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## INSTALLATION INSTRUCTIONS

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### 40-Foot (11-Meter) Remote Connection Box Kits PAB-258849 and PAB-258849-SD For 20-1600 kW Standby Generator Sets

The 40-ft. (11-m) remote connection box is designed to allow the controller to be mounted in a location remote from the generator set. The connection box is mounted on the junction box in place of the controller and it is connected to the generator set. A 40-ft. (11-m) wiring harness connects the connection box to the remote mounted controller.

#### NOTE

Applicable local, state, and national electrical codes must be observed when installing electrical equipment.



#### **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.

| <b>WARNING</b>                                                                      |                          |
|-------------------------------------------------------------------------------------|--------------------------|
| <br><b>Hazardous voltage.</b>                                                       | <br><b>Moving rotor.</b> |
| <b>Can cause severe injury or death.</b>                                            |                          |
| Do not operate generator set without all guards and electrical enclosures in place. |                          |

**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.

**Hazardous voltage can cause severe injury or death.** Short circuits can cause bodily injury and/or equipment damage. Do not contact electrical connections with tools or jewelry while adjustments are made. Remove wristwatch, rings, and jewelry that can cause short circuits.

## INSTALLATION

1. Move generator master switch to OFF position.
2. Remove generator set battery cables, negative lead first.
3. Remove controller cover.
4. Disconnect the following external leads from the controller (see Figures 1 and 3): plug P1 from the controller board; leads V7, V8, and V9 from AC fuse terminal block; leads V0, C0, C1, C2, and C3 from CT/meter terminal block; lead 5 (water temperature sender input) from water temperature gauge; lead 7C (oil pressure sender input) from oil pressure gauge. Disconnect connector at voltage adjustment potentiometer (leads 67 and 68). Remove controller ground strap.
5. Remove four controller mounting nuts and washers (save hardware for mounting the remote connection box). Carefully push wires through hole in the bottom of controller and remove controller assembly.
6. Mount controller assembly in new location (mounting hardware must be customer supplied).
7. Insert generator leads through grommet of remote connection box. Route leads through cable tie loop and connect leads to corresponding terminals on terminal blocks (see Figure 2).
8. Connect plug P1 to corresponding connector on the remote connection box.
9. Install remote connection box assembly (B-258849) to controller mounts on generator junction box. Secure with nuts and washers.

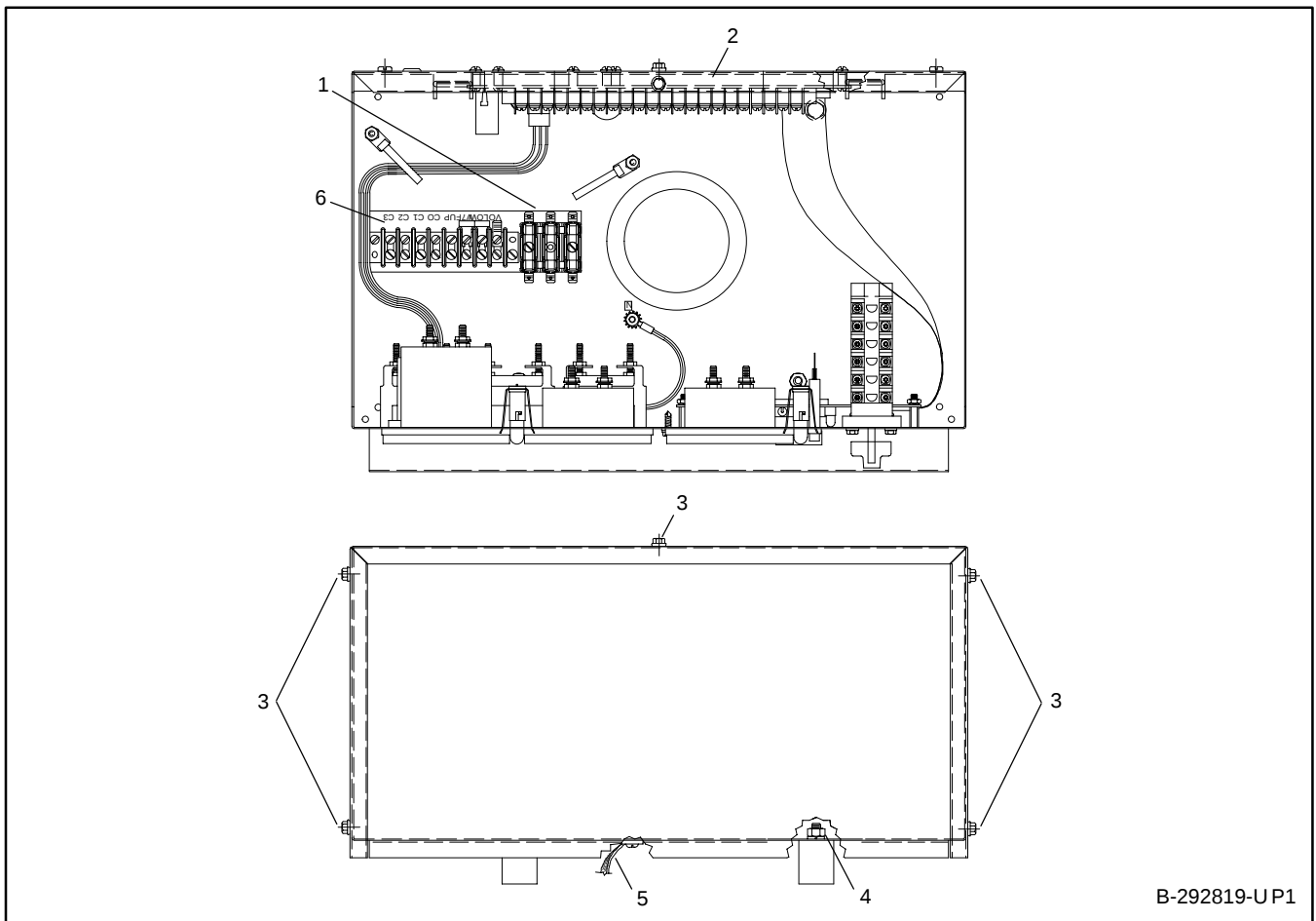
### NOTE

Verify that all connections are tight and leads are securely attached to the inside of the connection box before mounting connection box to junction box.

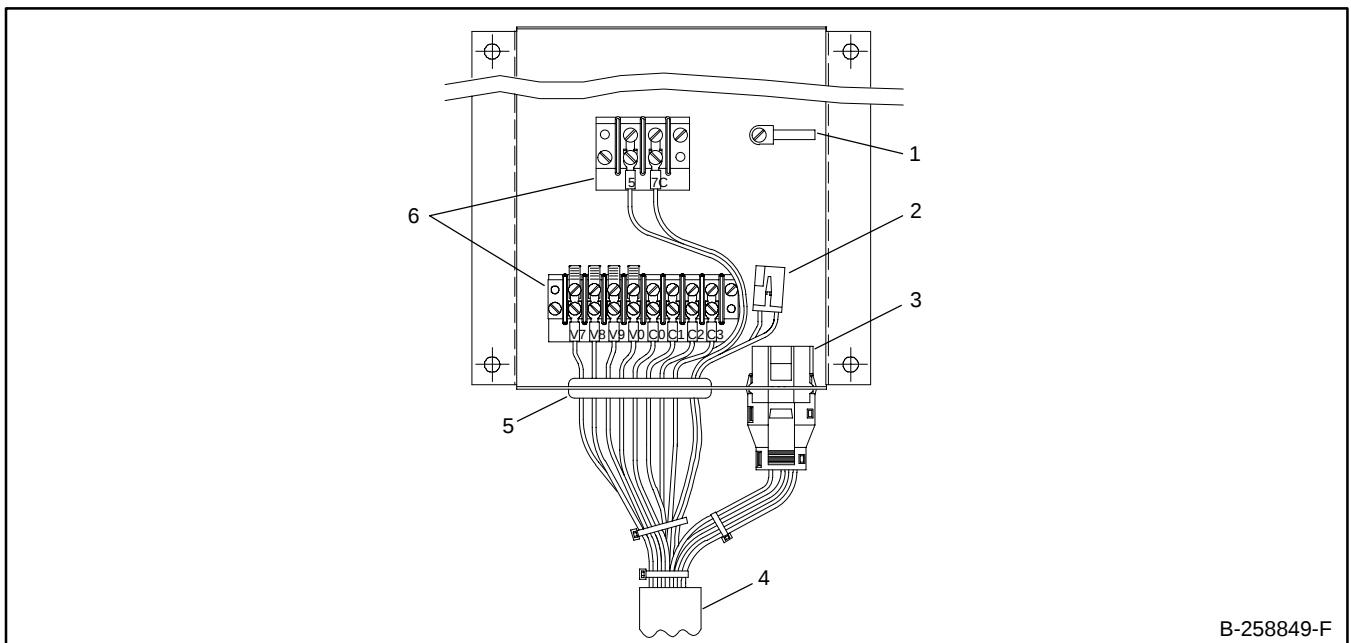
10. Route 40-ft. (11-m) wiring harness to the controller. Connect harness leads to corresponding terminals (see wiring diagram, Figure 3).
11. Reinstall controller cover. Reconnect battery cables, negative lead last.
12. Move generator master switch to normal operating position.

## Parts List

| Kits PAB-258849 and PAB-258849-SD                                      |      |          |
|------------------------------------------------------------------------|------|----------|
| Description                                                            | Qty. | Part No. |
| Connection Box Assembly (includes *)                                   | 1    | B-258849 |
| Grommet, 2.12 x 2.50 x 0.06 in. *                                      | 1    | X-284-10 |
| Tie, 7.44/8.38 in. cable *                                             | 1    | X-468-3  |
| Tie, 21 in. cable *                                                    | 1    | X-468-7  |
| Screw, 8-32 x 0.750 in. r.h.m. *                                       | 2    | X-51-11  |
| Screw, 8-32 x 0.625 in. r.h.m. *                                       | 4    | X-51-53  |
| Terminal *                                                             | 4    | 238898   |
| Block, terminal *                                                      | 1    | 243845   |
| Block, terminal *                                                      | 1    | 246115   |
| Harness, wiring *                                                      | 1    | 258277   |
| Box, remote connection *                                               | 1    | 258845   |
| Marker, strip *                                                        | 1    | 258848   |
| Marker, strip *                                                        | 1    | 282824   |
| * Represents parts that are included with the connection box assembly. |      |          |



**Figure 1. Controller Assembly**



**Figure 2. Remote Connection Box Assembly**

