

TUNING UP YOUR ROLLING STOCK



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TUNING UP YOUR ROLLING STOCK

- Couplers
- Trucks
- Wheels
- Weight
- Tools

What is the need?

- Surveyed layout owners. What do you find is the cause of non-operator caused failures
 - 29% misaligned couplers
 - 24% Uncoupling dissimilar couplers
 - 11% other coupler problems
 - 8% trucks too tight or loose
 - 5% Dirty wheels
 - 4% Wheel gauge
 - 4% Wheels not freerolling
 - 1% Car weight

Couplers

- Standardize
 - Kadee vs Kadee Compatible
 - Plastic Memory
 - Plastic Strength
 - Kadee conversion list
 - Standard Head vs Scale Head



**Kadee®
#28 plastic
couplers**
12.3 lbs for
over 24 hrs.



**Kadee®
#58's**
12.3 lbs for
over 24 hrs.



"Knockoff"

"Knockoff"

3.0 lbs for
1-2 Sec.



"Knockoff"

"Knockoff"

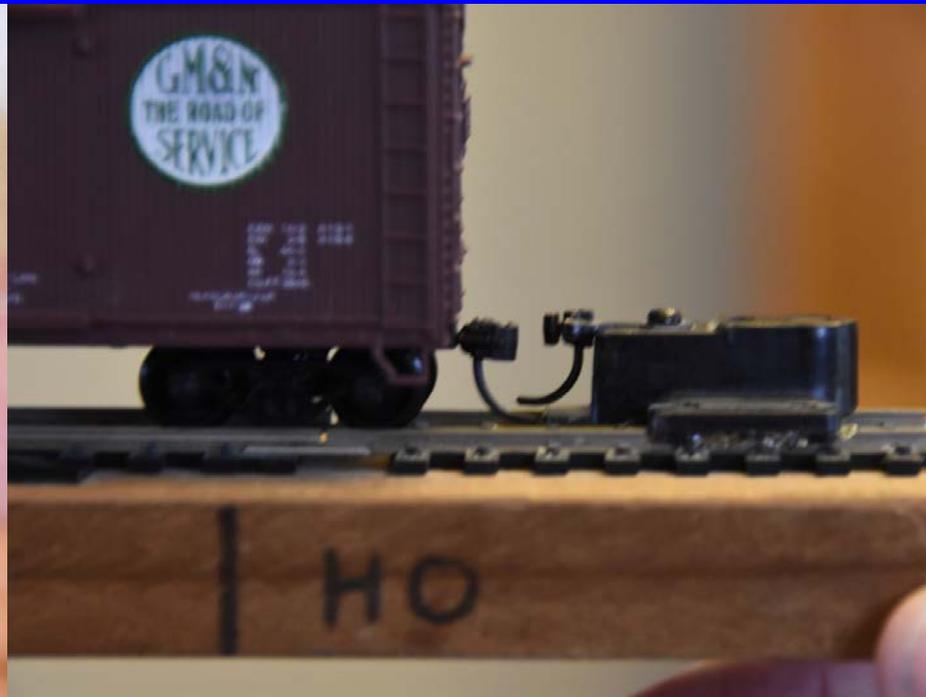
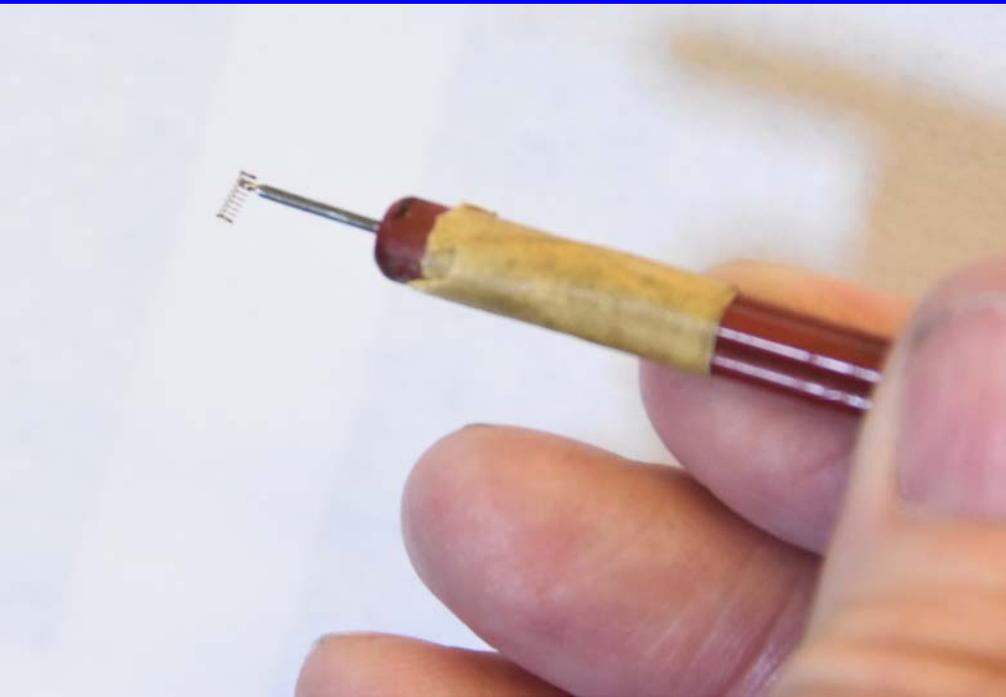
3.0 lbs for
1-2 Sec.

The spring
popped out
at less than
2.0 lbs



Couplers

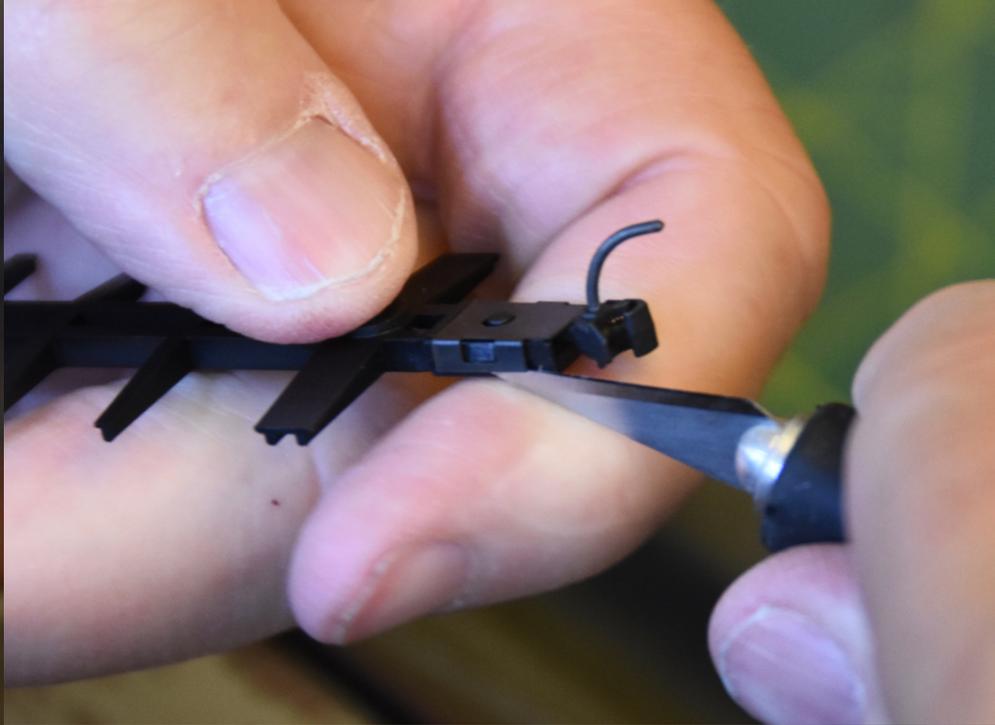
- Coupler Height
- Trip Pin
- Knuckle Spring



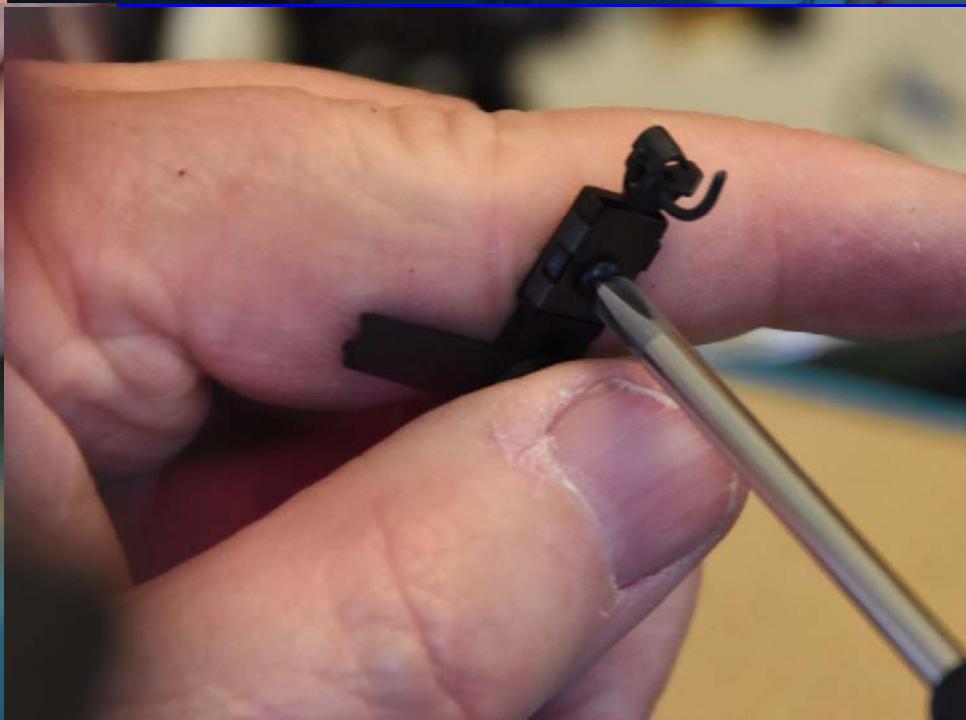
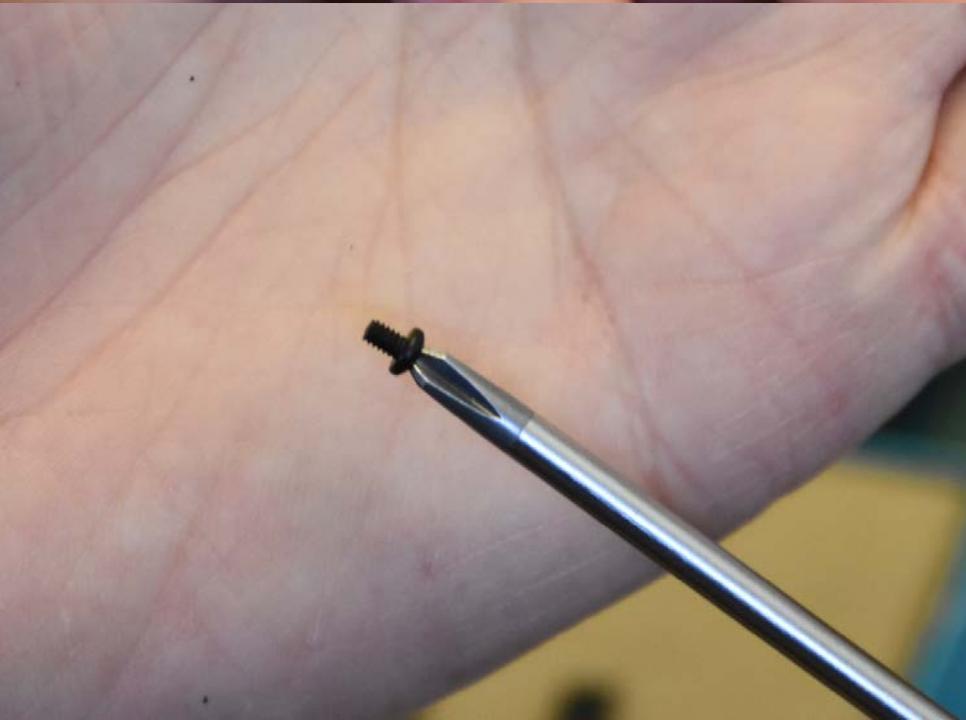
Couplers

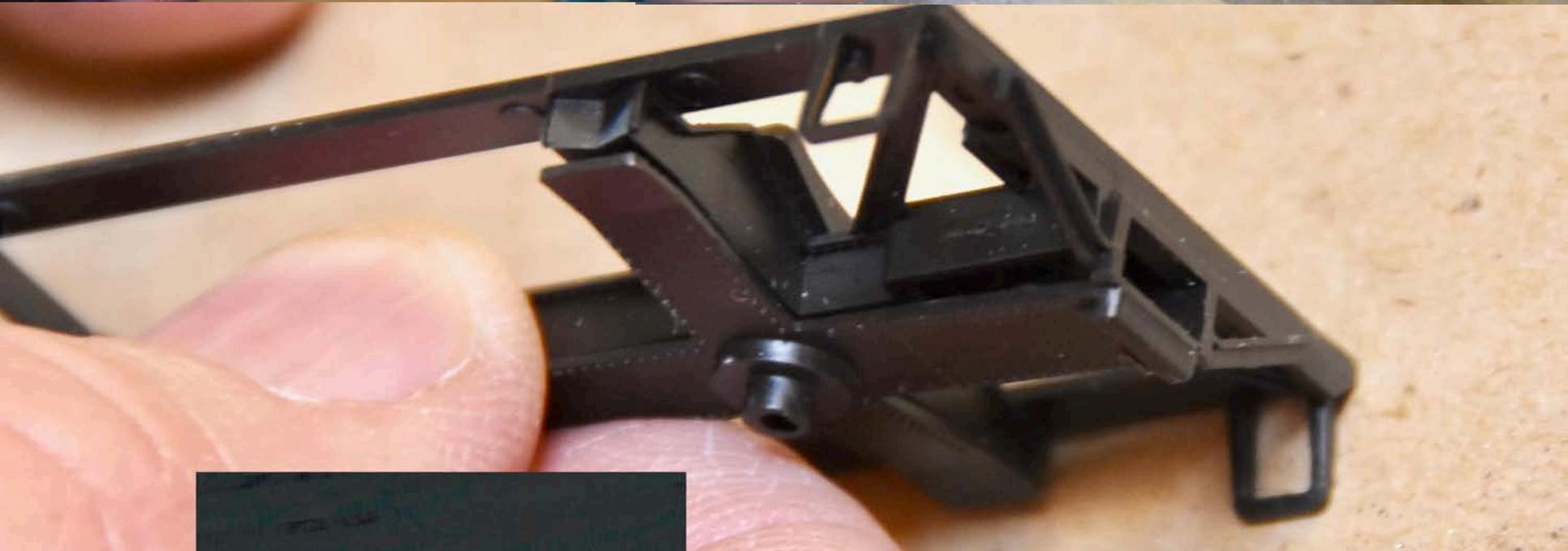
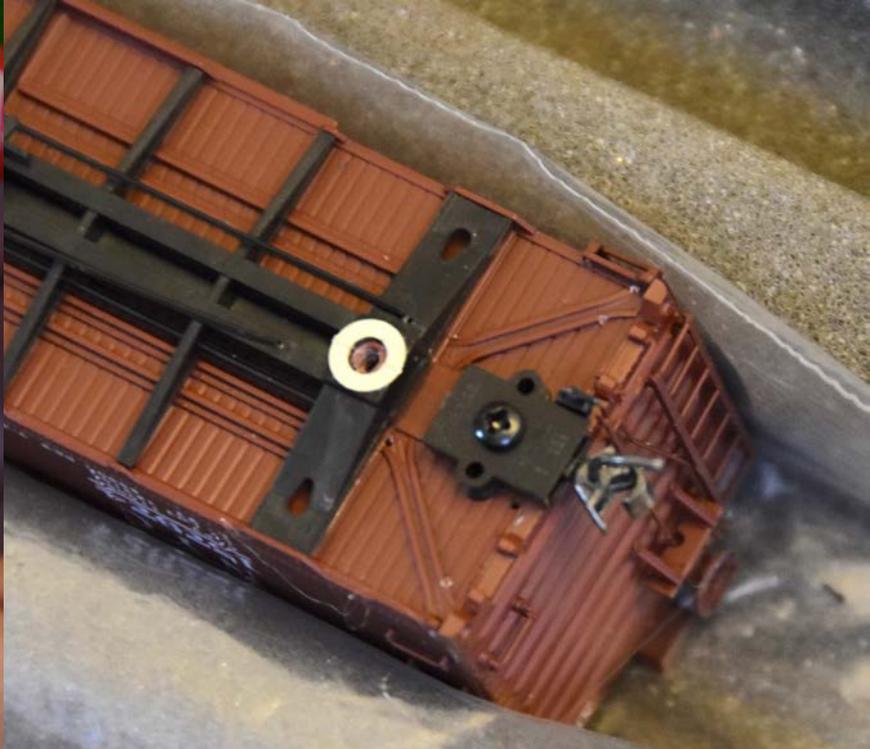
- Installation
 - Mount securely, Do not rely on friction pin or Athearn clips
 - A-Line Drill and Tap tools.









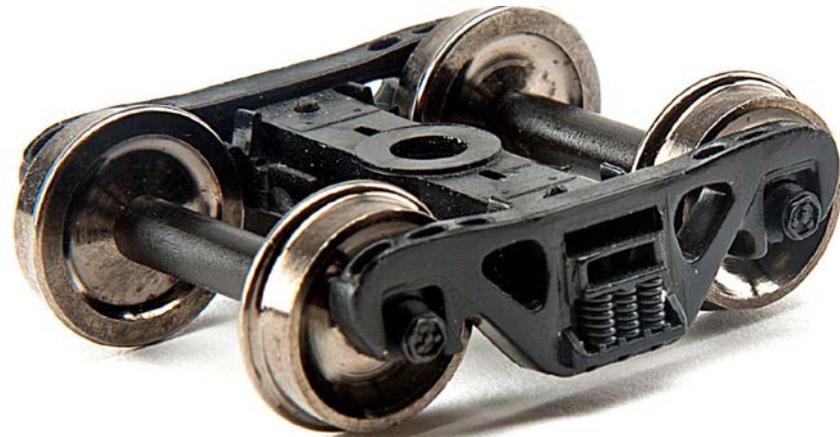
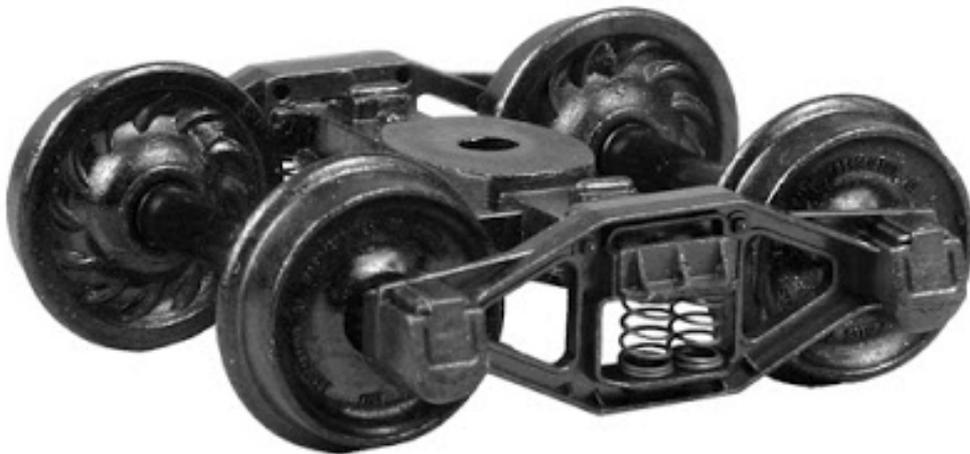






Trucks

- Sprung or 1 piece



Trucks

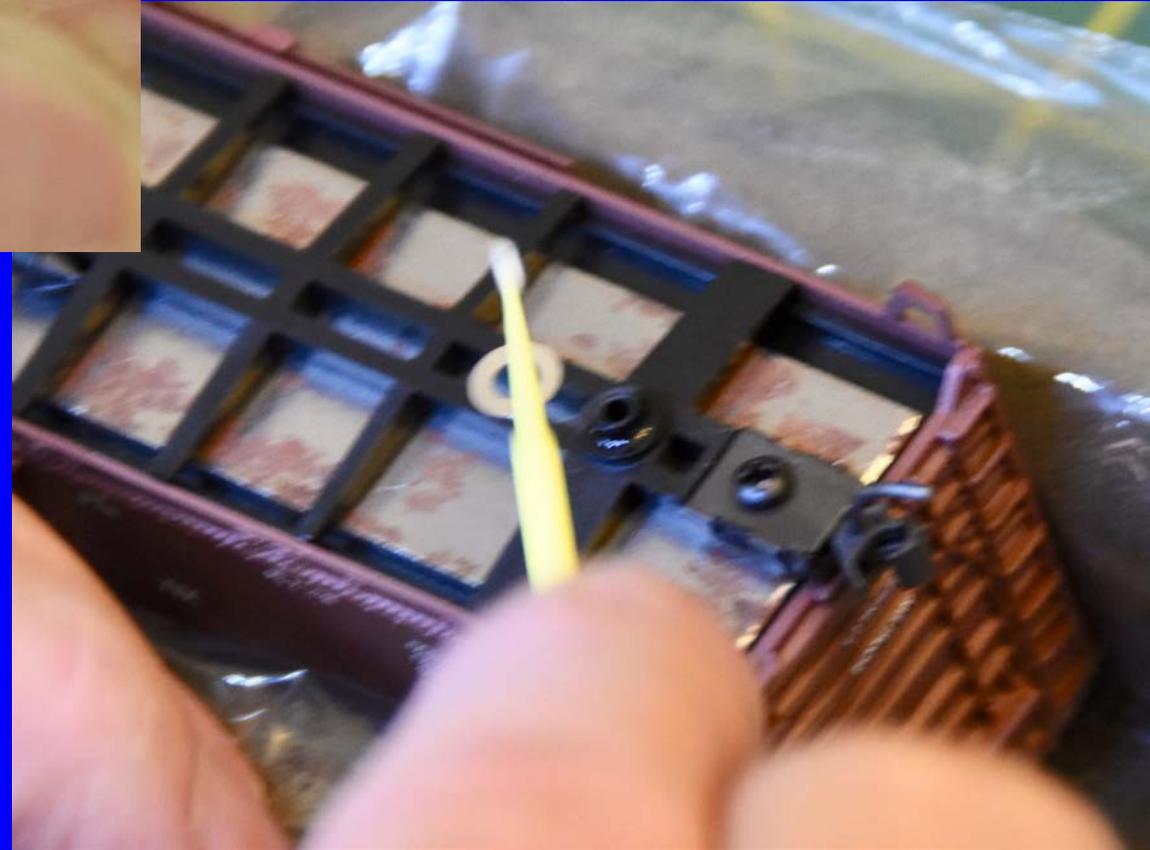
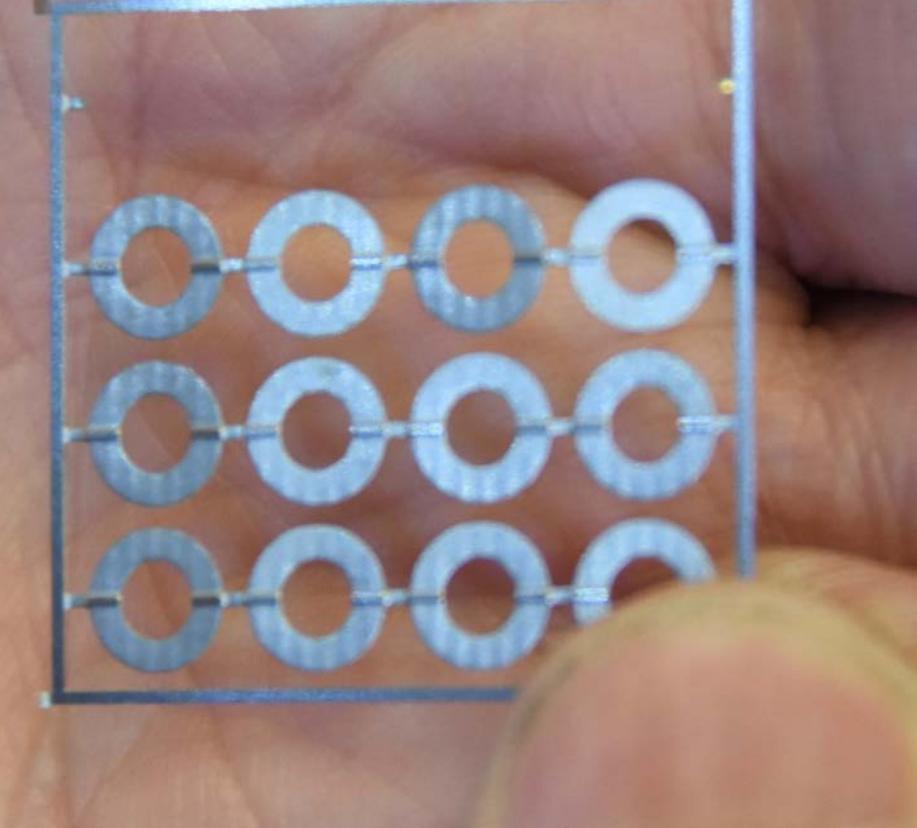
- Inspection
 - Junk
 - Flashing
 - Warped
- Truck Tuner

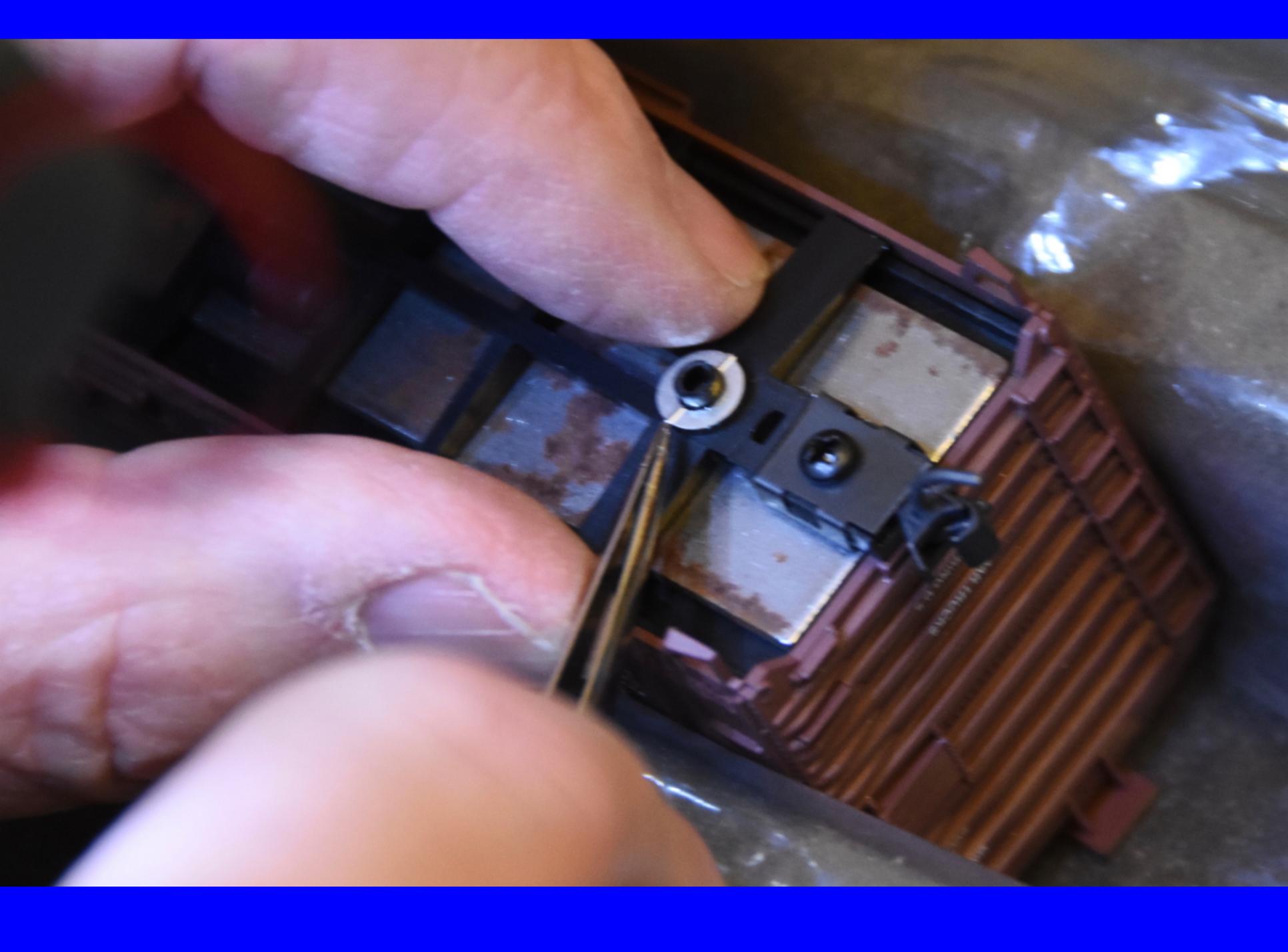




Trucks

- 3 point Mount
 - 1 truck just swivels
 - 1 truck rocks
- Truck Washers for Gimbal Effect
 - 1 truck rocks fore and aft
 - 1 truck rocks side to side
- NO FRICTION PINS - SCREWS ONLY







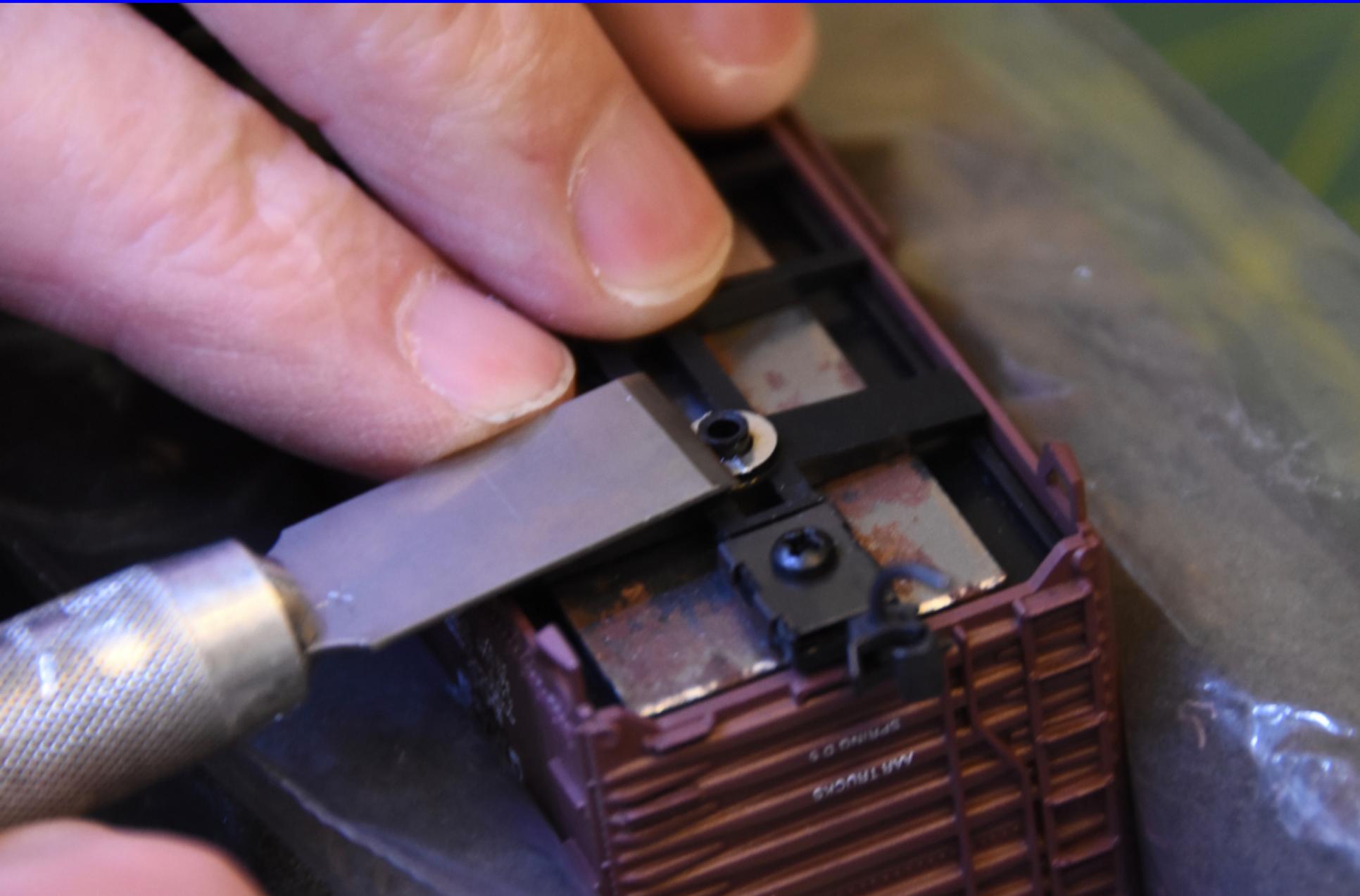
NESTLÉ
CXM 800
SERIAL NO. 12345678
MADE IN SWITZERLAND

NESTLÉ CXM 800

CXM

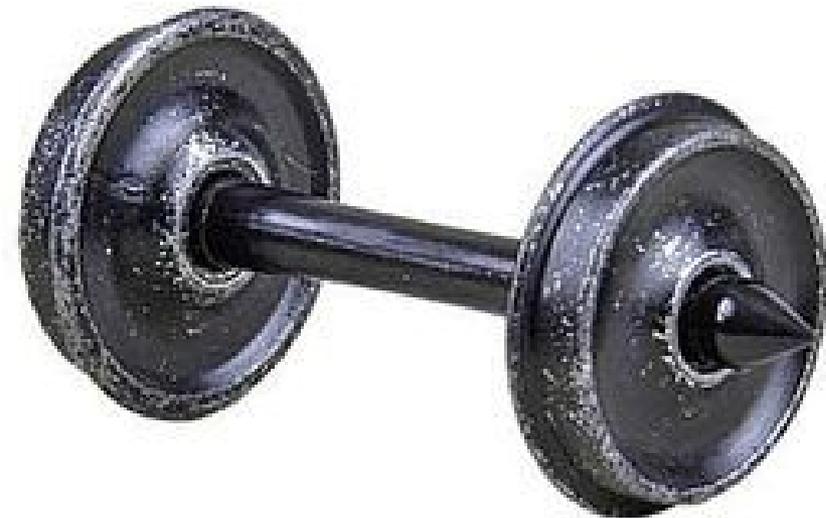
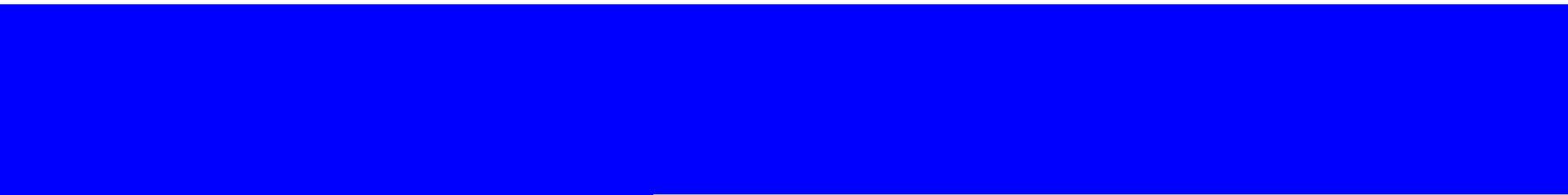
NESTLÉ

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CXM 800
SERIAL NO. 12345678
MADE IN SWITZERLAND



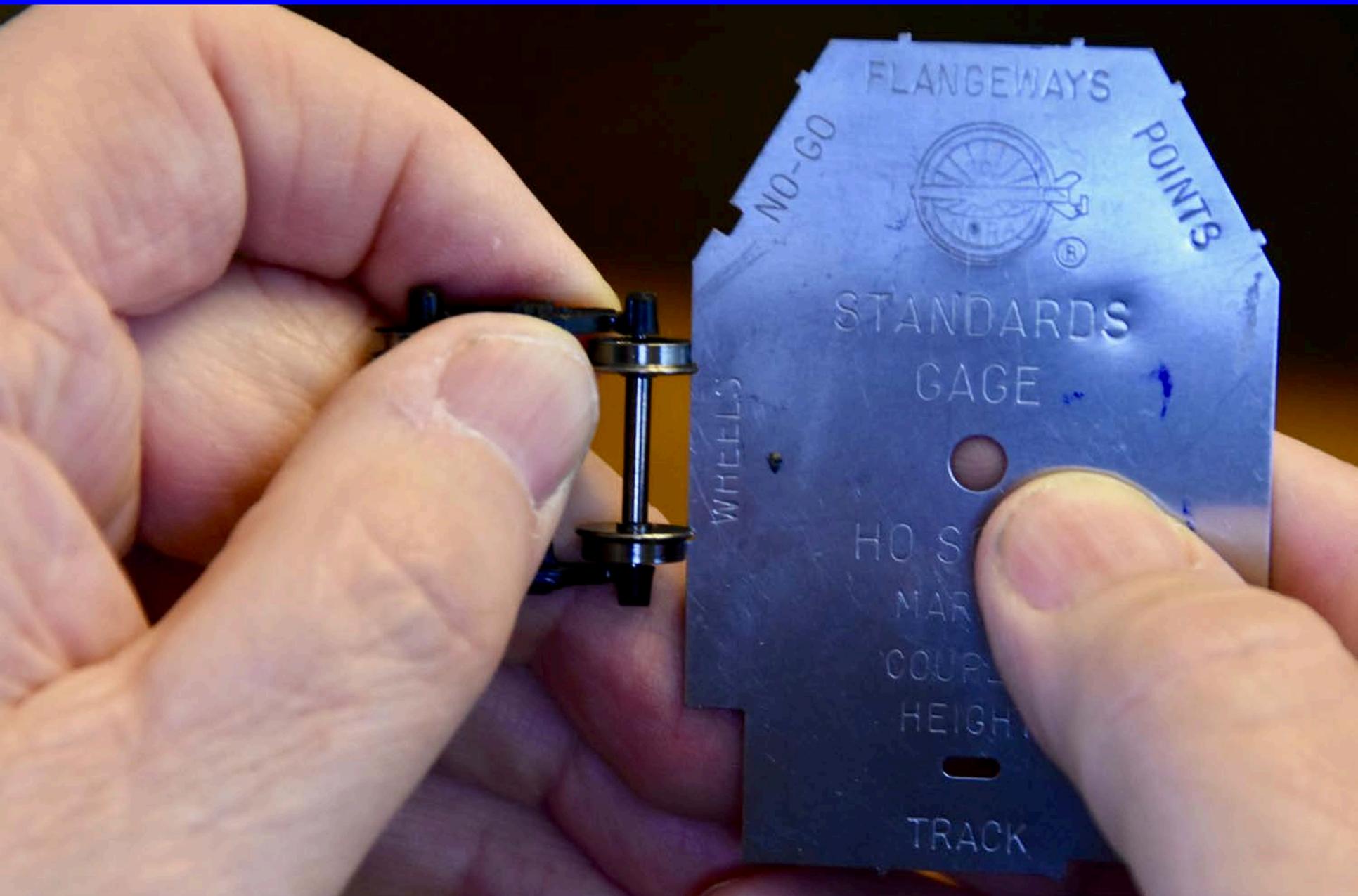
Wheels

- Plastic
 - Light weight
 - Dirt Build up, hard to clean
- Metal
 - Weight down low
 - Less dirt, easy to clean
 - Resistors for detection circuits



Wheels

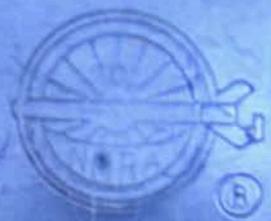
- NMRA gauge
- Axel lengths
 - Reboxx wheels
- Test Roll
 - Friction
 - Wobble



FLANGEWAYS

NO-GO

POINTS



STANDARDS
GAGE

WHEELS

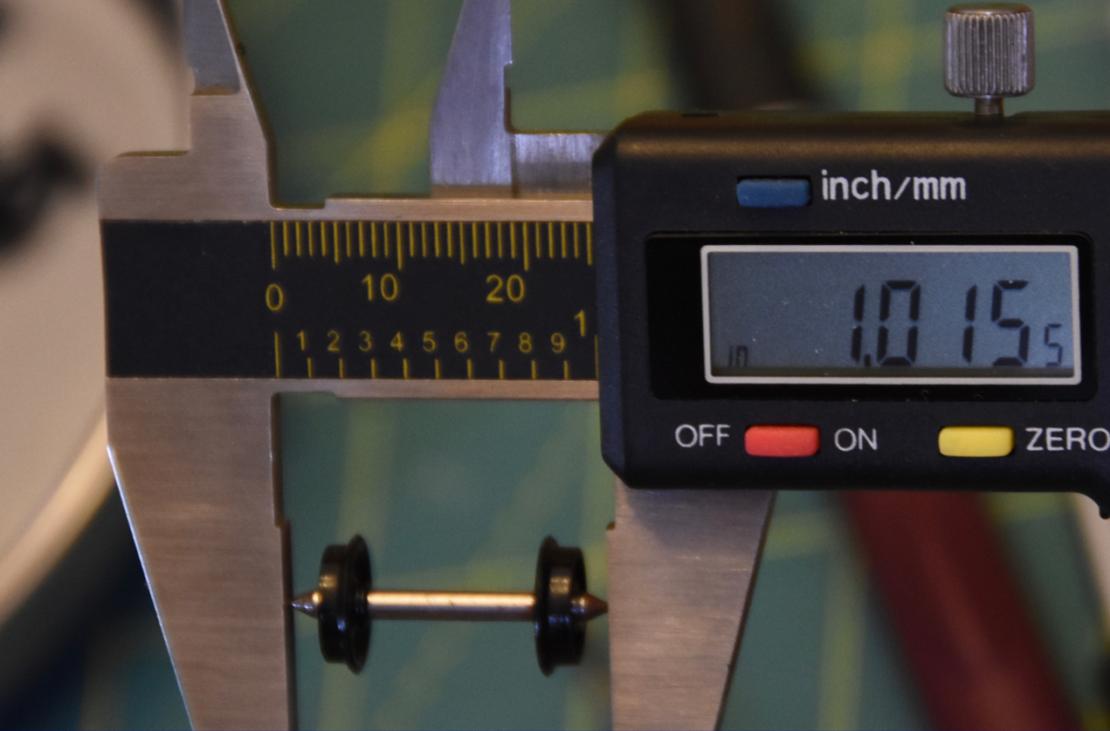
HO S

MAR

COUPL

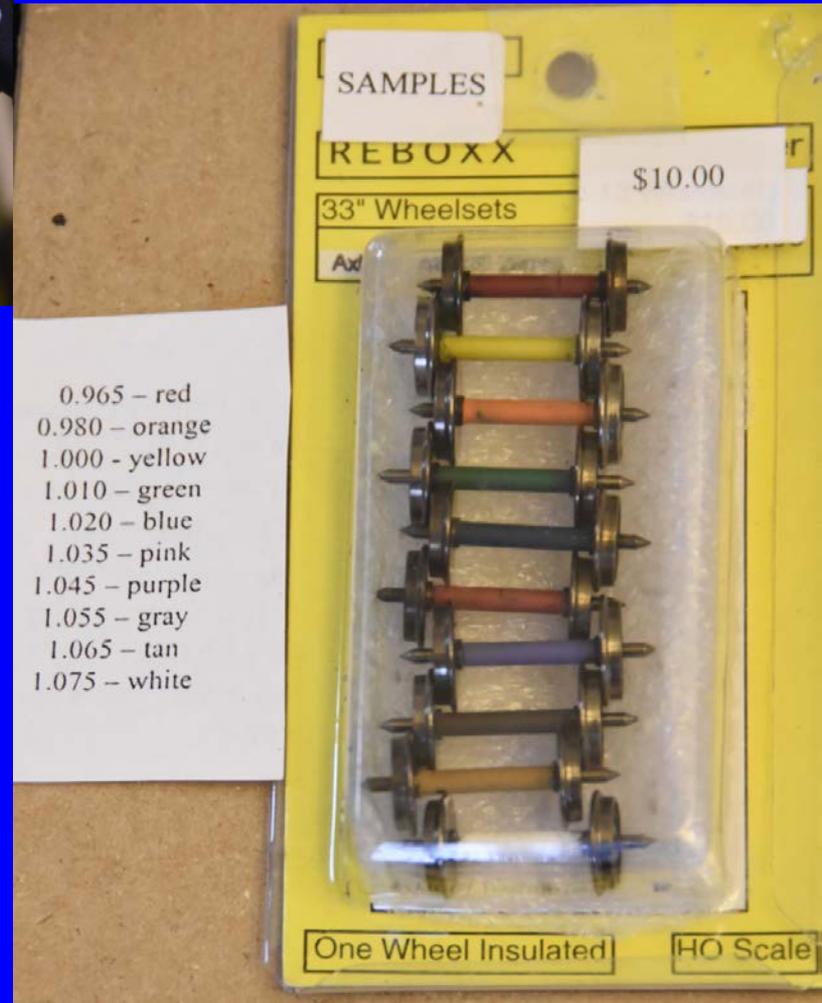
HEIGHT

TRACK



Axle Lengths

- 0.965 - red
- 0.980 - orange
- 1.000 - yellow
- 1.010 - green
- 1.020 - blue
- 1.035 - pink
- 1.045 - purple
- 1.055 - gray
- 1.065 - tan
- 1.075 - white



Car Weight

- Balance
- NMRA Standard ??
- Too Heavy
 - Shorter trains
 - Derailments, String lining
- Too Light
 - Derailments, String lining
 - Train handling



TARE

ZERO

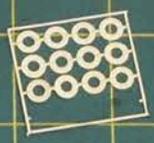
OFF

ON

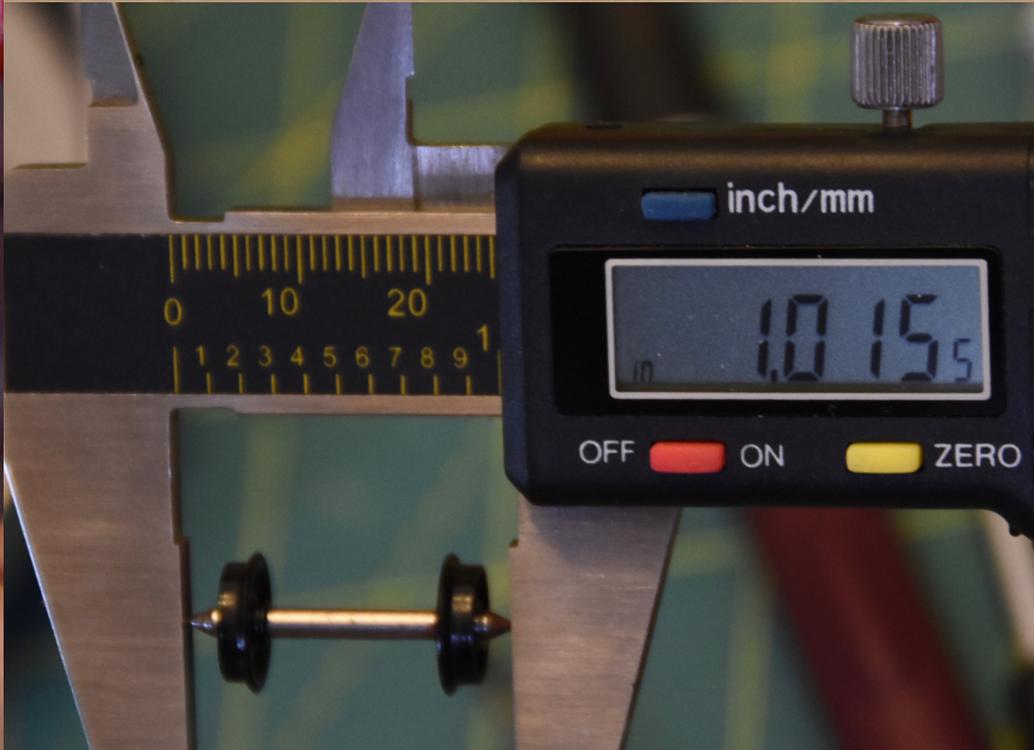
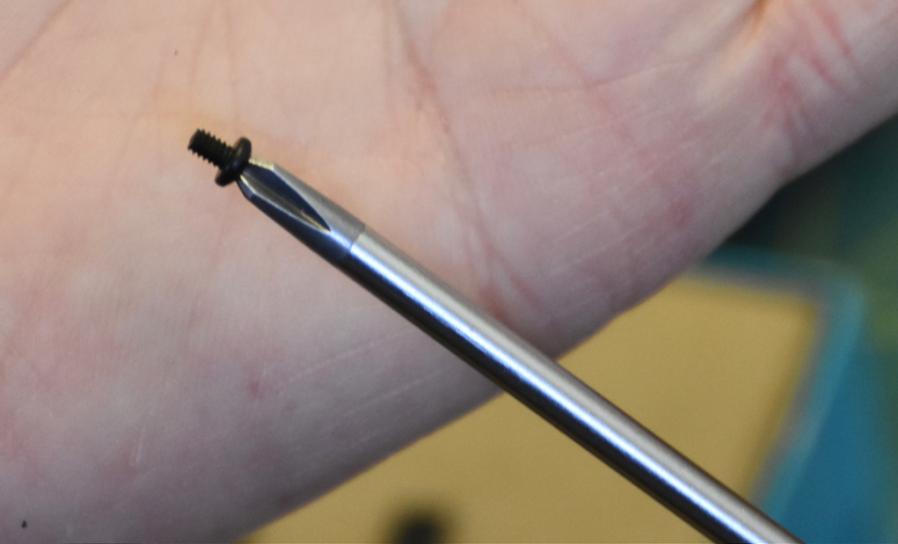
1/10g
7g
1/10g
7g
1/10g
7g

Tools





INCHES



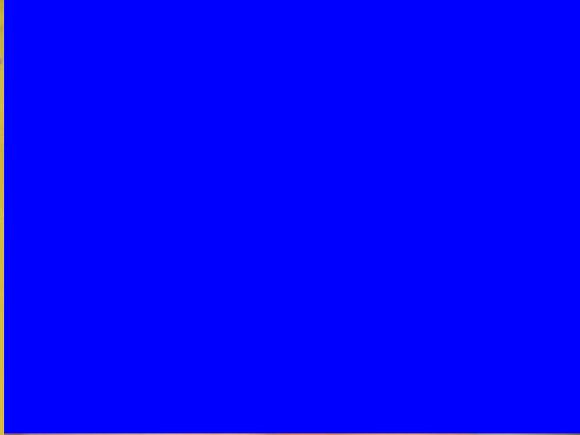


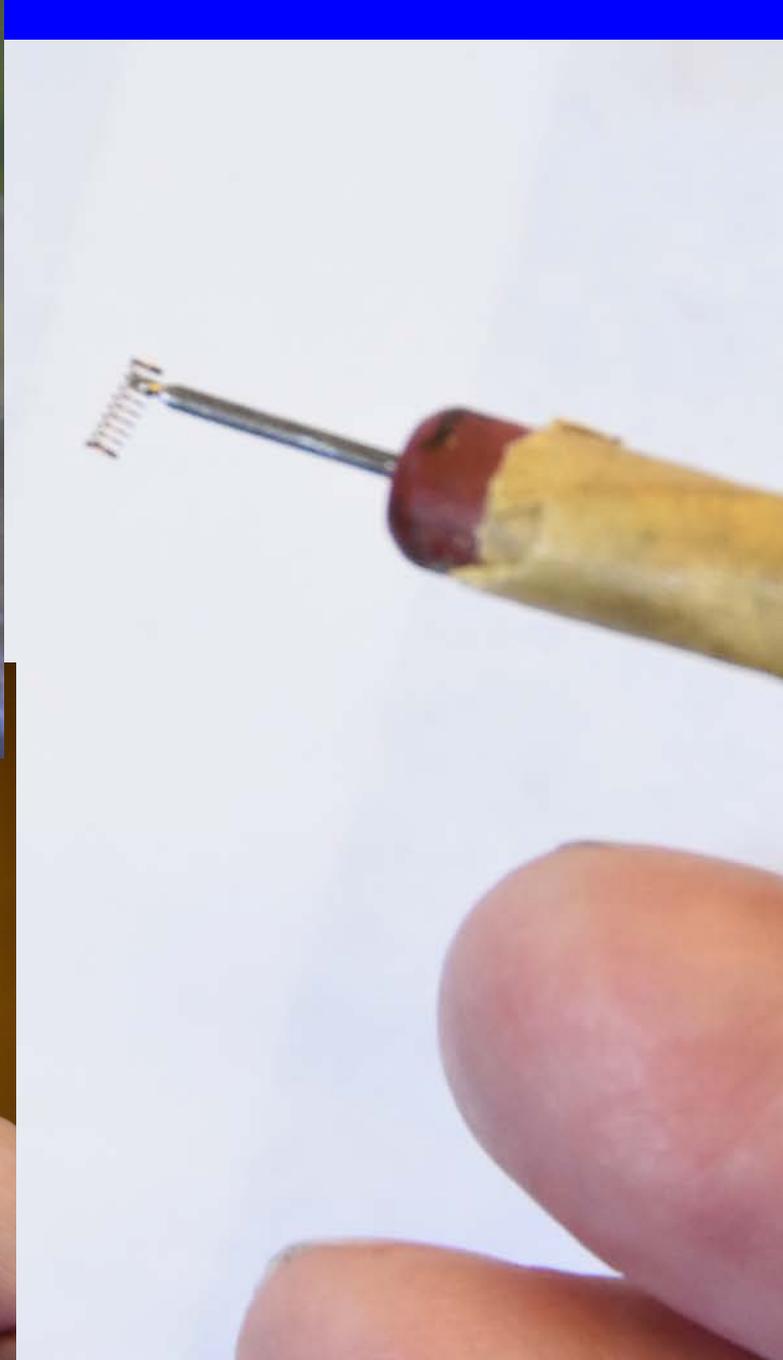
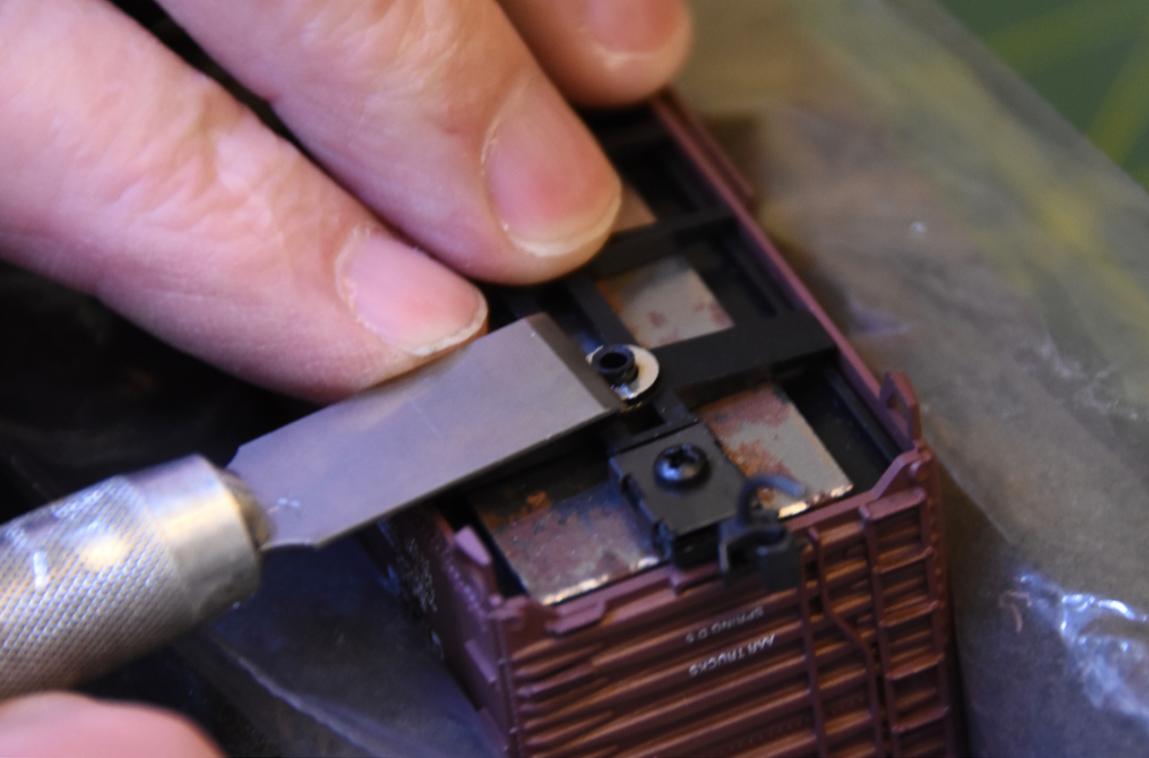


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NEW











THE END

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