PRR T-1 DUPLEX 4-4-4

Locomotives of the 4-4-4 type represented advanced mechanical engineering concepts of the very popular 4-8-4. Both wheel arrangements were similar, but testing showed that doubling up on cylinders and machinery produced great benefits to railway travel. This new development was to be dubbed "duplex".

Duplexes had lighter machinery, had a shorter cylinder stroke, utilized less wear and tear on the parts, had a lower piston thrust, had smaller cylinders, and had a rigid frame.

The first two T1 engines, which were experimental, were the 6110 and 6111 in the year 1942. The 6111 got a Franklin booster in its trailing truck, and with this addition was now able to carry up to 13,500 pounds. The total length of the engine along with the tender was 122 feet.

In 1945, the Pennsylvania Railroad placed an order for fifty engines. Altoona built the numbers 5500-5524 and Baldwin built 5525-5549. Then things started going wrong for the T1. Poppet valve cost for maintenance rose sharply, contour rotary cams were tried out, the economy was in a poor state after World War II, and some locomotives were fitted with Walschaert valve gear to become class T1a. The T1 engines were not performing up to par and without the use of steam operations its shortcomings could not be overcome. By the mid-1950's, the T1's were all but obsolete.

Another problem that the T1 faced was being slippery on the rails due to weight transfer from front to back of the train. Plans were designed to make the train adhere more to the rails, but no feasible solution was ever found to save the plight of the T1. The T1 was popular in its day because it was an unusual engine; however its career was to be short-lived. Unfortunately, none of the T1's were ever saved.

PROTOTYPESPECIFICATIONS

26"
s.

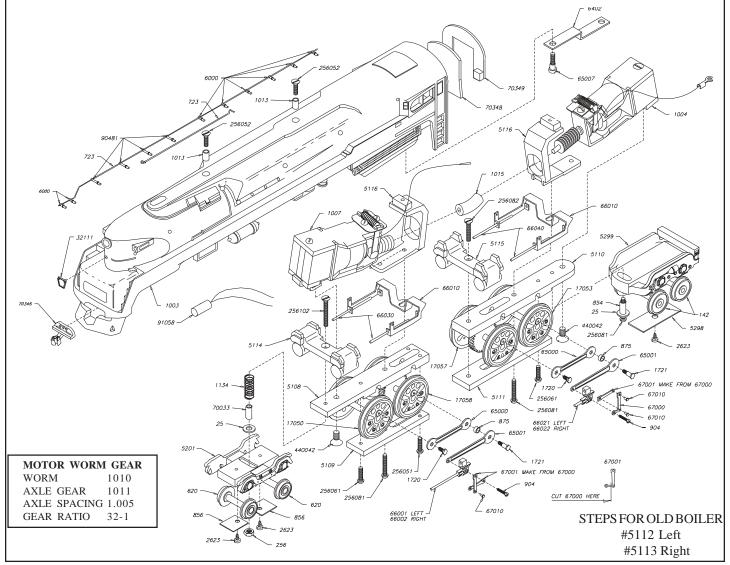
MODEL SPECIFICATIONS		
Length with 7	Fender	17"
Height		2-1/4"
Weight		3 lbs.
Minimum rad	lius	22"
Power	Bows	er DC-71
Drivers	80"	Box Pok

BOWSER T-1 DUPLEX KITS

#101000 PRR T-1 Duplex w/ Tender, Kit

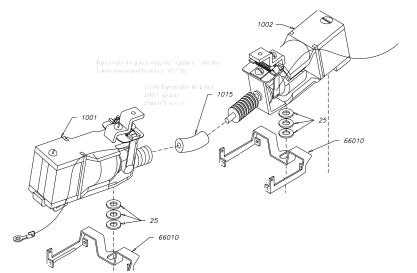
Includes the superdetail parts and the holes are predrilled for this parts. Some holes may need reamed to get proper fit.

ZINC DIE CAST BODY T-1 DUPLEX



PRR T-1 DUPLEX 4-4-4

Old boiler mounting method



The T-1 Duplex require 22" radius curves. To make the T-1 work on 18" RADIUS follow the following steps.

1. Using a Dremel tool grind the inside of the body to allow the motor greater swing.

2. Using a round file widen the slot in the pony truck frame. You may have to use a smaller washer on the bottom of the frame (our part #26).

3. Make a longer drawbar using .020 x .250 brass (K&S)

4. Eliminate the flexible coupling (1015) connecting the motors.

SUPER DETAIL KIT #101025

This kit is used only on old Lead cast T-1's. The new zinc die cast body kits all include the detail parts

