## X-axis Arm Squaring Check and Adjustment

## Check

- Power off the system
- Remove the #2 mirror cover by removing the thumbscrew, sliding the cover to the right and then off the rail.



- Grasp the X-axis arm and slowly pull the arm towards you until it stops.
- Observe if the left side and right side of the X-axis arm makes contact with the left and right side shoulder screws, at the same time, respectively.

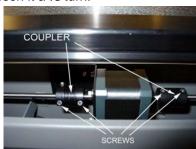




• If there is a gap between the shoulder screw and the contact point on either the left or right side of the arm, you will need to square the arm by making an adjustment.

## Adjustment

• Locate the Y-axis couplers. For each of the two couplers, there are two screws that mount it to the Y-motor and the Y-axis shaft. Using a 3/32 inch Allen wrench, choose ONE (only one) of those four screws and loosen it a ½ turn.



 With your hand, grasp the center of the arm and pull it forward to contact the shoulder screws. While holding it against the arm against the two shoulder screws, tighten the screw that you loosened.  Now, push the arm into the approximate center of the engraving field. With your thumb and forefinger of your left hand, touch the two y-axis bearings and attempt to "turn" or "rotate" them.



- You should feel an equal turning resistance for each bearing. If one bearing spins freely and
  the other has a turning resistance, or the turning resistance is unequal, then adjustment is
  necessary. To adjust, using a 3/32 inch Allen wrench, loosen BOTH the two socket head
  screws ¼ turn. Then, re-tighten them. This procedure automatically equalizes the force on
  both Y-axis bearings. Re-check the turning resistance once again and re-adjust if necessary.
- Re-install the #2 mirror cover.
- Squaring is complete.

If you have any questions, please contact:

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