523DR-2

## MODELS 523CR/DR ELECTRONIC COUNTERS SERIAL NO. 010-00425 AND BELOW

NOTE

## CONNECTIONS FOR STANDBY OPERATION OF CRYSTAL OVEN

Crystal ovens in @ Models 523CR/DR Electronic Counters under control of the front panel power switch can be easily connected for standby duty, so the oven will remain on when the power switch is turned off.

SERVICE

After modification, the Operating and Servicing Manual for instruments with serial number prefix 319- will be correct for your instrument. The 319- manual was supplied for most instruments with serial number prefix 010.

Instruments already connected for 115 volt standby operation have a resistance of about 1000 ohms across the power cord terminals when the instrument power switch is off; those aranged for complete turn-off will give an open reading.

## WIRING PROCEDURE -

1) Remove instruments' top and bottom covers.

2) Locate the two wires (usually white and blackwhite) which supply 115 vac to the crystal oven heater element. The white wire terminates on the tiepoint terminal strip for the power cord; disconnect the white wire at this point. The other wire may be connected to terminal A1 of the power transformer; if so, remove it. In some instruments, this wire is connected to the junction of the power switch and fuse on the front panel; if so, leave it connected. Do not remove jumpers on crystal oven terminals.

3) Trace the primary power circuit. The connections <u>must be</u> in the following order: From the black wire of the power cord to terminal Al of the power transformer, through the primary winding to terminal A2, through the shielded cable to the power on-off switch S201, through the fuse F202, and back through the shielded cable to the other wire of the power cord. It may be necessary to reverse the cable wires at S201 and F202 to obtain this sequence.

4) Cut to length and connect the white wire for the crystal oven heater element to terminal Al of the power transformer.

5) The other terminal for the crystal oven heater element must be connected to the junction of S201 and F202 through a <u>shielded wire</u>. If you add this shielded wire, run it along the existing shielded wires which run from the oven to S201 and F202. Ground the shield at the tiepoint for the power cord. This completes wiring.

6) Check power cord circuit resistance. Circuit should measure open when front panel fuse F202 is removed, about 1000 ohms when power switch is off (fuse in), and about 10 ohms when power switch is on, based on 115 volt operation.

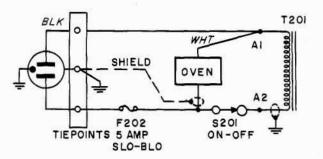


Figure 1. Connections for Standby Operation of Crystal Oven.

PACKARD

distribution abcefg<sub>1</sub> 00735-2 COMPLETE COVERAGE IN ELECTRONIC MEASURING EQUIPMENT