

INSTRUCTIONS FOR #100800 PRR L-1 MIKADO KIT

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 the 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 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 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 small 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 PAINTING YOUR MODEL OR DETAILING THE BOILER, WE RECOMMEND THAT YOU BUILD THE COMPLETE MECHANISM ATTACH THE UNDECORATED BODY AND THOROUGHLY TRACK TEST IT.

STEP #1

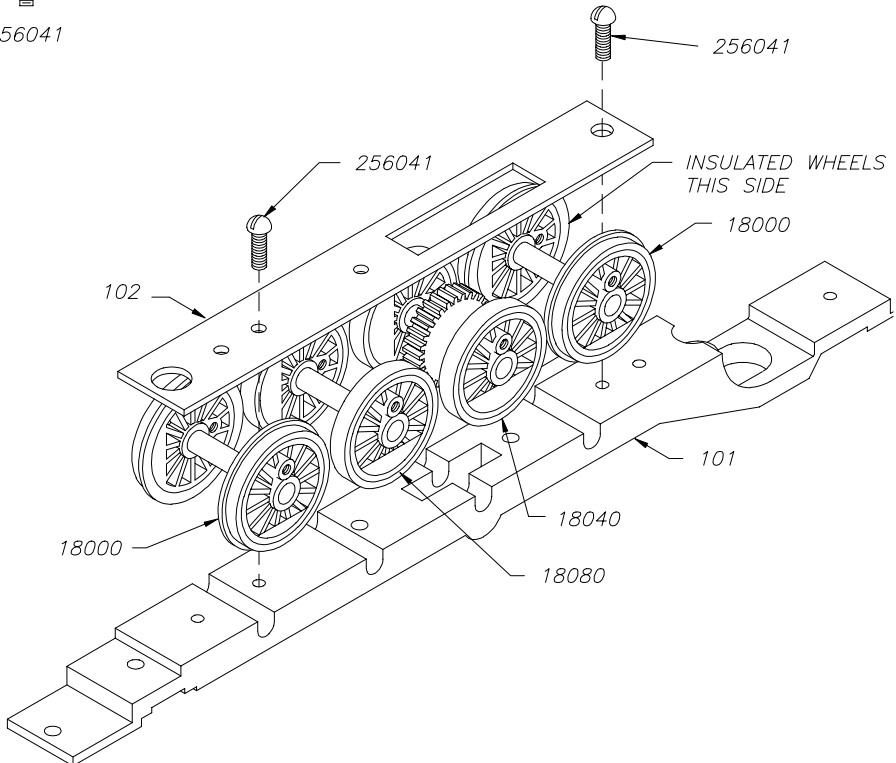
Clean flash from edges of parts.
File mating surfaces on a flat file.
Assemble and assure the wheels spin freely.
Spin lightly.

SUBKIT 100803



256041

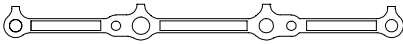
Identify which wheel of each set of drivers is insulated. With two wires hooked to your powerpack, touch one to the axle and one to a wheel rim. If you cause a spark, that is the uninsulated wheel. If there is no spark, that is the insulated wheel. The insulated wheel has a thin gray strip of insulation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



STEP #2

Assemble side rods as shown.
The fluted surface faces out. Assure
the wheels spin freely. Enlarge holes with
round file in side rods to eliminate any binds.
Oil lightly.

SUBKIT #100801
FULL SIZE



8762 RIGHT



8761 LEFT



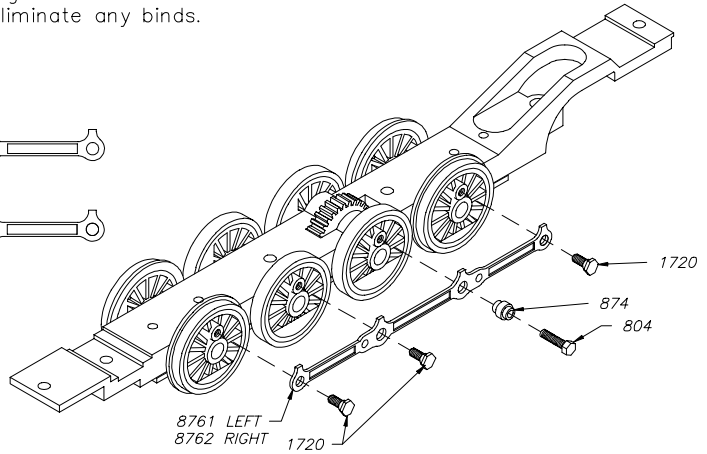
804



1720



874



STEP #3

Install cylinders, crossheads
and main rods to mechanism.
Mechanism must roll freely.
Oil lightly.

SUBKIT 100803
FULL SIZE



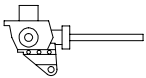
256041



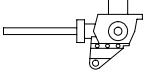
804



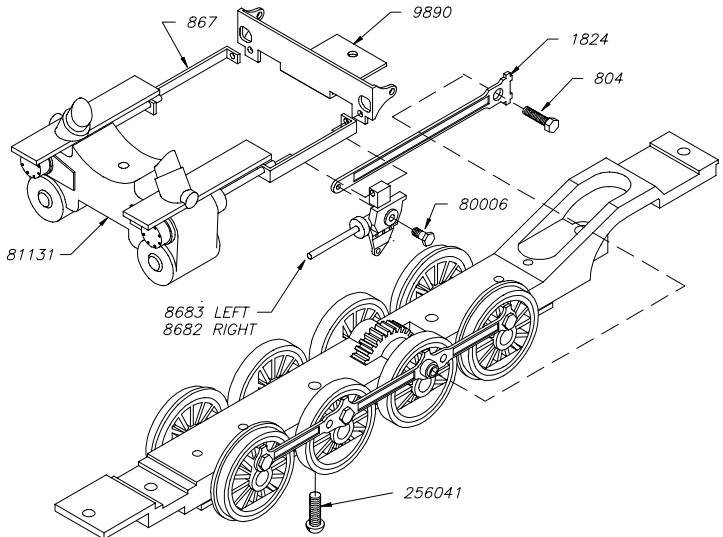
80006



8682 RIGHT

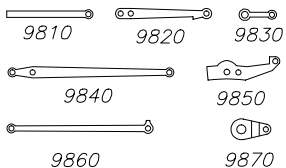


8683 LEFT

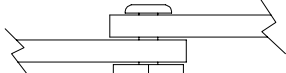


STEP #4

PARTS IDENTIFICATION LIST SIBKIT 100805 FULL SIZE



SET RIVET TOOL WITH CENTER POINT IN HOLE IN END OF RIVET. TAP WITH LIGHT HAMMER UNTIL RIVET IS PROPERLY FLARED. BE CAREFUL NOT TO MAKE JOINT TOO TIGHT.



SIDE VIEW OF RIVET SHOWN 10X SIZE
NOTE CLEARANCE

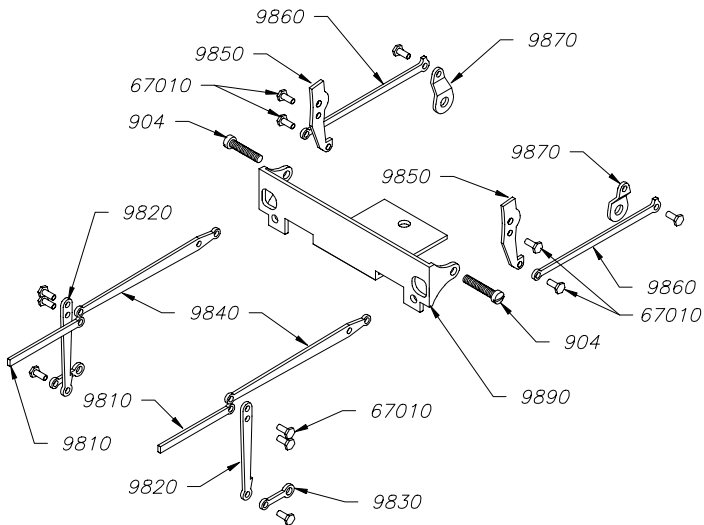


FIG 1
LEFT FRONT

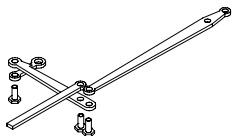


FIG 2
RIGHT FRONT

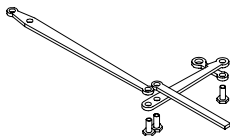


FIG 3
LEFT REAR

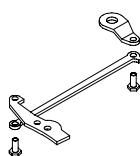


FIG 4
RIGHT REAR

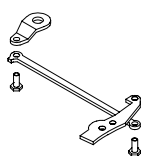


FIG 5

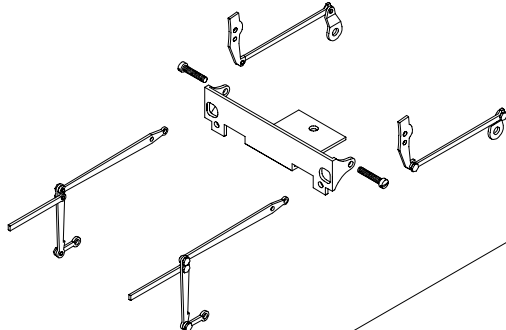


FIG 6

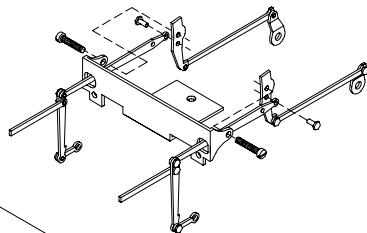
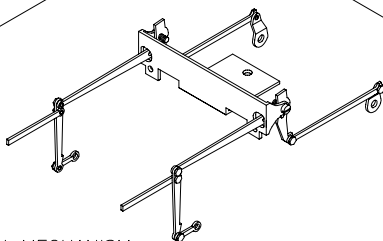


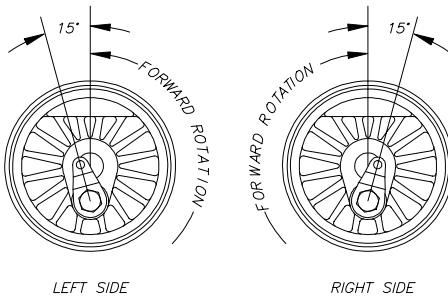
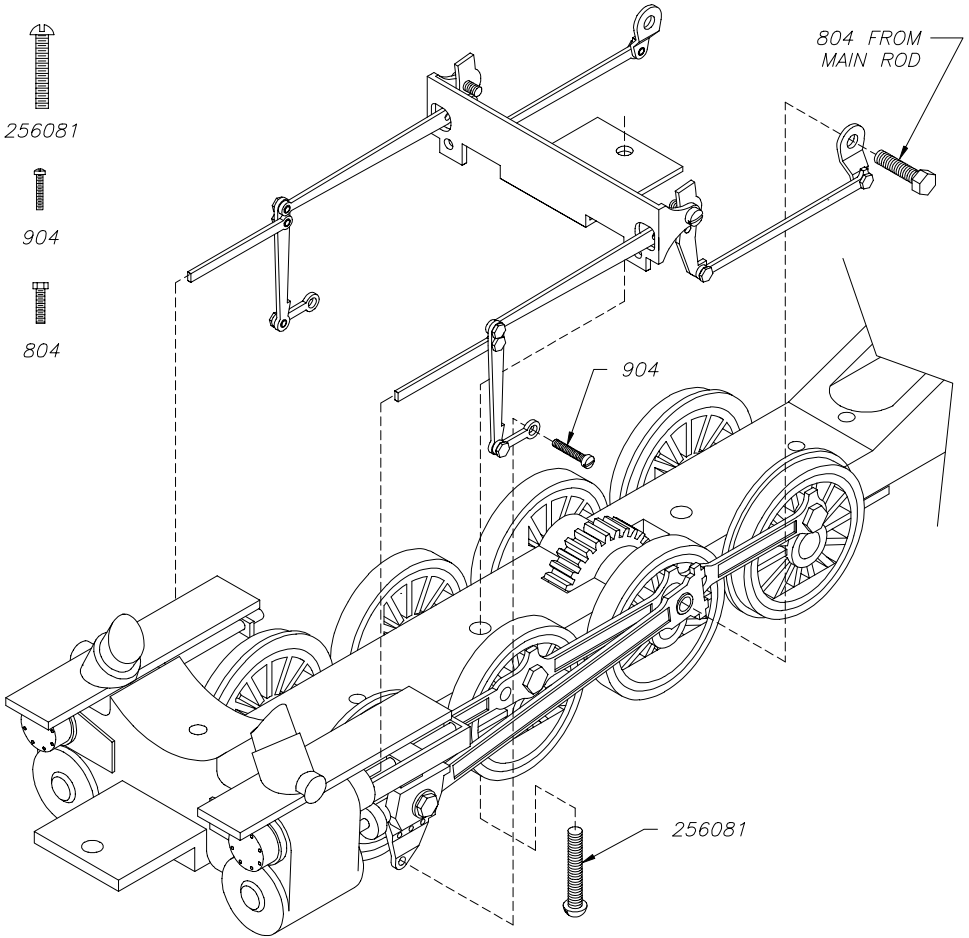
FIG 7
READY TO INSTALL ON MECHANISM.



STEP #4a

Install valve gear. Cut off end of screw 904 flush with back of crosshead. Put drop of glue on threads to keep screw from backing out. Time valves as shown below.

SUBKIT 100803



STEP #5

Install motor. Adjust gear mesh using #29 washers as shown in sketch below.

SUBKIT 100803
FULL SIZE



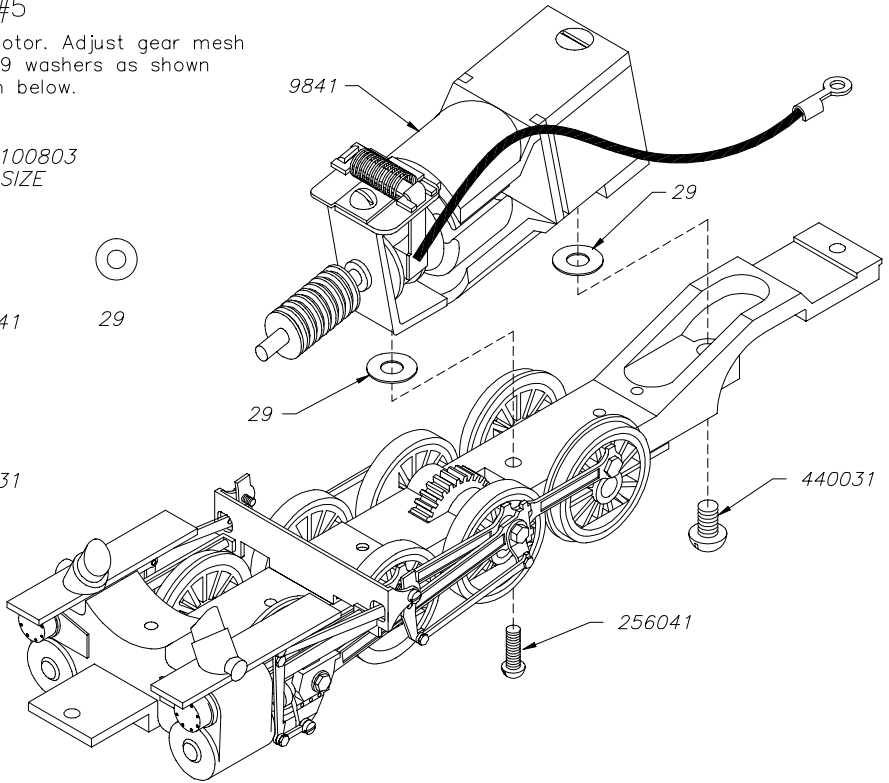
256041



29



440031



TOO TIGHT
WORM BOTTOMS
IN ROOT OF GEAR
CAUSING EXCESSIVE
DRAG ON GEARS.



CORRECT MESH
SEVERAL TEETH
IN CONTACT.



TOO LOOSE
POOR TOOTH CONTACT
CAUSING EXCESSIVE
BACKLASH IN GEARS.

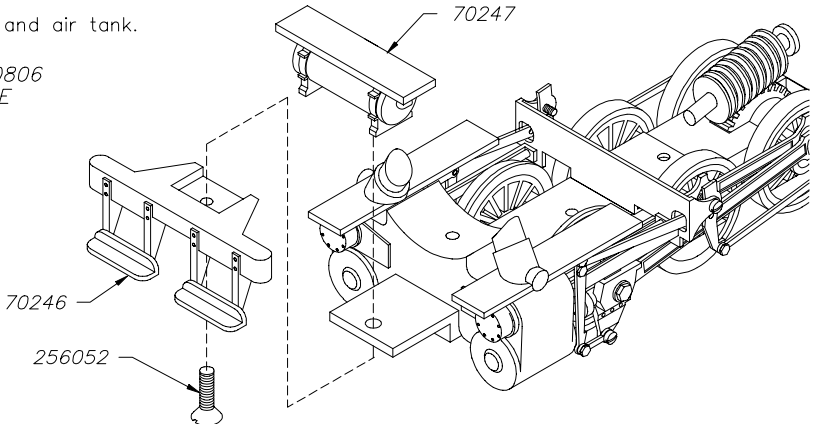
STEP #6

Install pilot and air tank.

SUBKIT 100806
FULL SIZE



256052



70246

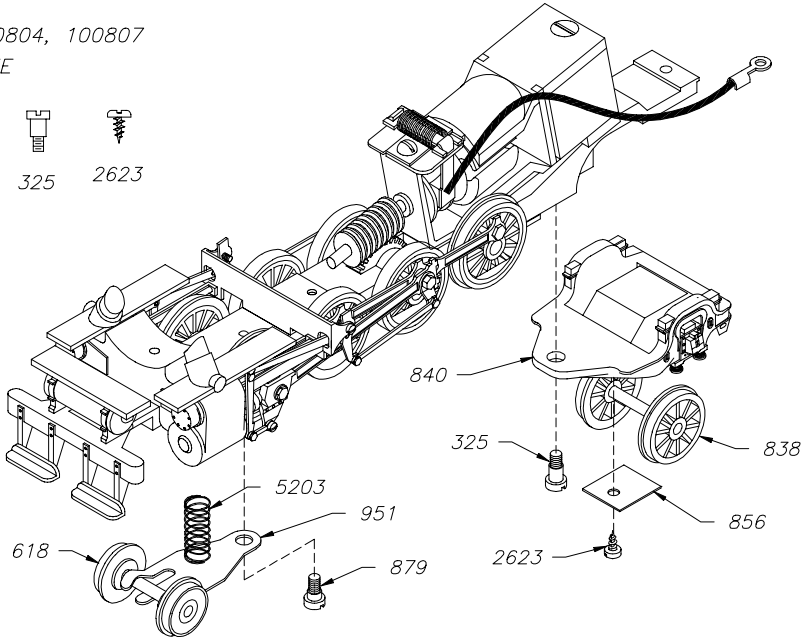
256052

70247

STEP #7

Install motor. Adjust gear mesh using #29 washers as shown in sketch below.

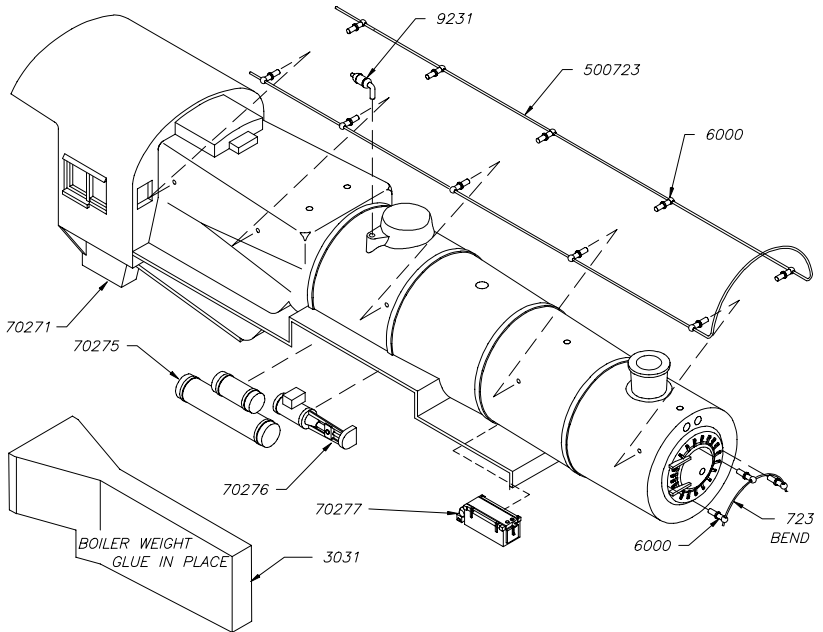
SUBKIT 100804, 100807
FULL SIZE



STEP #8

Detail left side of boiler.

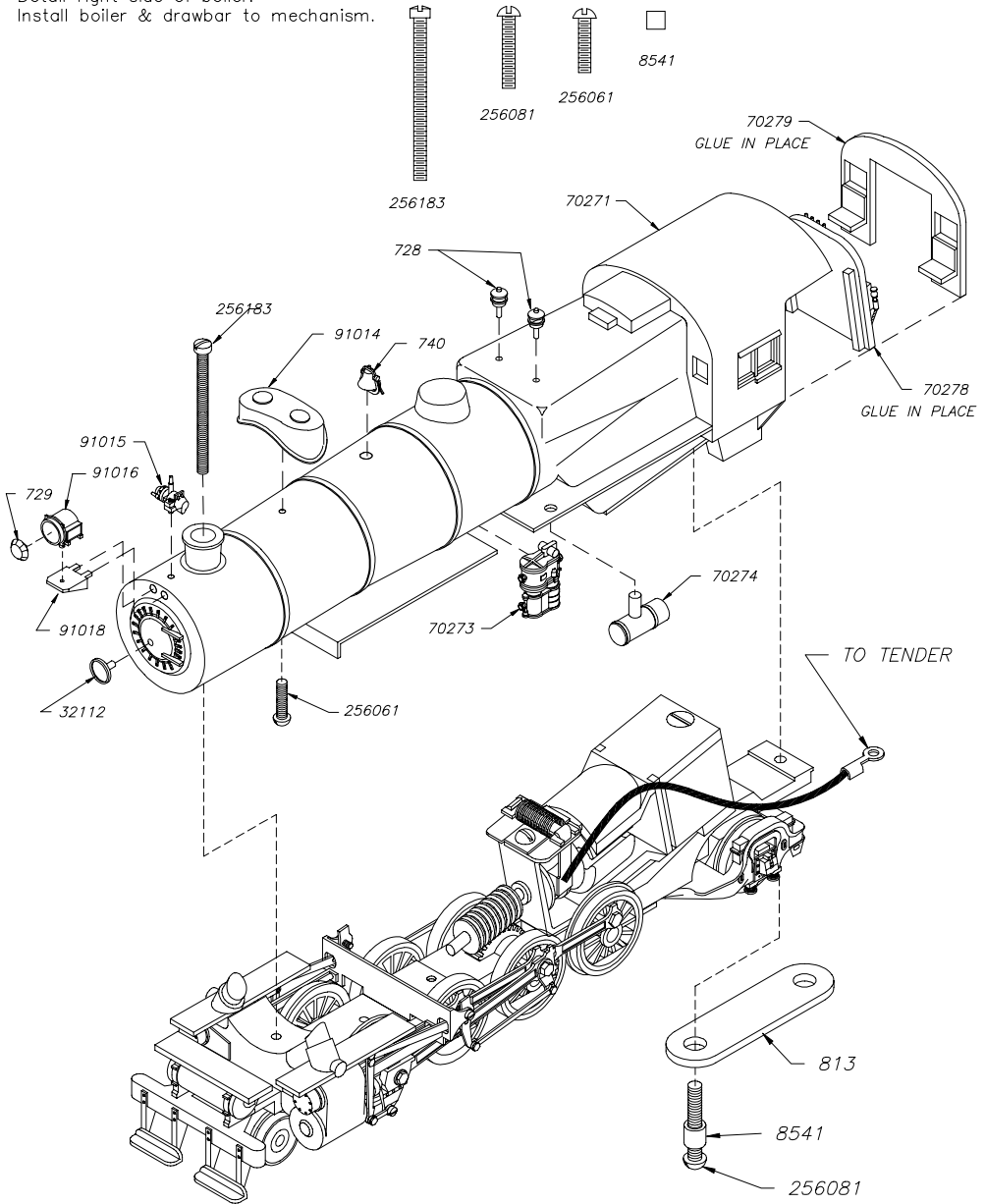
SUBKIT 100806



STEP #9

SUBKIT 100803 FULL SIZE

Detail right side of boiler.
Install boiler & drawbar to mechanism.

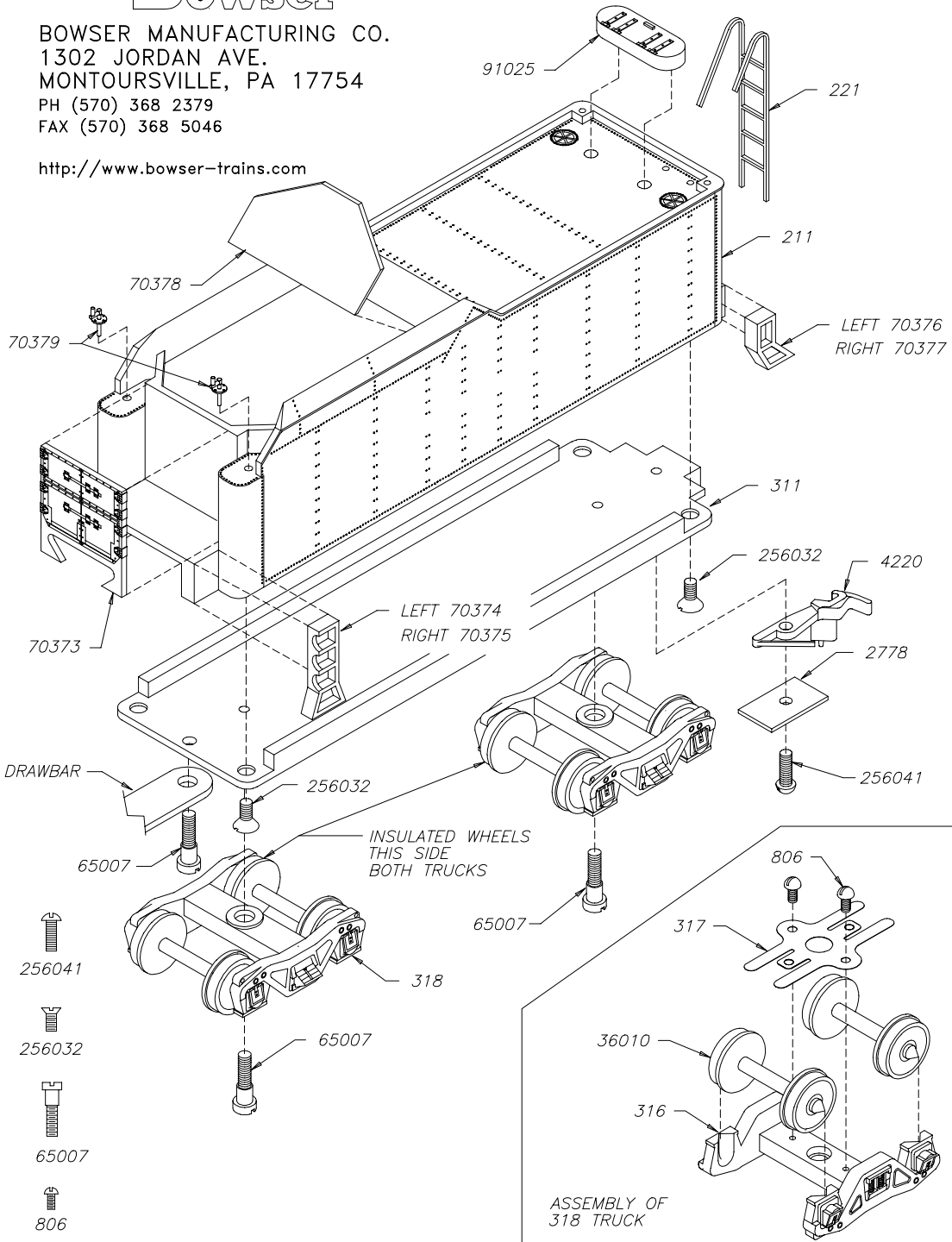


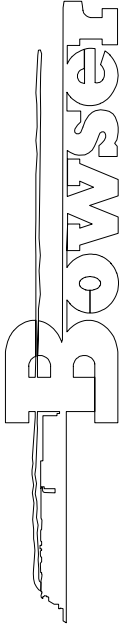


13000 GAL TENDER KIT 150635

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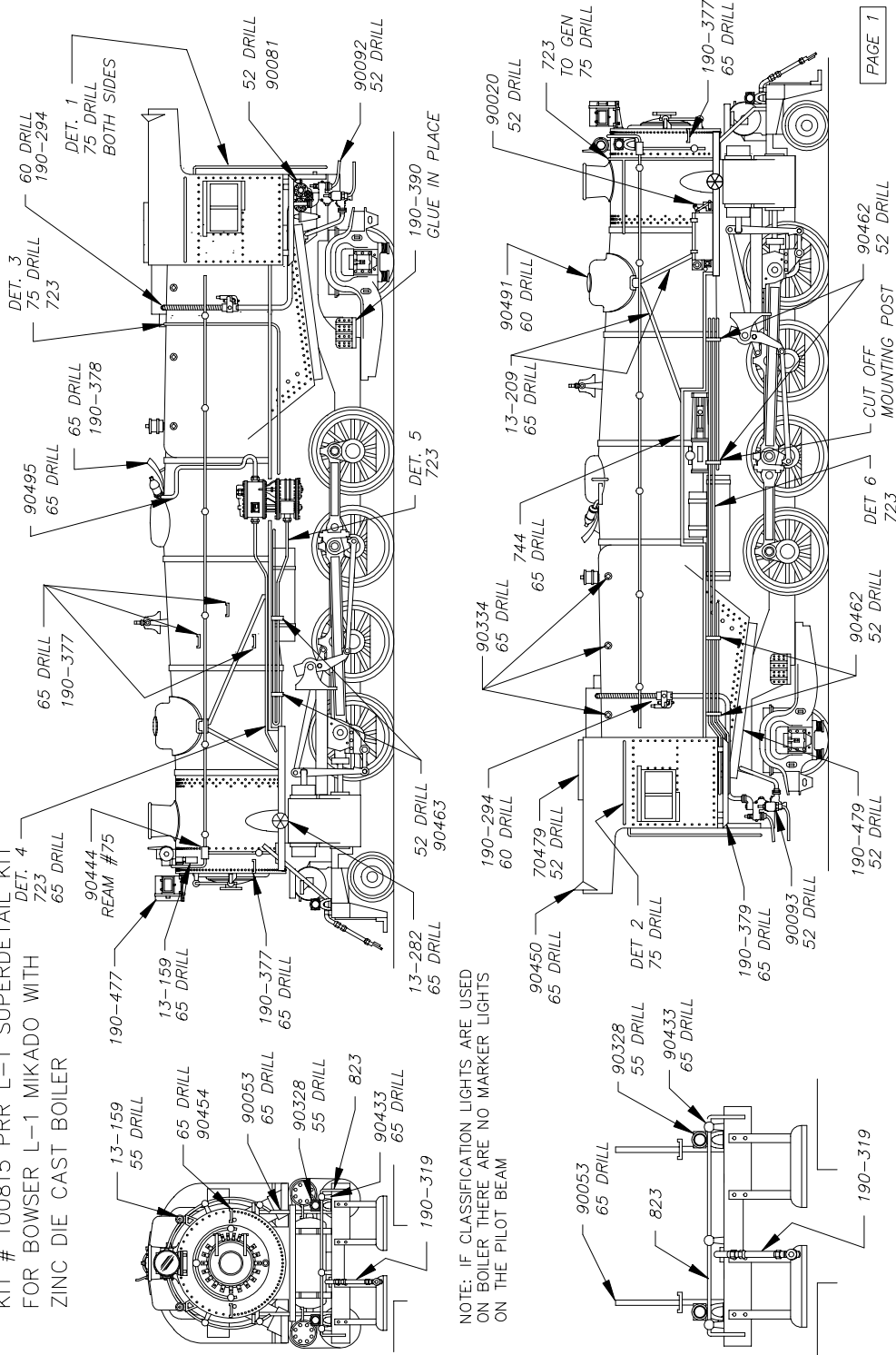



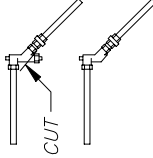

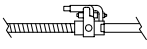

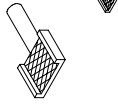
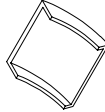
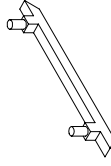

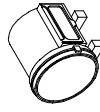
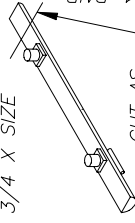
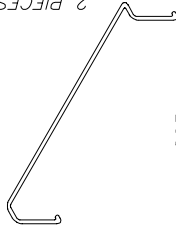
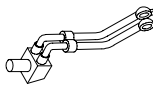
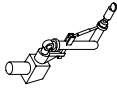

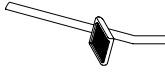

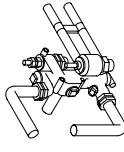
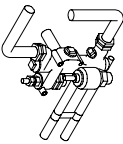




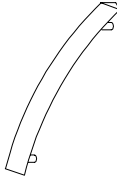

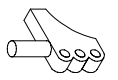
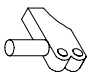
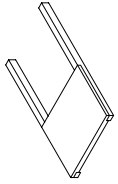

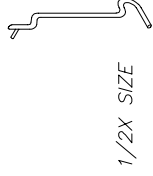


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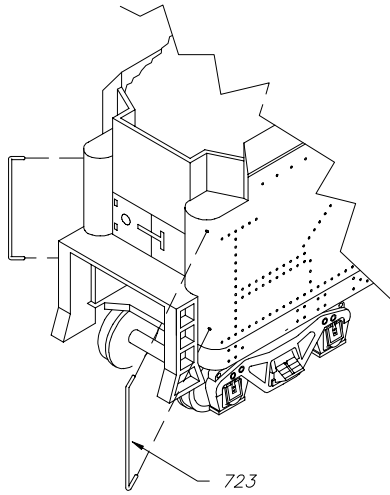
**KIT # 100815 PRR L-1 SUPERDETAIL KIT
FOR BOWSER L-1 MIKADO WITH
ZINC DIE CAST BOILER**



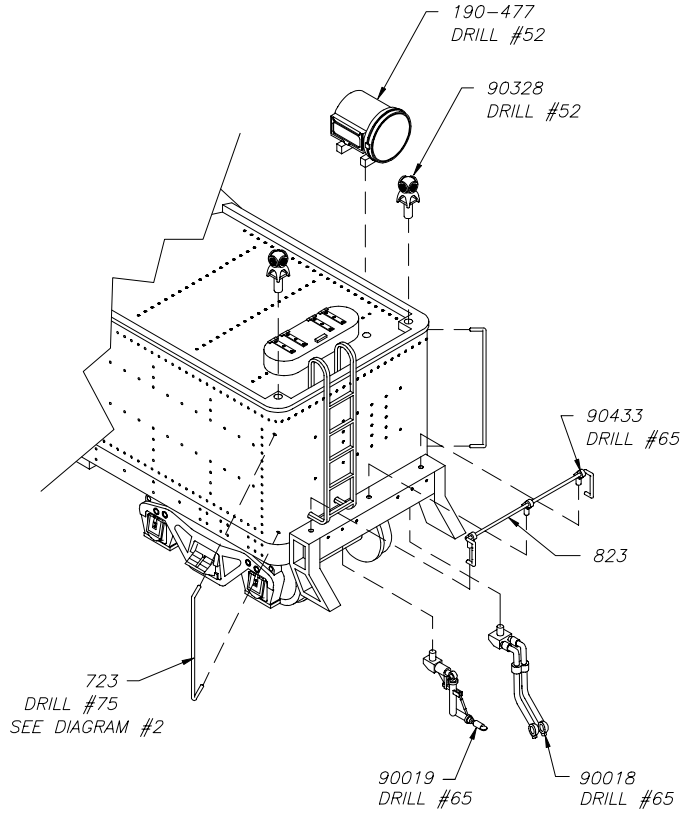
 <p>13-159</p> <p>1 PAIR</p>	 <p>CUT</p> <p>13-209</p> <p>4 PIECES</p>	<p>13-282</p> <p>2 PIECES</p> 	<p>190-294</p> <p>2 PIECES</p> 	<p>190-319</p> <p>1 PIECE</p> 	<p>190-377</p> <p>3 PAIR</p> <p>2X SIZE</p> 
 <p>190-378</p> <p>1 PIECE</p>	 <p>1 PAIR</p> <p>190-379</p>	<p>190-390</p> <p>1/2 SIZE</p> <p>1 PAIR</p> <p>LEFT</p> <p>RIGHT</p> 	<p>190-477</p> <p>2 PIECE</p> 	<p>190-479</p> <p>3/4 X SIZE</p> <p>1 PAIR</p> <p>CUT AS REQUIRED</p> 	<p>823</p> <p>2 PIECES</p> 
 <p>90018</p> <p>1 PIECE</p>	 <p>90019</p> <p>1 PIECE</p>	 <p>90020</p> <p>1 PIECE</p>	 <p>90053</p> <p>2 PIECES</p>	 <p>90081</p> <p>1 PIECE</p> <p>LEFT</p> <p>90092</p>	 <p>1 PIECE</p>
 <p>90093</p> <p>RIGHT</p> <p>1 PIECE</p>	 <p>90328</p> <p>2 PAIR</p>	 <p>90334</p> <p>6 PIECES</p>	 <p>90433</p> <p>6 PIECES</p>	<p>2X SIZE</p>  <p>90444</p> <p>2 PIECES</p>	 <p>1 PIECE</p> <p>90450</p>
 <p>90454</p> <p>2 PIECES</p>	 <p>2X SIZE</p> <p>90462</p> <p>4 PIECES</p>	 <p>2X SIZE</p> <p>90463</p> <p>2 PIECES</p>	 <p>90479</p> <p>1 PIECE</p>	 <p>90491</p> <p>2 PIECES</p>	 <p>1/2X SIZE</p> <p>90495</p> <p>1 PIECE</p>

Bowser

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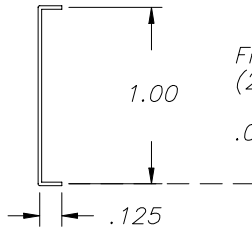


723
 DRILL #75
 SEE DIAGRAM #1



723
 DRILL #75
 SEE DIAGRAM #2

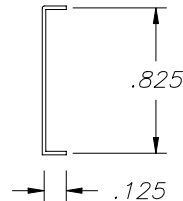
DIAGRAM 1



FRONT GRAB RAILS
 (2) REQUIRED

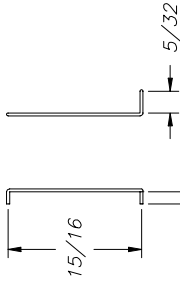
.020 WIRE

DIAGRAM 2

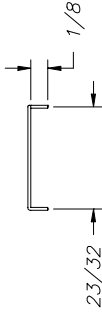


REAR GRAB RAILS
 (2) REQUIRED
 .020 WIRE

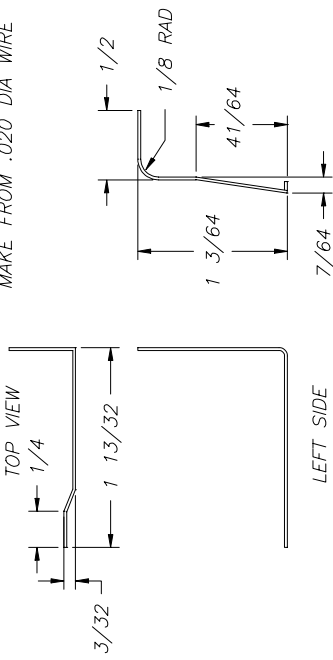
DET. 1
MAKE FROM .020 DIA WIRE
(1) LEFT, (1) RIGHT REQUIRED
LEFT SHOWN



DET. 2
MAKE FROM .020 DIA WIRE
(2) REQUIRED

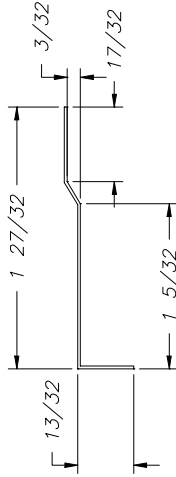


DET. 3
MAKE FROM .020 DIA WIRE

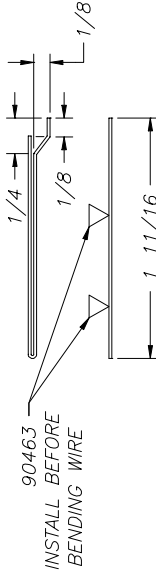


VIEW
FROM CAB

DET. 4
MAKE FROM .020 DIA WIRE



DET. 5
MAKE FROM .020 DIA WIRE

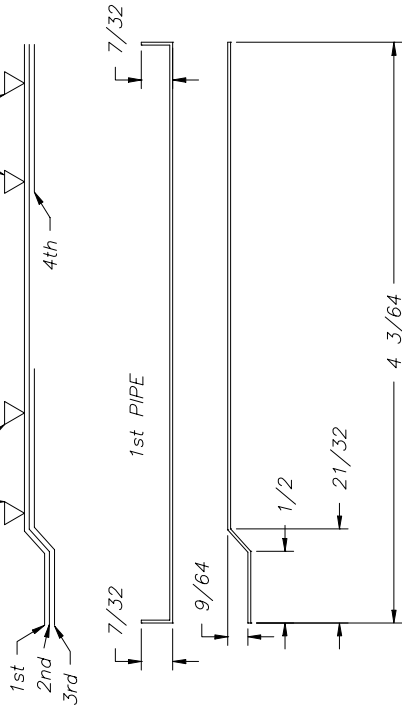


LIST OF DRILLS REQUIRED

- #75
- #65
- #60
- #55
- #52

DET. 6
MAKE FROM .020 DIA WIRE

INSTALL BEFORE
MAKING END BENDS
90462



INSTALL BEFORE
MAKING END BENDS
90462

