

5DX-89

S E R V I C E N O T E

Supersedes:
NONE

5DX Series 5000 Systems

N7271A = SG42710933, SG42710937, SG42710939 – 942, SG42710944 – 947, SG42710949, SG42710951, SG42710953 – 958, SG42710968 – 969, SG42710972 – 973, SG42710975 – 977, SG42710982, SG42710984 – 986, SG42710988, SG42710994 – 995, SG42710997, SG42711000, SG42711002 – 1008, SG42711010 – 1012

N7272A = SG42720929 – 932, SG42720934 – 936, SG42720938, SG42720943, SG42720948, SG42720950, SG42720952, SG42720959 – 967, SG42720970 – 971, SG42720974, SG42720978 – 981, SG42720983, SG42720987, SG42720989 – 993, SG42720996, SG42720998 – 999, SG42721001, SG42721009

Defective Vac Ion Power Supply Failure Can Damage X-ray Tube

Parts Required:

| P/N | Description | Qty. |
|-----------|------------------|------|
| 2110-0907 | Fuse, Time Delay | 1 |

ADMINISTRATIVE INFORMATION

| | |
|------------------------------|------------------|
| SERVICE NOTE CLASSIFICATION: | |
| INFORMATION ONLY | |
| AUTHOR: Joachim Low | PRODUCT LINE: 80 |
| ADDITIONAL INFORMATION: | |

© AGILENT TECHNOLOGIES, INC. 2008
PRINTED IN U.S.A.

April 7, 2008
Rev. 14



Situation:

The Vac Ion Power Supply produces an output of 5kV and is connected to the X-ray tube in order to remove impurities inside the tube and prolong its life. When the Vac Ion Power Supply fails, it may not be immediately noticeable by the user as the unit is located on the underside of the system. If the system continues to operate for more than 10 days with a defective Vac Ion Power Supply, the X-ray tube can be easily damaged.

Without the function of the Vac Ion Power Supply, user may observe a degrading of image resolution and grid voltage over a period of time when Confirmation, Diagnostics and Adjustment procedures are performed. At this point, both the X-ray tube and the Vac Ion Power Supply may be damaged and have to be replaced.

Ensuring the proper functioning of the Vac Ion Power Supply helps to reduce X-ray tube failures.

Solution/Action:

1. During the weekly Preventive Maintenance of the system, verify that the green lamp indicator on the Vac Ion Power Supply is lit.

Figure 1: Green Lamp Indicator on Vac Ion Power Supply



2. If the green lamp indicator is observed to be OFF, pull out the fuse compartment and verify if the active fuse is blown. Note that there is also a spare fuse

Figure 2: Fuse Compartment on the Vac Ion Power Supply

3. If the active fuse is blown and there is no spare fuse available, order a replacement fuse. (2110-0907)
4. If the fuse is functioning but still the green indicator lamp does not turn on, it is recommended to shut down the system and place a service call to Agilent. It may be due to a defective Vac Ion Power Supply or PDU (Power Distribution Unit) that needs to be replaced by Agilent-Qualified personnel.