



## Upgrading an HO Athearn “Ready To Roll” 50’ Flat Car with 45’ Trailer

Add weights along with a few details to improve this model / **Howard J. Samarin**

This is the first in a series of articles about upgrading “Ready To Roll” freight cars. In this article, we’ll take a factory painted Athearn 50’ flat car with 45’ trailer, and add a few details along with an Adair Shops weight upgrade kit. I selected a car painted in the C&NW scheme, as this is one of my favorite roads, even though it isn’t a prototypically correct car. The C&NW did convert a large number of 50’ boxcars into TOFC flat cars at their Clinton Car Shops in Clinton, Iowa.

First, we need to completely disassemble the flat car and trailer. Start by removing the trailer from the flat car. Then, remove the trailer body from the underframe by gently spreading the trailer body in the center where it meets the underframe. I inserted a small flathead screw driver between the two pieces, and slowly worked them apart. Be careful not to damage the trailer body! You can also gently pull down on the wheel assembly while holding the trailer body.

Once the underframe is removed from the body, we then need to remove the wheel assemblies from the underframe. Hold one side of wheels, and gently twist off the opposite set of wheels. Repeat for the other set of wheels. Remove the remaining wheels from the metal axle by holding the metal with a pair of needle nose pliers, and gently twisting off the wheel assemblies. Finally, separate the rubber tires from the plastic wheel hubs.

Start disassembling the flat car by unscrewing the trucks. Set the trucks and truck screws aside for now. Remove the underframe piece from the body. If you are going to be installing Kadee #5 couplers during the final assembly, complete the steps in this paragraph. Otherwise, skip to the next paragraph. Remove the couplers from the underframe by inserting a flat head screwdriver between the coupler lid and side of the coupler box. Twist the screwdriver slightly, and this should pop the coupler lid off. Remove the couplers and set all pieces aside for now.

Next we need to remove the factory weight from the body. The weight is affixed to the underside of the body using double sided tape. Starting at one end, insert a flat head screwdriver between the weight and body, and gently pry the weight up. Work alternately from each side, gently prying the weight away from the body. Be careful not to damage the body during this process. As you pry the weight up, hold the weight away from the body with your fingers. Take your time with this step, and eventually the weight come off the body. Set the weight aside.

Now we can start work on the body. Remove the cast on stirrup steps using a flush cutting parts snipper. Using a #73 drill bit, drill out the holes for the A-Line stirrup steps. Use Figure 1 as a guide. I found that using the unpainted areas from the removed cast on stirrup steps was a starting point for hole locations. My first hole was centered in the unpainted area closest to the end sill, while the second hole was placed just outside of the adjacent unpainted area (again, use Figure 1 as a guide). Install the stirrup steps using CA glue.

Next, we’ll install the Kadee air hose / angle cock. Drill a #65 hole just to the right of the cast on coupler box, on each end sill. For horizontal placement, I centered the hole between the cast on couple box and the cast on end grab iron. For vertical placement, I centered the hole between the two cast on vertical rivets on the right hand side of the cast on coupler box. Refer to Figure 2 for placement. Note that the placement is a little high as the instructions from Kadee call for the hole location to be centered vertically on the coupler. This would place the hole right at the bottom edge of the body, thus giving no room for error when drilling the hole. Install the air hoses using styrene glue.

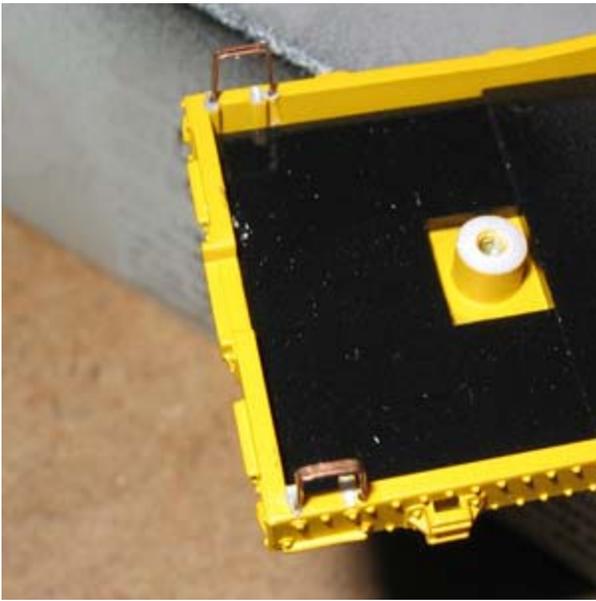


Figure 1

Before we install the Adair Shops weight upgrade kit for the 50' flat car, we'll paint the weight segments first. Remove the weight segments from the parts envelopes, and mark the part number on one side of each weight segment. A Sharpee permanent marker works best for this. Next, take an old box top or bottom, and mount the weight segments to the box. I take small pieces of masking tape, and make a loop so that the glue side is out. Place the loop on the box,



Figure 2

and then press the weight segment on top of the loop. Be sure the part number is face down so that it doesn't get painted over. Refer to Figure 3.

Cut two pieces of Plastruct 3/64" styrene angle to 3-1/8" long each. These pieces will make up the trailer rub rails for the flat car. Mount the pieces on the same box with the weight segments.

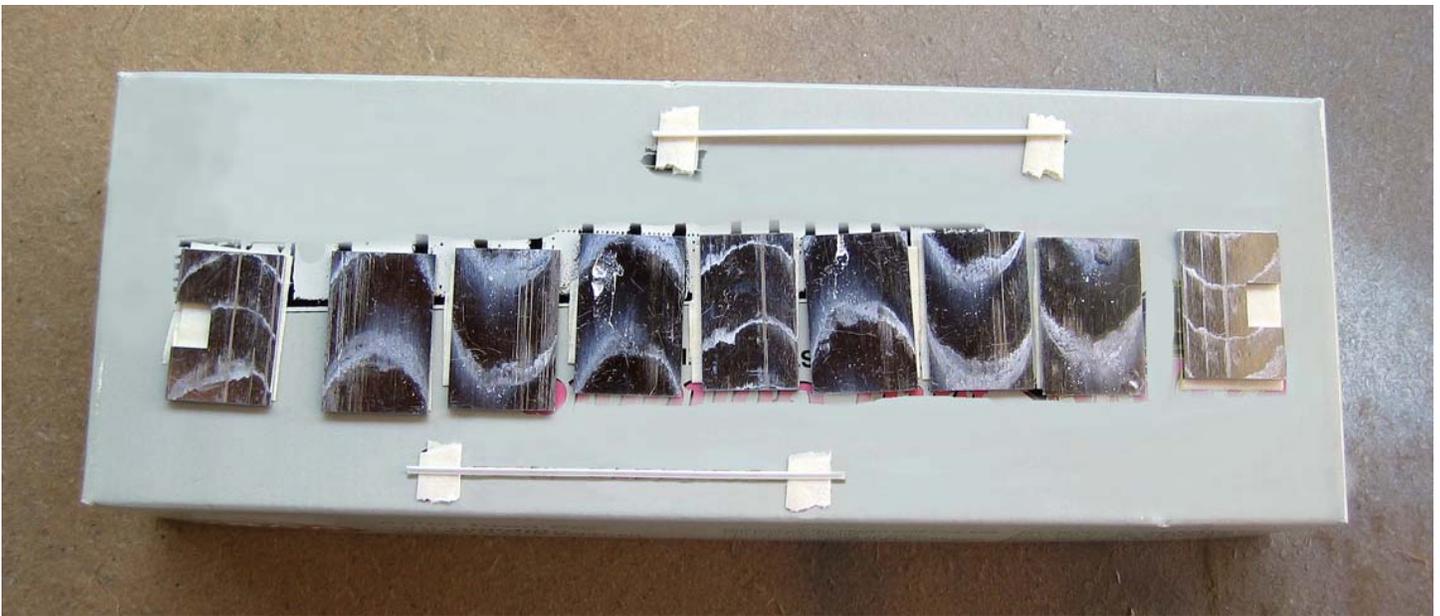


Figure 3

Take another box top or bottom, and mount the trailer wheel hubs to the box using loops of masking tape. Mount the hubs so that the end with the axle hole is pressed against the masking tape. Mount the trailer underframe to the box using the same process. Be sure ribbed side of the underframe (the side with the landing gear) is facing up. Paint the underframe and wheel hubs using Polly Scale Stainless Steel. I found this is a very close match to the silver that

Athearn uses. Set aside to dry overnight.

Remove the rub rails and the 50' flat car weight segments from the paint box. Referring to Figure 4, mount the rub rails to the flat car using CA glue. Install the 50' flat car weight segments (painted side up) using the manufacturer's instructions. Remember to reference the part number that was written on the bottom of each weight segment. Set flat car aside to dry overnight.

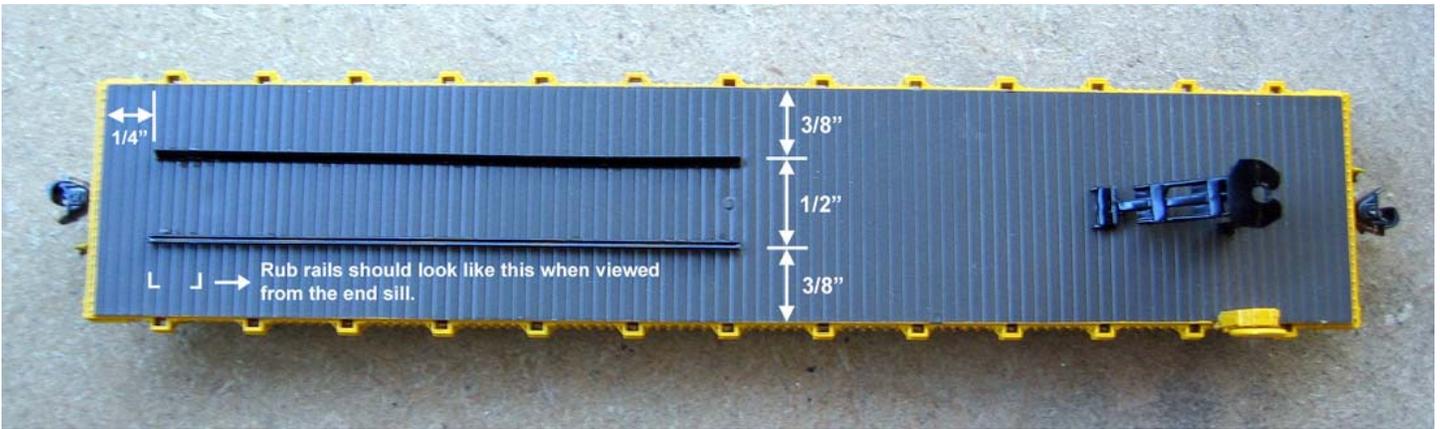


Figure 4

Remove the trailer underframe and wheel hubs from the other paint box. Press the rubber tires onto the wheel hubs. Clean off the ends of each metal axle. Insert one end of each metal axle back into a wheel assembly. Insert the axle / wheel assembly through the suspension axle hole, and then press on the other wheel assembly. Repeat for the other axle / wheel assembly. Install the Adair Shops weight upgrade kit for the 45' trailer. There is no need to paint these weight segments, as they will be concealed by the trailer body. Set aside to dry overnight.

Spot paint the stirrup steps and the angle cock portion of the air hose assembly Polly Scale C&NW Yellow. If you are brush painting,

it will take several coats to cover. Spot paint the hose and glad hand portion of the air hose assembly Polly Scale Steam Power Black.

If you are going to use Kadee #5 couplers, install them at this time. Press fit the flat car underframe into the body, being sure that the pointed end of the brake cylinder is pointing to the brake wheel end of the car. Install the trucks using 3/16" long 2-56 round head screws. Tighten the truck screws so that the trucks pivot freely, and also have a little side to side movement.

Finally, insert the trailer underframe into the trailer body. Apply weathering to the flat car and trailer if desired. □

<b>Athearn</b>	
92057	C&NW 50' Flat with 45' Trailer (CNW 780522)
<b>Adair Shops</b>	
2010R	Weight Upgrade Kit – Athearn 45' Trailer
2021R	Weight Upgrade Kit – Athearn 50' Flat Car
<b>A-Line</b>	
29000	Stirrup Steps (Style A)
<b>Kadee</b>	
5	#5 Couplers & Springs
438	Air Hoses & Angle Cocks
<b>Plastruct</b>	
90501	3/64" Styrene Angle
<b>Polly Scale Paint</b>	
414110	Steam Power Black
414191	CNW Yellow
414296	Stainless Steel
<b>Misc</b>	
	3/16" 2-56 Round Head Screws (2)
	CA Glue
	Liquid Styrene Glue
<b>Weight Scorecard</b>	
4.5 oz	Out of the box Athearn car & trailer
5.6 oz	Finished car & trailer
4.9 oz	NMRA recommended weight