X-ACTO® BOSTON®

Electric Pencil Sharpener Troubleshooting Guide

Symptom	Possible Causes/Solutions/Explanations
Sharpener does not operate at all ("dead")	1) Check that the outlet has power, for example, by connecting another appliance. 2) All X-ACTO® sharpeners have an interlock switch that prevents operation of the sharpener (cutters) when the shavings receptacle is removed. This feature is usually actuated by a pin on the back of the receptacle. Check that this pin is intact and that the receptacle is fully inserted into the sharpener. 3) Unplug the sharpener and check the power cord for damage, including cuts or fraying. Do not use any sharpener with a damaged power cord as it can present a fire or electrical shock hazard.
Sharpener "hums" when a pencil in inserted but the cutters do not rotate (AC motor models)	A humming (only) sound is an indication that the motor has electrical power but is mechanically blocked. This may be caused by the following conditions: 1) Check that the shavings receptacle has been emptied. A severely over-filled receptacle can cause pencil shavings to back up into the rotating parts and jam them. 2) Check that the cutters, cutter carrier, and the internal gear (located at the base of helical cutters) are free of excess pencil shavings. If the shavings receptacle has previously been overfilled, there may be residual shavings remaining inside the rotating parts of the sharpener. To clear the shavings: a) Unplug the sharpener. Remove the shavings receptacle. b) While holding the sharpener over a wastebasket, gently tap with on the sides with the palm of a hand to free any loose shavings. c) Inspect the cutters and internal gear for any remaining pencil shavings (this usually requires turning the sharpener over and/or holding it at an angle). Any remaining shavings in the internal gear can be removed with a small tool such as a paper clip. 3) Check for and remove any foreign objects in or around the cutters or cutter gears and inside the pencil bore. To inspect the pencil bore, rotate the size selector, where present, to the largest opening, and use a slender tool to move the pencil actuation bar to the side. Once all of the obstructions are removed, the

	cutter/carrier should normally rotate relatively easily by hand on AC motor models.
Sharpener "hums" when a pencil in inserted in new product (AC motor models)	This is often an indication of internal shipping damage. The cutter/carrier will usually rotate freely by hand but will lock-up when energized.
Motor is running but the carrier is not rotating -or- loud grinding noise	This can be an indication of gear damage inside the sharpener and is not user-serviceable.
Off-center sharpening/Sharpens one side only/Sharpens to a wood point	This is a common customer complaint, but rarely is it due to a defect in the sharpener. When sharpeners are operating normally, the cutter(s) and carrier rotate all the way around the pencil many times so that they "see" all sides of the pencil equally. When the sharpening is uneven/not centered, it is usually due to some external factors. The following tips are helpful to obtain the best results: 1) On multi-size-pencil sharpeners, make sure that you have selected the hole that provides the best fit for the pencil. Any "slop" in the pencil fit will translate into some off-centeredness. 2) Hold the pencil with a "neutral" grip, not pressing it in any direction (up, down, left, or right). Any side force on the pencil will offset the cutting. 3) Keep the pencil in contact with the cutters but don't force it. Let the cutters do the work. 4) Yes, sometimes the graphite core of the pencil is offset from the center of the wood casing. It seems to occur randomly (even within the length of a pencil) with some brands having the issue more than others. 5) If you have a stubborn pencil, you can ignore rule #2 and apply a slight side force in the direction of the excess-graphite side to take off more of the wood. Severe off-center sharpening (to the point where the pencil is not usable for writing) can sometimes be caused by a worn internal gear. This ring-shaped gear is located at the base of the cutter(s). Internal gear wear must be significant (visually obvious) to be the cause of off-center sharpening.
Cutter carrier is rotating but the pencil is not sharpening (doesn't feel like the cutter is engaging the pencil)	This is usually caused by a foreign object (e.g., an eraser or broken pencil lead) inside the pencil bore. Examine the pencil bore as in item 3 of the "hums" section above. If the object is loose, it may fall out the front of the sharpener. If not loose, it may be possible to push it loose from inside the shavings receptacle compartment with a paper clip. If it is not possible to dislodge the object, partial or full disassembly of the sharpener may be required. For sharpeners with the "fly-away" cutter system where the cutter is moved out of the pencil bore once sharpening is complete, it is possible for the pencil tip slide to be jammed

	(held in the fly-away position) by foreign object. To check for this, unplug the sharpener, remove the receptacle, and turn the sharper over. Look for and remove any foreign objects (typically broken colored-pencil cores) near the chrome-plated pencil tip slide.
Rough sharpening	Rough operation is normally caused by worn cutters. To inspect the cutters, unplug the sharpener, remove the receptacle, and turn the sharper over. Examine the cutting edges of the helical cutter(s). A smooth polished or glazed appearance, especially near the end where the graphite is sharpened in an indication of the amount wear. When the cutter edges are glazed across most of their width, they need to be replaced. We offer the following replacement cutters/cutter assemblies: School Pro® - replace with Elmer's item 1674 Model 41 – replace with Elmer's item R1827
Dull point after sharpening (sharpeners with helical cutters)	Usually caused by cutter wear – see "Rough Sharpening" above. Pencils tips are normally sharpened to a usable (but not excessively sharp) point. As the cutters wear, the size of the point will gradually become larger.
Slow sharpening (sharpeners with helical cutters)	Usually caused by cutter wear – see "Rough Sharpening" above. May also be caused by shavings build-up on the cutters. To remove build-up, unplug the sharpener, remove the receptacle, and turn the sharper over. Us a paper clip to remove shavings from the cutter grooves. It may be necessary to rotate the cutter to several different positions to reach all of the grooves.
Broken pencil leads (sharpeners with razor blade cutters)	Broken pencil leads and dull, glazed, or protruding pencil points are an indication of worn razor blade cutters. The wear is not normally visible to the naked eye.
Broken pencil tips (colored pencils)	Colored-pencil cores are often more prone to breakage than graphite pencil cores. To sharpen colored pencils, it is helpful to follow the tips for "Off-Center Sharpening" above. Crayons, chalk, and soft, waxy pencils should not be sharpened in pencil sharpeners.