

Release Notes for PathPilot® v1.9.8

Release Date: January 13, 2017

NOTE: Updates do not need to be applied sequentially. Download the latest software update to be completely up-to-date on PathPilot operating system.

Enhancements:

- #1340: Mill/Lathe - Work Offset Table: Make table of work offsets editable.

Bug Fixes:

- #1278: Mill - Conversational tapping hole pattern with dwell only the first hole is posted.
- #1332: Mill/Lathe - MDI: The UP arrow cycles backward through MDI history. Add DOWN arrow to move forward in history.

Adding an Image to Comment Lines

As an enhancement for code comments, you can now include images when a comment:

- is on a line containing M00 or M01, **and**
- contains a file name ending in *.jpg* or *.png*.

If both requirements are met, when PathPilot reaches a programmed M00 or M01 break, it displays the image in the tool path window.

To add an image to a comment line:

1. Add a *.jpg* or *.png* image file to your PathPilot controller in one of the following locations:
 - G-code program file directory
 - G-code program file directory > *images* sub-directory
 - Home directory > *images* sub-directory

NOTE: File names and directory names are case-sensitive. For example, a sub-directory named "Images" will not work, while a sub-directory named "images" will work.

2. Program an M00 or M01 break.
3. In the line of G-code containing the M00 or M01 break, enter a comment surrounded by parentheses ().
4. Within the comment, enter the file name of the image, including its *.jpg* or *.png* extension.

Example

```
M01 ( photo_of_my_setup.jpg )
```

For more information on programming with comments, refer to chapter 7, *Programming*.

Editing G-code with Conversational Programming

1. From the *File* tab, select the file and click *Conv. Edit* (see **Figure 1**).

A job assignment editor opens the file in a new window. The left window displays job assignments of a program. The right window displays a preview of the program (see **Figure 2**).

2. Edit the file contents as needed:
 - To change the order in which the steps of the program occur: Click *Move Up*, *Move Down*, *Duplicate*, or *Remove*.
 - To create a new job assignment using conversational programming:
 - i. Click *Insert Step*. PathPilot creates the job assignment and opens the *Conversational* tab.
 - ii. Click *Insert*.
 - iii. If necessary, edit the job assignment order in the program.
 - To load an existing G-code file into the program:
 - i. Click *Insert File*. G-code files that are hand-written, or generated from CAM software or conversational programming in PathPilot, can be inserted.
 - ii. Navigate to and select the *.nc* file that you want to insert.
 - iii. Click *Open*.
 - iv. If necessary, edit the job assignment order in the program.
 - To edit a job assignment that was created in conversational programming:
 - i. Select the job assignment and click *Conv. Edit*. In the *Conversational* tab, PathPilot opens the relevant tab.
 - ii. Make the desired changes to the job assignment.
 - iii. Click *Finish Editing*.
4. Click *Save*.

The G-code program file is updated.

Tips

- To restore an edited job assignment to its original parameters: Click *Revert*.
NOTE: *Revert* is only available for individual job assignments created in conversational programming.
- To undo all changes made to an entire G-code program: Click *Close*. When prompted, *Close Without Saving*.

SERVICE BULLETIN

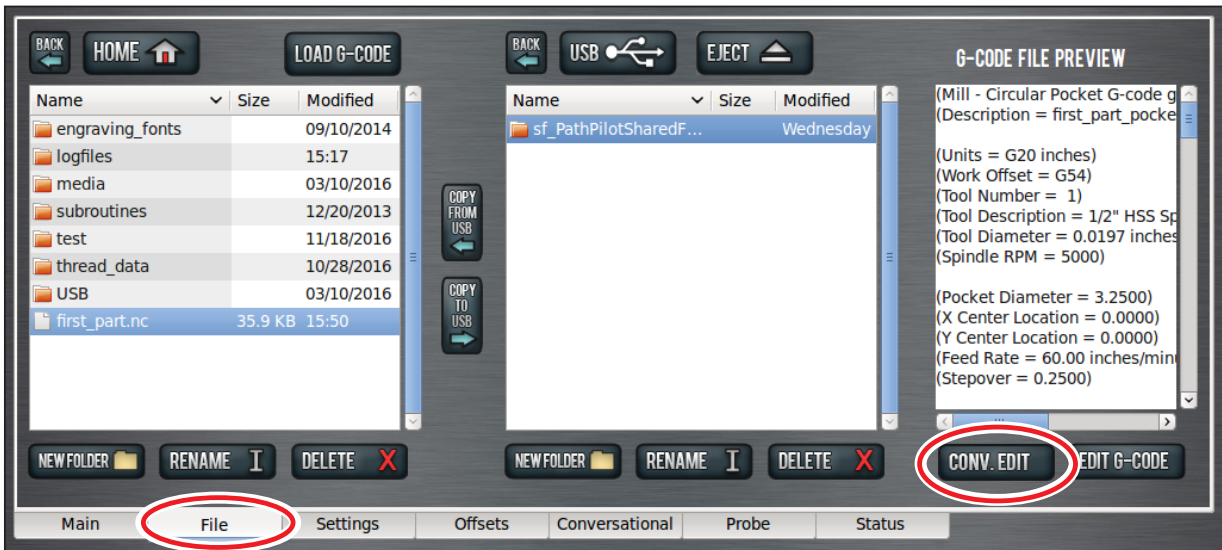


Figure 1

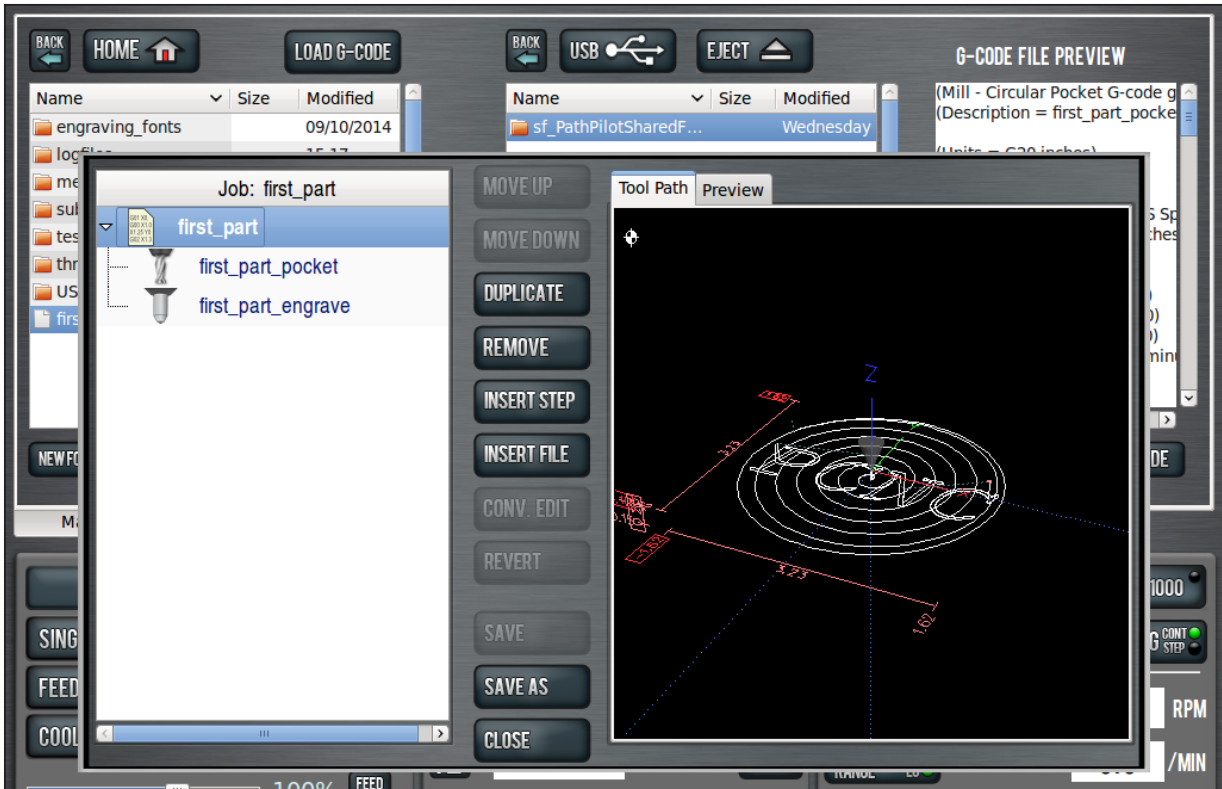


Figure 2

Release Notes for PathPilot® v1.9.7

Release Date: September 20, 2016

Enhancements:

- #1265: Mill - Conversational: Improved tool path for circular, rectangular profile
- #1238: Changes to touch off for grooving and parting tool touch off. Previously, tool control point was set to the tailstock side when touching off; now, control point is set to the spindle side. All conversational routines have a tool width entry field to account for the change in control point. This was done in response to many customer requests to make touch off easier on grooving/parting tools.

NOTE: *Old G-code conversationally created in versions before PathPilot v1.9.7 will not work with a tool touched off in v1.9.7 and later; new G-code conversationally created in v1.9.7 and all future versions will not work with tools touched off in versions v1.9.5 and earlier. If in doubt, touch off your parting/grooving tool again and repost the parting and grooving code.*

Bug Fixes:

- #1236: RapidTurn - Soft Limit: 770 RT configuration has incorrect soft limit travel setting for lathe Z-axis (mill X-axis)
- #1231: Mill - Conversational: Spot drill DOC DRO should accept either positive or negative values, then convert them to the value expected by the canned cycle
- #1238: Lathe/Rapid Turn: Selecting a parting tool on the Offsets tab defaults to tip orientation 1 or 4, but conversational parting routine requires 2 or 3. Workaround: manually edit orientation on Offsets tab.
- #1237: Mill - Conversational Thread Mill: Internal threads post with bad character on G64 line. Workaround: find G64 line and replace entire line with G64 P0.
- #1224: Mill - Conversational Thread Mill: Internal diameters with fine pitch (32 or greater) fail to interpolate helix because of G64 blending
- #1156: Mill - Touch Screen: Soft number pad doesn't work with drill table on conversational Drill/Tap tab
- #1223: Mill - Conversational Serial Number Engraving: Spindle RPM of 0 prevents G1 motion if engraving just a serial number
- #978: Mill - M8 or M9 on the same line as G40 gives error message
- #840: Mill - Interpreter: G50 and G80 should be allowed on same line

Release Notes for PathPilot® v1.9.6b

Release Date: July 12, 2016

Bug Fixes:

- #1220: Mill - Conversational Engraving: Pressing Enter key after entering text in engraving text DRO results in “: Enter either Text and/or a Serial Number” error message
- #1210: Mill/Lathe - MDI: Don't remove focus from MDI line on non-ADMIN commands
- #1206: Mill/Lathe - _sim_specific.ini files missing in released .tgp file
- #1204: Mill - Error message when posting G-code with serial number on engraving tab
- #1205: RapidTurn - Conversational: Can't post drill G-code

IMPORTANT! This version of PathPilot removes Dropbox feature. For more information, refer to Tormach service bulletin SB0051: Uncommanded Spindle Acceleration in PCNC 440.

SERVICE BULLETIN

Updating Software

NOTE: Updates do not need to be applied sequentially. Simply download latest update file to be completely up-to-date on PathPilot operating system.

1. Download most recent PathPilot update file (vX.X) at www.tormach.com/updates
2. Transfer the PathPilot update file to a USB drive.
3. Insert USB drive in any open USB port on the PathPilot controller.
4. With the PathPilot controller on and out of *Reset*, click *Update* on the *Status* tab (see **Figure 3**).

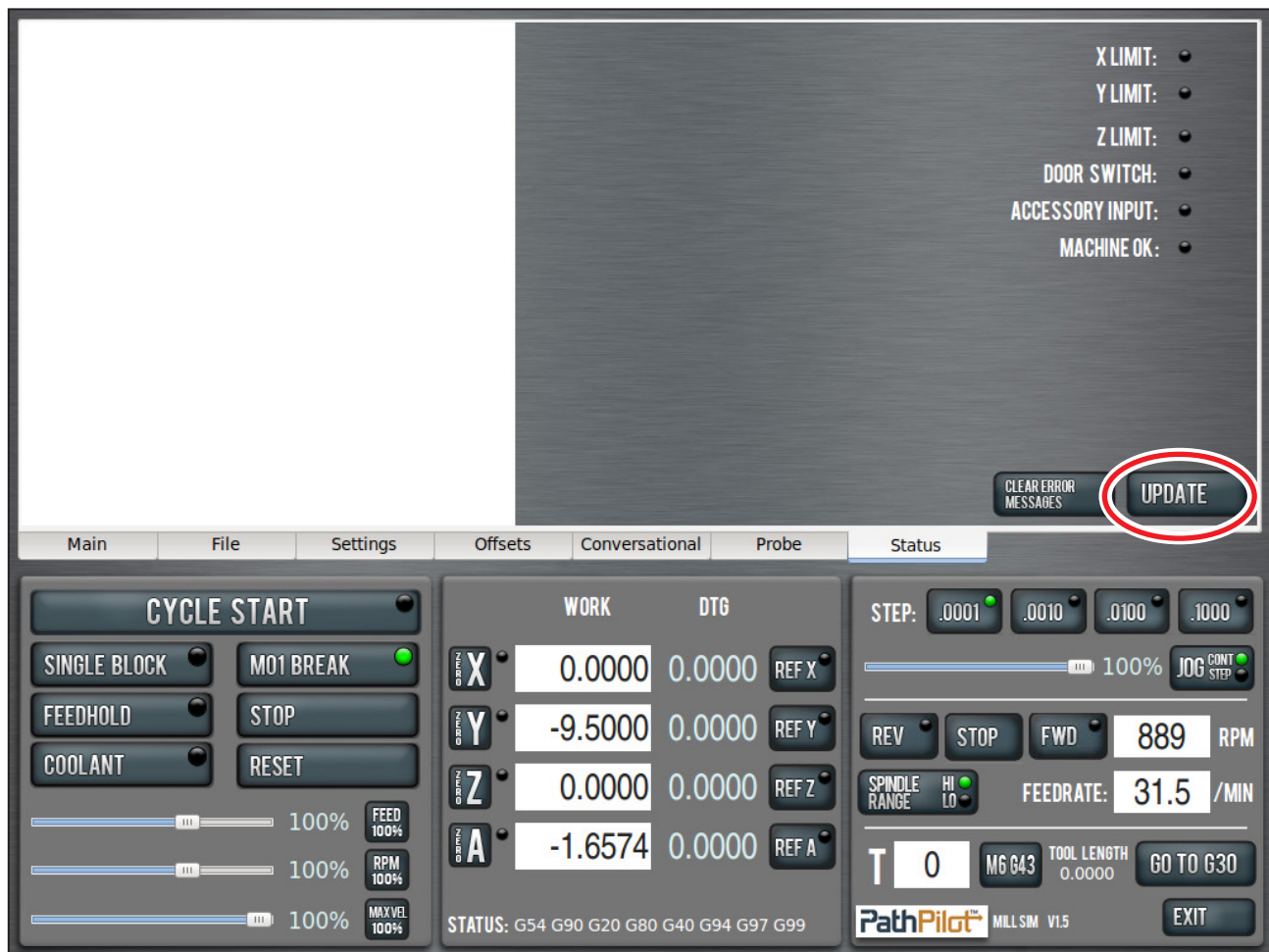


Figure 3

SERVICE BULLETIN

5. Navigate to the PathPilot update file (vX.X) on the USB drive; click *Update* (see **Figure 4**).

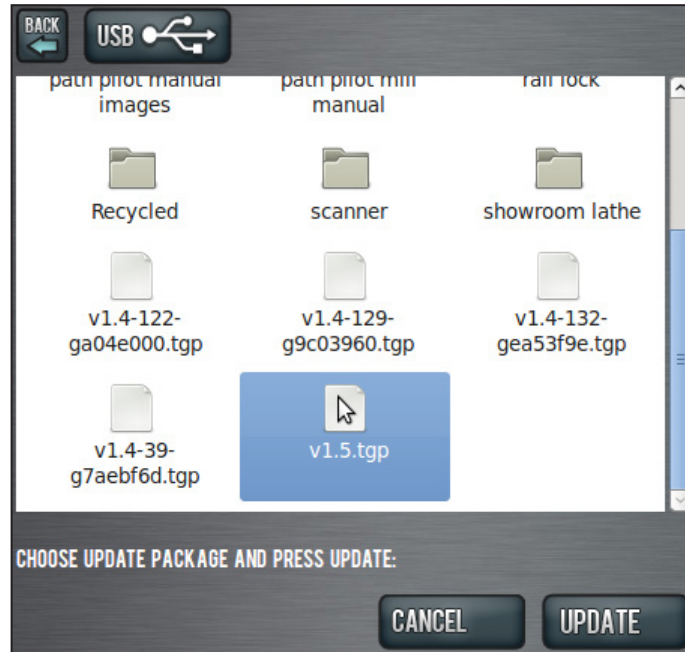


Figure 4

6. When prompted, push red E-stop button (see **Figure 5**) and click *OK*.

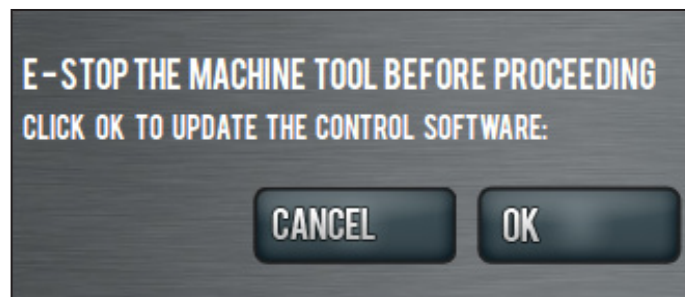


Figure 5