

Horse fact sheets – Horseshoe Studs

Also known as calkin or calks, studs are projections on a horse's shoe that improve balance and grip over uneven or slippery terrain, allowing the animal to move better and jump more confidently in poor footing.

Traditionally a farrier forged a stud into the shoe and it was a permanent feature - these are rarely used now. They were fairly dangerous and potentially damaging. Screw-in studs are used in sport competition because they can be removed when not in use, and changed to suit different terrain.

While the use of studs involves extra work, they can be invaluable for providing better grip for jumping, and, in some conditions, for dressage and showing as well. They are mainly recommended for riders at higher levels.

Whatever anyone might tell you, studs are not good for your horse's fetlock joints; and can be injurious to a horse. They are, however, a necessary evil because without them you risk falling over in hard or slippery conditions, which could be far worse.

There is a great variety of shapes and sizes to choose from and most have a tungsten core for durability. Choosing the correct type of stud will depend upon the ground, the type of shoes in use and the activity in which your horse is participating. Generally the harder the ground the more pointed the stud and the softer the ground the squarer the stud and, remember, perfect ground means no studs should be required.

Many people put just one stud on the outside of each shoe. However, if you think about this, one stud has got to drag one-sidedly on the horse's joints. When the stud sinks into the ground the pull is minimal, but what happens when the stud hits harder ground?

Obviously the outside of the hoof is tipped upwards which affects the joints in the leg. Horse's fetlock joints have no lateral movement, so this tipping will unbalance and stress the leg. You might not notice any effects immediately as they will be minimal each time but, as these occurrences of stress stack up, two or three years down the line your horse may go lame as his leg finally 'gives up'.

To minimize any damage, it is preferable to use two studs on each foot, one either side, so a horse completely studded up will be wearing eight studs. If the ground is hard you might use studs with small points on the front feet and those with medium points on the hind feet. If the ground is soft you might use studs with fairly square points in front and those with large squares behind: remember, it is your horse's hind legs which are more likely to lose their footing. For that reason, some people put studs only in a horse's rear hooves.

This photo shows the "sleepers" used to plug stud holes between uses, studs, tap, spanner, and horseshoe nail.



STUD GUARDS When using pointed studs in the front feet, horses that snatch their front legs up tightly over a fence can 'stud' themselves behind the girth, so it may be necessary to use a stud guard or belly pad which attaches to the girth.



FITTING STUDS

1. The first step in the use of studs is having your farrier put stud holes into your horse's shoes. These should then be plugged. (see notes above). If you haven't used them before, ask your farrier lots of questions and ask for a demonstration of fitting studs.
2. Before putting in a stud you will need to remove the plug, so keep a horseshoe nail handy for doing so.
3. Place the stud tap into the holes and screw down to clean the thread and be careful to keep the tap square or else you will damage the thread. Do not allow your horse to put his foot down while you are using the tap otherwise he may panic at the feel of something attached to his foot and serious injury could result if he were to jump about or bolt. Practise holding his foot up for some time, until you are sure he is quite happy about the procedure before using a tap.
4. While still holding the hoof up, select an appropriate stud and screw it into the hold. Use the other end of the tap to make sure it is tight.
5. The type of studs you use in both front shoes must be the same, as must those used in both back shoes.

STUD REMOVAL

Having finished a competition you should always remove studs before putting your horse on the float or walking him on to a hard surface. Traveling your horse home in studs is like expecting a man to stand on a train in shoes with super high heels.

Shoes with stud holes are more expensive than standard shoes. So if you only use them for a short time and wear is minimal you can remove and store them (cleaned and oiled) until they are needed. The horse can then be returned to barefoot or fitted with cheaper ordinary shoes.

However, never put studs into shoes which are worn thin. If you do it will result in the end of the stud driving into the wall of the hoof.

Tip: Cleaning out stud holes is time-consuming, so take the time to clean and re-pack them the night before a competition, then stable your horse overnight if possible. The clean out job the next day will be much easier and less stressful.

PROTECTION OF STUD HOLES

In order to prevent stud holes from becoming clogged with mud and becoming rusty, it is essential to pack them out immediately the stud is removed. You can do this by making a plug of cotton wool smeared in Vaseline, or you can buy purpose-made stud 'sleepers' to plug the holes. Make sure you push any plug right in (a horseshoe nail is an ideal tool for this job) and that it plugs the hole out right to the top.



STUD CARE

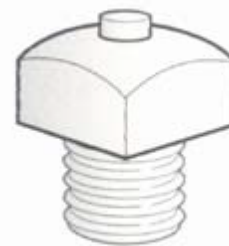
When studs are not in use you should keep them wrapped in an oily rag and put them into a polythene box to prevent rusting, together with the stud tap, plugs and spare horseshoe nail so that they are all to hand when you need them.

This article on studs (including pictures) is a modified version of one written by Kerry Hill for a 2005 Ringwood Pony Club newsletter, used with permission.

TYPES OF STUDS

There are many different studs, although, for most activities, one of the following six will be used

Road Studs are for hacking out on the roads to provide grip and durability for the shoes.



Pointed jump studs are for use in firm ground as they will penetrate the soil, offering hold without jarring the legs. They are ideal for all disciplines and in such conditions, including dressage and showing.

Large jump studs are longer than other studs and the end tapers off so that it will enter the ground more easily if it is slightly firm. They are

usually used on the hind feet of horses undertaking demanding show jumping or cross-country courses.



Standard Jump Studs provide extra grip in good going but when the conditions (perhaps dewy or rainy) might prove slippery.



Dome-top studs are another long stud but they do not taper at the end, the end is dome shaped instead. They too are designed for demanding jumping, especially where maximum grip is required in soft going.



Sharp studs have a round tapered barrel coming out of a square base. They are designed to penetrate hard ground, with the square base providing plenty of hold. They are used in all disciplines.

INNOVATIVE STUDFITTING

For those who struggle with fitting Studs or who have horse who gadget when studs are fitted, a new safety inspired stud, tap and socket unit (STS) may be the answer to the problem (see below).

The short 3/8th tap lessens the chance of penetrating the horse's sole or tapping too far into the shoe, and the flat unit lessens the chance of injury should the horse put his foot down. The sockets are located around the edge of the unit which is available in nylon or aluminium. Many people find that the smooth rounded shape of the unit is easier to get to grips than the traditional spanner.

