

K-Axe Safety Sheet: Rules & Recommendations

The physics of splitting wood.

When you deliver a lot of momentum with a striking tool to a hard piece of wood it can accelerate small chips and splinters to high speeds that could damage an eye. If you accidentally hit a rock or steel surface you may break off small fragments that can be even more dangerous. They travel faster than you can see and much faster than you can react to protect yourself. Think of the momentum delivered to a baseball when hit with a bat. For this reason you should use safety glasses for additional protection when using striking tools, including the K-Axe. You should insure that you cut on surfaces that are free from rock or metal. Also, never use another metal object, such as a steel hammer, to drive the K-Axe. It's OK to use a rubber mallet or a piece of wood to do so.



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Safety Rules and Recommendations

1. Develop safe habits. Safe habits reduce accidents. Safe habits can make accidents that do happen less serious. Safe habits protect you when things happen faster than you can react or think. Internalize safe habits until they are second nature for you.
2. Always be prepared for miss-hits and deflections. Always be prepared for the unexpected.
3. Plan ahead. Use common sense. Use caution. Don't hurry. Don't take unnecessary risks. Improper use of all striking tools, including the K-Axe, can be dangerous.
4. The K-Axe is not a toy. Never allow anyone to play with it, especially children.
5. Establish a safety zone around you. Make sure your area is clear. Check to make sure there is nothing behind you that might be hit inadvertently on your backswing.
6. Let people know that your area has to remain clear while you are working so no one walks into harm's way accidentally.
7. Kneel with both knees on the ground when splitting wood placed on the ground. The kneeling position will help protect you from cutting your legs and feet if you miss-hit.
8. If you must stand while splitting wood on the floor or ground, position yourself to avoid being struck by miss-hits. Leave yourself enough room so that if your swing is deflected your legs and feet will be safely out of the way.
9. Practice makes perfect. Take a few practice swings before you start.

10. When working with unfamiliar wood, test it out with a few practice swings to better understand what to expect.
11. **Always examine your K-Axe before starting.** Make sure the handle is secure and free of cracks. Make sure your grip is secure. To improve your grip you may scuff up the grip portion of the handle. Make sure the steel head is free of any cracks or impact burrs that might break off.
12. **Never cut toward any part of your body.**
13. Never hold down the wood you are chopping with your foot.
14. **Never hold the wood while you are chopping** it. You could lose a finger if you do. If you have to support the piece of wood you are splitting there are **three safe techniques** that can be used.
 - a. Place the cutting blade of the K-Axe where you want the wood split. Take a second piece of wood or similar semi-soft material (i.e., a rubber or wooden mallet) and drive the K-Axe into the wood. Once it has penetrated an inch or more deep, pry down using the leverage function to split the wood open.
 - b. Stabilize the wood with a stick (“chicken stick”) while chopping.
 - c. Place the cutting blade of the K-Axe where you want the wood split. Lift both axe and wood together and bring them down on the chopping block with sufficient force to embed the head in the wood. Repeat until it has penetrated an inch or more and then pry down using the leverage function to split the wood open.
15. Avoid using the K-Axe in the dark or poorly lit places. What you can’t see may hurt you.
16. **Protect your feet!** Wear boots or heavy shoes. Don’t wear sandals or go barefoot!
17. Sharp tools require less force to do their work. When you use less force you have greater control. **Keep your axe sharp** but exercise caution when handling and using it as you should with any sharp cutting blade.
18. If possible, choose conifers like pine or fir for your kindling wood. It is easier to split. If you can, avoid wood with lots of knots.
19. Avoid swinging with all your might. Try for accuracy and control. Embed the blade an inch or two in the wood, and then use the leverage function to split it apart.
20. Remember to start at the edges of the wood with the blade parallel to the direction of the rings. Wood usually splits more easily when you do. Work smart. Avoid uncontrolled violent swings. **The K-Axe is a finesse tool. Use finesse instead of brute force. It’s safer!**