

#1079 ASSEMBLY INSTRUCTIONS

New power truck kit for 9 ft. wheelbase.

(May be used as general instructions for other wheelbases, but first, refer to special instructions at bottom of page 2.)

Only the most common modeler tools are needed for assembly of this truck. Some soldering experience would be helpful. For best results, first read through all the instructions at least once, and familiarize yourself with all the parts and their relative location. (SEE DRAWING)

If you should desire, "PORT ABLE LINES" will assemble your 9 ft. wheelbase power truck for you for just \$5.00. Please send it to us insured. Our fee covers return postage and insurance.

STEP A DEBURR AND PREPARATION

- 1) - SPACER BUSHINGS (All 1/8 Dia. Brass Tubing)  
Peel off burr with pliers, and break inside corner at both ends with drill by twisting between fingers.
- 2) - EQUALIZER TUBES (Both 5/16 Dia. Brass Tubes)  
Remove burr from bottom of counterbore (knife) break inside corner at other end (knife again) brighten the surface at end of each tube where soldering will be done (refer to fig. 1).
- 3) - GEAR BOX PLATES (1/16 Brass Plates)  
(Again with drill) break corners on both sides of all holes if necessary.
- 4) - X-770 & X-771 GEAR BOXES  
Remove flash from inside of 5/16 ~~dia.~~ hole with round file. Run flat file on both mating surfaces for a smoother face. Rerun 0-80 tap through cover holes. (NOTE: Set screw of X-770 is not used-discard.)
- 5) - X-461 BEARINGS  
(Each of these are composed of two parts: a bearing proper, and a bearing holder.) File off gate on both bearing holders to smooth outside diameter. Take one ONLY X-461, slip out the bearing proper, and set aside until later.
- 6) - BOLSTER CASTING  
Remove gate.

STEP B GEAR BOX PLATE SUB-ASSEMBLY

- 1) - (REFER TO FIG. 1)  
Use the gear box screws and spacers to assemble the gear box plates. Slip this assembly, and the equalizer tubes on wooden dowel. BE SURE to orient the parts as shown on Fig. 1. While holding dowel in vise, solder the equalizer tubes to the gear box plates. (A flux, or Kemtron's solder paint will help.)
- 2) - Again, while holding dowel in vise, file slots in equalizer tubes as shown on Fig. 1. (Remove Burr)
- 3) - Solder (One Only) X-461 bearing holder at end of long equalizer tube. (Note that this holder MUST be located so bearing will be inserted from INSIDE of tube) again, fig. 1 on drawing.

STEP C GEAR AND AXLE SUB-ASSEMBLY

- 1) - Solder 20 tooth gear to motor as shown on fig. 2.
- 2) - Solder 25 tooth gear to long axle as shown on fig. 3, and solder LONG worm gear to dimension also shown. For best results, hold this dimension between the two gears as closely as possible.

NOTE: Before the small worm gear can be soldered in place, you MUST perform a few trial assemblies as follows:

- 3) - Slip one fiber washer, and the X-461 bearing proper (which had been set aside) on the long worm end of axle. Fig. 3
- 4) - For a first trial, slip one short spacer, one fiber washer, and one X-461 complete bearing on the short worm end of axle. Fig. 3 (Do not use the short worm gear yet.)

## STEP C (CONT.)

- 5) - Insert the above gear-axle into the gear box which was built up in step B. Repeat if necessary until a satisfactory number of washers has been added to take up end play. Again see Fig. 3.
- 6) - Now the short worm gear may be soldered to dimension shown on fig. 3.
- 7) - Reassemble the gear box plates including the idler gear assembly this time. See fig. 4 for proper location of spacer and bearings.  
(Lubricate all the gears and bearings.)
- 8) - Mount the X-770 and X-771 gear boxes, and wheelsets in place. Again see fig. 4 for orientation. Be sure both insulated wheels are on the same side.  
(Lubricate) both small gear boxes must swivel freely.

## STEP D FINAL ASSEMBLY

- 1) - File channel on bolster (if necessary) until it slides freely on 3/4 wide gear box plate. (Lubricate)
- 2) - Make up insulating sandwich and mount bolster to loco frame. Fig. 4
- 3) - Install one sideframe on bolster.
- 4) - Locate power truck (without motor) and install second sideframe. (Brass washers are provided to take up end play of wheelsets).
- 5) - Install motor in place (be sure to include the four short spacers as shown in fig. 2) the two top nuts are easily started. The two bottom nuts may be easily started if the entire assembly is held so the nuts are horizontal. Use a tooth-pick to get these nuts started.

SPECIAL INSTRUCTIONS

For other than 9 ft. wheelbase.

SHORTER - Between 9 ft. and 8 ft. (Minimum)

First find the difference between 9 ft. and the desired wheelbase. Subtract this difference from the dimensions marked \* on drawing. (Any cutting of long equalizer tube to be done on non-counterbored end.)

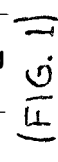
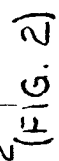
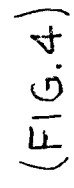
LONGER - Between 9 ft. and 16 ft. (Maximum)

You will have to send for parts no. 1081 and 1082 these are extra length equalizer tube and axle. See #1078 parts list.

Find the difference between the desired wheelbase, and 9 ft. Add this difference to the dimensions marked \* on drawing. (Any cut of long equalizer tube to be done on non-counterbored end.)

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SELF-ADDRESSED STAMPED ENVELOPE FOR LIST  
OF GP-9 DIESEL DETAIL CASTINGS.



S~SCALE POWER TRUCK

**DRAWING NUMBER**  
1080