
INSTALLATION INSTRUCTIONS

Load-Shed Kit 294563 For M340 Transfer Switch

These instructions cover the steps to install the new load shed control board.

 DANGER

<p>Hazardous voltage. Will cause severe injury or death.</p> <p>Disconnect power sources before servicing. Barrier must be installed after adjustments, maintenance, or servicing.</p>

(600 Volt and above)

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.

 WARNING

<p>Hazardous voltage. Can cause severe injury or death.</p> <p>Do not open enclosure until all power sources are disconnected.</p>

(under 600 Volt)

Hazardous voltage can cause severe injury or death. Disconnect harness plug before installing any accessories involving connection to transformer assembly primary terminals. Terminals are at line voltage!

(M340 models only)

INSTALLATION

1. De-energize both normal and emergency power sources before proceeding.
2. Move generator master switch on controller to OFF position and disconnect battery inputs to TB-DC1 before working on transfer switch. Disconnect battery negative (–) input from TB-DC1-32, TB-DC1-33, or TB-DC1-34. Disconnect battery positive (+) input from TB-DC1-29. Insulate lead end with tape.

NOTE

Disconnecting power sources to the M340 will de-energize all the load-shed relays. This may cause some connected loads to turn on or off.

3. Remove M340 load-shed and communications board cover by removing the nuts holding the cover in place.
4. If the remote communications option KD-51-A or KD-51-B is installed, it must be removed. Disconnect the P12 ribbon cable connector from the M340 main logic board. Remove the remote communications board (B-294499 or B-294501). See Figure 1.
5. Disconnect the P11 ribbon cable connector from the load-shed control board. See Figure 2.
6. Disconnect wire harness (294616) from the load-shed control board at plug P17.
7. Remove old load-shed control board.
8. Install new load-shed control board (C-294495).
9. Connect wire harness (294616) to new load-shed control board at plug P17.

10. Connect the P11 ribbon cable connector to new load-shed control board.
11. If the remote communications option KD-51-A or KD-51-B was installed, it should be reconnected. Replace the remote communications board (B-294499 or B-294501). Connect the P12 ribbon cable connector to the M340 main logic board.
12. Replace the load-shed and communications board cover. If a DC inductive load is connected to a load-shed relay board contact, a flyback diode should be installed across the DC inductive load. The flyback diode will limit the transient voltage that will occur when a DC inductive load is de-energized. Contact an authorized distributor/ dealer to order the flyback diode (233959). The flyback diode has 0.250-in. push-on terminals. It is important to connect the flyback diode at the load, not at the load-shed relay board. To install flyback diode, connect the cathode to positive (+) side of the load. Connect the anode to the negative (–) side of load. See Figures 3 and 4.
13. Reconnect battery positive (+) input to TB-DC1-29. Reconnect battery negative (–) input to TB-DC1-32, TB-DC1-33, or TB-DC1-34B. Re-energize normal and emergency power sources.
14. Re-energize normal and emergency power sources.

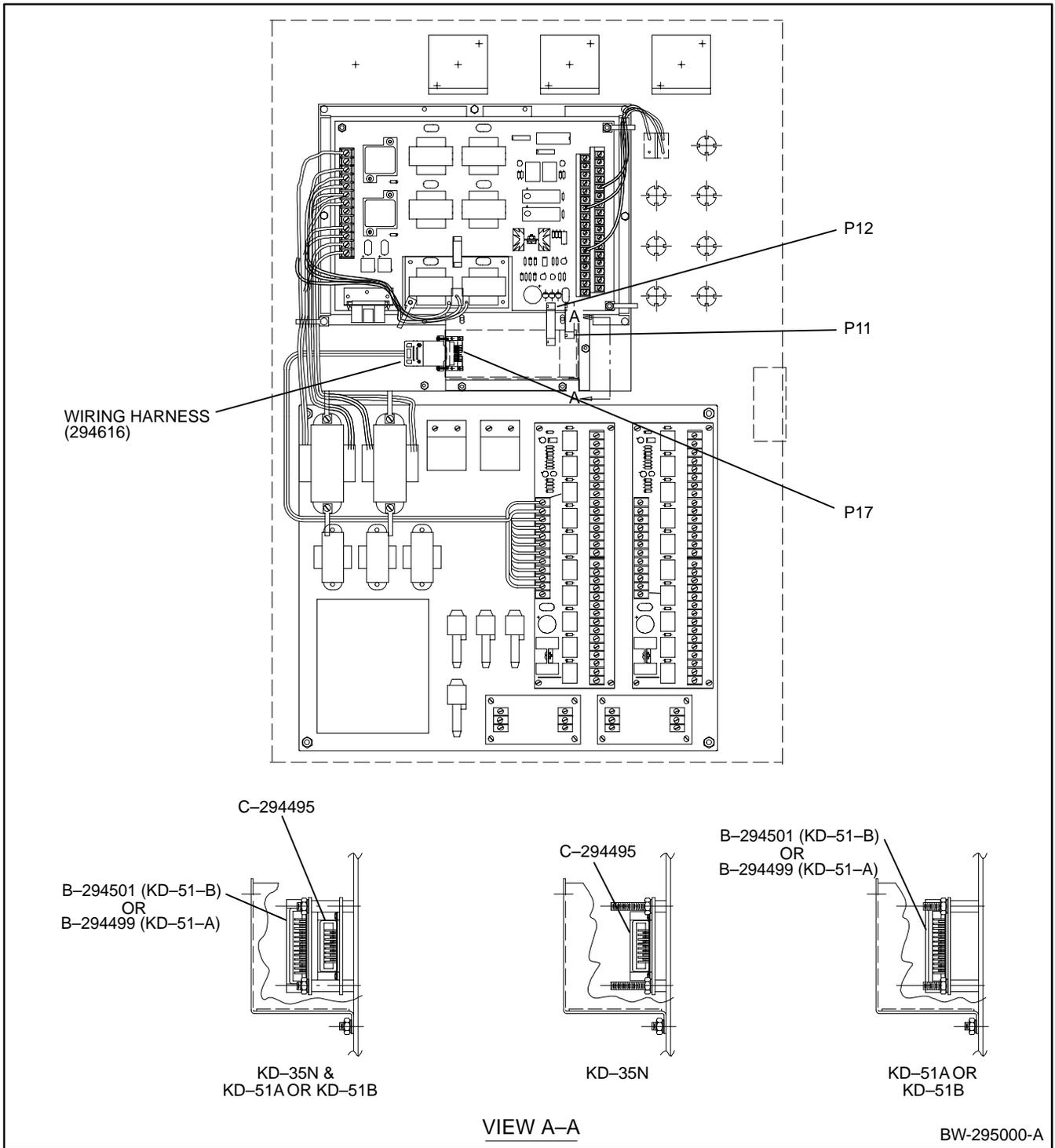
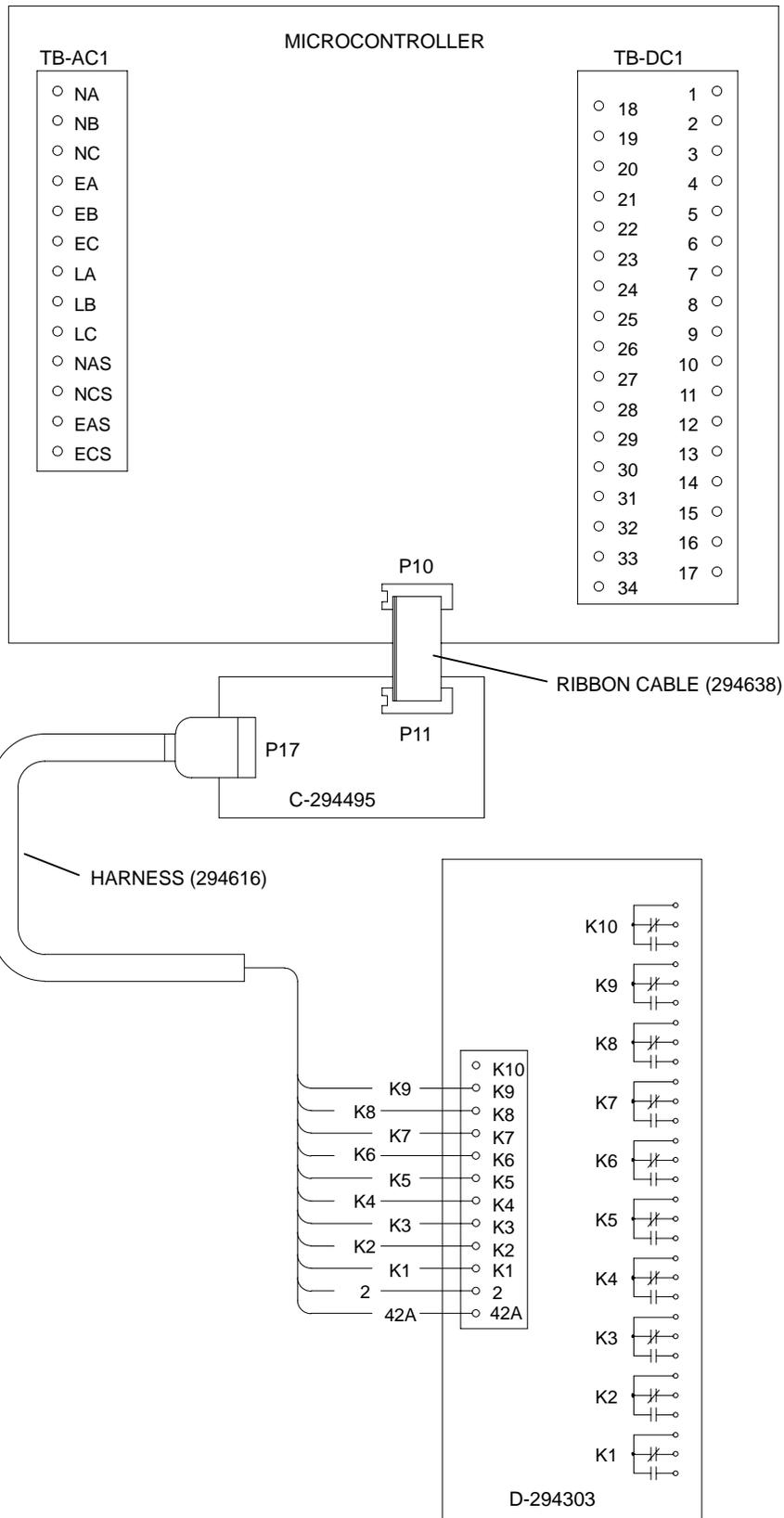


Figure 1. Remote Communications Board



BN-294683

Figure 2. Load-Shed Control Board

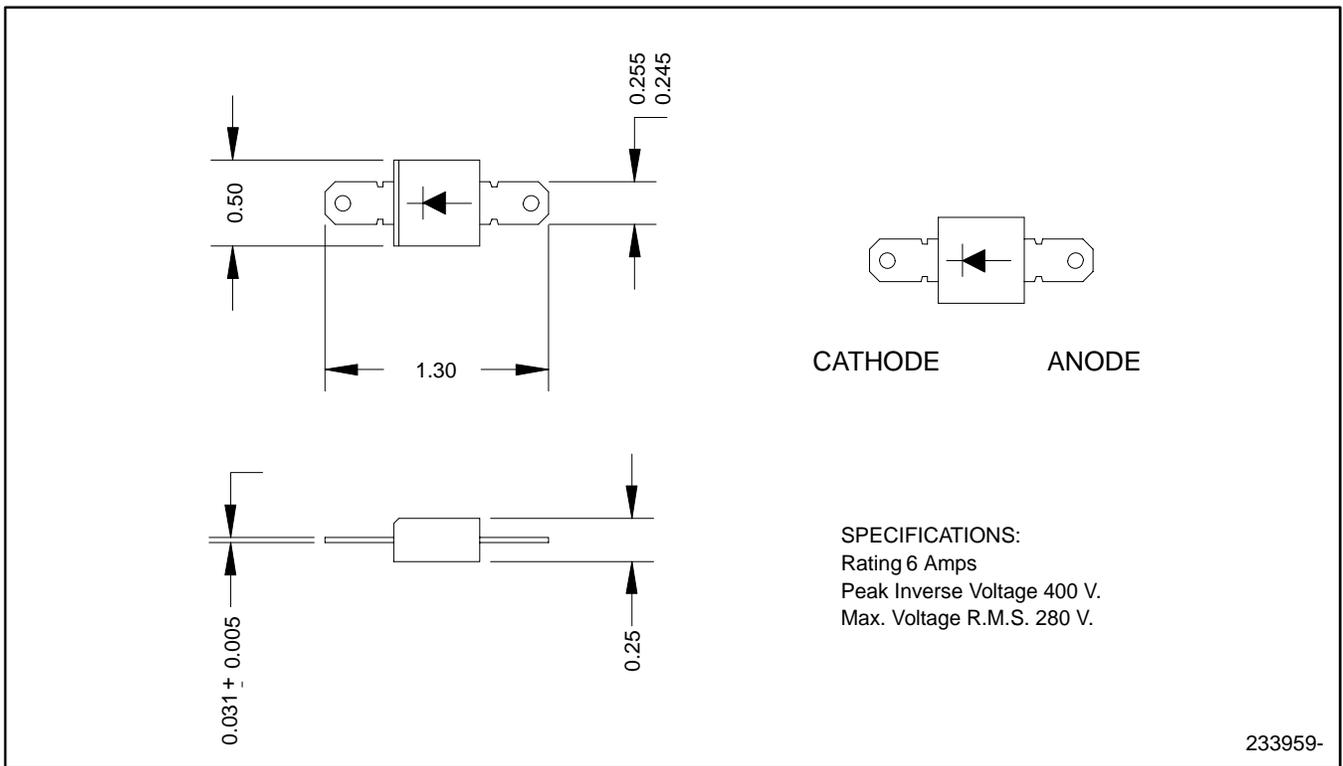


Figure 3. Flyback Diode

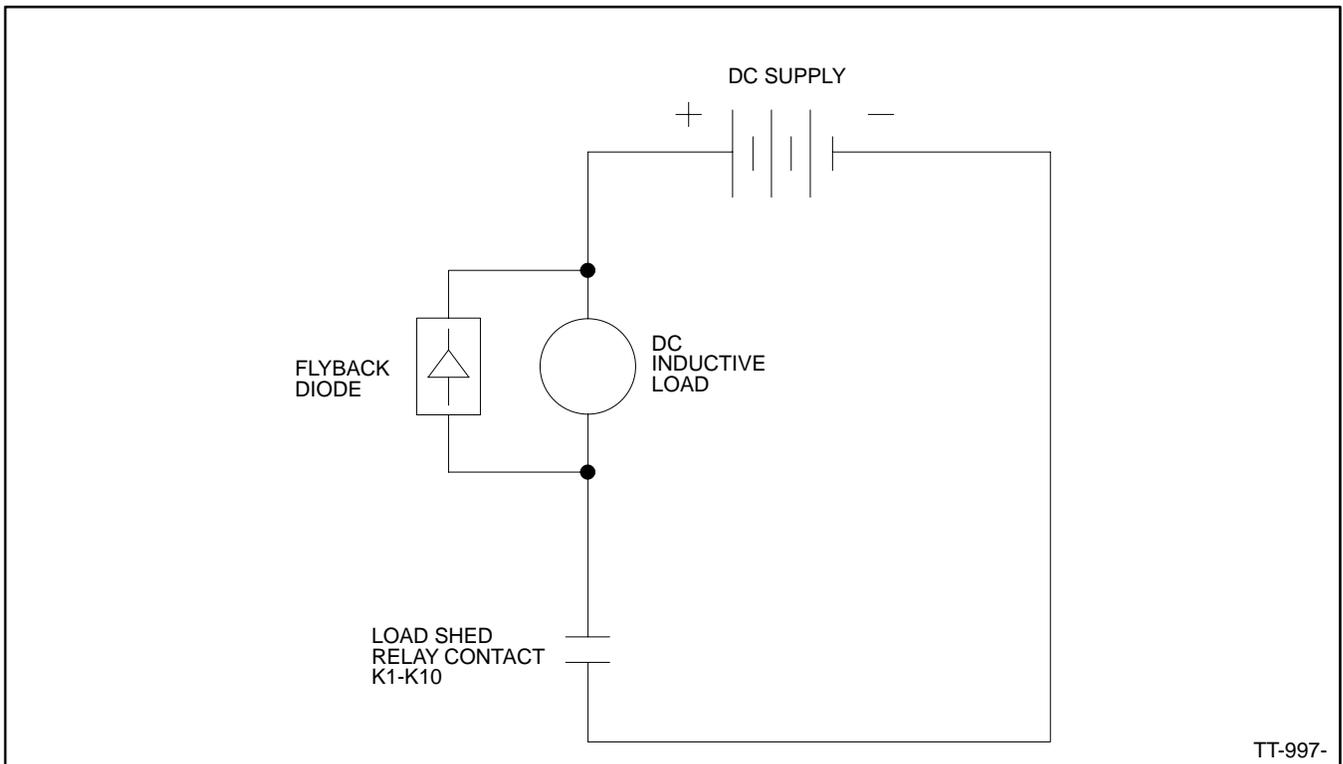


Figure 4. Wiring Schematic—Flyback Diode