

Load Bus (kit PA-274691)

This kit provides load bus bars for 125R0Z(J), and 150R0Z(J) generator sets with oversized alternators. See the following illustrations for reference in installing the kit. Use one of the three following terminal lug kits, selection depending on size of cables to be connected to the bus bars.



WARNING



Hazardous voltage can cause death or severe injury. Install this kit before connecting the generator to the planned system. Make sure that starting battery(ies) is not connected to the generator set, while installing kit. Disconnect battery negative (–) lead first, and reconnect it last.

Cable Size	Terminal Lug Kit	Cables per Lug	Terminal Lug No.	Attaching Hardware
600 MCM – 02	274778	2	297981 (4)	X-6205-11 (8), X-83-2 (16), X-22-1 (8)
600 MCM – 04	274697	1	X-6207-9 (4)	X-6205-11 (8), 275470 (4), X-83-2 (8), X-22-1 (4),
750 MCM – 3/0	274779	3	297983 (4)	X-6205-11-1 (8), X-83-2 (16), X-22-1 (8)

Lug Kit Selection

Installation

Note:

Before starting, decide whether terminal lugs are to be mounted in upper, or lower positions (based on junction box entry point for output cables as specified in plans).

- Remove junction box side covers.
- If terminal lugs are to be mounted in lower positions, mount the angle/support bracket (275452) to the floor of the junction box, as shown in Figures 1 & 2.
- Mount brackets 274332 and 274741 to vertical junction box support channels (see Figures 1 & 2).
- Mount the two cross bus support angles (274432) to brackets installed in step 3 (as shown in Figures 1 and 2) Fasten insulating standoffs (233269) to bus support angles (use 16 if lugs are to be top-mounted; 24, if lugs are to be bottom mounted).
- Mount bus bars (275453) to insulating standoffs. If bus bars are to be bottom-mounted, mount 4 insulating channels (274434) as shown in Figure 1.
- Final tighten all bus bar mounting hardware. If terminal lugs are to be mounted in upper positions, cut off bus bars below the lower support, as shown in Figure 1.
- Mount terminal lugs to the bus bars in either upper, or lower, position as shown in Figures 1 and 2.
- Route generator leads through current transformers for connection to bus bars as shown in Figure 3, according to system voltage specified in plans. Connect generator leads to bus bars as shown in Figures 2 and 3.
- Rivet the lug insulator pad (275598) to the left-side junction box side cover, as shown in Figure 2. Reinstall junction box side covers.

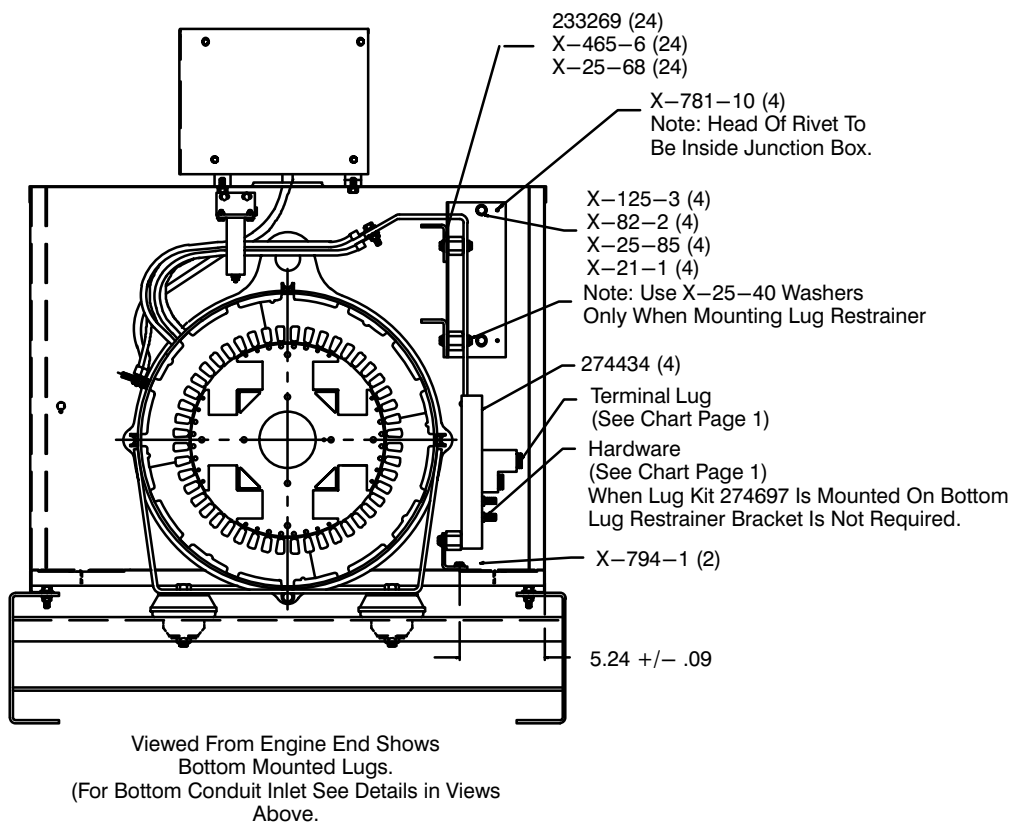
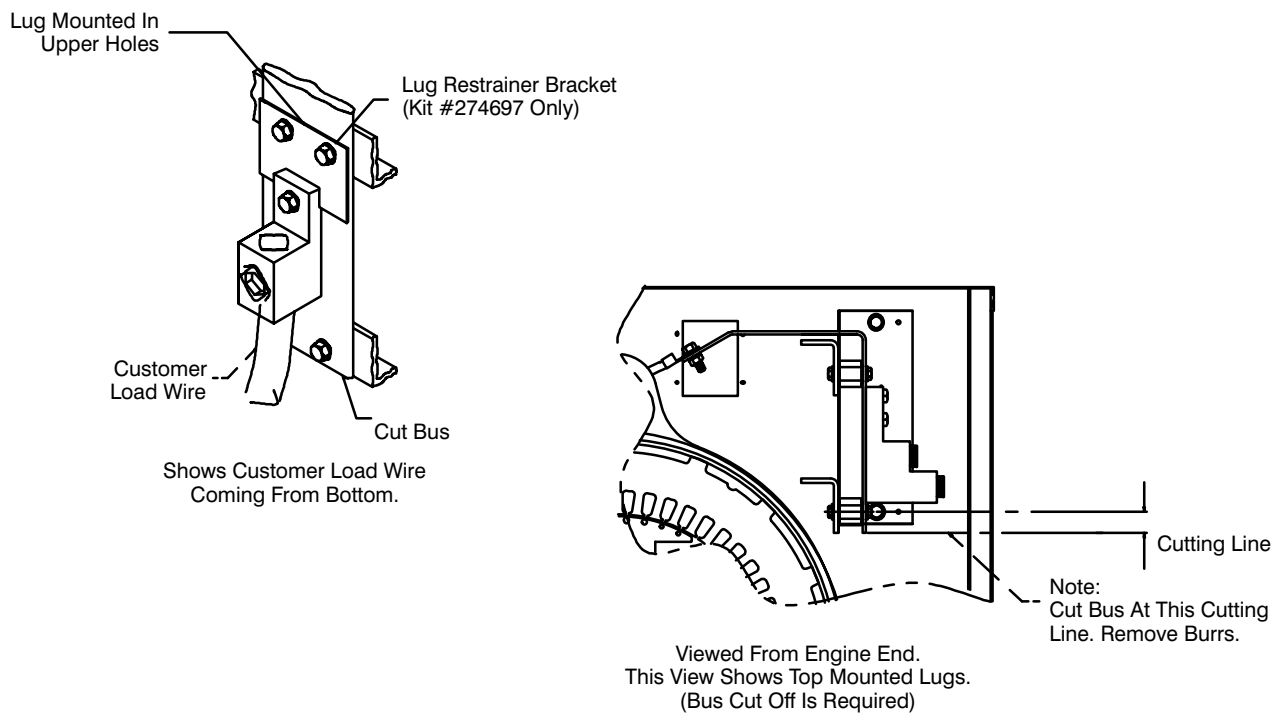


Figure 1. Assembly

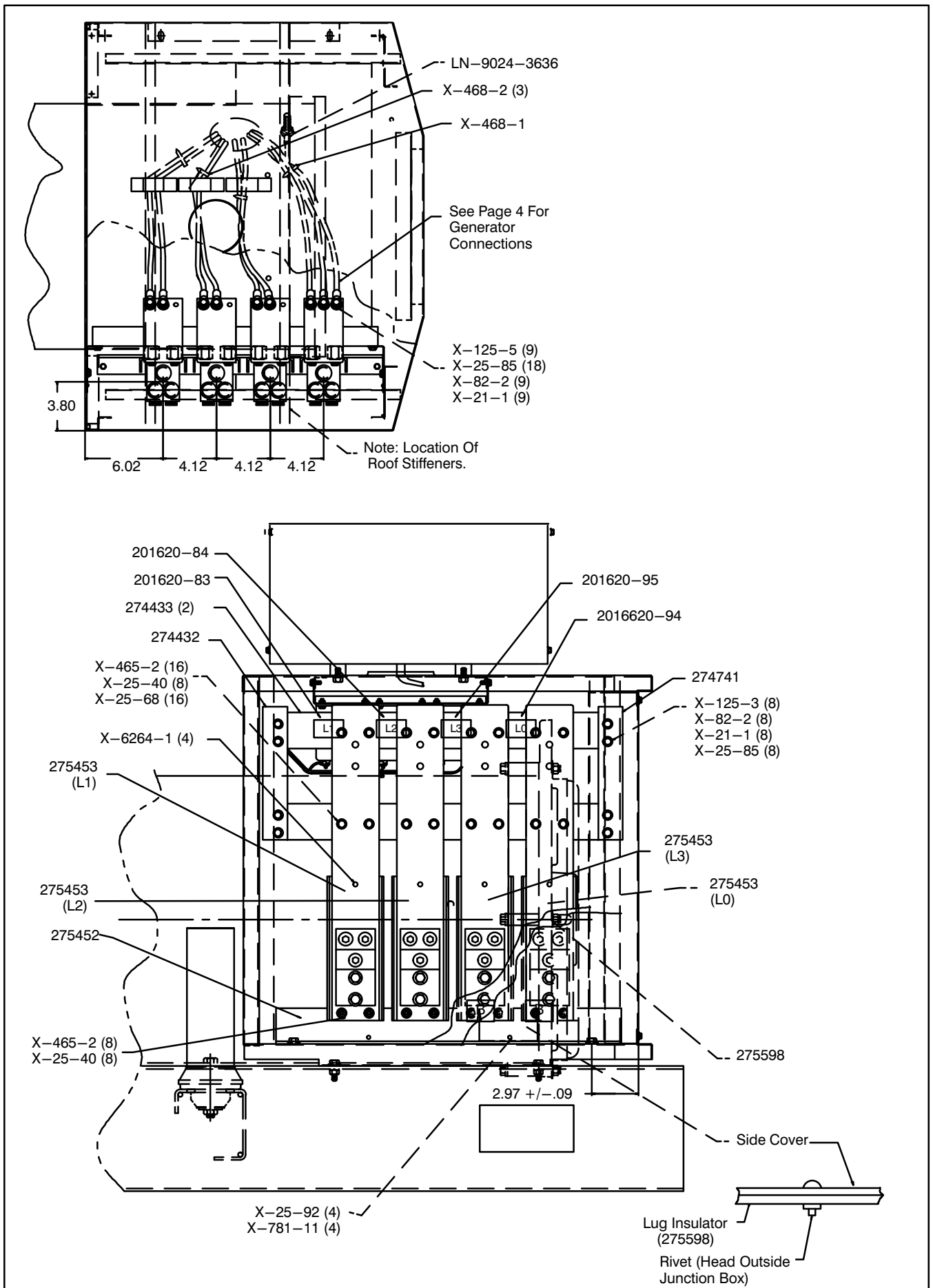
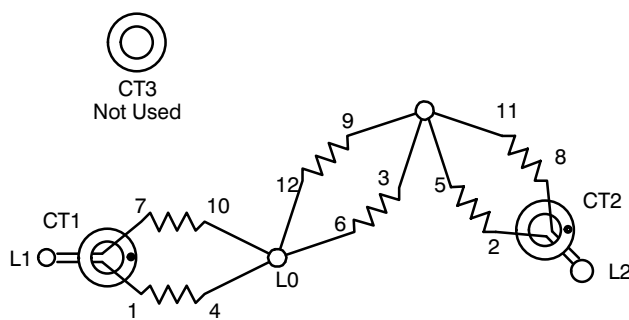
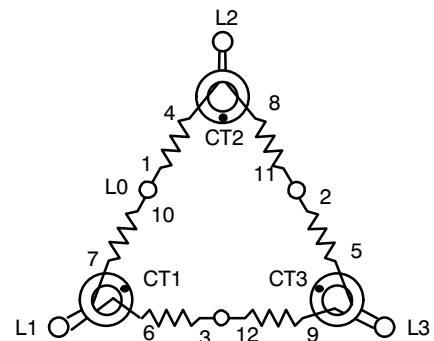
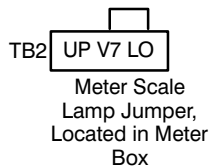


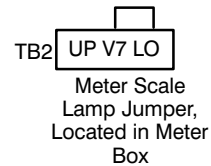
Figure 2. Installation



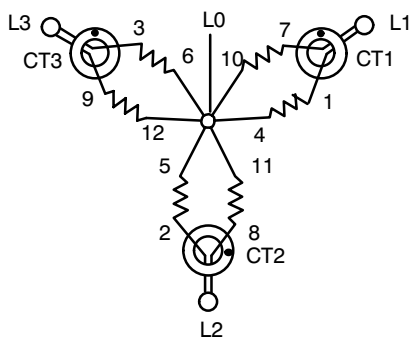
120/240—Volt, 60 Hz, 1—Phase, 3—Wire;
110/220—Volt, 50 Hz, 1—Phase, 3—Wire
(20 – 100 kW Only).



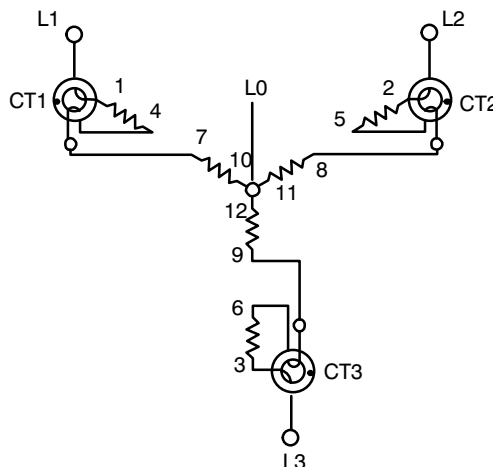
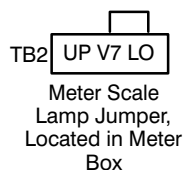
120/240—Volt, 60 Hz, 3—Phase, 4—Wire, Delta;
110/220—Volt, 50 Hz, 3—Phase, 4—Wire, Delta.



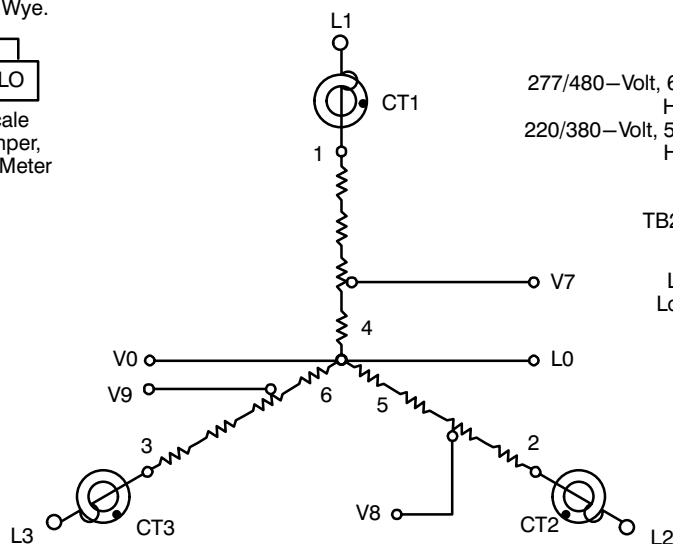
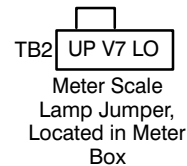
Note:
Current Transformer Dot Or
“HI” Toward Generator, for all
connections.



120/208 OR 139/240—Volt, 3—Phase, 4—Wire
Low Wye;
120/208 OR 110/190—Volt, 3—Phase, 4—Wire
Low Wye.



277/480—Volt, 60 Hz 3—Phase, 4—Wire
High Wye;
220/380—Volt, 50 Hz, 3—Phase, 4—Wire
High Wye.



600—Volt
6—Lead Stator.
Note:
Two Wire Turns Through Each
Current Transformer.

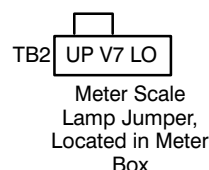


Figure 3. Generator Connections