

Load Bus (kit PA-274996)

This kit provides load bus bars for 180R0Z(J), and 150ROZ(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
350 MCM - 06	274696	1	X-6207-8 (8)	X-6238-4 (8), 275469 (4), X-83-2 (8), X-22-1 (8), X-25-18 (8)
600 MCM - 02	274698	2	297981 (4)	X-6238-1 (8), X-83-2 (8), X-25-18 (8), X-22-1 (8)
750 MCM - 3/0	274699	3	297983 (4)	X-6238-1 (8), X-83-2 (8), X-25-18 (8), 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 longer fiberglass insulating angle/support bracket (272871) to the floor of the junction box, as shown in Figures 1 and 2.
- Mount the shorter fiberglass insulating angle/support bracket (272872) to the roof stiffeners, using two metal brackets (274657). Note that roof stiffeners are center punched at mounting points for metal brackets.
- Mount the two insulating channels (274662) and bus supports (274659) to the junction box support channels, as shown in Figures 1 and 2.
- Mount bus bars (A-274870) to bus supports. 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.
- Mount the lug insulator pad (272874) to the left-side junction box side cover, as shown in Figure 2. Reinstall junction box side covers.

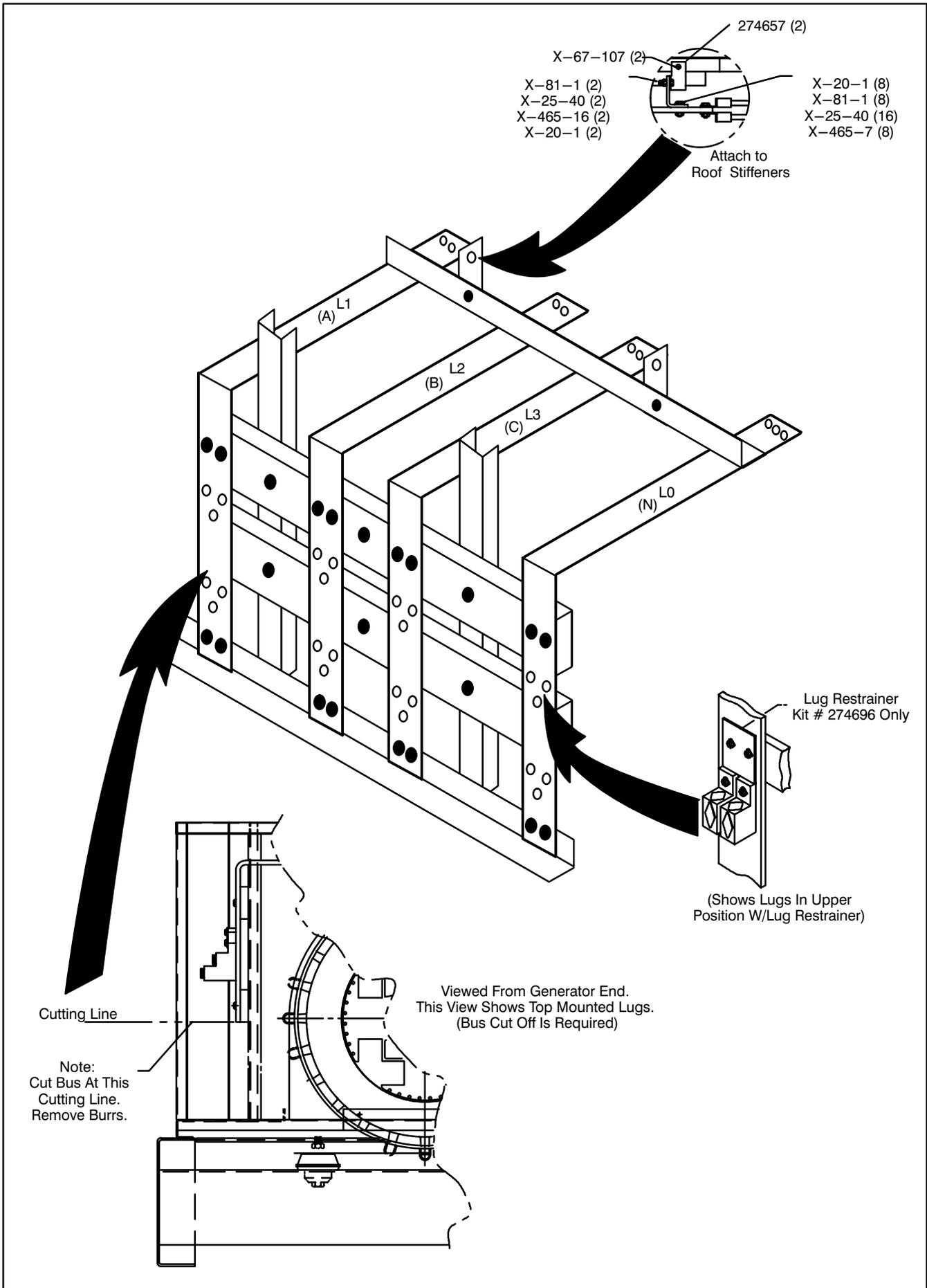


Figure 1. Assembly

Note:
See Figure 3 for
Generator Connections

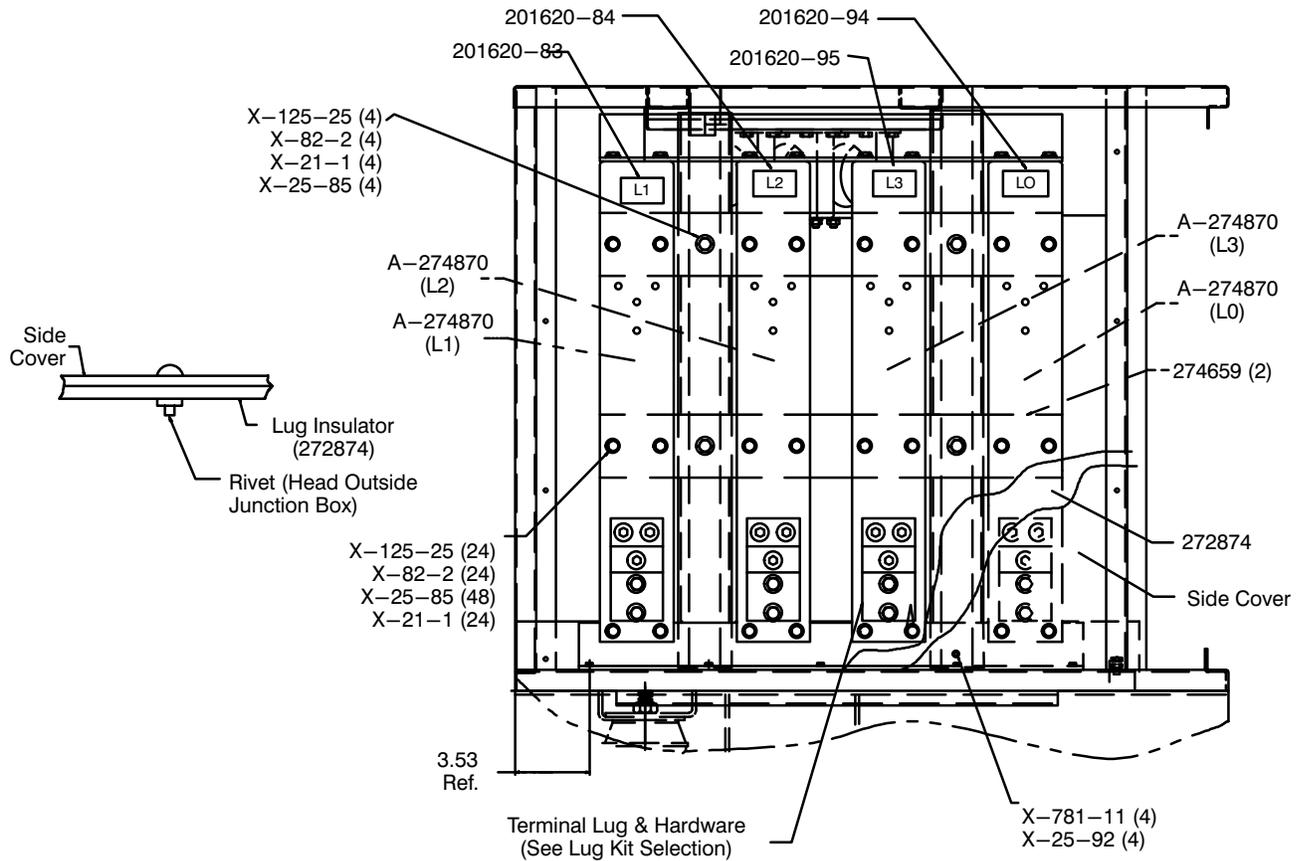
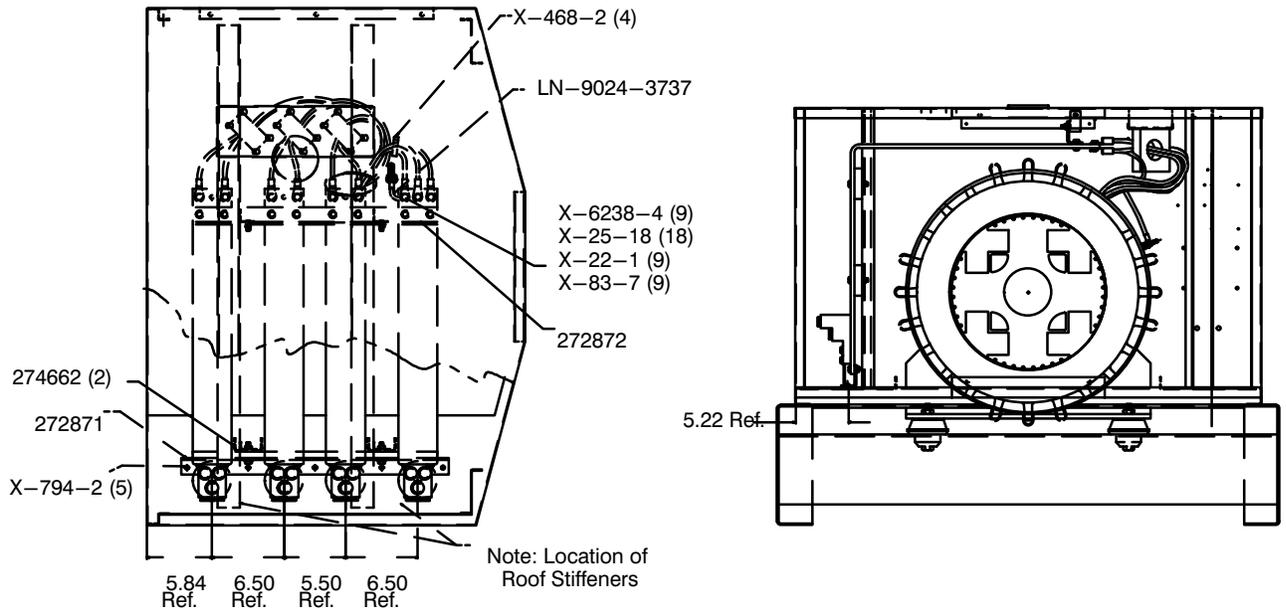
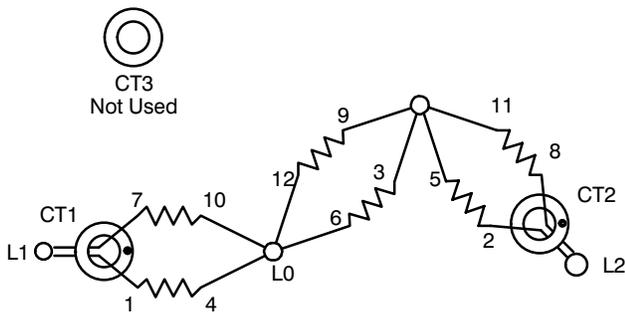
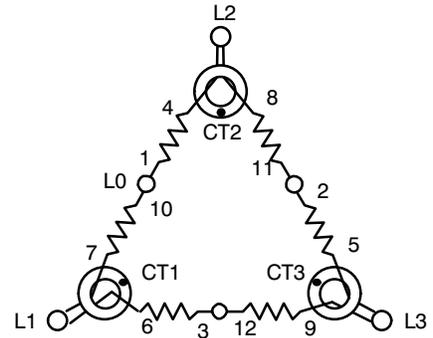
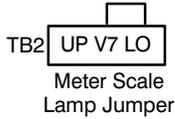


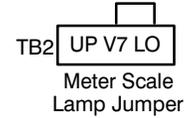
Figure 2. Installation



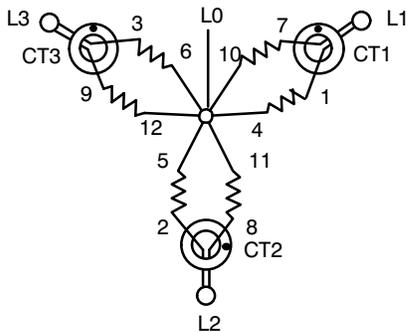
120/240-Volt, 60 Hz, 1-Phase, 3-Wire;
110/220-Volt, 50 Hz, 1-Phase, 3-Wire
(20 - 100 kW Only).



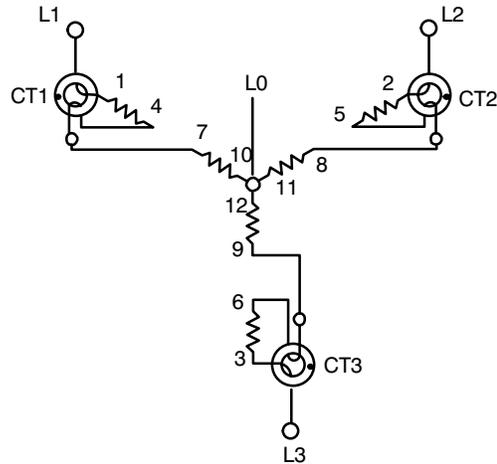
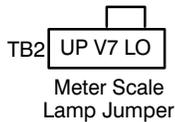
120/240-Volt, 60 Hz, 3-Phase, 4-Wire, Delta;
110/220-Volt, 50 Hz, 3-Phase, 4-Wire, Delta.



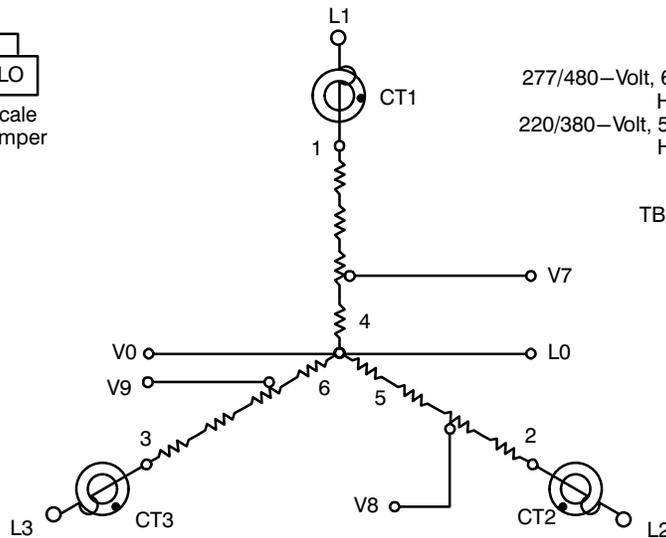
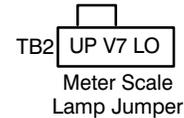
Note:
Current Transformer Dot Or
"HI" Toward Generator, for all
connections.



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.

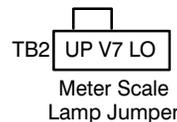


Figure 3. Generator Connections