5DX - 72

S E R V I C E   N O T E

Agilent 5DX Systems
Series 3 Service/Reliability Enhancement

Serial Numbers: USXXXX100 - USXXXX654

Replacement screws are available should those holding the Z - linear rails come loose.

To Be Performed By: Agilent-Qualified Personnel or Customer

Parts Required:

P/N	Description	Qty.
0515-2801	Z-rail Screw	12
2190-0073	Z-rail Lock Washer	12

Situation:
The screws used to mount the Fixed Rail and Adjustable Rail to the Z-linear rails can become loose, which can cause the rails to contact the screw head. This causes the stage to be limited in its z-motion causing alignment and surface mapping errors. Often this appears as an intermittent problem.

Solution/Action:
Remove the screws one at a time that hold the adjustable and fixed rail to the Z-linear rails and add the new screws (0515-2801) and lock washers (2190-0073). These should be set to 45 inch pounds. If you do not have a torque wrench, tighten these screws very tight. There are twelve screws and twelve lock washers, six sets on the fixed rail and six sets on the adjustable rail. See Figure 1 for identification of the affected screws on the Z-linear rails.

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:	
MODIFICATION AVAILABLE	
ACTION CATEGORY: AGREEABLE TIME	[[]] PERFORMANCE ENHANCEMENT X SERVICE / RELIABILITY ENHANCEMENT
LOCATION CATEGORY: X CUSTOMER INSTALLABLE X ON-SITE [[]] SERVICE CENTER	AVAILABLE UNTIL: End of Support
AUTHOR: BRG PRODUCT LINE: PL80	
ADDITIONAL INFORMATION:	

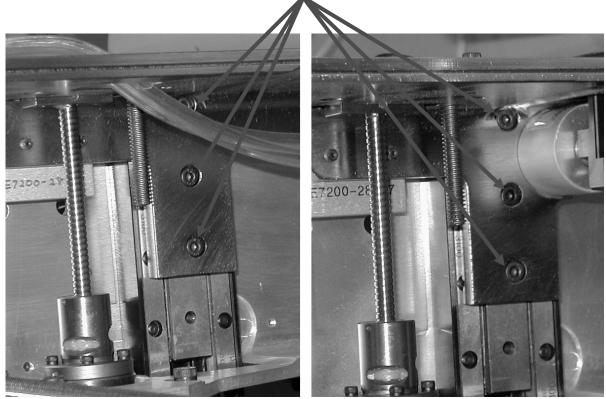∴∴ **Agilent Technologies**

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Figure 1: Identification of the Z-linear rail Screws

These screws and washers are set up and orderable through GTLS. Time and material should be charged to contract where applicable.

After the screws are replaced, run **lsmztest** from the command prompt to verify that the rails are properly aligned.

NOTE: Do not add Loctite to the screws. Loctite can cause the linear rails to bind.