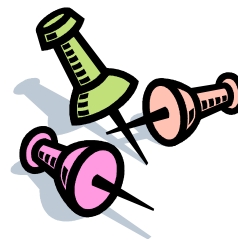




# Safety Note

UNIVERSITY OF CALIFORNIA  
AGRICULTURE AND NATURAL RESOURCES  
ENVIRONMENTAL HEALTH AND SAFETY



Safety Note #41

## ROTOTILLER SAFETY



*Photograph Courtesy of UC Hansen  
Agricultural Learning Center*

Data available from the Consumer Product Safety Commission indicate a total of about 1,300 people were treated in hospitals for rototiller injuries during 2003. Of this total, approximately 36% were strains to backs, necks, and shoulders, 36% were lacerations to legs, feet, hands, and fingers, 14% were fractures to hands and fingers, and 10% were burns to hands. Rototiller operations are addressed under California Code of Regulations Title 8, Sections 3440, 3441, and 4002. The following safety note discusses walk-behind rototillers.

### Pre-Use Activities

- Thoroughly review and understand information provided in the rototiller operator's manual with particular attention given to descriptions of safety procedures.
- Before using, always inspect the rototiller for damage or disrepair and make sure all shields and guards are securely in place. In addition, assure all belts are properly tightened and do not have excessive wear or damage.
- If a rototiller fails the pre-use inspection, notify your supervisor and remove the rototiller from service by attaching a red tag that states "DO NOT USE." Complete red tag with appropriate information.

### Operating Precautions

- Always wear safety glasses or goggles when using a rototiller. In addition, hearing protection should also be used since engine noise from a rototiller is at about 90 decibels.
- Wear long pants and sturdy shoes (i.e., no sneakers or sandals) when using a rototiller. Do not wear loose clothing.
- Always start a rototiller outside. Do not operate a rototiller inside an enclosed space (i.e., sheds or garages) where carbon monoxide exhaust gas can accumulate.
- Prior to starting, inspect the area to be tilled for large rocks or foreign objects that could damage the rototiller.
- Do not till above underground utility lines.
- Shift rototiller into neutral and disengage clutch before starting.
- Always operate a rototiller in conditions of good visibility and adequate light.
- Keep hands and feet away from rotating equipment.
- Do not overload rototiller engine capacity by tilling too deep or fast.
- Never fuel the rototiller when the engine/muffler is hot. Use a rag to wipe up fuel spills.
- Shut off the rototiller engine and disconnect the spark plug wire before performing mechanical adjustments, maintenance, or repairs or clearing/unclogging the tines.
- Always shut off a rototiller before leaving it unattended.