

TRIX UNION PACIFIC 4-8-8-4 “BIG BOY” TEST REPORT

By Dean Windsor

Trix is the division of Marklin that produces 2-rail HO scale models. This massive 4-8-8-4 is their first locomotive. It has virtually all of the details of early brass import locomotives, including separate handrails and piping. There's an index of all previous Locomotive Performance Tests in this issue and our website at www.railmodeljournal.com

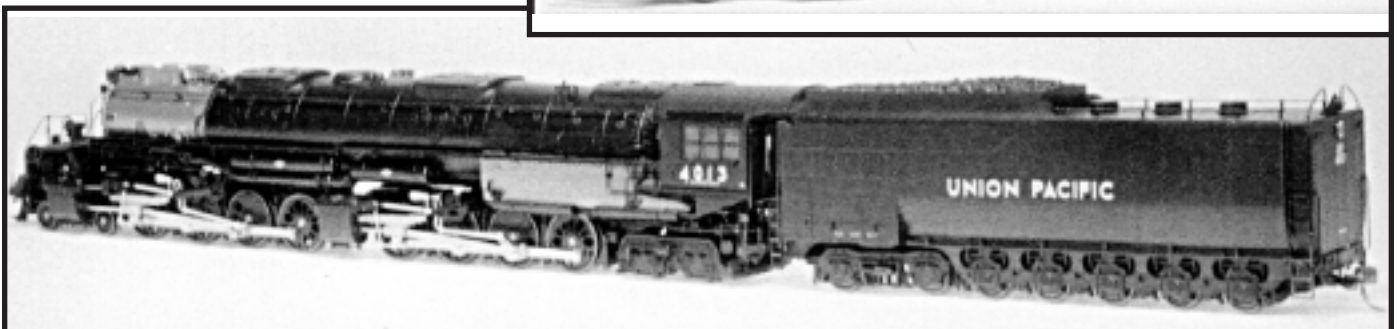
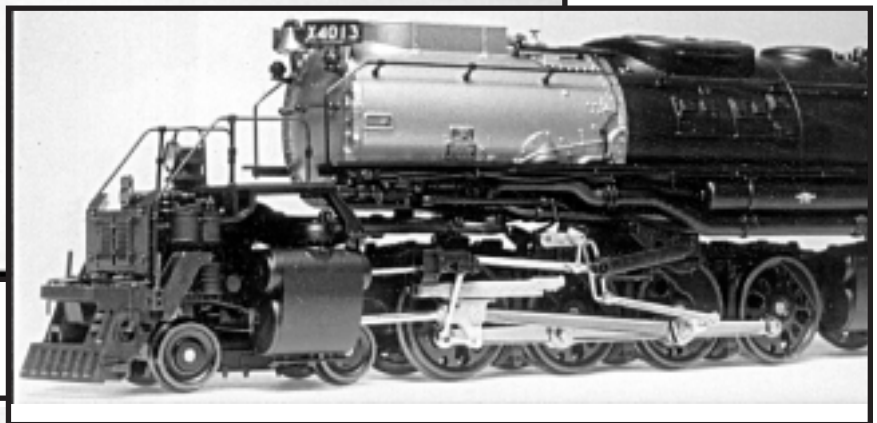
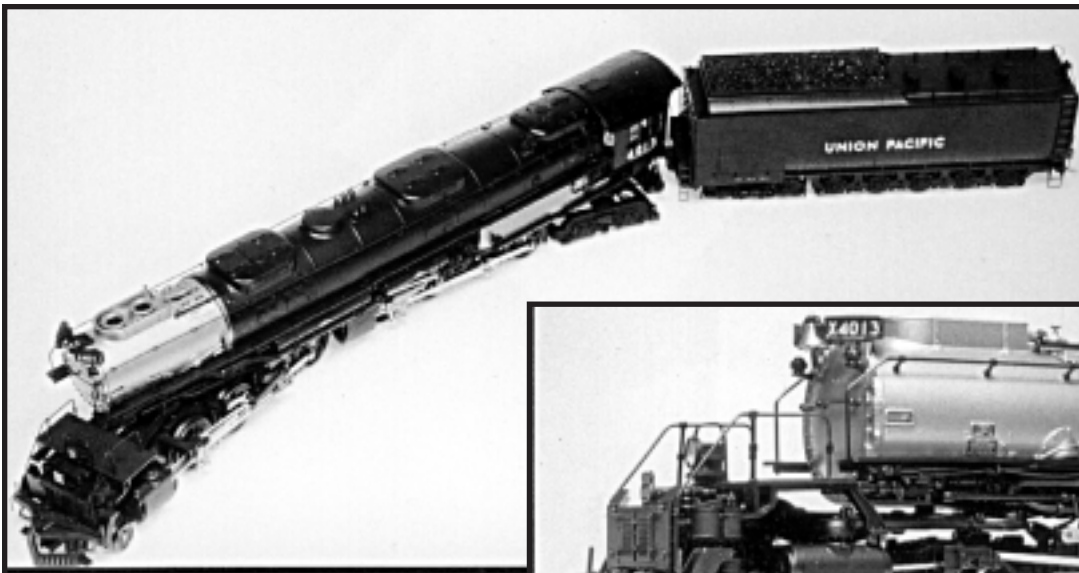
Marklin's Trix Trains Division has produced the largest steam locomotive ever. The Trix models are built specifically for North American 2-Rail DC model railroaders. This class 4000 Union Pacific Big Boy number 4013 brings a quality non-brass steam locomotive model to the market. It is

based on an Era III style built in December 1941 and as it would have looked around 1959.

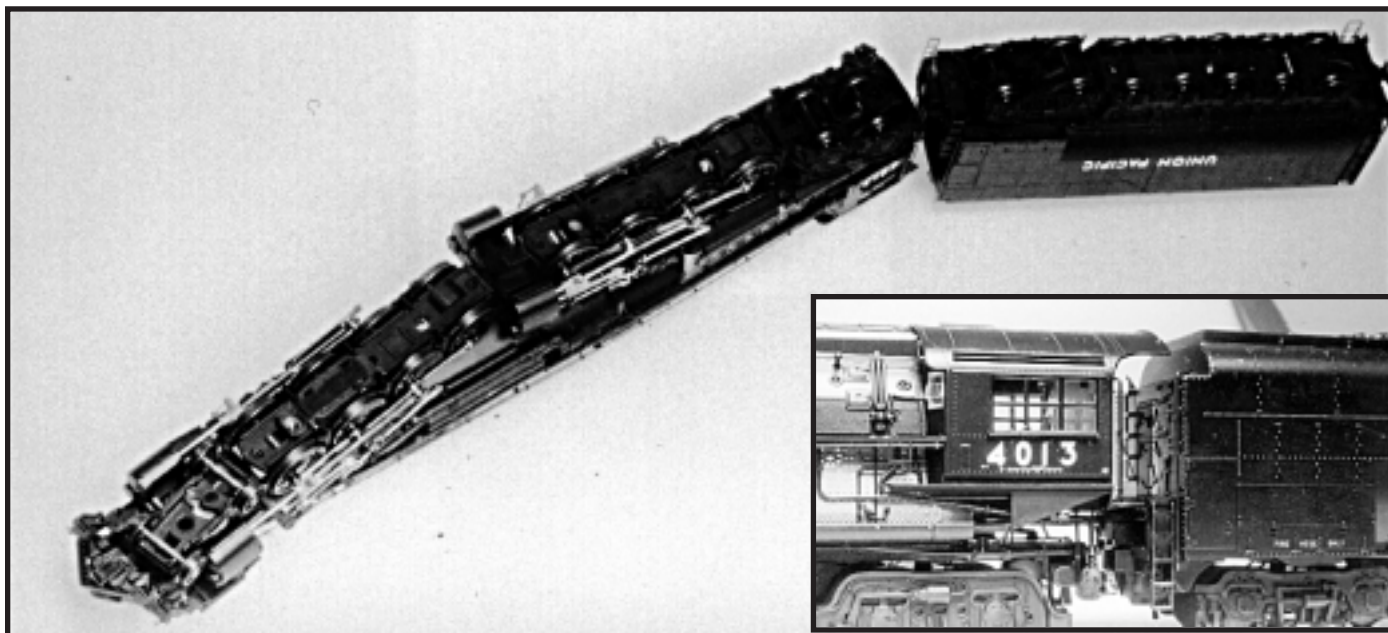
It is equipped with a high-efficiency can motor with a bell-shaped armature. It has a single brass flywheel pressed onto one end of the stainless steel shaft. The ends of the shaft connect to plastic drive shafts via press-fit universals. The universals turn a stainless steel worm gear in each of two gear towers. All 16 drivers

are powered through a series of gears and all have electrical pickup along with 10 wheels on the rear of the tender. The forward tender truck has separate pickups for use with your choice of sound system. The leading locomotive truck has separate pickups to power twin smoke generators, which can be bought separately.

The Trix model has a two piece die-cast metal frame/boiler and a metal ten-



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der. It features close coupling between the locomotive and tender and has steam lines that swing out with the cylinders for negotiating tight curves. The forward engine is mounted so that it can swing laterally rather than just rotate allowing it greater movement for tight curves. Marklin's advertised minimum radius is 18 inches although they recommend at least 20 inches. The tender is equipped with a Kadee number 18 coupler, and they provide several options for a front coupler. Additional options included but not installed are a fireman and engineer.

The paint is crisp and clean, and the lettering is so fine that you can read the builder's plates under a magnifier. This model contains many additional details; most are metal, including fine wire steam lines and grabirons. All wheels are chemically blackened, and the center two driving axles on each engine are spring loaded. Electronics included are LED headlight, lighted numberboards and directional tender backup light. Although it is DCC ready, there are no instructions included or diagrams for mounting a decoder.

It comes bolted inside a wooden case surrounded by a foam cradle, which can be removed. Although it is advertised as ready to run out of the box, we found it necessary to clean all wheels before loading it on the testbed.

The test sample was very smooth running and scored very well in motor efficiency. Although the fast speed was little under prototype maximum safe speed, the slow speed came in under maximum parameters. The tractive force could have been somewhat higher, but the number of cars pulled came in at 130. Overall this test sample received an excellent 4.4 rating, a fine choice for any UP modeler.

RAILMODEL JOURNAL LOCOMOTIVE PERFORMANCE REPORT NO. 164 Trix UP 4-8-8-4 "Big Boy" HO Scale

Action Analysis:

Observed Performance:

As Received:

Minimum Speed, level (no load, scale miles per hour)

With full wave power:	2.71
With pulse power:	1.28
Over No. 6 switch, pulse power:	1.40

Maximums (at 12 volts max. where applicable)

No load top speed, level, full wave, smph:	53.0
Uphill grade maximum, percent:	11.1%
Tractive force, ounces:	5.61
Number of cars pulled, level:	130
Number of cars pulled, 4% grade:	26

Modifications — none

Mechanical Measurements

Motor-to-drivers gear reduction ratio:	n/a
Driver diameter, scale inches:	64
Flange depth, actual inches:	0.025
Model weight, ounces:	50.50
Driving wheelbase, scale feet and inches:	n/a
Model turntable length, actual inches:	133' 9"

Subjective Judgments

Noise at fast speed:	Excellent
Basic shape and proportions:	Excellent
Painting and marking quality:	Excellent
Downhill run smoothness:	Excellent

Electronic Responses

Throttle response at no load, volts:	1.9
Throttle response at mid load, volts:	4.3
Throttle response at full load, volts:	4.7
Motor current at full load, amperes:	0.22
Motor stall current at 12 volts, amperes:	0.740

Performance Ratings (1 to 5)

Tractive force:	3.0
Efficiency:	5.0
Noise:	5.0
Speeds:	4.0
Assembly workmanship:	5.0

OVERALL RATING:

4.4

Prototype Top Speed: 70.4 mph