

## PARTS POLICY

If you break a part, ruin it with glue, or if you find a part to be defective, Red Caboose will replace it free of charge if you return the broken, ruined or defective part to us. In the case of a missing part or one that falls into the carpet never to be seen again please notify us by mail and the part will be replaced free. Always advise what kit the part came from including scale (N - HO - O) and road name. Subject to stock on hand.

## PARTS LIST:

Part #	Part Description	On Sprue #	Quantity
1.	Roof walk		1
2.	Roof		1
3.	Roof walk grab irons	A	2
4.	Body		1
5.	Frame	B	1
6.	Air line	C	1
7.	Distributing valve	C	1
8.	Air reservoir & pipes	C	1
9.	Branch line	C	1
10.	Brake rigging	C	1
11a.	Small grab irons	A	8
11b.	Short end ladders	A	2
12a.	Side grab irons	D	10
12b.	Short side ladders	A	2
13a.	7 rung end ladders	A	2
13b.	Short end ladders	A	2
13c.	8 rung end ladders*	E	2
14.	Brake mechanism/rod & chain	C	1
15a.	Tall retainer valve	G	1
15b.	Short retainer valve	G	1
16a.	Tall brake mechanism/platform	A	1
16b.	Short brake mechanism	A	1
17a.	7 rung side ladders	A	2
17b.	Short side ladders	A	2
17c.	8 rung side ladders*	E	2
18.	Youngstown door*	F	2
19.	Superior door*	F	2
20.	Stirrup steps	A	4
21.	Coupler box	B	2
22.	Coupler box cover	B	2
23.	Accu Mate Couplers		
24.	Air hoses	C	2
25.	Metal uncoupling lever		2
26.	Uncoupling bracket	H	2
27.	Trucks		2
28.	Truck screws		2
29a.	Small tack boards	A	2
29b.	Large tack boards	A	4
30.	Weight		1
31.	Brake wheel	A	1
32.	Roof walk supports	A	2
33.	Coupler crossover step	A	2

\*Not included in all kits

# RED CABOOSE

HO Scale

**American Car & Foundry**  
**4-3-1 End - 10'6" Box Car**  
**1955 - 1961 Prototype Production**

## HISTORY

By the mid 1950's the standard 40' box car was being replaced with box cars of longer length, greater capacity in both weight and interior cubic capacity. The design captured in this model represents one of the last mass-produced 40' box cars. Railroads could order the car either riveted or welded and with either 6', 8' or 9' doors. Different side panel configurations included either 10 or 12 panel and cars came with different side sill layouts. Purchasers could also specify what type of brake mechanism, brake wheel, doors and running boards they wanted applied to the car. Other less obvious items were also allowed by the builder. (If you wish to model a specific car, check prototype photographs for correct items to that specific car.)

The 1960's brought change to railroading with safety laws passed requiring car owners to remove running boards from cars and cut the height of ladders so that people could no longer climb on top of most types of freight cars. This resulted in cars with different height brake mechanisms, different height ladders and roof walks removed in different ways. Check prototype photographs of the car you wish to model if other than the one shown on the enclosed drawing for this particular car.

## HELPFUL TOOLS

Hobby Knife	Sharp Blades
Small Phillips screw driver	Pin vise
#75 Drill bit (for other parts)	Needle nose pliers w/cutter
#77 Drill bit (for ladders & grab irons)	Tweezers

## ASSEMBLY

Please note that most parts have been silhouetted for easy identification and/or are shown in the exploded view. Part numbers follow logical assembly sequence. All holes on painted models should be drilled out with a #75 or #77 drill bit which will clean out paint and allow for a better bond when gluing.

This car can be built three ways, i.e.:

1. With tall ladders, tall brake/retainer and roof walk.
2. Short ladders, short brake/retainer and no roof walk.
3. No roof walk, all short ladders except B end corner which has tall ladders and tall brake/retainer. (Some railroads did not cut the B end corner ladders down and did not lower the brake mechanism/retainer).

Prior to assembly, if you are going to model a specific car, decide which variation as noted above you will use. Note that the instructions parts list and drawings show "like parts" i.e.: 12a & 12B, together. You can only put one type of part on the car. Each kit, except undecorated, has a drawing and list of parts to help you apply the correct parts for the car modeled. An \* shown on the parts list indicates parts that are not supplied with each kit. Also note that not all parts are used, parts lettered X are for special models only.

## RED CABOOSE

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## ROOF

1. If your model does not use a roof walk, move on to step #3. If your model does use a roof walk, mount the roof walk, #1, to roof, #2. Cut the pins off the bottom of the roof walk and glue it directly to the roof walk supports on top of the car.
2. Cut the two roof corner grab irons, #3 on sprue A, from their sprue and glue in place as shown on the exploded view.

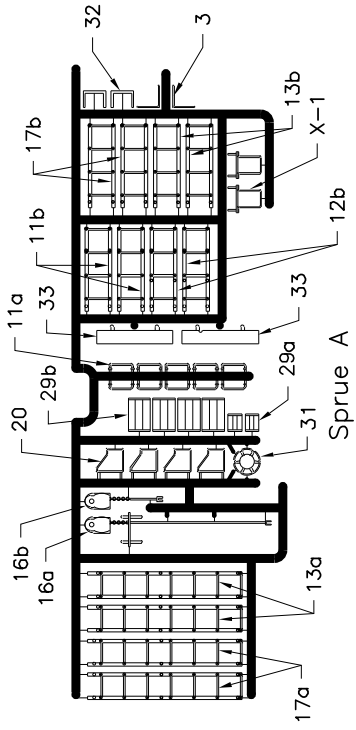
## UNDERBODY

3. The underbody drawing shows the "B" or "Brake End" of the car underbody and how all the main underbody parts fit together. Be sure to assemble the parts so that the proper end part is located at the "B" end of the car.  
  
Note the large sprue in the center of the cars underbody, be sure that this is trimmed flush with the cast on portion of the frame. The body is part #4.
4. Underbody assembly begins with cutting the frame, #5, from sprue B. Now cut the airline, #6 on sprue C, from its sprue and glue in place in the notches on the top of the frame. Now glue the frame to the car body "B" end at the "B" end.
5. Mount the distributing valve, #7 on sprue C, to the underbody as shown. Be sure that the two ovals on one side are facing inward. Follow this by mounting the air reservoir and pipes, #8 on sprue C, and gluing them in place and cutting the pipes to fit into the back of the distributing valve but do not glue in place at this time. Test fit the branch line, #9 on sprue C, between the trainline and the rear of the distributing valve, trim and glue only to the trainline at this time.
6. Carefully remove the brake rigging assembly, #10 on sprue C, and test fit as shown on the underbody drawing being sure that the "B" end is at the "B" end of the car. Glue in place when fit is correct. You can now glue all the pipes to the rear of the distributing valve.

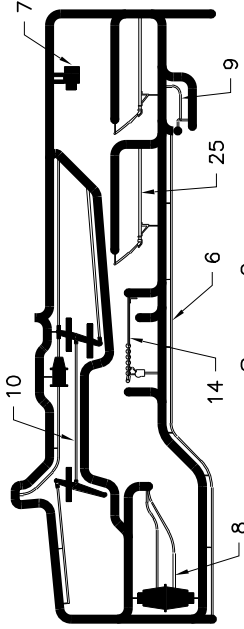
## BODY DETAIL

7. On both ends glue in place 2 small grab irons, #11a on sprue A, see end view drawing. If making a modified car without a roofwalk, substitute short ladders 11b found on sprue A.
8. To the left of the door on the side of the car add 2 grab irons, 12a on sprue D. If making a modified car without roof walk, substitute short ladders 12b on sprue A.
9. To the end of the car add 7 rung end ladders, #13a on sprue A. If making a modified car without roof walk, substitute short ladders #13b on sprue A. For some cars, 8 rung ladders, # 13c on sprue E, will be supplied and should be used instead of ladder 13a.
10. Cut from sprue C the brake rod and chain #14 and glue in place on the underbody as shown in the exploded view.
11. Cut from sprue A the tall retainer, #15a. Note on the end assembly drawing two dots near the top of the car body. The dot on the left represents where a #77 hole needs to be drilled. Align #15a in place to check location for drilling of top hole, the bottom of #15a should angle under the car body. Note there are also two lower dots which represent where holes need to be drilled. Check, drill and glue #15a in place. If building the modified car, repeat the above but substitute the short retainer, #15b on sprue G and drill out the dot shown on the drawing.

12. Cut from sprue A the tall brake mechanism, #16a. Note on the end assembly drawing two dots. The dot on the right represents where a #75 hole needs to be drilled to mount #16a. Follow the sequence as in step #11 for the tall retainer, be sure to have the clevis at the bottom of #16a in place on #14 when checking your hole location. Glue the tall brake mechanism in place. If making a modified car and using the short brake mechanism, #16b on sprue A, note the lower dot on the end drawing and follow the sequence to check, drill and then glue in place.
13. To the right of the door, glue in place the 7 rung ladders, #17a on sprue A as shown on the exploded view. If building a car without roof walk substitute ladders 17b also found on sprue A. For some cars, 8 rung ladders, #17c on sprue E, will be supplied and should be used instead of 17a.
14. You will find that only one type of door is supplied with each kit (undecorated get both doors). The enclosed drawing for the specific car shows the correct door for the paint scheme supplied. On sprue F you will find either #18, the Youngstown door or #19 the Superior type door. Cut the doors from the sprue and glue the doors in the position you want - opened, closed or partially open.  
  
It should be noted that Red Caboose sells wooden floors and walls separately for these cars for those of you wanting to model the car with open doors.
15. Cut from sprue A the four stirrup steps, #20, and glue in place as shown on the exploded view.
16. Cut from sprue B the coupler box, #21, and the coupler box cover, #22. Assemble and install the coupler of your choice. If using a #5 coupler, you will need to cut the back of the the coupler box out to allow for proper coupler swing. Accumate couplers, #23, are supplied with this kit. The drawing found on the drawing page will show you how to assemble the Accumate coupler.
17. Cut from sprue C the two air hoses, #24, and glue in place as shown on the exploded view.
18. Locate the metal uncoupling lever, # 25, and the uncoupling lever bracket, #26, sprue H. Using the placement drawing on the drawing page as a guide, insert the lever into the bracket and glue to the underbody as shown.
19. Attach the two trucks, #27, to the underbody with screws #28.
20. Note on the paint scheme drawing the location of the two door tack boards, #29a & #29b. Also note on the end the placement for the two additional #29b tack boards. Glue in place as shown on the drawing.
21. Add the weight, #30, to the car interior using a good glue.
22. Glue the car roof assembly to the body.
23. Cut from sprue A the brake wheel, #31, and glue in place on the brake wheel mechanism.
24. Cut from sprue A the two roof walk supports, #32, and glue in place under the roofwalk ends as shown on the exploded view.
25. Part # 33 is a coupler crossover step not used on earlier cars. When cars were modified (no roof walks, etc.) these crossover steps were usually added. See exploded view for location (note, one crossover step has a notch to fit over the brake rigging).

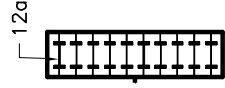


Sprue A

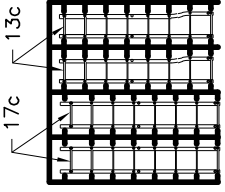


Sprue C

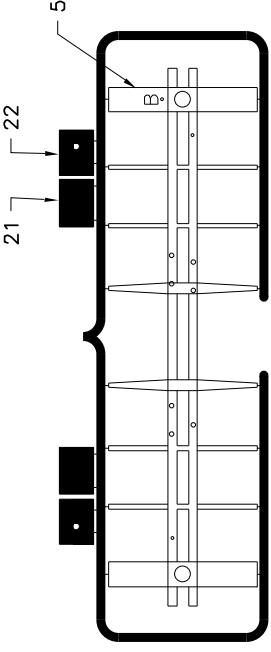
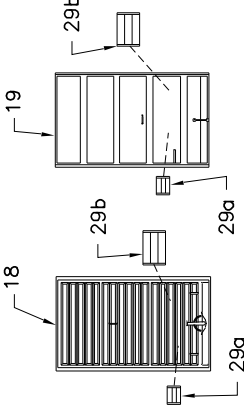
Sprue D



Sprue E

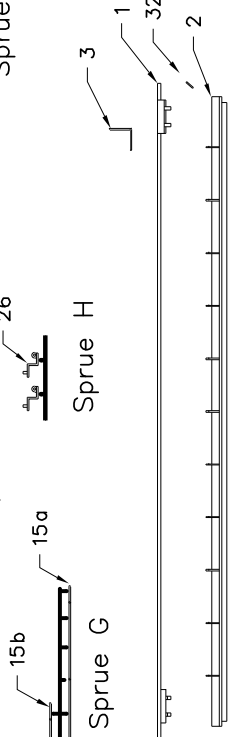


Sprue F

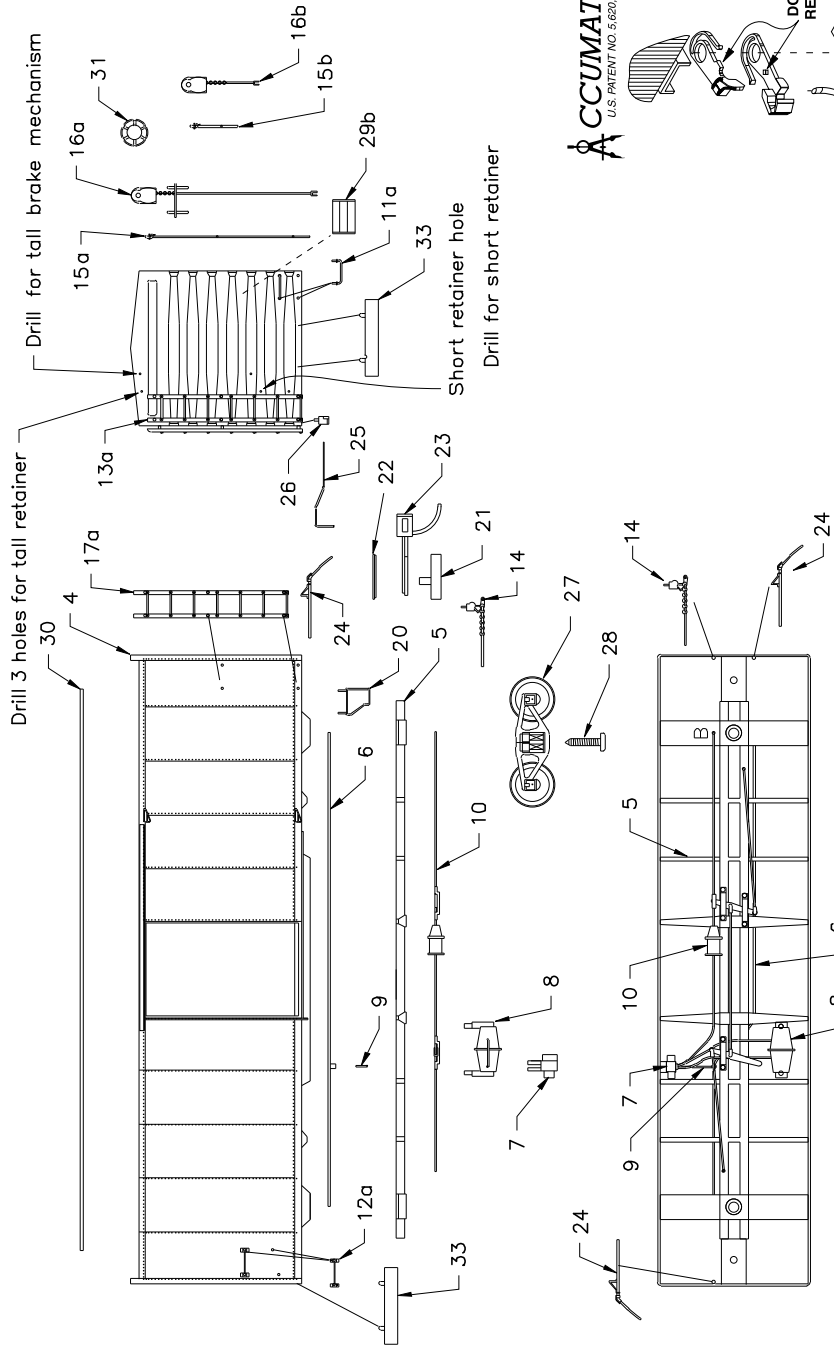
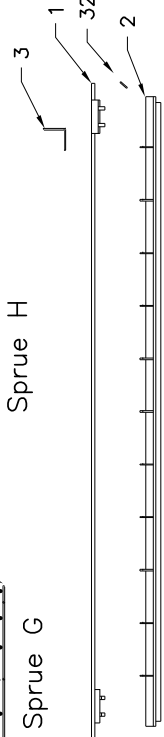


Sprue B

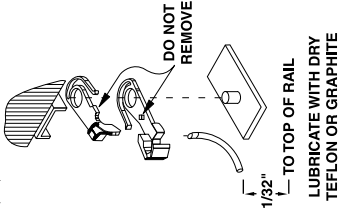
Sprue G



Sprue H



Underbody detail



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