

SPEECH DISSECTOR

MAINTENANCE INSTRUCTIONS

GENERAL INFORMATION:

This exhibit allows the visitor to slice up a recording of their voice to see the visual pattern on the screen. The recording can be altered by selecting segments and reversing the playback and changing the playback speed.

General Cleaning:

The glass may be cleaned with glass cleaner. The finished or painted surfaces of the exhibit may be cleaned with a mild soap solution or general purpose cleaner. The acrylic panels should be cleaned with a plastic cleaner and a soft wipe that will not leave scratches, (we suggest Wype-All™).

Potentiometer Replacement:

Be sure the power is off. The potentiometers are accessed from underneath by loosening the two white nylon thumb-nuts and pulling on the potentiometer firmly but slowly until it releases. To reassemble, first turn the pot shaft and the knob both completely clockwise. This will avoid a 'spongy' feel at the knob stops. Then align the plate with the threaded studs and push the pot shaft into the rubber coupling. Replace the nylon thumb-nuts hand tight.

Push-button Replacement:

The switches are accessed from underneath by removing the locking bottom. The micro-switches can be removed by sliding the wire connectors off and bending the plastic clip just enough to rotate the switch body out of the button mechanism. No tools are required and replacement is the reversal of this procedure.

Trackball Maintenance:

If the trackball becomes intermittent, it is probably due to dirt on the rollers. The ball can be thoroughly cleaned by disassembling the

carrier it is mounted in. The bezel is held in place with four screws located at the corners. Unplug the two wiring harnesses, keeping track of their position. The trackball mechanism is held onto the bezel with four more screws and nuts. After these screws are removed, the trackball carrier can then be split by removing the six tapping screws and separating the case by lifting the top half off. The ball and rollers will then be quite accessible for inspection and cleaning. Clean the steel rollers with a cloth or paper towel. A detergent can be used on the ball. Check that the rollers turn freely. The bearings can easily be replaced if any feel glitchy, but check the cost of a new unit before getting much further involved. When replacing the flathead fasteners in the bezel, be careful not to over tighten as it is easy to crack the plastic. If the cursor on the monitor moves sideways after you're all done, the wiring plugs are probably swapped.

Microphone Replacement

The microphone is accessed by loosening the set screw on the microphone cap. Unplug the microphone from the back of the computer and carefully pull the microphone out of the top of the microphone neck. To install a new microphone, reverse the procedure. Replace the cap and tighten the set screw.