



## WARRANTY

Your new Mirage trailer is warranted by Novae LLC to be free from defects in material or workmanship for 3 years, with reasonable limitations.

### Additional Warranties

- 1 Year Tire Hazard and Abuse Protection: All tires provided with Mirage trailers come with hazard and abuse protection for 1 year, starting on your purchase date. Should you encounter any issue with your tire, including road hazard damage, blowout, flat tire etc. our tire supplier will, without question, replace the tire at no charge, freight paid to the dealer or owner along with a preset installation labor reimbursement.
- 5 Year Standard Tire Warranty: All tires are covered under the original manufacturer's 5-year limited warranty against defects in material and workmanship. See [www.MirageTrailers.com](http://www.MirageTrailers.com) for tire warranty details.
- 5 Year Axle and Suspension Warranty: Mirage provides only premium axles that are warranted by the manufacturer for 5 years for leaf spring and 10 years for torsion axles. See [www.MirageTrailers.com](http://www.MirageTrailers.com) for axle warranty details.

### To Obtain Service

Contact an authorized Mirage dealer to open a warranty claim. Your dealer will contact Novae LLC to obtain authorization prior to any work being done. Novae LLC will service all claims but will not accept liability for repairs made without approval.

### Registration

Your trailer must be registered to validate your purchase date and process any warranty request. You may register at any time, however, if we cannot validate your purchase date, your warranty period will commence on the date of manufacture. Warranty registration is available through your dealer or on the web at [www.MirageTrailers.com](http://www.MirageTrailers.com). Another benefit of timely registration is to be sure you receive safety and other notices.

### Limitations

Items NOT Covered Under This Warranty:

1. Maintenance items worn through normal use like bearings, brakes, tires, lumber, batteries, etc.
2. Hydraulic pumps and cylinders, axles and suspensions, wheels and tires covered under the original manufacturer's warranty. See additional warranties above and [www.MirageTrailers.com](http://www.MirageTrailers.com) for details.
3. Paint.
4. Damage or failure resulting from: a) any misuse including, overloading, improper loading, negligence, alteration, or accidents, b) inadequate maintenance including loose nuts, bolts, screws, or improperly torqued wheel lug nuts, c) use of underrated or incorrect hitch equipment including the hitch ball, pintle, or improper hitching, d) towing a trailer that exceeds the tow vehicle manufacturer's specific towing limitations.
5. Inconvenience, loss of time, loss of trailer use, loss of revenue, rental or substitute equipment costs or any other loss or cost including travel time and expenses, such as food, fuel, lodging, etc., incurred to obtain warranty service.
6. Overtime labor rates, service calls, towing charges, expediting, freight or transportation costs.



2212 Industrial Rd.  
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[www.mirageinc.com](http://www.mirageinc.com)



208.461.7776



### **Limitation of Remedies**

UNDER NO CIRCUMSTANCES WILL NOVAE LLC BE LIABLE TO A PURCHASER OR ANY OTHER PERSON FOR ANY SPECIAL, INCIDENTAL, INDIRECT, CONSEQUENTIAL, OR PUNITIVE DAMAGES ARISING OUT OF OR RELATING TO THE SALE OF GOODS BY NOVAE LLC, WHETHER UNDER A THEORY OF CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE. THE OBLIGATION OF NOVAE LLC UNDER THIS WARRANTY IS LIMITED TO REPAIR OR REPLACEMENT OF ANY PART OR PARTS WHICH, IN THE OPINION OF NOVAE LLC IS/ARE DEFECTIVE IN MATERIAL OR WORKMANSHIP UNDER NORMAL USE AND SERVICE. IN NO EVENT WILL NOVAE LLC'S TOTAL LIABILITY TO A PURCHASER UNDER THIS LIMITED WARRANTY EXCEED THE PURCHASE PRICE OF THE PRODUCT(S).

### **Disclaimers**

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY IMPLIED WARRANTIES ARISING FROM COURSE OF PERFORMANCE, COURSE OF DEALING OR USAGE OF TRADE, ALL OF WHICH ARE EXPRESSLY DISCLAIMED. THERE ARE NO OTHER WARRANTIES, AGREEMENTS OR UNDERSTANDING WHICH EXTEND BEYOND THOSE SET FORTH IN THIS DOCUMENT. NO OTHER WARRANTY, ORAL OR WRITTEN, IS AUTHORIZED OR HAS BEEN GIVEN BY NOVAE LLC TO PURCHASER. THIS WARRANTY IS EXTENDED TO THE ORIGINAL REGISTERED OR CONSUMER OWNER AND IS NOT TRANSFERABLE.



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# Tire Safety: Everything Rides On It

The National Traffic Safety Administration (NHTSA) has published a brochure (DOT HS 809 361) that discusses all aspects of Tire safety, as required by CFR 575.6. This brochure is reproduced in part below. It can be obtained and downloaded from NHTSA, free of charge, from the following web site:

[http://www.nhtsa.gov/cars/rules/tiresafety/ridesonit/tires\\_index.html](http://www.nhtsa.gov/cars/rules/tiresafety/ridesonit/tires_index.html)

Studies of tire safety show that maintaining proper tire pressure, observing tire and vehicle load limits (not carrying more weight in your vehicle than your tires or vehicle can safely handle), avoiding road hazards, and inspecting tires for cuts, slashes, and other irregularities are the most important things you can do to avoid tire failure, such as tread separation or blowout and flat tires. These actions, along with other care and maintenance activities, can also:

- Improve vehicle handling
- Help protect you and others from avoidable breakdowns and accidents
- Improve fuel economy
- Increase the life of your tires

The following information presents a comprehensive overview of tire safety, including information on the following topics:

- Basic tire maintenance
- Uniform Tire Quality Grading System
- Fundamental characteristics of tires
- Tire safety tips

Use this information to make tire safety a regular part of your vehicle maintenance routine. Recognize that the time you spend is minimal compared with the inconvenience and safety consequences of a flat tire or other tire failure.

## Safety First—Basic Tire Maintenance

Properly maintained tires improve the steering, stopping, traction, and load-carrying capability of your vehicle. Underinflated tires and overloaded vehicles are a major cause of tire failure. Therefore, as mentioned above, to avoid flat tires and other types of tire failure, you should maintain proper tire pressure, observe tire and vehicle load limits, avoid road hazards, and regularly inspect your tires.

## Finding Your Vehicle's Recommended Tire Pressure and Load Limits

Tire information placards and vehicle certification labels contain information on tires and load limits. These labels indicate the vehicle manufacturer's information including:

- Recommended tire size
- Recommended tire inflation pressure
- Vehicle capacity weight (VCW—the maximum occupant and cargo weight a vehicle is designed to carry)
- Front and rear gross axle weight ratings (GAWR—the maximum weight the axle systems are designed to carry).

Both placards and certification labels are permanently attached to the trailer near the left front.

## Understanding Tire Pressure and Load Limits

Tire inflation pressure is the level of air in the tire that provides it with load-carrying capacity and affects the overall performance of the vehicle. The tire inflation pressure is a number that indicates the amount of air pressure—measured in pounds per square inch (psi)—a tire requires to be properly inflated. (You will also find this number on the vehicle information placard expressed in kilopascals (kPa), which is the metric measure used internationally.)

Manufacturers of passenger vehicles and light trucks determine this number based on the vehicle's design load limit, that is, the greatest amount of weight a vehicle can safely carry and the vehicle's tire size. The proper tire pressure for your vehicle is referred to as the "recommended cold inflation pressure." (As you will read below, it is difficult to obtain the recommended tire pressure if your tires are not cold.)

Because tires are designed to be used on more than one type of vehicle, tire manufacturers list the "maximum permissible inflation pressure" on the tire sidewall. This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.

## Checking Tire Pressure

It is important to check your vehicle's tire pressure at least once a month for the following reasons:

- Most tires may naturally lose air over time.
- Tires can lose air suddenly if you drive over a pothole or other object or if you strike the curb when parking.
- With Radial tires, it is usually not possible to determine under inflation by visual inspection.

For convenience, purchase a tire pressure gauge to keep in your vehicle. Gauges can be purchased at tire dealerships, auto supply stores, and other retail outlets.

The recommended tire inflation pressure that vehicle manufacturers provide reflects the proper psi when a tire is cold. The term cold does not relate to the outside temperature. Rather, a cold tire is one that has not been driven on for at least three hours. When you drive, your tires get warmer, causing the air pressure within them to increase. Therefore, to get an accurate tire pressure reading, you must measure tire pressure when the tires are cold or compensate for the extra pressure in warm tires.

## Steps for Maintaining Proper Tire Pressure

- Step 1: Locate the recommended tire pressure on the vehicle's tire information placard or certification label.
- Step 2: Record the tire pressure of all tires.
- Step 3: If the tire pressure is too high in any of the tires, slowly release air by gently pressing on the tire valve stem with the edge of your tire gauge until you get to the correct pressure.
- Step 4: If the tire pressure is too low, note the difference between the measured tire pressure and the correct tire pressure. These "missing" pounds of pressure are what you will need to add.
- Step 5: At a service station, add the missing pounds of air pressure to each tire that is underinflated.
- Step 6: Check all the tires to make sure they have the same air pressure (except in cases in which the front and rear tires are supposed to have different amounts of pressure).

If you have been driving your vehicle and think that a tire is underinflated, fill it to the recommended cold inflation pressure indicated on your vehicle's tire information placard or certification label. While your tire may still be slightly underinflated due to the extra pounds of pressure in the warm tire, it is safer to drive with air pressure that is slightly lower than the vehicle manufacturer's recommended cold inflation pressure than to drive with a significantly underinflated tire. Since this is a temporary fix, don't forget to recheck and adjust the tire's pressure when you can obtain a cold reading.

## Tire Size

To maintain tire safety, purchase new tires that are the same size as the vehicle's original tires or another size recommended by the manufacturer. Look at the tire information placard or the sidewall of the tire you are replacing to find this information. If you have any doubt about the correct size to choose, consult with the tire dealer.

## Tire Tread

The tire tread provides the gripping action and traction that prevent your vehicle from slipping or sliding, especially when the road is wet or icy. In general, tires are not safe and should be replaced when the tread is worn down to 1/16 of an inch. Tires have built-in tread wear indicators that let you know when it is time to replace your tires. These indicators are raised sections spaced intermittently in the bottom of the tread grooves. When they appear "even" with the outside of the tread, it is time to replace your tires. Another method for checking tread depth is to place a penny in the tread with Lincoln's head upside down and facing you. If you can see the top of Lincoln's head, you are ready for new tires.

## Tire Balance and Wheel Alignment

To avoid vibration or shaking of the vehicle when a tire rotates, the tire must be properly balanced. This balance is achieved by positioning weights on the wheel to counterbalance heavy spots on the wheel-and-tire assembly. A wheel alignment adjusts the angles of the wheels so that they are positioned correctly relative to the vehicle's frame. This adjustment maximizes the life of your tires and prevents your car from veering to the right or left when driving on a straight, level road. These adjustments require special equipment and should be performed by a qualified technician.

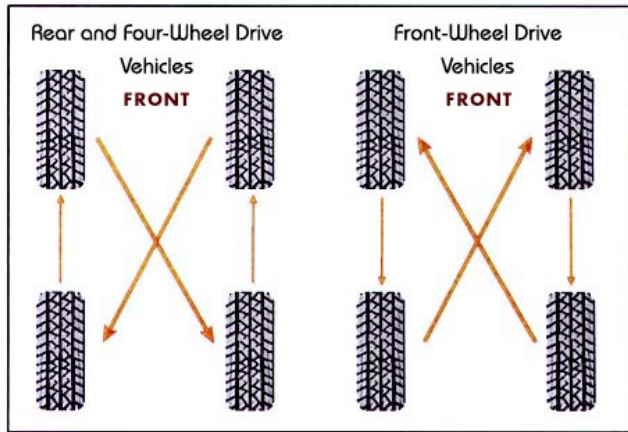
## Tire Rotation

Rotating tires from front to back and from side to side can reduce irregular wear (for vehicles that have tires that are all the same size.) Look in your owner's manual for information on how frequently the tires on your vehicle should be rotated and the best pattern for rotations.

Be aware that some tires may have a one-directional tread pattern that requires them to be operated in one-direction. Therefore, these tires should only be rotated from front to back on the same side of the vehicle.

### A Tire Rotation Example

For maximum mileage, rotate your tires every 5,000 miles. Follow correct rotation patterns.



## Tire Repair

The proper repair of a punctured tire requires a plug for the hole and a patch for the area inside the tire that surrounds the puncture hole. Punctures through the tread can be repaired if they are not too large, but punctures to the sidewall should not be repaired. Tires must be removed from the rim to be properly inspected before being plugged and patched.

## Uniform Tire Quality Grading System (UTQGS)

To help consumers compare a passenger car tire's tread wear rate, traction performance, and temperature resistance, the federal government requires tire manufacturers to grade tires in these three areas. This grading system, known as the Uniform Tire Quality Grading System, provides guidelines for making relative comparisons when purchasing new tires. You also can use this information to inquire about the quality of tires placed on new vehicles.

Although this rating system is very helpful when buying new tires, it is not a safety rating or guarantee of how well a tire will perform or how long it will last. Other factors such as personal driving style, type of car, quality of the roads, and tire maintenance habits have a significant influence on your tire's performance and longevity.

### Treadwear Grade

Tread wear grades are an indication of a tire's relative wear rate. The higher the tread wear number is, the longer it should take for the tread to wear down. For example, a tire grade of 400 should wear twice as long as a tire grade of 200.

### Traction Performance Grade

Traction grades are an indication of a tire's ability to stop on wet pavement. A higher graded tire should allow you to stop your car on wet roads in a shorter distance than a tire with a lower grade. Traction is graded from highest to lowest as "AA", "A", "B", and "C".

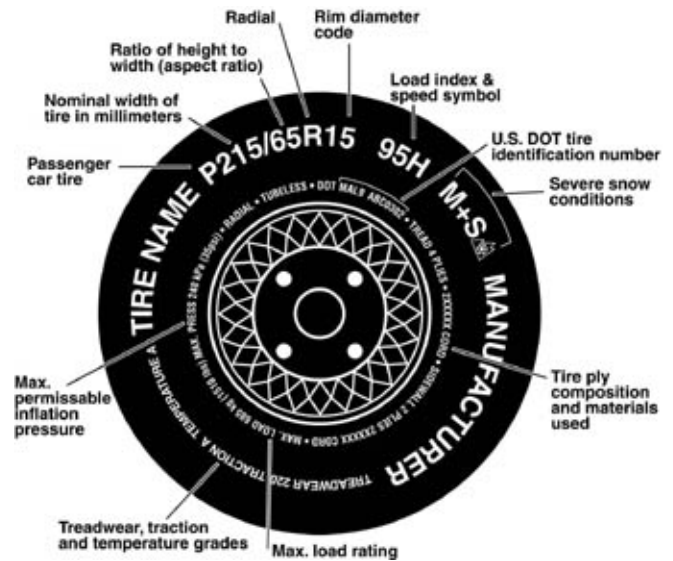
### Temperature Resistance Grade

Temperature grades are an indication of a tire's resistance to heat. Sustained high temperature (for example, driving long distances in hot weather), can cause a tire to deteriorate, leading to blowouts and tread separation. From highest to lowest, a tire's resistance to heat is graded as "A", "B", or "C".

## Tire Fundamentals

Federal law requires tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a tire identification number for safety standard certification and in case of a recall.

## Information on Passenger Vehicle Tires (Please refer to the diagram below.)



### P

The "P" indicates the tire is for passenger vehicles.

### Nominal Width

This three-digit number gives the width in millimeters of the tire from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

### Aspect Ratio

This two-digit number, known as the aspect ratio, gives the tire's ratio of height to width. Numbers of 70 or lower indicate a short sidewall for improved steering response and better overall handling on dry pavement.

### R

"R" stands for radial. Radial ply construction of tires has been the industry standard for the past 20 years.

### Rim Diameter Code

This two-digit number is the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

### Load Index

This two- or three-digit number is the tire's load index. It is a measurement of how much weight each tire can support. Note: You may not find this information on all tires because it is not required by law.

### Severe Snow Conditions

The "M+S" or "M/S" indicates that the tire has some mud and snow capability. Most radial tires have these markings; hence, they have some mud and snow capability.

### Speed Rating

The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time. Please remember, no trailer is to be hauled at speeds exceeding 60MPH.

### U.S. DOT Tire Identification Number

This begins with the letters "DOT" and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code where it was manufactured, and the last four numbers represent the week and year the tire was built. For example, the numbers 3197 means the 31st week of 1997. The other numbers are marketing codes used at the manufacturer's discretion. This information is used to contact consumers if a tire defect requires a recall.

## Tire Ply Composition and Materials Used

The number of plies indicates the number of layers of rubber-coated fabric in the tire. In general, the greater the number of plies, the more weight a tire can support. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others.

## Maximum Load Rating

This number indicates the maximum load in kilograms and pounds that can be carried by the tire.

## Maximum Permissible Inflation Pressure

This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.

## UTQGS Information

### Tread wear Number

This number indicates the tire's wear rate. The higher the tread wear number is, the longer it should take for the tread to wear down. For example, a tire graded 400 should last twice as long as a tire graded 200.

### Traction Letter

This letter indicates a tire's ability to stop on wet pavement. A higher graded tire should allow you to stop your car on wet roads in a shorter distance than a tire with a lower grade. Traction is graded from highest to lowest as "AA", "A", "B", and "C".

### Temperature Letter

This letter indicates a tire's resistance to heat. The temperature grade is for a tire that is inflated properly and not overloaded. Excessive speed, under inflation or excessive loading, either separately or in combination, can cause heat build-up and possible tire failure. From highest to lowest, a tire's resistance to heat is graded as "A", "B", or "C".

## Tire Safety Tips

### Preventing Tire Damage

- Slow down if you have to go over a pothole or other object in the road.
- Do not run over curbs, and try not to strike the curb when parking

### Tire Safety Checklist

- Check tire pressure regularly (at least once a month), including the spare.
- Inspect tires for uneven wear patterns on the tread, cracks, foreign objects, or other signs of wear or trauma. Remove bits of glass and other foreign objects wedged in the tread.
- Make sure your tire valves have valve caps.
- Check tire pressure before going on a long trip.
- Do not overload your vehicle. Check the tire information placard for the maximum recommended load for the vehicle.
- If you are towing a trailer, remember that some of the weight of the loaded trailer is transferred to the towing vehicle.

## Reporting Safety Defects

If you believe that your vehicle has a defect that could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Novae LLC at 1-800-372-1755.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Novae LLC.

To contact NHTSA, you may either call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153), go to <http://www.safercar.gov> or write to:

Administrator  
NHTSA  
1200 New Jersey Avenue S.E.  
Washington, DC 20590

You can also obtain information about motor vehicles safety from <http://www.safercar.gov>.

Visit [mirageinc.com](http://mirageinc.com) for more information, including product manuals.