

# Tire Care and Maintenance Guide

## IMPORTANT SAFETY INFORMATION

### TIRE CARE

The easiest way to help ensure top mileage and performance from your Dunlop radials is to give them a simple but frequent inspection for proper inflation, treadwear, and the presence of any damage.

### SAFETY WARNING

**Serious injury may result from tire underinflation/overloading. Follow owner's manual and tire placard in vehicle.**

**DO MAINTAIN PROPER INFLATION PRESSURE IN YOUR TIRES.** Proper inflation pressure is necessary for optimum tire performance, safety and best fuel economy. To maintain proper inflation pressure, frequently check tires (when they are cool) with an accurate tire pressure gauge. For example, it is difficult to tell just by looking at radial tires whether they are underinflated.

- Evidence of air loss or repeated underinflation requires tire removal and expert inspection.

Always maintain inflation pressure at the level recommended by the vehicle manufacturer as shown on the vehicle placard or in the owner's manual. Higher inflation pressure increases stiffness which may deteriorate ride and generate unwanted vibration.

Tire footprint and traction are reduced when van, pickup or RV tires are overinflated for the loads carried. In particular, tires with aggressive tread patterns may contribute to oversteer or "roadwalk" if inflated beyond the inflation pressure specified in the owner's manual and vehicle placard for standard or customary loads. Overinflation also increases the chances of bruise damage.

Underinflation is the most common cause of failures in any kind of tire and may result in severe cracking, component separation or "blowout," with unexpected loss of vehicle control and accident. Underinflation increases sidewall flexing and rolling resistance resulting in heat and mechanical damage.

Furthermore, when operating a vehicle equipped with radial tires, it is difficult to notice when a tire has gone flat or near flat since the "feel" of the vehicle does not change significantly.

**DON'T OVERLOAD YOUR VEHICLE.** Check your vehicle owner's manual to determine the load limits. Maintain axle loads below specified vehicle and tire capacities. Replacement tire load capacity (lbs.) must always meet or exceed original tire "Max Load." Overloading your vehicle places stress on your tires and other critical vehicle components. Overloading can cause tire failure. Overloading a vehicle can also cause poor handling and increase fuel consumption. Never fit tires with less load capacity than shown on the vehicle tire placard or original equipment tire sidewalls.

**DON'T SPIN YOUR TIRES EXCESSIVELY.** Avoid excessive tire spinning when your vehicle is stuck in snow, ice, mud, or sand. **SAFETY WARNING:** The centrifugal forces generated by a free spinning tire/wheel assembly may cause sudden tire explosion resulting in vehicle damage and/or serious personal injury to you or a bystander. Never exceed 35 mph indicated on your speedometer. Use a gentle backward and forward rocking motion to free your vehicle for continued driving. Never stand near or behind a tire spinning at high speed, as for example, while attempting to push a vehicle that is stuck or when an on-the-car spin balance machine is in use.

**DO CHECK YOUR TIRES FOR WEAR.** Always remove tires from service when they reach two thirty-seconds of an inch (2/32") remaining tread depth. All new tires have treadwear indicators which appear as smooth bands in the tread grooves when they wear to the two thirty-seconds of an inch (2/32") level. Many wet weather accidents result from skidding on bald or nearly bald tires. Excessively worn tires are more susceptible to penetrations.

**DO NOT APPLY SIDEWALL DRESSINGS/CLEANERS.** Dunlop sidewalls are specially compounded to resist ozone cracking or weather checking.

**SIDEWALL TREATMENTS.** Use a mild soap solution to clean sidewalls, white striping or lettering, and rinse off with plain water. Instruct service personnel and customers never to apply any other material to enhance sidewall appearance. These may degrade rubber and remove inherent ozone resistance.

**DO CHECK YOUR TIRES FOR DAMAGE.** Frequent inspection of your tires for signs of damage and their general condition is important for safety. If you have any questions, have your tire dealer inspect them. Impacts, penetrations, cracks, knots, bulges or air loss always require tire removal and expert inspection. Never perform a temporary repair or use an innertube as a substitute for a proper repair. Only qualified persons should repair tires.

Proper Tire Repair

- Must be made between the tread shoulders, to a 3/16" diameter or less straight-through puncture, with no run low, run flat, cutting, cracking, separation or other damage.
- Must fill the injury. (Example - vulcanized rubber plug or patch-plug combination.)
- Must also seal the innerliner. (Example - cemented patch or patch-plug combination.)
- Must be done from the inside of the tire. (This also insures that the damaged tire is thoroughly inspected for secondary damage to the innerliner and plies.)
- Must conform to the repair kit manufacturer's instructions. ("String" or fabric-based plugs are not recommended.)
- Must not be injected or inserted from the outside of the mounted tire.
- Must not employ a tube or sealant.

**NOTE: Dunlop does not warrant any inspection or repair process. The repair is entirely the responsibility of the repairer. Do not exceed posted speed limits on any repaired tire. Speed ratings are voided if tires are repaired.**

**DON'T ATTEMPT TO MOUNT YOUR OWN TIRES. SAFETY WARNING:** Serious injury may result from explosion of tire/rim assembly due to improper mounting procedures. Follow tire manufacturer's instructions and match tire diameter to rim diameter. Mount light truck radials on rims approved for radial service. Do not apply bead sealer, this can inhibit bead seating. Lubricate beads and tire rim (including tube or flap) contact surfaces. Lock assembly on mounting machine or place in safety cage. **STAND BACK** and never exceed 40 psi to seat beads. Never use a volatile substance or a rubber "donut" (also known as a bead expander or "O-Ring") to aid bead seating. Only specially trained persons should mount tires.

There are a number of serious injuries encountered each year as a result of tire mounting accidents.

**DON'T MIX TIRES OF DIFFERENT SIZES AND TYPES ON THE SAME AXLE.** For optimum handling and control, Dunlop recommends fitment of four tires of the same type and size unless otherwise specified by the vehicle manufacturer. FOLLOW THESE ADDITIONAL GUIDELINES: Fit newest tires on rear axle. If radials and non-radials must be fitted to the same vehicle, fit radials on rear axle. If tires of different profiles must be fitted, fit widest tires on rear axle. Never mix radials and non-radials on the same axle. When fitting snow tires or all-season tires to perfor-

mance vehicles, always fit in sets for four. Do not fit tires with differing speed ratings. Never mix sizes and types on the same axle.

**WHEN REPLACING TIRES, ALWAYS CONSULT VEHICLE AND RIM MANUFACTURER REQUIREMENTS FOR SAFETY.** Never fit P-Metric (P) passenger car tires in place if Light Truck (LT) tires or fit as duals. Use of lift kits and some vehicle/tire combinations can cause instability. When changing sizes, carefully check vehicle/tire clearances.

**DO MAINTAIN VEHICLE SUSPENSION, WHEEL ALIGNMENT AND BALANCE AND ROTATE YOUR TIRES.** Lack of rotation, worn suspension parts, underinflation/overinflation, wheel imbalance, and misalignment can cause vibration or irregular wear. Rotate tires at maximum intervals of 6,000 miles.