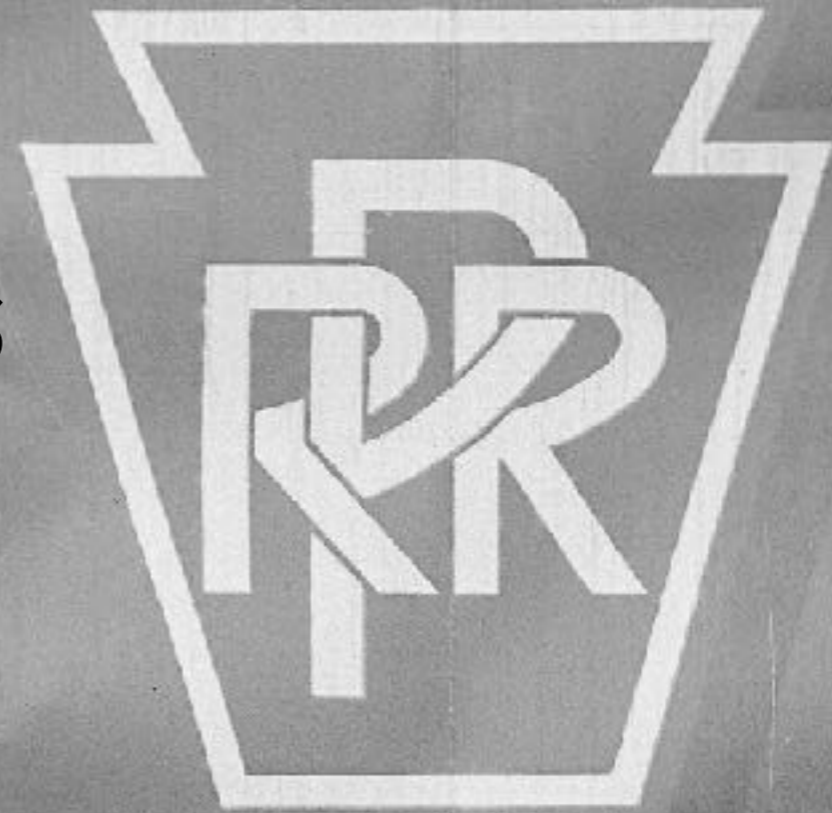


Pennsylvania Railroad Early Welded Box & Auto Cars

PRRT&HS Annual Meeting

14-16 May 2026, Gettysburg, PA



Thank you

Joe Acri

Barbara Hall

Jim Homoki

Aaron McWilliams

Gerry Schaefer

PRR Railfan site

This will be posted to prototopics.blogspot.com

EX.W. 10-5 H.13-0 E.W. 8-11 H. 14-6

LL.50-6 LW. 9-2L.H. 10-6 CU. FT. 4862

BLT. 11 51

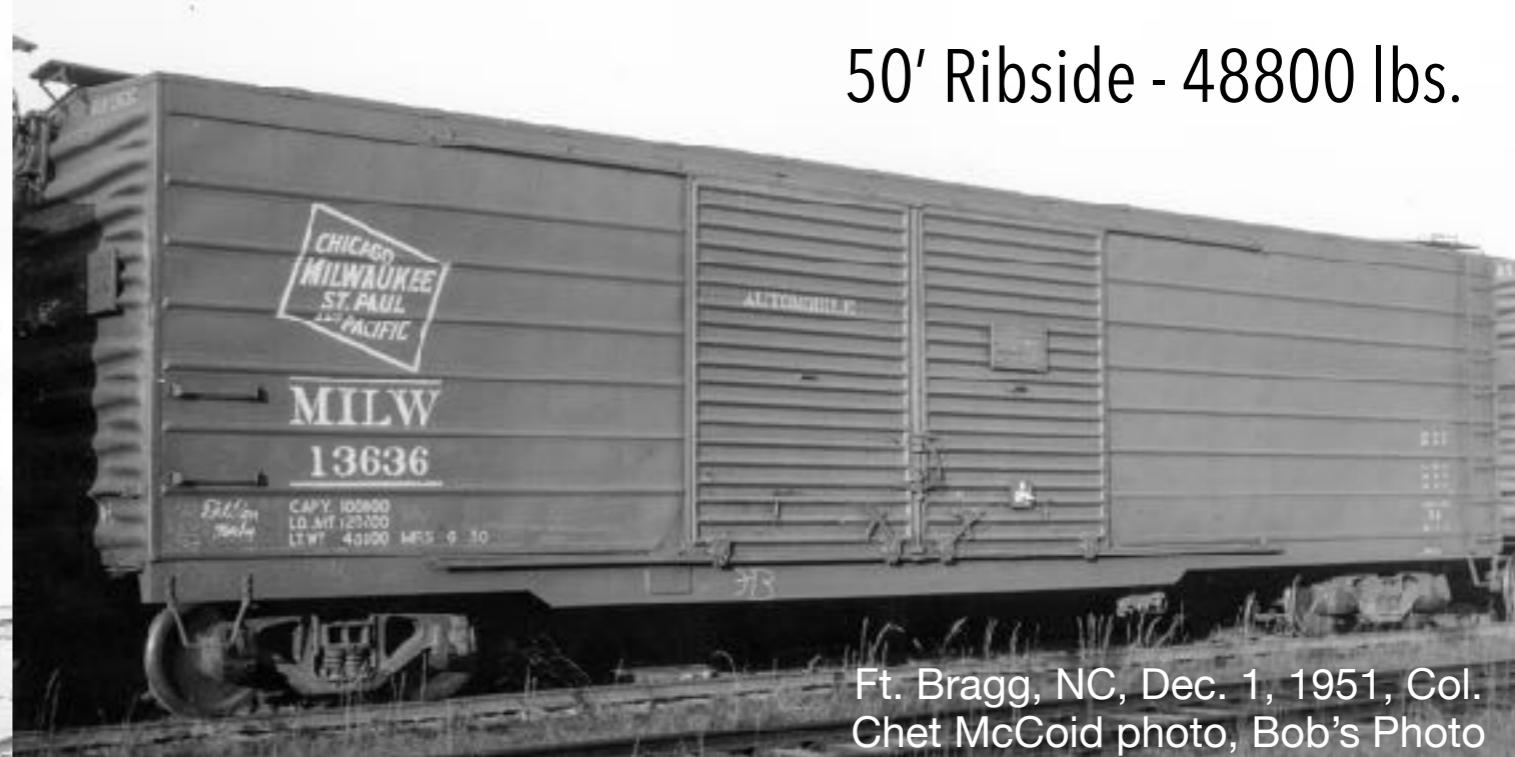
X45

RED

Weight Comparison



X38 - 55000 lbs.



50' Ribside - 48800 lbs.

Ft. Bragg, NC, Dec. 1, 1951, Col. Chet McCoid photo, Bob's Photo



AAR - 56500 lbs.

San Francisco, Will Whittaker



X40 - 49200 lbs.
for a 60' car!

Top left and bottom right -
Hagley Museum and
Library



A-50-14 - 55600 lbs.

Cedar Rapids, IA, June, 1941,
John C. LaRue, Jr. Collection

PRR Early Welded Box & Auto Cars

Class	Series Start	Series End	Quantity	Notes
X36	103500	103500	1	
X40	36987	36996	10	
X40A	36987	36995	4	from X40
X40C	36996	36996	1	from X40
X40B	36997	37096	100	
X41	84536	84825	290	
X41A	81890	82089	200	
X41B	118491	119990	1500	
X41C	84826	85325	500	
X42	2540	2549	10	Express (Mail Storage) car
X43A	602000	603499	1500	American Car & Foundry
X45	73000	73499	500	
X48	47000	47019	20	Pullman-Standard



EX.W. 10-5 H.13-0 E.W. 8-11 H. 14-6
 LL.50-6 LW. 9-2LH. 10-6 CU. FT. 4862
 BLT. 11 51 X45

RED

X36

- Built 1936, Altoona
- X36 (1 car)
 - 103500
 - 40'6" IL – 7'0" door opening
- Proprietary design



EX.W. 10-5 H.13-0 E.W. 8-11 H. 14-6
IL.50-6 LW. 9-2L.H. 10-6 CU. FT. 4862
BLT. 11 51 X45

RED

X36



P E N N S Y L V A N I A

103500

CAPY 100000
LD LMT 127400
LT WT 41600
NEW 9 36



WGT ST WLS
EEV 10-5 H-11-0
CW 0-4 H 11-0
IL 40-6
IV 3-4
IS 16-9
CU FT 3750
BLT 36 X 36 PRR

70513, 9-25-36

BLT. 11 51

X 45

X36



F10523 7070-36

BLT. 11 51

X45

X36



E.10586.10-10-36.X36



P R R
103500

X 36
E.10515 9-25-36

X36



LL.50-6 LW. 9-2LH. 10-6 CU. FT. 4862

BLT. 11 51

X45

J.M.P., Trenton, New Jersey, Sept. 18, 1951

RED



R. Guthlein photo, John C. LaRue, Jr. Collection

48200 lbs.
 vs. 44900 lbs.
 vs. 41600 lbs.



Top and bottom - Hagley Museum and Library

X40

- Built 1946-1947, Altoona
- X40 (10 cars)
 - 36987-36996
 - 60'6" IL – 18'0" door opening
- X40A (4 cars from X40)
 - 36987-36996
 - 60'6" IL – 7'0" door opening
- X40B (100 cars)
 - 36997-37096
 - 60'6" IL – 7'0" door opening
- X40C (1 car from X40)
 - 36996
 - 50'6" IL – 18'0" door opening
- Proprietary design



EX.W. 10-5 H.13-0 E.W. 8-11 H. 14-6
IL.50-6 LW. 9-2L.H. 10-6 CU. FT. 4862
BLT. 11 51 X45

X40B

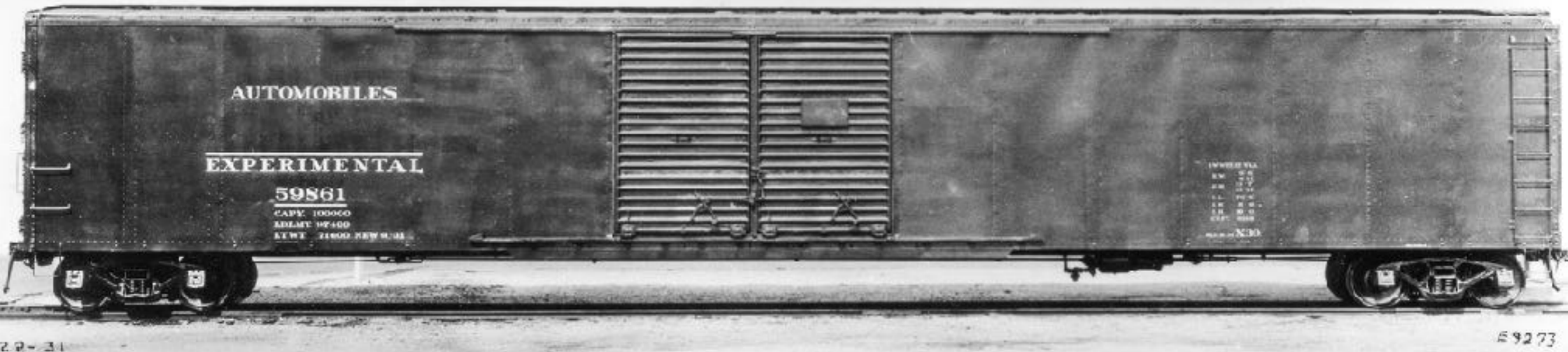


X40B



Hagley Museum and Library

Not the Pennsy's first venture in large automobile cars...



-22-31

59273

X40B



MERCHANDISE SERVICE

PENNSYLVANIA

37007

CAPY. 100000
EDMT 112000
ETMT 56000000137



THE PENNSYLVANIA
RAILROAD
NEW YORK
PHILADELPHIA
PITTSBURGH
RICHMOND
WILKES-BARRE

REG. U.S. PAT. OFF.

E.16501-10-29-47

LA.W. 10-6 H. 15-0 E.W. 0-11 H. 15-0
LL. 50-6 LW. 9-2 LH. 10-6 CU. FT. 4862

BLT. 11 51

X45

X40B



Hagley Museum and Library

X40B



PENNSYLVANIA

37091

NET WT 100000
GROSS WT 118000
LWT 20000 NEW H 47



THE PENNSYLVANIA
RAILROAD
PHILADELPHIA
PA
EST. 1825
www.prr.com

F 16421

LL 50-6 LW 9-2 LH 10-6 CU. FT. 4862

BLT. 11 51

X45

PRR
37091

PENNSYLVANIA

37091

ESTABLISHED
1825
GEORGETOWN, PA.

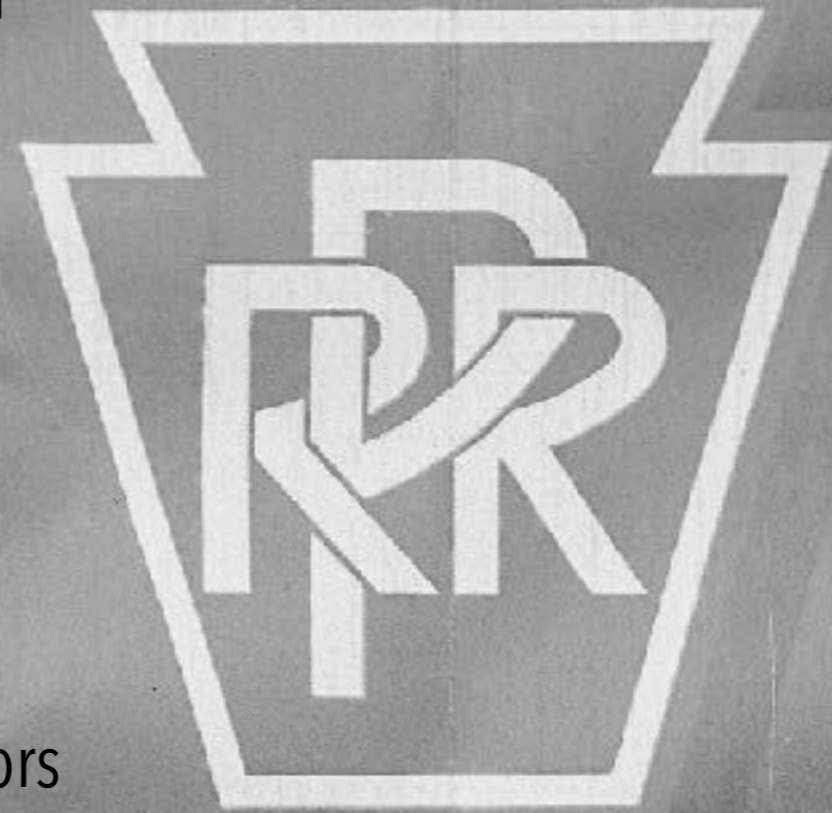
CAPY 10000

LENT 115900

LTWT 50100NEV 147

X41

- Built 1947-1948, Altoona
- X41 (290 cars)
 - 84536-84825
 - 50'6" IL – 14'6" door opening
- X41A (200 cars)
 - 81890-82089
 - 50'6" IL – 14'6" door opening; end doors
- X41B (1500 cars)
 - 118491-119990
 - 50'6" IL – 7'0" door opening
- X41C (500 cars)
 - 84826-85325
 - 50'6" IL – 14'6" door opening
- Proprietary design



EX.W. 10-5 H.13-0 E.W. 8-11 H. 14-6
IL.50-6 LW. 9-2L.H. 10-6 CU. FT. 4862
BLT. 11 51 X45

X41B



Presenter's collection

RED

X41B



Fayetteville, NC, Dec. 24, 1951, Col. Chet McCoid photo, Bob's Photo, Collection of J. P. Barger



X41B



San Diego, Nov. 23, 1954, Col. Chet McCoid photo, Bob's Photo

BLD, 11 31

X41b

RED

X41B



PENNSYLVANIA

119894

CAPY 100000 LO LMT 116200 LF WT 52000 P-57 54

RETURN WHEN EMPTY TO NORRIS PHILA PA



EX W 10-4 B12-6 EW 8-10 B14-7
IL 50-4 LW 8-2 LB 10-7 CO FT 4935

BLT 9 47

X41B

E-20556

Hagley Museum and Library

BLT. 11 51

X45

RED

X41B



PENN CENTRAL

PC

145060

CAPY 110000 XM
LD LMT 129700
LT WT 47300 PG2 12-72



X41B

LL.50-6 LW. 9-2LH. 10-6 CU. FT. 4862

BLT. 11 51

X45

RED

X41C



Hagley Museum and Library

RED

X41C



E.16267-6 2-47

X41C



11,500 L.W. 9'2 1/2 H. 10' 6" C.O. FT. 400 2

BLT. 11 51

X45

Denver, Sept. 2, 1955, Otto Perry photo, Denver Public Library

RED

X41C



R. R. Wallin Collection

X41C



X41E - ex-X41B



BLT. 11 51

X45

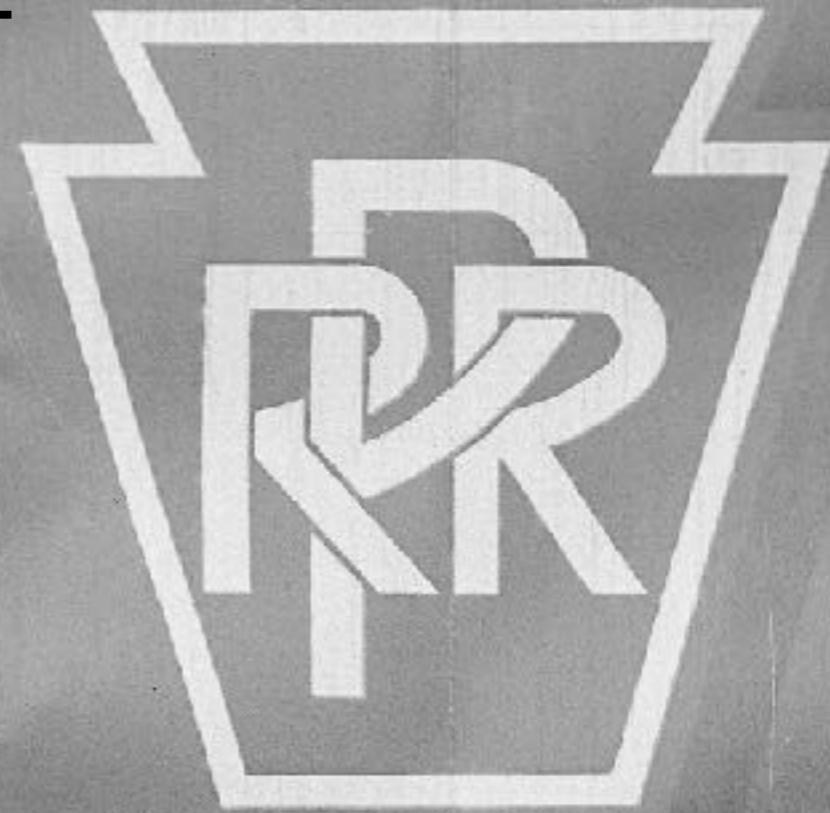
RED

X41F
ex-X41A



X42

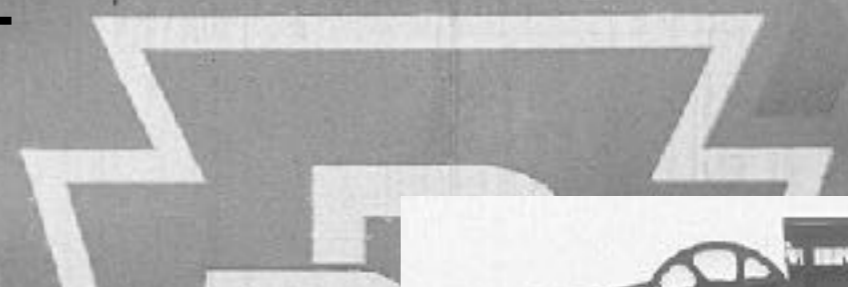
- Built 1950, Altoona
- 2540-2549 (10 cars)
- 60'0" IL – 7'0" door opening (two)
- Article by Chuck Yungkurth, including drawings, appeared in October, 1999, *Railroad Model Craftsman*



EX.W. 10-5 H.13-0 E.W. 8-11 H. 14-6
IL.50-6 LW. 9-2L.H. 10-6 CU. FT. 4862
BLT. 11 51 X45

RED

X42



BLT. 10 50 PRR

BLT. 11 51

X43A

- Built 1950-1951, American Car & Foundry, Berwick
- 602000-603499
- 40'6" IL – 7'0" door opening
- AAR-design; welded construction



EX.W. 10-5 H.13-0 E.W. 8-11 H. 14-6
IL.50-6 LW. 9-2L.H. 10-6 CU. FT. 4862
BLT. 11 51 X45

RED

X43A



E.18745

BLT. 11 51

X45

X43A



Ft. Bragg, NC, Oct. 11, 1951, Col. Chet McCoid photo, Bob's Photo

X43A



Brooklyn, NY, Sept. 18, 1955

BLT. 11 51

X 45

RED

X43A



PENNSYLVANIA

603443

CAPY00000 LDLMF122400 LTWT45000 P203A-53

EW3-4H13-7 EW3-4H14-5

IL4061W92 IRLD-6 CUFT 3000

BLT 2-51

X43A

BLT. 11 51

X45

RED

X43A



X43A



Potomac Yard, June, 1968, Bob's Photo, Collection of J. P Barger

BLE, 11 31 X43

RED

X43A



Courtesy of James Rogers

For context, an X43B



PENNSYLVANIA

601601

CAPY 100000
LD LMT 132900
LT WT 46100

NEW 2-51



ET W 10-0 H 11-4
EW 9-6 H 11-4
LE 8-0
LV 9-2
LR 10-4
CT 11-0
BLT 2-11 X 43-B

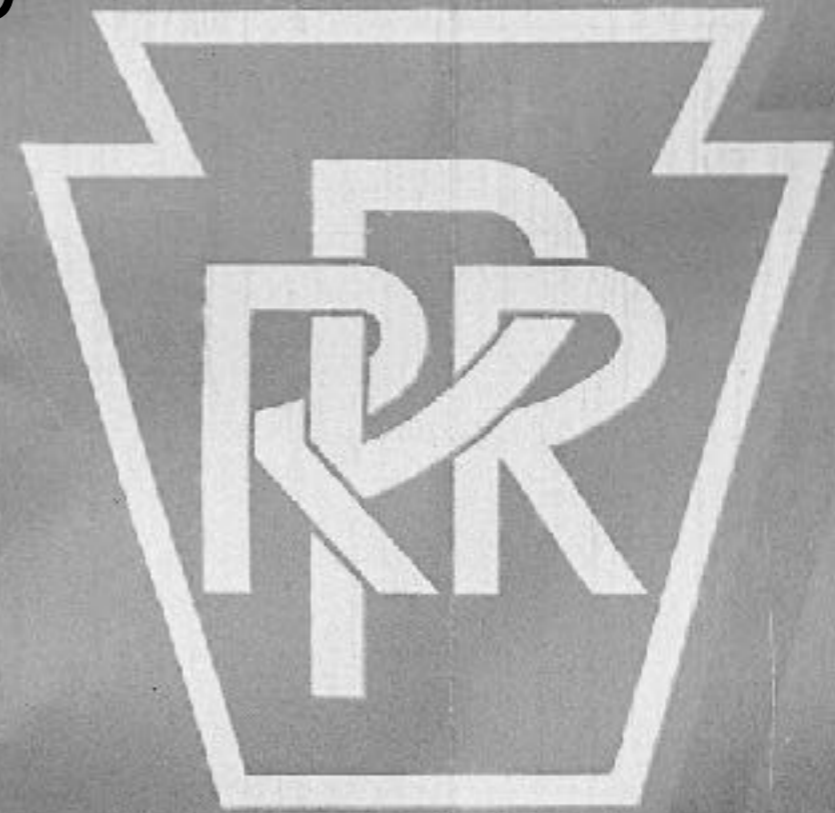
TL 30'6" LW 9'2 1/2" H 10'6" CU FT 4862

BLT. 11 51

X 45

X45

- Built 1951, Altoona
- 73000-73499
- 50'6" IL – 8'0" door opening
- Proprietary design



EX.W. 10-5 H.13-0 E.W. 8-11 H. 14-6
IL.50-6 LW. 9-2L.H. 10-6 CU. FT. 4862
BLT. 11 51 X45

RED



PENNSYLVANIA

73000

CPT 1000
LASHED
LFT 200 NW 2



TV 10-3 H10-0
TW 3-1 H10-0
LL 50-0
LV 0-2
LH 10-0
CWT 4502

ST D G X45

PRR
73000

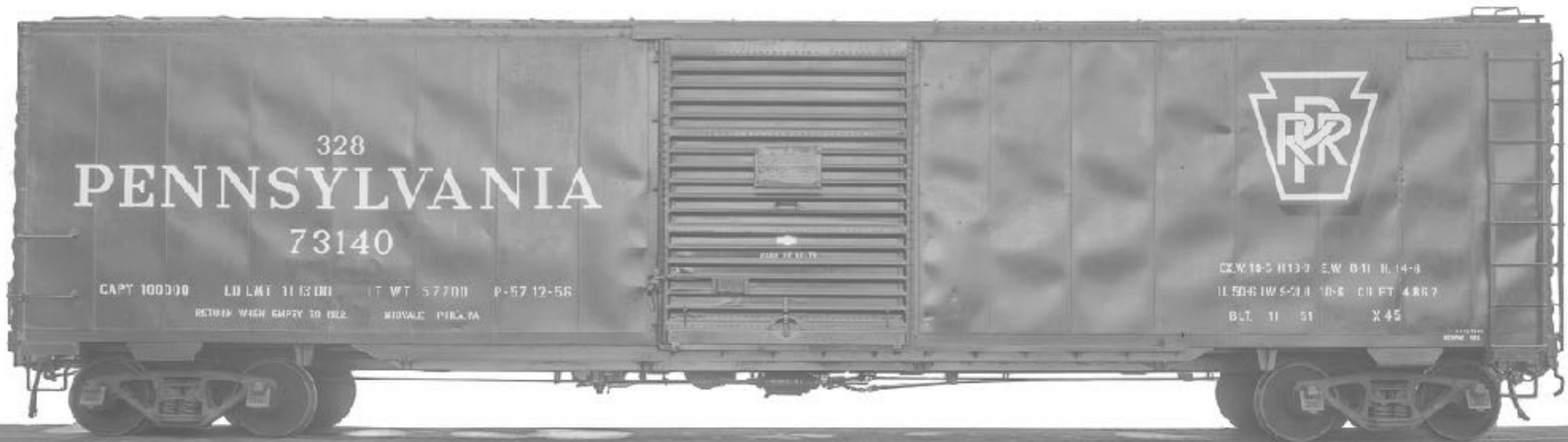
SPEC. 3 INTRAVEL

TW WENT WLS

X45



X45



E 21232

IL 50-6 LW 9-2 LH 10-6 CU. FT. 4862

BLT. 11 51 X45

X45



E-22214

LL. 50-6 LW. 9-2 LH. 10-6 CU. FT. 4862

BLT. 11 51

X45

X45



11.50-6 I.W. 9-21.H. 10-6 CU. FT. 4862

BLT. 11 51

X45

Los Angeles, Mar. 7, 1976, Steve Vincent photo, courtesy of Matthew Herson

RED

X45



Buffalo, NY, Oct. 10, 1982, John C. Benson

X45



X45



X45



Conrail Photo Archive

BLT, 11 51

X45

RED

X48

- Built 1954
- 47000-47019
- PS-1 design
- Cushion underframe
- *Mainline Modeler*,
January 2002



Hagley Museum and Library

H0 Scale Modeling

- X40 series – Rail Classics (brass)
- X41 series – Sunshine Models
- X42 – Funaro & Camerlengo
- X43A – Speedwitch (pattern work in process)
- X45 – Speedwitch (pattern work in process)
- X48 – Kadee kitbash



EX.W. 10-5 H.13-0 E.W. 8-11 H. 14-6
I.L.50-6 I.W. 9-2I.H. 10-6 CU. FT. 4862
BLT. 11 51 X45

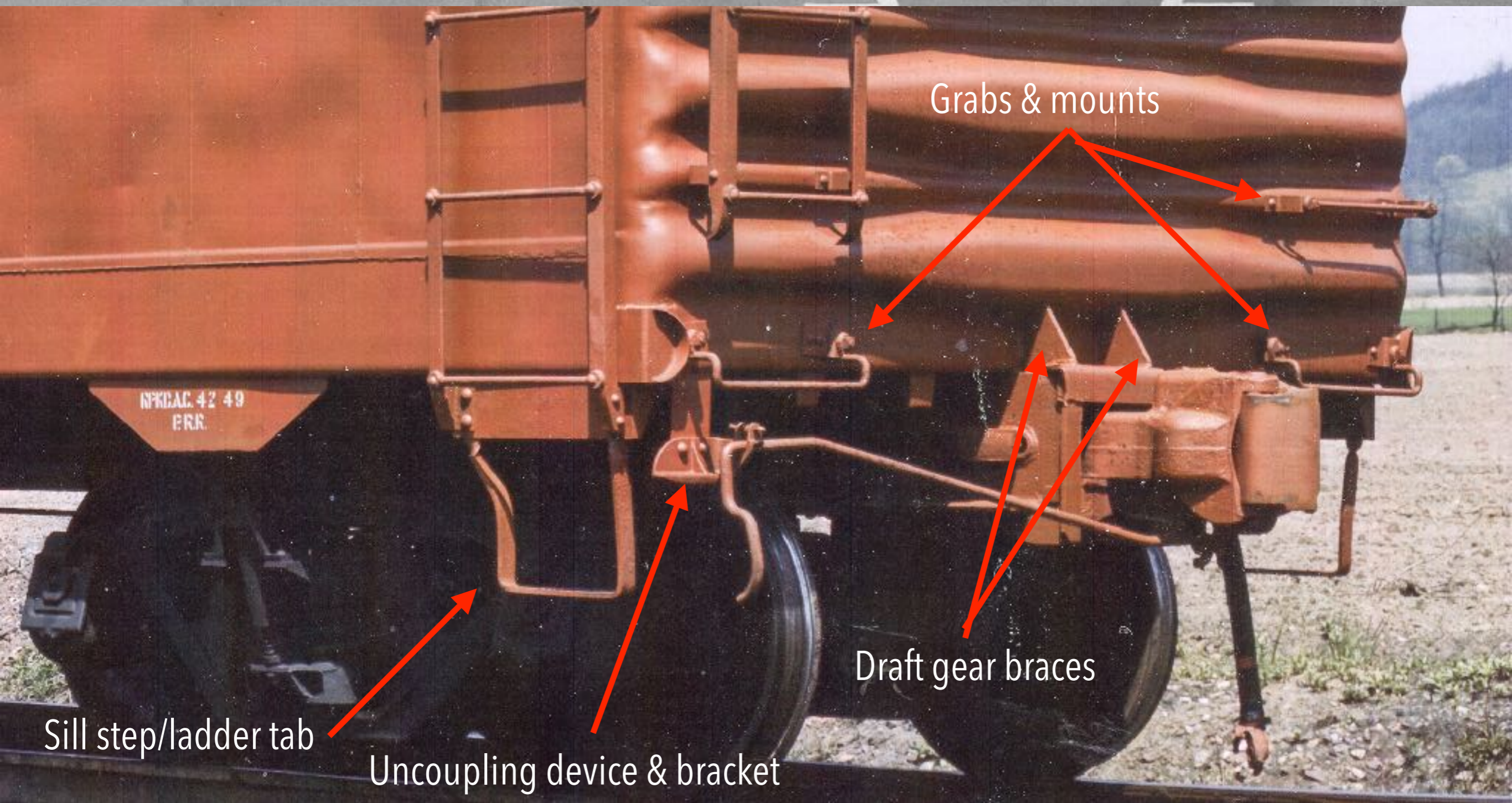
Sunshine Models X41B: Modeling Considerations

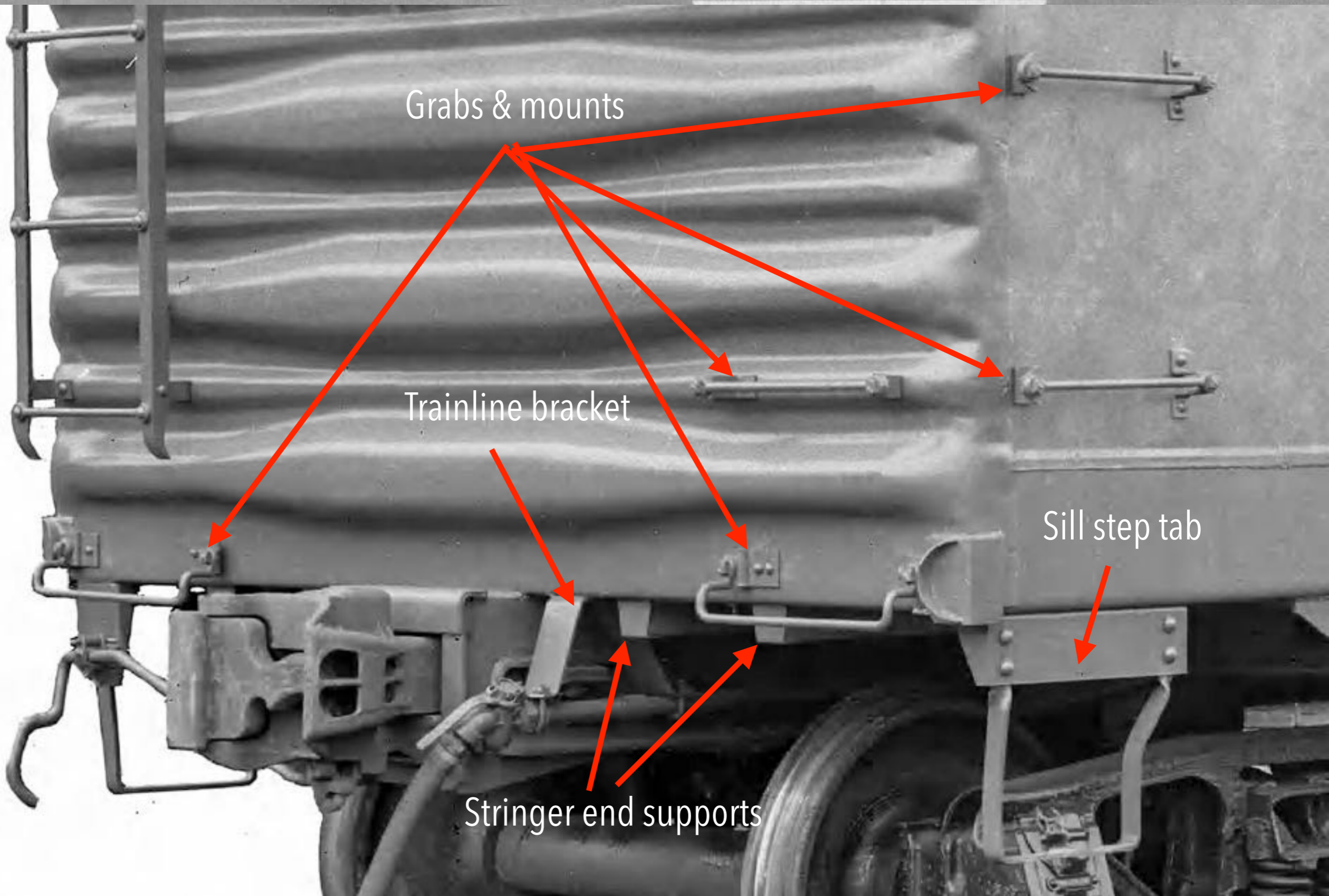
- Underframe – entirely wrong
- Grabs
- Ladders
- Lower side/sill steps
- Side sill tab supports
- Door frame brace
- Additional details
 - Draft gear braces
 - Brake levers
 - Royal brake adjuster
 - Trust plates



EX.W. 10-5 H.13-0 E.W. 8-11 H. 14-6
I.L.50-6 I.W. 9-2I.H. 10-6 CU. FT. 4862
BLT. 11 51 X45

Sunshine Models X41B:



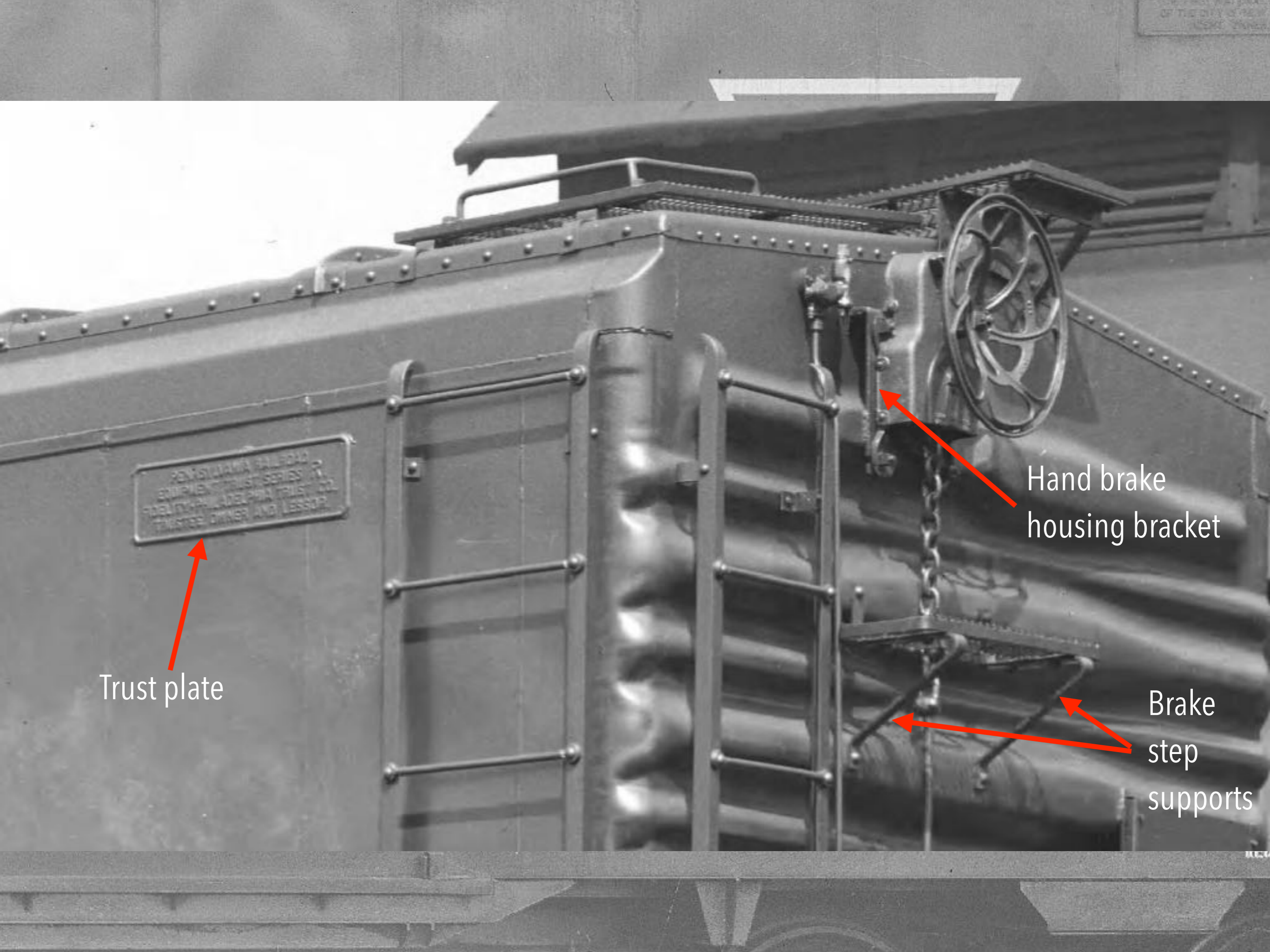


Grabs & mounts

Trainline bracket

Sill step tab

Stringer end supports

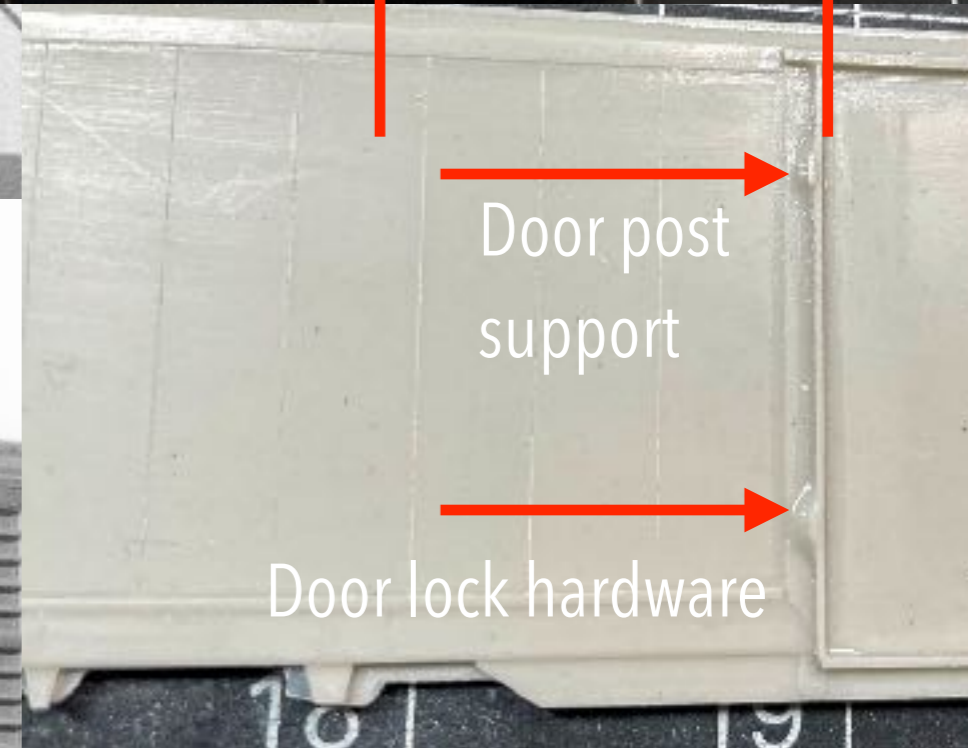


PENNSYLVANIA RAILROAD
EQUIPMENT TRUST SERIES 11
FIDELITY AND PHILADELPHIA TRUST CO.
TRUSTEE OWNER AND LESSOR

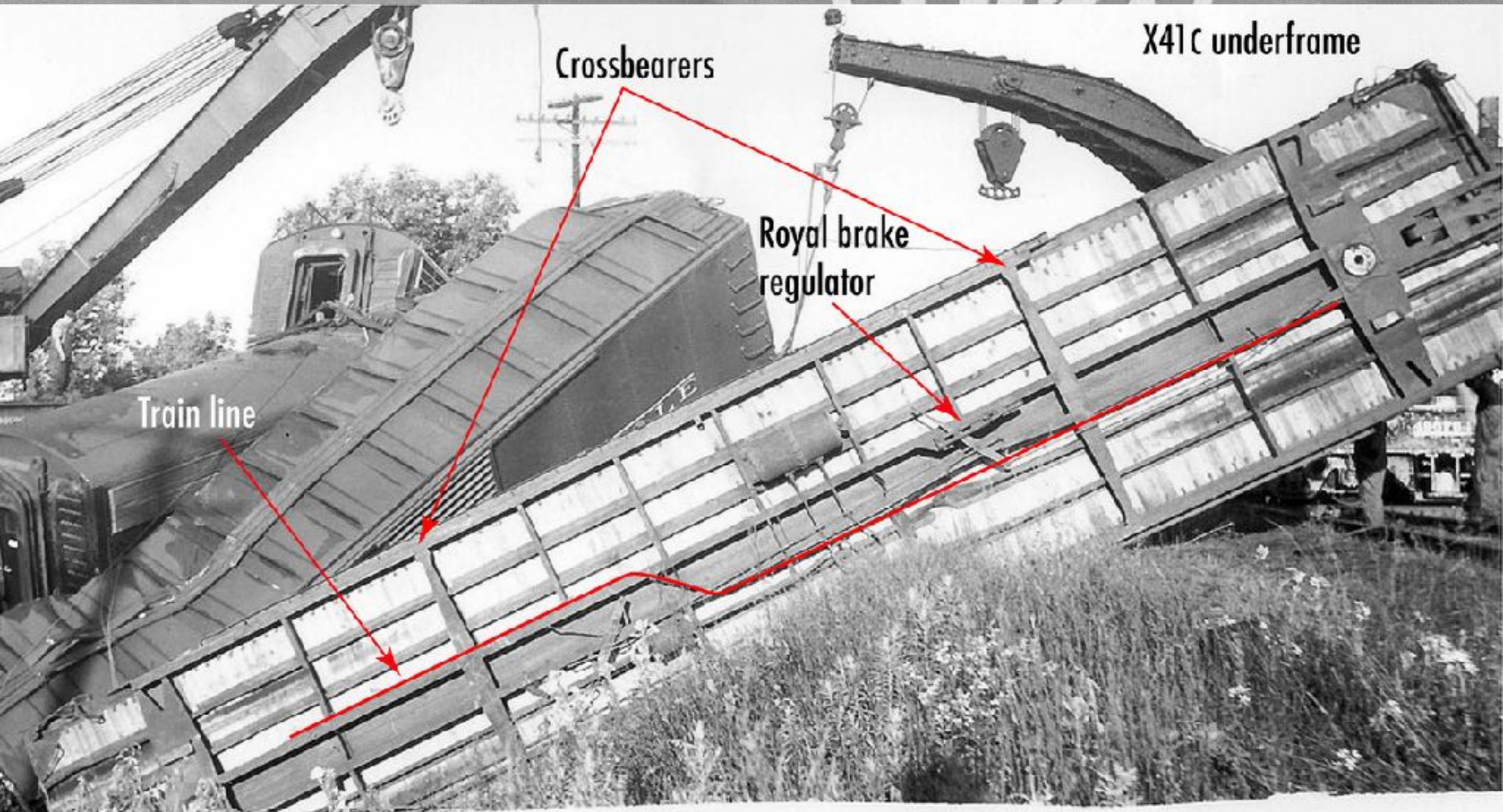
Trust plate

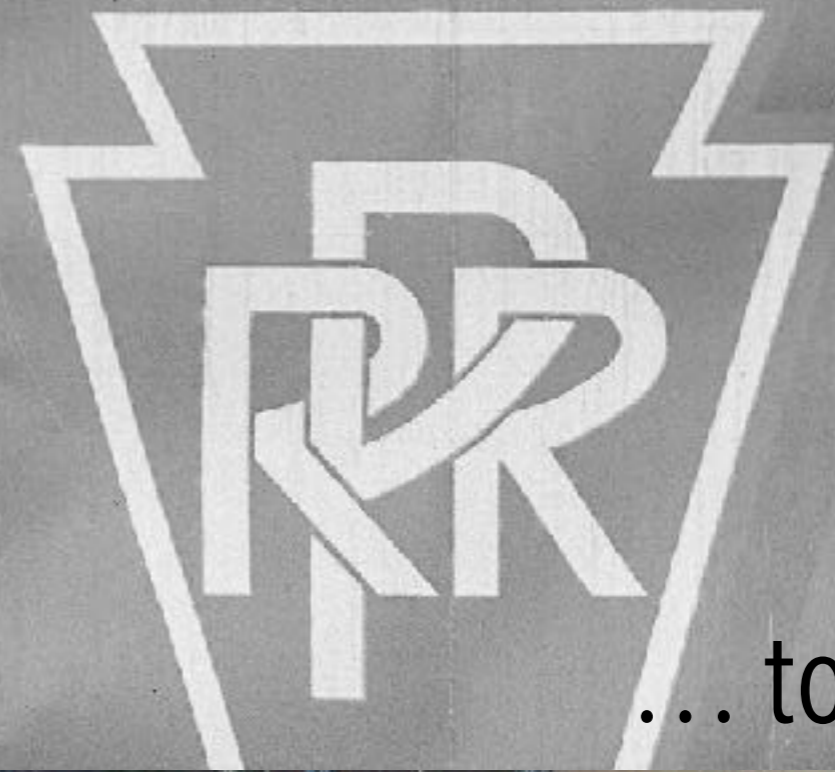
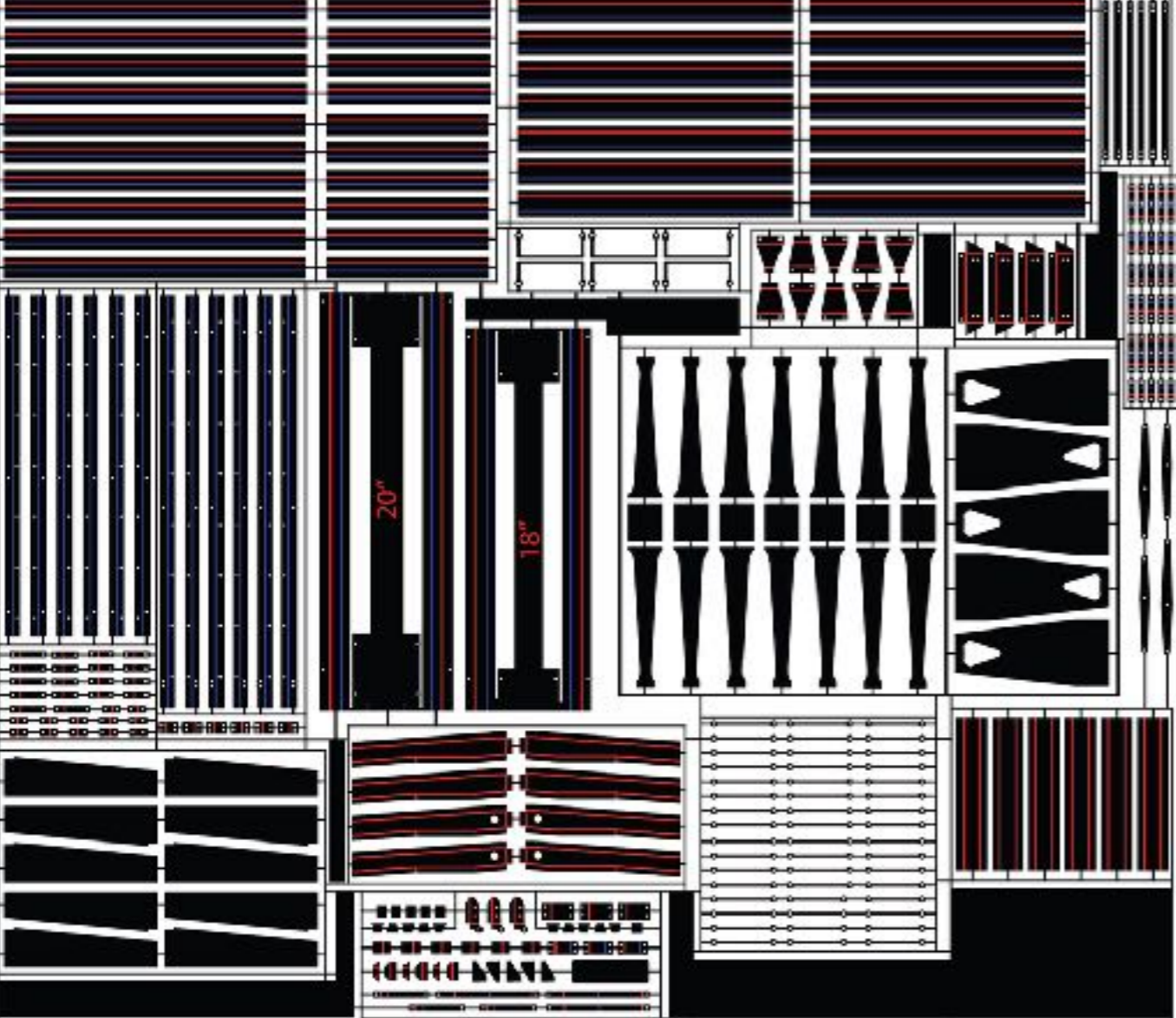
Hand brake
housing bracket

Brake
step
supports



The underframe X41C



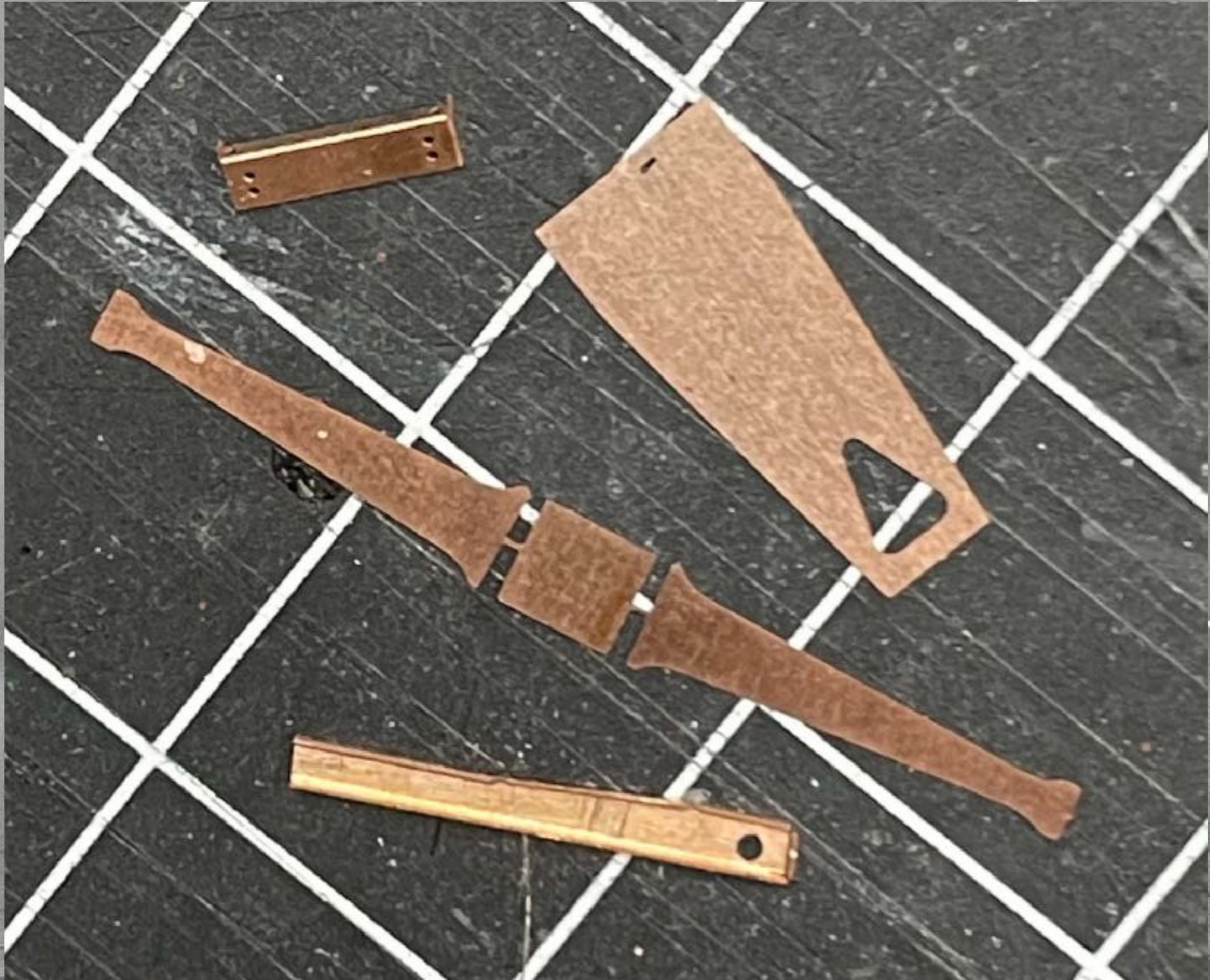


... to etchings

From artwork...



... to etchings

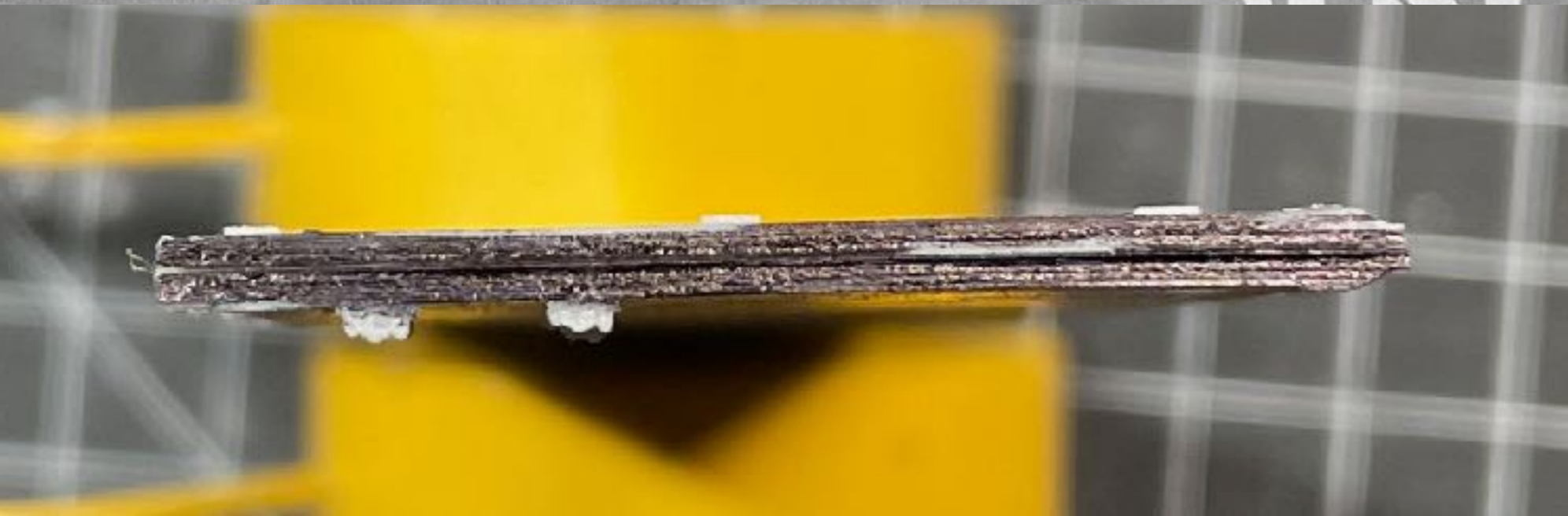


6

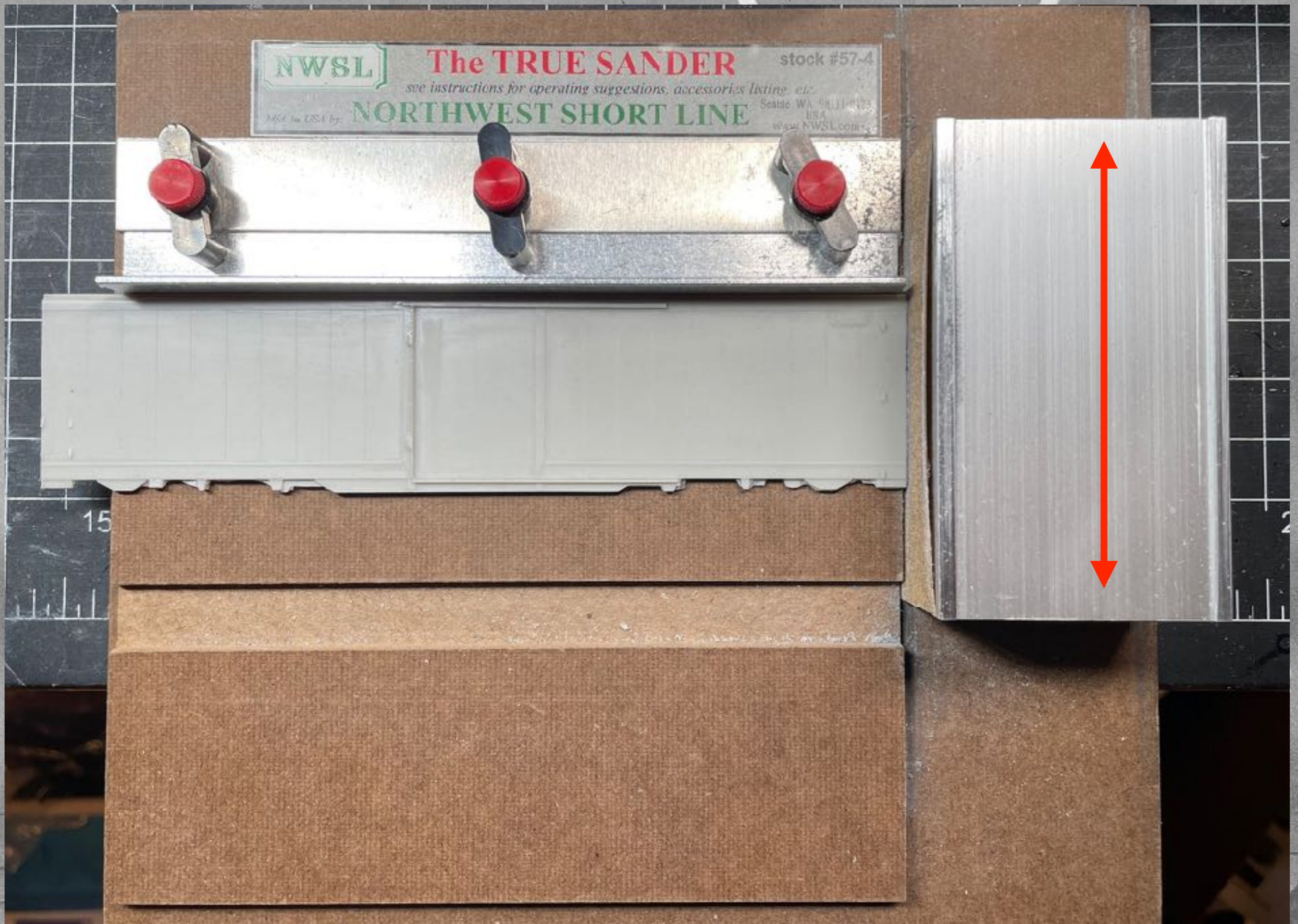
862

RED

Sunshine Models X41B: Building "the box"



Sunshine Models X41B: Building "the box"

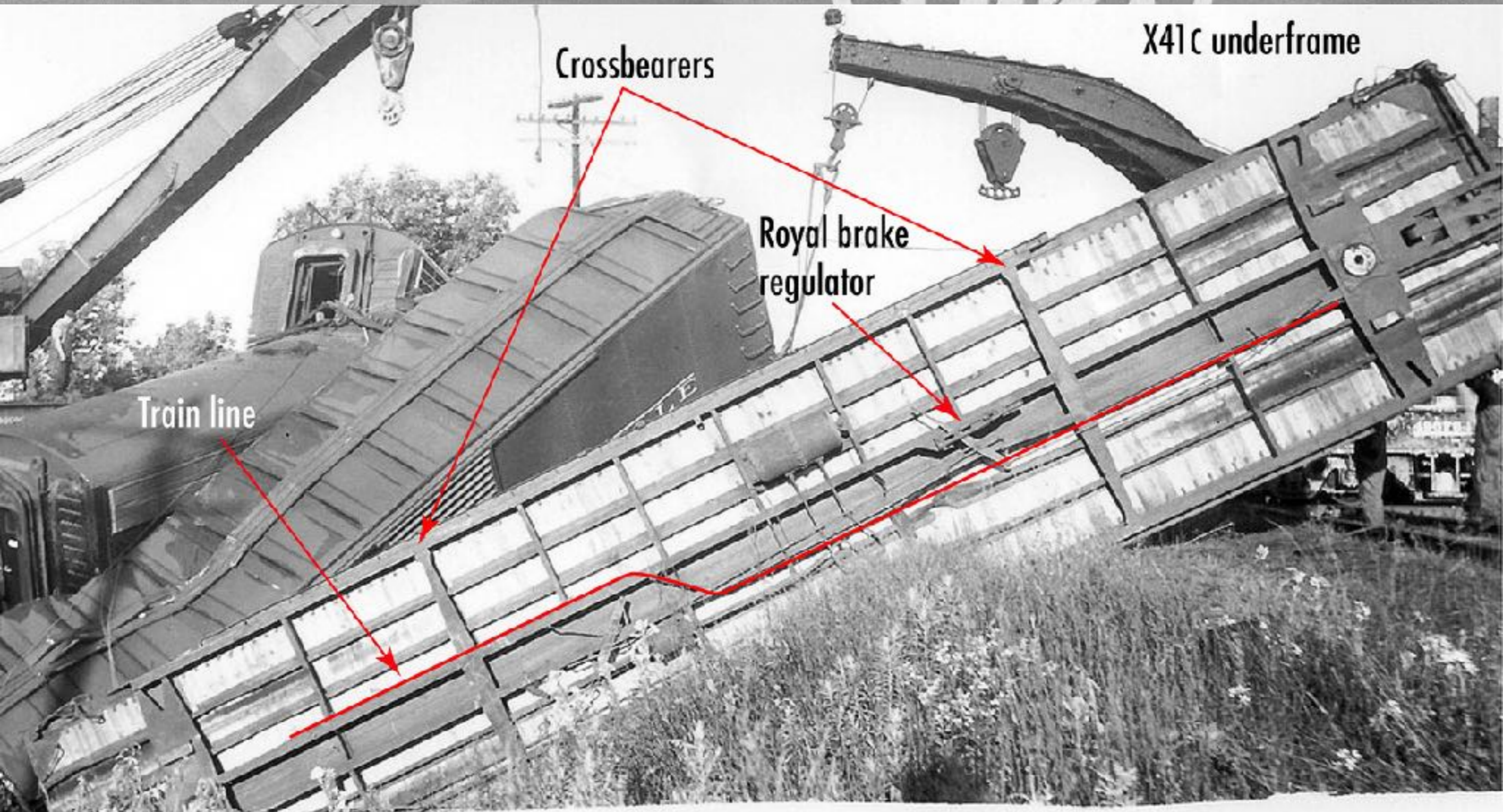


Sunshine Models X41B: Building "the box"



EX. W. 10-5 H. 15-0 E. W. 8-11 H. 14-0
I.L. 50-6 I.W. 9-2 I.H. 10-6 CU. FT. 4862
BLT. 11 51 X45

The underframe X41C



Sunshine Models X41B: the underframe



Sunshine Models X41B: the underframe



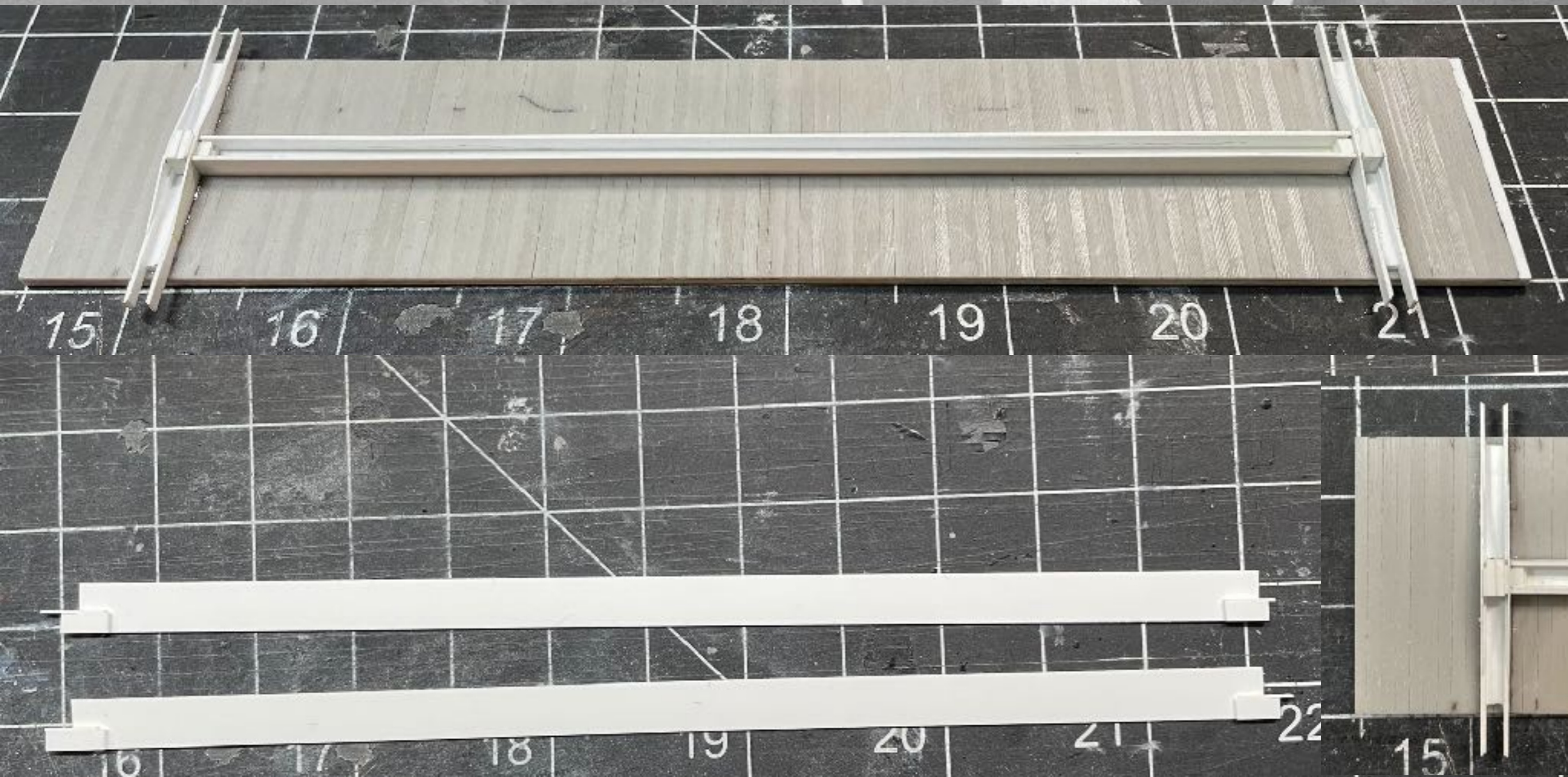
LL.50-6 LW. 9-2LH. 10-6 CU. FT. 4862

BLT. 11 51

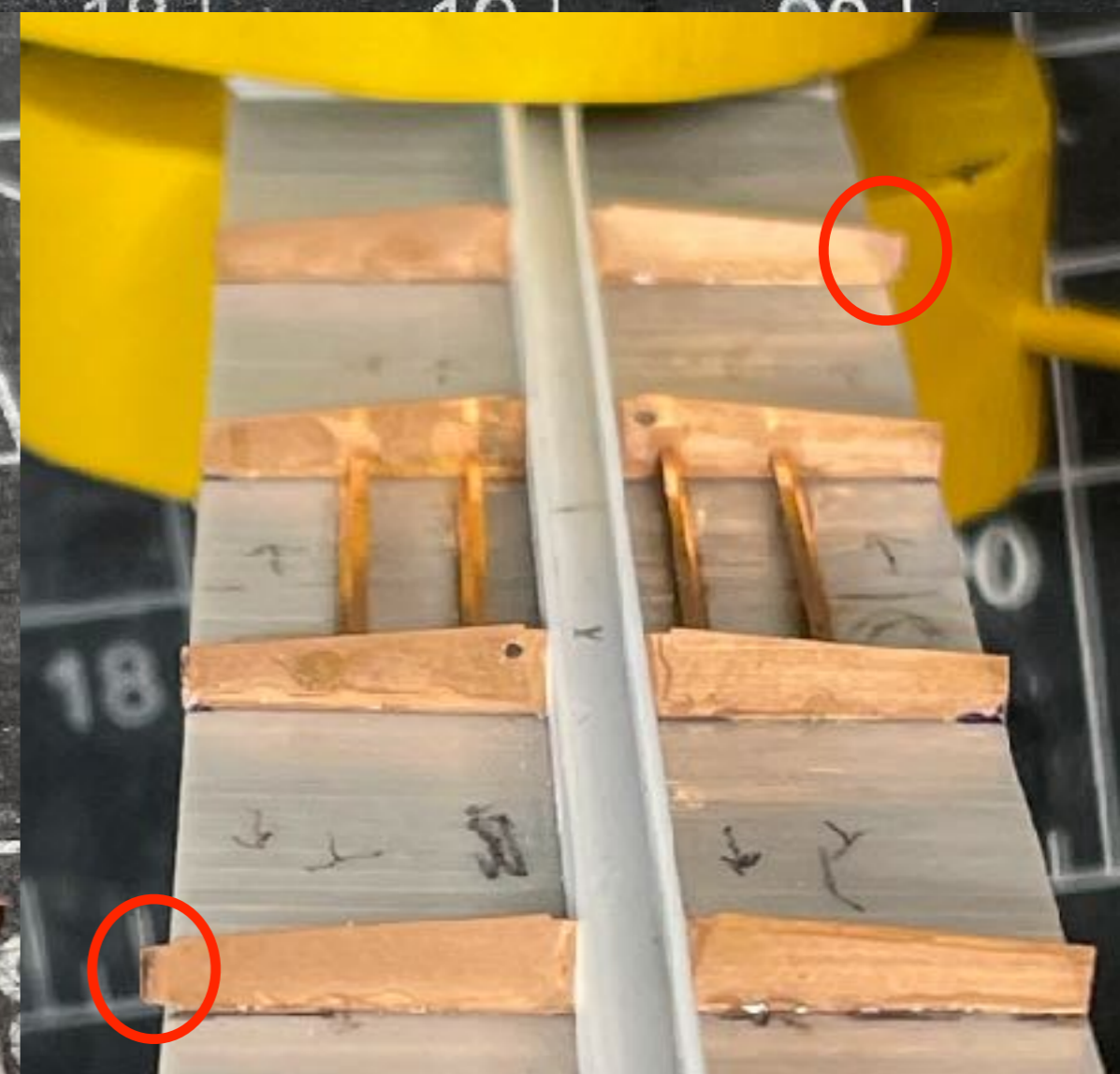
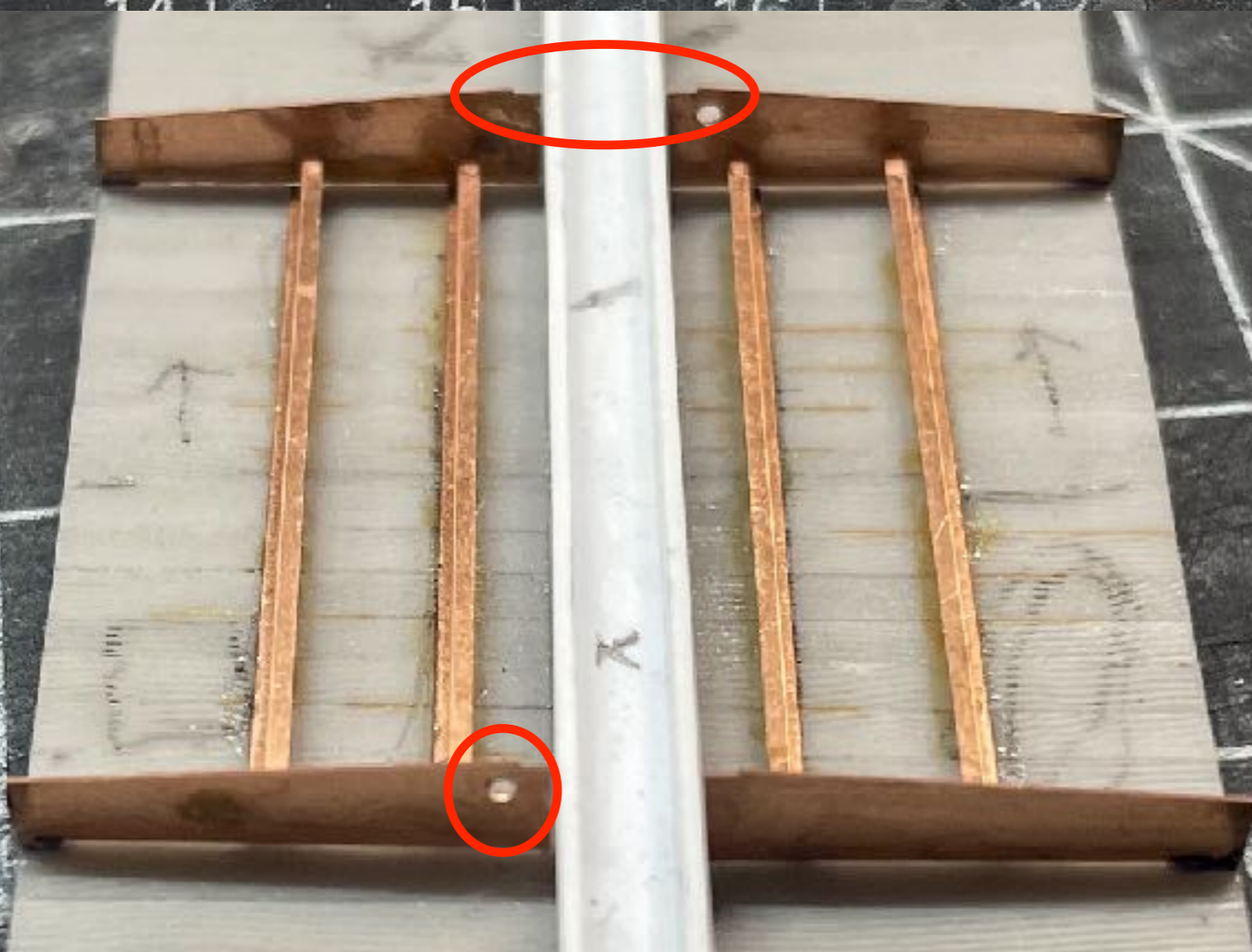
X45

RED

Sunshine Models X41B: the underframe



Sunshine Models X41B: the underframe

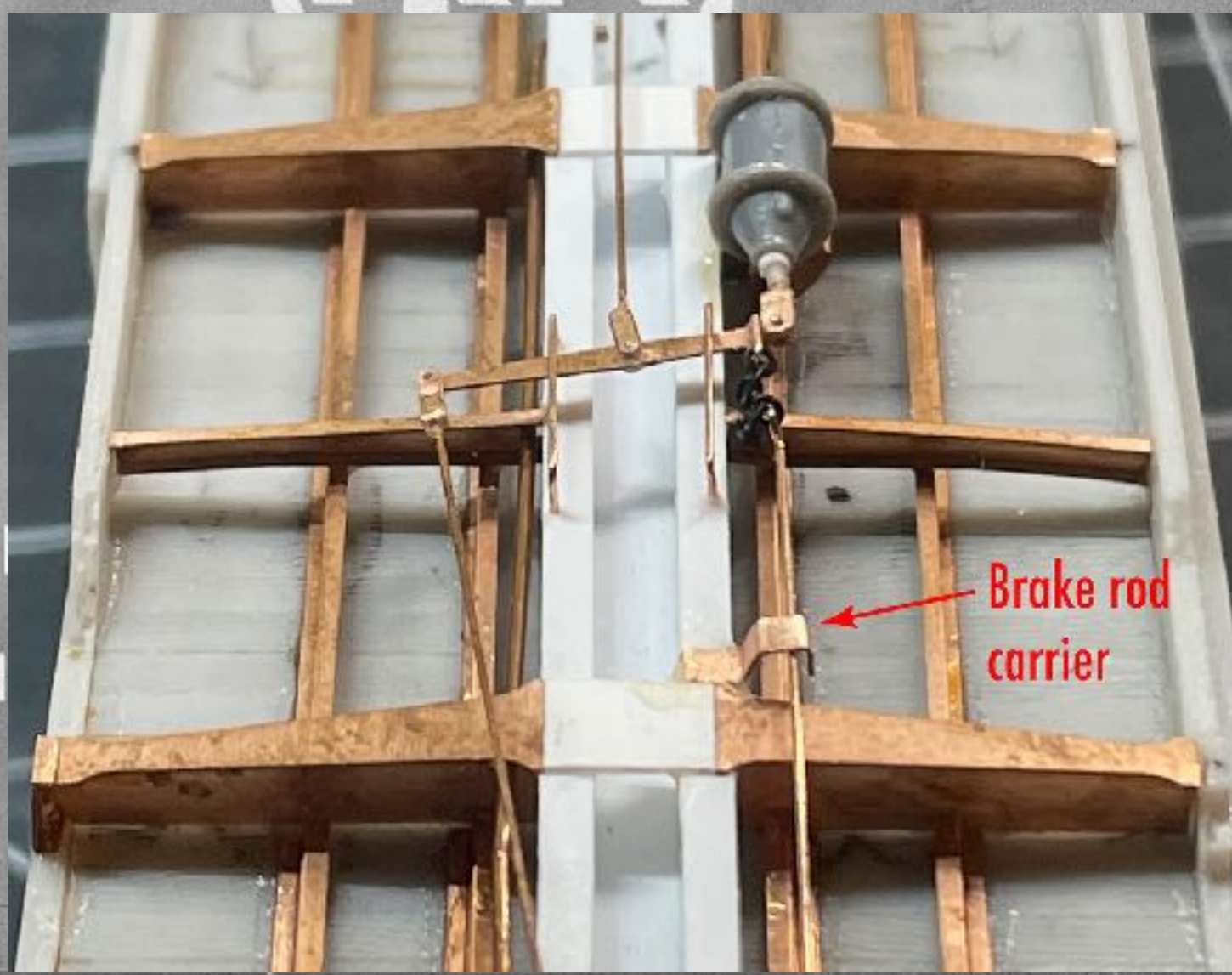
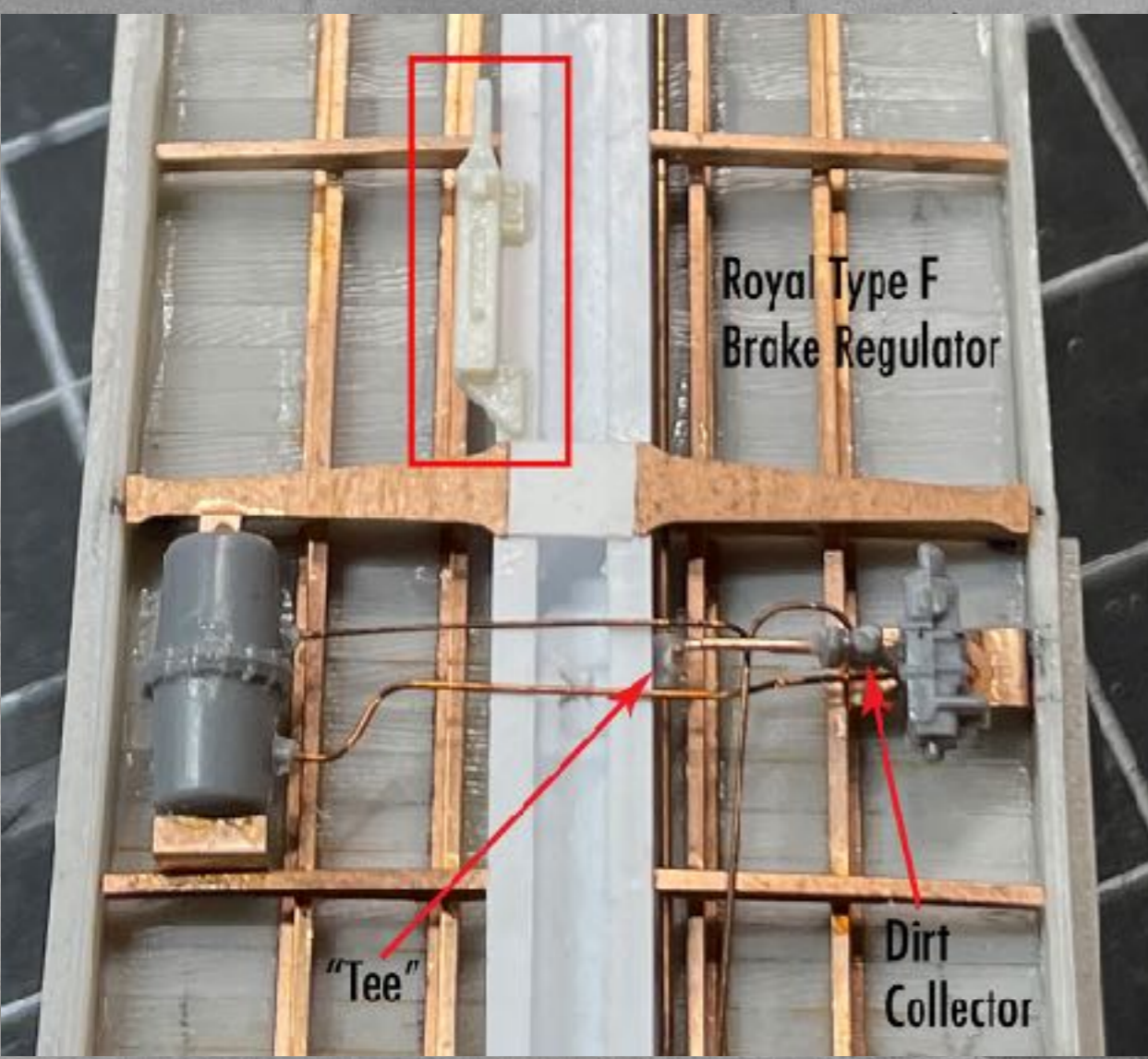
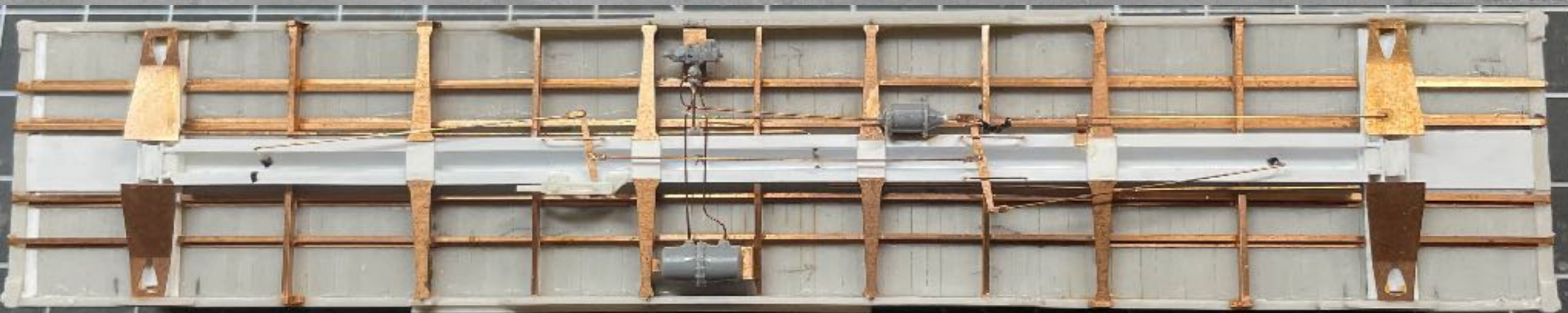


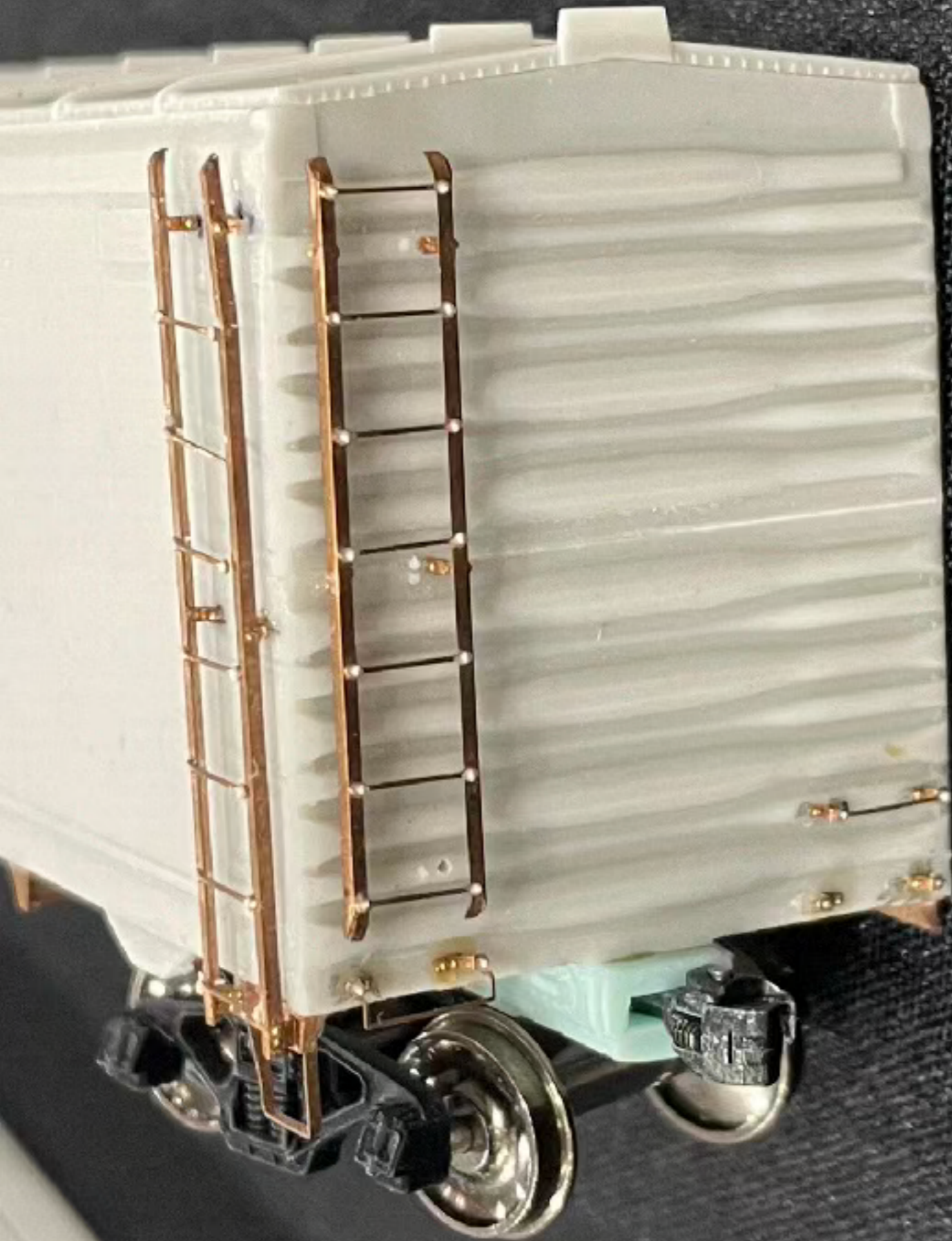
Sunshine Models X41B: the underframe



EX.W. 10-5 H.13-0 E.W. 8-11 H.14-6
I.L.50-6 I.W. 9-2 I.H. 10-6 CU. FT. 4862
BLT. 11 51 X45

RED





Sunshine
Models
X41B

5 H.13-0 E.W. 8-11 H.14-6
W.9-2L.H. 10-6 CU.FT. 4862
11 51 X45

RED

Welded Car Sides



- Welded car sides frequently exhibit wrinkled side panels
- It's an extremely subtle effect, but convincing when well-executed

Sept 18, 1955, Brooklyn, NY

Welded Car Sides



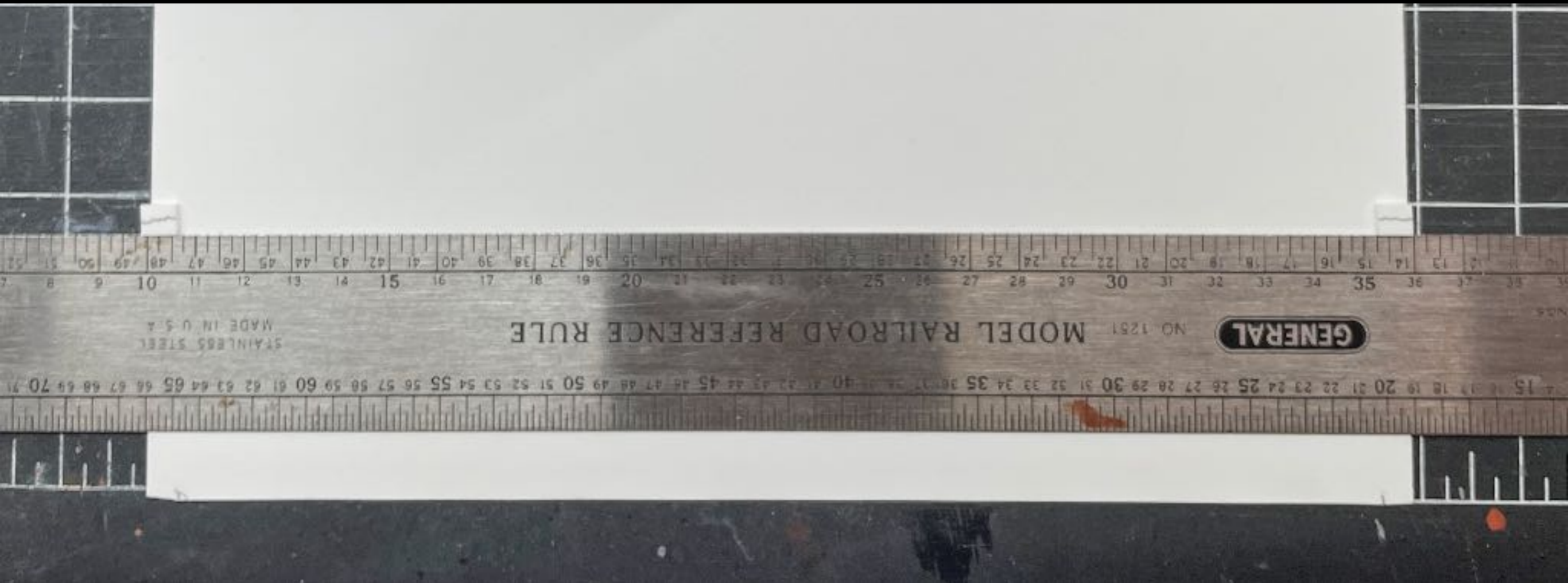
- Making a side with consistent height across its length

Welded Car Sides



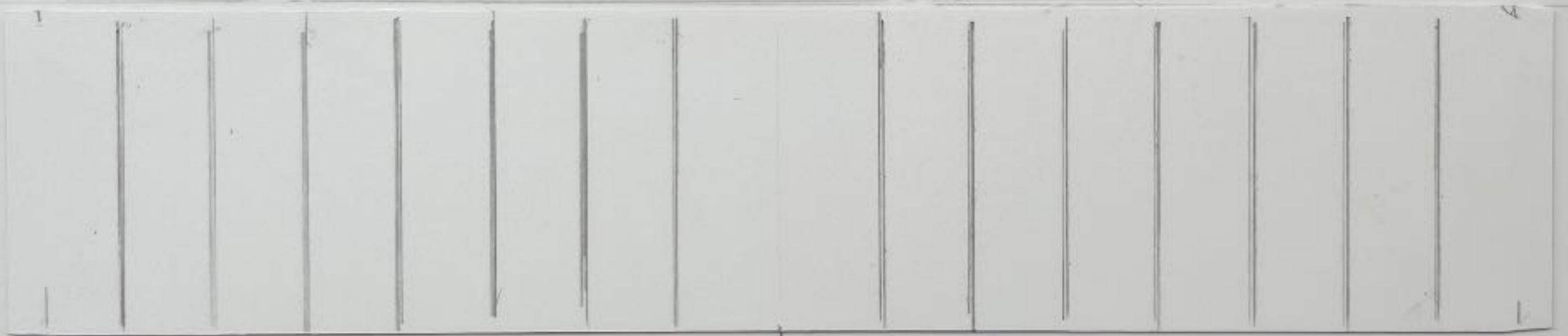
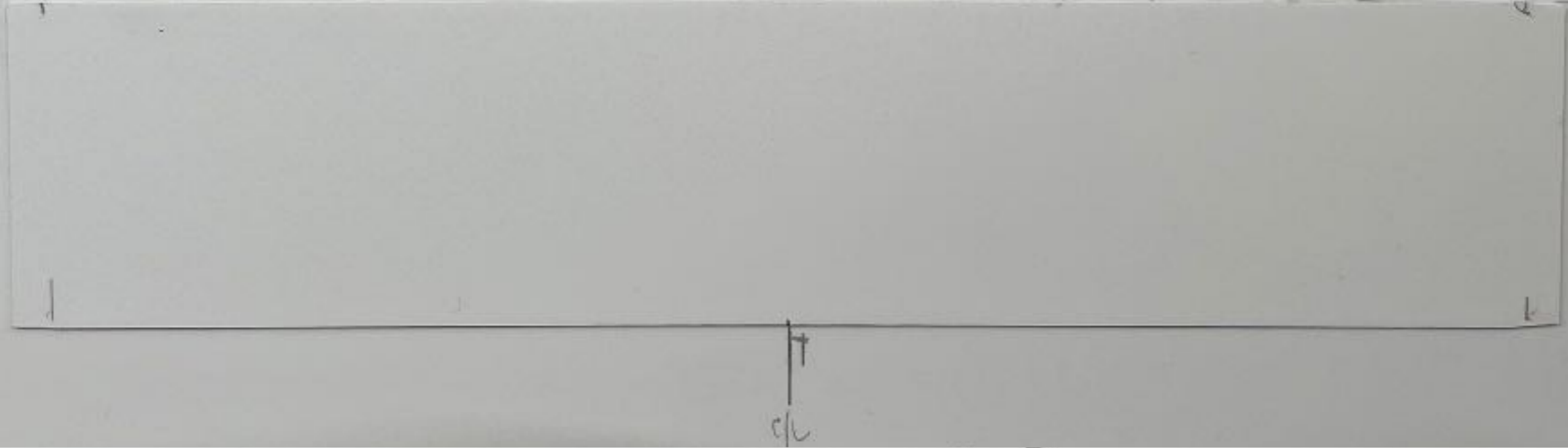
- Transfer the dim to the sheet and glue strips to be used as “stops”

Welded Car Sides



- Cut along the steel edge
- The length is adjusted on the cast parts and is not a concern at this moment

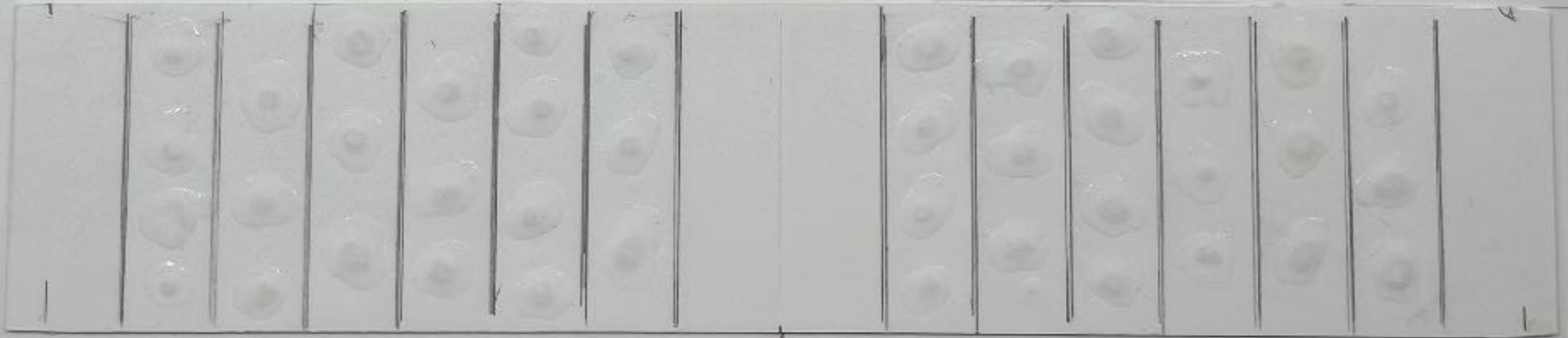
Welded Car Sides



- Glue to styrene “plate” (top)
- Mark panel line locations (bottom)

12-panel

Welded Car Sides



- Add ACC “bulges” (top)
- “Knock down” the peaks using sandpaper (bottom)

Welded Car Sides



- Add top sheet (0.010") secured with styrene-compatible contact cement
- Finish with panel lines, details, etc. (not shown)

X43A pattern: the underframe

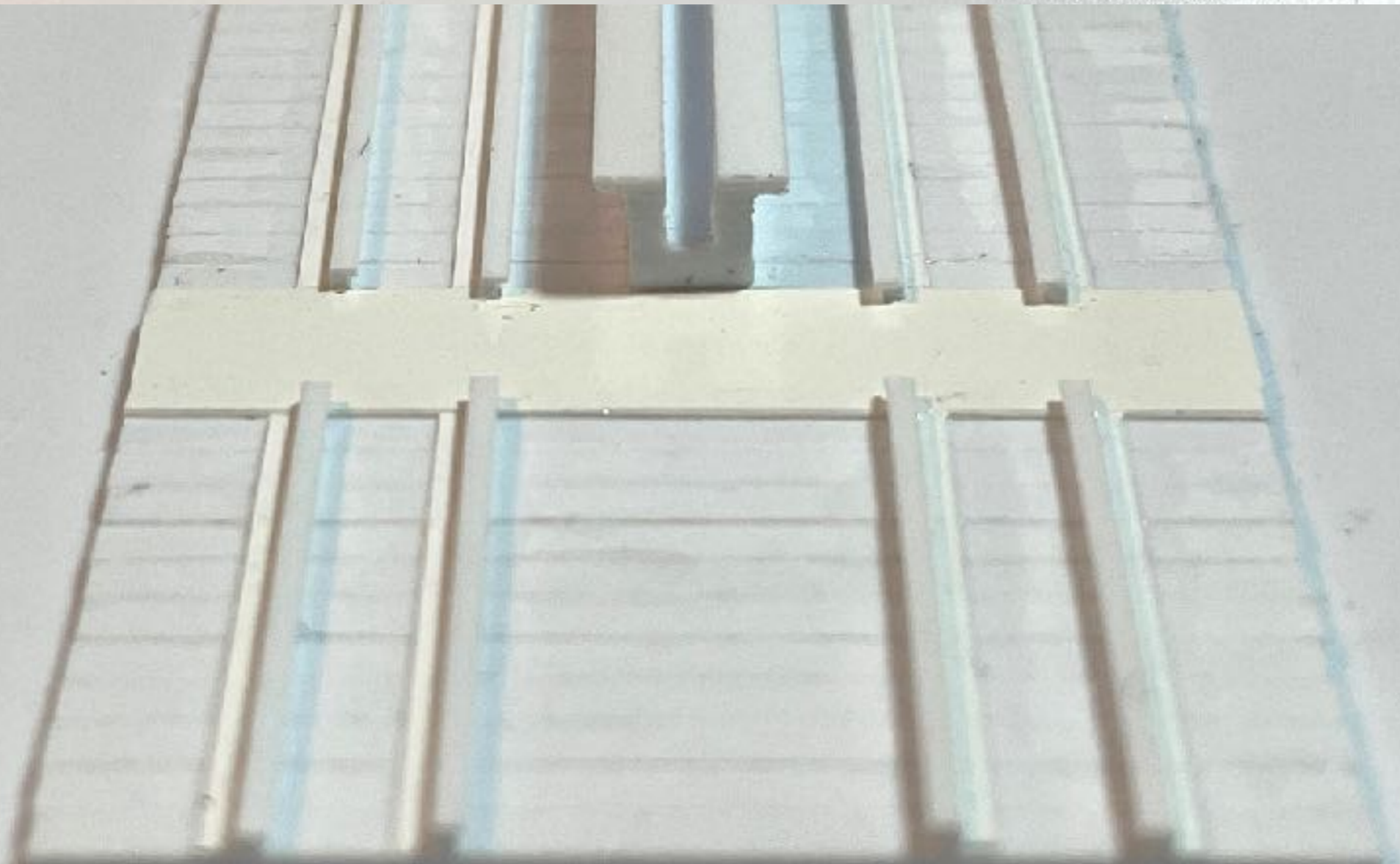


RED

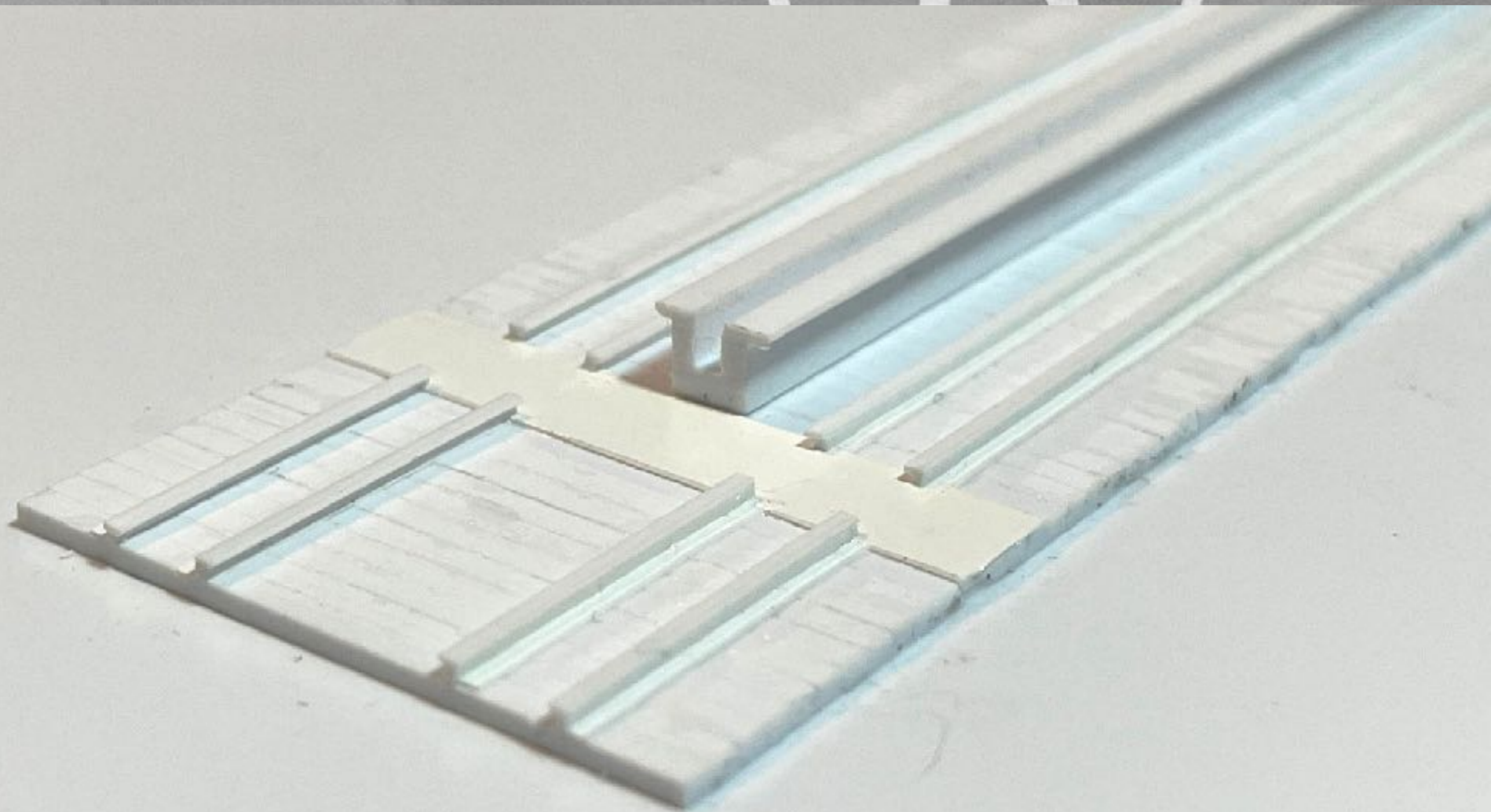
X43A pattern: the underframe



X43A pattern: the underframe



X43A pattern: the underframe



X43A pattern: the underframe



Thank you

Joe Acri

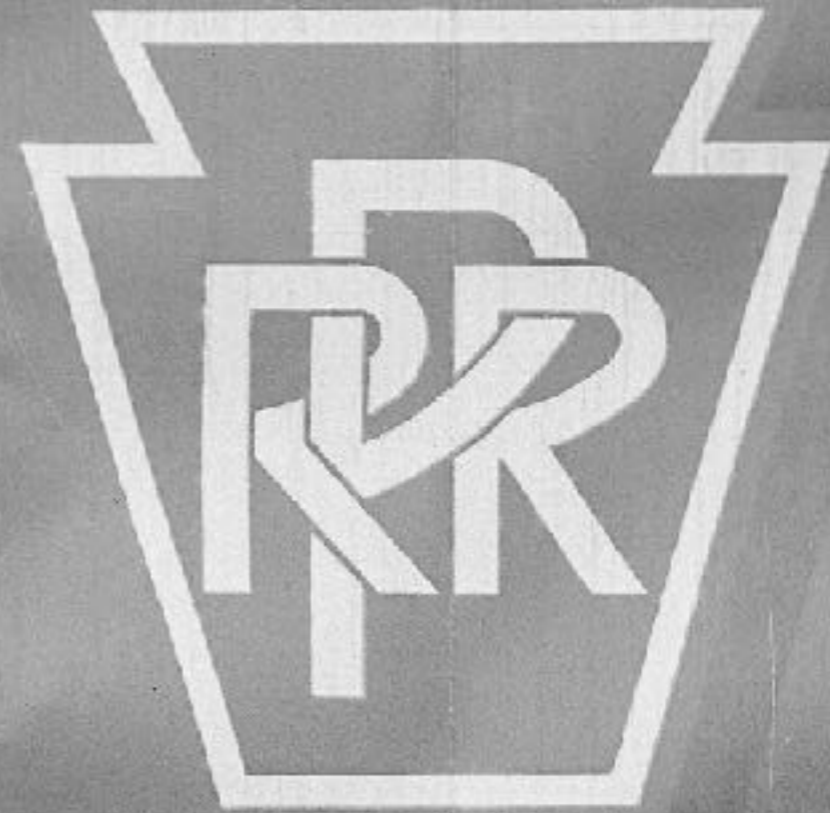
Barbara Hall

Jim Homoki

Aaron McWilliams

Gerry Schaefer

PRR Railfan site



This file along with updates to the X41B project
will be posted to prototopics.blogspot.com

EX.W. 10-5 H.13-0 E.W. 8-11 H. 14-6
I.L.50-6 I.W. 9-2I.H. 10-6 CU.FT. 4862
BLT. 11 51 X45

RED