

MODIFICATION AVAILABLE – SERVICE/RELIABILITY ENHANCEMENT  
CHARGEABLE TO CONTRACT IF THERE IS ONE.

**5DX- 59**

# **S E R V I C E N O T E**

## Agilent 5DX Systems Series 3 Service/Reliability Enhancement

Serial Numbers: USXXXX500/USXXXX612

### 65 Volt Upgrade to Improve Z-motor Performance and Reliability

To Be Performed By: Agilent-Qualified Personnel

#### Parts Required:

P/N	Description	Qty.
N7200-69020	65 Volt Upgrade Kit	1

#### Situation:

Some Series 3 5DX systems have experienced intermittent Z-axis stoppages. One possible problem could be that the Z-axis stepper motors need more power. Series 2L systems used 65 volts to power the stepper motors while the affected Series 3 systems only use 48 volts. The typical symptom experienced is a sudden stalling out of the stage as it is exercised along the Z-axis. Service Note 54 provided a means of adjusting this voltage to 55 volts. However, this voltage may still not be sufficient to solve all problems.

#### Solution/Action:

If this problem is experienced, verify that the symptom is not a result of a stepper motor failure or failure of other Z-axis hardware. Also check for any loose stage components that might be leading to an alignment problem. If possible test the Z-axis with different weight boards. If insufficient voltage is the problem, it will likely appear in the heaviest boards first Very light boards should operate without incident.

## ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		
<b>MODIFICATION AVAILABLE</b>		
ACTION CATEGORY:	AGREEABLE TIME	<input type="checkbox"/> PERFORMANCE ENHANCEMENT <input checked="" type="checkbox"/> SERVICE / RELIABILITY ENHANCEMENT
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input checked="" type="checkbox"/> ON-SITE <input type="checkbox"/> SERVICE CENTER	AVAILABLE UNTIL: End of Support
AUTHOR: BRG    PRODUCT LINE: 5DX		
ADDITIONAL INFORMATION:		

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An upgrade kit has been created to increase the voltage supplied to the motors to 65 volts. This kit provides all the materials needed to upgrade both 48 and 55-volt systems. If the cause of the Z-axis stoppages is isolated to insufficient voltage, order the 65 volt upgrade kit (PN N7200-69020) prior to the next scheduled maintenance visit, and perform the upgrade while onsite. The CE should charge his labor and material costs to a Service Contract where applicable.

Because this upgrade kit is set up as an exchange part, be sure to return the Digital I/O assembly according to the standard exchange part process.