



DEEP CREEK ORTHO

SERVING THE O AND P COMMUNITY SINCE 1981



# 2021 PRODUCT GUIDE

[deepcreekortho.com](http://deepcreekortho.com)

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# CONTENTS

About **Deep Creek Ortho** | **3**

Design & Manufacturing | **5**

Modular Philosophy | **5**

## PRODUCTS

DC 1000 / 1100 Polycentric Free Motion Knee Joint | **7**

DC 1050 / 1150 Polycentric Free Motion Knee Joint Extension Stop | **8**

DC 1060 / 1160 Polycentric Free Motion Knee Joint ROM | **9**

DC 3000 / 3100 Polycentric ROM *SNAP STOP* | **10**

DC 2000 Polycentric Elbow Joint ROM | **11**

DC 2100 Polycentric Free Motion Elbow Joint | **12**

Knee Joint Options | **13**

Bending Information | **14**

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Product Order Guide | **15**

Parts Order Guide | **16**

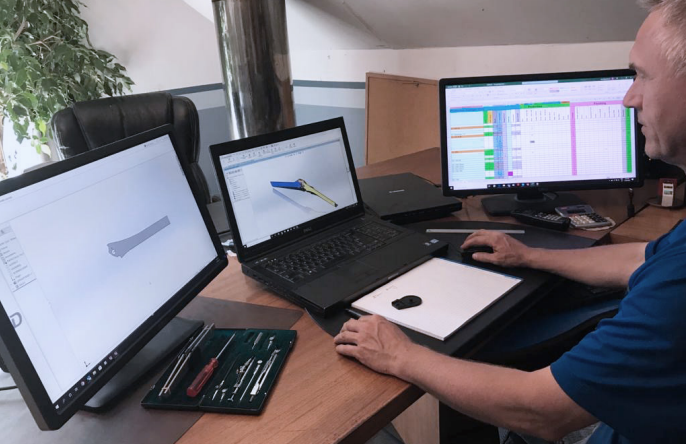
Warranty | **17**



## DEEP CREEK ORTHO

We're in the business of simplifying orthopaedic lab work. Because of this, everything we design has the unique needs of an orthopaedic technician in mind. We know they're looking for durable products, customizable by patient—all at a sensible cost.

**In partnering with Deep Creek Ortho, our clients ensure the best in care for their patients with high quality products that are designed and produced in North America.**



## OUR HISTORY

**Deep Creek Ortho** was founded only two years after owner Beat Diefenbacher moved to Crysler, Ontario from Zurich, Switzerland in 1979. He discovered a need and an opportunity in the orthopaedic market for manufacturing parts and products for orthopaedic labs. Deep Creek became known in the orthopaedic community as a company that manufactured quality products and offered friendly and reliable **customer service**.

Today, some 40 years later, the business remains a family-run operation but has grown to **specialize in the design and fabrication of knee and elbow joints**. By recognizing the need that the orthopaedic technician has in being able to work with joints that are easy to manipulate and replace, Deep Creek focuses on a

modular approach to manufacturing knee and elbow joints. Components can be replaced quickly and easily, without destroying the entire brace.

The priority that **customer service** holds is demonstrated through the developed designing capabilities that enable **Deep Creek Ortho** to do custom fabrication to suit specific customer needs. In the future, **Deep Creek Ortho** plans to continue to serve its customers with the kind of quality products that it has become known for and to always be aware of the needs of the orthopaedic technician who, in the end, is saved precious time and energy. Our goal and yours can truly be one.



## DESIGN & MANUFACTURING

**To serve you better, we use modern CAD CAM designing solutions and manufacturing tools.**

CNC machining centers help us to attain consistent and precise output. Our advanced computer network aids us in providing you with faster service and making custom fabrication a realistic and less complicated endeavor.

### **Mod-u-lar**

*Involving modules: made up of separate modules that can be rearranged, replaced, or interchanged easily.*

**A design concept that Deep Creek Ortho pays great attention to. The only polycentric joints on the market to incorporate interchangeable parts allowing the joint to be completely serviceable.**



# PRODUCTS



The Deep Creek **DC 1000 / 1100 Polycentric** joint has been a staple offering in the orthotic industry since 1981. Its proven reliability combined with its modular design incorporating **interchangeable bushings and gears** makes servicing an easy task. The DC 1000 incorporates **fixed stops of 7 degrees** and is the only serviceable joint using **replaceable gear wheels and bushings** following our modular philosophy.

The mechanism of the polycentric gear joint follows the movement of the knee closely through the initial stage of flexion to approximately **50 degrees** making it suitable for many cases where the most used range is in the first stages of flexion.



## FEATURES

- Integrated bushing (no extra parts).
- Tough wear resistant plastic gears that allow for smooth movement and a waterproof joint.
- Stainless steel screws for strength and wear resistance.
- Anodized black finish for a professional look.
- Phillips screws make the joint easy and economical to work on.
- Modular components allow for quick and easy replacement.
- Full extension joints set at 7 degree stop.



The Deep Creek **DC 1050 Polycentric** joint with extension stops is an evolution of the DC 1000 which has been a staple offering in the orthotic industry since 1981. Its proven reliability combined with its modular design incorporating **interchangeable bushing and gears** makes servicing an easy task. The DC 1050 incorporates interchangeable extension **stops ranging from 5 degrees to 90 degrees** and is the only serviceable joint using **replaceable gear wheels and bushings** following our modular philosophy.

The mechanism of the polycentric gear joint follows the movement of the knee closely through the initial stage of flexion to approximately **50 degrees** making it suitable for many cases where the most used range is in the first stages of flexion.



## FEATURES

- Interchangeable extension stops
  - 5, 10, 15, 20, 30, 40, 60, 90 degrees
- Integrated bushing (no extra parts).
- Tough wear resistant plastic gears that allow for smooth movement and a waterproof joint.
- Stainless steel screws for strength and wear resistance.
- Anodized black finish for a professional look.
- Phillips screws make the joint easy and economical to work on.
- Modular components allow for quick and easy replacement.





The Deep Creek **DC 1060 Polycentric ROM** joint with extension and flexion stops is an evolution of the DC 1050. Its proven reliability combined with its modular design incorporating **interchangeable bushings and gears** makes servicing an easy task. The DC 1060 incorporates interchangeable extension and flexion stops ranging from **5 degrees to 90 degrees** and is the only serviceable joint using **replaceable gear wheels and bushings** following our modular philosophy.

The mechanism of the 1060 polycentric gear joint follows the movement of the knee closely through the initial stage of flexion to approximately **50 degrees** making it suitable for many cases but also allows the user to limit the range as required in both extension and flexion.



## FEATURES

- Interchangeable extension stops
  - 5, 10, 15, 20, 30, 40, 60, 90 degrees
- Interchangeable flexion stops
  - 20, 30, 40, 60, 90 degrees
- Integrated bushing (no extra parts).
- Tough wear resistant plastic gears that allow for smooth movement and a waterproof joint.
- Stainless steel screws for strength and wear resistance.
- Anodized black finish for a professional look.
- Phillips screws make the joint easy and economical to work on.
- Modular components allow for quick and easy replacement.



Since 2000. The Deep Creek **DC 3000 Polycentric ROM *SNAP STOP*** has proven its reliability combined with its modular design incorporating simple **interchangeable bushings, gears and stops** making servicing and changing stops an easy task without the use of tools. The DC 3000 incorporates **interchangeable *SNAP STOP* extension and flexion stops** ranging from **5 degrees to 90 degrees** and is the only serviceable joint using **replaceable gear wheels and bushings** following our modular philosophy.

The mechanism of the polycentric gear joint follows the movement of the knee closely through the initial stage of flexion to approximately **50 degrees** making it suitable for many cases where the most used range is in the first stages of flexion and allows the user to quickly and easily limit the range without tools as desired

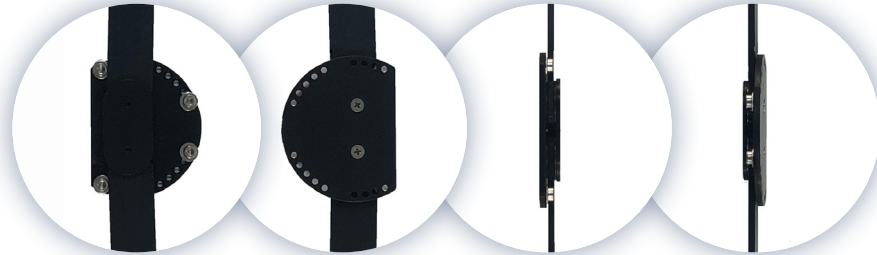


## FEATURES

- Interchangeable extension *SNAP STOP*
  - 5, 10, 15, 20, 25, 30, 40, 45, 60, 90 degrees
- Interchangeable flexion *SNAP STOP*
  - 40, 60, 90 degrees
- Integrated bushing (no extra parts).
- Tough wear resistant plastic gears that allow for smooth movement and a waterproof joint.
- Stainless steel screws for strength and wear resistance.
- Anodized black finish for a professional look.
- Phillips screws make the joint easy and economical to work on.
- Modular components allow for quick and easy replacement.



The Deep Creek **DC 2000 Range of Motion Polycentric** joints have been designed to provide adjustable limiting screws that can be easily repositioned in **specific degree increments** for both **extension and flexion**. Their smaller size is ideal for both adult and pediatric use. **Interchangeable gears and bushings** are shared with the DC 2100 in keeping with the Deep Creek modular design philosophy making them easily serviceable



#### DIMENSIONS

Range of motion plate 6cm x 4.8cm ( 2.4" x 1.9" )

EXT limit screw – 30, 55, 80, 100 degrees

FLX limit screw – 15, 45, 70, 90, 115 degrees positions

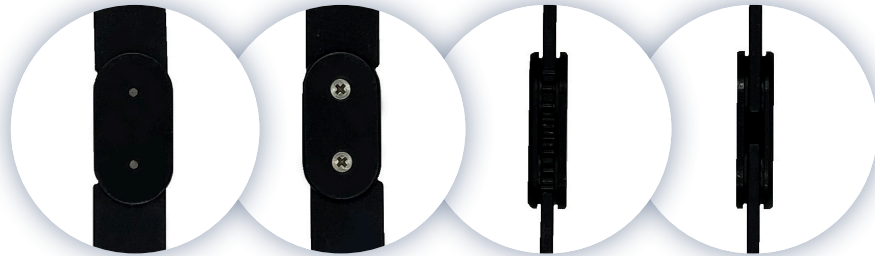
Joint housing – 2.4cm x 3.7cm ( 1" x 1.5" )

Thickness – 10mm ( .4" )

Upright length – 14cm ( 5.5" )



The Deep Creek **DC 2100 Range of Motion Polycentric** joint has been designed as a free motion full extension polycentric joint. Their smaller size is ideal for both adult upper extremity and pediatric upper and lower extremity use. **Interchangeable gears and bushings** are shared with the DC 2100 in keeping with the Deep Creek modular design philosophy making them easily serviceable.



### DIMENSIONS

Joint housing – 2.4cm x 3.7cm ( 1" x 1.9" )

Thickness – 10mm ( .4" )

Upright length – 14cm ( 5.5" )

# KNEE JOINT OPTIONS

## DC 1000 / 1100

<b>MATERIAL</b>	6061-T6
<b>UPRIGHT THICKNESS</b>	DC 1000 3.18mm (.125") DC 1100 4.75mm (.1875")
<b>UPRIGHT LENGTH</b>	Standard – 20cm ( 8" ) Long – 33cm ( 13" )

## DC 1050 / 1150

<b>MATERIAL</b>	6061-T6
<b>UPRIGHT THICKNESS</b>	DC 1050 3.17mm (.125") DC 1150 4.75mm (.1875")
<b>UPRIGHT LENGTH</b>	Standard – 20cm ( 8" ) Long – 33cm ( 13" )
<b>STOPS</b>	5, 10, 15, 20, 30, 40, 60, 90 degrees

## DC 1060 / 1160

<b>MATERIAL</b>	6061-T6
<b>UPRIGHT THICKNESS</b>	DC 1060 3.17mm (.125") DC 1160 4.75mm (.1875")
<b>UPRIGHT LENGTH</b>	Standard – 20cm ( 8" ) Long – 33cm ( 13" )
<b>EXT STOPS</b>	5, 10, 15, 20, 30, 40, 60, 90 degrees
<b>FLX STOPS</b>	20, 30, 40, 60, 90 degrees

## DC 3000 / 3100

<b>MATERIAL</b>	6061-T6
<b>UPRIGHT THICKNESS</b>	DC 3000 3.17mm (.125") DC 3100 4.75mm (.1875")
<b>UPRIGHT LENGTH</b>	Standard – 20cm ( 8" ) Long – 33cm ( 13" )
<b>EXT SNAP STOP</b>	5, 10, 15, 20, 30, 40, 45, 60, 90 degrees
<b>FLX SNAP STOP</b>	45, 60, 90 degrees

# BENDING RECOMMENDATIONS

## IMPORTANT BENDING RECOMMENDATIONS

Maintaining structural integrity of the material is imperative when bending uprights. The structural integrity of the upright material may be compromised if the radius of the bend is too tight. **Keep the following recommendations in mind while bending.**

The bending radius limits for **Deep Creek Ortho** 6061-T-6 aluminum is approximately two- and one-half times the material thickness. For example, if the thickness is 3.17mm (.125") the maximum contour radius would be 8mm (.3125"). If the upright thickness is 4.76mm (.1875") the maximum contour radius would be 12mm (.46875"). **Exceeding the bending limits will risk fractures and possible breakage of the upright material.**

# PRODUCT ORDER GUIDE

Generate your **CUSTOM PRODUCT NUMBERS** by following these steps as shown:

STEP 1 INDICATE BASE PRODUCT NUMBER	STEP 2 INDICATE EXTENSION STOP DEGREE <i>(if applicable)</i>	OR INDICATE FLEXION STOP DEGREE <i>(if applicable)</i>	STEP 3 INDICATE DOWNRIGHT LENGTH <i>(if applicable)</i>	
PRODUCT	EXTENSION (E)	FLEXION (F)	LENGTH	
DC 1000			STANDARD = S LONG = L	
DC 1100				
DC 1050	E - 5, 10, 15, 20, 30, 40, 60, 90			
DC 1150	E - 5, 10, 15, 20, 30, 40, 60, 90			
DC 1060	E - 5, 10, 15, 20, 30, 40, 60, 90	F - 20, 30, 40, 60, 90		
DC 1160	E - 5, 10, 15, 20, 30, 40, 60, 90	F - 20, 30, 40, 60, 90		
DC 2000				
DC 2100				
DC 3000	E - 5, 10, 15, 20, 25, 30, 40, 45, 60, 90	F - 45, 60, 90		STANDARD = S LONG = L
DC 3100	E - 5, 10, 15, 20, 25, 30, 40, 45, 60, 90	F - 45, 60, 90		

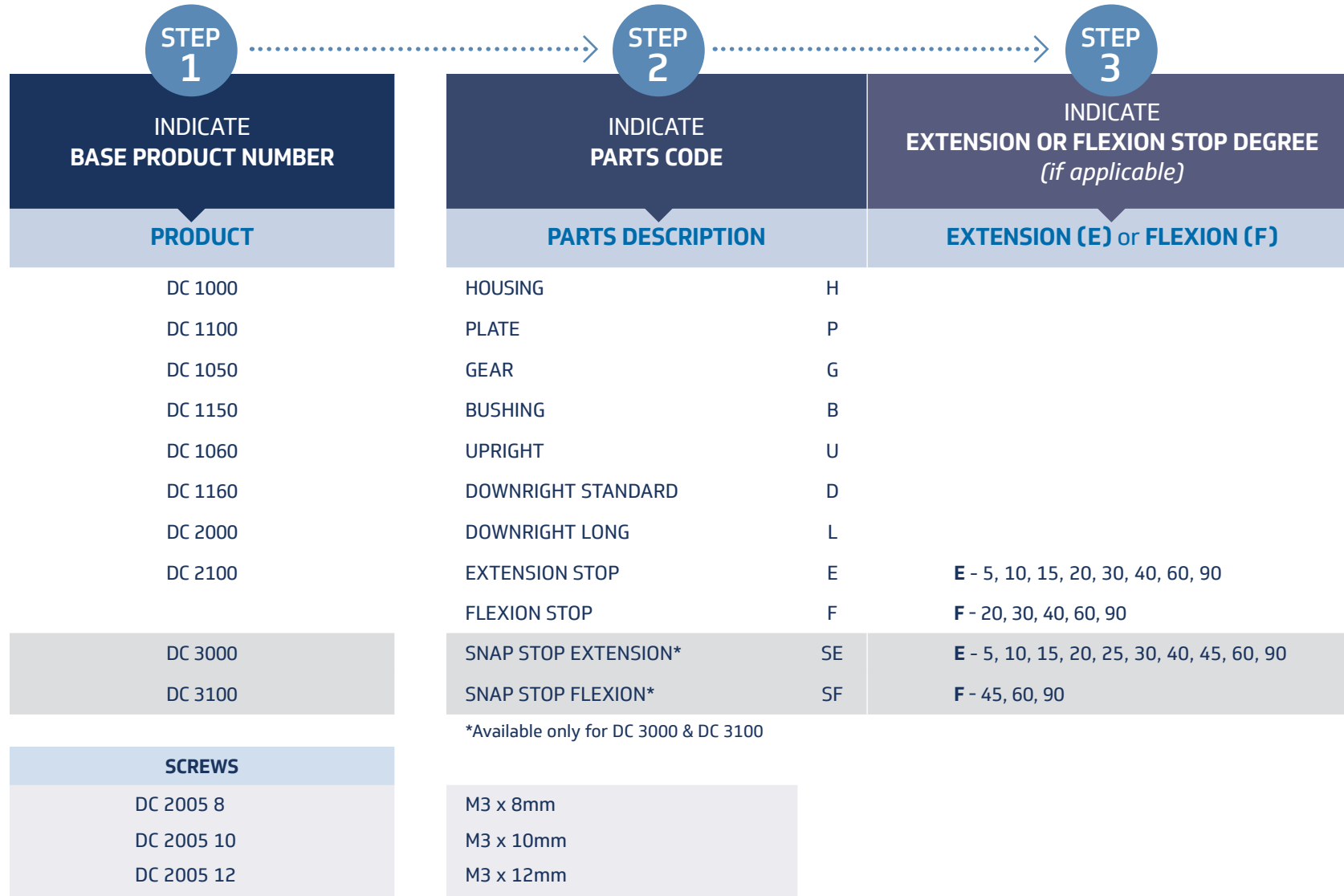


**SAMPLE FINAL PRODUCT NUMBER > DC 1160 E 40 L**

**SUBMIT YOUR ORDER:** Phone: 613.987.5398 Fax: 613.987.2424 Email: [sales@deepcreekortho.com](mailto:sales@deepcreekortho.com)

# PARTS ORDER GUIDE

Generate your **CUSTOM PARTS ORDER** by following these steps as shown:



**SUBMIT YOUR ORDER:** Phone: 613.987.5398 Fax: 613.987.2424 Email: [sales@deepcreekortho.com](mailto:sales@deepcreekortho.com)



# WARRANTY

Thank you for your interest in the products and services of **Deep Creek Ortho** Inc.

This Limited 1 Year Warranty applies to all physical goods sold directly by **Deep Creek Ortho** Inc.

- **What does this limited warranty cover?**

This Limited Warranty covers any defects in material or workmanship of all new products under normal use and maintenance during a 1-year Warranty Period starting from the original date of purchase. Any replacement part offered by deep Creek Ortho assumes the remaining warranty of the original part or 30 days from the date of replacement or repair, whichever is longer.

- **During the warranty period,**

**Deep Creek Ortho** Inc. will repair or replace, at no charge, products or parts of a product that proves defective because of improper material or workmanship, under normal use and maintenance.

- **What will we do to correct problems?**

**Deep Creek Ortho Inc.** will either

- Repair the product at no charge, using new or refurbished replacement parts.
- Replace the product with a new part if **Deep Creek Ortho** deems the product non repairable.

(Any replacement part offered by deep Creek Ortho assumes the remaining warranty of the original part or 30 days from the date of replacement or repair, whichever is longer.)

- **This limited warranty does not cover any problem that is caused by:**

- Conditions, malfunctions or damage not resulting from defects in materials or workmanship
- The product has been subjected to misuse, neglect, accident or abuse to its product outside of its intended use.
- The product has been subjected to alteration, modification or repair by persons other than Deep Creek or persons authorized by Deep Creek to perform alterations, modifications or repairs.
- DEEP CREEK ORTHO INC. SHALL NOT BE LIABLE FOR ANY DAMAGES OR FOR ANY OTHER OBLIGATION OR LIABILITY ON ACCOUNT OF THE PRODUCTS COVERED BY THIS AGREEMENT.

- **Dispute Resolution and Submission to Jurisdiction**

- Any dispute, suit or action brought against **Deep Creek Ortho** Inc. shall be submitted to Ottawa, Ontario, Canada.

- **What do you have to do?**

- Speak with a company representative prior to shipping to determine if your specific request for warranty repair or replacement is within the limitations of the warranty.
- All warranty returns must be accompanied by a **Deep Creek Ortho** return form.

To obtain a form contact [info@deepcreekortho.com](mailto:info@deepcreekortho.com)

This warranty dated December 1<sup>st</sup>, 2020 supersedes all other warranties expressed or implied by Deep Creek Ortho Inc.



# DEEP CREEK ORTHO

**SERVING THE O AND P COMMUNITY SINCE 1981**

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