

INSTRUCTIONS FOR BOWSER #100500 PRR K-4 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 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 PAINTING YOUR MODEL OR DETAIL THE BOILER, WE RECOMMEND THAT YOU BUILD THE COMPLETE MECHANISM ATTACH THE UNDECORATED BODY AND THOROUGHLY TRACK TEST IT.

STEP #1

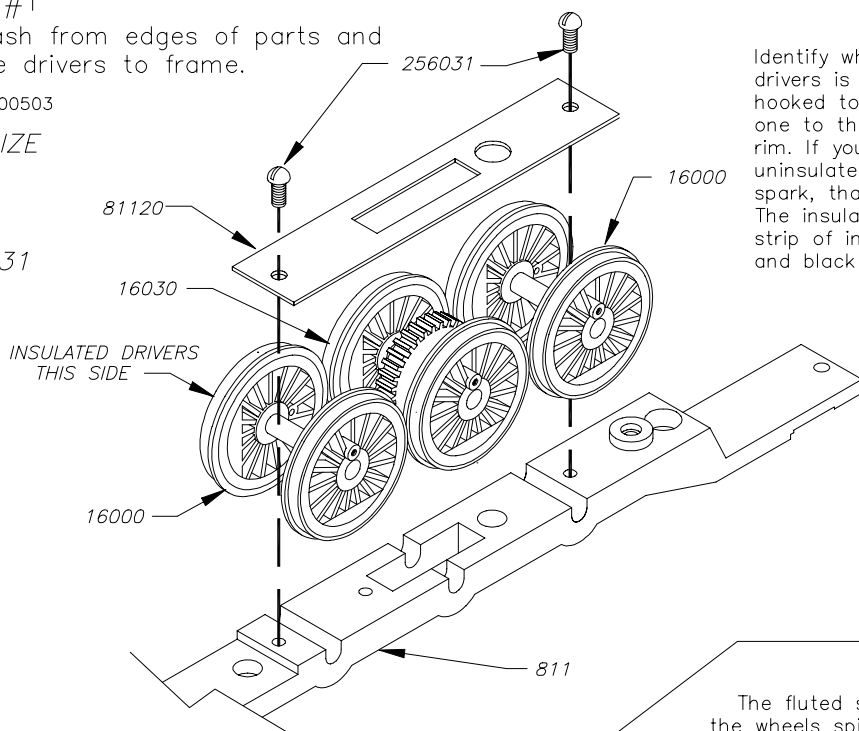
Clean flash from edges of parts and assemble drivers to frame.

Subkit 100503

FULL SIZE



256031



Identify which wheel of each set of drivers is insulated. With two wires hooked to your power pack, 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.

The fluted surface faces out. assure the wheels spin freely. Enlarge holes in side rods with a round file to eliminate any binds. Mechanism must roll freely before proceeding any further. Oil lightly.

STEP #2

Assemble side rods to mechanism.

Subkit 100501

FULL SIZE



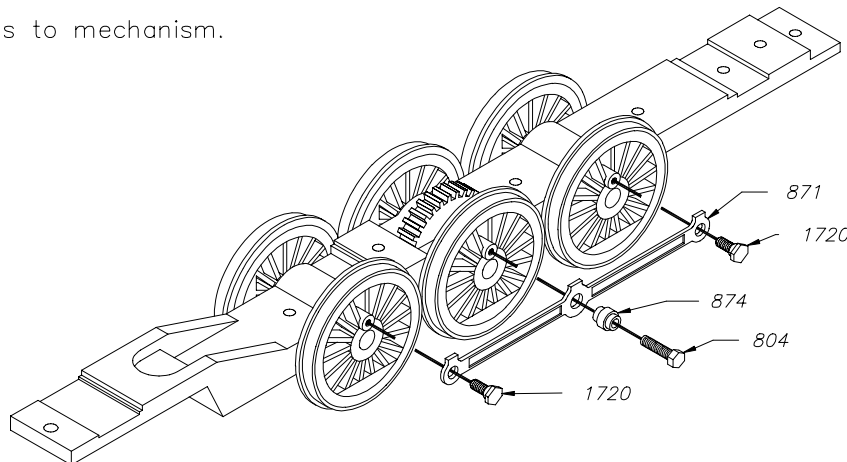
1720



874



804



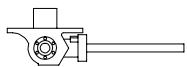
STEP #3

Assemble cylinders, crossheads
& main rods.

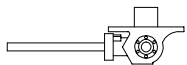
Crossheads must slide freely
on guide rods.

Subkit 100501, 100504

FULL SIZE



66021
RIGHT



66022
LEFT



904



256031



804



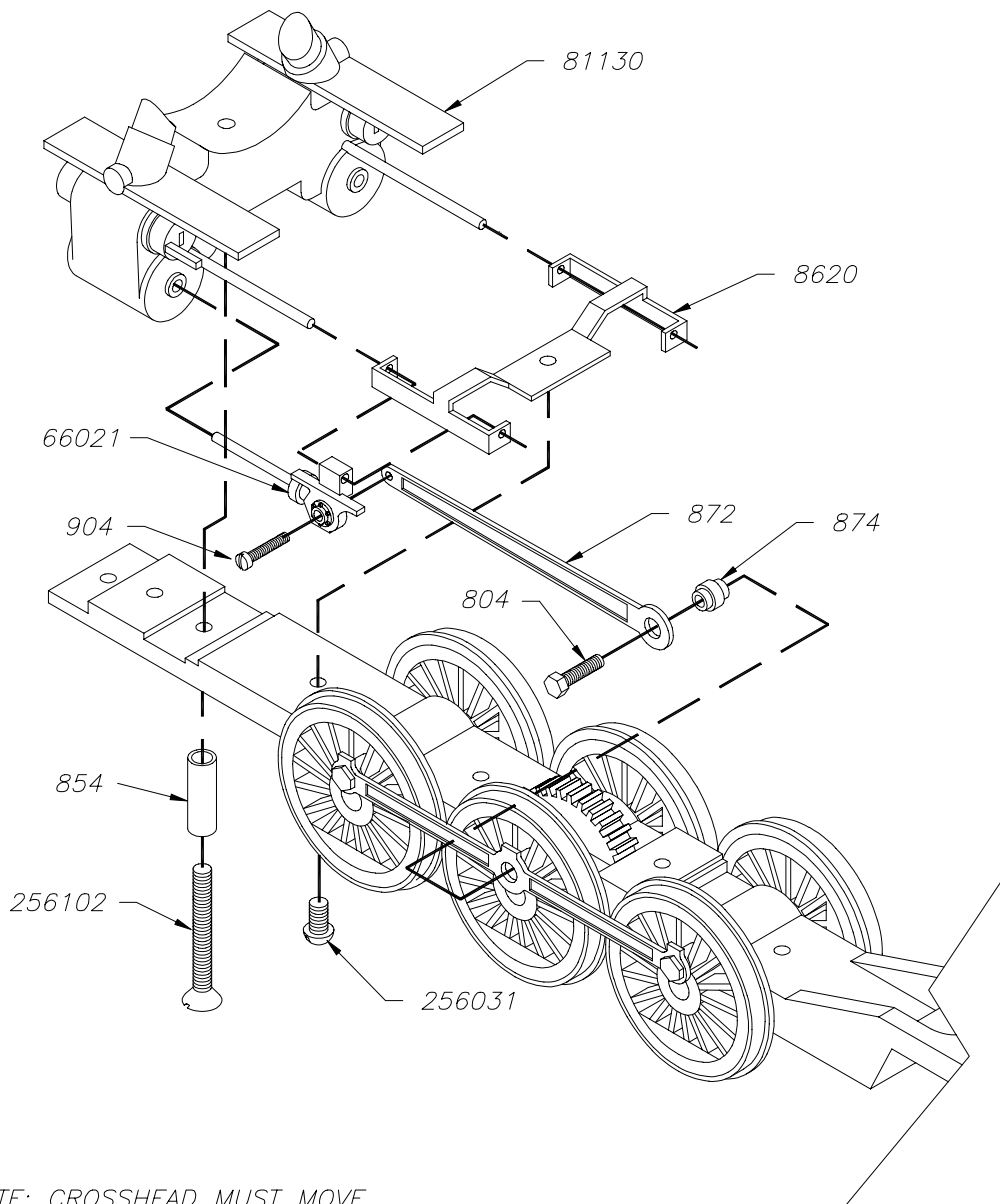
874



256102



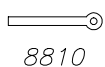
854



NOTE: CROSSHEAD MUST MOVE
FREELY ON #904 MAIN ROD SCREW.

STEP #4

PARTS IDENTIFICATION LIST
SUBKIT #100505
SHOWN FULL SIZE



8810



8830



8850



8860



8820



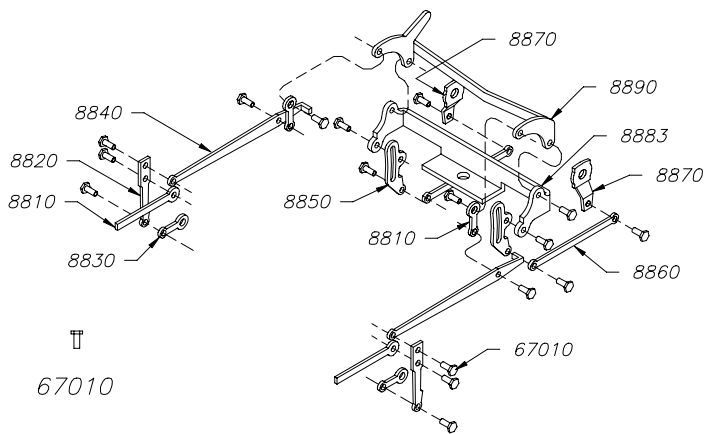
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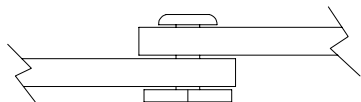
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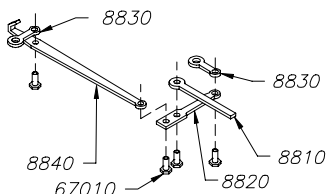
67010



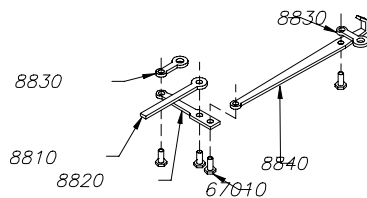
SET RIVETOOL WITH CENTER POINT
IN HOLE IN END OF RIVET. TAP WITH
LIGHT HAMMER UNTIL RIVET IS
PROPERLY FLARED. BE CAREFUL
NOT TO MAKE JOINT TOO TIGHT.



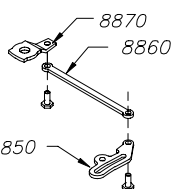
SIDE VIEW OF RIVET
SHOWN 10X SIZE
NOTE CLEARANCE



RIGHT SIDE
FRONT UNIT
STEP 1

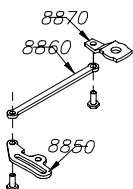


LEFT SIDE
FRONT UNIT
STEP 2



RIGHT SIDE
REAR UNIT

STEP 3



LEFT SIDE
REAR UNIT

STEP 4

RADIUS ROD
8840

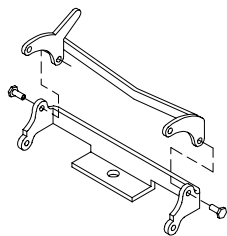
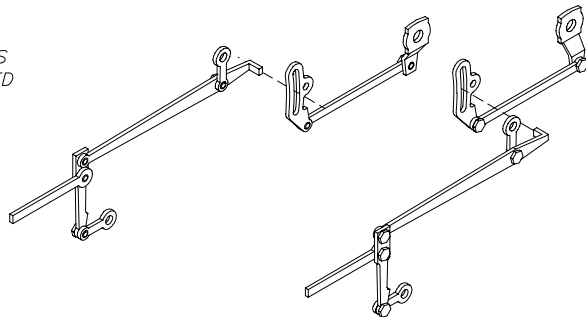
TAB AS
FORMED

PUT TAB THRU
SLOT IN LINK.
BEND INNER
END FORWARD

ROD MUST MOVE
FREELY IN LINK

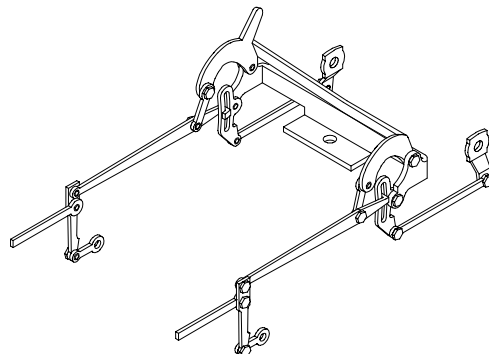
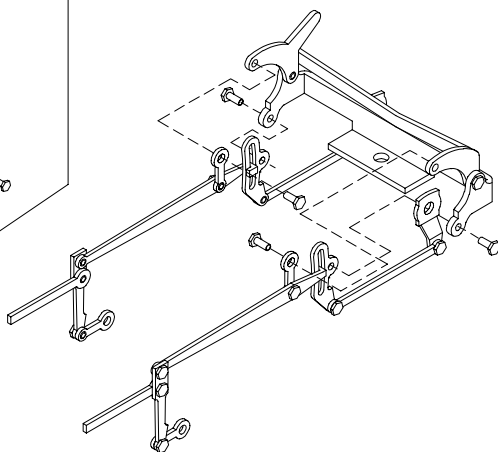
8850

STEP 5



STEP 6

STEP 7

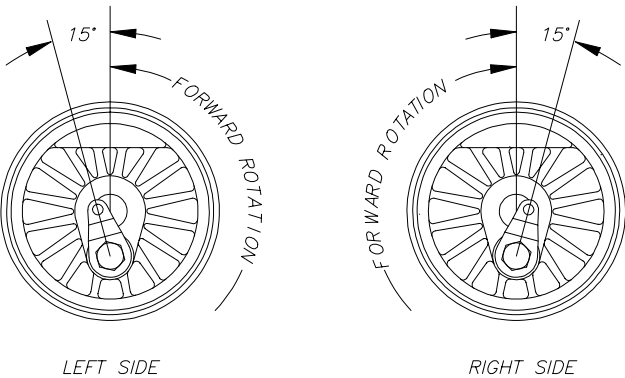
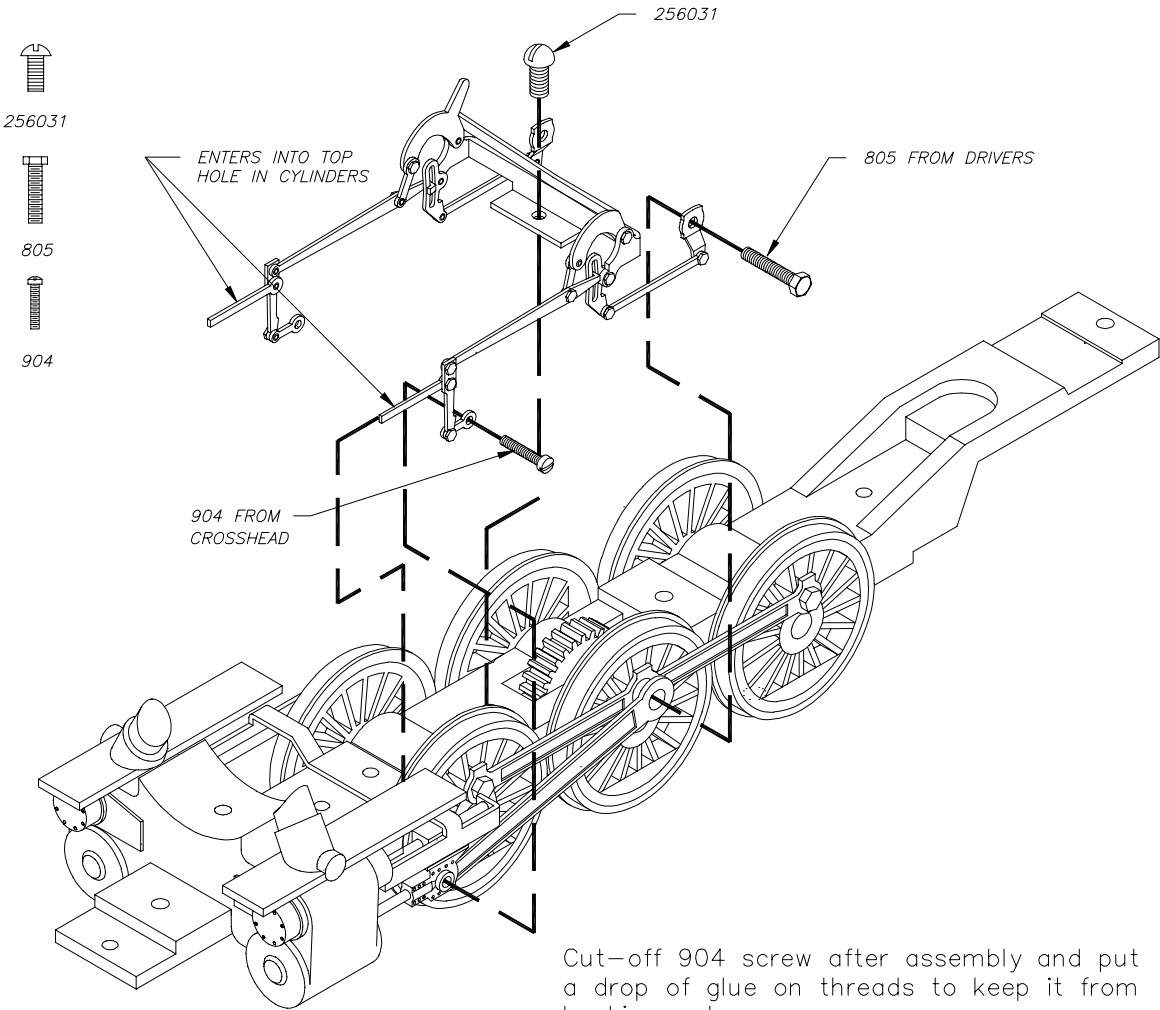


STEP #5

Install valve gear.
Time valves as shown in diagram below.

Subkit 100506

FULL SIZE



STEP #6
Install motor.

Subkit 100503
FULL SIZE



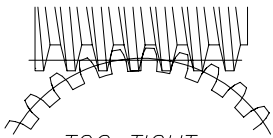
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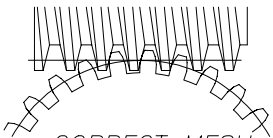
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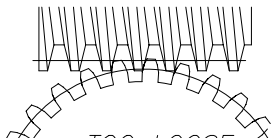
29 FIBRE



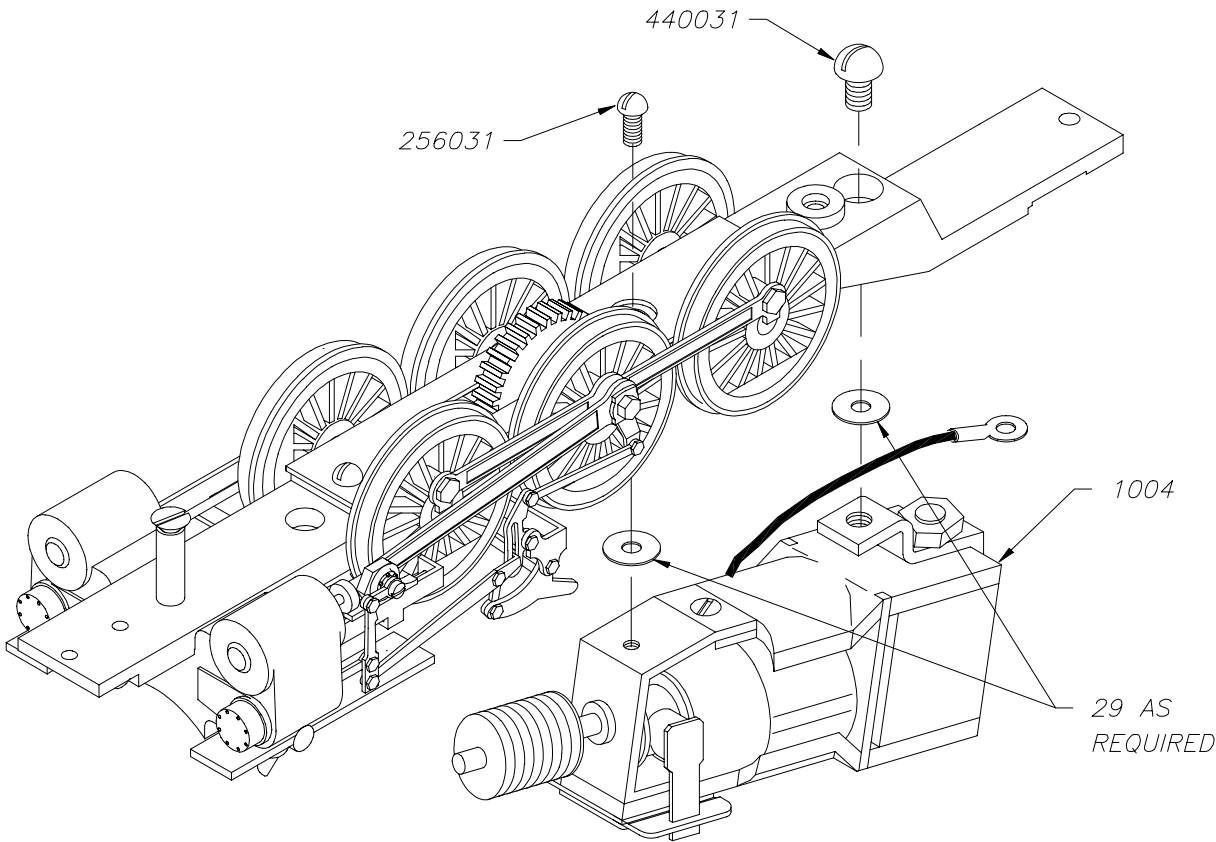
TOO TIGHT
WORM BOTTOMS
IN ROOT OF GEAR
CAUSING EXCESSIVE
DRAG ON GEARS.
ADD WASHER UNDER
FRONT OF MOTOR



CORRECT MESH
SEVERAL TEETH
IN CONTACT.



TOO LOOSE
POOR TOOTH CONTACT
CAUSING EXCESSIVE
BACKLASH IN GEARS.
ADD WASHER UNDER
REAR OF MOTOR

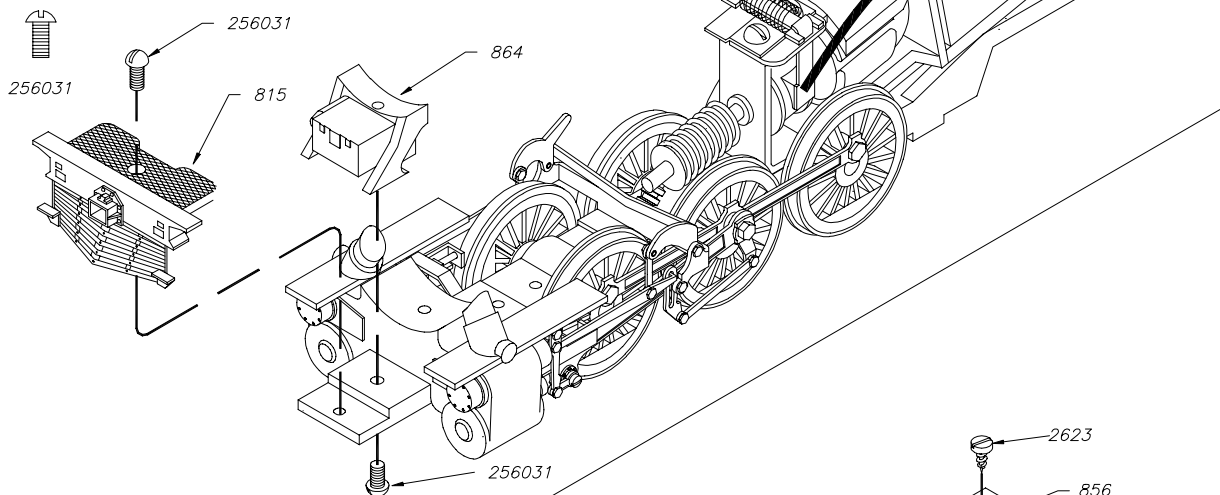


STEP #7

Install pilot & train control box.

Subkit 100506

FULL SIZE

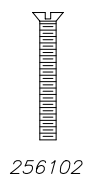
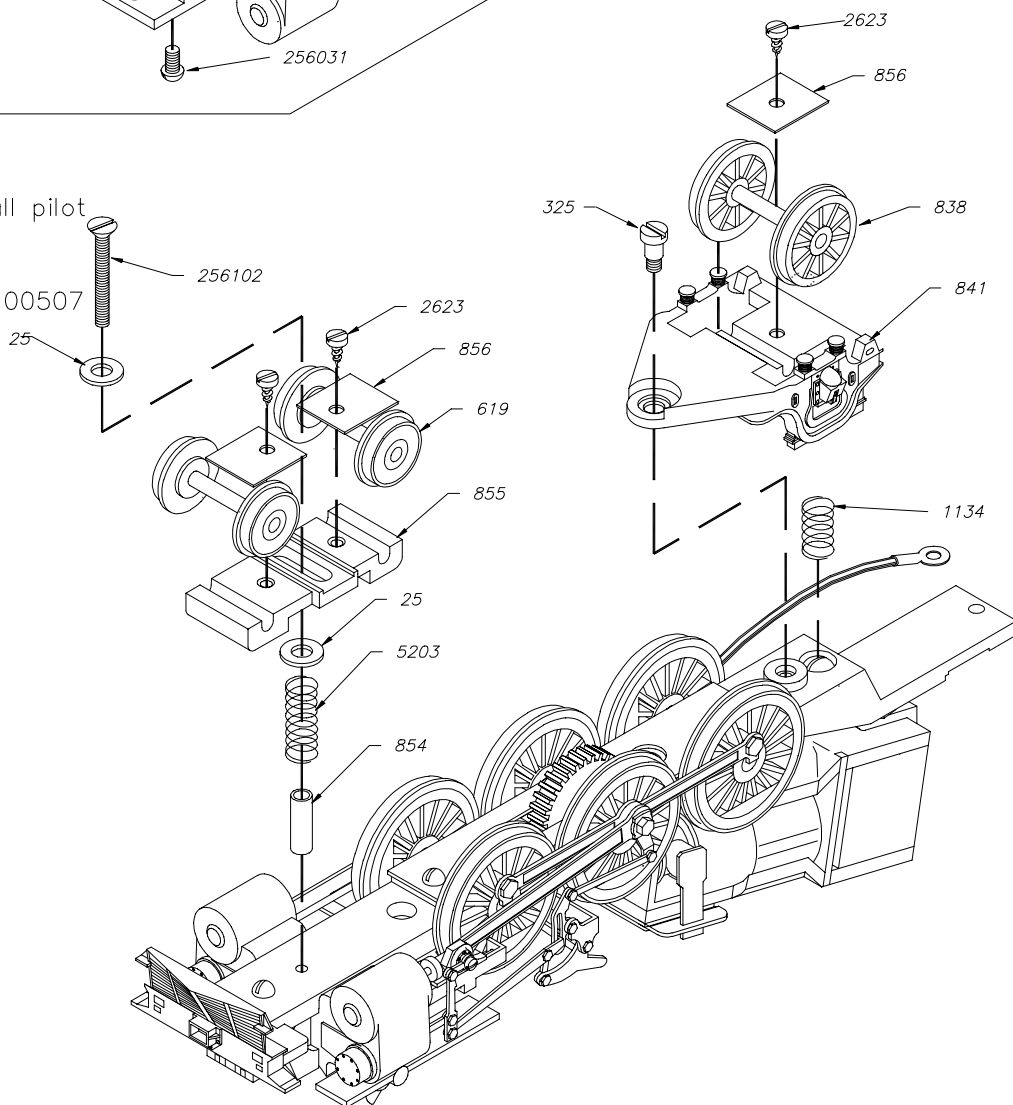


STEP #8

Assemble & install pilot
& trailing trucks.

Subkit 100504, 100507

FULL SIZE



256102



25 BRASS



854



5203



2623



325



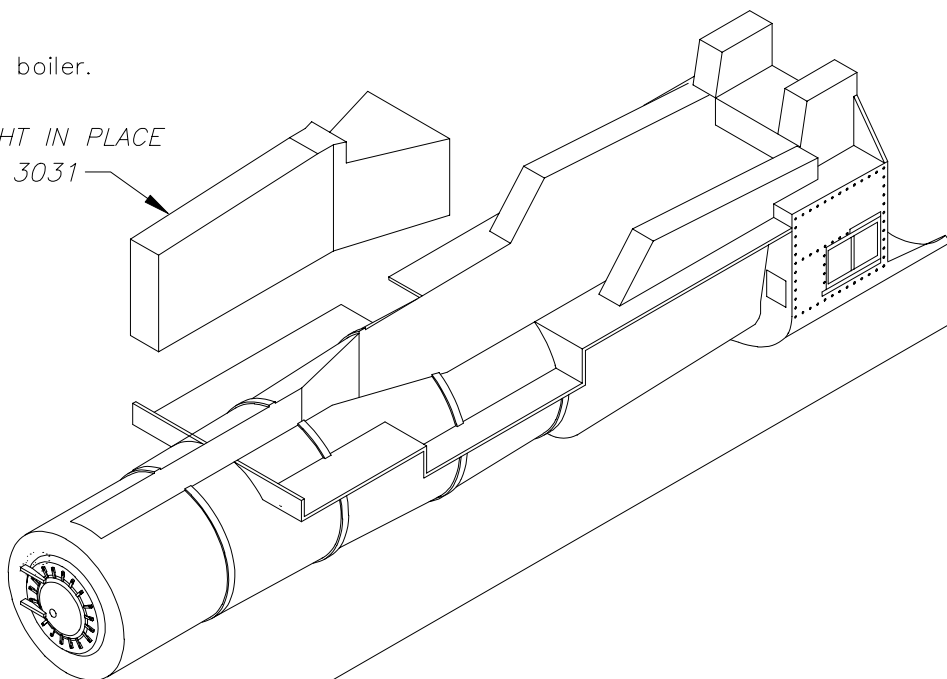
1134

STEP #9

Install weight in boiler.

GLUE WEIGHT IN PLACE

3031



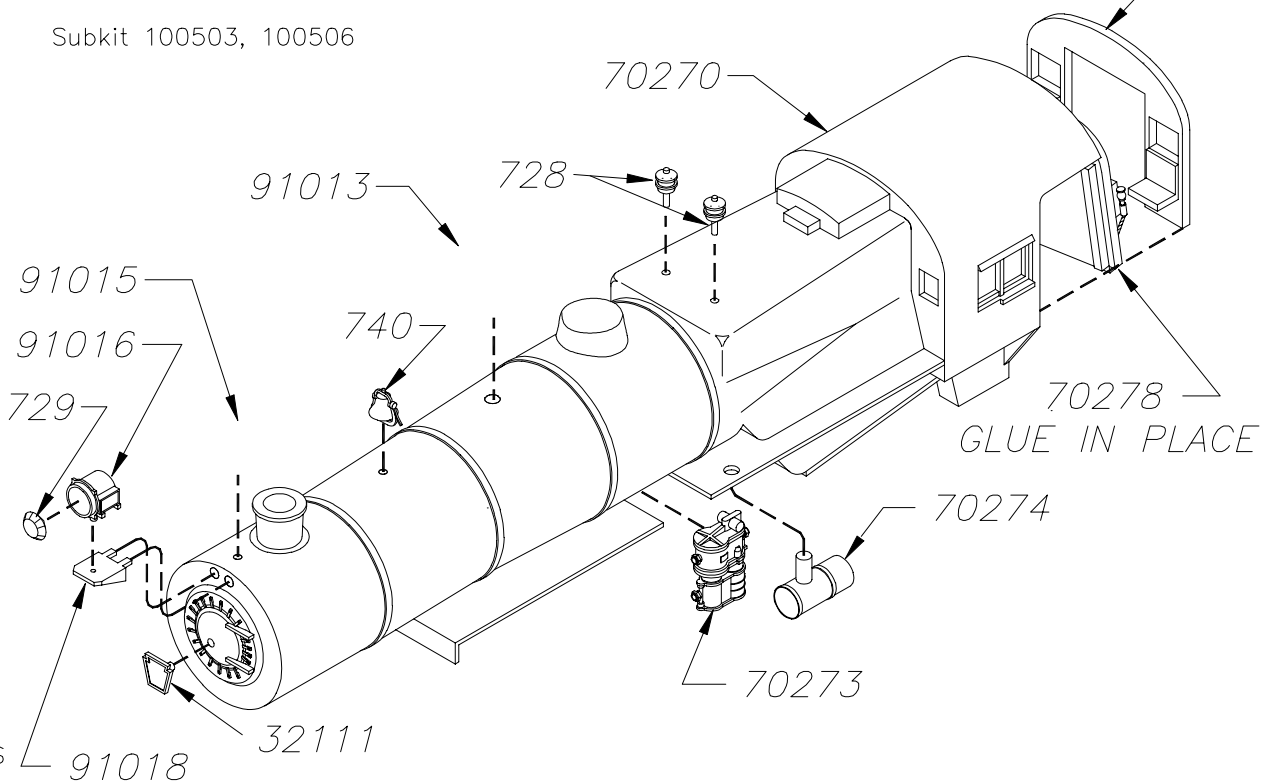
STEP #10

Detail boiler
to mechanism.

Subkit 100503, 100506

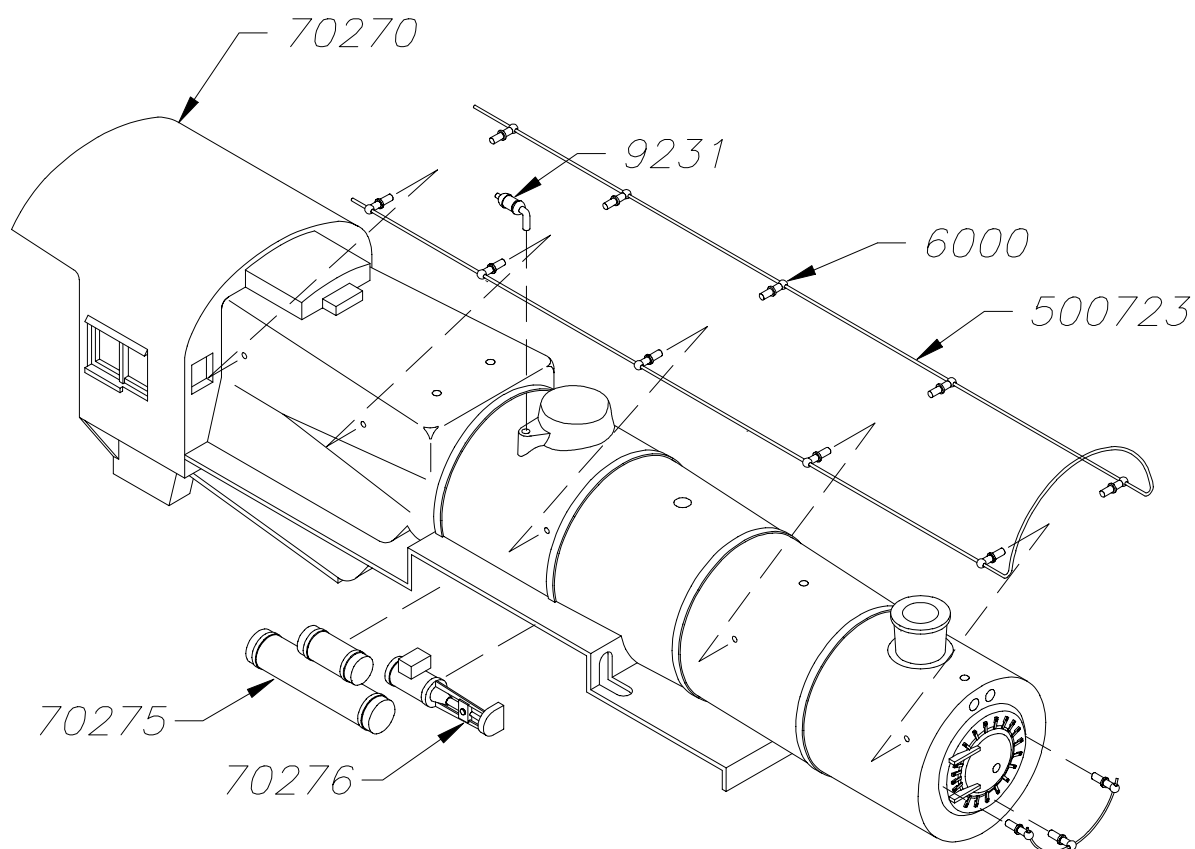
GLUE IN PLACE

70279



STEP #11

Install handrails &
finish detailing boiler.

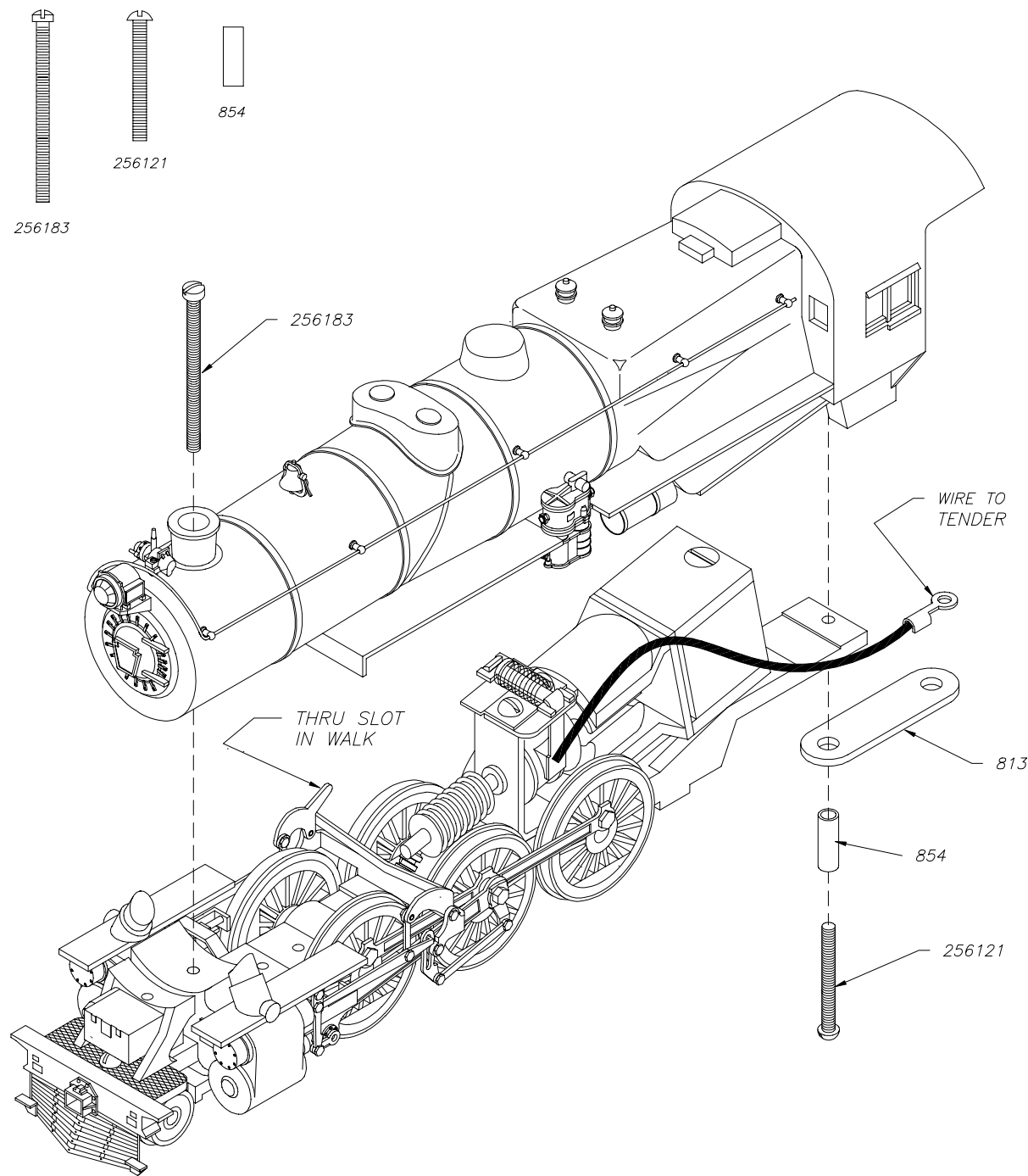


CUT .020 DIAMETER WIRE 1 1/4"
LONG. FORM TO 19/64" RADIUS.

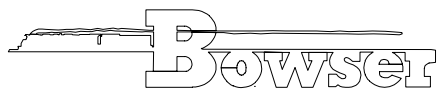
STEP #12

Install handrails &
finish detailing boiler.

Subkit #100503
FULL SIZE



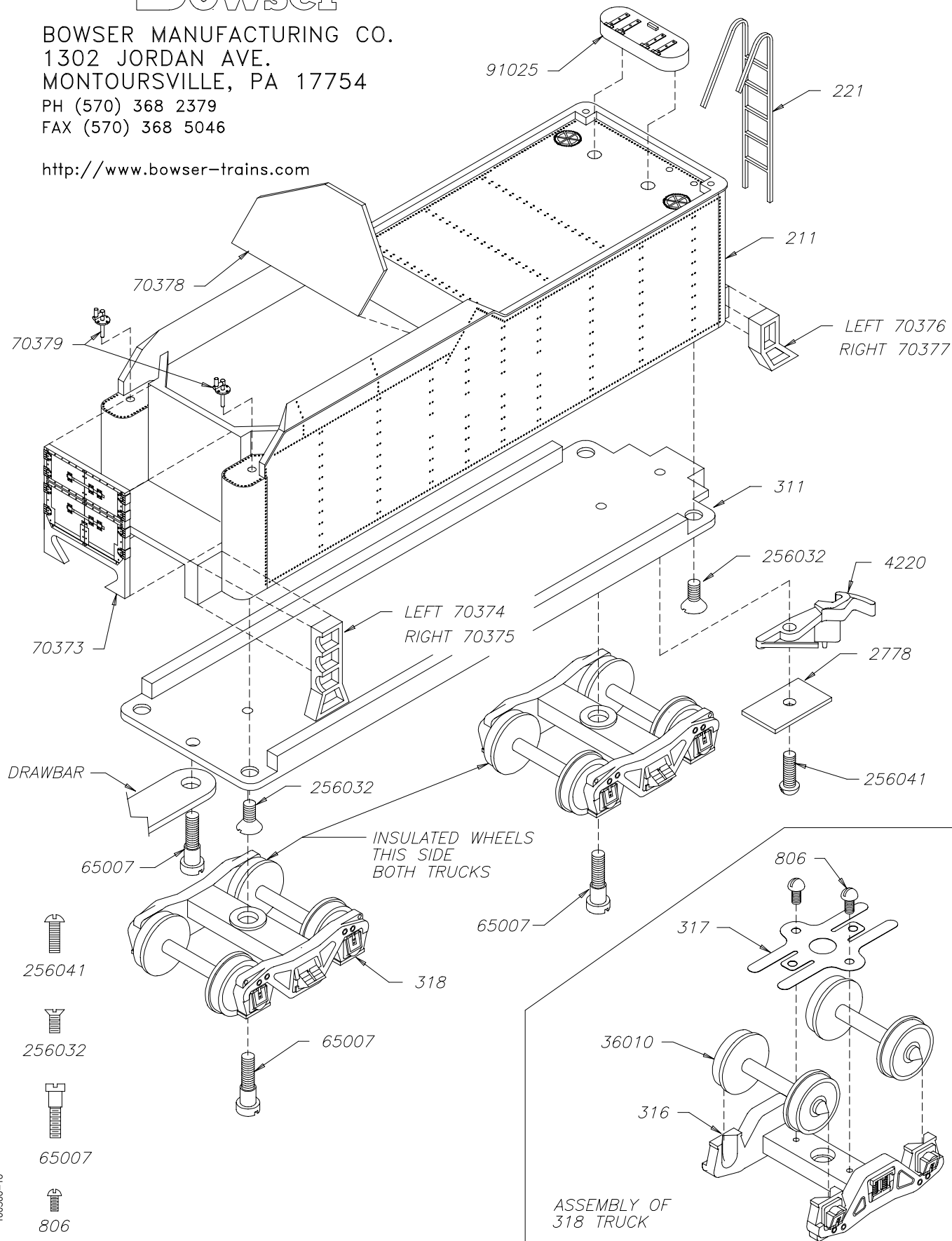
Assemble tender.
Track test.

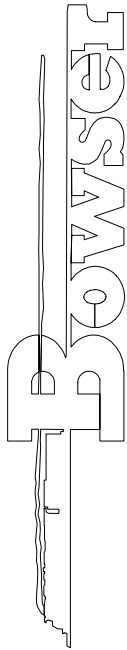


13000 GAL TENDER KIT 150635

BOWSER MANUFACTURING CO.
1302 JORDAN AVE.
MONTICELLO, PA 17754
PH (570) 368 2379
FAX (570) 368 5046

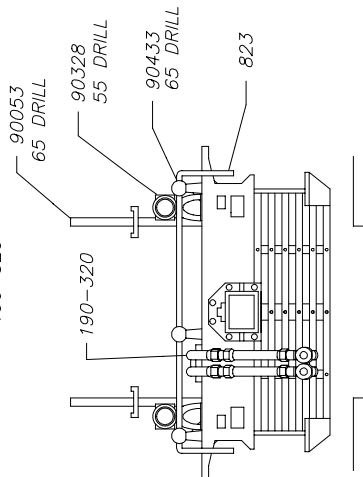
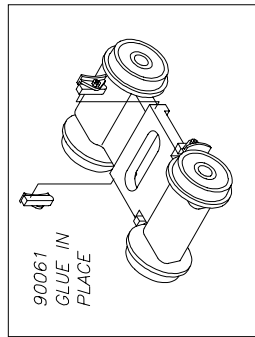
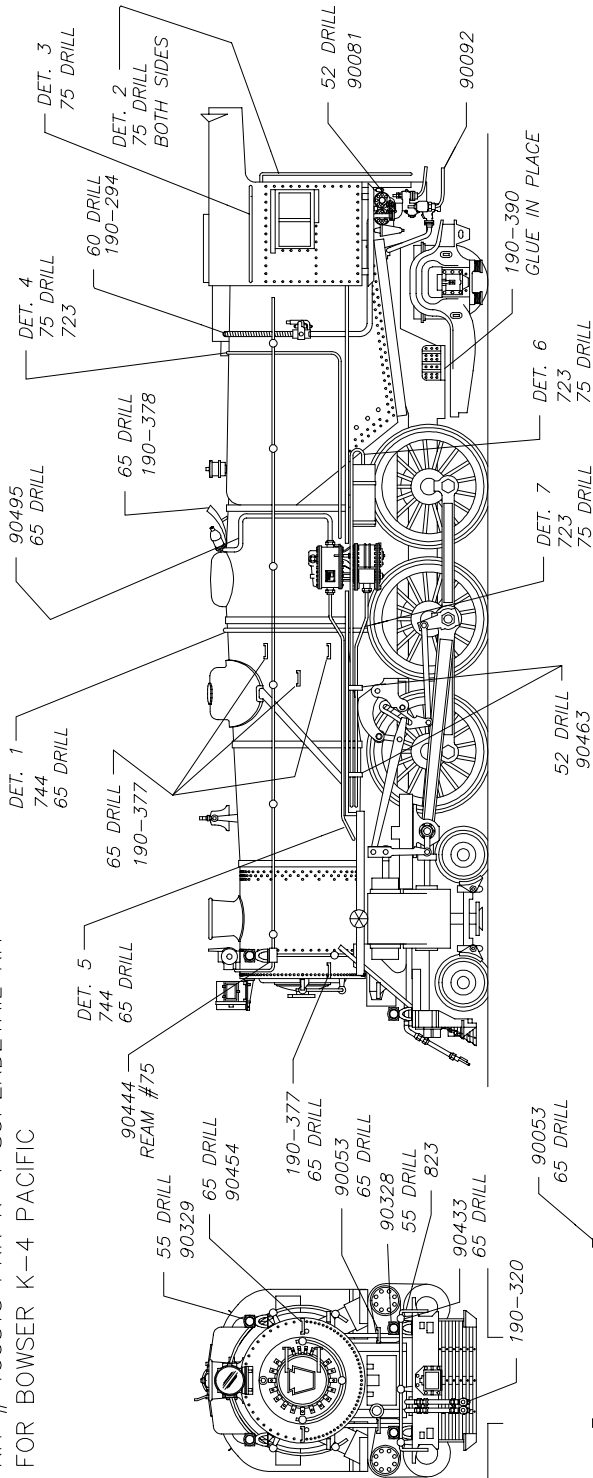
<http://www.bowser-trains.com>





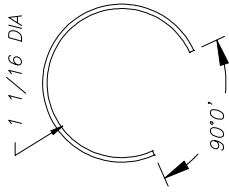
KIT # 100515 PRR K-4 SUPERDETAIL KIT FOR BOWSER K-4 PACIFIC

BOWSER MANUFACTURING PHONE (570) 368-2379
PO Box 322 FAX (570) 368-5046
MONTROUSEVILLE, PA 17701



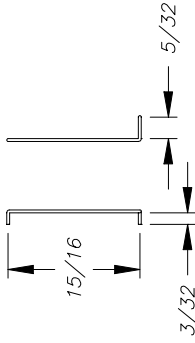
DET. 1

MAKE FROM .032
DIA BRASS WIRE



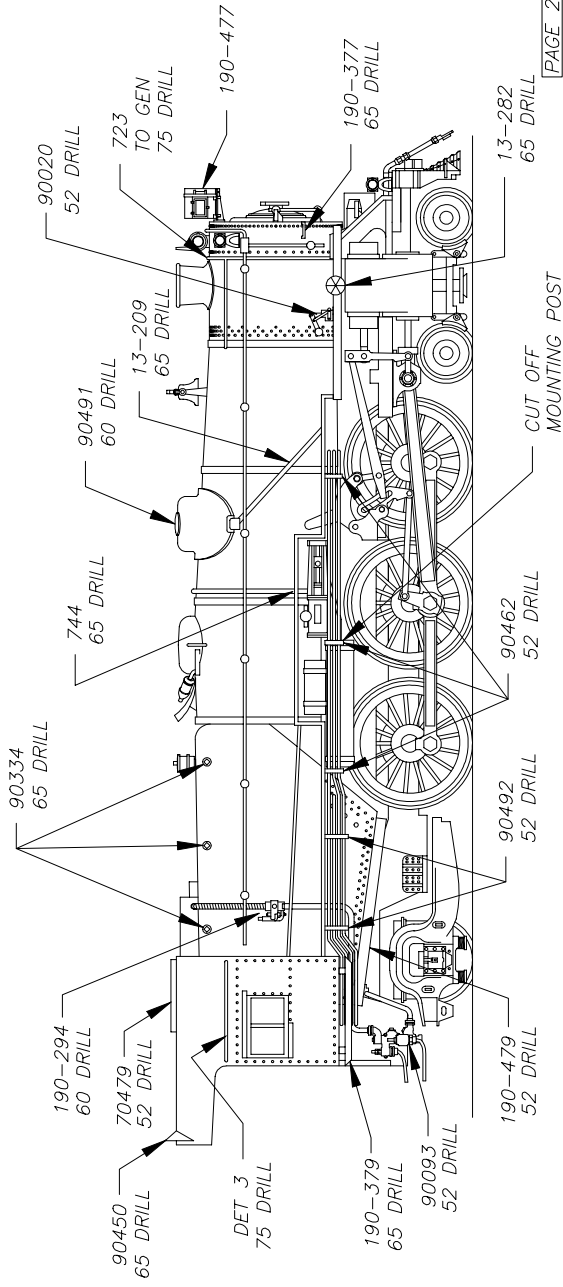
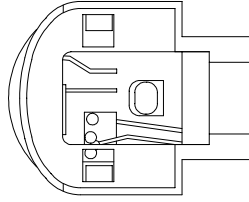
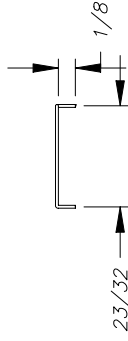
DET. 2

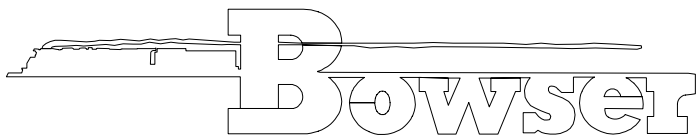
MAKE FROM .020 DIA WIRE
(1) LEFT, (1) RIGHT REQUIRED
LEFT SHOWN



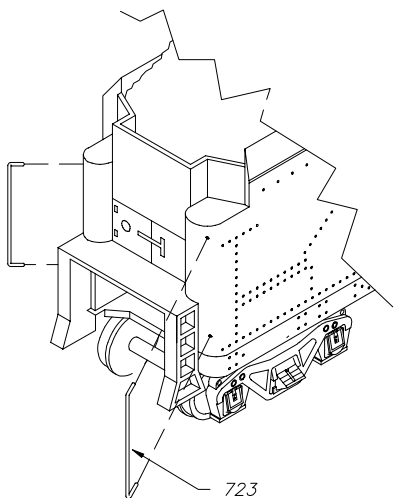
DET. 3

MAKE FROM .020 DIA WIRE
(2) REQUIRED

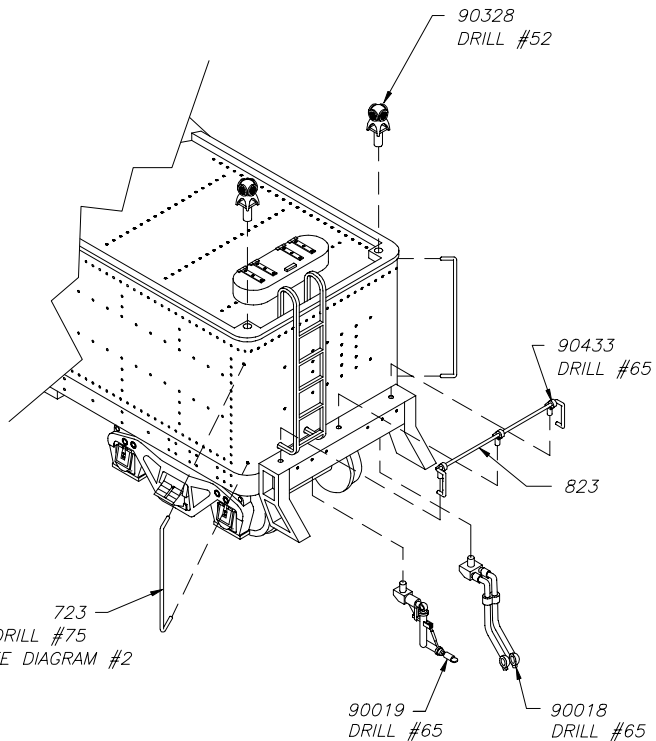




Bowser Manufacturing Co
P0 Box 322
Montoursville, Pa 17754
Phone (570) 368-2379 Fax (570) 368-5046



723
DRILL #75
SEE DIAGRAM #1



90328
DRILL #52

90433
DRILL #65

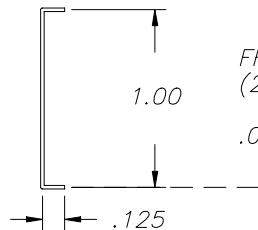
823

723
DRILL #75
SEE DIAGRAM #2

90019
DRILL #65

90018
DRILL #65

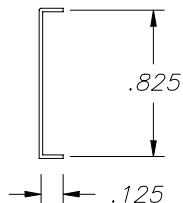
DIAGRAM 1



FRONT GRAB RAILS
(2) REQUIRED

.020 WIRE

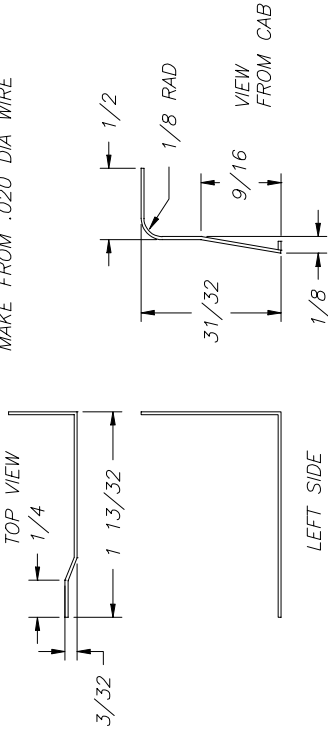
DIAGRAM 2



REAR GRAB RAILS
(2) REQUIRED
.020 WIRE

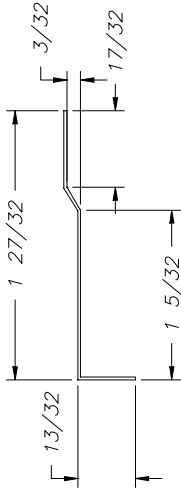
DET. 4

MAKE FROM .020 DIA WIRE



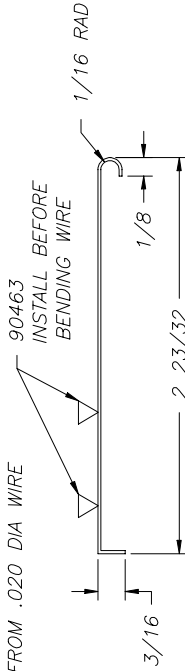
DET. 5

MAKE FROM .020 DIA WIRE



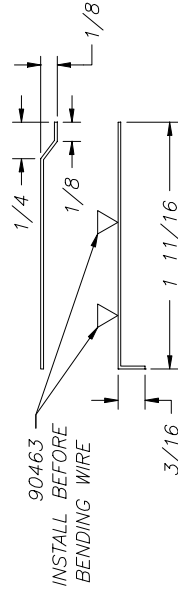
DET. 7

MAKE FROM .020 DIA WIRE



DET. 6

MAKE FROM .020 DIA WIRE

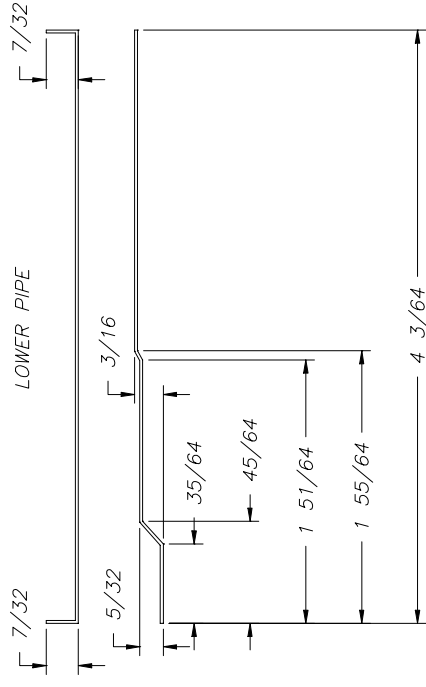
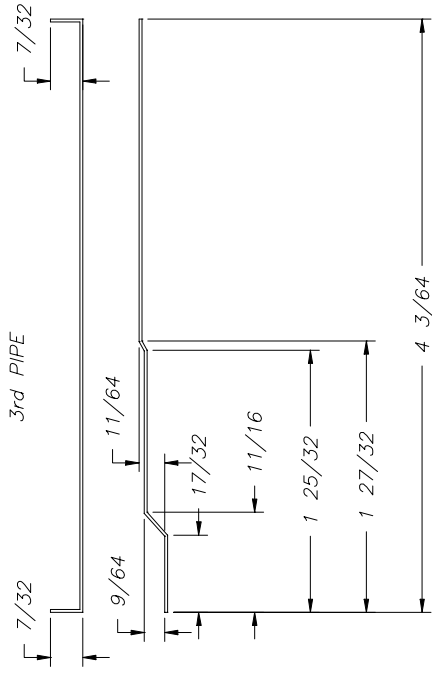
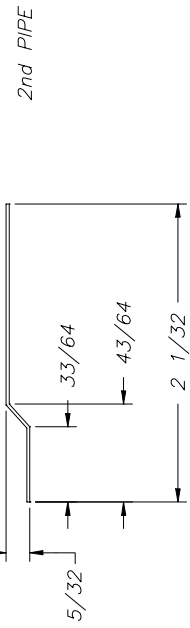
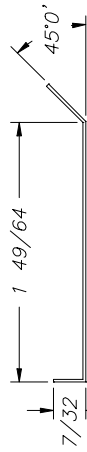
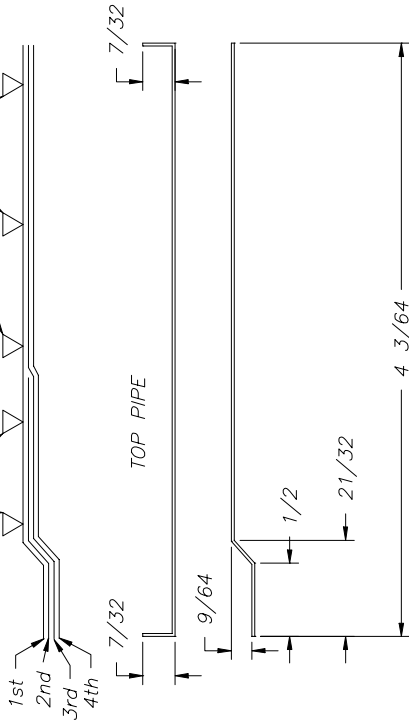


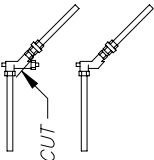
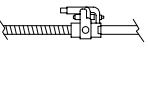
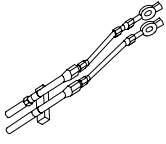
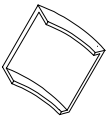
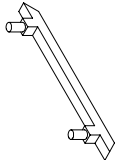
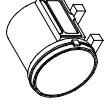
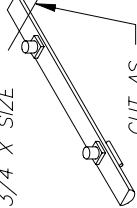
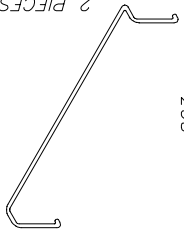
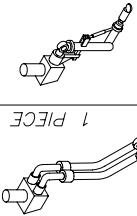
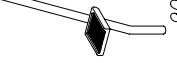
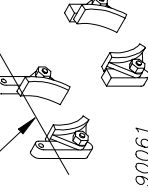
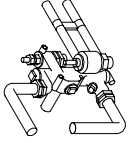
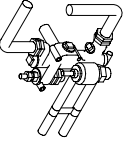
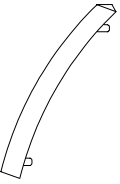
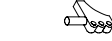
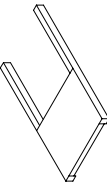
LIST OF DRILL REQUIRED

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

DET. 8
MAKE FROM .020 DIA WIRE

INSTALL BEFORE
MAKING END BENDS
90492



 CUT 13-209	 13-282	 190-294	 190-320	 2X SIZE 190-377	 190-378 1 PIECE
 190-379	 LEFT 190-390 1/2 SIZE RIGHT 190-477	 190-477	 3/4 X SIZE CUT AS REQUIRED 190-479	 823 2 PIECES	 190-479 1 PIECE 90018 1 PIECE 90019
 90020	 90053 2 PIECES	 90061 CUT OFF 2 PAIR	 90081 1 PIECE	 LEFT 90092 1 PIECE	 RIGHT 90093 1 PIECE
 90328	 90329 1 PAIR	 90334 6 PIECES	 90433 6 PIECES	 90444 2X SIZE 2 PIECES	 90450 1 PIECE
 90454 2X SIZE 2 PIECES	 90462 3 PIECES	 90463 2X SIZE 2 PIECES	 90479 1 PIECE	 90492 2X SIZE 2 PIECES	 90495 1/2X SIZE 1 PIECE PAGE 6