

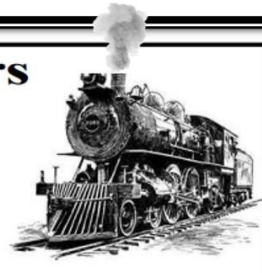


# Maricopa Live Steamers

## STACK TALK

### April 2025

The official newsletter of the Adobe Mountain Railroad in Phoenix, Arizona, Operated by the Maricopa Live Steamers Railroad Heritage Preservation Society.



## MLS 2025 Spring Meet Fun!

The MLS Spring Meet was held from March 17th thru March 23rd. The work week was March 10th thru March 16th. We had between 80 and 110 people attend the meet at different times. People came for a few hours, a day, a couple days, and the full meet. The yards had a good assortment of trains.

The weather cooperated very nicely as some people had fun running their trains while others worked on track maintenance projects. Lunches were mesquite grilled by Pete and Becky Pennarts Wednesday thru Saturday. On Thursday, visiting member Steve Ianno from Albany, NY, surprised those present with 2 large trays of his infamous homemade eggplant parmesan. On Saturday morning, Carlye Rossow cooked up and flipped a serious pancake breakfast.

We would like to recognize Dan Benton for being our meet coordinator and thank all those who contributed their time and efforts to make the MLS spring meet a fun and successful event.

**Larry Kirchner**  
**President, MLS**











## MLS Storage Container Beautification

Mick Janzen, Jim Zimmerman and Joe Fego had their storage containers professionally painted with a "Direct to metal" paint. They look better than the photos! Check them out in person. The painters did a thorough job from start to finish. The containers were power washed, surfaces were scrubbed and wire brushed and repairs were made accordingly. There are many options available. If you would like further information and how to contact the folks who did the work, please contact Mick, Jim or Joe.



As a friendly reminder, all privately owned **golf carts** and utility vehicles that are kept on County property or inside a storage container must be registered and insured. The annual County inspection is right around the corner. Please check your container facade and make the necessary repairs if needed. Also, ensure that batteries, oils and gasoline, that are not part of your locomotive, are stored at a minimum of 4 ft above the floor and any oil / solvent spills are properly cleaned up. If you have changed your lock or combination on your container, please forward a new key and /or combination to our treasurer, Dave Pulver.

**Let's all strive for a perfect annual County inspection!**

**Joe Kalisak**  
**Vice President, MLS**



## Track Updates from Larry...

### Perryville Passing Siding

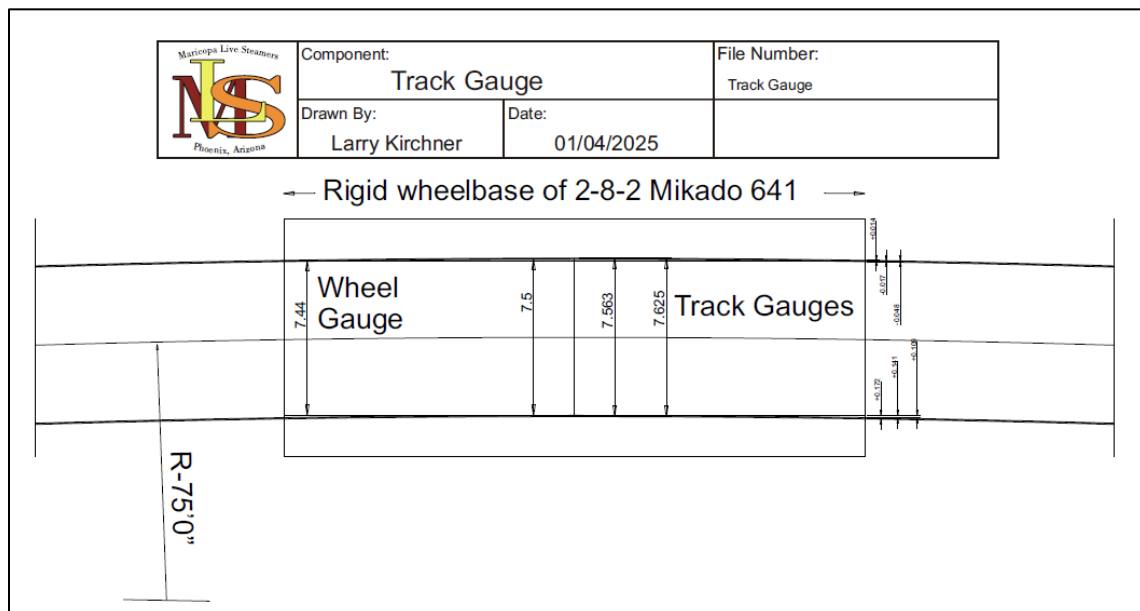
The Perryville passing siding is now complete. This section of track is fabricated to our updated standards.

We will be keeping a close eye on this to see how it “responds” to the environment. Thanks go out to the numerous individuals who worked to get this prepped, fabricated, installed and ready for service.



## MLS Track Gauge

Many people have asked why we are gauging our track at 7-5/8" instead of 7-1/2". On straight sections, a gauge of 7-1/2" works well with all wheelbase sizes. But when you run into a curve with a large rigid wheelbase, like on a steam locomotive, you essentially have a rectangle inserted into a curve. Even though the locomotive may have lateral movement in the drivers, as the curve radius gets smaller, you will experience binding and the classic flange squealing. You may also derail as the flange runs up on the rail. Since you cannot alter your locomotive, the solution is to slightly widen the gauge to accommodate the longer wheelbase in curved track structure.



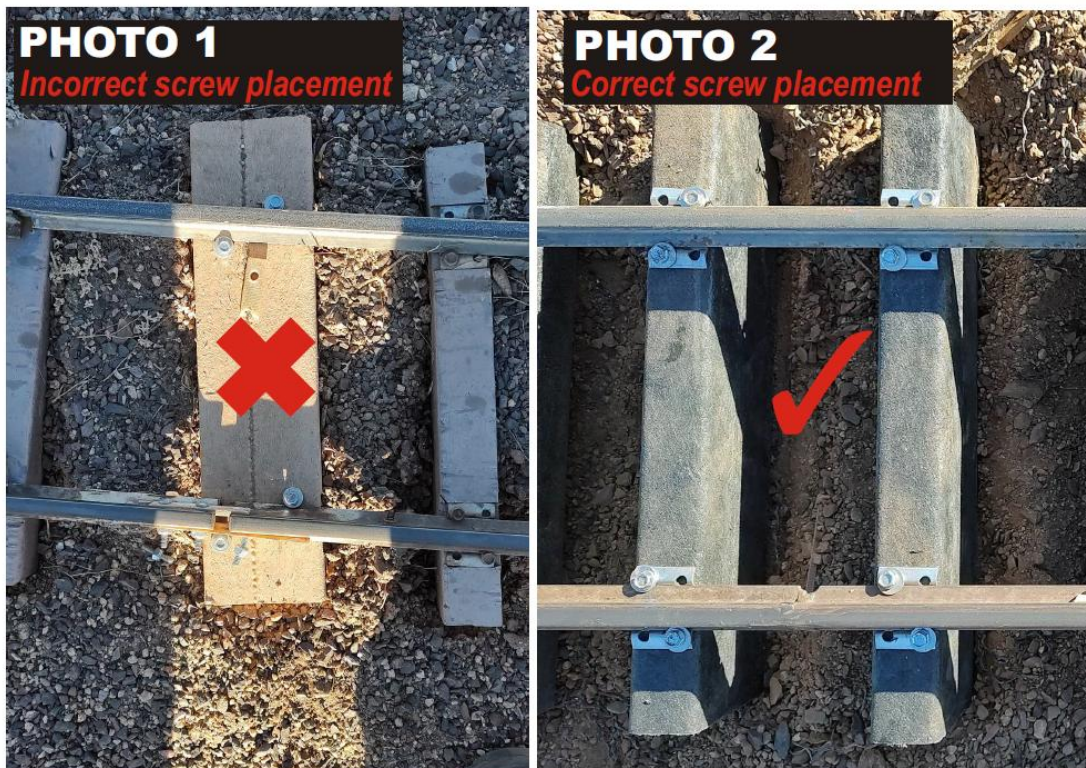
The above drawing shows the amount of offset based on differing gauges with a rigid wheelbase locomotive. This shows that a gauge of 7-5/8" will prevent binding in all but the most severe curves. Some may ask, why not make the straight sections at 7-1/2" and the curves at 7-5/8"? You could do that, but you would then have to fabricate different track panels for the differing gauges. Since MLS has many curves of various curvature, a gauge of 7-5/8" is called for. This will help prevent binding; and more importantly, derailments. And since the wheels are conical in shape, they self-center in the slightly wider gauge.




## Tie Screw Placement

Why is screw placement important on a tie? The answer is based on geometry. The purpose of the placement is to prevent the tie from rotating out of square with respect to the rail. **Photo 1** shows an incorrect screw placement. You will notice the tie has rotated counter clockwise and the screws are losing contact with the foot of the rail. This will cause the gauge to go out and a derailment can happen. **Photo 2** shows the correct screw placement. The screw placement on the top of the photo prevents clockwise rotation and the screws on the bottom of the photo prevent counter clockwise rotation. The opposing alignment cancels the rotation out.

*So, if you are making repairs in place out on the railroad, please make sure the screw placement is as shown in **PHOTO 2** below.*



## Placement Diagram

	Component: <b>Single Tie Screw Placement</b>		File Number: Single tie screw placement
	Drawn By: Larry Kirchner	Date: 02/06/2025	Approved:

**NOTE:**

The opposing alignment of the screws and washers is to help prevent the tie from rotating out of square in relation to the rails.

Screws and washers are placed diagonal to each other

Shown with tie plates. Placement of screws is the same without tie plates.

Screws and washers are placed diagonal to each other

**1/8" Pilot Hole 1-1/4" deep into the tie at each location**

7-5/8" gauge

7-5/8" gauge

With metal tie plates

Only tighten the screw so it touches the foot of the rail. DO NOT crush the rail.

**IMPORTANT!**

The black HDPE high density polyethylene tie material must be pre-drilled with a 1/8" pilot hole.

Without a pilot hole:

The screwhead can snap while screwing into the tie

It can weaken the screw which can cause it to break during rail expansion or loading

When starting the screw, it can wander on the tie and stress the gauge, causing gauge misalignment

#10 hex and washer at each location

The angle of the screw should match the angle on the foot of the rail as closely as possible

Without tie plates

#10 hex washer head 1-1/2" length type A thread

⊙ #10 USS washer



## April Train Events:

**PHOENIX, AZ**  
**APRIL 26TH - 27TH, 2025**  
**SAT. 9AM - 5PM / SUN. 9AM - 4PM**  
 AZ FAIRGROUNDS - EXHIBIT BUILDING  
 1826 W. MCDOWELL RD. PHOENIX, AZ 85007  
**A TRAIN SHOW LIKE NO OTHER**

**FESTIVAL OF TRAINS**



### [Phoenix — Festival Of Trains](#)



### [OCME SPRING MEET – 2025 – Orange County Model Engineers](#)



Wow! A full consist of great information this month!

See you soon out at the park!



***Thank you for all your MLS support!***

Send comments and suggestions to: [stanfm@aol.com](mailto:stanfm@aol.com)

Visit our website [Maricopa Live Steamers](#) and our Facebook page [MLS Public Rides](#) to stay informed!