Wheels and Tires Part 3 of 4

Competition Tires

As with choosing street tires, there are some questions you'll need to answer when choosing tires for competition:

- 1.) What are the limits of the rules I'll be competing under?
- 2.)What, if any, modifications to the bodywork am I willing to make to get the tires I want to fit?
- 3.) Will these tires also be used on the street?
- 4.) Is competing in the rain a possibility?
- 5.) Will the tires be used for autocross only, or track events as well?

For SCCA Stock and Street Prepared autocross use, I highly suggest you acquire a set of "R" tires if you're planning on running more than one or two events per year. The reasons are:

1 - Regular autocrossing (say 10 events) will completely wear out your street tires. It is cheaper to run real tires than to "save money" by trying to get away with a single set of tires. Sometimes you can get closeouts of the previous year's tires, or buy a set used if you're on a tight budget.

2 - R-compound tires have so much more adhesion than even high performance "normal" tires that tuning the chassis and learning to drive on anything else is, to a degree, a waste of time. The car rolls more, the bushings deflect differently, and the tires break away differently.

Selecting a set of tires for competition in some ways is easier than selecting street tires, especially if you are going to have two sets of tires for the car. In fact, that is the first decision you will need to make - do you want to have a second set of tires, and if so, do you want to change them at home or at the event. If you elect to have a second set of tires and are willing to change them at the event, you will need to take a jack and lug wrench, plus you'll need to stuff them in the back seat and trunk, limiting space for other things or passengers. The up side to doing this is that you can choose tires without worrying about ground clearance, speedometer error, or highway gearing considerations. Another possibility, and an added expense, is to get a small utility trailer and build a lockable enclosure on it.

This is a very popular choice among autocrossers with street legal cars. Your other choice is to run your race tires on the street, either all the time or just to events. This works well for some, if they don't drive the car much (~5000 miles per year), and the events are generally about 30 miles or less away. This way poses limits in that you can't use really short tires because of ground clearance problems and you'll be very limited in highway cruising speed - don't forget that a stock Corvair turns about 3500 RPM at 70.

Here's a point that's worth mentioning - lower is better when it comes to handling (you can read more about why in Fred Puhn's book on handling). So the best choice for a Corvair is usually considered to be a 13" wheel with the lowest profile, widest tire you can put on it, which is a 215 or 225 width 50 series. Shorter tires will also give you a shorter overall gear ratio, so the car will accelerate better. Finally, a smaller tire is (obviously) lighter, reducing both your unsprung weight and rotating mass.

The downside is that wide 13" wheels are uncommon, so you'll have to either find a used set from another Corvair racer, or have some made. 14" wheels are pretty common, and with a 50 series tire you won't have to worry much about clearing the fenders. Either of these setups will probably be too short for the street, so you should plan on two sets of tires if you choose one of these options.

For those of you competing on slicks or with shaved DOT tires it's worth thinking about a set of rain tires, especially if you're doing track events. To help with the expense, you might look at a tire that's a bit less expensive and use them for some testing as well. Don't forget that tires age, you don't want to try to use the same tires for more than a season if possible, so run the rain tires some of the time to save your dry set.