

**TIRE
MAINTENANCE
WARRANTY
AND
SAFETY
MANUAL**



Firestone

"LIMITED WARRANTY" Firestone Brand Passenger and Light Truck Tires

TIRES AND USES COVERED

This warranty covers all new Firestone brand passenger tires including radial passenger tires with Self Seal, the TEMPA SPARE, the LIMITED SERVICE SPARE, and the new Firestone brand truck tires as listed in our "Light Truck Tire and Tube Price List." Tires branded "Blern" are not warranted for ride or appearance. Tires marked "NA" or "NO ADJ" are not warranted.

WHO GETS THE WARRANTY, WHAT IS WARRANTED AND FOR HOW LONG?

If, before wearing down to 2/32nds of an inch of tread depth remaining (i.e., worn down to the top of the built-in indicators in the tread grooves), any tire covered by this warranty becomes unusable for any reason within the manufacturer's control, such tire will be replaced with an equivalent new Firestone tire on the basis set forth below. Some examples of causes or conditions normally beyond the manufacturer's control are:

1. Road hazards, (for example: puncture, cut, snag, stone drill, impact or bruise break) or damage from curbing or wheel spinning.
2. Apparent overload or improper inflation pressure.
3. Wheel misalignment, tire/wheel assembly imbalance, or other vehicle conditions, defects, or characteristics.
4. Mounting damage, racing, or other abuse.
5. Improper repair or improper insertion of sealant, balancing, or filler materials.
6. Intentional alteration of either the appearance or the physical characteristics of the tire.
7. Conditions caused by aging or improper storage; and
8. Failure to observe any of the safety and maintenance precautions contained in this manual.

This warranty is in addition to and/or may be limited by any other applicable written warranty covering special tires or situations you may have received.

REPLACEMENT PRICE

Radial passenger and light truck tires adjusted under this warranty will be replaced free of charge during the first 25% of treadwear or within the first 12 months after purchase (Proof of Purchase and Purchase Date are required) whichever is to owner/user's advantage.

Non radial passenger and light truck tires adjusted under this warranty will be replaced free of charge during the first 10% of treadwear.

During the free replacement period, mounting and balancing of passenger tires only are included.

After the free replacement period, to determine the replacement price, the percent of used treadwear is multiplied by the owner/user's regular buying price. Taxes, mounting, balancing or other service charges will be added to the adjustment/replacement price.

IN CANADA, the tire will be adjusted at dealerships (subject always to dealer discretion) at a predetermined "Adjustment Price."

REPLACEMENT WARRANTY. If you receive a tire under this warranty, it will be covered by the warranty Firestone then gives on that tire.

WHERE TO GO. See your Firestone retailer listed in the Yellow Pages under Tire Dealers - Retail.

CONSUMER RIGHTS. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state and in Canada from province to province.

CONDITIONS AND EXCLUSIONS

TO THE EXTENT PERMITTED BY LAW, FIRESTONE DISCLAIMS LIABILITY FOR ANY CONSEQUENTIAL DAMAGES, LOSS OF TIME OR LOSS OF VEHICLE USE, OR INCONVENIENCE.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty applies only to consumers actually using the tire and adjustments made in the United States or Canada.

Firestone's obligations under this policy may not be enlarged or altered by anyone.

IMPORTANT: In accordance with Federal Law, this warranty has been designated as a "Limited Warranty." Nothing in this warranty is intended to be a representation by Firestone that tire failures cannot occur.

OWNER-USER'S OBLIGATION

It is the owner-user's obligation to operate tires within tire load and specification limits and at cool air pressures specified by your vehicle manufacturer for load and speed according to individual tire size, type and load capacity. It is also the owner-user's obligation to maintain proper alignment of wheels and to maintain proper tire-wheel assembly balance.

In case of adjustment claim, owner-user must present the tire to a Firestone retailer, complete and sign the customer section of the Firestone adjustment claim form, and pay appropriate replacement price, taxes and service charges.

We strongly recommend that you have your Firestone retailer inspect tires any time you notice irregular or uneven treadwear, or every 6,000 to 8,000 miles. This service is free.

Given in U.S.A. by:
Firestone Tire
Division of Bridgestone/
Firestone, Inc.
1200 Firestone Parkway
Akron, Ohio 44317

and
Given in Canada by:
Bridgestone/Firestone
Canada, Inc.
5770 Hurontario St.
Suite 400
Mississauga, Ontario L5R 3G5

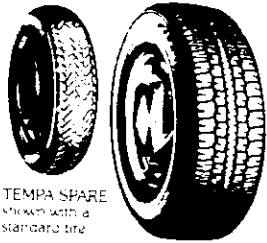
THE FIRESTONE TEMPA SPARE

...a revolutionary space-saving spare tire

- Fully inflated and mounted on its own wheel... always ready for use.
- About half the size of a conventional spare... provides more usable storage space in your trunk.
- Weighs less than a regular tire, so it's easier to handle.

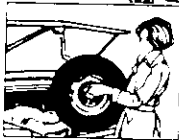
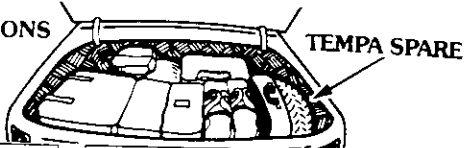
TEMPA SPARE is a special tire designed to let you finish a trip and obtain a replacement tire, if needed, at your convenience.

The TEMPA SPARE is smaller and thinner than a regular tire, which means you have more space in your trunk for luggage, golf clubs, children's equipment, etc. Check your inflation pressure.



TEMPA SPARE
is smaller than a
standard tire

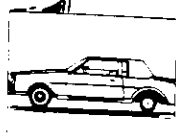
INSTRUCTIONS FOR USE



Remove TEMPA SPARE from trunk. Check inflation pressure every 30 days and adjust to 60 ps.



Replace flat tire with TEMPA SPARE.



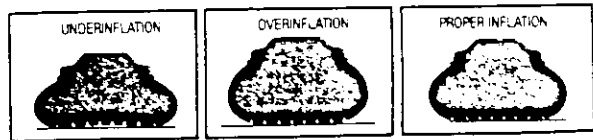
Your car is now ready for temporary use.

IMPORTANT SAFETY INFORMATION

Any tire, no matter how well constructed, may fail in use as a result of punctures, impact damage, improper inflation, overloading or other conditions resulting from use or misuse. Tire failure may create a risk of serious personal injury or property damage. To reduce the risk of tire failure, we strongly recommend you read and follow all safety information contained in this manual.

TIRE INFLATION

Always keep the recommended air pressure in all your tires, including the spare. This is an important requirement for tire safety and mileage. **Your vehicle tire placard or owner's manual will tell you the recommended air pressure.** On some vehicles, the recommended front and rear tire pressures will be different. Your Firestone retailer will be happy to point this out to you.



SAFETY WARNING: Driving on tires with too little air pressure is dangerous. Your tires will get over-heated. This can cause a sudden tire failure that could lead to serious personal injury.

Underinflation may also:

1. damage the tire leading to tire failure.
2. adversely affect vehicle handling.
3. reduce tire life.
4. increase fuel consumption.

SAFETY WARNING: Driving on tires with too much air can be dangerous. The tires are more likely to be cut, punctured, or broken by sudden impact. On some vehicles, handling characteristics can be seriously affected. Serious personal injury could result. Consult your vehicle tire placard for the recommended inflation and your owner's manual for other tire information.

SAFETY WARNING: Never inflate a tire unless it is secured to the vehicle or a tire mounting machine. Inflating an unsecured tire is dangerous. If it bursts, it could be hurled into the air with explosive forces resulting in serious personal injury.

TIPS FOR SAFE TIRE INFLATION

- Check your tire air pressure, including your spare tire, at least once a month and before long trips. Be sure to use an accurate pressure gauge.
- Check your air pressure when the tires are "cold." The tires are "cold" when your vehicle has been driven less than a mile at moderate speed after being stopped for three or more hours.
- If you must add air when your tires are hot, add four pounds per square inch (psi) (28 kPa) above the recommended cold air pressure. Recheck the inflation pressure when the tire is cold.
- Never release air from a hot tire in order to reach the recommended cold tire pressure. Normal driving causes tires to run hotter and air pressure to increase. If you release air when your tires are hot, you may dangerously under-inflate your tires.
- If your tires lose more than two pounds per square inch (psi) (14 kPa) per month, the tire, the valve, or wheel may be damaged. Consult your local Firestone store or tire dealer for a free inspection.
- Check your spare tire also. Consult your vehicle owner's manual for the correct inflation and use of a "temporary use" spare tire.

OVERLOADING

SAFETY WARNING: Driving your vehicle in an overloaded condition is dangerous. Overloading causes excessive heat to build up in your tires. This can lead to sudden tire failure and serious personal injury while the tire is overloaded or at some later date.

TIPS FOR SAFE LOADING

Consult your vehicle tire placard and owner's manual for the vehicle load limits, proper tire inflation, and special trailer towing instructions that apply to your vehicle and tires.

- Never exceed the maximum load rating stamped on the sidewall of your tire or the maximum vehicle load rating, whichever is less. The maximum vehicle load rating (GVWR) is found on the certification label on the driver's door.

TIRE DAMAGE

SAFETY WARNING: Driving on damaged tires is dangerous. A damaged tire can suddenly fail causing serious personal injury. Have your tires regularly inspected by your Firestone retailer for damage.

TIPS FOR SPOTTING DAMAGED TIRES

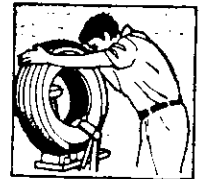
- After striking anything unusual in the roadway, ask your Firestone retailer to demount the tire and inspect it for damage. A tire may not have visible signs of damage on the tire surface. Yet, the tire may suddenly fail without warning, a day, a week, or even months later.
- Inspect your tires for cuts, cracks, splits, or bruises in the tread and sidewall areas. Bumps or bulges may indicate a separation within the tire body. Have your tire inspected by a qualified tire service person. It may be necessary to have it removed from the wheel for a complete inspection.
- Inspect your tires for uneven wear. Wear on one side of the tread or flat spots in the tread may indicate a problem with the tire or vehicle. Consult your Firestone retailer.
- Inspect your tires for adequate tread depth. When the tire is worn to the built-in indicators (.2-.32 inch / 1.6 millimeters, or less tread groove depth) or the tire cord or fabric is exposed, the tire is dangerously worn and must be replaced immediately.
- Inspect your tire rims also. If you have a bent or cracked rim, it must be replaced.



TIRE REPAIRS

SAFETY WARNING: Driving on an improperly repaired tire is dangerous. The repair can cause further damage to the tire. It may suddenly fail, causing serious personal injury. To be safe, go to your Firestone retailer for proper tire repairs.

- Never repair a tire with less than 2/32 inch (1.6 millimeters) tread remaining. At this tread depth, the tire is worn out and must be replaced.
- Never repair a tire with a puncture larger than 1/4 inch (6.4 millimeters) in diameter. Such tires cannot be properly repaired and must be replaced.
- Repairs of all tires (radial and non-radial) must be of the plug and inside patch type unless the hole is too small to insert a plug. Using plugs alone on any type of tire is not a safe repair.
- Never repair a tire with a puncture or other damage outside the tread area. Such tires cannot be properly repaired and must be replaced.



- Any tire repair done without removing the tire from the rim is improper.
- Tubes, like tires, should be repaired only by a qualified tire service person.
- Never use a tube as a substitute for a proper repair.

REMOVING AND REPLACING TIRES ON RIMS (TIRE MOUNTING)

SAFETY WARNING: Always stand well clear of any tire mounting operation. This is especially important when the service operator inflates the tire. If the tire has been improperly mounted, it may burst with explosive force causing serious personal injury.

A new valve must be installed in the rim each time a worn out passenger tire is replaced.

SAFETY WARNING: Removing and replacing tires on rims can be dangerous. Attempting to mount tires with improper tools or procedures may result in a tire explosion causing serious personal injury. This is a job for your Firestone retailer or qualified tire mechanic only.

Personal injury can result from

1. Failure to select the proper tire and rim
The tire must match the width and diameter requirements of the rim. For example, when mounting 16-inch diameter tires, use only 16-inch diameter rims. When mounting truck type radial tires, use only wheels approved for radial tires.

2. Failure to inspect both the tire and rim.

The rim must be free of cracks, dents, chips, and rust. The tire must be free of bead damage, cuts, and punctures.

3. Failure to follow proper procedures.

For proper mounting procedures, consult the **Care and Service of Automobile Tires** or the **Care and Service of Highway Truck Tires** published by the Rubber Manufacturer's Association.

4. Exceeding the maximum bead seating pressure

The service mechanic must never inflate a tire beyond 40 pounds per square inch (psi) (276 kPa) to seat the beads. Be absolutely certain beads are fully seated before adjusting inflation pressure to the level recommended for vehicle operation.



SAFETY WARNING: Driving your vehicle with an improper mix of tires is dangerous. Your car's handling characteristics can be seriously affected. You could have an accident resulting in serious injury. Consult your vehicle owner's manual or Firestone retailer for the proper tire replacement.



TEMPORARY-USE SPARE TIRES

Your car may be equipped with a "temporary use" spare tire. This spare may differ in size and construction from the other tires on your vehicle.

SAFETY WARNING: Check inflation pressure before use. See Tire Inflation Section in this manual.

SAFETY WARNING: Placing (mounting) your temporary use tire on a wheel which is not specifically designed for use with the temporary use tire or placing another type tire on your temporary use wheel can be dangerous. Your vehicle's handling characteristics can be seriously affected. You could have an accident resulting in serious personal injury. Consult your vehicle owner's manual for proper use of your "temporary use" spare tires.

HIGH SPEED

SAFETY WARNING: Driving at high speed is dangerous, and can cause a vehicle accident, including serious personal injury or death.

1. Regardless of the speed and handling capabilities of your car and its tires, a loss of vehicle control can result from exceeding the maximum speed (a) allowed by law or (b) warranted by traffic, weather, vehicle, or road conditions. High-speed driving should be left to trained professionals operating under controlled conditions.
2. No tire, regardless of its design or speed rating, has unlimited capacity for speed, and a sudden tire failure can occur if its limits are exceeded.
 - (a) Non-speed rated tires are built for ordinary passenger service, and should never be used for high-speed driving.
 - (b) Even "speed-rated" tires may not be safely driven at speeds exceeding their maximum actual speed capability. The following information should help you understand the tire speed rating system and use speed-rated tires safely.

TIRE MIXING

3. LT (Light Truck) Designated Tires Only.

It is not recommended that your truck be operated at speeds in excess of legal limits. However, if it is anticipated that sustained driving at speeds in excess of 65 MPH may be required, then:

- (a) At speeds from 66 MPH through 75 MPH (106 KM/H through 121 KM/H), cold inflation pressures must be increased 10 PSI (70 KPA) above the recommended pressures for the load being carried. Do not exceed the maximum inflation pressure of the wheel. Sustained speeds from 66 MPH through 75 MPH are not permitted when the 10 PSI increase would exceed the wheel's maximum inflation pressure.
- (b) For sustained driving at speeds from 76 MPH through 85 MPH (122 KM/H through 137 KM/H), reduce axle load capacity by 10% in addition to increasing the inflation pressure as listed in (A) above.

NOTE: LT tires should not be operated at speeds in excess of 85 MPH (137 KM/H).

TIRE SPEED RATINGS

Some tires, especially "performance" tires, bear a letter "speed rating" designation indicating the tire's design speed capability. This speed rating system is intended to allow you to compare the speed capabilities of tires.

When purchasing or replacing speed-rated tires, make sure to:

- (a) use the rankings in the chart below to compare the speed ratings of all the tires, and
- (b) follow the vehicle manufacturer's recommendations, if any, concerning the use of speed-rated tires.

To avoid reducing the speed capability of the vehicle, replace a speed-rated tire only with another tire having at least the same speed rating. Remember, it's the "top speed" of the "slowest" tire on the car which cannot be exceeded without risk of tire failure.

The letter symbols and corresponding design speeds are as follows:

Speed-Rating Symbol	Speed Category
S	Up to 112 mph (180 km/h)
T	Up to 118 mph (190 km/h)
H	Up to 130 mph (210 km/h)
V	
(with service description)	Up to 149 mph (240 km/h)
V	
(no service description)	Over 130 mph (210 km/h)*
Z	Over 149 mph (240 km/h)*

*Although no upper-limit speeds are specified here, the indicated tires nonetheless have limited rated speed capabilities. For more detailed technical information, call Firestone at 1-800-356-4644.

These speed ratings are based on laboratory tests under specific, controlled conditions. While these tests relate to performance on the road under those conditions, remember that real-life driving is rarely identical to any test conditions. Your tire's actual speed capability may be less than its rated speed since it is affected by factors such as inflation pressure, load, prior alteration or damage, driving conditions, alignment, wear, vehicle condition, and the duration for which high speed is sustained.

A tire's speed rating becomes void if the tire is repaired, retreaded, damaged or abused, or otherwise altered from its original condition. Thereafter, it should be treated as a non-speed-rated tire.

The tire's speed rating designation appears on the tire sidewall with the tire size. Examples:

P215/65R15 88H P205/60TR15 90T 185/70SR13

In these examples, the "H," "T," and "S" respectively, are the speed ratings ("R" indicates that each of the example tire sizes are radials). The "88H" and "90T" in the first two examples are called "service descriptions"

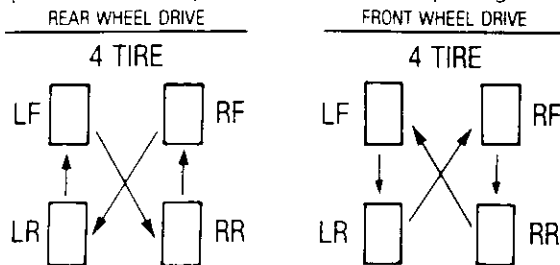
TIRE SPINNING

SAFETY WARNING: Spinning a tire to remove a vehicle stuck in mud, ice, snow, or wet grass can be dangerous. A tire spinning at a speedometer reading above 35 miles per hour (55 km/h) can in a matter of seconds reach a speed capable of disintegrating a tire with explosive force. Under some conditions, a tire may be spinning at a speed twice that shown on the speedometer. This could cause severe injury to a bystander or passenger and extensive vehicle damage. Never spin tires above a speedometer reading of 35 mph (55 km/h).

SAFETY WARNING: Spin balancing a tire at speeds exceeding a vehicle speedometer reading of 35 mph (55 km/h) [70 mph (115 km/h) if the tire is being balanced off of the vehicle or if your vehicle is equipped with a limited slip differential] can be dangerous. The tire may fail with explosive force causing serious personal injury. Only trained personnel should spin balance tires. You should stand well away from the work area when tires are being spin balanced.

RADIAL TIRE ROTATION PASSENGER CAR TIRES

The purpose of tire rotation is to minimize irregular or uneven wear caused by maintaining a tire in one rotation direction and one position over an extended period. The following rotation patterns are normally recommended for radial passenger tires:



Some exceptions to these patterns may exist. See your owner's manual for recommended pattern.

Follow the vehicle manufacturer's recommendations for the mileage interval for tire rotation. If the vehicle manufacturer's recommendations cannot be found, tires should be rotated every 6,000 to 8,000 miles. Individual tire pressures must be checked after rotation and adjusted to the vehicle manufacturer's recommendation for the new location on the vehicle. Vehicle alignment should be checked if irregular wear is evident.

TIRE STORAGE

Tires should be stored indoors in a cool dry place where water cannot collect inside the tires. The tires should be placed away from electric generators and motors and sources of heat such as hot pipes. Storage surfaces should be clean and free of grease, gasoline, or other substances which can deteriorate the rubber. Improper storage can damage your tires in ways that may not be visible and can lead to serious personal injury.

TIRE SERVICE/ CUSTOMER SATISFACTION

Normal tire maintenance and warranty services are available at Firestone retailers across the U.S.A. and Canada. For more information, please call our Customer Relations Department (1-800-356-4644). In Canada (1-416-890-1990).

Additional information on the care and service of automobile tires is available by writing to the:

Rubber Manufacturer's Association
1400 K St., N.W.
Washington, DC 20005

or

Rubber Association of Canada
89 Queensway West, Suite 308
Mississauga, Ontario L5B 2V2

TIRE REGISTRATION

Registration of your tires is an important safety precaution since it allows the manufacturer to notify you in the event of a recall. When you purchase replacement tires at a store owned by a tire manufacturer (e.g., Firestone) or tire brand name owner, the retailer will register the tires for you. When you purchase tires at an independent tire dealer, however, you will be provided with a registration card on which the tire serial numbers have been recorded. Be sure to fill in your name and address on this card and mail it promptly.

You need not register tires which come as original equipment on new vehicles, as the vehicle and tire manufacturers handle that for you.