



MICHELIN

***MICHELIN RETREAD
TECHNOLOGIES, INC.***

***NATIONAL LIMITED
WARRANTY***



***MICHELIN
RETREAD
TECHNOLOGIES***



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MICHELIN® RETREAD TECHNOLOGIES NATIONAL LIMITED WARRANTY

WHAT IS COVERED AND FOR HOW LONG

Michelin Retread Technologies, Inc (MRTI) Franchise (hereinafter referred to as MRT Dealer), provides a national limited warranty for every retread, whether using a customer's casing or an MRT Dealer's casing and for every repair produced by an MRT Dealer.

The national limited warranty applies to all retreads and repairs bearing the MRT Dealer's valid DOT⁽¹⁾ plant code and is warranted against defects in workmanship and materials for the "useable"⁽²⁾ life of the retread tread and within 3 years from the retread DOT or in the absence of a retread DOT, the date of purchase.⁽³⁾ Thereafter, all warranties, express or implied, expire.

WHAT IS NOT COVERED

- Road hazard injury (e.g., a cut, snag, bruise, impact damage, or puncture, whether repairable or not);
 - Incorrect or improper mounting, tire/wheel imbalance, or improper repair made by others;
 - Underinflation, overinflation, curbing, improper maintenance, neglect or other abuse;
 - Mechanical irregularity in the vehicle such as vehicle damage or wheel misalignment resulting in uneven or rapid wear;
 - Accident, fire, chemical corrosion, tire alteration or vandalism;
 - Casings classified and marked by the MRT Dealer as "NA" (not adjustable) adjacent to the retread DOT code.
 - Any tire casing designed in such a manner as to render MRT inspection techniques and/or equipment ineffective is not covered by this warranty.
- All other workmanship and material coverage remains in effect.

HOW REPLACEMENT CHARGES ARE CALCULATED

If a cap and casing, a retread, and/or a repair produced by an MRT Dealer retread plant⁽⁴⁾ is within 3 years from the MRT Dealer's DOT becomes unserviceable due to a condition covered by this warranty, it will be credited based on the percent of the retread that is worn. If the retread tread is not available, then the credit will be based on time of use.

If the retread, casing and/or repair becomes unserviceable due to a condition covered by this warranty in the first 10% of the useable tread life, and the retread tread is available, then the credit will be 100% of the invoice price for the casing, retread and/or repair. After 10% of the useable retread life is worn, and before 4/32nds, the credit will be on a pro rata basis using the calculation below.

$$\frac{\text{Remaining Retread Tread} - 4}{\text{Original Retread Tread} - 4} = \% \text{ Credit Due}$$

If the retread, casing and/or repair becomes unserviceable due to a condition covered by this warranty and if no measurable retread tread is available, credit will be given on a pro rata basis of the actual purchase

(1) DOT - Department of Transportation

(2) The usable life of a retread tread is defined as the tread depth down to 4/32nds of an inch of tread remaining.

(3) Date of purchase is documented by the retread or repair sales invoice.

(4) Retread must bear plant's DOT identification code.

price⁽⁵⁾ for the casing, retread and/or repair, based on the number of weeks of usage according to the following table. The customer pays the cost of mounting, balancing and any other service charges or applicable taxes.

<u>DOT Retread Date</u>	<u>Percent of Credit</u>
0-16 weeks	100% Casing, Retread and/or Repair
17-39 weeks	75% Casing, Retread and/or Repair*
40-52 weeks	50% Retread Only*
53-70 weeks	25% Retread Only*
After 70 weeks	0%

*X One casings will be credited at 100% of casing value

The customer pays the charges for mounting and balancing of the tire and any other service charges or applicable taxes in either the pro rate basis on available tread or the pro rate basis of time used.

Note: Please refer to Page 9 for MICHELIN® X One® casing specific warranty information.

If the purchase price cannot be obtained, the adjusting MRT Dealer can calculate the Warranty Credit Amount. The price for the tire in the current Michelin Retread Technologies Suggested Fleet Price List is multiplied by the percentage adjustment to determine the credit for the retread, and the current value of the casing is multiplied by the same percentage to determine the credit for the casing (not applicable after the first 25% of tread is worn). Adding the 2 numbers together provides the total credit to be issued.

WHAT THE END USER FLEET/ CUSTOMER MUST DO

When making a claim under the terms of this warranty, the end-user fleet/ customer must present the retreaded/repared tire to an MRT Dealer.

If the vehicle on which the tires are mounted is within 250 km of the producing MRT dealer who manufactured the retread/repair or the producing dealer's commercial servicing location, the tire must be presented to that MRT dealer for warranty consideration.

CONDITIONS AND EXCLUSIONS

This warranty is in lieu of all other warranties, express or implied, including without limitation, warranties of merchantability and of fitness for a particular purpose.

The customer is not a participant in any retread program with Michelin Retread Technologies, Inc., Michelin North America, Inc., or with MRT Dealers, that includes warranty and adjustment provisions as an integral part of the program.

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 the above limitation or exclusion may not apply to you. This warranty gives the customer specific legal rights, and you may have other rights that vary from state to state.

This warranty is for the exclusive benefit of the original customer and is not transferable.

This limited warranty applies **only** in Canada.

(5) Note: If the purchase invoice is not available, the adjusting MRT Dealer will attempt to obtain the actual purchase pricing for the retread and casing and to inform the producing MRT dealer of the impending warranty claim.

SAFETY AND MAINTENANCE RECOMMENDATIONS

! WARNING

DISREGARDING ANY OF THE SAFETY PRECAUTIONS AND INSTRUCTIONS CONTAINED IN THIS MANUAL MAY RESULT IN TIRE FAILURE OR EXPLOSION CAUSING SERIOUS PERSONAL INJURY OR DEATH.

DRIVING ON ANY TIRE THAT DOES NOT HAVE THE CORRECT INFLATION PRESSURE IS DANGEROUS AND MAY CAUSE IRREPARABLE TIRE DAMAGE.

Any underinflated tire builds up excessive heat that may result in sudden tire destruction. For replacement tires, the correct inflation pressure will be provided by your Michelin Truck Tire Retailer. If not, refer to the vehicle placard.

The placard indicates the inflation pressures required for the maximum axle loads (gross axle weight rating). However, do not exceed the maximum inflation pressure for the tire or the wheel on which it is mounted.

! WARNING

DO NOT DRIVE UNNECESSARILY ON IMPROPERLY INFLATED TIRES.

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

Failure to maintain correct inflation pressure may result in improper vehicle handling and may cause rapid and irregular tire wear, sudden tire destruction, loss of vehicle control and serious personal injury. Therefore, inflation pressures should be checked at least once each week and always prior to long distance trips.

Please refer to your authorized Michelin Truck Tire Retailer or www.business.michelin.ca for detailed information on axle loads and appropriate cold inflation pressures.

Pressures should be checked when tires are cold; in other words, before they have been driven on. The ideal time to check tire pressures is early morning. Driving, even for a short distance, causes tires to heat up and pressure to increase.

Never bleed air from hot tires. Bleeding air from hot tires could result in under inflation.

Use an accurate tire gauge to check pressures. Never allow children to inflate or deflate tires.

If your pressure check indicates that one of your tires has lost pressure of four pounds or more, look for signs of penetration, valve leakage or wheel damage that may account for the pressure loss.

Any tire suspected of having been run flat or run at very low pressure (less than 80% of normal operating pressure) should not be re-inflated without careful inspection of the entire tire.

Visit a Michelin Truck Tire Retailer.

INSPECT YOUR TIRES DAILY — IF YOU SEE ANY DAMAGE TO THE TIRES OR WHEELS TAKE THEM TO AN AUTHORIZED MICHELIN RETAILER AT ONCE

HAZARDS

Driving over potholes, curb, glass, metal, rocks, wood debris and the like, can damage a tire and should be safely avoided. Unavoidable contact with such hazards should prompt a thorough tire inspection.

If you see damage to your tires or wheels, replace with a spare and immediately visit a Michelin Truck Tire Retailer for advice.

 WARNING	DO NOT DRIVE UNNECESSARILY ON A TIRE OR WHEEL WITH ANY VISIBLE DAMAGE.
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INSPECTION

Always examine your tires for bulges, cracks, cuts, penetrations and abnormal tire wear, particularly on the edges of the tire tread, which may be caused by misalignment or underinflation. If any such damage is found, the tire must be inspected by a Michelin Truck Tire Retailer at once. Use of a damaged tire could result in rapid pressure loss and sudden tire destruction. Failure to control a vehicle when one or more tires experience a sudden pressure loss can lead to an accident.

All tires will wear out faster when subjected to high speeds as well as hard cornering, rapid starts, sudden stops, frequent driving on surfaces which are in poor condition, and off-road use. Surfaces with holes and rocks or other objects can damage tires and cause vehicle misalignment. When driving on such surfaces, drive carefully and slowly, and before driving again at normal or highway speeds, examine your tires for any damage, such as cuts, bulges, penetrations, unusual wear patterns, etc.

WEAR BARS

MICHELIN® Truck Tires contain “Wear Bars” in the grooves of the tire tread which show up when only 2/32nds of an inch (1.6 mm) of tread is remaining. At this stage, tires must be replaced. Tires worn beyond this stage are dangerous.

(Federal law requires the tires on front axles of a Bus, Truck or Truck Tractor to have at least 4/32nds of an inch of tread depth remaining.)

HIGH SPEED DRIVING CAN BE DANGEROUS AND MAY DAMAGE YOUR TIRES

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

 WARNING	DO NOT DRIVE AT SPEEDS FASTER THAN THE SPEED RATINGS FOR YOUR TIRES. NEVER EXCEED LEGAL SPEED LIMITS OR SPEEDS REASONABLE FOR THE DRIVING CONDITIONS.
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If you see any damage to a tire or wheel, replace it with the spare at once and visit a Michelin Truck Tire Retailer.

The maximum speed at which MICHELIN® Truck Tires can be operated is indicated in the MICHELIN® Truck Tire Data Book. This speed varies for each type of tire and depends on the type of application. Consult a Michelin Truck Tire Retailer for assistance in determining the maximum speed for your application.

Exceeding this maximum speed will cause the tire to build up excessive heat, which can cause tire damage that could result in sudden pressure loss and rapid tire destruction. Failure to control a vehicle when one or more tires experience sudden pressure loss can lead to an accident, property damage, and personal injury.

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

WHEEL ALIGNMENT, TRACKING, AND BALANCING ARE IMPORTANT FOR SAFETY AND MAXIMUM MILEAGE FROM YOUR TIRES

 WARNING	DO NOT DRIVE ON UNEVENLY WORN, OUT OF ALIGNMENT, OR UNBALANCED TIRES.
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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, your vehicle may be out of alignment. This condition not only shortens the life of your tires but also adversely affects the handling characteristics of your vehicle, which could be dangerous. If you detect irregular wear, have the alignment of the wheels and the parallelism of the axles checked immediately. Also check to see that your tires are properly inflated.

For optimum tire life and performance, the front end alignment on vehicles equipped with MICHELIN® Truck Tires should be in accordance with the recommendations of the vehicle manufacturer.

Care should be taken to ensure tire/wheel concentricity to avoid potential issues with imbalance. It is recommended that you have your tires and wheels dynamically balanced. Tires and wheels which are not balanced may cause steering difficulties, a bumpy ride and irregular tire wear.

DO NOT OVERLOAD — DRIVING ON ANY OVERLOADED TIRE IS DANGEROUS

 WARNING	DO NOT DRIVE ON OVERLOADED TIRES. DRIVING ON ANY OVERLOADED TIRE IS DANGEROUS.
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The maximum load rating marked on the tire sidewall of any truck tire is based on a specific maximum speed of operation. Consult a MICHELIN® Truck Tire Data Book for complete information on allowable loads for the tires in your application. Tires which are loaded beyond their maximum allowable loads for the particular application will build up excessive heat that may cause sudden tire destruction, property damage and personal injury.

In the case of dual mounted tires, if one of the tires is run underinflated or flat then the other tire will become severely overloaded which could lead to tire failure. "Limping in" is illegal and should never be attempted.

TIRE MIXING

 WARNING	DO NOT DRIVE IMPROPERLY MIXED TIRES.
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FOUR WHEEL TRUCKS

For best performance it is recommended that the same size and type of tire be used on all four wheel positions. If only two MICHELIN® radial truck tires are mounted with two non-radial tires, the radial tires should be mounted on the rear axle.

Before mixing different types of tires 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.

VEHICLES WITH MORE THAN FOUR WHEEL POSITIONS

For best performance, it is strongly recommended that radial and non-radial tires not be mixed in a dual fitment.

TIRE ALTERATIONS

 WARNING	DO NOT DRIVE ON ALTERED TIRES.
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Do not make or allow to be made any alteration to your tires. Alterations may prevent proper performance, leading to tire damage which can result in an accident. Tires which become unserviceable due to alterations such as, but not limited to, truing, addition of balancing or sealant liquids, or the use of tire dressings containing petroleum distillates, are excluded from warranty coverage.

IMPROPERLY RETREADED AND/OR REPAIRED TIRES ARE DANGEROUS AND CAN CAUSE TIRE DESTRUCTION, PROPERTY DAMAGE AND PERSONAL INJURY

 WARNING	DO NOT DRIVE ON IMPROPERLY RETREADED OR REPAIRED TIRES.
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Retreading and repairing of MICHELIN® Truck Tires should be performed only by qualified personnel with proper equipment using the procedures contained in MICHELIN® Retread and Repair manuals.

If any MICHELIN® Tire sustains a puncture, take it to an authorized Michelin Tire Retailer to check for possible damage that may have occurred.

Plug-only repairs done on-the-wheel are considered improper and are therefore not recommended. Such repairs are not reliable and may cause

further damage to the tire and may result in tire failure.

STORAGE

Tires contain waxes and emollients to protect their outer surfaces from ozone and weather checking. As the tire rolls and flexes, the waxes and emollients 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. Also serious problems occur with tube-type tires when mounted with water trapped between the tire and the tube. Due to pressurization, the liquid can pass through the inner liner and into the casing plies. For these reasons, tires should always be stored in a cool, dry, clean indoor environment. Failure to store tires in accordance with these instructions could result in 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 the surfaces on which tires are stored are clean and free from grease, petroleum products or other substances which could deteriorate the rubber. (Tires exposed to these materials during storage or driving could be subject to sudden failure.)

FOLLOW THESE MOUNTING RECOMMENDATIONS TO PREVENT TIRE DESTRUCTION, PROPERTY DAMAGE AND PERSONAL INJURY

Recommendations published by the Canadian Center for Occupational Health and Safety (CCOHS) deal in detail with mounting and demounting of tires for trucks. You should ensure that you are always in compliance with these recommendations. In addition, Michelin urges you to bear in mind the following considerations:

Tire changing can be dangerous and must be done by professionally trained persons using proper tools and procedures as specified by the Tire and Rubber Association of Canada (TRAC).

**WARNING**

TIRE AND WHEEL SERVICING CAN BE DANGEROUS AND MUST BE DONE ONLY BY TRAINED PERSONNEL USING PROPER TOOLS AND PROCEDURES. FAILURE TO READ AND COMPLY WITH ALL PROCEDURES MAY RESULT IN SERIOUS INJURY OR DEATH TO YOU OR OTHERS.

Tires should be mounted on wheels of the correct size and type which are in good, clean condition. Bent, chipped, or rusted wheels or rim components may cause tire damage and can also malfunction causing an accident.

All wheel components (i.e. flanges, lock rings, rim base, etc.) must match. Be sure to check wheel manufacturer's specifications.

When changing any tire, always deflate the tire before loosening any wheel or rim lugs. Always install new valve cores with new mountings.

FOR ALL MICHELIN® TUBE-TYPE TIRES

TUBES: Always fit a new MICHELIN® tube of the proper size in a new mounting. A tube through normal use will experience growth; therefore, if an old tube is re-used, there is a probability of creasing it with subsequent chafing and eventual failure of the tube causing tire damage. MICHELIN® Tubes are made of butyl rubber and marked with the trade name "AIRSTOP®." It is essential to use an "AIRSTOP®" tube with a MICHELIN® 'X®' Tire. These tubes are made with an overlap splice which is stronger than the butt splice used in many other tubes. The use of other tubes, not designed for MICHELIN® 'X®' Radial Tires, could result in tube failure causing tire damage.

FLAPS: Always install a new MICHELIN® Flap when you install a new tire. After a limited time the flap will develop a set to match the tire and wheel in which it is fitted; therefore, it will not exactly match a new tire/wheel combination.

FOR ALL MICHELIN® TIRES

LUBRICANT: Always use a proper lubricant when mounting tires. Use only an approved tire mounting lubricant. Never use anti-freeze, silicones or petroleum-based lubricants. Do not allow excess lubricant to run down and collect inside the tire.

SAFETY CAGE: Always use a safety cage or other OSHA approved restraining devices when inflating a truck tire. Ensure that the safety cage is large enough to accommodate wide base tires when inflating MICHELIN® X One® Tires. Never stand over the tire or in front of the valve when inflating. Use an inline gauge and stand to the side. Before final inflation, check the assembly carefully for signs of weakness or irregularities.

VALVE CAPS: It is essential that all valves be fitted with pressure-sealing metal valve caps, which are the PRIMARY seal of the valve, to avoid leaks. After mounting, check the assemblies for leaks. When wheel assemblies are mounted on a vehicle, be sure that the valves do not touch the brake drums or any mechanical part of the vehicle.

DUAL MOUNTING: Tires mounted in duals must be matched so that the maximum difference between the diameters of the tires does not exceed 1/4 inch. Failure to properly match dual tires will result in the tire with the larger diameter carrying a disproportionate share of the load which can cause sudden tire destruction, property damage and personal injury.

Proper dual spacing must be provided to prevent the tires from rubbing together and to allow for the flow of cooling air. Consult the MICHELIN® Truck Tire Data Book or visit a Michelin Truck Tire Retailer for information on the minimum dual spacing required for a particular tire/wheel fitment.

PREPARATION OF WHEELS AND RIMS

Prior to fitment, wheel assemblies should be thoroughly inspected for cracks, warpage, deformation of flanges, side rings, lock rings, etc. The condition of the stud holes on wheels should also be checked. If any of these conditions are discovered, the wheel should be discarded. All burrs, welds, hammer dents, etc., that are present on the tire side of the rim must be made smooth with a file and/or emery cloth. Remove rust with a wire brush and apply a rust inhibiting paint. Make sure the tires are being mounted on the correct wheel size and type. The wheels and rim components should be in good condition and clean.

MICHELIN® X ONE® CASING WARRANTY

Michelin Retread Technologies, Inc. (MRT) is pleased to offer an extended warranty coverage pertaining to MICHELIN® X One® tire casings retreaded via the MRT franchise network.

In assessing warranty credits payable for a MICHELIN® X One® tire retread and/or repair produced by an MRT franchisee via the MRT retread process when no measurable tread remains, warranty credits will be applied to both casings, retreads and repairs during the first 70 weeks of casing usage. The historical pro rata usage structure will continue to apply for retreads and repairs; however, an X One casing will be warranted at 100% for the full 70 weeks.

<u>DOT Retread Date</u>	<u>Percent of Credit</u>
0-16 weeks	100% Casing, Retread and/or Repair
17-39 weeks	75% Retread and/or Repair
40-52 weeks	Retread Only
53-70 weeks	Retread Only
After 70 weeks	0%

MICHELIN® X ONE® TIRE SPECIFIC INFORMATION

**ALL DRIVERS OF VEHICLES EQUIPPED WITH MICHELIN®
X ONE® TIRES SHOULD BE AWARE OF THE FOLLOWING:**

PRESSURE MAINTENANCE

Drivers have commented that an underinflated MICHELIN® X One® Tire is more likely to be detected with a simple visual inspection than duals. However, pressure is difficult to gauge visually even for the most experienced driver. Drivers should always use a properly calibrated gauge when verifying the pressure of a MICHELIN® X One® Tire and should not rely on the aspect of the tire. If the tire is 20% below the recommended pressure, it must be considered flat, removed and inspected for punctures or other damage. Failure to do so may cause tire failure.

VEHICLE HANDLING

Drivers have commented that the wide, stable footprint of the MICHELIN® X One® Tire can provide the feel of a much more stable truck compared to traditional dual tires. Most MICHELIN® X One® fitments allow the track of the tractor and trailer to be widened. However, drivers should not let the outstanding handling of the MICHELIN® X One® Tire give them a false sense of stability in curves. Drivers should always respect all posted speed limits regardless of tire fitment. Failure to do so may cause vehicle to tip.

RAPID PRESSURE LOSS TECHNIQUES

Extensive testing has shown that rapid pressure loss on a MICHELIN® X One® Tire will not compromise the stability and behavior of the vehicle. However, with one tire on each axle end, the loss of pressure will allow the wheel and axle end to drop and possibly contact the road surface. To avoid additional damage to the tire, wheel and axle due to tire/wheel lock-up and brake drag, drivers should be encouraged to decelerate gradually through down shifting, use of trailer brake (when appropriate) or by pumping the brakes during the initial phase of deceleration to allow some rotation of the assembly. Failure to do so may cause irreparable damage to the tire, wheel, axle components and vehicle.

Any time you see damage to your tires or wheels, contact your local MICHELIN® Truck Tire Retailer listed in the dealer locator on business.michelin.ca at once. If further assistance is required, contact:

In Canada

Call: 1-888-622-2306

Or Write: Consumer Care
P.O. Box 19001
Greenville, SC 29602-9001

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

- Check tire pressures at least once each week when tires are cold
- Maintain the proper pressure in the tires for the load being carried
- Do not underinflate
- Do not overload
- Do not overinflate
- Drive at moderate speeds, observe legal speed limits
- Avoid driving over potholes, obstacles, curbs or edges of pavement
- If you see any damage to a tire, replace with a spare and visit a MICHELIN® Truck Tire Retailer at once
- If you have any questions, contact a MICHELIN® Truck Tire Retailer

business.michelin.ca

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Consumer Care: 1-888-622-2306

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