

# Tormach Usage Check List

This checklist is not a substituent for proper training on the usage of the machine. **You are required to take an orientation and sign off class to use the Tormach. Any un-authorized usage of this machine means that any damage to the machine is the responsibility of the un-authorized user. This includes repair and replacement of any damaged parts. This can be upwards to 25k if the machine is majorly damaged.**

Please print this checklist and fill it out with each usage

Date: \_\_\_\_\_

User: \_\_\_\_\_

Materials Cut: \_\_\_\_\_

Tools Used: (Others Not Listed Below) \_\_\_\_\_

<input type="checkbox"/> T1	<input type="checkbox"/> T11	<input type="checkbox"/> T21	<input type="checkbox"/> T31	<input type="checkbox"/> T41	<input type="checkbox"/> T51
<input type="checkbox"/> T2	<input type="checkbox"/> T12	<input type="checkbox"/> T22	<input type="checkbox"/> T32	<input type="checkbox"/> T42	<input type="checkbox"/> T52
<input type="checkbox"/> T3	<input type="checkbox"/> T13	<input type="checkbox"/> T23	<input type="checkbox"/> T33	<input type="checkbox"/> T43	<input type="checkbox"/> T53
<input type="checkbox"/> T4	<input type="checkbox"/> T14	<input type="checkbox"/> T24	<input type="checkbox"/> T34	<input type="checkbox"/> T44	<input type="checkbox"/> T54
<input type="checkbox"/> T5	<input type="checkbox"/> T15	<input type="checkbox"/> T25	<input type="checkbox"/> T35	<input type="checkbox"/> T45	<input type="checkbox"/> T55
<input type="checkbox"/> T6	<input type="checkbox"/> T16	<input type="checkbox"/> T26	<input type="checkbox"/> T36	<input type="checkbox"/> T46	<input type="checkbox"/> T56
<input type="checkbox"/> T7	<input type="checkbox"/> T17	<input type="checkbox"/> T27	<input type="checkbox"/> T37	<input type="checkbox"/> T47	<input type="checkbox"/> T57
<input type="checkbox"/> T8	<input type="checkbox"/> T18	<input type="checkbox"/> T28	<input type="checkbox"/> T38	<input type="checkbox"/> T48	<input type="checkbox"/> T58
<input type="checkbox"/> T9	<input type="checkbox"/> T19	<input type="checkbox"/> T29	<input type="checkbox"/> T39	<input type="checkbox"/> T49	<input type="checkbox"/> T59
<input type="checkbox"/> T10	<input type="checkbox"/> T20	<input type="checkbox"/> T30	<input type="checkbox"/> T40	<input type="checkbox"/> T50	<input type="checkbox"/> T60
					<input type="checkbox"/>

Total Machine Time: \_\_\_\_\_

Folders Created: \_\_\_\_\_

Do you need to keep the folders Y/N

Date Folders Can be removed: (No more then 30 days) \_\_\_\_\_

## Machine Setup

- ☐ Check coolant level on the back of the machine. If coolant is needed mix 4010 coolant stored in the bottom cabinet 4 cups water to 1/2 cup coolant.
- ☐ Turn on Air compressor. Red power knob on the side of the air compressor
- ☐ Pull the oil choke out. Note this in the log book. This really only needs to be done every 8 hrs, so check the log book first
- ☐ Power on machine. Power knob is on the right had side of the machine. Reach from the front of the machine
- ☐ Once path pilot is upback
  - ☐ Un estop the machine
  - ☐ Push green reset button on pendant
  - ☐ Select reset in path pilot
  - ☐ Ensure vise handle it in center hole
  - ☐ Select RefX, RefY, RefZ

You are now ready to either run a conversational program or execute a gcode program created using fusion or other CAM program

## Machine Usage

- ☐ Setup Stock
  - 1. If using the vise
    - a. Make sure that the stock is held securely and is set square to either a parallel bar or the bottom of the vise
    - b. Make sure you CAM accounts for all fixtures and will not cut into the vise or vise jaws
  - 2. If using other fixture
    - a. Use a substrate under your material to ensure you do not cut into the table. A new replacement table is expensive and if damaged is the responsibility of the user to replace.

- ☐ Measure and set X0, Y0, Z0 (Critical to success and not damaging the machine)
  - 1. Hamier Probe (most accurate and preferred method)
    - a. Insert Hamier probe into collet
    - b. Move probe to Z0 as trained. Make sure to move in slow movements to ensure you dont break the tip. A broken tip is a \$45 charge
    - c. Set Z0
    - d. Repeat for Y axis. Remember to always have Y0 be the back jaw of the vise unless there is a reason to set Y in another location
    - e. Repeat for X axis.
  - 2. Manually
    - a. Select the tool being used in path pilot
    - b. Locate tool at X0, Y0, Z0
    - c. Update X0, Y0, Z0 in path pilot
- ☐ Load Gcode from USB drive or conversational program
- ☐

#### Machine Shutdown

- ☐ Remove tool from collet and replace with the the an empty tool holder. **Never leave the collet empty this will damage the power drawbar and collet**
- ☐ Remove any parallels and other attachments from the vise and table
- ☐ Clean all chips from the table and vise
- ☐ Clean all chips from the baffels and back of the machine. This might require moving the table to front and back of the machine
- ☐ If the chips are deep in the pans use the chip scoop and trash can on the left hand side of the machine
- ☐ Use the shop vac to clean chips from the trays.
- ☐ EStop the machine
- ☐ Select Exit in Path Pilot and wait for computer to allow for shutdown
- ☐ Shutdown the machine using the power on the right hand side of the cabinet
- ☐ Shut of the air compressor behind the machine