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# Technical Document

**File name:** TD\_10139\_770\_Machine\_Control\_Software

**Rev:** 1.5

**Date:** 6/19/2012

**Product Identification:** PCNC 770 Mill (31190)

**Subject: Specification:** This document is to track revision changes to Mach 3 (M3) for PCNC 770 machines.

## General Instructions:

1. Download from <http://www.tormach.com/downloads.html>, page down to the “PCNC 770 Machine Control Software” section and select PCNC770M3-Relx.xx.exe.
2. Run the executable accepting the default installation directories.
3. Reboot the computer after installation.

## Upgrade Instructions:

1. The new installation will delete the contents of the C:\PCNC3 folder. If you have files that you want to preserve in this folder, save them to a different directory before installing the new software. For example, if you have saved G Code files in the C:\PCNC3\GCode folder make sure to save them to a different location if you want to access them after the install.
2. The license file (MachLic.dat), the tool table, and the fixture offsets are automatically preserved by the new installation.
3. An updated version of PCNC Config will be installed with this software. If an old version of PCNC Config exists on your system, please remove it before installing the new software. In the Control Panel, start up the “Add or Remove Programs” utility to remove the old version of PCNC Config.
4. The installation will overwrite any fine tuning you have done with spindle speed calibration, touch probe polarity, or jog shuttle config. This is detailed in chapter 9 of the owner’s manual.

### *Changes made to M3, Version 1.5*

- Updated Newfangled wizards to current version (2.86)
- Added support for Proconier tapping head to settings screen
- Changed M990 initialization macro to better support starting the machine in metric mode (G21)
- DROs on offsets screen now allow input of negative numbers

### *Changes made to M3, Version 1.3/1.4*

- Make install compatible with Windows Vista
- Removed buggy wizards
- Notepad++ shortcut added to start menu
- Changed travel limits so that machinable area displays correctly on tool path display

### *Changes made to M3, Version 1.2*



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- Updated xml pulse width to 8  $\mu$ s
- Changed M03 to shorten pause before axis motion on spindle on command
- Fixed bug in 871-874 macros where users saw error message on G code loading if no spindle speed had previously been commanded
- Added “Boss Center Point” probing wizard
- Changed installation package to preserve license file, tool table, fixture offsets
- Updated PCNC Config to include Probe Logic and 4<sup>th</sup> Axis Homing configuration
- Altered probe diameter validation on probing screens to accept values from 0.1 to 0.5 inches (previous range was 0.1 to 0.25 inches)

*M3, 770 initial release version 1.1c*

- Mach release 3.042.029