

HO

YAKIMA VALLEY TRACTION 298



YAKIMA VALLEY TRACTION Steeple Cab No. 298

BOB BELT/PHOTOS BY THE AUTHOR EXCEPT AS NOTED

YVT 298

ABOVE: The author's HO scale model of Yakima Valley Traction 298 as judged in the NMRA Mid Central Region Boardman Convention in May 2018.

My wife's hometown is Yakima, Wash., and I'd had a chance to visit the Yakima Valley Transportation Co. (YVTCO) facilities a few years back while we were visiting family there. Opened in 1907, YVTCO operated freight and street-car service until 1947. After that time, freight service continued under wire until 1984. Union Pacific acquired a controlling interest in the line going back to 1909. In the modern era, YVTCO's fleet of freight motors was painted in the same Armour Yellow and Harbor Mist Gray colors as its parent. Today a portion of the line and 298 survive to this day as part of the Yakima Electric Railway Museum.

YVTCO was a traction line and I needed a model for Motive Power Merit Award as a step toward earning my Master Model Rail-

roader certificate from the NMRA. While researching for a possible model, a Google search revealed several vintage color photos of YVTCO steeple cab 298 in action. Bingo! This was an instant hit since it was totally different from any other locomotive I'd ever built or modified. I searched the Prints & Photographs collection on the Library of Congress website, and found a good black-and-white photo by Jigger Schmidt that was taken during a Historic American Engineering Record (HAER) survey in the 1970s.

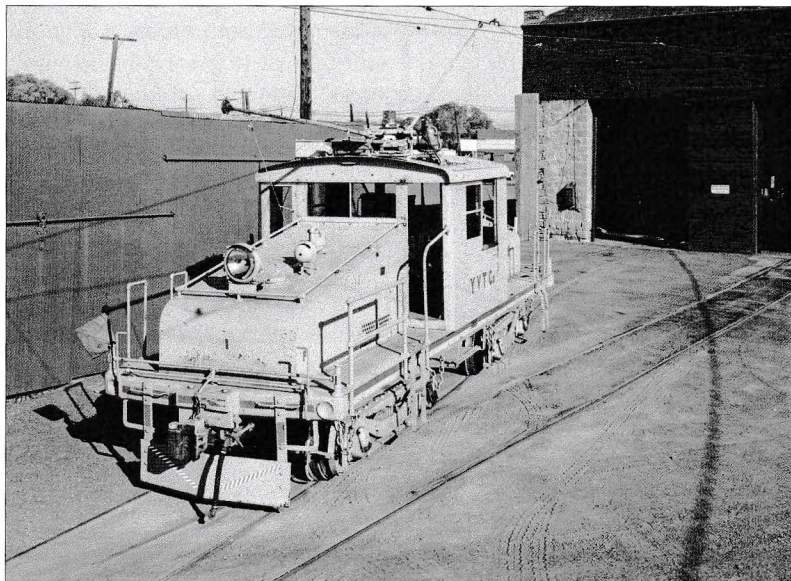
I started digging for more resources. I found a steeple cab kit in the form of Cannonball Car Shops GE Steeple Cab (no. 197-9810). Further research found a number of detail kits for the Cannonball Car Shops kit at Ameri-

can Model Builders, Inc. (AMB), so I ordered them.

Then I started a deeper research looking for photos of the YVTCO steeple cabs. A Google search produced a bunch of photos. I zeroed in on 298 since several of the photos from 1970 featured that 50T American Locomotive Company (Alco) cab, and the Cannonball Car Shops kit pretty closely matched the body.

According to the National Register of Historic Places Inventory-Nomination Form for the Yakima Valley Transportation Co. in 1984, "The cab and truck frames (type Alco RM 63B) were built by the American Locomotive Company. General Electric supplied all of the engine machinery." No. 298 was purchased new from GE in 1922.

YVTCO



When I started looking at the AMB detail kits, the instructions in the Chassis Lowering Kit (no. 9201) suggested using an early Bachmann Spectrum 44-tonner for the drive, so I found one on eBay. However, the instructions for modifying the Bachman motors were too much of a hassle for me, so I opted to use NWSL Stanton drives (which I already had previous experience with for another model). I measured the 1970 photos for wheel diameter and axle spacing and found NWSL Stanton drives with wheels which were only about 15 percent oversize. I got one powered and one dummy drive with the 70" axle spacing. The AMB kit no. 9200 had side frames to match the Alco-built trucks.

Many other details required "digging" to find those resembling 298 but I finally assembled those I wanted for the model. I purchased rerail frogs, a pole, Pyle headlights, pipe fittings and small tank for the outside body shelf; a brake stand for the interior; flag holders and poling pockets for the pilots — all from Precision

Cab of 298

ABOVE: Inside the cab of Yakima Valley Traction 298. The interior of these vintage locomotives was pretty plain.

YVT 298

TOP LEFT: Yakima Valley Traction 298 is seen outside the railroad's shop, August 1985.

—JIGGER SCHMIDT
PHOTOS, HAER

In Color

MIDDLE LEFT: Because Yakima Valley Traction was owned by Union Pacific (originally Oregon Railroad & Navigation Company), the railroad's electric motors wore UP's Armour Yellow.

—KEVIN IDARIUS PHOTO,
JIM STRAIN COLLECTION

Kits and Parts

LEFT: Steeple Cab kit from American Model Builders and other ordered parts

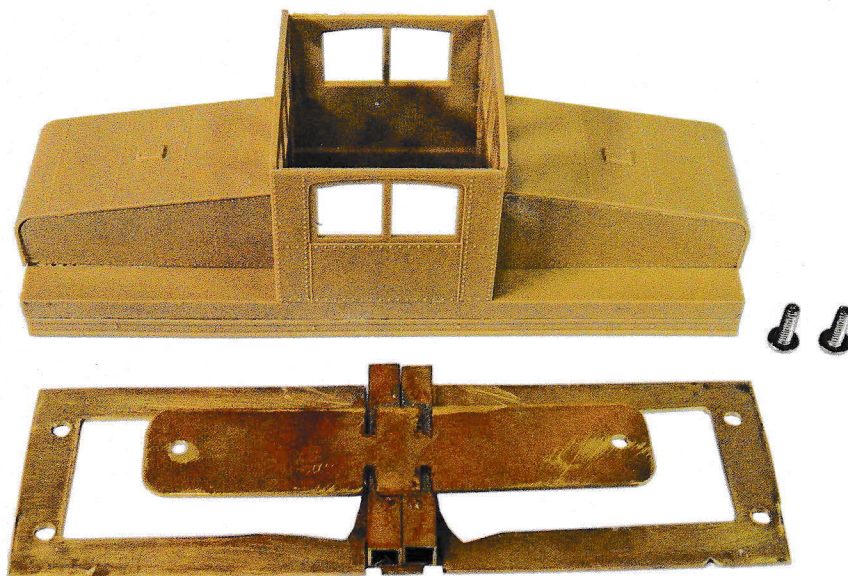


Kit Body and Frame

RIGHT: Steeple Cab body and final brass frame for Stanton drives.

Scale. From Cal Scale, I located a steam engine bell and bell ringer that looked right. I found trolley poles from Easton Custom Engineering that closely matched the prototype photos, so I ordered them, too. The wire for the railings came from Tichy. Kadee No. 150 whisker couplers and pockets completed the pilot beams.

After evaluating the AMB kits, I decided to use bits and pieces of those kits with the Cannonball kit cab body since it appeared to need the fewest modifications. I started assembling the cab kit. I modified the kit body to slightly enlarge and square off the win-



Pilot Beam

RIGHT: Construction detail of front & rear brass steps and coupler mounting.



dows to match the prototype photos. In addition, I opened one of the cab doors like those shown in the photos.

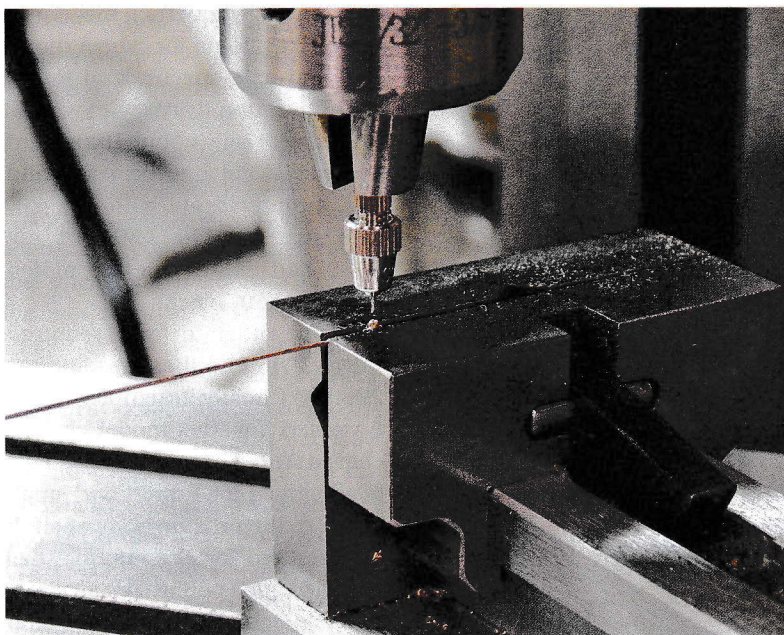
Moving on to the AMB detail kits, I found several of the detail instructions and parts didn't fit my style of modeling. First was the basic plastic frame in the no. 9201 chassis/lowering kit – it wouldn't support the NWSL drives – so I created a brass one for the Stanton drives.

I put together the modified kit body but found the AMB no. 9205 pilot beam kit didn't quite match 298. So I created brass assemblies to match the prototype photos. (DSCN 2093) While building the assemblies I included operating lift levers with 40-link-per-inch chain to the top of the Kadee couplers. Another one of the AMB kits provided good side rail drawings so I used those as a pattern for the railing assemblies. Those drawings were for bare wire so I added pipe fittings which I thought matched the proto pics much better. The Cal Scale pipe castings required drilling to fit the Tichy phosphor bronze 0.015" wire I used for the handrail. After forming the wire and assembling it with the pipe fittings, I soldered the side rail assemblies and mounted them to the body.

Next, when I looked at the Precision Scale headlight castings, I

Drilling Pipe Fittings

RIGHT: The milling machine vise setup to drill the pipe fittings to fit the 0.015" wire railings.



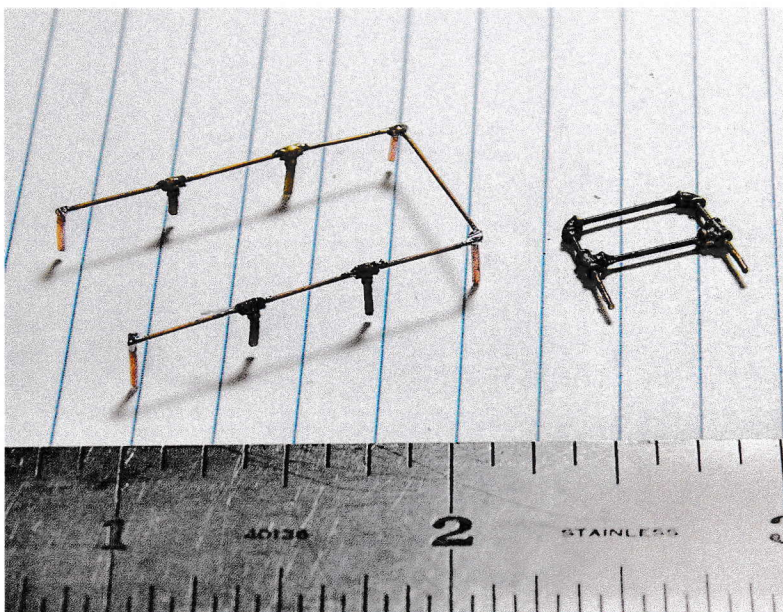
thought it would look better for a polished interior so I used a fine stone Dremel bit to polish them. Did I mention that I'd drilled a hole to mount an LED? After wiring the yellow-white 402 LEDs, testing them, installing them in the headlight and mounting them to the body, I finished the headlight faces with clear Gallery Glass.

It looked like glass windows would appear better so I cut microscope slide glass to fit the fixed cab windows and set them in with canopy glue.

Another picture from the Library of Congress showed the cab interior, so I built an interior platform out of styrene to support the throttle quadrants – some parts scratchbuilt and others from Precision Scale.

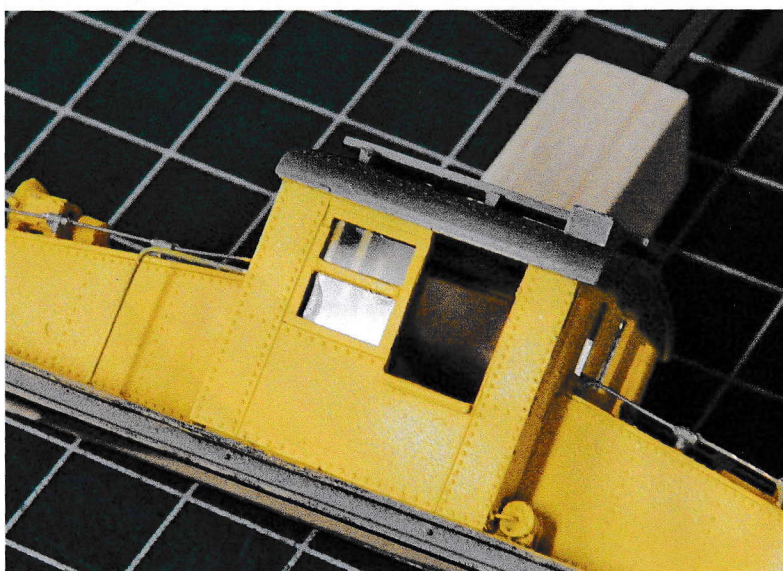
Finally, I added the Easton Custom Engineering trolley poles with scratchbuilt 0.010" 'keepers' and styrene 'cable retrievers' along with a bubble light and Cal Scale bell to the cab roof.

I came close to matching the 298 paint color with Tru-Color DM&E/ICE yellow. I first airbrushed the body with a gray primer followed by the Tru-Color paint. Then it was time for the final details – the lettering and numbering. I make my own dry transfers using Pulsar fx foils. I



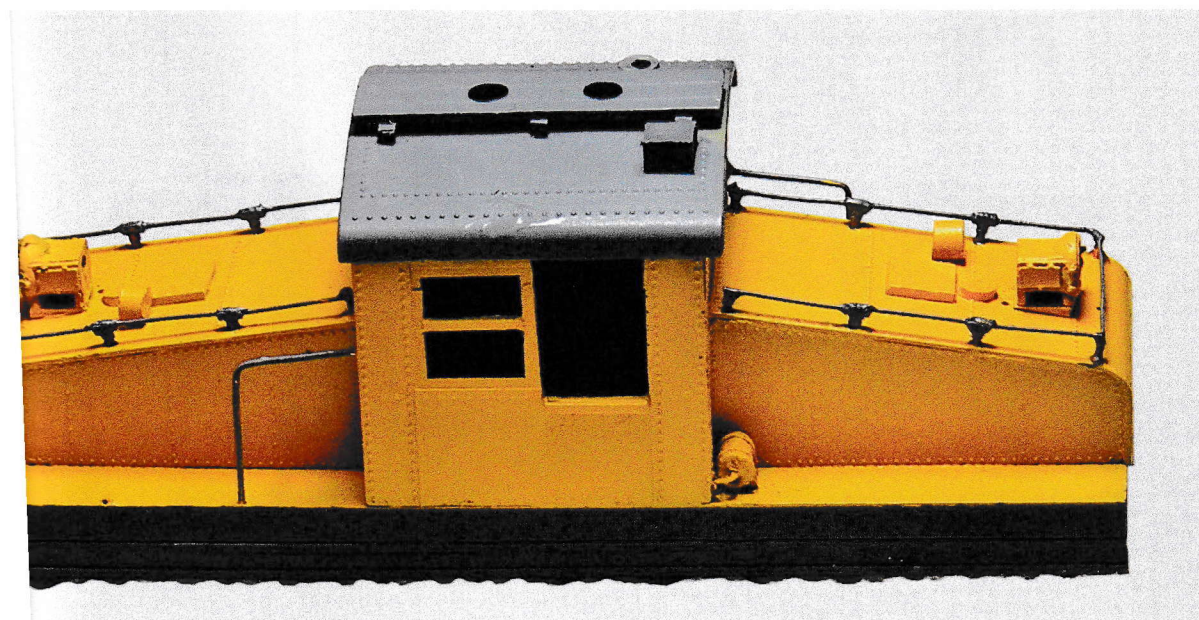
Railing Assembly

LEFT: The 0.015" wire and the pipe fittings for one end.



Glass Windows

LEFT: Microscope glass cut and fitted to fixed window in cab. Note added sill.

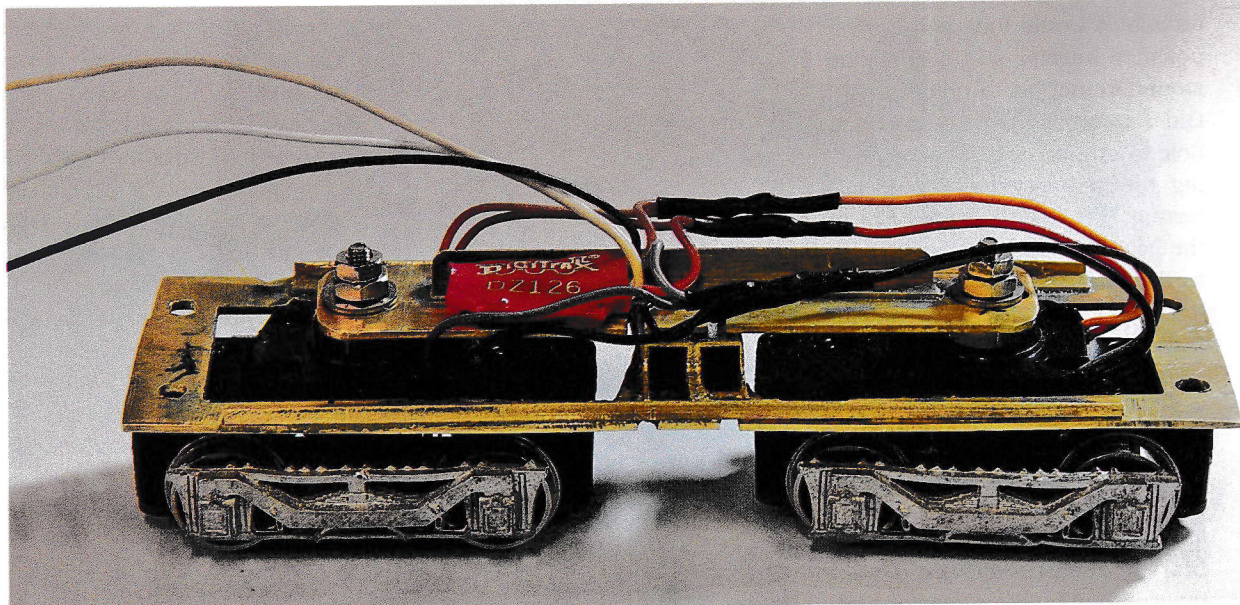


Railing Fit

LEFT: Initial railing fit check.

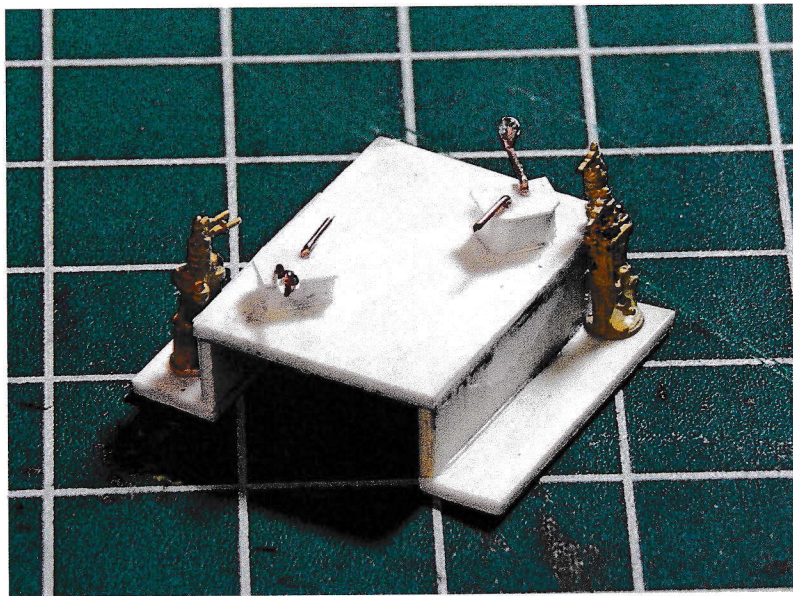
Frame with Decoder

RIGHT: Digitrax DZ126 decoder mounting in frame with Stanton drives.



Model interior

RIGHT: Styrene mount for control stands inside cab to cover decoder.

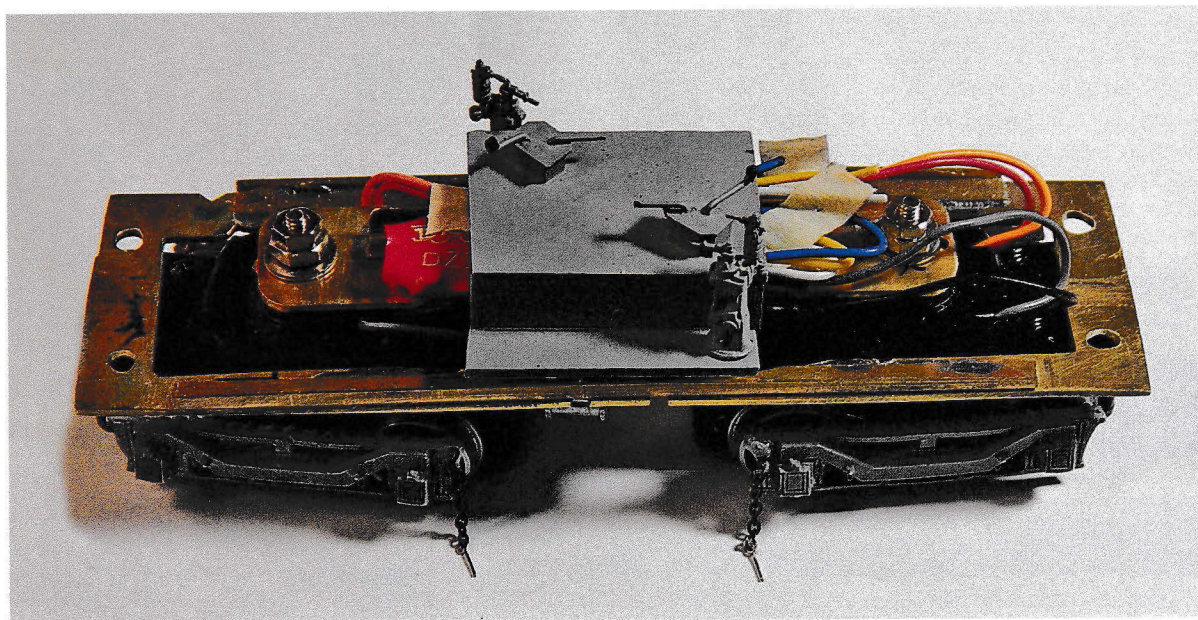


prepared the lettering and numbers using Calibri (Body) 10-point font which was as close to Union Pacific-style lettering as I could approach using Microsoft Word. Then I created the red dry transfers and applied them to the body.

For the final assembly, I added a Digitrax DZ126 decoder under the cab floor after testing the hookup with the Stanton drives and the headlights. (DSCN2130 and DSCN2138) Well – not quite final. I hadn't paid real close attention to the ventilation holes in the prototype pictures of the hood sides. So I built a jig for the hole spacing. Using the jig and a hand-held drill driver on the

Frame without Body

RIGHT: Brass frame with Stanton drives, Digitrax decoder & cab controls

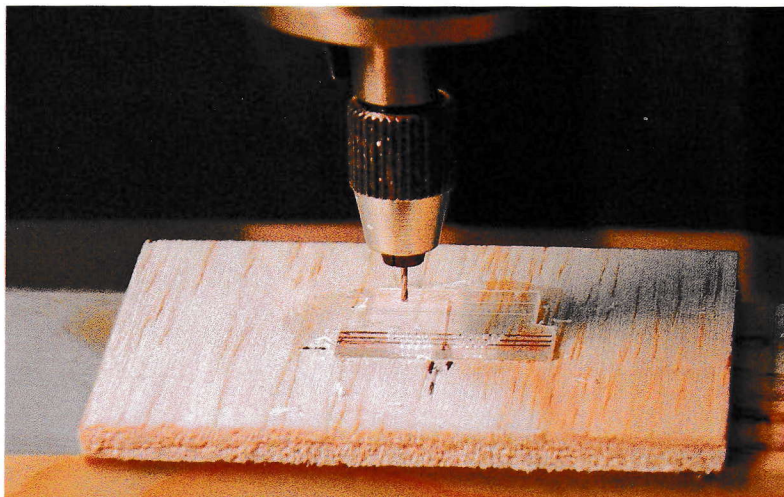


hood of the body over the rail, I lightly touched each jig hole with the drill bit to reveal the gray below the yellow finish to simulate holes.

I also added retainer 40-link/ inch chains between the frame and the trucks as well as a 0.020" wire step on the both ends of the loco. Yeah, and I missed putting the vent holes on the No. 2 end of the body. One of these days, I'll go back and correct that omission.

Conclusion

I accomplished what I set out to do – to earn a Merit Award in Motive Power. In fact, the model was awarded First Place People's Choice Locomotive at the NMRA Mid Central Region Boardman Convention in 2018. I didn't expect that! And it won First Place in the Diesel & Other Loco category. Seems like many others got as big a kick out of a steeple cab locomotive as I did in building it. **LB**



Making the Vent Hole Jig

LEFT: The setup for drilling the vent hole jig.



Vent Hole Jig

LEFT: The pattern is 7-6-5 top-to-bottom on each side of the centerline based on the prototype photographs.

