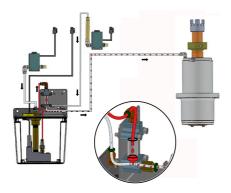


Spindle Minimum Lubrication System - Troubleshooting Guide

LAST UPDATED: 10/27/2023

# **Spindle Minimum Lubrication System** - Troubleshooting Guide

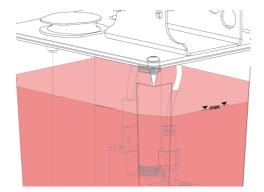
## Introduction



# Symptom Table

Symptom	Possible Cause	Corrective Action
Low Lube Icon	The Low Spindle Lube Oil Level sensor input was 1 more that 75% of the time when the Spindle Lube pump was On.	Make sure the reservoir has enough oil. Inspect the Oil level sensor on the tank. Go to <b>DIAGNOSTIC&gt;I/O tab</b> . Search for <b>Input 49 LOW_SPINDLE_LUBE_OIL_LEVEL</b> , make sure the bit toggles when the oil level sensor is tripped.
Alarm <b>805</b> LOW SPINDLE LUBRICATION.	The reservoir oil level is low.	Refill the reservoir.
	The oil level sensor is faulty.	Test the oil level sensor.
Hot, Noisy, or Failed Spindle	The reservoir is filled with the incorrect oil type.	Refill the reservoir.
	There are leaks in the fittings.	Inspect the fittings for leaks.
	The lubrication tube is damaged.	Inspect the lubrication tube for damage.
	A solenoid is not functioning.	Test the air and lubrication solenoids.
	Incorrect oil flow.	Perform an oil collection test.

## Oil Level

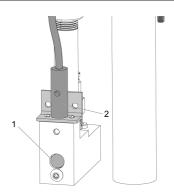


#### **Corrective Action:**

Refill the oil reservoir with Mobil SHC 625. If Mobil SHC 625 is not available, use Mobil 1 5W-20 or Mobil 1 10W-30.

Refer to the LUBRICANT TABLES.

### Sensor

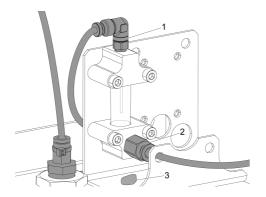


#### **Corrective Action:**

Make sure the oil float [1] moves freely.

Go to <u>PROXIMITY SENSOR</u> - <u>TROUBLESHOOTING GUIDE</u> to troubleshoot the proximity sensor [2].

### Leaks

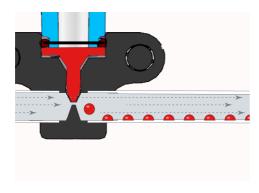


#### **Corrective Action:**

Examine the fittings [1,2] on top of the oil pump tank. The oil collects on top of the oil pump tank [3] either behind or in front of the sight glass bracket, underneath the leaking fitting. Fully seat the hose(s) into the fitting(s). Check the end of the hoses to make sure they are cleanly cut. Tighten or replace any leaking fittings.

Note: Do not disconnect the oil filled hoses unless there are still leaks after reseating the hoses into the fittings as this can introduce air in hoses which will need to be purged before checking for correct pump operation.

### **Lubrication Tube**



#### **Corrective Action:**

Examine the lubrication tube between the lube panel and the spindle for kinks, splits, or pinches.

Make sure you can see oil droplets in the tube.

Replace the tube if it is damaged.

## Voltage



#### **Corrective Action:**

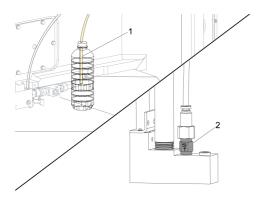
Use a multimeter or voltage detector to measure voltage at the solenoid connector while you do the Spindle Lubrication Test:

- **Next Generation Control:** Press **[DIAGNOSTIC]**. Cursor to the Maintenance and Lube tabs.
- Classic Haas Control: Press [PARAM DGNOS] (2) times and cursor to the LUBE tab.
- Press **[F3]** to start the 30 second Spindle Lubrication Test.

If the multimeter or voltage detector does not show 120 VAC during the test, refer to:

- NEXT GENERATION CONTROL I/O PCB TROUBLESHOOTING GUIDE
- I/O PCB TROUBLESHOOTING GUIDE (CLASSIC HAAS CONTROL)

## Oil Collection Test



#### **Corrective Action:**

Perform an oil collection test [1]. Refer to <u>MILL</u> - <u>SPINDLE - LUBRICATION OIL - COLLECTION</u> <u>TEST</u>.

If the oil supply is insufficient, and all other functions have been checked, replace the flow meter [2] in the oil pump.

**Note:** Make sure to assemble the flow meter with the arrow pointing toward the hose as shown.