

Trailer Tire Aging Dangers

by Capt. Bob Cerullo

Eyeballing your boat trailer tires may not be enough to ensure your safety when towing a boat trailer. A recent 20-20 TV program with John Stossel pointed out that there is a lot more to tire safety than the appearance of the tire. The age of the tire could be the reason for a tire failure even if it looks brand-new. Trailer tire danger may be undetectable.

At present there is no expiration date, like that on a bottle of milk, which would warn the user that the tire could be old. It is possible, particularly on odd-sized tires or tires that are not in high demand, for a tire to remain in a tire warehouse for several years. How the tire is stored in the warehouse is also very important.

We have all seen those tire stacks on the asphalt in front of service stations. Stacking tires outdoors on asphalt can damage the tire. Direct sunlight and even strong, reflected light can cause tires to deteriorate. Heat is used to manufacture tires and heat is a tire's worst enemy.



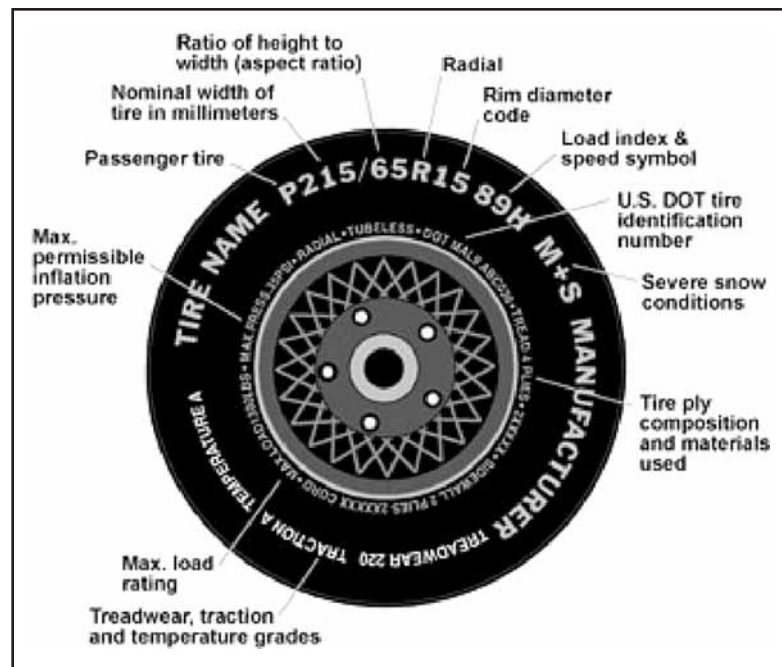
Keep trailer tires, properly inflated, clean and covered. Heat and sunrays will deteriorate your trailer tires to a point where they are unsafe.



a yard or even in an asphalt-covered parking lot. Tires that are used in this way become dangerously deteriorated while still looking like they are in good shape.

I learned of a man who purchased an RV in Florida that had very little mileage on it. The tires looked like new, but the RV had been stored in a lot behind the owner's home. After buying the RV, the new owner attempted to drive it home to Atlanta. On the trip home he blew four tires, one after the other. Anytime a tire blows there is risk of a wreck. Fortunately, the RV owner escaped injury, but he did have some terrifying moments until he replaced all of the tires.

The culprits are heat and the rays of the sun. There are other factors that cause tire failure. Running on an under-inflated tire creates heat that deteriorates the tire. Mismatched tires or tires that are not aligned will run hotter. RV tires run hotter when the RV wheels are misaligned or not balanced. Overloading is another major factor. While tires do



There is a fund of information molded into the sidewall of your tires including the birth date code of the tire next to the letters DOT.

would be approved for speeds up to 189 mph.

As a boat trailer or RV owner, your best bet is to store the trailer in a cool, dry, dark place. If you can't do that, you could block the wheels and take off the tires for storage in a garage. If you are lucky enough to have indoor storage, NHTSA recommends any vehicle in long-term storage be put on blocks and the weight taken off the tires. Covering the tires if you can't remove them is a good way to minimize sunlight damage.

The National Highway Traffic Safety Administration has conducted tests on literally thousands of junkyard tires. They have found the risk of having old tires on your car is minimal because a normally used car would wear out the tires before sunlight and heat could damage them.

On the other hand, tires older than 10 years are thought to be a danger by some safety people. NHTSA and ARM say there is no evidence that there is an epidemic of aging tires and, therefore, do not see how a tire expiration date would do anything more that eventually increase the price of tires.

I have visited a not-very-busy tire dealer who boasted that he had some 20-year-old tires on the shelf. In fact, the tires were stored near the ceiling and close to the skylight...two factors that could cause tire deterioration. Obviously, that dealer is an exception, but there are many low-volume dealers who might sell you a three- or four-year-old tire and not realize the danger. Don't panic, but it would be a good idea to determine the date on which your tires were made. On older tires you might have to look on the inside wall. On newer tires the markings are on the outside wall. Look for the DOT and record the numbers. While you are at it, check the two- or three-digit number that is the load index. It is on most tires, though is not required by law. Make sure the load rating of your tires is capable of bearing the weight of the boat.

You can learn more about tires than you ever dreamed possible at www.safercar.gov. If you learn nothing else, you need to learn that your boat trailer tires are subject to deterioration because they are not used as often as your automobile tires and they could easily be ready to blow while still looking like new. If you replace your six- or ten-year-old trailer tires, make sure you check and understand the birth date. Don't expect to buy tires made a month ago, but you should expect to find tires made within a year or two of when you buy them, particularly low-volume trailer tires.

In conversations with tire experts at the National Highway Traffic Safety Administration and the Rubber Manufacturers Association, I learned that how a tire is stored is a major factor in the safety of a tire. A tire that is stored in a cool, dry, dark warehouse is a safer tire because it is not exposed to heat and sunlight. Tires should not be stored near electrical equipment that creates ozone or volatile chemicals, which from even 20 feet away can cause a tire to deteriorate. Tires stored in the trunk of a car should be used in every tire rotation. The heat in the trunk deteriorates a tire.

BOAT TRAILER CONCERNS

Boat trailers, horse trailers, house trailers and RVs very often are parked for long periods of time and used only for a short time before they may appear to be worn out. It would not be unusual for a boater to use the trailer to put the boat in the water in the spring and then to take the boat out in the fall. For the rest of the time, the trailer might be stored in

not at present have an expiration date, they do have a "birth" date. It is a little hard to understand, but it is right there on all new tires right after the letters DOT. For tires made in the 90s, it is a three-digit code. For example, DOT259 means the tire was made during the 25th week of 1999. Starting in 2000 it is a four-digit code, e.g. DOT2602 means the tire was made during the 26th week of the year 2002.

There is a fund of information on the sidewall of the tire (see illustration), which gives you maximum load, a big factor when hauling a boat. In addition to size, traction, temperature, longevity and maximum air pressure, it should be noted that the maximum tire pressure molded into the tire wall is not the recommended operating pressure. That pressure will be either on a decal on the trailer or in the service manual. The vehicle manufacturer best determines that pressure.

Not all tires are equal and there is a designation molded into a tire that determines a safe speed. For example, a tire with a speed rating of Q should not be used at speeds over 99 mph. A tire marked with a Y