# Load Bus
# (kit PA−274689)



⚠ **WARNING**

This kit provides load bus bars for 20RZ/ROZ, through 60RZ/ROZ generator sets. 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.

**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.

## Lug Kit Selection

| Cable Size | Terminal Lug Kit | Cables per Lug | Terminal Lug No. | Attaching Hardware |
|---|---|---|---|---|
| 3/0 − 08 | 274693 | 1 | X−6207−7 (4) | X−465−9 (4), 275473, (4), X−81−8, X−25−40 (8), X−20−14 (4) |
| 350 MCM − 06 | 274694 | 1 | X−6207−8 (4) | X−6238−4 (4), 275471 (4), X−83−2 (4), X−22−1 (4), |
| | | | | X−25−18 (8) |
| 500 MCM − 04 | 274695 | 1 | X−6207−8 (8) | X−6238−4 (8), 275474 (4), X−83−2 (8), X−22−1 (8), |
| | | | | X−22−14 (8) |

## 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).**

1. Assemble bus assemlby mounting brackets (275457 & 275458) to junction box as shown in Figure 3.

2. Mount bus bars (275468) to bus supports (2754680. Final tighten all bus bar mounting hardware.

3. Mount terminal lugs to the bus bars in either upper, middle or lower, position as shown in Figures 1 and 2.

4. 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.

5. Mount the lug insulator pad (275562) to the left−side junction box side cover, as shown in Figure 2. Reinstall junction box side covers.
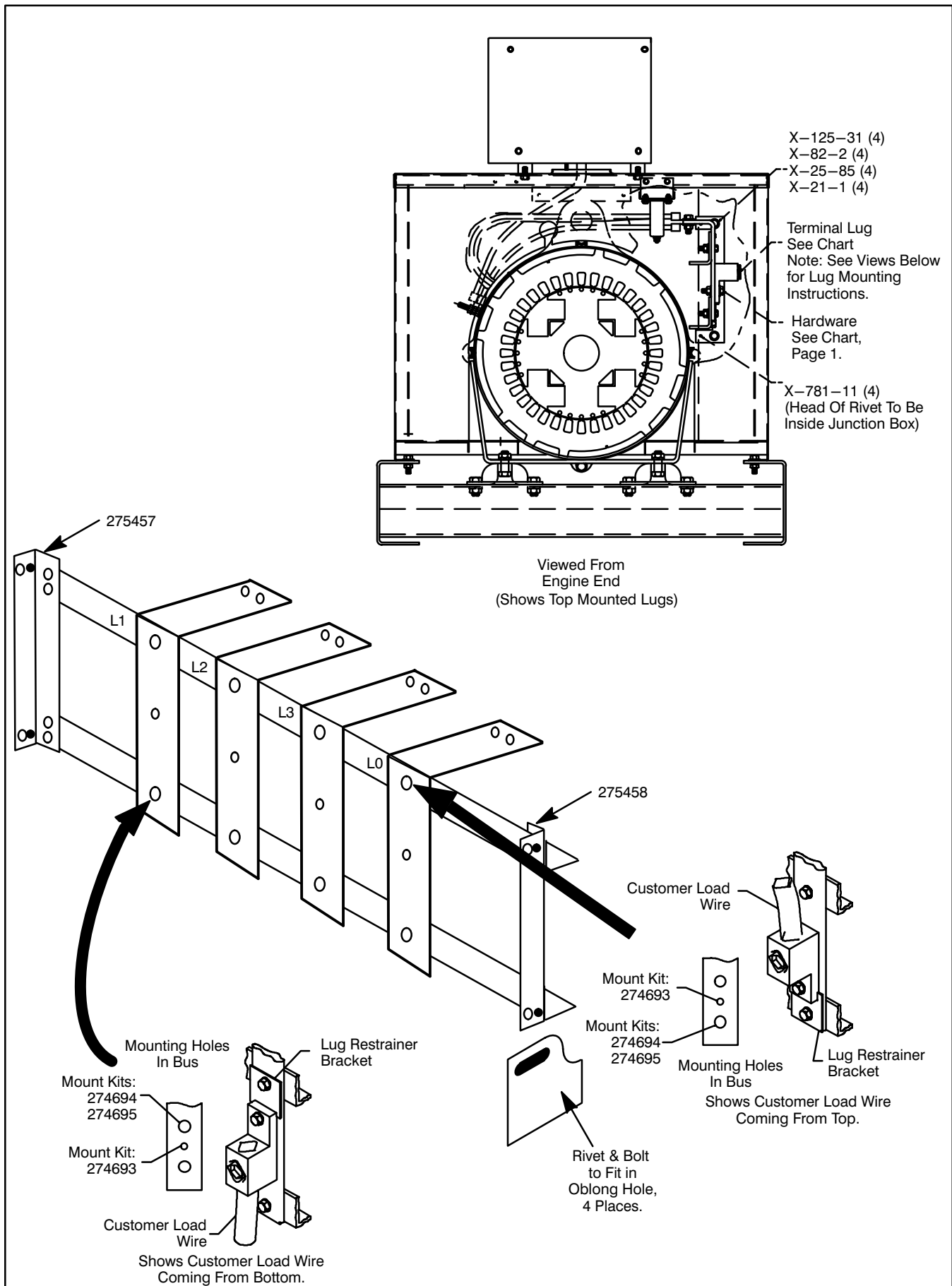
X−125−31 (4)
X−82−2 (4)
X−25−85 (4)
X−21−1 (4)

Terminal Lug
See Chart
Note: See Views Below
for Lug Mounting
Instructions.

Hardware
See Chart,
Page 1.

X−781−11 (4)
(Head Of Rivet To Be
Inside Junction Box)

275457

L1
L2
L3
L0

275458

Viewed From
Engine End
(Shows Top Mounted Lugs)

Customer Load
Wire

Mount Kit:
274693

Mount Kits:
274694
274695

Mounting Holes
In Bus

Lug Restrainer
Bracket

Shows Customer Load Wire
Coming From Top.

Mounting Holes
In Bus

Lug Restrainer
Bracket

Mount Kits:
274694
274695

Mount Kit:
274693

Customer Load
Wire

Rivet & Bolt
to Fit in
Oblong Hole,
4 Places.

Shows Customer Load Wire
Coming From Bottom.

**Figure 1. Assembly**

2

**Note:**
**For Use In Junction Box 273428.**

201620−84
201620−95
275459 (L1)
201620−94
201620−83
275459 (L0)
275468 (2)
275457
275458

L1  L2  L3  L0

X−125−5 (8)
X−82−2 (8)
X−21−1 (8)
X−25−85 (8)

X−465−7 (8)
X−81−1 (8)
X−25−40 (8)
X−20−1 (8)

275459 (L3)

275459 (L2)

Side Cover

Lug Insulator (275562)

Rivet (Head Outside Junction Box)

X−781−11 (4)
X−25−92 (4)

275562

LN−0424−3636

X−468−2 (4)

See Page 4 For Generator Connections

X−465−7 (8)
X−81−1 (8)
X−25−40 (16)
X−20−1 (8)

3.01

7.20   3.88   3.88   3.88

Note: Location Of Roof Stiffners.

**Figure 2. Installation**

3

CT3
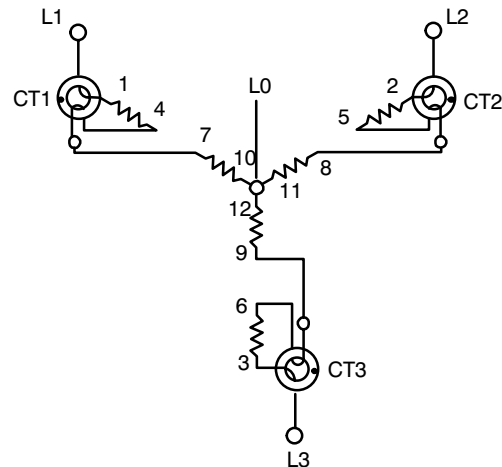Not Used

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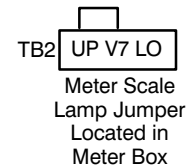110/220−Volt, 50 Hz, 1−Phase, 3−Wire
(20 − 100 kW Only).

TB2 | UP V7 LO

Meter Scale
Lamp Jumper
Located in
Meter Box

**Note:
Current Transformer Dot Or
"HI" Toward Generator, for all
connections.**
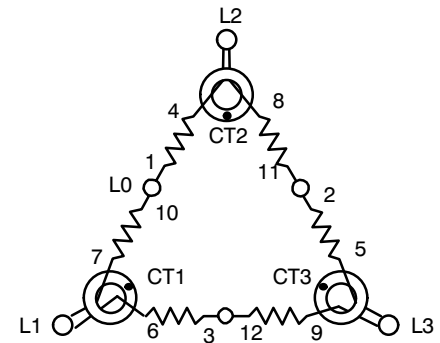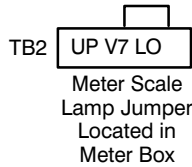
120/240−Volt, 60 Hz, 3−Phase, 4−Wire, Delta;
110/220−Volt, 50 Hz, 3−Phase, 4−Wire, Delta.

TB2 | UP V7 LO

Meter Scale
Lamp Jumper
Located in
Meter Box
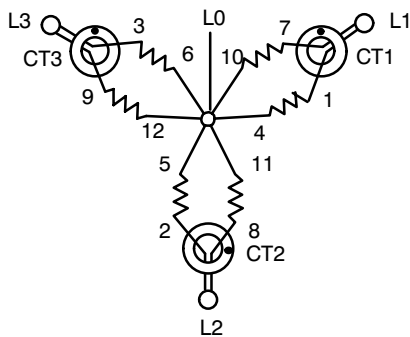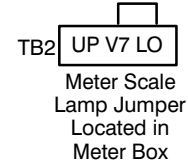
120/208 OR 139/240−Volt, 3−Phase, 4−Wire
Low Wye;
120/208 OR 110/190−Volt, 3−Phase, 4−Wire
Low Wye.

TB2 | UP V7 LO

Meter Scale
Lamp Jumper
Located in
Meter Box
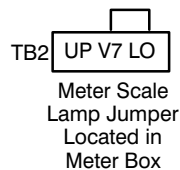
277/480−Volt, 60 Hz 3−Phase, 4−Wire
High Wye;
220/380−Volt, 50 Hz, 3−Phase, 4−Wire
High Wye.

TB2 | UP V7 LO

Meter Scale
Lamp Jumper
Located in
Meter Box
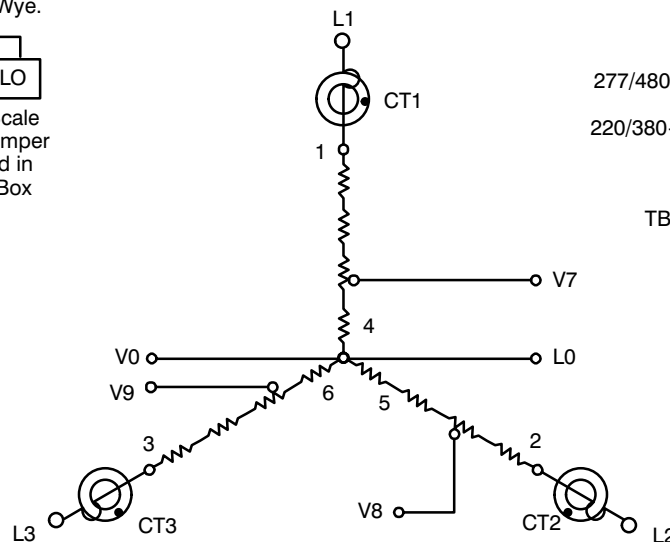
600−Volt
6−Lead Stator.
Note:
Two Wire Turns
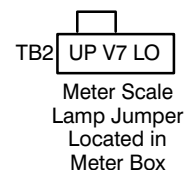Through Each
Current Transformer.

TB2 | UP V7 LO

Meter Scale
Lamp Jumper
Located in
Meter Box

**Figure 3. Generator Connections**