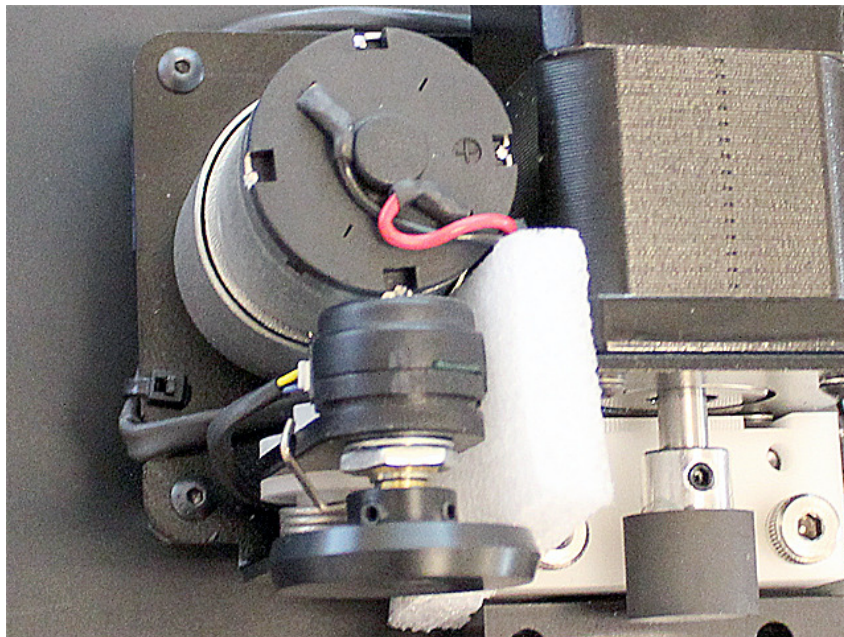


## REFURBISHED MOTOR REINSTALLATION VERSION 03.24.13

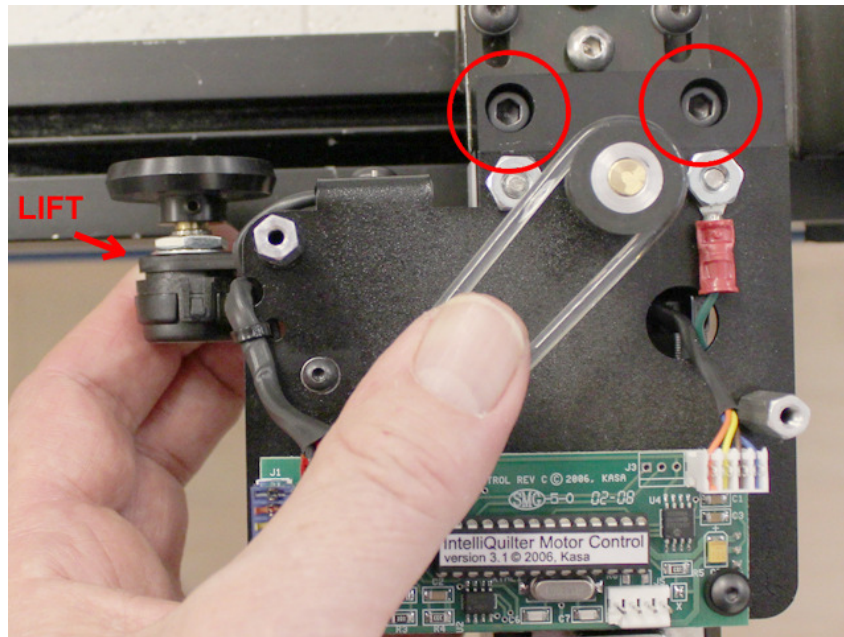
1. Remove their black plastic cover and identify the motors. The X-motor has a solder bead on the jumper beside the communication connector, the Y-motor (shown on the picture) does not.



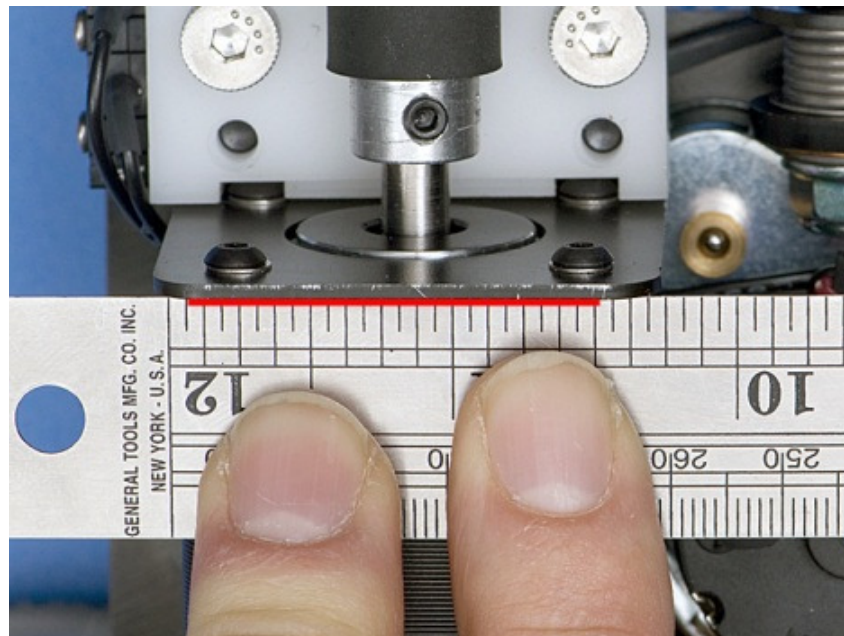
2. Remove the protective foam from the motor.



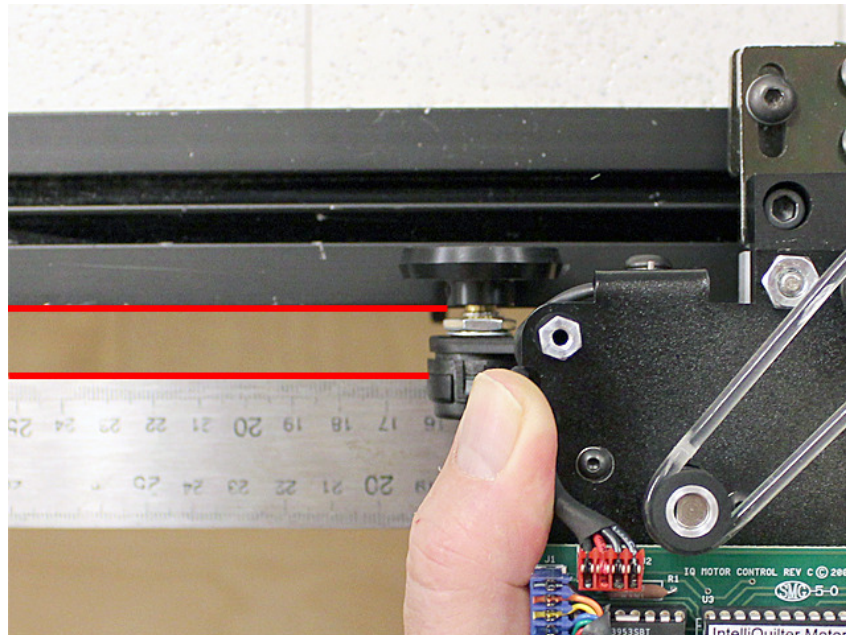
3. Pull up the sensor bracket and mount the new motor using the existing recessed bolts. Don't fully tighten the bolts.



4. Use a long ruler to help aligning the motor. Hold the ruler to the bottom of the drive motor, pushing its edge to the ridge (red line) of the motor mounting plate as the picture (bottom view) shows.



5. Rotate the motor left/right to make the ruler parallel to the edge of the table/carriage track (red lines). Tighten the bolts at this position.



6. Follow the attached MOTOR ALIGNMENT PROCEDURE to align the new motors.

7. Go to Utilities->Preferences and check/adjust the motor engagement strengths.

**NOTE:** If you need any help, please post a support request on <http://www.intelliquilter.com/support.php>

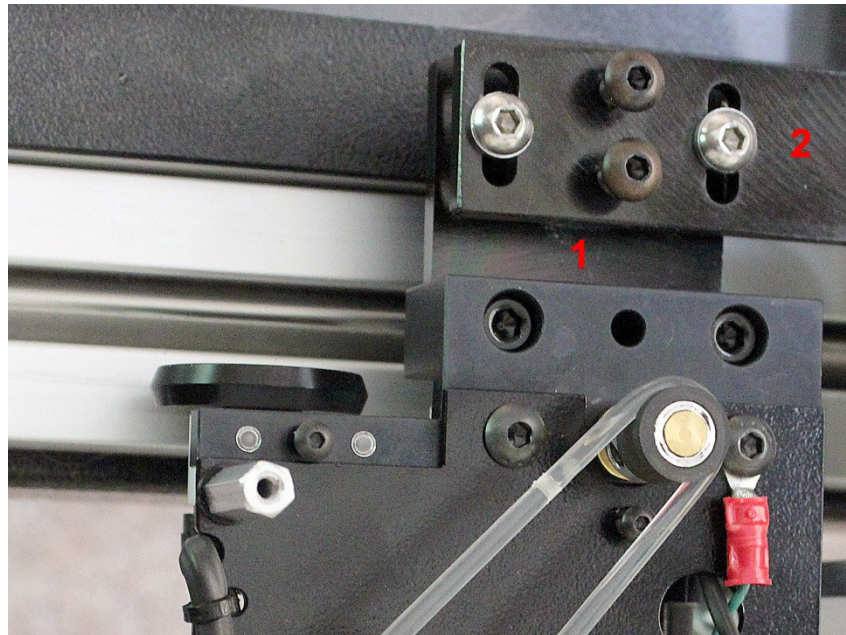
## MOTOR ALIGNMENT PROCEDURE VERSION 03.24.13

Fig. 1 shows the motor, mounted on the motor mounting plate (1), part of the mounting bracket (2) that is attached to the carriage or the arm of the machine, and the four adjusting screws.

The slots (vertical on the picture) can be found either in the motor mounting plate or the mounting bracket. They are provided to allow moving the motor in and out so the drive wheel is in the center of the flat surface of the table's track.

The color of the bolts shows whether tightening them causes the motor to be raised or lowered. The SILVER BOLTS, independently where they are, will raise the motor when tightened; the BLACK SCREWS will lower the motor when tightened.

The location of the screws determines the direction of tilting they affect: the INNER BOLTS (black ones on the picture) are used to tilt the motor up/down; the OUTER BOLTS (silver ones on the picture) tilt the motor sideways. Both sets of bolts are used to level the motor unit.



**Fig. 1**

The INNER BOLTS are used to set the angle of the drive wheel so it is parallel with the track. The goal of the adjustment is to set the drive wheel just above the surface of the table track – so you can see daylight between the wheel and the track, as shown on Fig. 2.

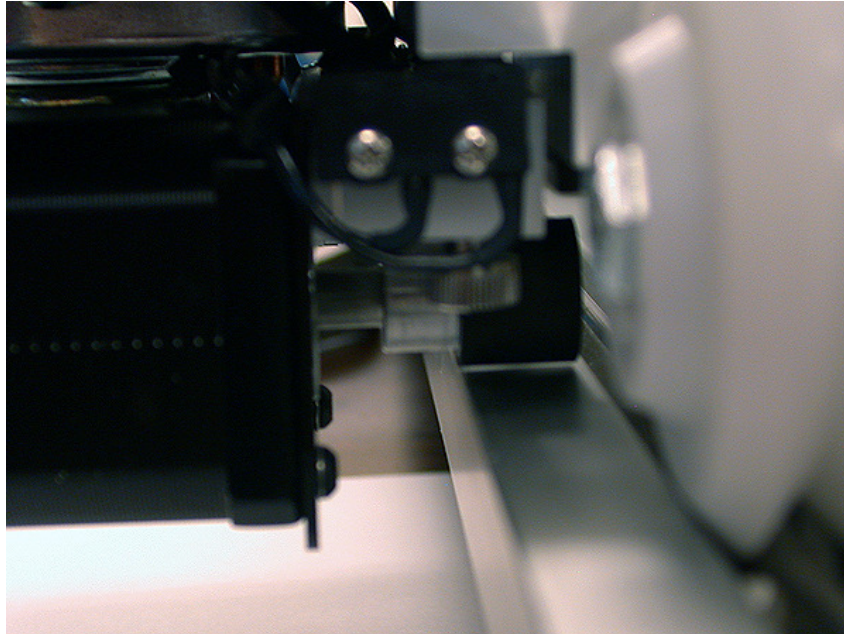


Fig. 2

#### ADJUSTMENT PROCEDURE

1. Loosen the **SILVER BOLTS** about *one quarter* turn.
2. Gradually tighten the **BLACK BOLTS**, a little at a time, to lower the drive wheel towards the track – it may help to lift the motor slightly to take the weight off the bolts.
3. When it is in about the right position (that is, the drive wheel is about 1 mm, or one credit card thickness off the table track), look and see if the metal plate is level at each end – adjust as required, using the **OUTER BOLTS**.
4. Check whether the sensor wheel and the drive wheel are in the center of the table track and they are in line down the middle of the track (or as close as possible).
5. Set the drive wheel parallel with the track by loosening/tightening the **INNER BOLTS** while looking at the drive wheel from under the motor. To tilt the motor, slightly loosen the corresponding bolt and tighten the opposite one.

**NOTE that the gap between the drive wheel and the track may change during this procedure. Use the SILVER and BLACK bolts as described in Steps 1 and 2 to reset the gap.**

6. Tighten the **OUTER BOLTS** to stabilize the bracket.

**NOTE that due to the gap between the motor mounting plate and the mounting bracket you will not feel a definite resistance increase, as it would appear when you tighten a bolt that holds together two plates. Stop tightening when you feel a gradual increase in resistance. DO NOT OVERTIGHTEN the bolts, for it can cause the bracket to bend.**