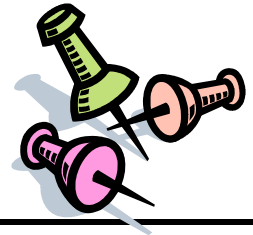




Safety Note

UNIVERSITY OF CALIFORNIA
AGRICULTURE AND NATURAL RESOURCES
ENVIRONMENTAL HEALTH AND SAFETY



Safety Note #93

TWO-ROW POTATO AND ONION HARVESTER SAFETY



Photographs Courtesy of Intermountain REC

To reduce the potential for injuries, California Code of Regulations Title 8, Section 3203 (7) requires employees to be trained on the equipment they use in the workplace. The following provides information about potato and onion harvester hazards and precautions that should be taken to prevent injuries related to potato and onion harvesting.

The two-row potato and onion harvester is a towed piece of agricultural equipment that carries up to eight employees on a sorting platform. Working on the harvester encompasses standing on a moving sorting platform and being in close proximity to rotating machinery components, shear points, and hydraulic lines. According to information available from the University of Maine Cooperative Extension, more than one-half of potato harvester injuries involve fingers. Other injuries frequently occur to hands, wrists, and arms. In order

Always mount the potato and onion harvester before it begins moving and dismount after it has stopped moving. Be prepared for jerking motions when the tractor begins towing or stopping the harvester.



Potato and Onion Harvester Sorting Table

Following excavation of potatoes or onions, inclined elevator conveyors lift potatoes or onions to a sorting table where remaining dirt clods and plant debris are hand sorted from the crop. As shown in the photograph at the left, moving conveyors and associated chain drives and sprockets pose potential pinch- and shear-point hazards to fingers and hands. Accordingly, always assure all equipment guards and shields are in place. Because moving conveyor parts can snag loose hair or clothing such as sleeves or shirt tails and cause wrap-type injuries, employees working on the sorting platform must keep hands and

fingers clear of rotating chain drives and sprockets, either secure loose hair or put it under a cap, and wear snug clothing and gloves. As an employee, you should always remain alert about your surroundings and potential hazards when working on a potato and onion harvester.

A hydraulic system is used to raise and lower the harvester and adjust the conveyors and sorting table. Injuries caused by hydraulic systems range from burns and injected fluids to contusions and lacerations. Prior to use, always inspect hydraulic hoses and fittings for leaks and to assure they are securely attached at connection points. Any hydraulic component that fails a pre-use inspection shall be removed from service by attaching a red tag that states "DO NOT USE." Lower hydraulic components to the ground before shutting off the engine. Thereafter, relieve all hydraulic pressure before disconnecting hydraulic hoses.



Potato and Onion Harvester Hydraulic Lines

Safety Notes #16, #22, and #33 provide further discussions about hydraulics, pinch points, and shear and cutting points, respectively