

Hoof Repair and Reconstruction Using Imprint Hoof Repair Material

Hoof Reconstruction Procedure (Prepare as for Hoof Crack)

- Trim and balance hoof to correct proportions to dissipate stress and facilitate even loading.
- Remove all diseased tissue using farriery tools and high speed burr tool – 4mm is very useful.
- Take care to avoid invading the vascular structures. Quick tip: Using a slightly dulled burr tool at low speed enables cleaning of the laminal leaves with reduced chance of cutting in deep and causing unwanted bleeding.
- This procedure can be carried out on both the wall and sole regions.
- Leave a clean step with some undercut at the margins of the defect area.
- Additional keying around the margins can be achieved by creating necked notches/dovetailing, again with undercut at intervals.
- Clean using surgical spirit.
- Where a large area of wall is reconstructed, it is advantageous to continue the Imprint Hoof Repair not only to the ground border, but onto the sole. If this is the case:
 - Clean the sole of any exfoliating horn and any dirt – DO NOT THIN THE SOLE OF HEALTHY HORN.
 - Clean using surgical spirit then
 - Apply a thin layer of Imprint Adhesive over the area to be reconstructed and the area of sole that the Imprint Hoof Repair is also to cover – up to, but not covering, the frog.
 - With preheated Imprint Hoof Repair softened in hot water, mould on from one edge of the defect, filling all the area progressing onto the sole.
 - Create the desired shape in the hoof wall – not too thick a skin on the sole -and creating a healthy concave shape with the outer margins only contacting the ground. Ensure adhesive is visible at the edges.
- Wear wet latex gloves for this procedure.
- A pallet knife is useful for smoothly sculpting the Imprint Hoof Repair.
- When the desired form is achieved, Imprint Freezer Spray may be used to cool and harden the Imprint Hoof Repair before weight-bearing.
- It may not be necessary to cool the Hoof Repair in all instances.
- If the hoof repair extends only to the ground border of the hoof, but is not bearing weight, it can be left to cool naturally. This can help the adhesive cure more quickly.

Example Lateral Toe Quarter Complete Rebuild



Lateral toe quarter white line lesion



Excavating undermined horn



Extent of wall separation



Edge of defect keyed

- If the defect repair is likely to get knocked or trodden on, on the medial side of the hoof, it is better to cool and harden the material first.
- NB When large areas of hoof are reconstructed, it has been found advantageous to initially build only to barely the ground border, then allow the soft Imprint Hoof Repair to harden naturally along with the adhesive whilst the foot is on the ground. This ensures that there is no unwanted tension or compression created in any areas that could cause complications.
- When this method is adopted, following the hardening of adhesive and Hoof Repair, a further stage of either fitting an Imprint shoe to the reconstructed hoof or further hoof building onto the sole can be carried out.
- Enclosing the white line zone, when completely clean, protects this otherwise vulnerable area from bacterial ingress and further decay.
- This procedure enables an otherwise defective hoof to be brought back into comfort and use at a greatly accelerated rate, speeding recovery for the patient.



Note sole slightly dropped in toe quarter



Applying Imprint Adhesive



Adhesive is then applied to sole in toe quarter



Softened Imprint Hoof Repair being modelled into defect area...



... and thin layer onto sole encapsulating white line zone



Modelled repair mimics hoof anatomy



Refrigerant used to harden Hoof Repair material



Hardening all areas of Hoof Repair



Procedure complete