

These instructions provide exploded view drawings, diagrams, step-by-step instructions if for reasons beyond our control, any shortage or faulty part is found, write directly to the factory 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 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 files, jewelers screwdriver (a set is convenient), a 6" flat file with a fairly fine cut, knife, pliers, flush cut pliers 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.

Disassemble Bachmann or Lionel engine. Remove valve gear carefully. Save all parts. We will use the body, cylinder, trailing truck, lead truck, main rod crosshead and valve gear assemblies, tender body, tender floor and trucks. We will not use the underframe, motor, drivers or side rods.

STEP #1

Clean flash from edges of parts. File mating surfaces on a flat file. Check to see that the frame is straight. Assemble wheels and assure they spin freely. Assemble side rods check for binds. Ream holes in side rods if necessary to eliminate binding. Oil lightly.



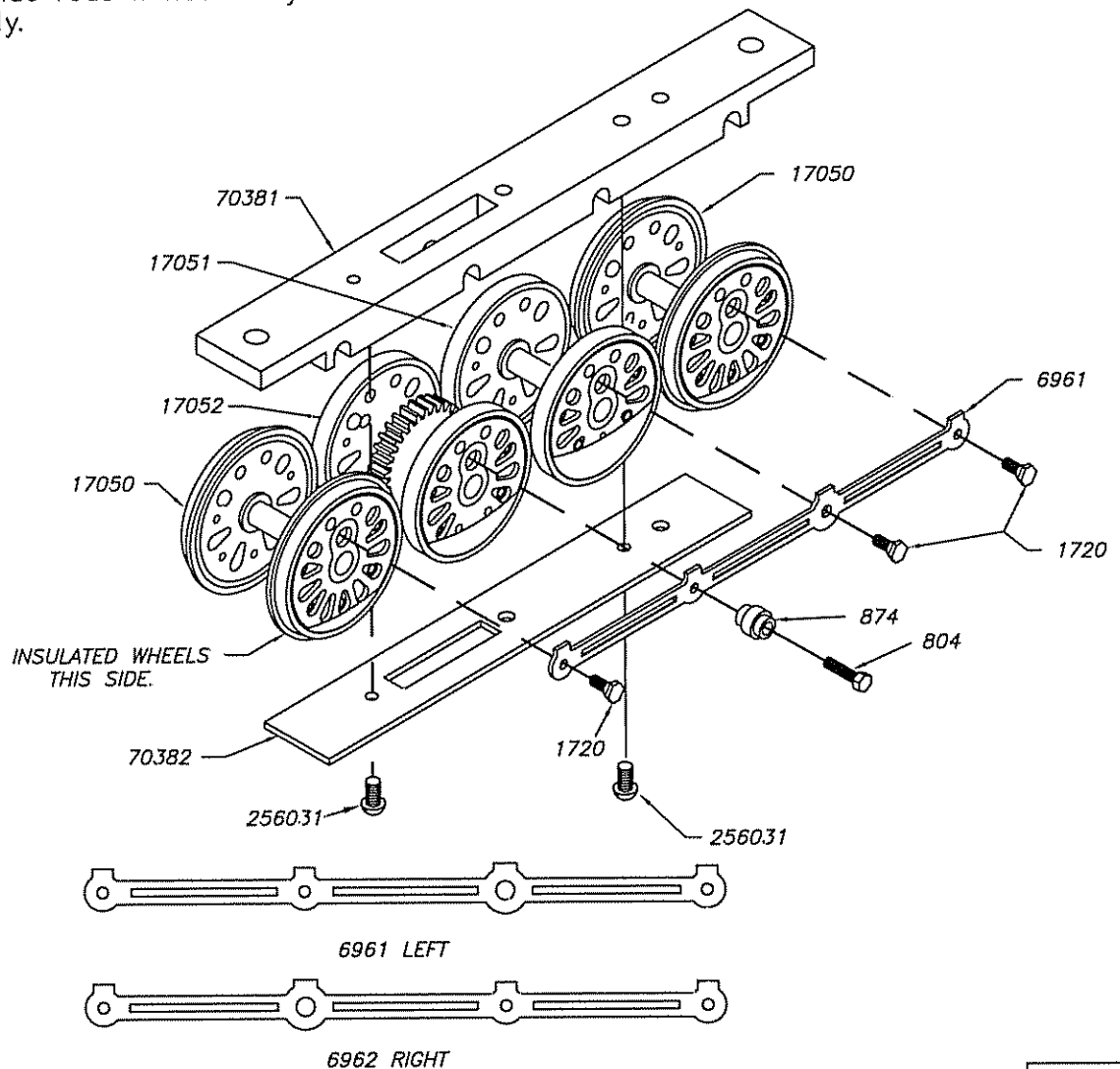
256031



804



874



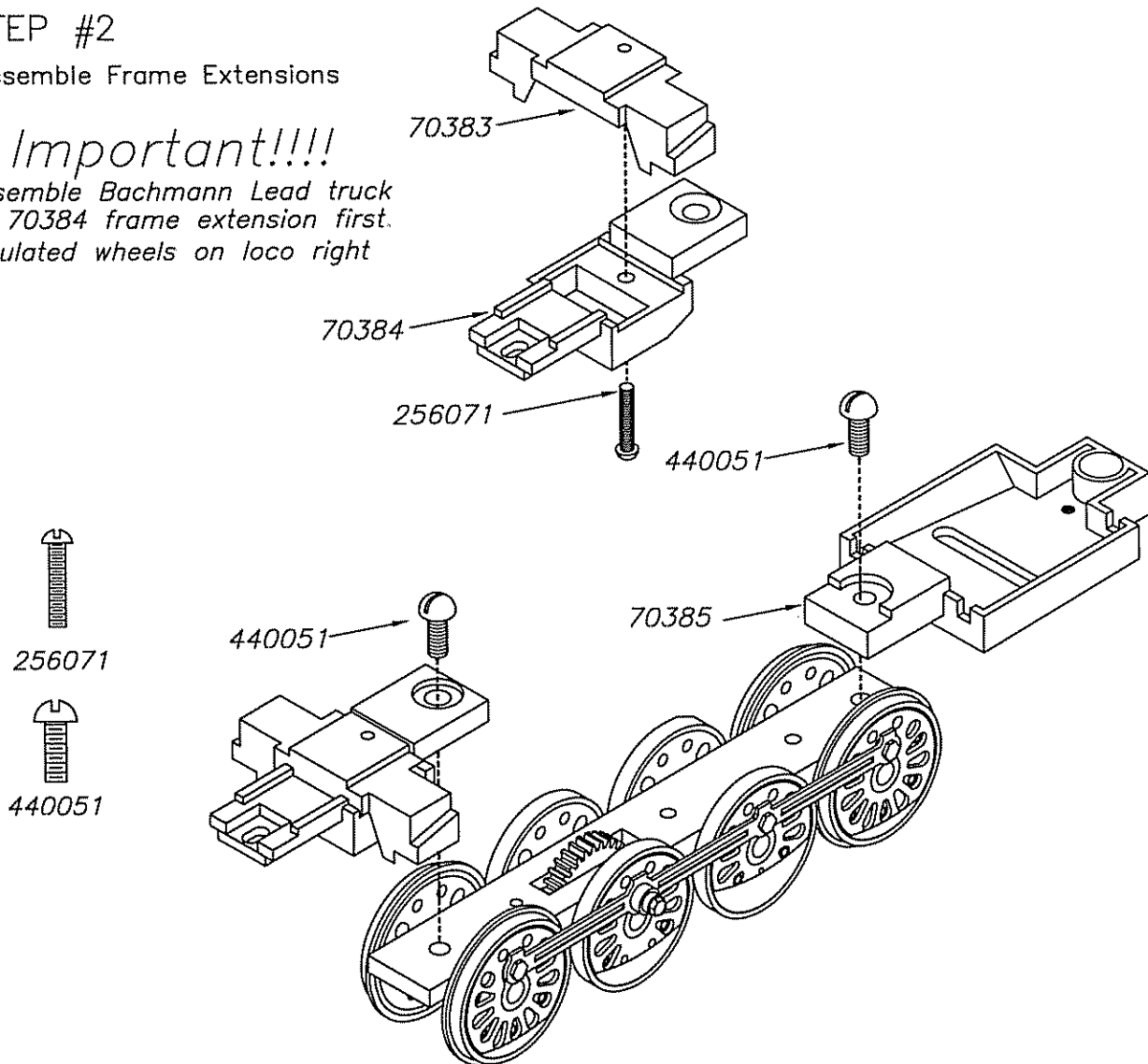
If you have a full cylinder with separate valve gear hanger go to page 6

STEP #2

Assemble Frame Extensions

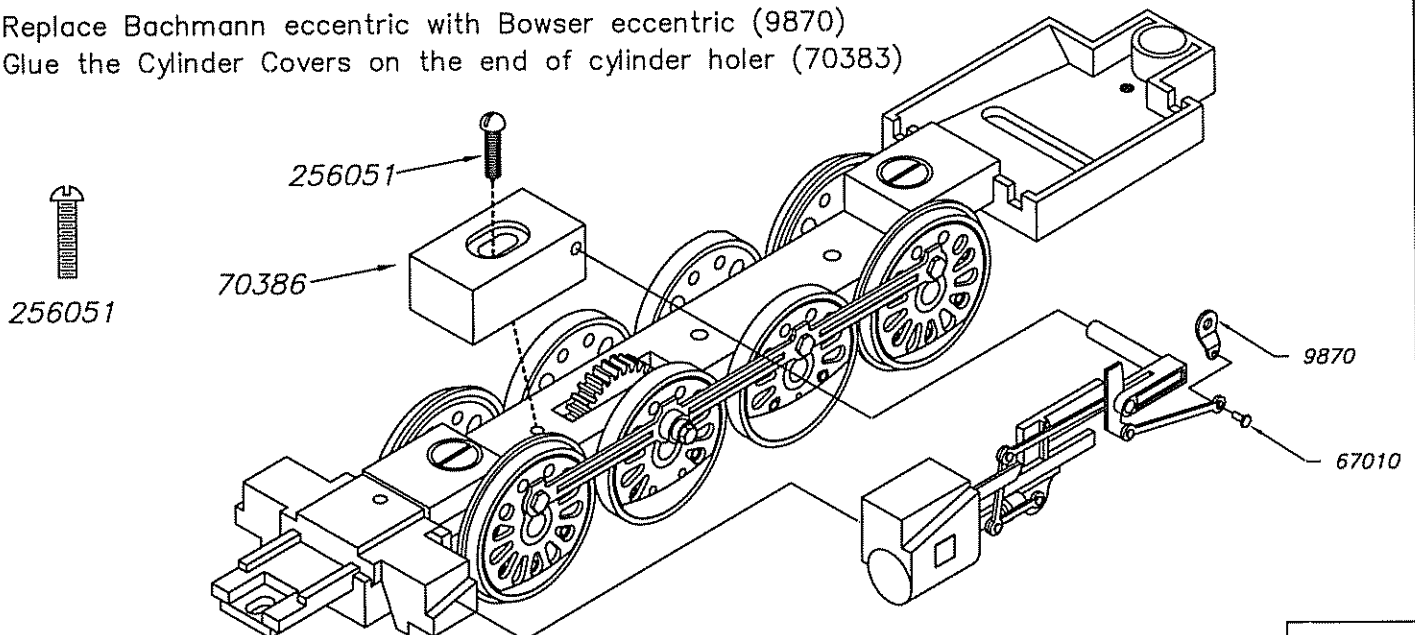
Important!!!!

Assemble Bachmann Lead truck to 70384 frame extension first.
Insulated wheels on loco right



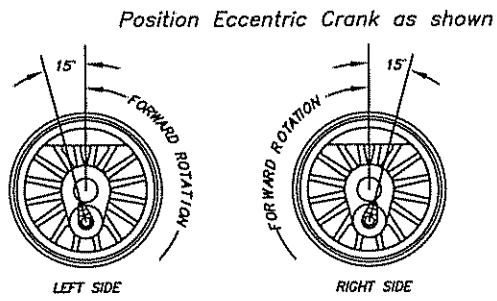
STEP #3

Replace Bachmann eccentric with Bowser eccentric (9870)
Glue the Cylinder Covers on the end of cylinder holer (70383)



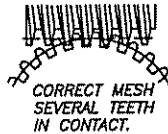
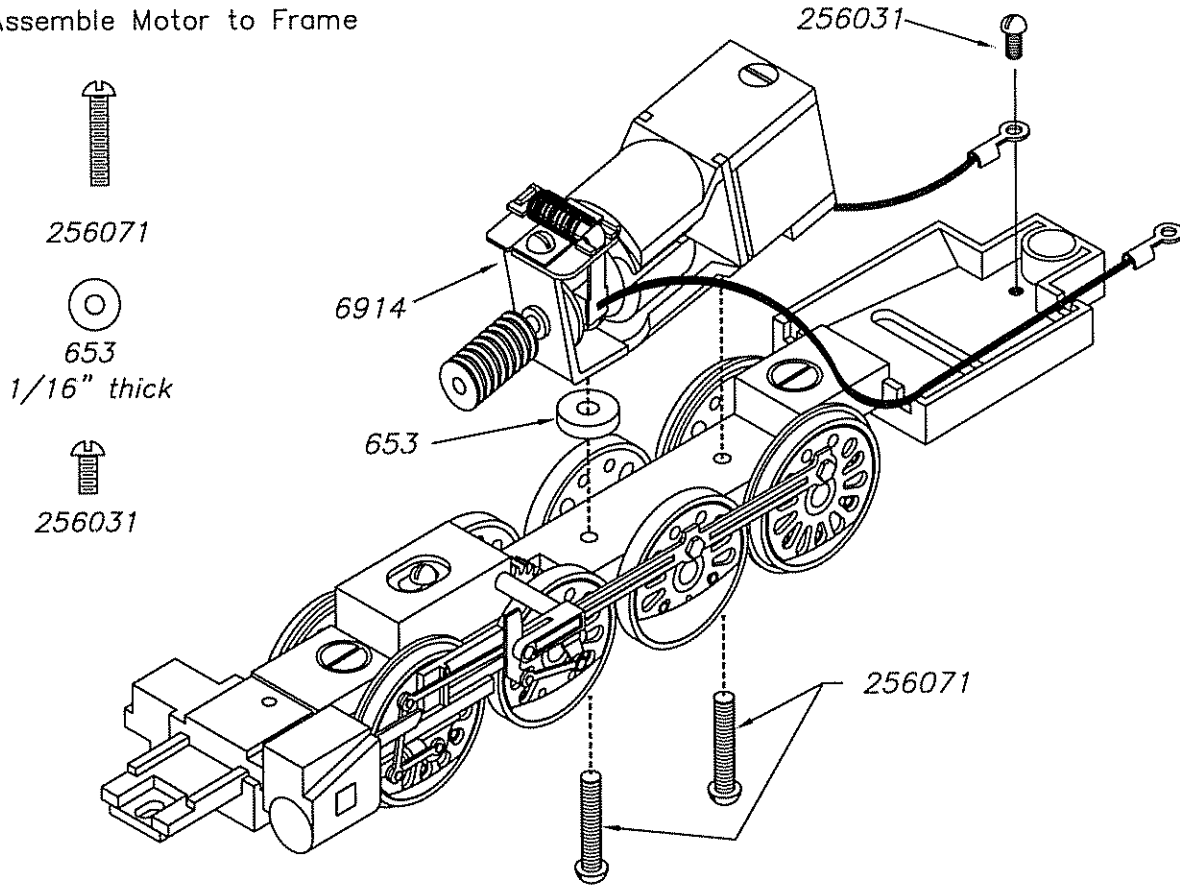
STEP #4

Position Eccentric Crank



STEP #5

Assemble Motor to Frame



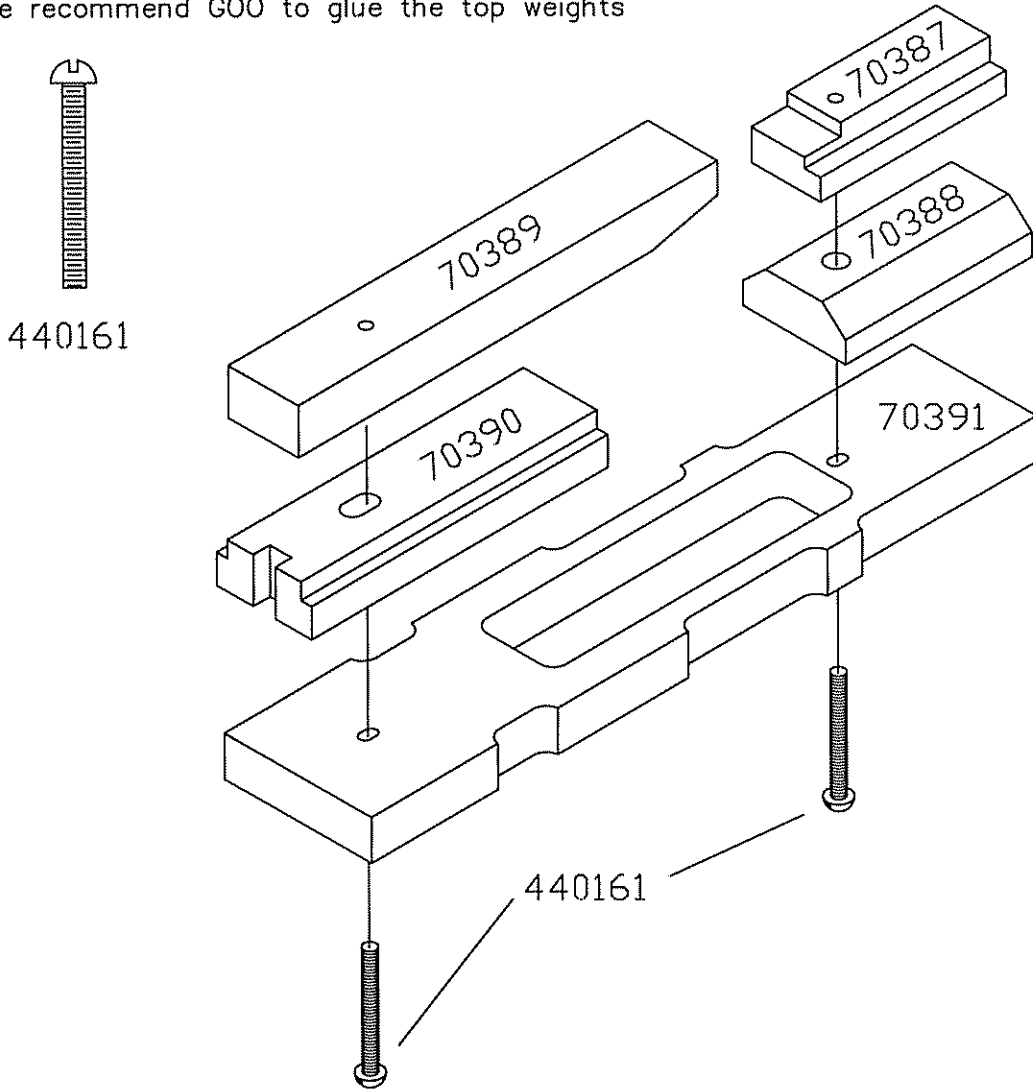
STEP #6

Assemble weights into boiler

Dry fit the weights first. Be sure the bottom weight (70391) sits inside of the body

ONLY GLUE the top weights 70387 & 70389 into top of body

We recommend GOO to glue the top weights



STEP #7

Assemble the trailing truck to the mechanism first
Assemble mechanism to body



Insulation on the trailing truck wheels, lead truck wheels and drivers must be on the same side. Right side.

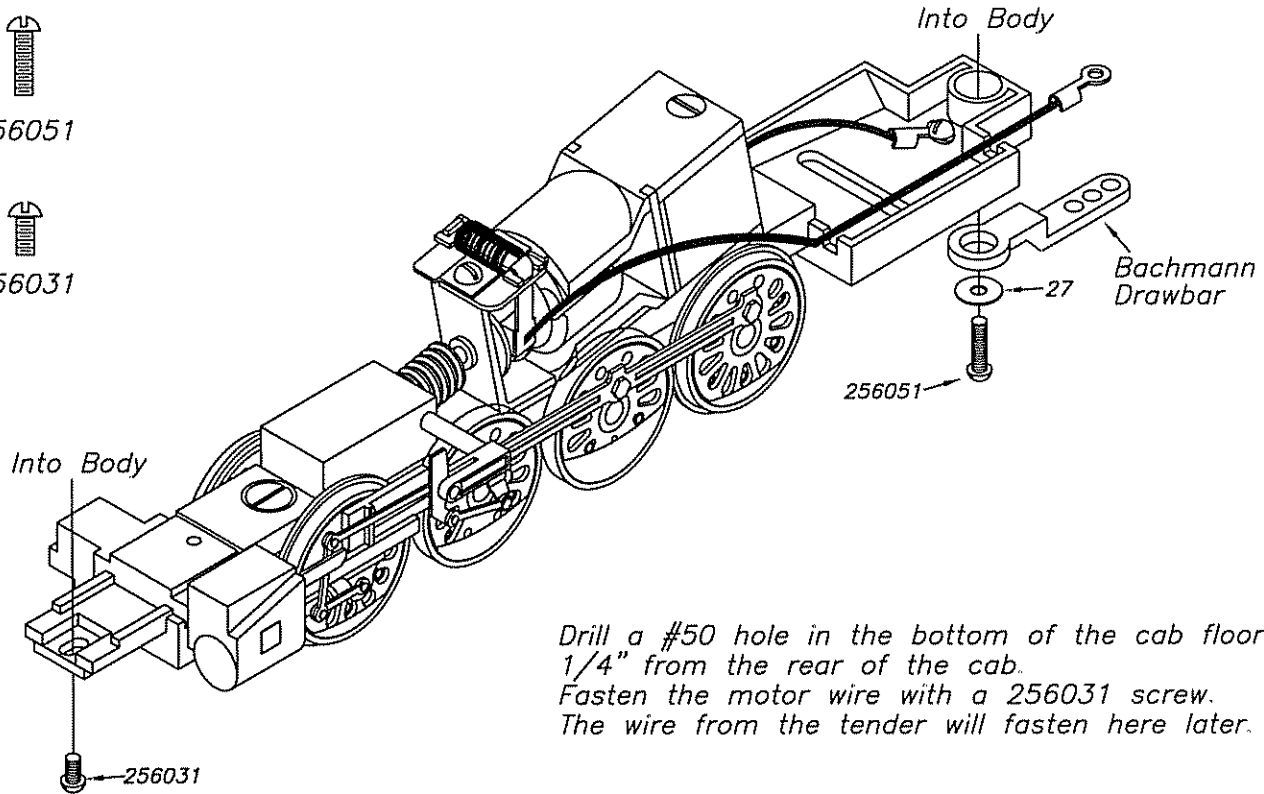
27



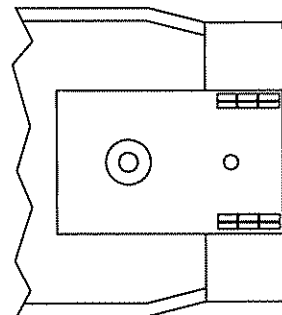
256051



256031



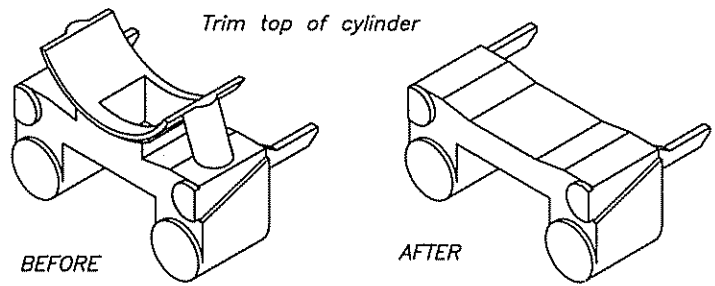
Drill a #50 hole in the bottom of the cab floor
1/4" from the rear of the cab.
Fasten the motor wire with a 256031 screw.
The wire from the tender will fasten here later.



Rear of Cab
from bottom

STEP #2 – for full cylinder

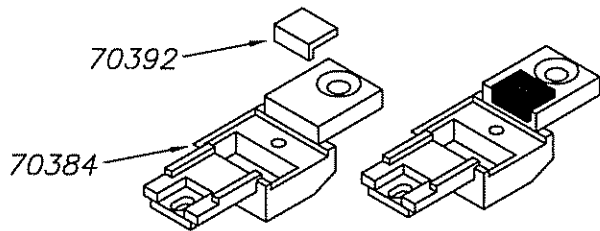
Assembly if the Bachmann or Lionel has complete cylinder as in drawing below.



STEP #2a– for full cylinder

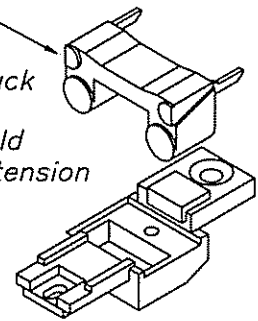
Assemble Lead truck and frame extension

Glue spacer in place



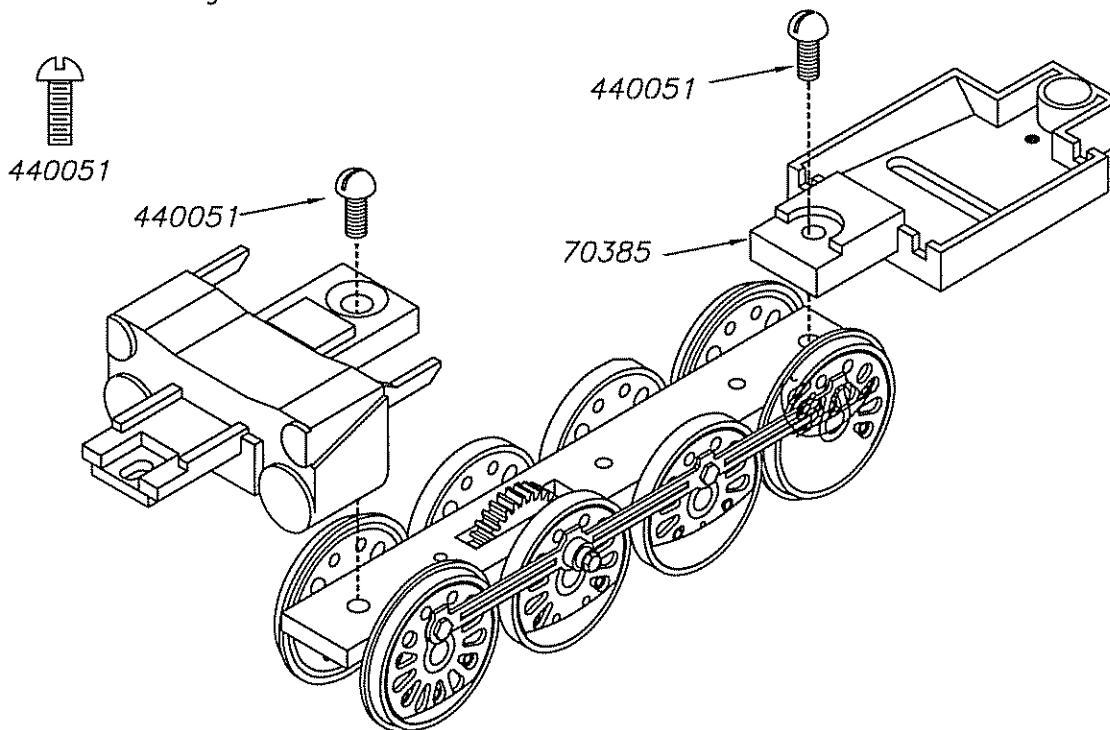
Plastic cylinder

Assemble Bachmann Lead Truck to the frame before gluing. Use a little glue (Goo) to hold the cylinder to the frame extension



STEP #2b for full cylinder


Assemble valve gear

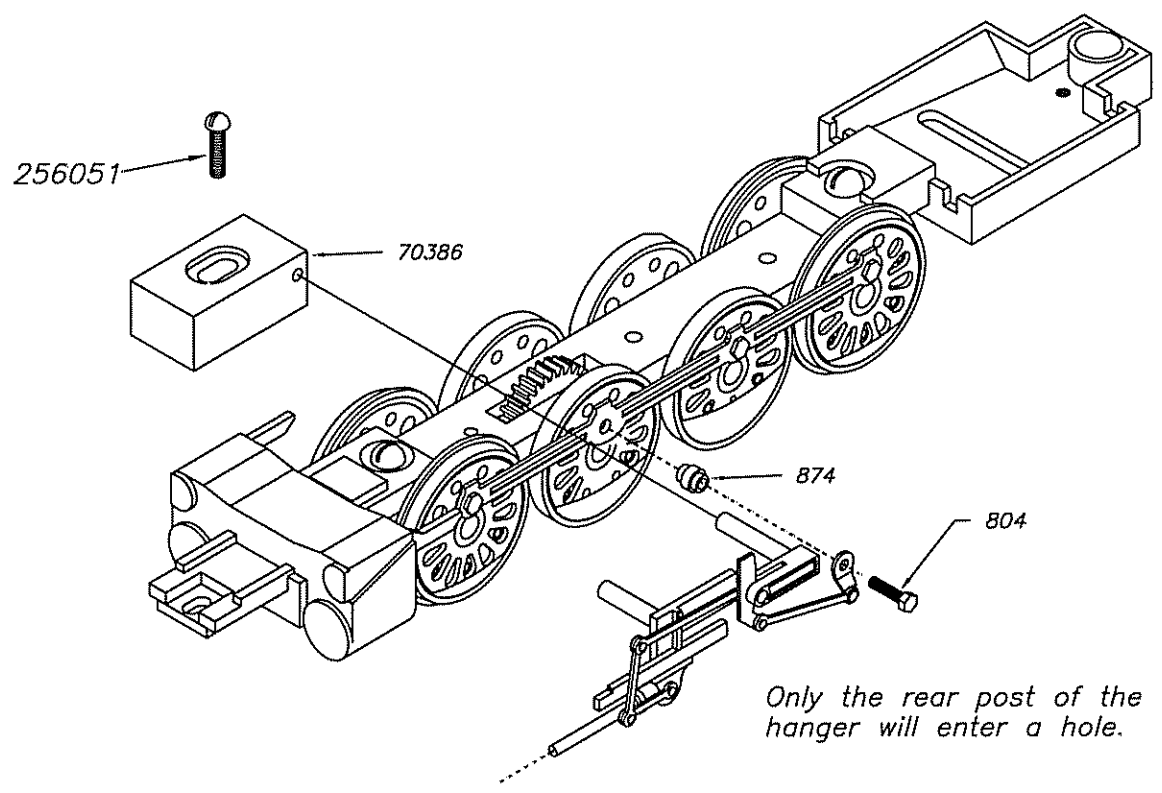
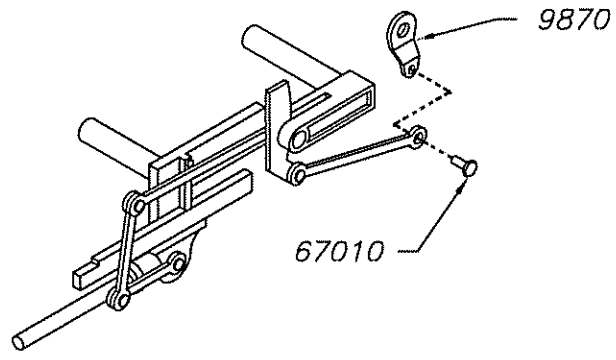


Go to Page 7

STEP #2c – for full cylinder block

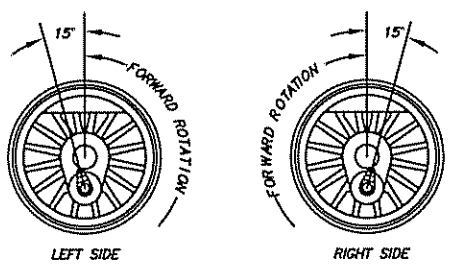
Assembly if the Bachmann or Lionel has complete cylinder as in drawing below.

- †
- 67010
- 
- 9870



Only the rear post of the valve gear hanger will enter a hole.

SET VALVE TIMING AS SHOWN

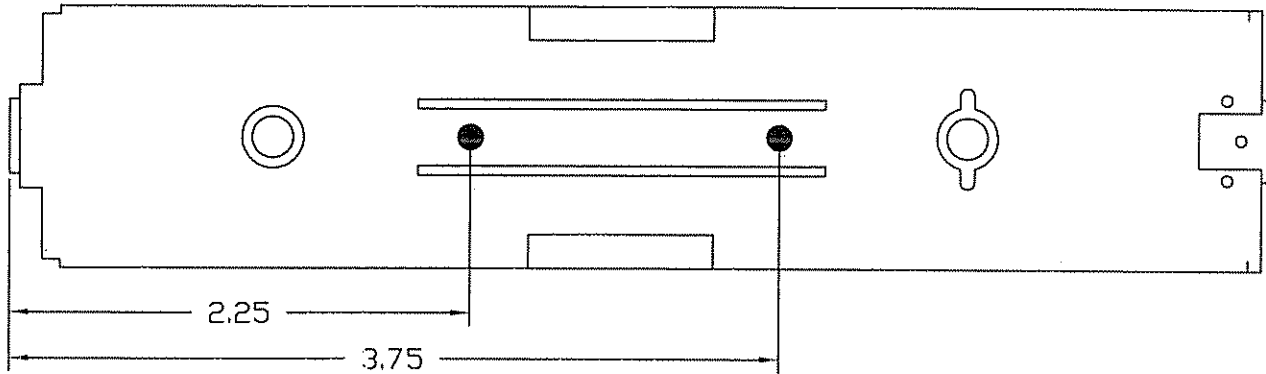


Proceed to Motor mounting page #3

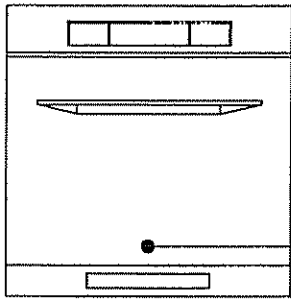
STEP #8

Tender - Remove tender trucks

Drill 2 holes 1/8" diameter

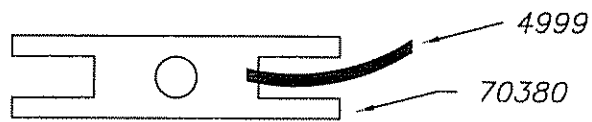


Front of Tender Body

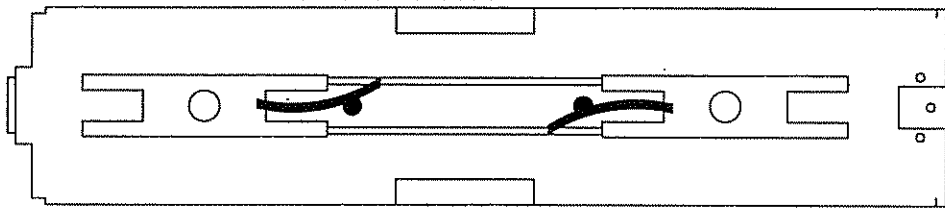


Drill 1/16" hole for wire

Cut 2 wire in half and Solder ends of wire to pickups



Bow ends of pickups so they touch the axles. Put trucks in place. Place pickup on truck and turn in screw.



Solder Together

6995 (2 pieces) Glue on frame

50315 wire with terminal

Through hole in front of tender and fasten to screw on bottom of cab

Pass wires from pickups through floor and solder three wires together.

6995 (2 pieces) Glue on frame