ASSEMBLY INSTRUCTIONS	;:	AINS MANWAY COVER
42		RAILING IS513
CHEMI	CAL	LADDER ISSO7
TAN	IK	HANDRAIL 15508 STEEL
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CH	R	BODY-UNDEC.
PART	NUMBER	BOTTOM SHEET
BODY-UNDECORATED BOTTOM SHEET UNDERFRAME CENTER SILL BRAKE GEAR BOX PLACARD HOLDER DZ. LADDER DZ. HANDRAIL EA.	15490 15502 15503 15504 15505 15506 15507 15508	GEAR BOX 15505 BRAKE WHEEL 90600 BRAKE WHEEL BRAKE
PLATFORM PLATFORM RAILING FA	15512	UNDERFRAME
MANWAY COVER BETTENDORF TRUCK PR. BRAKE WHEEL DZ. COUPLER PR. COVER PLATE DZ. STEEL WEIGHT R H SCREW 2-56 X 1/2" DZ.	15514 90400 90600 90601 90602 90705 99006	COUPLER 90601 CENTER SILL 15504 CENTER SILL CENTER SILL CENTER SILL COUPLER 99006 CENTER SILL CENTER SILL CENTER SILL

I ools needed to assemble this kit:	Small Screw Driver	NMRA wheel & track gage	
	Needle-nose pliers	Paint (optional)	
	Nail file (Coarse and fine sandpaper)	#2-56 thread tap with pin vise (optional)	
	Wood tooth pick (for applying Cyanocrylate glue)		
Adhesives needed to assemble kit:	Liquid cement for styrene for joining plastic to plastic		
	Cyanocrylate (super glue) for joining metal to plastic		

CAUTION: Avoid using excess glue. Most joints fit tightly without the need for gluing.

- 1. Open envelope containing small parts. Set aside for later.
- 2. Install steel weight in upper tank shell section. You may put a small amount of Cyanocrylate glue around the center post, where the hole in the weight will be seated, to make sure the weight is firmly secured within the tank shell.
- 3. Snap lower tank shell section in place no need to glue this joint, as a screw will be installed into the center post later.
- 4. (Optional) Run a #2-56 tap through the two holes in the underframe, where truck screws will be secured. This step will provide for easier installation of the truck mounting screws in a later step.
- 5. Press the manway cover onto the tank's dome. It should fit tightly without gluing. If too tight, check for flash around the inside diameter of the hole in the tank dome. Make sure the cover is oriented so the hinged side matches the hinges on the tank dome. Be careful not to break off the tiny hinge brackets on the tank dome.
- 6. Install the brake wheel in the gearbox. The wheel goes into the side with the protruding housing, **not** the flat side. This is a tight fit, and shouldn't require glue. Set aside for installation in the underframe later.
- 7. Install the wire railings on the platform. The ends fit into the holes in the platform, and the comers of the wire railings snap up under the overhanging flanges on each corner post. A small dab of Cyanocrylate glue under the

corner post overhanging flanges will hold the railings tight. This can be applied with the sharp tip of a wood toothpick.

- 8. Install the platform over the tank dome. It should snap into place. If too fight, don't force it. Using the nail file, file a little of the two protrusions on either side of the ring at the base of the tank dome. No glue should be necessary to secure the platform to the top of the tank. Be careful not to damage the wire railings while installing the platform.
- 9. Install couplers into the coupler boxes in the underframe, and snap the center sill into place. "Kadee" couplers may be substituted for the X2F style (horn hook) couplers provided with the kit. The center sill only fits one way, as there is a locating pin to prevent incorrect assembly. Snap each end of the center sill down into the proper position to retain the couplers. No glue is needed for this step. Install the four metal placard holders in the four small holes located on each side of the underframe. This is the most difficult step, as the placard holders are rectangular in cross-section, and don't fit well into the small round holes provided. It may help to file the lower edges of the placard holders to more of a round cross section, which will be easier to force into the holes. Be careful not to damage the underframe while trying to install these parts. Use needle-nose pliers to push the placard holders into the holes, or leave them off if this is too much of a challenge for you. Note: It is nearly impossible to install these parts it you have already installed the tank assembly to the underframe.
- 10. Install the underframe assembly to the tank assembly. Make sure the tank seats securely on the underframe. No glue is needed. Run the longer screw up through the center hole in the underframe, and into the center post in the bottom of the tank assembly. Don't over tighten.
- 11. Install the two tank handrails, and the two ladders as follows: Check the tank handrails to see if the ends are bent at a 90-degree (right) angle. If they are not bent at a 90-degree angle, they will not fit properly into the holes in the tank sides. The handrails can be bent using needle-nose pliers. Be careful not to bend them too much, as the wire ends can work harden and break off. Also check the holes in the tank they may riot be drilled all the way through. I used a 0.024-inch diameter drill to drill these holes through. If you don't have one, try to push the end of one of the handrails through the holes. Slip a ladder into the two small slots in the underframe on each side of the tank. Carefully spread the sides of one handrail to slip it onto the tank from the end. Install one bent end of the handrail through the hole in the ladder, and push into the hole in the tank. Now insert the other bent end of the handrail through the hole in the other ladder, and push into the hole in the tank. Now insert the other bent end of the handrail through the hole in the other ladder, and push into the hole in the tank. Now insert the other bent end of the handrail through the hole in the other ladder, and push into the hole in the tank. Now insert the other bent end of the handrail through the hole in the other ladder, and push into the hole in the tank until it is also seated. Repeat the process for the other handrail on the other end of the tank. No glue should be necessary, as the wires should fit tightly. If you wish, you can turn the tank/underframe over, and apply small amounts of Cyanocrylate glue to the underside of the ladder ends, where they protrude through the bottom of the underframe.
- 12. Check the positioning of the wheel sets, using the NMRA wheel and track gage. Adjust wheels on axles, if necessary, to ensure that the wheel sets are in gage.
- 13. While spreading the truck side frames with your fingers, carefully insert each wheel and axle assembly, being careful not to groove the truck side frames with the sharp points of the axles.
- 14. Install each assembled truck assembly to the underframe using the screws provided. Be careful not to over tighten the screws. The trucks should be able to rotate freely. For better stability, leave one screw about a full turn loose, while the other screw is tight enough to allow its truck to rotate, but not wobble. This will provide a three-point suspension for your car, which is very stable.
- 15. Install the brake wheel and its stand into the slot in the one end of the frame end platform. You can use either styrene cement or Cyanocrylate glue for this joint. This is one location where the parts do not fit tightly, so glue will be needed if you don't want to lose your car's brake wheel.

Congratulations! Your 10,000-gallon tank car is now complete.

For added realism, your car can be weathered, using chalks, "dry brushing" technique with paints, or "washing" with a dilute combination of India ink and water, to make it appear old or dirty. A coat of flat lacquer, such as Testor's Dull

Coat, wil take away the shine of the plastic, and give your car's finish a more realistic appearance. Be sure if you paint, to do it in a properly ventilated area (or outside in mild weather).