



Safety Note

UNIVERSITY OF CALIFORNIA
AGRICULTURE AND NATURAL RESOURCES
ENVIRONMENTAL HEALTH AND SAFETY



Safety Note #47

TIRE INFLATION AND CHANGER SAFETY



*Photograph Courtesy of
Sierra Foothill REC*

Serious injuries and deaths have occurred as part of tire inflation and changing operations. Inflating and changing tires potentially exposes personnel to a high energy environment associated with an exploding tire. In addition, a tire explosion may cause high-speed shrapnel hazards from burst tires and/or rims and wheels. California Code of Regulations Title 8, Sections 3325 and 3326 address tire inflation and changing operations, respectively.

Pre-Use Activities

- Thoroughly review and understand information provided in the tire inflation and changer operator's manuals with particular attention given to descriptions of safety procedures.
- Before using, always inspect the tire inflation and changer for damage or disrepair and assure hoses are intact and functioning properly.
- If the tire inflation or changer fails the pre-use inspection, notify your supervisor and remove the inflation or changer equipment from service by attaching a red tag that states "DO NOT USE." Complete red tag with appropriate information.

Operating Precautions

- Tires shall not be inflated beyond the manufacturer's recommendation or a maximum of 40 psi when seating beads. Always inspect beads for proper seating at 20 psi intervals [CCR Title 8, Section 3325 (e)].
- Prior to inflating a tire, the correct rim shall be matched to the correct tire [CCR Title 8, Section 3325 (c)].
- Tires shall be completely deflated before adjusting the tire, rim, or wheel components [CCR Title 8, Section 3325 (e)].
- Never stand within trajectory of the tire, rim, or wheel components during the inflation process [CCR Title 8, Section 3326 (h)(8)].
- Always use the proper tool for the type of rim or wheel being serviced [CCR Title 8, Section 3326 (g)(2)].
- Never apply heat to a wheel or wheel component that is mounted to an inflated tire [CCR Title 8, Section 3326 (h)(2)].
- Mount or dismount tires from the narrow ledge side of the wheel. Avoid damaging tire beads when mounting tires [CCR Title 8, Section 3326 (i)(1)].
- Only mount tires on compatible wheels of matching bead diameter and width [CCR Title 8, Section 3326 (i)(1)].
- Do not attempt to correct the seating of side and lock rings by hammering, striking, or forcing the components while the tire is pressurized [CCR Title 8, Section 3326 (i)(12)].
- Remove and dispose of any bent, corroded, broken, or cracked rim, wheel, or rim or wheel component [CCR Title 8, Section 3326 (g)(3)].
- Always replace damaged or leaky valves [CCR Title 8, Section 3326 (g)(3)].
- Rim flanges, rim gutters, rings, bead seating surfaces, and bead areas of tires shall be free of any dirt, surface rust, and loose or flaked rubber build-up prior to mounting and inflation [CCR Title 8, Section 3326 (i)(2)].
- Always use a safety cage when inflating tires with locking rings on the rim [CCR Title 8, Section 3326 (d)].