Technical Service Bulletin

Technical Service Bulletin: TSB190225	**Released Date**: 24-Jan-2020
Campaign #4035: Fix for C100D2RE Generator Set Paralleling Control Wiring Issue	

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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

- C100D2RE

Issue

When a C100D2RE generator set is attempted to parallel with a C150, C200 or C275 generator set, the B+ (24 VDC) on the two units short with each other, as a result of which the units cannot be paralleled, and temperature of the paralleling cable rises.

Root Cause:

- Due to a design error in C100D2RE generator set harness, paralleling C100 with any other models causes the B+ (24 VDC) from one unit to be shorted to B+ on the other unit

Verification/Confirmation

Confirm if the unit has this issue by checking in the list of affected generator set serial numbers. See Table 1.

Resolution

On the harness of C100D2RE (PN: A054R546) shown in Figure 1 below:

1. Swap P70-A and P70-B
2. Swap J40-1 and J40-2

Service Instructions

Follow all the necessary safety procedures along with Lock Out Tag Out.

On the harness of C100D2RE (PN: A054R546) shown in Figure 1 below:

1. Swap P70-A and P70-B
2. Swap J40-1 and J40-2

The harness is in the front panel inside the top rack of generator set. To locate connectors P70 and J40 with respect to the harness, refer to Figure 2.

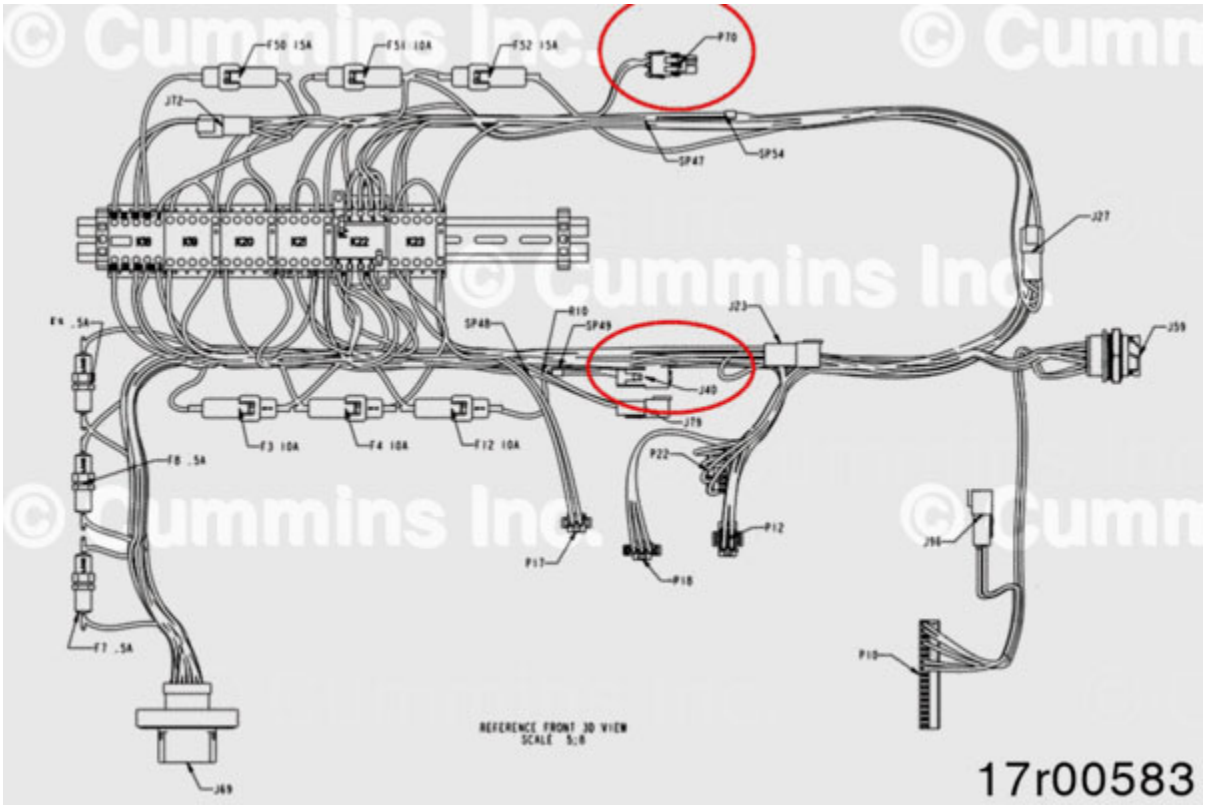

Figure 1, Harness A054R546 with P70 and J40 highlighted

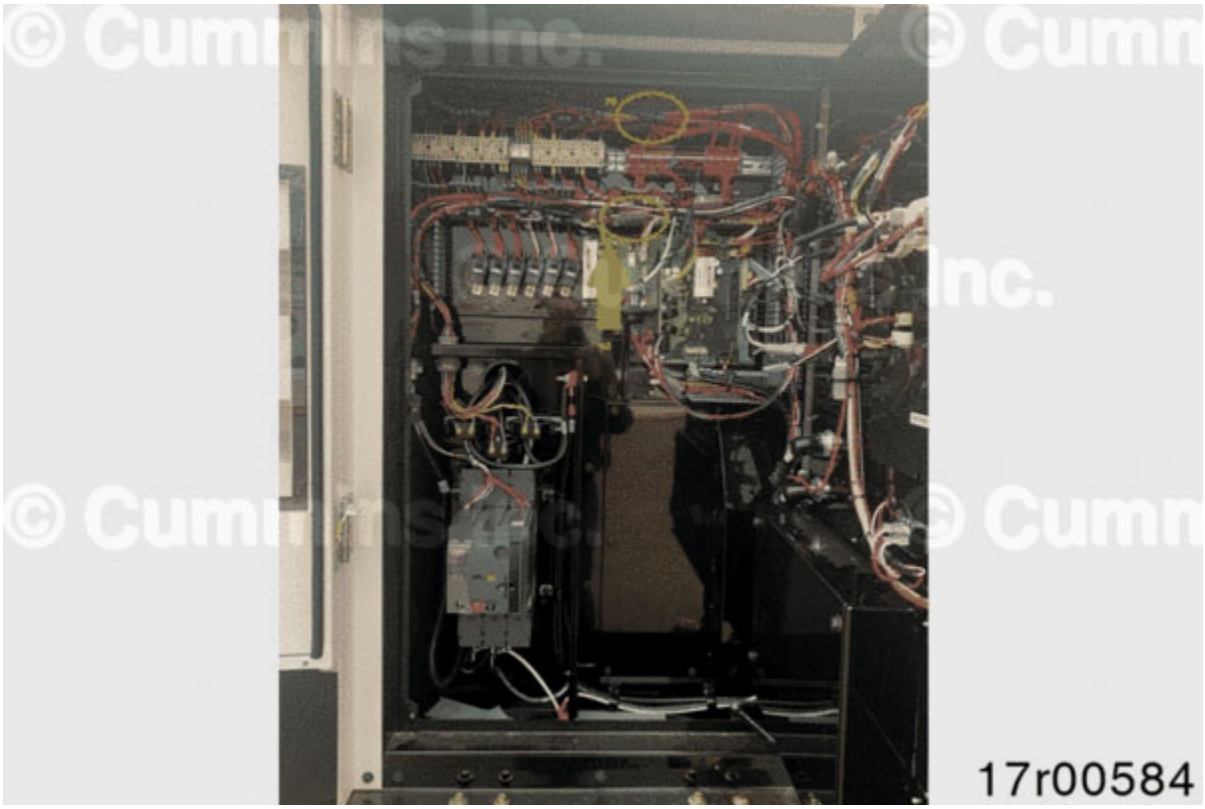

Figure 2, Location of connectors P70 and J40 on harness

1. Swapping connections of P70 connector (PN: 0323-1637) requires a Terminal Remover tool (refer to Figure 4 for examples) to remove the wires and reconnect them in the right location. Unplug the side clip on P70 connector as shown in Figure 3, before inserting the tool to remove wire connectors.

Figure 3, P70 Connector

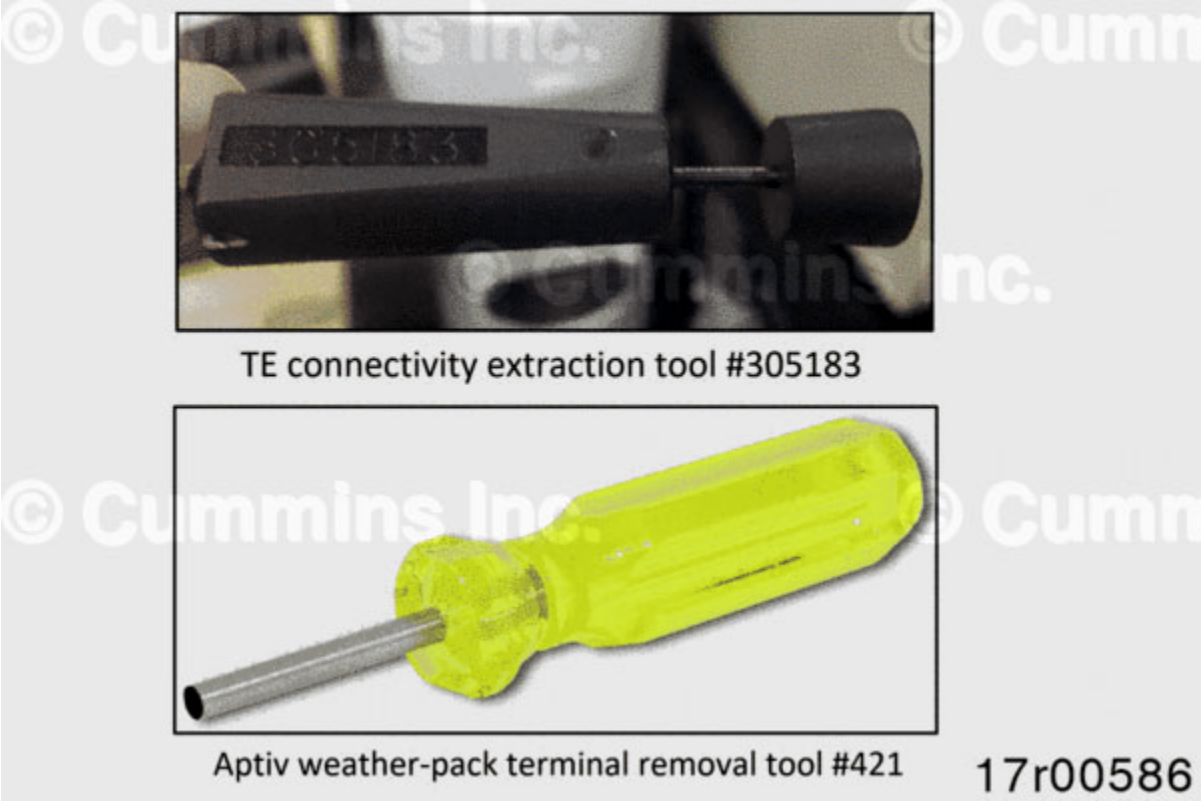

Figure 4, Terminal Remover Tools

2. J40 connector is a Deutsch connector (PN: 0323-2334) and the wires (size: 16 AWG) can be removed by removing the wedge (PN: 0323-2333) with a picker (refer to figure 4) and repositioning the wires in the right location.

Figure 5, Picker to Remove Wedge

Confirm the fix performed above by checking for continuity on the following terminals on harness A054R546.

Note : The connectors should be left unplugged and battery should remain disconnected to check for continuity.

1. From J66A-12 to K23A-1
2. From J66A-13 to K23A-2
3. From TB3-5 to K20A-2
4. From TB3-11 to K20-14 (resistance value should be 10k ohm)

After the resolution is applied, put a green dot on J40 and P70 connectors as well as on the master label for A054R546 with a permanent marker. If the fix is done in-house, add an extra green dot on the shipping box. This will help identify repaired units and avoid misconnecting in future.

Campaign details:

Authorization number: 4035

Account code: 65

Travel: One trip allowed

SRTs:

00-902 – administrative time – 0.7

99-999 – Install parallel wire pins – 0.3

Fail code: PR-WH-MR

Expiration date: December 12, 2021

Table 1, List of Affected Serial Numbers			
A180287414	A180288358	A180300973	A180300973
A180307780	A180307781	A180307781	A180311216
A180311217	A180313643	A180313644	A180313644
A180316108	A180316108	A190470269	A190470271
A190472904	A190472942	A190473300	A190474502
A190474503	A190474520	A190474940	A190474980
A190479021	A190483031	A190486483	A190486485
A190488255	A190488256	A190488274	A190488772
A190488831	A190489344	A190489345	A190489351
A190489352	A190489353	A190490695	A190493435
A190500492	B180316609	B180316645	B180318731
B180318732	B190501278	B190501279	B190502108
B190502233	B190506462	B190507252	B190507453
B190507472	B190508153	B190508286	B190509731
B190512632	B190512651	B190515225	B190515678
B190515698	B190516157	C180332369	C180336449
C180336449	C180339323	C180339323	C180341659
C180341907	C180342405	C180345016	C180345225
C180345225	C180345664	C190518791	C190518812
C190519115	C190519131	C190519132	C190519831
C190519861	C190530071	C190530791	C190531987
C190532273	C190532311	C190533114	C190536207
C190536272	C190536291	C190537174	C190537959
C190537960	C190538325	C190538415	D180348999
D180350622	D180350622	D180350927	D180350927

Table 1, List of Affected Serial Numbers			
D180351229	D180351229	D180351653	D180351653
D180352859	D180352859	D180353590	D180353591
D180353591	D180353593	D180353835	D180353953
D180353953	D180353955	D180353955	D180353955
D180354191	D180354305	D180354305	D180354711
D180354712	D190540193	D190540194	D190540194
D190540751	D190541688	D190542310	D190542314
D190545552	D190545553	D190547128	D190547458
D190548292	D190548311	D190549113	D190549131
D190549340	D190549371	D190549372	D190552810
D190552812	D190552831	D190553160	D190553161
D190553295	D190554332	D190554436	D190554473
D190554637	D190557749	D190557752	D190558064
D190559580	D190559631	E180357326	E180357721
E180357885	E180360471	E180360471	E180360473
E180360474	E180360719	E180360720	E180360720
E180361193	E180361193	E180361194	E180361195
E180361195	E180361234	E180363667	E180363668
E180363905	E180364314	E180364315	E180368942
E180368942	E180368943	E180368943	E180369729
E190559736	E190560539	E190560720	E190562176
E190562213	E190562214	E190562231	E190562357
E190562567	E190562807	E190562873	E190564244
E190564245	E190564852	E190564853	E190564854
E190564856	E190564857	E190565145	E190565732
E190566314	E190569452	E190569512	E190569513
E190570233	E190571005	E190571031	E190571571
E190571572	E190571591	E190571611	E190573672
E190573673	E190573692	E190573711	E190574359
E190574360	E190575200	E190575201	E190575202
E190577352	E190580052	F180369121	F180372734

Table 1, List of Affected Serial Numbers			
F180373572	F180373572	F180373573	F180374057
F180375675	F180375676	F180375677	F180377908
F180377908	F180378495	F180378998	F180380302
F180386546	F180386547	F180386989	F180386990
F180387335	F180387336	F180387346	F190580017
F190580034	F190580776	F190580779	F190580780
F190581343	F190581343	F190581344	F190581345
F190584252	F190584253	F190584254	F190584603
F190584604	F190584605	F190584606	F190584955
F190585347	F190585348	F190585365	F190585606
F190587945	F190587946	F190587947	F190588722
F190588723	F190588731	F190588732	F190588734
F190588735	F190588808	F190588834	F190590835
F190590872	F190590891	F190593448	F190593449
F190593452	F190594403	F190594404	F190594420
F190594421	F190594431	F190594975	F190594976
F190595042	F190595043	F190595052	F190595242
F190595244	F190595245	F190595271	F190595915
F190595916	F190595917	F190598912	F190598913
G180387366	G180387366	G180387367	G180388034
G180388066	G180388988	G180389049	G180389507
G180389973	G180391808	G180391828	G180394646
G180394666	G180394667	G180394686	G180394687
G190599859	G190599940	G190600952	G190600972
G190604754	G190605223	G190605224	G190606763
G190608418	G190608752	G190608811	G190609714
G190609715	G190610692	G190610693	G190610731
G190611069	G190611070	G190611111	G190611954
G190613014	G190615153	G190615154	G190615155
H180395106	H180395126	H180395146	H180408665
H180408674	H180409087	H190619135	H190619136

Table 1, List of Affected Serial Numbers			
H190619137	H190620042	H190620043	H190620388
H190620391	H190620793	H190620871	H190620872
H190620873	H190621202	H190621203	H190622245
H190622246	H190622247	H190622248	H190622249
H190622250	H190623084	H190623138	H190623195
H190623220	H190623502	H190623504	H190623505
H190623518	H190623519	H190624538	H190624539
H190624608	H190624612	H190624631	H190625403
H190625524	H190626070	H190626071	H190626137
H190626157	H190626158	H190626159	H190626173
H190626204	H190626862	H190626891	H190626892
H190626893	H190627234	H190627235	H190627236
H190629278	H190629931	H190630252	I170229858
I170230019	I170230019	I170230020	I180416026
I180416456	I180416466	I180416950	I180416966
I180416986	I180416987	I180416987	I190635292
I190635311	I190635331	I190636077	I190636078
I190636080	I190636081	I190637101	I190637102
I190637207	I190637231	I190637232	I190637467
I190637616	I190637617	I190637618	I190637619
I190637641	I190637651	I190640356	I190640397
I190640398	I190640399	I190640400	I190640401
I190640591	I190640592	I190640593	I190640611
I190640612	I190640613	I190640631	I190641403
I190642492	I190644675	I190646057	I190646956
I190646993	I190646994	I190646995	I190646996
I190646997	I190647704	I190647706	I190648006
I190648007	I190648385	I190648402	I190651966
J180430767	J180430768	J180431068	J180437306
J180438418	J180438419	J180441866	J180441886
J180442399	J180442402	J180443311	K180460487

Document History

Date	Details
2019-12-17	Module Created
2020-1-24	Non-Product Problem Solving (PPS)

Last Modified: 24-Jan-2020