Point Partial II

Installation Guide for the Prosthetist





This document provides information for the prosthetists who will be installing the Point Partial II.

Refer to www.pointdesignsllc.com/documentation to ensure you have the latest copy of this document.



point designs 1216 Commerce Ct., Ste 3 Lafayette, CO 80026 (720) 600-4753 www.pointdesignsllc.com info@pointdesignsllc.com



mdi Europa GmbH Langenhagener Str. 71 30855 Langenhagen Germany

Rx ONLY

Caution: Federal law restricts this device to sale by or on the order of a prosthetist.



This symbol is used throughout the guide to indicate important cautionary information. Text following this symbol should be read carefully.

Point Partial II

INSTALLATION AND SETUP GUIDE FOR THE PROSTHETIST V1.0

Thank you for choosing the **Point Partial II** and providing your client with an effective and robust prosthetic finger solution.

Whether you are retrofitting the **Point Partial** II into an existing prosthetic socket or you are building a new prosthesis from the ground up, this guide will familiarize you with the **Point Partial** II's functionality and installation.

The installation of any **Point Partial** II should be performed exclusively by a licensed prosthetist or technician. Point Partials are intended to be operated by a prosthesis user following installation and setup. Any unauthorized handling or installation of a **Point Partial** II could void their warranty.

Any questions? We are always happy to help. Call us or send us an e-mail.

(720) 600-4753 support@pointdesignsllc.com

Table of Contents

Introduction to the Point Partial II	6
Component Description • • • • • • • • • • • • • • • • • • •	8
Point Partial II unit 8	
Lamination spacers 8	
Mounting screws 8	
Mounting Bracket 9	
Alignment Tool	
Alignment Transfer Post	
Fingertip Pads	
Lateral Grip Pads	1.0
openiodiene extra	13
Installation	14
Fingertip Pad Installation	
Using the Point Partial II	18
Positioning/Flexion	
Release / Extension	
Troubleshooting	20
Maintaining The Point Partial II	21
Preventative Inspection	
Maintenance	
Disposal 21	
Repairs, Returns and Warranty	
Safety and Warnings	22
,	_

Point Partial II

Intended Use

The Point Partial II system is to be used exclusively for external prosthetic fittings of the upper limbs. In particular, it is intended to be used for patients with partial finger amputations.

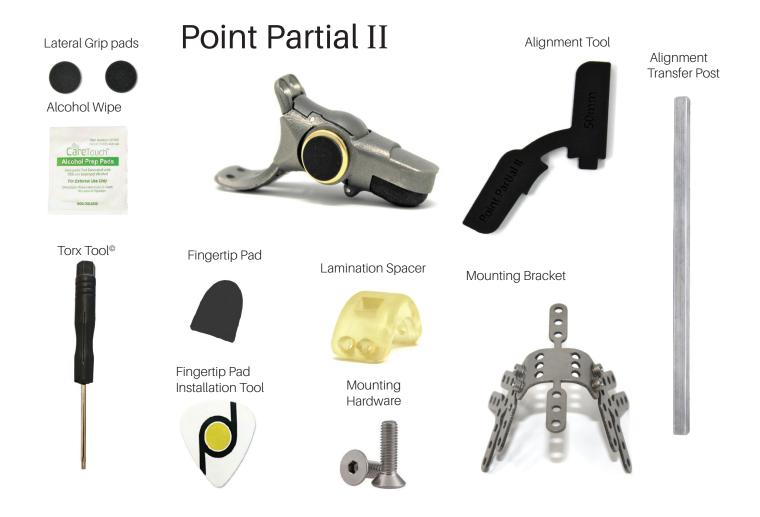
Indications

Users of the Point Partial II system will achieve the best clinical outcome if they have partial amputation of digits 2-5 near the PIP joint (slightly distal or proximal of the PIP joint is acceptable).

Contraindications

None known.

Introduction to the Point Partial II



*Images not to scale, lateral grip pads are not preinstalled

The Point Partial II is a passive (i.e. not powered) mechanical finger for people with partial hand amputation. It features a ratcheting mechanism that enables one-handed use and 7 distinct locking positions. The Point Partial II features integrated compliant touchscreen compatible* fingertip pads for enhanced grip. The Point Partial II is made from titanium for ample strength.

^{*}Touchscreen compatibility is not guaranteed, but has been tested on common iOS, Android, and Windows devices using standard socket material (silicone inner liner with carbon fiber outer shell)

Introduction to the Point Partial II

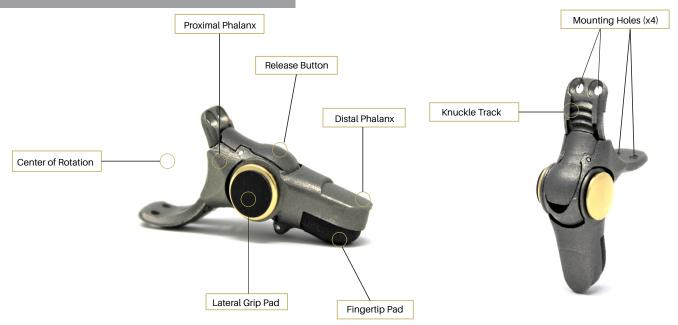
The **Point Partial** II can be flexed and locked by applying a force to the dorsal side of the fingertip. This force can be applied by the contralateral limb or by an opposing surface (e.g., leg, table, desk, wall, chair, etc.).

The Point Partial II can be extended in one of two ways:

- 1) depressing the push button, or
- 2) fully flexing the finger to engage the auto spring-back feature.

A single **Point Partial** II can be integrated into a prosthetic socket using the mounting kit, which includes a mounting bracket, lamination spacer, alignment tool, alignment transfer post and mounting screws.

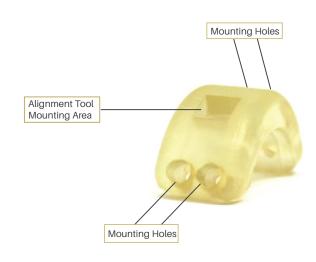
THE POINT PARTIAL II



The **Point Partial** II comes assembled as one unit. The **Point Partial** II is comprised of a curved knuckle track, proximal phalanx, distal phalanx, a release button, fingertip pad, lateral grip pad and several other internal parts. The curved knuckle track has 4 mounting holes.

LAMINATION SPACER

The lamination spacer is a curved component with mounting holes and a square alignment tool mounting area for use during the lamination process.

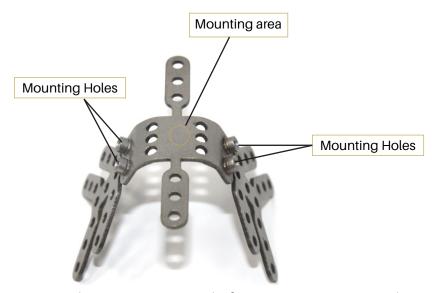


MOUNTING SCREWS

Torx® mounting screws (M2 x 5 mm) are provided for attaching the lamination spacer to the bracket during the lamination process and for mounting the finger to the bracket. 8 screws per finger are supplied with each *Point Partial II*.



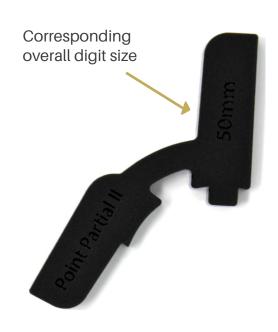
MOUNTING BRACKET



The mounting bracket is a single part comprised of a mounting area and 4 mounting holes. The mounting bracket is designed to be symmetric for bilateral use, i.e. it can be mounted on both a left and right hand in the same orientation.

ALIGNMENT TOOL

The alignment tool is an accessory designed to aid in the alignment of a Point Partial II during fabrication. The alignment tool should be used in combination with the lamination spacer. When inserted into the square mounting hole on top of the lamination spacer and then bolted onto the mounting bracket, the alignment tool represents the position of the Point Partial II throughout its entire range of motion. While initial alignment can be performed using the alignment tool, it is always recommended to attach the Point Partial II to the bracket prior to definitive fabrication to verify alignment and function.



ALIGNMENT TRANSFER POST

The alignment transfer post is an accessory designed to aid in the transfer of a Point Partial II from a diagnostic socket to a definitive socket while maintaining alignment. The alignment transfer post should be used in combination with the lamination spacer. The alignment transfer post is made from 1/4" square aluminum with an M2 threaded hole on one end. To use, insert the end with the threaded hole into the square mounting hole on the lamination spacer. Secure the alignment transfer post to the lamination spacer by inserting an M2x5mm screw from the underside of the lamination spacer. Once alignment of the bracket is achieved on the diagnostic socket, bolt the alignment transfer post/lamination spacer assembly to the bracket. Place the diagnostic socket assembly into a vertical alignment transfer jig (not provided), and plant the alignment transfer post into a container (e.g. cup, bowl, bucket, etc.) of plaster. Be sure to secure the plaster container so that it does not move. Once the plaster has hardened, separate the bracket from the diagnostic socket, raise the vertical alignment jig, remove the diagnostic socket from the mold, and replace with the initial layup of the definitive socket. Lower the vertical alignment transfer jig, and then tack the bracket to the definitive socket. At this point, the alignment should be transferred, and final lamination can be performed.

The alignment transfer post should be used when fabricating both a diagnostic and definitive socket, where transfer of the **Point Partial II** while maintaining alignment is necessary. This accessory is not needed if performing a direct to definitive fabrication, where alignment is performed on the definitive socket.

ALIGNMENT TRANSFER

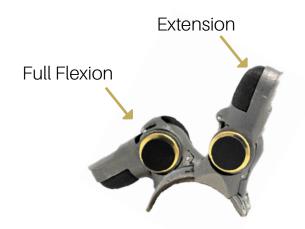


Lamination spacer mounted onto bracket



ALIGNMENT TRANSFER







FINGERTIP PADS

The Point Partial II features integrated compliant touchscreen compatible* fingertip pads for enhanced grip. Each Point Partial II comes with one preinstalled fingertip pad, 5 replacement pads, and an installation tool. Additional replacement pads can be acquired by contacting support@pointdesignsllc.com



LATERAL GRIP PADS

The Point Partial II comes with lateral grip pads to be installed after socket fabrication and final digit mounting. The lateral grip pads are intended for the index finger joints to improve lateral grip, but can be applied to any digit. Ten lateral grip pads and a surface preparatory wipe are included with each order.



Specifications

Material	Titanium
Expected service life	2 years
Rated pinch grip strength	667 N (150 lbf)
Rated hook grip strength	667 N (150 lbf)
Rated tear out strength	1334 N (300 lbf)

^{*}Touchscreen compatibility is not guaranteed, but has been tested on common iOS, Android, and Windows devices using standard socket material (silicone inner liner with carbon fiber outer shell)

13

Installation

FINGERTIP PAD INSTALLATION

The Fingertip Pad will have 1 hole and the distal phalange of the **Point Partial II** will have a corresponding post.

Point Partial II



Installation Tool



Fingertip Pad



1. Press the pad down onto the post so that it seats into the hole in the pad. Start by pressing on the proximal end of the pad and work your way distal. Maintain pressure on top of the pad as you move to Step 2.





Installation

FINGERTIP PAD INSTALLATION

2. With the pad mostly seated onto the post, use the Installation Tool to press the edges of the pad under the lip of the distal phalange. Start this process at the proximal end and then work your way distal. Make sure to maintain pressure on the top of the pad during this process.





3. With the edges pressed in, apply pressure to the top of the pad and rock back and forth gently to help make sure the pad is fully seated. If the pad looks to be bulging out still, repeat Step 2.



LATERAL GRIP PAD INSTALLATION

The Lateral Grip Pads come in a pack of 10 adhered to a polymer liner. Only 1 pad is needed as it is only installed on the lateral side of an index finger.



1. Clean the brass Chicago Bolt with the alcohol wipe (included).



2. Remove the Lateral Grip Pad from the backing



3. Center over the joint, then press on to the Chicago Bolt and hold pressure for at least 10-20 seconds. Clamping the pad down for 72hrs will yield optimal results, but is not necessary.



FINGERTIP PAD REMOVAL

1. Use the Installation Tool (or any similar tool such as a flat head screwdriver) to slide between the pad and wall of the distal phalange and pry the pad up.



2. With the pad partially pried up, use your fingers to grab the pad and pull it the rest of the way out.



LATERAL GRIP PAD REMOVAL

1. Peel the pad off of the Chicago Bolt using your fingernail or any appropriate tool.

Using The Point Partial II

POSITIONING / FLEXION







RELEASE/EXTENSION

There are two methods for extending the finger from a locked flexion position,

- 1) the manual release button, and
- 2) the auto spring-back function.

1. Manual Release





RELEASE/EXTENSION

2. Spring Back

Fully flex finger



Button should be propped up in full flexion



Release







If button doesn't reset, apply force in extension

Troubleshooting

In case of a problem, this section is intended to help you troubleshoot the operation of the Point Partial II.

We have included a few possible issues with solutions below. If your issue is not addressed, email us for support at support@pointdesignsllc.com.

The Point Partial II moves freely and does not lock into position OR

Cannot press Point Partial II button or button is stuck in depressed position

Most likely, the ratcheting mechanism has not been reset after the auto spring-back feature was activated. To resolve this issue, apply a force to the fingertip in extension until the finger "clicks", resetting the ratchet mechanism.

Point Partial II does not flex all of the way

Clean curved knuckle track of debris using a clean cloth, mild detergent, or compressed air. If problem persists, contact us for support.

Point Partial II resets prior to reaching full extension

The button lever did not reset properly in extension. Ensure that the digit reaches full flexion and the button is propped up in full flexion.

Point Partial II is loose or came off mounting bracket

Make sure thread locker has been applied to Torx screws, and then tighten them. If Torx screws are unable to be tightened, contact us for additional support.

Point Partial II is corroded

Contact us for support.

Maintaining Point Partials

PREVENTATIVE INSPECTION

All **Point Partial** II systems undergo extensive quality assurance inspections prior to shipping. Regularly inspect **Point Partial** IIs for dirt/grime in the joints, ratchet teeth, and sliding track. Clean **Point Partial** IIs (see MAINTENANCE section below) if decreased performance occurs.

MAINTENANCE

The **Point Partial** II can be cleaned with soap + water, mild detergent, or compressed air. Be sure to dry a **Point Partial** II completely after getting wet, especially when the liquid is likely to accelerate corrosion (e.g., salt water, sweat, etc.).

Lubrication (e.g., WD-40, graphite, etc.) may be applied to the joints and track after cleaning if increased resistance occurs.

No regular care is needed for the fingertip pads, but they can be cleaned with isopropyl alcohol if needed.

For any abnormal issues, discontinue use and contact Point Designs for support.

DISPOSAL



A **Point Partial** II should not be thrown away with common household waste. Dispose of the **Point Partial** II(s) by either returning the unit(s) to Point Designs or taking the unit(s) to your nearest metal recycling center.

REPAIRS, RETURNS + WARRANTY

Please contact Point Designs at **support@pointdesignsllc.com** regarding repairs and returns. **The Point Partial** II comes with a 1-year manufacturer's defect warranty.

Details of the warranty are in seperate documentation available at www.pointdesignsllc.com/documentation.

Safety and Warnings



WARNING: The **Point Partial** II is not designed to operate continuously in wet environments. A **Point Partial** II may get wet occasionally, but the user should be advised to thoroughly dry the **Point Partial** II after exposure to any liquid. Prolonged exposure to liquid may cause corrosion.



WARNING: The **Point Partial** II is electrically conductive and thus presents a potential electric shock hazard if it contacts a voltage difference and the user's (or someone else's) skin simultaneously. The **Point Partial** II should not be used around high voltage/current.



WARNING: The **Point Partial** II is thermally conductive and thus presents a potential burn hazard if it contacts a heat source and then the user's (or someone else's) skin subsequently. The **Point Partial** II should be kept away from hot objects. If a **Point Partial** II becomes hot, it should be allowed to cool before skin contact.



WARNING: The **Point Partial** II contains ferrous material, and can therefore interact with magnetic fields. Care should be taken when using a **Point Partial** II around magnets to avoid accidental attraction. For example, *keep away from MRI machines*.



WARNING: The **Point Partial** II contains moving parts (e.g., linkages, springs, ratcheting mechanisms, etc.), and thus presents a minor pinching hazard. The user should take care to keep loose skin, clothing, etc. from the moving parts of the **Point Partial** II.



WARNING: The **Point Partial** II contains internal springs under tension. The spring-back mechanism causes the finger to extend rapidly presenting a minor hazard. The user should take care to keep the **Point Partial** II away from self and others during springback.



WARNING: Any unauthorized modification to a Point Partial System can pose a safety risk to the user and will void the warranty. Changes or modifications not expressly approved by Point Designs could void the user's authority to operate the equipment.



WARNING: Adding material (e.g., coverings, etc.) to a **Point Partial** II that can trap moisture is not advised due to the likelihood of accelerated corrosion.



WARNING: Care should be taken when grasping objects to ensure a secure grip.

NOTES

NOTES



www.pointdesignsllc.com info@pointdesignsllc.com (720) 600-4753