

Programmable Coolant Inspection Checklist

Technician		Cell#	
Serial Number		Date	
Model			

Describe Customer's Issue

WARNING

OPENING THE COVER OF THE PCOOL UNIT IS NOT A RECOMMENDED STEP IN THIS INSPECTION

Initial Questions

What alarms are being generated?		
When does the alarm occur?		
Error report	Attached	
Attach video/photo of issue if it can be replicated.	Attached	N/A

Alarm Troubleshooting

1. Clean the P-Cool nozzle of chips or debris.		
2. Are there signs of external damage to the pcool?	Yes	No
3. Does the unit look as if it has been opened by the customer?	Yes	No
4. Inspect the swivel fitting on the nozzle. Can it be rotated and adjusted?	Yes	No
5. Will the P-Cool home itself? Place the nozzle in position 34 and power cycle to home the P-Cool.	Yes	No
6. Monitor Input 50. Does the value change at each P-Cool position?	Yes	No
7. Monitor analog Input 34. Does the value change at each position?	Yes	No
8. Monitor outputs 61 and 62. Do the values change when positions are commanded?	Yes	No
9. Visually inspect the cable assembly for any cut, pinch, damage or if plug and pins are seated		
10. Is there continuity through all four wires in the P-Cool cable from the unit to the spindle head bracket? Note differences below.	yes	no
11. Measure resistance across pins 3 (black) and 2 (brown) on the on the Pcool connector at the spindle head bracket while commanding the next position. Does the meter alternate between a value and OL.	yes	no
12. Does the switch, pins 4 (white) and 2 (brown), measure 12 volts at each of the 34 positions. Note differences below.	yes	no
13. Measure the continuity from pin 4 (white) to the following pins; 1 (Blue), 2 (Brown), 3 (Black). Is there continuity across these pins in at a resting state.	yes	no
14. Use the PCOOL_SWEEP_COLLECT Data collection program and upload the resulting .XML file. (Follow set up instructions in the troubleshooting guide)	Attached	
15. Use the PCOOL_STEP_COLLECT data collection program and upload the resulting .XML file. (Follow set up instructions in the troubleshooting guide)	Attached	

Coolant Troubleshooting

17. Verify the ball valve on the spindle head fully open.		
18. Clean or replace the auxillary or standard filter.		
19. Remove the coolant check-valve and check it for blockage.		
20. Make sure the trap door opens and closes freely.		
20. Take a video of the flow out of the nozzle	Attached	N/A

Notes/ Observations:

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