4.1.1 General Procedure Notes

- **a.** Set Power OFF before attempting to dismantle the instrument (for dismantling and reassembly instructions consult Section 3).
- **b.** If Top ground/guard assembly is removed subsequent testing with Power On should be completed in less than 5 minutes to avoid overheating.
- c. After servicing ensure that all connections have been made (Section 3, Fig. 3.6) and that Top and Bottom shields and covers have been replaced. Leave assembled instrument powered-up for at least 1 hour before carrying out any adjustment.
- d. Although replacement assemblies are set up by the manufacturer, the internal adjustments recommended in *Table 4.1* must be carried out to ensure correct operation. These adjustments need to be carried out when the assembly is in the user's instrument, in order to account for interaction between assemblies.

WARNING

HAZARDOUS ELECTRICAL POTENTIALS ARE EXPOSED WHEN THE INSTRUMENT COVERS ARE REMOVED.

ELECTRIC SHOCK CAN KILL!

CAUTION

AFTER ANY MAINTENANCE OPERATIONS WHICH INCLUDE REMOVAL OF TOP OR BOTTOM GROUND ASSEMBLY, CARRY OUT THE FULL SELF-TEST SEQUENCE (Section 2.3) BEFORE RETURNING TO NORMAL USE.

DAMAGE CAUSED BY UNAUTHORISED REPAIRS OR MODIFICATIONS CAN INVALIDATE INSTRUMENT WARRANTY. CHECK THE WARRANTY DETAILED IN THE "TERMS AND CONDITIONS OF SALE". IT APPEARS ON THE INVOICE FOR YOUR INSTRUMENT.

| Category C | Adjustment Following Replacement of PCBs | | | |
|-----------------------------------|---|--------------------------|------------------------|--------------------------------------|
| PCB Assembly | Adjustments | Procedure (Section 4) | Pre-cal (Sect. 1.4) | Routine cal (Sect. 1.2) |
| Terminal | Capacitive Load Test | 4.6 | - | Full |
| Digital | - | - | Full | Full |
| Reference Divider | - | - | Full | Full |
| DC | Capacitive Load Test | 4.6 | - | Full |
| Sine Source | | _ | - | Full |
| AC | Capacitive Load Test Sense Amp zeros | 4.6 4.10 | - | Full |
| Current/Ohms Assembly | Quiescent Current Compliance Resistance | 4.7 4.8 4.4 | _ | All I ranges All I ranges Ohms |
| Power Amp | 100V PA bias | 4.5 | - | - . |
| Mother | Common-mode null | 4.9 | Full | Full |
| Out-guard PSU | Common-mode null | 4.9 | - | Full |
| Heatsinks +ve & -ve | 100V PA bias | 4.5 | - | - |
| Power supply Current Heatsinks | Quiescent Current | 4.7 | - | All I ranges |
| HF or LF Transformer | - | - | - | 1kV Range |
| Mains (line) Transformer | Common-mode null | 4.9 | - | <u>-</u> |

TABLE 4.1c.

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