

Backlit LCD Installation instructions

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Thanks for purchasing the Backlit LCD kit for the CarveWright/CompuCarve machine. The kit contains a backlit LCD display and the hardware needed for installation. You will need a #1 and #2 Phillips screwdriver and Super Glue® or a hot glue gun to complete the installation. All the components included in the kit are shown in Figure 1.

The keypad assembly is held in place with six screws, four from the rear and two from the front. Accessing the rear screws is done from the inside of the machine and requires removal of the top cover. The included document “how_to_remove_cover.pdf”, from CarveWright, describes the removal of the top cover. It’s a good idea to put down a cloth or piece of cardboard to cover the inside of the machines; it’s very easy to drop a screw down there. With the top cover removed, crank the head down until the two top-rear screws can be accessed and remove them. Next, crank the head up until the lower two rear screws can be accessed and remove them as well; Note: the screw that goes through the plastic cable guide is longer and must be installed in this same location. Then, remove the two front screws from the keypad’s top. While holding the keypad with one hand, gently push in on the ribbon connector to dislodge the keypad from the machine and carefully thread the ribbon cable through the hole. Finally, unplug the 24 pin ribbon connector from the LCD connection board. See Figure 2.

Lay the keypad assembly face down on a soft cloth and remove four screws holding down the LCD connection board and lift the board gently and unplug the 14pin LCD connector; take care not to dislodge the thin keypad cable. Remove the two LCD hold down screws and remove the original LCD. The two mounting screws will not be reused but please retain the two small washers as they will be. See Figure 3.

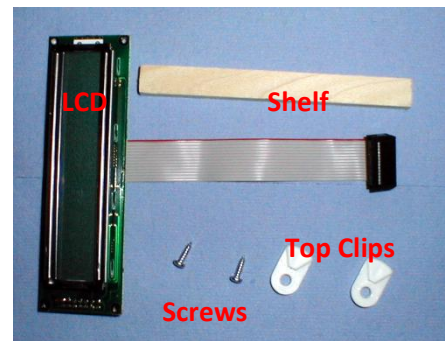


Figure 1

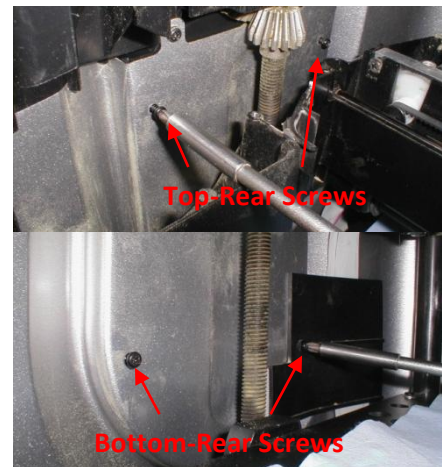


Figure 2

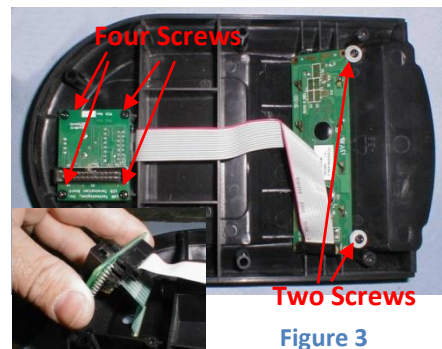


Figure 3

Backlit LCD's are a bit deeper than their non-lighted counterparts. The bottom of the original LCD sets in shelf formed in the plastic housing. The new backlit LCD requires the installation of a new shelf. The mounting shelf should be installed about 0.1" from the edge of the original shelf. The top mounting clips can be used as a spacing guage. It's a good idea to hold the new shelf and LCD in place while looking at the front of the keypad to insure the LCD is centered in the opening. When you are satisfied with the alignment, glue the new shelf down with SuperGlue© or a hot glue gun. See Figure 4.

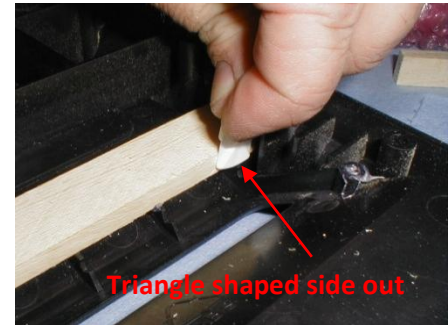


Figure 4

After the glue has set, install the new LCD and secure it with new clips provided, the side of the clip with the triangular shape should go up. Secure the clips with the original washers and the new longer screws. Note: make certain to use the washers to prevent the screws from penetrating the front of the keypad assembly, and do not overtighten the screws. With the LCD installed you can plug in the LCD ribbon cable into the interconnect board (the connector is notched so it will only plug in one way). Reinstall the LCD connection board and plug the keypad assembly back into the machine's ribbon cable. While holding the keypad turn on the machine and confirm operation of both the LCD and keyboard. If there is a problem shut off the machine and reset the connectors.



Figure 5

I prefer to keep the 24 pin ribbon cable plugged into the keypad assembly while reinstalling. This requires having one hand inside the machine to guide the cable back through the slot. You can also unplug the cable, remount the keypad and then plug the cable back in. Reassemble the rest of the machine in reverse order of disassembly.

Enjoy your new easy to read backlit LCD display. If you have questions or comments please contact: birt_j@soigeneris.com.

Thank you!