

Care and maintenance by Dick Lorntson

Owners who pay extra attention to their tire maintenance and protection will be rewarded with a safer and more comfortable ride, but probably will not extend their tire life much beyond the 7-year limit of service set by the tire manufacturers. Recently I had a 9-year-old tire in the shop for a puncture repair. The tire appeared to be in good condition and have no unusual cracking or aging. As the tire was being re-inflated, it exploded at the 60 PSI mark. Upon examination, the tire rubber looked OK but the sidewall steel cords in the area that let loose were full of rust. This confirmed for me and my customer that the tire manufacturer recommendation is a good one to follow.

Tires do much better when they are driven regularly. Unfortunately, this is not how most RV tires are used. Our own RV fits the typical pattern as it sits for long periods of time and then gets a few thousand miles on it and then it sits again for a while. The bending and flexing during regular use of a tire helps the oils in a tire to redistribute throughout the sidewall and face. This in turn reduces premature aging, much like the skin on our bodies. If we sit in the sun for long periods of time and don't move around much, we tend to develop dry and cracked skin, which is the same for your tires.

Keeping your tires out of the direct sunlight is another method of extending their life span. When your RV sits for extended days or weeks, cover the tires with some sort of opaque cover that keeps the sun from shining directly on them. An inexpensive solution is a dark brown or black garbage bag. Manufactured tire covers work well also and they tend to stand up to the elements better. One warning however--we have had customers in the shop requesting that we remove their rear dual wheels and remove the remnants of their tire cover from between the two tires because they forgot to remove the fancy tire covers before driving off. Whatever you use, develop a checklist to use when departing from your campsite and mark these items off when they are removed.

Another easy care tip is to wash your tires often and thoroughly with mild car wash soap and rinse well with water. Some RV owners use a tire dressing liquid. Many of these products will actually remove some of the natural oils from the rubber and cause them to dry out prematurely. If you wipe one of these products on your clean tire and your rag turns brown or black, it is removing a small amount of the rubber from the tire.

If you are going to stay put for a while (several weeks or more), make sure that your tires do not sit in direct contact with dirt, gravel, concrete or asphalt. Place a moisture barrier under your tires to prevent the ground from wicking the oils

out of the rubber tread face. If you have ever parked an RV for an extended period of time on concrete, you may have noticed the tread marks left on the concrete after moving your RV. If you try to sweep the marks away, you usually cannot do it because it is an oily stain left on the concrete, not just dirt or dust. There are a few places that sell "Landing Strips[®]" or plastic barriers for this purpose. If you use these, be sure to add them to your departure check-off list as well.

Make sure that whatever barrier you use--plastic strips, plastic bags, plywood or lumber--that the tires are fully supported while on your barrier. Do not park your tires on anything that is not wide enough to fully support the face of the tire. Doing so will cause damage to the belts inside the tire over time.

If you are going to park your RV for several consecutive months or years, jack the RV up and support the axle weight on blocks or jack stands, preferably inside a building. This will keep the tires up slightly off the ground and prevent flat spots from forming on the tire face. This was more of a problem in the old days of bias ply tires, but it can cause problems to radial tires as well.

Another item on your maintenance checklist should be to regularly check between the rear dual tires for obstructions. If you suspect that the item may have been lodged between the tires for a while, have a tire dealer remove the tires and do a thorough inspection of the tires both inside and out.

If you develop a leak in a tire, have the tire removed, properly inspected and plug patched from the inside if the wound is small enough or in a safe repair area of the tire. A competent tire technician should inspect both the tire bead and the mounting surface for corrosion as this may also cause a slow leak. Sidewall punctures should not be repaired as that area of the tire does too much flexing. Plugging a tire is only a temporary fix to get you safely to a location that can do a proper repair.

Do not use "canned flat repair" products if you can help it. The components in some of these products can cause harm to your tire if used for extended periods of time. Also, please tell the technician who is about to work on the tire that you used a canned flat repair before he dismounts the tire as some of these products are extremely flammable and have occasionally caused explosions when dismounting. If you have driven on a flat or very low tire (more than 20 % under inflated) for an extended period of time, please have it removed and inspected thoroughly to see if there is any internal damage. Tire damage is not always evident from the outside.

The subject of nitrogen in tires has generated much discussion lately. There is a vast array of opinions pertaining to its use in RV tires. Cost and availability for

refilling while on the road are typically the biggest reasons against using nitrogen. Disagreement over the value of nitrogen versus air centers on the argument that the air that we breathe and put in our tires is mostly nitrogen in the first place. If we could bypass the air compressor, the air quality would be similar. Water is a byproduct of compressing air and many service stations or self-serve air stations do not have a drier to remove the water. Water inside a tire will leach into the rubber and cause rust to form on the steel belts and beads and on the inner surface of the wheels. Filling a tire with pure nitrogen introduces no moisture into the tire.

Another pro-nitrogen argument is that a nitrogen atom is physically larger than an oxygen atom so nitrogen has a tendency to leak out less through the pores of the tire or around the tire bead. Nitrogen is a bit more stable at varying outside ambient air temperatures so your tire pressure will be more consistent.

Some publications have stated that nitrogen causes tires to run cooler, but my belief is that the pressures are simply remaining a bit more stable. We install pure nitrogen at our shop when requested and I do run it in all my tires, especially our RV and both of our motorcycles. You still have to check the pressures regularly, but I do not have to add as often.

Next month's article will be on tire wear, causes, how to remedy the potential problems, and at what point does uneven wear cause a tire to need replacing.

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