Technician	Spindle Motor Inspection	Repo	r <b>t</b>		
recimician			Cell#		
Serial Number			Date		
Model					
	Type of Spindle Motor				
What is the spindle taper?	20 30			HSK	
. What is the spindle motor RPM?	4k 6k 7.5k 8.1k 10k	12k	15k 18k	20k	30k 50k
. Is the spindle motor inline or belt driven?		Inline	Belt		
. What is the machine's software version?	W				
Mhat alawaa aya waxayatad	Why is the Spindle Motor being rep	laced?			
. What alarms are generated?					
. When does the alarm/symptom occur? . Is the alarm resettable?		Yes	No		
Is the spindle motor physically damaged?		Yes	No		
. To the opinion motor physically duringed:	9. Other - Describe the issue:		110		
	Spindle Motor Troubleshootin	ig			
<b>0.</b> Does the spindle motor run?				Yes	No
10b. If so, does the issue occus while the	e spindle motor is running?			Yes	No
10c. Is there excessive noise while the s	pindle motor is running?			Yes	No
10d. For Inline motors only: Is there a				Yes	No
1. Is the program too aggressive for the spin-				Yes	No
2. For TSC machines only: Has the TSC ur				Yes	No
	d, has the union been upgraded to the compe	nsating?		Yes	No
3. Has there been a vibrational analysis test?				Yes	No
4 11 11 15 1	Electrical Troubleshooting			<u> </u>	N
14a. Has the J-Box been inspected?				Yes	No No
14b. Does the temperature sensor work?  14c. Are all the connections secure?				Yes Yes	No
5. Have you tested the following:				165	INU
15a. Secure cable connections?				Yes	No
				Yes	No
	-			Yes	No
15b. Spindle fan?					
15b. Spindle fan? 15c. Vector drive?				Yes	No
15b. Spindle fan? 15c. Vector drive? 15d. Regen?				Yes Yes	No No
15b. Spindle fan? 15c. Vector drive? 15d. Regen? 15e. Wye/Delta?	or wear or damage?				
15b. Spindle fan? 15c. Vector drive? 15d. Regen? 15e. Wye/Delta?				Yes	No
15b. Spindle fan? 15c. Vector drive? 15d. Regen? 15e. Wye/Delta? 6a. Has the encoder system been checked for 16b. Has the encoder feedback been checked.	ecked for accuracy?			Yes Yes	No No
15b. Spindle fan? 15c. Vector drive? 15d. Regen? 15e. Wye/Delta? 6a. Has the encoder system been checked for	ecked for accuracy? the encoder pulley/belt been inspected?			Yes Yes Yes	No No No
15b. Spindle fan? 15c. Vector drive? 15d. Regen? 15e. Wye/Delta? 6a. Has the encoder system been checked for 16b. Has the encoder feedback been checked for 16c. For GB with belted encoder: Has	ecked for accuracy? the encoder pulley/belt been inspected?			Yes Yes Yes	No No No
15b. Spindle fan? 15c. Vector drive? 15d. Regen? 15e. Wye/Delta? 6a. Has the encoder system been checked for 16b. Has the encoder feedback been checked for 16c. For GB with belted encoder: Has	the encoder pulley/belt been inspected? for within the encoder?  Motor Ohm Out Test			Yes Yes Yes	No No No
15b. Spindle fan? 15c. Vector drive? 15d. Regen? 15e. Wye/Delta? 6a. Has the encoder system been checked for 16b. Has the encoder feedback been checked 16c. For GB with belted encoder: Has 16d. Has runout and play been checked 7. Measure between motor leads or terminals T1 & T4:	the encoder pulley/belt been inspected? for within the encoder?  Motor Ohm Out Test s and enter the value in ohms:  T2 & T5:			Yes Yes Yes Yes Yes Yes T3 & T6:	No No No
15b. Spindle fan? 15c. Vector drive? 15d. Regen? 15e. Wye/Delta? 6a. Has the encoder system been checked for 16b. Has the encoder feedback been checked 16c. For GB with belted encoder: Has 16d. Has runout and play been checked 7. Measure between motor leads or terminals	the encoder pulley/belt been inspected? for within the encoder?  Motor Ohm Out Test and enter the value in ohms:			Yes Yes Yes Yes Yes Yes	No No No
15b. Spindle fan? 15c. Vector drive? 15d. Regen? 15e. Wye/Delta? 6a. Has the encoder system been checked for 16b. Has the encoder feedback been checked 16c. For GB with belted encoder: Has 16d. Has runout and play been checked 7. Measure between motor leads or terminals T1 & T4: T2 & T4: T3 & T5:	the encoder pulley/belt been inspected? for within the encoder?  Motor Ohm Out Test and enter the value in ohms:  T2 & T5: T3 & T4: T1 & T6:			Yes Yes Yes Yes Yes Yes T3 & T6:	No No No
15b. Spindle fan? 15c. Vector drive? 15d. Regen? 15e. Wye/Delta? 6a. Has the encoder system been checked for 16b. Has the encoder feedback been checked 16c. For GB with belted encoder: Has 16d. Has runout and play been checked 7. Measure between motor leads or terminals T1 & T4:  T2 & T4:  T3 & T5:  8. Measure between each individual motor leads and the spin services of the spin servi	the encoder pulley/belt been inspected? for within the encoder?  Motor Ohm Out Test s and enter the value in ohms:  T2 & T5:  T3 & T4:  T1 & T6:  and or terminal and the motor's armature:			Yes Yes Yes Yes Yes Ta & T6: T1 & T5: T2 & T6:	No No No No
15b. Spindle fan? 15c. Vector drive? 15d. Regen? 15e. Wye/Delta? 6a. Has the encoder system been checked for 16b. Has the encoder feedback been checked 16c. For GB with belted encoder: Has 16d. Has runout and play been checked 7. Measure between motor leads or terminals T1 & T4: T2 & T4: T3 & T5:	the encoder pulley/belt been inspected? for within the encoder?  Motor Ohm Out Test and enter the value in ohms:  T2 & T5: T3 & T4: T1 & T6:			Yes Yes Yes Yes Yes Ta & T6: T1 & T5:	No No No No No Sisis:

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