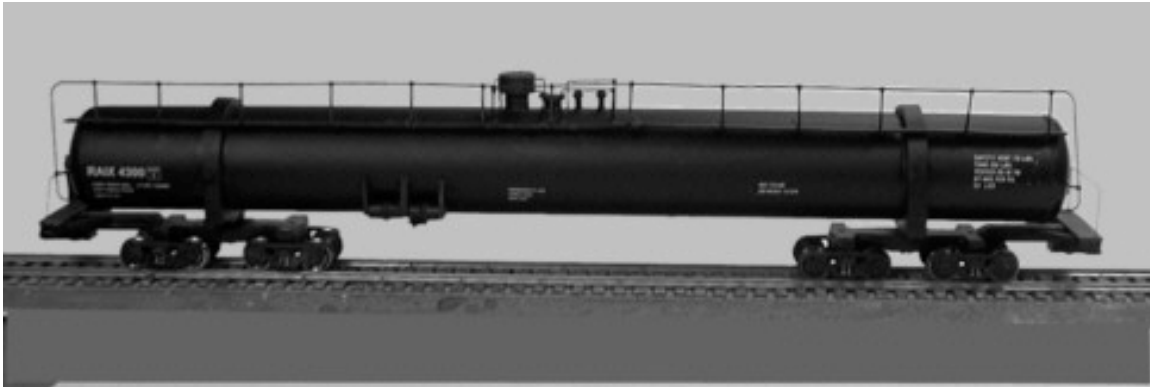


# CONCEPT MODELS

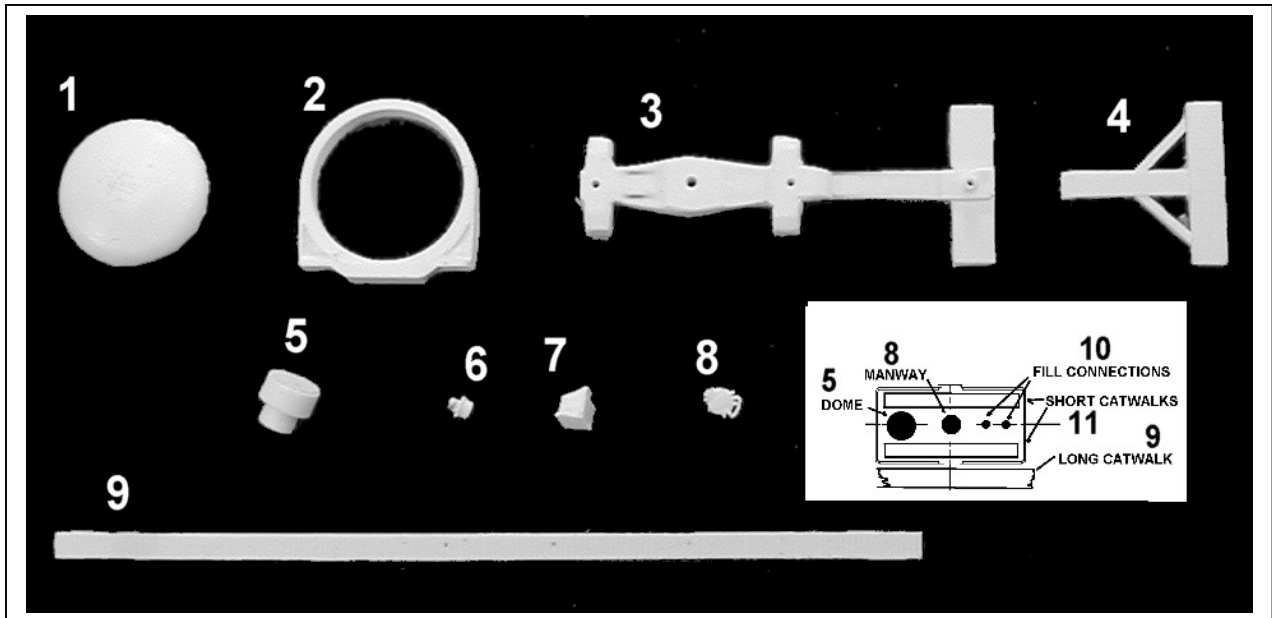
Web Address: <http://www.con-sys.com>  
Email: [concept\\_models@con-sys.com](mailto:concept_models@con-sys.com)

8331 Sheep Ranch Rd.  
Mountain Ranch, CA 95246



**INSTRUCTIONS FOR PRODUCT  
RAIX SERIES 4300 TANK CARS**

# RAIX 4300 PARTS

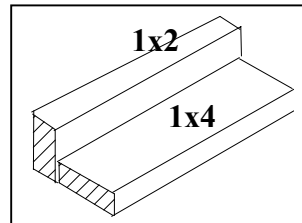


Item No.	Part No.	DESCRIPTION	QTY.
1	8037-1	Pressure Ends (pr)	1
2	8037-2	Tank Bolster	2
3	8037-3	Truck Bolster - Bottom	2
4	8037-4	Truck Bolster – Top	2
5	8037-5	Dome	1
6	8037-6	Relief Valve	1
7	8037-7	Brake Valve Mount	1
8	8037-8	Manway	1
9	8037-9	Long Catwalk	2
10	8037-10	Fill Connections	2
11	8037-11	Short Catwalks	2
12	8037-12	Brake Reservoir Bracket	1
13	1051	87' Tank Tube	1

Generic Parts	QTY.
Coupler Pocket Covers	2
1/8" x 2-56 Screws	2
3/8" x 2-56 Screws	2
Brake Valve	1
Brake Reservoir	2
Brake Wheel Mech.	1
Brake Stand	1
Brake Wheel	1
Small Pin	1
Tank Tube Template	1
Standard Catwalk Instr.	1
Decals	1
Instructions	1

## Tools

All basic model workers tools – files, motor-tool with fine burrs, hobby knife, 1/8” drill, Wood blocks for holding parts square, metal square, etc.



A gluing fixture is a great aid to assembly. It helps hold parts square while gluing.

## Instructions

**NOTE:** This kit consists of resin castings and must be assembled with an ACC cement (not provided) – both the thicker types as well as the thin. Solvent cements will **NOT** bond the parts together! Resin parts are more fragile than common styrene plastic used in injection molded models. Use reasonable care in handling and do not apply any solvents. The illustrations at the front show the general layout of parts for the car. Work very carefully when positioning the parts for gluing. ACC cements adhere very quickly and permanently.

## Gluing with ACC Cements – USE WITH CARE

ACC cements allow the modeler to work very quickly. A general rule is to use the thin cements to glue long joints taking advantage of capillary action that makes the cement run the length of the seam. The thicker cement is suited to applying large area parts to each other. An accelerator can be applied sparingly. One technique is to apply the glue to one part and the accelerator to the other part to be joined. I also use a Q-tip to apply a minute amount of accelerator to the glue after the parts have been joined. The accelerator triggers the ACC cement to set very quickly. It is only slightly slower with the thicker cement.

### **WARNING**

Some parts have lead encapsulated within them. In the event the lead is exposed for any reason, do not allow it to remain on the skin. Dispose of any lead shavings that may result. Obey all safety precautions of all suggested cements and assembly materials.

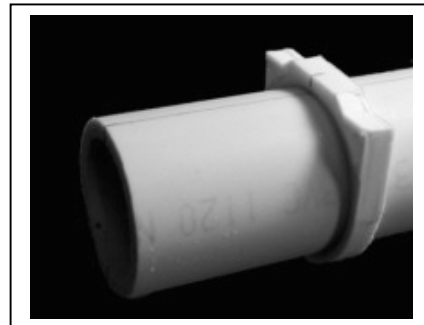
**PREPARATION** Wash the parts before assembling with a dish washing detergent such as “Dawn”. Rub lightly with a soft sponge.

## ASSEMBLY

**1** Clean the entire Main Tank Tube with lacquer thinner. Work fast since the chemicals can soften the PVC if left on for a long time. The idea is to remove the printed markings and take off the gloss surface. Draw a line the entire length of the tube using a straight edge as shown. Transfer the position of the line as shown and draw a second line 180 degrees from the first. This provides a center line top and bottom of the tank tube.



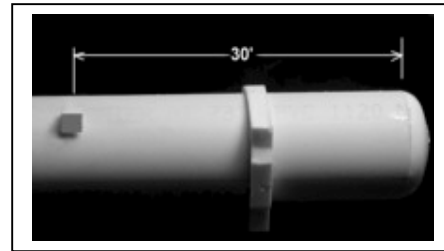
**2** Use the provided template to install the Tank Bolster (2). Apply just a spot of glue on the top and wait for the cement to set after making sure the part is straight (perpendicular to the tube length). Cement the rest of the bolster using capillary action to make the cement fill any gap between the bolster and the tube.



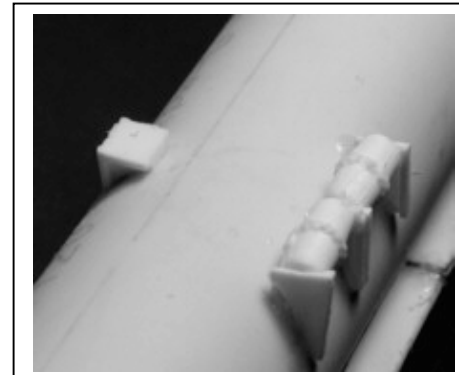
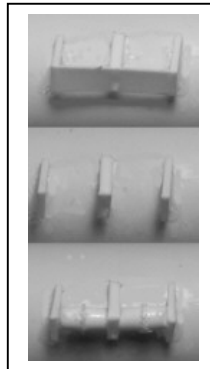
**3** NOTE: There is an "A" end and a "B" end. Refer to the tank layout template. Cement the Tank Pressure Ends (1) to the tank tube.



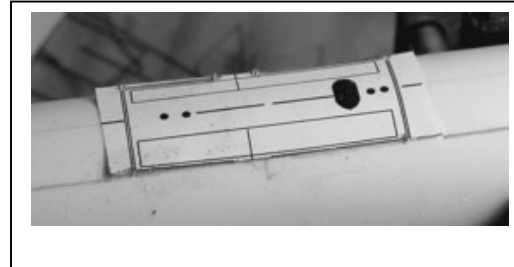
**4** Install the Brake Valve Bracket (7) and the Brake Reservoir Bracket (12). The Brake Valve Bracket should be filed down to fit the contour of the tank. The Brake Reservoir mounts need to be filed to make the brackets to appear attached to the bottom of the tank.



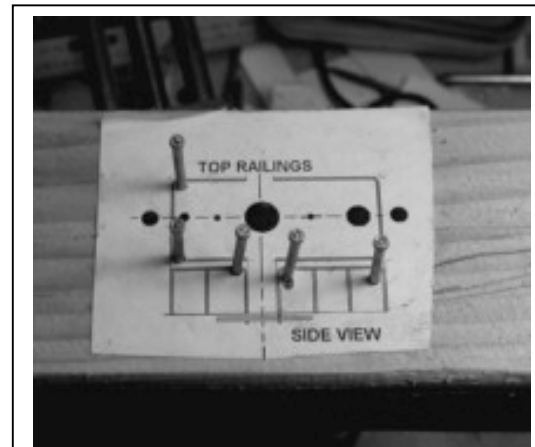
**5** Attach the Brake Reservoir Bracket as shown, that is with the cast-on spacers intact. After the bracket is securely glued, cut away the spacing material and glue the Brake Reservoirs as shown. It may be necessary to file them slightly to get a tight fit.



**6** Clip the part of the template as shown and apply to the tank tube. The picture shows a generic template. A template and layout guide is provided for this specific car. Rubber cement is a good solution since it can be removed by rubbing or with lighter fluid. The upright stanchions go at the corners (Athearn – not provided). Start with a #72 drill which is close for the .020" handrail at the center of the template Enlarge as necessary for the upright stanchions – up to #60 drill..

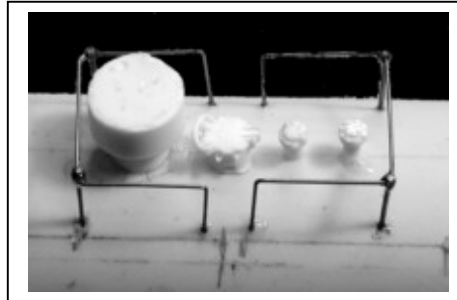
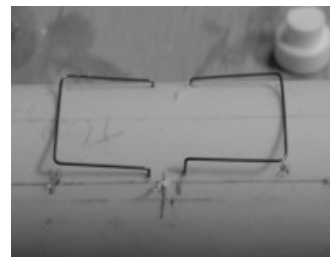


**7** Use the other diagram near the top of the template to make a bending fixture similar to the one pictured. The picture shows that these few are all the nails needed to perform all of the bends. Use .020" music wire to make all handrails. Again a generic template is shown. For this car all you need are the three nails to the left.

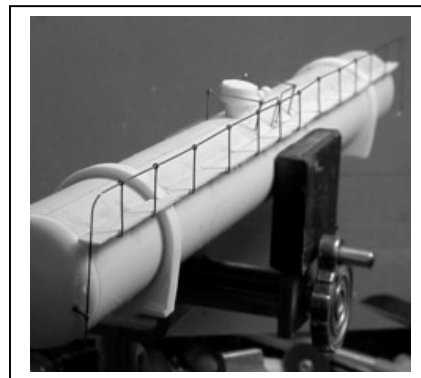
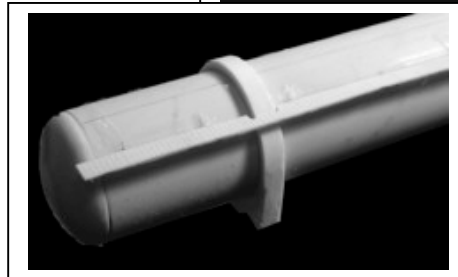
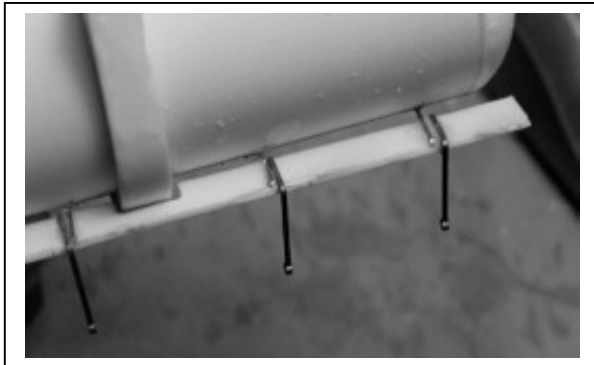
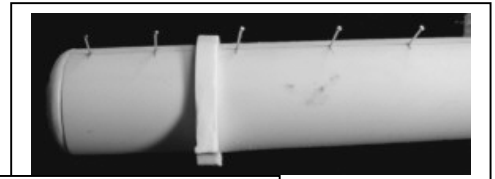
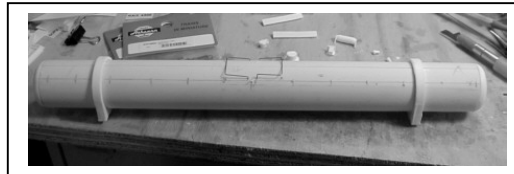


## 8

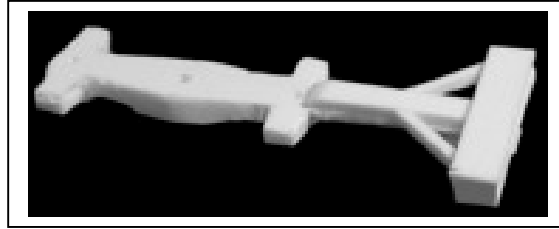
- 1) Install the handrails as shown. Just press them all the way down for the next step.
- 2) Add the details as shown.
- 3) Add the dome platform catwalks within the boundary of the handrails.
- 4) Add the corner stanchions. I used the long Athearn stanchions (not supplied) by straightening and then attaching to the handrails.



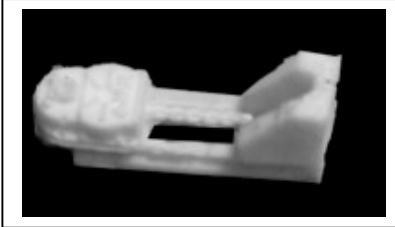
- 9 Use the template to measure off the handrail stanchion spacing for the catwalk. I used Athearn stanchions for the handrail bracing (not supplied).. Refer to the Standard Catwalk Instruction sheet for the installation of catwalks.



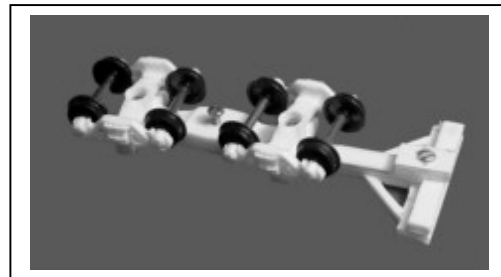
**10** Glue the Truck Bolster Top (3) to the Truck Bolster Bottom (4).



**11** Glue the Brake Wheel Mechanism (6) to the Brake Stand (7) as shown. Use the small pin to attach the brake wheel, then trim off the excess length of the pin. Drill #76 holes at the ends of the Bolster Top and add .020 music wire handrail



**12** After painting the trucks will be installed and the assembly will be installed using the 3/8" screw after drilling and tapping the Tank Bolsters (2) for 2-56 threads.



## PAINTING

. Use a lacquer based primer such as floquil.

- 1) If you followed the instructions for cleaning the parts before assembly, you are ready to paint. A primer such as Floquil's is recommended. Allow to dry overnight before proceeding with any of the color coats.
- 2) Overcoat entire car with Testor's Glosscoat prior to decaling.

## DECALING

The decals provided are a very thin film decal film. Success with these decals depends on following these instructions.

- 1) Cut out the decal segment you are going to apply.
- 2) Dip the decal in warm water which has had 1 drop of DAWN kitchen detergent. Do not leave the decal to soak in the water.
- 3) Slide the decal directly onto the wetted surface with a small brush. Position with the brush. Remove excess water with a tissue.

NOTE: The glue used for the decal sheet is different than what has been used in the past. The water does not dissolve the glue. Water causes a chemical reaction causing an almost immediate release of the decal. For this reason once the decal has been wetted it must be used quickly. It cannot be re-wetted later for use.

- 4) Top coat the decals with Testor's Dullcote for best results.

