

Cable Repair Procedure

Removing the table

1. Unplug the Appli-K.
2. Remove the knife assembly from the carriage.
3. Loosen the 4 screws at the corners of the table. Do not back the screws all the way out.
4. One at a time, slip the cables out of the tensioners and pull the cable down over the platen (the body of the cutter). Tape the cable down to the platen.
5. Repeat step 4 for all four cables.
6. Pull the table out from the front of the machine. It may be necessary to rotate the two rear tensioner brackets so that the table will slide out freely.

Inspect the cables and see how they are wrapped around the hubs. All of the cable should be wrapped around the hubs, and the sections of cable that go the corners of the table should be next to one another on the hub. If one of the hubs looks fine, tape it down to the platen to be sure that it cannot unravel from the hub. Use it as a guide for wrapping the other hub. If both hubs need to be wrapping, wrap them one at a time and so they look the same.

Re-wrapping a hub

1. Turn the machine upside down. **The Appli-K cutter is not stable in this position.** Place a block of material or a stack of books under the platen to keep the machine from tipping over.
2. Remove the screw found in the middle of the bottom cover.
3. Lift the cover 2-3 inches and unplug the fan from the logic board before fully removing the bottom cover.
4. The logic board and/or the power supply will need to be removed to access the underside of the hubs.
5. For the power supply, unplug the AC power leads and the wire connector from the logic board. Remove the two screws holding the sheet metal plate to the platen. For the Logic board unplug the 4 wire connectors and two ribbon cables (large gray with blue connector and small white one) and then remove the screws.
6. Remove the power supply and/or logic board.
7. Re-wrap the cable around the hub. When finished, the cables should wrap toward the middle of the hub in opposite directions. From the underside of the machine each hub should have 6 cable wraps (except on the hub where the cable ends there are 5).
8. Tape the cable to the top of the platen to keep cable from unraveling and to take out the slack in the hub.
9. If necessary retape the cables coming off of the other hub to remove slack from the cable wraps.

Reinstalling the Power Supply and/or the Logic Board

1. Align the holes in the platen with those in the Power Supply bracket or the Logic Board as you place the part inside the platen.
2. Install the screws.
3. Plug in the wire connectors and ribbon cables. For the Logic board, be sure to plug the x and y motor connectors in the proper location (the locations are labeled x and y encoder). The x motor is the one located under the logic board. **When wire connectors are installed correctly, they should not be easily pulled out (they should lock).**
4. Replace the bottom cover (don't forget to plug the fan in) and install the screw to hold it down tight.
5. Turn the machine back over.

Putting the table into the Appli-K

1. If any of the cable tensioner brackets that are attached to the four corners of the table are bent they need to be removed and bent straight. The inside angles of the brackets should be 60 and 90 degrees and the sides should be straight. If the long side is bent then bend it straight.
2. Attach the cable tensioners to the table by turning the screws until the threads just start to appear out the far side of the bracket threaded portion.
3. Slide the table back into the machine.
4. Place the ridge of the black track on the right side of the table into the groove of the v-wheel.
5. Compress the left v-wheel bracket to the outside and slip the black track on the table into the v-wheel groove.
6. Slide the table back so it is stable on the platen. Both v-wheels of the Appli-k should be riding on the black tracks on the table edges.

Attaching the cables

1. One at a time, attach the cables to the table by slipping the cable ball end into the slot on the tensioner bracket. **Do not pull cables tightly.** This may cause the cable to slip from under the tape and to unravel from the hub!
2. Tighten the tensioner bracket screws so that the cables are all tight (give all the screws about the same number of turns). With the table pulled all the way forward pluck the cables. The cables should have a clear tone. Tighten or loosen the adjustment screws to put the same tension on the cables (the pitch will be about the same when the tension is the same).
3. **Remove any tape that remains on the cables or the platen.**

Aligning the Table & Adjusting the Cable Tension

1. Slowly slide the table to the back of the machine. Line up the front surface of the platen with the front edge of the table.
2. The four cable brackets need to be adjusted so that the table is square to the platen. See Figures 2 and 3. Loosening a screw on either corner of the front edge of the Appli-K causes that corner of the table to move away from the body of the machine (and vice-versa for tightening). **Before tightening a screw, it is recommended that the screw at the other end of the cable be loosened.**
3. Any time a screw is loosened, the screw at the other end of the cable will have to be tightened so that proper tension is maintained. For example, if the screw at the front right corner of the table is loosened, then the screw at the back right corner of the table will need to be tightened.
4. Repeat step 2 through 4 until table is aligned sufficiently. When looking down on the machine, the front edge of the table should line up with the front edge of the platen as shown in figure 3.

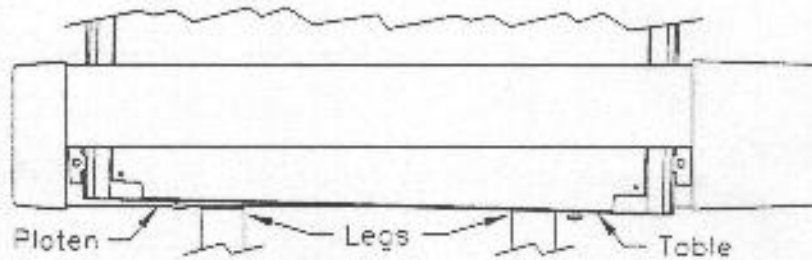


Figure 1: Mis-aligned table (top view).

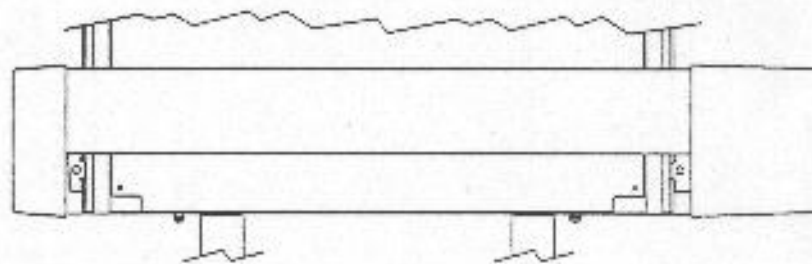


Figure 2: Properly aligned table (top view).

1. Slide the table back and forth several times and then go through step 2 one more time.
2. Slide the table to the front of the machine. On the *left* side of the Appli-K, hook the scale onto the cable approximately 10.0 inches (25.4 cm) from the front corner of the table. Look down over the table edge while slowly pulling the scale. See Figure 4. When the edge of the cable can first be seen the scale force should be between 2.25 and 2.75 lbs (10.2 to 12.5 kg).

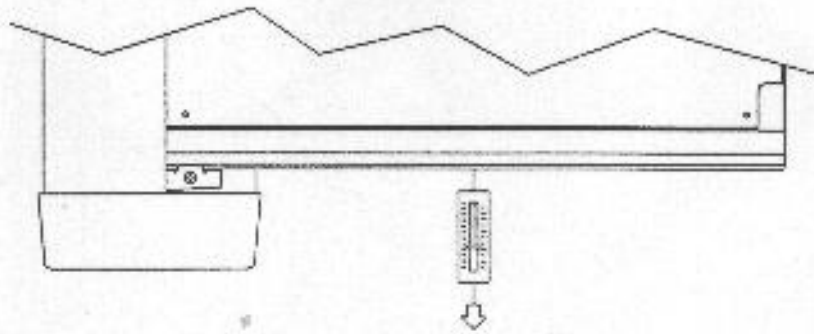


Figure 4: Testing cable tension (above the *right* side of the machine).

1. With the table pulled all the way forward, pluck the cable on the *right* side of the table. The two cables should vibrate about the same, or feel the same when plucked. To increase the tension tighten one or both of the adjustment screws (rotate clockwise).
2. Check table alignment again and adjust if necessary.