SERVICE NOTE

SUPERSEDES:

NONE

HP MODEL 5345A A7 LINEAR REGULATOR ASSEMBLY (05345-60007) All Serial Prefixes +15V SUPPLY WILL NOT POWER UP FROM STANDBY

There have been several instances when the +15V supply will not power up when the front panel POWER switch is changed from STANDBY to ON. The supply powers up correctly, however, if the switch is set to ON and the power cord is then removed and reinserted. Another symptom is that when the switch is in STANDBY, there is a small amount of negative voltage on the +15V supply line. The natural tendency is to troubleshoot the +15V supply. The problem, however, is in the -15V supply.

When the power switch is set to STANDBY the regulators in both supplies are electrically shutdown. The most common failure in these cases is that the shutdown circuits in U4 are not working properly and only partially turn off the -15V supply. Through circuits external to A7, a small amount of negative voltage is fed back onto the +15V supply lines and prevents that supply from turning on. Pulling the power cord completely removes this voltage; so when power is reapplied, both supplies power up together.

Again, the most common cause is A7U4. It is also possible to have these same symptoms if A7Q6 or A7Q8 is leaky or if there is a problem in the shutdown circuit: Q3 and Q4 or their associated diodes.

RG/mw/WO

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