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Railroad Report

Arnold N-Scale Locomotives

Arnold has been around for over 100 years.

We are all acquainted with the Hornby name. Most likely almost every dealer has many of their products on the shelves. The Arnold line of N-scale trains and railroad accessories is as old as the Hornby name. Both companies have been in existence for over 100 years respectively. This month we have two new N-scale engines, manufactured by Arnold and distributed by Hornby USA.

The engines we'll be looking at are the EMD SW1 Pennsylvania Central #8559 (HN2258) and the Boston & Maine #1117 (HN2254). Arnold offers its engines either as DCC, or for those customers who are still running analog power, DCC-Ready [*One of these days your last few holdouts will take a step forward and enter into the 21st century* - Ed]. The EMD versions modeled are of the later production variant of these popular switcher locomotives and include the extended stacks.

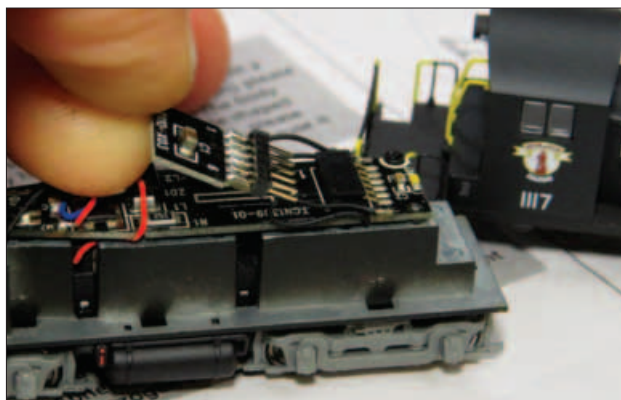
The engines we have for evaluation are the DCC-Ready offerings. Even though these were not sent from the factory DCC compliant, it only takes a few minutes and the addition of an inexpensive plug-in DCC circuit board and either of these locos can be converted to run DCC. Power is supplied to the trucks of each engine by a single five pole can type motor with dual output shafts used to power both sets of trucks via worm gear drive system. This setup provides smooth all wheel power for good hauling capability. Both engines have front and rear head lamps. In the DCC-Ready mode both lamps are illuminated continuously, however, in the DCC mode they are separately enabled depending on the direction of the locomotive's movement and the mode of



operation selected.

The preferred way to power an analog engine is with a straight DC analog controller. The analog Mode of a DCC controller has a few visual benefits in that the drive lamps are always on, but DCC operating in analog mode can cause buzzing and overheating of the motors. I avoid this, and I suggest you recommend to your customers they do the same and provide a separate loop of rails that are powered by a precision DC only analog controller.

As we mentioned, a DCC plug-in module is available. So how easy is it to install? Very easy. The hardest part is to remove the shell from the engine. The difficulty is not in the design but the small size. The shell is held in place with 4 tiny tabs. By holding the engine base and gently rocking the shell while pulling straight up, it will release. A quick visual revealed that right on top of the circuit board is the compliant socket with a dummy board in place. Simply slide it out and slide in the DCC controller board. Replace the shell and rail the loco. It's that simple.



Converting a locomotive to DCC is a simple matter of removing the shell and plugging in the appropriate circuit board.

But since the shell was off the loco, it was time to take a minute and see what makes this gem tick.

With my natural curiosity about things mechanical, the Arnold EMD locos were begging me to dig deeper. As mentioned, these are tiny locomotives, but by stacking my glasses like cordwood it was noticed there are two micro screws that are used to retain the main circuit board. Removing the screws and — gently — moving the board



up and to the side, we can see the motor and worm drives at each end.

Digging deeper, the gear covers were removed, and it became evident the entire lower chassis is cast metal. This provides the weight needed for traction. The entire layout is nicely done, and not a speck of space is wasted. Reassembly proved just as easy, and in minutes the loco was back together again.

As mentioned in the opening, Arnold has been in business for over 100 years, and the company's experience in the production of model locomotives shows. Out of the box there is a very realistic appearance to these engines. Unfortunately some molded plastic locos that are produced have way too shiny a finish. This requires a bit of work on the purchaser's part to bring to a more "working" locomotive look to them, but not so with the Arnold EMDs. That said, it's not all about looks. In operation,

Arnold's experience in the manufacture of locomotives is evident in the finish and the amount of included detail.

the lighting is bright and even. And even though these are small engines, they rail easily, and acceleration is smooth and steady. The weight is put to good use, and there is plenty of traction for pulling long strings of cars. And for younger or heavy handed engineers, they are not so delicate that breakage becomes a major concern.

The Arnold EMDs are perfect for any N-scale layout that includes an industrial area. These engines look and run great. The price, in combination with performance, is exceptional. Even though this review is all about two N-scale switcher locomotives, Arnold also offers track as well as other rail products and accessories in a variety of popular scales.

Dealers interested in inventorying the Arnold line of railroading supplies should contact Hornby. Not only does Hornby distribute Arnold, but it has a vast selection

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