

S E R V I C E N O T E

SUPERSEDES: None

**5DX Structural Process Test Systems Series I, II and 2L**

**Potential Cabinet X-Ray Emission**

**WARNING**

**Possible X-Ray Radiation Hazard**

**Serial Numbers:** USXXXXXX101 / USXXXXXX350

Small lead shields in the 5DX, which are glued in place, may experience failure of the glue and become displaced, resulting in unacceptable levels of X-ray radiation leakage from the system.

**To Be Performed By:** Agilent-Qualified Personnel

**Parts Required:**

P/N	Description	Quantity
E7200-60203	Latch Bracket Lead Kit	1

*Continued*

DATE: June 2000

**ADMINISTRATIVE INFORMATION**

SERVICE NOTE CLASSIFICATION:			
<b>PRIORITY SAFETY</b>			
ACTION CATEGORY: <b>IMMEDIATELY</b>		STANDARDS: 5.0 LABOR	
LOCATION CATEGORY:	<input checked="" type="checkbox"/> ON-SITE <input type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT
AVAILABILITY:	ALWAYS	USED PARTS:	<input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT
AUTHOR: GS	ENTITY: 0980	AGILENT RESPONSIBLE UNTIL : ALWAYS	
ADDITIONAL INFORMATION: Order E7200-60203 from ATLS.			



The E7200-60203 kit includes:

P/N	Description	Quantity
E7200-00619	Latch Bracket Lead Shield	6
E7200-01267	Latch Bracket Lead Shield Clamp	6
2940-0310	Tamper Proof Screws	12
3050-1909	Lock Washers	12
0470-2915	Loctite 262	1
	Set Screws (10-32 1/4" cone point)	12
E7200-84348	Service Note Verification Label	2
E7200-90076	X-ray Safety Test Report	2
9230-0319	Return Envelope	2
E7200-84349	Address Return Label	2

**Situation:**

A lead shield mounted on the latch brackets inside of the 5DX at the side access panels can fall off. There are six of these pieces per 5DX. These pieces were glued on and the glue can break down over time. This creates a potential for an X-Ray Radiation emission.

**Solution / Action:**

Implement this service note before doing an X-Ray Survey

**Note**

There are either three or six latch brackets and lead shields per 5DX. The kit has parts to do six latch brackets.

*Continued*

**Tools Needed:**

Hammer  
Chisel or flat-blade screwdriver  
5/32" tamper-proof bit  
1/4" open-end wrench

1. Locate lead shield. Lead shields are located inside main cabinet at each side access panel. See Figure 1.

**Note**

Systems 102 through 104 may have a lead plug over each rivet instead of the lead shield as shown in Figure 1. If the system has lead plugs, do NOT perform this service note upgrade.



**Figure 1. Existing 5DX with old lead shield**

*Continued*

2. Remove existing Lead shield using a chisel and hammer. See Figure 2.



**Figure 2. Existing 5DX with old lead shield removed**

3. Install new lead shield

**Note**

Verify that the Access Door latch pin is engaged such that the full latch pin diameter is through the mating hole in the latch plate. In rare circumstances the upper edge of the Lead Shield may need to be notched so the latch pin is fully engaged. See Figure 3.

*Continued*



**Figure 3. 5DX with new Lead Shield installed**

4. Put 262 Loctite onto the two Lead Shield Clamp set screws.



**Figure 4. Lead Shield Clamp and Set Screws**

*Continued*

5. Install Lead Shield Clamp such that the clamp is resting on the base of the cabinet.

**Note**

Lead Shield Clamp fits over Cabinet Latch Plate Bracket

6. Tighten Clamp set screws.

**Note**

Press the Clamp firmly against the Lead Shield to secure the Lead Shield in place.



**Figure 5. 5DX with new Lead Shield and Clamp Installed.**

7. Place a lockwasher on each tamper proof screw.
8. Tighten the two tamper proof screws with the tamper proof bit and 1/4 inch wrench such that the head of each screw is flush against the lock washer and Clamp.

**Note**

If the tamper proof screw is not tight against the washer and Clamp, you **MUST** remove the tamper screws and further tighten the inner set screws so the tamper screw can tighten flush against the lock washer and Clamp.

*Continued*



**Figure 6. Installing the Tamper Proof Screws.**

9. Repeat this for all three or six brackets.
10. Place the sticker that indicates Safety Service Note 5DX-50-S has been performed under the system Serial Number sticker on the base of the system.



**Figure 7. Safety Service Note 5DX-50-S Compliance Sticker.**

*Continued*

11. Perform a complete system X-ray survey
12. Complete X-ray Safety Test Report, part number E7200-90076. Check 'Other' on report and write SN-5DX-50-S and CSO number. Include the Customer Address on the report. (This is required).
13. Send report to the attention of: 5DX Support Manager.

All old or unused lead should be recycled properly or returned to Agilent.