

Removing and Replacing the Main Electronics Box (Controller)

To remove and replace the controller box you will need the following tools:

- #2 Phillips screwdriver or power drill with #2 screw bit

Removing the Controller Electronics Box

The CarveWright Woodworking system has an on-board computer which controls all the functions of the machine. In the event that a CarveWright service technician diagnoses a failure in this electronics box it can be easily replaced using the procedures in this document. Because critical calibration information for your specific machine is stored in these electronics you will need to provide the machine serial number to the technician so that the machine specific calibration data can be transferred to the new controller before it is sent to you.

1. **Ready the machine.** Unplug the machine from the power outlet and place it on a stable work platform. Remove the dust collection bag from the back of the machine.
2. **Remove the bottom cover.** Carefully lay the machine on its back with the dust collection port facing down. Remove the 12 screws securing the black sheet metal cover onto the base (four of which are located in the rubber feet) and remove the cover.

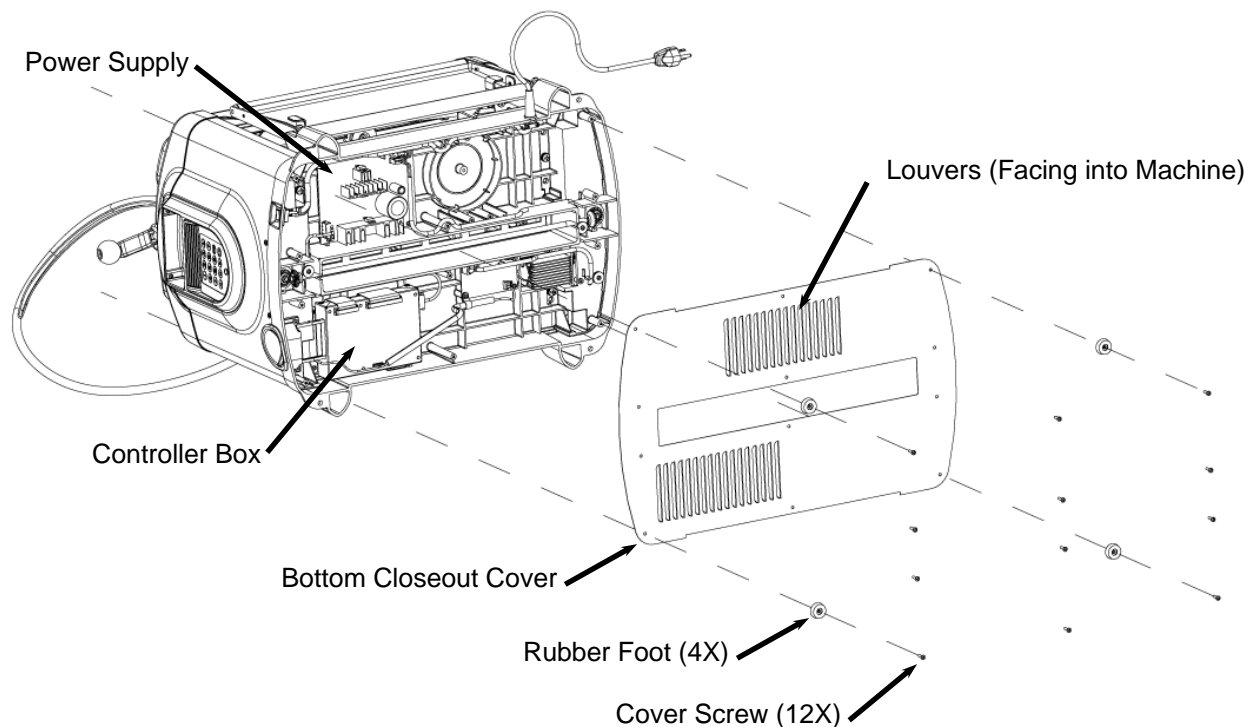


FIGURE 1: REMOVAL OF THE BOTTOM COVER

3. **Unplug the four cables connected to the controller.** Locate the controller box and unplug the DC power cable, the 40-pin head ribbon connector, the 16-pin LCD ribbon connector, and the AC motor control cable.

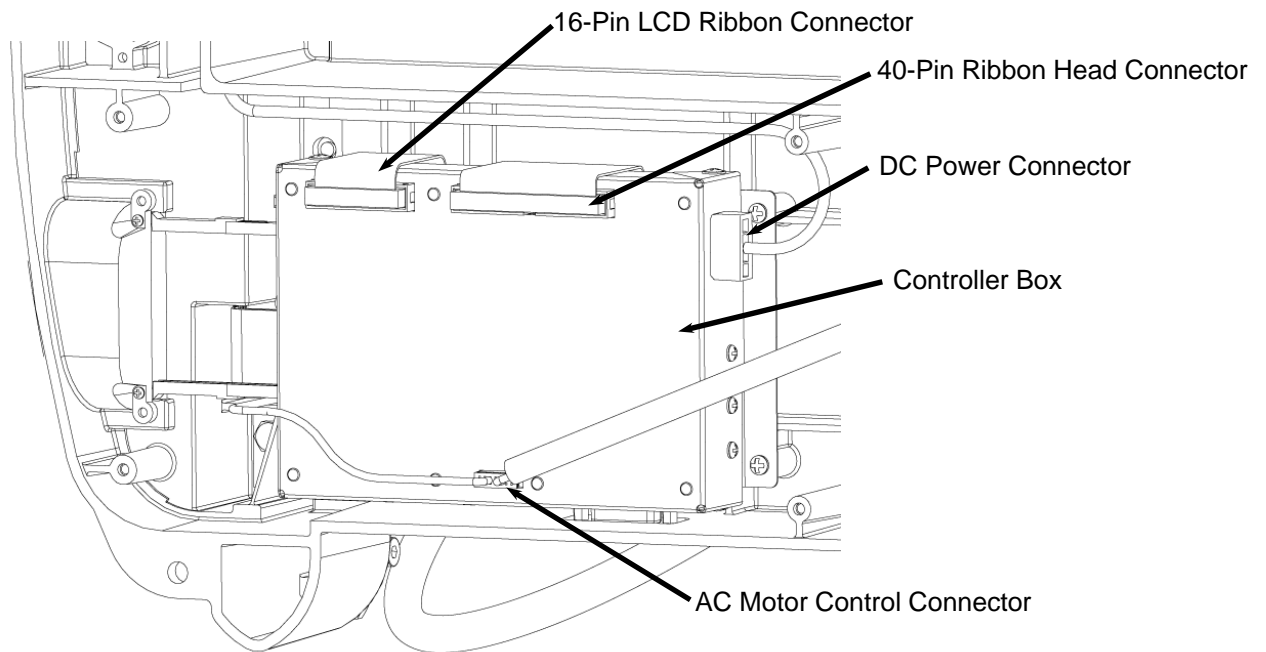


FIGURE 2: LOCATION OF THE CONTROLLER CONNECTORS

4. **Release the memory card guide arms.** These arms guide the memory card into the controller box and insure that the card connects properly. Remove the two screws securing these arms to the base casting.

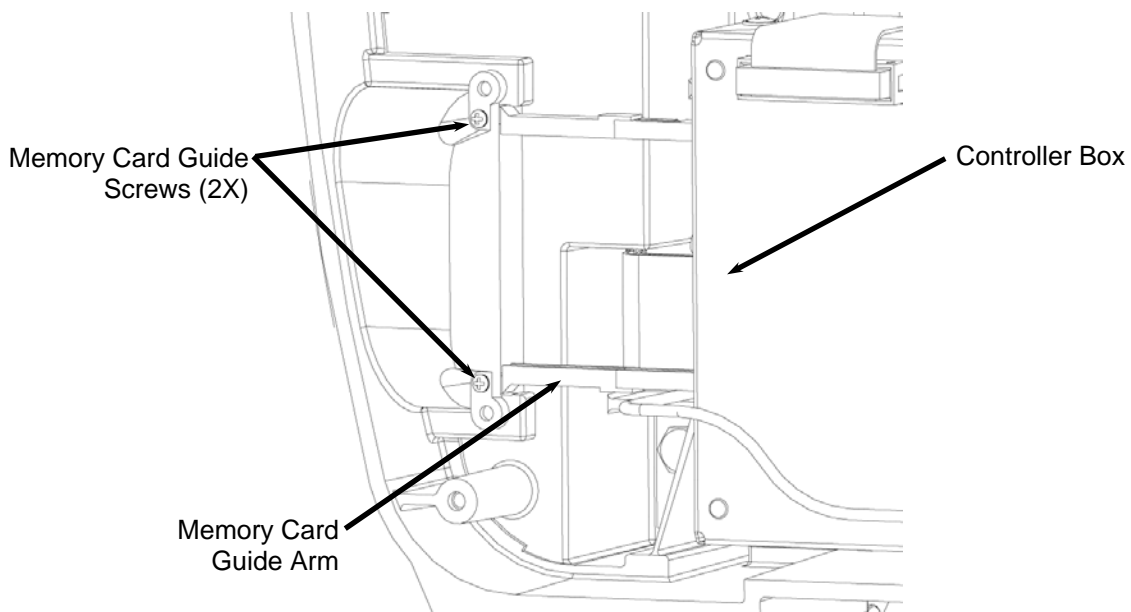


FIGURE 3: REMOVAL OF SCREWS SECURING THE MEMORY CARD GUIDE ARMS

5. **Remove the controller box.** Use the #2 Philips head screw-driver to remove the four screws that attach the controller box to the base casting. Gently slide the box toward the center of the machine to clear the memory card guide arms and lift the box free. Caution: these arms are delicate and can be broken if they are bent.

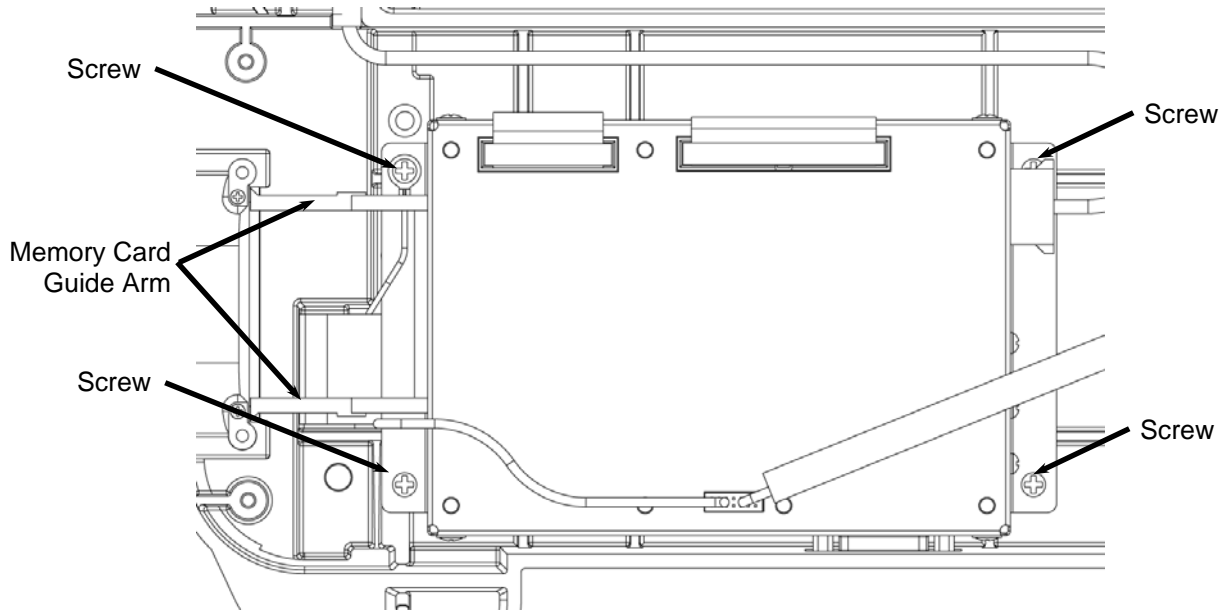


FIGURE 4: CONTROLLER BOX ATTACHMENT

Reinserting the Controller Box

1. **Insert the new controller box.** Slide the memory card guide arms into the slot in the side of the base and position the holes in the box over the holes in the base casting.
2. **Secure the controller box.** Replace and tighten the four screws that secure the controller box to the base casting. Next replace and tighten the two screws that secure the memory card guide arms to the base casting.
3. **Reconnect the controller cables.** Connect each of the four cables going to the controller box. Each cable connector has an orientation keying feature that restricts the connector from being plugged in backwards. **DO NOT FORCE A CONNECTOR.** If the connector does not seat easily please check the orientation and try again.
4. **Replace the bottom cover.** Replace the metal cover with the louvers pointing into the machine (see Figure 1). Insert and tighten the 12 screws. The four rubber feet are placed at the corners of the machine.