Applies to machines built from:
January, 1992

Programmable Coolant (PCOOL) - Spigot Positioning

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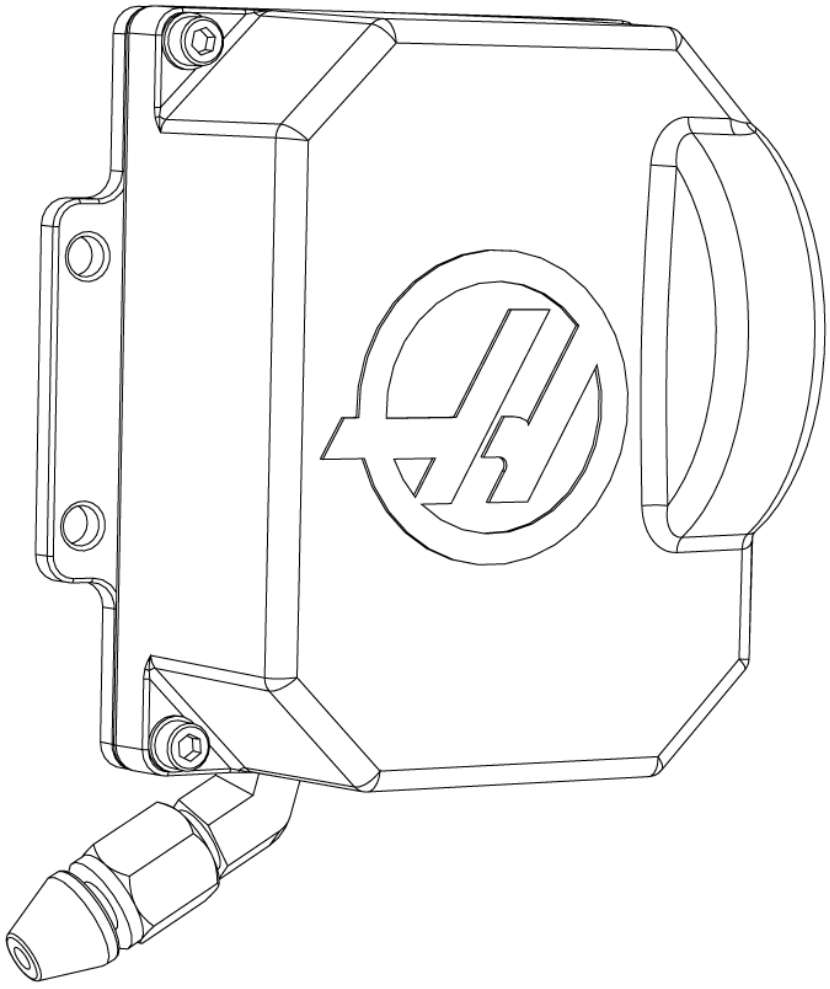
Translation Available

Programmable Coolant - Spigot Positioning - Introduction

This procedure tells you how to find the best Programmable Coolant (P-Cool) spigot position for each tool. The P-Cool spigot adjusts its position when the program calls a tool offset.

Caution: Do not move the P-Cool spigot by hand. This causes damage to the motor. Use only control commands.



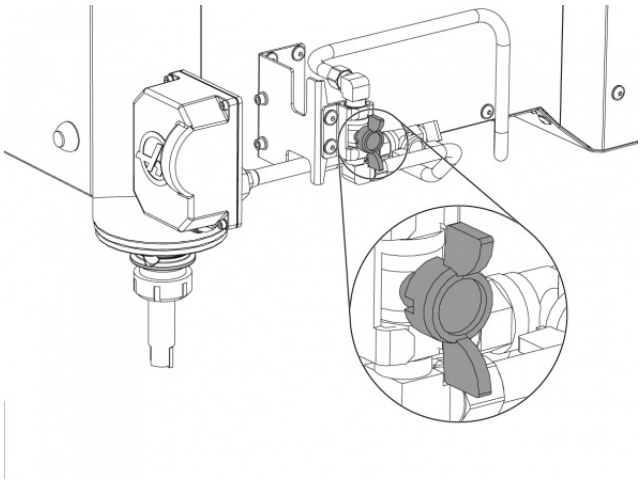
Prerequisites

Software Required:

- Mill Software Version 4.19 or higher

Programmable Coolant - Spigot Positioning - Positioning

STEP 1



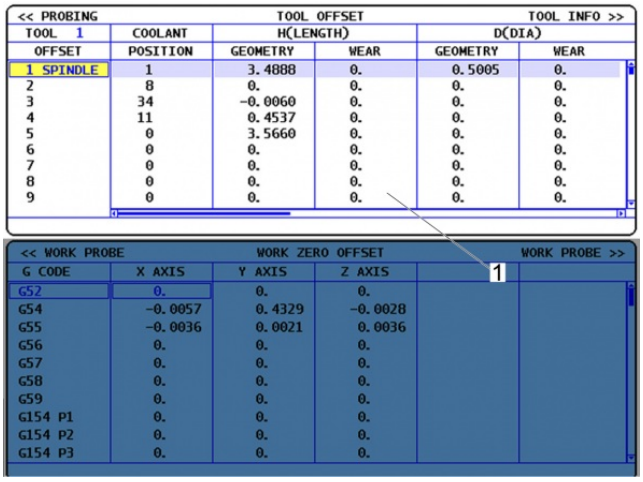
Set the ball valve to the P-Cool position.

Note:

This step is necessary only when you have a ball valve control to change between conventional coolant (lock lines or coolant ring) or P-Cool.

Valve placement and style can be different from the illustration.

STEP 2



<< PROBING TOOL OFFSET TOOL INFO >>

TOOL 1 OFFSET	COOLANT POSITION	H(LENGTH) GEOMETRY	H(LENGTH) WEAR	D(DIA) GEOMETRY	D(DIA) WEAR
1 SPINDLE	1	3.4888	0.	0.5005	0.
2	8	0.	0.	0.	0.
3	34	-0.0060	0.	0.	0.
4	11	0.4537	0.	0.	0.
5	0	3.5660	0.	0.	0.
6	0	0.	0.	0.	0.
7	0	0.	0.	0.	0.
8	0	0.	0.	0.	0.
9	0	0.	0.	0.	0.

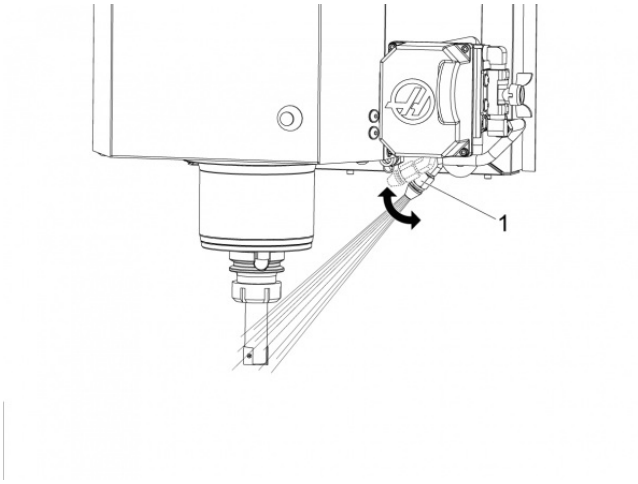
<< WORK PROBE WORK ZERO OFFSET WORK PROBE >>

G CODE	X AXIS	Y AXIS	Z AXIS
G52	0.	0.	0.
G54	-0.0057	0.4329	-0.0028
G55	-0.0036	0.0021	0.0036
G56	0.	0.	0.
G57	0.	0.	0.
G58	0.	0.	0.
G59	0.	0.	0.
G154 P1	0.	0.	0.
G154 P2	0.	0.	0.
G154 P3	0.	0.	0.

Press **[OFFSET]** until the TOOL OFFSET table [1] appears on the display.

Command the first tool into the spindle.

STEP 3



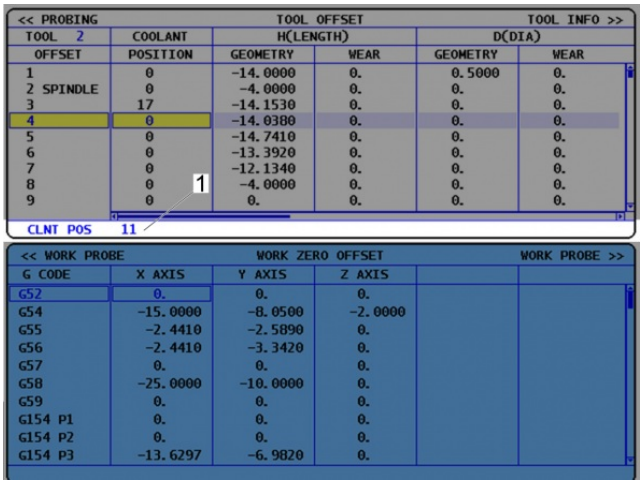
Press **[COOLANT]** to start the coolant flow.

Press **[CLNT UP]** or **[CLNT DOWN]** to change the position of the spigot [1].

Note:

Continue to the next step after you find a good position, where the coolant sprays on the tool tip.

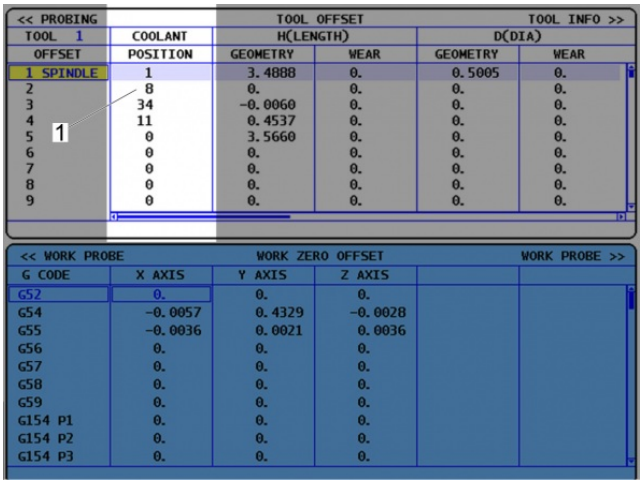
STEP 4



Press **[COOLANT]** to stop the coolant flow.

Record the value next to CLNT POS [1] at the bottom of the TOOL OFFSET table.

STEP 5



Highlight the tool offset you want to adjust.

Select the COOLANT POSITION column [1].

Type the coolant position number that you recorded in step 4.

Press **[F1]** to enter the value into the COOLANT POSITION column.

Note: The P-Cool spigot adjusts to the position in the COOLANT POSITION column when the program calls a tool offset.

Programmable Coolant - Spigot Positioning - Other Positioning Methods

You can also use these methods of changing the position of the coolant spigot.

1. Coolant Position System Variables
   - You can specify the coolant positions for tools 1 through 200. The systems variables you will use are 3401 through

3600.
    - Example: #3401=15 sets the coolant position for Tool 1 to position 15.
    - The machine must have Macros enabled.
2. Coolant Position in the Program Blocks
    - You can adjust the spigot in a program block with an M34 or M35 command.
    - The M35 command moves the spigot one position up.
    - The M34 command moves the spigot one position down.