

TECHNICAL SERVICES BULLETIN

Tire Storage Recommendations

Tire treads and sidewalls are constructed from compounds that resist deterioration caused by sunlight, ozone, and extreme temperatures. Nevertheless, stored tires should be protected against these and other potentially damaging conditions. If tires are not stored properly not only will there be deterioration in their appearance, there may be a loss in performance and compound integrity.

STORING TIRES NOT INSTALLED ON VEHICLES

- The longer the storage period the greater exposure there is to potential damage, so it is always advisable to first use the tires that have been in storage the longest.
- Store tires in an area that is clean, cool, dark, and well ventilated. Avoid areas that are wet, humid, oily, greasy, or in direct sunlight. Do not store in the same area as an electric motor or other ozone generating source. If there is a question, check the ozone level to be sure it does not exceed 0.08 ppm.
- Do not store tires directly on black asphalt or other heat-absorbent surfaces. Avoid storage adjacent to highly reflective surfaces.
- Ideally, tires should be stored in an upright position to prevent distortion or disfiguration and to make mounting work easier. If it is necessary to store tires in a horizontal position take care to ensure they are stacked safely.
- When storing tires that have been mounted onto wheel, deflate to fifty percent of the normal pressure. Keep valve caps in place. It is strongly recommended that mounted tires are stored upright.
- Used tires should be cleaned before they are stored. They should not be stored with tire shine or any other treatments.

WHITEWALL/RAISED WHITE LETTER TIRES

Store unwrapped whitewall/raised white letter tires with white sidewalls facing each other to avoid staining them through contact with the black rubber of the other tires. Alternatively, bagging the tires can prevent staining.

PRIOR TO MOUNTING STORED TIRES

Tire interior should be inspected to determine the air chamber is free of debris, dirt, and moisture. Dirt and debris can block the tire valve after mounting. Moisture can permeate the casing and initiate oxidation (rust) of steel cords, which reduces tire strength and casing integrity.

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STORING TIRES INSTALLED ON VEHICLES

Storage area should be level, well drained. Care should be taken to avoid prolonged contact with petroleum based substances: oils, fuels and asphalt.

LONG TERM STORAGE FOR TIRES INSTALLED ON SEASONAL VEHICLES i.e. RVs, BOAT TRAILERS, AND SHOW CARS

- Vehicles should be raised on blocks, so weight is removed from the tires.
- If blocking is not possible, tire pressure should be increased 25% from inflation required for the loaded vehicle.
- Vehicles should be moved every three months to prevent flat spotting and ozone cracking at the tire sidewall flex point.
- Flat spots usually disappear when the tires warm-up after a 25+ mile drive. Flat spotting which occurs on vehicles not moved for six or more months may not disappear.
- Tires on vehicles stored outdoors should be protected by opaque covers to prevent damage from sunlight.

PRIOR TO RETURNING VEHICLES TO SERVICE

Tire pressure needs to be adjusted to required inflation before the vehicle is returned to service.

REPLACEMENT OF TIRES ON FREQUENTLY STORED VEHICLES

Remaining tread wear is a poor gauge of tire serviceability on these vehicles. Over time, the bonds between the rubber and reinforcing materials deteriorate that may lead to cracking, regardless of remaining tread. When a tire reaches 5 years in age an annual inspection by a qualified tire professional is recommended at least once a year.