

E4421B-01A**S E R V I C E N O T E**Supersedes:
E4421B-01**ESG “B” Signal Generator E4421B****Serial Numbers:** [0000A00000 / 9999Z99999]**Replacement Procedure for Q501 on motherboard/CPU****Parts Required:**

P/N	Description	Qty.
E4400-60220	Repl Kit – CPU/Motherboard	1
Or		
E4400-60229	Q501 Reloc Kit	1

*(Refer to Solution/Action Section for correct part)***ADMINISTRATIVE INFORMATION**

SERVICE NOTE CLASSIFICATION:	
INFORMATION ONLY	
AUTHOR: PY	PRODUCT LINE: 15
ADDITIONAL INFORMATION:	

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Situation:

A large proportion of motherboard failures have been caused by stress fractures internal to Q501, the series-pass transistor for the +9 volt power supply.

Since replacement of the motherboard is complex and time consuming, it is best to first check any motherboard failure for proper operation of this supply. If this supply should fail, Error 508 (Synthesizer unlocked) will be generated and no RF power will be seen. The +9 volt LED (DS505) will not be lit, which is easily visible once the cover has been removed. In most cases, replacement of this transistor will restore proper operation with no further calibration required.

Solution/Action:

Relocate the Q501 on the motherboard. There are 2 types of upgrade kit depending on the repair that is required. If the motherboard is defective, and the Q501 also requires relocating, the kit to order is E4400-60220.

If only the Q501 is require for relocating, and the motherboard is still in good condition and does not require replacement, the kit to order is E4400-60229.