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WHEELS AND TIRES

Neons don't come from the factory with the best setup for performance driving, so often the best thing you can do to improve the handling is to upgrade your wheel/tire combination. But before making a decision about what wheels and tires are right for you, it's important to decide what you primarily want to do with your car. For a cool street look, there are many options out there. Most street drivers simply choose a wheel with good looks to complement their car's personality, but if racing is your priority, the selection of available wheels is more limited. Wheels for racing have an emphasis on function, and are generally not as attractive as those designed for street looks. You may end up choosing a wheel based on weight, specific diameter, width, backspace, and price, with little regard for looks. If winning is at the top of your list, then looks should not factor into your choice, but the type of racing you do should.

Street Wheels

Never in automotive history has there been a larger selection of aftermarket wheels from which to choose. Prices range from \$50 apiece to upward of \$2,500 per set. But how do you decide which wheel-and-tire combination is best for your car? There are several factors that can help you make this often difficult, but mostly fun, decision.

If you're not concerned with a budget for your project, then looks should be the priority. The particular design of the wheel selected should be



One of the best things you can do for your racing Neon is to invest in a set of race tires. There are many different compounds to choose from, so read this chapter carefully before you spend your money. These are shaved and heat cycled 225/50/14 Kumho Ecsta V700 tires from The Tire Rack.

one that enhances the overall look that you have planned for your vehicle. Shop around, as prices can vary as much as \$100 per set for the more expensive brands.

If you've taken the advice in the Introduction and have created a budget, then your budget will help you decide what wheels will best meet your needs. After buying the stereo, spoiler kit, intake, exhaust, and header, you may find that you won't have enough money left over to get some super expensive wheels. Then again, wheels may be more important than that stereo. A budget is

all about compromise, and it will help you to make sound decisions guided by your head, and not so much by your heart (or the limit on your Visa card). Remember, you need to have enough money (or credit) to go have fun with your car after the project is finished.

One of the big decisions you'll have to make in choosing a wheel/tire combo is the diameter. Keep in mind that the larger the diameter, the lower the final drive ratio. In other words, a larger combo makes fewer revolutions than a smaller diameter for a given distance. The results of this change are far reaching,



Choosing the right wheels for the street is more a matter of form than function. Pick the wheel that best fits the personality you want your Neon to present. But keep in mind that the bigger the wheel, the more expensive the tire. (Photo courtesy Howell Automotive)

impacting many of your vehicle's operating systems.

Stock Neon wheels are 14 x 5.5-inch wheels, with the 5 x 100-mm bolt pattern, and 40-mm offset. ACR and R/T wheels are 14 x 6-inches. The most popular sizes for performance (not looks) are 14 x 7 and 15 x 7 inches.

Since larger-diameter wheels go around fewer times for a given distance, your tires will last longer (unless you're doing burnouts). However, tires come in different compounds; this point is only valid when comparing tires of similar composition. Stickier tires will generally wear out sooner. Your car's speedometer will also be affected by a wheel/tire combination that is larger than the stock diameter. The common result of this phenomenon is a speeding ticket. The speedometer is tricked into thinking that your car is going slower than it actually is because there are less tire revolutions per mile.

A positive effect of changing to a larger diameter setup is that your wheel bearings may last longer, but you'll be putting more stress on your transmission. It's much easier to turn a small wheel than it is to turn a larger wheel. That also explains why you'll feel a reduction in torque when you use a larger wheel/tire combination. The good news is that although you may not be quicker off the line, you will be able to hold first and second gear longer

before having to shift. This effect, however, is undesirable if you want a lot of low-end torque, as most autocrossers do. A smaller combo will help keep the RPMs up slightly when you are trying to exit a turn. At any given point, acceleration with a smaller wheel will likely be livelier than with the bigger tire/wheel.

Then there is the cost of the tires. For a given brand and model of tire, the 14-inch size will be cheaper than the 17-

inch version every time. Of course, some high-performance street tires don't come in 13- or 14-inch sizes, but there are always alternatives. Just because a specific tire brand is "cool," doesn't mean that you won't be able to find your size in a different brand that will match or outperform your friend's "cool" tire. A 15 x 7-inch wheel is probably just the right size for most Neon applications because there are more performance tires available in that size. Of course, 15-inch



The tires you choose for the street should be researched before you buy a set of wheels. You may discover that the tire brand and compound you want isn't made in a size that will fit on the wheel you just bought.