INSTRUCTIONS FOR NYC K-11 PACIFIC 4-6-2 KIT #100200

These instructions provide photographs of completed model, exploded-view drawings, diagrams, step-by-step instructions and an itemized parts list. If for reasons beyond our control, any shortage or faulty part is found, write directly to manufacturer, including name of your dealer and date of purchase. Return any defective parts for exchange.

The builder should study the instructions and drawings to attain a working knowledge of proper procedure. Assembly work should be done in sequence outlined in this manual to assure proper construction.

We have included some extra parts in case you misplace or drop them on the floor.

Do not run the mechanism or the engine upside down.

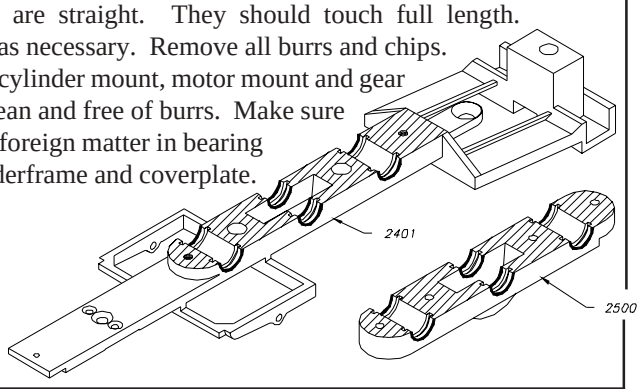
TOOLS

This is a builders kit, you will need a few tools. You will find use for the following: small hammer, several assorted pattern files, jewelers screwdriver (a set is convenient), a 6" flat file with a fairly fine cut, knife, pliers, flush cut nippers like Mascot #413 and tweezers.

BEFORE YOU PAINT THE MODEL OR DETAIL THE BOILER, WE RECOMMEND THAT YOU BUILD THE COMPLETE MECHANISM ATTACH THE UNDECORATED BODY AND THOROUGHLY TRACK TEST IT.

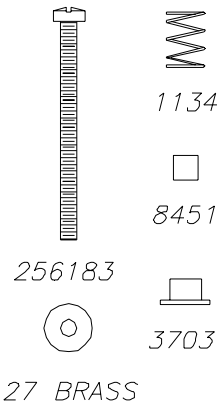
STEP #1. CLEAN UNDERFRAME AND COVERPLATE

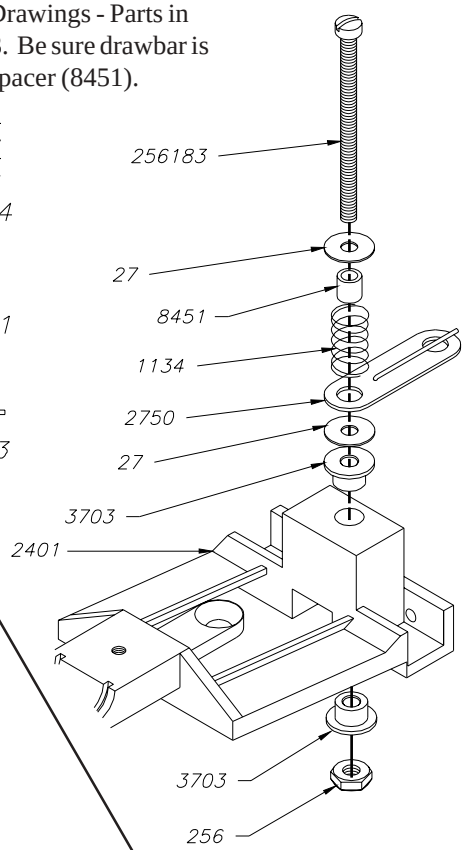
Clean flash from edges of bearing slots. (Dark lines). File matching surfaces (shaded) on a flat file. Check to see if thses parts are straight. They should touch full length. Straighten as necessary. Remove all burrs and chips. Make sure cylinder mount, motor mount and gear slots are clean and free of burrs. Make sure these is no foreign matter in bearing slots of underframe and coverplate.

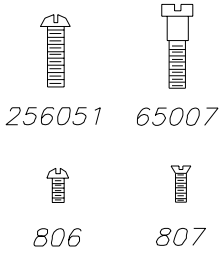


STEP #2: MOUNTING DRAWBAR

Full size Parts Drawings - Parts in Subkit #100203. Be sure drawbar is free to turn on spacer (8451).







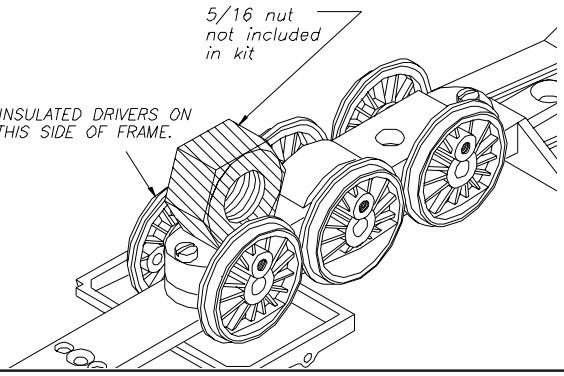
STEP 3: ASSEMBLING DRIVERS AND CYLINDERS TO FRAME

Identify which wheel of each set of drivers is insulated. With two wires hooked to your powerpack, touch one to the axle and one to a wheel rim. If you cause a spark, that is the uninsuldated wheel. If there is no spark, that is the insulated wheel. The insulated wheel has a thin gray strip of insulation between tire and black wheel center.

Install drivers making sure that the INSULATED wheel of each driver is on loco's LEFT SIDE. Left is determined by imagining you are sitting in cab of loco facing forward. Begin with geared driver (20023) in center slot and light counterwight drivers (20021) in rear and front slots. Put a small drop of oil on axle bearing.

STEP 4: SEATING BEARINGS

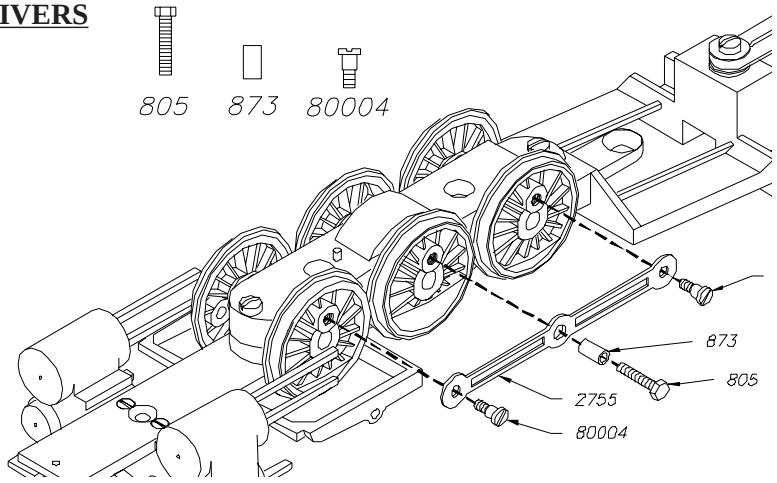
To seat bearing, turn frame and driver assembly upside down in your hand - NEVER ON ANYTHING SOLID - put a 5/16 nut or small block on coverplate between a set of drivers and hit nut/block (NEVER HIT WHEELS) until this set of drivers spins freely. Repeat for each set of drivers, getting as close to geared driver as possible, both forward and to the rear of gear housing, but not on gear housing. As you tap coverplate down, take up on screws. **WHEELS MUST SPIN FREELY BEFORE PROCEEDING**. Do not use shims between frame and coverplate.



STEP 6: ASSEMBLING SIDE RODS TO DRIVERS

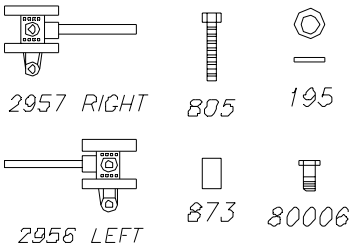
Small parts in Subkit #100201.
Check for binds by rolling back and forth on table. If you feel a bind, check to be sure screw heads are not pinching side rods to wheels. If that happens file back of side rod until it will move freely. It may be necessary to enlarge screw holes with a round file. Be careful, do not strip threads.

DO NOT PROCEED UNTIL THIS PART OF MECHANISM RUNS ABSOLUTELY FREE.

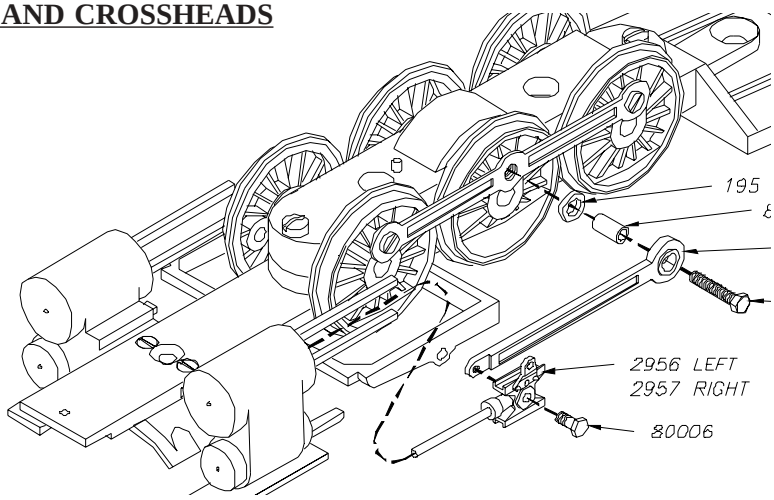


STEP 7: ASSEMBLING MAIN RODS AND CROSSHEADS

Full size Parts Drawings - Parts in Subkit #100201



Crosshead must slide freely. File slots as necessary. Do not over tighten screw 80006 and main rod 2754. Main rod and crosshead must be free to pivot. Use a dope of glue on the back of screw after assembly to keep screw from working loose.

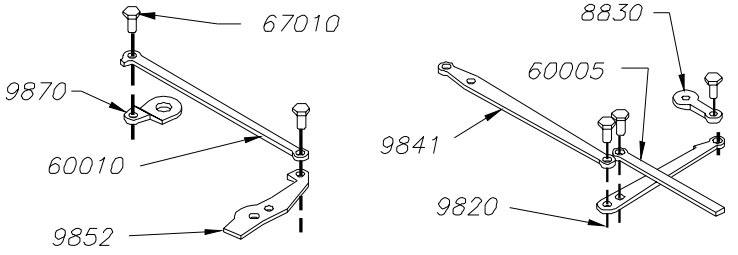


STEP 8: ASSEMBLING VALVE GEAR

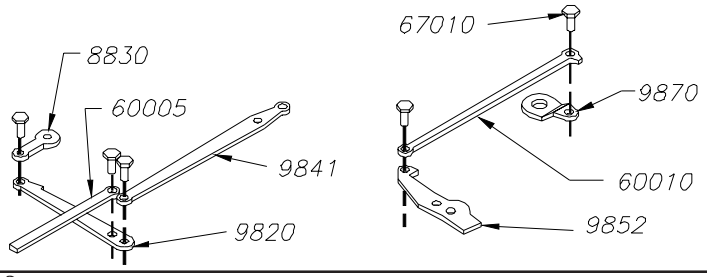
Parts in Subkit #100205.

Notice particularly OVER & UNDER parts. Check all parts and remove small burrs and roughness. Actual riveting must be done very, very carefully. Your kit contains a rivet tool (36) which will make this job much easier. Put rivet (67010) through proper holes in rods and lay assembly down with rivet head on a solid object. Set rivet tool with center point in hole in end of rivet and tap with hammer until rivet is properly flared. Gently, gently, gently feel your way. DO NOT MAKE JOINT TOO TIGHT. Test after each rivet is installed. ALL PARTS OF EACH ASSEMBLY SHOULD DANGLE FREELY. If they do not rivets are too tight and must be replace.

Left Side Assembly

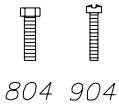


Right Side Assembly

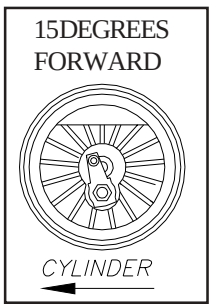


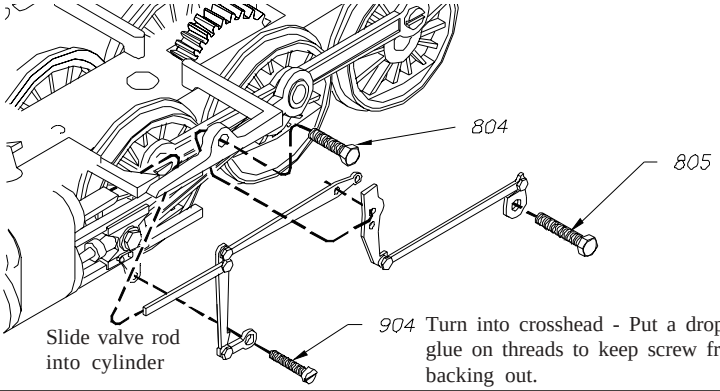
STEP 9: ASSEMBLING VALVE GEAR TO MECHANISM

Parts in Subkit #100205.



Set eccentric 15 degeree forward of axle.

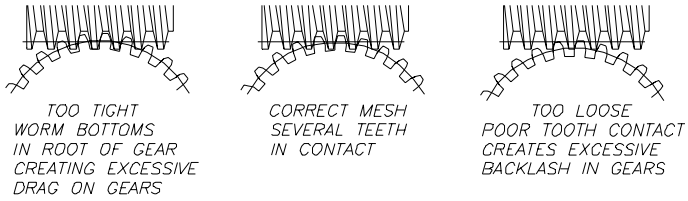


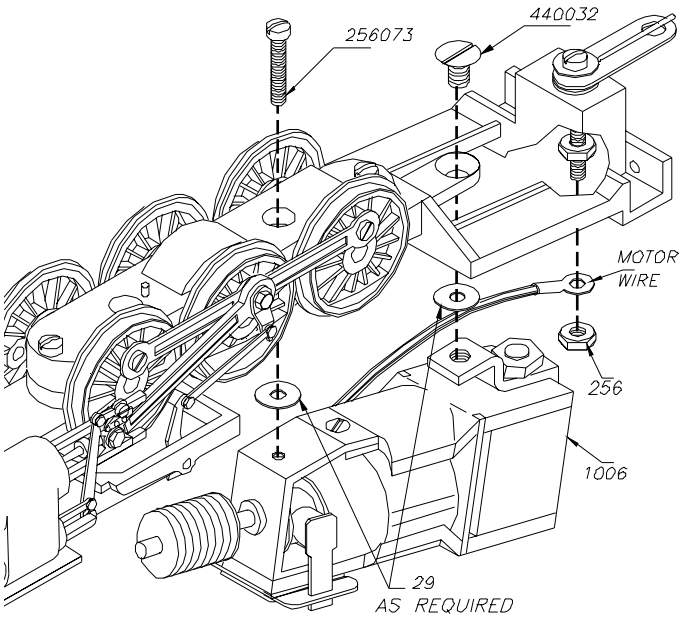


STEP 10: ASSEMBLING MOTOR TO FRAME

Parts in Subkit #100203

To get proper gear mesh, it may be necessary to raise the worm with a shim under front screw 256073 or to lower worm with a shim under back screw 440032. Fibre washer (29) is supplied for this.

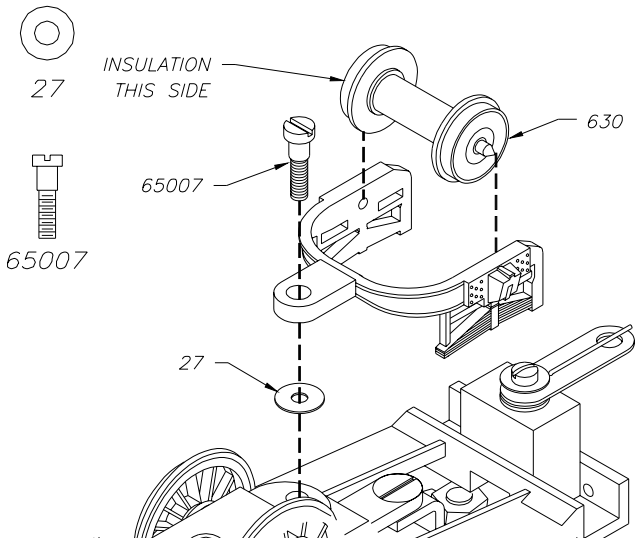




STEP 11: ASSEMBLING TRAILING TRUCK

Parts in subkit #100207

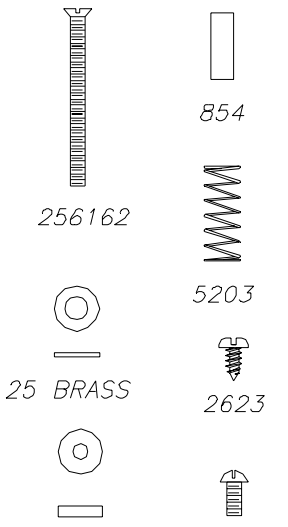
Spread frame to allow ends of axles to slip into journals. It will be necessary to do some shaping with pliers to get sides of trailing truck frame parallel and at the same time not let them get so close together that they will pinch on ends of axles. Sides of trailing truck frame should be vertical and parallel with longitudinal axis of engine. Wheels should spin freely.

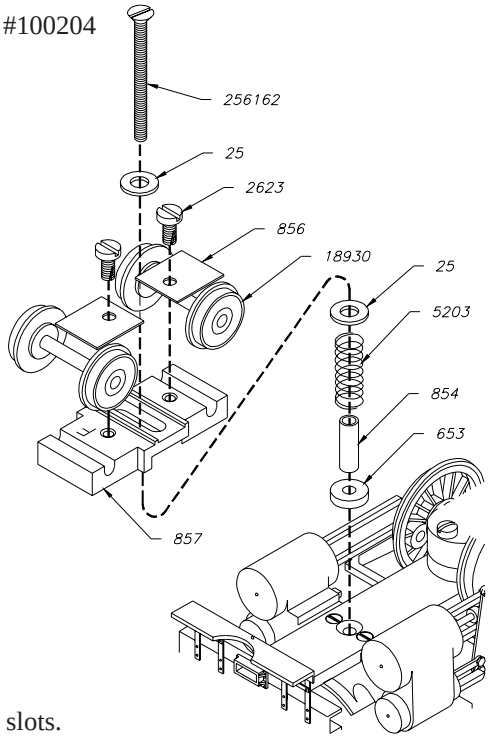


STEP 12: ASSEMBLING TRUCK AND MOUNTING TO UNASSEMBLED BOILER

Full size parts drawings.

Parts in subkit #100203 & #100204





Make sure wheels spin in slots.

The letter F cast on the top of the casting (857) is toward the front.

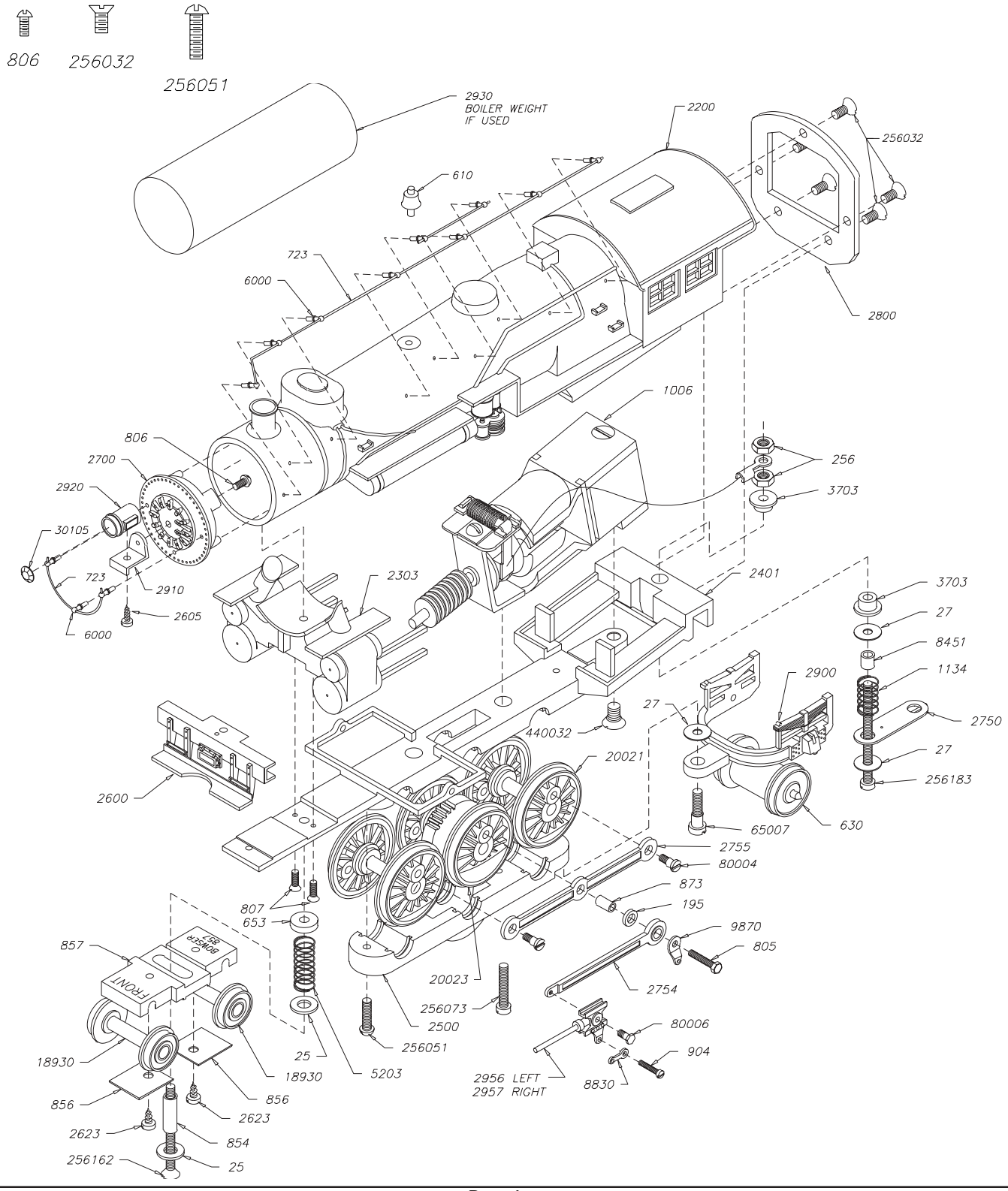
STEP 13: BOILER DETAILS

Clean boiler (2200). Take two pieces of handrail wire (723) 5" long, put a 90 degree bend in each 4-11/16" from one end. String 6 handrail stanchions (6000) on long leg of each piece and tap them into the 6 holes in each side of boiler. Put one handrail stanchion on each short leg and tap it into hole provided. A little shaping will be necessary on short leg so it will follow curve of boiler. Clip excess wire.

Cut piece of handrail wire 7/8" long, slip on 2 stanchions and tap into two holes on left side of boiler just below bell and steam dome.

Shape another piece of wire unto a U and lay it on smoke box front over the three stanchion holes. Work it into a smooth curve covering all three holes. String 3 stanchions on wire and tap into holes. Clip excess.

Mount boiler to mechanism.

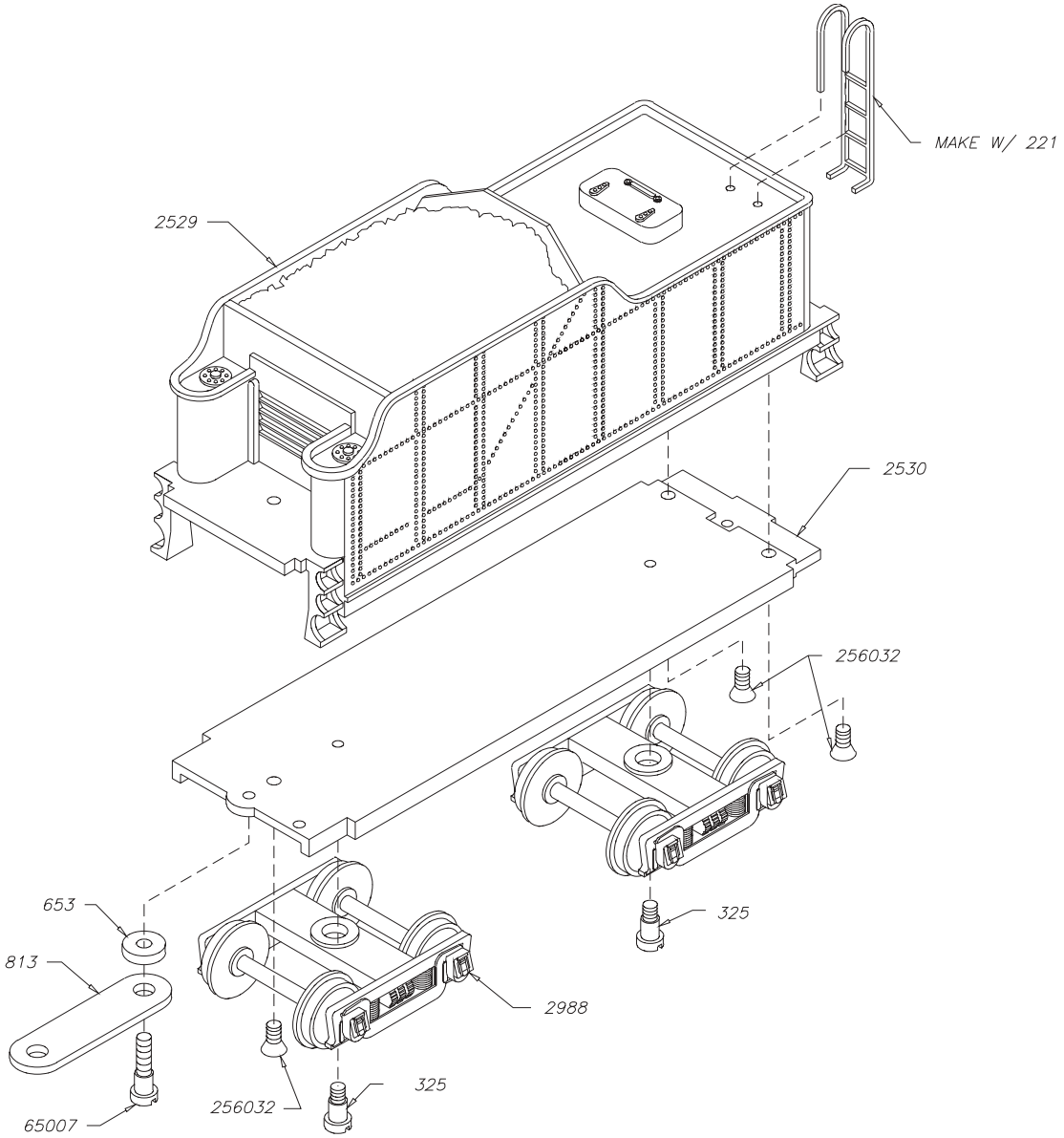


STEP 14: TENDER INSTRUCTIONS

Clean tender body (2529) and floor (2530).

Parts in subkit #40010.

Ladder should be formed as shown on drawing. There are two holes in rear end and two in rear deck of tender body to accept ladder ends. One hole in end and deck is drilled so ladder uprights will extend through and can be bent over to hold firmly. Glue may be necessary to keep other upright in place.



STEP 15: PAINTING - Disassemble mechnaism before painting.

We suggest that you do not paint your loco until it is thoroughly track tested as disassembly and handling generally ruins a paint job. Take your locomotive apart so that the various parts may be painted without getting paint on moving parts. Valve gear, side rods, bearings, lead truck, etc. will not operate properly if paint gets into the joints of moving parts.

CAUTION: Do not immerse wheels, underframes or coverplate in acid solution or cleaners. Brush cleaner and acid solutions on metal frames of lead and trailing trucks and on underframe surfaces to be painted,
NOT ON WHEELS, AXLES OR BEARING SLOTS. Drivers are preblackened and can be touched up, after removing flash, without using cleaner or acid.

Apply a smooth, uniform coat of good grade model railroad paint. Work carefully to avoid