

SERVICE BULLETIN

No. 113

REPLACING LESS THAN FOUR TIRES

When replacing tires on a vehicle, it is recommended and preferred that all four tires be replaced at the same time for continued optimal vehicle performance. However, for those cases where this is not feasible, below are some general guidelines to consider when replacing less than four tires for a light vehicle, whether it is one or two tires. If the vehicle manufacturer has alternate recommendations, always follow their recommendations.

IMPORTANT

In some cases, the vehicle manufacturer may specifically advise against replacing less than all four tires. Always check and follow the recommendations in the vehicle owner's manual. For 4WD and AWD vehicles, even small differences in outside diameter may cause drive-train damage or mechanical malfunction.

Replacing Two (2) Tires - When a pair of replacement tires is selected in the same size and construction as those on the vehicle, the two newer tires should be installed on the rear axle unless the new replacement tires are of a lower speed rating (see Cooper Service Bulletin # 107 "Tire Mixing"). Generally, new tires with deeper tread will provide better grip and evacuate water more effectively, which is important as a driver approaches hydroplaning situations. Placing greater traction on the rear axle on wet surfaces is necessary to prevent possible oversteer condition and possible loss of vehicle control, especially during sudden maneuvers.

Replacing One (1) Tire - Replacing a single tire on a vehicle can have an adverse affect on suspension systems, gear ratios, transmission, and tire treadwear. If single tire replacement is unavoidable, it is recommended that the single new tire be paired with the tire that has the deepest tread and both be placed on the rear axle. Placing greater traction on the rear axle on wet surfaces is necessary to prevent a possible oversteer condition and possible loss of vehicle control, especially during sudden maneuvers.

You can order additional copies of this Service Bulletin through the Consumer Relations Department, Cooper Tire & Rubber Company, Findlay, Ohio 45840 or call 1-800-854-6288. If you wholesale tires to other dealers (sub-dealers), each should receive a copy of this Service Bulletin.

CONSUMER RELATIONS

COOPER TIRE

SERVICE BULLETIN

#115

Passenger and Light Truck Used Tires

Attached is a Tire Information Service Bulletin issued by the Rubber Manufacturers Association (RMA) regarding previously used tires on a passenger or light truck vehicle. Anyone who is considering the purchase and/or installation of used tires, especially used tires with an unknown history, should read this bulletin carefully.

Consumers should be aware of possible serious risk associated with the installation and use of previously used tires. While tires are designed and built to provide many thousands of miles of excellent service, they must be maintained properly throughout their service life to achieve optimal performance. Proper tire maintenance includes regular (at least monthly) visual tire inspections for signs of damage or abuse (ie. cuts, cracks, bulges, snags, irregular wear, etc.) and inflation pressure checks. Tires can be damaged over the course of their service life due to abuse or improper service, maintenance, repair, or storage conditions, and such damage can eventually lead to tire failure. Only the original owner of a new tire can know the full extent of a particular tire's service and maintenance, and the conditions of use or abuse the tire has experienced. Thus, Cooper Tire fully endorses the RMA Tire Information Service Bulletin, "Passenger and Light Truck Used Tires".

Cooper urges that used tires should not be purchased, sold, or installed if they exhibit any of the conditions listed in the RMA bulletin, or if the used tires are offered by anyone other than a qualified tire service professional at a reputable new tire sales facility. Also, it should be noted that any used tire deemed not suitable for immediate service is also not suitable for spare tire applications. When a faulty spare tire is eventually used, it will be dangerous in service.

Consumers should also be wary of used tires that:

- May have been used on vehicles involved in an accident
- May have been used in severe service conditions (e.g. used for off-road, sporting, military or law enforcement purposes)
- May have been exposed to unusual environmental conditions such as severe storms, floods, fires, etc.

For additional and related information, please see the following previously issued Cooper Tire Service Bulletins:

- # 79 – Passenger & Light Truck Tire Safety
- # 94 – Safety Warning – Speed Rated Tires
- # 107 – Tire Mixing
- # 108 – Puncture Repair Procedures for Passenger and Light Truck Tires
- # 112 – Service Life for Passenger, Light Truck and Full-Size Spare Tires
- # 113 – Replacing Less than 4 Tires

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INFORMATION SERVICE BULLETIN

Volume 45, Number 2
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December 2007

PASSENGER AND LIGHT TRUCK USED TIRES

INTRODUCTION & PURPOSE

This tire information service bulletin applies to passenger and light truck tires, for use on light vehicles¹. Once tires are applied to a vehicle and put into service (this includes spare tires), they are considered “used”. The purpose of this bulletin is to address the potential risk associated with the installation of used tires that have uncertain or unknown history of use, maintenance or storage conditions. Such tires may have damage that could eventually lead to tire failure. This bulletin pertains to used tires installed as replacement tires or as equipped on a used vehicle².

Not all tire damage that can lead to tire failure is outwardly visible. For instance, improper repairs or damage to a tire’s innerliner can only be observed by inspecting the inside of the tire, demounted from the wheel. A qualified tire service professional should inspect the internal and external condition of the used tires prior to application. In the case of a used vehicle purchased by a consumer, the only way to determine the condition of its tires is to have them demounted by a tire service professional for the same type of inspection.



WARNING

Driving on damaged tires is dangerous. A damaged tire can suddenly fail leading to situations that may result in serious personal injury or death. Tires should be regularly inspected by a qualified tire service professional.

RMA DOES NOT recommend the installation of used tires that exhibit any of the following characteristics:

- Any punctures or other penetrations, whether repaired or not.
NOTE: This is not meant to preclude the proper repair of a tire installed on a consumer’s vehicle when the consumer is aware of the tire’s history. (See RMA “Puncture Repair Procedures for Passenger and Light Truck Tires” wall chart.)
- Any innerliner or bead damage.
- Indication of internal separation, such as bulges or local areas of irregular/fast treadwear indicating possible tread or belt separation.
- Indication of run-flat, under inflated and/or overloaded damage (e.g. innerliner abrasion, mid- to upper sidewall abrasion and stamping deterioration, delamination, or discoloration, excessive tread shoulder wear, etc.).

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- Any damage or wear exposing the body material of the tire — cuts, cracks, bulges, scrapes, ozone cracking/weather checking, impact damage, punctures, splits, snags, etc.
- Defaced or removed DOT tire identification number (TIN), which is located on the tire sidewall.
- Involved in a recall or a replacement program.
- Inadequate tread depth for continued service (i.e. nearly worn out). Tires with a tread depth of 2/32” or less at any point on the tire are worn out.
- Currently mounted on a rim that is bent, dented, cracked or otherwise damaged.
- Evidence of improper storage³ .
- Chemical, fire, excessive heat damage, or other environmental damage.
- Designated as a “scrap tire” or otherwise not intended for continued highway service.
- Evidence of prior use of tire sealant or balance/filler material.
- Altered to look like new tires (e.g. a regrooved tread).
- Labeled on the sidewall as “Not For Highway Use”, “NHS”, “For Racing Purposes Only”, “Agricultural Use Only”, “SL” (service limited agricultural tire), or any other indication that the tire is barred from use on public thoroughfares.
- Any other condition which would be cause for permanent removal from service. For more about out-of-service tire conditions, refer to the Tire Industry Association’s “Passenger and Light Truck Tire Conditions Manual”⁴.

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ENDNOTES

- 1** As defined by 49 CFR Part 571.139, Federal Motor Vehicle Safety Standard (FMVSS) No. 139, light vehicles are motor vehicles with a gross vehicle weight rating (GVWR) of 10,000 lbs. or less. Tire sizes for light vehicles include all passenger car tires and light truck tire sizes (through Load Range E). This bulletin does not address retreaded passenger and light truck (LT) tires.
- 2** Before replacing tires, ALWAYS refer to the vehicle manufacturer’s replacement tire instructions in the owner’s manual. Also refer to the vehicle and tire owner’s manuals for additional important tire maintenance and safety information applicable to new and used tires. For more information about tire replacement, please refer to the RMA “Replacement Guidelines for Passenger and Light Truck Tires” manual.
- 3** See RMA TISB Vol. 23 about tire storage recommendations.
- 4** Visit www.tireindustry.org for details.

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