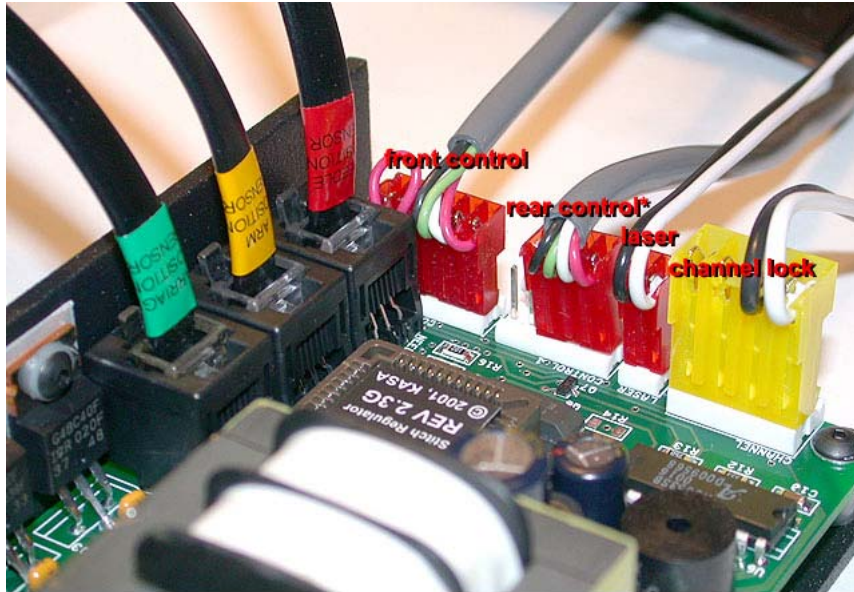


CONTROLLER BOARD REPLACEMENT PROCEDURE

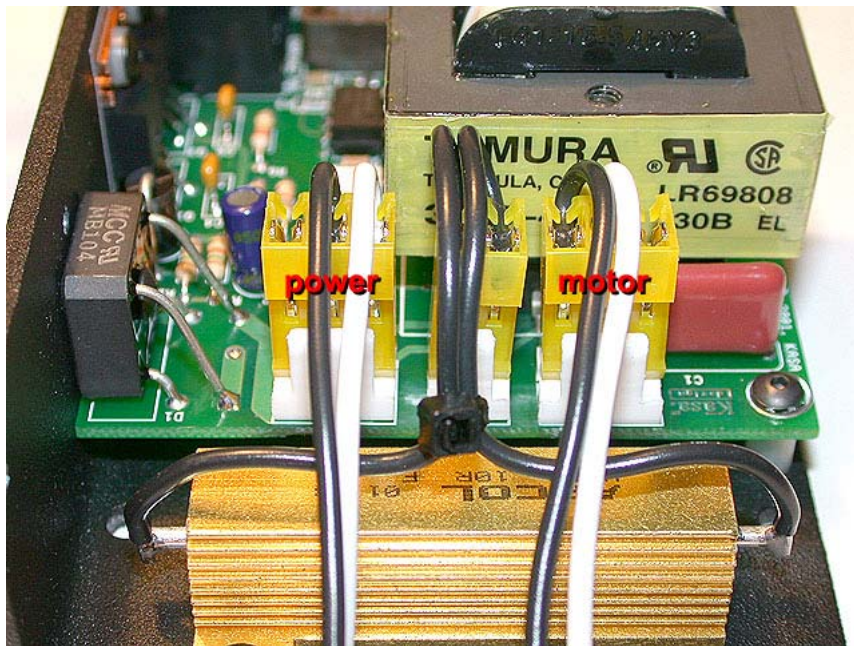
1. Using a 5/32 Allen wrench remove the four bolts holding the rear plastic cover and hang the cover by the power cord.
2. Remove the safety cover from the controller using a 1/8" Allen wrench.
3. Unplug all the connectors from the controller board.
4. Remove the controller from the back of the machine using a 9/64" Allen wrench. Remember how the ground wire was attached to the unit.
5. Put on the new controller board, making sure that the ground wire is connected firmly.
6. Plug in all the connectors. (See the pictures on the back)
7. Mount the protective cover. Make sure that only the power and motor cables go under the cover, all other cables should run outside of the cover.
8. Arrange the cables and put back the rear cover. Make sure that the sensor cables come out in the notches of the cover and neither those nor any other cables are not pinched by the edge of the cover.

In case of any problem please call your dealer or Kasa Engineering Services at (614) 792-0501.

CONTROLLER BOARD CONNECTORS



* the four pin connector should be aligned right, leaving two pins empty on the left



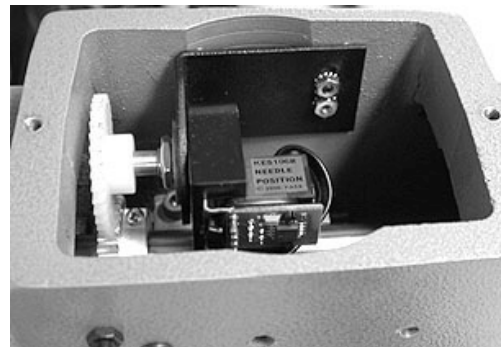
Before starting to use the I/S-Turbo_(CL), you need to realign the needle position sensor.

THE NEW "HOME POSITION" IS AT THE LOWEST POSITION OF THE NEEDLE.

The sensor alignment should be done in Setup Mode. Go to Setup Mode by holding down the SINGLE STITCH switch white turning on the power. You need to hold the switch until all the beeps sounded.

To realign the sensor on Gammill machines:

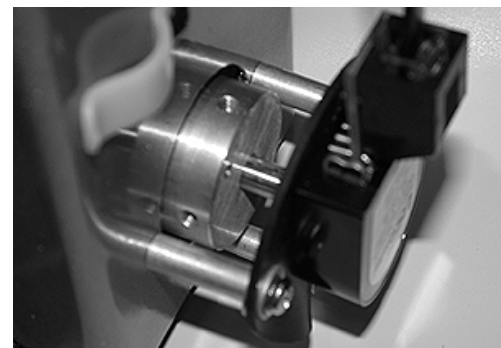
- Slightly loosen up the setscrew in the white plastic wheel.
- Turn the handwheel until the RED FAIL light comes on.
- Hold the shaft of the needle position sensor with pliers, keeping the RED light on.



- Turn the handwheel until the needle reaches its lowest position. Turn the handwheel slightly back and forth to make sure it is set in that position.
- Tighten the setscrew in the white plastic wheel (you may need to slowly turn the handwheel to reach the setscrew).

To realign the sensor on APQS machines:

- Slightly loosen up the setscrews in the sensor adapter.
- Turn the handwheel until the RED FAIL light comes on.
- Hold the shaft of the needle position sensor with pliers, keeping the RED light on.



- Turn the handwheel until the needle reaches its lowest position. Turn the handwheel slightly back and forth to make sure it is set in that position.
- Tighten the setscrews in the sensor adapter (you may need to slowly turn the handwheel to reach the setscrews).

After the successful installation you need to make an initial adjustment to match the new software with the mechanism of your machine:

- Turn on the machine in normal mode and start the warm-up by holding down the LASER button and hitting the START switch. Remember to remove the thread from the needle and the bobbin before starting the warm-up.
- After the warm-up automatically stopped (about 3 minutes), turn off the power and go to Setup Mode by holding down the SINGLE STITCH switch while turning on the power. You need to hold the switch until all the beeps sounded.
- Run the Auto Setup by turning the dial to B1 and hitting the SINGLE STITCH switch. Note that you need to repeat the Auto Setup if it stops with a long beep.
- Turn the dial to MAX. and set the maximum constant speed to match your quilting speed.
- Turn off the power to exit the Setup Mode.
- Turn on the machine in normal mode and check the stitch quality in regulated mode, setting 12 stitches/inch. If the stitches are getting longer when you move the machine faster, follow the Regulated Stitching Speed adjustment on Page 2 of the Adjustment Procedure section of your User Manual.
- Test the needle-up and needle-down positions using the DOWN button. If the positions don't match the description on Page 4 of the Adjustment Procedure section, follow the instructions on Pages 4 and 5.

If the machine cannot complete the Auto Adjustment, or you have any problem with the installation, please call your dealer for assistance.

SURGE PROTECTOR INSTALLATION ON GAMMILL MACHINES

Before starting the installation make sure that the power cord is unplugged.

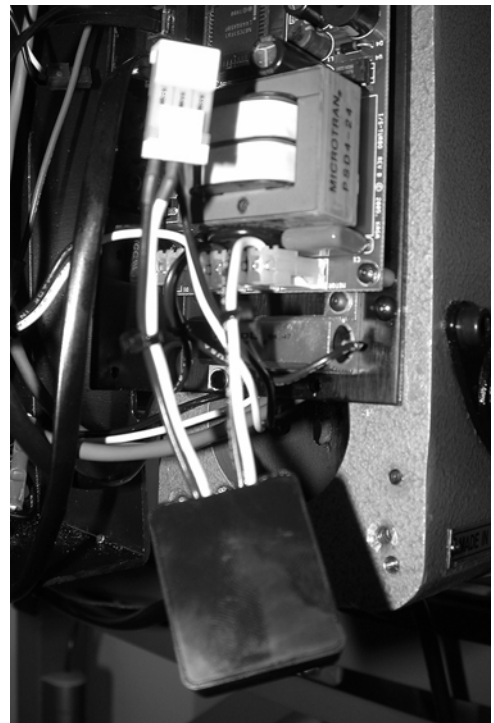
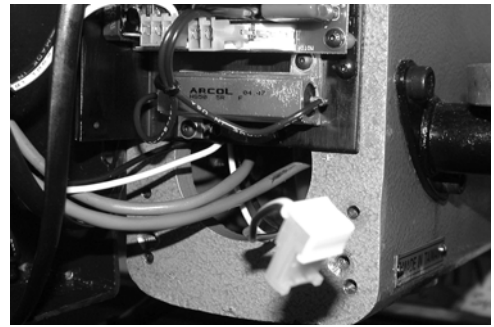
Remove the bolts holding the rear plastic cover and flip the cover to the left.

Remove the black safety cover from the control unit.

Unplug the motor connector (rightmost position), and put the protective cover on it, as the picture shows.

Plug the motor connector in the header of the surge protector module, and insert the module's connector in the motor header, as the picture shows.

Replace the safety cover, making sure that only the power (on the left) and the surge protector cables get under it.



Replace the back cover. Push the surge protector and the motor cable connector into the cover as the picture shows. Arrange the phone cables inside the notches on the bottom and the left side before tightening the bolts.

