FF0710 00D

# Information Only Service Note

Supersedes: E5071C-28A

## E5071C ENA Series Network Analyzer, 9kHz to 20GHz

Serial Numbers: MY46212347 to MY46215618, SG46200264 to SG46200289

Manufacturing ID Number: N/A

Automatically shut down after a few seconds beeping occurs when user turns on the instrument

#### Parts Required:

P/N	Description	Qty.	
3160-4452	CPU Fan	1	
3160-4518	CPU Fan	1	
E5052-62070	Com-Express CPU Module	1	
E5071-61680	Interface cable		1

#### ADMINISTRATIVE INFORMATION

[[]] Calibration Required	PRODUCT LINE: WN
X Calibration NOT Required	AUTHOR: Is

ADDITIONAL INFORMATION:



#### Situation:

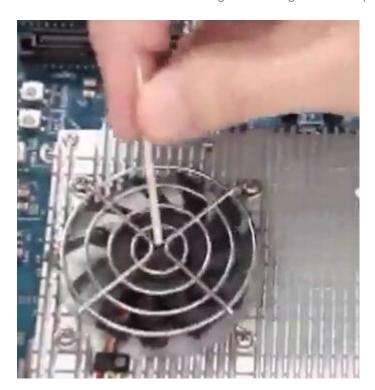
#### Situation:

Automatically shut down after a few seconds beeping occurs when user turns on the instrument. This is due to CPU Fan rotor dropped off or CPLD on CPU board is broken.

#### Solution/Action:

Trouble isolation and action needed

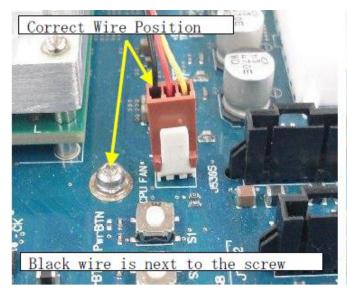
1. Push down CPU fan's rotor using something like tooth pick just after turning on power switch.

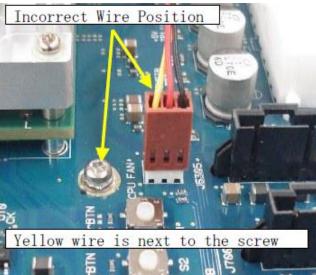


2. If CPU fan rotates, then the cause of the trouble is [dropped off rotor]



2-1 Check whether connector post (J19) for the CPU fan's interface cable is the correct direction or the opposite (incorrect) direction as shown below.



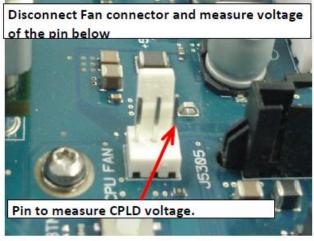


- 2-2 If black wire of the CPU fan cable is next to the nearby screw, J19 is assembled in a correct way.
  - 2-2-1. If CPU fan is COFAN, replace CPU fan with 3160-4452 for repair.
  - 2-2-2. If CPU fan is COOLER MASTER, replace CPU fan with 3160-4518 for repair.





2-3 If yellow wire of the CPU fan cable is next to the nearby screw, J19 is assembled in an incorrect way. In this case, disconnect the CPU fan cable from J19 and measure CPLD voltage of the pin.





- 2-3-1. If the voltage is less than 1.2V, CPLD circuit of the CPU carrier board is damaged. In this case, replace whole CPU assembly with E5052-62070.
- 2-3-2. If the voltage is greater than 1.5V, the circuit of the CPU carrier board is OK. 2-3-2-1. If CPU fan is COFAN, replace CPU fan interface cable with 3160-4452 and E5071-61680.
  - 2-3-2-2. If CPU fan is COOLER MASTER, replace the CPU fan with 3160-4518.
- 3. If CPU fan does not rotate when rotor is pressed down lightly even when POST LED turned on and it proceeded from 00, check if the voltage of the red wire of the fan is 12V.
  - 3-1. If +12V is supplied to the red wire, then most suspicious cause is CPU fan itself.
  - 3-1-1. If the interface cable is incorrect wire position,
    - 3-1-1-1. If CPU fan is COFAN, replace CPU fan interface cable with 3160-4452 and E5071-61680.
    - 3-1-1-2. If CPU fan is COOLER MASTER, replace CPU Fan with 3160-4518.
  - 3-1-2. If the interface cable is correct wire position,
    - 3-1-2-1. If CPU fan is COFAN, replace CPU fan interface cable with 3160-4452 and E5071-61680.
    - 3-1-2-2. If CPU fan is COOLER MASTER, replace the CPU fan with 3160-4518.
  - 3-2. If +12V is not supplied to the red wire, check if CPU carrier board is OK or check if power supply can be started.

**Note:** To prevent from this failure in future, ask customer to keep the operating environment clean. If onsite cleaning service (inside the instrument cleaning service) is available at your region, offer it to the customer.

### Revision History:

Date	Service Note Revision	Author	Reason for Change
31 Dec 2013	E5071C-28	jm	As Published
09 Jan 2014	E5071C-28A	jm	Expand serial number range Add CPU fan ramification.
13 May 2016	E5071C-28B	ls	Add 3160-4518 CPU fan on Cooler Master replacement.