

MIOSHA Fact Sheet



Tire Inflation Hazards

Removal, replacement, and inflation of tires is a common practice so it may seem a simple task, but it can cause very serious injuries. Inflated tires contain a large amount of stored energy and can cause explosions resulting in injury, and even death, if employees are not protected. The hazards are greatly increased when servicing multi-piece rims and tires requiring inflation to 45 pounds per square inch (psi) and above.

MIOSHA's General Industry Standard [Part 72, Automotive Service Operations](#), has rules that help protect employees from the hazards of tire and wheel servicing. Below are some ways to help avoid injury from servicing tires.

Tips to Reduce the Risk of Violent Explosion when Servicing Tires

- Do not inflate tires that have been significantly underinflated until inspected. Examine wheels and tires (externally and internally) for signs of damage, such as cracks, marbling (black lines), bulging, soft spots, or exposed steel cords in the tire carcass. If in doubt, do not reinflate the tire.
- Do not use airlines without either a functioning pressure gauge or pressure control device being fitted to ensure you are inflating to the correct pressure.
- Use a clip-on chuck with a sufficient length of hose to permit employees to stand clear of the potential trajectory of the wheel components during tire inflation.
- Watch and listen for signs that might indicate a failure within the tire. If you suspect a problem, do not approach the tire to deflate it.
- Follow tire manufacturers' procedures and recommendations during the servicing and repair of automobile, light truck, and other tires.
- Use a safety cage or other approved restraining device when inflating tires.
- Never attempt to install a tire of one bead diameter on a rim or wheel of a different rim diameter. The tire size is molded into the sidewall of the tire.
- Follow the rim manual instructions or tire placard instructions located on the vehicle.
- Only inflate tires to the recommended proper inflation pressure. Tires should not be inflated above the maximum pressure recommended by the manufacturer to seat the tire bead firmly against the rim flange.
- Never inflate a tire unless it is securely mounted to the tire mounting machine, the vehicle, or an approved restraining device.
- Proper personal protective equipment should be identified and available for use by employees.
- Establish procedures for tire servicing, repair, and inflation and train all employees on the hazards related to servicing tires and the appropriate safeguards.

Additional Information

The Occupational Safety and Health Administration (OSHA) has publications that provide guidance for safely servicing tires and rims. Go to https://www.osha.gov/publications/publication-products?publication_title=tire

Please visit the MIOSHA website at www.michigan.gov/miosha where additional information may be available; or contact the Consultation Education and Training Division at (517) 284-7720 for no cost, voluntary, confidential consultative assistance.

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