Lawn Care:
Powered Hand Tool Safety

Objective: To promote the safe use of powered hand tools used in lawn care

How to Use This Training Module – Steps to Success

- Read the operator’s manual and understand powered hand tool operation and safe practices.
- Ask your supervisor to demonstrate the safe use of different powered hand tools and their maintenance.
- Become familiar with personal protective equipment (PPE) and understand when different types are to be used.
- Discuss common accidents that can occur during the use of powered hand tools and ways to prevent them with your supervisor.
- Review the important points in the Review section of this module.

Safety Tips for Operating Powered Hand Tools

- Do not allow children to operate powered hand tools.
- Keep bystanders, children, and pets at least 50 feet away from the work area when operating powered hand tools.
- Wear full eye and ear protective devices when operating powered hand tools.
- Wear protective clothing (long pants, closed-toe shoes) when using powered hand tools. Do not wear loose clothing or jewelry.
- Remember that for all power equipment used, a “safety always” attitude is the best defense against accidents and injuries.
- Remove all loose items in the work area that can cause personal injury before operating the powered hand tools.
- Read and understand the operator’s manual of the hand-powered tool to be used.
- Do not operate a hand-powered tool under the influence of alcohol, medications, or drugs.
- Never start or run a powered hand tool inside an enclosed area. Breathing exhaust fumes can be fatal.
- Follow fueling and premixing instructions strictly. Wipe up any fuel spillage immediately to prevent a fire hazard. Immediately replace the fuel cap to minimize contamination and potential for explosion.
- Wear a dust mask to prevent inhalation of dust or smoke.
- Never leave a hand-powered tool unattended with the engine running.

Background

In addition to mowers and hand tools, several powered hand tools such as string trimmers, lawn edgers, hedge trimmers, and leaf blowers are widely used in landscaping work. These machines can be dangerous if they are used improperly. A past study has shown that string trimmers and edgers alone cause more than 4,600 injuries that require emergency room treatment each year. About one-third of these cases are eye injuries.
Safety Tips for Operating String Trimmers

- Maintain firm footing and balance when using a string trimmer. Make sure lighting is adequate and do not overreach.
- Keep your body away from the rotating string head and hot surfaces. Keep the string head below waist level.
- Use the string trimmer only for trimming weeds and grass.
- Inspect the string trimmer for loose fasteners, fuel leaks, and cracked string head before each use. Replace damaged parts.
- Secure long hair above the shoulder when operating a string trimmer.

Safety Tips for Operating Lawn Edgers

- Make sure the edger blade is firmly attached and rotates freely.
- Do not inspect, repair, or carry out maintenance on a lawn edger when it is running.

Safety Tips for Operating Garden Tillers

- Disengage the tiller tines before starting the engine.
- Never try to make any adjustments while the engine is running except when it is recommended in the operator’s manual.
- Use only attachments and accessories approved by the manufacturer.
- Be familiar with all the controls and their functions.
- Use caution when tilling near fences, buildings, and underground utilities.
- Do not overload the tiller by tilling too deep or at high speed.
- Stop the tiller and turn off the engine if it vibrates excessively or makes unusual noise.

Safety Tip for Operating Leaf Blowers

- Follow all rules listed in the Safety Tips for Operating Powered Hand Tools section.

Safety Tips for Operating Hedge Trimmers

- Check the hedge trimmer before use to make sure all of the safety features are working and there are no loose parts.
- Keep hands away from the blade.
- Maintain control but do not hold the unit with an excessively tight grip.

Review

- Do not allow children to operate powered hand tools.
- Watch for bystanders, children, and pets when operating powered hand tools. Keep them at least 50 feet away.
- Wear full eye and ear protection when operating powered hand tools.
- Wear protective clothing when using hand-powered tools. Long pants, closed-toe shoes, and gloves are best. Do not wear loose clothing or jewelry.
- Read and understand the operator’s manual for the powered hand tool to be used.

Acknowledgements

This publication was developed with the support of National Youth Farm Safety Education and Certification (grant No. USDA/NIFA-2010-41521-20830), National Institute of Food and Agriculture, and the U.S. Department of Agriculture. The team that developed this publication is solely responsible for its content; it does not necessarily reflect the views of the U.S. Department of Agriculture or the U.S. Department of Labor. Team members are Robert Grisso, John Perumpral, Don Ohanehi, Mike Goatley, Kathleen Jamison, Cathy Sutphin, Dan Swafford, and Carl Estes.

The team would like to express appreciation for the reviews and comments by David Balderson, teacher, Atlee High School; Phil Blevins, Virginia Cooperative Extension agent; Deborah Chaves, instructor, Monroe Technology Center; Sonya Furgurson, VCE associate agent; Michael Hopkins, instructor, Louisa High School; Emerson Lynn “Kip” Kirby Jr., teacher, Richlands High School; Michael Lachance, VCE agent; Alyssa Walden, VCE associate agent; A.J. Powell Jr., professor emeritus, University of Kentucky.