



Shay Logging Locomotives

FOURTH IN A SERIES OF FIVE
SPECIAL INTRODUCTIONS



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Receive a \$100.00 U.S. Savings Bond*
with the purchase of this locomotive.
Please see coupon offer inside product
package for complete details.

* Or \$50.00 cash

Offer expires 1/31/03.



ACTUAL PRODUCTION MODELS SHOWN

SHOWN
ACTUAL
SIZE



FEATURES:

- TrainMaster™ Command Control equipped—able to run in Command Control Mode or in Conventional Transformer Control Mode
- RealSound™ sound system with CrewTalk™ communication, TowerCall™ announcement and DynaChuff™ synchronized chuffing
- Powerful maintenance-free motor with momentum flywheel
- Fully functional Shay drive system
- Operating headlight
- Die-cast metal locomotive body, frame, pilot and trucks
- ElectroCoupler™ on front of locomotive
- Four traction tires
- Fan-driven smoke unit
- Separately applied metal details
- Accurate, separately applied builder's plates
- Precise glue
- Authentically detailed and illuminated cab interior
- Engineer and fireman figures
- Die-cast metal tender body and trucks
- ElectroCoupler™ on rear of tender
- Directional back-up light on rear of tender
- Minimum Radius: 0-04
- Length of locomotive and tender: 18 3/4"

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 ©2007 Elk River Coal & Lumber Company. Shop #21800
 Modeler log cars sold separately.



Authentic tender detailing with operating back-up light and ElectroCoupler™



Side view of the Wisconsin showing the opposite side of the unique Shay locomotive



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FEATURES:

- TrainMaster® Command Control equipped—able to run in Command Control Mode or in Conventional Transformer Control Mode
- RailSounds™ sound system with CrewTalk™ communication, TowerCom™ announcement and DynaChuff™ synchronized chuffing
- Powerful maintenance-free motor with momentum flywheel
- Fully functional Shay drive system
- Operating headlight
- Die-cast metal locomotive body, frame, pilot and trucks
- ElectroCoupler™ on front of locomotive
- Four traction tires
- Fan-driven smoke unit
- Separately applied metal details
- Accurate, separately applied builder's plates
- Firebox glow
- Authentically detailed and illuminated cab interior
- Engineer and fireman figures
- Die-cast metal tender body and trucks
- ElectroCoupler™ on rear of tender
- Directional back-up light on rear of tender

Minimum Radius: O-54

Length of locomotive and tender: 16 3/4"

(6-38057) Weyerhaeuser Timber Company Shay \$1199.95

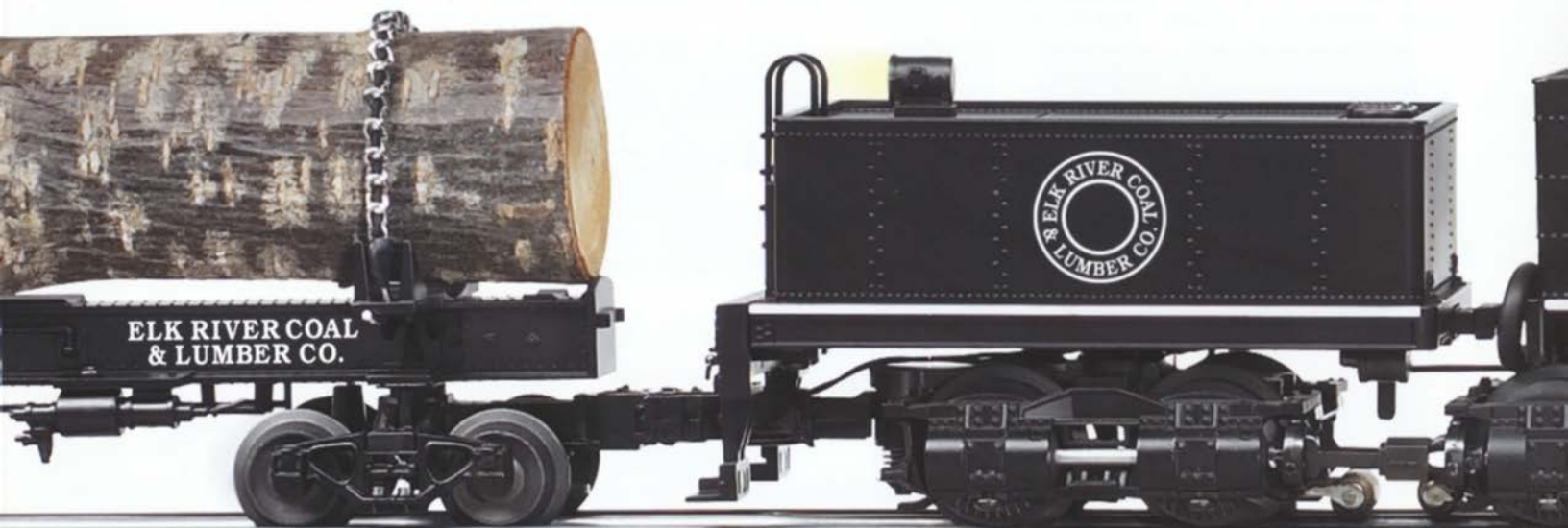
(6-38066) Elk River Coal & Lumber Company Shay \$1199.95

Skeleton log cars sold separately.



Authentic tender detailing with operating back-up light and ElectroCoupler™

ACTUAL PRODUCTION MODELS SHOWN



Left view of the Weyerhaeuser showing the opposite side of the unique Shay locomotives



6-38057 Weyerhaeuser Shay with matching skeleton log cars



Locomotive #12 of the Elk River Coal & Lumber Company chugs through the West Virginia wilderness with a log train in tow. The rails ahead descend into a stream. Is the #12 headed for imminent disaster? Not at all. The locomotive fords the stream as though it were not even there. The #12 is a Shay, a geared locomotive that is the “off-road vehicle” of railroading. The Shay was born out of necessity and bears the name of its ingenious inventor.

In 1873, a Civil War veteran named Ephraim Shay operated a sawmill in northern Michigan. He faced a problem that then plagued most loggers. Transportation accounted for almost three-quarters of the total cost of his lumber operation, drastically affecting his profits. Once the timber stands close to easy water transport were exhausted, lumberjacks had to venture further into more rugged, often higher country. They had to drag logs out via horse-drawn sleighs and logging wheels, which often got bogged down or broken in the rough wilderness.

Shay first attempted to solve his problem by building a tramway, a set of crude wooden rails that horse-drawn log carts with flanged wheels rode upon. Tramways had become common in late nineteenth century logging operations. Shay’s tramway initially cut his transportation costs. However, the log carts frequently overtook their

teams on a downgrade, often killing the horses. Shay decided to turn his tramway into a real railway and looked toward the iron horse that was linking America for inspiration.

From the outset, conventional rod locomotives proved ill suited for deep woods logging. They slipped and stalled on the extreme mountain grades. They derailed on tight curves and any bump in the rail. Shay also found that a conventional locomotive tore up his track, even though it was lighter than his heavy log cars. This mishap inspired Shay to invent the geared locomotive. As other loggers took notice, Shay began to receive orders. He looked to the production capabilities of the Lima Machine Works, which later became the Lima Locomotive Works, Inc. Even as they gained fame with their super power giants, Lima would build 2770 Shays, continually improving the design.

The Shay locomotive is based on four-wheel articulated trucks, similar to those on a freight car, that are connected to each other via gears and a flexible driveshaft. Three vertically mounted rods transfer power to the shaft from the boiler. Lack of large counterbalanced drivers, and the “hammer blow” of rod motion that can damage track, meant that a Shay could travel on much lighter rail than a rod locomotive of the same size. Since all of the wheels were

powered, the entire weight of the locomotive contributed to the tractive effort. The flexible driveshaft kept all of the wheels on the crudest temporary railroads despite rails full of kinks and the lack of a graded, ballasted roadbed. The articulated trucks ensured that the Shay could handle the tightest curves without losing its valuable load.

With efficient transportation becoming ever more important to logging and mining operations in the 20th century, Shay locomotives remained a staple for loggers and miners until the 1960s. The Lionel Shay locomotives represent historic logging railroads of the east and west coasts.

The Elk River Coal & Lumber Company operated in the mountains of Clay County, West Virginia from 1903 until the late 1950s. Headquartered in Washington State, the Weyerhaeuser Timber Company remains one of the nation’s largest harvesters of forest products. Both TrainMaster Command Control-equipped locomotives feature realistic, operating rods, gear-drive and rotating flexible drive shaft. Each model includes dual ElectroCouplers for prototypically pulling or pushing a log train. The special RailSounds sound system includes the authentic chuffs of the Shay, one of the most unique success stories in the history of railroading.

Check out these matching Skeleton Log Car 3-Packs for your Shay locomotives.

6-29434 Weyerhaeuser Skeleton Log Car 3-Pack \$124.99



6-29445 Elk River Skeleton Log Car 3-Pack \$124.99



LOG CAR FEATURES:

- Die-cast metal bodies
- Die-cast metal sprung trucks and operating couplers
- Detailed brake rigging and air cylinders
- Natural wood logs with metal chain tie-downs



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