

22 tons tip over on a tiny jack

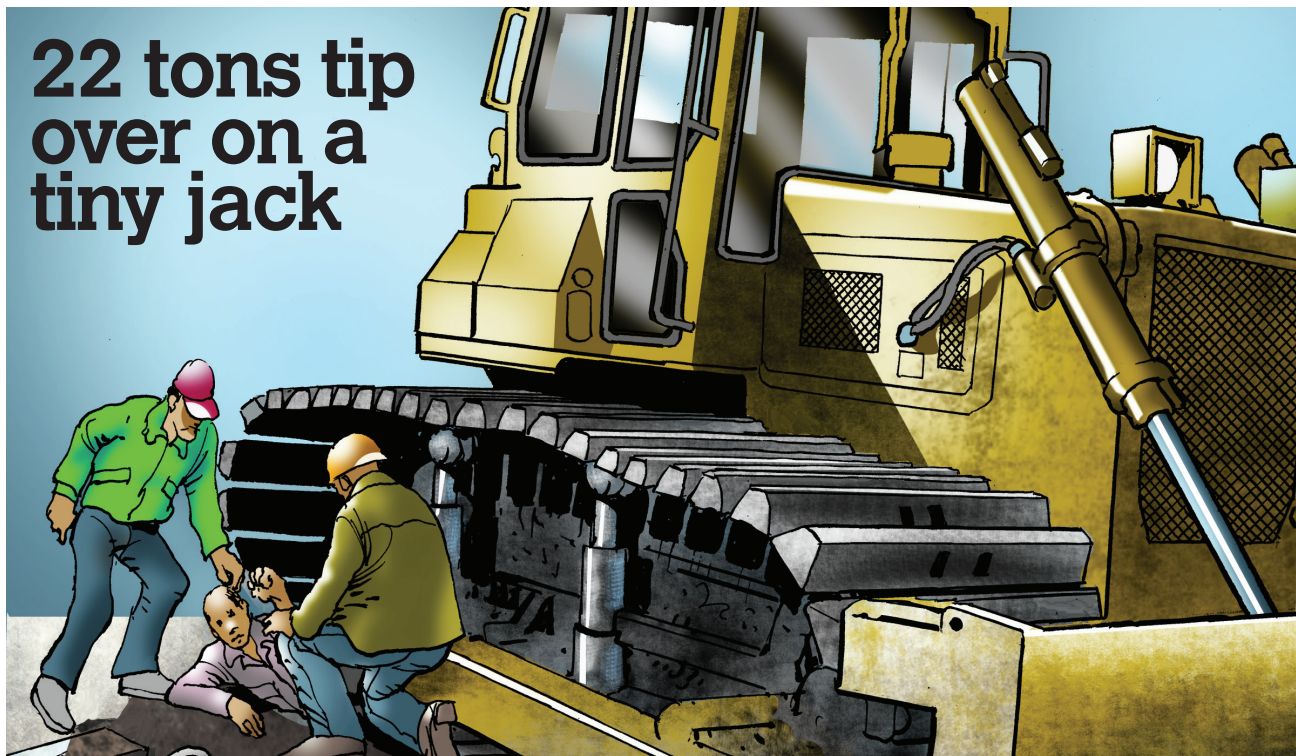


Illustration by Don Lomax

Experience was no match for the weight of a dozer when a 70-year-old heavy-equipment mechanic was fatally crushed while lowering a 44,200-pound dozer off a bottle jack.

He had raised up one side of the dozer to replace the track adjuster. The air actuated bottle jack was rated for 30 tons but sat on a baseplate measuring approximately 8 by 10 inches. The saddle, where the top of the jack contacted the dozer, measured 2.5 inches square. The jack had a warning label that cautioned against performing work around equipment supported only by the jack. But the label was worn to the point of being unreadable.

To start the repair, the victim jacked up the dozer and put cribbing underneath it. Once the cribbing was in place, the jack was removed. After installing the new track adjuster, another piece of oak cribbing was placed under the dozer, and the machine was jacked above the original cribbing. The

mechanic removed the original cribbing and began to lower the dozer on the jack, but noticed the undercarriage wasn't lining up with the tracks below it.

The mechanic got on a creeper and rolled himself under the dozer to better monitor the alignment of the machine with the track. That's when the jack tilted, and the dozer fell onto the mechanic's lower extremities.

Coworkers reported hearing a loud bang and the victim yelling for help. They ran to find the mechanic pinned under the dozer. Emergency medical services were called, and the victim's coworkers freed him by jacking the dozer back up. The victim was transported to a hospital but died three days later from his injuries.

How this accident could have been prevented

- Never work around or under any vehicle or piece of equipment supported by jacks alone. A

jack's only purpose is to raise the equipment. After that, cribbing or jack stands should be used to support the load.

- Make sure that warning labels on jacks and all other tools and equipment are in good condition and easy to read.
- All employees should be trained in the proper use of jacks and the procedures for using and removing cribbing.
- Consult the equipment's manual to determine the proper jack points and to make sure the machine is not unbalanced while on the jacks or cribbing.
- While the job of lowering the dozer was considered a one-man operation, investigators suggested that having two people present might have deterred the victim from crawling under a 44,200-pound dozer supported by only a 2.5-inch square jack saddle. For more information on this accident see: www.cdc.gov/niosh/face/pdfs/13ma002.pdf



Date of safety talk: _____ Leader: _____
 Attending: _____