Appendix A. Replacement instructions fan

Important notice

This service manual is designed for use by qualified personnel who are experienced in servicing this type of equipment. Because of the possible hazards to an inexperienced person in servicing this product as well as the risk of damage to the product we strongly recommend that all servicing is performed by our field service representatives.
In addition to improve instrument performance changes have been made to the instrument by the manufacturer since this service manual was originally printed. Accordingly we make no representations or warranties either express of implied that the information contained in this service manual is complete or accurate. It is understood that the purchaser must assume all risk in the use of this manual for the purpose of performing service upon the instrument is covers. Components of this instrument which are considered user serviceable are discussed in the manual standard supplied with each instrument.
This instrument contains electrostatic sensitive parts. Always use proper protection against electrostatic discharges, especially when boards are removed and / or components such as integrated circuits, (MOS)FET opamps are handled.

General safety reminders

The following pages summarise cautionary information basic to the safe operation of this instrument. **It is strongly recommended that the user reads the safety practises as they are posted for his safety!** Always take extra care of your test equipment. Be sure to use the right equipment for the right job. Measuring high voltages requires a well insulated high voltage probe.
Damaged probes and cables are dangerous and should be replaced. Also be cautious around test equipment like an oscilloscope. The oscilloscope housing may become live if the cable is connected to a live circuit! **Avoid dangerous situations at all time!**
Basic tips regarding to good electrical safety practises are easy to remember. Combined with good common sense they should keep you on the job for a long time to come.

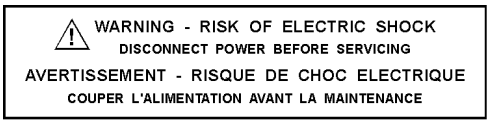
ages in connection with the furnishing, performance, or use of this material.

Safety practices

The following safety practices are intended to insure safe operation of the equipment.

Electrical hazards

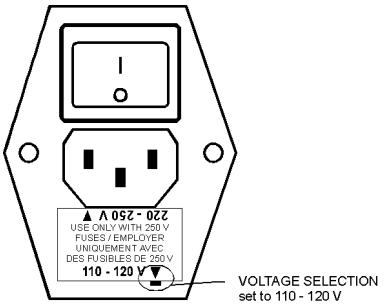
1. Disassembly exposes potentially dangerous voltages. Therefore disconnect the instrument from all power sources before disassembly.



2. Replace blown fuses with size and rating stipulated on the rear panel and in this manual where listed.

WARNING - RISK OF FIRE REPLACE FUSE AS MARKED		
	FUSE RATING	
INPUT VOLTS	UL / CSA	IEC 127
100-120 V 200-240 V	3.2A 250V TL 1.6A 250V TL	T 3.2A 250V T 1.6A 250V

3. Replace faulty or frayed power cords.
4. Check whether the voltage selector is in the correct position. If the triangle with the voltage range is pointing towards the small white block, the system is set to that line voltage. If not correct this insert has to be reversed. Also the fuses are included in the line connector. The correct values are given on the rear panel for the different line sources.

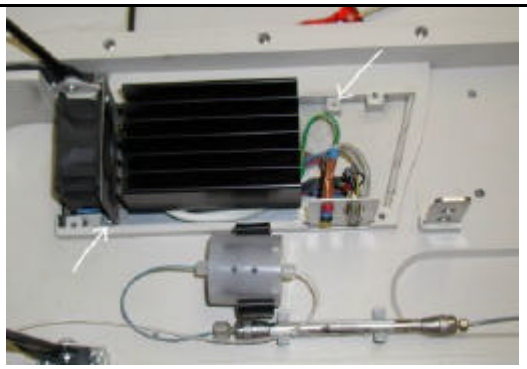
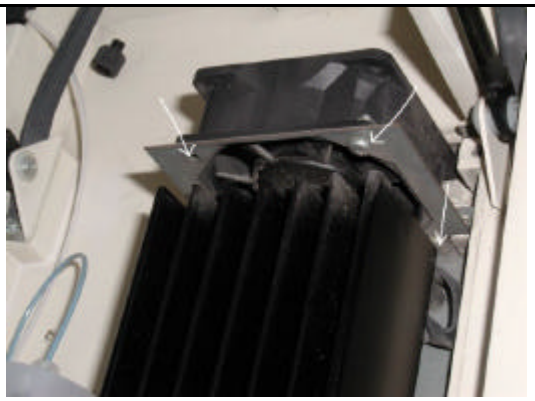


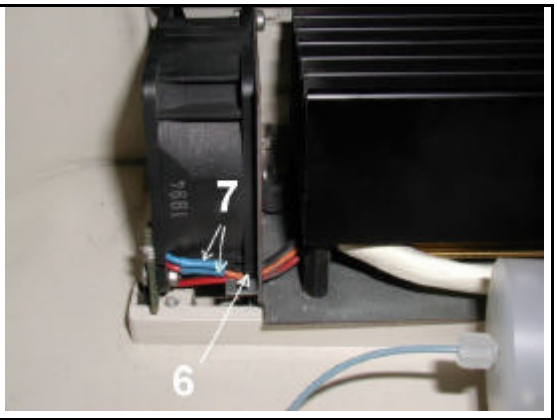
General precautions

1. Perform periodic leak checks on LC tubing and connections.
2. Do not allow flammable and/or toxic solvents to accumulate. Follow a regulated, approved waste disposal program. Never dispose of such products through the municipal sewage system.

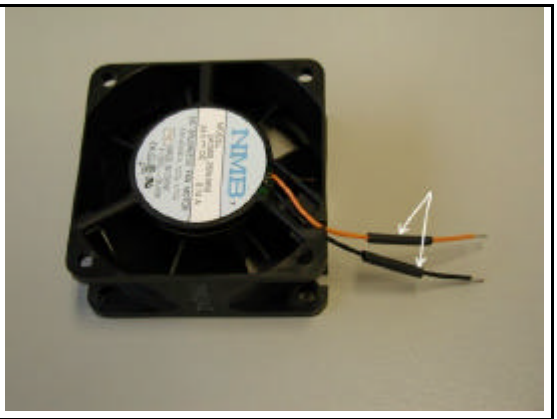
Replacement instructions fan for oven power unit

1. Disconnect the unit from mains power.
2. Remove the oven cover plastic part complete with the metal mazes, notice that they differ in shape, so keep them at the original side.

3. Loosen the oven power unit by removing the four screws in the bottom corners.	
4. Loosen the temperature transducer triangle board.	
5. Remove the 3 bolts and nuts from the fan mounting, one bolt also holds the shielding wire !	

6. Using a sharp cutter, cut the plastic corner of the old fan so that the wires can be released (see new fan for details) do not damage the wires. 7. Cut the orange and black wires from the old fan close to the fan, and strip the insulation of the wires.	

8. Place the new fan and place the 3 bolts and nuts, one bolt also holds the shielding wire !

9. Use the supplied heat shrinkable tube over the wires to prevent short circuit.	

10. Solder the wires from the oven power unit and the fan together.
11. Heat the heat shrinkable tube over the soldered parts.
12. Replace the temperature transducer triangle board using the bolt and nut.
13. Check that the fan runs free from any obstructions.
14. Reassemble the oven power unit by replacing the four screws in the bottom corners.
15. Replace the oven cover plastic part complete with the metal mazes.