
INSTALLATION INSTRUCTIONS

**Lug Wire Kits
20-300 kW Standby Generator Sets**

Kits covered by this TT include:

PA-274693	PA-274700
PA-274694	PA-274778
PA-274695	PA-274779
PA-274696	PA-274696-SD
PA-274697	PA-274698-SD
PA-274698	PA-274699-SD
PA-274699	PA-274700-SD

The lug wire kits provide for mounting connection lugs on the generator bus bars for easy connection of the load leads. The leads can be routed into the generator set junction box through either the top or the bottom of the junction box.

NOTE

These kits require that the optional load bus kit be installed on the generator set. Some installations will also require removal (cut-off) of a portion of the bus bars to provide adequate clearance for the load wires.



Accidental starting.

Can cause severe injury or death.

Disconnect battery cables before working on generator set (negative lead first and reconnect it last).

Accidental starting can cause severe injury or death. Turn generator master switch to OFF position, disconnect power to battery charger, and remove battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator. The generator set can be started by automatic transfer switch or remote start/stop switch unless these precautions are followed.

⚠ WARNING
<p>Hazardous voltage. Backfeed to utility system can cause severe injury, death, or property damage. Do not connect to any building electrical system without connecting through an approved device and after building main switch is open.</p>

Hazardous voltage can cause severe injury or death. Perform electrical service only as prescribed in equipment manual. Be sure that generator is properly grounded. Never touch electrical leads or appliances with wet hands, when standing in water, or on wet ground as the chance of electrocution is especially prevalent under such conditions. Wiring should be inspected at the interval recommended in the service schedule—replace leads that are frayed or in poor condition. The function of a generator set is to produce electricity and wherever electricity is present, there is the hazard of electrocution.

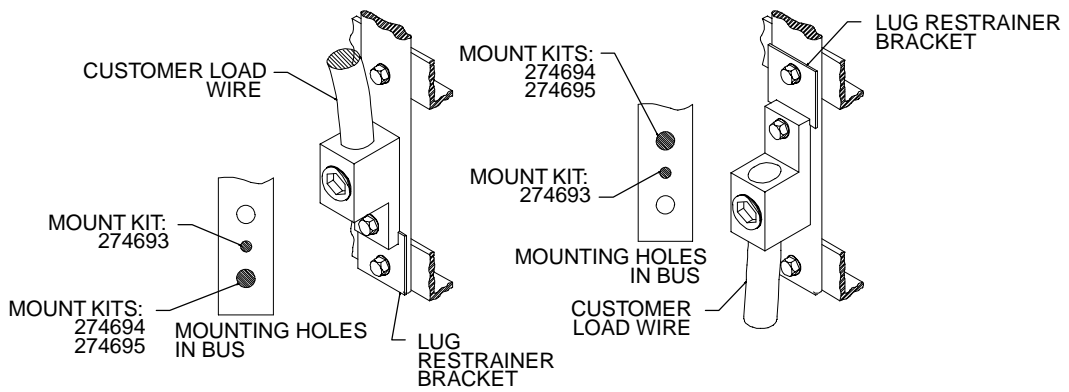
INSTALLATION

1. Turn generator set master switch to the OFF position. Disconnect battery leads, negative lead first.
2. Remove side and rear panels from generator housing as needed.
3. Determine if load wires will be routed through top or bottom of junction box. On some generator sets the mounting location and position of the lugs will vary depending on the routing of the load wires. Some installations will also require removal (cut-off) of a portion of the bus bars to provide adequate clearance for the load wires.
4. Install the lugs and lug restrainer brackets (if required) with the hardware supplied with each kit.

5. See Figure 1 to determine the correct illustration to be referenced for installation of your kit.
6. Reinstall side and rear panels.
7. Reconnect battery cables, negative lead last.
8. Return generator master switch to normal operating position.

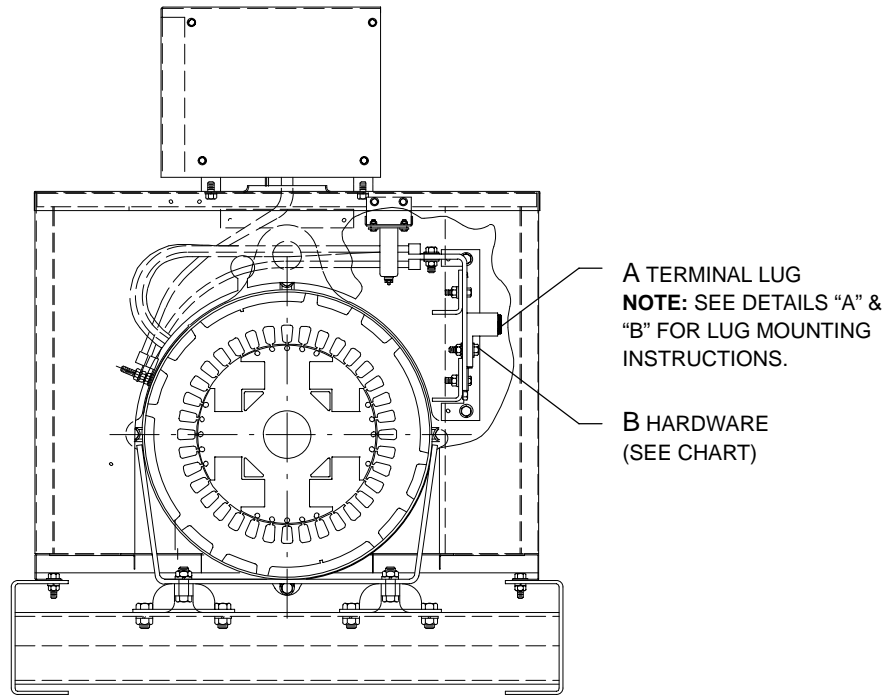
Kit No.	Models (kW)	Wire Size	No. Wires Per Lug	Figure No.
PA-274693	20-60	3/0-08	1	2
PA-274694	20-60	350 MCM-6	1	2
PA-274694	80-100	350 MCM-06	1	3
PA-274695	20-60	500 MCM-04	1	2
PA-274696	80-100	350 MCM-06	1	3
PA-274696	200-300	350 MCM-06	1	5
PA-274697	125-150	600 MCM-04	1	4
PA-274698	200-300	600 MCM-02	2	5
PA-274699	200-300	750 MCM-3/0	3	5
PA-274700	200-300	600 MCM-02	4	5
PA-274778	125-150	600 MCM-02	2	4
PA-274779	125-150	600 MCM-03	2	4
PA-274696-SD	80-100	350 MCM-06	1	3
PA-274696-SD	200-300	350 MCM-06	1	5
PA-274698-SD	200-300	600 MCM-02	2	5
PA-274699-SD	200-300	750 MCM-3/0	3	5
PA-274700-SD	200-300	600 MCM-02	4	5

Figure 1. Figure Illustration Reference for Kit Installation



DETAIL A
SHOWS CUSTOMER LOAD WIRE
COMING FROM TOP.

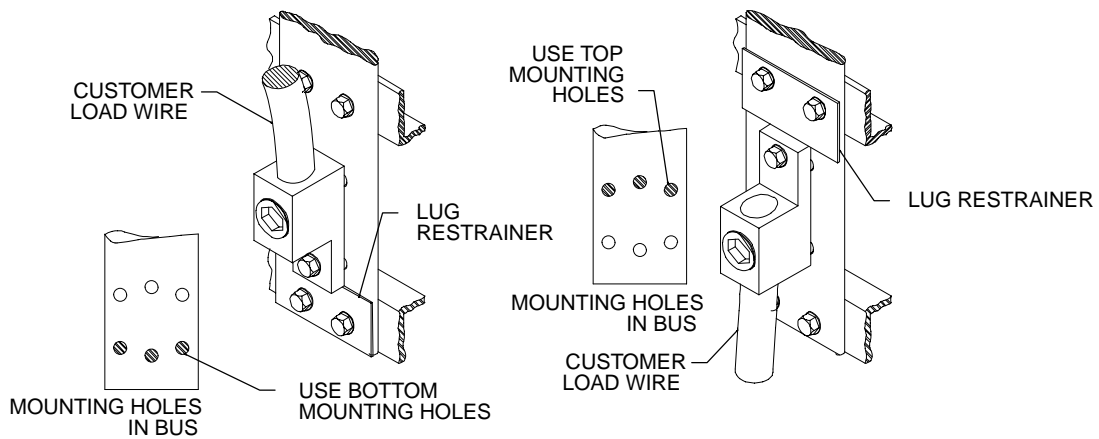
DETAIL B
SHOWS CUSTOMER LOAD WIRE
COMING FROM BOTTOM.



**VIEWED FROM
ENGINE END
(SHOWS TOP MOUNTED LUGS)**

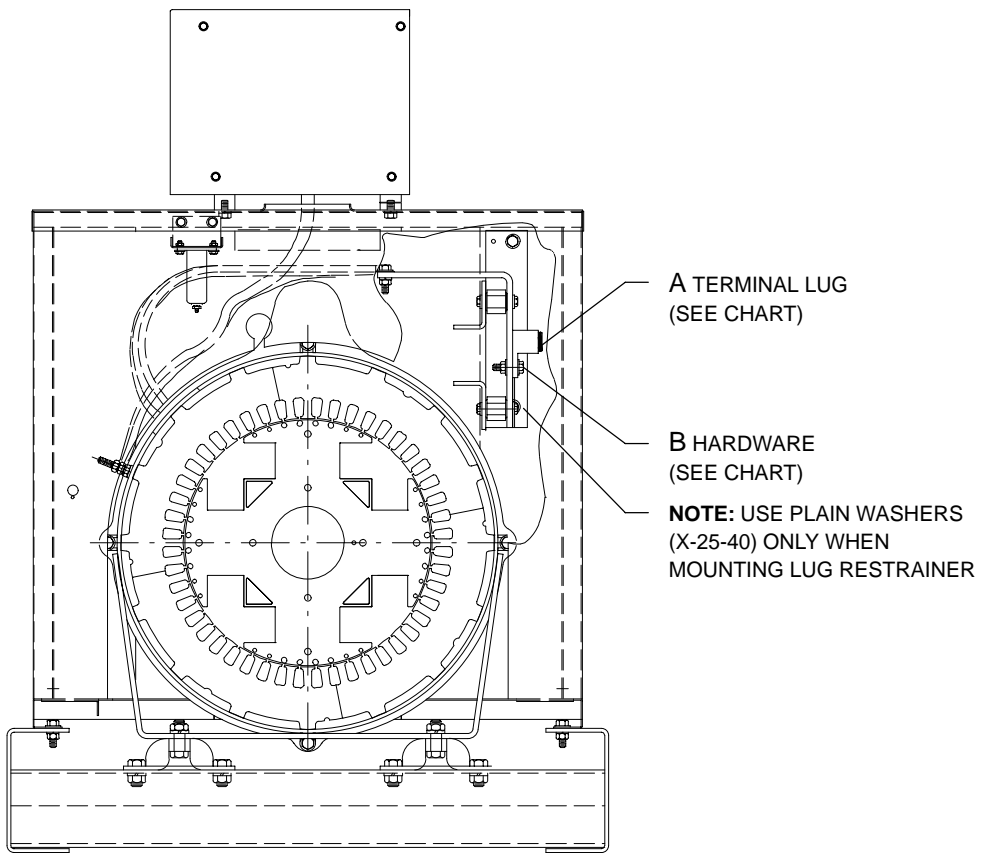
CM-273000-A

Figure 2. Lug Wire Kit Installation (20-60 kW)



DETAIL A
SHOWS CUSTOMER LOAD WIRE
COMING FROM TOP.

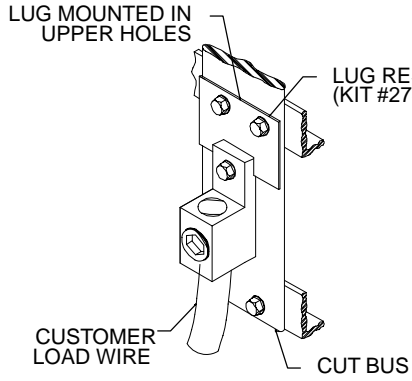
DETAIL B
SHOWS CUSTOMER LOAD WIRE
COMING FROM BOTTOM.



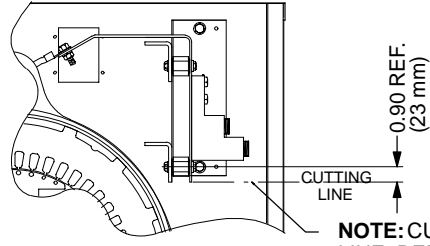
**VIEWED FROM
ENGINE END
(SHOWS TOP MOUNTED LUG)**

CP-273000-B

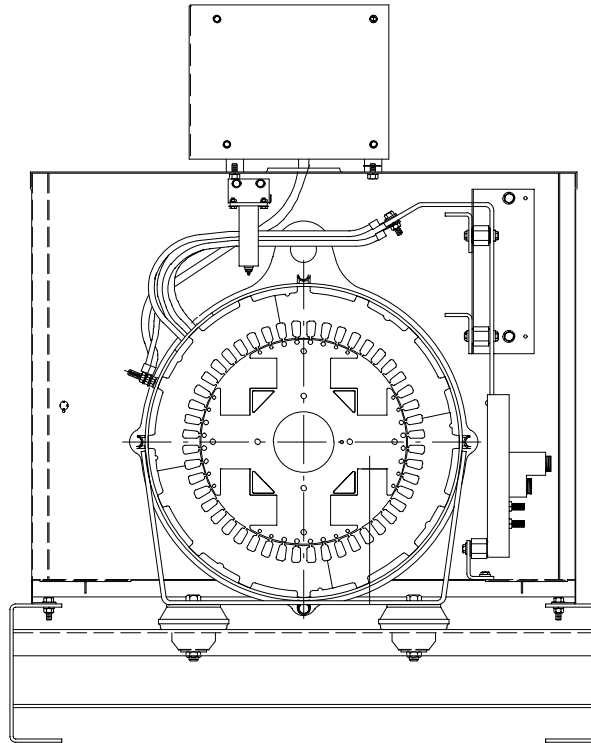
Figure 3. Lug Wire Kit Installation (80-100 kW)



DETAIL B
SHOWS CUSTOMER LOAD WIRE
COMING FROM BOTTOM.



DETAIL A
VIEWED FROM ENGINE END.
THIS VIEW SHOWS TOP MOUNTED LUGS.
(BUS CUT-OFF IS REQUIRED)



**VIEWED FROM
ENGINE END**
(FOR BOTTOM CONDUIT INLET SEE DETAIL "A" & "B")

CP-273000-B

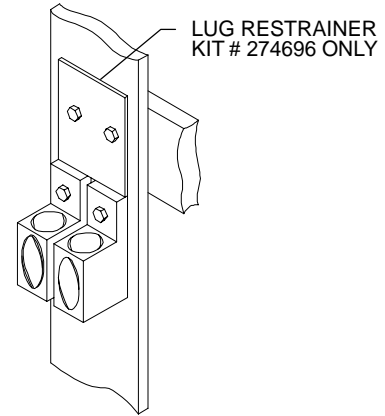
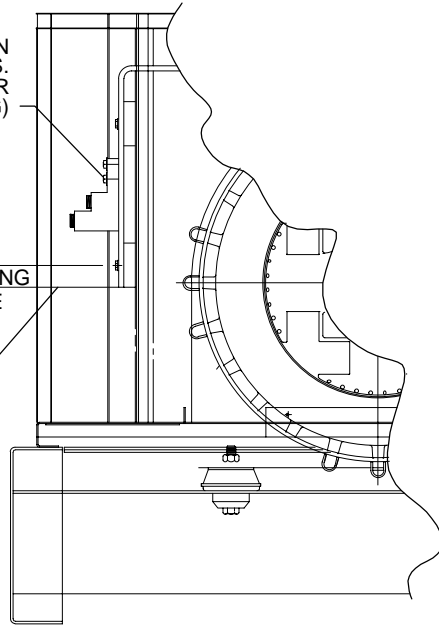
Figure 4. Lug Wire Kit Installation (125-150 kW)

LUGS MOUNTED IN
UPPER MOUNTING HOLES.
(SEE DETAIL "C" FOR
LUG RESTRAINER MOUNTING)

1.50 REF.
(38 mm)

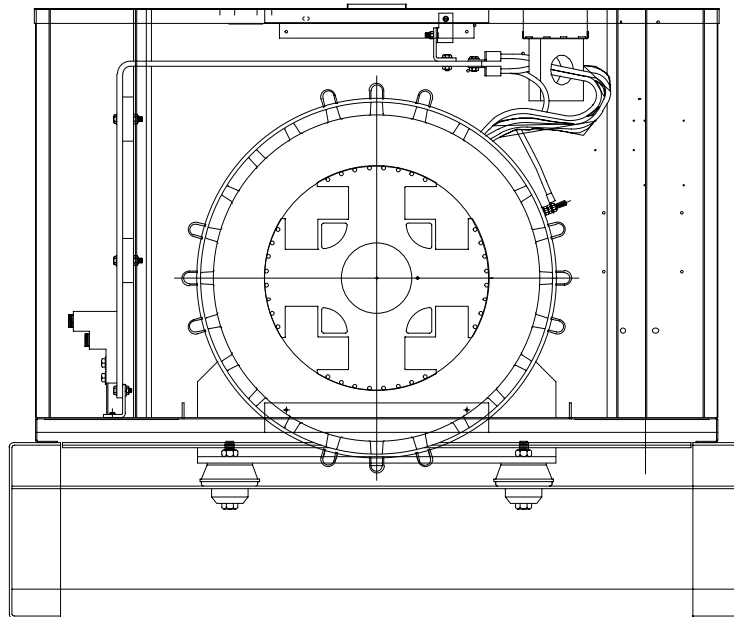
CUTTING
LINE

NOTE: CUT BUS AT
THIS CUTTING LINE.
REMOVE BURRS.



DETAIL C
SHOWS LUGS IN UPPER
POSITION W/LUG RESTRAINER

DETAIL A
VIEWED FROM GENERATOR END.
THIS VIEW SHOWS TOP MOUNTED LUGS
(BUS CUT-OFF IS REQUIRED)



**VIEWED FROM
ENGINE END**
SHOWS BOTTOM MOUNTED LUGS
(FOR BOTTOM CONDUIT INLET SEE DETAIL "A")

CA-273000-C

Figure 5. Lug Wire Kit Installation (200-300 kW)

Parts Lists

Description	Kit Number					
	PA-274693		PA-274694		PA-274695	
	Qty.	Part No.	Qty.	Part No.	Qty.	Part No.
Lug	1	X-6207-7	4	X-6207-8	4	X-6207-5
Bracket, lug restrainer	4	275473	4	275471	4	275474
Bracket, lug restrainer	—	—	4	275561	—	—
Screw *	4	X-465-09	4	X-6238-4	4	X-6238-4
Washer *	8	X-25-40	8	X-25-18	8	X-25-18
Washer *	—	—	4	X-25-37	4	X-25-37
Nut *	4	X-6210-2	4	X-6210-9	4	X-6210-9

Description	PA-274696 PA-274696-SD		PA-274697		PA-274698 PA-274698-SD	
	Qty.	Part No.	Qty.	Part No.	Qty.	Part No.
	Lug	8	X-6207-8	4	X-6207-9	4
Bracket, lug restrainer	4	275469	4	275470	—	—
Screw *	8	X-6238-4	4	X-6238-4	8	X-6238-1
Washer *	16	X-25-18	12	X-25-37	16	X-25-18
Washer *	8	X-25-37	—	—	8	X-25-37
Nut *	8	X-6210-9	4	X-6210-9	8	X-6210-9

Description	PA-274699 PA-274699-SD		PA-274700 PA-274700-SD		PA-274778	
	Qty.	Part No.	Qty.	Part No.	Qty.	Part No.
	Lug	4	297983	4	297582	4
Bracket, lug restrainer	—	—	—	—	—	—
Screw *	8	X-6238-1	8	X-6238-1	8	X-6238-1
Washer *	16	X-25-18	16	X-25-18	—	—
Washer *	8	X-25-37	8	X-25-37	24	X-25-37
Nut *	8	X-6210-9	8	X-6210-9	8	X-6210-9

Description	PA-274779	
	Qty.	Part No.
	Lug	4
Bracket, lug restrainer	—	—
Screw *	8	X-6238-1
Washer *	—	—
Washer *	24	X-25-37
Nut *	8	X-6210-9

* See common hardware list on page 8 for hardware descriptions.

Common Hardware		
Description	Qty.	Part Number
Washer, 0.319 x 0.875 x 0.062 in. plain	*	X-25-18
Washer, 0.406 x 0.812 x 0.065 in. plain	*	X-25-37
Washer, 0.281 x 0.625 x 0.065 in. plain	*	X-25-40
Screw, 1/4-20 x 1.50 in. hex	*	X-465-9
Nut, 1/4-20 whiz	*	X-6210-2
Nut, 3/8-16 whiz	*	X-6210-9
Screw, 3/8-16 x 1.75 in. hex	*	X-6238-1
Screw, 3/8-16 x 1.25 in. hex	*	X-6238-4

* See kit parts list for hardware quantity.