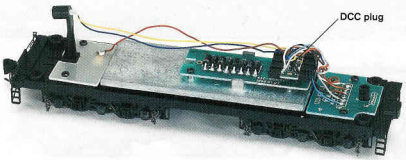

This arrangement allows for some appropriate open space between the frame and the boiler above the drivers. However, inappropriate daylight also shows between the trailing truck and firebox. This situation comes from shortening the frame and leveling the ash pans to provide clearance for tight model curves.

The metal side rods are flat, but the valve gear is embossed with a nice relief, and the eccentric cranks are properly oriented on both sides. All of the engine's drivers and all the tender wheels pick up current for smooth operation.

The wheels are all metal and they match the National Model Railroad Association's RP-25 contour. They all matched the NMRA standards gauge; however, the scale 68" drivers appear to be just the wheel centers as the tires are omitted. This makes the treads very thin and the counterweights incorrectly extend to the edges of the wheels.

All of the drivers and valve gear are chemically darkened, but the color is an odd silvery gray. A little weathering with some grimy black will improve the appearance here.

The large coal tender on the PM engine is the same size as the NKP version, which carried 22,000 gallons of water and 22 tons of coal. The tender trucks have the correct scale 33" wheels and metal safety chains at each corner.

Two printed circuit boards are concealed inside the tender to operate the reversing constant headlight and backup light. An eight-pin Digital Command Control socket is wired into one of them. Purchasers can easily disconnect and discard the diode lighting circuit and plug in a decoder. The instructions explain that, but the low-voltage bulbs must be replaced with higher-voltage lamps for DCC operation.

Like previous Proto 2000 models, the constant-lighting circuit in the tender absorbs the first 2.1 volts, so the motor actually starts at 1.5 volts. The model's overall speed range is excellent and very close to that of the prototype. Its current requirements are very low.

The Berkshire's drawbar pull is equivalent to about 47 free-rolling cars on straight and level track. It does seem to slip easily, so its pulling capacity will probably improve as the blackening is worn off the drivers.

Operating magnetic knuckle couplers came mounted at the proper height on both the engine and tender. It's great to have working couplers on both ends of a freight locomotive for double-heading or switching cars.

Overall, I'm pleased with the excellent work that's gone into these beautiful new Van Sweringen Berkshires. Their smooth performance and chunky good looks make a great case for backdating my layout to the Berkshire era! – *Jim Hediger, senior editor*

Wheel cleaner saves time and effort

This cleaning machine effectively cleans oil and dirt off all types of rolling stock wheels. It can be used with all control systems including two-rail DC, three-rail AC, and Digital Command Control (DCC). It's manufactured by Lux-Modellbau in five sizes for permanent installations in model railroads built in N, HO, HO narrow gauges, and TT.

The cleaner has a pair of tough molded-plastic sides with mounting flanges along the top edges. Eight spacer tubes hold everything in position, and eight brass rollers support the moving sliders. These brass sliders are faced with felt strips which do the actual wheel cleaning. (Abrasive strips are also available separately, but they're intended for heavy duty cleaning and should not