

S E R V I C E N O T E

SUPERSEDES: E3101A-06

E3101A Semiconductor Parametric Tester

- | | |
|--------------------------------|---------------------------|
| E3121-66501/E3121-69501 | Pin Board |
| E3120-66531 | Chuck Board |
| E3120-66516 | Relay Test Board |
| E3120-66512 | LC Input Board |
| E3120-66513 | Kelvin Input Board |
| E3120-66515 | CMU Input Board |

Serial Numbers: JP10D00152/JP10D00276
 JP10D00279/JP10D00280
 JP10D00283/JP10D00285

Solution for the breaking of a relay coil

To Be Performed By: Agilent-Qualified Personnel

Continued

DATE: February 1999

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS:	LABOR 0.5 Hours
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input checked="" type="checkbox"/> ON-SITE <input type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY:	<input checked="" type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	USED PARTS:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT
AUTHOR: MO	ENTITY: 3300	AGILENT RESPONSIBLE UNTIL: February 2001	
		ADDITIONAL INFORMATION:	

Parts Required:

P/N	Description	Quantity
E3121-69511	Pin Board	(See note.)
E3120-66561	Chuck Board	1
E3120-66526	Relay Test Board	(See note.)
E3120-66512	LC Input Board	(See note.)
E3120-66513	Kelvin Input Board	1
E3120-66515	CMU Input Board	1

Note: *The quantities depend on the situation.

Situation:

The relay test of the diagnostics program (diag4070) fails with the following conditions:

- The diagnostics program indicates a normally open relay will not close.

--or--

The diagnostics program indicates a normally closed relay will not open.

- The relay test failure is permanent (not intermittent).
- The resistance of the suspected relay's coil is over one mega ohm. (Measure the coil resistance on the reverse side of the board by using a hand-held multimeter.) The resistance of a good relay coil is approximately 1.2 kohm (2-line relay) or 800 ohm (3-line relay).

Solution / Action:

Replace the board isolated by the diagnostics program. For the low current input board, Kelvin input board, and CMU input board, use a board whose EDC (engineering date code) is 33-3819 or later. (The part numbers are the same.) You can check the EDC of the board on the label on the board:

E3120-66513	
33-3819	← 3819 is the EDC.
xxxxx-xxxx	
MADE IN JAPAN	

The failure is caused by the breaking of a relay coil. The breaking usually occurs if water penetrates the filler of the relay and reaches the coil wire, or if corrosive material exists on the surface of the wire. These problems have been corrected by changing the manufacturing processes.