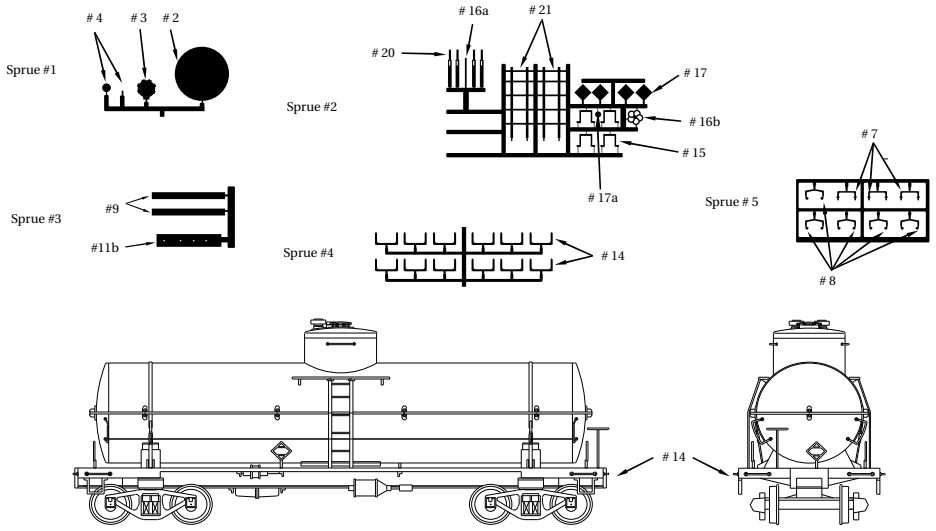
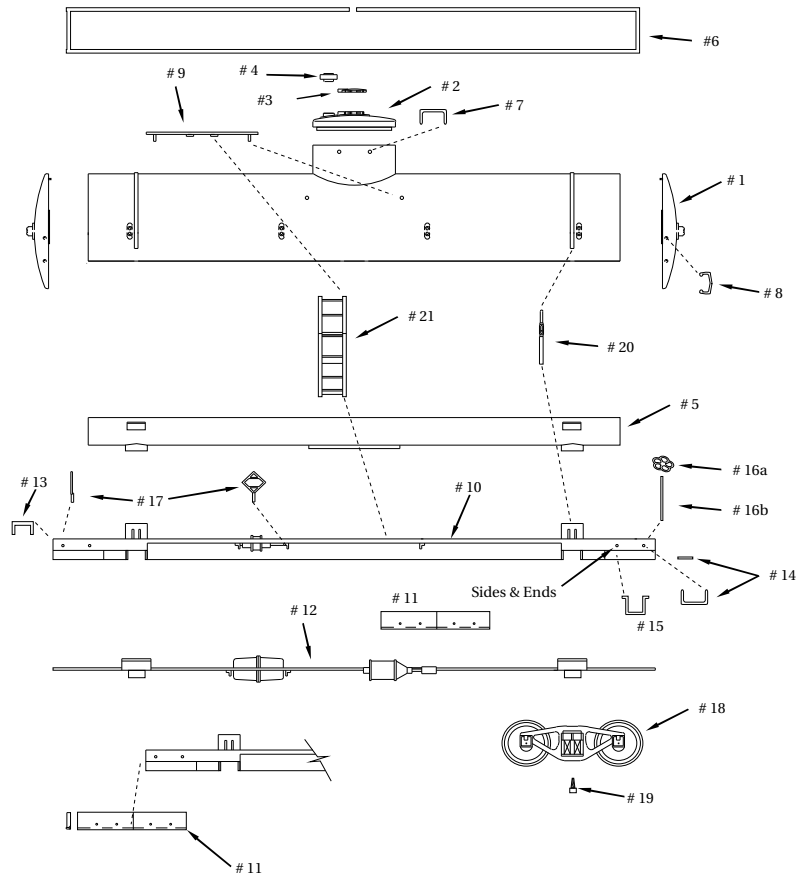
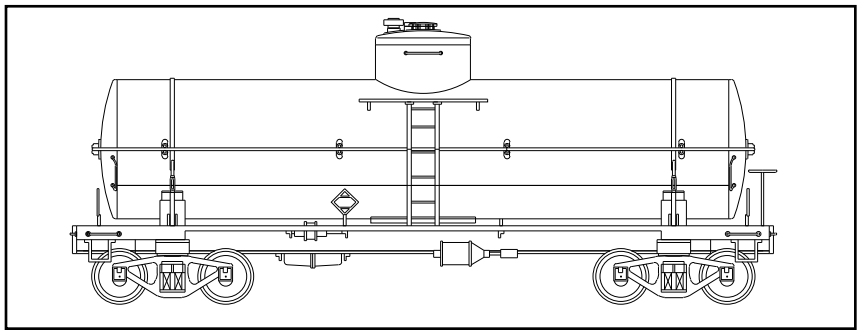




RED CABOOSE

HO Scale



10,000 Gallon Type 103W Tank Cars

HISTORY

Railroad tank cars made of wood, steel, aluminum and other materials and held together by hoops, nails, bolts, rivets and welds have been around for over 150 years. Riveted cars dominated the first half of the 20th century until technologies allowed for stronger joints through welding. The Type 103 riveted tank car design was used for over twenty years as the basis for cars produced by a number of freight car manufactures. In the late 1940s, the riveted cars beganto be replaced by the welded steel type 103W design. This kit represents a welded car built in 1949 and is still in service. Last seen in Denver, Colorado in September 1994.

Variations of this car include 6,000, 8,000, 10,000, 12,000 and 19,000 gallon cars used for the general commodities as well as chemical and heated versions. This kit represents a 1949 built 10,000 gallon general commodities car.

A FEW TIPS

Before you begin, read the instructions thoroughly. After reading the instructions, keep in mind this model will assemble quickly if the following rules of assembly are followed:

a. Carefully cut all parts from their sprue with a sharp knife.
b. Check each part to be sure it is free of flash, remove flash as needed.
c. Be sure to remove all sprue marks from the part.
d. MOST important, be sure to clean all holes and surfaces where parts are to be glued together so that the part is paint free.

HELPFUL TOOLS

Hobby Knife
Small Phillips screw driver
#75 Drill bit
100 grit or finer sand paper
Sharp Blades
Pin vise
Needle nose pliers w/cutter

ASSEMBLY

Please note that most parts have been silhouetted for easy identification and/or are shown in the exploded view. Part numbers follow the logical assembly sequence. Assembly follows this pattern so that smaller more delicate parts will not be handled as often during assembly. All holes on painted models should be drilled out with a #75 drill for best fit and to clear paint for good part bonding.

1. For undecorated kits, cut the tank's ends, part #1, from their sprue and glue to tank ends, being sure grab iron holes are located below the center line of each end.
2. Also for undecorated kits, cut the tank dome top, part #2, from sprue #1 and glue to the top of the dome. Note the small locating pin in the bottom of this part.
3. From sprue #1 remove the dome lid, part #3, and glue into the center hole on dome top.
4. Also from sprue #1 remove the two safety valves, part #4, and glue into the two small holes on the dome top.
5. Glue into the bottom of the tank body the tank bottom, part #5. If you want to add a weight to this car, do so before glueing part #5 in place.
6. The handrail, part #6, should now be glued in place in the handrail stanchions.
7. From sprue #2, cut the two dome grab irons, part #7, and glue in place on the dome sides. (Sprue #5 has two #7a which duplicate #7, but are Delrin plastic.)
8. Also from sprue #2, cut four end grab irons, part #8, and glue them in place on the tank ends. (Sprue #5 has 4 #8a which duplicate #8 but are Delrin plastic.)
9. Now add from sprue #3 the dome platforms, part #9. Be sure that you clean the paint off of all mounting surfaces, the two holes and #9a so that you will have a strong bond.

10 & 11. The main frame, part #10, needs to have holes drilled into the four corners so that you can mount the corner grab irons. This is an easy process and will take only a few minutes. Part #11 is located on sprue #3, which is a corner drilling jig.

12. Install your couplers at this time and glue into place the lower frame section, part #12.
13. The end stricker plates, part #13, are cast inside the main frame and must be removed from there. Glue them in place on the end of the car as shown on the end view drawing.
14. Now glue into place all grab irons, part #14, located on sprue #4.
15. The stirrup steps, part #15, located on sprue #2 are now glued into the bottom of the frame at each corner. You may need to drill out the holes as grab irons may be partially blocking the hole.
16. The brake wheel staff, part #16a, and the brake wheel, part #16b, will be found on sprue #2. Glue the staff into the base of the brake wheel and then glue the assembly into the hole on the frame as shown on the exploded view.
17. The four warning placards, part #17, and the drain, part #17a, are located on sprue 2. Remove from sprue and glue them into the provided holes on the frame.
18. Assemble the wheelsets into the truck sideframes.
19. The frame assembly can now be attached to the tank body. Using the two screws, part #19, secure the trucks, frame and tank together.
20. The four tank-to-frame turnbuckles, part #20, are located on sprue #2. Remove from the sprue and glue in place as shown on the exploded view.
21. Dome ladders, part #21, are located on sprue 32. Remove and glue in place as shown on the exploded view.

This completes your Type 103W 10,000 gallon tank car. We hope that you enjoyed building the kit.

PARTS POLICY

If you break or ruin a part during assembly, or find a part with a manufacturing defect, it will be replaced free of charge by returning the part to the Red Caboose. Subject to stock on hand. Please specify road name when sending in parts.

PARTS LIST:

Part #	Part Description	On Sprue #	Quantity
1	Car Ends		2
2	Dome	1	1
3	Dome Lid	1	1
4	Safety Valve	1	2
5	Tank Bottom		1
6	Handrail		1
7	Dome Grab	2 & 5	2
8	Tank End Grab	2 & 5	4
9	Platform	3	2
10	Main Frame		1
11	Corner Hole Drill Jig	3	1
12	Lower Frame		1
13	End Striker Plate	2	2
14	Frame Grab Iron	4	12
15	Stirrup Steps	2	4
16a	Brake Staff	2	1
16b	Brake Wheel	2	1
17	Warning Placard	2	4
17a	Drain	2	1
18a	Wheels		4
18b	Truck Sideframes		2
19	Screws		2
20	Turnbuckles	2	4
21	Dome Ladders	2	2

RED CABOOSE
P.O. Box 250 • Mead, CO 80542
May 1996