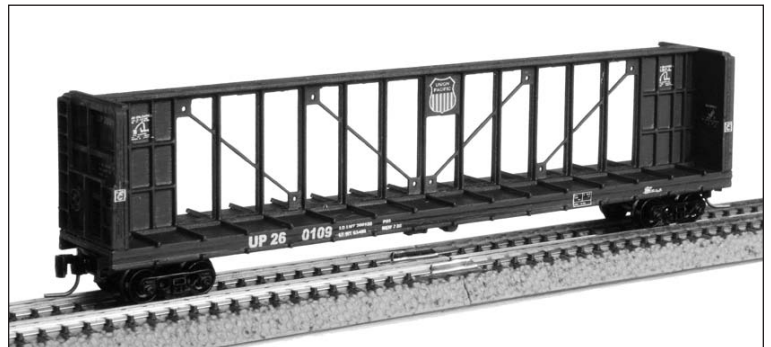


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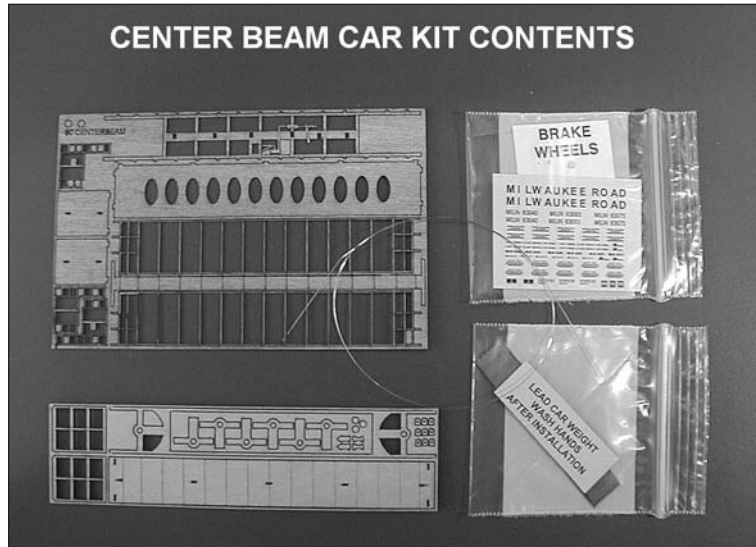
Warning:

Ztrack Craftsman Kits contain small parts. Kits are not recommended for minors. Parts may pose a choking hazard. The weights used in the kit are lead. Safe handling procedures is recommended. Wash hands throughouly after handling. Eye protection is recommended when working with small parts. Ztrack assumes no liability for injury suffered in producing the kits.

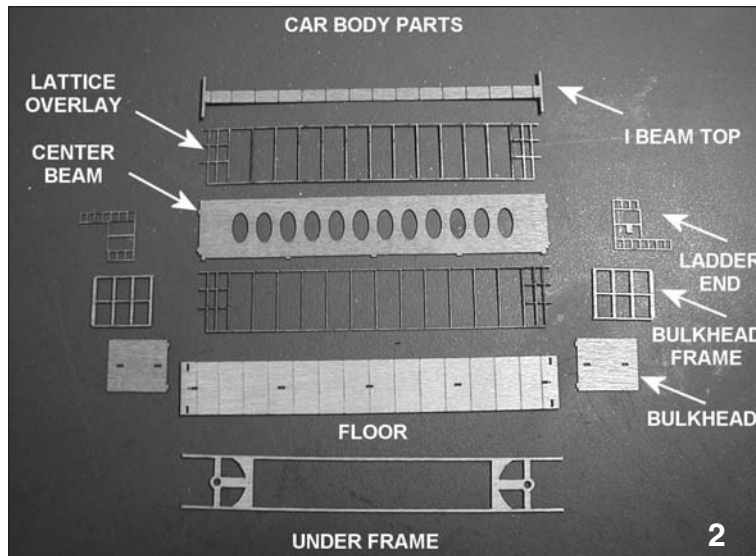
Ztrack Craftsman Kits - Center Beam Flat Cars

Thank you for purchasing the Center Beam Kit. This kit requires moderate modeling skills, as care has to be taken when cutting the delicate parts off the sheets, glue applied carefully during construction, some brake gear formed from brass wire, and extreme care used while cutting the tiny decals from their sheet. Please read the instructions thoroughly before starting construction, for best results.

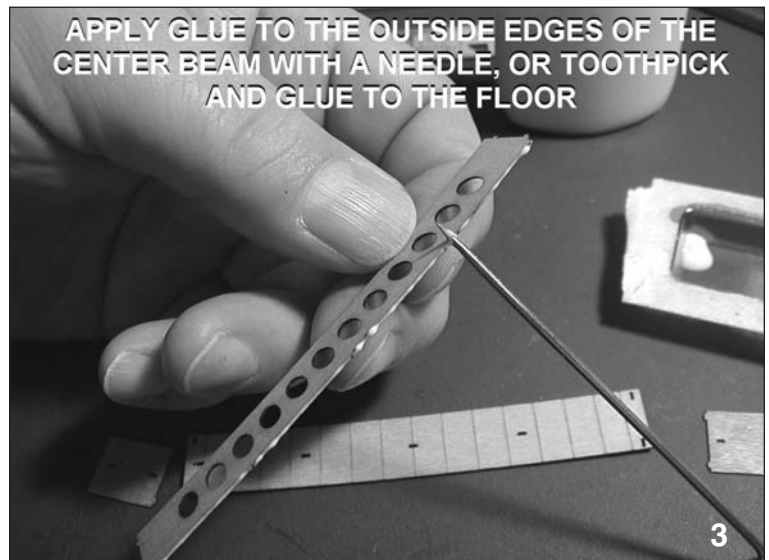
Construction takes a few hours, and results in a very satisfying model. Laser cutting sometimes does not cut all the way through, so care must be taken to use a sharp hobby knife to free parts from sheets.



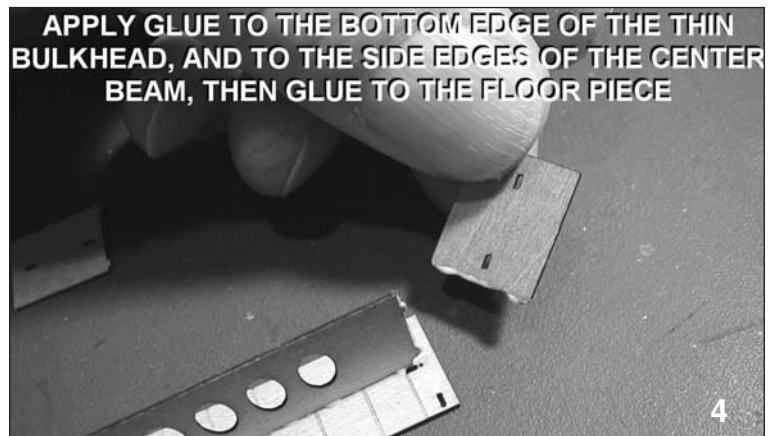
The parts sheets shown above are included but you must provide your own paint, trucks, and couplers. Decals, Brass Brake Wheel, and Brass Wire Included. The model can be built very easily by omitting the brake gear installation, and all the decal data, for those wishing to save time on construction.



Starting with the car body, examine photo #2 and remove the parts from their plywood sheets very carefully with a sharp hobby knife.

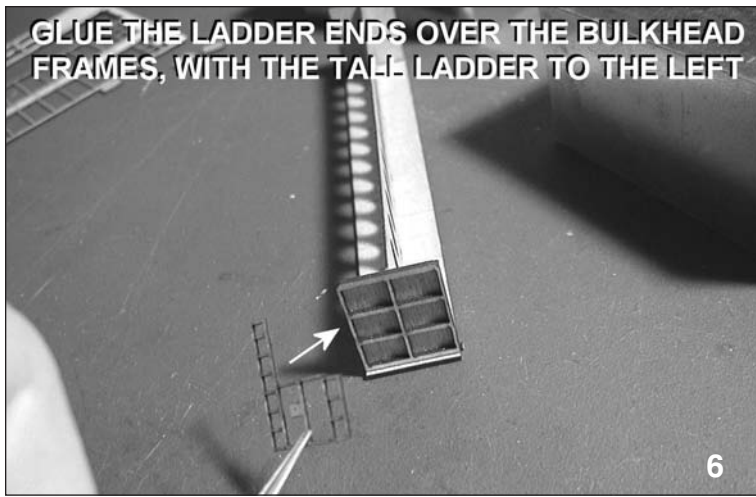


Apply white glue to the bottom and end edges of the Center Beam part as shown in photo #3, then attach to the floor part as shown in photo #4. Use a toothpick or large needle to apply the glue sparingly. The parts may be slightly warped, so hold the Center Beam in alignment while pressing down for a minute until the glue sets. These parts have alignment tabs/notches.



Examine photo #4, and apply glue to the bottom edge of the Bulkhead end, then attach to the floor ends. If the glue on the Center Beam end edges has dried, apply some more, then attach the Bulkhead end. Hold everything in alignment while the glue sets up. You can also use weights or blocks to hold everything square.

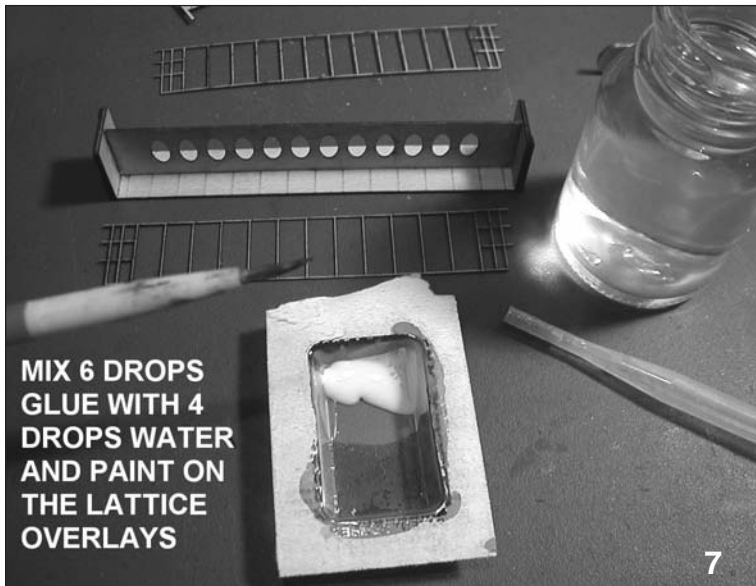




GLUE THE LADDER ENDS OVER THE BULKHEAD FRAMES, WITH THE TALL LADDER TO THE LEFT

6

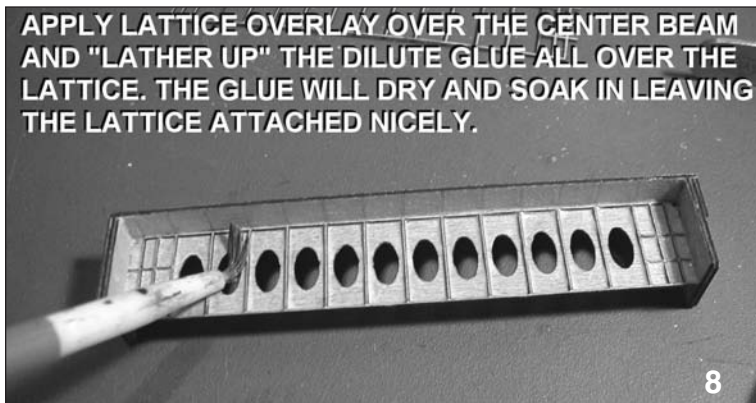
Examine photo #5, and glue the 2 bulkhead frames over the bulkhead ends as shown. Examine photos #6 and glue the ladder ends on as shown. Pay attention to align the tall ladder to the left side of the car ends.



MIX 6 DROPS GLUE WITH 4 DROPS WATER AND PAINT ON THE LATTICE OVERLAYS

7

Examine photos #7 and #8 for Center Beam Lattice Overlay gluing instructions. Mix white glue with water at a ratio of 4 drops water to 6 drops white glue, then stir with a cheap hobby paint brush. Apply a Lattice Overlay over the Center Beam, and 'Paint' the dilute white glue over the Lattice until the glue looks like it is foaming up.

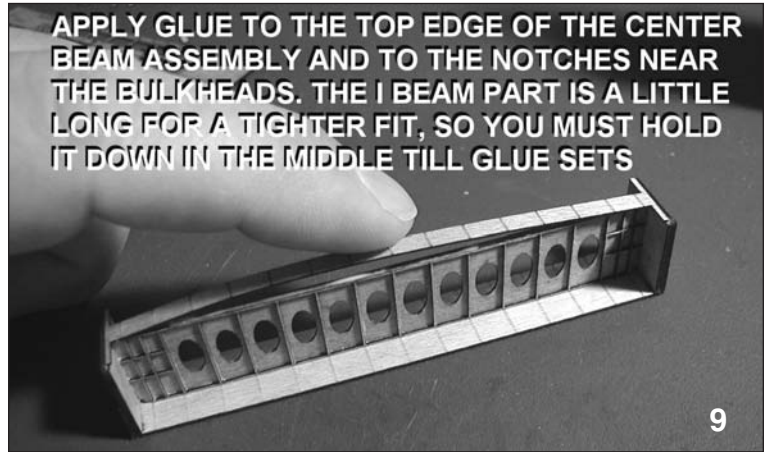


APPLY LATTICE OVERLAY OVER THE CENTER BEAM AND "LATHER UP" THE DILUTE GLUE ALL OVER THE LATTICE. THE GLUE WILL DRY AND SOAK IN LEAVING THE LATTICE ATTACHED NICELY.

8

The glue will work its way all around the Lattice, and as it starts to dry the foam will dissipate, leaving the Lattice glued in place over the Center Beam part. By using a paint brush to apply

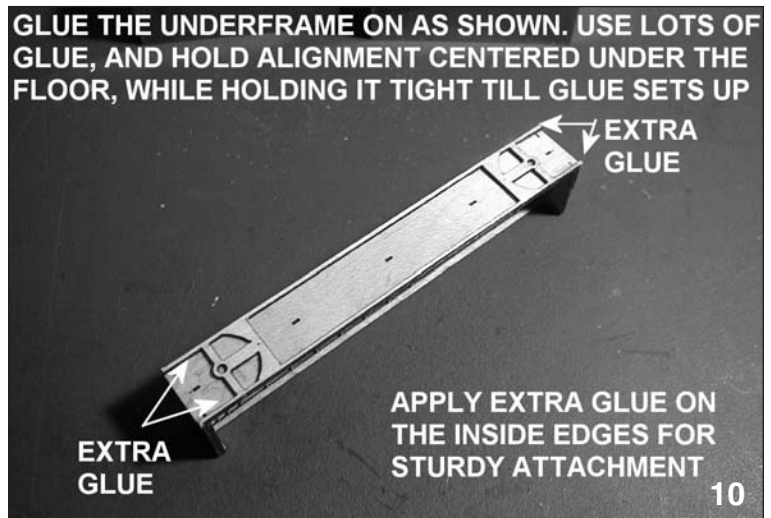
the dilute glue, the Lattice will not break. The Center Beam may start to warp as the side gets wet, however when you apply the Lattice to the other side of the Center Beam, it will straighten out.



APPLY GLUE TO THE TOP EDGE OF THE CENTER BEAM ASSEMBLY AND TO THE NOTCHES NEAR THE BULKHEADS. THE I BEAM PART IS A LITTLE LONG FOR A TIGHTER FIT, SO YOU MUST HOLD IT DOWN IN THE MIDDLE TILL GLUE SETS

9

Find the "I Beam" top part of the Center Beam, and apply glue to the top edges, then put one end of the I beam part on, and bow it up a little in the middle then glue the other end in. It is slightly oversize, but when you press it down in the middle, everything will fit snug. While the glue is setting on the I beam, make sure the Center Beam underneath is centered lengthwise (photo #9)



GLUE THE UNDERFRAME ON AS SHOWN. USE LOTS OF GLUE, AND HOLD ALIGNMENT CENTERED UNDER THE FLOOR, WHILE HOLDING IT TIGHT TILL GLUE SETS UP

EXTRA GLUE

EXTRA GLUE

APPLY EXTRA GLUE ON THE INSIDE EDGES FOR STURDY ATTACHMENT

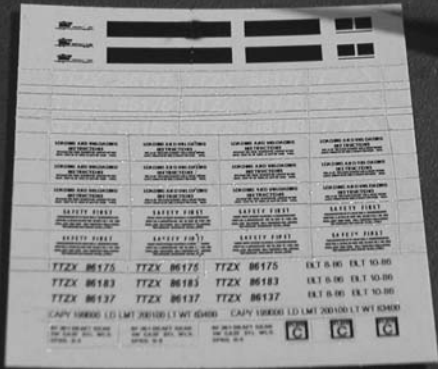
10

Glue the 1/32" plywood Under frame part on (as shown in photo #10) use care to align it as centered as possible. Put Weights on the model and let it dry a while before continuing.

Use a round tool (like a Floquil paint bottle) to "knead" the lead weight a little flatter so it will sit slightly counter sunk in the rectangular opening. Lead is soft and will knead just like pizza dough real quick, so test fit often (photo #11). Superglue it in when it is flat enough.

The thin plywood under frame/brake piece will glue over it, so the lead must be flat enough and thin enough to not bow the next piece up. I used a Popsicle stick to spread some Squadron putty, (photo #12) to fill in the gap around the lead weight, then sanded the bottom flat after the putty dried.

USE A SHARP HOBBY KNIFE TO CUT AROUND ALL THE DECALS YOU PLAN ON USING, BUT LEAVE THE PAPER BACKING IN TACT, JUST CUTTING THE FILM



Fold over a small napkin or paper towel and saturate with water, then lay the whole decal sheet on top, and use fine pointed tweezers to peel off the decals as you use them. Be sure to dip the decal in decal setting solution (the vinegar smelling kind) before applying to the car.

SET THE DECAL SHEET ON A WET PAPER TOWEL AND PULL THEM OFF THE SHEET WITH SHARP TWEEZERS, DIP THEM IN DECAL SETTING SOLUTION, THEN APPLY TO THE MODEL.



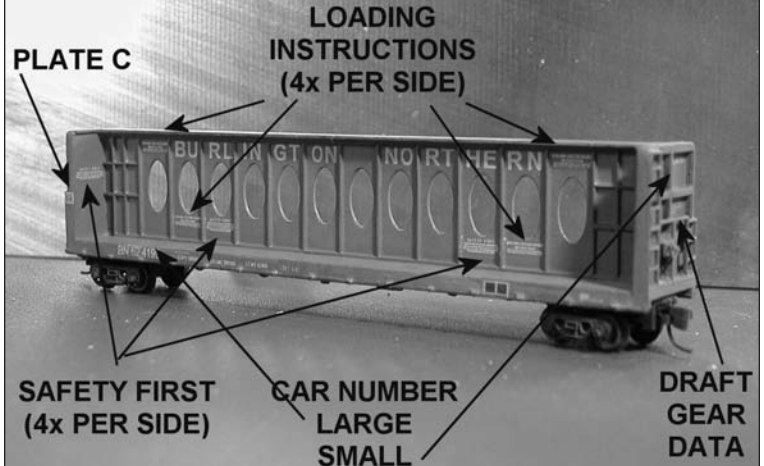
I use Microscale Micro Sol setting solution by pouring a little in the bottle cap, and dipping the decals in it as I pull them off the decal sheet. If they fall out of the tweezers, you can find them easy in the small bottle cap.

After a few minutes most of the decal setting solution dries, and some decals may even start to peel up. That is when I apply the decal softening solution. I like an aggressive solution so I use Floquil's Polly S Decal Softener. I apply it very gently with a soft paintbrush, and the decal will melt onto the surface of the model. DO NOT TOUCH THE SOFTENED DECAL! Let it dry completely, then seal with a gloss finish. I use Floquil's Polly S Clear Gloss finish followed by Polly S Flat Finish.

The following shows the general decal arrangement. Roadnames and placement may vary. Please see the images on the packing for correct and specific decal placement and colors.

I found it best to apply the decals around one side of the center beam and on the bulkhead ends first, then apply decal softening solution before the decals start to peel up. Next I do the other side of the center beam, and finally the reporting data marks on the car sides.

PAINT AND DECAL FOR YOUR ROAD



Examine these photos for decal placement for the roads you chose, or you can look up your specific model in books or prototype photos for alternate arrangements, as many varied slightly.

After your model has been painted, lettered, and sealed it is time to mount the trucks and couplers. The model was designed to use truck mounted or body mounted couplers. The minimum radius recommended for truck mounted is 7" and 9" for body mount couplers.

I used Micro-Trains roller bearing trucks WITH couplers for maximum turning radius (#956 - 004 02 031). I cleaned out the truck pin hole with a 1/16" twist drill bit, and the truck pin fit was perfect.

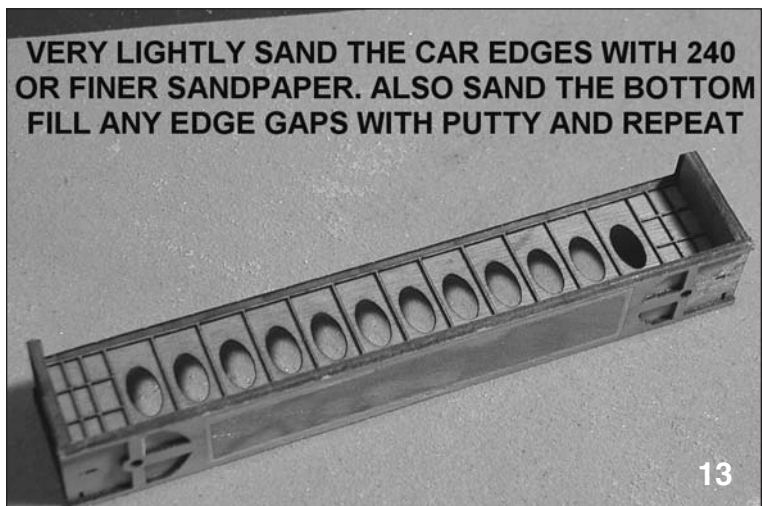
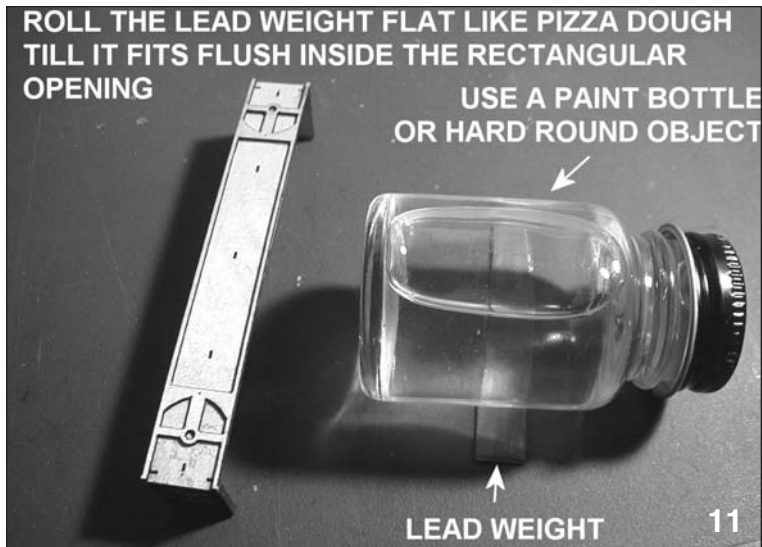
There is a tiny circular cutout at the end of the center beam tab slot thru the floor, where a body mount coupler screw can fit if you prefer body mount couplers. Just drill out the end of that slot with a #65 bit, and tap with a #00-90 tap, then you can mount a MT #903 coupler.

Thank you for purchasing this craftsman kit, and I hope you enjoy constructing your own Center Beam flat car, and that it brings you years of satisfaction.

- Robert Ray

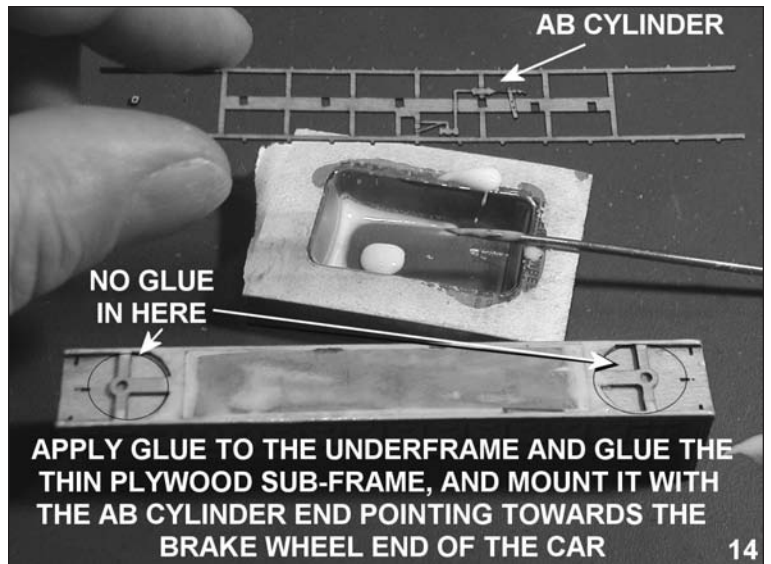
Recommended Colors:

- BNSF - opera window - ATSF Mineral Brown
- Centex - dual truss - SP Lettering Gray
- TTX - opera window - Railbox Yellow
- UP - quad truss - Boxcar Red

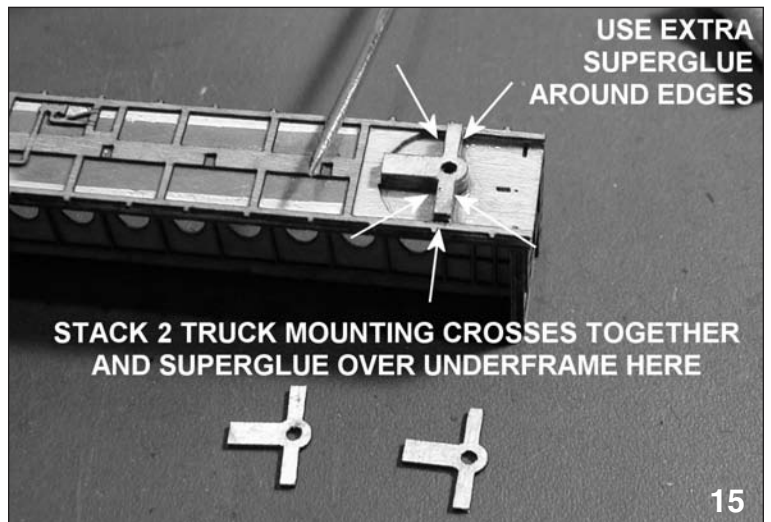


Examine photo #13 and use some 240 grit or finer sandpaper laid flat on a surface, then gently sand the car edges. It is important that these edges are sanded smooth as decals will be applied later on, but do not over sand. Use putty if needed to fill gaps.

Examine photo #14 and glue the thin plywood Under frame part on, with the AB Brake cylinder/chain end pointing towards the side of the car that the Brake Wheel ladder end is located.



This step in effect hides the lead weight. Do not get glue in the truck mounting cross area, as those will be super glued in place, and the superglue will absorb into the plywood making a good bond.



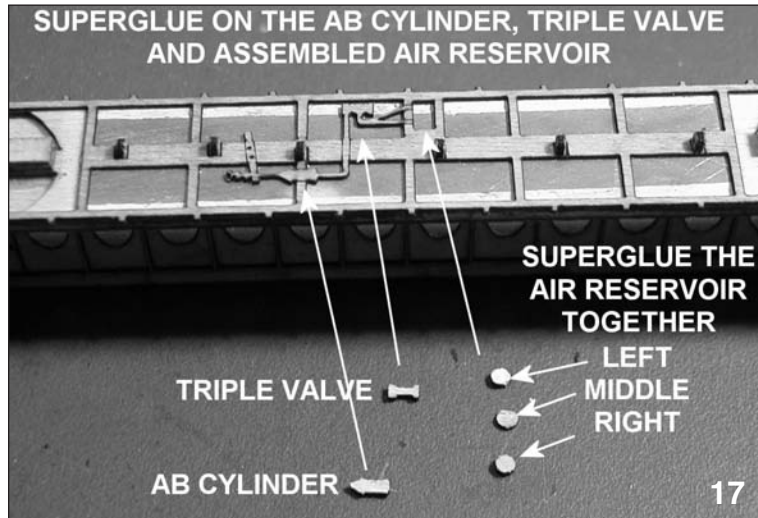
Superglue 2 truck mounting crosses together and on top of the cross on the Under frame as shown in photo #15. Use extra superglue around the outside edges of the truck mounts so they are well bonded to the car. For those wishing to save time, you can skip steps shown in photos #16 through photo #19.



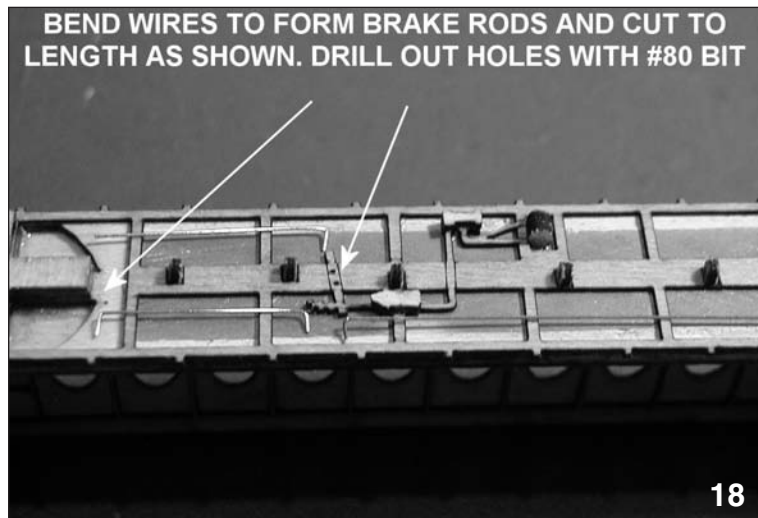
Find the brake rod guide mounts on the 1/32" plywood sheet, drill out the holes with a #80 bit while still attached to the sheet.

Superglue 6 of the brake rod "Guide Mounts") in their rectangular openings as shown in photo #16.

Superglue the small 1/32" plywood "I" shaped brake part over the Triple Valve shape to form a Triple Valve. Superglue the arrowhead shaped part next to it over that part to make an AB Brake Cylinder.

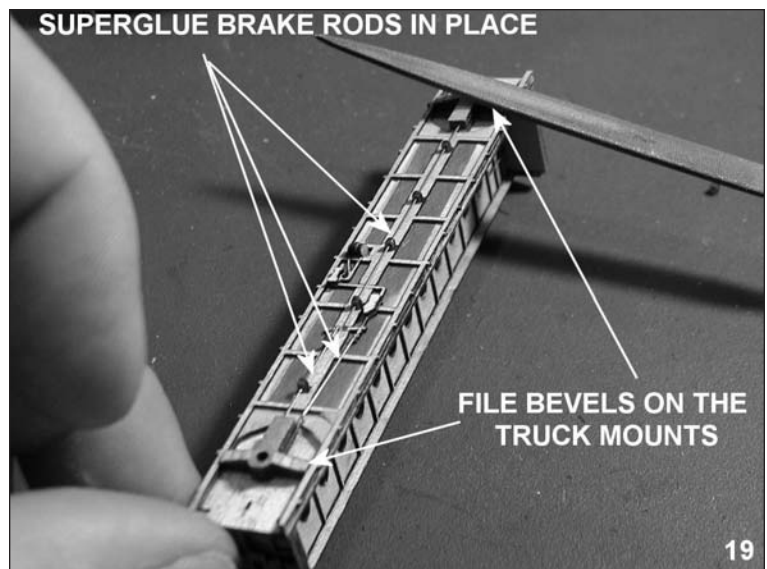


Glue 2 of the 1/32" plywood circles, and one of the 1/64" circles to make an Air Reservoir. The thin plywood circle gets sandwiched between the smaller thicker circles. Glue this in the rectangular opening so the left and right sides of the Air Reservoir are lined up with the brake lines from the Triple Valve as seen in photos #17 and #18.

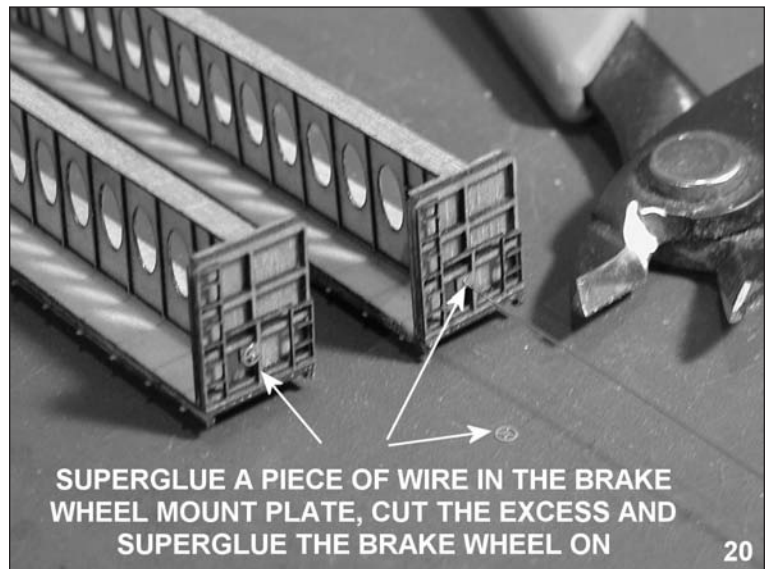


Use a #80 drill bit and drill out the holes shown in photo #18, then bend some 90 degrees in the ends of brass wire to form the brake rods. Thread the long ones thru the Brake Rod Guide Mounts and cut excess wire at the truck mounts, and superglue in place. Superglue the short one from AB Cylinder to the hole next to the truck mounts.

File bevels on the truck mounts from the center, down to the car side edges as shown in photo #19. Use care not to file around



the circle area in the center as that height is needed for coupler swing clearances.



Examine photo #20, superglue a length of brass wire thru the Brake Wheel Mount Plate, then superglue the Brake Wheel on and cut the excess wire. These cars have 2 comb shaped slat parts that glue over the floor (Shown page 4 on the 1st and 3rd cars) to better represent the topside of the floor. Glue them on each side with the teeth slightly overhanging the sides of the car.

The car is ready for painting now. I like to use Floquil solvent based paint because it penetrates the wood and seals it. It takes 2 to 3 coats if brush painted as I do, or you can airbrush the models in a couple lighter coats.

Please see the recommended colors in order to match to the prototype. Let paint completely dry before applying decals.

I found the best way to deal with whole sheet decals is to use a fresh blade in my hobby knife, and cut around the lettering as close as possible using a ruler or straight edge. Just lightly cut thru the decal film and not all the way thru the paper. NOTE the decals included with this kit may be laser cut. Inspect first since this step may not be necessary.