



# Using Your Needle/Vacuum Pump

## To Add Air to a Touchpad

If your touchpad always sends a signal to the electronic swim timer, it is "shorted" and may need to have air added (vented) to it. Please consult the Troubleshooting Guide in your Touchpad Manual. If venting is recommended, follow these steps:

1) Air must be added to a touchpad while it is out of the water. **IMPORTANT:** Make sure the cable end of the touchpad is not splashed or doused with water while the adjustment is being made.

**NOTE: DO NOT add air to the touchpad while the touchpad is in the water! If air is added to the touchpad while in the water, water may get inside the touchpad. This will ruin the touchpad.**

2) Insert the touchpad plug (see Figure 1) into the test meter included with your system .

3) Ensure that the orange rubber plug on the connector block is completely dry (see Figure 2).

4) Remove the needle from its receptacle on top of the touchpad meter. Ensure the needle is free of all burrs, or rough edges. Burrs can be removed by drawing the needle across a stone or concrete surface, rotating the needle as you move it.

5) Insert the needle into the center of the orange plug as far as it will go. **BE CAREFUL NOT TO PUSH THE NEEDLE TOO HARD.** Leave the needle in the orange plug until the red meter lights are off. Wait three seconds and remove the needle (see Figure 3).

6) If adding air to the touchpad does not result in the above meter reading, refer to the Care and Maintenance chapter of your Touchpad Manual.

**NOTE: Never handle your touchpads by the cable. This includes when adding air to or releasing air from the pads.**

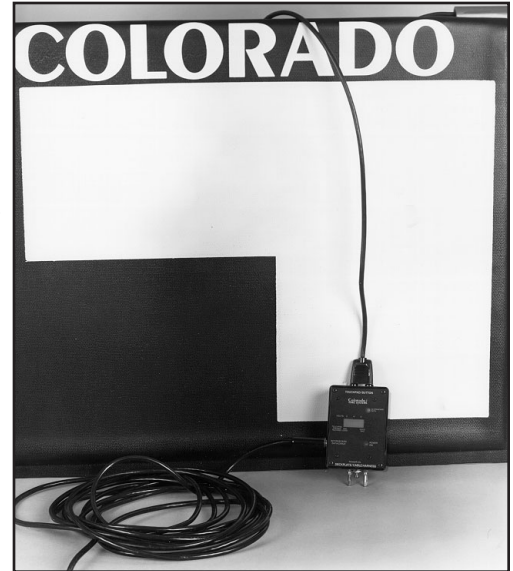


Figure 1: Touchpad Test



Figure 2: Connector Block

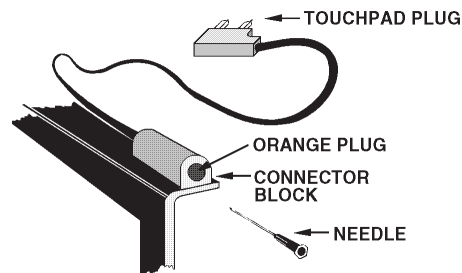


Figure 3: Touchpad venting instructions

# To Release Air from a Touchpad

If your touchpad will not send a signal to the electronic swim timer while fingertip touched, it is "open" and may need to have air released (evacuated) from it. Please consult the Troubleshooting Guide in your Touchpad Manual . If evacuating is recommended, follow these steps:

- 1) Remove the touchpad from the water.
- 2) Insert the touchpad plug (see Figure 1) into the test meter included with your system.
- 3) Ensure that the orange rubber plug on the connector block is completely dry (see Figure 2).
- 4) The port on the front of the pump is the vacuum port (see Figure 4). The clear tubing should be attached here. If it is not, remove the tubing from the pressure port (on the top of the pump) and attach it to the vacuum port on the front (see Figure 5).
- 5) Remove the needle from its receptacle on top of the touchpad meter.
- 6) Remove the needle cover, and ensure the needle is free of all burrs, or rough edges. Burrs can be removed by drawing the needle across a stone or concrete surface, rotating the needle as you move it.
- 7) Replace the needle cover, and firmly attach the needle to the open end of the clear plastic hose.
- 8) Remove the needle cover, and insert the needle into the center of the orange plug as far as it will go. **BE CAREFUL NOT TO PUSH THE NEEDLE TOO HARD.**
- 9) Squeeze the handles on the pump together, pumping and releasing until the test meter lights up red completely from right to left. At this point, the touchpad switch mechanism is fully closed. Stop pumping and wait until the meter lights

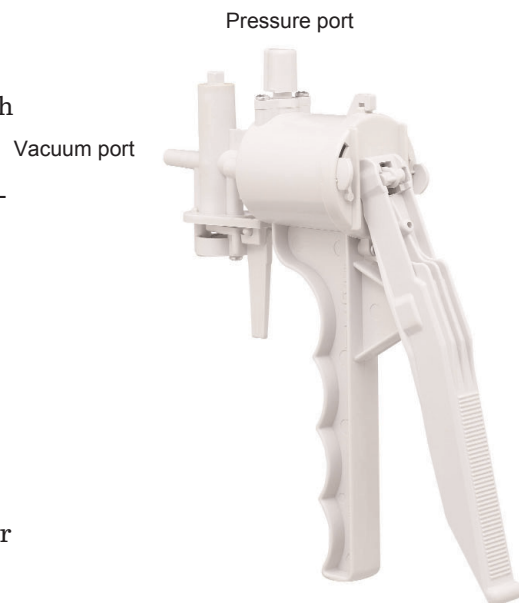


Figure 4: Vacuum and pressure ports

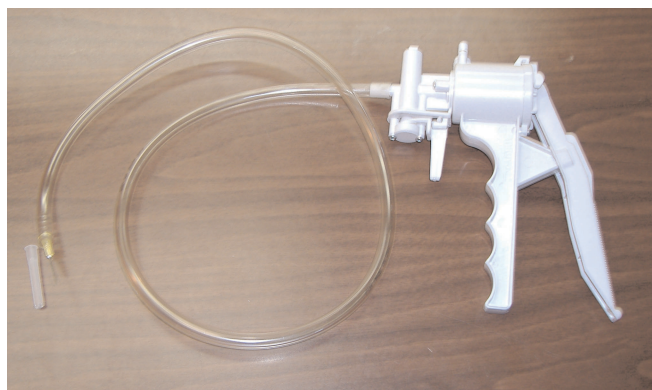


Figure 5: Vacuum Pump (VP-2)



Figure 6: Vacuum pump in use

begin to go off from right to left. Wait five seconds and remove the needle from the orange plug.

10) Replace the needle cover on the needle, and return the needle to its receptacle on top of the touchpad meter.

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F908 Rev.0806