

32010/32011 PRR/PC/CR X54

HO Assembly Instructions

Bridge Line Design



We ask that you please read through all instructions before starting construction to familiarize yourself with the order of assembly and construction methods.

DO NOT skip or re-arrange steps, as they have been carefully researched and are in the correct sequence.

Important:

Please keep in mind that this is a UV cured 3D Printed kit. Direct sunlight will further cure the parts in this kit. If cured too long this can cause some warping and can cause parts to become brittle. Some parts were cured for a specific amount of time to allow some more flexibility during assembly. Once primed and painted most of the curing will stop. Until you are ready to assemble please do not let the parts sit in direct sunlight or other UV light for long periods of time.

Etched Metal Parts:

- 2 Underbody Brake Levers
- 1 Hand Brake Chain Assembly
- 2 End Ladder Assemblies
- 4 Side Ladders
- 2 End Platforms
- 2 Defect Card Holders
- 2 Cut Lever Brackets
- 2 Types of Cut Levers
- 1 Roofwalk
- 2 Rookwalk corner grabs

Multiple Stirrups

Lost or damaged parts may be purchased direct from 3D Central for a nominal charge.

Additional Parts Needed:

4 2-56 5/16" screws

Bowser 40192 Trucks (Pair)

Rapido 2D-F8 Trucks (Pair)

Kadee 158 Whisker couplers or the couplers of your choice

Preparation:

You will need the following tools to build this

1 X- ACTO knife with a new #11 blade

1 small pair of tweezers

Small needle files (square, round & flat) Pin vise with #70 #79 & #80 drill bits

2-56 Tap

Regular viscosity - C.A.

Five-minute epoxy

Parts List:

Included in this kit are the following items:

- 1 Carbody
- 1 Peel and stick Floor Weights
- 1 Underframe
- 4 Tack Boards
- 1 Air Reservoir
- 1 Triple Valve
- 1 Brake Cylinder
- 2-Coupler Box
- 2-Coupler Box Lid
- 4-Roofwalk End Supports
- Multiple Handbrake Housings
- 2-Brake Wheels
- 1 Instruction Sheet
- Remove rough spots from the resin parts using wet sandpaper. If you notice that any of the parts are a little 'tacky', wash the part with IPA (Isopropyl Alcohol), let dry, then expose to UV for a minute or two. Anywhere outdoors even on a cloudy day will do.
- Drill and tap the truck holes and the coupler box holes 2-56. Drill the holes for the cut lever brackets using a #79 drill bit. This part is extremely fragile. Go slow and do not put much pressure on this part. Ideally put a small block of wood behind the part to help with breaking forces.

- 3 Identify and orient the parts. The 'B' end of the car features the handbrake location.
- 4 There are 2 small recesses in the floor for the weight. We recommend some epoxy or a product like "5 Second Fix", or "Bondic" to glue the weight in place. These are viscous UV activated resin products This car includes self adhesive weights that SHOULD be good enough. Use your discretion.
- Test fit the underframe to the carbody. Ensure that it fits up into the carbody, resting on the sills inside.
- 6 Apply the brake detail parts to the underframe. We have included Brake Levers for modelers who wish to super detail the underbody running gear.
- 7 Remove the end ladder assemblies from the etched fret. Mount them to the corresponding mounting braces on the ends of the car. We recommend installing the stirrups BEFORE the side ladders.
- 8 Add the door Grabs.
- 9 Add the rest of the grabs on the ends of the cars. Please note there is a small typo on the fret labeling 24in grabs as 18in grabs. Please see exploded diagram for correct placement.
- 10 Remove the hand brake etched platform from the metal fret. Depending on your prototype one of the platforms have etched lines so that the proper z shape can be bent into the walkway. Please refer to prototype pictures. The front (coupler side) should be bent towards the track. The back (car side) should be bent up.

- 11 Glue the brake wheel in place on top of the brake wheel housing. Add the housing to the car.
- 12 These cars USUALLY had tackboards on both ends of the car. Check photos to see if your car had them (sometimes they were ripped off).
- 13 If you wish to add air hoses, drill holes #70, but do not glue them in yet as they can be quite fragile.
- 14 Complete final placement of the underbody into the body. Add coupler and coupler box. Screw in place with a 2-56 Screw. This will hold the underbody in place.
- 15 Paint and letter the car.

This completes the construction of your HO Scale PRR/PC/CR X54 Boxcar. If you have any questions or comments, please write to:

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MANUFACTURER'S NOTES:

Please also note that we have included some duplicate parts in this kit. Leftover parts will be normal.

Build lines: As 3D printing technology becomes more mature, build lines are becoming a thing of the past! However, we're not completely there yet!. If you do see some 90% of build lines will disappear after your first coat of primer. You may also SEE build lines but when running a fingernail over it, you won't actually feel it. Now, IF you do have a kit that has some build lines that do not disappear with the first coat of primer, you may have to do some sanding and possibly some filling. **NOTE:** If you MUST sand the kit or parts, **ALWAYS** wet sand it as resin dust may be harmful to you if inhaled!

We do our best to go over each kit for random flaws in the printing process but it CAN happen. If you have a deep line or other obvious printing flaw please let us know right away and we will make it right!

Bridge Line Design In cooperation with

3D Central
PRR/PC/CR X54 40' Boxcar
32010 - 32011







For any questions or concerns please reach out to us! Info@3DCentralTrains.com www.3DCentralTrains.com