Lionel O Gauge NYC "S" Class Locomotives

by Robert M. English 96-43303

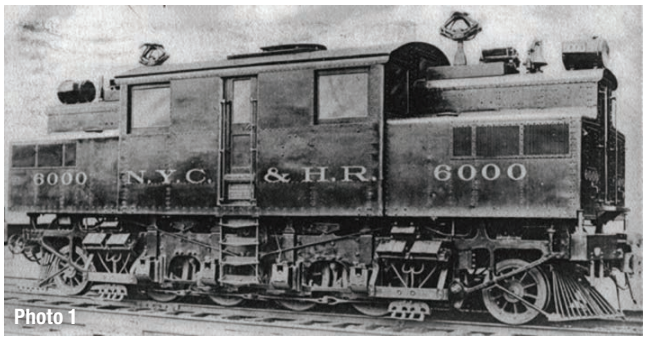


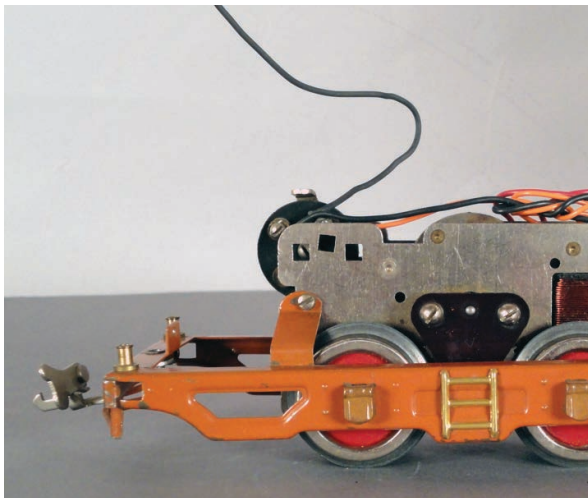
Photo 1

In 1995 I was browsing a local train show and one of the vendors happened to have a Lionel outfit #352E with a 10E locomotive and #330 series cars in peacock and orange paint. Up to that time I hadn't thought about any Lionel trains other than modern-era and postwar production. I was fascinated, I had to have it! From that moment, I began selling my modern era and postwar trains to fund my embryonic prewar collection. Early on I came across a dark green Lionel #250 that ran beautifully, and its original paint was still glossy. No need to say I was hooked!

About the same time, I was meeting collectors around town, talking to them, as well as, viewing their collections. These new friendships led me to join the TCA in 1996. Here's serendipity in a train-collecting context: New friendships plus a great start beginning research on the various locomotives and cars that had caught my interest. One of the locos was the New York Central S2-class offered in 0 gauge tinplate by Lionel as their #250 and its siblings the #252 and #252E.

There are a limited number of authoritative print resources for beginning collectors. Two excellent ones are the *Quarterly* and *Greenberg's Guide to Lionel Trains 1901-1942, Volume II, O and OO Gauges*, by Bruce C. Greenberg, PhD. The latter, the 2001 edition, was particularly helpful because it includes photographs of the trains. This comprehensive work is being updated as of this writing. All references to Types and Lionel numbering in this essay are based on data presented in the 2001 Greenberg book. Ultimately, I found collecting #250s and #252s very enjoyable, in part because of the large number of documented variations.


Photo 2



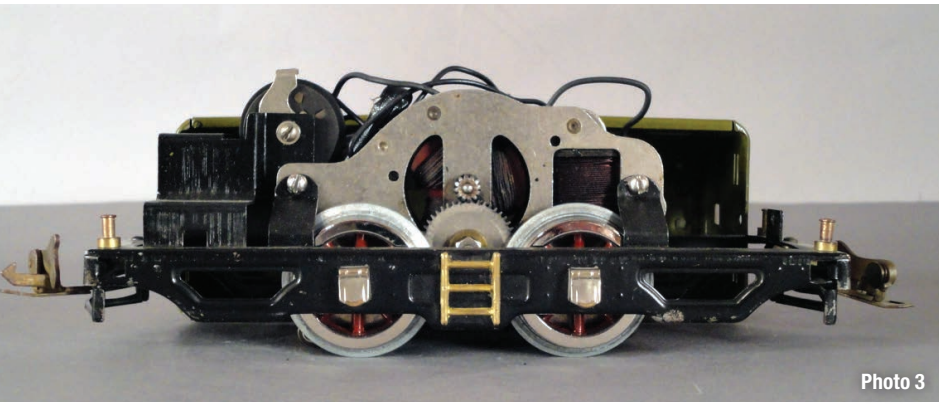


Photo 3

The New York Central was forced to switch to electric locomotives in New York City because of a significant accident in 1902. One train crashed into a waiting train when the fast-moving steam locomotive's engineer could not see the signals because visibility in the Park Ave. tunnel was obscured by smoke from the steam locomotives. In short order New York legislators required the railroad to cease steam locomotive operations in the tunnel. Earlier the B&O addressed a similar problem by using electric helpers to pull trains (with locomotive fires banked) through tunnels in Baltimore. Voltamp and others offered toys patterned after the B&O locos as early as 1903. The NYC S-class motor (Photo 1) was the first class of main line Bi-Polar electrics to serve Grand Central Terminal. The locomotive had two electromagnetic field poles in its electric motor design, hence it was termed "Bi-Polar".

During Lionel's classic era 1923 to 1936, Lionel produced a tinplate interpretation of the New York Central S2 motor in its 0 gauge line. The locomotives were numbered #250, #252 and #252E. Before 1942, the NYC S-class, more than any other prototype electric locomotive, inspired toy manufacturers to offer operating representative tinplate toys. Those manufacturers were responding to demand for the locomotive from the local and largest American market, New York City. Many boys in the city were seeing the New York Central S motors every day and asking for a model in the familiar shape. Lionel responded by producing many models. In 1910 Lionel offered three Standard gauge locos of the S class; these were revised several times and replaced by a single Standard gauge model in 1923, then finally supplemented by a second in 1927.

Lionel produced four models in 0 gauge in 1915 and later revised in 1917. In 1926 and 1927 Lionel offered new models of the S-class, the #250 and #252. In addition to Lionel, the Dorfan, Ives, and Elektoy companies produced models in the USA, while in Germany Bing and Märklin developed products for the American market. From 1910 to 1936, the consumer of the day could purchase a model of an S-class loco in varying configurations of cast iron, stamped steel, and even brass, with cast iron or die-cast wheels. (Note: The #250E Hiawatha streamlined 4-4-2 steam locomotive, offered by Lionel circa 1935, has an identical catalog number, but is not a subject of this article.) Lionel produced 0 gauge NYC S-class models #250 and #252 from 1926, with the #252E starting in 1933. Production of these locomotive models ended at different times but the last were made in 1935-1936. The first #250 could be reversed only by turning the locomotive around. The #252 and some late #250s, had manual reversing switches, while the #252E after 1933 had the "distant control" (originated by Ives) that we know as the drum-style Lionel E-unit. These three small locomotives filled an important niche in the Lionel array as mid-priced, affordable models.

Numbers #250-252 came in at least eight color combina-

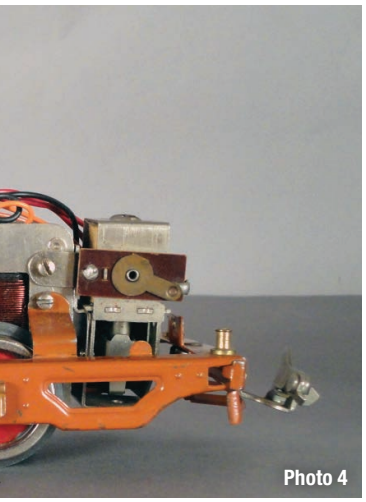


Photo 4


Photo 5

Photo 6

tions ranging from the homely light olive cab on black frame or the dark green cab on black frame to the very attractive terra-cotta cab on a wine-colored frame or equally attractive light orange cab on a terra-cotta frame (Photo 2). The trim remained the same through locomotive production except for three changes: 1) Plate numbering, the 250 designation was discontinued in 1928, but briefly reappeared in 1931-1932 and again in 1935; 2) the headlights were initially a nickel-plated steel strap style which was replaced in 1928 by a gold-painted die-cast headlight; and 3) the journal box covers, initially nickel, changed to copper in 1931 and finally to either nickel or copper near the end of production. Lionel built the #250-252 locomotives with three different frames. All three frame types have a rectangular full size open area with body and motor mounts bent up. The Type 1 frame was 1926-1927 and has a subframe tabbed onto the main frame to support the manual reverse disc switch. The Type 2 frames were introduced about 1928, when a motor design change eliminated the need for the subframe. The vestigial tabs were bent down out of the way. This design continued until 1929. The Type 3 frames were made 1929-1936 with tabs bent upward.

Lionel installed five different motors in the #250-252 locos. The earliest #250s had the humpback motor with strip sprung brush that was continued from the preceding #150 series locos. This Type 4 motor was soon replaced with a Type 5 brush tube, humpback motor (Photo 3) during 1926 production runs. In 1928, the motor was replaced by a Type 6 larger motor with comparatively square side-plates. Type 6 motors, with rectangular metal brush plates, also sporting the new disc wheels, were produced until 1929. Type 7 saw the introduction of phenolic brush-plates and was produced until 1930. Type 8 introduced phenolic gear covers and was produced for about a year, being replaced by Type 9 (Photo 4) motors, which had a simplified gear train. The Type 9 motor was used from 1932-1936 in #250 series electric locos. The #250 family used spoked wheels from 1926-1928, and disc wheels thereafter. These locos used Type 2, Type 2s, Type 3, and Type 3s couplers. Type 2 or 2s couplers were used on the early #250 and #252 models from 1926 to 1927. The vast majority of the #252s used the Type 3 or 3s. The "s" designation meant "slot". These slots added a piece of steel to the regular coupler, allowing the coupler to engage hook and slot style couplers. These additional pieces were added for 1-2 years after a model was introduced to allow the customer to continue to play with existing cars. The analytic framework of motors, frames, couplers, headlight, and trim as well as a rudimentary understanding of production processes can help us determine the originality of these 80+ year-old locomotives.

Photo 7

Photo 5 shows a locomotive that would be very difficult to date unless we consider its details. If the dating is based on its #250, we would conclude 1926 or 1927. However, the disc wheels and the cast headlight began in 1928. Looking at the underside, we see a Lionel drum type E-unit, first offered in 1933 (Photo 4). As mentioned previously, the Lionel E-unit followed the Ives 1924 design. We know this locomotive, as shown with the E-unit, was produced by the factory because of the stamped and nickel plated E-unit bracket that is found on other similar 1933-1936 locomotives. In this case, we are fortunate to have a box with legible stamping, "252-X" which indicates not an ordinary #252 locomotive. These clues give us a #252 with #250 plates. The reason for the "X" on the box indicates production after 1933. Knowledgeable collectors believe that some #252Es, #253Es, and #254Es were made in 1933-1936. They have Type 9 motors, with the same bracket and drum-style E-unit. Considering all these factors, we conclude that this #252E was most likely produced between 1933 and 1936.

Photo 10

Photo 6 shows contemporary stablemates, a #252 (1932) and a #252-X (1933). Note that the details are identical save the insert numbers. Photo 7 also shows contemporary stablemates, the very same #252 and #252E with the rubber-stamped "E" on the door. Now we have four unique #250-series locomotives that, at first glance, are the same. Is there another variation lurking about?

Photo 8 shows examples of Lionel's exceptionally attractive 1930s liveries. The 1933 terra-cotta over wine frame with the cream stripe is a beautiful locomotive and was produced as both a #252 and a #252E. Was there also a #252-X produced in this livery?

Photo 9 shows the #250 and #252 in the dark State green color scheme. We see that the details slightly differ. The #250's whistle location was possible because there was no manual reverse. It is easy to see why variation collecting is so enticing to train collectors. There is always the risk of being misled while learning about all these variations. Study the reference works and talk with other collectors before making a purchase. Compare potential acquisitions to known correct pieces. Ferret out what was produced when. The #250-252 series will keep you searching for a good while!

The New York Central S-class is still being produced. Photo 10 is Lionel artwork for their recently produced S-2.

I welcome reader comments on their #250-series variations. Please email me at stlfrisco@gmail.com.

The author wishes to thank Glenn McComas for his numerous contributions and advice. The author also wishes to thank Bruce C Greenberg, Fred Lagno and others for their ideas, proofreading, editing, and advice.

Photo 8

Photo 9