TB0239 Fault Finding G Axis Stalling

Faults on the G axis on a Flowline / ZX / Microline have proved to be a little difficult to trace. It is easy to follow a red herring and change the wrong component.

Contents

Technical Bulletin

TB Number:	238
Originator:	Gareth Green
Machine:	Flowline, Microline, ZX
Date:	27/11/13
Circulate to:	Service
Title:	Fault Finding G Axis Stalling

Detail

Faults on the G axis on a Flowline / ZX / Microline have proved to be a little difficult to trace. It is easy to follow a red herring and change the wrong component.

Symptoms

Code	Description
AX001	Not Datuming: G Axis
AX002	Not Datuming: X Axis
AX016	Error Message: Wait 20 Seconds
AX017	Gripping position on profile inconsistent
AX018	Noise / Vibration from Gripper Stepper Motor

Actions / Checks

Code	Description	Tick
DOCKOFFSET	Check Dockoffset Parameter Correct	
CHK_AX001	Check G Axis Leadscrew Bearings and nut tension	
CHK_AX002	Check G Axis Beam is Parallel	
CHK_AX003	Check G Axis End Stops exist for both forward and reverse travel and are set correctly. What happens if G axis overruns? Any Blockages?	
CHK_AX004	Check G Axis Belt Tension and position of joiner block in relation to end of travel	

CHK_AX005	Check function of G axis Stepper Motor (Assuming mechanics are all ok)	
CHK_AX006	Check SA14 G Axis Stepper drive unit - Blackened connectors / internal D110 Stepper Card / Internal Power Supply / External Fuse	
CHK_AX007	Check G Axis Power Cables for continuity on all 4 or s/c to earth	
CHK_AX008	Check lubrication of G axis, should move comfortably by hand via toothed belt when motor de-energised	
CHK_AX009	Check Function of datum switch and mechanical setting. Is it sticky? Is it set too far out?	
CHK_AX010	Check leadscrew coupling grubscrews	
CHK_AX011	Check integrity of Step and direction signal cables. Check under heatshrink as excessive heat can melt the cable insulation on original assembly	