

## Automator 2000 Patient Reference Guide

### **What safeguards prevent Automator 2000 from distracting faster than it is supposed to?**

Automator 2000 was engineered to provide highly precise adjustments. Through the window in the top of the device, you will see a series of holes around the perimeter of the gear, which directly controls the position and adjustment of the telescoping rod. A sensor marks the progress of these holes as the gear turns. If the progress of the gear does not maintain accuracy within 1/72 mm, then an alarm is sounded.

Further software and circuitry safeguards have been engineered into the device to prevent the motor from running when it is not supposed to and to confirm that the motor is operating under normal parameters.

### **Are there any maintenance requirements for Automator 2000?**

Once Automator 2000 is initiated, the device should require little maintenance. It is important, however, to periodically confirm the following:

- All nuts holding the device and telescoping rod to the ring or bracket are tight.
- The switch cap is firmly in place.
- There is sufficient telescoping rod to complete the prescribed distraction. The last 20 mm of the rod are beveled and colored to warn the user that the end of the telescoping rod is approaching. When Automator 2000 is installed between rings or on a unilateral frame, patients should inform their physician if the beveled portion at the end of the rod becomes visible. The device will not sufficiently stabilize the frames when less than 10–15 mm of rod remain inside. When Automator 2000 is installed outside of the rings, there must always be a portion of the telescoping rod projecting from the top of the device. Note that as the gears inside the device turn, the rod is ejected out of the device. The rod itself should not turn whatsoever.

### **How do I know when the battery power will run out?**

The batteries in Automator 2000 are designed to last more than four months (when the rate is set to 1 mm per day). Most users will never see the device go to low power; however, should the batteries run low, an alarm will sound. Instead of the green “run” light flashing every 15 seconds, the run light and red “alarm” lights will flash. The device will continue to run for only a few days after the low power alarm, so patients should notify their doctor and Autogenesis immediately to get a replacement device, if necessary.

### **How do I know if the device(s) is/are running?**

In addition to noticing the extension of the telescoping rod, progress may also be seen through the window on the top of each device. Notice that the gear under the window has markings just like the nut on the telescoping rod that is used for manual turns (one dot, two dots, three dots and four dots — each spaced 90 degrees apart). When set for forward motion, the gear will turn, over the course of a day, to reveal the dots, increasing from one to four dots. The red and green lights on the front of the device also confirm the operation of Automator 2000. During normal

operation in run mode, the green run light will flash every 15 seconds. The patient will also periodically hear the brief hum of the motor in each Automator.

The following chart describes how frequently the device makes 1/360 mm adjustments:

<b>Rate Setting</b>	<b>Adjustment Interval</b>
---------------------	----------------------------

0.5 mm/day	8 minutes
------------	-----------

0.75 mm/day	6 minutes
-------------	-----------

1.0 mm/day	4 minutes
------------	-----------

1.25 mm/day	3.5 minutes
-------------	-------------

1.5 mm/day	3 minutes
------------	-----------

2.0 mm/day	2 minutes
------------	-----------

4.0 mm/day	1 minute
------------	----------

Finally, the user may run a self diagnostic at any time by pressing the control button. If the run light flashes, the device is operating as programmed. If no lights flash and no chirp is heard, then the device is in sleep mode.

### **If an Automator 2000 is alarming, what should I do?**

Automator 2000 is designed to maintain accuracy within 1/72 mm. If the device is unable to maintain this high level of accuracy, then an alarm will sound. It is likely, therefore, during some portion of the procedure, that an alarm will be heard. If a device alarms, press the control button for three seconds to silence the alarm. Continue to hold the button. An acknowledgement chirp should be heard; however, the button must be held down for an additional eight to 10 seconds until the green LED starts flashing. Once the green LED is flashing, release the button. Now press the button for one second. The device will resume operation. After a moment, additional beeps will be heard, representing the rate at which the device is set. Now the device is running again.

### **What should I do if Automator 2000 alarms more than once, or I am unable to reset it?**

If Automator 2000 alarms repeatedly or if there is difficulty restarting the device, you should call Autogenesis, Inc. (See "Contact Us" on page 1.) A representative at Autogenesis will assist you with resetting the device and determining if there is a problem that requires attention.

### **Can I go swimming or take a shower with Automator 2000 on?**

Automator 2000 is designed to be waterproof to depths of four feet. As long as the switch cap is secure, the device may get wet and/or be submerged in water.

### **Does the device need to remain on the frame once the lengthening is complete?**

Once the lengthening portion of the procedure has been completed, Automator 2000 may be removed from a ring frame and replaced by threaded rods. On a unilateral frame, the second sliding component on the rail may be locked down, and the device may be removed, as well. Only the physician should remove the devices.

Information contained in this reference guide was obtained from Autogenesis, Inc., on April 15, 2003, and is reprinted with permission.

Make An Appointment

**651-290-8707**

Refer a Patient

**651-325-2200**

This information is for educational purposes only. It is not intended to replace the advice of your health care providers. If you have any questions, talk with your doctor or others on your health care team.

If you are a Gillette patient with urgent questions or concerns, please contact Telehealth Nursing at **651-229-3890**.