

756 Logger Valve Gear Assembly

ASSEMBLY INSTRUCTIONS

1. Check all parts with the replacement parts list. Riveting the valve gear links together requires a reasonable amount of care and study.
2. On a sheet of white paper place all the valve gear parts just as they will be assembled on the locomotive. The drawing shows the exact relation of the parts to each other. Check your layout over again with the drawing as each part must overlap the other as shown.
3. A few tools will be required for the riveting operation:
 - A small flat block of steel as an anvil
 - A flat fine cut needle file
 - A small center punch
 - A light-hammer
4. Start with riveting together the No. 8458 eccentric crank and No. 8449 eccentric rod, using No. 8351 rivet. Do this for both left and right sides. Just insert a small center punch in the hollow end of the rivet and tap lightly with the flat face of the hammer until it pulls the eccentric crank and the eccentric rod together snugly but not tight. All the rods and levers must operate freely before assembling them on the locomotive frame. Finish both sides before going to the next step, being careful to keep the eccentric crank projecting lug up thus distinguishing the left from the right assembly. Important Note: All No. 8351 rivets are placed with the head outside. A few extra rivets are supplied for your convenience.
5. Left Side — Rivet No. 8449 to No. 8473
Right Side — Rivet No. 8449 to No. 8473
6. Left Side — Rivet No. 8473 to No. 8474
Right Side — Rivet No. 8473 to No. 8474
7. Left Side — Rivet No. 8474 to No. 8475
Right Side — Rivet No. 8474 to No. 8475
8. Left Side — Rivet No. 8475 to No. 8478
Right Side — Rivet No. 8475 to No. 8478
9. Left Side — Rivet No. 8475 to No. 8472
Right Side — Rivet No. 8475 to No. 8472
10. Left Side — Rivet No. 7096 main rod to No. 8470 crosshead and piston rod. Use No. 8355 long rivet.

- Right Side — Rivet No. 7096 main rod to No. 8471 crosshead and piston rod. Use No. 8355 long rivet.
11. Left Side — Rivet No. 8472 to No. 8470
Right Side — Rivet No. 8472 to No. 8471
12. Left Side — Rivet No. 8473 to No. 8476 crosshead guide.
Right Side — Rivet No. 8473 to No. 8477 crosshead guide.
This completes the entire riveting job of the valve gear.
13. The valve gear linkage is now ready to be installed in place on the locomotive. Insert crosshead assemblies in No. 8476 (L.H.) and No. 8477 (R.H.) crosshead guides and reverse link hangers as shown in drawing (insert).
Steps 14-17, follow step 13 of mechanism instructions.
14. No. 7165 Hex Head screw is removed from each rear set of drive wheels so main rod and eccentric crank can be installed.
15. Slip the end of the main rod over the No. 6390 bushing. Insert the No. 6390 main rod bushing in place between the main rod and side rod. Now, with the No. 8458 eccentric crank placed over the end of the No. 6390 bushing, insert one No. 7165 hex, head main rod screw (0-80 x 1/4") thru bushing and screw up tight.
16. The eccentric crank may be set at any angle from 0 degrees to 30 degrees. The 0 degree setting allows a minimum amount of movement of the valve gear. A 30 degree setting allows a maximum amount of movement and also more wear on the valve gear. Insert drawing shows 0 degree angle in dotted line position and 30 degree angle in solid line.
17. Put a small drop of oil at each riveted link and run in mechanism the same as mentioned in the mechanism assembly "break-in" period.

INSTRUCTION SHEET NO. 55-0043

Any quantity of replacement parts may be purchased at retail list price. Add \$2.00 to cover postage and handling.

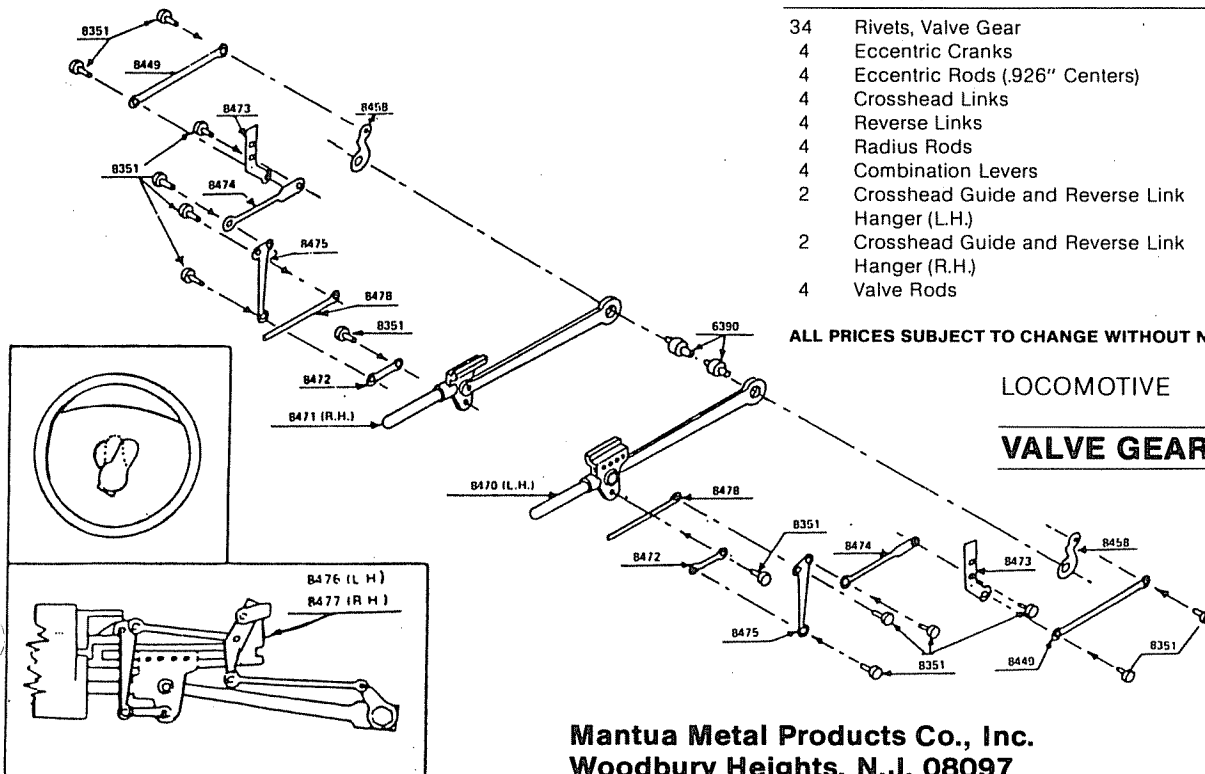
NOTE: We reserve the right to make changes in design and changes or improvements upon our products without imposing any obligation upon ourselves to install the same change or improvements upon our products previously manufactured.

No. in Kit	Description	Part No.	Unit Price Each
34	Rivets, Valve Gear	8351	.10
4	Eccentric Cranks	8458	.25
4	Eccentric Rods (.926" Centers)	8449	.25
4	Crosshead Links	8472	.25
4	Reverse Links	8473	.25
4	Radius Rods	8474	.25
4	Combination Levers	8475	.25
2	Crosshead Guide and Reverse Link Hanger (L.H.)	8476	.75
2	Crosshead Guide and Reverse Link Hanger (R.H.)	8477	.75
4	Valve Rods	8478	.25

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

LOCOMOTIVE

VALVE GEAR ASSEMBLY



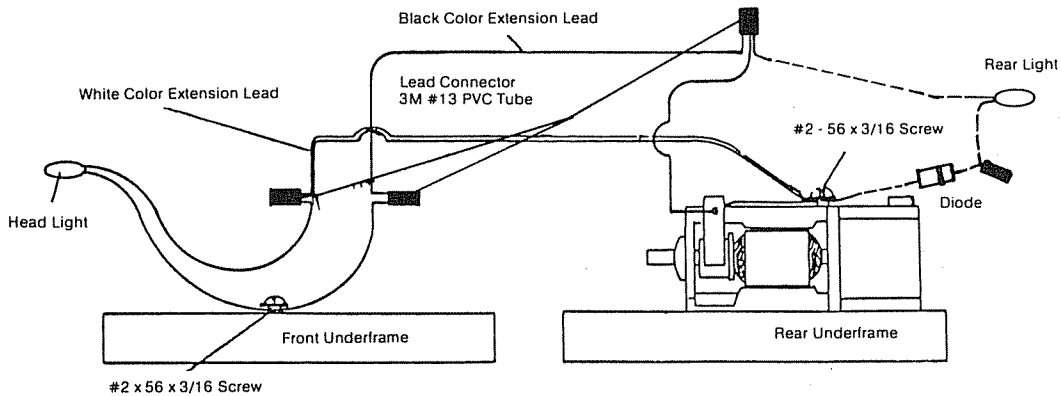
Mantua Metal Products Co., Inc.
Woodbury Heights, N.J. 08097

WIRING DIAGRAM

- A. Strip the insulation $1\frac{7}{8}$ " back from headlight on one lead. Expose $\frac{1}{4}$ " of wire. Ground this lead to the front frame as shown and attach the end of the lead to the black wire which goes through the boiler and attaches to the left motor lead wire.
- B. The other lead from the front light fastens to the white lead wire which goes through the boiler and is fastened to the top of the motor with the lead wire from the right side of the motor. Use a #7494, 2-56 x 3/16" W. H. Screw.

If your locomotive has a tender, skip to the "tender assembly" instructions.

- C. If your locomotive has a backup light, continue. The wide band on the diode marks the front, which should face toward the rear light. One lead from the rear light attaches to the front end of the diode. The other lead attaches to the black extension lead which passes through the boiler. Attach the back of the diode to the screw on top of the motor. Use insulators to cover wire joints. Proceed to the next page. (Skip tender assembly).



TENDER ASSEMBLY

1. Use insulators to cover all wire connections.
2. Check all parts with replacement parts list. Study drawings to identify the parts. Read instructions through before starting and BE SURE you understand how each part is to be mounted and avoid disappointing and expensive errors. Smooth edges of all castings with a knife or fine file to remove all flash and burrs.
3. Assemble No. 3285 Frame to No. 2292 Body by pressing the three pins on the frame into the holes provided in body.
4. Place No. 2601 Coupler in No. 2603 Coupler Pocket and insert No. 7477 Screw, #0 x 7/32" lg, S.T.R.H. as shown on drawing. Screw into hole provided on Tender Body. Be sure coupler is under spring tension and moves freely.
5. Install No. 34803 Trucks with insulated wheels on the right hand side (opposite side to loco insulated wheels). Screw into place with two No. 7494 Screws, #2-56 x 3/16" W.H.S.T.
6. Place No. 6612 Drawbar over boss at front of tender frame, secure with a No. 7494 Screw, #2-56 x 3/16" S.T.W.H. The other end of Drawbar slips over the boss at the rear of loco frame, No. 7494 Screw is also used here.

