
INSTALLATION INSTRUCTIONS

Remote Voltage Regulator Kits PA-273613 & PA-273613-SD 350-1600 kW Standby Generator Sets

This kit provides for remote mounting of the voltage regulator and the voltage adjust potentiometer.



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.

INSTALLATION

1. Turn generator master switch to OFF and disconnect battery cables, negative lead first.
2. Remove cover from generator junction box.
3. Remove voltage adjust potentiometer from controller and voltage adjust regulator from junction box. Save mounting hardware for reuse.
4. Position terminal marker strip (263268) on terminal strip (269244) and mount terminal strip to terminal strip plate (279712) with two 8-32 x 0.750-in. screws (X-51-11), washers (X-25-48) and whiz nuts (X-6210-4). See Figure 1.
5. Install fuse block (X-6129-3) on terminal strip plate with two 10-24 x 0.75-in. screws (X-50-3), washers (X-25-36) and whiz nuts (X-6210-5).
6. Connect fuse block (TG3) to terminals 12, 13, and 14 of the terminal strip (TG2) with leads (TT1F-1806-2422), (TT2F-1805-2422), and (TT3F-1804-2422) as shown in Figure 1.
7. Install three fuses (X-6135-6) in fuse block.
8. Install assembled terminal strip plate (279712) where voltage regulator was located in junction box. Mount terminal strip plate to junction box with six 10-24 x 0.500-in. Crimpite screws (X-6216-1).
9. Install six terminals (238898) and one jumper (X-6073-2) on terminal strip as shown in Figure 1. Make electrical connections to terminal strip per wiring diagram (see Figure 2).

NOTE

If optional droop current transformer is to be used, connect wires between terminals 1 and 2 of terminal strip TG2 and terminals CTB1 and CTB2 of voltage regulator. Remove jumper from terminals 1 and 2 of terminal strip TG2.

10. The maximum recommended wire distance between the generator set and the voltage regulator is 100 ft. (30.5 m). Use of 12-gauge stranded wire is recommended.
11. The maximum recommended wire distance between the voltage regulator and the voltage adjust potentiometer is 15 ft. (4.6 m). Use of 18-gauge twisted pair wires is recommended between the potentiometer and the voltage regulator.
12. Mount voltage regulator board and voltage adjust potentiometer in desired locations and make connections per wiring diagram in Figure 2.

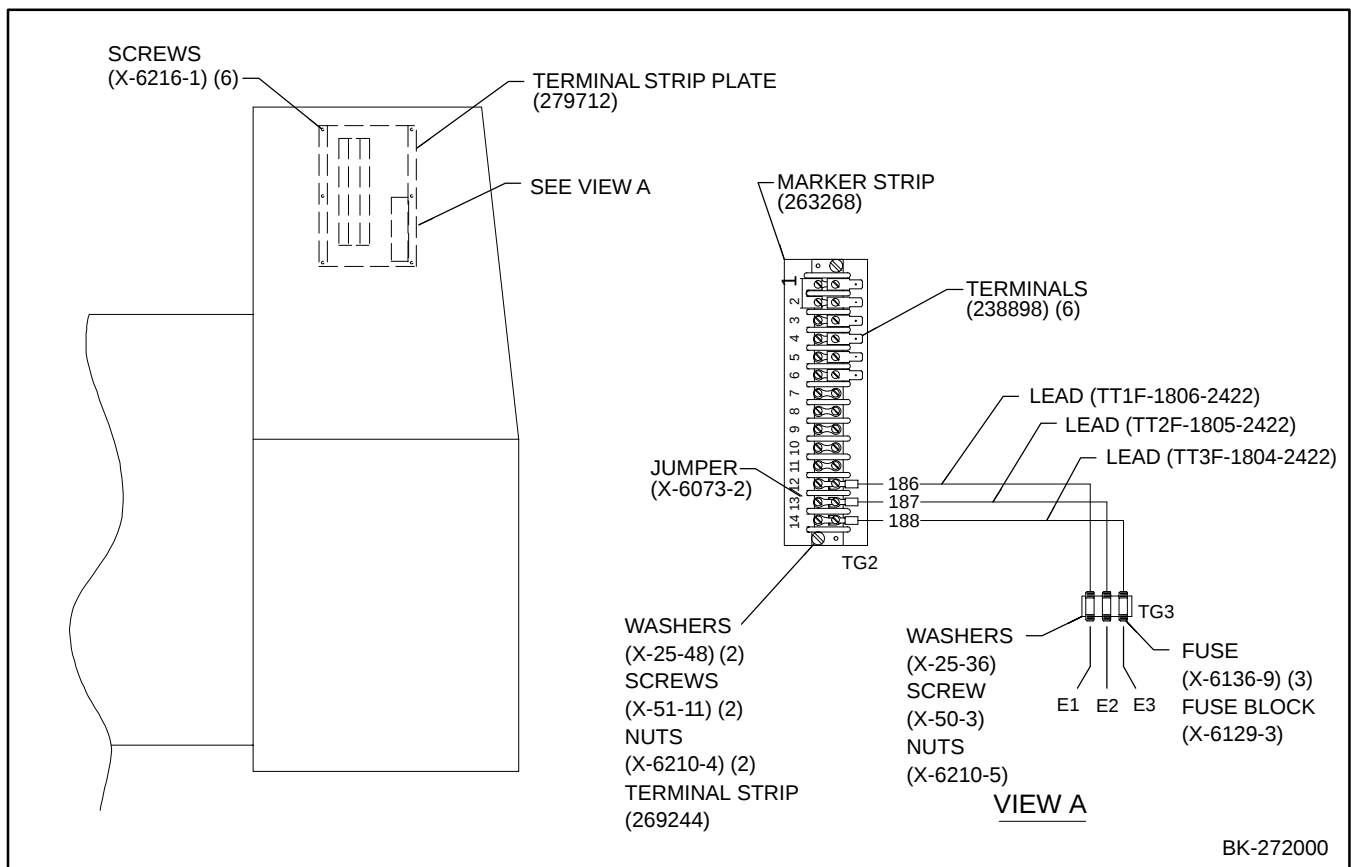


Figure 1. Kit Installation

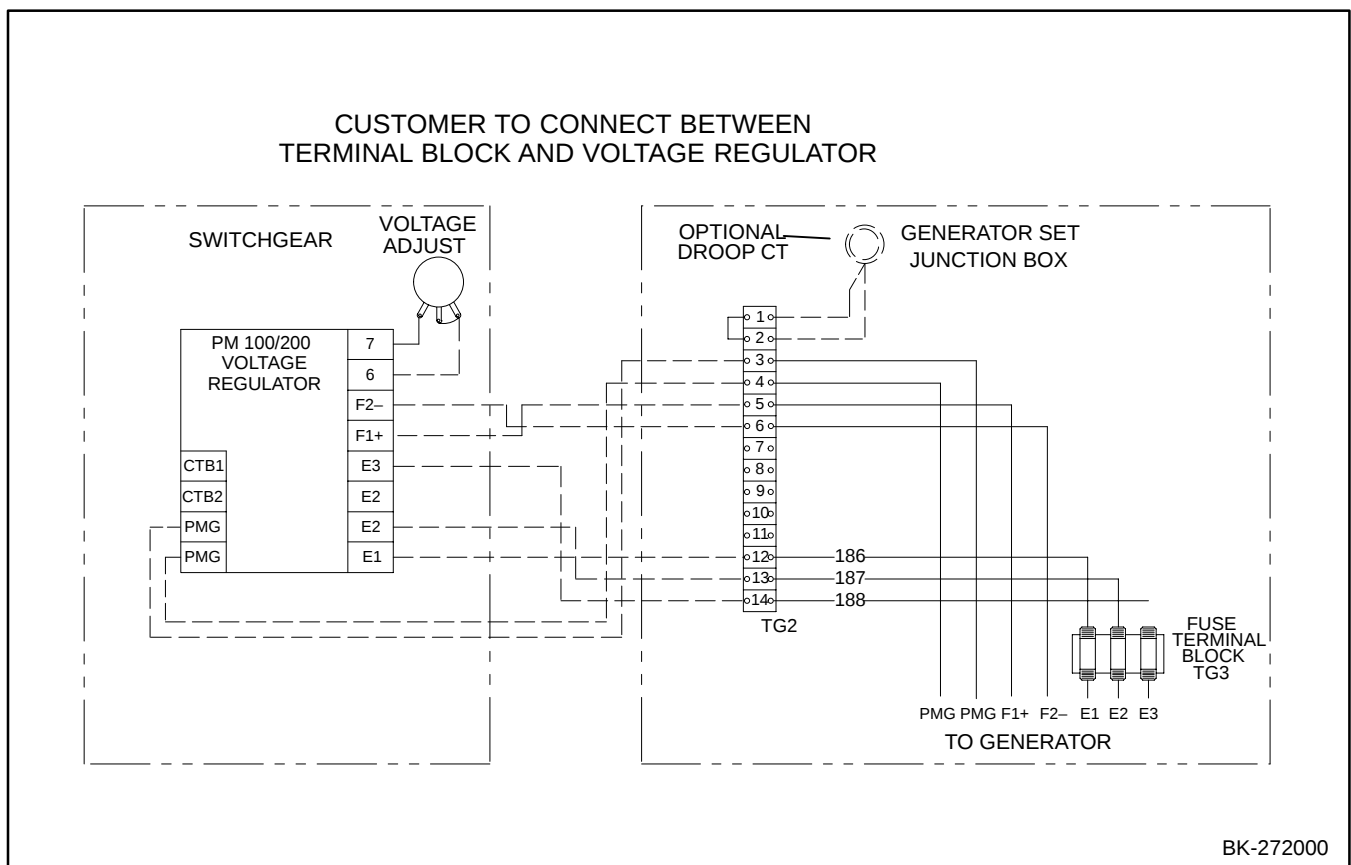


Figure 2. Wiring Diagram

13. Reconnect battery, negative lead last.
14. Disconnect load from generator set. Verify that voltage setting is correct. Make adjustments as necessary. STOP generator set.
15. Reconnect load to generator set.

Parts List		
Kits PA-273613 & PA-273613-SD		
Qty.	Description	Part Number
1	Lead	TT1F-1806-2422
1	Lead	TT2F-1805-2422
1	Lead	TT3F-1804-2422
2	Washer, plain 0.219 x 0.500 x 0.049 in.	X-25-36
2	Washer, plain 0.188 x 0.438 x 0.049 in.	X-25-48
2	Screw, 10-24 x 0.750 in.	X-50-3
2	Screw, 8-32 x 0.750 in.	X-51-11
1	Jumper	X-6073-2
1	Block, fuse	X-6129-3
3	Fuse	X-6135-6
2	Nut, whiz, 8-32	X-6210-4
2	Nut, whiz, 10-24	X-6210-5
6	Screw, Crimptite, 10-24 x 0.500 in.	X-6216-1
6	Terminal	238898
1	Strip, marker	263268
1	Strip, terminal	269244
1	Plate, terminal strip	279712