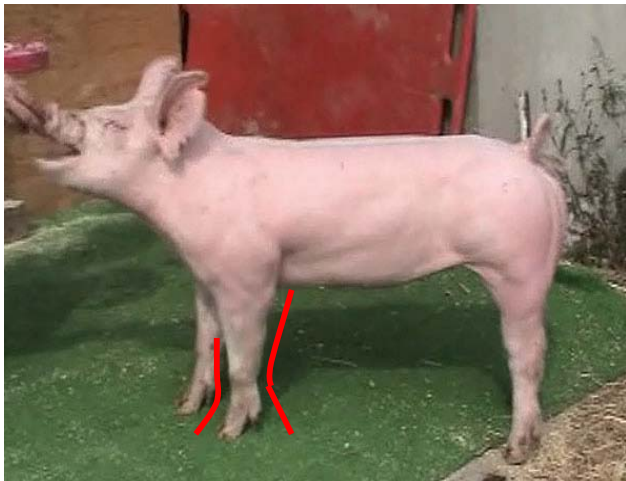


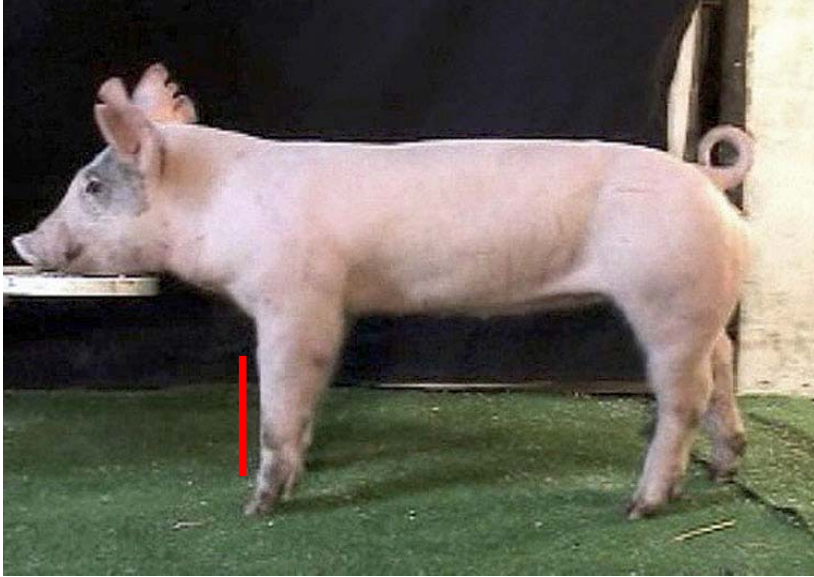
## Knee Placement

The ideal knee placement is essential in the function and flexibility of the front feet. The knee works in conjunction with the shoulder, forearm, foot, toes, dewclaws, and pasterns. If the knee placement is too high on the front leg the pig will tend to walk more on their toes. When the knee placement is lower to the ground the pasterns, evenness of the toes, and dewclaws maybe improperly utilized in movement. When determining the proper knee placement and angle it is impertinent to analyze the front leg from all views. The side view of the front leg will allow the judge to see if the knee is in the proper location in conjunction with the toes and forearm. Additionally when viewing the knee from the side a judge can determine the proper angle behind the knee. The knee needs to have some curvature going up towards the back of the forearm and to the dewclaws. Pigs that tend to be straight front will lack the curvature to the knee and will have very little flexibility to the knee. When viewing the front leg from the front, a judge can see the curvature of the knee in comparison to the toes and front forearm. A straight fronted pig will tend to have less curvature and the angles will tend to be a straight line from the forearm, knee, and toes.

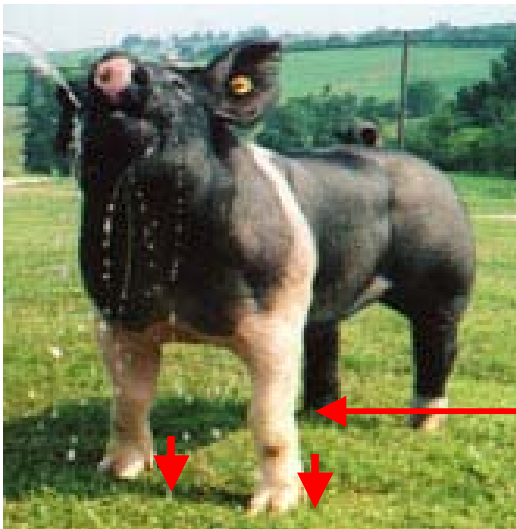
Understanding the proper knee placement will allow you to determine how well a pig will move on their front feet. A pig whose knee placement is in the wrong location will tend to walk uncoordinated off of their front end. The pig will naturally try to compensate for the uncoordination and the rear legs may camp under, may be low fronted, or they may roach their top.



This pig has the ideal angle and placement to her front knees. The proper knee placement allows her to stand correctly on he toes and her pasterns are off of the ground.

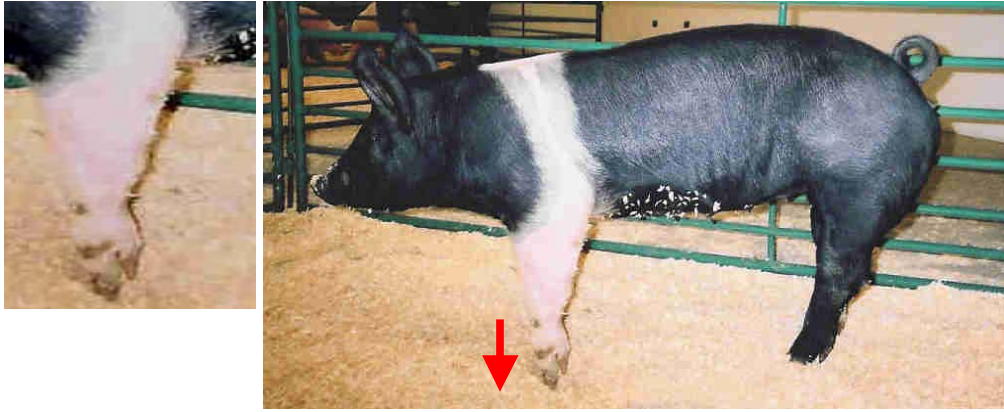


This straight fronted barrows needs to have a better knee placement. His front knee needs more of a curvature which would allow him to stand down more on his toes. Just looking at the picture you might assume this barrow would walk stiff on his front feet.



The more ideal knee placement

The boar pictured above has weak pasterns and his knee placement is set too low to the ground. A more ideal knee placement might make this boars pasterns stronger with less pressure to withstand his weight.



This hampshire appearing gilt is extremely straight on her front and rear legs. She stands on her tippy toes and her knee placement need to be in a different location.

## Bench Knee

The term bench or buckled knee is used when a pigs bends their front knees forward and points their toes backwards. Pigs that are straight fronted will bend their knees and point their toes in an awkward position. A straight fronted pig will try to shift their weight off of the stiff front legs, shoulder, and toes. The weight will predominantly be placed on the knees when the pig is standing still. This structural abnormality tends to be caused by the pig being straight fronted and not having any angle to the shoulder.



This white composite boar is straight fronted and, while standing at the pull pan, he tends to bend his front knees forward.

Bench knee can also be represented with too much bend or angle to the knee. This causes the pigs weight to push the knee forward because of the excess weight on the joint.



## Width of Chest

The distance between the front feet when the pig stands and walks towards you is classified as width of chest. This concept is important in understanding volume in breeding gilts, market hogs, and boars. The width of chest ideally expresses the width or size of the chest floor. The chest floor is the lower portion of the chest that starts to determine a pigs rib shape and volume.



**Wide Chested**

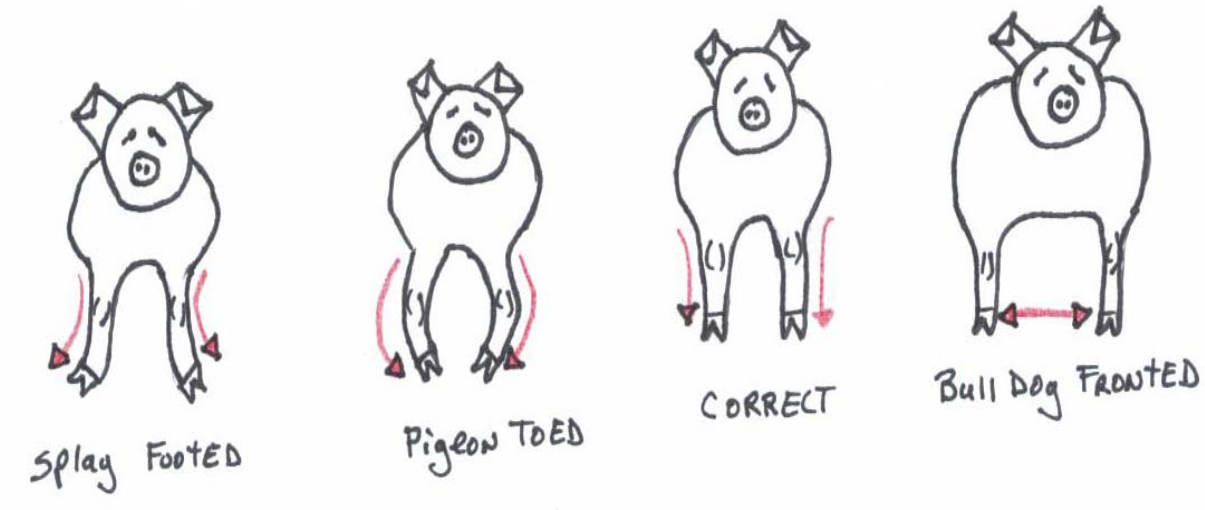


**Moderate Chested**

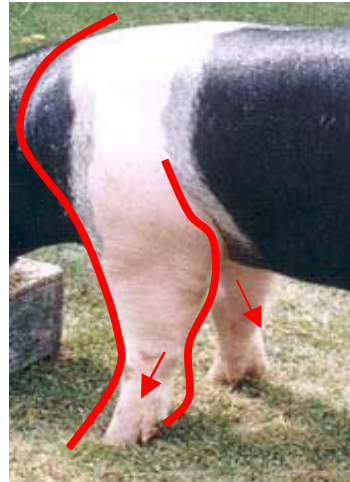


**Narrow Chested**

There are several different kinds of structural abnormalities that can be associated with width of chest. Terms that describe width of chest can be described as narrow chested, wide chested, splay fronted, pigeon toed, and bulldog fronted. A harder concept to understand is when the pig stands wide and pulls their front feet inward while walking.

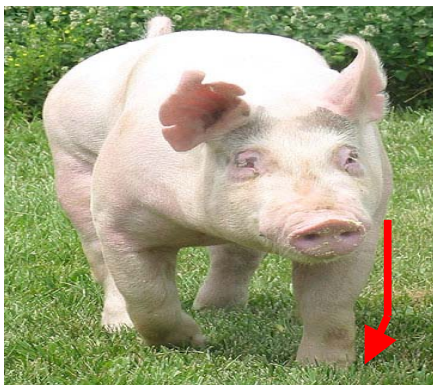


### Splay Footed



Splay footed is when the front toes are pointing outward from the front legs. Pigs that are splay footed will tend to have uneven toes with the inside toe shorter than the outside toe.

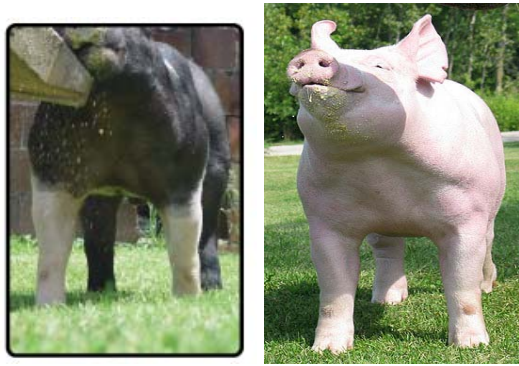
### Pigeon Toed



Pigeon toed is when the front toes are pointing inward from the front legs. Pigs that are pigeon toed will tend to have uneven toes with the inside toe longer than the outside toe.



## Correct Width of Chest

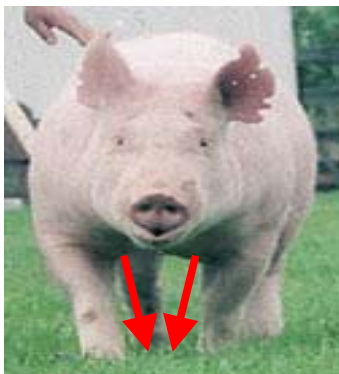


## Bull Dog Fronted



Bull dog fronted is a term that describes a pig that is too wide chested and this additional width allows the pig to move uncoordinated. The pig often times walks like a bull dog on their front feet with awkward motion. Width of chest is a desirable trait but when too much width of chest is created, this is a structural abnormality that should not be selected.

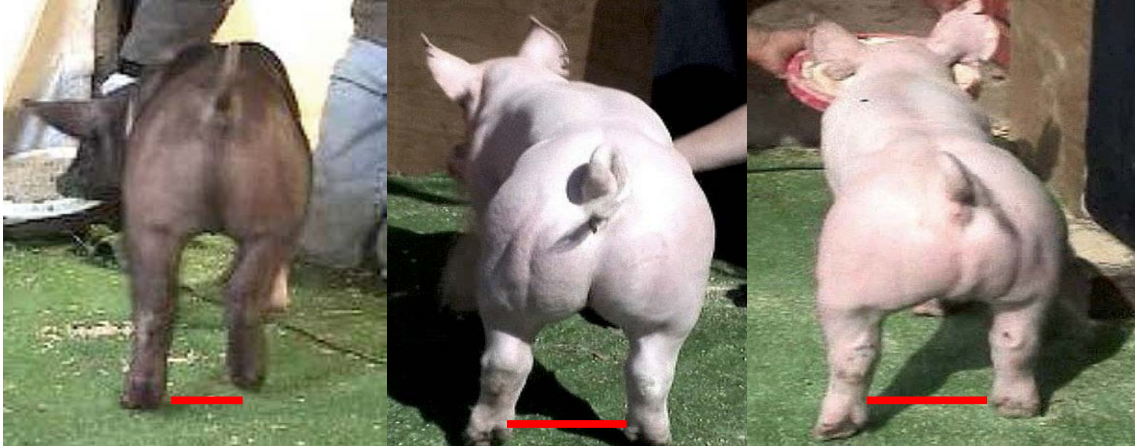
## Width of Chest that Tracks in Narrow



In certain cases some pigs will stand wide in their chest but track in narrow. This is a structural abnormality and is less desirable for selection.

# Width of Base

Width of base is the distance between the rear legs when the pig is standing or walking away. This distance varies from pig to pig and is determined from the ham shape or the rear leg structure. The width of base should be proportional to the width of chest. A pig's width of base can be described as being too narrow, ideal for their width of base, and too wide. Pigs that are classified as too narrow or too wide are less desirable for selection and considered a structural abnormality.

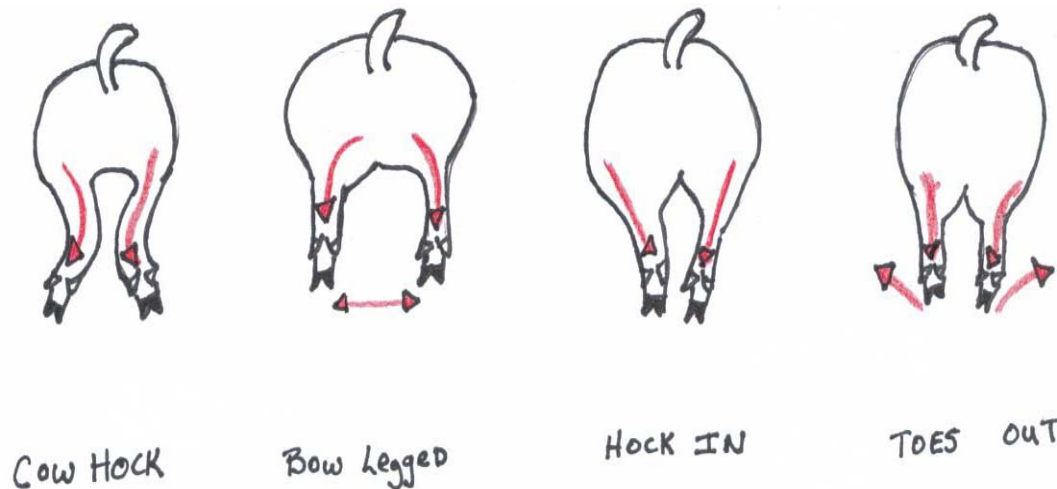


**Too Narrow**

**Ideal for Width**

**Too Wide**

Additional structural abnormalities for the rear legs includes: cow hocked, bow legged, hocked in, or toeing out. These abnormalities can cause the pig to walk incorrectly off of their rear legs. It is important to be able to decipher between the different rear leg structural abnormalities.



Cow Hock

Bow Legged

Hock IN

TOES OUT

## Cow Hock



Cow hocked is when the rear leg knees and hocks bow inward while the rear toes will stand and bow outward. This creates a “C” shape angle to the rear legs and the pig will stand in an awkward position.

## Bow Legged



A bow legged pig is one that stands extremely wide between their rear legs. This extra width of base will be unproportional in comparison to the width of chest. Bow legged pigs will tend to sit down more often on their rear legs while eating at a feeder. A bow legged pig will tend to wobble their rear legs in an uneven motion in comparison to a structurally correct hog.

## Hocks IN



Pigs that tend to hock in their rear legs can also be described as narrow based. When the rear hocks roll in or naturally want to be closer together the pig will have less ham shape when viewed from behind.

## Toeing Out



**Toes Out**



**Stands Correct & Square**



**Toes Out**

A pig will toe out when their rear legs do not stand down square or even on the ground. This term is described as toeing out on the rear legs and is a structural abnormality. Pigs that toe out will be uneven in their rear toes in comparison to a structurally more correct individual. The inside toes will tend to be smaller, while the outside toes will be longer in length.

## Swollen Hocks



Swelling of the hocks is an indicator for lameness or injury. The swelling in the hock is caused from inflammation or infection around the cannon bone. Pigs that tend to have swollen hocks tend to be structurally incorrect or lame.