

TECHNICAL SERVICES BULLETIN

Tire Storage Recommendations 11/21/2002

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The storage of tires requires particular care. 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.

CONSIDERATIONS / INSPECTIONS

- Tire treads and side walls 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. The longer the storage period, the greater exposure there is to potential damage; so it is always advisable to use first the tires that have been in storage the longest.
- Store tires in an area that is clean, cool, dark, and well ventilated, but with a minimum of circulating air. 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.
- As a rule, 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, be sure to stack passenger car and light truck radial tires no higher than one meter (@ 3 feet), and radial truck tires no higher than one and one-half meters (4 1/2 feet).
- When storing tires that have been inflated, deflate to fifty percent of the normal pressure. Keep valve caps in place.

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.

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.

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, or storage of seasonal vehicles; i.e. RV's, boat trailers and show cars requires special preparations. Vehicles should be raised on blocks, so weight is removed from the tires.

TIRE STORAGE RECOMMENDATIONS - Page 2

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 out-of-doors, 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

Owners of RV's, boat trailers, show cars etc. should have their tires inspected by a qualified tire dealer, if sidewall cracking and crazing occurs. Remaining tread wear is a poor gauge of tire serviceability on these vehicles. Over time, the bonds between the rubber and reinforcing materials deteriorate, regardless of remaining tread. Unserviceable tires should be scrapped, by cutting beads, or cutting through sidewalls, to prevent re-use by unsuspecting persons.