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The Postwar Era at Lionel

A quarter-century of toy train production overflowing with excitement and nervousness, innovation and tradition, boldness and hesitation, legendary leadership and shortsighted guidance. There you have it the post-World War II era at the Lionel Corporation summarized rather generally in just a single sentence.

Of course, collectors of Lionel trains and accessories demand a more detailed and careful explanation of what happened at the toy train giant between 1945 and 1969. Not content to acquire examples of different locomotives, cars, and so forth, they want to understand how Lionel put together great lines of toys year after year and then how those items were marketed.

For what is plain to hobbyists is that the postwar era stands out as a noteworthy period in the development of electric trains. These toys became symbols of the wonder and delight children felt at the time, feelings collectors and operators from that generation still feel decades after the end of their childhood. Such emotions motivate many of these individuals to buy and cherish individual Lionel pieces.

New era begins

To understand the meaning and significance of Lionel electric trains requires first considering the boundaries of the quartercentury known as the postwar era. The period began, according to toy train historians, late in 1945, a few months after the surrender of Japan ended World War II. The release by frantic executives at Lionel of a new O gauge train outfit for the holiday season launched what many hobbyists proclaim was the most significant era in the history of American toys. Frankly, identifying the opening of the postwar period with events taking place immediately after the conclusion of global hostilities makes sense. After all, a federal mandate enacted in the spring of 1942 had curtailed the production of various consumer items, including electric trains, that depended on "strategic materials."

Lionel could not have defied that order, lifted only as the end of the war came into sight. The toy firm had been unable to manufacture its signature products for three years. Only when federal authorities relented could Lionel again make trains.

The moment when Lionel enthusiasts contend the era concluded had nothing to do with international relations or domestic events. They focus, instead, on a shift in the electric train industry occurring in 1969. Namely, the release of the final cataloged line marketed by the Lionel Corporation. During that year, General Mills leased the rights to make and sell Lionel toy trains. That well-known producer of consumer items soon announced its first line in 1970.

Definitely a tidy chronological package with neat boundaries. Too bad that, when analyzed with care and rigor, it unravels. The trains themselves dictate expanding the parameters of the postwar era.

On the one hand, the roots of the era really extend back into the late 1930s and early 1940s. Some of the locomotives, rolling stock, and accessories filling out the Lionel roster in the first years after the war represented updated versions of prewar items. On the other hand, the branches of the postwar era reached beyond 1969, stretching into the 1970s. General Mills put out motive power, railcars, and more based on models developed well in the past.

Unprecedented appeal

Getting bogged down in the temporal limits of the postwar era narrows vision. Instead, let's pay attention to trends at Lionel and in the general culture of postwar America. They shed light on why toy trains proved extraordinarily popular and how Lionel's leaders sought to capitalize on the skyrocketing appeal of its products.

The place to begin is with Lionel. Analyzing and appreciating what the engineers, advertising executives, production supervisors, and sales personnel at the corporation achieved during the postwar period are essential tasks. We must, as a consequence, direct our attention to different trends influencing how the largest and most important domestic manufacturer of electric toy trains made and marketed them between 1945 and 1969.

Overshadowing everything else were both the extraordinary popularity in America of those playthings in the 13 years after the war and the gradual decline of their appeal in the 12 years that followed. Public fervor for electric trains enriched Lionel well into the late 1950s and shaped its brilliant streak of answering with superb, highly entertaining models. Yet as consumers, especially young ones, lost interest, nothing seemed to work.

Never, though, should observers forget the unprecedented appeal of Lionel electric trains. People from every walk of life, every income level and educational level, and every region of the United States desired a train set. The urgency they felt rivaled their wish for a blackand-white television, a shiny new sedan, or the latest refrigerator or washer and dryer. Lionel outfits from the middle of the 1950s, including the no. 1523, balanced toy-like qualities with realism. This train, like all the ones photographed, comes from the collection of Joe Algozzini.



Indeed, viewing a Lionel outfit less as a toy and more as an electric appliance aids in comprehending why Americans wanted one so badly. Folks everywhere believed owning a set was going to improve the quality of their life while testifying to their status as solid members of the growing middle class.

Necessary and not cheap

A train would demonstrate to neighbors a family's determination to provide generously for its children. As Lionel's advertising had long maintained, boys who played with an electric train grew up to become productive, hardworking, and intelligent adults. Parents who envisioned their sons as future accountants, dentists, factory foremen, scientists, and so forth accepted the responsibility to prepare them with the right tools. A train was thus paramount, as vital as textbooks and a blue suit.

From the 1940s well into the 1950s, families across the country, even ones struggling to make ends meet on a regular basis, invested in Lionel trains for their sons. They did so fully aware those toys were not inexpensive. An electric train should be viewed now as it was then: a luxury item treated with care and respect. No wonder many parents insisted trains be used only during the holiday season and then be carefully packed away.

Families had spent too much on the locomotives and railcars for them to be handled recklessly. Lionel pieces, even basic rolling stock, were not trivial in cost. To drive home that point, the original price of every item listed in this book has been adjusted for inflation. In each More Information box, retail values of long ago are translated into current dollars.

Magic for boys

How frustrating the rules about putting the beloved Lionel train back in the attic or closet must have been for youngsters who wanted to play with it all the time. They associated their set with fun and magic rather than personal enlightenment or a successful career.

Boys, especially those who lived near full-size railroads or had traveled on real passenger expresses, filled their heads with dreams of running their own network. After the war, no plaything meant more or seemed as sophisticated than an electric train. So what if that miniature railroad empire depended on track with an unrealistic three rails and spanned only a sheet of plywood or a rug on the floor.

Well into the 1950s, children prized an electric train as the finest thing they could own. They begged parents and grandparents for one and let displays in department stores and other retail outlets mesmerize them. Boys saved every dime and quarter they earned delivering newspapers and mowing lawns in hopes of affording more track or another boxcar or gondola.

Tastes keep changing

Unfortunately for Lionel, the confluence of social, cultural, and economic factors boosting the appeal of electric trains after the war simply couldn't last. Youngsters matured and so discovered pastimes and consumer goods more fascinating than miniature locomotives and stations.

No matter what Lionel did in hopes of retaining the loyalty of its customers, fickle youngsters in time came to prefer spending dollars and hours on baseball gloves and hockey sticks, used Impalas and fresh-offthe-lot muscle cars, and, of course, girls. Even earlier, their infatuation with speed and innovation caused male baby boomers to abandon railroads, full-size as well as miniature, for jet-propelled airplanes and rockets, along with slot cars.

Yet even if sadness and neglect tainted the final chapter of the postwar saga, no one should overlook the joy and thrills Lionel gave children of the postwar era and their parents for so many years. The slogan, "An Investment in Happiness," accurately characterized every train set Lionel sold. A new generation would never forget the pleasures of those toys.

Technological advances

The myriad pleasures and excitement Lionel trains and accessories created in their grateful audiences reflected noteworthy advances in how the company developed, mass-produced, and marketed its action-packed and magical playthings. No account of Lionel during its postwar glory should minimize the contributions made by ingenious designers, industrious production supervisors, clever advertising men, and tireless sales personnel. Those dedicated employees, often unidentified or ignored, deserve credit in some way for all the magnificent toys.

Improvements in tool design and breakthroughs in the molding of various kinds of plastics enabled Lionel, along with its domestic competitors, to manufacture more efficiently and at lower cost durable locomotives and rolling stock with greater detailing. The revolution in the production of consumer goods attributed to the amazing development of injection-molded plastics changed every facet of life in



had been well aware of which engines and passenger trains ran on the Pennsylvania Railroad and the New York Central. That trend influenced two of the new locomotives highlighting the line for 1946.

Just two years earlier, the Pennsy had ordered a huge turbine-driven 6-8-6 engine from Baldwin Locomotive Works. That beast, the sole member of the S2 class, never amounted to much. It pulled only scattered passenger trains prior to being retired in 1952. But all the publicity given the Turbine intrigued Lionel, and its designers announced O and O-27 gauge versions (nos. 671 and 2020, respectively).

That three-rail giant, with a whistle, smoke unit, and double worm-drive Atomic Motor, stood front and center when evaluating the line. Lionel adapted its Turbine to serve as motive power for the Electronic Control Set (no. 671R).

Engineers set their sights on updating the 226, a die-cast 2-6-4 painted black and cataloged between 1938 and 1941. They adapted its boiler, installed an extra set of drive wheels (to make it a 2-8-4), fitted it with the latest trucks and couplers, and put in an Atomic Motor and a smoke unit. They christened the no. 726 the Berkshire, after a prototype on the Boston & Albany, a subsidiary of the New York Central.

Continued greatness

The release of the Turbine and the Berkshire, plus updated versions of older switchers and midrange engines, expanded the O-27 and O gauge lines. Yet designers and marketing executives showed no intention of relaxing, even as Lionel, like prototype railroads, began diverting more resources toward diesels. For example, 1947 saw some noteworthy developments at the toy giant. Its engineers ironed out problems with the Berkshire and Turbine and improved the smoke unit. They modified the 225 steamer, a 2-6-2 cataloged from 1938 through 1942. The new engine, which was assigned numbers 675 in O gauge and 2025 in O-27, was promoted (incorrectly) as a replica of the Pennsy's class K4 Pacific.

Low-end novelty

The exploding demand for toy trains was pushing Lionel from scale realism to toylike items as the decade came to a close. Decision-makers emphasized the need to make and market playthings families could afford no matter what their budget.

The change in priorities influenced the creation of a steam locomotive and tender introduced in 1948. Designers, while completely ignoring the O gauge roster, gratified the wish of sales personnel for an inexpensive train to counter the advances being made by Louis Marx & Co.

The Engineering Department devised the no. 1001 Scout locomotive, a 2-4-2 with Lionel's first injection-molded plastic boiler. A year later, perhaps because leaders felt uncomfortable relying on inexpensive plastic, they substituted a die-cast metal boiler and renumbered that stripped-down steam model as no. 1110.

Unfortunately, as people operating the low-end steamer quickly learned, the Scout's real problems were mechanical and not aesthetic. Its plastic-case motor and unreliable reverse unit frustrated consumers. They inundated Lionel's service stations with repairs, grumbling about engineering and quality control at the firm.

Magne-Traction

As though to make amends for the Scout, Bonanno and associates George Jurasov and John Salles conducted experiments involving magnetism and powder metallurgy. Their labors led to the development of Magne-Traction, an innovation that advanced a model locomotive's pulling and climbing capabilities while enabling it to stay on metal track much better.

Magne-Traction became standard on locomotives. Or it was until the Korean Conflict and resulting shortages of Alnico magnetic material interrupted the process. As a consequence, Lionel felt compelled in 1952 to release versions of the Turbine as well as the Berkshire (nos. 671RR and 726RR, respectively) and a reissued 675 and 2025, all lacking Magne-Traction.

Hudsons galore

Pleased as Lionel's engineering and sales crews were about Magne-Traction, they could have guessed the return of a nearscale model of the New York Central's 4-6-4 Hudson would overshadow it. In 1950, to mark the firm's golden anniversary, Lionel brought back what many observers claimed was its finest O gauge steamer. The no. 773, even if not entirely to scale, still had the latest features, notably Magne-Traction and a smoke mechanism.

Also in 1950, Lionel added a modified Hudson to the O-27 line. The no. 2046 shared a New York Central heritage with its O gauge counterpart. Its boiler casting derived from one developed for the Berkshire. The 2046 ran through 1951. Then the no. 2056, a twin lacking Magne-Traction, replaced it for 1952, only to have Lionel revive the 2046 for 1953. LIONEL SCOUT

1110 Scout 2-4-2 and Tender

he announcement in the opening pages of the Consumer Catalog for 1948 still causes readers to stop and stare: "The biggest model railroad news in years!" Bigger than the smoke mechanism Lionel had created? Bigger than the realistic remotely controlled knuckle coupler? Bigger than the automatic milk car or the F3 diesels?

1949

1110

The bold copywriter dared tantalize designers and customers alike when he declared Lionel about to introduce something greater and more important.

The inaugural Scout outfit! A brandnew freight train intended to appeal to families without too much money to spend

on a toy. Lionel stood poised to engage in battle with Louis Marx & Co. The chief weapon to be employed in combat ended up being the no. 1110 steam locomotive and tender new in 1949.

Missing the mark

Common sense and the bottom line told Lionel's leaders they should attend to the low end. Selling basic outfits with few frills did much to pad the financial reports and put a smile on the faces of accountants and stockholders.

Demand for electric trains skyrocketed after the war. Lionel needed to respond because Marx with its low-cost sets and Hafner with its windups continued to snipe at the giant and steal customers.

Elementary O-27 trains retailing for around \$20 apparently had failed in 1946 and 1947 to secure a key segment of the market for Lionel. Time, executives concluded, to devote resources to accomplishing that goal. The pair of Scout sets heralded in 1948 as news of enormous significance represented their best hope.

Not ready

Designers handed the task of forming the Scout roster reached a fateful decision. To save money and give the train a unique identity, they devised a new coupling system incompatible with every other regular-production model. What they

> deemed Manumatic Control relied on an ancillary piece to uncouple the cars. Operators had only to press the button on

the controller to release one of them.

The brand-new no. 1001 steam engine and tender, derived from a 2-4-2 Columbia type, featured a puny motor. Cutting production costs dictated leaving off a three-position reverse unit.

Lionel packed the 1001 in two sets in 1948, each with a price below \$20. One train consisted of two freight cars and a caboose; the second offered three cars. Minimal decoration covered the lightweight unpainted plastic rolling stock.

All too soon, many consumers felt they had been fooled by the so-called big news. The plastic motors in their Scout steamers quit working or proved too weak. Being unable to couple the cars to regular O-27 models left them frustrated.

An improvement

Angry customers and complaining repair personnel drove home the vital point that Lionel had to remedy the Scout debaclefast!—without pushing retail prices higher. Exasperated designers left the rolling stock alone. They refused to disown Manumatic Control. Those aspects of the line carried forward into 1949.

Attention went to the locomotive, condemned as the culprit in the show. Gone was the 1001 and in its place rolled a better, more dependable performer.

Even before 1948 had ended, engineers had finished an upgraded steamer, the no. 1101. That uncataloged 2-4-2 had a die-cast metal body instead of the plastic one used for the 1001 steamer, a metal motor, and a three-position reverse unit.

Further tinkering with an eye on holding down costs brought forth the no. 1110. Lionel cataloged that 2-4-2 and its no. 1001T non-whistle tender in 1949 and again in 1951 and 1952. The 1110 retained the die-cast body painted black. But designers had no choice but to revive the plastic motor and two-position reverse.

Where it fits

The 1110 earns a spot as part of Lionel's strategy for conquering the market. Consider the slightly modified Scout engine as an artifact with historical significance rather than a solid O-27 performer.

- Illuminated but lacked headlight lens; also lacked smoke unit
- Whistle tender not included
- Replaced in 1950 by no. 1120 equipped with Magne-Traction
- Sold only as outfit component

2245 *Texas Special* Electro-Motive F3 A-B Units

arketing possibilities multiplied after designers completed work on the first replicas of an F3 diesel. Initially, though decisionmakers cataloged models with just the names of the two railroads whose investment had underwritten the research and development. New York Central and Santa Fe were all from 1948 through 1951.

A significant trend took off a year later, when Lionel brought out the next F3s. They came decorated for a western railroad, perhaps reflecting a campaign to bolster sales in a different part of the country. From then on, Lionel gambled with its diesels. They featured road names with regional appeal at best. A key example of what Lionel hoped to achieve was the no. 2245 *Texas Special* F3 A and B duo.

Indiana rival

Intense demands for electric trains after the war ignited fierce competition. Lionel

acted to counter some of what its major rivals—Gilbert and Marx—were doing. Smaller companies, content to nip away at less-prosperous segments of the market,

annoyed but hardly threatened the giant.

American Model Toys, based in Auburn, Ind., initially bewildered Lionel. AMT's streamlined passenger cars and near-scale freight cars eventually sparked serious responses as Lionel refused to concede important and profitable fields. In time, AMT also introduced O gauge models of Electro-Motive F7 diesels that bothered Lionel, although it already ruled the roost with its more reliable F3s.

Members of the Engineering Depart-

ment, like their peers in Lionel's sales offices, tallied the diverse road names AMT used on its diesels. One, in particular, intrigued them. Red-and-white F7s came decorated not for a railroad but for a passenger train crossing the Southwest.

The Texas Special

Something different

Not since the prewar period, with the introduction of the Standard gauge *Blue Comet*, had Lionel cataloged a model based on a full-size passenger train. But competition with AMT explained the decision to paint and letter F3 A and B units for the *Texas*



Special, which ran between St. Louis and San Antonio over the St. Louis-San Francisco Ry. and Missouri-Kansas-Texas RR.

Cautious marketers proved reluctant to pair the 2245 combination brought out in 1954 with streamlined passenger cars bearing *Texas Special* markings. Yet they did take a few bold steps with the F3s.

To start, the non-powered unit they matched with the powered A unit ended up being a B unit. Never before had Lionel done that with its F3 diesels.

Second, planners designated the *Texas* Special A and B units as O-27 entries. Making them the first F3s assigned to the less prestigious half of the train line. The 26"-long duo led a freight outfit and a passenger set in 1954, besides being offered for separate sale. Lionel put them in only a passenger outfit in 1955.

Real beauties

The 2245, in spite of being equipped with only one motor (horizontally mounted in 1954 and vertically a year later), muscled boldly ahead with Magne-Traction and a three-position reverse mechanism. The A unit presented a blinding headlight and an operating knuckle coupler on its pilot.

Terrific looks distinguished the *Texas Special*. Early production featured a silver-painted chassis with a red-painted pilot and silver side frames with steps. Then the pilot evolved to silver, and the side frames were blackened chemically.

The plastic shells dazzled with their glossy red paint. Laborers masked the lower portion by hand before screen-printing each side white, with lettering and details carefully cut out of the tape to remain shiny red.

A white five-pointed star on the nose and two-piece ornamental horns on the roof added class. As did decals of the heralds of the sponsoring Frisco and MKT.

- **\$39.95 (\$357.39)**
- Price dropped to \$29.95 in 1955
- Drawbar pull of 8 to 10 freight cars
- B units with closed portholes released late in 1955



2321 Lackawanna Fairbanks-Morse H-24-66 Train Master

ionel, the diesel kingpin when it came to "covered wagons" and switchers, fell behind with heavy-duty road units. Gilbert scooped its rival in 1950 by releasing no. 370, its S gauge model of an Electro-Motive Division GP7. Executives and engineers at Lionel plotted revenge. The only issue was which road diesel they would model in O gauge. Something else from General Motors would have been logical, and in 1953, an advertisement showed a preliminary model of what looked like an EMD SD9.

Yet that engine never entered discussions for mass-production at Lionel. Instead, the toymaker took its cue from a

massive 2,400-horsepower, six-axle hood unit Fairbanks-Morse began shopping in 1953. This powerhouse, designed for

freight and passenger service, carried the impressive title of "Train Master."

Auspicious debut

Despite the efforts of public relations personnel with Fairbanks-Morse, the boxy yet powerful H-24-66 Train Master tempted only a few railroads to place orders.

Regardless, Lionel took notice of the Train Master. Their "scale-length" replica, 16½" long, made its debut in 1954—one more reason collectors laud that year's line as among the best in history.

The 2321 Train Master is one of the landmark O gauge locomotives of the era. Mechanically, it lived up to its billing in the Consumer Catalog as a "Power Giant." Designers packed two worm-drive motors equipped with Magne-Traction plus a three-position reverse unit inside the injection-molded body shell. No wonder the Train Master was capable of pulling as many as 24 freight cars. Don't forget the other outstanding components. A beaming headlight at each end, along with operating knuckle couplers



and a blasting horn delighted owners. The six-wheel passenger trucks featured "delicately molded springs and hand brake

connections," according to the description in the Consumer Catalog.

Picking a name

Key people on the engineering and sales staffs saw the wisdom of starting with one of the railroads owning Train Masters. Therefore, factory personnel painted and lettered preliminary O gauge samples for the Delaware, Lackawanna & Western, the Reading Lines, and the Southern Pacific.

Those attractive mock-ups went on display at national and regional toy fairs. Evidently, industry insiders voted for the Lackawanna. Lionel fell in line and offered a model with a simplified scheme.

The process began with the body shell being painted maroon. Then, after workers masked selected areas by hand, they sprayed on gray, like Lackawanna Train Masters. Originally, they left the roof maroon. Undoubtedly an aesthetic benefit, that step demanded additional painting to cover overspray. To save pennies and minutes, supervisors opted for a gray roof.

Consumers praised the rubber-stamped yellow stripes and maroon lettering. Gratifying them as well were the decaled Fairbanks-Morse medallions on the sides and the Lackawanna heralds on each end. Those details, not to mention the wire handrails, enhanced the 2321.

Solid sets

The Train Master looked confident, bold, and strong. Planners used the 2321 as the motive power for a pair of excellent freight outfits in 1954 and another in 1955.

Five-car outfit no. 2223W, nicknamed "Big Haul" in the 1954 Consumer Catalog, stood out with its two animated cars (3461 log car and 3482 milk car) and no. 6417-25 color-coordinated porthole caboose. The star was no. 6464-100 Western Pacific boxcar with its orange body and short blue feather.

The 2321, like the other two models of a Train Master added in 1955 and 1956, exemplified the commitment at Lionel to merging toy-like elements with scale realism. No other O gauge locomotive, not even the F3, raised the line to such greatness in the middle of the postwar era.

- **\$43.50 (\$389.15)**
- Separate sale only in 1956
- Priced reduced to \$39.95 in 1955
- Front end equipped with headlight and Mars light



60 Lionelville Rapid Transit Trolley

S ometimes the best ideas are actually revivals of old ones. Manufacturers, including businesses producing miniature electric trains, return to what has worked for them or even a competitor in the past, and breathe new life into it.

Lionel accessories and motorized units seemed ripe for revivals. A station or loader could, if modified slightly, be made a worthwhile addition. More telling were those small items equipped with a motor whose form or function hearkened back to what Lionel had done before. A terrific example was the no. 60 Lionelville Rapid Transit Trolley.

Old business

When Lionel introduced the 60 in 1955, grizzled veterans of the toy train fraternity might have been excused for grumbling about how the little plastic trolley paled in comparison to what the company had marketed almost half a century earlier.

The text in the Consumer Catalog for 1955 claimed the model of a Birney type of trolley was "new!" The Lionelville Rapid

Transit Trolley could be used, the copywriter claimed "on a separate street railway, or as an 'interurban' on your main line."

"New"? Didn't anyone remember how, 40 or so years earlier, Lionel had cataloged trolleys or, more accurately, streetcars? They had been big business, right from the time Lionel introduced Standard gauge trains in 1906. The firm had offered sturdy models fabricated out of sheet steel and equipped with four or eight wheels and featuring open or closed platforms through 1916. True, Lionel had not made an O gauge trolley during the decades immediately preceding and following World War I. Neither had it endeavored to do so during the first part of the postwar era.

Back in

But in 1955, a year after Development Engineer Frank Pettit devised the no. 50 Section Gang Car, something clicked. Perhaps he just showed how the mechanism he had developed could be adapted to a trolley.

Pettit had equipped the 50 with a special motor and drive mechanism. When the Gang Car rammed a bumper or another train, a shifting metal plate slid backwards. That briefly broke the motor's electrical circuit before reconnecting it, but in a way that caused the motor's armature to reverse direction. The back-and-forth

> bumper action generated interest and laughs. Ouickly Pettit forured

Quickly, Pettit figured out how to use the same mech-

anism on a trolley. On making contact, the 60 shifted course and the pole on its roof swung around. None of the prewar trolleys ever did anything like that.

Younger executives with no memory of Lionel's old trolleys, would have enjoyed the animation. The elderly Joshua Cowen must have been pleased at how they were using an old concept to invigorate the line.

Few changes

Most of the features on the Lionelville Rapid Transit Trolley stayed the same during its four years in the catalog. The unit had an unpainted yellow plastic body and unpainted red roof, a rotating overhead pole, and internal lighting. Window strips secured to the interior depicted the silhouettes of passengers.

The earliest examples had hot-stamped black lettering (a few rare examples had red markings), roof slots, two-part spring bumpers, and metal motorman silhouettes. Soon the motorman silhouettes were eliminated. Then hot-stamped blue lettering became the norm over the remaining years.

Later variations used a solid one-piece bumper. Then designers added four more clerestory vents. The lamp, once partially painted silver, was left unpainted once the underside of the roof was fitted with an aluminized paper reflector.

Watching a Lionelville Rapid Transit play bumper cars on a main line or a separate track was a joy. That motorized unit likely put a smile on the face of Cowen as he recalled how Standard gauge trolleys and interurbans had helped his fledgling business grow into a national institution.

- \$7.95 (\$71.39)
- 71/16" long
- Cataloged from 1955 through 1958
- Variations related to lettering, clerestory vents, and bumpers



3927 Track Cleaning Car

otorized units served an important purpose for sales executives. Individuals at the helm never imagined someone would buy a lightweight diesel, a snowplow, or another item as a primary purchase. An outfit, including a locomotive and railcars, should be first. But to keep tempting consumers, there had to be a diverse assortment of auxiliary items. Accessories were obvious; then came motorized units.

Designers and marketing men wanted to appeal to Lionel fans in different ways to entice them to acquire a motorized unit. Entertaining them opened doors. So did promising prototype realism. A third method, one used infrequently, related to need. Offer modelers something necessary to improving the operation of a train. For that reason, in 1956, Lionel introduced the no. 3927 Track Cleaning Car.

A bit late

How often did Lionel operators worry about the cleanliness of their track? Not a concern to cause them to lose sleep. But designers and marketers imagined they could boost sales if they planted the idea in the minds of enthusiasts.

Already, the clever if insidious scheme

had helped a competitor. The A.C. Gilbert Co. had introduced a novel piece of rolling stock intended to clean and buff

its American Flyer S gauge track. Engineers had for 1952 modified a 10¹/2"-long depressed-center flatcar by installing four felt track wipers. Two were saturated with cleaning fluid to wash the rails; the other wipers dried and seemed to polish them.

The ploy succeeded magnificently. Any S gaugers focused on maintaining sidings and main lines would couple the no. 648 Track Cleaning Car to the engine guiding a freight or work train and let it traverse the layout a time or two. A version of the specially equipped flatcar equipped with knuckle couplers followed the 648. That model, the no. 948, gave way to the no. 24533 Track Cleaning Car, which lasted through 1966.

Motorized cleaner

Members of the Engineering Department at Lionel, observing how S gauge operators responded to the campaign for cleaner, shinier track, felt strongly motivated to surpass their counterparts at Gilbert. Instead of devising a unique railcar for the task, they upped the ante in 1956 by inventing a motorized track cleaner.

How it did its job was straightforward. Integral to operation, of course, was the motor. Unlike the Flyer car, whose wipers merely rubbed over the rails, the Lionel

> unit featured a brand-new mechanism that, once manually switched on, rotated a sponge on the no. 3927-47 plate assembly.

Meanwhile, cleaning liquid in the plastic bottle secured to the cab assembly passed from a well on top to the rotating sponge below. The Track Cleaning Car, securely coupled to a locomotive, washed the rails as the saturated sponge turned.

Seconds after washing was done, the procedure ended with the track being dried. The absorbent cotton cylinders attached to the spring-loaded wiping carriage at the rear of the unit dried the rails. Layout owners liked seeing all three shine brightly.

Fresh start

Engineers developed every major component used on the 3927 specifically for that novel motorized unit. Key pieces, notably the frame assembly, handrail and switch assembly, cab assembly, sponge and plate assembly, and wiper carriage assembly, were invented for the 8¼"-long unit. Other parts were borrowed from other motorized items.

Nobody painted the orange plastic body. Laborers did hot-stamp Lionel Lines and the four-digit product number black. The fixed die-cast metal coupler meant the 3927 needed to be coupled to a locomotive or whatever railcar finished the train.

Once designers had completed their part of the process, the advertising and sales teams took over. They avidly pitched the novel unit to Lionel loyalists. Nothing could be more essential for superior performance, they contended, than clean track.

Should consumers agree and put a Track Cleaning Car high on their list of what to buy next, executives were more than ready to sell refill items. They insisted that only Lionel's cleaning fluid would work with a 3927. Soon, the line included cans of no. 3927-75 Track-Clean plus packs of no. 3927-50 track wipes.

- **\$12.95 (\$114.57)**
- Cataloged from 1956 to 1960
- Price reduced to \$10.95 in 1959
- Listed with "Operating Action Cars" in catalogs





3620 Lionel Lines Rotating Searchlight Car

ometimes with Lionel, the best ideas yielding the most popular kinds of rolling stock had to wait. Yes, for reasons never quite clear, the men at the top might hesitate to proceed. Or they would deliberately choose to delay certain projects.

An outstanding and puzzling example of such inaction after the war was an operating searchlight car. Instead of reviving a prewar model right after the war, Lionel waited to release a new type in 1949.

Then the firm moved ahead with more sophisticated searchlight cars over a

12-year span. The first three of those five models were basic in appearance, but their operation went from mainly manual with

the no. 6520 to wholly automatic with the no. 3620 Rotating Searchlight Car.

Prewar invention

The idea of mounting one or two floodlights on a toy railcar was not new. Lionel had introduced searchlight cars for both its Standard and O gauge lines in 1931.

Throughout the 1930s, operating floodlight cars occupied spots of prominence. In fact, two models—nos. 2620 and 2820 remained in the O gauge catalog until production was suspended in 1942.

Surprisingly, then, engineers and executives held back after the war. The only item in 1946 with anything close to a searchlight was the deluxe model of the brand-new wrecker caboose. The no. 2420 was it. Lionel appeared content to let the Gilbert Company dazzle consumers with a true searchlight car for its American Flyer line.

1949 arrival

We'll never know why the largest toy train maker did not herald its first searchlight car of the postwar era until 1949. In that year, the no. 6520 made its debut as a set component and a separate-sale item.

That car boasted a look unlike any searchlight car seen before the war. The design departed from a flatcar with a light mounted on a pressed steel frame.

Lionel's model makers took the die-cast metal depressed-center chassis they had created for the no. 2461 Transformer Car (new in 1947) and adapted it to hold a modern-looking metal searchlight. With the 6520 the light could be switched on by remote control but rotated strictly by hand.

Designers did something beyond just substituting a heavy depressed-center flatcar for a plain model. They came up with a small generator, to be molded out of plastic and mounted at the end of the 6520 opposite from the floodlight. That generator came in green, maroon, or orange.

Besides creating a model that looked up to date and felt hefty to a child, Lionel improved its searchlight car by developing a brand-new floodlight that, like the generator, seemed to be in the right proportion to the car. Now, the firm had a new operating model that looked right on an O gauge or an O-27 work train.

Getting better

The only drawback with the 6520 related to its operation. Owners could maneuver the floodlight only by hand.

Leave it to Development Engineer Frank Pettit to correct the shortcoming. He adapted a vibrating mechanism he had been tinkering with for the searchlight car. Once the floodlight was illuminated, rubber "fingers" on its base rubbed against the round platform beneath it so the light could rotate automatically.

The improved searchlight car, designated no. 3520 and introduced in 1952, promised more control over how the light went on and off and where it shined.

Designers went on fine-tuning the model until they had one whose operation had nothing to do with remote control.

The 10"-long 3620, introduced in 1954 and cataloged for two more years, depended entirely on track power to illuminate and swivel around a darkened room. Hands-off operation had finally arrived, and kids loved watching the bright light rotate while their favorite locomotive pulled the searchlight car over main lines.

More information

- \$7.95 (\$71.35)
- Cataloged from 1954 through 1956 as both set component (O-27 and O gauge) and separate-sale item
- Searchlight housings (part 3520-12) were unpainted gray or painted gray over orange plastic

Flatcars



6434 Illuminated Poultry Car

S tudy the immense variety of freight cars cataloged during the postwar era and interesting changes become apparent. Designers worked daily to improve the roster. They searched for little ways to make models more appealing to the public and less costly to produce in quantity.

Perhaps one employee had a brainstorm about how to transform the humble nearscale stock car. Introduced with fanfare in

1954, that model had been languishing ever since. Nothing helped, even a new paint scheme that was part of its transformation in identity two years later.

Missing from the two-level stock car, someone in engineering must have declared, were animals. Kids needed to see the cargo it carried. Willing to try anything, designers finished artwork showing the small livestock typically transported in stock cars with two levels. From their fertile minds burst forth in 1958 the no. 6434 Illuminated Poultry Car.

Slow going

Confidence in the appeal of a stock car seemed to wax and wane at Lionel. The company had dragged its feet after the war, not cataloging a model until 1949, when it broke into the market with an operating car that worked in conjunction with a corral to simulate the movement of tiny cattle.

Lionel followed with a non-operating stock car in 1950. Then, pushed by the near-scale versions from American Model Toys, they had abandoned the short stock car in favor of a longer model in 1954.

The inaugural 11¹/4"-long stock car differed slightly from the railcar typically envisioned. People usually associated stock cars with the transport of cows. The

1958 an

No big deal! Lionel announced the yellow-painted stock car with black New York

POULTRY DISPATCH

Central markings with excitement. It put no. 6356 in one O-27 and three O gauge outfits in 1954. The next year, though, the model was not a component of a single outfit, with its inventory being sold separately.

Planners dropped the 6356 after 1955 and invested their hope in a novel car. They recommended painting the plastic shell white and calling it the no. 6376 Circus Car. Cautiously assigning the updated stock car to only one O gauge set for 1956, they must have been disappointed by the response. The 6376 ended up as a separate-sale item in 1957, leftover stock likely being sold off.

Timely change

The line for 1958 saw the individuals in charge adopting two approaches with stock cars. For some reason, they imagined another basic car might appeal if given the right road name. Out came the no. 6556 Missouri-Kansas-Texas model.

Collectors now prize the red-painted car with white hot-stamped markings, which Lionel produced in low numbers. Yet knowing the 6556 did not return for even a second year in the catalog suggests it failed to captivate many consumers. Enthusiasts did take more of a liking to the 6434, which shared several traits with the M-K-T stock car, right down to the plastic body shell painted red. Setting the Illuminated Poultry Car apart were, of course, the four translucent panels fabricated out of polystyrene on which were printed rows of chickens and turkeys. Interior illumination made it easier for onlookers to see all the poultry.

Louis Melchionne, who handled various artistic tasks for Engineering, created the illustrations of hens, roosters, and so forth that were reproduced on polystyrene panels, held in place with eight small gussets.

Laying eggs

Five Super O outfits cataloged for 1958 featured an Illuminated Poultry Car, including the sole set containing a 6556 M-K-T stock car. Safe to say, therefore, corporate leaders believed the 6434 would impress potential customers.

Unfortunately, after seeing the upgraded stock car offered for separate sale only a year later, the conclusion it missed the mark was unavoidable. All Lionel could do for 1959 was exhaust whatever inventory of 6434s was left while hoping to do better with an operating version—the new no. 3434 Chicken Sweeper Car.

- \$6.95 (\$58.06)
- Cataloged in 1958 and 1959
- Component of no. 2543WS Super O Berkshire Freight Outfit in 1959



3366 Operating Circus Car and Corral

he mark of a great business in any field is the ability of its leaders to continue to innovate and develop new products while at the same time constantly improving its current line. Achieving both goals should enable it to withstand challenges in the marketplace because it succeeds at exceeding the expectations of customers.

1959

The no. 3366 Operating Circus Car and Corral, an animated car that came with its own accessory, epitomizes much of what was best about Lionel. For this

model represented, not the first incarnation of an operating stock car with an unloading and loading mechanized platform,

but an ongoing improvement of something that had already proved to be popular.

Starting small

The story of the animated circus-oriented car and its platform introduced by Lionel in 1959 went back a decade. The big news in 1949, besides the first diesel switcher and operating boxcars in the line, was a new operating car that used an accessory to replicate the shipment of cattle.

Driving the development of the no. 3656 remote-controlled cattle car and platform was the success of the no. 3462 milk car. That revolutionary model had been selling in amazing quantities since entering the line in 1947. Lionel's leaders pressed their designers to duplicate it.

Frank Pettit, named the "development engineer," proved to be up to that task. He developed an operating car that made fuller use of its platform than did the milk car to enable kids to imitate an activity found on railroads throughout the West.

Vibration generated by electricity could, Pettit saw, cause figures placed on

top of a special surface to shake and move. Specifically, he installed a remote-controlled solenoid on the underside of

both a special stock car and the base of the platform of the metal corral used with it. By activating these solenoids, an operator started the runway inside the car and the floor of platform buzzing and vibrating.

Once everything was vibrating, rubberized cows would move, thanks to "fingers" glued to the underside of their bases. Pettit aimed for the beasts loaded inside the car to move ahead, through the opened door, and down a ramp. Cows would shuttle around the confines of the stockyard and be directed to climb up the other ramp.

Trying horses

Too bad the cattle fell down or meandered in circles once in the stockyard. So Lionel kept modifying the platform in hopes of eliminating those frustrating problems.

A better idea arrived in 1956. Having dropped the 3656, Lionel released a superior item. The no. 3356 Operating Horse Car and Corral looked better, and its newly designed metal and plastic platform worked more consistently and reliably.

The improved design of the platform, with its narrow, curved channel, pleased modelers. The mechanics of that operating car and accessory had not changed from Pettit's original design. But the sleek horses (a step above the pudgy cows) almost pranced around the yard.

Circus time

Lionel kept the 3356 in its line through 1959, offering it for separate sale and as a component of five outfits. Then it replaced that car and its corral with all-but-identical ones molded in white and gray polystyrene, respectively. The 3366 Operating Circus Car had a red-painted roofwalk and red hot-stamped graphics.

Smart—or desperate?—to attempt to boost sales of an item that might have worn out its welcome by changing its identity. Lionel had sought to exploit the popularity of the circus with a Mickey Mouse train in the middle 1930s. It hoped an operating car and corral with a similar theme would again win applause.

- \$17.95 (\$148.92)
- Came with no. 3366-100 box with nine white vinylite horses
- Cataloged from 1959 through 1961
- Part of only one outfit: no. 2555W for 1960