

Best Grip Studs: Installation and use tips for motorcycle and scooter applications.

Note: What follows is a general guide. With the vast number of uses, applications, and variables involved, it is not possible for us to provide reliable technical application information for each user and application, and it would be a disservice to try. The general principles are similar for all stud applications (boots, bicycles, snowmobile tracks, auto tires, etc.)

Safety Warning: Wet pavement below freezing usually is a mix of salt, liquid water and ice crystals (called 'slush') which is much, much slipperier than above-freezing wet pavement. Studded tires do not increase tire grip on wet and slushy pavement.

Remember that when using the short studs for a street riding applications, the idea is to get where you are going safely in mixed ice and dry pavement situations. Usually a studded tires are ridden cold. Between the cold tire rubber's lower-than-normal pavement grip, and the short studs themselves slightly reducing the tread rubber's pavement interlock, all traction, braking and cornering limits will be lower than they are in the summer and with non-studded tires.

Successful installation and optimum performance of Best Grip studs depends on the individual rider's preferences, and on the specific application. Fifty studs per tire are sufficient for most street riding applications, but one can fit up to 250 (or more...) studs into a tire intended for off-road riding use only.

For mixed-surface street riding (dry pavement with occasional icy or snowy areas) the basic idea is to install just enough studs so that whenever one is riding on dry pavement, the tire tread rubber continues to interlock with the surface of the road as it normally does, but on icy/snowy places the carbide tip of each stud digs down into the frozen surface a bit. This means that on dry areas the hard surface of the road should slightly push the stud a bit deeper into the tire so the surrounding rubber tread interlocks normally with the surface granularity of the pavement.

Safety Warning: Riding with only the tips of steel or carbide studs on pavement, with no rubber in contact with the road surface, is very 'skatey' and dangerous. There is very little traction from only stud-against-pavement. Do not set up tires for street use so they function this way.

For off-road riding, using longer-stud is desirable. As many as three or four of the longer studs may be fitted into each knob of an off-road tire, but most riders go with one-to-a-knob. The larger studs will add a noticeable amount of weight to each wheel when several hundred of them are involved. The stud installation pattern depends on the rider's needs, and the specific tire rubber tread pattern. See the illustration of the tire shown in the last image on the stud presentation on the website, but adjust specific installation for your own tire tread pattern. When riding on snow and ice 100% of the time, the tire's rubber tread is not a factor in providing grip. One can install up to 250 (or more...) of the longer studs for this type of riding. Again, if this longer style stud should not be used for paved surface riding.

Individual studs can be removed at any time and may be re-used later, or a studded tire can be removed with the studs left in place. A studded tire may also be used until it wears out, but this is not recommended.