

INSTALLATION INSTRUCTIONS

Original Issue Date: 6/90
 Model: 20-300 kW
 Market: Standby
 Subject: Line Circuit Breaker Kits (Type 1 Mounting)

The line circuit breaker kit is used as an interrupting device to protect the load and generator set from overload. The circuit breaker is installed on the left side of the generator set junction box.



WARNING

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 set 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 set. The generator set can be started by automatic transfer switch or remote start/stop switch unless these precautions are followed.

INSTALLATION

1. Place generator master switch in OFF position. Disconnect battery of generator set, negative lead first.
2. Remove left-side panel of junction box by removing six screws. Then remove junction box rear panel by removing seven screws.
3. Select holes in bracket to mount circuit breaker, see Figure 1. If shallow circuit breakers (Types CA, TQD, Q2L, FDB, or TED) are used, locate circuit breaker on nonflange side of bracket. For all other circuit breakers, locate circuit breaker on flange side of bracket.

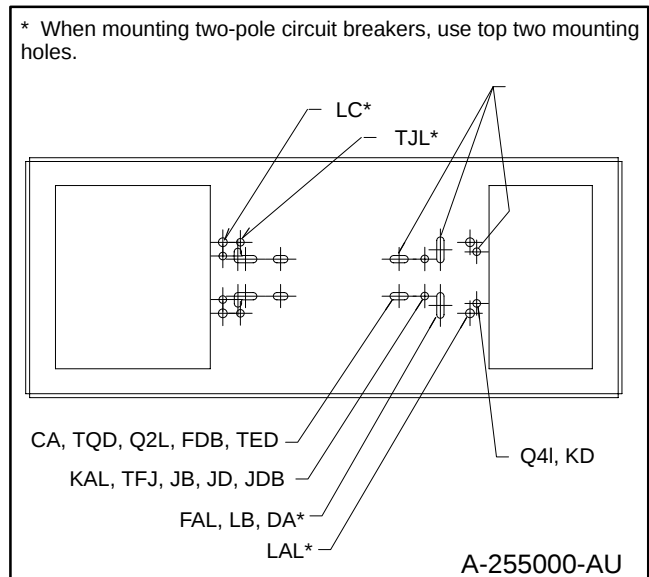


Figure 1. Mounting Bracket

4. Locate the ON side of circuit breaker nearest to small rectangular hole of bracket and place two breaker insulators between circuit breaker and bracket. If mounting a three-pole circuit breaker, use four screws, flat washers, lock washers, and nuts. If mounting a two-pole circuit breaker, use two screws, flat washers, and nuts. Locate in top two mounting bracket holes. See Figure 2.
5. Mount bracket to junction box using four screws, flat washers, and nuts. Locate the ON side of the circuit breaker toward the rear of the junction box.

NOTE

When mounting Q4L, LAL, TJK, LC, or DA breakers, mount bracket with larger hole of bracket toward rear of junction box. This will also locate the OFF side of the circuit breaker toward the rear of the junction box.

Do NOT final tighten hardware. Place new panel over circuit breaker and adjust bracket so that the circuit breaker fits flush with panel cutout. Remove panel and final tighten hardware.

6. Wire the circuit breaker according to proper wiring diagram, see Figure 3.

NOTE

After connecting jumper leads to generator leads, be sure to insulate with electrical tape.

7. With new panel clean and dry, attach decals and nameplates. See old panel for locations.

8. Install rear panel to junction box using seven screws. Install left-side panel using six screws.

9. Check that the generator master switch is in the OFF position. Reconnect battery, negative lead last.

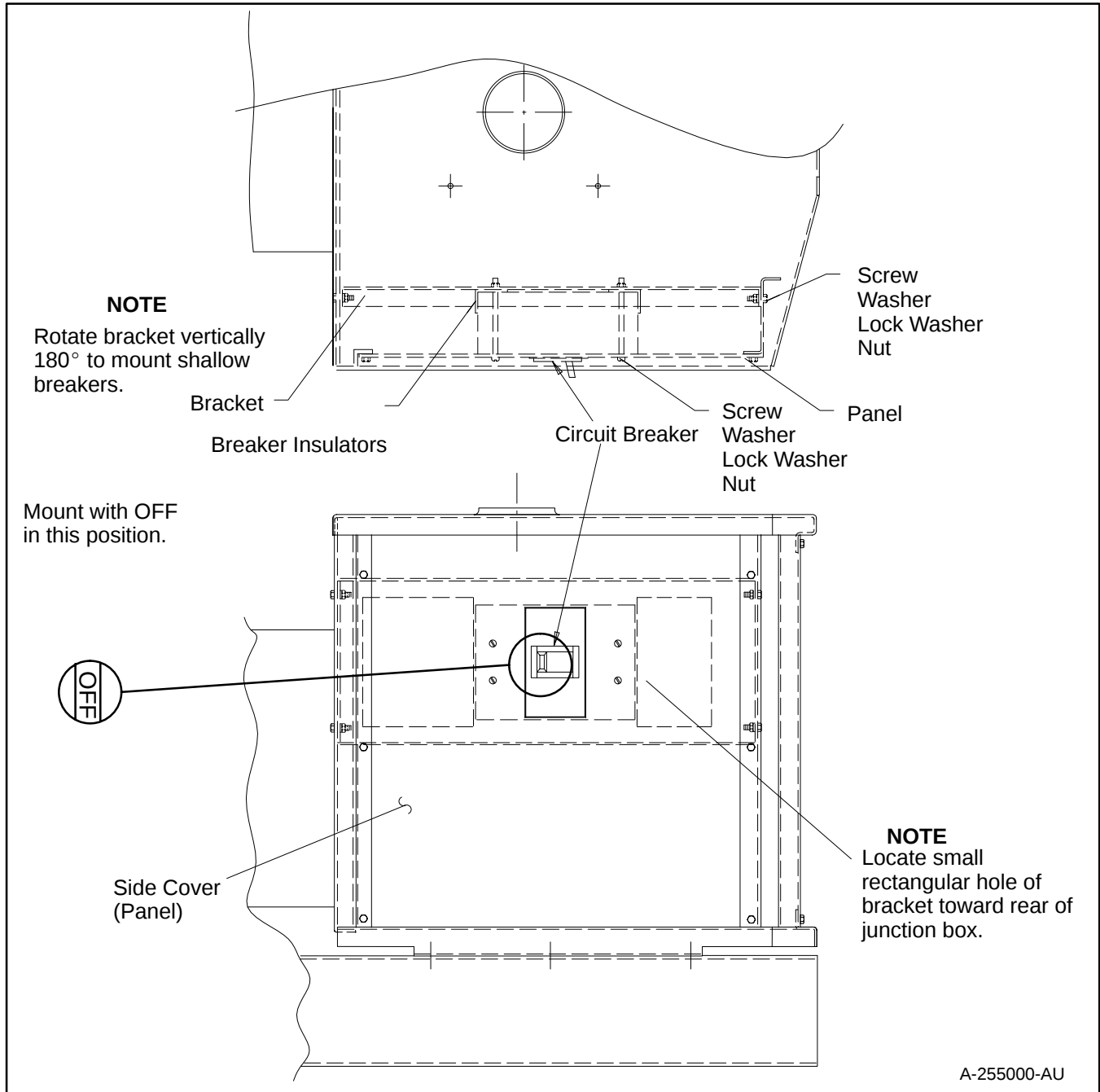


Figure 2. Circuit Breaker Assembly

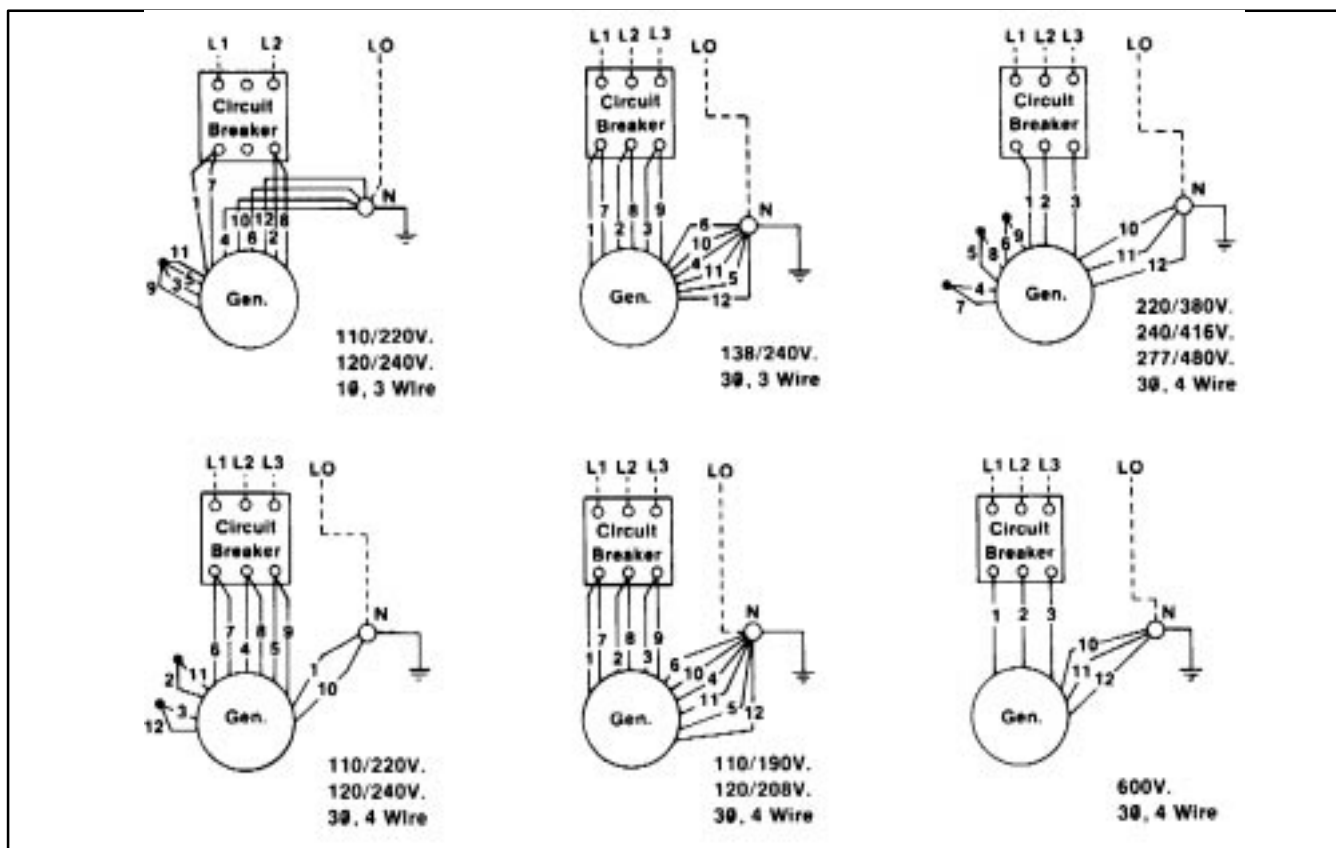


Figure 3. Circuit Breaker Wiring Diagram

Common Parts List		
Qty.	Description	Part Number
4	Screw, 5/16-18 x .75	X-125-3
4	Nut, 6/16-18 whiz-lock	X-6210-7
8	11/32 x 11/16 x 1/16	X-25-85
1	Decal, "stripes"	X-6232-1
1	Decal, Nameplate	255084
4	Screw* 1/4-20 x 2.0	X-73-11
	10-24 x 3.0	X-50-51
	8-32 x 2.25	X-51-40
	8-32 x 1.75	X-51-41
4	Nut* 1/4-20 Whiz-lock	X-6210-2
	Nut* 8-32 Whiz-lock	X-6210-4
	Nut* 10-24 Whiz-lock	X-6210-5
4	Washer* 1/4 x 1/2 x 1/16	X-25-36
	1/4 x 5/8 x 1/16	X-25-40
	3/16 x 7/16 x 1/16	X-25-48
4	Screw, 8-32 x 3.5**	X-51-47
2	Insulator***	290020
1	Bracket#	255026
	Bracket	258985

* Only one of the part numbers listed is included with each kit.

** Kits 255064, 255065, 274467-274469, 274471-274481

*** All kits except 255409, 255410, 255411, 258927, 274473, 274474, 274481

All Kits, Except PA-255059, PA-255060

Parts List					
Kit No.	Poles	Volts	Amps.	Circuit Breaker	Side Cover
PA-255057	2	240	150	X-786-39	273552
PA-255058	2	240	225	X-786-40	273552
PA-255059	2	240	250	X-786-3	255027
PA-255060	2	240	400	X-786-5	273530
PA-255061	3	240	175	X-786-98	273552
PA-255062	3	240	225	X-786-99	273552
PA-255063	3	240	225	X-786-99	273578
PA-255064	3	240	350	X-786-44	273530
PA-255065	3	240	400	X-786-45	273530
PA-255070	3	600	150	X-786-126	273530
PA-255071	3	600	225	X-786-103	273530
PA-255114	3	240	150	X-786-97	273552
PA-255409	3	600	90	X-786-91	273552
PA-255410	3	600	90	X-786-91	273578
PA-255411	3	600	100	X-786-102	273578
PA-255412	3	600	125	X-786-92	273530
PA-255482	3	600	300	X-786-49	273530
PA-255598	3	240	250	X-786-32	273530
PA-255967	3	600	175	X-786-17	273530
PA-258821	3	600	500	X-786-22	273530
PA-258822	3	600	600	X-786-23	273530
PA-258927	3	600	80	X-786-58	273578
PA-258946	3	240	125	X-786-27	273552
PA-258947	3	600	80	X-786-58	273552
PA-273524	3	600	225	X-786-103	273530
PA-273525	3	600	300	X-786-49	273530
PA-273526	3	600	150	X-786-125	273530
PA-273527	3	600	500	X-786-22	273530
PA-273528	3	240	400	X-786-101	273530
PA-273529	3	600	600	X-786-23	273530
PA-273573	3	240	150	X-786-28	273552
PA-273574	3	600	90	X-786-91	273552
PA-273575	3	600	100	X-786-102	273578
PA-273577	3	600	125	X-786-92	273552
PA-273579	3	240	175	X-786-98	273552
PA-273580	3	240	350	X-786-100	273530
PA-273581	3	600	125	X-786-92	273578
PA-273624	3	600	350	X-786-94	273530
PA-273625	3	600	200	X-786-93	273530
PA-273627	3	600	250	X-786-65	273530
PA-273698	3	240	225	X-786-99	273552
PA-273960	3	600	600	X-786-84	273530
PA-274467	3	600	225	X-786-70	273530
PA-274468	3	600	300	X-786-71	273530
PA-274469	3	600	150	X-786-72	273530
PA-274470	3	600	500	X-786-73	273530
PA-274471	3	240	400	X-786-74	273530
PA-274472	3	240	150	X-786-75	273552
PA-274473	3	600	90	X-786-76	273552
PA-274474	3	600	100	X-786-77	273578
PA-274475	3	240	175	X-786-78	273552
PA-274476	3	240	350	X-786-79	273530
PA-274477	3	600	125	X-786-80	273578
PA-274478	3	600	200	X-786-81	273530
PA-274479	3	600	250	X-786-82	273530
PA-274480	3	240	225	X-786-83	273552
PA-274481	3	600	125	X-786-80	273552