



Minimum-Quantity Lubrication - System Purge

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Translation Available



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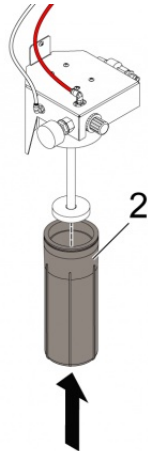
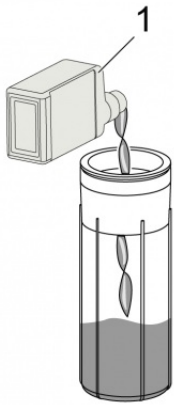
The Minimum-Quantity Lubrication (MQL) system supplies oil to the tool. The MQL system has tubes that supply the oil. Air can get into the tubes. This procedure shows you how to remove the air from the tubes.

Prerequisites

Do this procedure at these times:

1. Before you operate the system for the first time.
2. After you try to operate the system with the oil reservoir empty.
3. After you change fluids.

STEP 1



Fill the oil reservoir with MQL lubricant [1].

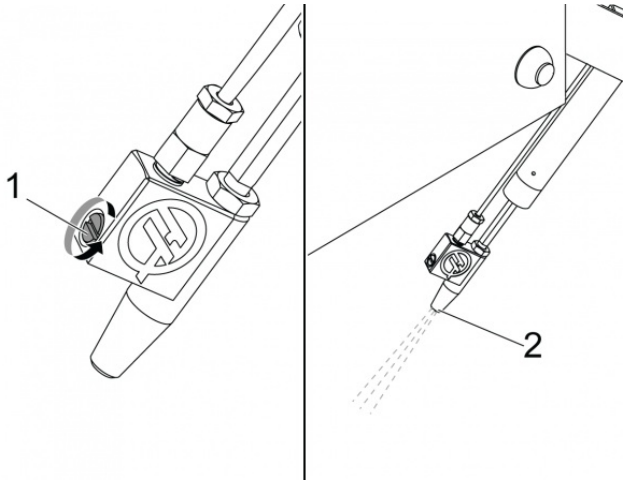
Install the reservoir [2] into MQL Reservoir assembly.



Caution: Only use lubricants that are non-toxic and specially made for MQL systems. Refer to the [Lubricant Table for Haas Machine Components](#) for recommended lubricants.

Go to <http://diy.haascnc.com> for more information.

STEP 2



Find the atomizer needle valve [1]. Turn the needle valve counterclockwise (2) full turns from the closed position.

Set the oil regulator pressure to 40 psi (2.8 bar).

Operate this code in **[MDI]** mode:

%

M83;

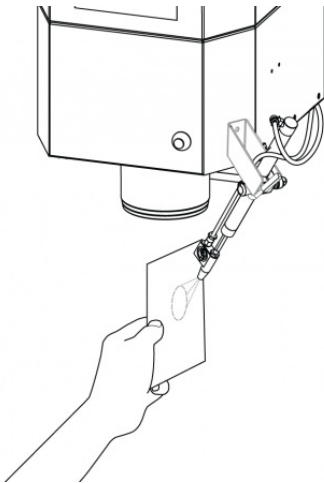
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Operate the MQL system [2] until no air is in the system. The mist can stop momentarily. This shows that air is in the system. If the mist does not stop, no air is in the system.



Push **[RESET]** to cancel the purge cycle.

STEP 3



Close the atomizer needle valve. Then open it (1/2) to (1) turn.

Set the pressure for the oil regulator. Set the air pressure to 30 psi (2.1 bar).

Do these steps to make sure the MQL system operates correctly: Hold a small piece of paper approximately 3 inches from the atomizer. Operate the program in Step 2. A round wet pattern shows that the MQL system is adjusted correctly.

Some oils have a higher viscosity. Oils with higher viscosity flow slowly. To make the oil flow correctly, do these steps:

- Adjust the air pressure.
- Adjust the needle valve.

Adjust the air pressure high enough to atomize the oil and carry the oil to the tool. Change the pressure for different tools, workpieces, programs and the type of oil that you use.

Do not use more than the necessary quantity of oil. The necessary quantity prevents these problems:

- Chips attach to the tool.
- Chips attach to the workpiece.

Conclusion

If the pressure of the oil mist from the spray head is not sufficient, make sure no kinks are in the oil tube.

If no kinks are in the oil tube, the filter is possibly clogged. The filter is inside the reservoir. Refer to the [VMC - Minimum-Quantity Lubrication - Filter - Maintenance](#) procedure.

Go to <http://diy.haascnc.com> for more information.

