

Carpus-Paw Fiberglass Impression Instructions

Please view this video on creating a carpus impression:

<http://vimeo.com/24063805>

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 SEDATION

DO NOT SHAVE THE FUR

Important Anatomical Landmarks to be Included and Defined in Impression

- ✓ Olecranon
- ✓ Humeral Lateral/Medial Epicondyles
- ✓ Radial/Ulnar Styloids
- ✓ Metacarpal Heads
- ✓ Entire Paw

Important Anatomical Positioning During Carpus Impression

- Your patient should be in **LATERAL** position for this impression procedure.
- Position the carpus to 180 degrees. If the carpus cannot be placed at 180 degrees, position it as close to 180 that the patient will tolerate.
- If the patient presents with a varus or valgus instability of the carpus 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 carpus at 180 degrees.
- **Do not anesthetize or sedate your patient for this process**

Step-by-Step Instructions

1. Begin by wrapping the entire limb with “Press-N-Seal” plastic wrap. Present the plastic wrap from **above the elbow joint** down and **include the paw**. This will ensure that 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. Ensure the accessory carpal pad has not been compressed and that it is still prominent through your Press N Seal.
4. Tape the cut strip or your tube on the cranial (front) aspect of the limb. The cut strip should present **above the level of the elbow and extend below the paw**.
5. 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.
6. Start by applying the casting material with a 2-layered wrap **proximal to the elbow joint**.
Spiral wrap the casting 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 casting material 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 cast should be firm and intimate with the limb, but not tight enough to create lumps at the layers.



7. 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.
8. Cut any excess fiberglass material off and discard. **Do not wrap back up the leg. Your impression will end up being too thick.**
9. Rub the layers of casting material together to ensure the layers are bonding together and that the casting material is conforming around the bony anatomical landmarks.
10. Position the carpus (wrist joint) at 180 degrees (normal standing position). **Please ensure you are not creating a false varus, valgus, supination, pronation, or rotation of the carpus and/or paw.**
11. While holding just above the paw and supporting caudally at the carpus, 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.
12. Spend additional time rubbing fiberglass material around the following areas:
 - Press and identify the bony anatomy globally around the carpus including the distal aspect of the radius/ulna, the accessory carpal bone and pad, the flexor carpi ulnaris, and the styloid process of the ulna.
13. Once the fiberglass 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 cast. You may apply a small gentle “wiggle” movement of the hook blade if you feel resistance during this process.
14. Remove the yellow cut strip.
15. Next, using bandage scissors, cut through the “Press N Seal” plastic wrap.
16. Remove the fiberglass impression from the limb. Then, remove the “Press N Seal” and tape from cast.
17. Lastly, immediately tape the cast back together to allow the material to completely cure without losing any of the shape

