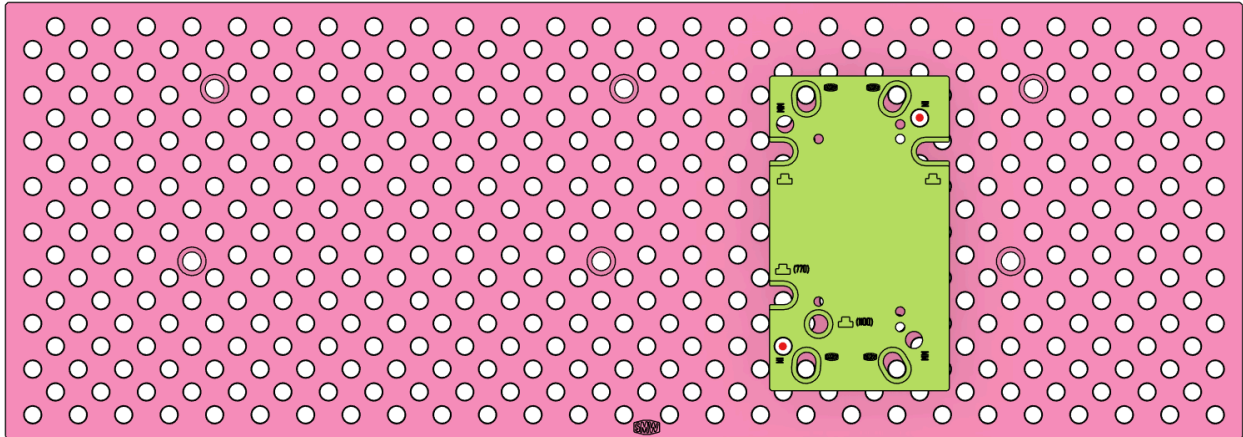


microARC 4 Installation Instructions

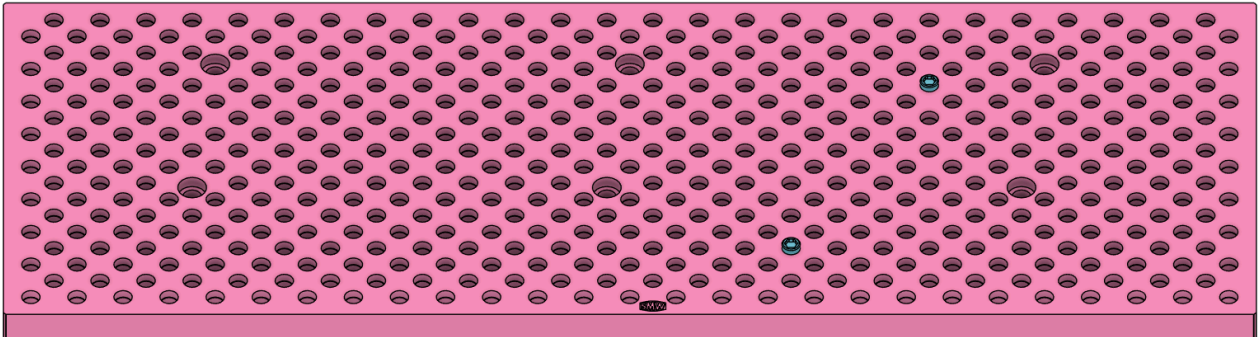
Tormach microARC 4 4th Axis Subplate [S1066]

SMW Fixture Plate Installation

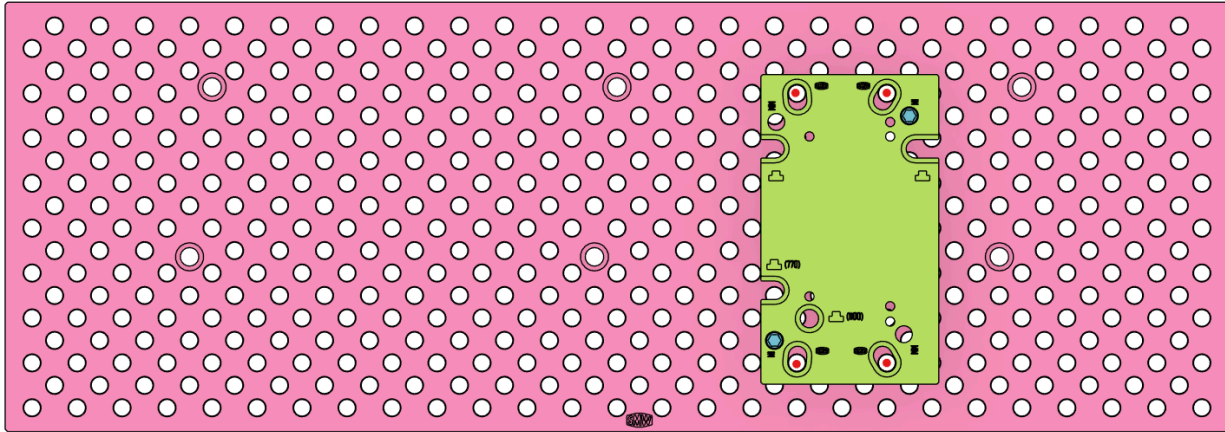
1. If installed, remove the key from the underside of the microARC rotary.
2. Place the **subplate** on your **fixture plate** and determine the correct location so that the rotary sits within your work envelope. Make note of the **two locating bores** that align with your plate (engraved with 'IN' for ½" plates and 'MM' for M12 plates).



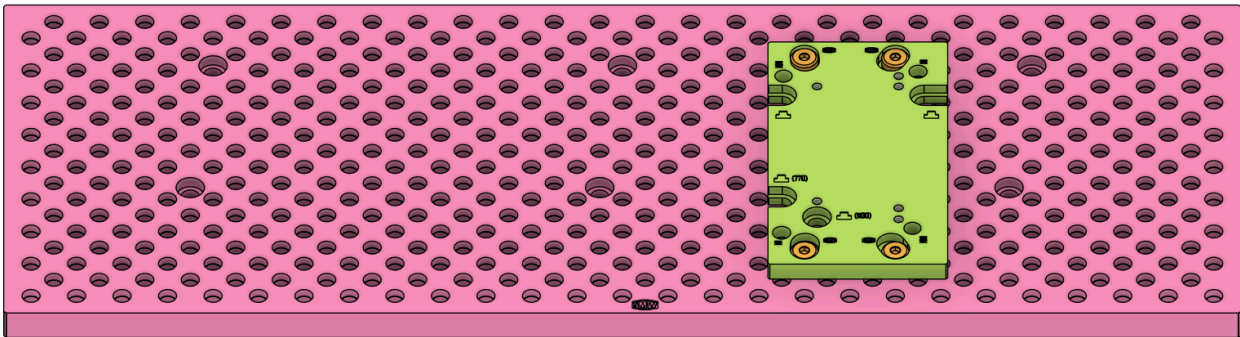
3. Install **locating pins** in the two locations noted in the last step. We recommend SMW fixturing pins but off-the-shelf dowel pins are acceptable.



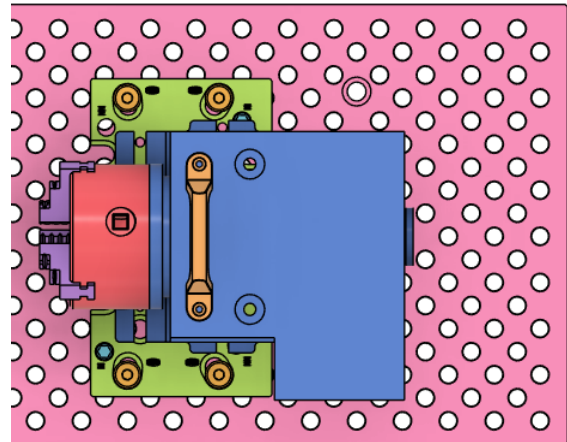
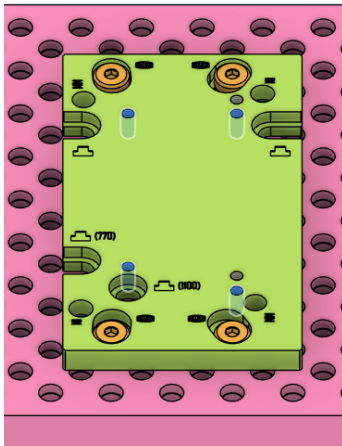
4. Place the **subplate** back on the **fixture plate**, carefully sliding it over the installed **locating pins**. Note the **four counterbored holes** which align with your **fixture plate** pattern (denoted by an engraved SMW logo).



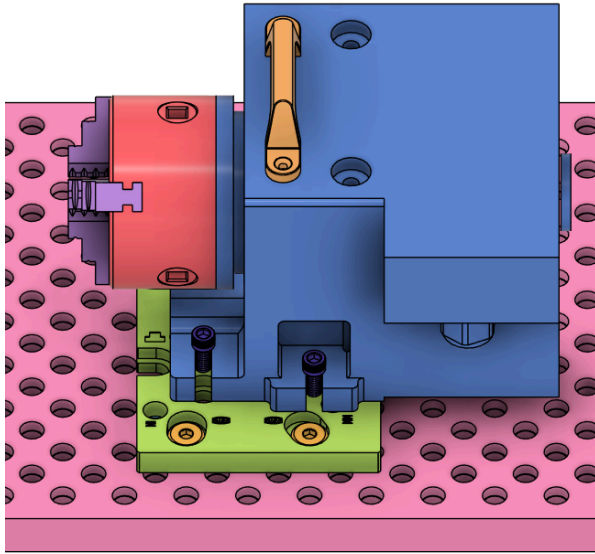
5. Install the **four low-profile socket head screws** ($\frac{1}{2}$ -13 x 1.0" or M12 x 25mm) into the four holes noted in the previous step. See [this page](#) for torque specifications for your specific **fixture plate**.



6. Place the **microARC** on top of the **subplate**, aligning the mounting slots with the 5/16-18 threaded holes on the subplate. For this mounting case you will be using the **four holes highlighted below**. Note: we recommend a light coat of dielectric grease or corrosion inhibitor between the rotary and subplate.

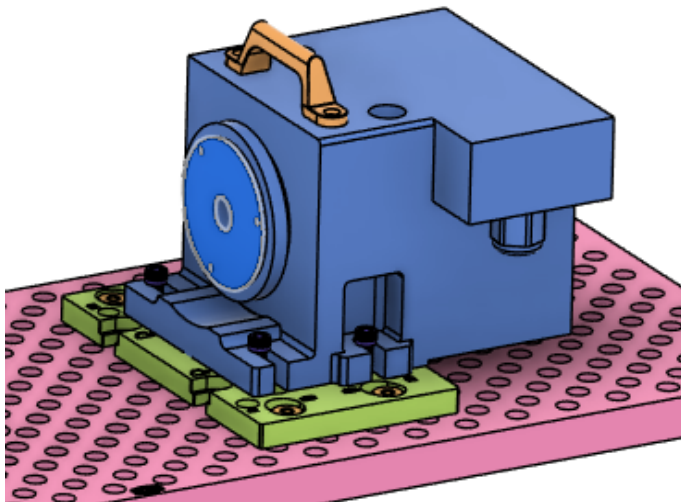


7. Install the **four 5/16-18 x 1 1/8" socket head cap screws** and washers into the threaded holes in the above step. Before tightening ensure the rotary is positioned as desired. You may slightly shift the microARC along the mounting slots but ensure none of the **1/2-13 or M12 screws** are covered.



Once in place, lightly snug these screws. Do not fully tighten.

8. Tram the rotary so it aligns with your machine axes. We recommend removing the **chuck** (shown above) and sweeping the **front face of the rotary** with a dial indicator. Gradually tighten the **5/16 screws** while tapping the rotary with a mallet to align it to your machine. Repeat this until the bolts are fully tightened and the rotary is aligned. Do not exceed 100 in-lbs [11.3 N-m].

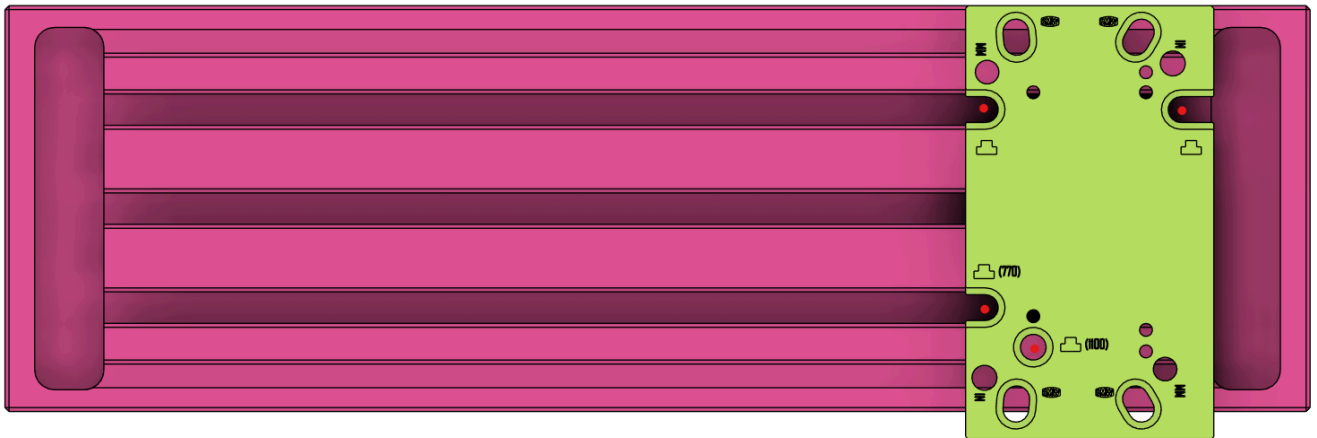


9. Installation is complete. When ready to remove the rotary, leave the **5/16 screws** in place, loosen the **1/2-13 or M12 screws**, and remove the **rotary + subplate** as a unit. Re-installation is as simple as installing the subplate back over the locating pins and tightening the mounting bolts.

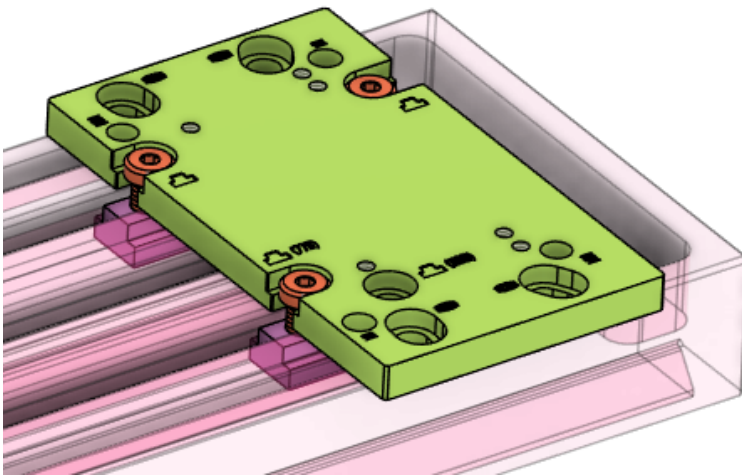
T-Slot Installation (Tormach 770 or 1100)

If installing your microARC directly to your machine's table, our subplate allows for adapting the smaller microARC mounting slots to the larger t-slots on the 770 or 1100 table.

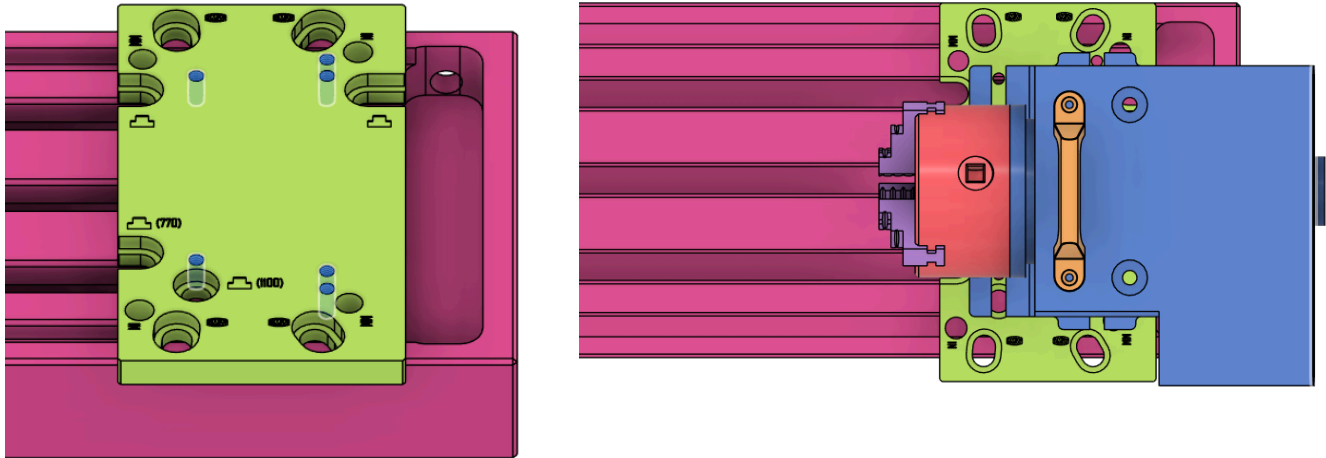
1. If installed, remove the key from the underside of the microARC rotary.
2. Place the **subplate** on your **machine table** (770 shown below) and align the **three mounting holes** with your t-slots (these are denoted by a t-nut shaped engraving. One mounting hole is machine specific and additionally engraved with either 770 or 1100.) *Note: we recommend a light coat of dielectric grease or corrosion inhibitor between the rotary and subplate.*



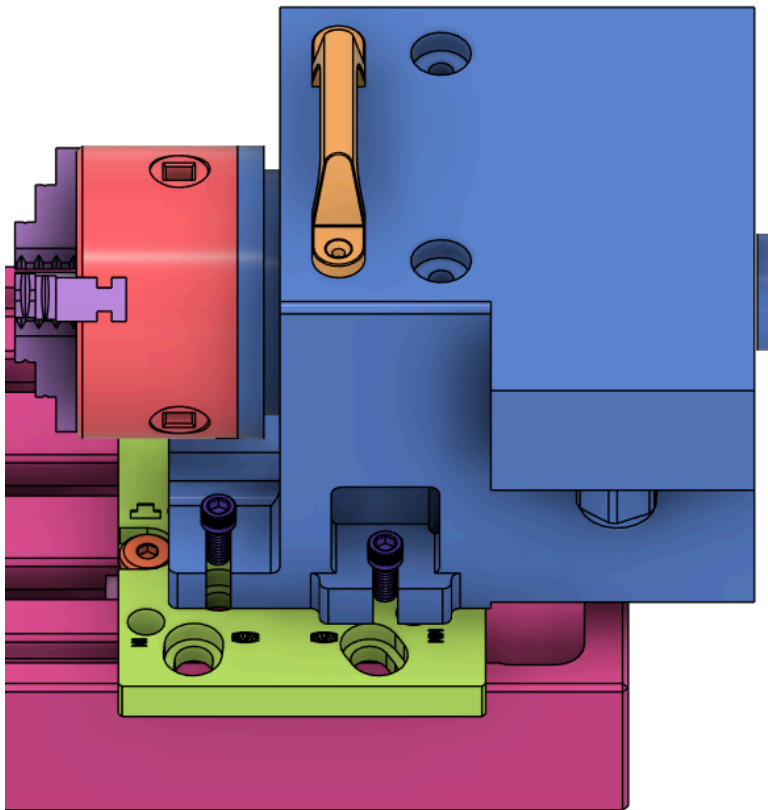
3. Install the three **t-nuts** and secure the subplate with the **½-13 x 1" low profile screws**. Tighten the bolts to 60 ft-lbs [81 N-m]. *Note: to allow for adequate alignment of the microARC, this should be trammed to your machine axis within approximately 0.01" [0.25mm].*



4. Place the **microARC** on top of the **subplate**, aligning the mounting slots with the 5/16-18 threaded holes on the subplate. You may use any of the **six holes highlighted below**, shifting the rotary to sit in the desired Y-axis position. *Note: we recommend a light coat of dielectric grease or corrosion inhibitor between the rotary and subplate.*



5. Install the **four 5/16-18 x 1 1/8" socket head cap screws** and washers into the threaded holes in the above step. Before tightening ensure the rotary is positioned as desired.



Once in place, lightly snug these screws. Do not fully tighten.

6. Tram the rotary so it aligns with your machine axes. We recommend removing the **chuck** (shown above) and sweeping the **front face of the rotary** with a dial indicator. Gradually tighten the **5/16 screws** while tapping the rotary with a mallet to align it to your machine. Repeat this until the bolts are fully tightened and the rotary is aligned. Do not exceed 100 in-lbs [11.3 N-m].

