

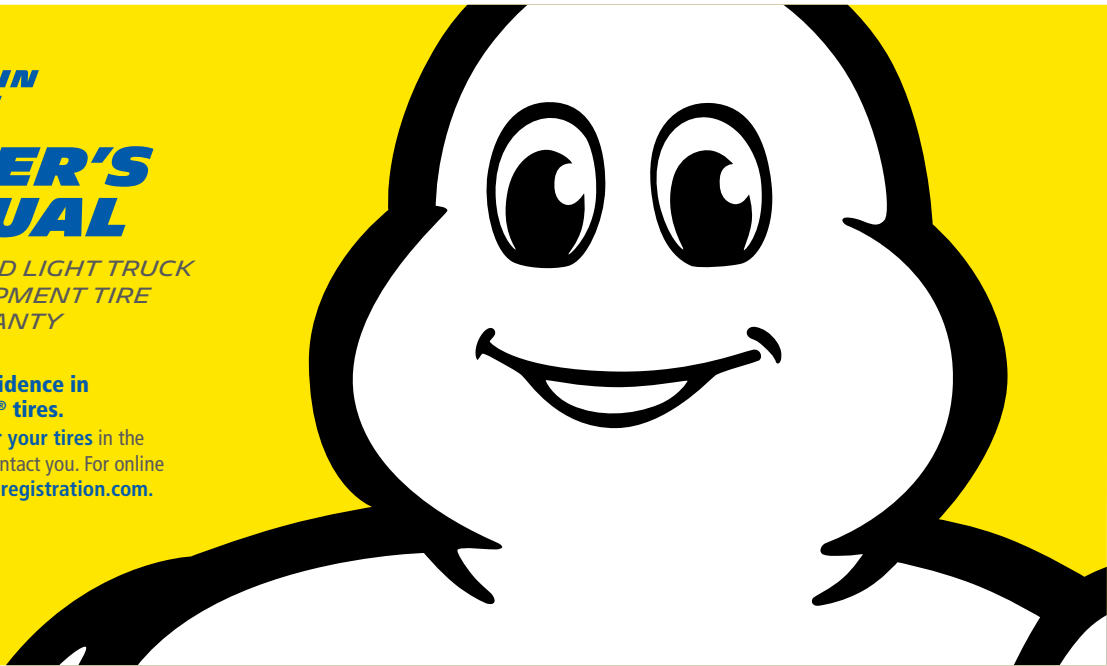


# ***OWNER'S MANUAL***

*PASSENGER AND LIGHT TRUCK  
ORIGINAL EQUIPMENT TIRE  
LIMITED WARRANTY*

**Have complete confidence in  
your new MICHELIN® tires.**

It's important to **register your tires** in the event that we need to contact you. For online tire registration, visit [tireregistration.com](http://tireregistration.com).



# MICHELIN® PASSENGER AND LIGHT TRUCK TIRE LIMITED WARRANTY

## ABOUT THIS WARRANTY

As the original purchaser of a vehicle equipped with MICHELIN® passenger or light truck tires, you are covered by all the benefits and conditions (subject to the maintenance recommendations and safety warnings) contained in this booklet. To ensure your understanding of and compliance with the terms and conditions of this warranty, please read it carefully. It is essential that you also read and understand the safety and maintenance recommendations for tires contained in this booklet.

## WHAT IS COVERED AND FOR HOW LONG?

MICHELIN passenger and light truck tires that are used in normal service on the vehicle on which they were originally fitted are covered as follows:

### Workmanship and Materials

If there is a defect in workmanship and materials during the life of the original usable tread, or six (6) years from date of purchase (whichever comes first), your tire may be replaced on a pro rata basis under this warranty. After six (6) years or the wear of the original usable tread, whichever occurs first, all warranties, expressed or implied, expire.

The “date of purchase” refers to the date on your sales invoice. If you cannot find your sales invoice, the date will be calculated based on the date of manufacture which is molded on the sidewall of your tire.

The “life of the usable tread” refers to the original tread worn down evenly across the face of the tread to the level of the treadwear indicators, which is 2/32nds of an inch (1.6 mm) of tread remaining. Uneven wear is defined as a tread groove difference of 2/32nds of an inch or more across the face of the tread on the same tire.

## WHAT IS NOT COVERED

This warranty does not cover tires damaged due to misuse, abuse or accident such as:

- Road hazards (e.g., cuts, snags, bruises, impact damage or punctures);
- Incorrect mounting of the tire, tire/wheel imbalance or improper repair;
- Misapplication, improper maintenance, racing, underinflation, overinflation or other abuse;
- Uneven or rapid wear which is caused by mechanical irregularity in the vehicle such as wheel misalignment (a measured tread difference of 2/32nds of an inch or more across the face of the tread on the same tire);
- Accident, fire, chemical corrosion, tire alteration or vandalism;
- Flat spotting caused by improper storage or brakelock;
- The addition of liquid, solid or gaseous materials other than air, nitrogen or carbon dioxide (for example, waterbase sealers or balancing substances);

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- Minor cosmetic ozone or weather cracking;
- Use of MICHELIN® Self-Supporting Zero Pressure (ZP) tires without a properly operating low air pressure warning system.
- Use of MICHELIN tires that is inconsistent with the safety and/or maintenance information provided in your owner's manual.

Other limitations include but are not limited to the following:

- Michelin does not cover Original Equipment tires for mileage.

## WHAT WILL MICHELIN DO?

If a tire is covered, and 2/32nds of an inch (1.6mm) or less of the original tread is worn (or 25% or less, whichever is more beneficial to you), and it is within 12 months of the date of purchase, Michelin will, free of charge, replace your tire with a comparable new MICHELIN® replacement tire, mount the tire, and balance the tire. You must pay the cost of any other service charges and applicable taxes.

If a tire is covered, and more than 2/32nds of an inch of original tread has been worn (or more than 25%, whichever is more beneficial to you), or it has been more than 12 months from the date of purchase, Michelin will replace the tire with a comparable new MICHELIN replacement tire on a pro rata basis. This means that you will be responsible for paying a portion of the cost. The Michelin tire retailer will determine the portion for which you will be responsible by multiplying the percentage of the original usable tread worn, by the current

selling price at the adjustment location or the price in the current Michelin Base Price List, whichever is lower. You also will be responsible for paying in-full the cost of mounting and balancing the tire, and the cost of any other service charges and applicable taxes.

## HOW DO I GET A REPLACEMENT?

Take your tire to any MICHELIN tire retailer. The retailer will require that you provide one or more the following:

1. The vehicle on which the tire was used,
2. Personal identification (e.g. Driver's License),
3. Your vehicle registration,
4. Payment if you owe a pro rata share for the replacement,
5. A completed Service Record form, and Original Owner/Tire Installation Information Form,
6. Your original invoice and copy of this Owner's Manual.

## Self-Supporting Tires Zero Pressure (ZP)

As the purchaser of a MICHELIN® Self-Supporting Zero Pressure (ZP) passenger tire, mounted on a vehicle approved for ZP tires, equipped with a properly operating low tire pressure warning system, you are covered by this warranty. Please pay close attention to the Owner's Manual part of this booklet since it provides specific safety and maintenance information for your ZP tires.

# MICHELIN® PASSENGER AND LIGHT TRUCK TIRE LIMITED WARRANTY

MICHELIN® Self-Supporting Zero Pressure (ZP) tires are part of a very sophisticated system which is designed to provide a very simple benefit: Peace of Mind. With these tires, you can maneuver the vehicle up to 50 miles (80 kilometers) at 55 mph (90 kph), unless otherwise specified in your vehicle owner's manual, even though the tire has lost all air! That means time to exit from the highway and get to a place where the tire can be inspected, replaced, or possibly returned to service. The distance that can safely be travelled following an air loss incident will depend upon the conditions under which the vehicle is operating, the degree of air loss, the extent of the damage causing the air loss, the ambient temperature, the load, and the operating speed of the vehicle. The fewer miles you travel after an air loss incident, the greater the likelihood that the tire can be re-inflated (or, if punctured, repaired) and returned to service.

## Michelin Tires with the Acoustic Logo



Michelin tires with the Acoustic logo are covered under this warranty. These tires are treated with acoustic foam, and have specific instructions for repair by tire professionals at Michelin authorized dealers.

## Michelin Tires with the Self-Seal Logo



Michelin tires with the Self-Seal logo are covered under this warranty. These tires are designed to seal in the event of a puncture, and have specific instructions for repair by tire professionals at Michelin authorized dealers.

## WHAT CONDITIONS AND EXCLUSIONS APPLY?

This warranty does not provide compensation for loss of time, loss of use of vehicle, inconvenience or consequential damage. Some states do not allow the exclusion or limitation of incidental or consequential damages, so these limitations or exclusions may not apply to you.

This warranty limits the length of all express and implied claims. Some states do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you.

Tires presented for claim remain the property of the consumer, and Michelin is not responsible for loss of or damage to tires which are in the custody or control of a Michelin tire retailer for the purpose of inspection for warranty claims. In the event of a disputed claim, the consumer must make the tire available for further inspection. Tires accepted for claim become the property of Michelin.

No Michelin representative, employee or retailer has the authority to make or imply any representation, promise or agreement, which in any way varies the terms of this warranty. These limited warranties apply only in the United States and Canada.

This warranty gives the user specific legal rights, and the user may also have other rights which vary from state to state.

# MICHELIN® PASSENGER AND LIGHT TRUCK TIRE LIMITED WARRANTY

## HOW DO I DISPUTE ISSUES CONCERNING THIS WARRANTY?

ALL CLAIMS ARISING FROM THIS LIMITED WARRANTY OR THE MARKETING, SALE OR PERFORMANCE OF THE PURCHASED PRODUCT AGAINST MICHELIN NORTH AMERICA, INC. AND ITS AGENTS, EMPLOYEES, DEALERS, AFFILIATES, PARENT OR SISTER CORPORATIONS, RELATED CORPORATE ENTITIES, PREDECESSORS, SUCCESSORS OR ASSIGNS (HEREINAFTER COLLECTIVELY "MICHELIN") SHALL BE SUBJECT TO BINDING ARBITRATION. You and Michelin acknowledge your and its right to litigate claims, disputes and controversies arising out of or in connection with this limited warranty or the marketing, sale or performance of the purchased product in court, but prefer to resolve any such claims, disputes and controversies through arbitration and hereby waive the right to litigate such claims, disputes and controversies in court upon election of arbitration by either party. Therefore, you and Michelin agree that all claims, disputes, and controversies between you and Michelin arising out of or in connection with this limited warranty, or any other warranties, express or implied, including a failure of warranty, or any claims arising out of or in connection with the marketing, sale or performance of the purchased product, including but not limited to claims for consumer fraud or brought under any consumer protection statute, but excluding claims for personal injury or property damage, shall be finally resolved solely by arbitration, upon election by either party, according to the formal dispute resolution procedures then in effect of the National Arbitration Forum, or if the National Arbitration Forum is no longer conducting such arbitrations, a successor organization thereto or

such other private arbitration service as you and Michelin shall mutually agree (the actual authority involved, the "Arbitral Body"). The Arbitral Body shall decide the issues submitted in accordance herewith, provided that all substantive questions of law will be determined under the laws of the State in which you purchased the product at issue. You agree that no claim subject to arbitration shall be arbitrated as a class action, or on a class-wide or representative basis, or on behalf of the general public, or on behalf of other persons that may be similarly situated. You agree that you do not have the right to act as a private attorney general, a class representative, or to participate as a member of a class of claimants with any claim subject to arbitration. You further agree that no claim subject to arbitration shall be heard by a jury and that any judgment or award of the Arbitral Body will be final and not subject to judicial review. All arbitrations will be conducted as document hearings. Each party shall bear its own costs arising from and associated with the document hearing with the exception of the arbitrator's fee which will be borne by all parties in equal shares. If either party requests any procedures beyond a document hearing, the requesting party will be responsible for all fees, including filing and administrative fees, above and beyond the fees required for document hearings. Any award of the arbitrator(s) may be entered as a judgment and shall be enforceable in any court of competent jurisdiction. The arbitrators will have no authority to award punitive or other damages not measured by the prevailing party's actual damages, except as may be required by statute. Information about arbitration may be obtained and claims may be filed at any office of the National Arbitration Forum or at P.O. Box 50191, Minneapolis, MN 55405.

## **TIRE SAFETY AND MAINTENANCE**

### **THE IMPORTANCE OF MAINTAINING SAFE TIRES**

The tire is the only contact between your vehicle and the road surface. Following the inspection and maintenance instructions in this owner's manual is critical to help ensure safe use and longer tire life. Visit the Safe Driving page at [michelinman.com](http://michelinman.com) for more information about the important safety instructions and procedures in this owner's manual.

### **SAFETY MAINTENANCE INFORMATION**

Read this Owner's Manual, the information on the sidewall of your tires, your vehicle owner's manual and the tire information placard that came on your vehicle, for essential safety and maintenance information.

While you should have complete confidence in your new MICHELIN® tires, it's important to register your tires so we can contact you about any new safety developments. For online tire registration, visit [tireregistration.com](http://tireregistration.com).

### **TIRE FAILURE – SAFETY WARNING**

Any tire may fail as a result of an improperly repaired puncture, impact damage, improper inflation, overloading, a crack, a bulge or other distortion, or other conditions resulting from use or misuse. Tire failures, such as a rapid air loss or a tread and belt detachment, may increase risk of injury, death, or property damage. To reduce the risk of a tire failure, you should thoroughly read and

follow the instructions in this manual, your vehicle owner's manual, the tire information placard on the vehicle (located in the vehicle's door jamb, inside the fuel hatch, or on the glove compartment door), and tire sidewall information regarding safety warnings, proper tire use, and proper tire maintenance.

### **CONTROLLING A VEHICLE WHEN A TIRE FAILURE OCCURS**

If a tire failure occurs, you may hear a loud noise, feel a vibration, or feel the vehicle pull toward the side of the failed tire. If that happens, **DO NOT BRAKE OR ABRUPTLY TURN THE STEERING WHEEL**. Instead, slowly remove your foot from the accelerator and hold the steering wheel firmly while steering to remain in your lane. Once the vehicle has slowed and is fully in your control, apply the brakes gently, safely pull over to the shoulder, and come to a stop in the safest location possible. Inspect all tires. If any tire looks flat or low, or shows detachment or any other damage, replace the wheel and tire with a properly inflated spare after first inspecting the spare for visible damage. Bumps, bulges, or cracks in any tire may indicate detachment within the tire body and require inspection by a qualified tire professional. If any tire, including the spare, has bumps, bulges, cracks, or other visible damage, do not resume driving with that tire. If you have no other option, you should drive as slowly and cautiously as possible until you can obtain towing or mechanical assistance. If the spare tire is not properly inflated, do not resume driving with that tire unless you have no other option, in which case you should drive only as slowly as is safely possible in the traffic conditions until you can both get the spare tire properly inflated and have it checked by a tire professional to ensure that it is safe to use.

## PROPER INFLATION



### **DRIVING ON ANY TIRE THAT DOES NOT HAVE THE CORRECT INFLATION PRESSURE IS DANGEROUS**

An underinflated tire builds up excessive heat that may result in sudden tire failure and an accident. If your tires are those that came as original equipment on your vehicle when it was new, refer to the tire information placard that came on your vehicle (located in the vehicle's door jamb, inside the fuel hatch, or on the glove compartment door), for the recommended operating pressures. For replacement tires, ask your Michelin tire retailer for the correct inflation pressure; if you do not, refer to the tire information placard that came on your vehicle (located in the vehicle's door jamb, inside the fuel hatch, or on the glove compartment door), for the recommended operating pressures. These inflation pressures must be maintained as a minimum. Never exceed the Maximum Pressure rating stated on the tire sidewall. Note that proper inflation pressures for rear tires may differ from proper inflation pressures for front tires. The Maximum Pressure rating on the tire is normally not equal to the placard pressure.

### **CHECK THE COLD INFLATION PRESSURE IN ALL YOUR TIRES, INCLUDING THE SPARE, AT LEAST ONCE EACH MONTH**

Failure to maintain correct inflation may result in improper vehicle handling and may cause rapid and irregular tire wear, sudden tire failure, loss of vehicle control, and an accident. Therefore, inflation pressures should be checked at least once each month and before every long-distance trip. This applies to all tires, including sealant types and self-supporting tires, which are as susceptible to losing air pressure as any other type of tire if not properly maintained. Pressures should be checked before the tires have been driven on or after they have been allowed to cool down to the ambient air temperature. Driving for even a short distance causes tires to heat up and their air pressure to increase, and recommended tire pressures are for tires that have not been heated by recent driving on them.

### **UNDERINFLATION AND OVERINFLATION MUST BE CHECKED WITH A TIRE PRESSURE GAUGE**

Tires must be checked monthly with a tire pressure gauge. It is impossible to determine whether tires are properly inflated by simply looking at them. It is almost impossible to feel or hear when a tire is being run underinflated or overinflated. Use an accurate tire pressure gauge to check tire pressure each month. Small and inexpensive tire pressure gauges are available. You should keep one in your vehicle's glove box or trunk and use it monthly and as otherwise needed.

## **SELF-SUPPORTING ZERO PRESSURE™ (ZP) TIRES AT LOW OR ZERO AIR PRESSURE**

The handling characteristics of a vehicle with a deflated Self-Supporting Zero Pressure (ZP) tire (whether front or rear) are not the same as those of a vehicle with normally inflated tires. Avoid high speeds and hard cornering whenever a low-pressure warning is activated. Even a Self-Supporting Zero Pressure (ZP) tire can build up excessive heat when run underinflated for an extended period of time. The length of time and distance a Self-Supporting Zero Pressure (ZP) tire will perform at low or zero inflation will depend on the severity of the event causing air loss, the ambient temperature, the speed at which the tire is operated, and the conditions under which the tire is operated. In particular, hard braking, cornering, and other sharp maneuvers will greatly reduce the length of time the tire can perform at low or zero inflation. Continuous use of an underinflated tire may lead to sudden tire failure and an accident. If a tire at low or zero pressure begins to vibrate or cause difficulty in vehicle handling, replace it immediately with the temporary spare. If Self-Supporting Zero Pressure (ZP) tires are supplied as original equipment, refer to the vehicle owner's manual for complete details on the low tire pressure warning system designed to alert you in the event of a low pressure condition.

MICHELIN® SELF-SUPPORTING ZERO PRESSURE™ (ZP) TIRES MUST BE USED ONLY WITH AN OPERATIONAL, MICHELIN APPROVED, LOW TIRE PRESSURE WARNING SYSTEM. Otherwise, all provisions of the limited warranty are void. For a list of approved systems, see your Michelin tire retailer or call 1-800-847-3435. NOTE: Some MICHELIN Self-Supporting Zero Pressure (ZP) tires can only

be mounted on special SH-M (Symmetric Hump - Modified) wheels. These tires bear the special SH-M designation, molded into the sidewall of the tire, next to the ZP designation. DO NOT MOUNT A TIRE WITH THE SH-M DESIGNATION ON THE SIDEWALL ON A STANDARD WHEEL. DOING SO VOIDS THIS LIMITED WARRANTY AND COULD CAUSE THE TIRE TO BECOME UNSERVICEABLE AT LOW OR ZERO PRESSURE, RESULTING IN SERIOUS PERSONAL INJURY OR DEATH. For a list of approved systems, see your participating Michelin® tire retailer, or call 1-800-847-3435. For all types of tires, consult your vehicle owner's manual or the tire information placard that came on your vehicle (located in the vehicle's door jamb, inside the fuel hatch, or on the glove compartment door) for recommended operating pressures. Recommended operating pressures will be provided by a Michelin tire retailer for self-supporting ZP tires. These inflation pressures must be maintained as a minimum. Never exceed the Maximum Pressure rating shown on the tire sidewall.

## **FOR SELF-SUPPORTING ZERO PRESSURE (ZP) TIRES, CHECK INFLATION PRESSURES AS SOON AS POSSIBLE FOLLOWING A LOW PRESSURE WARNING**

Be certain to ensure that your vehicle's Tire Pressure Monitoring System (TPMS) is functioning and is correctly calibrated. Refer to your vehicle owner's manual or your vehicle dealer. Low pressure warning systems are designed to alert the driver to a low inflation situation in at least one tire on the vehicle. While your ZP tires are designed to provide continued mobility in the event of an air loss, the sooner you respond to a warning and take corrective action, the greater the likelihood that the tire can be returned to service. Always visually inspect your Self-Supporting



tires and use a pressure gauge to check the inflation in all 4 tires following any low pressure warning (unless advised to do otherwise by the manufacturer of your low pressure warning system). If the tire pressure is at or below 18 PSI, proceed to the Michelin tire retailer for ZP tires (or a representative of your vehicle manufacturer if advised to do so in your vehicle owner's manual) and have the tire demounted and thoroughly inspected for possible internal damage. If you are unable to see any damage to the tire, and the tire pressure is more than 18 PSI, reinflate your tire to the proper inflation. When tires have cooled, check inflation again. If any tire has lost more than 5 PSI from the previous pressure check, have the tire inspected at once by a Michelin tire retailer (or representative of your vehicle manufacturer if your vehicle owner's manual so advises.) Failure to do so may cause irreparable damage to the tire and result in sudden tire failure and an accident.

### **TIRE PRESSURE MONITORING SYSTEMS (TPMS):**

Your vehicle is likely equipped with a Tire Pressure Monitoring System (TPMS) that is designed to monitor the pressure of tires mounted on your vehicle and sends a signal to the driver if a tire pressure falls below a predetermined level. A TPMS should not replace monthly manual pressure checks for all four tires and the spare. You should manually monitor and check tire pressure inflation with a pressure gauge. Your tires should have the recommended pressure listed by your vehicle's manufacturer. This information can be found in the vehicle owner's manual and is on a placard located in the vehicle's door jamb, inside the fuel hatch, or on the glove compartment door. If you have plus-size tires that require a higher inflation pressure, your tire pressure monitoring system will require re-calibration to the new proper inflation pressure. Refer to your tire dealer/installer of plus-size tires for

proper inflation pressure. You should check air pressure in all your tires, including the spare, once each month and before every long trip. Regardless whether your spare is a full-size spare or a mini-spare, make sure that it is properly inflated. If the TPMS generates improper monitoring or signals, you should consult your vehicle owner's manual and follow up with your vehicle's manufacturer.

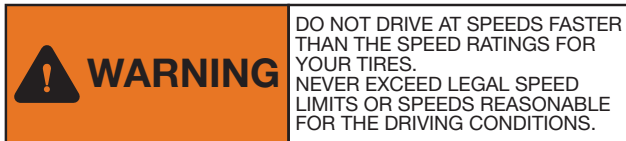
### **TIRE SPINNING**



Do not spin wheels at more than 35 mph (55 km/hr) as indicated on your vehicle's speedometer. Excessive speed in a free-running, unloaded tire can cause it to "explode" from centrifugal force. The energy released by such an explosion may cause serious physical injury or death. Never allow anyone to stand near or behind a spinning tire. When in mud, sand, snow, ice, or another slippery condition, do not engage in excessive wheel spin. Accelerating the motor excessively, particularly with automatic transmission vehicles, may cause a drive tire that has lost traction to spin beyond its speed-enduring capability. This is also true when balancing a drive tire/wheel assembly on the vehicle using the vehicle engine to spin the tire/wheel assembly.

## HIGH SPEED DRIVING IS DANGEROUS

Correct inflation pressure is especially important. However, at high speeds, even with the correct inflation pressure, a road hazard is more difficult to avoid, and if tire contact is made with it, there is a greater chance of causing tire damage than at a lower speed. Moreover, driving at high speed reduces the reaction time available to avoid accidents and bring your vehicle to a safe stop.



Exceeding the maximum speeds shown on the following page for each type of MICHELIN® tire will cause the tire to build up excessive heat, which can cause tire damage that could result in sudden tire failure and rapid air loss. Failure to control a vehicle when one or more tires experience a rapid air loss can lead to an accident.

In any case, you should not exceed reasonable speeds as indicated by the legal limits and driving conditions.

## SPEED RATING SYSTEM

The speed rating of a tire indicates the speed category (or range of speeds) at which the tire can carry a load under specified service conditions. The speed rating system used today was developed in Europe in response to the need to categorize tires into standardized speeds. A letter from A to Z symbolizes a tire's certified speed rating, ranging from 5 km/hr (3 mph) to above 300 km/hr (186 mph). This rating system (see chart on this page) describes the top speed for which a tire is certified.

When this speed rating system was originally developed, the Unlimited V category of over 210 km/hr (130 mph) was the top speed rating a tire could achieve. As manufacturers made more tires that fit into this category, it was necessary to

better regulate performance at standardized speeds to help ensure safety. The Limited V category of 240 km/hr (149 mph) was then created, and the Z or (Y) speed rating was added as the top speed rating that a tire could achieve. W and Y limited speed symbols have been added as higher speed categories.

Speed Symbol	Speed (km/hr)	Speed (mph)	
L	120	75	
M	130	81	
N	140	87	
P	150	94	
Q	160	100	
R	170	106	
S	180	112	
T	190	118	
U	200	124	
H	210	130	
V	240	149	
W	ZR	270	168
Y		300	186
(Y)	Above 300	Above 186 (consult tire manufacturer)	

Always consult the tire manufacturer for the maximum speed of Unlimited Z or (Y) tires. Speed rating is identified as a part of the tire's sizing or service description. Exceeding the lawful speed limit is neither recommended nor endorsed.

In the latest attempt to standardize tire designations, all ratings except Unlimited Z incorporate the speed symbol and load index as the tire's service description.

For Example:

<b>205/60R15 91V</b>		
205	=	Section Width in Millimeters
60	=	Aspect Ratio
R	=	Radial Construction
15	=	Rim Diameter in Inches
91V	=	Service Description (Load Index and Speed Rating)

## **"Z" Rated Tires**

When "Z" appears in the size description with the service description, the maximum speed is indicated by the service description.

Examples:

<b>Tire Designation</b>	<b>Maximum Speed</b>
P275/40ZR17	Above 240 km/hr (149 mph)*
P275/40R17 93Y	300 km/hr (186 mph)
P275/40ZR17 93Y	300 km/hr (186 mph)
P275/40ZR17 (93Y)	Above 300 km/hr (186 mph)*
*Consult Tire Manufacturer	

For tires having a maximum speed capability above 240 km/hr (149 mph), a "Z" may appear in the size designation.

For tires having a maximum speed capability above 300 km/hr (186 mph), a "Z" must appear in the size designation and the service description must include Y in parenthesis. Example: 275/40ZR18 (99Y). Consult the tire manufacturer for maximum speed when there is no service description.

Consult your Michelin tire retailer for maximum speed capabilities. Although a tire may be speed-rated, no vehicle should be operated in an unsafe or unlawful manner. Speed ratings are based on laboratory tests that relate to performance on the road, but are not applicable if tires are underinflated, overloaded, worn

out, damaged, altered, improperly repaired, or retreaded. Furthermore, a tire's speed rating does not imply that vehicles can be safely driven at the maximum speed for which the tire is rated, particularly under adverse road and weather conditions or if the vehicle has unusual characteristics. Michelin highway passenger tires that do not have a speed symbol on the sidewall have a maximum speed rating of 105 mph (170 kph). Light truck highway tires that do not have a speed symbol on the sidewall of the tire have a maximum speed rating of 87 mph (140 kph). Michelin winter tires that do not have a speed symbol on the sidewall or tires with Q symbols have a speed rating of 100 mph (160 km/hr). Winter tires with a speed symbol have a maximum speed rating in accordance with the symbol. The speed and other ratings of retreaded tires are assigned by the retreader and replace the original manufacturer's ratings. **IMPORTANT:** The replacement tire speed rating should be equal to or higher than the OEM tire speed rating. If a lower speed rated tire is selected, then the vehicle top speed becomes limited to that of the lower speed rating selected. The customer must be informed of the new speed restriction and that the vehicle's handling may be adversely impacted. **REMEMBER...**High speed driving can be dangerous and may damage your tires. **AND...**When driving at highway speeds, correct inflation pressure is especially important.

## **INSPECT YOUR TIRES, AND DO NOT DRIVE ON A DAMAGED TIRE OR WHEEL**



Road hazards and objects in the road, such as potholes, curbs, glass, metal, rocks, wood, and debris, can damage a tire and should be safely avoided. If your vehicle hits any such hazard or object, however, you should promptly inspect your tires. If you see any damage to any tire or wheel, replace it with a properly inflated spare at once and have your tires, including the spare, inspected by a tire professional.

A tire that hits a road hazard or object can be damaged but not have any visible sign of damage on its surface. A tire damaged by an impact can suddenly fail a day, a week, or even months later. You may not recall having hit an object or a road hazard and may not see any tire damage, but such an event may have damaged one or more of your tires. Air loss, unusual tire wear, localized wear, or vibrations can also be signs of internal tire damage and, accordingly, should be addressed as promptly as are instances of visible tire damage.

If you suspect any damage to your tire or wheel from an impact with a curb, pothole, debris on the road, or any other road hazard or object, or if you feel or hear any unusual vibration, replace the tire and wheel with a properly inflated spare at once and immediately visit a qualified tire professional.

## INSPECTION



If you see any damage to a tire or wheel, replace it with a properly inflated spare at once and visit a Michelin tire retailer.

Inspect your tires at least once per month, and immediately after contacting any road hazard or object, such as a curb, a pothole, or debris. When inspecting your tires, including the spare, check the inflation as instructed above. If the pressure check indicates that one of your tires has lost pressure of two pounds or more, look for signs of penetration, valve leakage, or wheel damage that may account for the air loss.

If you have Michelin SelfSeal tires and observe an object penetrating the tread surface, have the object removed by a trained tire technician at an authorized Michelin dealer who can then inspect the tire for potential damage.

Always look for bulges, cracks, cuts, penetrations, and abnormal tire wear, particularly on the edges of the tire tread. Any of these may be caused by misalignment, contact with road hazards or objects, or improper inflation. If any such damage is found, the tire must be inspected by your Michelin tire retailer at once. Use of a damaged tire could result in tire failure and an accident.

All tires will wear out faster when subjected to high speeds, hard cornering,

rapid starts, sudden stops, frequent driving on roads that are in poor condition, or off-road use. Roads with holes, rocks, or other objects can damage tires and cause misalignment of your vehicle. When driving on such roads, drive carefully and slowly, and before driving again at normal or highway speeds, examine your tires for any damage, such as cuts, bumps, bulges, penetrations, or unusual wear patterns.

## TIRE WEAR BARS INDICATE THE LIMIT OF TREAD LIFE

MICHELIN® tires contain “Wear-Bars” in the tire tread grooves at 2/32nds of an inch (1.6mm). When the tread remaining matches the height of the Wear Bars, your tires must be replaced to ensure tire safety. Tires worn beyond this stage are extremely dangerous. For more information on checking tread depth, visit Safe Driving at [michelinman.com](http://michelinman.com) and read the illustrated how-to information on tire inspection.

## LOADING



The maximum load rating of your tires is molded on the tire sidewall. Do not exceed this rating. Follow the loading instructions of the manufacturer of your vehicle to ensure that your tires are not overloaded.

Tires loaded beyond their maximum allowable loads for the particular application will build up excessive heat that may result in sudden tire failure and an accident. Do not exceed the gross axle weight rating for any axle on your vehicle.

## **TRAILER TOWING**

If you anticipate towing a trailer, you should visit your Michelin tire retailer for advice about the correct tire size and pressures. Tire size and pressures will depend on the type and size of trailer and hitch utilized, but in no case must the maximum cold inflation pressure or tire load rating be exceeded. Check the tire information placard that came on your vehicle, (located in the vehicle's door jamb, inside the fuel hatch, or on the glove compartment door) and the owner's manual supplied by the manufacturer of your vehicle for further recommendations on trailer towing.

## **Self-Supporting Zero Pressure (ZP) Tires and Trailer Towing**

Operation of ZP tires at low or zero air pressure with a trailer in tow is dangerous and should be avoided. If the low pressure warning indicator is activated when a trailer is in tow, stop, disconnect the trailer, and do not continue to tow the trailer until the tire has been properly repaired and re-inflated to the proper inflation. If the tire cannot be properly repaired, it must be replaced with a new full-size, matching ZP tire, and inflated to the proper inflation, before the trailer can be safely towed again.

## **WHEEL ALIGNMENT AND BALANCING ARE IMPORTANT FOR SAFETY AND MAXIMUM MILEAGE FROM YOUR TIRES.**



## **CHECK HOW YOUR TIRES ARE WEARING AT LEAST ONCE EACH MONTH**

If your tires are wearing unevenly, such as the inside shoulder of the tire wearing faster than the rest of the tread, or if you detect excessive vibration, your vehicle may be out of alignment or balance. These conditions not only shorten the life of your tires but adversely affect the handling characteristics of your vehicle, which could be dangerous. If you detect irregular wear or vibration, have your alignment and balance checked immediately. Tires which have been run underinflated will show more wear on the shoulders than in the center of the tread. Read and follow the instructions on tire rotation and replacement below.

## TIRE MIXING



MICHELIN® tires are radial tires. For best, safe performance, the same size and type of tire should be used on all four wheel positions, and the full size spare should be the same size and type. Before mixing tires of different types in any configuration on any vehicle, be sure to check the vehicle manufacturer's owner's manual for its recommendations. It is especially important to check the vehicle manufacturer's owner's manual when mixing, matching, or replacing tires on 4-wheel drive vehicles, as this may require special precautions.

SELF-SUPPORTING ZERO PRESSURE™ (ZP) TIRES SHOULD NOT BE MIXED WITH NON-ZP TIRES OTHER THAN THE TEMPORARY USE OF THE PROPERLY INFLATED SPARE IF THE VEHICLE IS SO EQUIPPED.

## WINTER DRIVING

Tires that meet the US Tire Manufacturers Association (USTMA) definition of snow tires are marked M/S, M+S, or M&S. On such tires, normally referred to as "All-Season" tires, the "M+S" designation is molded into the sidewall. Tires without this notation are not recommended for winter driving in regions that experience winter conditions.

Although All-Season tires are designed to provide reliable performance in some winter conditions, the use of four winter tires is recommended for optimal performance. Tires designated for use in severe winter conditions are marked on at least one sidewall with the letters "M" and "S" plus a pictograph of a mountain with a snowflake on it. If such a tire needs to be temporarily replaced with a tire not so marked, you should immediately drive at a safe speed to a Michelin dealer to have the spare returned to the trunk and replaced on your vehicle by another tire with the letters "M" and "S" and the related pictograph.



## TIRE ROTATION AND REPLACEMENT

To obtain maximum tread life, you must rotate your tires. You should rotate your tires every 6,000 to 8,000 miles (10,000 to 12,000 km) or as specified by your vehicle manufacturer, whichever occurs more frequently. Check your vehicle owner's manual for any recommendations by your vehicle manufacturer. Monthly inspection for tire wear is recommended. Your tires should be rotated at the first sign of irregular wear, even if it occurs before 6,000 miles (10,000 km). This is true for all vehicles. When rotating tires with a directional tread pattern, observe the arrows molded on the sidewall that show the direction in which the tire should rotate.

Care must be taken to maintain the proper rotation direction. Some Tire Pressure Monitoring Systems (TPMS) may not recognize that a tire has been moved to a different position on your vehicle. Make certain that your TPMS system is reset, if necessary, so as to correctly identify the location of each tire on your vehicle.

Refer to your vehicle owner's manual or your vehicle dealer for this information. Determine whether rotated tires require tire inflation adjustment, because front and rear position tire pressure may vary according to the vehicle manufacturer's specification due to the actual load on that wheel position. Some vehicles may have tires of different size mounted on the front versus the rear axles, and these different tires have rotation restrictions. Always check the vehicle owner's manual for the proper rotation recommendations.

### **Full-Size Spare**

Full-size spare tires (not temporary spares) of the same size and construction should be used in a five-tire rotation and should be inspected by a tire professional during routine tire inspection. Always have spare tires inspected before installation. Tires are composed of various types of rubber compounds and other materials having performance properties essential to the proper functioning of the tire. These component properties change over time. Always check the inflation pressure of the full-size spare and look for any indication of cracking or other damage immediately before incorporating the spare into rotation. If you see any damage, or if the tire is underinflated, do not resume driving with that tire unless you have no other option, in which case you should drive only as slowly as is safely possible in the traffic conditions until you can both get the spare tire properly inflated and have it checked by a tire professional to ensure that it is safe to use. Follow the vehicle manufacturer's recommended pattern for rotation. If such a recommendation is unavailable, see a qualified tire professional.

### **Replacement of Two Tires**

All four tires should be replaced at the same time. However, if only two tires are replaced, the new ones should be put on the rear. Deeper tread tires on the rear axle provide better handling, wet grip and evacuate water, thereby helping to avoid oversteer and loss of vehicle stability on wet surfaces. Deeper tread tires on the front axle can improve wet straight line braking and stopping distance. If only two tires are being replaced, Michelin generally recommends they be installed on the rear axle in the absence of a tire service professional's recommendation or consumer's preference to the contrary.

### **CUSTOMIZATION OF TIRES, WHEELS, OR SUSPENSION ON SUVs AND LIGHT TRUCKS**

Due to their size, weight and higher center of gravity, vehicles such as SUVs and light trucks do not have the same handling characteristics as automobiles. Because of these different characteristics, failure to operate your SUV or truck in a proper and safe manner can increase the likelihood of vehicle rollover. Modifications to your SUV or truck tire size, tire type, wheels or suspension can change your vehicle's handling characteristics and further increase the likelihood of vehicle rollover. Whether your SUV or truck has the original equipment configuration for tires, wheels and suspension or whether any of these items have been modified, always drive safely, avoid sudden, sharp turns or lane changes and obey all traffic laws. Failure to do so may result in loss of vehicle control leading to an accident and serious injury or death.



## TIRE ALTERATIONS



Do not make or allow to be made any alterations on your tires. Alterations may prevent proper performance, leading to tire damage that can result in an accident. Tires that become unserviceable due to alterations such as truing, whitewall inlays, addition of balancing or sealant liquids, or the use of tire dressing containing petroleum distillates, are excluded from warranty coverage.

## TIRE REPAIRS



**WHENEVER A REPAIR IS NEEDED, IMMEDIATELY SEE YOUR MICHELIN® TIRE RETAILER OR, IF ONE IS NOT READILY AVAILABLE, ANOTHER QUALIFIED TIRE PROFESSIONAL**

If any MICHELIN® tire sustains a puncture, have the tire demounted and thoroughly inspected by a qualified tire professional for possible damage that

may have occurred. A tread area puncture in any MICHELIN® passenger or light truck tire can be repaired if the puncture hole is not more than 1/4" in diameter, not more than one radial cable per casing ply is damaged, and the tire has not been damaged further by the puncturing object or by running underinflated. Tire punctures consistent with these guidelines can be repaired by following the US Tire Manufacturers Association (USTMA) recommended repair procedures.

Repairs of all tires must be of the combined-plug-and-inside-patch type. Your MICHELIN tires must be removed from the wheel for inspection prior to repair. Plug-type repairs made on a tire that remains mounted on a wheel are improper and can result in an accident. A tire should be removed from the rim and inspected prior to repair. Any tire repair done without removing the tire from the rim is improper and can result in an accident. An improperly repaired tire may cause further damage to the tire by either leaking air or allowing air, moisture, and contaminants to enter the structure of the tire. An improperly repaired tire can fail suddenly at a later date and result in an accident. Never repair a tire with less than 2/32nds of an inch of tread remaining. At this tread depth, the tire is worn out and must be replaced.

## STORAGE

Tires contain materials to protect their outer surfaces from ozone and weather checking. As the tire rolls and flexes, those materials continually migrate to the surface, replenishing this protection throughout the normal use of the tire. Consequently, when tires sit outdoors, unused for long periods of time (a month or more), their surfaces become dry and more susceptible to ozone and weather checking, and the casing becomes susceptible to flat spotting. For this

reason, tires should always be stored in a cool, dry, clean, indoor environment. If storage is for one month or more, eliminate the weight from the tires by raising the vehicle or by removing the tires from the vehicle. Failure to store tires in accordance with these instructions could result in damage to your tires or premature aging of the tires and sudden tire failure. When tires are stored, be sure they are placed away from sources of heat and ozone such as hot pipes and electric generators. Be sure that surfaces on which tires are stored are clean and free from grease, gasoline or other substances which could deteriorate the rubber. Tires exposed to these materials during storage or driving could be subject to sudden failure.

One reason why your spare tire should be included in the tire rotation schedule is that temperatures in a vehicle's closed trunk, especially in sunny geographical areas, can become high enough so that, over a sustained period, they can cause small cracks or other changes to the properties of a tire stored in the trunk. An accumulation of such changes can weaken the tire and, especially if the tire is not kept properly inflated, make it unsafe to use when it is needed.

## **PROPER TIRE MOUNTING**

Tire mounting can be dangerous and must be done by professionally trained persons using proper tools and procedures as specified by the US Tire Manufacturers Association (USTMA).

Your tires should be mounted on wheels that are the correct size and type and are in good, clean condition. Wheels that are bent, chipped, rusted (steel wheels) or corroded (alloy wheels) may cause tire damage. The inside of the tire must be free from foreign material. Have your tire retailer check the wheels before

mounting new tires. Mismatched tires and rims can explode during mounting. Also, mismatched tires and rims can result in dangerous tire failure on the road. If a tire is mounted by error on the wrong-sized rim, do not remount it on the proper rim – scrap it. It may have been damaged internally (which is not externally visible) by having been dangerously stretched and could fail on the highway, resulting in an accident.


Old valves may leak. When new tubeless tires are mounted, have new valves of the correct type installed. Tubeless tires must be mounted only on wheels designed for tubeless tires, i.e., wheels that have safety humps or ledges. Always utilize valve caps capable of containing the tire's inflation, should the valve core leak. The valve cap is the primary seal against air loss. Each tire and wheel assembly should be balanced to ensure proper tire and vehicle performance and to maintain tire warranty coverage. Tires and wheel assemblies that are not balanced may cause steering difficulties, a bumpy ride, and irregular tire wear.

## **SPECIAL MOUNTING INSTRUCTIONS FOR SELF-SUPPORTING ZERO PRESSURE™ (ZP) TIRES**

ZP tires can be more difficult to mount than conventional tires. They should be mounted and demounted only by a properly trained tire professional. ZP tires can generate a tremendous amount of heat when run at low or zero pressure. ALWAYS ALLOW A ZP TIRE TO COOL BEFORE ATTEMPTING TO HANDLE IT. FAILURE TO DO SO COULD RESULT IN INJURY OR DEATH. Michelin® ZP tires are tubeless tires designed to operate in emergency conditions at low or zero air inflation.

## MICHELIN® SELF SUPPORTING ZERO PRESSURE™ (ZP) TIRES AND SPECIAL SH-M (SYMMETRIC HUMP-MODIFIED) WHEELS

Some MICHELIN® ZP tires can perform with zero pressure capability only when mounted on special SH-M wheels. These tires bear the SH-M designation immediately following the ZP designation on the sidewall of the tire.

 <b>WARNING</b>	<b>DO NOT MOUNT ZP TIRES WITH THE SH-M DESIGNATION ON STANDARD WHEELS. IN SUCH APPLICATIONS, THE TIRES MAY BECOME UNSERVICEABLE AT LOW OR ZERO PRESSURE, CAUSING SERIOUS INJURY OR DEATH.</b>
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## TEMPORARY TYPE SPARE TIRES

When using any temporary type spare tire, be sure to follow the vehicle manufacturer's instructions.

## READING THE DOT

DOT XXXX XXXX XXX (prior to August 2000)

DOT XXXX XXXX XXX ◀ (1990-1999)

DOT XXXX XXXX XXXX (after July 2000 to 2025)

DOT XXXXX XXXX XXXX (transition to 13 digits beginning 2018; in effect for all plants by 2025)

## THE DOT

The "DOT" symbol certifies tire manufacturer's compliance with U.S. Department of Transportation tire safety standards. Next to the symbol is the tire identification or "serial number." The first two characters identify the plant where the tire was manufactured. The next two characters reflect the tire size. The following one to four digits may be used at the tire manufacturer's option as a descriptive code. The last three characters are numbers identifying the week and year of manufacture. (Example: "O25" means second week of the year of decade, e.g.: 1995, 1985, etc.) For the 1990-1999 decade MICHELIN® brand tires are marked with a triangle pointing to the last three numeric characters. Tires produced after July 2000 have an additional digit to identify a given decade. For example, 2800

means the tire was produced during the 28th week of 2000; 0201 during the 2nd week of 2001. If the last digits of your DOT number contain three numeric characters and are not marked with a triangle, consult a qualified tire professional to determine the year of manufacture.

## **SERVICE LIFE FOR PASSENGER CAR AND LIGHT TRUCK TIRES INCLUDING SPARE TIRES**

Tires are composed of various types of material and rubber compounds having performance properties essential to the proper functioning of the tire itself. These component properties evolve over time. For each tire, this evolution depends upon many factors such as weather, storage conditions, and conditions of use (load, speed, inflation pressure, maintenance etc.) to which the tire is subjected throughout its life. This service-related evolution varies widely so that accurately predicting the serviceable life of any specific tire in advance is not possible. That is why, in addition to regular inspections and inflation pressure maintenance by consumers, it is recommended that passenger car and light truck tires, including spare tires be inspected regularly by a qualified tire specialist, such as a Michelin tire retailer, who will assess the tire's suitability for continued service. Tires which have been in use for 5 years or more should continue to be inspected by a specialist at least annually. Consumers are strongly encouraged to be aware not only of their tires' visual condition and inflation pressure but also of any change in dynamic performance such as increased air loss, noise or vibration, which could be an indication that the tires need to be removed from service to prevent tire failure. It is impossible to predict when tires should be replaced based on their calendar age alone. However, the older a tire, the greater the chance

that it will need to be replaced due to the service-related evolution or other conditions found upon inspection or detected during use. While most tires will need replacement before they achieve 10 years, it is recommended that any tires in service 10 years or more from the date of manufacture, including spare tires, be replaced with new tires as a precaution even if such tires appear serviceable and even if they have not reached the legal wear limit. For tires that were on an original equipment vehicle (i.e., acquired by the consumer on a new vehicle), follow the vehicle manufacturer's tire replacement recommendations, when specified (but not to exceed 10 years). The date when a tire was manufactured is located on the sidewall of each tire. Consumers should locate the Department of Transportation or "DOT" code on the tire. The code begins with "DOT" and ends with the week and year of manufacture. For example, a DOT code ending with "2214" indicates a tire made in the 22nd week of 2014.

**REMEMBER . . . TO AVOID DAMAGE TO YOUR TIRES AND A POSSIBLE ACCIDENT:**

- *INSPECT TIRES AT LEAST MONTHLY, AND IMMEDIATELY AFTER STRIKING ANY ROAD HAZARD.*
- *CHECK TIRE PRESSURE AT LEAST ONCE EACH MONTH WHEN TIRES ARE COLD AND BEFORE EVERY LONG TRIP.*
- *NEVER UNDERINFLATE OR OVERINFLATE A TIRE.*
- *NEVER OVERLOAD YOUR VEHICLE AND TIRES.*
- *ALWAYS OBEY LEGAL SPEED LIMITS AND DRIVE AT A SPEED THAT IS REASONABLE UNDER THE ROAD AND WEATHER CONDITIONS.*
- *AVOID DRIVING OVER POTHOLES, OBSTACLES, CURBS OR EDGES OF PAVEMENT.*
- *AVOID EXCESSIVE WHEEL SPINNING.*
- *IF YOU SEE ANY DAMAGE TO A TIRE, REPLACE THE TIRE WITH A PROPERLY INFLATED SPARE AND VISIT A QUALIFIED TIRE PROFESSIONAL AT ONCE.*
- *KEEP TIRES AND WHEELS PROPERLY ALIGNED, BALANCED, AND ROTATED.*
- *HAVE MOUNTING AND REPAIRS DONE BY A TIRE PROFESSIONAL.*
- *IF YOU HAVE ANY QUESTIONS, CONTACT YOUR MICHELIN TIRE RETAILER.*

FAILURE TO FOLLOW ANY OF THE RECOMMENDED PRECAUTIONS CONTAINED IN THIS OWNER'S MANUAL CAN LEAD TO ERRATIC VEHICLE BEHAVIOR OR TIRE DAMAGE, POSSIBLY RESULTING IN AN ACCIDENT.

If you see or suspect any damage to your tires or wheels, contact your local Michelin tire retailer, or visit our web site listed below for dealer locations. If further assistance is required, contact:

IN THE USA 1-800-847-3435

or write:

Michelin North America, Inc.  
Attention: Consumer Care Department  
Post Office Box 19001  
Greenville, SC 29602-9001

or visit:

[michelinman.com](http://michelinman.com)

IN CANADA 1-888-871-4444

or write:

Michelin North America (Canada) Inc.  
2500 Daniel Johnson, Suite 500  
Laval, Quebec  
H7T 2P6

or visit:

[michelin.ca](http://michelin.ca)

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## ORIGINAL OWNER/TIRE INSTALLATION INFORMATION

To be completed at time of purchase

Date of Purchase: \_\_\_\_\_

Customer Information:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone No.: \_\_\_\_\_

Vehicle Information:

Year: \_\_\_\_\_

Make/Model: \_\_\_\_\_

Vehicle odometer reading when tires installed:

\_\_\_\_\_

Tire Size/Design: \_\_\_\_\_

Recommended Tire Pressure Front: \_\_\_\_\_ PSI

Recommended Tire Pressure Rear: \_\_\_\_\_ PSI

DOT No: \_\_\_\_\_ Tire #1:

\_\_\_\_\_ Tire #2:

\_\_\_\_\_ Tire #3:

\_\_\_\_\_ Tire #4:

## TIRE REMOVAL INFORMATION

Odometer reading when tires removed: _____	Date Removed: _____	Retailer Name: _____	Retailer Signature: _____
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