

# EDSS Hoof Care Guidelines

FOR THE SUCCESSFUL APPLICATION OF QUALITY HOOF CARE PRODUCTS DISTRIBUTED BY EDSS, INC.

The following guidelines are critical for the successful application of **Centre Fit, NB PLR, Natural Balance, TK Slider, Vulcan RM, and Elite Hind shoes**, both front and hind patterns. The design of these shoes compliments much of the latest information regarding equine foot function and biomechanics relating to leverage reduction and balance around the distal interphalangeal joint. The basic premise behind the proper application of all of these shoes 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 balanced 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.EDSSHoofCare.com](http://www.EDSSHoofCare.com)

## Foot Exfoliation Process

1. Exfoliate the ground surface of the foot by first locating and marking the TRUE frog apex, (Figure 1-A) where the sole and frog join together. Other frog maintenance includes removing any loose or non-functional frog pieces, and then open & clean the central sulcus of the frog. (Figure 1-B) Trimming the corners of the frog buttress is also recommended for better access to the heels with your rasp. (Figure 1-C)
2. When exfoliating the sole, you will only pare away the flaky or chalky appearing sole (Figure 2-A) until the smooth, waxy or shiny appearing surface is visible. (Figure 2-B) This is the functional sole and should not be over trimmed, especially in the toe & toe-quarter regions of the foot. The sole callus & pillars are located in this region which support and protect the distal phalanx (PIII), so be respectful of this area of the foot. (Figure 3-A) 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. (Figure 3-B)
3. The bars can be trimmed some if they are fractured, laid over or have a sharp curvature to them. (Figure 3-C) They should only be maintained to the point where the bars have a nice gradual arc and are free of cracks.

Figure 1

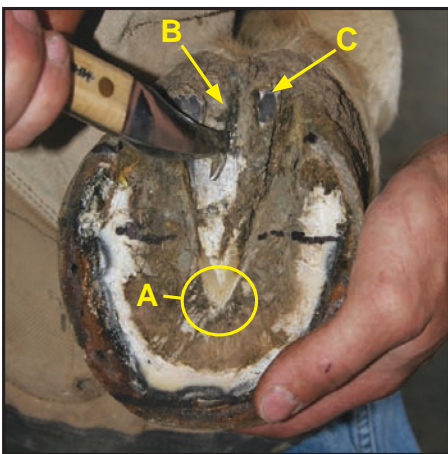


Figure 2

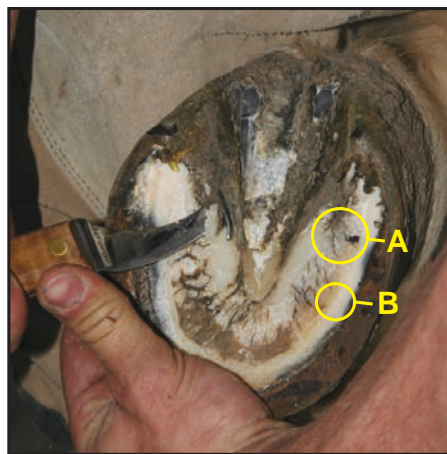
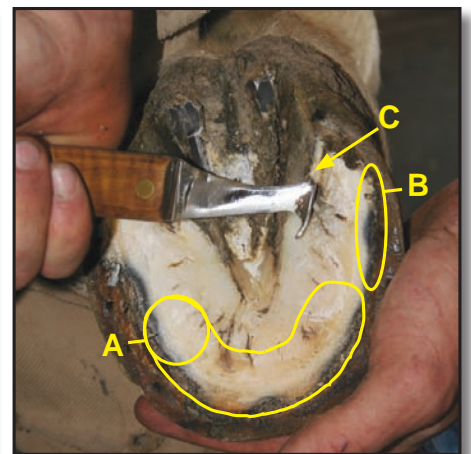


Figure 3



## Hoof Mapping Procedure (FOR COMPLETE DETAILS VISIT: [WWW.E-HOOF-CARE.COM](http://WWW.E-HOOF-CARE.COM))

4. To most accurately locate the Widest Part of the Foot (WPOTF), three (3) methods should be employed. (Figure 4-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 generally 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.*

Figure 4

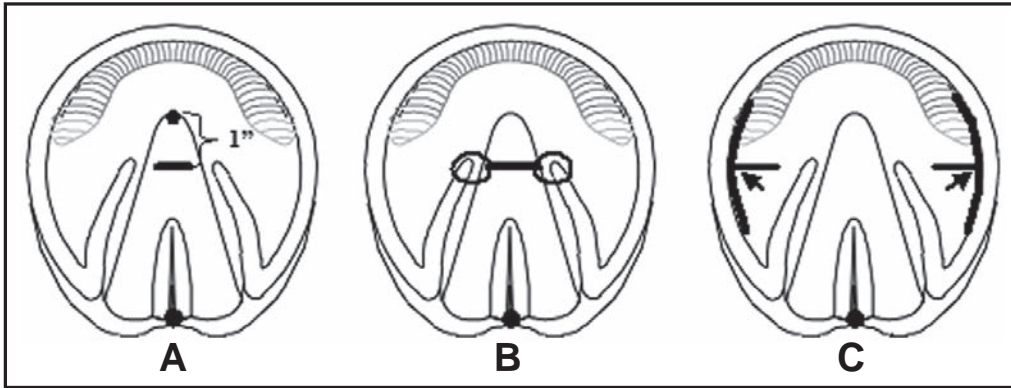


Figure 5



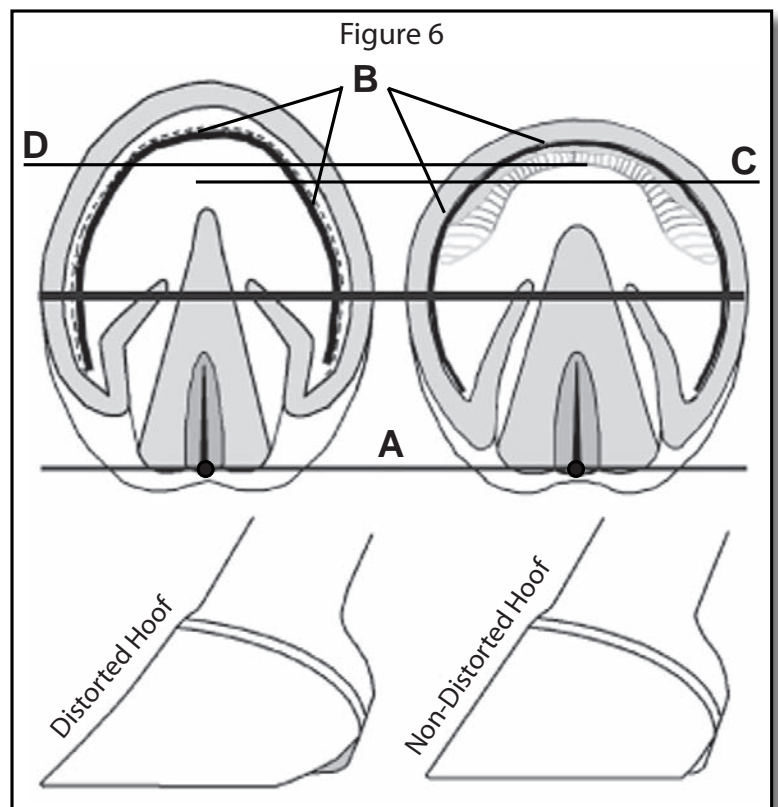
If all 3 locations you have marked line up, then you can feel comfortable that you have accurately located the widest part of the foot. If only 2 of the 3 marks line up, then you can approximate the widest part by going with the 2 marks that concur. Draw a final line all the way across the foot once you have settled on the most accurate marks. (Figure 5)

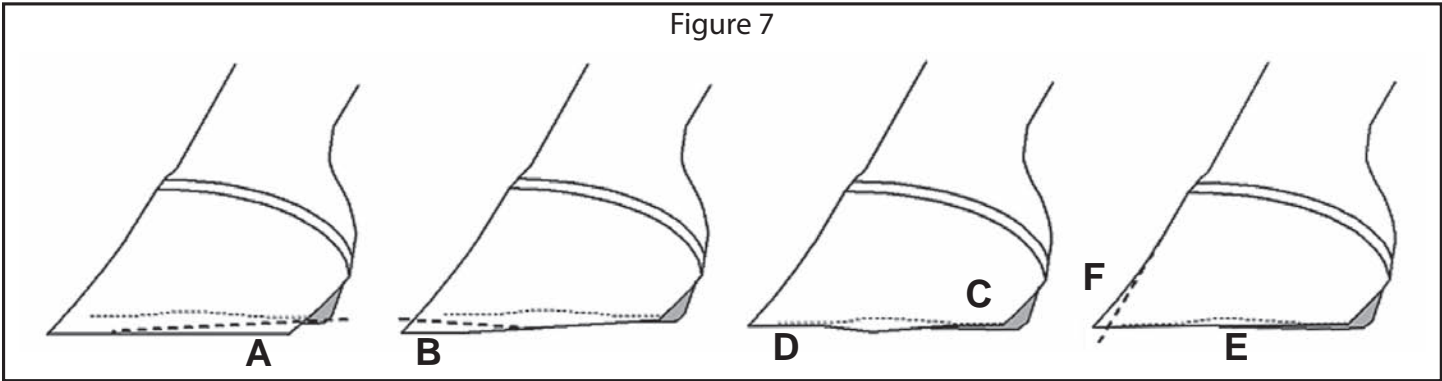
5. Draw a line across the very back of the frog. (Figure 6-A) You can see a dimple in the back of the central sulcus that represents the most caudal support structure of the frog. The heels of the shoe will be fit to this line on front feet and on some hind feet. It can be OK to fit the heels on hind feet a little behind this line, but the heels of the shoe should not be fit ahead of this line.

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

7. From the WPOTF, measure forward 1.75" (45mm) on a medium size foot (size 0 - 2) and make a mark. This is a very close approximation of the tip of the distal phalanx (P111). [For larger or smaller feet, add or subtract 1/16" (2mm) per size to this measurement.] A good starting point for the placement of the point of breakover of the selected shoe would be about 1/4" (6mm) ahead of the tip of the distal phalanx (or 2" ahead of the WPOTF).

Figure 6





## Hoof Preparation

8. Start just behind the toe pillar region with half your nipper blade out of the cut. (Figure 8) 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. (Figure 7-A)

9. For trimming the toe, start behind the pillar and trim around the toe making sure that you leave the black line. (Figure 7-B) Trimming into the black line (live sole) at this point can jeopardize your ability to maintain good sole clearance for your shoe.

10. Final heel preparation consists of rasping the heel flat and close to the level of the live sole (in the 'V' between the bar and hoof wall). (Figure 7-C) The back of the heel generally ends within 1/4" (6mm) from the dimple or 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. When finished, you should have a flattened area that includes a small portion of the bar and produces a substantial base of support. The heels should have a similar size and curvature. (Figure 10)

11. Final toe preparation consists of rasping the wall down **CLOSE TO** the level of the sole. You should have an equal amount of wall on each side above the sole in the pillar region. (Figure 7-D) This will ensure good Lateral/Medial Balance. Be conservative and do not completely remove the black line, especially at the pillars.

12. Blend the wall in the quarters with the finished toe and heel until the wall is perfectly flat and ready to accept the shoe. (Figure 7-E) There should be an equal gap on each side from the sole to the ground surface of the wall in the quarters. (Figure 9)

13. 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 7-F) 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 10) 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 continued problem.

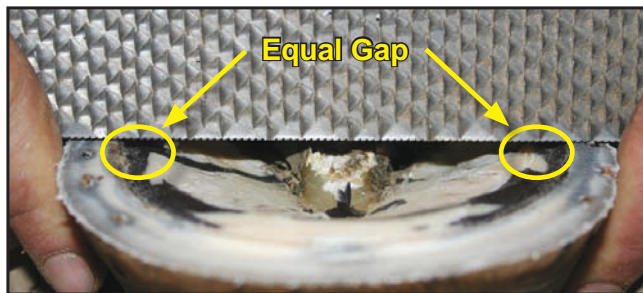
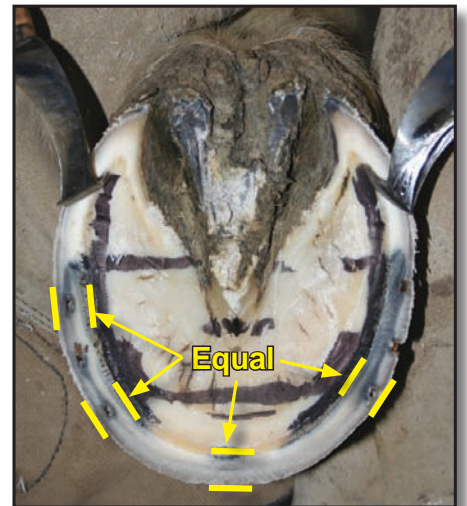


Figure 9

Figure 8



Figure 10

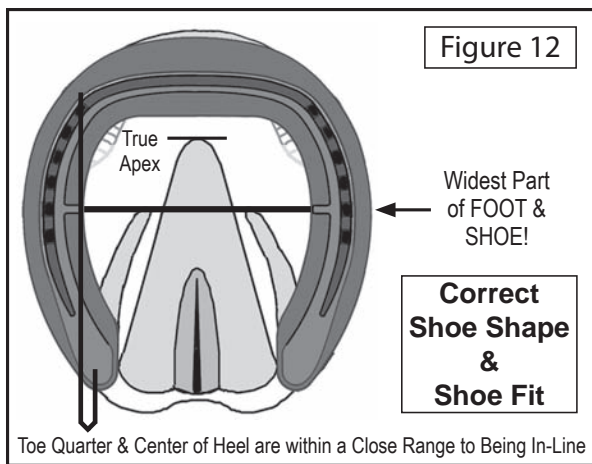
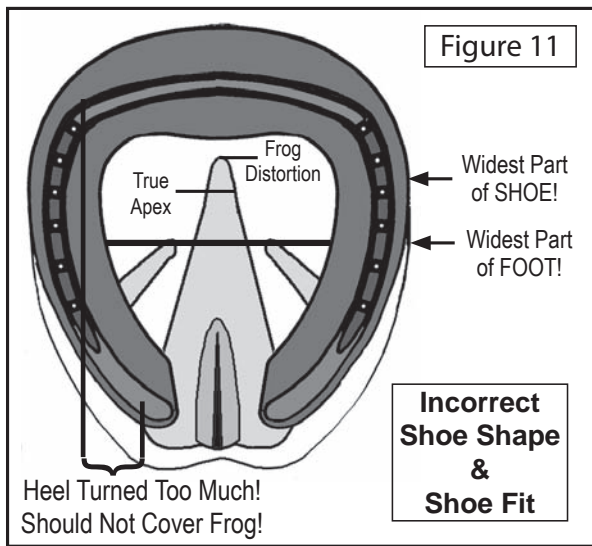


# General Shoe Fitting & Application

14. When shaping, fitting, and attaching the shoe, the follow guidelines should be met. (Figure 11 = Incorrect & 12 = Correct)

- A - The width of the shoe should match the width of the trimmed foot at the widest part.
- B - The foot surface of the shoe should bisect the foot equally around the widest part of the foot.
- C - The heels of the shoe should extend slightly behind the heel buttress of the foot and end at the line drawn at the back of the frog (the dimple). The heels of the shoe on hind feet can extend slightly behind the back of the frog. (See website for more details on hind feet & clubbed 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 center of the heels should not be much narrower than the center of 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 may vary depending on the amount of dorsal hoof wall distortion that exists. 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 PIII and there will be little to no hoof wall extending ahead of the shoe.

15. 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. **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.



For more examples and additional information on fitting TK Sliders & other Front or Hind pattern shoes, please visit: [www.EDSSHoofCare.com](http://www.EDSSHoofCare.com) or call: (719) 372-7463  
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