

# Centre Fit™ Horseshoes

From Alpha

The following guidelines are critical for the successful application of the Centre Fit shoes, both front and hind patterns. The design of this shoe compliments much of the latest information regarding equine foot function and biomechanics relating to excess leverages and balance around the distal interphalangeal joint. The basic premise behind the proper application of the Centre Fit shoe is that by properly placing it with respect to the widest part of the foot, it equally distributes the foot surface of the shoe in a dorsopalmar relationship around the articulating surface of the distal end of PII which helps to establish equilibrium around the DIP joint. Trimming the heels with respect to the functional sole plane is critical to produce a good base of support and for achieving proper caudal foot function. At the same time, the toe is not over trimmed to ensure adequate sole thickness. Special attention must be given to these guidelines during the application process to ensure the best results.

For more detailed Application Instructions, please visit: [www.centrefit.com](http://www.centrefit.com)

## Foot Exfoliation Process

1. Exfoliate the ground surface of the foot by first locating and marking the TRUE frog apex, where the sole and frog join together. Other frog maintenance includes removing any loose or non-functional frog pieces, and then open and clean the central sulcus of the frog. Trimming the corners of the frog buttress is also recommended for better access to the heels with your rasp.
2. When exfoliating the sole, you will only pear away the flaky or chalky appearing sole until the smooth, waxy or shining appearing surface is visible. That is the functional sole and should not be over trimmed, especially in the toe & toe-quarter regions of the foot. The sole callus is located in this region which supports and protects the distal phalanx (P3), and again, should not be over trimmed. Once you are finished exfoliating, you should have a nice clean area all the way around the perimeter of the sole. For hoof mapping purposes, the area of the sole and wall junction should be clean as well.
3. The bars can be trimmed some if they are fractured, laid over or have a sharp curvature to them. They should only be removed to the point where the bars have a nice gradual arc and are free of cracks.

## Hoof Mapping Procedure

4. To most accurately locate the widest part of the foot, three (3) methods should be employed. (Figure 1 - A, B & C)

**A** - From the True Apex of the frog, measure back (caudally) about 1" or 26mm (on a size #0 to #2 foot) and draw a line on the frog.

**B** - Find the position where the bars terminate into the frog commissures. If you run a hoof pick up the commissures (from the back forward), you will find a raised hump which general indicates the termination of the bars. Mark a line at that position.

**C** - Mark an arc about 2" long in the quarters at the sole/wall junction on both sides of the foot. You should be able to visually see the peak of the arc on each side of the foot. Make a mark on each side at the widest part of the sole.

If all 3 locations you have marked line up, then you can feel comfortable that you have accurately located the widest part of the foot. If only 2 of the 3 marks line up, then you can approximate the widest part by going with the 2 marks that concur. Draw a final line all the way across the foot once you have settled on the most accurate marks.

5. Draw a line across the very back of the frog. (Figure 2-A) You can see a dimple in the back of the central sulcus that represents the most caudal support structure of the frog. The heels of the shoe will be fit to this line on front feet and most hind feet. It can be OK to fit the heels on hind feet a little behind this line, but the shoes should not be fit ahead of this line.

6. Starting at the line in the quarter, mark a line at the sole/wall junction all the way around the foot. (Figure 2-B) This line will help ensure that you do not over trim the wall or sole in the toe & pillar region.

Fig. 1

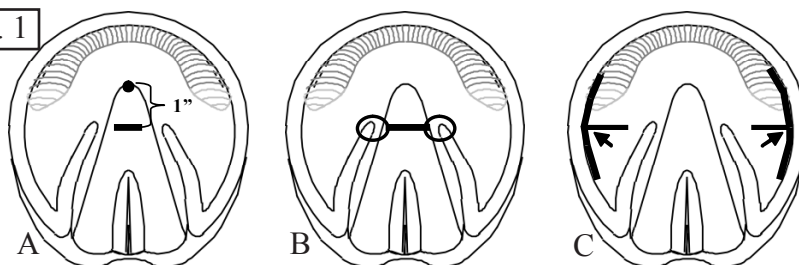
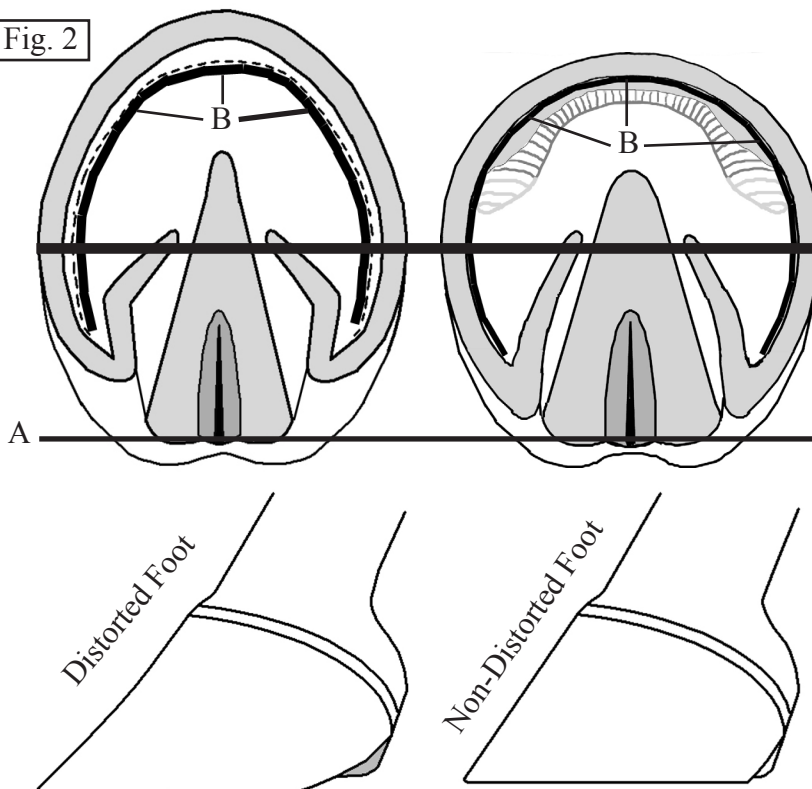


Fig. 2



## Hoof Preparation

7. Start just behind the toe pillar region with half your nipper blade out of the cut. Trim above the black line leaving about 1/8" – 1/4" (3mm – 6mm) of wall above the black line through the quarters. Continue straight through the heels just above the black line.

8. For trimming the toe, you again start behind the pillar and trim around the toe making sure that you leave the black line. Trimming into the black line (live sole) at this point can jeopardize your ability to maintain good sole clearance for your shoe.

9. Final heel preparation consists of rasping a flattened area of the heel that includes a small portion of the bar and produces a substantial base of support. The heels should also be the same size and curvature. (Figure 3-A) The heel generally ends close to the back of the frog, which is good rule of thumb; however, use the live sole as the primary guide and the back of frog as a secondary guide.

10. Final toe preparation consists of rasping the wall down to the level of the sole, until you have just touched the black line with your rasp. You should make equal contact with the black line on each pillar (toe-quarter). (Figure 3-B) This will ensure good Lateral/Medial Balance. Be conservative and do not completely remove the black line.

11. Blend the wall in the quarters with the wall at the toe and the heel until the wall is perfectly flat and ready to accept the shoe. There should be an equal sole/wall gap in the quarters. (Figure 3-C)

12. It is very important to dress any flares on the outer wall prior to fitting your shoe. Select a prominent growth ring about half way up the hoof wall. Rasp from there down to the distal end of the wall. (Figure 3-D) The wall should be dressed so that it is basically straight from the hairline to the ground and you have achieved a uniform wall thickness on the ground surface. (Figure 4-A) If there is a considerable amount of distortion, you may not get the wall perfectly straight the first time or two. Your indication to stop rasping is when you start to see the white zone appear near the bottom of the wall. Within 3 or 4 shoeing cycles, the wall will migrate back to a better orientation with the coffin bone and serious distortions will not be a problem.

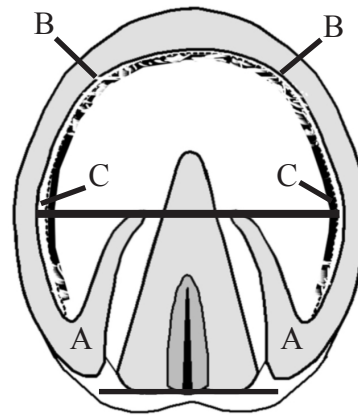


Fig. 3

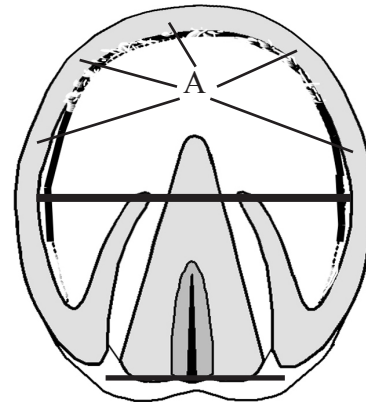
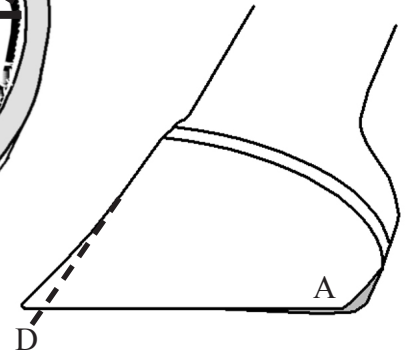
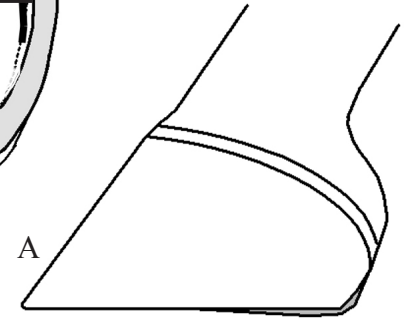


Fig. 4



## Shoe Application

13. When shaping, fitting and attaching the Centre Fit shoe, the follow guidelines should be met. (Figure 5 [Distorted Foot] & Figure 6 [Non-Distorted Foot])

A - The width of the shoe should match the width of the trimmed foot.

B - The alignment marks on the shoe should line up very close to the mark at the widest part of the foot.

C - The heels of the shoe should extend slightly behind the heels of the foot and end at the line drawn at the back of the frog. **Heels on hind feet can extend slightly behind the back of the frog.** (See website for more details on hind feet & club or upright feet).

D - As much as 1/8" to 3/16" (3mm – 4.5mm) of "expansion" is acceptable. Do not kink or bend the heels of the shoe in sharply to match narrow, curved heels, especially if it covers part of the frog buttress. The heels should not be much narrower than the toe quarters of the shoe.

E - The shoe should fit in the toe quarters, but may not fit to the full perimeter of the toe. The amount of toe extending beyond the front of the shoe will vary depending on the amount of dorsal hoof wall distortion. **Again, this is why it is imperative to leave ample sole thickness at the toe when trimming.** Within a few shoeing cycles, the dorsal wall will migrate back to a better orientation with the bone and there will little to no hoof wall extending ahead of the shoe.

14. Since you have already dressed the wall prior to applying shoes, there is very little rasping that should be required on the dorsal wall, aside from finishing your clinches. However, if there is any wall extending ahead of the shoe, simply angle your rasp at a 15° to 25° degree angle (about the same as the roll in the shoe), and slightly undercut the amount hanging over. (Figure 5-F) DO NOT attempt to take the dorsal wall back to the shoe's perimeter in a vertical manner. This will weaken the dorsal wall and can cause instability within the hoof capsule.

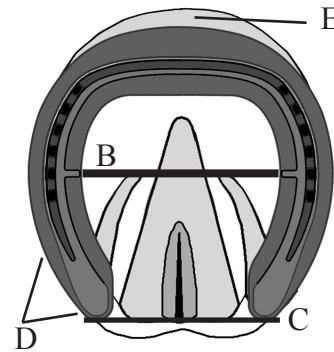


Fig. 5 [Distorted Foot]

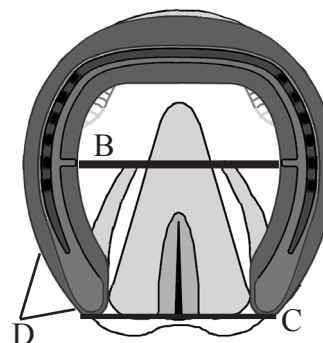


Fig. 6 [Non-Distorted Foot]