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2/23/2004

Kohs & Company The Finest in 'O'scale

The Union Pacific 'type' (4-12-2)

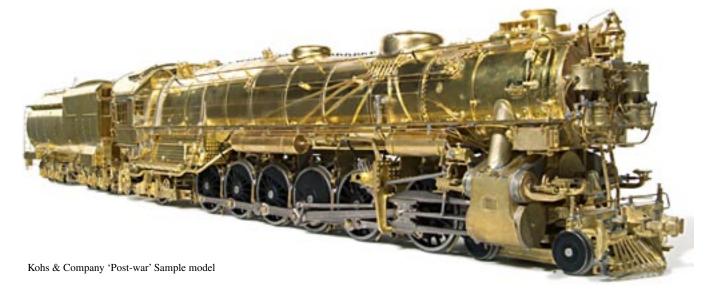
Reservation / Order Information

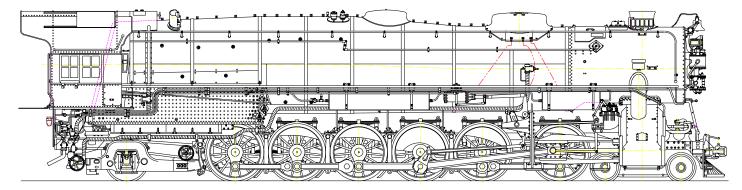
In keeping with our desire to model historically significant prototypes, we chose the Union Pacific 'nines' which were arguably the most successful three cylinder locomotives used in regular service in North America. The longest rigid-frame locomotive ever built, distinctive both in sight and sound, the 9000's compiled an admirable thirty year record running fast-freight in the American West, one of the most demanding rail systems in the world,

With each of our projects we endeavor to capture the true character of our chosen prototype and that usually leads to the development of new modeling techniques with every project. Such is the case with the UP 'nines' which required replicating the third cylinder and Gresley valve-gear, making them function mechanically as they should and matching the site of the model in action with the sound. A fully equalized suspension with real leaf springs is the foundation that we have built on and we have not forgotten any of the features, such as prototypically mounted running boards, previously introduced. Our Union Pacific 9000 development has taken longer than any previous project and the time has been put to good use, the evidence lies in the photos and descriptions to follow later in this brochure. Our effort has been not to miss the smallest of details and to wrap them in an historically correct package.

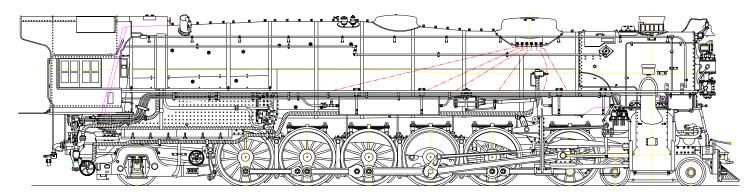
One of the most difficult aspects at the outset of a project once the prototype has been chosen, is to select the versions that will be included in the production of the model. Again, with this prototype there were a number of prime possibilities, but keeping in mind the historical background as well as the periods of time that our customers typically model, we have chosen versions that span a time frame from the mid 30's to the end of service for the class, the late 50's. Encompassed in our time frame is the transition point when the Union Pacific Railroad changed from the traditional early style graphics to the modern style, the significance of this and the features incorporated in our chosen configurations will be explained as we proceed.

The definite reference work if you desire more background knowledge on this prototype is a two-volume set entitled, *The Union Pacific Type*, co-authored by William W. Kratville and John E. Bush. We are very pleased and honored to have had the opportunity to consult with both of these gentlemen in Omaha, Nebraska during the development and production of this miniature replica.





Pre-war Configuration: this will include UP-3 and UP-4 locomotives with road numbers ranging from 9015 to 9054. Unlike the UP-1 and Up-2 locomotives, those in this group are all equipped with front-end throttles, they also utilized fabricated frames and steam cylinders. This configuration features a boiler-tube pilot, matched drivers, three (3) exposed sander lines and 'early' style rods with Alemite grease fittings. The cab has an extended back wall to allow for a new brakeman's seat behind the fireman, a 'greenhouse' type extended engineer's sliding side window and it retains the original sliding ventilators on the roof. Because this configuration existed during the railroad's transition period, both 'early' and 'modern' style graphics are appropriate. A near as-built style 18C 18,000 gallon tender is included with this configuration.



Post-war Configuration: this configuration became the final evolution of the class, most all UP 'types' in service after WWII received the treatment shown immediately above, once again, UP-3 and UP-4 locomotives and road numbers 9015-9054 are included. Common major characteristics for the 'postwar' rebuilds were: retro-fitted cast steam cylinders, five (5) exposed sander lines, Boxpok style #3 main drivers, strap iron 'ATC' equipped pilot, late style trailing truck, late style main & side rods, E-2 radial buffer, relocated and widened cab, modified side cab windows, hatch type roof ventilators and modified air pumps. A modified 18C tender equipped with a stoker engine relocated from the locomotive, extended coal boards, an engineer's grip box, re-railing iron hangers and 'modern'



In developing a selected version it needs to be understood that we make every effort to determine what variations were planned in the service life of our selected prototype and not unique departures from the norm due to an individual's approach to locomotive maintenance. Our efforts are based on both blueprint documentation and photographic reference and we try to offer models that represent a significant group of locomotives that operated during our chosen period of time.

This project will include a number features that are firsts for us as well as those that our customers have come to expect with our models. There are a couple of factors that are consistent both of the versions that we are offering: all of the drivers for each version will be flanged as they were for the prototype in service and we will rely on the use of lateral motion devices to get this monster around as tight a radius as possible, our designed minimum radius is 72" to the center-line of the trackage. The unique character of this Union Pacific prototype will highlight many of the features that have been well concealed on our previous projects.

Model Features

- Fully Equalized and Sprung Suspension with Real Fabricated Leaf Springs
- All Axles on Locomotive and Tender Ride on Ball-Bearings
- 39 Ball-Bearing Units used throughout the model
- Custom built Pittman Motor for maximum Torque
- Nickel Silver Rods and Valve Gear
- Ball-Bearing Equipped Side & Main Rods
- Custom Ball-Bearing Equipped Drive
- Stainless Tires on All Wheel Sets
- User Controlled Electronic Valve Gear with Working Gresley Mechanism and Working Third Cylinder
- Full Cab Detail: with Wood Detail, Brass Gauge Bezels & Lenses
- Real Glass Window Glazing
- All Hatches and Compartments will be Operational
- Full Under-body Detail on Locomotive & Tender
- Special Dallee Electronics Sound System will reproduce the unusual 3-cylinder cadence of the '9000'
- Continuous Voltage Lighting System

All directional lighting will be both automatically and manually controlled. All lighting functions will be accessible through the included control box which is also used to control the sound functions. All remote functions are compatible with most DCC installations.

Order / Reservation Form

The price of our Union Pacific 'type' 4-12-2 is \$3,900 (shipping costs to be quoted at time of delivery) and there is a \$975 non-refundable deposit required at the time of ordering to secure the reservation. An additional \$975 will be due as the final assembly commences which will leave a 50% balance due at the time of final delivery. A confirmation letter will be issued to verify the order and regular project updates will follow until the completion of the project.

Name:		Address:		
City:	State:	Zip Code:	Country:	
Phone:	Fax:		E-mail:	
Version	Road Number	Deposit Amount		
			Total Enclosed:	