



Technical Service Bulletin

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TSB220176

Released Date: 21-Mar-2023

Safety Campaign #4935 C500D6RE Door Switch Logic Corrective Action

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Warranty Statement

The information in this document authorizes specific changes to the repair practice for failures covered under product warranty coverages.

Contents

Product Affected

- C500D6RE

Issue

Symptom

- Some C500D6RE rental generator sets have incorrect door switch logic, disabling the generator set's shut down command to paralleled generator sets when the busbar door is opened during paralleled operation of the generator set, potentially exposing the operator to energized electrical components.

Root Cause

- Incorrect busbar door switch wiring.

Verification/Confirmation

Locate the generator set serial number (GSN) on the nameplate inside the enclosure. If the GSN is listed in Table 1 below, please proceed to the Resolution section below.

Table 1, Affected Generator Set Serial Numbers

J20082 4749	B21088 7146	D21091 4621	D21092 1355	E21092 6148	G21095 7304	G21096 0172	L21002 2105
J20082 4971	C21088 9838	C21090 4156	D21092 2978	E21093 4358	G21095 7378	G21096 0182	L21002 2493
J20083 6024	B21088 9498	C21090 2696	D21092 2951	E21093 4340	G21095 7359	K21000 4336	A22002 9583
J20083 3648	C21089 1512	C21090 2684	D21091 9496	F21093 6186	G21095 7804	G21096 0167	A22003 2655
L20085 6302	C21089 1525	D21091 4622	D21091 9516	F21093 6185	G21095 7786	K21000 4449	A22003 1047
A21086 6484	C21089 4116	D21091 4968	D21092 2958	F21093 9891	G21095 7633	K21000 7466	A22003 2186
A21087 0070	C21089 4070	D21091 4666	D21091 9359	F21094 0630	G21095 8699	L21001 6224	A22003 2178
B21088 4144	C21089 4167	D21091 9376	D21092 2953	F21094 0631	G21095 8700	L21001 7303	A22003 4303
B21088 3218	C21089 4099	D21091 9246	D21092 2959	F21093 9245	G21095 8701	L21001 8316	B22003 9074
B21088 4042	C21089 9036	D21091 9456	D21092 2954	F21093 9977	G21095 8702	L21002 1129	A22003 3251
B21088 2731	C21089 8236	D21091 4623	F21093 6037	F21094 0629	G21095 8712	L21002 2193	B22003 9075
B21088 3036	C21089 9994	D21091 9457	D21092 2955	F21094 4937	G21096 0166	L21002 2194	C22005 2086
B21088 3016	C21090 2444	D21091 9357	D21092 3008	F21094 1624	G21096 0168	L21002 2443	B22003 9265
B21088 5516	C21089 9996	D21091 9358	F21093 6106	F21095 1663	G21096 0169	L21002 2195	C22005 2008
B21088 5518	C21089 9034	E21092 9300	D21092 4657	F21095 1664	G21096 0170	L21002 2492	C22005 2083
B21088 7145	D21091 4393	D21092 2950	E21092 4648	G21095 7358	G21096 0171	L21002 2444	A22003 0813

Resolution

To correct the door switch logic, changes to the door switch wiring is required using retrofit kit (Girtz Part Number KTS20-0015-A01). To order, contact Girtz Industries Inc. via email at sales@girtz.com with your container serial number (located behind rear access doors), generator set serial number, shipping contact and shipping address.



Figure 1, Container Serial Number Location

To install the retrofit kit, see the Service Instructions section below.

Service Instructions

Warning! Make sure the equipment is in an electrically safe work condition and Lock-out Tag-out procedure has been followed prior to performing any work.

1. Disconnect the negative battery cable.
2. Remove the protective cover to access the control panel wiring.

3. Using the Din rail included in the kit as a template, drill 4, 1/4" holes and mount 4" din rail to the divider panel inside the control box behind the roadside rear access panel. (Mounting hardware not included)

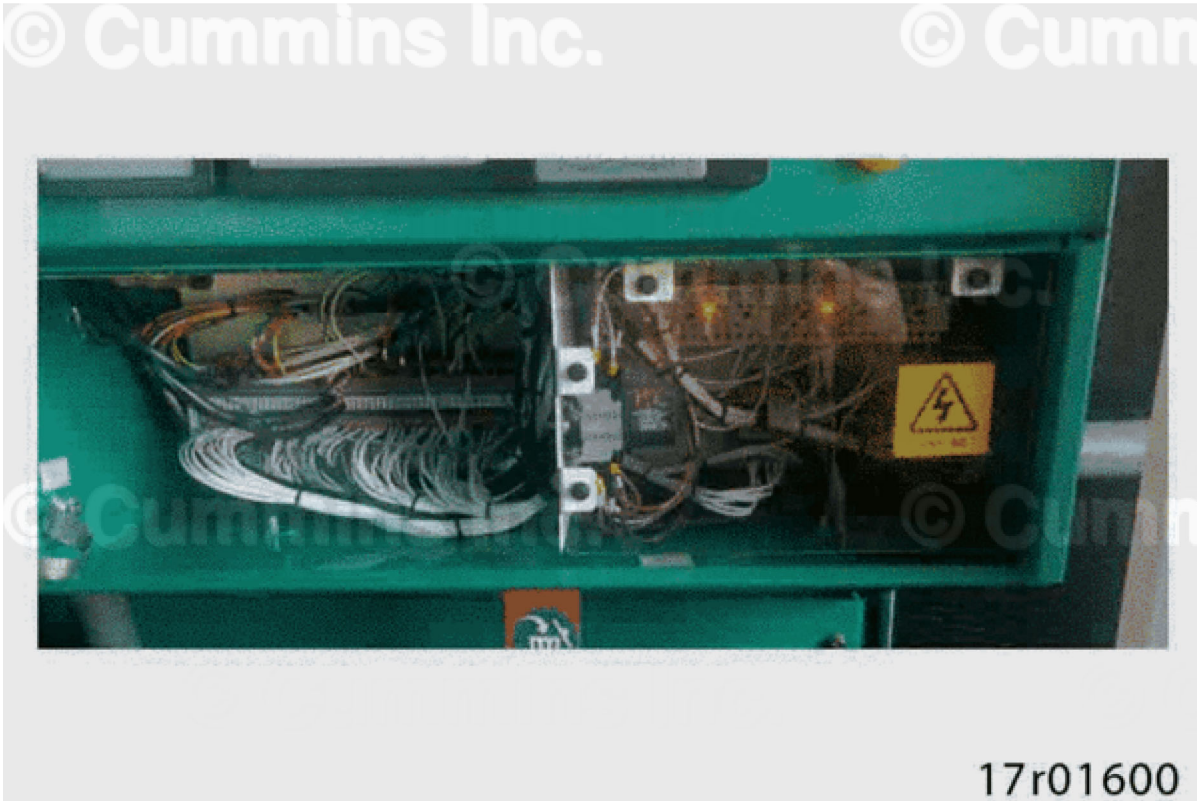


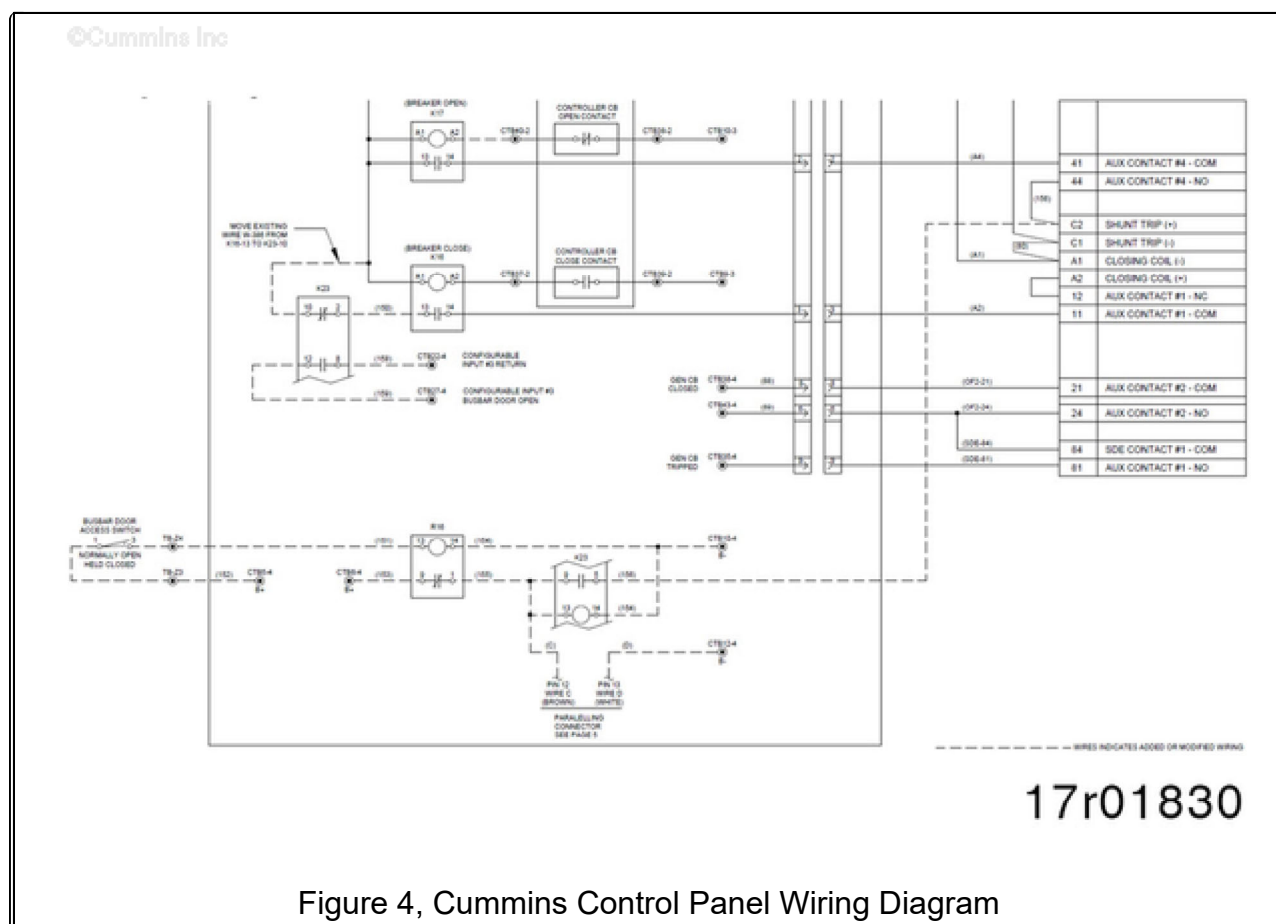
Figure 2, Control Box

4. Place end stop, 3 pole relay (K23), 1 pole relay (R16) onto the Din rail. (See Figure 3)

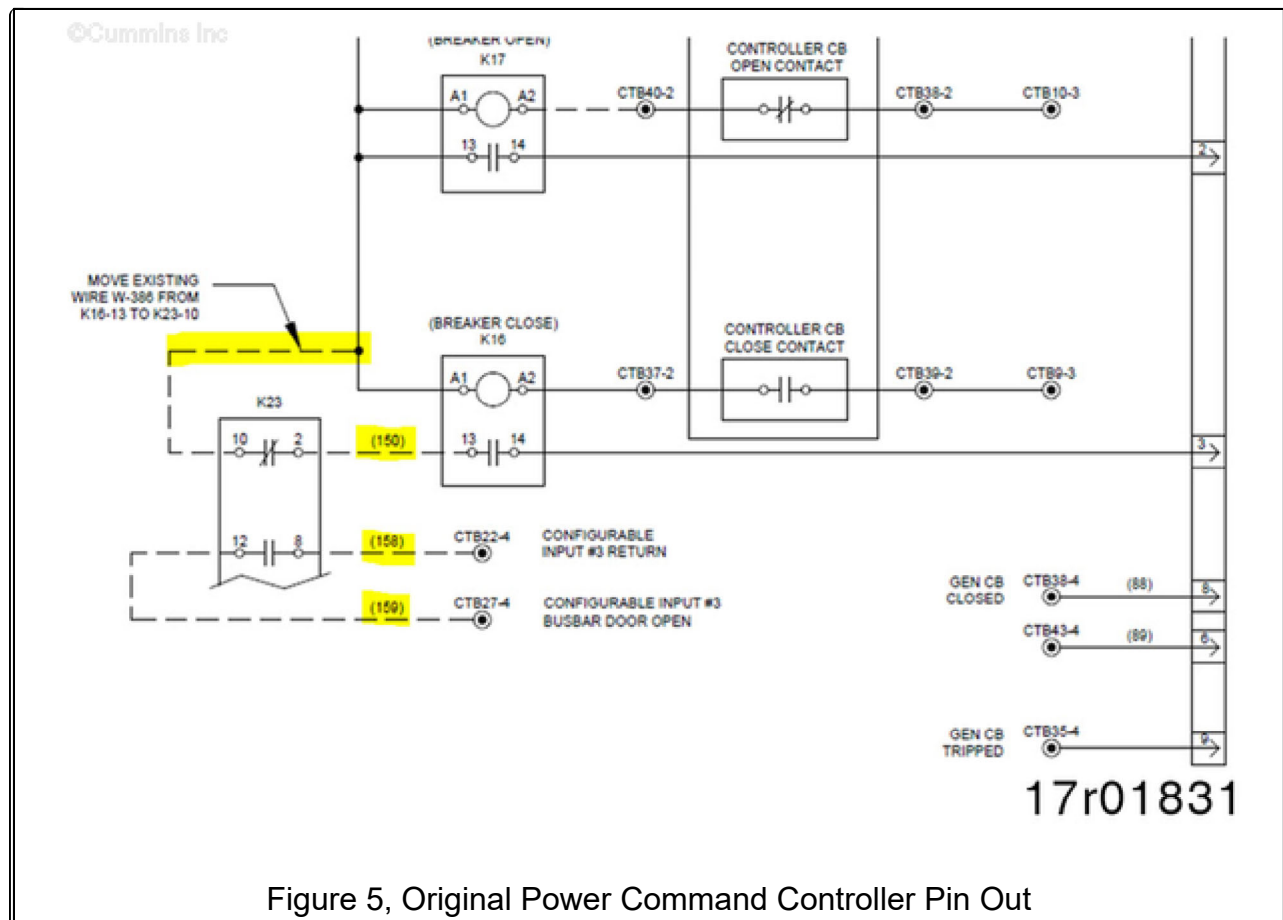


Figure 3, Mounting of DIN Rail and Relays

Removing of existing wires

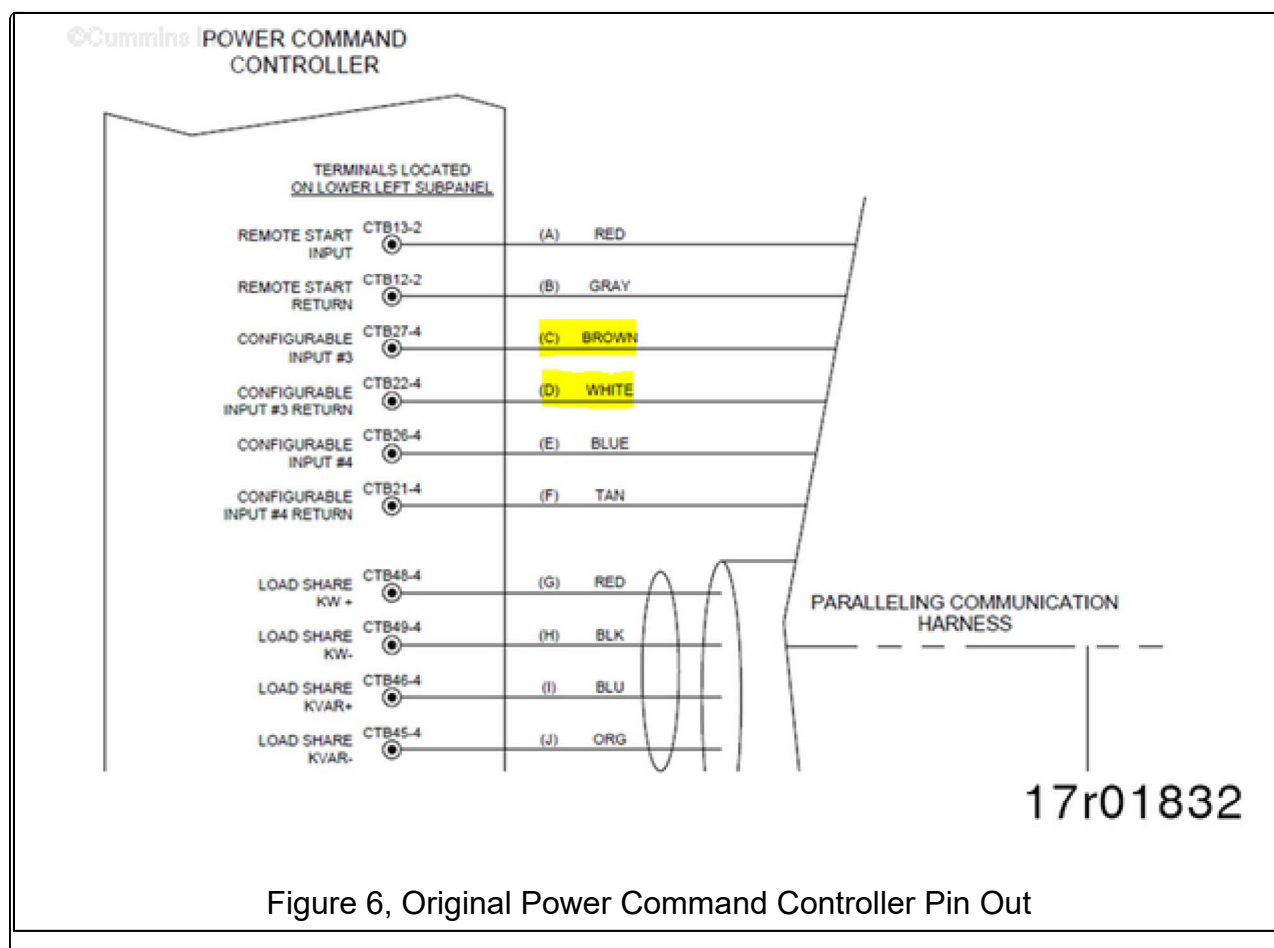


5. Inside of the power command controller box remove wire W-386 from K16-13 and move it to K23-10 (See Figure 5).



6. Remove Wire "C" (Brown) from CTB27-4 and move it to K23-13. Wire should now connect the paralleling connector to K23-13 (See Figure 6 and Figure 7).

7. Remove wire "D" (white) from CTB22-4 and move it to CTB12-4. Wire should now connect the paralleling connector to CTB12-4 (See Figure 6 and Figure 7).



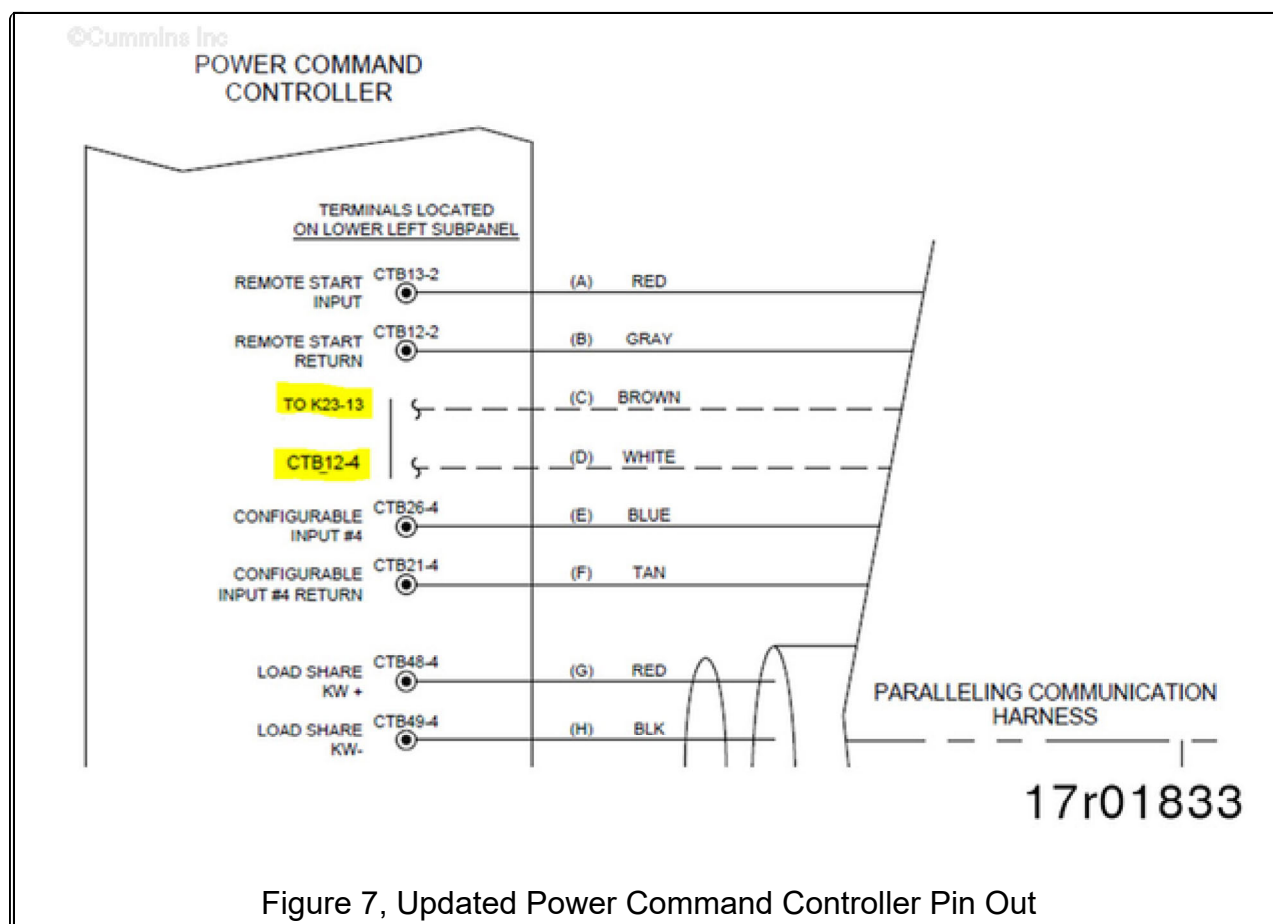


Figure 7, Updated Power Command Controller Pin Out

8. At the rear customer connection panel, remove the customer connection cover panel and remove wire "C" (Brown) from TB-Z3 and move it to TB-Z14 (See Figure 8).
9. Remove wire "D" (white) from TB-Z4 and move it to TB-Z15 (see Figure 8).
10. On the busbar door switch, remove the wire from pin 2 (normally closed) and move it to pin 3 (normally open) (see Figure 8).

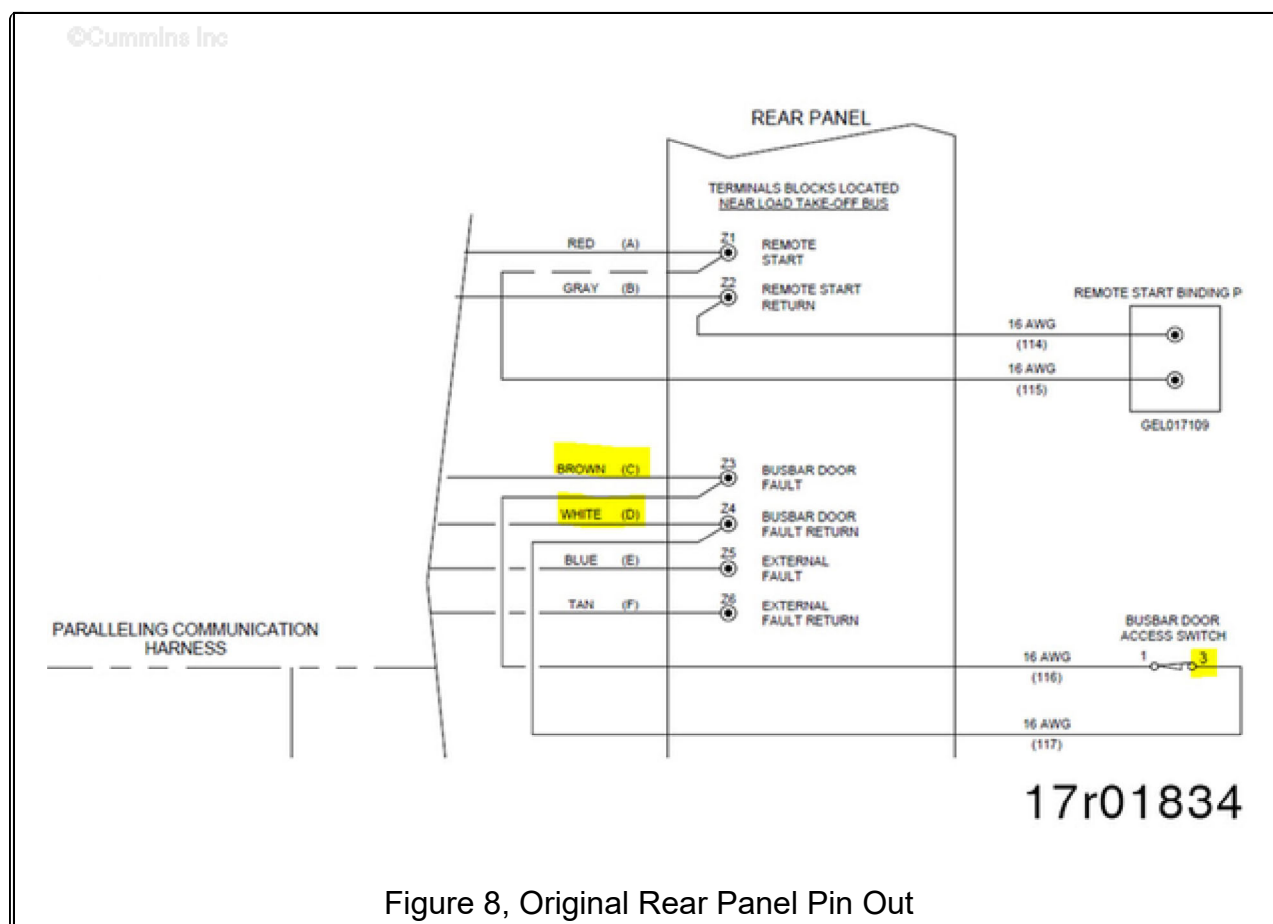


Figure 8, Original Rear Panel Pin Out

Installing additional wires

Note: 20' of wire is supplied in the kit, installer is responsible for cutting wire to correct length and labeling wires.

11. Wire from K23-2 to K16-13 (See wire 150 in Figure 4 and Figure 5).

12. Wire from R16-13 to TB-Z4 (See wire 151 in Figure 4 and Figure 9).

Note: Roadside rear louver will need to be removed to gain access.

***Warning*:** Louvers are over 50lbs, use proper lifting tools or additional person

13. Wire from CTB5-4 to TB-Z3 (See wire 152 in Figure 9).

Note: Roadside rear louver will need to be removed to gain access.

14. Wire from CTB6-4 to R16-9 (See wire 153 in Figure 9).

15. Wire from CTB10-4 to R16-14 and jumper from R16-14 to K23-14 (See wire 154 in Figure 9).

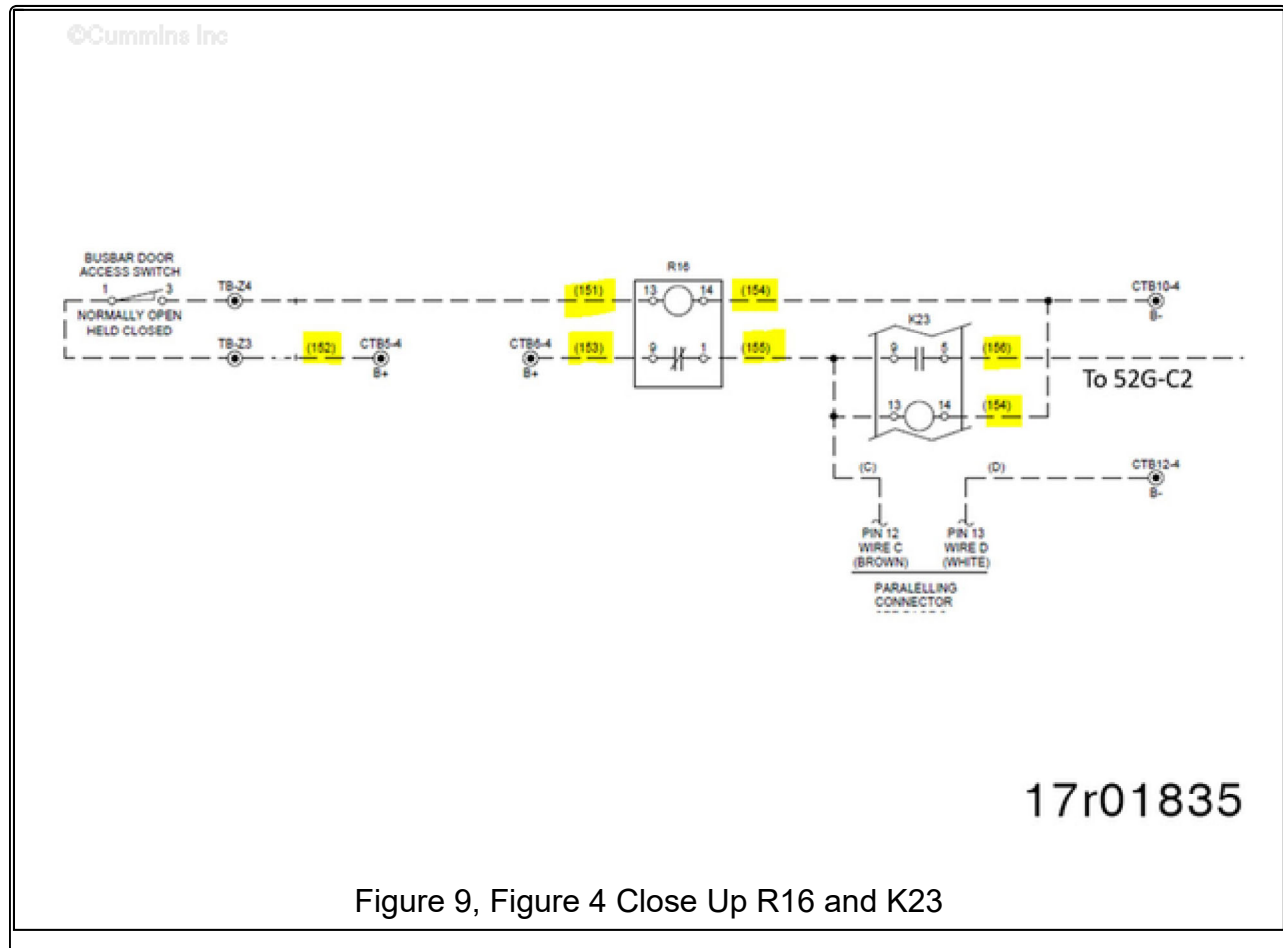
16. Wire from R16-1 to K23-9 with jumper from K23-9 to K23-13 (Double K23-13 with wire "C" and (155) (See wire 155 in Figure 9).

17. Wire from K23-5 to 52G-C2 of rear panel (See wire 156 in Figure 9).

Note: Roadside rear louver and rear breaker cover will need to be removed to gain access.

18. Wire from CTB22-4 to K23-8 (See wire 158 in Figure 9).

19. Wire from CTB27-4 to K23-12 (See wire 159 in Figure 9).



Testing Door Logic

1. Turn on battery power.
2. Plug paralleling plug into generator.
3. Close busbar door.
4. Measure DC voltage between pins 12 and 13 of the unterminated end of the paralleling harness.

Warning! Touching pins 12 and 13 together can cause a 24 V short to ground.

- Meter leads should be set as follows: Positive lead pin 12, negative lead pin 13.
- Voltage should be 0 VDC.

5. Repeat with the busbar door open.

- Voltage should be 24 VDC.

End of Repair

Campaign Filing Instructions:

Fail Code: PRWHMW

Account Code: 65

Authorization Code: 4935

Applicable SRT's:

- 00-902: 0.3 hours - Administrative time (shop)
- 00-90F: 0.2 hours - Administrative time
- 99-999: 7.0 hours - Install Door Switch Kit

Part Availability

Service parts are available. See Table 2 for part numbers.

Table 2, Service Parts		
Part Description	Part Number	Order Instructions
Retrofit kit for Door Switch for 500KW Towable	Girtz Part Number KTS20-0015-A01	Contact Girtz Industries Inc via email at sales@girtz.com

Document History

Date	Details
2022-8-17	Module Created
2022-8-19	Non-Product Problem Solving (PPS)
2023-3-20	Non-Product Problem Solving (PPS)

Last Modified: 21-Mar-2023
