

S E R V I C E N O T E

SUPERSEDES: None

**4062UX Semiconductor Process Control System**

**Serial Numbers:** 0000J00000 / 9999J99999

**Voltage of +12V goes down in 4084B Switching Matrix Controller**

**Duplicate Service Notes:**

- 4062C-06
- 4062F-01
- 4062UX-06
- 4084B-02
- 4085M-02

**Parts Required:** None

**Situation:**

The 4084B Switching Matrix Controller (SWC) may not work when the FAIL indicator is on. When you observe the following symptoms, a zenner diode (P/N 1902-1200) on the A2 Power Supply Board is broken and has conductivity:

- When you turn on the 4084B in spite of connecting it to the 4085 or 4089 Switching Matrix (SWM) properly, the FAIL indicator lights up on the front panel of 4084B.

- Status indicators shows number 7 as follows on the A1 MPU Board in the 4084B:

8	4	2	1
OFF	ON	ON	ON

*Continued*

DATE: October 1995

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
<b>INFORMATION ONLY</b>		
AUTHOR:  ET	ENTITY:  3300	ADDITIONAL INFORMATION:



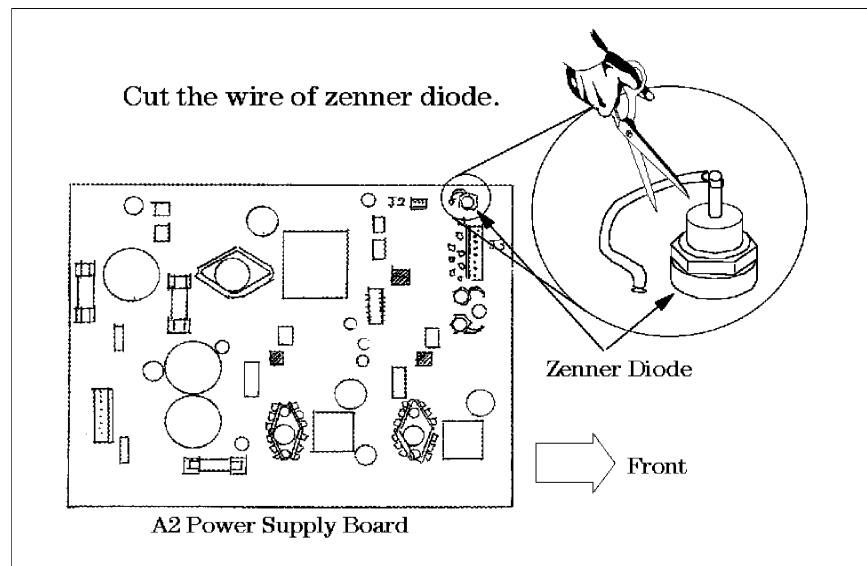
- When you turn the 4084B on after disconnecting the control cable from the SWM, +12V line shows less than 12V, for example, 1.5V. To check the +12V line, you probe with your digital voltmeter between TP9/TP7 (+12VF) and TP8 (FGND) on the A2 Power Supply Board.
- The zener diode at the corner of the A2 board is hot.

The zener diode may break if you disconnect the control cable from the 4084B SWC or 4085/4089 SWM while the 4084B is on. This is one possible cause of the broken diode.

**Solution/Action:**

To fix this problem, cut the wire between the zener diode and A2 PC board, and remove wire (see figure 1). After removing wire, check the 4084B SWC operations by turning it on.

If the +12V line still does not show proper voltage, replace the A2 board with new one.



**Figure 1. Part Location of Zener Diode (A2 Board)**