

Supersedes:

None

**HP MODEL 5345A ELECTRONIC COUNTER**  
**A13 Boards with Series 1820 and 1912**  
**NOISE ON REG CLK LINE CAUSES MISCOUNTING**

Many IC's on the A13 Adder/Subtractor Assembly were changed from standard TTL to low power Schottky (LS) devices, beginning with board series number 1820. This same type of change was done on A14 boards (05345-60044) and A15 boards (05345-60045), and they also changed to an 1820 series number.

Noise on the REG CLK line can cause miscounting under two presently known conditions: 1) when a new A13 board is placed on an extender board, 2) when a new A13 board is placed in an instrument with older A14 and A15 boards (i.e., pre LS circuitry). To prevent miscounting, order the following capacitor and install it as described.

C4      CF 100pF 20% 200V      HP P/N 0160-3877

Modify the A13 board by soldering the capacitor between pins 7 and 11 of U6 (REG CLK line and ground). All A13 boards with series 1820 and some with 1912 will require this change. Make the appropriate changes to your service manual.

RG/mw/WO

6-79-02

HEWLETT  PACKARD

MEMORANDUM FOR THE DIRECTOR

DATE: 10/15/54

TO: THE DIRECTOR, FEDERAL BUREAU OF INVESTIGATION

RE: [Illegible]

[Illegible]

[Illegible]

WALTER P. [Illegible]

[Illegible]