

Tarsus-Paw Impression Instructions

Please view this video on tarsus impression:

<http://vimeo.com/album/1562354>

It is 10 minutes long and explains the entire process.

Required Materials

- ✓ Glad “Press N Seal” **CANNOT BE SUBSTITUTED**
- ✓ Cut Strip (can be substituted w/ cut (bi-valved) suction tubing)
- ✓ Hook Blade (can be purchased at local hardware store)
- ✓ Tape
- ✓ Bandage Scissors
- ✓ Measuring Tape
- ✓ Permanent Marker
- ✓ Gloves
- ✓ Bowl of room temperature water
- ✓ Appropriate sized **non-flexible** fiberglass casting tape
- ✓ Measurement Form



***A fiberglass impression kit can be purchased for \$60 + shipping and will include all supplies listed above (Press N Seal can be purchased for an additional charge) and all necessary paperwork. ***

YOUR PATIENT SHOULD NOT NEED TO BE SEDATED

DO NOT SHAVE THE FUR

Important Anatomical Landmarks to be Included and Defined in Impression

- ✓ Greater and Lesser Tibial Tuberosities
- ✓ Lateral Fibular Head
- ✓ Calcaneal Tendon
- ✓ Calcaneus
- ✓ Lateral/Medial Malleoli
- ✓ 2nd & 5th Metatarsal Heads
- ✓ Dewclaw (if present)
- ✓ Entire Paw

Important Anatomical Positioning During Impression

- Your patient should be in **LATERAL** position for this impression procedure.
- Please extend the tarsus to 165 degrees. If the patient cannot extend it's tarsus to this degree, please extend to a comfortable position and note why.
- If the patient presents with a varus or valgus instability of the tarsus and/or paw, please correct this as much as possible in the impression.
- Please ensure you have not created a FALSE varus/valgus in your impression.
- Please ensure you have not created a FALSE external or internal rotation of the limb in your impression.
- Please dorsi-flex the paw as close to normal position the patient is comfortable at while holding the tarsus at 165 degrees.
- **Do not anesthetize or sedate your patient for this process**

Step-by-Step Instructions

1. Begin by wrapping the affected limb with "Press N Seal" plastic wrap. Present the plastic wrap **from the stifle (knee) joint down and include the paw.** This will ensure you have the limb protected from the fiberglass.
2. Dorsi-flex the paw to normal while in the press and seal to confirm you have not wrapped it too tight and that the width of the paw has not been compressed.
3. Tape the cut strip or your tube on the **lateral aspect of the limb at the stifle and then end cranial at the tarsus.** **The cut strip should present above the level of the stifle and extend below the paw.**
4. Put on rubber gloves. Remove the fiberglass material from pouch, submerge in room temperature water for 5-8 seconds, and gently squeeze roll to ensure complete water saturation. Remove roll from water and gently squeeze out excess water.
5. Start by applying the fiberglass material at the center of the stifle joint (include the tibial tuberosities in your impression). Spiral wrap the fiberglass material distally being careful to **only overlap ½ of the previous layer.** **Do not wrap more than 2 layers thick as this can make the impression difficult to remove and removes the required detail we need to fabricate the device.** Do not wrap so tightly that soft tissue is compressed. The impression should be firm and intimate with the limb, but not tight enough to create lumps at the layers.
6. Continue wrapping down the limb and end by **including the entire paw.** Be cautious not to bind the width of the paw as under normal weight-bearing position, the paw spreads and increases in width.



7. Cut any excess fiberglass material off and discard. **Do not wrap back up the leg. Your impression will end up being too thick.**
8. Rub the layers of fiberglass material together to ensure the layers are bonding together and that the casting material is conforming around the bony anatomical landmarks.
9. Position the tarsus (ankle joint) at 165 degrees (more extended than normal). **Please ensure you are not creating a false varus, valgus, supination, pronation, or rotation of the tarsus and/or paw.**
10. While holding just above the paw and supporting caudally at the calcaneus, **dorsi-flex the paw** into a normal standing position. If the paw cannot be dorsi-flexed to normal, please dorsi-flex to the degree the patient can tolerate and document so. Hold the paw in this position while the fiberglass is hardening. Apply a compressive force on the top and bottom surface of the paw to ensure you are expanding the width of the paw to simulate normal paw width during weight-bearing activities.
11. Spend additional time rubbing the fiberglass material around the following areas:
 - Press and identify the bony anatomy globally around the tarsus joint including the distal shafts of the tibia/fibula, the lateral/medial malleoli, calcaneus, calcaneal tendon, and base of the metatarsals. Apply a compressive cranial/caudal force at the distal aspect of the metatarsals to expand the medial/lateral width.
12. Once the material has hardened (3-4 minutes; use this time to mold), you will prepare to cut through the fiberglass material over the cut strip or rubber tube.
 - If you have an “OrthoPets Impression Kit”, you will utilize the hook blade
 - Start a 1” cut at the top of the mold with the bandage scissors
 - Then, simply “pull” the hook blade down the cut strip the blade will easily and smoothly cut the hardened fiberglass material. You may apply a small gentle “wiggle” movement of the hook blade if you feel resistance during this process.
13. Remove the yellow cut strip.
14. Next, using bandage scissors, cut through the “Press N Seal” plastic wrap.
15. Remove the impression from the limb. Then, **remove the “Press N Seal” and tape from inside of the impression.**
16. Lastly, **immediately** tape the impression back together to allow the material to completely cure without losing any of the shape.

