

## ASSEMBLY INSTRUCTIONS:

1. Cement floor and triple valve to frame assembly.
2. Drill out the 0.015 inch diameter holes on both side skirts and both end sills to match the diameter of the grab irons being used.
3. Glue the stake pockets into the rectangle recesses and align pockets on the far ends next to the plate & rivet details.
4. Glue the side skirts under the floor overhang with the access holes toward the brake shaft tab on the frame assembly and the vertical ribs facing inward.

**NOTE:** The side skirts have notches along the top edge which should help align the skirts properly along the length of the flat car with tabs inward & overhanging on each end.

5. Glue the left handed and right handed gusset plates which have legs, close to the center line of the car up close to the air reservoir with the angle iron protruding away from any obstacles. Make sure you use the vertical ribs inside the side skirt to assist alignment and gluing.
6. Working from the two center gusset plates, glue the four remaining large gusset triangles between the rib sets with their angle iron detail matching those at the center line of the flat car.
7. Glue the four smaller cut off gusset plates between the remaining ribs on the side skirt also with their angle iron matching those at the center line of the flat car.
8. Glue the deck patch plank which has a notch to the brake wheel end of the flat car, using the tabs on the inside of the side skirt for gluing, and glue the other patch plank to the opposite end in the same manner.
9. Glue the end sills to each end with the "double tabs" under the deck patch planks. To insure strength apply glue to all five tab locations under the patch plank.
10. Glue the tab on the bottom brake ratchet & pawl to the notch in the deck patch plank over the brake wheel tab on the frame assembly.
11. Cut the 0.020" diameter wire to about 9/16 inch in length and glue the brake wheel using cyanoacrylate type glue.
12. Insert the brake wheel and shaft through the ratchet & pawl into the hole in the brake shaft tab on the frame.

**OPTIONAL:** Before gluing the bottom of the shaft to the tab, wind on a short section of scale chain from the inside and glue it off to the brake detail under the car.

13. Install couplers (not included) and cement pocket covers into place. The pockets accept K.D. #5, 9, 28, 38, & 58 medium "centerset" shank couplers.
14. To install trucks (not included) using truck pins, drive pins through truck bolsters into snaps on frame like small nails. Trucks can then be snapped on or off. If truck pins are used, remove truck mount bosses from floor before cementing frame to floor. If trucks are to be installed with #2 screws (not included), DO NOT REMOVE TRUCK MOUNT BOSSES FROM FLOOR.
15. Install (your choice of manufacture) Grab Irons: using cyanoacrylate type glue, into the holes drilled out in step #2.
16. Frame center beam can be carved out for addition of weight, loads on the car should be used for the majority of the cars weight.
17. These cars were built in 1932 and remained in service well into the 1970's. The cars were painted black with a wood deck and black under frames.

#1003

HO

SCALE

## 41' NP Built Flat Car Kit



The 1003 HO scale 41' NP Flat Car Kit! This stunning Flat Car is from the 1930's to the late 1970's era and is beautifully detailed from the brake wheel to its underbelly! With its wood grain planks, and its stunning stake boxes. The NP railway systems used this 41' Flat Car, as maintenance car to help clean up train after wrecks, as well as for hauling heavy equipment, like bull dozers, milling equipment, pipe layers, excavators and compactors. They were workhorses and any HO modeler would be proud to have this Central Valley Flat Car on their layout!

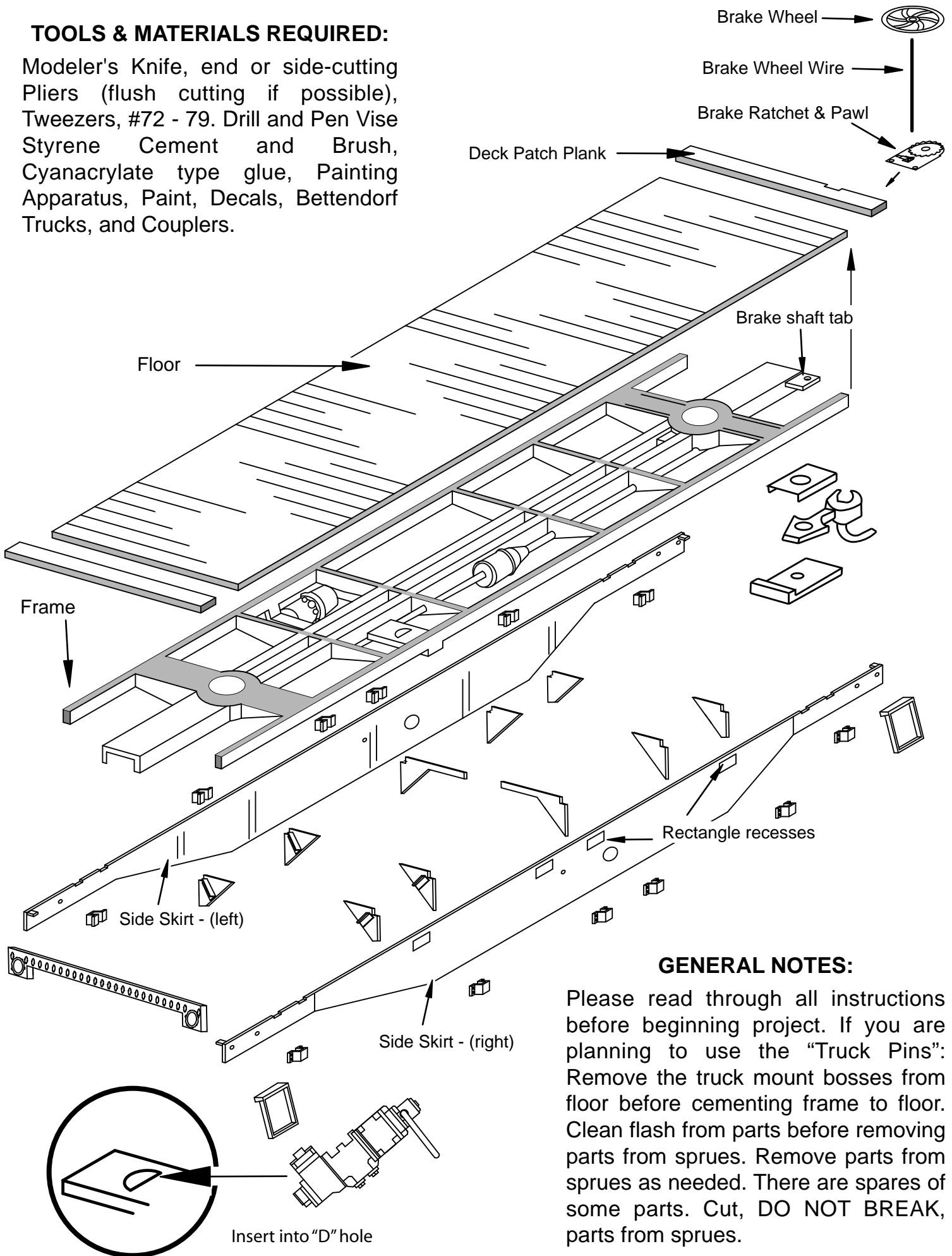
Makes 2  
Flat Cars

(Less: Trucks,  
Couplers & Decals)

JHD0026R

## TOOLS & MATERIALS REQUIRED:

Modeler's Knife, end or side-cutting Pliers (flush cutting if possible), Tweezers, #72 - 79. Drill and Pen Vise Styrene Cement and Brush, Cyanacrylate type glue, Painting Apparatus, Paint, Decals, Bettendorf Trucks, and Couplers.



## GENERAL NOTES:

Please read through all instructions before beginning project. If you are planning to use the "Truck Pins": Remove the truck mount bosses from floor before cementing frame to floor. Clean flash from parts before removing parts from sprues. Remove parts from sprues as needed. There are spares of some parts. Cut, DO NOT BREAK, parts from sprues.