The K-4 has come to be known as "America's most famous Pacific". The first K-4 engine developed was locomotive 1737, produced in Juniata Shops in May of 1914; its original design remained basically unchanged. This model was so popular it was mass-produced in 1917, and would be copied 424 times in the next 18 years.

The first K-4s produced utilized the common boiler design. They came equipped with screw reverses, were superheated, and hand fired. They came with 80" drivers, used 205 pounds of pressure, weighed 308,890 pounds, held 7,000 gallons water, and carried 12 1/2 tons of coal. The last engines were built in 1928. Motive power chief J.T. Wallis and his assistants, Alfred Gibbs and Axel Vogt, would be the first men to evolve the K-4. In 1919 a small group of engines were built containing power reverses and Street underfeed stokers. These stokers were deemed unreliable, and removed until the mid-1930's, when the revolution of the K-4s began. At this time, the K-4s were fitted with dependable standard stokers. This move was considered to be the largest single operational improvement of the K-4. Stokers greatly increased the performance of the K-4 engine. Originally the K-4 was designed to haul 11 cars and could achieve an average speed of 60-75 miles an hour. With the implementation of the stokers, engines could now pull up to 16 or more cars, still achieving high rates of speed. A test train even reached a maximum speed of 92 miles an hour in 1938! They were also fitted with larger tenders, known as Kiesel tenders, (sometimes referred to as Baldwin tenders) named after its developer W.F. Kiesel, Jr. Superheaters were also introduced, and would come to be known as the best overall improvement made to the K-4, as its efficiency was increased by 20% after their installation. The superheaters collected the engine's steam in a series of boiler tubes, and then re-routed and dried the steam.

By 1956, only 72 K-4 locomotives were left in existence. Only 20 were in use, all of which were located in New Jersey. The Pennsylvania Railroad has preserved some of the K-4 engines. The K-4 was one of the most successful and widely recognized locomotives ever developed.

### PROTOTYPE SPECIFICATIONS
- **Cylinders**: 27" x 28"
- **Firebox size**: 79-7/8" x 126"
- **Steam pressure**: 205 lbs.
- **Starting tractive force**: 44,460 lbs.
- **Weight of engine in working order**: 308,890 lbs.
- **Weight of engine on pony truck**: 53,640 lbs.
- **Weight of engine on trailing truck**: 53,420 lbs.
- **Weight of tender, loaded**: 198,400 lbs.
- **Weight of tender, empty**: 82,300 lbs.

### MODEL SPECIFICATIONS
- **Length with Tender**: 11-7/16"
- **Height**: 2-1/8"
- **Weight**: 2 lb. 7 oz
- **Minimum Radius**: 18"
- **Recommended Radius**: 22"
- **Power**: DC-71 Motor
- **Drivers**: 80" with RP-25 flanges
- **Color**: Brunswick Green

### BOWSER PRR K-4 PACIFIC KITS AND ACCESSORIES
- **#525**: PRR K-4 Pacific Deluxe Kit (includes body & tender drilled for superdetailing and all parts)
- **#100500**: PRR K-4 Pacific w/ High Side Tender, Kit Basic Kit
- **#100515**: K-4 Superdetail Kit
- **#100516**: Smoke Unit Kit
- **#91000**: Painted Engineer and Fireman (cut off their legs)
- **#500505**: Assembled Valve Gear
LATEST VERSION OF K-4 PACIFIC (AS OF 7-93)
WITH ZINC DIE CAST BOILER

Pilot Coupler
Use KD® #4 coupler only (no pocket). File side lugs off coupler shank. Clean out cast on coupler pocket to fit the coupler shank. Use a 2-56 x 5/16" screw to mount pilot to frame. Carefully enlarge rear half of rectangleopening to clear a 2-56 screw. Back screw out of pilot until it is flush with the bottom of the frame. Insert #4 coupler into pocket and tighten pilot screw through coupler's enlarged hole. Hold in place with a 2-56 nut and tighten only until nut touches bottom of coupler.

MOTOR WORM GEARS

<table>
<thead>
<tr>
<th>WORM</th>
<th>AXLE</th>
<th>GEAR RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1010</td>
<td>1011</td>
<td>32-1</td>
</tr>
</tbody>
</table>

Assembled piping #100513

The piping is preformed and soldered together for you. Simply attach as follows: Using a razor saw position piping (starting at rear). Cut a slot in the walk for the bracket, press in place and go on to the next slots.

ALTERNATE METHOD: Bend bracket close to wire and glue to the underside of walk.

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For many years, the K-4 was the most popular engine built for standard passenger service. Its design was incorporated from the E-6, and from 1914-1928, 425 engines were built simultaneously with the L-1, having similar boiler design and interchangeable parts.

Smoke Unit Kit For Bowser & Penn Line Locos
Kits includes a Model Power Smoke Unit, Instructions and the necessary mounting hardware. Smoke fluid not included. #100516 For PRR K-4. Requires drilling smoke stack, filing underside of boiler & drilling mounting holes for bracket.

Marker Light Jewels:
Rule of thumb: Green to front, amber to side and red to rear. The Pennsy had amber to the side and red to front and rear. When the loco was traveling forward the tender marker lights would show red. When the loco was backing up the marker lights on the pilot or smoke box front would show red. Sometimes one of the crew would change the markers to the color desired.

Operating Headlight
If you already have a headlight. Use a #91039 Grain of Rice bulb for headlight. Drill out headlight and drill a hole in front of generator to run wire to motor brushes. Solder one wire to each brush.

Valve Gear Assembly:
KIT #100505
ASSEMBLED #500505

Boiler and Tender Bodies - Drilled for Superdetail parts
Retail Customers: TRADE IN your old K-4 PACIFIC BOILERS for a new zinc die cast boiler drilled for our new superdetail kit. Over 40 holes drilled. Superdetail kits sold separately.
Trade in - No boiler detail parts included - K-4 #71002
Trade in - includes all boiler detail parts from basic kit - K-4 #71003

HIGH SIDE TENDERS the tender bdy mold has been damaged beyond repair. Our only PRR is the 13,000 gallon tender. This tender is included with most Bowser PRR Loco Kits.

Drawing Of K-4 w/ Modern Front
PARTS NEEDED:
#810 White metal pilot or
#190-387 brass pilot
#70145 TANK
CAL SCALE#2001 Modern front detail kit

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Old style Bowser loco w/ lead boiler

When ordering replacement parts for older style Bowser and Penn Line locos, use the Part Number Conversion Chart to insure receiving correct parts.

Old style Penn Line with lead boiler

FOR #430 BOILER SEE NEW VERSION (7-93)
(lead boiler no longer available)
The K-4 boiler has been changed to a zinc die casting.