# SECTION 4 SERVICING & INTERNAL ADJUSTMENTS

## 4.1 INTRODUCTION

This section provides procedures for any maintenance or calibration operations which require removal of covers or partial dismantling. The operations fall into three Categories:

A: Routine Servicing (TABLE 4.1a),

B: Internal Calibration Adjustments (TABLE 4.1b)

C: Adjustment Following Replacement of PCBs (*TABLE 4.1c* - overleaf).

Category A	Routine Servicing				
Servicing Required	Time Interval	Procedure (Section 4)	Calibration Required	Calibration Procedure	
Clean the Air Intake Filter	1 year (or less in adverse conditions)	4.2	-	-	
Change Lithium Battery (non-volatile calibration memory)	5 years	4.3	(a)Full pre-cal then (b)Full routine recalibration	Sect. 1.4 Sect. 1.2	

TABLE 4.1a.

Category B	Internal Calibration Adjustments					
Indication	Adjustment Required	Procedure (Section 4)	Calibration Required	Calibration Procedure		
"ERROR 6" (during Routine Recalibration)	Re-set internal trimmers	4.4	Routine 4-wire & 2-wire Ω	Sect.1.2		

TABLE 4.1b.

#### 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.