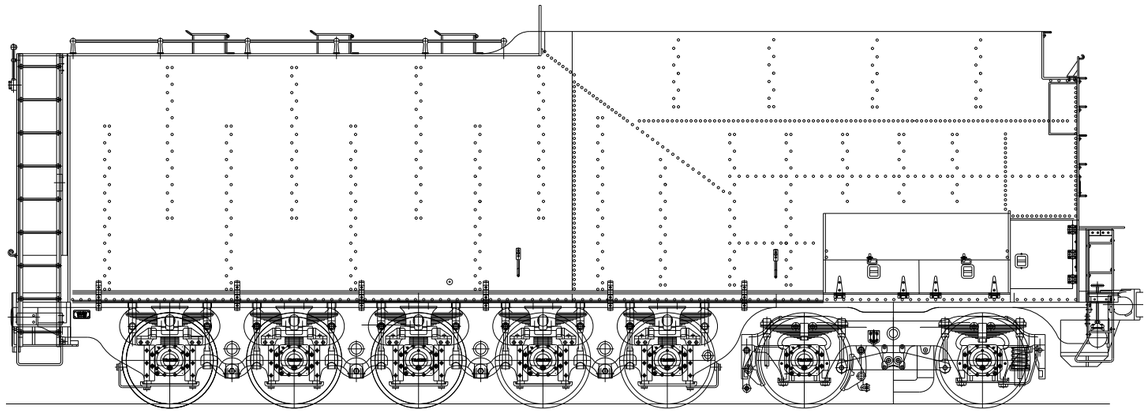
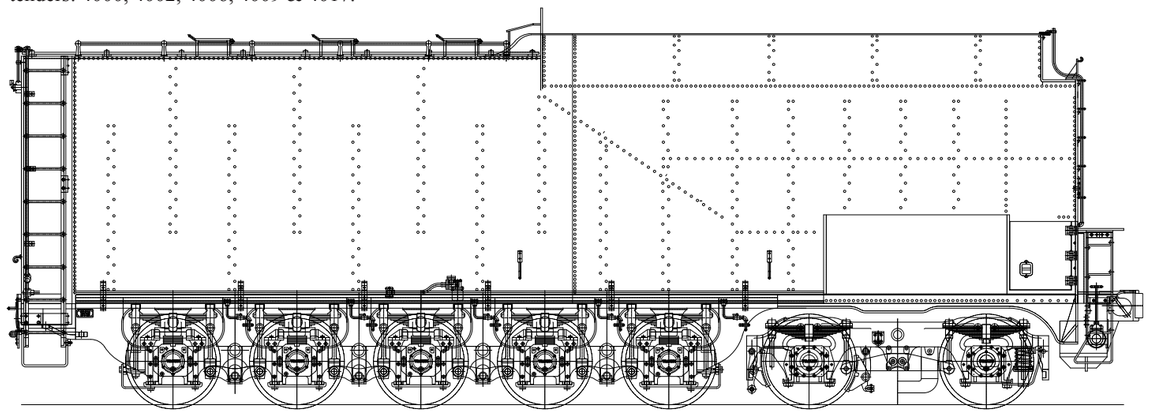


The original centipede tenders designed for use with the 1939 Northern class locomotives were slightly smaller, but were so successful that the design was adapted for use with all later road engines including the 'late' Challengers and Big Boys. The tender elevation drawing shown above is of a 25-C-1 type built for use with the first production series (4000-4019) of Big Boy locomotives. The drawing below is of a 25-C-4 type used with the second production order (4020-4024) of Big Boys. The primary difference between the two tenders was the amount of water carried, the 25-C-1 carrying 24,000 gallons while the 25-C-4 carried 25,000 gallons, both carried 28 tons of coal. In later service you will find that the two tender types were frequently interchanged between locomotives from the two production orders. You may note the obvious differences in the seam and rivet arrangements as well as the front compartment configurations, but the tender beds were virtually identical.

For the first time to our knowledge, our Big Boy project will provide correct pairings of locomotive and tender types for all road numbers included in our production. There will be early and late service variations included in the production and they will include the appropriate detail not represented in these basic 'as-built' construction elevations. If you are interested in ordering a 'late' version locomotive and want to know what tender it will have, all road numbers will have 25-C-1 tenders except the following which will be paired with 25-C-4 tenders: 4000, 4002, 4006, 4009 & 4017.



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Kohs & Company INCORPORATED *The Finest in 'O' scale*

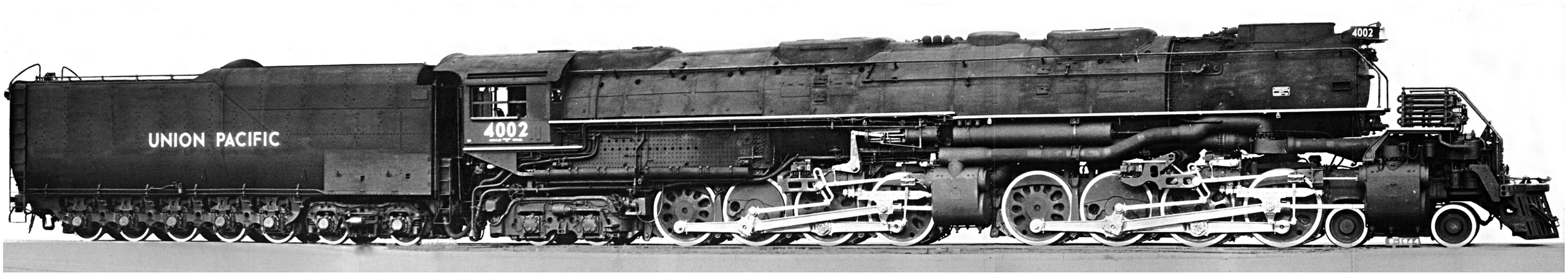
Union Pacific 4884-1&2 Class 'Big Boy'
Project Information

Kohs & Company proudly presents our most anticipated O scale locomotive project ever, the Union Pacific 4884 class 'Big Boy'. This locomotive is the prototype by which all other large road engines are judged and our plan is to make our Kohs & Company rendition of this prototype the model by which all others will be judged, starting with the specifications presented below.

Model Locomotive Specifications

- Custom Built Sound System Synced to Each Engine Playing through Three Speakers with DCC functionality, sounds are Digitized Correct Prototype Actual Sounds not Synthesized
- Twin Custom Wound Ball-Bearing Equipped Pittman Motor
- Purpose Designed Ball-Bearing Equipped Drive Mechanism
- Scale Prototypical Stainless Tired Wheel Sets with 68" Operating Radius
- Nickel Silver Rods and Valve Gear
- Full Under-body Detail on Locomotive & Tender
- Prototypically Running Boards mounted on Scale Brackets
- Prototypical Hollow Drive Axles
- Punched Rivet Detail for maximum fidelity in Rivet Shape and Sheet Metal Contours, particularly on the Boiler Jacket and Tender Tank
- Fully Equalized and Sprung Suspension with Fabricated Leaf Springs on both the Locomotive and Tender
- 68 Ball-Bearing Units used throughout the model
- Ball-Bearing Equipped Side & Main Rod
- User Controlled Electronically Operated Valve Gear
- Full Cab Detail: Wood Liner, Brass Gauge Bezels & Lenses
- Real Glass Window Glazing
- Prototypical Operating Buffer Assembly between Loco & Tender
- All Hatches and Compartments are Operational with 'Behind' Detail
- Real Wood Decking on appropriate Tender Versions
- Prototypical Hollow Core Boxpok Drivers
- Constant Low Voltage Lighting

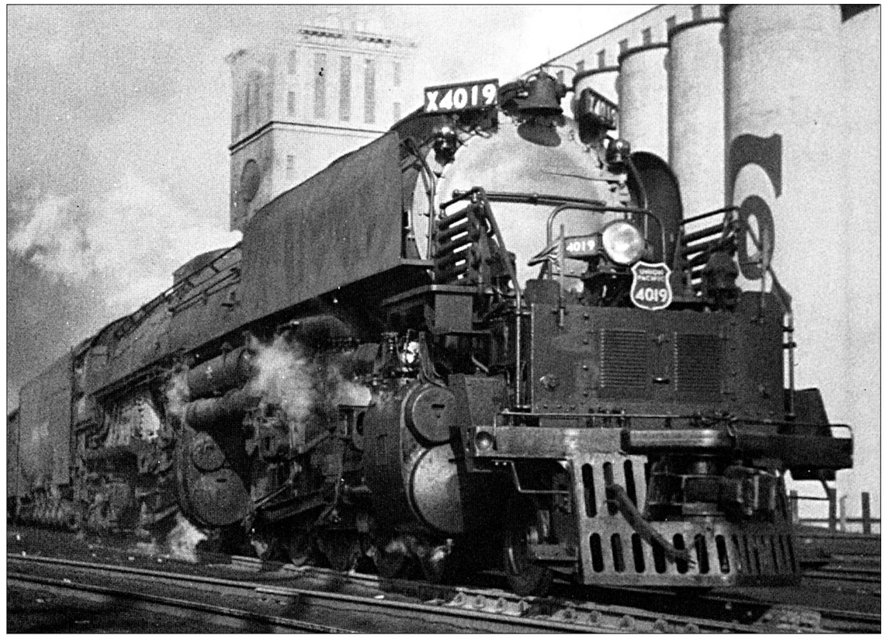
(Products bearing Union Pacific marks are made under license from Union Pacific Railroad Company)



The specifications as listed represent our starting point, not where we will conclude our efforts. Each specification mentioned has already been realized with a previous model and all of them are embodied in our Union Pacific Challenger models, so it is not a matter of wishful thinking for us. As we have routinely done with each project, we expect to surpass all of our previous projects with features, detail and overall quality, we plan to deliver more than promised. This is only made possible by continually upgrading our production technology just as we have our model technology. Although our models will remain always hand-built, the production of component parts relies heavily on the very latest in 3D solid modeling computer design (which has now replaced the usual early sample model), CNC machining and state-of-the-art Rapid Technology for pattern making.

There were a total of twenty-five 4884 class locomotives built in the two production orders contracted for. While there were important differences between the two orders in the details of construction, there were only two significant visual differences; the cooling coils present on the front pilot deck of the first production order and the two different tender versions used for each order. These difference can be easily seen when comparing the builder's photographs above and below, production order 4884-1 represented above and order 4884-2 below. There were additional innumerable subtle visual differences including the routing of piping, secondary air vents on the fireboxes and the main air reservoirs, our plan is to capture all of these differences with the versions selected for production. The matter of tender versions is explained on page four of this brochure.

As the 'Big Boys' were put into service there were modifications made based on the initial experiences of the road crews, these modifications will be included in our early-service models, divided into versions #1 and #2 based on their prototypical production order. The most visible modifications were those made to the secondary air vents on the firebox. The later development of this prototype class closely paralleled that of the 'late' Challengers, our last project. Since we are limited here in the details that can be presented, I would suggest visiting the project web site for our Challenger project to gain a better understanding of the detail evolution of our Big boy: http://www.kohs.com. The listing at the right highlights the areas of most significant change during the later service years and again, these areas of detail will be correctly modeled based on our in-depth research.



- Pilot & Coupler Housing
- Pilot Deck Modifications
- Sander Valve Compartments
- Firebox Secondary Air Vents
- Steam Dynamo Location
- Automatic Train Control Equipment
- External Sander Air Lines
- Steam Pipe Shrouding Modifications
- Oiler Mechanism Modifications
- Air Compressor Lubricator Location
- Blowdown System Added
- Piping Modifications
- Extended Coal Boards on Tender
- Tender Compartment Modifications
- Tender Deck Modifications

The photo to the left is of Big Boy 4019, the only member of the class that received smoke-lifters, commonly referred to as 'elephant ears'. The smoke-lifters were originally developed when the late Challengers were converted to oil-fired operation. 4019 had the smoke-lifters installed during early service and as best we can determine kept them well into the final service years. Had this been only a short-term experiment, it would have fallen into our 'anomaly' category of unimportant situations, but the length of service in this configuration and the interest in similarly configured Challengers made this a must include variation. This variation is our version #5 model and the quantity will be limited.

As previously mentioned, tenders are certainly part of the configuration variables even though with most previously produced models it has not been a serious factor. The transition of tenders through their service life certainly provides some of the most interesting detail.