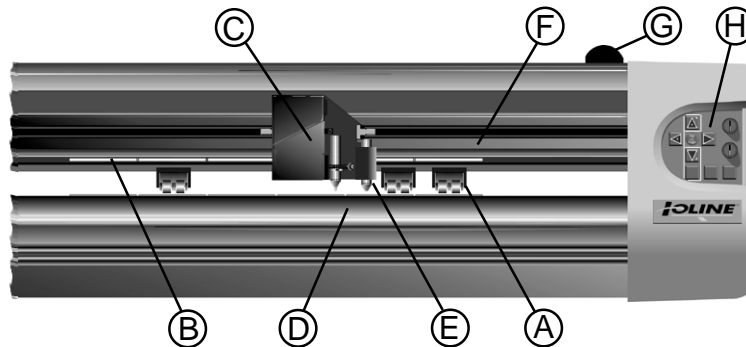


This quick start guide shows how to assemble and setup the Ioline Ae plotters. Consult the user guide on the CD-ROM for more detailed information about installation and operation. Use the provided Adobe® Acrobat® viewer to print the user guide if necessary.

**Caution:** *The plotter is heavy and could cause an injury if it falls. A minimum of two people are required to safely unpack the plotter and attach it to the stand.*

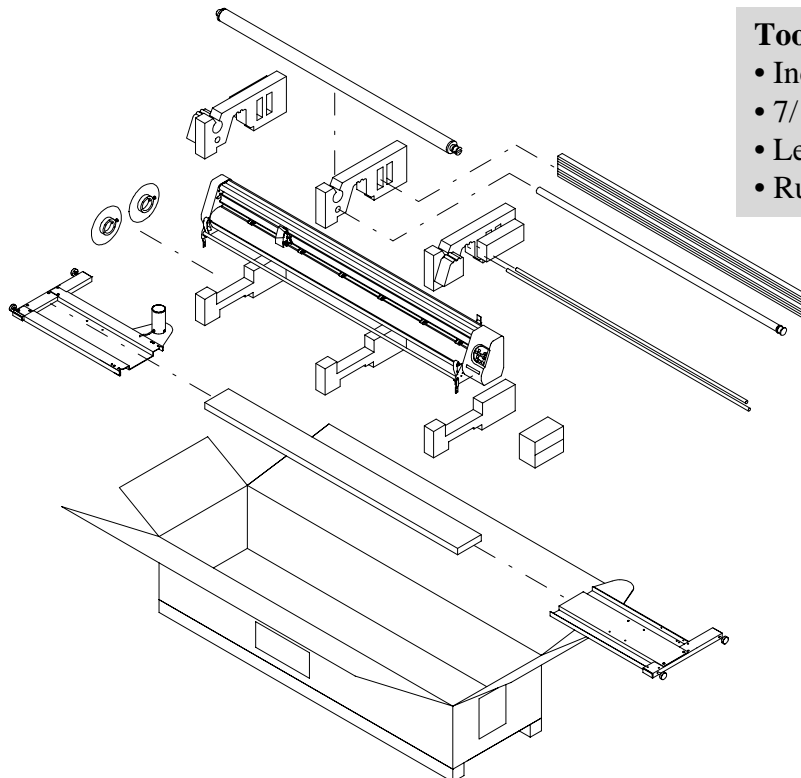


- A. Pinchwheel
- B. Drive Shaft Marker
- C. Carriage
- D. Platen
- E. Sensor (600Ae only)
- F. Carriage Rail
- G. Pinchwheel Lever
- H. Keypad

## Installation

### Step 1 Unpack

- Remove the plotter, stand parts, and accessory kit from the box and check the packing list. Always lift the plotter with two people, one person holding the shiny top bars at each end. See Step 4 for more details. Save all packing materials.



#### Tools Required for Assembly:

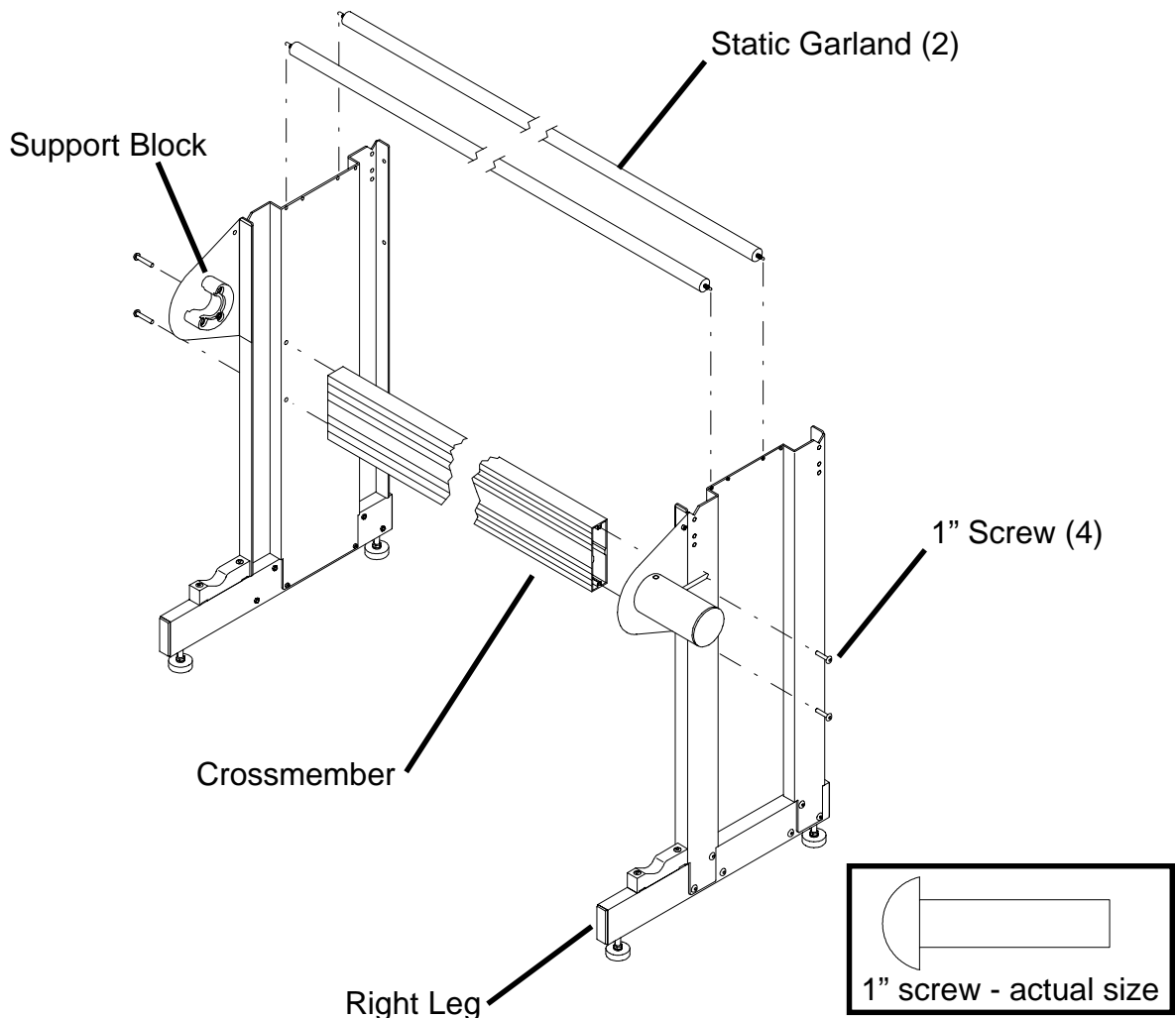
- Included hex (Allen) wrench
- 7/16" or adjustable wrench
- Level
- Rubber headed mallet

## Step 2 *Assemble the Stand*

**Note:** The crossmember is reversible and can be attached upside down and from either side.

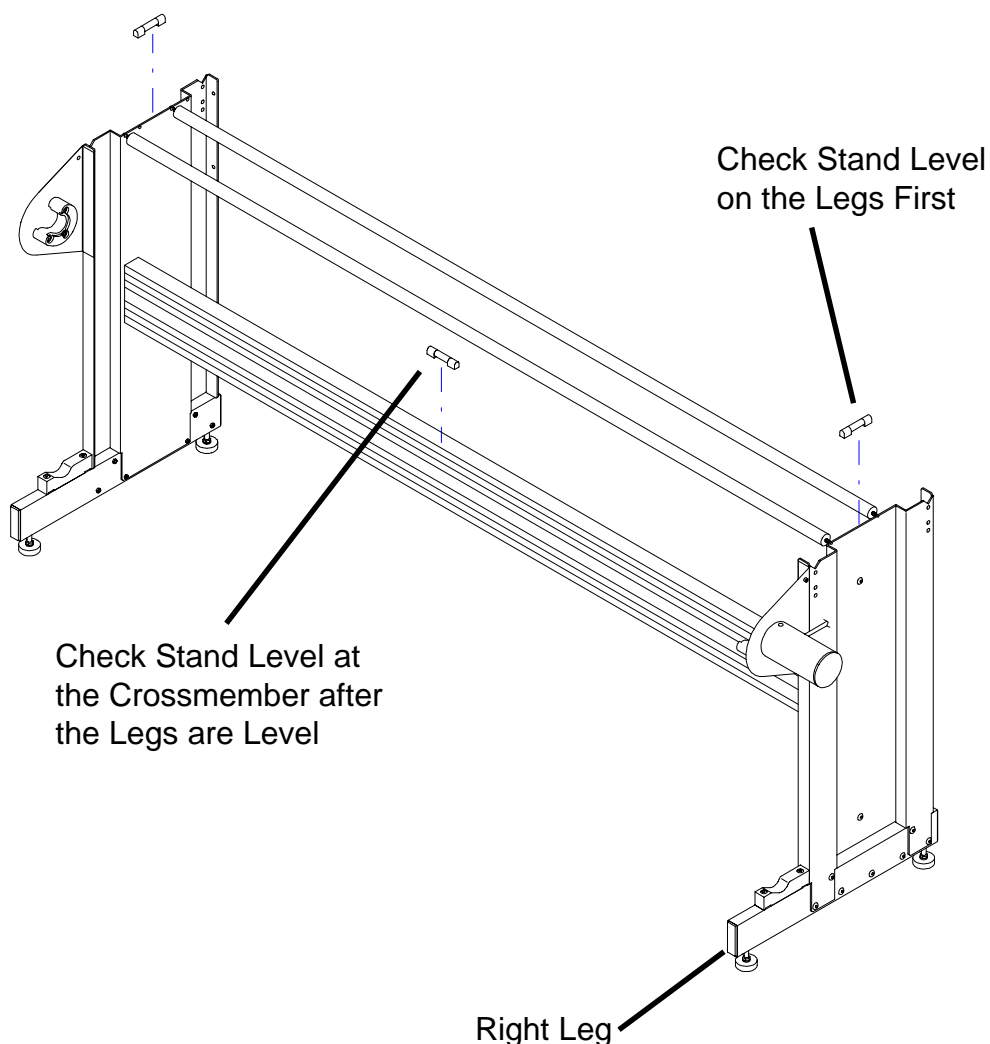
1. Align the holes in the right leg with the threaded holes in the crossmember. Make sure that the crossmember is mounted on the same side of the leg as the support block. The support blocks should face toward the center of the stand after the crossmember is installed.
2. Insert two 1 inch socket head screws into the threaded holes. Leave them loose.
3. Repeat this procedure for the left leg. Make sure that the support block on the left leg is on the same side as the crossmember.
4. Place the stand assembly upright and tighten all four crossmember screws.
5. Hook the ends of the static garland into the holes in the stand leg as shown.

**Note:** The static garland must make contact with the paper while the machine is plotting. If it does not, check that the garlands are installed in the correct holes in the leg.



### Step 3 ***Level the Stand***

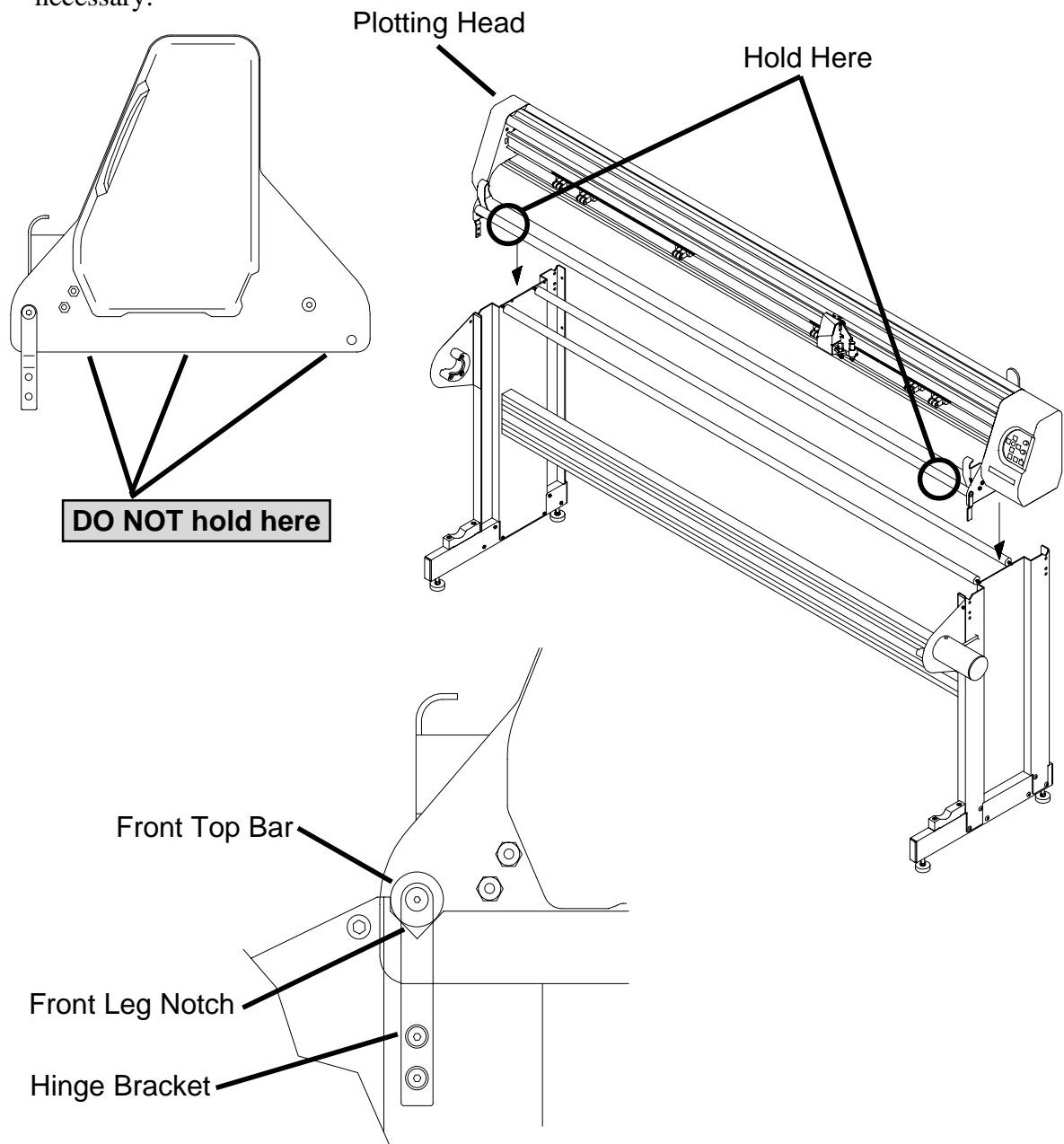
1. Use an adjustable wrench to loosen the lock nut on both of the right leg levelers. Place a level across the top of the right stand leg, perpendicular to the crossmember. Adjust the threaded feet until the stand is level along the long axis of the leg.
2. Repeat this procedure for the left leg.
3. Place a level on the crossmember. Repeat the adjustment procedure as above except rotate both levelers on each leg the same amount so that the legs stay level. Adjust the threaded feet until the stand is level on the long axis of the crossmember.
4. Check the level of the legs again and make small adjustments as necessary until the stand is level in both directions.
5. Tighten all of the lock nuts on the levelers.



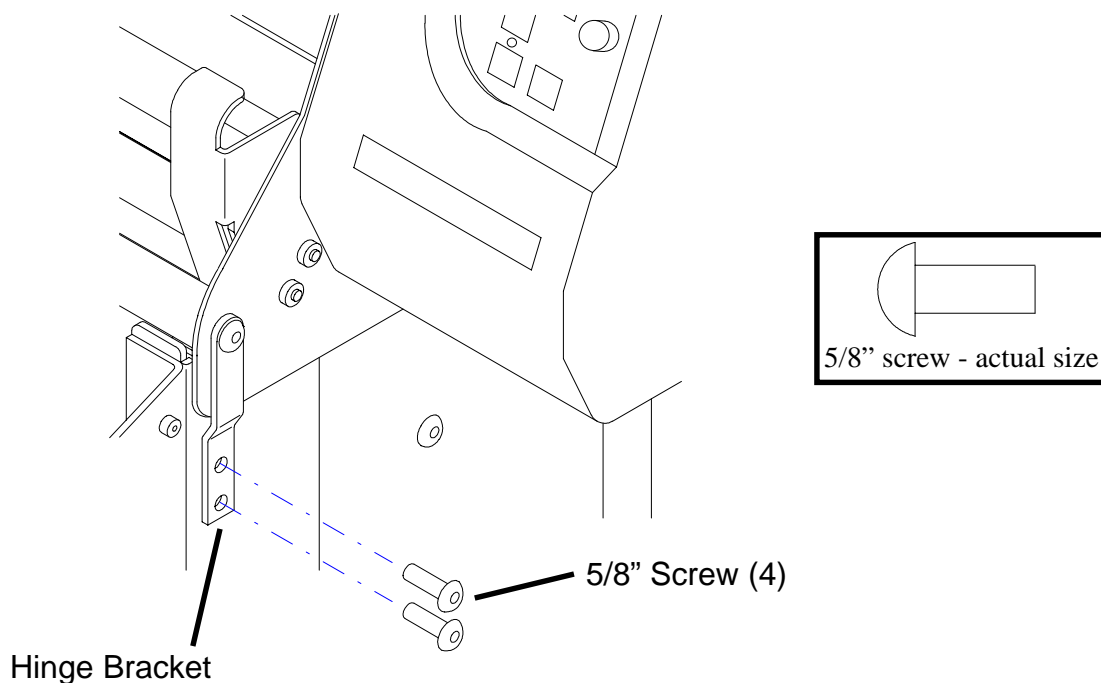
## Step 4 *Attach the Plotter to the Stand*

**Caution:** Do not hold the plotting head by the bottom edge of the end plates when attaching it to the stand. Fingers and hands might get pinched between the end plates and stand legs. Hold the shiny metal top bars a few inches from each end when handling the head.

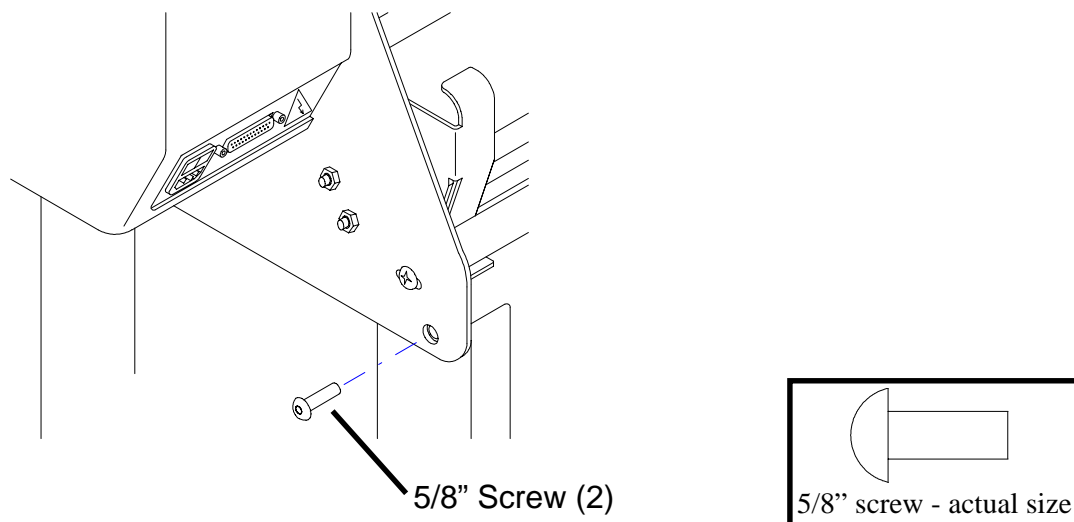
1. Using two people, lift the plotting head onto the stand. The front (carriage side) of the plotter should be facing the same direction as the support blocks. Make sure the front top bar rests in the notch in the front of both legs. Rotate the hinge brackets out of the way if necessary.



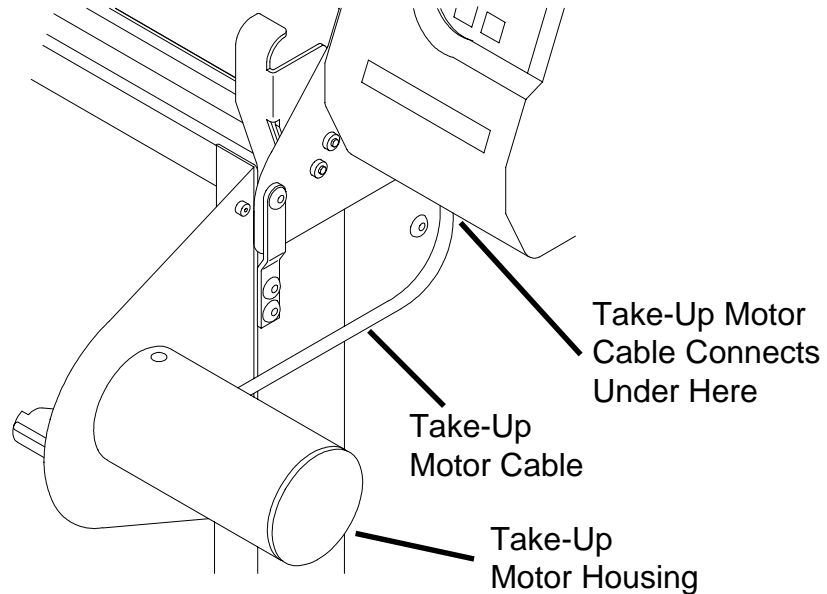
2. Rotate both front hinge brackets so that the holes in the bracket line up with the holes in the leg. If the bracket holes do not align with the two threaded holes, check to make sure that the front top bar is resting in the front notch on both legs.
3. Fasten both brackets to the legs with two 5/8" button-head screws and tighten with the supplied hex wrench. Make sure all 4 screws are tight.



4. Insert a 5/8" button-head screw through the hole in the back of both end plates to connect the head to the stand. Tighten the screws with the supplied hex wrench.



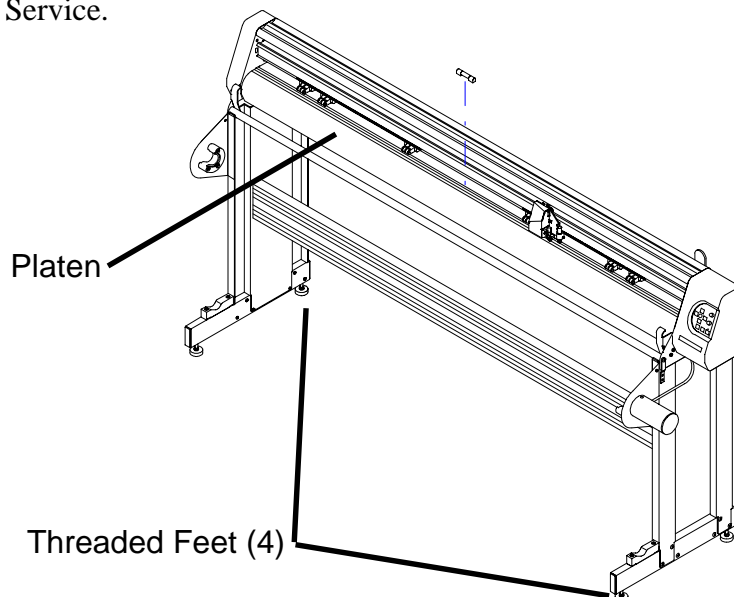
5. Plug the take-up motor cable into the socket on the bottom of the right cover and rotate the locking collar until it stops. Gently pull on the cable to ensure that the plug is securely fastened.



6. Cut the plastic straps holding the carriage in place and remove any packing foam.

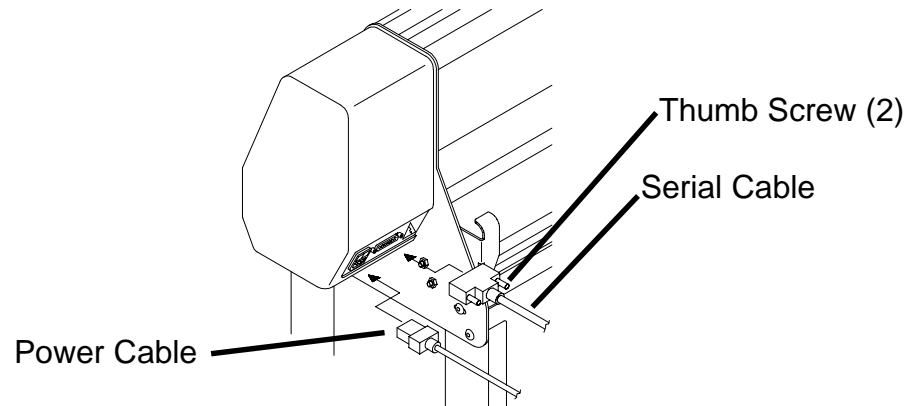
### **Step 5** **Adjusting the Plotter**

- Place a level on the platen so that it is parallel to and in front of the drive shaft. Make small adjustments to the threaded feet if the machine is not level. If the machine is difficult to level, check the plotter for shipping damage and contact your distributor or Ioline Customer Service.



## Step 6 Connect the Communication and Power Cables

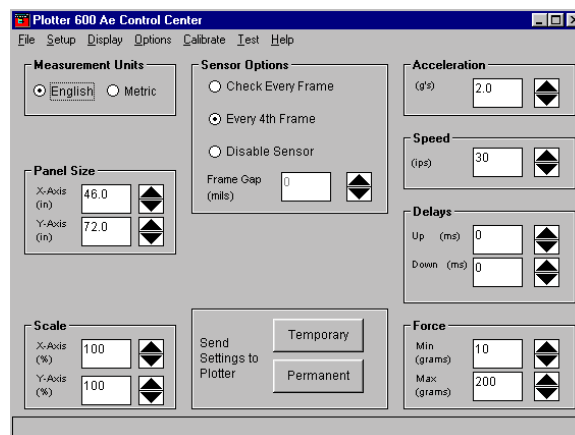
1. Make sure that power is off to the plotter. Off is marked with a, “O,” and on with a, “1.”
2. Connect the supplied serial cable and power cord to the panel on the back of the right side of the plotter. Lock the serial cable to the port on the plotter with the thumb screws.
3. Plug the plotter power cable into a wall socket or surge protector.



4. Make sure that power is off to the computer.
5. Connect the serial cable to a 25 pin-male-serial port on the back of the computer. If your computer only has a 9 pin connector, use the supplied 9 pin to 25 pin serial adapter between the cable and the port. Tighten the thumbscrews.

## Step 7 Install the Software

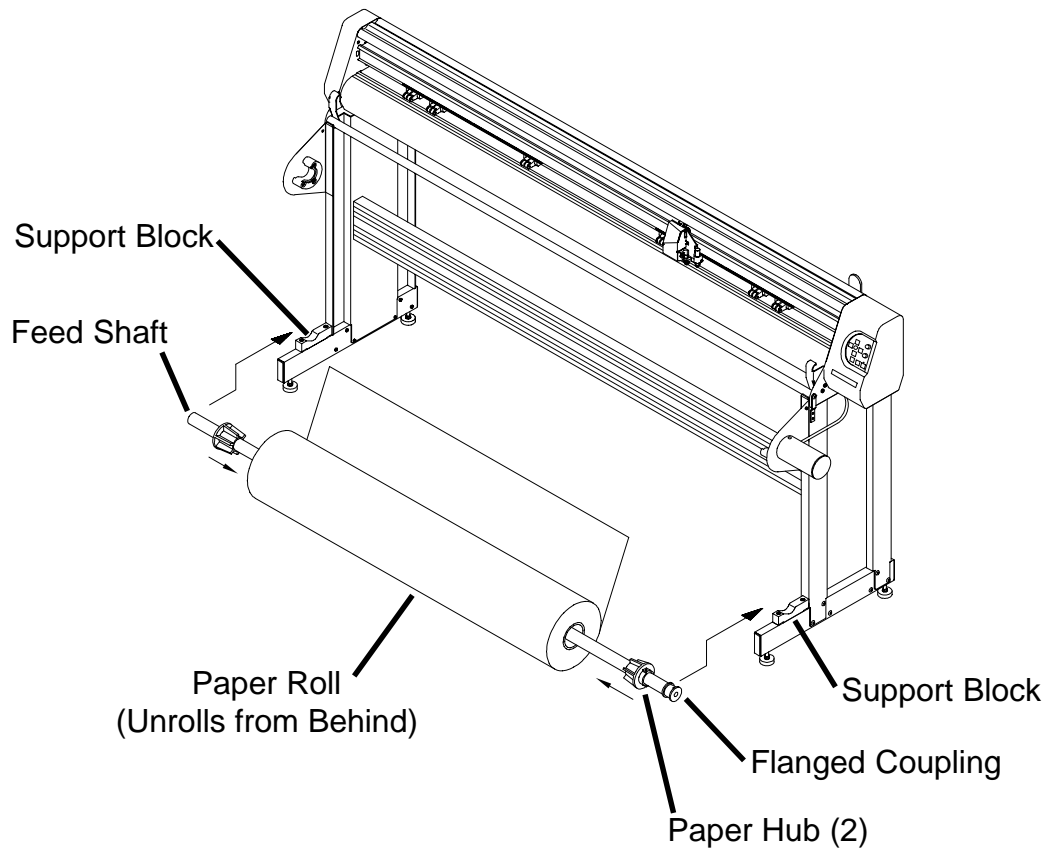
1. Insert the installation CD-ROM into the computer CD-ROM drive. The install program should start automatically. If it does not, select **Run** from the **Start** menu. Browse to the CD-ROM and double click on **Iosetup.exe**. Press OK to start the install.
2. Install the Ioline Control Center and 601 software. Installing the electronic user and quick start guides and Adobe Acrobat to the hard drive makes help easily accessible.



## Prepare to Plot

### Step 1 *Loading the Feed Roll*

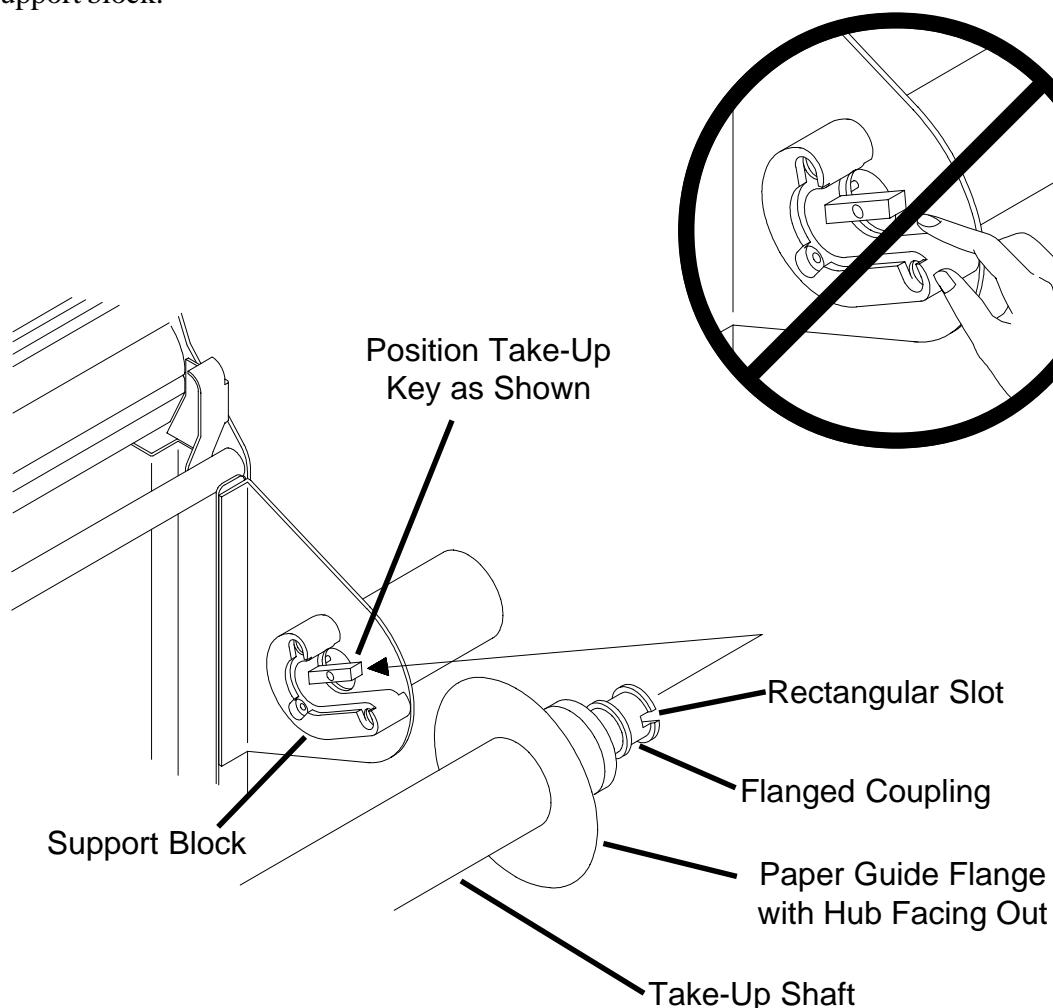
1. Before loading a new paper roll always make sure the drive shaft is clean. See the *Preventative Maintenance* section in the user guide for more details.
2. Place a paper hub in each end of the paper roll. Use a rubber mallet to insert the hubs.
3. Slide the feed shaft through the paper hubs and the paper roll. If a paper hub falls out, press it firmly back into the end of the paper roll and set it with a rubber mallet.
4. **This step is very important.** Center the paper roll on the feed shaft by sliding the feed shaft left or right through the paper roll. Make sure the hubs remain securely in place.
5. Use the supplied hex wrench to tighten both screws on each paper hub.
6. Lift the feed shaft and paper roll into the support blocks. **Make sure the paper unrolls from behind and towards the plotter.**



## Step 2 Loading the Take-Up Roll

**Caution:** Never touch the take-up key or flanged coupling while they are rotating. Serious personal injury could result.

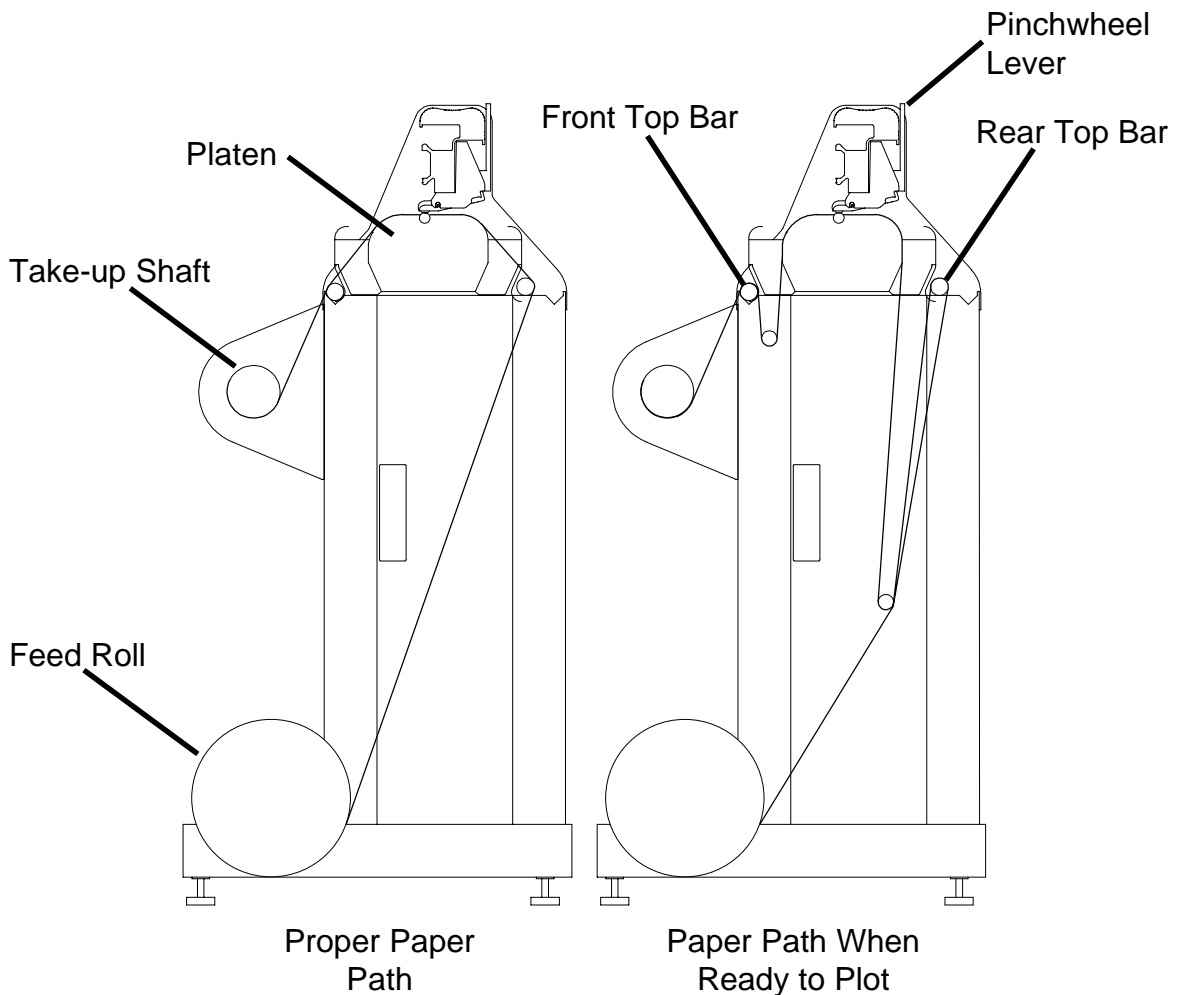
1. Turn on the power to the plotter with the switch on the back of the right cover.
2. If the take-up shaft has plotted markers on it, remove them. See *Unloading Completed Markers* in the *Ioline Ae Plotter User Guide* for details.
3. Rotate the take-up key with the **Roll** arrow keys until it is oriented perpendicular to the support block opening as shown below.
4. If rolling up more than 42 yards on the take-up shaft (model 600Ae only), install the paper guide flanges. Make sure the hub with the thumbscrew is on the outside of flange.
5. Put the take-up shaft into the front support blocks with the flanged coupling at the right (keypad) end. Rotate the shaft until the slot in the flanged coupling is aligned with the take-up key. When the shaft slot and the key are aligned, push the take-up shaft into place until it is seated in the support block.



### Step 3 *Feeding Paper*

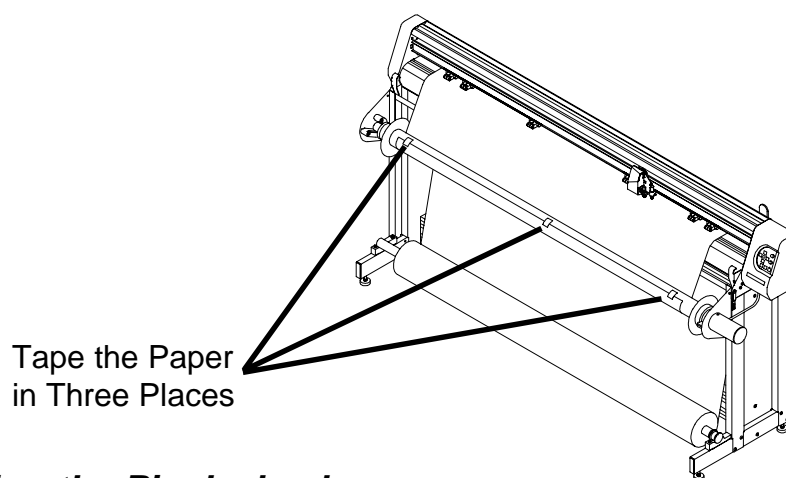
The figure below represents the proper paper paths. The diagram on the left shows the paper after it is inserted properly and taped to the take-up shaft. The figure on the right shows the result after the dancer bars are inserted and an origin is set with the **Set Origin** keypad button.

1. On the model 600Ae, slide each of the paper guide flanges toward the outside ends of the take-up shaft to create enough room for the width of the paper.
2. If the pinchwheels are lowered, raise them by pushing the pinchwheel lever away from the machine.
3. Turn on the power to the plotter if it is not already on.
4. Pull a long leader of paper off of the paper roll and insert it through the stand, behind the plotting head, over the rear top bar, and between the platen and pinchwheels.
5. Temporarily lock the paper in place by pulling the pinchwheel lever toward the machine to lower the pinchwheels. Refer to the figure below for help with the proper paper path.



## Step 4 Taping Paper to the Take-Up Shaft

1. Stand in front of the machine.
2. Attach a short piece of masking tape to the center of the dust cover on top of the machine.
3. Grasp the front edge of the paper. Push the pinchwheel lever to raise the pinchwheels.
4. Hold the front edge of the paper with both hands and pull 20" (51 cm) of paper over the platen and shiny top bar and under the take-up shaft (see *Step 3* for the proper paper path).
5. Align the paper by gently moving it left and right until the tension feels even. Attach the paper to the take-up shaft with the tape stuck to the dustcover.
6. Tape the right and left ends (about 2" or 5 cm in from the edge) to the take-up shaft.

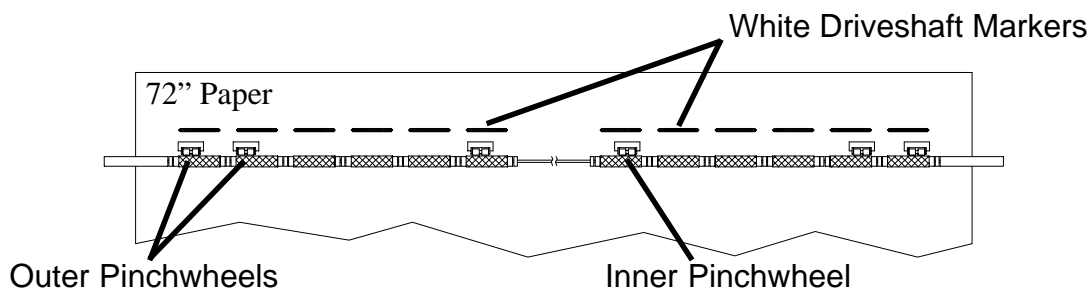


## Step 5 Positioning the Pinchwheels

**Important Note:** Ensure that the paper roll is centered on the feed shaft.

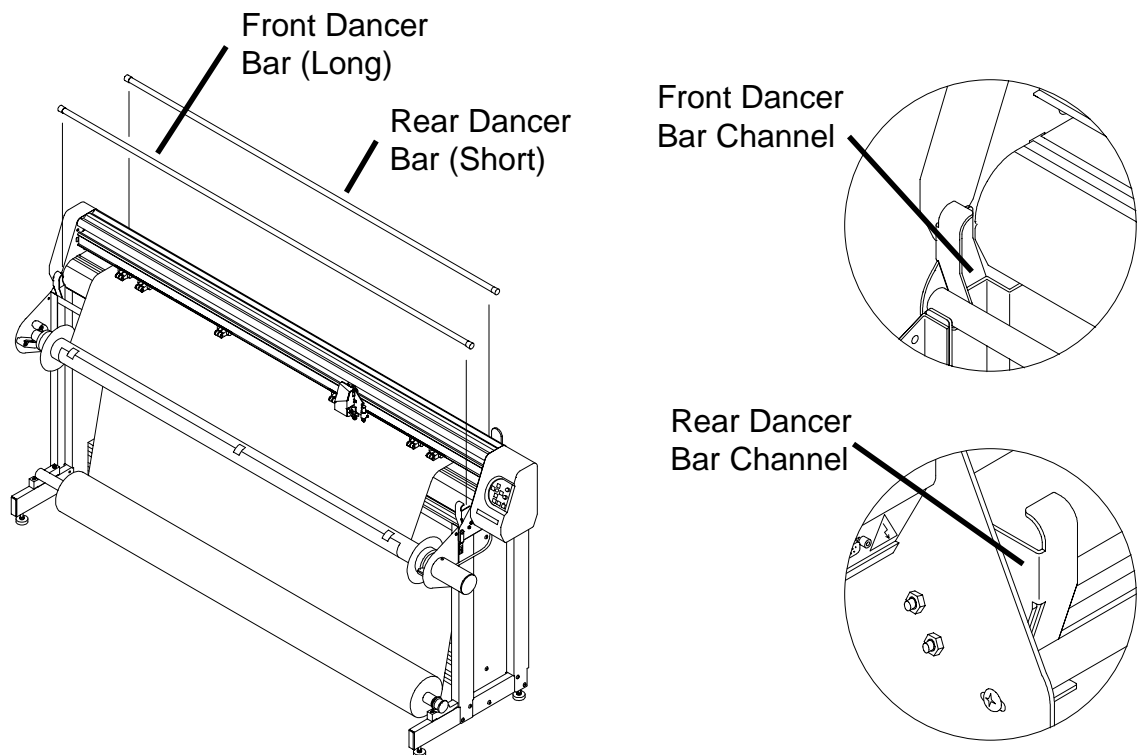
Different paper sizes require different pinchwheel positions. Experiment to find the proper positions remembering to place two pinchwheels near both edges of the paper.

1. Ensure that the paper is loaded as described in the previous steps.
2. Raise the pinchwheels (if they are not up) by pushing the lever away from the machine.
3. Make sure that the paper roll is centered on the feed shaft.
4. Move the pinchwheels to the proper position. See the figure below for an example. **Do not place a pinchwheel over any smooth portion of the drive shaft.** Use the white markers on the carriage rail to find drive shaft segments when they are covered by paper.



## Step 6 *Insert the Dancer Bars*

1. Lower the pinchwheels (if they are not down) by pulling the lever toward the machine.
2. Ensure that the keypad LED is red. If the keypad LED is green, press the **Start/Stop** button.
3. Insert the short rear dancer bar into the rear dancer bar channels.
4. Insert the long front dancer bar into the front dancer bar channels.
5. Press the down **Arrow** key until the front dancer bar falls into a take-up loop formed by the paper. Pull enough media to form a loop that is about 12" (30 cm) deep.
6. Move the paper flanges (model 600Ae only) to about 1/16" (1.5 mm) from the edges of the paper. Tighten the flange thumb screws.



## Step 7 *Set an Origin*

1. Loosen the thumb screw and clamp on the carriage jaw. Install a pen in the jaw. Tighten the thumb screw until the pen is held firmly.
2. Use the left and right **Arrow** keys to move the carriage to the desired starting location. Make sure the pen will start to the left of the right most pinchwheel.
3. Press the **Set Origin** key. The plotter will pull paper from the feed roll and create a feed loop in the rear. The keypad LED will turn green when the plotter is ready to receive a file.

**The plotter is ready to plot. Refer to the user guide and the design software documentation for more information about optimizing plotter performance.**