LARGE SCALE MODEL RAILWAY ENGINEERING

This month marks the completion of the hopper car series. The past several issues of the Gazette had detail and assembly drawings to build either a two or three bay Norfolk and Western peak end hopper. With this issue I want to finish up with a couple of detail drawings that I forgot and some short instructions on assembly.

The original cars that these drawings are based on were welded together with the detail parts (grabs, stirrups etc.) riveted in place. Using this method a car can be assembled in four to five hours if all of the parts are made ahead of time. The best way to start is to assemble the two sides and ends. light tack welds are all that are required to hold the parts together. Next I tack the slop sheet supports(CD-157) in place followed by the centersill channels. The hopper pieces(CD-162) and bottom sheet(CD-159) can then be tacked in place. At this point the basic body is assembled and one can start to install all of the corner angles, side ribs, end braces and such. These can be welded in place and or riveted. Lastly the grab irons and stirrups can be riveted on along with the brake wheel detail. The brake wheel detail is left up to the discretion of the builder. Paint, trucks and couplers complete the project.

The last car that is to be covered in the car building series is a small caboose. Since Ken and I have not finished ours yet I am going to wait a few months before starting the series in the Gazette. In the mean time I thought I would do several articles on locomotive accessories and maybe some shop equipment. Stay tuned till next month.
TACK WELD ALL CORNERS AND SEAMS

1/8 RIVETS AS REQUIRED
SEE SHEET 2 FOR END AND CROSS SECTION DETAILS.

PIKE LAKE & EASTERN

MATERIAL:

NOTES:

PIPER CAR BODY - 3 BAY CD-177
45.63 (2 BAY)
59.50 (3 BAY)

0.38

0.50

0.50

0.13

SAW SQUARE AND DEBURR

DO NOT SCALE DRAWING
TOLERANCES
UNLESS OTHERWISE SPECIFIED
ANGLES: 15°
DECK: 10 PLACES: 1.250
12 PLACES: 1.938

MATERIAL: 1/8 ANGLE

PIKE LAKE & EASTERN
Hartford Shops

REV. 9-27-95

SYMP. NO.

REVISION

REV.

BY

DATE

ANGLE, TOP SIDE

CD-165
PIKE LAKE & EASTERN
Hartford Shops

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TITLE: CHANNEL, CENTER SILL

CD-167

MATERIAL: 1 1/2 X 1/2 X 1/8 STEEL CHANNEL

DO NOT SCALE DRAWING
TOLERANCES
UNLESS OTHERWISE SPECIFIED:

ANGLES: +1°
DEPARTURES: +3 PLACES 0.010
-2 PLACES 0.005

SAW SQUARE AND DEBURR
SAW SQUARE AND DEBURR

DO NOT SCALE DRAWING
TOLERANCES
UNLESS OTHERWISE SPECIFIED
ANGLES 15°
DEMENTS .013 PLATED .020

MATERIAL: 1/8 ANGLE

PIKE LAKE & EASTERN
Harford Shops
PIKE LAKE & EASTERN
Hartford Shops

MATERIAL: 3/4" x 3/8" x 1/8" STEEL CHANNEL

DO NOT SCALE DRAWING
TOLERANCES
UNLESS OTHERWISE SPECIFIED.
ANGLES ± 1/16
DEVIATIONS: 12 PLACES ± 1/1000
12 PLACES ± 1/1000

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SAW SQUARE AND DEBURR

PIKE LAKE & EASTERN
Hartford Shops

MATERIAL: 1/8 ANGLE

DO NOT SCALE DRAWING
TOLERANCES
UNLESS OTHERWISE SPECIFIED
ANGLES: A
DEGREES: 2 DIGITS
TOLERANCES: 3 DIGITS

Title

Date

Revision

By Date

No.

ANGLE, END BRACE

CD-170
SAW SQUARE AND DEBURR

0.50 DRILL THRU
DEBURR BOTH ENDS AND HOLE

MATERIAL: 1/2 COLD ROLLED

PIKE LAKE & EASTERN

Hartford Shops

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