

- **ALWAYS** inflate tires in a safety cage, when positioned behind a barrier, or bolted onto the vehicle (with the lug nuts fully tightened).

EQUIPMENT OPERATORS

- **ALWAYS** check the tires on your equipment before putting it into operation. Remove equipment with defective tires from service.
- **NEVER** operate equipment that has cut tires, tires with obvious air loss, tires with material lodged between duals or in cuts or equipment-tire interference.
- **NEVER** spin tires when getting underway (or when loading a self-propelled scraper).
- **NEVER** turn dozers sharply when push-loading scrapers; this could damage rear scraper tires.
- **NEVER** turn your vehicle's front wheels unless the vehicle is in motion.

Remember –

- **Never** work beneath suspended loads.
- **Always** watch for pinch points when working with tires and rims.
- **Always** check tires and rims for damage and defects before performing any work on them.
- **Never** use mismatched rim parts.
- **Never** weld or cut on an assembled tire.
- **Never** apply heat to a wheel.
- **Always** inflate tires to recommended pressures.

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Tire and Rim Safety

Best Practice Series BP-30



Handling and repairing tires and rims expose workers to a variety of potential hazards such as explosions, being struck by flying parts and materials, and pinch points. Miners have been severely injured or killed while mounting and demounting tires, installing and removing rim wheels, and inflating tires. The best practices listed on this card are generic and apply to all sorts of work involving tires and rims on and off mine property.

GENERAL SAFETY

- **ALWAYS** follow standard operating procedures when working with tires and rims. Get help if you need it.
- **ALWAYS** watch for pinch points when working with tires and rims.
- **ALWAYS** use appropriate personal protective equipment.
- **NEVER** operate a vehicle on a single tire of a dual wheel assembly.
- **ALWAYS** (in a dual assembly) inflate both tires to recommended balanced pressures before operating the vehicle.
- **NEVER** inflate a flat tire without checking the tire, wheel assembly, and rim for potential unsafe conditions.

- **ALWAYS** stay within manufacturer’s recommended tire pressures. Do not overinflate or underinflate tires since either condition is dangerous.
- **NEVER** “bleed” hot tires that appear to have abnormally high air pressure.
- **NEVER** exceed the load rating of the tires.
- **NEVER** use undersized tires.
- **ALWAYS** store spare rims and components in a dry area to prevent rust or corrosion.
- **NEVER** work beneath suspended loads.

WORKING WITH MULTIPIECE RIMS

- **ALWAYS** check tires and rims for damage and defects before performing any work on them.
- **ALWAYS** deflate and remove tires from rims before making repairs. Be sure the tire is completely deflated before removing a rim wheel from the axle.
- **ALWAYS** stay clear of the area where multipiece rims and wheels are being handled unless your job requires you to be there.
- **ALWAYS** replace cracked, bent, broken, damaged, or severely rusted rim components.
- **NEVER** use mismatched rim parts. Be sure to match component parts and rims by make, size, and type.
- **ALWAYS** inspect the lock ring for damage. Make sure it’s secure in the gutter before inflation.
- **NEVER** add air until each side of the lock ring is fully sealed.
- **NEVER** weld or cut on an assembled tire.
- **NEVER** apply heat to a multipiece wheel.
- **ALWAYS** apply rubber lubricant to the bead and rim mating surfaces when assembling the wheel and inflating the tire (unless otherwise recommended by the manufacturer).

- **ALWAYS** check the valve stem to make sure it’s clear before inflating a tire.
- **ALWAYS** inflate tires in a safety cage. A tire shall be inflated outside a restraining device only to a pressure sufficient to force the tire bead onto the rim edge and create an airtight seal.
- **NEVER** rest or lean against the safety cage when inflating a tire or a rim wheel.

WORKING WITH SINGLE PIECE RIMS

- **ALWAYS** check tires and rims for damage and defects before performing any work on them.
- **ALWAYS** deflate and remove tires from rims before making repairs. Be sure the tire is completely deflated before removing a rim wheel from the axle.
- **NEVER** weld or cut on assembled tires.
- **NEVER** apply heat to a single piece wheel.
- **ALWAYS** replace cracked, bent, broken, damaged, or severely rusted wheels.
- **ALWAYS** mount or demount tires from the narrow ledge side of the wheel.
- **ALWAYS** apply nonflammable rubber lubricant to the bead and wheel mating surfaces before assembling the rim wheels (unless otherwise recommended by the manufacturer).
- **ALWAYS** when using a tire changing machine, inflate the tire only to the minimum pressure necessary to force the tire bead onto the rim ledge and create an airtight seal.
- **ALWAYS** remove a bead expander before installing the valve core and as soon as the rim wheel becomes airtight.
- **ALWAYS** check the valve stem to make sure it’s clear before inflating a tire.