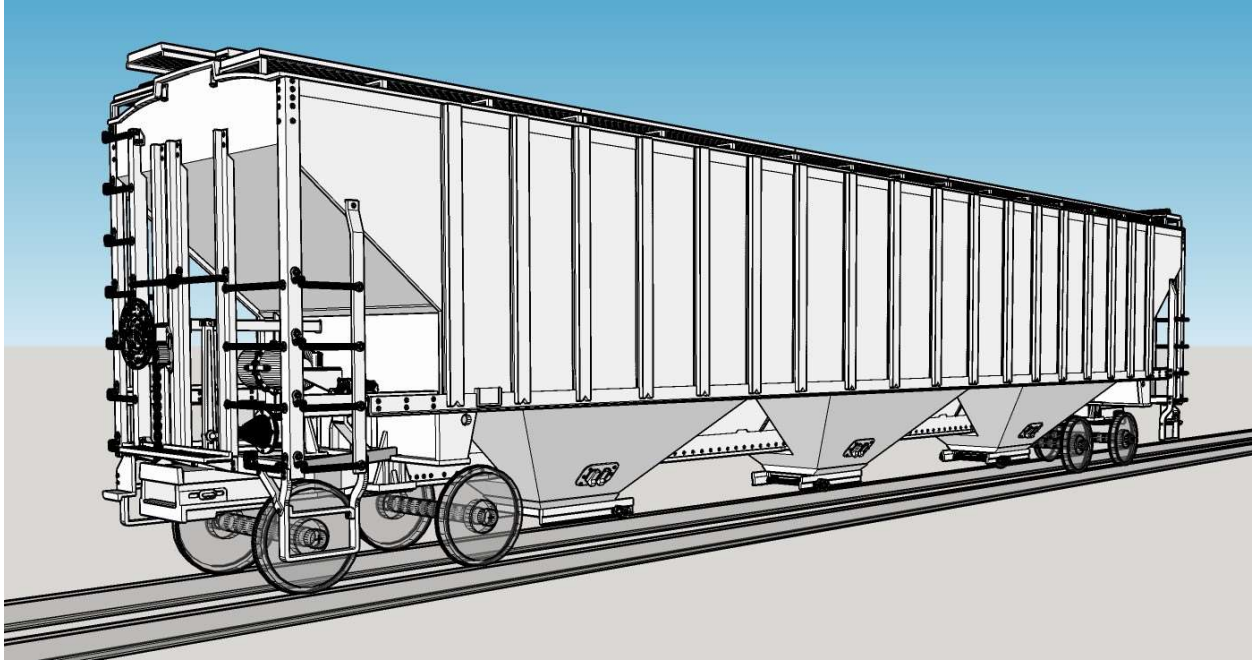


## PS 4750 Covered Hopper



## Assembly Instructions

### General

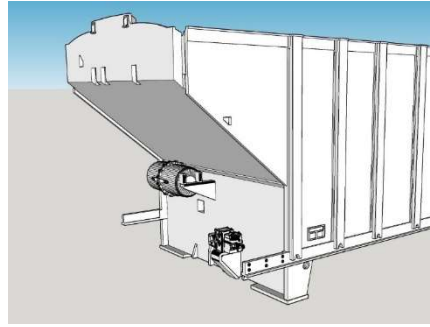
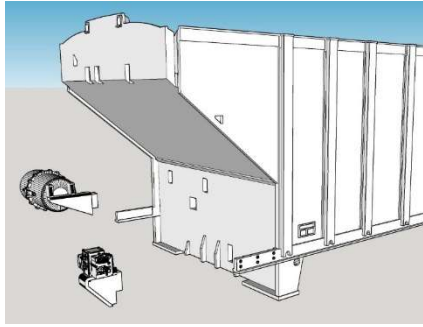
This model is based mostly on the Pullman Standard 4750 cubic foot covered hopper with some input from pictures I took at a local grain elevator – primarily for brake components and arrangement.

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. If possible, test the glue you intend to use before starting.

The plastic surfaces can be smoothed to remove the visible texture using a small stiff fiberglass abrading brush.

## Cage Interior Brake Components

Install the reservoir tank and triple valve to the B-end bolster wall

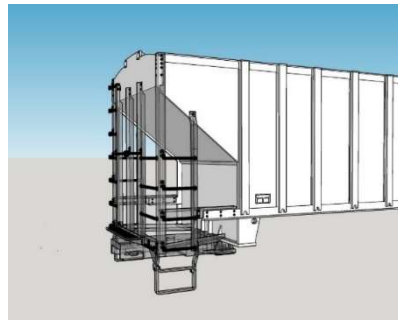
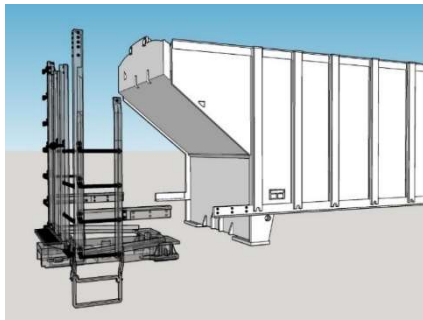


## Roof and End Cages

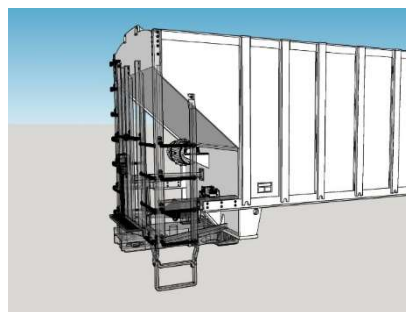
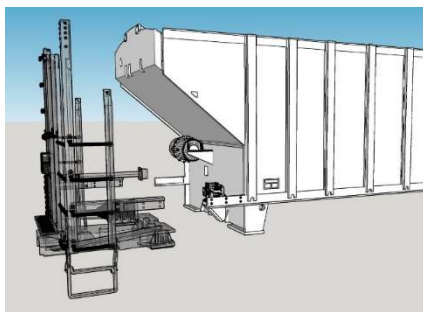
Roof or the end cages may be installed next.

Position the cages at their respective ends. Do one cage at a time.

- Glue the bolster first and work around the cage to glue the various parts to the body.
- There are 2 studs and corresponding round recesses where the bottom angle irons overlap. The studs recess into the holes to align the pieces.
- The top of the corner posts have studs that fit into recesses in the carved-out corner of the body.



**A End**



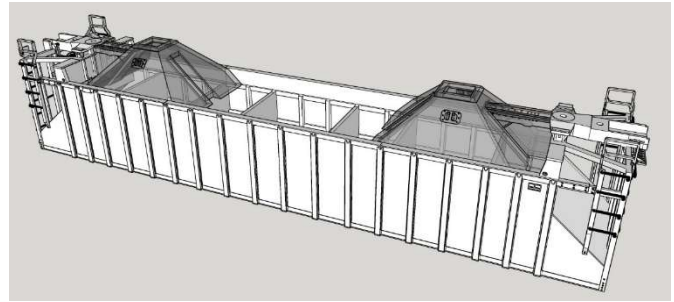
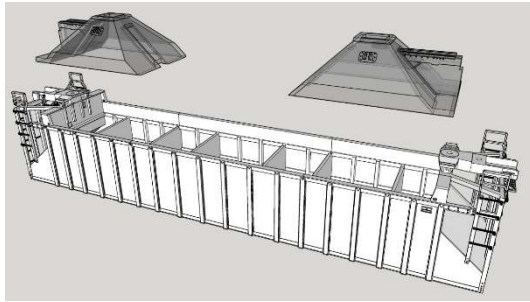
**B End**

- Install the roof if already not done so. The fit is snug. Apply a short bead of glue, position the roof and hold until set. Apply glue to the intersection of the roof and walls from the inside and hold tight until set.

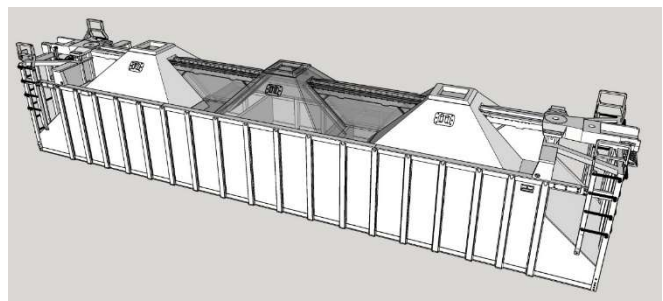
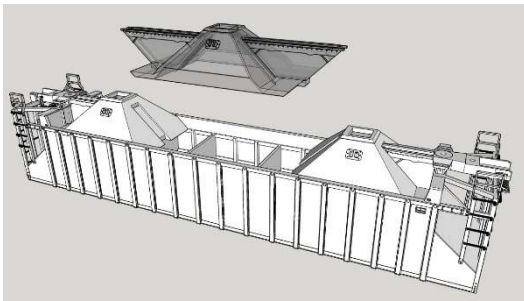
## Hoppers

After the cages and roof are attached install the bottom hoppers. The inside faces of the hoppers are a good place to add weight.

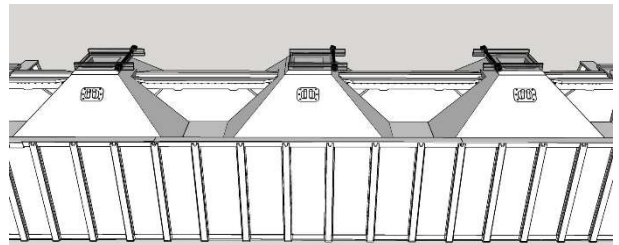
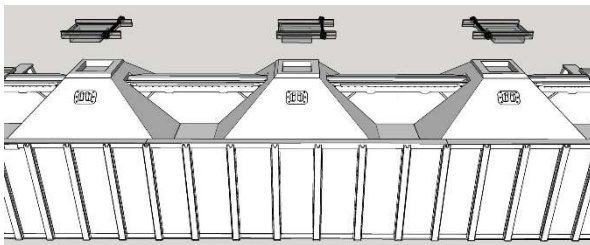
- Attach the end hoppers first making sure they are flush to the bolster wall.



- The middle hopper has a correct orientation. The protruding ends of the hopper door (see next step) point to the A end of the car.
- Carefully install the middle chute by positioning one end of the center beam against its adjacent hopper in the slot and then lowering the other end into place against its adjacent hopper while pushing gently against the first positioned end so that the second end drops into the chute slot.



- Install the chute doors



## Draft Gear and Brake Wheel

The draft gear is designed for a Kadee 802 (803, 808) coupler.

- Use a 00-80 tap to tap the holes in the pads at the car ends.
- Install the coupler and spring in the draft gear box. Place the draft gear box on to the pad and use the provided flat-head screws to attach the box to the pad. There are two screw lengths. Use the shorter screw at the hole closer to the bolster.

Install the brake wheel.

## Trucks

The car is designed for 100-ton trucks with 36" scale wheels. Smaller capacity trucks may be used with 36" wheels. Trucks with 33" scale wheels may be used but require shim washers so the couplers are at the correct height off the rail head. Use Kadee fiber washers 208 (red, 0.015" thick) and 209 (gray, 0.010" thick).

33" hirail wheels may be used but will increase the minimum radius of track the car can negotiate. If using Kadee 802 with hirail wheels, install the shim washers.

Benn Central Shops has a conversion kit to use American Flyer knuckle couplers in the model's draft gear. E-mail [ben.benncentral@gmail.com](mailto:ben.benncentral@gmail.com).

- Tap the hole in the car bolster with a 2-56 tap. Install the trucks using the provided round-head machine thread screws.