



Servicing Single, Split Rim & Multi-piece Rims

An average-size truck tire, when fully inflated, exerts a force of more than 40,000 pounds against the rim flange.

Failure of tire/wheel components can result in an explosive pressure release. Locking rings or other components may be propelled at speeds up to 130 miles per hour. Anyone nearby could be killed or seriously injured.

Most accidents occur during tire inflation, usually because of over-inflation or improper procedure, or because of improperly seated, mismatched or damaged tire/wheel components.

Mounting and Inflation

1. Pre-inspect for proper tire and wheel sizing, damaged wheels or corrosion. Lubricate beads and rim surfaces. Assemble the tire and wheel.
2. Use a clip-on chuck with at least 24" of hose between the chuck and an inline gauge and valve or properly pre-set regulator. Attach the clip-on chuck and stand back during inflation. Inflate to no more than 5 psi to seat beads and lock rings.
3. Use a cage or restraining device for inflation of tires on multi-piece wheels, and for inflation of tires on single-piece wheels that can't be restrained on a hold-down cone-type tire inflation system. Check for properly seated components before removing the mounted tire from the restraining device.

Other Considerations

4. Do not weld or apply heat to rim components of inflated or partially inflated tires. Do not mount tires to rim components that have not cooled to ambient temperature.
5. Under-inflated tires on multi-piece or split rim wheels may be re-inflated while the wheel is on the vehicle only when pressure has not dropped below 80% of the recommended pressure.
6. Stand clear of the potential trajectory path during inflation.
7. Ensure mobile and road side repair trucks are equipped with all safety devices such as tire cages and a clip-on chuck with at least 24" of hose.

Training

Employers must make certain that employees understand, demonstrate and maintain the ability to safely service single, split and multi-piece wheels.

Required Charts and Manuals

- A current split and multi-piece rim or wheel matching chart
- A typical rim contours and marking location chart
- A current rim manual containing instructions for proper tools recommended for the type of rim or wheel being serviced.

Discussion Questions

- How does using a clip-on chuck and 24" hose extension help you stay clear of the potential trajectory path?
- Where would you look for rim markings?
- Where are the charts and rim manual located?
- How could the safety of servicing of wheel rims be improved in your shop?

What is Required?

The regulations for servicing of single, split, and multi-piece rims are covered in Title 8, California Code of Regulations, Section [3325](#) Tire Inflation, and Section [3326](#) Servicing Single, Split and Multi-piece Rims or Wheels.

Contacting Cal/OSHA Consultation Service

Consultation Programs:

<http://www.dir.ca.gov/dosh/consultation.html>

Toll-free Number: **1-800-963-9424**

Publications: <http://www.dir.ca.gov/dosh/puborder.asp>

Onsite Assistance Program Area Offices:

Central Valley: 559-454-1295 San Diego/Imperial: 619-767-2060
No. California: 916 263-0704 San Bernardino: 909-383-4567
SF/Bay Area: 510-622-2891 San Fernando Valley: 818-901-5754
Santa Fe Springs/LA/Orange: 714-562-5525

Note: *The information provided is not meant to be either a substitute for or legal interpretation of the occupational safety and health regulations. Readers are cautioned to refer directly to Title 8 of the California Code of Regulations for detailed information regarding the regulation's scope, specifications, and exceptions and for other requirements that may be applicable to their operations.*

