**Upgrading to 17.5 Wheels/H-Rated Tires**

Jack Mayer, [www.jackdanmayer.com](http://www.jackdanmayer.com)
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If you own (or in intend to buy) a heavy trailer it likely has G-rated tires on two or three axles. Many trailer manufacturers use G-rated tires on two axles to save adding an axle. This saves money for the manufacturer and allows them to price their products more competitively. By deleting the third axle, there is less maintenance for the owner due to having fewer brakes, bearings and suspension components. Use of G-rated tires and the correct wheels allows for this economy. G-rated tires/wheels are also used on triple-axle trailers to properly support the weight of the trailer.

An increasingly common aftermarket upgrade is to replace the G-rated tires and 16” wheels with 17.5” wheels and H rated tires. This upgrade is also available from New Horizons as a factory installed option.

Why would one want to do this? First and foremost, the use of a heavier tire and wheel means that there is excess capacity. This permits the tire to be aired up to less than full pressure, resulting in a better ride. It also operates at a cooler temperature. And high temperature is the primary cause of tire failure – other than road hazard. The extra capacity gives you a greater safety margin. Think of it this way – do you want a tire that is loaded to its maximum (or near maximum capacity) or a tire that is lightly loaded and “loafing along”?

If you order the upgraded tires/wheels with your RV then it is as simple as checking the right box on an order sheet. But what are the considerations if you want to retrofit an existing trailer with the safer tires?

First is wheel and tire clearance. You need to identify the outer diameter of the tire as mounted. All tire manufacturers publish this information. For example, a Goodyear G614 has a 0.7” outside diameter. You need to know this because some trailers have tight axle spacing, and you will need to maintain equivalent clearance between the tires. Along with outside diameter, you need to check the tire width to make sure that you have enough wheel well clearance. The tire width of a G614 is 9.5”.

Next is the tire speed rating. All tires carry a maximum speed that they are designed to handle. Many of the H-rated tires carry a low speed rating, since they are designed for commercial operation where speeds are typically lower. You need to ensure that the speed rating is consistent with your operating speeds. In H-rated tires the common speed rating is 62-65 mph. Only Goodyear and Sumitomo make tires with higher ratings. Goodyear’s G114-LHT tire carries a 75 mph rating. This is the tire offered by New Horizons when you specify the H-rated tire upgrade.

The type of hub and studs you have on your RV will determine the 17.5” wheels available to you. The 16” wheels on most 6-7K RV axles are stud-piloted wheels with ½” or 9/16” studs that have conical ends to properly position and hold the wheel. Eight thousand pound axles are typically hub-piloted with 5/8” studs with flat lug nuts. The wheel is held into position by the ridge of the hub. Many 17.5” wheels are designed for hub-piloted axles, but there are special wheels available that allow stud-piloted RV’s to upgrade to 17.5” wheels and the corresponding H-rated tires. You need to determine your wheel type, and the size/type of the studs. Once you know this, you will know what types of wheels are available to you.

If you own an RV with 16” wheels and wish to upgrade, the New Horizons Service Center can handle this upgrade for you. If you prefer to do the upgrade yourself the following resources may help you. Southwest Wheel, Trailer Tire and Wheel Supermarket, and Rickson Wheel all carry conversion wheels that will fit existing 6 and 7K axles. (Googling these names will find their websites.)

I prefer the Goodyear G114 tires on Alcoa rims. The Goodyear tire has a 75mph speed rating, and the Alco rims are high quality and look great. But there are other available combinations.

The bottom line is that if you have a heavy trailer and are near your load rating on your existing tires/wheels then the upgrade to higher capacity tires will provide you a very good safety margin. Loosing a tire can result in catastrophic damage to your trailer, as well as the cost and inconvenience of replacing the tire.