

Rototiller Safety

Tools and equipment used by fruit and vegetable growers are typically smaller and may be different than those used by grain and livestock farmers, but they can still be hazardous. Many beginning growers buy used equipment and tools and may have little experience using small agricultural machinery. This brief is part of a series on safety for fruit and vegetable growers. Developed by the University of Minnesota On-Farm GAPs Food Safety Team. Reviewed by Dr. Jonathan Chaplin, PE.

Rototillers are useful tools on small farms. Many farmers use rototillers to dig and turn over soil prior to planting. Rototillers are also helpful for controlling weeds, aerating compacted soil and incorporating soil amendments.

Rototillers vary in size, from large, tractor-sized machines to small walk-behind models. Whatever the size, all rototillers must be used properly and carefully by qualified adults. Rototillers can be dangerous machines, especially for children or other people who are not tall enough or strong enough to use the tiller. Children should never operate a rototiller.

Accidents involving rototillers can be serious, and can include lacerations and bruising to the hands, legs and wrists, as well as burns and back strains. You can reduce the chance of injury by following safety

precautions and reading the operator manual.



Rototillers are heavy, unpredictable and dangerous machines. They should never be operated by children.

**For more information on
Tiller Safety**

- Tiller Safety University of Arizona Cooperative Extension
- Rototiller Safety, Ag and Natural Resources, University of California

Rototiller Safety

Before Using the Tiller

- Review and understand the information in the operator's manual.
- Inspect the rototiller for damage.
- Make sure all shields and guards are securely in place.
- Make sure all belts are properly tightened and do not show signs of excessive wear.
- Inspect the area to be tilled and remove large rocks or foreign objects that could damage the tiller.
- Do not till above underground utility lines!
- Use caution around fences.

Using a Tiller Safely

- Never override safety features.
- Never use rope or other materials in the "on" position.
- Never start the engine in a closed building. Deadly fumes can build up.
- Shift the rototiller into neutral and disengage the clutch before starting.
- Work slowly. Do not overload the engine by tilling too deep or fast.
- Only operate a tiller when there is good visibility and light.

- Do not operate when the ground is wet or slippery.
- Do not leave the tiller running unattended.

Tiller Maintenance

- Refuel with an anti-spill gas can.
- Shut off the rototiller engine and disconnect the spark plug wire before making adjustments, or unclogging the tines.
- Disengage the tines when turning or transporting the tiller.

Worker Safety

- Keep your hands and feet away from all rotating equipment.
- Always wear safety glasses or goggles when operating the tiller.
- Wear hearing protection; engine noise from a tiller can exceed 90 decibels.
- Wear sturdy shoes (no sneakers or sandals) and long pants (no loose clothing).
- Take work breaks and drink plenty of water, especially on hot days.



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