

# THE ATLANTIC DIVISION EXPRESS



**SUMMER 1991**

**TRAIN COLLECTORS  
ASSOCIATION**

ATLANTIC DIVISION EXPRESS

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SUMMER, 1991

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Atlantic Division - Train Collectors Association  
2933 N. Wales Rd., Norristown, PA 19401

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EDITOR  
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ATLANTIC DIVISION MEETS - 1991 - WESTOVER C.C. - NORRISTOWN, PA.

Sunday, July 21, 1991  
Sunday, September 22, 1991  
Sunday, November 17, 1991  
Sunday, January 19, 1992

ON THE COVER

A rare item made by *Voltamp*, one of the earlier toy train manufacturers, is shown. Although not a toy train item, I felt it was rare enough to justify putting it on our cover for some of you students of *Voltamp* to see. Another few words about this item are found on page 7.

On pages 3,5, and 6 you will find some items requiring answers from you readers. Many questions have been posed in past Atlantic Division Express issues with nary a reply since I have been editor. Doesn't anyone read this 'mag' or are the questions too hard? The *Express* goes to only about 950 train collectors so I certainly don't expect that we should break my mailman's back with responses about any particular question. But, I do think there must be some of you who can occasionally input some data regarding an item or two. Frankly, I think that some of the things we do are of sufficient historical interest that I wish the *National TCA Quarterly* would lift them from the *Express* and print them nationally. With 20,000(+) readers the possibility of more data is intriguing.

Meet photos may be found on pages 4, 8, and 9, and some more paper from the Warren Schuch collection can be found on the back cover. Hope you enjoy them. Lastly, the "uncataloged set" series continues with both a pre-war and a post-war set being described.

A Comment from Al McDuffie

In the Summer, 1990 issue of the *A.D. Express* was an article (pp.10-12) postulating that the identity of an '027' boxcar might be a "Super Scale Models" product. No one has yet responded regarding this item. As indicated there, I had written to Al McDuffie about this car and his response was reproduced there. Since he was writing this response Al chose to send some other comments regarding past issues of the *Express*. One of these referred to a street light pictured on the cover of the Winter, 1989 issue. This photo is reproduced on the right. Al writes:

" I am very curious why the lamp post on the cover (left) is called a Dorfan? I had Dorfan catalogs for 1928, 1929, and 1930 and no such item is listed or shown. Now, the base on this post was used by Dorfan for a flagpole...Dorfan's lamp posts are crude - specially the over hanging model. I suspect that the mast and lamp unit on this item is a Fandor? I don't know if Dorfan owned the die for this base or whether it was shipped in from Germany as were stations, tunnels, and bridges?? There was a German toy firm (autos mostly) that produced lighted stamped metal lamp posts and semaphores for 'O' gauge use for years. Unfortunately I can't now recall their name. Signals were made with German or English blades."

Well, readers, what do you think? Can anyone identify this unusual street light? And, since the subject of Fandor has been brought up, does anyone have any of their catalogs? I've never even seen one!



Along with the Satterthwait memorabilia which completely filled the last issue of the Express was a little two sided sheet which is reproduced full size on the next page. I think it may be of some interest to you "Reading" fans and, I hope, some of you might let us know more about this model. It is possible that one of you or your parent may have been one of these apprentices who built this model. If so, please contact me. The model shown on this flyer really looks super! The prototype class G-1-sa locomotives were built for the "Reading" by Baldwin in 1924, while the streamlining for the "Crusader" was attached to the class in 1937. It follows that this model was then probably constructed during this time period.

The questions I would like answered are: (1) When was it constructed? (2) The flyer says "the finished locomotive is now on exhibition..." Where and when? (3) Where is this beautiful looking model today? It seems highly unlikely that a one ton model was tossed in the trash can! (4) If it is still around, does it still work?



One of the interesting things about Atlantic Division meets is the display that we always have and to which many people contribute. The January, 1991 meet featured "signals". But, much to everyone's surprise the beautiful and rare item shown below appeared.

Francis Audia of Cameria, PA brought this American Flyer dealer display and set it up for us all to admire. It is made of thick cardboard and came with the train set shown in the photo. The coloring is really sharp! Fran tells me that it is dated by being pictured in a 1920 copy of *American Boy* magazine. He also said that another variation exists that differs in respect to the appearance of the boy on the left. The tunnel portals are open and it is designed to put a circle of track through them so that the dealer could continuously run a train. It must have been quite an attention getter. Fran, thanks for bringing it.





WORKING MODEL

**Passenger Locomotive—Pacific Type G1-sa**

Built by Apprentices in Reading Company Shops, Reading, Pa.



READING RAILWAY SYSTEM

1957

**BUILDING THE MODEL**

The Reading Company Junior Boosters organization, composed of Reading Company apprentices, decided to undertake the construction of a model locomotive, on their own time, with the approval of the Management. The apprentices felt that the project would be a valuable addition to their shop training and provide pleasure as well.

It was decided to construct an exact one-eighth scale model of the Reading Pacific type passenger locomotive, Class G-1-sa. They followed this plan faithfully, and the finished locomotive now on exhibition is the result of their perseverance in the work of developing this model. The apprentices made their own drawings from the original designs and the model is in every respect one-eighth actual size.

Fifty-two apprentices did active work on the model, such as making the drawings, patterns, machining parts, building the boiler complete and assembling the parts, so that the result is a complete working model of a modern Pacific type passenger locomotive.

**COMPARISON OF THE MODEL WITH THE ORIGINAL DESIGN**

Scale— $\frac{1}{8}$  inch equals 1 inch

<i>Item</i>	<i>Original</i>	<i>Model</i>	<i>Item</i>	<i>Original</i>	<i>Model</i>
Cylinders	25" x 28"	3 $\frac{1}{8}$ " x 3 $\frac{1}{2}$ "	Total weight of engine and tender	457,300 lbs.	1,991 lbs.
Driving wheels	80 in.	10 in.	Total heating surface	2,984 sq. ft.	47.3 sq. ft.
Boiler pressure	220 lbs.	40 lbs.	Grate surface	94.5 sq. ft.	1.48 sq. ft.
Tractive power	40,900 lbs.	116 lbs.	Total wheel base	71' 8 $\frac{1}{2}$ "	8' 11 $\frac{5}{8}$ "
Total weight of engine	273,600 lbs.	1,712 lbs.	Length overall	81' 0 $\frac{3}{4}$ "	10' 1 $\frac{1}{2}$ "
Total weight of tender	183,700 lbs.	279 lbs.			

*The original locomotive is the same type as that used on the "Crusader."*

(over)

MORE THOUGHTS FROM AL McDUFFIE

In addition to Mr. McDuffie's questioning the identification of a signal (see p. 3), Al also had some comments regarding the "houses" display that was pictured in the Phil Ritter meet report found in the Spring, 1989 Atlantic Division Express. Here is exactly what he had to say.

"Loved the articles on houses. (This would have been in my planned book.) ...Too bad the group photos are so small. Others not mentioned that come to mind are: 1) Atlas Tool Co...Metal Station with houses for "O" ; 2) Life Magazine's 4 cardstock 1/4" scale houses (pre-war) ; 3) GE had a New England 2-story house that fit "O"; 4) An assembled terminal station and trainshed (white) made near the end of WW II that was pirated from "Trix Many Ways" designs (HO) but for "O" gauge. (Used fine chicken wire in the windows and in the roof of the shed.) 5) Lincoln Logs had a cardstock station as part of its figure sets.; 6) A series known as "Pretty Village" (O size) made from circa 1897 to WW I - one period you glued buildings together - another the buildings were fitted with hospital tape so that you opened them up and their roofs made them stay in shape! A pirated version appeared circa 1929 on paper to be glued and looked like comic pages from newspapers - plates for same obviously made from a set of them and quality not good.

One other comment on structures - I saw one set (in the east) of a box labelled J-MAR or J-LINES (?) (Marx ?) which consisted of about 5 metal litho'd buildings. (No punched details such as windows.) I can only recall a station, freight station, switch tower and two others of which one may have been a tool shed? This was early 1970's...all structures litho'd same colors - R.R. tan with brown trim...set was brand new condition too.

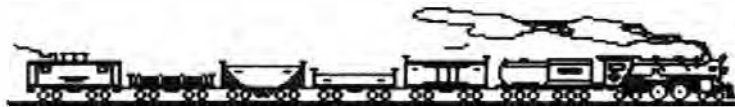
Years ago I worked with Plasticville and suggested some items they made. I did one for Unlimited Plastics (Littleton) before they were sold to Banner Toys but they couldn't afford to tool for it. (A bus depot using basic supermarket parts.) Bachmann signed a contract with Disney to reproduce Disneyland structures but the deal fell through. I saw slides of the sample Disneyland Station which cost them \$2000 to make by hand. - I suspect just too expensive to make at the time, more elaborate than anything done at this time. Another Plasticville "sample" was a working 4-wheel trolley car, battery operated! It was dropped because it couldn't be guided and therefore was uncontrollable."

Well, readers, how about some input from you?? If desired, I could do some small features about "Pretty Village" as well as some cardboard Marx stuff. But what about the rest? Some of you must have some of the metal Marx items and the Lincoln Log station. Bring them to Westover for photographing, or at least let me know you have some of these things and I'll

contact you regarding some other arrangements. And, what about the others? Does anyone have an "in" at Bachmann and could and would contact them to see if they have any old photos or other records stuffed somewhere regarding the Disneyland proposition and/or the trolley? Any such artifacts might make an interesting article.



On the next two pages are some photographs from our 11/90 Westover meet. One of the pictures taken there is shown on our cover. One of our regulars from Maryland, Frank Spence, brought this interesting piece of medical instrumentation. Voltamp, like some of the other early toy train manufacturers, made all sorts of electrical gadgets. Around the turn of the century, when electricity was still largely a mystery to the "average Joe", and engineers were just starting to learn some of it's properties and how to make it work for people, the medical people were experimenting with it also and concluding that electricity could cure all sorts of ills. Voltamp made the kit pictured here to cash in on this market. I suspect that it was made around 1910, but forgot to note the exact date in the instruction book. Frank tells me he sold it at York this spring. If the purchaser reads this, please contact me and let us know it's date. Quite an interesting and unusual piece, indeed.



SOME DEALER NEWS

From George Tebolt, Box 149, Spencertown, NY, 12165 : New reproduction parts!! #2333-60 F3 coupler and drawbar assy., \$9.50, # 622-58 coupler and drawbar assy., \$8.50, early solder-on handrail stanchion for Lionel # 38,42, and 150 series electric locos, \$0.75, 2046 tender floor, \$9.50, # 2333-12 F3 screen, \$1.25, # 2333-13 twin speed nut for F3 screen, \$1.00, # 2454-5 door guide and rivets, \$0.75, and # 3530-6 door guide and rivets, \$1.00. SAE (\$0.52) for complete lists.

At the 5/91 Westover meet I stopped by John Davanzo's table. (Pride Lines Ltd., 651 W. Hoffman Ave., Lindenhurst, NY, 11757). I was impressed. A number of years ago John bought the original molds for Manoil cars and is now producing this line of vehicles. Although they are not of my personal interests, I found them to be quite attractive. They are available in eleven basic styles and can be customized somewhat with "spare tire" and plating options. Prices are in the \$25 to \$40 range. John has even made a cute little freight train consisting of a Mickey Mouse style locomotive and tender pulling a series of flat cars holding the Manoil cars. Pride Lines is also coming out with his version of the Ives double dome station. Absolutely beautiful!! Contact Pride Lines for price and other details.

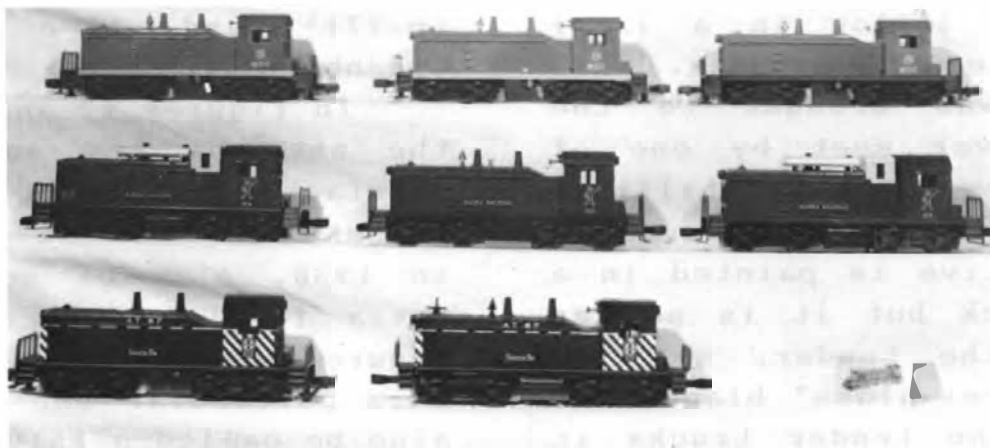
Activities at the 11/90 Westover meet. The happy prize winners (clockwise from top right). George Donze presenting Joe Wojtko with an intermodal crane set; Kathy Kushner with her Rio Grande switcher; and Pat Bigley with a T-1 (??). Jeff Netkowilz was selling clocks with a toy train motif.







Above: Leon Persky presents his son, Peter, with a special gift for his activities in the "Special Olympics". Upper right: Barry Grove checking a Flyer Shasta on the test track. Right: Carmen Conicelli Jr. introduces C.C. the III to the nuances of boxcar collecting. Below: a small segment of the diesel switcher display.



## UNCATALOGED SETS - Part XI

Lionel #5216E

CWW

Well, here we go again!.... another 259E set! I'm starting to think that during the thirties the marketing folks at Lionel sat around (at least once a year) saying to themselves "Well, what can we clean out with a 259 this year?". Actually, I'm not complaining as these little dickens do usually run very well. The 259 was catalogued in 1932 and the 259E in 1933 through 1938 (except 1935) so we would expect that it would be quite common and be found with many variations, which it is. But, it still seems a little wierd that they seemed to "pick on" the 259(E) and the similar 258 as far as uncataloged sets is concerned. Between these three locomotives we find in the TCA book<sup>1</sup> that thirty-three uncataloged sets are listed. Well, here is one that is not in the book and another will follow in a later issue of the A.D. Express.

This was brought to the 1/90 Westover meet by one of our regulars, Charlie Phillips. The set is shown in figure #1. The locomotive is painted in a glossy black but it is not as shiny as the tender, so I'll call it "semi-gloss" black. Except for the tender trucks it

seems to match the photograph on the very bottom of p.13 In "Standard of the World".<sup>1</sup> The loco drivers are of the "nickel, thick (or wide) rim" variety. Both loco and tender have all nickel trim except for the brass 'L' on the side of the locomotive cab and the rear of the tender and the brass "LIONEL LINES" plates on the tender sides. Tender trucks are of the variety commonly found on the 1670, series of '027' freight cars of this vintage (called type IV-A or IV-B in the Greenberg book [p.133]<sup>2</sup> and type IV in the TCA book [p.271]<sup>1</sup>). Sorry, but I forgot to note which of the two possible types they are. The tender bottom is rubber stamped "261-T".

The 607,607,608 passenger cars have one of my favorite color schemes: Steven Girard green with dark green roofs and cream inserts. The air tank ends and journal boxes are nickel while the observation platform is painted silver. The trucks on the cars are called type VII by the TCA book [p.271]<sup>1</sup> and type VII-A in Greenberg [p.135]<sup>2</sup>.

In figures #2 and #3 we see the set box end and the box manufacturer's stamp which implies that the set was packed in 1938. Also of note is the extra little sticker shown in figure #4 which tells us that this particular set #5216E can also be called a #5100-74.



Fig. #1 - The trains in the set.



Fig. #2 - The remaining boxes.

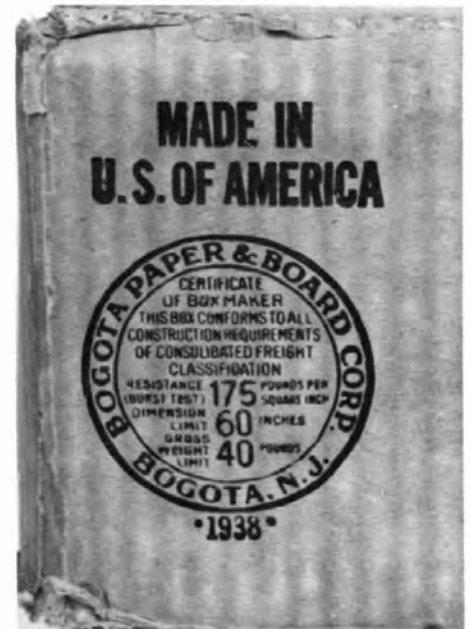


Fig. #3 - The Box manufacturer's stamp.

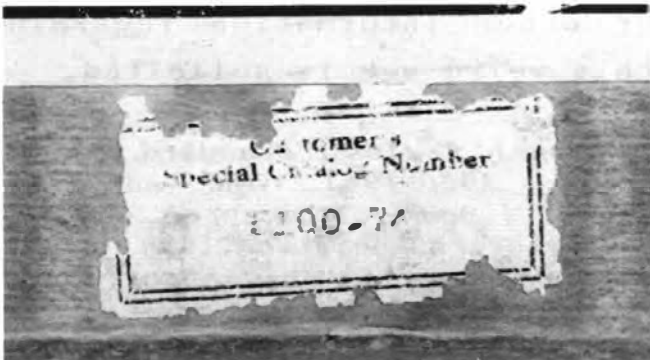


Fig. #4 - The special sticker.

Unfortunately this is where we run out of information. Everything surviving with this set, is pictured except for a 1935 instruction booklet. Thus we do not know what transformer or other paraphernalia might have come with this set and we don't know for sure if it was sold as '0' or '027', although the two "single item" boxes imply '0'.

If one compares this set and it's details to the catalogs, one finds some interesting shenanigans going on. In 1937 we see this set almost catalogued. That is, set #232E (or W) looks like this one except that the catalogued tender is 1689T or(W) and the cars have "underbellies" rather than the air tanks found in this set. The catalogued loco's drivers are "thin rim" rather than "thick rim". The catalogs also show us that on the 603 and 607 type passenger cars, air tanks were affixed through 1935. In 1936 the "underbellies" appear and are shown until these cars disappeared from the catalogs. The loco's drivers were common to 264's, 265's, 249's and 259's during this 1935-42 time period. We see the following in the catalogs: wide nickel rims

in 1935, thin rims in 1936, and some thin rims and some thick black rims in 1937 and 1938. The drivers on the catalogued 1938 259E sets appear to be of the thin rim variety. So, what does all this imply? Well, I'm not sure. But, it looks like the company took cars and tender from 1935 along with some 1935 drivers and put them into locomotive cabs from 1937 to come up with this set in 1938. It does seem hard to believe that they had 3 year old stock left around and it also seems implausible that they would have packed 1938 trains with 1935 instructions. In fact, it looks like this is an uncatalogued 1935 set that somehow made it's way into some other uncatalogued set's box from 1938! I suspect that the set really is from 1938, made mostly of old stock, but I really don't think that the 1935 instruction booklet actually came with the set. Any opinions or other information regarding this weird set is solicited.

. *Lionel Trains, Standard of the World, 1900-1943*, 2nd ed., The Lionel Book Committee, Train Collectors Association, 1989  
2. *Greenberg's Guide to Lionel Trains, 1901-1942: Volume II*, C.F. Rohlfsing, Ed., Greenberg Publishing Co., Inc., Sykesville, MD., 1988



Fig. #1 - The set components.

UNCATALOGED SETS - Part XII

Lionel Set # X - 802

CWW

Jack Turner of Audubon, N.J. who is a pre-war Lionel fan and who has brought pre-war uncataloged sets for our series surprised me when he showed up with this uncataloged postwar set. Jack saw it at a house auction and "just liked it".

The set components and their respective boxes can be seen in figure #1 except for the dummy A unit. We didn't bother showing this piece as it looks exactly like the powered

unit. Both diesel units are painted in the common red and silver AT & SF "Warbonnet" passenger locomotive graphics and do have the "BLT 8-57" date on their sides. The power unit is packed in a corrugated box labelled "218 P", while the dummy is packed in a regular orange box with the tear out front and is labelled "218 T". This type box holds all the set components except the power unit and the caboose and is called a "type 3D" in Tom Rollo's work on Lionel boxes (p.95)<sup>1</sup>. The two locomotive units have all dummy couplers and the power unit has two axles with magne traction.

All cars except the caboose have early plastic operating coupler trucks described by Algozzini under "1959 Production" and "1960 Production" (pp. 74-75) in his fine 6464 series in *Classic Toy Trains*<sup>2</sup>. The 6464-475 box car is of the type III(f) variety, has the 2-57 built date, and (I think) is molded in black plastic. The #6820 is painted light blue over a #6424-11 mold and holds a red helicopter with a black main blade and a red tail blade. There is no lettering on the copter and there is no evidence of it's having the little white rocket attached. If there ever was one, it is now gone. The #6175 rocket car is black (mold #6511-2) and holds a red and white rocket with "U. S. NAVY" lettering (not visible in the photograph). I am sorry, but I am not well enough acquainted with the #6519 Allis-Chalmers condenser car to have been able to note exactly which shade of orange this one is. The last component car of the set is a normal #6517 bay window caboose which was obviously a left over car thrown into this uncataloged set to get rid of them. We know this, as it was not catalogued after 1959 and, as you can see in figure

#1, it is packaged in an older box style than the rest of the components. The car built date is not underlined. The caboose is missing an end ladder, but both Jack and I feel that it simply disappeared over the years rather than thinking that the car is a variation or a factory error.



Fig. #2 - The set box end with the special sticker.

As found, the set contained no track but I would assume that it was marketed as an '027' set. It does have a #1053 transformer but it's box has disappeared. An instruction sheet for the Alco locomotives, dated 4-59, was included along with a 1960 instruction booklet. It is this booklet's date that I am using to assign 1960 as the marketing year. The set box is shown in figure #2 and is of no help in confirming the

set date. The box manufacturer's stamp tells us that the box was made by the "Star Corp. of Mass Peth, L.I., N.Y." and the number near the stamp is "8-4 B", which means nothing to me. Note that the set box is just a plain ordinary corrugated box, not the "Linen Look" variety. On the left lower corner of the box end is a sticker (similar to a store's pricing sticker) that says "08-09-60" and "1486". Also the "X-802" stamp is on a separate sticker that covers the number of the set that Lionel designed this box for. My guess is that Lionel packaged this set on August 9, 1960 as uncataloged set #1486. Then they added the X-802 number for whichever store(s) bought the set. Greenberg's book (pp.16 & 20) lists three uncataloged sets with the 218 locos but none sound like this one. In particular, sears set # 49N9693 is attributed to 1960, but only the helicopter car is listed in the X-802 as well as the 9693.

1. *Greenberg's Guide to Lionel Trains, 1945-1969, Vol. II*, LaVoie and Kimball, Eds., Greenberg Publishing Co. Inc., Sykesville, M.D., 1988

2. *Classic Toy Trains*, Vol. 4, #1, Feb., 1991, J. Algozzini, Kalmbach Publishing Co., Waukesha, WI

On the rear cover we find the last of the Lionel paper that Warren Schuch sent and which we have been publishing off and on. Thanks again, Warren.

To the left of the page is shown a one sided sheet that was enclosed with standard gauge locomotives containing a "small gear super motor" with the two position (or pendulum) reversing unit. Under this sheet with it's left edge protruding is the identical sheet except for the "IMPORTANT NOTICE" lettering that has been added. This lettering is done in red while the rest of the documents are printed in black. The top sheet was evidently provided in 1926 until it was discovered that the older switches would cause the new electric reverse motors to sometimes whip the train into reverse. It must have been quite a disconcerting discovery for purchasers of the new equipment! The bottom sheet was probably then provided in at least 1927, and possibly in subsequent years.

To the right of the rear page is the instruction sheet for the 99/099 semaphore. Note the need for a special middle (amber) bulb. On p.20 of the *Summer, 1979 (Vol. 25, #4) TCA Quarterly*, Ron Morris indicates that this bulb can be replaced with a #1447 bulb if you want to operate your signal. By the way, the wiring diagram on p.22 is easier to follow than the one on this original instruction sheet.

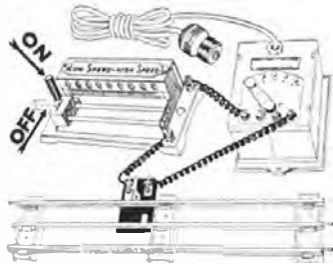
**IMPORTANT NOTICE:** These Electrically Controlled Locomotives work best with our new model switches Nos. 210, 220 and 222, and new type No. 20 crossing. All old type switches and crossings may cause the locomotive to reverse itself when passing over them. Therefore, in order to obtain best results, old types should be replaced by new ones.

## Directions for Operating Lionel Electrically Controlled Locomotives

After laying track, consult page 10 of direction book for the necessary voltage required for operating your train.

When Lionel "Multivolt" transformer is used, connect one wire from the proper post on it with one of the clips on the "Lockon" Contact found on one section of track.

Another wire must be connected from the other proper post on the transformer to one of the posts on the controlling rheostat. The remaining post on the controlling rheostat should be connected with the other clip on the "Lockon" Contact.



To start locomotive, the small lever on the sliding contact of the controlling rheostat must be raised. When this lever is lowered the current is cut off and train will stop. When lever is again raised the train will start in the opposite direction. However, if the lever is raised and lowered twice in quick succession, the train will resume operation in the direction in which it was running before being stopped.

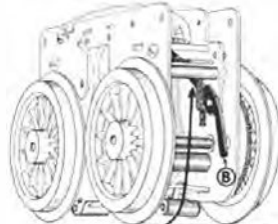
The speed of the train is regulated by moving the sliding contact toward points marked "Low" or "High."

When using Direct Current Reducer or Batteries, make connection in the same manner as mentioned above.

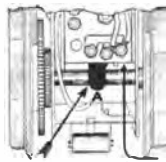
**CAUTION**—Do not reverse locomotive until it comes to a dead stop. If motor is reversed while locomotive is moving in the opposite direction, the mechanism is subjected to a great

strain—the same as though a real locomotive is reversed while momentum is moving it in the opposite direction. As Lionel Trains are just like real ones, they must be handled in the very same way if best results are to be obtained.

To operate locomotive by hand, push in lever "B" towards the motor, (which disconnects the electrical control unit). By moving lever "A" from side to side locomotive will either go forward or reverse.



**DO NOT OIL THIS PART OF MECHANISM**  
Lever For Disconnecting Electrical Control Unit



Lever for Hand Operation.

Do not oil this part of mechanism.

When using our No. 78 Train Control, lever "B" should be pushed in towards the motor, otherwise the locomotive will automatically reverse itself after being stopped by the train control. This automatic operation, however, is very interesting as it is done as if by magic.

### IMPORTANT

Do not oil the control mechanism indicated by letters "A" and "B." All other parts of the motor should be kept cleaned and lubricated, as shown in direction book.

DIRECTIONS FOR THE INSTALLATION OF

## Color Light Train Control

NUMBERS 99 OR 099

THIS perfected color light train control embodies features which make it one of the most realistic and fool proof accessories ever added for the hobby of model railroading.

In operation, the yellow light shines as a warning when there is no train within the block of track set off by the fibre pins A and B. As a train approaches, the yellow light changes to red and the train comes to a stop. After an interval, the length of which is determined by the position of lever in the base of signal, the red light changes to green and the train proceeds. When the last car has left the block, the light changes to yellow and the action is repeated.

By setting the lever to the continuous position, at the extreme right, the train does not stop but continues past the light signal. The yellow light, however, changes to green while the train is passing and returns to yellow when the last car has cleared the block. When lever is set to the fast position, the train is stopped for only a few seconds. The train may be held for many seconds by shifting the lever to the "slow" position. Intermediate positions will give correspondingly smaller delay intervals. The length of time is somewhat affected by the voltage used on the train; being faster when using large outfits and therefore higher voltage.

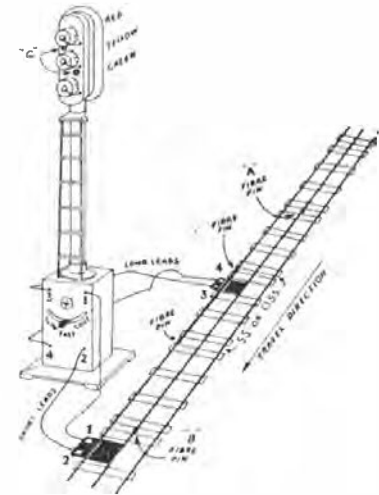
It must also be understood that the first time the train stops on the block, more time will be required for the lights to change than at succeeding stops. Once the unit becomes "warmed up" the action takes place with greater regularity.

### LOCOMOTIVES WITH AUTOMATIC REVERSE

When set on *continuous* it will not be necessary to disconnect the automatic reverse mechanism. But, if the train is to be brought to a stop by the train control, it will be necessary to disconnect the automatic reverse as explained in the direction booklet accompanying the locomotive.

### SPECIAL TRACK

The position of special section of track in the block is not fixed. It may be placed in any position, provided that one of the cars or locomotive comes to a stop over this



section. The position shown in the diagram will be correct for most outfits. This shows three sections of track to the block with the special track section placed two sections away from the TRAIN CONTROL. If used with many different locomotives and voltages it may be desirable to add one or more section of Special Track at either side of the section already shown so that it will be easy to stop at least one car on an insulated rail. High speed layouts with long straightaways over which the train may coast more than three sections, may require an additional section in the block which can be included by moving fibre pin "A" one section further away from signal.

### CHANGING LAMPS

To replace lamps, remove the screws "C" and lift off the front section of the light case. The top and bottom lamps are Lionel No. 28, 1/2" clear round lamp. While the center lamp MUST BE Lionel No. 29, Special Yellow Lamp. No other lamp will operate in this device.

## THE LIONEL CORPORATION

15 EAST 26th STREET

NEW YORK, N. Y.

SERVICE DIVISION - - SAGER PLACE - - IRVINGTON, N. J.