RED CABOOSE



MATHER MEAT REFRIGERATOR CAR

HISTORY - by Mr, Richard Hendrickson

The Mather Stock Car Company of Chicago was founded early in the twentieth century by Alonzo C. Mather. As the company's name indicates, its primary business was the leasing of stock cars, which many railroads preferred to lease rather than buy because the stock business was highly seasonal. Mather branched out into leasing refrigerator cars in the 1920's. however, and beginning in the 1930's the company did a brisk business in box cars as well. The Mather fleet even included a few tank cars.

Mather leased cars to railroads and shippers in many parts of the country and was modestly successful throughout the 1920's. However, it was during the severe depression following the 1929 stock market crash that the Mather company prospered. With most new railroads in financial distress and many in receivership, there was no capital with which to purchase new freight cars, yet serviceable cars were often urgently needed. Leasing

provided a viable alternative, as leased freight cars could be paid for a little at a time out of current revenue. Mather's Chicago Ridge shops therefore worked overtime building and rebuilding cars in the early 1930's,

at a time when other car builders were largely idle for lack of orders.

Though Mather remained a relatively small company, it contained its profitable leasing business until, in the late 1950's, it was acquired by the North American Car Corporation.

Mather's 37' Refrigerator Cars

Among the cars in the Mather leasing fleet were several hundred 37' meat refrigerator cars which had been converted from stock cars. From the 1930's through the 1950's, several hundred of these cars were leased to the Rath Packing Co. Other meat packing firms that leased 37' Mather reefers at one time or another include the Hygrade Food Products Corporation, the Hunter Packing Co., the Kohrs Packing Co., and Oscar Mayer and Co. These cars were also operated on a short-term lease basis under Mather's own MUNX and MRRX reporting marks.

Mather's 37' refrigerator cars had steel framed bodies with wood sheathing and interior lining, single sheathed ends, and Mather patent metal sheathed roofs. During the 1940's they were upgraded

with AB air brakes, geared hand brakes, new draft gear, and modified end sills. In this form, many remained active through the 1950's and some lasted into the 1960's.

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. Cut all parts from their sprue with a sharp knife.
- b. Check each part to be sure it is free of flash, remove flash if needed.
- c. Be sure all sprue marks are removed from parts.
- 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	Sharp Blades
Small Phillips screw driver	Pin vise
#75 Drill bit	Needle nose pliers w/cutter
#41 Drill bit	Tweezers

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. All holes on painted models should be drilled out with a #75 drill for best fit.

ROOF

- 1. You can mount the roof walk, #2, to the roof, #1, either by turning the roof upside down and drilling out the 4 inside round dimples with a #41 drill (a 3/32 drill may be a little snug. Use a 7/64th drill if you do not have a numbered drill) and gluing the roof walk in place. However, the best way is to cut the four pins from the bottom of the roof walk and glue the roof walk directly to the roof. Mount the roof walk now.
- 2. Sprue A has two types of roof hatches, 3a without grab irons attached and 3b with grab irons attached. Using your roof drawing as a guide, note the location of the two types of roof hatches and glue in place as shown.

Sprue A also has the roof hatch covers, #4. Remove these from the sprue and glue in place as shown (all four covers are the same). Generally meat refrigerator car hatches were always kept in a closed position unlike produce refrigerator cars. The only time one would see the hatches open would be when the car was being iced, cleaned and/or being aired out after cleaning. This information came from a retired Swift employee who iced and cleaned meat refrigerator cars. This is why the lack of hatch support levers as found on produce refrigerator cars. (This was not the case with meat refrigerator cars.)

3. Sprue B has the roof walk end support braces, #5. Remove from the sprue and glue in place as shown on the exploded view and end view.

BODY

- 4. Carefully remove the two ends from their sprue and glue the ends to the car body, #6. Note that the ends have locating holes so that the correct end will go on the correct end of the car. Keep in mind the end 7b is the brake wheel end of the car, it is the end with the two horizontal pins in it. Before you mount side/end ladders and grab irons, all corner holes must be drilled out with a #75 drill.
- 5. From sprue C cut four side grab irons, #8, and glue in place as shown on the exploded view. There are two extra supplied. Drill out corner mounting holes.
- 6. Also from spre C, cut two side ladders, #9, and glue in place as shown on the exploded view. Drill out mounting holes.
- 7. From sprue B, remove the two end ladders, #10, and glue in place as shown on the end view. Drill out corner mounting holes.
- 8. Also from sprue B, remove the retainer valve and pipe, #11, and glue in place as shown on the end view.

FLOOR & FRAME

- 9. The floor is #12. Glue the main frame, #13, to the sub-frame, #14. They will only fit together one way. Glue this assembly to the main floor, #12, noting that it will only fit one way (the center cross brace of the sub-frame is off center).
- 10. From sprue D, cut the four heavy cross bearers, 15a & 15b. Note on the exploded view and the floor bottom view that the open side of the channel faces to the end of the car. Glue the four cross bearers in place.
- 11. From sprue D, cut the four drains, #16. Note the location of the hole for the four drains near each corner on the bottom view. All four holes need to be drilled with a #75 drill bit. When done, glue the four drains in place as shown on the bottom view.
- 12. From sprue F, remove the brake lever and rod assembly, #17. Glue this in place to the bottom of the frame using a sticky type of glue. All parts on sprue F are made of engineering plastic which is very slippery and most standard glues will not bond them well to other plastics. See the bottom view to help you locate part #17. Also note there are only three mounting holes in the bottom of the frame and three pins on the part.
- 13. From sprue E, cut the brake cylinder, #18, and glue in place on the round stand up on the car floor. You will need to carefully insert the clevis end onto the brake lever put in place in step #12.
- 14. Locate the two coupler boxes, #19, and glue in place so that the two pins on the box go into the two rear pins in each set (closest to the center of the car). See also the bottom view of the car.
- 15. From sprue F, cut the brake rods #20 & 21. These are the rods that go out to the trucks. Look at the bolster on the floor and notice a notch. Insert the rod into the notch in the bolster and glue the clevis end of the rod to the lever. These rods are tucked into the notch for truck clearance. The long rod, #22, can now be removed from the sprue and glued in place as shown on the bottom view: one end to the top of the bolster and the clevis end to the appropriate lever.

FINAL ASSEMBLY

- 16. Glue your floor/frame assembly into the bottom of the body, it can only fit one way.
- 17. From sprue D, cut four stirrup steps, #23 (5 are supplied), and glue in place on the body corners as shown on the exploded view.
- 18. From sprue D, cut two door steps, #24 (3 are supplied). See drawing, cut 3/64" off the top for best fit, (top of round circle). Glue into place under the door behind the frame. Note the slot, see also the underframe drawing.
- 19. Install the brake fulcrum, #25, on sprue F.
- 20. You may now want to add weight to the car and when done, glue the roof assembly in place on the car.
- 21. From sprue B, remove six grab irons, #26, making sure the mounting pin is only cut to 1/32" long. Glue them in place on both ends as shown on the end view drawing. Drill out corner mounting holes before mounting, as side grab iron pins now in the hole are in the

way.

- 22. Turn your car upside down and install couplers of your choice. The box has been designed to accept Kadee™ #5 couplers. Cut 1/32" off coupler box lid pin, #27 and then push into place securing the couplers
- 23. From sprue E, remove the two air hoses, #28, and trim mounting pin to 1/8" length see sprue drawing. Glue in the hole in each end to the right of the coupler area.
- 24. Assemble the truck side frames, #29 on sprue G, to the truck bolsters, #30 on sprue H, and insert the wheels, #31. Using the supplied screws, #32, mount the trucks to the car.
- 25. From sprue B, cut the power brake mechanism, #33, and glue in place on the B end as shown on the end view drawing. Also from sprue B, cut the brake rod/chain, #34, and glue in place as shown on the end view inserting the fulcrum into the clevis end and the pin on the chain into the hole on the power brake mechanism. Lastly, from sprue B, remove the brake wheel, #35, and glue in place on top of the brake staff.

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PARTS POLICY:

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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 Red Caboose. Subject to stock on hand. Always specify which kit the part is for.

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Part #	Part Description	On Sprue #	Quantity
1	Roof	•	1
2	Roof walk		1
3a	Ice Hatch no grab irons	А	2
3a	Ice Hatch with grab irons	А	2
4	Ice Hatch Lids	А	4
5	Roof walk end support	В	2
6	Body		1
7a	"A" end body end		1
7b	"B" end body end		1
8	Side Grab Iron	С	4
9	Side ladder	С	2
10	End ladder	В	2
11	Retainer & pipe	В	1
12	Floor		1
13	Main frame		1
14	Sub frame		1
15a	Heavy cross bearers	D	2
15b	Heavy cross bearers	D	2
16	Drains	D	4
17	Brake lever & rod assembly	F	1
18	K Brake cylinder	E	1
19	Coupler box		2
20	Short brake rod	F	1
21	Short brake rod	F	1
22	Long brake rod	F	1
23	Stirrup steps	D	4
24	Door steps	D	2
25	Fulcrum	F	1
26	End grab irons	В	6
27	Coupler cover plate		2
28	Air hose	E	2
29	Side frames	G	4
30	Truck Bolster	Н	2
31	Wheels		4
32	Screws		2
33	Power brake mechanism	В	1
34	Brake rod/chain	В	1
35	Brake wheel	В	1