

WeHero

Helping Hands

Manual

A hand-up to help others through
building prosthetic arms for those in
need supporting over 80 countries!



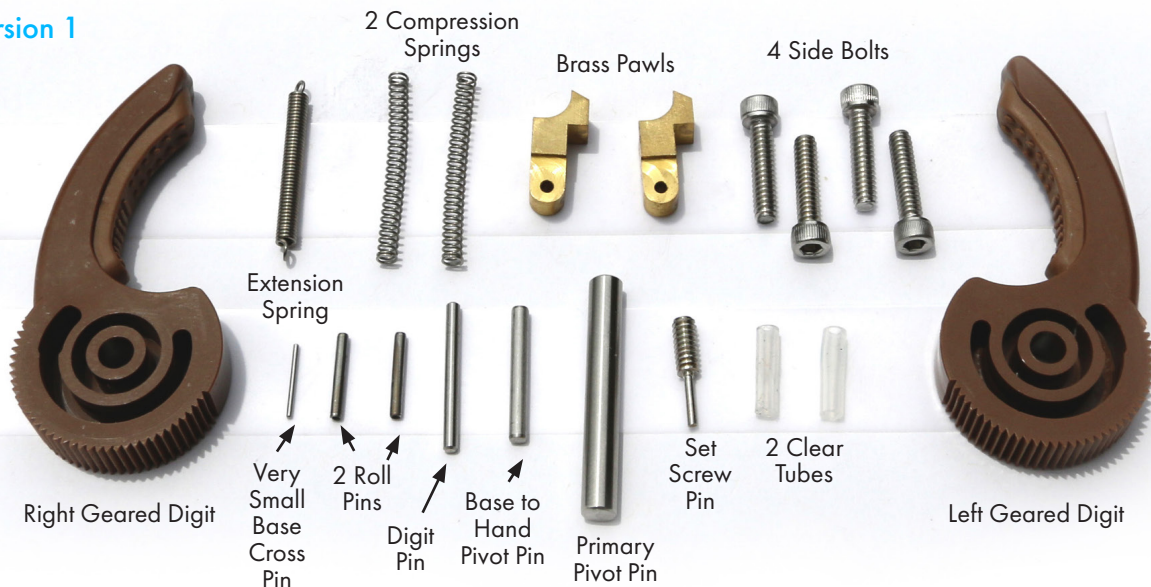


PLEASE DO NOT WRITE IN BOOKLET!

Step 1: Before you start building, determine if you have **Version 1** or **Version 2** of the hand.

Compare your Geared Digits to these two photos, metal parts are located in the small bag.

Version 1



Version 2





These items are the same in
Version 1 and Version 2.



You will NOT have all of the below tools, but you will have what you need.

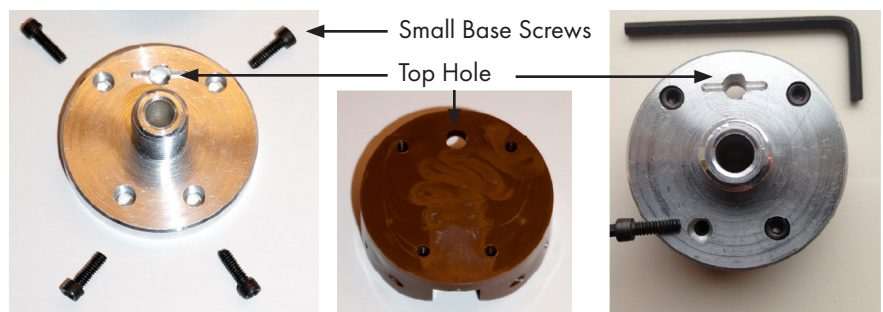
Sample of tools provided for Version 1 or Version 2:

You will find a combination of these tools. You will **NOT** have **ALL** of the tools in this photo, but you **WILL** have what you need.

Good Luck! REMEMBER, THIS IS A PROBLEM SOLVING ACTIVITY!

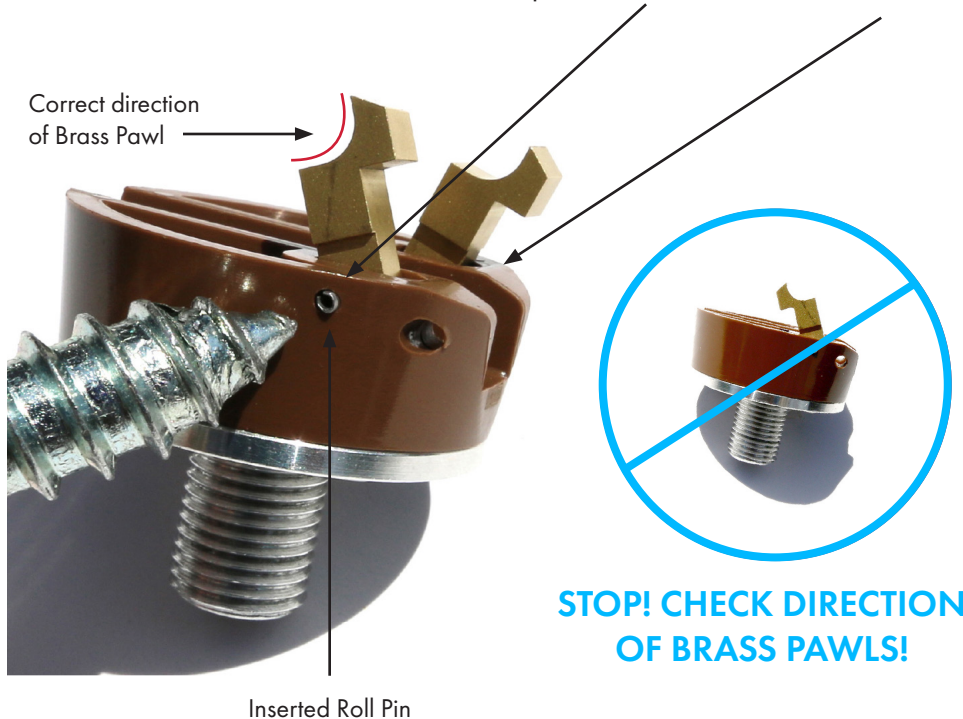
Start here if this step has not already been done for you:

Insert Small Base Screws into corresponding holes. The top hole should not have a screw in it. **Screw them all the way in tight.**





Step 2: Insert Brass Pawls into Base **CONFIRM THE PROPER DIRECTION**, then insert Roll Pins to secure. Use screwdriver or bolt to push **Roll Pin** sub flush to **Base**. (**Sub flush equals below surface**)



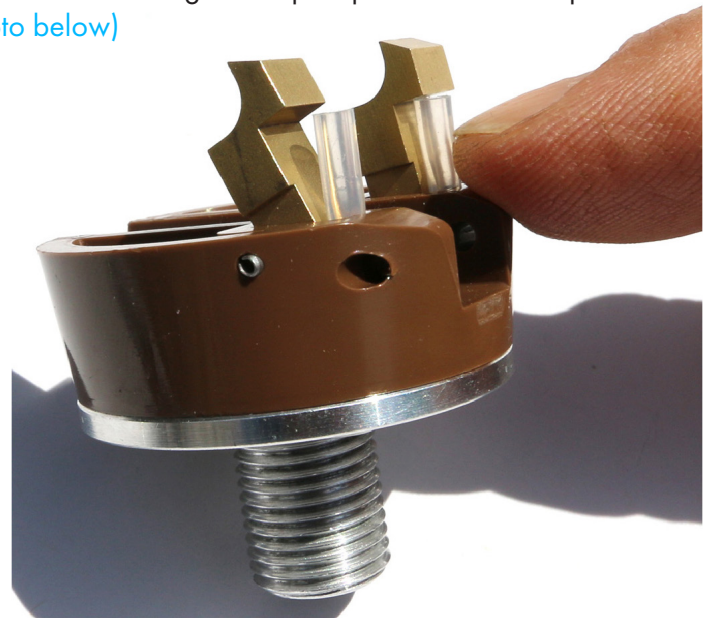
STOP! CHECK DIRECTION OF BRASS PAWLS!



If you Make a Mistake and get your Brass Pawls backward use this paperclip to remove the Roll Pin. If you do not have this tool, ask for help from staff.

Step 2.5: After Step 2 use your fingertip to insert the Clear Tubing as deep as possible into the space behind the Brass Pawls. (**Match the photo below**)

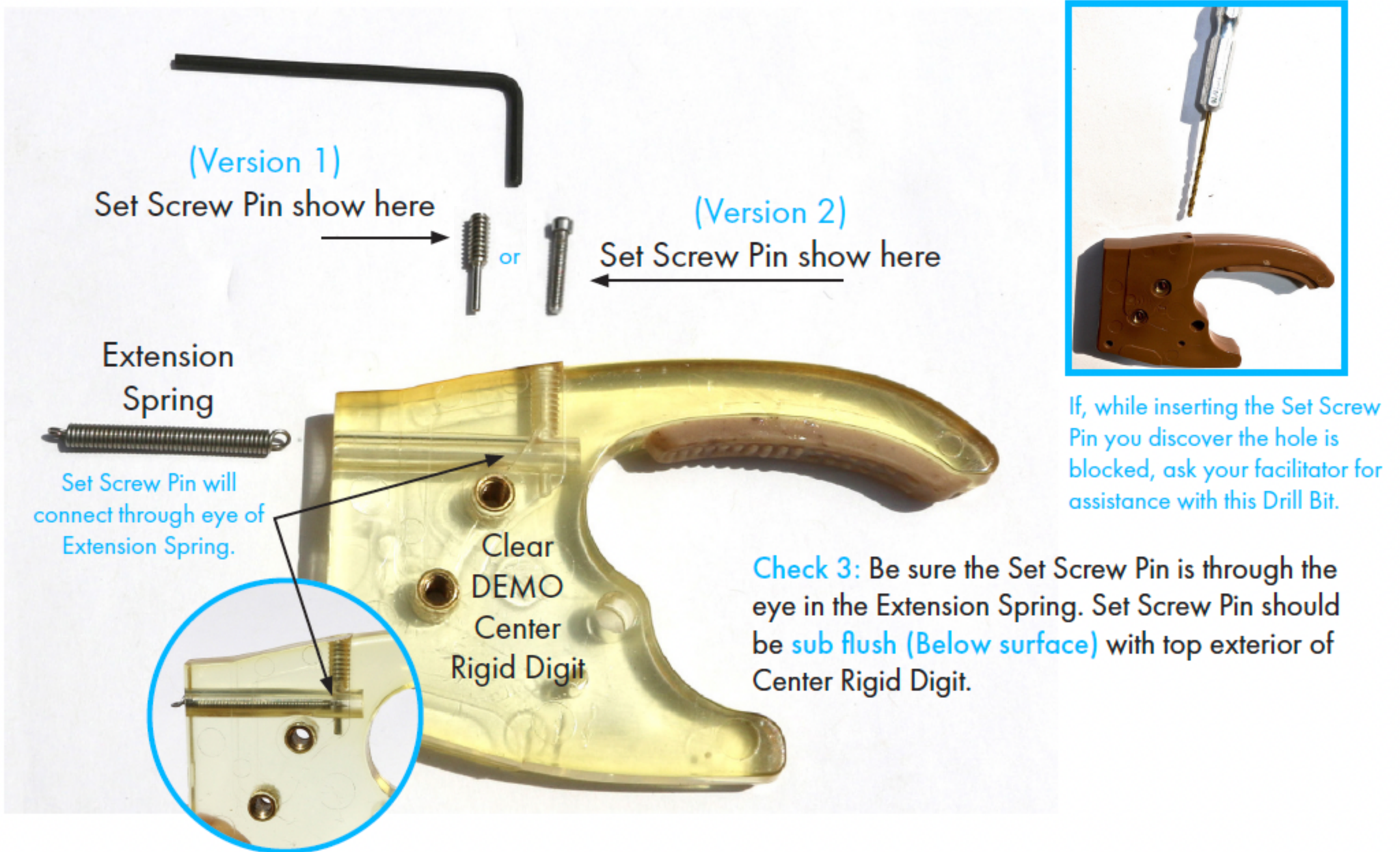
NOTE: LOOK CLOSELY IN THE SMALL CLEAR BAG FOR 2 CLEAR TUBES. (THEY CLING TO THE SIDES)



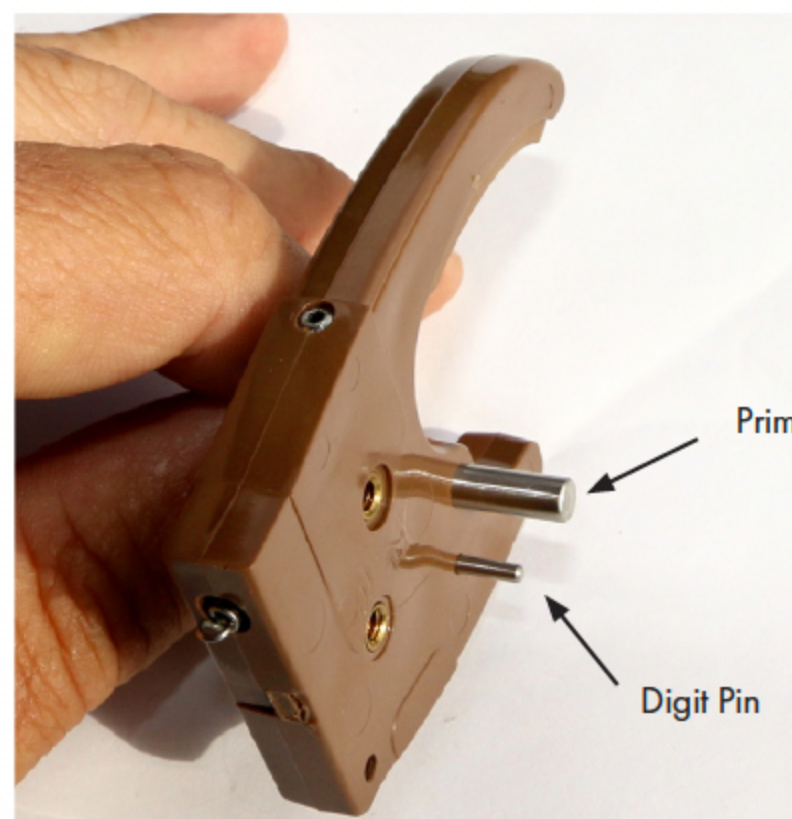
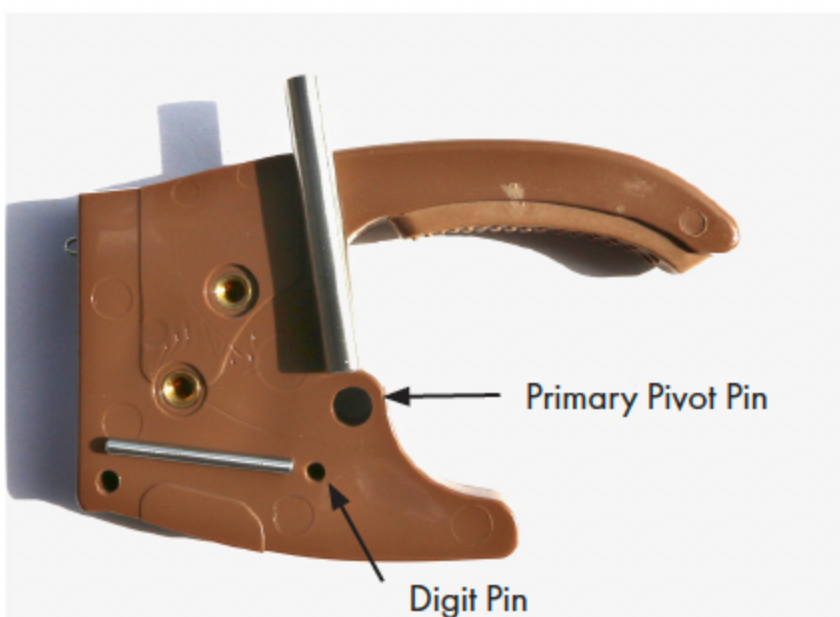
Check 2: Brass Pawls are oriented properly, Roll Pins are pushed in below surface (**Sub flush**) and Clear Tubes are in position.



Step 3: Insert the Extension Spring into the hole in the Center Rigid Digit. Identify the Set Screw Pin. (Be certain you have the Set Screw Pin) Then screw the Set Screw Pin in the top hole of the Center Rigid Digit and lace through the eye of the Extension Spring. This is tricky.



Step 4: Be sure to use the correct pin, many pins are close in size.



Check 4: Be sure both pins are into the holes halfway.

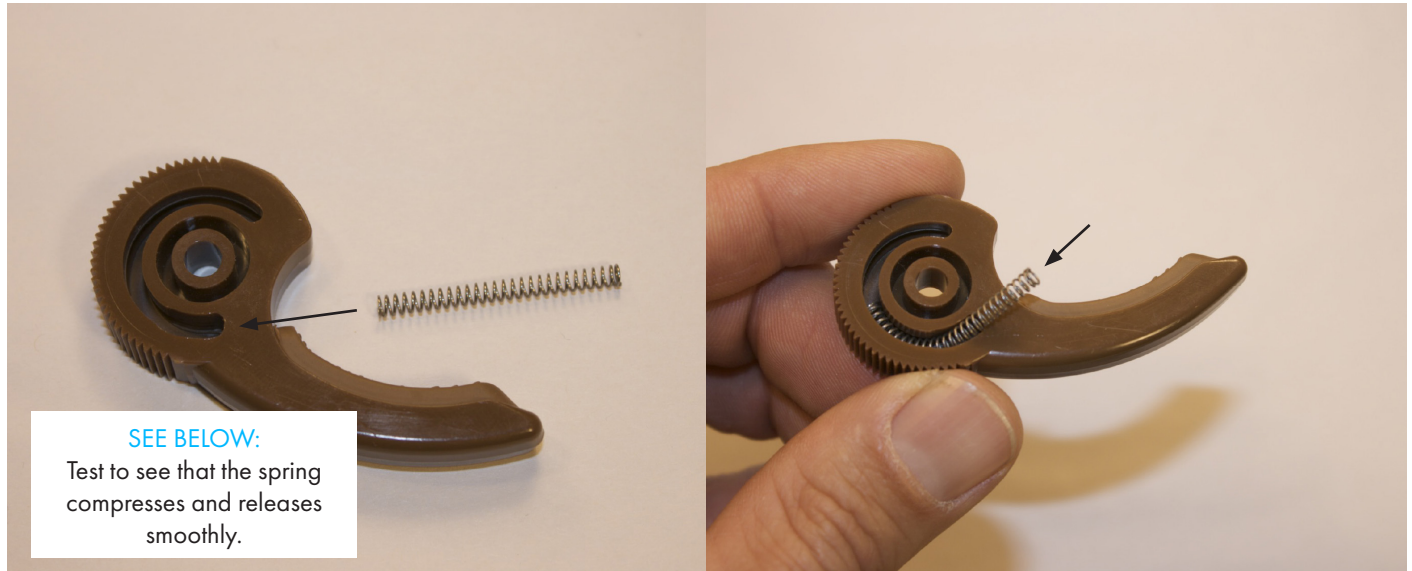


FINISH STEP 5 THEN REPEAT!

Step 5: Inserting Compression Spring into Geared Digits.

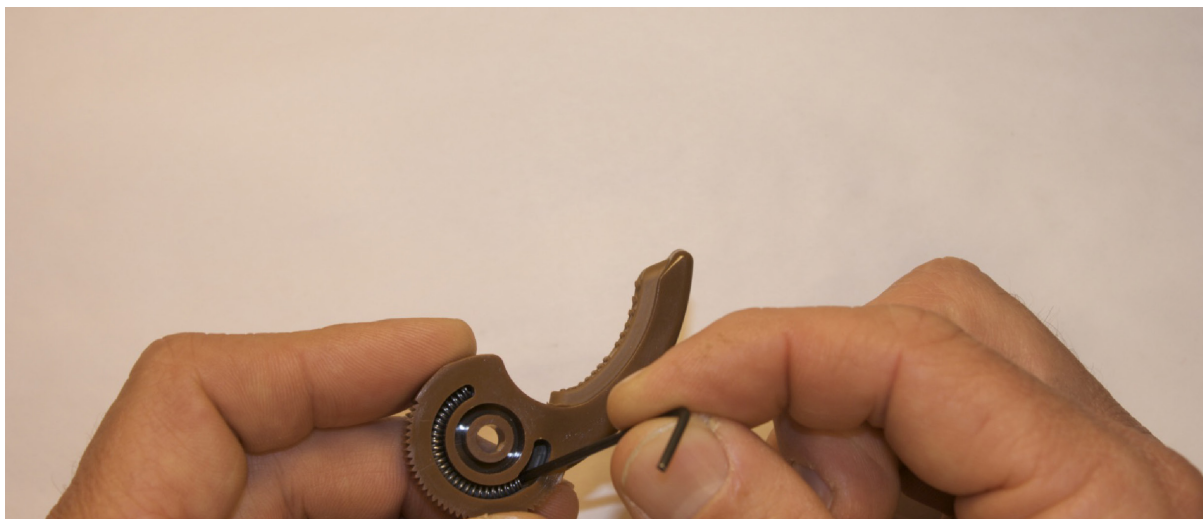
Insert Compression Spring into larger end of the slot using a gentle, arcing motion while pushing/turning.

NOTE: There should be a right and left of each Geared Digit.



VERY IMPORTANT !!!

BE SURE COMPRESSION SPRING IS ADJUSTED SO IT IS AWAY FROM THE FINGER END



Check 5: Compression Spring is adjusted away from finger end, creating space for the Digit Pin.

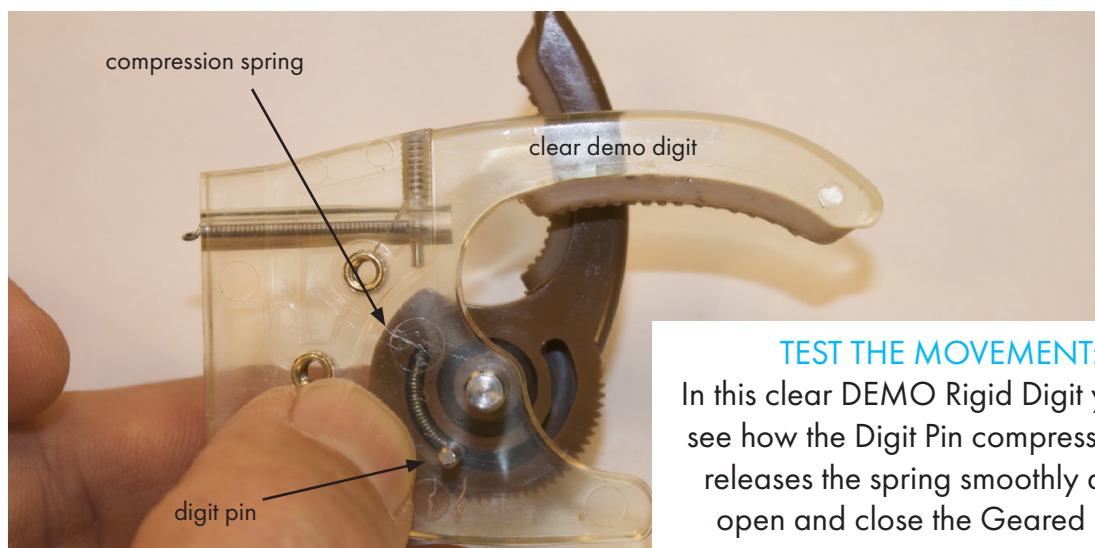
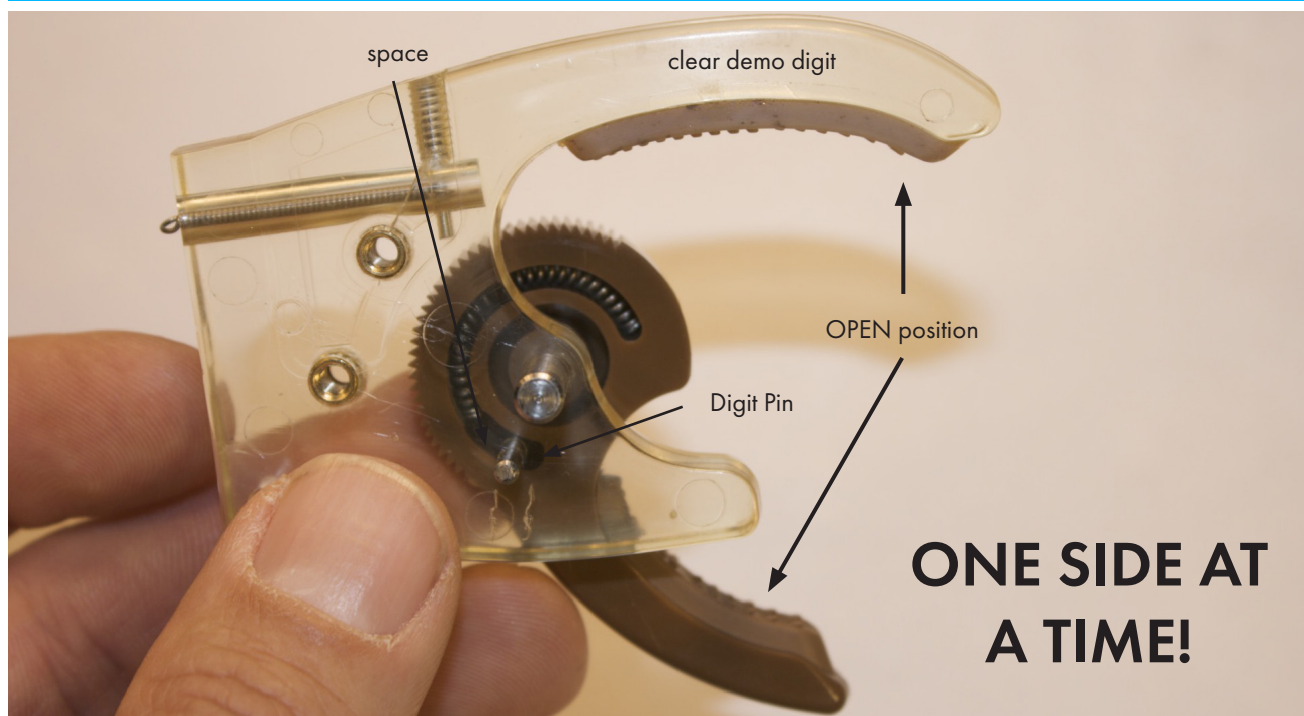


FINISH STEP 6 & 7 ONE SIDE AT A TIME, **THEN REPEAT!**

Step 6: Attach Geared Digit to Center Rigid Digit.

VERY IMPORTANT!

Be very sure the Digit Pin does not hit the Compression Spring in the Geared Digit, it will **DAMAGE THE COMPRESSION SPRING** if not done properly. Install the Geared Digit in the **OPEN** position to avoid damage.



TEST THE MOVEMENT:

In this clear DEMO Rigid Digit you can see how the Digit Pin compressed and releases the spring smoothly as you open and close the Geared Digit.

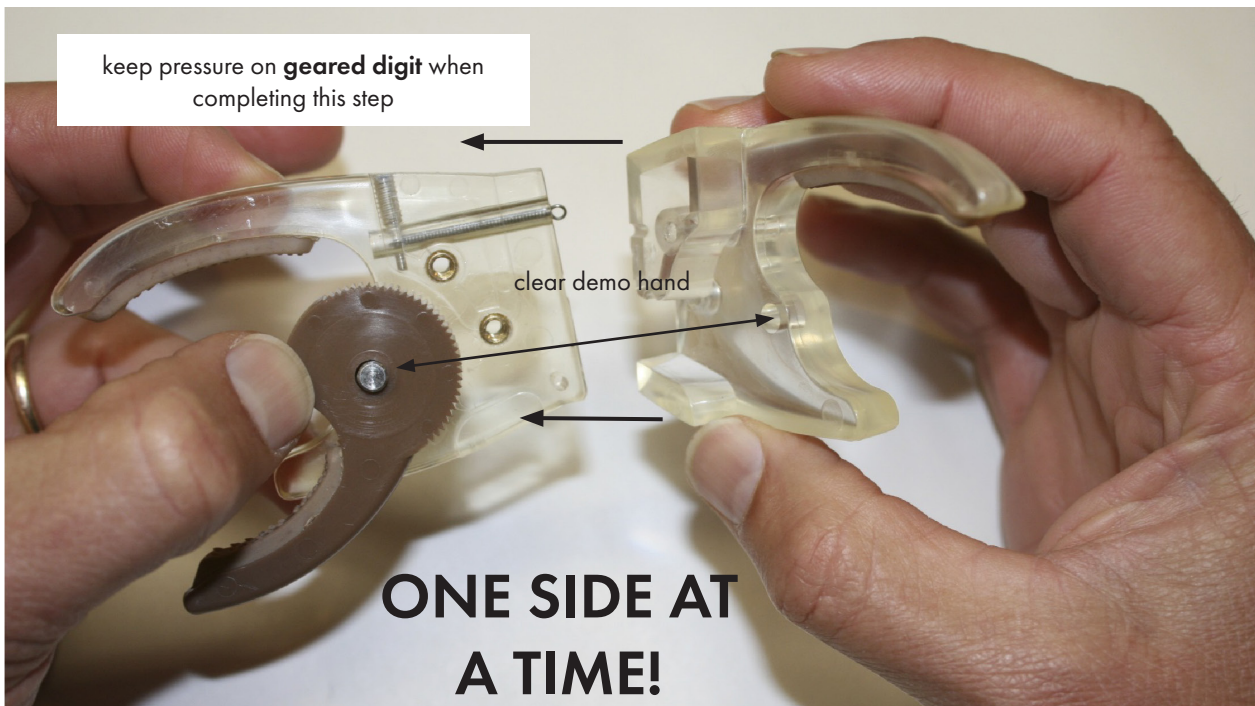
Check 6: Geared Digit moves smoothly and you can feel the Spring Compressing as you open and close the Geared Digit.



Step 7: Attach the Side Rigid Digit over Geared Digit and secure with Two Bolts.

VERY IMPORTANT !!!

Finish one entire side of hand **BEFORE REPEATING STEPS 6 & 7** on the other side.



Screw in Side Bolts when two parts are **joined properly**.

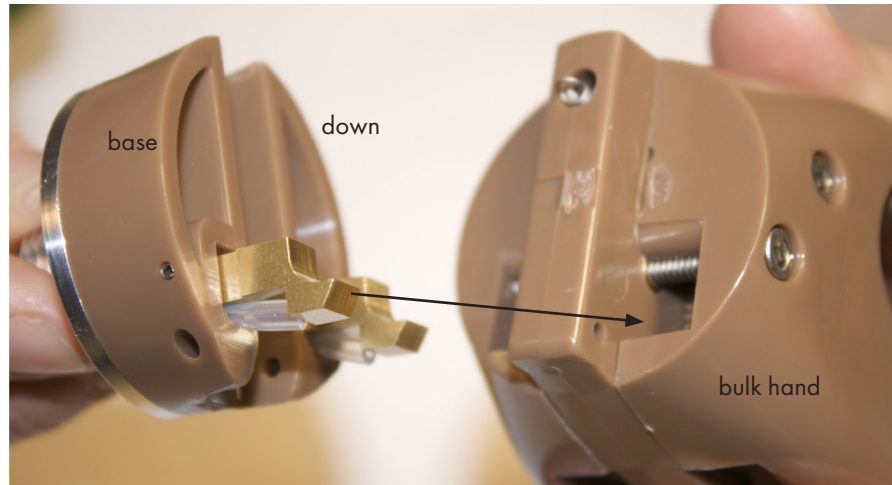
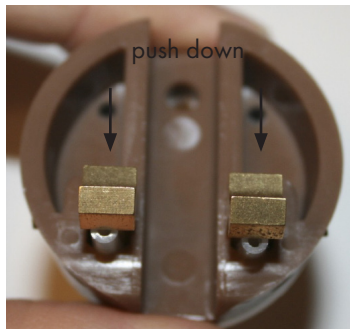
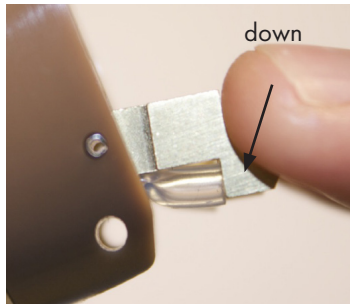


Check 7: Test the movement of one Geared Digit. If it moves smoothly now is the time to **REPEAT STEPS 6 & 7** for the other side. Be sure Bolts are tight.

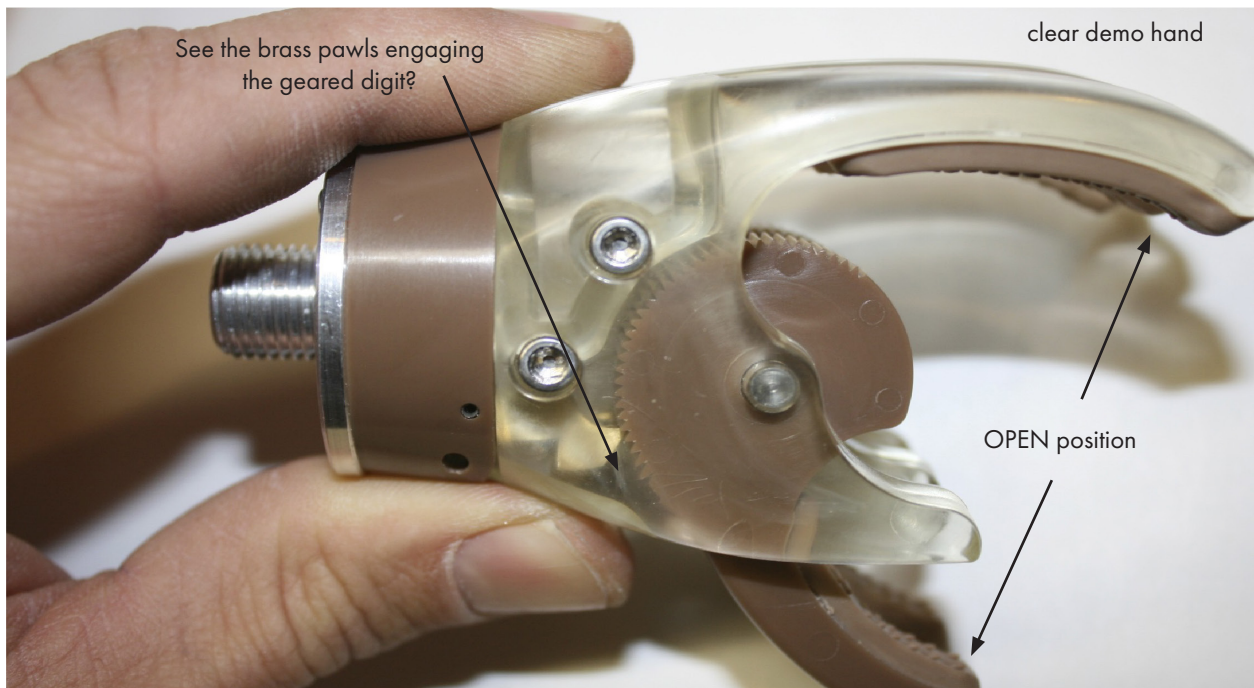


**IMPORTANT! DO NOT ATTEMPT TO OPEN OR CLOSE
GEARED DIGITS UNTIL STEP NUMBER 12.
AVOID DAMAGE. BE PATIENT.**

Step 8: Joining the Bulk Hand and the Base



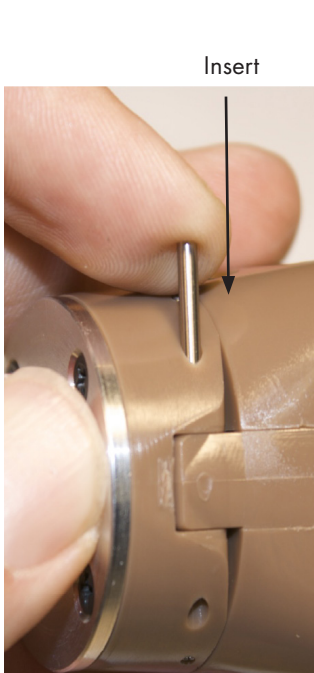
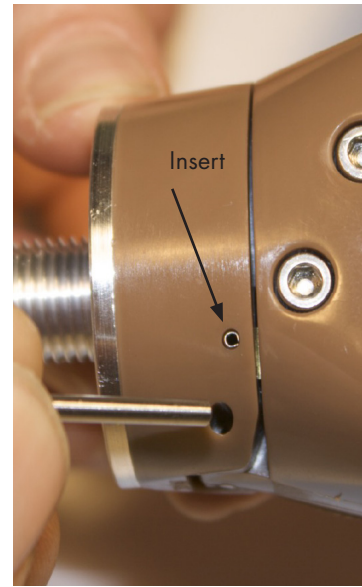
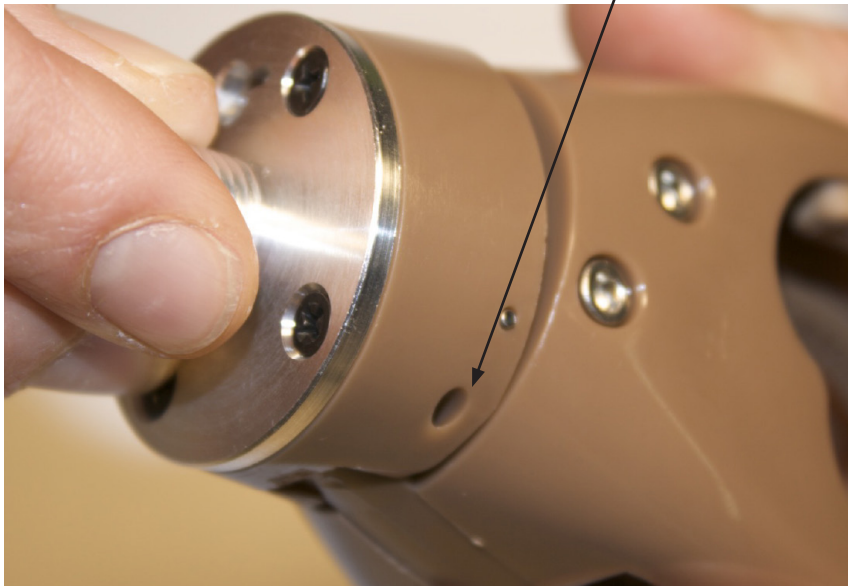
Press the Brass Pawls and Tubing down. This will help them fit better in the holes on the Bulk Hand and **align them properly** with the Geared Digits.



Check 8: Hold the Bulk Hand and the Base together tightly. **GO TO STEP 9.**

**Step 9:**

Finish joining the Bulk Hand and Base by installing the Base to Hand Pivot Pin.
It is a very tight fit! Use the Large Silver Bolt or Screwdriver Handle to hammer in the Base to Hand Pivot Pin until Pin is sub flush with Base exterior.

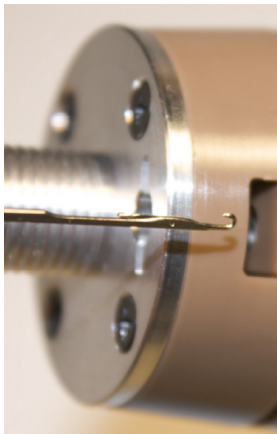


Check 9: All Pins and Bolts need to be sub flush with the exterior. **BE SAFE!**

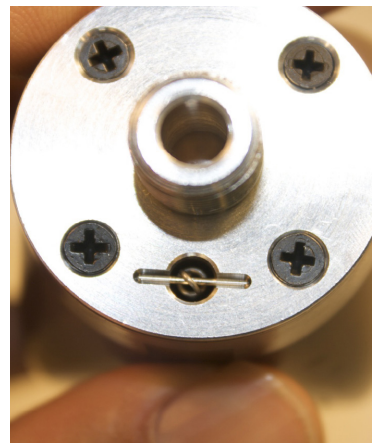
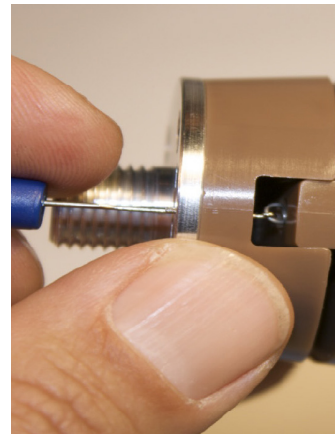


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AVOID DAMAGE. BE PATIENT.**

Step 10: Insert **VERY SMALL BASE CROSS PIN**

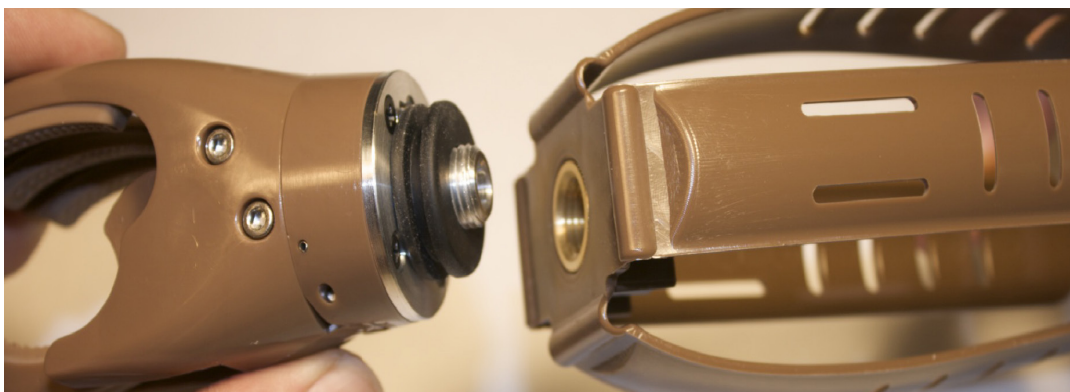


Use the **Hook Tool** to pull the Extension Spring through the hole in the Plastic and Aluminum Base. While pulling and holding the Extension Spring, **insert the Very Small Base Cross Pin** through the eye of the Extension Spring and release. **This is a two person job.**



Check 10: Pin should be in Pin Bed and held tightly by the Extension Spring.

Step 11: Attach the Grommet over aluminum threads and connect completed Hand to Cuff.

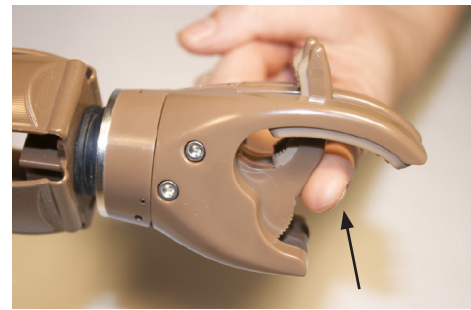
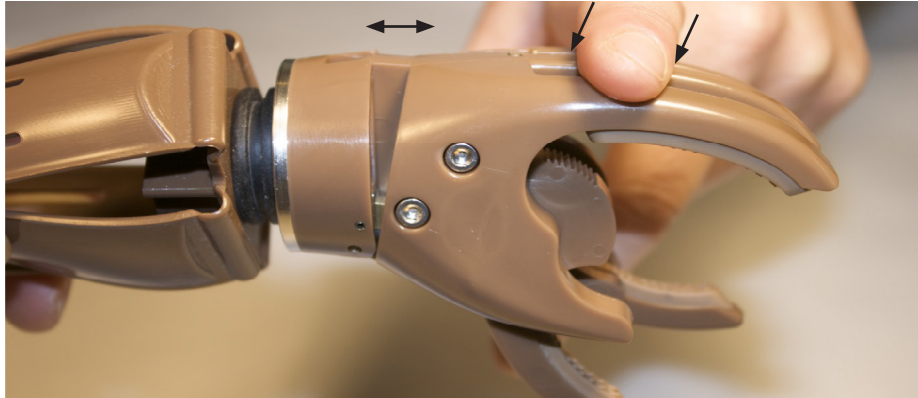


Check 11: Be careful not to cross thread.



Step 12: TEST the hand.

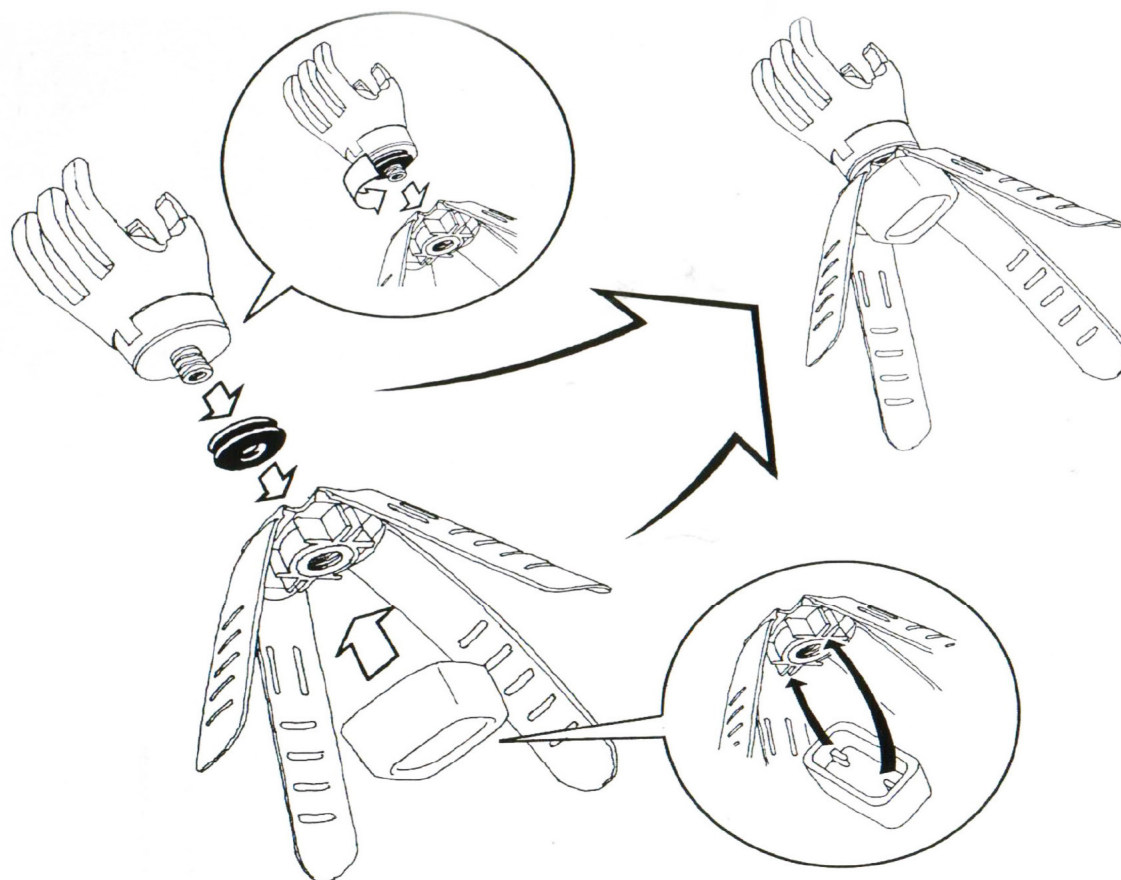
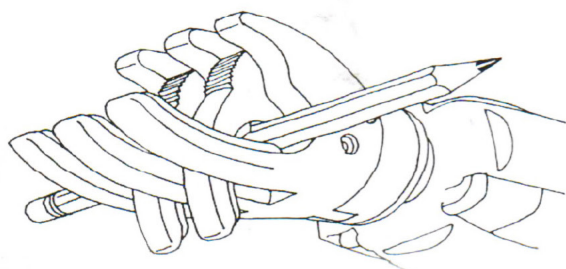
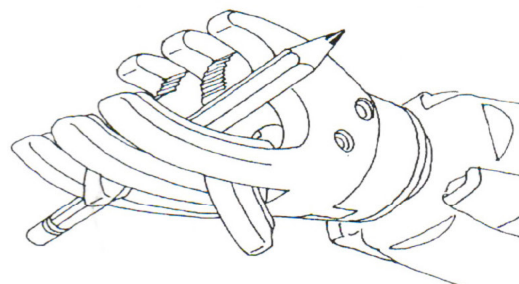
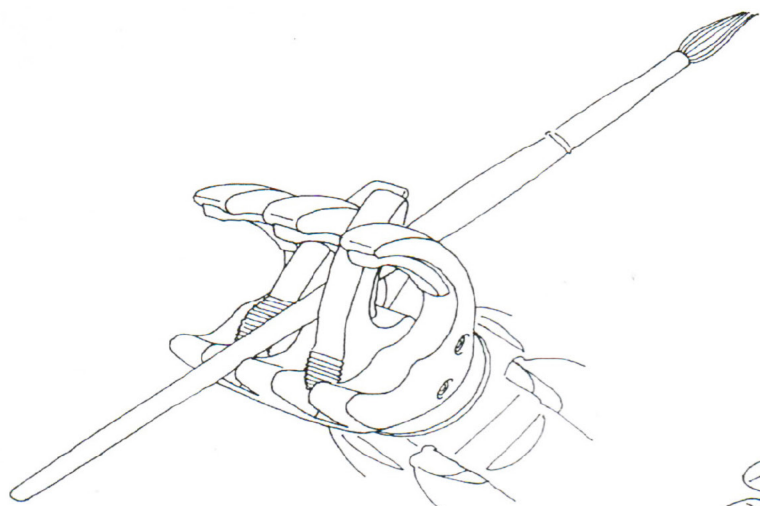
To OPEN: press down on top of Rigid Digits. **DO NOT FORCE THEM OPEN!**



To CLOSE: press up on Geared Digits. Listen for the clicking sound of the gears. The sound should be clear and crisp. Both Digits should sound the same. **This is VERY important!**



CURIOUS HOW IT WORKS? To release Geared Digits, press on the top of the Rigid Digits. This action disengages the Geared Digits from the Brass Pawls and releases the grip. Digits will **pop open quickly** and can bounce back randomly.





ARM BAND ASSEMBLY

Step 13:



A. Lay nylon arm band in front of you – with **BUCKLE** to the **LEFT**, velcro side **DOWN** and three skinny straps away without any twists.



B. On the four-legged **PLASTIC** cuff, find one of the two wider legs containing 5 slots. Lay one of those 5 slot legs down on the **MIDDLE** nylon strap.



C. Feed the middle strap **UP** through **FIRST** slot.



D. Skip two slots and go back **DOWN** through the **FOURTH** slot.



E. Come **UP** through **SECOND** slot.



F. Go **DOWN** through **FIRST** Slot. Leave 4 inches of tail and pull tight.



ARM BAND ASSEMBLY

Step 13 CONTINUED:

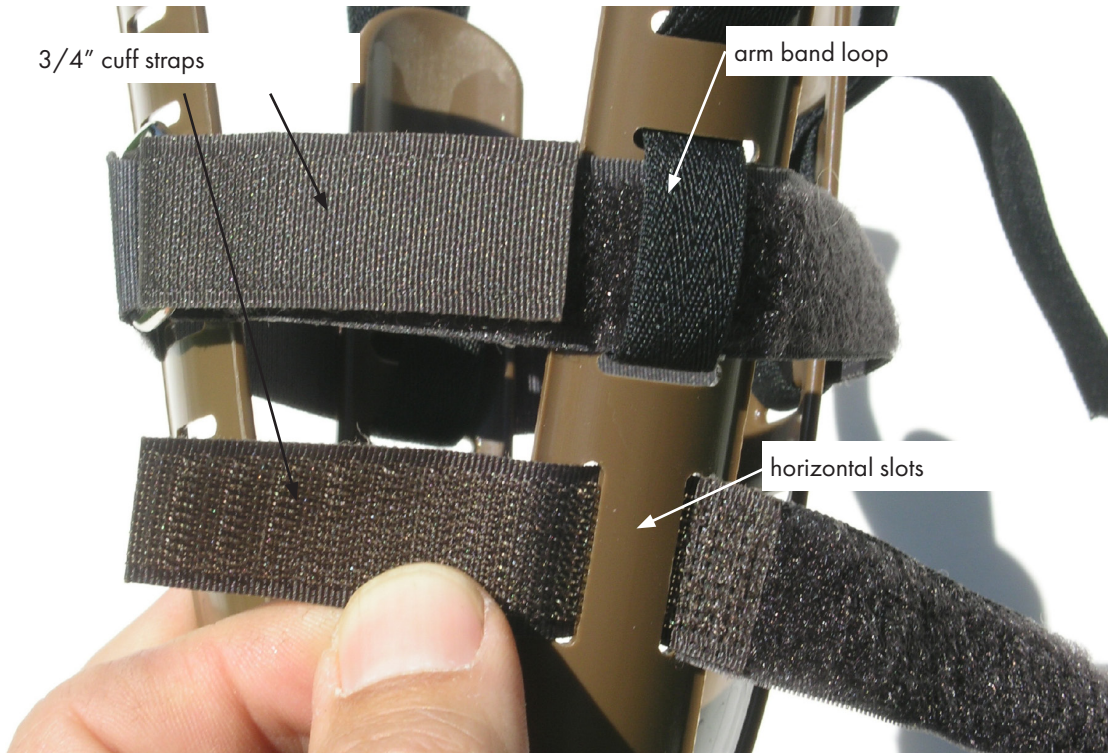


G. Before inserting the skinny strap on the left, imagine you are going to wear the **LN-4** hand. The Arm Cuff with Velcro will be curved around your lower bicep. Follow the skinny strap on the left side ensuring no twists as you go through the first slot from outside in. **Then, follow the same weave pattern in D,E,F on previous page.**

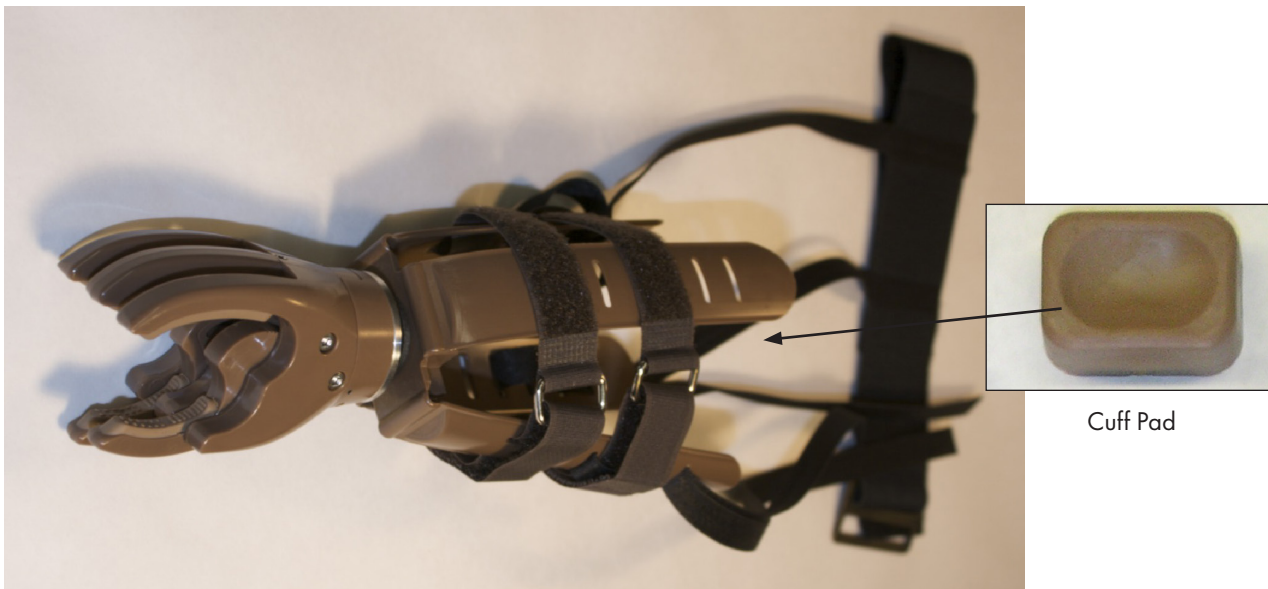


H. Before inserting the skinny strap on the right, imagine you are going to wear the LN-4 hand. The Arm Cuff will be around your lower bicep. Follow the skinny strap on the right side ensuring no twists as you go through the first slot from outside in. **Then, follow the same weave pattern in D,E,F on previous page.**





Step 14: Weave one of the 3/4" Cuff Straps through the horizontal slots in the two skinny legs of the Cuff. Weave the remaining 3/4" Cuff Strap through the loop you created with the straps from the Arm Band. (see above photo) Be sure you have no twists in any of the strapping and insert the Cuff Pad into the base of the Cuff.





Quality Control Test

Please be very careful and complete the test.
The LN-4 Hand must pass in all areas to be
given to a recipient.

Visual inspection – All Pins, Screws and Side Bolts SUB-FLUSH with exterior and tight.

Mechanical inspection – Completely close and release both Digits at least five times. Completely close and release each Digit individually at least five times. Close Digits to align the tips with the Fixed Digits (a partial close) and open.

Audio inspection – Listen for strength in the ratcheting of Geared Digits. Both Digits should be robust and similar to each other in ratcheting sound and feel. Slowly close Digits starting in the fully open position.

Repair: If ratcheting sounds weak or quiet, check for damaged Compression Springs by removing outside Fixed Rigid Digits.

Repair: If digit does not fully open with a clean snap, check for misalignment between the Digit pin and the Compression Spring. Replace Compression Spring in all instances if damaged. Geared digit sticks in between Rigid Digits – check for excess plastic and check for alignment of Side Digits. If 4 Side Bolts are over tightened it can pinch the Geared Digit and restrict movement.

- Check for and insure ALL pins are sub-flush (Below Surface) Not FLUSH or ABOVE SURFACE.
- Check ARM BAND/CUFF: Put on your Arm securing Velcro Arm Strap. Follow each of the Three Straps to the Plastic Cuff and check for any twists. Remove and fix any twists. Leave 4" of Tail on Straps.

Step 15: Place ONLY finished hand, Cuff, Strapping, and optional note to recipient into your decorated Hand-Carrying Case and Slip into Large Plastic Bag to protect your artwork.

Step 16: Place all items in designated places per facilitator instructions.
Note: Facilitator might request you to separate each item in "like item" locations.

Step 17: Using the original box everything came in, add the completed kits and reseal. Attach the prepaid shipping label and schedule your USPS pickup. You can also drop your box off at your local post office. To schedule your pickup, simply use the following link and follow the steps: www.wehero.co/pick-up/

Note: If the system asks for weight, you can enter 6 pounds and the shipping provider will update the weight automatically.

Step 18: Take a photo of yourself with your completed kits and share the experience with your friends and family. This is an opportunity to spread awareness and share the act of kindness. Be sure to tag WeHero when you post on social media!

CONGRATULATIONS AND THANK YOU, YOUR HAND IS DONE!