

Detailed Troubleshooting Recommendations:

1. Swap EMS CDU 1 with EMS CDU 2.
 - a. If fault follows, return EMS CDUs to their original configuration and replace the EMS CDU 1.
2. Swap ACPC microprocessor cards.
 - a. If the fault follows, return ACPC microprocessor cards to their original configuration and replace the left microprocessor card.
3. Replace ACPC supervisor card.

EMI Filter/Wiring check

4. Disconnect EMS CDU 1 connector A94P1.
5. Remove both microprocessor cards.
6. Remove the Junction Box #3 (JB3).
7. Do a continuity check with the connections that follow:

From	To
A94P1-5	Ground
A94P1-6	Ground
JB3AP1-9D	Ground
JB3AP1-9E	Ground

- a. If there is no continuity, continue with step 8.
- b. If there is continuity, disconnect ACPC connector A54P6.
 - i. Do a continuity check with the connections that follow:

From	To
A94P1-5	Ground
A94P1-6	Ground
JB3AP1-9D	Ground
JB3AP1-9E	Ground

- ii. If there is continuity, repair the wiring between ACPC and EMS CDU1 or ACPC and JB3.
- iii. If there is no continuity, replace ACPC.

8. Do a continuity check with the connections that follow:

From	To
A94P1-7	Ground
A94P1-8	Ground

- a. If there is continuity, repair the wiring between JB3 and EMS CDU 1.
- b. If there is no continuity, continue with next step.

9. Do a continuity check with the connections that follow:

From	To
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A94P1-7	JB3AP1-9B
A94P1-8	JB3AP1-9C

- a. If there is no continuity, repair the wiring between JB3 and EMS CDU 1.
- b. If there is continuity, continue with next step.

CAUTION

To prevent damage to the ACPC motherboard connectors, ensure that the wire jumper pin outside diameter (OD)/socket inside diameter (ID) does not exceed 0.025 inch.

10. Do a continuity check with the connections that follow:

From	To
A94P1-5	P2A-23
A94P1-6	P2B-23
JB3AP1-9D	P2A-21
JB3AP1-9E	P2B-21
JB3AP1-9D	P3A-21
JB3AP1-9E	P3B-21

- a. If there is no continuity, disconnect ACPC connector A54P6.
 - i. Do a continuity check with the connections that follow:

From	To
A54J6-V	P2A-23
A54J6-W	P2B-23
A54J6-R	P2A-21
A54J6-S	P2B-21
A54J6-R	P3A-21
A54J6-S	P3B-21

- ii. If there is no continuity, replace ACPC
- iii. If there is continuity, repair the wiring between ACPC, JB3 and EMS CDU 1.

ACPC Data Bus check

11. Make sure that the EXT AC cord is not connected to the aircraft.
12. Remove one of fifteen SSPC cards.
13. Set BMS to ON.

Note

Monitor the fault via the AC Synoptic page or the Counters (EMS CDU Diagnostic Mode)

14. Verify if the fault is still present.
 - a. If not, replace the defective SSPC.

- b. If yes, repeat step 12 to 14 for the other SSPC cards until the fault is corrected.
- 15. Remove one of three PLC cards.
- 16. Set BMS to ON.
- 17. Verify if the fault is still present.
 - a. If not, replace the defective PLC.
 - b. If yes, repeat step 15 to 17 for the other PLC cards until the fault is corrected.
- 18. Remove one of four SLC cards.
- 19. Set BMS to ON.
- 20. Verify if the fault is still present.
 - a. If not, replace the defective SLC.
 - b. If yes, repeat step 18 to 20 for the other SLC cards until the fault is corrected.
- 21. Remove EPQM card.
- 22. Set BMS to ON.
- 23. Verify if the fault is still present.
 - a. If not, replace the defective EPQM card.
 - b. If yes, continue with next step.
- 24. Remove A/D converter card.
- 25. Set BMS to ON.
- 26. Verify if the fault is still present.
 - a. If not, replace the defective AC/DC converter card.
 - b. If yes, replace ACPC