

John Sipple

Sipple on Trains

Bachmann Fn3 Forney Loco

A large-scale locomotive destined to become a garden railroading favorite

Back around the days of the Civil War, Mathias Forney designed an appealing locomotive to work on overhead urban railways. Facing tight curves but minimal grades, Forney chose a 0-4-4T layout. The initial 0-4-4T designs had the stores over the drive wheels and as the water and fuel were consumed the locomotives would lose traction. To provide a more stable traction platform Forney put the water and fuel into its own tender-like section, held up by its own four-wheel truck.

Later the design would be refined to include a two-wheel front truck to permit somewhat higher speed operation. A few of the Forneys were built in narrow gauge, mostly for use in mill, mine or lumber industries. Forney-type locomotives were eventually found all over, doing a variety of jobs. Their greatest strength was that they worked equally well in either direction.

Bachmann has a new 2-4-4T Forney in large scale decorated as the Sandy River & Rangeley Lake #12. There is also a number #11, painted but undecorated. Number 11 has a rather standard inside frame that is complicated by the fact that the SR&RL was a two-foot narrow gauge railroad, meaning that the frame wasn't much more than a foot wide. To spread out the bearing surfaces, the number 12 was built as an outside frame, so that the drive wheels are located inside the frame, with the running gear, counterweights and cranks outside. All the Bachmann 2-4-4Ts are built as 1/20.3 narrow gauge.



Aside from the substantial differences in the running gears between the number 11 and 12 locomotives, the cab window arrangements are different. The number 11, being older, has a four-window cab-side set up, while the newer number 12 has a simpler three-window configuration. Differences in the cab layout include the fact that the #11 has a wood design while #12 has all steel construction. There are some other obvious differences in the airbrake plumbing as the exhaust of the dynamo. Both versions of this locomotive have dynamo details in front of the main stack, so early electric headlights are prototypical. While cab lights and firebox flicker are included, there aren't any back-up lamps. While that was generally true of



Dare we call it cute? Perhaps, but when the details and operational qualities are examined, it's a whole lot more than just cute.

SR&RL prototypes, suburban machines almost always had back-up lamps. As a final detail note, both locomotives are equipped with Stephenson valve gear and slide valve chests.

The prototypes had 35-inch-diameter drivers, so the front truck only helps with high-speed running. More in keeping with the Mason Bogie, the four-wheeled steam engine is capable of swiveling to a limited extent. This adds to the swing of both front and rear trucks to give the machine an easy facility with four-foot diameter curves. The Bachmann locomotives come with the engine locked into place, making it good for greater

than 4 and up to 12-foot diameter curves. It is also possible for the slide on the rear truck to be locked, further restricting it to greater than 12-foot diameter curves.

Bachmann has shown great initiative in the design of its new couplers by going to a height now proposed as a standard for garden railroading. As a result, the Bachmann couplers work well with Kadees and the new Aristo-Craft Kuppler.

Conversion to Kadees is quite easy if that is your customer's choice. As delivered, the couplers are mounted on swing bars, allowing them to serve cars on tight curves. Bachmann includes the box hardware to let a customer convert to body mounts; however, this requires a minimum curve of eight feet or greater. Lastly Bachmann also tosses in a set of low head tow couplers for the few customers who still might need them.

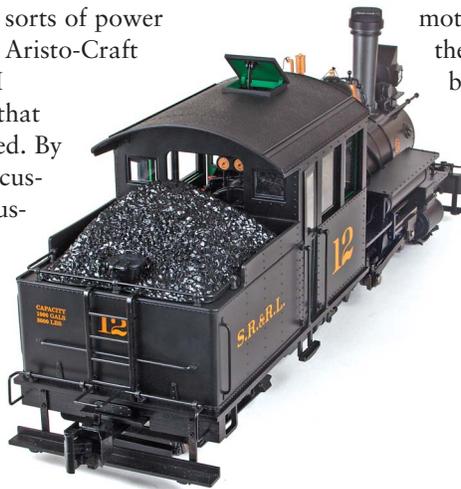
Bachmann's "Non-proprietary plug-and-play electronics socket" permits the purchaser to use all sorts of power solutions that fit this socket set-up. The Aristo-Craft Revolution Receiver fits as does the QSI Quantum DCC sound board, although that requires a separate speaker to be installed. By leaving the "dummy" board in place, a customer has a dandy DC hauler. If your customer is so inclined, Bachmann provides an optical chuff switch, and there are connections to operate the locomotive on battery power. One of the switches on the power board selects between battery and track. Another switch turns the motor on or off, which is useful when testing accessories when movement is not desired. There is another switch for selecting between the NMRA recommended and the defacto standard. More switches are located under the



Pop off the coal load and underneath is this tidy and well-designed power board. The clear plastic shield keeps any condensation that forms inside the coal load from dripping onto the power board.



The Forneys used by Sandy River and Rangely Lake were diminutive, straight-boilered steamers. Originally designed for urban commuter service, the Forney found a home in the Maine woods.



This is the front—when running in reverse—and that's the whole point of the Forney. The model runs just as well in reverse as forward, giving you a great little tea kettle for point to point operation.

coal load. One is the cab LED switch, allowing settings for DCC-off-DC. Another is for smoke.

The review model had nothing extra installed. Whether or not the steam engine is locked, it has marvelous flexibility over track. It is driven by a vertical motor with a brass flywheel and worm drive, giving it great smoothness. While this locomotive has the drive works of a 0-4-0, it also gets track power pickup from the rear truck, approximately tripling the electrical wheelbase. All of this adds up to a nimble, reliable, little machine.

Full-scale Forney locomotives weren't high-speed machines, having been built for elevated or narrow gauge work where 25mph would be hasty. In theory, the 35-inch diameter drivers would provide a speed of 35mph, but curves and other realities conspired against that speed, so an appropriate model locomotive needs to be restrained. At 18 volts, the review model was up to 35 scale mph, but would start at 3 volts and giving a smooth, realistic three scale mph. Later the Forney was tied onto a train with several the new Bachmann Fn3 freight cars, handling them well with either end of the locomotive forward.

Bachmann's Forney joins a long line of 1/20.3 locomotives. It shares the quality of the Spectrum detail and accuracy of its predecessors. The electronics of the Forney are ready for upgrades based on a customer's choice. Everything is offered from sound to battery operation. Bachmann has endowed this model with three levels of curve radius operation to better fit every customer's needs. Best of all, the Forney is downright cute. **HM**