

TECHNICAL DOCUMENT

INSTALLATION GUIDE: CONTROLLER ARM

Product Identification: Controller Arm (PN 38791)

Purpose: This document gives instructions to install a controller arm on a mill or a lathe.

Qty.	Controller Arm	PN
1	10.3 mm Drill Bit	—
2	Emergency Stop Cable Clip	37414
1	Keyboard Table	34828
6	M4 x 8 mm Flat Head Screw	37417
4	M4 x 10 mm Phillips Round Head Screw	30537
4	M4 x 12 mm Wood Screw	33035
4	M5 Flat Washer	30532
4	M5 Lock Washer	30534
4	M5 x 25 mm Socket Head Cap Screw	37411
2	M8 Hex Nut	32341
2	M8 Flat Washer	30531
2	M8 Lock Washer	32339
2	M8 x 30 mm Socket Head Cap Screw	30544
1	Monitor Mounting Plate	35496
1	Round Monitor Post	—
1	Square Tube Arm	—
4	Wire Tie	31719
4	Wire Tie Mount	31460

NOTE: If any of these items are missing, contact Tormach Customer Service at (608) 849-8381 for a replacement.



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Required Items and Tools

- Dead-blow hammer (or similar)
- Electric drill (for use with a mill)
- Electrical tape
- Flat-head screwdriver
- Marker (for use with a mill)
- Metric hex wrench set
- Phillips screwdriver

Prepare the Machine Stand

1. Identify the correct mounting position for the controller arm on the machine stand.
2. Make sure that there are no obstructions inside of the machine stand.
3. Depending on your machine, do one of the following:
 - If you have a 15L Slant-PRO lathe: Go to the section “Install the Controller Arm”.
 - If you have a PCNC 770 or PCNC 1100 mill: Go to Step 4.
4. Use the 2-hole mounting clevis as a template to mark two holes on the machine stand.
5. Use the provided 10.3 mm drill bit to drill two holes through the machine stand.

Install the Controller Arm

1. Use two sets of M8 x 30 mm socket head cap screws, M8 hex nuts, M8 flat washers, and M8 lock washers to attach the mounting clevis to the machine stand (see **Figure 1**). Make sure that the cable slots on the square tube arm are facing as shown in **Figure 1**.

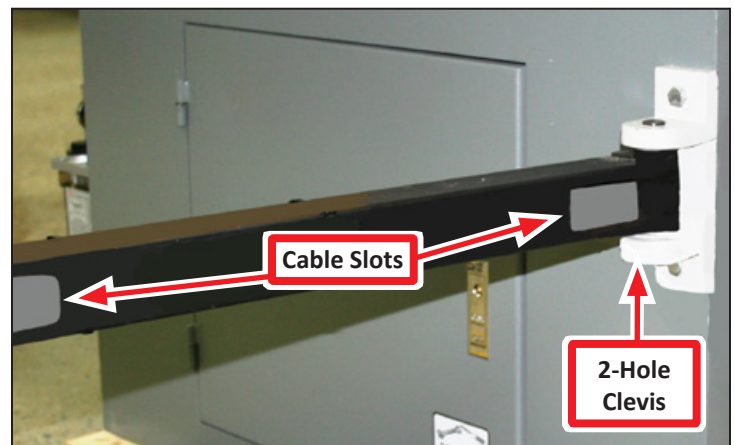


Figure 1

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Figure 2



Figure 3

2. Insert the round monitor post into the square tube arm and tighten the cross bolt (see **Figure 2**). Make sure that the holes are along the inside of the round monitor post as shown in **Figure 2**.

You can adjust the working height of the post the keyboard table and the monitor are attached.

3. Use a dead-blow hammer (or similar) to tap the end plug into the square tube arm (see **Figure 3**).
4. Position the round monitor post to mount the keyboard table as shown in **Figure 4**. Tighten the applicable screws to maintain the desired position.



Figure 4

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5. Use four M5 x 25 mm socket head screws, four M5 flat washers, and four M5 lock washers to attach the keyboard table to the round monitor post (see **Figure 5**).
6. Depending on your machine, do one of the following:
 - If you have a 15L Slant-PRO lathe: Go to Step 7.
 - If you have a PCNC 770 or PCNC 1100 mill: Go to Step 8.

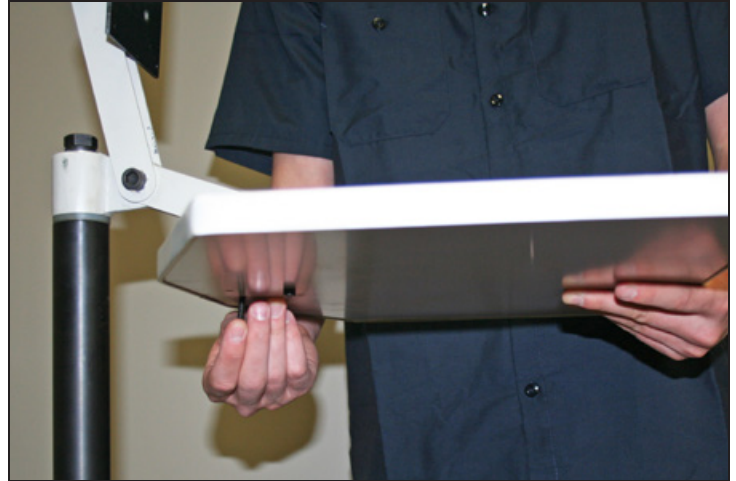


Figure 5

7. Use four M4 x 12 mm wood screws to attach the Emergency Stop box below the keyboard table (see **Figure 6**).



Figure 6

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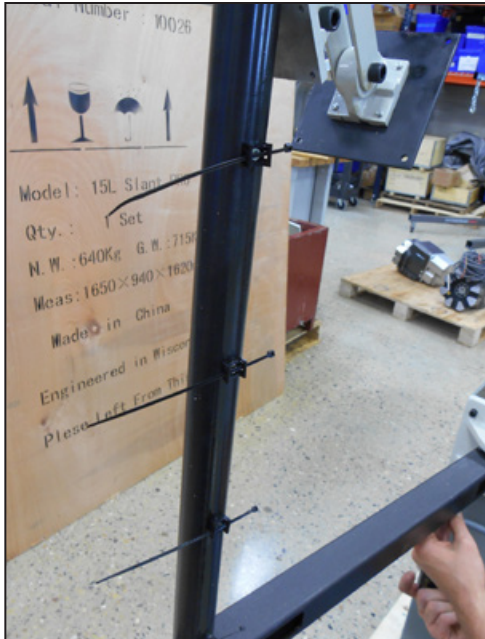


Figure 7

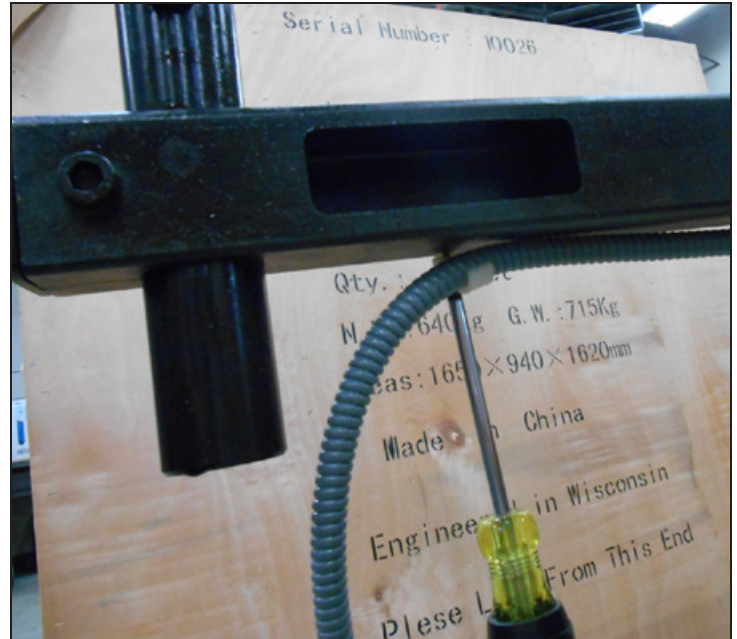


Figure 8

8. Use four M4 x 8 mm flat head screws to attach four wire tie mounts to the round monitor post (see **Figure 7**).
9. Use two M4 x 8 mm flat head screws to attach two Emergency Stop cable clips to the bottom of the square tube arm (see **Figure 8**).
10. Use four M4 x 10 mm Phillips round head screws to attach the monitor, and then route the cables through the controller arm.

NOTE: We recommend wrapping all cable connections in electrical tape.

11. Adjust the monitor height and keyboard angle as needed.