

## Ballscrew Troubleshooting Inspection Report

Technician		Cell#	
Serial Number		Date	
Model			

### Ballscrew

What Axis is the ballscrew?			
What is the brand of the ballscrew?			
What type of bearing pack do they have?	Bearing pack (old)	Cartridge Bearing (new)	
What type of coupler is installed?	Flex Coupling	Solid Coupling	Spider Coupling

### Why is the Ballscrew being replaced?

1a. What alarms are generated?		1b. Does the alarm reset?	Yes	No
1c. When does the alarm occur?		1d. Have you submitted a video of the original issue to service?	Yes	No
1e. Have you submitted an error report?	Yes No			
2a. Is the ballscrew physically damaged?	Yes No	2b. Are the support or motor housing bearings damaged? Bearings should feel smooth by hand.	Yes	No
2c. Do the support or motor bearings need to be replaced?	Yes No			

3. Other - Describe the issue:

### Mandatory Troubleshooting

4. Did you check the ballscrew for correct lubrication?	Yes	No		
5. Is the correct lubrication being used?	Yes	No	Lubrication Used:	
6. Did you check the ballscrew and ballnut for damage? Has it been crashed?	Yes	No	Yes	No
8. Observe Axis Servo load while Jogging axis in question through full travel. A properly aligned Ball Screw will exhibit consistent servo loads throughout its travel.	Load % Range:			
	Please describe the behavior:			
9. Can you physically feel the ballscrew binding (turning by hand)?	Yes	No		
10. If this machine is a GM-2 with dual ballscrews and you experience high loads while jogging the X-axis. Did you complete an <b>inspection report</b> and submit an <b>error report</b> to service? <b>DO NOT</b> make geometry adjustments before consulting with service. What is the Load range for both the F1 and X axis	Inspection Report		Error Report:	
	Ye	No	N/A	Yes
	No	N/A	Yes	No
	N/A	Motor	Middle	Support
10a. Verify the breakaway torque value (this value will be in in-lbs) at the motor end, middle of travel and support end for both X and F1 axis ( <b>GM-2 dual ballscrew only</b> ). Check N/A box if this does not apply to your machine.	X:			
	F1:			
11. Are there LSC files active on the machine? (Parameter X.319)	Yes	No		
12. Have you verified ballscrew backlash?	Yes	No	Backlash value:	
13. Has a ballbar plot been taken and submitted to service?	Yes	No		
14. Is there humming present?	Yes	No		
15. For axis humming have you visited the axis humming troubleshooting guide? Have you visited the ballscrew troubleshooting guide	Yes	No	Yes	No
16. Did you download and install the latest configuration files for the machine?	Yes	No		

### Notes/ Observations:

**Attach this report, an error report, and any relevant documentation to a service notification in the Haas Service App.**