



Partial Hand SOLUTIONS, LLC



Technical Instructions

*M-Fingers / Partial M-Fingers
Pediatric M-fingers / M-Thumb*

Positioning the Fingers

- Flex wrist to bend fingers
- Extend wrist to extend fingers

Positioning the Partial M-Finger

- Have patient flex knuckle (MCP joint) to flex finger
- Have patient extend knuckle (MCP joint) to extend finger

Positioning the M-Thumb

- Push on the back of the M-Thumb to flex the digit by bending the joint.
- Push on the inside of the M-Thumb to straighten the joint.
- The M-Thumb can be rotated 360 degrees.

Adjustments

- Evaluate cable from wristband to fingertip. Adjust cable as needed to avoid skin irritations. Adjust cable tension to desired tension by moving the metal cable cleat up or down. Moving up will tighten the cable tension, moving down will loosen the tension. The cable cleat converts the two cables into one allowing the two cables to become in-line with each other so they enter the finger base straight and not at an angle. If the cleat was not installed the cables would have to enter the finger base at angles and this would cause unnecessary wear on the cable. Sliding the cleat up or down on the cable allows for slight cable tension adjustment.

Adjustments (M-Thumb)

- If more rotation resistance is required, remove Phillips screw, remove M-Thumb to access Allen head screw. Tighten Allen screw to desired tension. Install thumb back into position by reinstalling Phillips screw.
- If more friction is required for flexion/extension, insert a Phillips screwdriver into the side of the M-Thumb to tighten screw.

Additional Considerations/Tech Tips

- New users should start with a wearing schedule and ease in to a full day of use.
- If using a silicone socket, apply a small amount of water or Cal Stat® lubricant to limb to dampen skin. Push limb into prosthesis.
- If applying wristband to hand. Apply small amount of water or Cal Stat lubricant to dampen finger/fingers and push each finger into the prosthetic sockets.
- If a strap is used on the forearm section, secure in place.
- Adjust BOA reel to the ideal cable tension. Flex wrist to bend fingers, extend wrist to extend fingers.
- To remove the prosthesis, remove the strap, loosen the BOA reel tension and remove limb from prosthesis.
- To remove partial fingers from limb, pull on socket to remove. Remove wrist band.
- Do not Loctite screws.

⚠ Cautions/Warnings

- Do not expose this product to corrosive or caustic materials, salt water or pH and temperature extremes.

Inspection/Maintenance

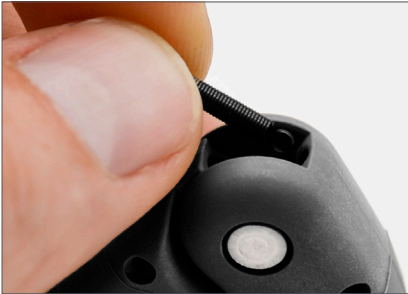
- Users should clean the inside of the prosthesis and silicone liner with fragrant-free, anti-bacterial wipes daily.
- Check attachment screws to ensure they are tight.
- Evaluate cabling to make sure it is not fraying.
- Inspect grip tip for wear and replace as needed
- Visual/Audible signs of wear, cracks, damage, etc.
- Ensure that the joint moves freely without obstruction.

Warranty – 1 year

(No warranty on finished fabrication)

Repairs/Replacements (Full M-Finger)

Spring Assembly - If needed, the fingers can be disassembled to replace springs.



Install spring into tip as shown.



Align spring loop with screw hole and insert screw through spring loop and screw in place using a Phillips screwdriver. Do not over tighten this screw.



Insert thread through exposed spring loop and pull through with tweezers.



Insert the two ends of the thread through the center joint and pull through the other end.



Apply tension to pull spring loop back to screw hole. Once you see the spring loop through the screw hole insert Long 0-80 screw to lock spring in place. Tighten screw with Phillips screwdriver and remove thread



Install base spring. Align spring loop with screw hole, insert 0-80 screw and tighten with Phillips screwdriver to lock spring in place.



Insert thread through exposed spring loop and pull through with tweezers.



Apply tension to pull spring loop back to screw hole. Once you see the spring loop through the screw hole insert 0-80 screw to lock spring in place. Tighten screw with Phillips screwdriver and remove thread.

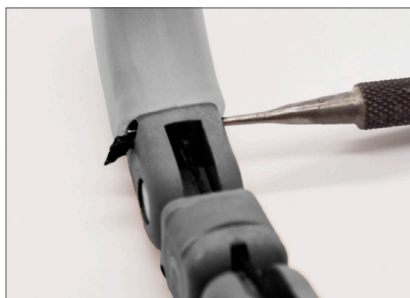
Cable Assembly - If needed, the fingers can be disassembled to replace the cable in the cable assembly.



If replacing cable due to wear, remove existing cable and re-route as shown.



Remove cable set screw with the Allen wrench.



Push out knot from 1/16" hole on opposite side with supplied 1/16" rod.



Cut off knot with razor blade.



Adjust cable length to proper length and mark with marker.

Note: This varies depending on the length of the cable. If replacing cables from a 4-finger system, match the length match with the other fingers. If replacing all cables, then determine where you want the DCM to sit and set the cable length on all fingers based on the DCM location.



Tie new knot and apply super glue to back side of knot. Cut cable 1/8" past knot.



Pull knot into hole.



Re-install knot set screw with the Allen wrench.

Partial M-Finger Assembly

Installation of fingertip into finger base



Insert fingertip into base.
Insert rivet.



Insert washer on other side of finger.



Insert retaining ring. Only install
retaining ring at final assembly.



Secure retaining ring in place with
air hose fitting (not supplied)

Partial M-Finger Assembly

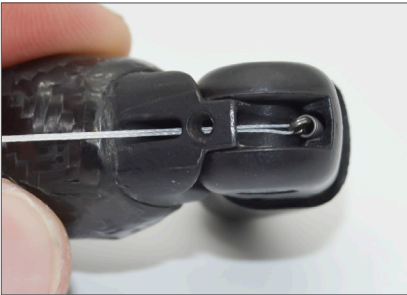
Installation of spring



Insert spring into base of finger.



Insert long 0-80 screw to secure spring into fingertip. Tighten with small Phillips screwdriver.

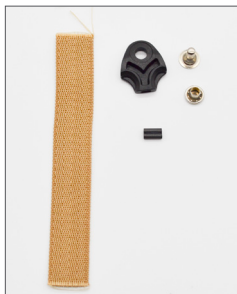


Insert thread through spring loop and pull through with tweezers then exit both ends of thread through oval slot on finger base. The two threads will be close together in order to get them through the oval slot in base. Apply tension until you see the spring loop. Insert short 0-80 screw into hole on finger base and secure screw and spring with Phillips screwdriver. Remove thread



Partial M-Finger Assembly

Cable Assembly



Prepare cable anchor assembly This step is usually done at the fabrication facility. The finished assembly gets built into the silicone wrist band.



Insert both ends of cable through hole in fingertip and exit through the bottom. The photo on shows the 2 cables converting into one as they pass through the cable cleat. Both cables go through the finger base



Pull both ends through bottom slot on finger base with tweezers and exit through threaded hole on side of fingertip. The cable cleat allows the two cables to come together; both cables follow the same line through the process and exit out of the finger together



Silicone wrist band fabricated at fabrication center should be placed over apex of knuckle. Pull both cables exiting finger to proper length and knot. Have patient flex and extend finger to make sure cable length is set to their preference. Superglue knot, Let superglue set then pull knot into hole.

Partial M-Finger Assembly

Cable Assembly (continued)



Install Allen screw to secure knot in place. Do not over-tighten.



Final assembly.



TECHNICAL ASSISTANCE/ EMERGENCY SERVICE 24-7-365

College Park's regular office hours are Monday thru Friday, 8:30 am - 5:30 pm (EST). After hours, an emergency Technical Service number is available to contact a College Park representative.

