

Bits and Pieces of the Bit

Thank you for returning to part three of our four-part discussion on identifying bit problems and learning how to correct them. So you go to the store or a website and you see the names of the bits. What do you look for? Well the basic designs are either leverage bits or direct action bits. Ask yourself does the rein attach directly to the mouthpiece and apply direct pressure? There is no amplification of pressure from the reins. This is a type of direct action bit. Usually the cheek piece will be a ring attached to the mouthpiece that the rein attaches to. These are ring bits, D ring bits, Egg butts, and spindled ring bits. They will either be a loose connection where the ring turns, a sleeve where it can lock under rein pressure, or fixed with slight leverage such as with the D ring. A loose ring slides through the hole in the mouthpiece. It allows the horse some play with the bit, and some riders feel it provides an aspect of pre-signal to the horse. Sleeves allow the ring to turn and slide but prevent it from flipping forward and can lock the ring for direct signal with pressure from the reins.

D rings lessen the pinch and pull-through of the mouthpiece. When using a D ring or egg butt with hooks or slots attach the headstall and reins to the outside of the slots.



A full cheek uses spindles where the mouthpiece attaches. A bit keeper is used to attach the spindle to the bridle offering slight poll pressure. Hooks on a full cheek D ring will offer more leverage, assist you in lifting the shoulder, and keep the bit upright and off the tongue. Hooks or slots can be custom built on most cheek pieces.

Independent side movement is where the bit does not pull across the mouth putting pressure on the opposite side. To demonstrate the significance of this, consider the plain snaffle bit. I am approaching my turn. I apply pressure with my inside leg intending for my horse to bend his ribcage away from my leg. I put pressure on my outside rein pulling back the outside ring to square his shoulders from the outside rein pressure, but the

inside ring is pulled into the side of the mouth. Now he bends his head to the outside to move away from the inside ring pressure. With independent side movement you are able to isolate and communicate with one side of the horse's mouth.

The mouthpiece is the part that crosses through the mouth over the tongue of the horse. What makes a mouthpiece soft on the horse is smoothness and width. A narrow mouth piece that is the same diameter across the tongue applies equal pressure to the tongue as the lips so it is more severe or harsh. A two-piece bit has a joint in the middle of the mouthpiece. It puts pressure down on the tongue.

The horse's tongue is sensitive to pressure, similar to our own. Have your veterinarian apply downward pressure to the center of your tongue as you walk down the driveway (actually, we would prefer you do this yourself) and notice how you bend your neck and drop your head to move away from the pressure on your tongue. Very nice. You just broke at the poll, (second vertebra of your neck) and your face is at a 90 degree angle to the ground. You are ready for the show ring.

Feel the tension in your ventral neck as you pull the tongue down and away from the bit pressure. This tension in your ventral neck muscles makes it hard to relax in the poll and the mouth, and actually interferes with balance. Now as you learn to change leads, bend your turns, and take directions, your veterinarian will move to a level two and then level three bit to communicate more subtle pressures on the lips and poll, and to communicate more focused directions such as lift your shoulder. This reduces tongue pressure and improves your relaxation and the ride. You can pick up the rein on the left or right to communicate to the horse. This is best done riding with two hands on the reins ('Dr. J. Thing'). A barrel at the juncture of the mouthpiece allows the bit to turn so that you can still communicate to the right and left side of the horse, yet keeps the mouthpiece straight in the mouth, so it does

not hinge or break in the mouth and puts more pressure to the tongue. This is for the horse that is not responding to the bit. Sometimes this is a little older horse that has perhaps been ridden by several riders or learned to ignore the pressure to the lips. A snaffle can exert pressure on the tongue beyond the bars.

Ported bits utilize the sensitivity of the palate to encourage the horse to brake at the poll.

How much bit space is in the mouth is also determined by palate height. The height of the port should match the height of your horse's palate. The port is more commonly utilized to provide relief to the tongue for swallowing. Width is also a component of the port. A wide port can help a horse with tongue damage. If the port is too high it will hurt the horse.



A three-piece bit will have a connector between the left and right side of the mouthpiece. If it is a disk, this is referred to as a sucker, sweet spot, or pre-signal to the horse. These tip up to put light pressure on the tongue before the pressure from the reins increases on the lips and tongue. It signals the horse that a correction is coming and can avoid bracing by the horse. A connector bit is a transition between the snaffle and curb bit. Here, the purchase (the top of the shank) connects to the head stall and pulls on the poll before pressure from the reins is applied to the tongue.

The shank gives the rider more leverage on the mouthpiece. The leverage bit or curb bit uses the shank to increase the pressure the rider applies to the mouthpiece. The curb strap is helpful in stopping. The longer the shank, the more leverage it gives the rider. Again, having a full taper to the mouthpiece will reduce its severity. The experienced rider can correct the horse with their hand and not need to pull back with the arms. Don't have the chin strap too loose. You lose the communication from the chin strap to the horse and you increase the pressure on the mouthpiece. A ported bit may unnecessarily bang on the palate. Remember the chin strap attaches to the top of the shank and tightens with the headstall. I like to be able to place two fingers under the chin strap.



Consider the point of purchase. The top of the shank is the part above the connection to the mouthpiece. We call this the purchase. You would attach the headstall and curb strap to the outside of the purchase to keep it from rubbing. I like to have them bend out slightly to avoid rubbing. Bushings allow the shank to turn outward without turning the purchase into the horse. A square purchase ring helps keep straps in position.

Trainers categorize shanks as quick or slow. The straighter and longer the shank is the quicker the bit is and the more leverage it provides. A shorter and curved shank is slower and provides a more subtle signal to the horse. The shank should be matched to the rider as much as the horse. A rider with a soft and giving hand

can use a long shank to give a quick response. If a rider is always yanking on the reins, first school them, then use a pre-signal and a shorter curved shank.

A cavalry and a seven shank are a curved shank that transfers less pressure and stays out of reach from a horse that tries to lift the shank with its lips.

Smaller riders that also overreact with the reins may find the HBT shank appropriate. It is shorter and angled toward the rider, making it slower. An HBG shank slides in the mouthpiece and acts as a pre-signal before engaging. It is also used to introduce a horse to leverage bits.

I call the Pelham, Kimberwick, and gag bits “combination bits”.

The Pelham uses three rings and two reins. The top ring is on the purchase and attaches to the headstall. The center ring attaches to the first rein and applies direct pressure to the mouth. The third ring is at the bottom of the shank for the second rein and applies leverage pressure with a curb.

The Kimberwick is a D ring bit with a purchase and a curb chain to increase leverage. The rings have two rein slots or hooks. Riding with one rein the upper slot is used for direct pressure and the lower for leverage and curb chain pressure. The headstall is attached to the small purchase on the D.

Some gag bits provide a pulley effect and leverage action with a piece of leather or rope that is attached to the headstall, slides through the rings of the bit, and attaches to the reins.

Other gag bits consist of a ring with a purchase and a shank that pulls backward and upward with rein pressure. Myler bits have a fancy rig out there called the MB02. This is a shank combination bit with a “comfort snaffle” mouthpiece.

I would feel remiss not to discuss the Hackamore. The Hackamore utilizes the same principals of a leverage bit by working off the nose without a mouthpiece. The three parts include the noseband, the shanks, and the curb chain or strap. The headstall and curb strap are attached to the top ring of the shank and the noseband is attached to the shank below the top ring. The reins attach to the bottom ring of the shank. Some Hackamores use a second rein that is attached to the shank next to where the noseband is attached. The shanks can be round, flat, curved, straight, and of variable lengths. The noseband may be chain, rope, or leather. The Hackamore can be a good choice for horses under saddle for long periods of time, such as a trail horse.

To look at bits, you can find a link to Richard Shrake’s website on our website at www.blueskyanimal.com. Go to “horses”, and then “links”.

Enjoy your horse.

Dr. Jeff Johnson