Servo Motor Troubleshooting Inspection Report

Technician		**Cell#**	
Serial Number		**Date**	
Model			

Servo Motor Type and size

Type	**Size**

Why is the Servo Motor being replaced?

1a. What alarms are generated?	**1b.** Does the alarm reset?	
1c. When does the alarm occur?		
2. Is the Motor physically damaged?		

3. Other - Describe the issue:

Mandatory Troubleshooting

4a. What is the incoming voltage to the machine? Measure the incoming voltage at the main circuit breaker and record the measured values below.

L1-L2	*L2-L3*	*L1-L3*	*L1-GND*	*L2-GND*	*L3-GND*

4b. What is the main transformer tap setting.	
5a. What was the measured DC BUSS output voltage?	
5b. Does the DC Buss gauge in diagnostic match the actual measured DC BUSS voltages?	

8. Power OFF. Wait for the Vector Drive to fully discharge. Disconnect all the cables from the Motor. With a Multimeter set to Ohms measure and fill out the readings below (for chassis point, use one of the screw heads from the power connector):

A-Phase pin to GND (Chassis)	*B-Phase pin to GND (Chassis)*	*C-Phase pin to GND (Chassis)*

9. For servo motors used for Spindle applications. Did you check Y/D wiring?	
10. Did you check the Servo Amplifier that drives this motor for shorts?	
11. Did you check the power cable for shorts to chassis and phase to Phase?	
12. Did you check the Vector Drive for shorts to chassis?	
13. What Axis is this servo motor used ?	
13. Did you inspect the axis servo amp command cable to make sure that the pins and connectors are in good condition?	
14. Is there a ferrite filter installed on the encoder cable at the Maincon end for the axis being troubleshot?	
15. Are there ferrite filters installed on the output cables from the servo amps?	
16. Are there ferrite filters installed on the output cables of the drive and REGEN cable?	
17. For servo motors equipped with Brake, did you measure the 24Vdc at the I/O PCB?	
18. Did you inspect the Motors encoder connector at the Maincon and Motor end?	
19. Did you inspect the Motors Encoder cable for broken or pinched insulation?	
20. Are there any encoder pins pushed into the motors body?	
21. When rotated by hand, does the motor shaft rotate smoothly?	
22. Did you download and install the latest configuration files for the machine?	
23. Was the troubleshooting information in the Haas Service Page useful and complete?	

Notes/ Observations:

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