

## MAINE THREE RAILERS LIONEL FASTRACK

## Design \& Application

## ROUNDHOUSE QUESTION

DECEMBER 2020

## Why Do Lionel FasTrack Sets Have So Many Pieces？ \＆Why Should You Care？



亜亜亜
072 Wye （6－81954）


22 1／2 Degree Crossover （6－12050）

## Lionel FasTrack Track

## Why Should You Care?

- Lionel FasTrack very popular
- Components readily available
- Sturdy and reliable design
- Multiple size components easily adapt to diverse layout designs
- Easily assembled
- Track stocked on M3R Club trailer
- Track used for M3R mobile layouts


## FasTrack Track Basics

## Track Features



## FasTrack Track Basics

## Straight Track:



## FasTrack Track Basics

## Straight Track (Cont.)



## FasTrack Track Basics

## Straight Track - S1 3/8" w/Half Roadbed



FasTrack Switch Straight /Aux T1 / W/Roadbed
Not Available for Purchase as Component or Repair Part

## FasTrack Track Basics

## Straight Track Combinations

| LENGTH | $13 / 8$ | $13 / 4$ | $41 / 2$ | 5 | 10 | PIECES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $13 / 8$ | 1 |  |  |  |  | 1 |
| $13 / 4$ |  | 1 |  |  |  | 1 |
| $23 / 4$ | 2 |  |  |  |  | 2 |
| $31 / 8$ | 1 | 1 |  |  |  | 2 |
| $31 / 2$ |  | 2 |  |  |  | 2 |
| $41 / 8$ | 3 |  |  |  |  | 3 |
| $41 / 2$ |  |  | 1 |  |  | 1 |
| $41 / 8$ | 1 | 2 |  |  |  | 3 |
| 5 |  |  |  | 1 |  | 1 |
| $51 / 4$ |  | 3 |  |  |  | 3 |
| $51 / 2$ | 4 |  |  |  |  | 4 |
| $5 \%$ | 1 |  | 1 |  |  | 2 |
| $61 / 4$ |  | 1 | 1 |  |  | 2 |
| $63 / 8$ | 1 |  |  | 1 |  | 2 |
| $65 / 8$ | 1 | 3 |  |  |  | 4 |
| $63 / 4$ |  | 1 |  | 1 |  | 2 |
| $61 / 8$ | 5 |  |  |  |  | 5 |
| 7 |  | 4 |  |  |  | 4 |
| $71 / 4$ | 2 |  | 1 |  |  | 3 |
| $75 / 8$ | 1 | 1 | 1 |  |  | 3 |
| $73 / 4$ | 2 |  |  | 1 |  | 3 |


| LENGTH | $13 / 8$ | $13 / 4$ | $41 / 2$ | 5 | 10 | PIECES |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 |  | 2 | 1 |  |  | 3 |
| $81 / 8$ | 1 | 1 |  | 1 |  | 3 |
| $81 / 4$ | 6 |  |  |  |  | 6 |
| $83 / 8$ | 1 | 4 |  |  |  | 5 |
| $81 / 2$ |  | 2 |  | 1 |  | 3 |
| $85 / 8$ | 3 |  | 1 |  |  | 4 |
| $83 / 4$ |  | 5 |  |  |  | 5 |
| 9 |  |  | 2 |  |  | 2 |
| $91 / 8$ | 3 |  |  | 1 |  | 4 |
| $93 / 8$ | 1 | 2 | 1 |  |  | 4 |
| $91 / 2$ |  |  | 1 | 1 |  | 2 |
| $95 / 8$ | 7 |  |  |  |  | 7 |
| $93 / 4$ |  | 3 | 1 |  |  | 4 |
| $97 / 8$ | 1 | 2 |  | 1 |  | 4 |
| 10 |  |  |  |  | 1 | 1 |

## FasTrack Track Basics

## Curved Track




## FasTrack Track Basics

## Curved Track



## FasTrack Turnouts

## Two Operating Modes:

- Manual
- Remote/Command


## Two Design Categories:

- Equivalent Curve Replacements
- Non-Equivalent Curve Replacements


## FasTrack Turnouts

## Equivalent Curve Replacements



## FasTrack Turnouts

## Equivalent Curve Replacements Design



## FasTrack Turnouts

## Non-Equivalent Curve Replacements

## Fatrack 0so lemote/Command Switch LII

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faatrack un Wys limote/tomeand 5witch



- lemph Ir staigs

68954 5189

LIONEL, UL



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MADE IN CHINA

FEATURES:

- 14-1/2" Straight, 22-1/2-Degree turnout with operating lighted signal lantern
- Includes three extension sections that allow you to join the switch with the 45 Degree Crossover, the 072 Wye Switch, and other switches
- Includes six numbered inserts that allow you to identify the switch you want to control


## FasTrack Turnouts

## Non-Equivalent Curve Replacements Design

## O60 Turnout (6-12057)



## 060. curve

LHO60

## 060

 St IIIS1 $3 / 8$ w/o BedLHO60
\#\#\#.......... S1 3/8 w/1/2 Bed

$141 / 2^{\prime \prime}$

## FasTrack Turnouts

## Non-Equivalent Curve Replacements Design

## O72 Turnout (6-12048)




## FasTrack Turnouts

- Non-Equivalent Curve Replacements Design


## O72 Wye Turnout (6-12047)



072-1/2


## FasTrack Turnouts

## Lionel FasTrack Turnout Summary

| Item | Description | Dimension | Actual | Box | Lionel 2020 Catalog | Extent of Condition | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6-81252 | O31 Turnout | Length | 1111/32" | $113 / 8{ }^{\prime \prime}$ | 10" | 6-81251, 6-81254,6-81253 | $\begin{aligned} & \hline \text { Lionel Catalog: Correct Catalog Length from } 10 " \\ & \text { to } 113 / 8^{\prime \prime} \end{aligned}$ |
|  |  | Arc | $333 / 4^{\circ}$ \& $111 / 4^{\circ}$ | $45^{\circ}$ | $333 / 4^{\circ}$ \& $111 / 4^{\circ}$ |  |  |
|  |  | Middle Rail Cord | $9 "$ | NA | NA |  |  |
|  |  | Parts | 1x6-81662 | 1x6-81662 | 1x6-81662 |  |  |
| 6-12045 | 036 Turnout | Length | 10 " | 10 " | $10^{\prime \prime}$ | $\begin{gathered} 6-12017,6-12018,6-12046,6-16824, \\ 6-16825,6-81946,6-81947 \end{gathered}$ |  |
|  |  | Arc | $333 / 4^{\circ}$ \& $111 / 4^{\circ}$ | $333 / 4^{\circ}$ \& $111 / 4^{\circ}$ | $333 / 4^{\circ}$ \& $111 / 4^{\circ}$ |  |  |
|  |  | Middle Rail Cord | $109 / 16 "$ | NA | NA |  |  |
|  |  | Parts | 1x6-12023 | 1x6-12023 | 1x6-12023 |  |  |
| 6-12065 | 048 Turnout | Length | 14 31/32" | 15 " | $15^{\prime \prime}$ | $6-12066,6-16830,6-16831,6-81948$$6-81949$ |  |
|  |  | Arc | $30^{\circ}$ | $30^{\circ}$ | $30^{\circ}$ |  |  |
|  |  | Middle Rail Cord | 12 13/32" | NA | NA |  |  |
|  |  | Parts | None | None | None |  |  |
| 6-12057 | 060 Turnout | Length | $131 / 8^{\prime \prime}$ \& $13 / 8^{\prime \prime}$ Ext. | $141 / 2^{\prime \prime}$ | $141 / 2^{\prime \prime}$ | $\begin{gathered} 6-12058,6-81950,6-81951,6-16828, \\ 6-16829 \end{gathered}$ | Lionel Box: Joins with 22 1/2 ${ }^{\circ}$ Crossover not $45^{\circ}$ Crossover Lionel: $221 / 2^{\circ}$ turn starts $11 / 8^{\prime \prime}$ from entry and ends at Junction with $13 / 8$ " Half Roadbed Track extension. |
|  |  | Arc | $221 / 2^{\circ} \mathrm{w} / \mathrm{o}$ Ext. | $221 / 2^{\circ}$ | $221 / 2^{\circ}$ |  |  |
|  |  | $\begin{gathered} \text { Middle Rail } \\ \text { Cord } \\ \hline \end{gathered}$ | 12 7/8" w/o ext 14 3/16" w/ext | NA | NA |  |  |
|  |  | Parts | $\begin{gathered} 1 \times 6-12074 ~ \& ~ \\ 2 \times 610-2047-350 \\ \hline \end{gathered}$ | $\begin{gathered} 1 \times 6-12074 ~ \& ~ \\ 2 \times 610-2047-350 \\ \hline \end{gathered}$ | $\begin{gathered} 1 \times 6-12074 \& \\ 2 \times 610-2047-350 \\ \hline \end{gathered}$ |  |  |
| 6-12048 | 072 Turnout | Length | $145 / 16$ " w/o ext. $15 \text { 21/32" w/ ext. }$ | 15 5/8" | 15 5/8" | $6-12049,6-16826,6-16827,6-81952$,$6-81953$ | Lionel Box: Joins with $221 / 2^{\circ}$ Crossover not $45^{\circ}$ Crossover Lionel: Completes $221 / 2^{\circ}$ turn w/o $13 / 8^{\prime \prime}$ half roadbed extension. |
|  |  | Arc | $\begin{aligned} & 221 / 2^{\circ} \\ & \text { w/o } 13 / 8^{\prime \prime} \mathrm{Ext} . \end{aligned}$ | $221 / 2^{\circ}$ | $221 / 2^{\circ}$ |  |  |
|  |  | Middle Rail Cord | 14 1/32" w/o ext. $1511 / 32 \mathrm{l}$ w/ ext. | NA | NA |  |  |
|  |  | Parts | $\begin{gathered} 1 \times 6-12074 \& \\ 2 \times 610-2047-350 \\ \hline \end{gathered}$ | $\begin{gathered} 1 \times 6-12074 \& \\ 2 \times 610-2047-350 \end{gathered}$ | $\begin{gathered} 1 \times 6-12074 \& \\ 2 \times 610-2047-350 \end{gathered}$ |  |  |
| 6-12047 | Wye Turnout (072) | Length | 107/16" w/o ext <br> 12 3/32" w/ 1 3/8" Ext. | NA | 12 " | 6-16832, 6-81954 | Lionel Box: <br> Joins with $221 / 2^{\circ}$ Crossover not <br> $45^{\circ}$ Crossover <br> Lionel: <br> - Each leg with 1 3/8" half roadbed connected is equivalent to a $111 / 4^{\circ}$ half O72 Curve joined with a 5 " Straight section. <br> - Turnout provides $2 \times 111 / 4^{\circ}$ turns not $2 \times 221 / 2^{\circ}$ turns. |
|  |  | Arc | $2 \times 111 / 4^{\circ} \mathrm{w} / \mathrm{e} \mathrm{ext}$. | $2 \times 221 / 2^{\circ}$ | $221 / 2^{\circ}$ |  |  |
|  |  | $\begin{aligned} & \text { Middle Rail } \\ & \quad \text { Cord } \end{aligned}$ | $109 / 16 \mathrm{w}$ w/o ext. <br> 11 15/16" w/ ext. | NA | NA |  |  |
|  |  | Parts | $\begin{gathered} 1 \times 6-12074 \& \\ 2 \times 610-2047-350 \end{gathered}$ | $\begin{gathered} 1 \times 6-12074 \& \\ 2 \times 610-2047-350 \end{gathered}$ | $\begin{gathered} \begin{array}{c} 1 \times 6-12074 ~ \& ~ \\ 2 \times 610-2047-350 \end{array} \end{gathered}$ |  |  |

## FasTrack Crossovers

## 22 ½ Degree Crossover Design

## 22 1/2 degree Crossover (6-12050)



## FasTrack Crossovers

## Lionel FasTrack Crossover Summary

| Item | Description | Dimension | Actual | Box | Lionel 2020 Catalog | Extent of Condition | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6-12050 | $221 / 2^{\circ}$ Crossover | Length | $2 \times 17{ }^{\prime \prime}$ | $2 \times 17{ }^{\prime \prime}$ | $2 \times 17 \mathrm{w}$ / ext. | None |  |
|  |  | Angle | $221 / 2^{\circ}$ | $221 / 2^{\circ}$ | 22 1/2 ${ }^{\circ}$ |  |  |
|  |  | Parts | 4x610-2047-350 | 4x610-2047-350 | 4x610-2047-350 |  |  |
| 6-12050 | $45^{\circ} \mathrm{Crossover}$ | Length | $2 \times 10 "$ | $2 \times 10 "$ | $2 \times 10$ | None |  |
|  |  | Angle | $45^{\circ}$ | $45^{\circ}$ | $45^{\circ}$ |  |  |
|  |  | Parts | NA | NA | NA |  |  |
| 6-12019 | $90^{\circ} \mathrm{Crossover}$ | Length | $2 \times 6 "$ | $2 \times 6 "$ | $2 \times 6 "$ | None |  |
|  |  | Angle | $90^{\circ}$ | $90^{\circ}$ | $90^{\circ}$ |  |  |
|  |  | Parts | NA | NA | NA |  |  |

## FasTrack Applications

1 3/8" No Roadbed Track Extension Application


## FasTrack Applications

## O72, 072 Wye, \& Crossover Sample Applications



45 Degree
Crossover

## FasTrack Applications

## O72 Wye Sample Application



## Lionel FasTrack Track Take-Aways

- O31, O36, \& O48 turnouts more easily inserted into existing layouts (both straight or curved legs)
- Avoid using 060 turnouts
- Avoid mixing 048 curves and turnouts with other curves, turnouts, or crossovers
- O60, O72, \& O72 Wye turnouts must use provided half roadbed or no roadbed track extensions
- 22.5 degree crossovers must use provided half roadbed or no roadbed track extensions
- Keep turnout and crossover track set components together and when buying them used, assure all track pieces are provided


## Lionel FasTrack Track Take-Aways (Cont)

- Don't believe everything printed on the box or catalog description (trust but verify)
- Track layout software may not be fully accurate (trust but verify)


## Lionel FasTrack Track

## Questions?

