

SAFETY – IMPLEMENTED DURING NORMAL COURSE
OF PROVIDING SUPPORT

5DX-76-S

S E R V I C E N O T E

Supersedes:
[NONE]

5DX Series 3 and 5000 Systems

Serial Numbers: USxxxxx500 / USxxxxx814

POSSIBLE ELECTRICAL SHOCK HAZARD

WARNING

The Motion Control Servo Modules were not correctly Hi-Pot tested causing a potential electrical safety hazard.

To Be Performed By: Agilent-Qualified Personnel Only

Parts required:

P/N	Description	Qty.
N7200-68706	Surge Suppressor Kit	1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
SAFETY			
ACTION CATEGORY: AGREEABLE TIME		STANDARDS: LABOR: 1.0 Hours	
LOCATION CATEGORY: ON-SITE		SERVICE INVENTORY: SEE TEXT	USED PARTS: SEE TEXT
AVAILABILITY: End of Support			
AUTHOR: Guy Sittler PRODUCT LINE: 80 ADDITIONAL INFORMATION: The N7200-68706 is orderable through SPD (Service Parts Delivery) at 1-800-816-8650. Reference the service note number in the activity description field of the SR.			

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Situation:

For the affected systems within the serial number range referenced above, the Motion Control Servo Modules were Hi-Pot tested at a lower than required voltage, causing a potential electrical safety hazard.

Systems with serial numbers greater than the range above incorporate production changes to the Motion control servo modules, and have been hi-pot tested to the required values.

Solution/Action:

Installing service kit N7200-68706 limits transient surge voltages present at the servo modules to a value less than the original hi-pot test voltage, thereby assuring safe operation during transients.

Warning labels applied to Motion Control Servo Modules in affected systems reduces the possibility of inadvertent use in later systems without the E1135-67900 surge suppressor.

Installation instructions on next page:

Installation instructions for N7200-68706 service kit:

Tools Required: Flat-blade screw driver and T-25 Torx driver

Shut down the System

- 1) Perform the 5DX System Shutdown procedure found in the System Administration Guide.

WARNING:

High Voltages are present. Follow the “Lock-Out, Tag-Out” procedure found in the “System Administration Guide”.

Install the service kit

- 1) Open the door that allows access to rear of the **Electronics Cabinet**.
- 2) Remove the Electronics Cabinet right side panel by removing the Torx screws located at the bottom of the panel.
- 3) The E1135-67900 will be installed in the space between the E1135C PDU and the rear of the Motion Control Assembly (MCA) on the bottom of the Electronics Cabinet; see Figure 1 below.

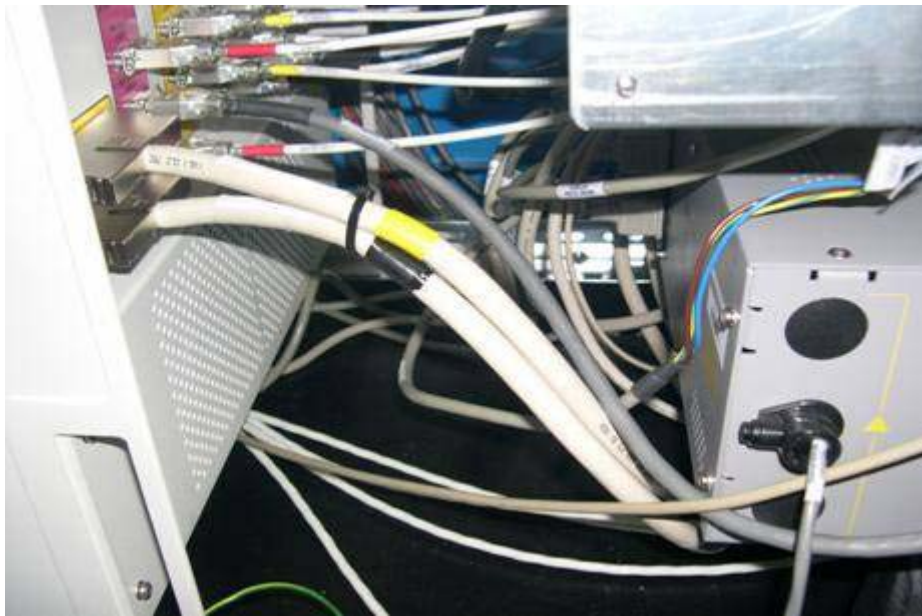


Figure 1: Space between E1135C PDU and MCA

- 4) Disconnect the four Servo module AC mains cords from the E1135C PDU outlets numbered 5, 6, 7, and 8 at the back on the top row. Put the cords to one side of the rack as they are disconnected so that they are out of the way and easy to find in a later step. Each cord is labeled as follows:

Cord 1: X-motor 5
Cord 2: R-motor 6
Cord 3: Y1-motor 7
Cord 4: Y2-motor 8

- 5) Using caution not to put undue stress on connectors, arrange the cables inside the Electronics Cabinet bottom so as to clear an area for the surge suppressor unit
- 6) Use a wipe on the cleared area from step 4 above to clean any dust from the inside bottom panel of the Electronics Cabinet.
- 7) Remove the protective covering from the double-stick mounting tape on the bottom of the surge suppressor unit. A photo of this tape is shown in Figure 2 prior to the removing the protective covering from the tape.



Figure 2: Bottom of Suppressor Showing Covered Two Sided Tape

- 8) Position the unit in the area cleared in step 4 and 5 above and press on the unit to secure the adhesive. Figure 3 shows the installed unit.



Figure 3: Installed Surge Suppressor Unit

- 9) Connect the cords from the surge suppressor unit with male IEC connectors to the E1135C PDU outlets numbered 5, 6, 7, and 8 as specified on the labels shown below:

Male AC connector 1, labeled as: E1135 AC outlet #5

Male AC connector 2, labeled as: E1135 AC outlet #6

Male AC connector 3, labeled as: E1135 AC outlet #7

Male AC connector 4, labeled as: E1135 AC outlet #8

- 10) Connect the cords from the unit with female IEC connectors to the male cords set aside in step 3 as specified on the labels shown below:

Female AC connector 1, labeled as: X-motor 5 connects to male AC connector labeled with the same.

Female AC connector 2, labeled as: R-motor 6 connects to male AC connector labeled with the same.

Female AC connector 3, labeled as: Y1-motor 7 connects to male AC connector labeled with the same.

Female AC connector 4, labeled as: Y2-motor 8 connects to male AC connector labeled with the same.

- 11) Remove “Lock-Out, Tag-Out” devices.
12) Turn on the PDU (E1135C)
13) Use the flat-blade screwdriver to loosen the two cover screws on top of the surge suppressor unit and open the hinged cover.
14) Locate the four LED status indicators on top of the modules marked “MA15”. Verify that they are illuminated with the 5DX powered on.
15) Close the hinged cover on the surge suppressor unit and use the flat-blade screwdriver to tighten the two cover screws on top of the unit.
16) Arrange the power cords on top of the Surge Suppressor.
17) Open the door that allows access to front of the Electronics Cabinet.
18) Open the drop-down cover over the front of the MCA assembly.

- 19) Install the N7200-84367 alert labels from the service kit below the Product ID labels on the front of the Servo modules that read “Servo Module...Agilent P/N: N7200-00002. Repeat on all four servo modules. Refer to the following figures for the correct placement of this label.



Figure 4: Installed N7200-84367

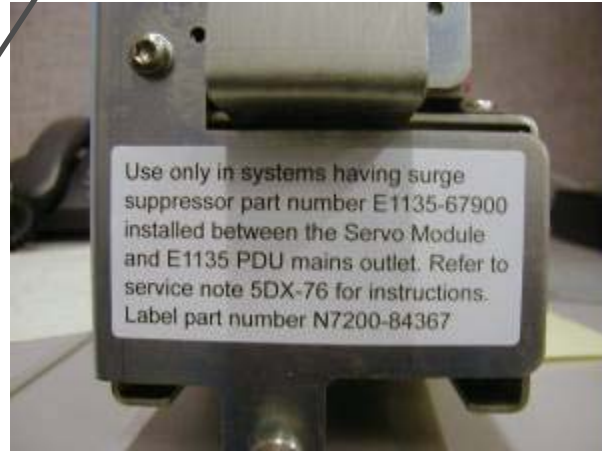


Figure 5: Close up of Installed N7200-84367 Label

- 20) Close the MCA drop-down cover.

Start up the System

- 1) Perform the 5DX System Startup procedure found in the System Administration Guide
- 2) Close the rear Electronic cabinet access door.
- 3) Install the right side Electronic cabinet panel.

Once you have completed the installation and verification of the Surge Suppressor Kit, fill out and affix the Service Note label (Part Number N7200-84366) to the 5DX System. The following photo shows the location of the label area on the 5DX cabinet.

Note: The N7200-84366 label located to the lower right of the existing labels in the photo below.



Figure 6: Detailed view of N7200-84366 service note label installed at lower right of label area

- After completion of this Service Note send an email with the Service Note number and the 5DX Serial number to to: MTBUSERVICENOTES@agilent.com