

TIRE INFORMATION SERVICE BULLETIN

TIRE BEAD LUBRICANTS, MOUNTING AIDS, BEAD SEALERS, OEM MOBILITY KITS, TIRE SEALANTS, BALANCING SUBSTANCES AND FLAMMABLE SUBSTANCES

TIRE BEAD LUBRICANTS USED TO MOUNT TIRES

Use commercially available lubricants made for bead seating to seat tire beads. Also, vegetable oil and animal soap solutions may be used. If a lubricant is water-based, it should contain a rust inhibitor. Care should be exercised to avoid excessive application of lubricant to minimize moisture in the air chamber. Do not allow any lubricant to run between the tube and casing in tube-type tires or on the inside surface of tubeless tires. When dry, the lubricant should not remain slippery.

TIRE MOUNTING AIDS AND BEAD SEALERS

Some mounting aids (such as rubber “O” rings or “donuts”) can become trapped between the tire bead and rim during mounting. This prevents the bead from properly seating on the rim, which can lead to failure.

Bead sealers may also impede bead seating, if allowed to dry on beads and rim contact surfaces before mounting.

OEM MOBILITY KITS, TIRE SEALANTS AND BALANCING SUBSTANCES

The USTMA does not endorse any tire sealant or tire balancing product because it does not test the multitude of such products on the market.

WARNING

Silicone, petroleum, or solvent-based lubricants must not be used. These substances may:

- cause the tire to slip on the rim.
- have a harmful effect on the tire, tube, flap and/or rim.
- create explosive mixtures of air and vapors in the tire which may result in serious injury or death.

WARNING

TIRE SEALANTS AND BALANCING SUBSTANCES

Solvent-based liquids must not be used due to the possibility of creating explosive mixtures of vapors in the tire, which may result in serious injury or death.

Vehicle Original Equipment Temporary Tire Mobility Kits

A temporary tire mobility kit may be supplied by the vehicle manufacturer as an alternative to a spare or runflat tire in passenger car and light truck applications. The temporary tire mobility kit is normally comprised of a puncture sealant and a small air compressor or container of propellant.

Use of a temporary tire mobility kit:

- Is not considered a repair to the tire
- Only provides a temporary solution to promptly reach a service location for professional inspection and possible repair of the affected tire. Refer to tire manufacturer for specific guidelines regarding repairability and warranty.

End-users of temporary tire mobility kits supplied as original equipment in a passenger car or a light truck vehicle should always follow all instructions provided by the vehicle manufacturer, including limits on the amount of driving at reduced speeds allowed to safely reach a tire service location.

Aftermarket Sealants

Aerosol, liquid, gel or other substances injected into a tire through the valve are not considered proper repairs. Such products may be flammable and potentially explosive, may damage the tire, may void the tire manufacturer's warranty and may interfere with or damage tire pressure monitoring system sensors. Consult the tire manufacturer's service recommendations and warranty policy.

FLAMMABLE SUBSTANCES IN TIRES

Flammable vapors may inadvertently be pumped into a tire along with the air from the compressor when the tire is inflated. These vapors can originate from several sources:

- Using alcohol, methanol, dry gas, or any other flammable material in the compressor tank to prevent freezing of condensation;
- Storing flammable solvents or rubber cements near the air intake of the compressor;
- Cleaning of the air screen on the compressor intake with flammable solvents;
- Locating a battery charger near the air compressor intake can result in hydrogen gases being drawn

WARNING

Never, under any circumstance, introduce a flammable substance into a tire.

Igniting this substance in an effort to facilitate seating the beads is extremely unsafe. This may result in an explosion of the tire with force sufficient to cause serious personal injury or death.

This practice may also result in undetected damage to the tire or rim that could result in failure of the tire in service.

WARNING

Serious injury or death may result from an explosion of the tire and rim/wheel assembly due to heating the rim/wheel. Never rework, weld, braze or heat a wheel or rim.

Recommendations:

- Locate compressor inside (where freezing will not be a problem) in an area by itself (away from operations such as tire repairing, battery charging, etc.).
- Do not add anti-freeze materials to the compressor tank.
- Each day, open the bleed valve on the tank to expel moisture.
- Filters, traps, and driers can be added to compressors to remove moisture and avoid frozen hoses.
- Do not use highly flammable solvents to clean compressor or air screens.

Aftermarket Sealers/Inflators:

Flammable propellants and/or liquids in aftermarket sealants or aerosol inflators may cause a tire to explode under certain circumstances. Never introduce a flammable substance into a tire. Tire service professionals should assume that any aftermarket product used to seal or inflate a tire is flammable. In addition to following proper demounting procedures, take the following precautions:

- Keep the tire away from heat, flame, sparks or other ignition sources.
- Use tools with caution, particularly tire irons, reamers and hammers, to avoid causing sparks.
- In a well-ventilated area - and with the tire secured to a vehicle, tire mounting machine or other restraining device - remove the valve core and completely deflate the tire.
- Re-inflate and deflate the tire a few times to further dissipate and expel potentially flammable vapor.

NOTE

For proper repair procedures, refer to the USTMA wall charts on puncture repair procedures for passenger/light truck and truck/bus tires.

For demounting and mounting procedures, refer to the appropriate USTMA wall charts on demounting/mounting procedures.

For additional information, refer to the USTMA puncture repair and demount/mount wall charts.

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