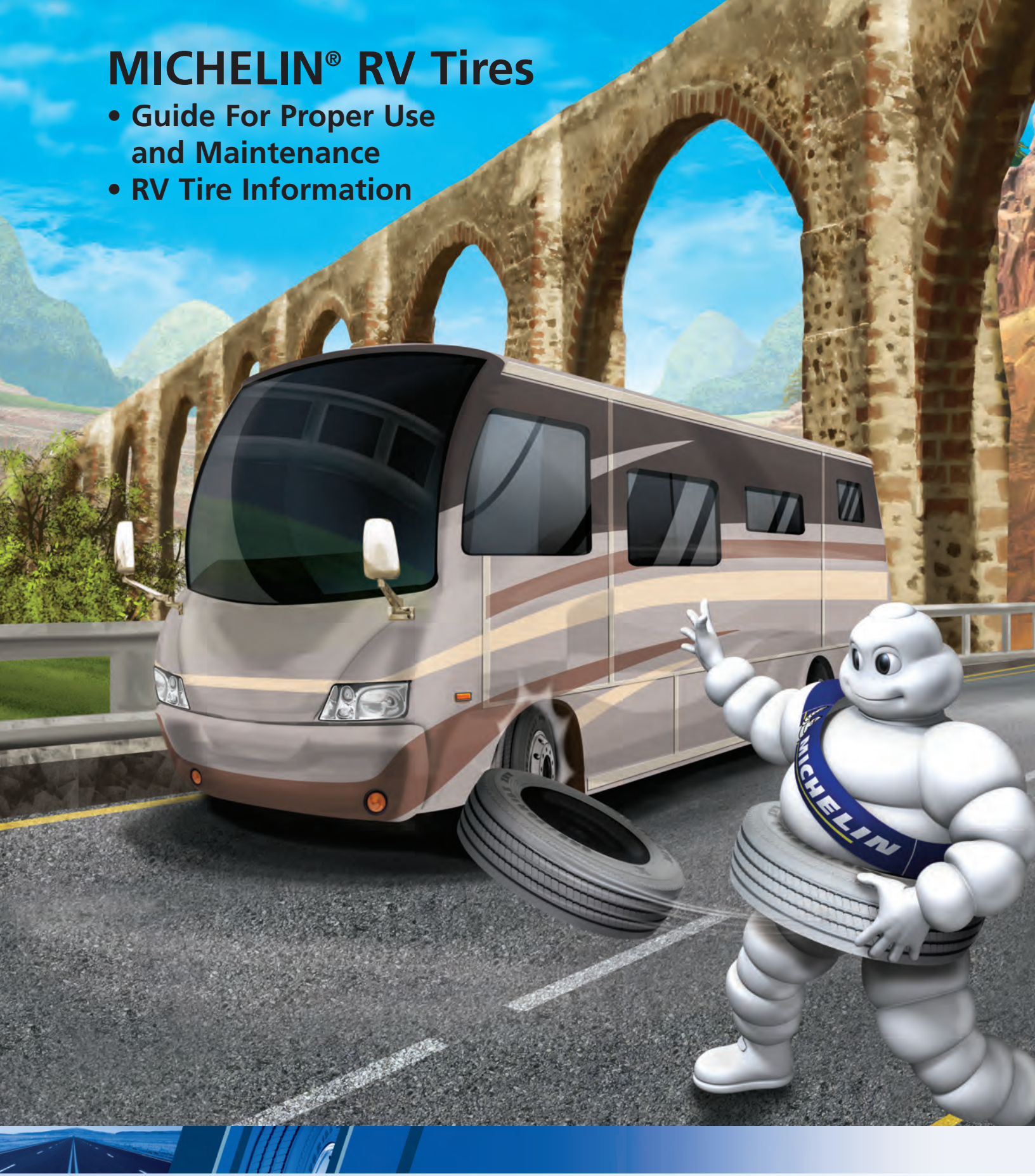
MICHELIN® RV Tires

- Guide For Proper Use and Maintenance
- RV Tire Information



MICHELIN
A better way forward

TABLE OF CONTENTS

General Information About MICHELIN® RV Tires 1
- Service Life for RV/Motorhome Tires 1
- The Importance of Tire Pressure 1
- Pressure Requirement 2
- When to Check RV Tire Pressure 2
- Determining the RV's Correct Weight 2

How to Weigh the Recreational Vehicle 3
- How To Weigh the RV 3
- Three Different Types of Scales 3
- Weighing the Single Axle Recreational Vehicle 4
- Weighing the Tandem Axle Recreational Vehicle 5
- The Effect of Towed Vehicles or Trailers 5
- How to Use the Actual RV Weight Information with the Tire Data Load Chart 6
- Using Blocks to Level Motorhomes and RVs Equipped with Radial Tires 6

Maintaining MICHELIN® RV Tires 7
- Aging, Weather Checking, and Ozone Cracking 7
- Long Term Storage of RV Tires 7
- Proper Cleaning of RV Tires 7
- Tire Repair 7
- Tire Inspection 7

Common Tire Damages 8
- Underinflation 8
- Fatigue Rupture 8
- Dual Kissing 8

Tire Wear, Balance, and Wheel Alignment — Toe Wear, Camber Wear, Tire Rotation 9

Vibration Diagnosis 10
- Vibration Complaint 10
- Vibration Diagnosis 10

Selecting Replacement Tires for the RV 10

MICHELIN® RV Tire Reference Chart 11
- MICHELIN® XRV® 12
- MICHELIN® XZA® (10R17.5) 12
- MICHELIN® XPS RIB® 13
- MICHELIN® XZA3®+ EVERTREAD 14
- MICHELIN® XZA® (365/70R22.5) 14
- MICHELIN® XZA2® ENERGY 15
- MICHELIN® XZA®1 15
- MICHELIN® XZE®2+ 16
- MICHELIN® XZE®2 16
- MICHELIN® XZE® 17

Michelin Inflation Charts for RV Usage Only 18
- Wheel Diameter 16" 18
- Wheel Diameter 17.5" 18
- Wheel Diameter 19.5" 18
- Wheel Diameter 22.5" 19
- Wheel Diameter 24.5" 20

RV Front Axle Overload 21

GENERAL INFORMATION ABOUT MICHELIN® RV TIRES

SERVICE LIFE FOR RV/MOTORHOME TIRES

The following recommendation applies to RV/Motorhome 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.

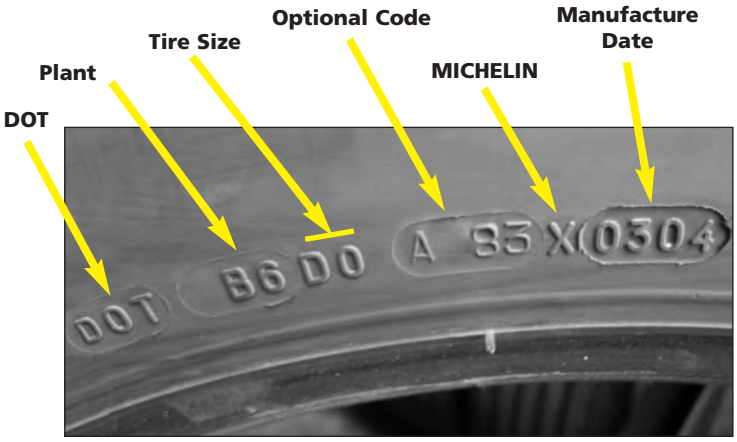
That is why, in addition to regular inspections and inflation pressure maintenance by consumers, it is recommended to have RV/Motorhome tires, including spare tires, inspected regularly by a qualified tire specialist, such as a tire dealer, who will assess the tire's suitability for continued service. Tires that 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 conditions and inflation pressures, but also of any changes in dynamic performances such as increased gas 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 simple 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. RV owners should locate the Department of Transportation or DOT code on the tire that begins with DOT and ends with the week and year of manufacture. For example, a DOT code ending with "0304" indicates a tire made in the 3rd week (Jan) of 2004.



THE IMPORTANCE OF TIRE PRESSURE

The most important factor in maintaining the life of MICHELIN® RV tires is making sure they are always properly inflated. Incorrect pressure for the weight of the vehicle is dangerous and could cause things like premature wear, tire damage, or a harsher ride.

An underinflated or overloaded tire will build up more heat that could go beyond the endurance limits of the rubber and radial cords. This could cause sudden tire failure. Underinflation will also cause poor handling, faster and/or irregular tire wear, and can decrease fuel economy.

Overinflation, on the other hand, will reduce the tire's contact area with the road, which reduces traction, braking ability, and handling. A tire that's overinflated for the weight it's carrying is more prone to a harsh ride, uneven tire wear, and impact damage.

PRESSURE REQUIREMENT

The amount of pressure required in each tire depends on the weight of the fully loaded vehicle. So the RV owners cannot determine the tire's correct pressure unless they know their vehicle's actual weights. The maximum load capacity allowed for the size tire and load rating and the minimum cold inflation pressure needed to carry that maximum load are located on the tire's sidewall. The lower the pressure, the lower the load that the tire can carry. A complete load and inflation table is available at www.michelinrvtires.com; MICHELIN® RV Tires: Guide For Proper Use and Maintenance and RV Tire Information – MWL43146; and the MICHELIN® Truck Tire Data Book – MWL40731.

WHEN TO CHECK RV TIRE PRESSURE

The RV owners need to know the correct pressure per axle for their RV, and they need to know when and how often to check the MICHELIN® RV tires.

Here are a few recommendations for the RV owners:

1) Check at least once a month and before any major trips.
2) On long trips, check every morning before driving.
3) Check before and after storage.
4) On short trips of a day or less driving each way, check before you leave and before you return home.

Always try to check tires when they're "cold" and have not been driven for more than one mile. The stated load capacity for a given cold inflation pressure is based on ambient outside temperatures. The pressure in a "hot" tire may be as much as 10-15 psi higher than the "cold" tire pressure. If the RV owners must check the tires when they're warm, be sure to allow for an increase in pressure, and make sure the pressure of the tires on both sides of the axle are within a couple of pounds of each other.

Never let gas out of a hot tire.

To make checking the tire pressure easier and more accurate, Michelin recommends that the RV owners purchase a quality truck tire pressure gauge with a dual-angled head. This allows the RV owners to check the pressure of the inner and outer dual wheels. And the easier it is to check the pressure, the more that the RV owner will do it. Nothing should restrict the RV owner's ability to check their tire pressure daily when driving their RV. Be sure to use pressure-sealing valve caps to prevent gas from escaping the valve stem. If the valve stem extension hoses are used, make sure they're good quality stainless steel braid reinforced and are securely anchored to the outer wheel. The joints should be soaped immediately after initial installation to check for pressure loss. If the RV has wheel covers, consider removing them since the extra time and effort they require could lead the RV owners to avoid checking the tire's pressure.

DETERMINING THE RV'S CORRECT WEIGHT

The GVWR (Gross Vehicle Weight Rating) and the GAWR (Gross Axle Weight Rating) stickers on the RV (normally located on the support pillar next to the driver's seat) will show the chassis manufacturer's and/or the RV manufacturer's total vehicle weight ratings and per axle weight ratings.

The GVWR is the maximum total weight rating — this includes passengers, fluids, and cargo. The GAWR is the maximum for a single axle. These ratings can vary based on a number of components, so RVs of the same make and model will vary because of different options and personal loads.


MOTORHOME
WEIGHT INFORMATION

Model _____
GVWR _____
UVW _____
NCC _____
GCWR _____

GVWR (Gross Vehicle Weight Rating) means the maximum permissible weight of this motorhome. The GVWR is equal to or greater than the sum of the Unloaded Vehicle Weight plus the Net Carrying Capacity.

UVW (Unloaded Vehicle Weight) means the weight of this motorhome as built at the factory with full fuel, engine oil, and coolant. The UVW does not include cargo, fresh water, LP gas, occupants, or dealer installed accessories.

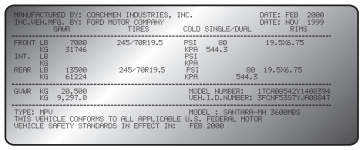
NCC (Net Carrying Capacity) means the maximum weight of all occupants including the driver, personal belongings, fuel, fresh water, LP gas, tools, tongue weight of towed vehicle, dealer installed accessories, etc., that can be carried by this motorhome. NCC is equal to or less than (GVWR minus UVW).

GCWR (Gross Combination Weight Rating) means the value specified by the motorhome manufacturer as the maximum allowable loaded weight of this motorhome with its towed trailer or towed vehicle.

This motorhome is capable of carrying up to _____ gallons of fresh water including water heater for a total of _____ pounds. Reference: Weight of fresh water is 8.33 lbs/gal. Weight of LP gas is 4.4 lbs/gal (average).

CONSULT OWNER'S MANUAL FOR SPECIFIC WEIGHING INSTRUCTIONS AND TOWING GUIDELINES.

That's why the RV owners need to weigh their RV in a loaded condition to know its actual weight. Michelin recommends weighing each wheel position of the vehicle. Why? Because when you weigh the entire vehicle at once, it's possible to be within the GVWR, but overloaded on an axle. And when you weigh one axle at a time, it's possible for one wheel position to be overloaded even though the GAWR has not been exceeded (we've seen as much as a 1200-pound difference between left and right front tires). Weighing each wheel position will give you a clear indication of how the weight of the RV vehicle is distributed, so you can determine the correct tire inflation pressure.


MANUFACTURED BY: CORCHMEN INDUSTRIES, INC. DATE: FEB 2000
INC.VEH.MFG. BY: FORD MOTOR COMPANY DATE: NOV 1999

		GVWR	TIRES	COLD SINGLE/DUAL	RIMS
FRONT	LB	7000	245/70R19.5	PSI 80	19.5X6.75
	KG	3174K		KPA 544.3	
INT.	LB			PSI	
	KG			KPA	
REAR	LB	13500	245/70R19.5	PSI 80	19.5X6.75
	KG	6122K		KPA 544.3	
GVWR	KG	20,500		MODEL NUMBER: 1T5P0P5E7V1A00594	
	KG	9,297.6		VEH.I.D.NUMBER: 3FCNF53S7V.P00847	

TYPE: MPV MODEL : SANTARA-MH 3600MBS
THIS VEHICLE CONFORMS TO ALL APPLICABLE U.S. FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON FEB 2000

For instructions on how to weigh by wheel position, see next pages 3-5. Once you know total weight and weight on each wheel position, the tire load data chart will show you the correct inflation pressure for each wheel position.

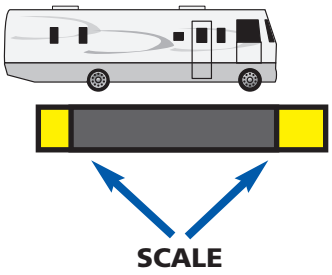


HOW TO WEIGH THE RECREATIONAL VEHICLE

NOTE: Michelin recommends using a professional weighing group or organization to perform the weighing of your Motorhome/RV. The Recreational Vehicle Safety Foundation (RVSEF) is an organization that performs weighing and other educational services. They can be contacted at www.rvsafety.com. If you are planning to do your own weighing, you should follow the procedures below. Michelin recommends checking with the scale operator to make sure there are no concerns on damage to the scale or to the vehicle if weighing side to side to determine individual wheel position weights.

HOW TO WEIGH THE RV

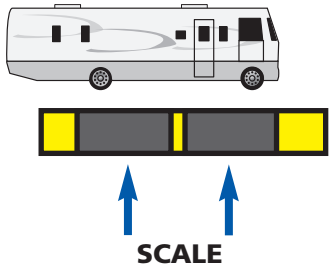
First, the RV must be weighed fully loaded — that includes passengers, food, clothing, fuel, water, propane, supplies, and anything else you can think of. Also, any towed vehicle (car, boat, or trailer) or item loaded on brackets on the back of the RV (like bikes or motorcycles) should be included in the weighing.



THREE DIFFERENT TYPES OF SCALES:

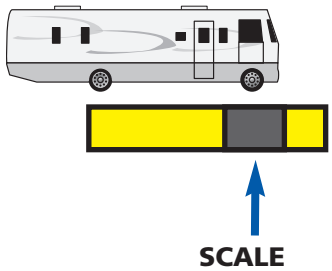
1) Platform – Platform scales are usually long enough to weigh the entire vehicle at once. Michelin suggests the following:

a) Pull onto the scale so that only the front axle is on the platform. The rear end of the scale needs to be midway between the front and rear axles. Record the weight.
b) Pull forward until the full unit is on the scale. Record the weight.
c) Pull forward until only the rear axle is on the platform. The front end of the scale needs to be midway between the front and rear axles. Record the weight.
d) If the RV has a rear tag axle, pull forward so only tag axle is on the scale. Record the weight.
e) To determine individual wheel position weights, repeat steps (a) through (d) with only one side of the vehicle actually on the scale and the vehicle centered over the side of the scale. See diagram on next page. Record the weights.
f) To calculate the opposite wheel positions' weights, subtract the weights recorded in step (e) from the weights recorded in steps (a) through (d). If there is not a towed vehicle, the tag axle weight derived from (d) will represent the actual weight on the tag axle.
g) If a vehicle is being towed, it should be weighed and combined with the GVW (Gross Vehicle Weight) to ensure the total weight doesn't exceed the GCWR (Gross Combined Weight Rating).



2) Segmented Platform – Platform scales with segmented sections can provide individual axle weights and total vehicle weights all at once when the vehicle is positioned properly. To do this, simply:

a) Position the vehicle on the scales so that each axle is centered as much as possible on the segments, and record the weight.
b) Reposition the vehicle so that only one side is on the scale – centered on the segment as much as possible.
c) Subtract the weighed wheel positions from the total axle weights to determine the unweighed wheel position weights.



3) Single Axle – Weighs one axle at a time.

Follow these steps:

a) Drive the front axle onto the scale and stop long enough for the weight to be recorded.
b) Pull vehicle forward until the rear axle is on the scale.
c) For gross vehicle weight, add the two axle weights together.
d) To obtain the individual wheel position weights, repeat this process with only one side of the RV on the scale.

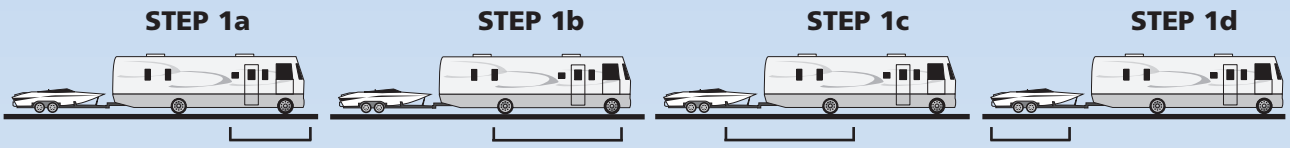
Note: Even though the weight of the total axle is within the axle rating, it may be overloaded on one side, which means an overloaded wheel position. That's why side-to-side weighing is required.

The RV must remain as level as possible on the scale (even when an axle or side isn't on the scale). Therefore, to obtain side-to-side weights, there must be enough space on either side of the scale to accommodate the RV being partially off the scale.

If there is a difference in the weights on one side of the vehicle as compared to the other, it is important to redistribute the load more evenly to avoid component failure and improve handling. These weights make it possible to compare against the GAWR (Gross Axle Weight Rating), GVWR (Gross Vehicle Weight Rating), and tire capacities. They also help determine proper tire pressure.

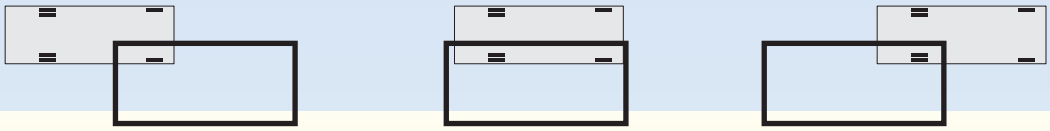
WEIGHING THE SINGLE AXLE RECREATIONAL VEHICLE

TO OBTAIN INDIVIDUAL AXLE AND GROSS VEHICLE WEIGHTS



	STEP 1a	STEP 1b	STEP 1c	STEP 1d
Scale Weight	_____ lbs. (Step 1a = Gross Axle Weight)	_____ lbs. (Step 1b = Gross Vehicle Weight)	_____ lbs. (Step 1c = Gross Axle Weight)	_____ lbs. (Step 1d)
From Owner's Manual	_____ lbs. Gross Axle Weight Rating	_____ lbs. Gross Vehicle Weight Rating	_____ lbs. Gross Axle Weight Rating	_____ lbs. Vehicle Weight (Gross Combined Weight Rating – Gross Vehicle Weight)

TO OBTAIN INDIVIDUAL WHEEL POSITION WEIGHTS

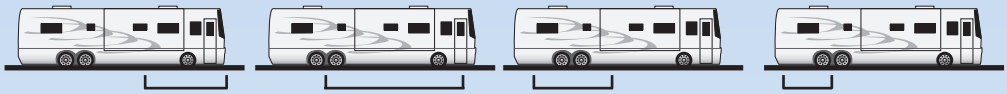


	STEP 2a	STEP 2b	STEP 2c
One Side Scale Weight	_____ lbs. (Step 2a)	_____ lbs. (Step 2b)	_____ lbs. (Step 2c)
Calculate Other Side Weight	_____ lbs. (Step 1a-2a)	_____ lbs. (Step 1b-2b)	_____ lbs. (Step 1c-2c)
Tire Load (lbs.)	_____ lbs. (See Note #1)	_____ lbs.	_____ lbs. (See Notes #1 & #2)
Inflation	_____ psi (See Note #1)		_____ psi (See Note #1)

1. From the tire manufacturer's load and inflation tables or the sidewall of the tires mounted on the vehicle.
2. If vehicle has duals, read dual capacity from tire and multiply by 2 to obtain dual assembly load capacity.

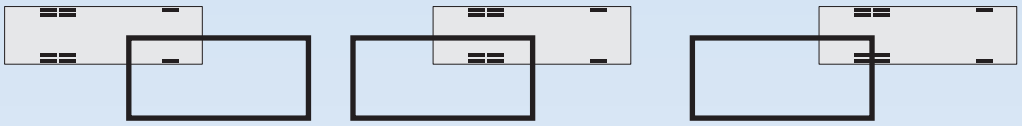
WEIGHING THE TANDEM AXLE RECREATIONAL VEHICLE

TO OBTAIN INDIVIDUAL AXLE AND GROSS VEHICLE WEIGHTS

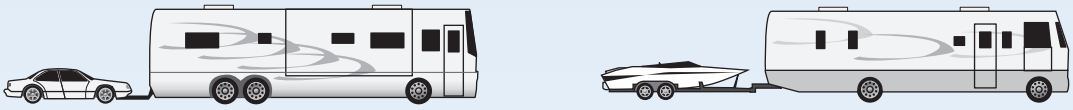


	STEP 1a	STEP 1b	STEP 1c	STEP 1d	STEP 1e (calculated)
Scale Weight	_____ lbs. (Step 1a = Gross Axle Weight)	_____ lbs. (Step 1b = Gross Vehicle Weight)	_____ lbs. (Step 1c)	_____ lbs. (Step 1d = Gross Axle Weight)	_____ lbs. Drive Axle Weight = (1c-1d)
From Owner's Manual	_____ lbs. Gross Axle Weight Rating	_____ lbs. Gross Vehicle Weight Rating		_____ lbs. Gross Axle Weight Rating	_____ lbs. Gross Axle Weight Rating

TO OBTAIN INDIVIDUAL WHEEL POSITION WEIGHTS



	STEP 2a	STEP 2b	STEP 2c	STEP 2d (calculated)
One Side Scale Weight	_____ lbs. (Step 2a)	_____ lbs. (Step 2b)	_____ lbs. (Step 2c)	_____ lbs. Step 2d: Right Duals = (2b-2c)
Calculate Other Side Weight	_____ lbs. (Step 1a-2a)	_____ lbs. (Step 1c-2b)	_____ lbs. (Step 1d-2c)	_____ lbs. Left Duals = (2d)
Tire Load (lbs.)	_____ lbs. (See Note #1)		_____ lbs. (See Note #1)	_____ lbs. (See Notes #1 & #2)
Inflation	_____ psi (See Note #1)		_____ psi (See Note #1)	_____ psi (See Note #1)



1. From the tire manufacturer's load and inflation tables or the sidewall of the tires mounted on the vehicle.
2. If vehicle has duals, read dual capacity from tire and multiply by 2 to obtain dual assembly load capacity.

THE EFFECT OF TOWED VEHICLES OR TRAILERS

If your RV is towing a vehicle, you need to know the RV's GCWR (Gross Combined Weight Rating), the total actual loaded weight of the RV, plus the total actual loaded weight of the towed vehicle. Even though the GCWR has more to do with the design limits of the drivetrain (engine, transmission, axle, brakes, and bearings), the additional weight can also affect the tires and the RV's handling. Also, always remember to consider the tongue weight of the trailer and its effect on handling.

HOW TO USE THE ACTUAL RV WEIGHT INFORMATION WITH THE TIRE DATA LOAD CHART

Let's consider an RV running on 275/80R22.5 MICHELIN® XZA3®+ EVERTREAD LRG tires, with actual corner weights of 5,400 lbs. on the left front tire, 5,175 lbs. on the right front tire, 8,500 lbs. on the left rear duals, and 9,200 lbs. on the right rear duals. For control of the RV, it is critical that the tire pressures be the same across an axle. Therefore, we must "overinflate" the right front tire and the left rear duals. Checking the load/inflation table below shows that a cold tire pressure of 95 psi will support 5,510 lbs. on a single front tire.

To determine the pressure for the rear duals, again take the heaviest position, in this instance the right rear weighs 9,200 lbs. The load/inflation table below shows that a cold pressure of 85 psi will support 9,380 lbs. on 2 dual tires. It is important to note that the cold inflation pressure for the tire must never exceed the maximum inflation rating that is stamped on the wheel.

REMEMBER: For control of the RV, it is critical that the tire pressures are the same on both sides of an axle.

Please note that the standard MICHELIN load/inflation charts have been altered for RV usage only.

S = 1 tire on 1 side of single axle **Single Axle**	[---------]
D = 2 tires on 1 side of dual axle **Dual Axle**	[[---------]]
For Tag axle, use applicable Single or Dual chart	

This chart is for RV wheel end use only.

275/80R22.5 LRG

PSI		70	75	80	85	90	95	100	105	110	MAXIMUM LOAD AND PRESSURE ON SIDEWALL	
kPa		480	520	550	590	620	660	690	720	760		
LBS	SINGLE	4500	4725	4940	5155	5370	5510	5780	5980	6175	S	6175 LBS at 110 PSI
	DUAL	8190	8600	9080	9380	9770	10140	10520	10880	11350	D	5675 LBS at 110 PSI
KG	SINGLE	2040	2140	2240	2340	2440	2500	2620	2710	2800	S	2800 KG at 760 kPa
	DUAL	3720	3900	4120	4260	4440	4600	4780	4940	5150	D	2575 KG at 760 kPa

USING BLOCKS TO LEVEL MOTORHOMES AND RVS EQUIPPED WITH RADIAL TIRES

When using blocks to level motorhomes or RVs, extreme caution must be taken to make sure the tires are fully supported. The weight on the tire should be evenly distributed on the block. And in the case of duals, it should be evenly distributed on blocks for both tires. If not, the sidewall cables can become fatigued and damaged, resulting in a sidewall rupture and a complete, sudden loss of pressure.

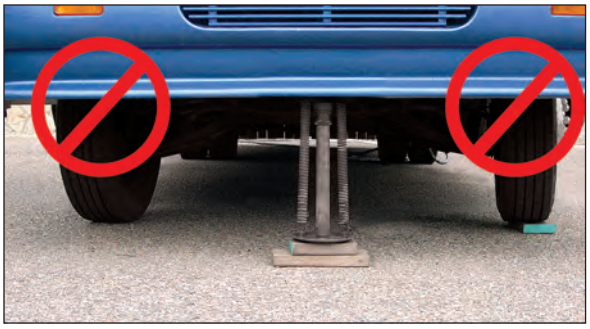
Note in the correct method, the blocks are wider than the tread and longer than the tire's footprint. This provides maximum support to the tires and assures that the load is evenly distributed.

Correct
Evenly supporting the full load.



Incorrect
One tire or only a portion of one tire is supporting the full load.





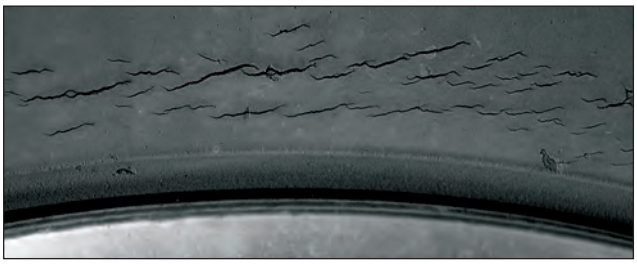
MAINTAINING MICHELIN® RV TIRES

AGING, WEATHER CHECKING, AND OZONE CRACKING

During the pre-trip inspection, be sure to check the tires for signs of aging, weather checking, and/or ozone cracking — these show up as tiny cracks in the rubber surface on the sidewall of the tire. If the cracks are less than 1/32" deep, the tire is fine to run. Between 1/32" and 2/32",the tire is suspect and should be examined by the MICHELIN dealer. If the cracks are any deeper than 2/32",the tire should be replaced immediately.

Here are a few tips to help you protect the tires from these common damage conditions:

1) Keep the tires properly inflated.
2) Keep the tires clean.
3) Avoid prolonged exposure to heat, cold, or moisture.
4) Avoid prolonged exposure to ultraviolet rays.
5) Cover the tires when the vehicle is not in use.
6) Do not park near electric generators or transformers.
7) Do not store vehicle in an area where welding is being done or in a garage that has mercury vapor lamps.



LONG TERM STORAGE OF RV TIRES

Unless the RV owner is a full-time RV-er, the vehicle probably spends some time in long-term storage. But what the RV owner probably didn't know is that rubber tires age when not being used. So, if the owner must store the RV, a cool, dry, sealed garage is the best bet. Also, some storage surfaces can cause tires to age faster. That's why Michelin recommends placing a barrier (cardboard, plastic or plywood) between the tire and the storage surface.

Here are some other steps the RV owner can take to help reduce the aging effects from long-term storage:

1) Thoroughly clean tires with soap and water before placing into storage.
2) Cover tires to block direct sunlight and ultraviolet rays.
3) Store out of a high ozone area.

Note: When a vehicle is stored, tires should be inflated to the inflation pressure indicated on the sidewall.

Before removing the vehicle from long-term storage, thoroughly inspect each tire – this includes sidewalls, tread area, and pressure. If the tires have lost pressure, be sure to inflate them to the correct pressure before driving.

PROPER CLEANING OF RV TIRES

Like the rest of the RV, it pays to keep the MICHELIN® tires clean. Road oil will cause deterioration of the rubber, and dirt buildup will hold the contaminants next to the tire.

As with the cleaning of any rubber product, proper cleaning methods must be used to obtain the maximum years of service from the tires. A soft brush and the normal mild soap that you would use to clean the RV may be used. If you use a dressing product to "protect" the tires from aging, use extra care and caution. Tire dressings that contain petroleum products, alcohol, or silicones will cause deterioration or cracking and accelerate the aging process.

In many cases, it is not the dressing itself that can be a problem, but rather the chemical reaction that the product can have with the antioxidant in the tire. Heat can add to the negative reaction. When these same dressing products are used on a passenger car tire that is replaced every three to four years, it is rare to see a major problem. However, in most cases, RV tires may last much longer due to limited annual mileage, and the chemical reactions have much longer to take place.

TIRE REPAIR

Even the best drivers can drive over a nail, and the best tires can pick up that nail or screw and go flat. If you pick up an object that causes a flat with a MICHELIN® RV tire, the repair must be made to the inside of the tire to be repaired properly. To do this, the tire needs to be demounted and inspected on the inside of the casing for any other damage that the object may have caused. See the MICHELIN® truck tire dealer for the proper repair and damage inspection.

TIRE INSPECTION

The MICHELIN® RV tires should be inspected thoroughly at least once a year, and any time the owner drives in rough or rocky terrain, or when the owner is having their RV serviced. This inspection should include both sidewalls, the tread area, and the valves, caps, and any valve extensions. Inspect for nails, cuts, bulges, aging, or fatigue cracks and weathering or ozone cracking. Also, check between the duals for objects lodged between them. See the MICHELIN® dealer at once if anything unusual is observed.

On a regular basis, rub the palm of your hand across the face of the tread on your front tires to feel for any feathered wear from "toe" alignment problems. **NOTE:** Be careful since severe wear can expose steel belt edges that are very sharp. A "toe" misalignment problem can be caused by impact with a "chuck" hole in the road. Bad "toe" wear can be hard to find visually, but can be felt very quickly with the hand. This type of alignment problem can wear rubber off the tread of the tires in just a few hundred miles.

COMMON TIRE DAMAGES

No tire, regardless of its quality, is indestructible. Certain conditions of use and abuse can stress a tire beyond reasonable operating limits, causing it to come out of service even when considerable tread remains. Such conditions are clearly indicated by the damage they leave on the tire itself. Listed below are some common damages and the signs they leave behind. Please understand that this list is by no means exhaustive and is intended only as a general guide.

UNDERINFLATION

This condition is often referred to as a "run-flat" tire. It is caused by operating a tire at very low or zero pressure. When a tire is run at normal highway speeds, underinflated, it flexes too much and builds up heat. This heat damages the inner liner, casing, and outer sidewall of the tire. If not remedied quickly, the tire will be irreparably damaged.

In extreme cases, the sidewall of the tire is destroyed, from the excessive heat and the weight of the vehicle crushing/cutting the tire against the wheel as it rolls on the uninflated sidewall. According to guidelines put out by the Rubber Manufacturers Association (RMA), any tire that has been run at less than 80% of normal recommended pressure for the load it is carrying should be inspected for possible damage.

When one tire in a dual configuration comes out of service due to under-inflation/run-flat damage, the other tire in the dual configuration should be inspected immediately. If the unserviceable tire was underinflated, that means the serviceable tire was carrying more and more of the load for that wheel position. Consequently, it too may have suffered some casing damage.



Underinflation

FATIGUE RUPTURE

This type of damage is sometimes called a "zipper rip" because of the zipper-like effect it creates in the steel casing cords of the damaged tire. When a casing cord is damaged or repeatedly and excessively bent due to over-load and/or underinflation, it will eventually break and subject the cords on either side to even more stress. When enough strength has been lost due to additional cord breakage, a rupture occurs and can progress rapidly along the path of least resistance in the upper sidewall. This can happen hours, days, or even months after the initial damage event when all evidence or memory of the initial damage or overload/underinflation is gone.

Casing cords in the MICHELIN® truck tires used on motorhomes are very strong twisted steel cables. Extreme over-deflection of a tire, that can occur during improper blocking of tires or high energy impacts, may weaken the structure of the cable so as to make it less tolerant of the repeated bending stress encountered in normal use. If in addition, the integrity of the steel cords is degraded by corrosion from moisture reaching the cords through cuts or tears in the rubber, their tolerance of these conditions will be even further reduced. This corrosion may result from mounting damage, foreign objects left inside the tire, road hazards, tire mishandling, or even improper repair of a nail hole.



Fatigue Rupture or "Zipper"

DUAL KISSING

While somewhat romantic in name only, this type of damage refers to what happens when two tires in dual configuration make contact with each other while in operation. The heat generated by the friction between the two tires severely weakens the casing material of the dual tires. This is easily seen on the sidewalls of the tires where the duals came in contact. The condition may be caused by several factors:

- improper mounting
- incorrect wheel width or offset
- underinflation
- "casing growth"

In this last case, the fabric casing cords of the tire actually stretch and expand, causing the tire to touch or kiss, under load at the contact patch.

TIRE WEAR, BALANCE, AND WHEEL ALIGNMENT

All tires mounted on RVs should wear in a smooth, even wear pattern when the tires are maintained with the correct pressure for the load on the tire. If tires begin to show an irregular wear pattern, and the vehicle alignment is correct, sometimes just rotating the tires to change direction of rotation and wheel position will allow the tires to wear evenly.

Significant tire and wheel assembly imbalance may cause steering difficulties, a bumpy ride, and worn spots on your tires. It is recommended that tire and wheel assemblies be inspected and balanced if one of these conditions exists.

Check with the motorhome chassis manufacturer for the correct alignment specifications. Michelin recommends, for optimized radial tire life and performance, that the "toe-in" setting should be as close as is practical to zero, within the motorhome manufacturer's specifications. The caster should be set to the maximum positive or minimum negative setting within the tolerances specified by the manufacturer.

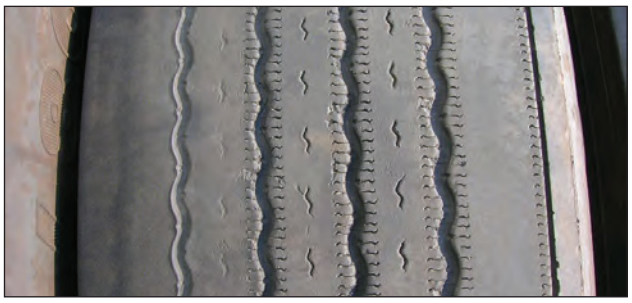
Toe Wear

A feathered wear pattern on the front tires typically indicates misalignment (toe-in or toe-out). Sometimes a radial tire will not have this wear pattern unless the toe condition is severe. Instead of the feathered edge wear, the tire will be worn on the inside or outside shoulder, which could be confused with camber wear.

On a three-axle RV, a skewed rear axle and tag could cause feathered edge wear on one shoulder of one front tire and feathered edge on the opposite shoulder of the other front tire. In order to correctly diagnose a tire wear condition, the motorhome should have the alignment checked on all wheel positions.



Toe Wear



Toe Wear

Camber Wear

Also known as edge wear, camber wear shows up on the inside or outside shoulders of the tread. Wear on the inside edge of both tires may be due to negative camber or toe-out, a misalignment. If only one tire shows edge wear, check for worn kingpin bushings, bent or worn steering components, or excessive positive camber. For solid beam axles, excessive camber can result from axle over-load.



Camber Wear



Camber Wear

Tire Rotation

If correct pressure and proper alignment are both continually maintained, tire rotation may never be needed. However, in other cases, tire rotation may be needed to help even out wear patterns caused by alignment, underinflation, or free-rolling wear problems. Follow the motorhome manufacturer's rotation service recommendations. There are no restrictions as to the method of rotation with the MICHELIN® RV tires; however, Michelin recommends including the spare tire in the rotation pattern and changing the direction of rotation. Tires can be rotated front to rear and side to side. If using directional tires, ensure tires are mounted to rotate in proper direction as it may contribute to premature wear.

VIBRATION DIAGNOSIS

VIBRATION COMPLAINT

When a motorhome owner comes in with a vibration complaint, contact the appropriate chassis and motorhome manufacturers to establish an incident report and get possible motor-home warranty handling instructions. The following procedure should take care of most complaints.

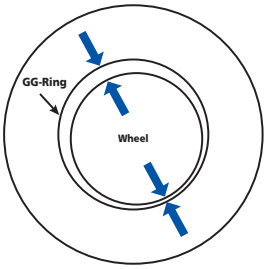
1. Driver interview — this should include the following:
   – has this vehicle been worked on by the chassis manufacturer or MICHELIN® dealer for this complaint?
   – type of complaint
   – driving and road conditions when the vibration occurs - mph/rpm acceleration/deceleration
   – when in the life of the vehicle did it begin?
   – where does the vibration seem to be coming from? Front or rear?
   – recent maintenance or modifications to the vehicle
2. Vehicle test drive - ride in the vehicle and have the owner demonstrate the complaint to you to verify that there is in fact a problem.
   Include the following observations:
   – speed at onset of vibration and the speed range
   – does the vibration phase in and out, or is it constant?
   – sensitivity to road surface? Smooth roads? Rough roads? Both?
   – effects of acceleration/deceleration/constant speed
   – is vibration felt through the seat? Floor? Steering wheel? Other?
   – is this a ride quality or a drive train vibration complaint?
3. Complaint history
   – check all motorhome warranty records, etc., to determine past history of the same or similar complaints on this vehicle
   – have there been any changes or modifications to the chassis since manufacturing?
   – has any prior effort been made to diagnose or correct the complaint? By whom?

VIBRATION DIAGNOSIS

If the vibration seems to be driveline related and from the wheel ends, then perform the following:

Tire and wheel assembly inspection

1. Jack up the front of the vehicle and spin each assembly, observing the wear conditions of each tire and concentricity of the tire on wheel mounting. If the variation in the distance between the line-up (“gg”) ring and the wheel flange exceeds 1/16",have the assembly broken down, relubed, and remounted (see diagram).



2. Measure and record the radial runout on the vehicle of each assembly with tire runout gauge. Mark the highest point of the assembly. Rotate each assembly until the high spot is at the 12:00 position (without allowing the assembly to turn). Loosen all lug nuts and re-torque in the proper sequence. Re-measure and record the radial runout of the assembly.
   If either front assembly still exceeds 0.040",measure the rear assemblies and put the two assemblies with the least runout on the steer axle.
3. Repeat the vehicle test drive. If the vibration still exists, contact the appropriate chassis manufacturer.

SELECTING REPLACEMENT TIRES FOR THE RV

One of the most important RV equipment purchases that the RV owner will make will be the replacement tires. If they obtained good service with their first set of tires, chances are that they were matched well for the RV’s weight needs and the RV owner type and area of driving.

Should the RV owner choose to replace their tires with another size, be very careful with this selection. There are some basic areas of concern, such as the load rating of the new tire and the overall diameter of the new tire for vehicle clearance, speedometer reading, and wheel width.

There is also the matching of the tires to the dual wheel offset for the dual spacing clearance and the load rating of the wheel. For example: buying a tire with a higher load rating that might require 105 psi would be inappropriate if the RV wheel is limited to 80 psi. (Be sure that the wheel width is compatible with the new tire size; doing otherwise is dangerous.) Consult the vehicle manufacturer for wheel specifications.

If the RV owners have already been driving on MICHELIN® RV tires, they are aware of some of Michelin’s extra benefits, such as the great wet and dry traction and outstanding handling. Most RV owners who drive on MICHELIN® tires for the first time comment on the smooth, quiet ride.

MICHELIN® RV TIRE REFERENCE CHART

SIZE	Load Range	Tread	Catalog Number	Tread Depth	Max. Load and Pressure Single				Max. Load and Pressure Dual			
				32nds	lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
LT215/85R16	E	XPS RIB	39510	15	2680	80	1215	550	2470	80	1120	550
LT225/75R16	E	XPS RIB	08404	14	2680	80	1215	550	2470	80	1120	550
LT235/85R16	E	XPS RIB	13080	15	3042	80	1380	550	2778	80	1260	550
LT245/75R16	E	XPS RIB	26848	15	3042	80	1380	550	2778	80	1260	550
10R17.5	G	XZA	05008	16	4805	115	2180	790	4540	115	2060	790
225/70R19.5	F	XRV	58916	13	3640	95	1650	660	3415	95	1550	660
	F	XZE	81473	17	3640	95	1650	660	3415	95	1550	660
	G	XZE	91043	17	3970	110	1800	760	3750	110	1700	760
245/70R19.5	F	XRV	67140	14	4080	95	1850	660	3860	95	1750	660
	H	XZE	75997	18	4940	120	2240	830	4675	120	2120	830
9R22.5	F	XZE	75473	18	4540	105	2060	720	4300	105	1950	720
10R22.5	F	XZE	79883	21	5205	100	2360	690	4940	100	2240	690
	G	XZE	99141	21	5675	115	2575	790	5355	115	2430	790
11R22.5	G	XZA3+ EVERTREAD	25041	19	6175	105	2800	720	5840	105	2650	720
	G	XZE2	78390	22	6175	105	2800	720	5840	105	2650	720
	H	XZA3+ EVERTREAD	38479	19	6610	120	3000	830	6005	120	2725	830
	H	XZE2	67042	22	6610	120	3000	830	6005	120	2725	830
12R22.5	H	XZE ❀	85335	22	7390	120	3350	830	6780	120	3075	830
235/80R22.5	G	XRV	87511	16	4675	110	2120	760	4410	110	2000	760
	G	XZE	68749	19	4675	110	2120	760	4410	110	2000	760
255/70R22.5	H	XZE ❀	61737	18	5510	120	2500	830	5070	120	2300	830
255/80R22.5	G	XRV	59634	16	5205	110	2360	760	4805	110	2180	760
	G	XZE	94390	20	5205	110	2360	760	4805	110	2180	760
275/70R22.5	J	XZA2 ENERGY	90059	18	6940	130	3150	900	6395	120	2900	830
	J	XZE2+	78395	19	6940	130	3150	900	6395	120	2900	830
275/80R22.5	G	XZA3+ EVERTREAD	26413	19	6175	110	2800	760	5675	110	2575	760
	G	XZE2	55895	22	6175	110	2800	760	5675	110	2575	760
	H	XZA3+ EVERTREAD	39174	19	7160	120	3250	830	6610	120	3000	830
	H	XZE	01637	22	7160	120	3250	830	6610	120	3000	830
295/60R22.5	J	XZA2 ENERGY	33215	16	7390	130	3550	900	6780	130	3075	900
295/80R22.5	H	XZA2 ENERGY	76807	16	7830	120	3550	830	6940	120	3150	830
	H	XZE2+	81993	20	7830	120	3550	830	6940	120	3150	830
305/70R22.5	L	XRV	93499	16	7830	120	3550	830	6940	120	3150	830
315/80R22.5	L	XZA1	47056	18	9090	130	4125	900	8270	130	3750	900
	L	XZA2 ENERGY	76184	17	9090	130	4125	900	8270	130	3750	900
365/70R22.5	L	XZA	71842	19	10500	125	4750	860	—	—	—	—
11R24.5	G	XZA3+ EVERTREAD	27983	19	6610	105	3000	720	6005	105	2725	720
	G	XZE2	91867	22	6610	105	3000	720	6005	105	2725	720
	H	XZE2	88507	22	7160	120	3250	830	6610	120	3000	830
275/80R24.5	G	XZA3+ EVERTREAD	28791	19	6175	110	2800	760	5675	110	2575	760
	G	XZE2	75519	22	6175	110	2800	760	5675	110	2575	760

❀ With chip and cut resistant tread compound.

MICHELIN® XRV®

COACH APPLICATIONS

All-position radial designed specifically for exceptional performance on recreational vehicles and motorhomes

- Wide, "see-through" grooves promote drainage efficiency to help improve traction on wet surfaces
- Multi-siping helps deliver dependable grip and long, even wear
- Enlarged sidewall characters makes load/pressure information easier to read, facilitating proper use and maintenance
- Stable tread with cool running compound engineered to reduce squirm and lower heat for improved handling and durability



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded Radius		Overall Diameter		Overall Width (‡)		Approved Wheels (Measuring wheel listed first.)	Min. Dual Spacing (‡)		Revs Per Mile	Max. Load and Pressure Single				Max. Load and Pressure Dual			
			32nds	mph	in.	mm	in.	mm	in.	mm		in	mm		lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
225/70R19.5 [1]	F	58916	13	75	14.9	379	32.0	813	8.7	222	6.00, 6.75	9.7	246	648	3640	95	1650	660	3415	95	1550	660
245/70R19.5 [1]	F	67140	14	75	15.5	393	33.3	846	9.6	245	6.75, 7.50	10.7	272	625	4080	95	1850	660	3860	95	1750	660
235/80R22.5 [1]	G	87511	16	75	17.4	443	37.1	942	9.2	233	6.75, 7.50	10.3	262	556	4675	110	2120	760	4410	110	2000	760
255/80R22.5 [1]	G	59634	16	75	17.9	456	38.2	972	9.9	251	7.50, 8.25	11.2	284	541	5205	110	2360	760	4805	110	2180	760
305/70R22.5 [2]	L	93499	16	75	18.1	460	39.1	994	12.3	312	9.00, 8.25	13.5	343	531	7830	120	3550	830	6940	120	3150	830

(1, 2) Tread design as indicated above the tire picture.

MICHELIN® XZA®

REGIONAL AND LINE HAUL APPLICATIONS

All-position radial with proven versatility

- Massive shoulders and application specific compound help resist scrub and abrasion, promoting extended tread life
- Zig-zag groove design for true all-position use



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded Radius		Overall Diameter		Overall Width (‡)		Approved Wheels (Measuring wheel listed first.)	Min. Dual Spacing (‡)		Revs Per Mile	Max. Load and Pressure Single				Max. Load and Pressure Dual			
			32nds	mph	in.	mm	in.	mm	in.	mm		in	mm		lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
10R17.5	G	05008	16	65	15.6	397	33.9	861	9.5	241	6.75, 7.50	11.1	282	615	4805	115	2180	790	4540	115	2060	790

Note: Wheel listed first is the measuring wheel.
(*) Exceeding the lawful speed limit is neither recommended nor endorsed.
(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.
MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.
Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

MICHELIN® XPS RIB®

MICHELIN® XPS Rib® tires offer long wear life with steel casing strength and retreadability

- Tread compounds specifically developed for commercial applications help tires last longer so your business dollars go farther
- Added strength and the ability to retread are just two advantages of steel casing — a feature that keeps trucks where they belong: on the job



Size (1)	Load Range	Catalog Number	Tread Depth	Overall Width (1)			Load/ Speed Rating	Overall Diameter		Wheel Width Range (1)	Min. Dual Spacing		Revs Per Mile (at 45 mph)	Max. Tire Load Single				Max. Tire Load Dual			
			32nds	in	mm	wheel		in	mm		in	mm		lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
LT215/85R16	E	39510	15	8.6	218	6.0"	115/112/Q	30.7	780	5.5" - 7.0"	9.9	251	681	2680	80	1215	550	2470	80	1120	550
LT225/75R16	E	08404	14	8.7	221	6.0"	115/112/Q	29.4	747	6.0" - 7.0"	10.2	259	706	2680	80	1215	550	2470	80	1120	550
LT235/85R16	E	13080	15	9.7	246	7.0"	120/116/Q	32.0	813	6.0" - 7.0"	11.0	279	655	3042	80	1380	550	2778	80	1260	550
LT245/75R16	E	26848	14	9.6	244	7.0"	120/116/Q	30.6	777	6.5" - 8.0"	11.3	288	676	3042	80	1380	550	2778	80	1260	550

LIGHT TRUCK TIRE WARRANTY

Standard Limited Warranty
What's Covered

All MICHELIN® Light Truck Tires have a Standard Manufacturer's Limited Warranty, which covers defects in workmanship and materials for the life of the original usable tread, or for 6 years from date of purchase, whichever occurs first. See Tire Dealer for details. The owner's manual/limited warranty booklet also includes an additional limited warranty for tread life or mileage.

NOTES AND WARNING

Note: All comparisons are between MICHELIN® tires within this category.
(1) Sizes listed do not include P-metric and floatation dimensions. For full range of products refer to "MICHELIN® Data Book" No. MDL41080.
(2) Exceeding the lawful speed limit is neither recommended nor endorsed.
(3) Tire section widths and overall widths will change 0.1 inch (2.5 mm) for each 1⁄4 inch change in rim width. Minimum dual spacing should be adjusted accordingly.
(4) Range of approved rim widths. For specific rim profiles and measuring rim, refer to "MICHELIN® Data Book" No. MDL41080.

DANGER: Never mount a 16" diameter tire on a 16.5" rim.

WARNING: Serious or fatal injury may result from tire failure due to underinflation/overinflation/overloading. To ensure correct pressure and vehicle load, refer to vehicle owner's manual or tire information placard in the vehicle. Serious injury or death may result from explosion of tire/rim assembly due to improper mounting. Only tire professionals should mount tires, and they should never inflate beyond 40 psi to seat the beads. See Tire Dealer for proper mounting. Before mixing types of tires in any configuration on any vehicle, be sure to check the vehicle owner's manual for recommendations.

MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligation.

Please consult rim manufacturer's load and inflation limits. Never exceed rim manufacturer's limits without permission of component manufacturer.

Note: Wheel listed first is the measuring wheel.
(*) Exceeding the lawful speed limit is neither recommended nor endorsed.
(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.
MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.
Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

MICHELIN® XZA3®+ EVERTREAD

LINE HAUL APPLICATIONS

Next generation ultra-fuel-efficient(2) radial that delivers our longest original tread life in long haul steer service.

- Even wear to the end of tread life due to directional miniature sipes in the groove walls (directional to half life)
- Get more mileage without compromising fuel efficiency(2) with the patent-pending Dual Compound Tread
- Maximum retreadability backed up with a 3-Retread Manufacturing Limited Casing Warranty: 3 retreads or 700,000 miles or 7 years(3) for XZA3®+ EVERTREAD™ when retreaded by an authorized Michelin Retread Technologies (MRT) Dealer only
- Approved for use on EPA SmartWay℠ certified equipment and meets California's CARB requirements
- Optimum handling and responsiveness due to a wide, flat tread
- Excellent casing protection from bruising and penetrations with a full-width, elastic protector ply

Directional tread



7 Year **7 YEAR** 700,000-MILE 3-RETREAD LIMITED WARRANTY

Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded Radius		Overall Diameter		Overall Width (‡)		Approved Wheels (Measuring wheel listed first.)	Min. Dual Spacing (‡)		Revs Per Mile	Max. Load and Pressure Single				Max. Load and Pressure Dual			
			32nds	mph	in.	mm	in.	mm	in.	mm		in	mm		lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5 (1)	G	25041	19	75	19.3	489	41.3	1048	11.1	282	8.25, 7.50	12.5	318	502	6175	105	2800	720	5840	105	2650	720
11R22.5 (1)	H	38479	19	75	19.1	485	41.3	1049	11.2	284	8.25, 7.50	12.5	318	503	6610	120	3000	830	6005	120	2725	830
275/80R22.5 (1)	G	26413	19	75	18.6	473	40.1	1018	10.9	277	8.25, 7.50	12.2	311	518	6175	110	2800	760	5675	110	2575	760
275/80R22.5 (1)	H	39174	19	75	18.7	474	40.1	1018	10.9	278	8.25, 7.50	12.2	311	518	7160	120	3250	830	6610	120	3000	830
11R24.5 (1)	G	27983	19	75	20.2	513	43.3	1099	11.1	282	8.25, 7.50	12.5	318	479	6610	105	3000	720	6005	105	2725	720
275/80R24.5 (1)	G	28791	19	75	19.3	491	41.3	1048	10.7	272	8.25, 7.50	12.2	311	501	6175	110	2800	760	5675	110	2575	760

(1) Directional tread design.
(2) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.
(3) 7/7/3 Manufacturer's Limited Casing Warranty: 7 Year or 700,000 Mile or 3-Retread Limited Warranty for MICHELIN® XZA3®+ EVERTREAD™ tire when retreaded by an authorized Michelin Retread Technologies (MRT) Dealer only. See limited warranty for details.

MICHELIN® XZA®

LINE HAUL APPLICATIONS

Fuel-efficient(1), all-position radial designed for long life in highway steer axle service

- Advanced Technology™ compounding helps reduce rolling resistance promoting low fuel consumption(1) in balance with mileage, durability and casing endurance
- Over 7,000 trapezoidal micro sipes on groove edges help break water surface tension to promote traction on wet and slippery surfaces
- Original shoulder groove design offers enhanced resistance to uneven shoulder wear



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded Radius		Overall Diameter		Overall Width (‡)		Approved Wheel	Revs Per Mile	Max. Load and Pressure Single			
			32nds	mph	in.	mm	in.	mm	in.	mm			lbs.	psi	kg.	kPa
365/70R22.5	L	71842	19	75	19.6	497	42.5	1080	14.3	363	10.50	490	10500	125	4750	860

(1) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.

Note: Wheel listed first is the measuring wheel.
(*) Exceeding the lawful speed limit is neither recommended nor endorsed.
(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.
MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.
Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

MICHELIN® XZA2® ENERGY

LINE HAUL APPLICATIONS

Fuel-efficient[3], all-position radial designed for long life in highway steer axle service[6]

- Unique intermediate rib design helps combat the onset of irregular wear in highway service
- Exceptional handling and responsiveness through optimized shoulder design
- Traction and lateral control offered by miniature sipes and variable groove angles



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded Radius		Overall Diameter		Overall Width (‡)		Approved Wheels (Measuring wheel listed first.)	Min. Dual Spacing (‡)		Revs Per Mile	Max. Load and Pressure Single				Max. Load and Pressure Dual			
			32nds	mph	in.	mm	in.	mm	in.	mm		in	mm		lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
275/70R22.5 [1]	J	90059	18	75	17.6	448	38.0	966	10.9	277	7.50, 8.25	11.9	303	545	6940	130	3150	900	6395	120	2900	830
295/60R22.5 [2]	J	33215	16	65	16.7	424	36.1	918	11.4	290	9.00 [4]	13.0	329	575	7390	130	3350	900	6780	130	3075	900
295/80R22.5 [1]	H	76807	16	75	19.1	486	41.3	1048	11.8	299	9.00, 8.25	13.2	335	503	7830	120	3550	830	6940	120	3150	830
315/80R22.5 [1]	L	76184	17	75	19.5	496	42.3	1074	12.5	318	9.00, 8.25 [5]	13.8	351	492	9090	130	4125	900	8270	130	3750	900

(1, 2) Tread design as indicated above the tire picture.
(3) Fuel savings are estimates based on comparative rolling resistance. Actual on-road savings may vary.
(4) For further instructions on proper usage of the 295/60R22.5, see Page 21.
(5) For use with 8.25 x 22.5 wheels, see Page 20. When mounting the 315/80R22.5 LRL on an 8.25" wheel, do not load or inflate to the maximum load or inflation pressure indicated on the sidewall. The maximum load per tire for the 315/80R22.5 LRL, single mount on an 8.25" wheel, is 8000 lbs at 120 PSI (3630 kg at 830 kPa).
(6) **"No bus shall be operated with regrooved, recapped or retreaded tires on the front wheels." US Code of Federal Regulations: Title 49, Transportation; Part 393.75.**

MICHELIN® XZA®1

LINE HAUL APPLICATIONS

Even-wearing, all-position tire optimized for heavy axle loads in highway and limited regional service[1]

- Miniature sipes in groove walls and variable groove angles help reduce irregular wear and improve overall performance
- Full-width elastic protector ply helps protect the working plies from bruising and penetrations
- Flat crown radius helps enhance wear and treadlife



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded Radius		Overall Diameter		Overall Width (‡)		Approved Wheels (Measuring wheel listed first.)	Min. Dual Spacing (‡)		Revs Per Mile	Max. Load and Pressure Single				Max. Load and Pressure Dual			
			32nds	mph	in.	mm	in.	mm	in.	mm		in	mm		lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
315/80R22.5	L	47056	18	75	19.6	499	42.5	1079	12.5	317	9.00, 8.25 [2]	13.8	351	489	9090	130	4125	900	8270	130	3750	900

(1) **"No bus shall be operated with regrooved, recapped or retreaded tires on the front wheels." US Code of Federal Regulations: Title 49, Transportation; Part 393.75.**
(2) For use with 8.25 x 22.5 wheels, see Page 20. When mounting the 315/80R22.5 LRL on an 8.25" wheel, do not load or inflate to the maximum load or inflation pressure indicated on the sidewall. The maximum load per tire for the 315/80R22.5 LRL, single mount on an 8.25" wheel, is 8000 lbs at 120 PSI (3630 kg at 830 kPa).

Note: Wheel listed first is the measuring wheel.
(*) Exceeding the lawful speed limit is neither recommended nor endorsed.
(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.
MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.
Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

MICHELIN® XZE®2+

REGIONAL AND LINE HAUL APPLICATIONS

All-position radial optimized for steer axles in regional and limited highway service

- Buttressed shoulder helps resist wear in high scrub applications
- Full depth sipes offer enhanced traction throughout the usable tire life
- Full-width protector ply helps protect the working plies from bruises and penetrations
- **European design**



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded Radius		Overall Diameter		Overall Width (‡)		Approved Wheels (Measuring wheel listed first.)	Min. Dual Spacing (‡)		Revs Per Mile	Max. Load and Pressure Single				Max. Load and Pressure Dual			
			32nds	mph	in.	mm	in.	mm	in.	mm		in	mm		lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
275/70R22.5	J	78395	19	75	17.6	448	38.0	966	10.9	276	7.50, 8.25	11.9	303	545	6940	130	3150	900	6395	120	2900	830
295/80R22.5	H	81993	20	75	19.3	489	41.5	1055	11.7	298	8.25, 9.00	12.8	326	500	7830	120	3550	830	6940	120	3150	830

MICHELIN® XZE®2

REGIONAL AND LINE HAUL APPLICATIONS

Exceptional regional, all-position radial with extra-wide, extra-deep tread designed to help deliver our best wear in high scrub applications

- Enhanced application specific compound to promote resistance to aggression and longer tread life
- 6% wider tread for improved wear and handling(1)
- *Matrix*™ Siping technology and micro sipes protect against irregular wear
- Zig-zag grooves and sipes help increase traction in new and worn tire conditions
- **North American design**



Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded Radius		Overall Diameter		Overall Width (‡)		Approved Wheels (Measuring wheel listed first.)	Min. Dual Spacing (‡)		Revs Per Mile	Max. Load and Pressure Single				Max. Load and Pressure Dual			
			32nds	mph	in.	mm	in.	mm	in.	mm		in	mm		lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
11R22.5	G	78390	22	75	19.3	491	41.3	1050	11.2	285	8.25, 7.50	12.5	318	501	6175	105	2800	720	5840	105	2650	720
11R22.5	H	67042	22	75	19.2	488	41.4	1051	11.3	286	8.25, 7.50	12.5	318	501	6610	120	3000	830	6005	120	2725	830
275/80R22.5	G	55895	22	75	18.6	473	40.2	1021	11.1	282	8.25, 7.50	12.2	311	517	6175	110	2800	760	5675	110	2575	760
11R24.5	G	91867	22	75	20.3	516	43.5	1104	11.1	281	8.25, 7.50	12.5	318	476	6610	105	3000	720	6005	105	2725	720
11R24.5	H	88507	22	75	20.3	516	43.5	1104	11.1	281	8.25, 7.50	12.5	318	476	7160	120	3250	830	6610	120	3000	830
275/80R24.5	G	75519	22	75	19.3	490	41.3	1050	10.8	274	8.25, 7.50	12.2	311	501	6175	110	2800	760	5675	110	2575	760

(1) When compared to the MICHELIN® XZE® tire.

Note: Wheel listed first is the measuring wheel.
(*) Exceeding the lawful speed limit is neither recommended nor endorsed.
(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.
MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.
Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

MICHELIN® XZE®

REGIONAL AND LINE HAUL APPLICATIONS

Exceptional all-position radial with extra-wide, extra-deep tread designed to help deliver our best wear in high scrub applications



- Beefy, buttressed shoulders help resist tearing and accelerated wear in high scrub applications
- Extra strong curb guards help protect sidewalls against most impacts and abrasions for long casing life
- Groove bottom protectors help deliver additional defense against stone drilling
- Application specific high scrub compound (chip and cut resistance in LRH versions with ⍟ designation) make the MICHELIN® XZE® tire our longest wearing regional steer tire
- Deep, wide tread and optimized footprint shape help deliver long, even tread wear

Size	Load Range	Catalog Number	Tread Depth	Max. Speed (*)	Loaded Radius		Overall Diameter		Overall Width (‡)		Approved Wheels (Measuring wheel listed first.)	Min. Dual Spacing (‡)		Revs Per Mile	Max. Load and Pressure Single				Max. Load and Pressure Dual			
			32nds	mph	in.	mm	in.	mm	in.	mm		in	mm		lbs.	psi	kg.	kPa	lbs.	psi	kg.	kPa
225/70R19.5	F	81473	17	75	14.9	378	32.2	819	8.9	227	6.00, 6.75	9.7	246	646	3640	95	1650	660	3415	95	1550	660
225/70R19.5	G	91043	17	75	14.9	378	32.2	819	8.9	227	6.00, 6.75	9.7	246	646	3970	110	1800	760	3750	110	1700	760
245/70R19.5	H	75997	18	75	15.6	396	33.6	853	9.7	247	6.75, 7.50	10.7	272	619	4940	120	2240	830	4675	120	2120	830
9R22.5	F	75473	18	75	17.8	452	38.2	970	8.9	226	6.00, 6.75, 7.50	10	254	543	4540	105	2060	720	4300	105	1950	720
10R22.5	F	79883	21	75	18.7	475	40.1	1018	10.2	259	6.75, 7.50, 8.25	11.1	282	517	5205	100	2360	690	4940	100	2240	690
10R22.5	G	99141	21	75	18.7	475	40.1	1018	10.2	259	6.75, 7.50, 8.25	11.1	282	517	5675	115	2575	790	5355	115	2430	790
12R22.5 ⍟	H	85335	22	75	19.8	503	42.6	1082	11.4	290	8.25, 9.00	13.2	335	486	7390	120	3350	830	6780	120	3075	830
235/80R22.5	G	68749	19	75	17.4	443	37.4	949	9.3	236	6.75, 7.50	10.3	262	555	4675	110	2120	760	4410	110	2000	760
255/70R22.5 ⍟	H	61737	18	75	17.2	437	36.7	932	10.2	260	8.25, 7.50	11.6	295	563	5510	120	2500	830	5070	120	2300	830
255/80R22.5	G	94390	20	75	17.9	455	38.5	979	10	254	7.50, 8.25	11.3	287	538	5205	110	2360	760	4805	110	2180	760
275/80R22.5	H	01637	22	75	18.7	475	40.2	1022	11.1	282	8.25, 7.50	12.2	311	516	7160	120	3250	830	6610	120	3000	830

⍟ With chip and cut resistant tread compound.

Note: Wheel listed first is the measuring wheel.
(*) Exceeding the lawful speed limit is neither recommended nor endorsed.
(‡) Overall widths will change 0.1 inch (2.5 mm) for each 1/4 inch change in wheel width. Minimum dual spacing should be adjusted accordingly.
MICHELIN® tires and tubes are subject to a continuous development program. Michelin North America, Inc. reserves the right to change product specifications at any time without notice or obligations.
Please consult wheel manufacturer's load and inflation limits. Never exceed wheel manufacturer's limits without permission of component manufacturer.

MICHELIN INFLATION CHARTS FOR RV USAGE ONLY

For RV use only, Michelin displays tire loads **per axle end** in the load and inflation tables, as we recommend weighing each axle end separately and using the heaviest end weight to determine the axle's cold inflation tire pressure. **For control of your RV, it is critical the tire pressures be the same across an axle, while NEVER exceeding the maximum pressure limit stamped on the wheels.**

To select the proper load and inflation table, locate your tire size in the following pages, then match your tire's sidewall markings to the table with the same sidewall markings. If your tire's sidewall markings do not match any table listed, please contact your Michelin dealer for the applicable load and inflation table.

Industry load and inflation standards are in a constant state of change, and Michelin continually updates its product information to reflect these changes. Printed material may not reflect the latest load and inflation standards.

In the load and inflation tables, SINGLE means an axle with one tire mounted on each end, while DUAL means an axle with two tires mounted on each end. In an RV application, the loads indicated represent the total weight of an axle end. When one axle end weighs more than the other, use the heaviest of the two end weights to determine the unique tire pressure for all tires on the axle. The maximum cold pressure for each axle may vary, depending on their weights. These tables are applicable for all RV axles, whether or not they are power-driven.

Wheel Diameter 16"	PSI	35	40	45	50	55	60	65	70	75	80	MAXIMUM LOAD AND PRESSURE ON SIDEWALL	
	kPa	250	280	310	350	380	410	450	480	520	550		
LT215/85R16 LRE XPS RIB	LBS SINGLE	1495	1640	1785	1940	2050	2180	2335	2430	2550	2680	S	2680 LBS AT 80 PSI
	LBS DUAL	2720	2980	3250	3530	3730	3970	4300	4420	4640	4940	D	2470 LBS AT 80 PSI
	KG SINGLE	695	745	810	880	930	990	1060	1100	1155	1215	S	1215 KG AT 550 kPa
	KG DUAL	1260	1350	1475	1600	1690	1800	1950	2005	2105	2240	D	1120 KG AT 550 kPa
LT225/75R16 LRE XPS RIB	LBS SINGLE	1500	1650	1790	1940	2060	2190	2335	2440	2560	2680	S	2680 LBS AT 80 PSI
	LBS DUAL	2730	3000	3260	3530	3750	3990	4300	4440	4660	4940	D	2470 LBS AT 80 PSI
	KG SINGLE	700	750	813	880	935	995	1060	1108	1160	1215	S	1215 KG AT 550 kPa
	KG DUAL	1270	1360	1480	1600	1700	1810	1950	2015	2115	2240	D	1120 KG AT 550 kPa
LT235/85R16 LRE XPS RIB	LBS SINGLE	1700	1870	2030	2205	2335	2485	2625	2765	2905	3042	S	3042 LBS AT 80 PSI
	LBS DUAL	3090	3400	3690	4010	4250	4520	4760	5030	5290	5556	D	2778 LBS AT 80 PSI
	KG SINGLE	790	850	920	1000	1060	1130	1190	1255	1320	1380	S	1380 KG AT 550 kPa
	KG DUAL	1440	1545	1675	1820	1930	2050	2160	2280	2400	2520	D	1260 KG AT 550 kPa
LT245/75R16 LRE XPS RIB	LBS SINGLE	1700	1865	2030	2205	2335	2480	2625	2765	2900	3042	S	3042 LBS AT 80 PSI
	LBS DUAL	3090	3390	3690	4010	4250	4510	4763	5030	5280	5556	D	2778 LBS AT 80 PSI
	KG SINGLE	790	845	920	1000	1060	1125	1190	1255	1315	1380	S	1380 KG AT 550 kPa
	KG DUAL	1440	1540	1675	1820	1930	2045	2160	2280	2395	2520	D	1260 KG AT 550 kPa

Wheel Diameter 17.5"	PSI	85	90	95	100	105	110	115	120	125	MAXIMUM LOAD AND PRESSURE ON SIDEWALL	
	kPa	590	620	660	690	720	760	790	830	860		
10R17.5 LRG XZA	LBS SINGLE	3860	4005	4150	4300	4470	4640	4805			S	4805 LBS AT 115 PSI
	LBS DUAL	7280	7570	7860	8160	8470	8780	9080			D	4540 LBS AT 115 PSI
	KG SINGLE	1750	1820	1890	1950	2030	2110	2180			S	2180 KG AT 790 kPa
	KG DUAL	3300	3440	3580	3700	3840	3980	4120			D	2060 KG AT 790 kPa

Wheel Diameter 19.5"	PSI	65	70	75	80	85	90	95	100	105	110	115	120	MAXIMUM LOAD AND PRESSURE ON SIDEWALL	
	kPa	450	480	520	550	590	620	660	690	720	760	790	830		
225/70R19.5 LRF XRV, XZE	LBS SINGLE	2755	2895	3040	3195	3315	3450	3640						S	3640 LBS AT 95 PSI
	LBS DUAL	5200	5440	5720	6000	6230	6490	6830						D	3415 LBS AT 95 PSI
	KG SINGLE	1250	1310	1380	1450	1500	1570	1650						S	1650 KG AT 660 kPa
	KG DUAL	2360	2460	2600	2720	2820	2940	3100						D	1550 KG AT 660 kPa
225/70R19.5 LRG XZE	LBS SINGLE	2755	2895	3040	3195	3315	3450	3640	3715	3845	3970			S	3970 LBS AT 110 PSI
	LBS DUAL	5200	5440	5720	6000	6230	6490	6830	6980	7230	7500			D	3750 LBS AT 110 PSI
	KG SINGLE	1250	1310	1380	1450	1500	1570	1650	1690	1740	1800			S	1800 KG AT 760 kPa
	KG DUAL	2360	2460	2600	2720	2820	2940	3100	3160	3280	3400			D	1700 KG AT 760 kPa

Wheel Diameter 19.5"	PSI	65	70	75	80	85	90	95	100	105	110	115	120	MAXIMUM LOAD AND PRESSURE ON SIDEWALL	
	kPa	450	480	520	550	590	620	660	690	720	760	790	830		
245/70R19.5 LRF XRV	LBS SINGLE				3640	3740	3890	4080						S	4080 LBS AT 95 PSI
	LBS DUAL				6830	7030	7310	7720						D	3860 LBS AT 95 PSI
	KG SINGLE				1650	1700	1770	1850						S	1850 LBS AT 660 kPa
	KG DUAL				3100	3180	3320	3500						D	1750 LBS AT 660 kPa
245/70R19.5 LRH XZE	LBS SINGLE			3390	3570	3750	3925	4100	4270	4440	4610	4775	4940	S	4940 LBS AT 120 PSI
	LBS DUAL			6420	6760	7100	7430	7760	8080	8400	8720	9040	9350	D	4675 LBS AT 120 PSI
	KG SINGLE			1540	1620	1700	1780	1860	1935	2015	2090	2165	2240	S	2240 KG AT 830 kPa
	KG DUAL			2910	3065	3220	3370	3520	3665	3810	3955	4100	4240	D	2120 KG AT 830 kPa

Wheel Diameter 22.5"	PSI	70	75	80	85	90	95	100	105	110	115	120	125	130	MAXIMUM LOAD AND PRESSURE ON SIDEWALL	
	kPa	480	520	550	590	620	660	690	720	760	790	830	850	900		
9R22.5 LRF XZE	LBS SINGLE	3370	3560	3730	3890	4080	4235	4390	4540						S	4540 LBS AT 105 PSI
	LBS DUAL	6540	6820	7100	7380	7720	8010	8300	8600						D	4300 LBS AT 105 PSI
	KG SINGLE	1530	1615	1690	1760	1850	1920	1990	2060						S	2060 KG AT 720 kPa
	KG DUAL	2960	3100	3220	3340	3500	3640	3780	3900						D	1950 KG AT 720 kPa
10R22.5 LRF XZE	LBS SINGLE	4080	4280	4480	4675	4850	5025	5205							S	5205 LBS AT 100 PSI
	LBS DUAL	7720	8090	8460	8820	9170	9520	9880							D	4940 LBS AT 100 PSI
	KG SINGLE	1850	1940	2030	2120	2200	2280	2360							S	2360 KG AT 690 kPa
	KG DUAL	3500	3660	3820	4000	4160	4320	4480							D	2240 KG AT 690 kPa
10R22.5 LRG XZE	LBS SINGLE	4080	4280	4480	4685	4850	5025	5205	5360	5515	5675				S	5675 LBS AT 115 PSI
	LBS DUAL	7720	8090	8460	8820	9170	9520	9880	10150	10420	10710				D	5355 LBS AT 115 PSI
	KG SINGLE	1850	1940	22030	2120	2200	2280	2360	2430	2500	2575				S	2575 KG AT 790 kPa
	KG DUAL	3500	3660	3820	4000	4160	4320	4480	4600	4720	4860				D	2430 KG AT 790 kPa
11R22.5 LRG XZA3+ EVERTREAD, XZE2	LBS SINGLE	4530	4770	4990	5220	5510	5730	5950	6175						S	6175 LBS AT 105 PSI
	LBS DUAL	8760	9160	9520	9900	10410	10830	11250	11680						D	5840 LBS AT 105 PSI
	KG SINGLE	2050	2160	2260	2370	2500	2600	2700	2800						S	2800 KG AT 720 kPa
	KG DUAL	3980	4160	4320	4500	4720	4920	5120	5300						D	2650 KG AT 720 kPa
11R22.5 LRH XZA3+ EVERTREAD, XZE2	LBS SINGLE		4770	4990	5220	5510	5730	5950	6175	6320	6465	6610			S	6610 LBS AT 120 PSI
	LBS DUAL		9160	9520	9900	10410	10830	11250	11680	11790	11900	12010			D	6005 LBS AT 120 PSI
	KG SINGLE		2160	2260	2370	2500	2600	2700	2800	2870	2940	3000			S	3000 KG AT 830 kPa
	KG DUAL		4160	4320	4500	4720	4920	5120	5300	5360	5420	5450			D	2725 KG AT 830 kPa
12R22.5 LRH XZE	LBS SINGLE		5200	5450	5690	6005	6205	6405	6610	6870	7130	7390			S	7390 LBS AT 120 PSI
	LBS DUAL		9980	10380	10780	11350	11570	11790	12010	12530	13050	13560			D	6780 LBS AT 120 PSI
	KG SINGLE		2360	2470	2580	2725	2820	2910	3000	3120	3240	3350			S	3350 KG AT 830 kPa
	KG DUAL		4520	4700	4880	5150	5260	5360	5450	5680	5920	6150			D	3075 KG AT 830 kPa
235/80R22.5 LRG XRV, XZE	LBS SINGLE	3255	3440	3625	3805	3980	4160	4330	4505	4675					S	4675 LBS AT 110 PSI
	LBS DUAL	6140	6490	6840	7180	7510	7840	8170	8500	8820					D	4410 LBS AT 110 PSI
	KG SINGLE	1475	1560	1645	1725	1805	1885	1965	2045	2120					S	2120 KG AT 760 kPa
	KG DUAL	2785	2945	3105	3255	3405	3555	3705	3855	4000					D	2000 KG AT 760 kPa
255/70R22.5 LRH XZE ⊛	LBS SINGLE			4190	4370	4550	4675	4895	5065	5205	5400	5510			S	5510 LBS AT 120 PSI
	LBS DUAL			7940	8220	8550	8820	8910	9220	9350	9830	10140			D	5070 LBS AT 120 PSI
	KG SINGLE			1900	1980	2060	2120	2220	2300	2360	2450	2500			S	2500 KG AT 830 kPa
	KG DUAL			3600	3720	3880	4000	4040	4180	4240	4460	4600			D	2300 KG AT 830 kPa
255/80R22.5 LRG XRV, XZE	LBS SINGLE	3875	4070	4300	4440	4620	4805	4975	5150	5205					S	5205 LBS AT 110 PSI
	LBS DUAL	7050	7410	7720	8080	8410	8820	9050	9370	9610					D	4805 LBS AT 110 PSI
	KG SINGLE	1760	1850	1950	2010	2100	2180	2260	2340	2360					S	2360 KG AT 760 kPa
	KG DUAL	3200	3360	3500	3660	3820	4000	4100	4260	4360					D	2180 KG AT 760 kPa

⊛ With chip and cut resistant tread compound.
More Wheel Diameter 22.5" continues on the next page.

Wheel Diameter 22.5"	PSI	70	75	80	85	90	95	100	105	110	115	120	125	130	MAXIMUM LOAD AND PRESSURE ON SIDEWALL	
	kPa	480	520	550	590	620	660	690	720	760	790	830	860	900		
275/70R22.5 LRJ **XZA2 ENERGY XZE2+**	LBS SINGLE				4940	5170	5400	5625	5850	6070	6290	6510	6730	6940	S	6940 LBS AT 130 PSI
	LBS DUAL				9710	10160	10610	11050	11490	11930	12360	12790			D	6395 LBS AT 120 PSI
	KG SINGLE				2250	2340	2460	2550	2640	2750	2840	2950	3040	3150	S	3150 KG AT 900 kPa
	KG DUAL				4420	4600	4820	5000	5180	5400	5580	5800			D	2900 KG AT 830 kPa
275/80R22.5 LRG **XZA3+ EVERTREAD, XZE2**	LBS SINGLE	4500	4725	4940	5155	5370	5510	5780	5980	6175					S	6175 LBS AT 110 PSI
	LBS DUAL	8190	8600	9080	9380	9770	10140	10520	10880	11350					D	5675 LBS AT 110 PSI
	KG SINGLE	2040	2140	2240	2340	2440	2500	2620	2710	2800					S	2800 KG AT 760 kPa
	KG DUAL	3720	3900	4120	4260	4440	4600	4780	4940	5150					D	2575 KG AT 760 kPa
275/80R22.5 LRH **XZE, XZA3+ EVERTREAD**	LBS SINGLE		4915	5175	5435	5690	5940	6190	6435	6680	6920	7160			S	7160 LBS AT 120 PSI
	LBS DUAL		9080	9560	10030	10500	10970	11430	11880	12330	12780	13220			D	6610 LBS AT 120 PSI
	KG SINGLE		2230	2345	2465	2580	2695	2810	2920	3030	3140	3250			S	3250 KG AT 830 kPa
	KG DUAL		4120	4335	4550	4765	4975	5185	5390	5595	5795	6000			D	3000 KG AT 830 kPa
295/60R22.5 LRJ **XZA2 ENERGY**	LBS SINGLE				5260	5505	5750	5990	6230	6465	6700	6930	7160	7390	S	7390 LBS AT 130 PSI
	LBS DUAL				9650	10100	10550	10990	11430	11860	12290	12720	13140	13560	D	6780 LBS AT 130 PSI
	KG SINGLE				2385	2495	2610	2715	2825	2930	3040	3145	3230	3350	S	3350 KG AT 900 kPa
	KG DUAL				4375	4580	4785	4985	5185	5380	5575	5770	5940	6150	D	3075 KG AT 900 kPa
295/80R22.5 LRH **XZA2 ENERGY, XZE2+**	LBS SINGLE		5375	5660	5940	6220	6495	6770	7040	7300	7570	7830			S	7830 LBS AT 120 PSI
	LBS DUAL		9530	10030	10530	11030	11510	12000	12470	12950	13420	13880			D	6940 LBS AT 120 PSI
	KG SINGLE		2440	2565	2695	2820	2945	3070	3195	3310	3435	3550			S	3550 KG AT 830 kPa
	KG DUAL		4325	4550	4775	5005	5220	5445	5655	5875	6085	6300			D	3150 KG AT 830 kPa
305/70R22.5 LRL **XRV**	LBS SINGLE		5375	5660	5940	6220	6495	6770	7040	7300	7570	7830			S	7830 LBS AT 120 PSI
	LBS DUAL		9530	10030	10530	11030	11510	12000	12470	12950	13420	13880			D	6940 LBS AT 120 PSI
	KG SINGLE		2440	2550	2700	2810	2960	3060	3170	3310	3410	3550			S	3550 KG AT 830 kPa
	KG DUAL		4340	4540	4800	4980	5240	5440	5620	5880	6060	6300			D	3150 KG AT 830 kPa
315/80R22.5 LRL XZA1, XZA2 ENERGY on 9.00" wheel (design wheel)	LBS SINGLE				6415	6670	6940	7190	7440	7610	7920	8270	8810	9090	S	9090 LBS AT 130 PSI
	LBS DUAL				11680	12140	12790	13090	13540	13880	14420	15220	16020	16540	D	8270 LBS AT 130 PSI
	KG SINGLE				2910	3030	3150	3260	3370	3450	3590	3750	3980	4125	S	4125 KG AT 900 kPa
	KG DUAL				5300	5500	5800	5940	6140	6300	6540	6900	7240	7500	D	3750 KG AT 900 kPa
***315/80R22.5 LRL XZA1, XZA2 ENERGY on 8.25" wheel** (alternate wheel)	LBS SINGLE		5495	5785	6070	6355	6640	6910	7190	7460	7730	8000			S	9090 LBS AT 130 PSI*
	LBS DUAL		10450	11000	11550	12090	12630	13150	13680	14200	14720	15220			D	8270 LBS AT 130 PSI*
	KG SINGLE		2490	2625	2755	2885	3010	3135	3260	3385	3505	3630			S	4125 KG AT 900 kPa*
	KG DUAL		4740	4990	5240	5485	5730	5965	6205	6440	6675	6905			D	3750 KG AT 900 kPa*
365/70R22.5 LRL **XZA**	LBS SINGLE			7350	7710	8070	8430	8780	9130	9480	9820	10200	10500		S	10500 LBS AT 125 PSI
	KG SINGLE			3335	3495	3660	3825	3985	4140	4300	4455	4625	4750		S	4750 KG AT 860 kPa

* When mounting the 315/80R22.5 LRL on an 8.25" wheel, do not load or inflate to the maximum load or inflation pressure indicated on the sidewall. The maximum load per tire for the 315/80R22.5 LRL, single mount on an 8.25" wheel, is 8000 lbs at 120 PSI (3630 kg at 830 kPa).

Wheel Diameter 24.5"	PSI	70	75	80	85	90	95	100	105	110	115	120	MAXIMUM LOAD AND PRESSURE ON SIDEWALL	
	kPa	480	520	550	590	620	660	690	720	760	790	830		
11R24.5 LRG **XZA3+ EVERTREAD, XZE2**	LBS SINGLE	4820	5070	5310	5550	5840	6095	6350	6610				S	6610 LBS AT 105 PSI
	LBS DUAL	9320	9740	10140	10520	11020	11350	11680	12010				D	6005 LBS AT 105 PSI
	KG SINGLE	2190	2300	2410	2520	2650	2770	2890	3000				S	3000 KG AT 720 kPa
	KG DUAL	4220	4420	4600	4780	5000	5160	5320	5450				D	2725 KG AT 720 kPa
11R24.5 LRH **XZE2**	LBS SINGLE		5070	5310	5550	5840	6095	6350	6610	6790	6970	7160	S	7160 LBS AT 120 PSI
	LBS DUAL		9740	10140	10520	11020	11350	11680	12010	12410	12810	13220	D	6610 LBS AT 120 PSI
	KG SINGLE		2300	2410	2520	2650	2770	2890	3000	3080	3160	3250	S	3250 KG AT 830 kPa
	KG DUAL		4420	4600	4780	5000	5160	5320	5450	5640	5820	6000	D	3000 KG AT 830 kPa
275/80R24.5 LRG **XZA3+ EVERTREAD, XZE2**	LBS SINGLE	4545	4770	4940	5210	5420	5675	5835	6040	6175			S	6175 LBS AT 110 PSI
	LBS DUAL	8270	8680	9080	9480	9860	10410	10620	10990	11350			D	5675 LBS AT 110 PSI
	KG SINGLE	2060	2160	2240	2360	2460	2575	2650	2740	2800			S	2800 KG AT 760 kPa
	KG DUAL	3740	3940	4120	4300	4480	4720	4820	4980	5150			D	2575 KG AT 760 kPa

RV FRONT AXLE OVERLOAD

275/70R22.5 LRJ – 7.00" and 8.25" Wheel, Max Speed 75 mph[1,2]

The 275/70R22.5 MICHELIN® XZE®2+ and MICHELIN® XZA2® ENERGY LRJ truck tires have a maximum single tire load of 6,940 lbs at 130 psi with a maximum speed rating of 75 mph[1]. See Load and Inflation table below. Overloading the 275/70R22.5 LRJ tires (or any highway tire) and/or exceeding the speed rating of the tire is dangerous and may lead to tire failure.

7.50" or 8.25" Wheel, Max Speed 75 mph[1,2]	PSI	85	90	95	100	105	110	115	120	125	DESIGN MAXIMUM LOAD AND PRESSURE			
											PER AXLE END		PER TIRE	
	kPa	590	620	660	690	720	760	790	830	860	Single	Dual	Single	Dual
											900	830	900	830
275/70R22.5 LRJ XZA2 ENERGY	LBS SINGLE	4940	5170	5400	5625	5850	6070	6290	6510	6730	6940		6940	
	LBS DUAL	9710	10160	10610	11050	11490	11930	12360	12790			12790		6395
	KG SINGLE	2240	2345	2450	2550	2655	2755	2855	2955	3055	3150		3150	
	KG DUAL	4405	4610	4815	5010	5210	5410	5605	5800			5800		2900

295/60R22.5 LRJ – 9.00" Wheel, Max Speed 65 mph[1]

The recommended alternative fitments are the 295/60R22.5 MICHELIN® XZA2® ENERGY and MICHELIN® XDA2®+ ENERGY LRJ, which are designed to be used on a 9.00 x 22.5" wheel and at a maximum speed of 65 mph[1].

(Note that the maximum load and pressure under these conditions match those indicated on the sidewall.)

9.00" Wheel, Max Speed 65 mph[1,2]	PSI	85	90	95	100	105	110	115	120	125	DESIGN MAXIMUM LOAD AND PRESSURE	
											PER AXLE END	PER TIRE
	kPa	590	620	660	690	720	760	790	830	860	900	900
295/60R22.5 LRJ XZA2 ENERGY	LBS SINGLE	5260	5505	5750	5990	6230	6465	6700	6930	7160	7390	7390
	LBS DUAL	9650	10100	10550	10990	11430	11860	12290	12720	13140	13560	6780
	KG SINGLE	2385	2495	2610	2715	2825	2930	3040	3145	3230	3350	3350
	KG DUAL	4375	4580	4785	4985	5185	5380	5575	5770	5940	6150	3075

295/60R22.5 LRJ – 9.00" Wheel, Max Speed 75 mph[1]

The maximum speed of the 295/60R22.5 MICHELIN® XZA2® ENERGY LRJ and MICHELIN® XDA2®+ ENERGY LRJ on a 9.00 x 22.5" wheel may be increased to 75 mph[1] by applying the following reduced load and pressure table.

(Note that the maximum load under these conditions is less than that indicated on the sidewall.)

9.00" Rim, Max Speed 75 mph[1,2]	PSI	90	95	100	105	110	115	120	125	ADJUSTED MAXIMUM LOAD AND PRESSURE	
										PER AXLE END	PER TIRE
	kPa	620	660	690	720	760	790	830	860	900	900
295/60R22.5 LRJ XZA2 ENERGY	LBS SINGLE	5260	5505	5750	5990	6230	6465	6700	6930	7160	7160
	LBS DUAL	9650	10100	10550	10990	11430	11860	12290	12720	13140	6570
	KG SINGLE	2385	2495	2610	2715	2825	2930	3040	3145	3230	3230
	KG DUAL	4375	4580	4785	4985	5185	5380	5575	5770	5940	2970

295/60R22.5 LRJ – 8.25" Rim, Max Speed 75 mph[1]

In addition to running at 75 mph[1], the 295/60R22.5 MICHELIN® XZA2® ENERGY LRJ and MICHELIN® XDA2®+ ENERGY LRJ may be mounted on an 8.25 x 22.5" wheel by applying the following further reduced load and pressure table.

(Note that the maximum load and pressure under these conditions are less than that indicated on the sidewall.)

8.25" Wheel, Max Speed 75 mph[1,2]	PSI	70	75	80	85	90	95	100	105	110	115	ADJUSTED MAXIMUM LOAD AND PRESSURE	
												PER AXLE END	PER TIRE
	kPa	480	520	550	590	620	660	690	720	760	790	830	830
295/60R22.5 LRJ XZA2 ENERGY	LBS SINGLE	4300	4515	4675	4925	5125	5355	5520	5710	5840	6085	6175	6175
	LBS DUAL	8080	8490	8820	8960	9330	9880	10050	10390	10710	11070	11350	5675
	KG SINGLE	1950	2050	2120	2230	2330	2430	2500	2590	2650	2760	2800	2800
	KG DUAL	3660	3860	4000	4060	4240	4480	4560	4720	4860	5020	5150	2575

(1) Exceeding the legal speed limit is neither recommended nor endorsed.
(2) Matches maximum load and pressure indicated on tire sidewall
Load and inflation industry standards are in a constant state of change. Michelin continually updates its product information to reflect these changes. Therefore, printed material may not reflect the current load and inflation information.
Note: The actual load and inflation pressure used must not exceed the wheel manufacturer's maximum conditions. Never exceed a wheel manufacturer's limits without permission of the component manufacturer.
Single configuration = 2 tires per axle. Dual configuration = 4 tires per axle. Loads are indicated per axle end for RV applications.
Always refer to the MICHELIN® Truck Tire Data Book (MWL40731) and MICHELIN® Truck Tire Service Manual (MWL40732) for proper tire selection, inflation and maintenance. Both manuals can be found at www.michelintruck.com > Tool Box > Reference Materials.

MICHELIN® RV Tires

To learn more please contact your MICHELIN Sales Representative or visit
www.michelintruck.com

To order more books, please call Promotional Fulfillment Center
1-800-859-0665
Monday through Friday, 8 a.m. to 8 p.m. Eastern Time

United States
Michelin North America, Inc.
One Parkway South
Greenville, SC • 29615
1-888-622-2306

Canada
Michelin North America (Canada), Inc.
2500 Daniel Johnson, Suite 500
Laval, Quebec H7T 2P6
1-888-871-4444

Mexico
Industrias Michelin, S.A. de C.V.
Av. 5 de febrero No. 2113-A
Fracc. Industrial Benito Juarez
7 6120, Querétaro, Qro. Mexico
011 52 442 296 1600

An Equal Opportunity Employer

Copyright © 2013 Michelin North America, Inc. All rights reserved.
The Michelin Man is a registered trademark owned by Michelin North America, Inc.

MWL43146 (04/13)



MICHELIN
A better way forward