




**Smith+Nephew**

**VISIONAIRE**   
UNI Cutting Guides



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*VISIONAIRE UNI Cutting Guides  
Surgical Procedure:*

*ZUK UNI\*, JOURNEY  UNI,  
JOURNEY II UNI, JZ\* (Hybrid)  
UNI knee systems*

*\*Available in the US only*

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# VISIONAIRE<sup>◇</sup> UNI Cutting Guides Surgical Procedure:

ZUK UNI\*, JOURNEY<sup>◇</sup> UNI, JOURNEY II UNI, JZ\* (Hybrid) UNI  
knee systems

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# Introduction

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Unicompartmental knee arthroplasty (UNI) has been shown to be an effective treatment for isolated osteoarthritis. This guide to the surgical technique is a step-by-step procedure written for medial compartment UNI using VISIONAIRE<sup>®</sup> UNI Cutting Guides for the ZUK UNI\*, JOURNEY<sup>®</sup> UNI, JOURNEY II UNI, and JZ\* (hybrid) UNI Knee Systems. It is strongly recommended that the surgeon read the complete procedure for details, notes, and technique tips prior to the first case.

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## Indications

VISIONAIRE UNI Cutting Guides are intended to be used as a surgical instrument to assist in the positioning of partial knee replacement components intra-operatively and in guiding the marking of bone before cutting and to guide cutting of the bone provided that anatomic landmarks necessary for alignment and positioning of the implant are identifiable on patient imaging scans.

VISIONAIRE UNI Cutting Guides are only to be used with ZUK UNI, JOURNEY UNI, JOURNEY II UNI and JZ (Hybrid) UNI Knee Systems prostheses.

VISIONAIRE UNI Cutting Guides are intended for single use only.

**Note:** Please verify the case information on the documentation and labeling matches the information inscribed on the part.

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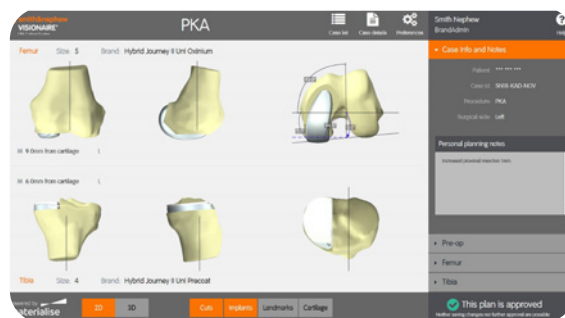
## Exposure

Perform a standard unicompartmental knee incision (see ZUK UNI\* High Flex Knee Spacer Block Surgical Technique, JOURNEY UNI, or JOURNEY II UNI Surgical Technique for reference).

Remove at least the anterior half of the medial meniscus and expose the anterior portion of the medial plateau. Any remaining meniscus will be removed after the tibia bone resection.

Do not remove any osteophytes from the femur or tibia.

Remove any soft tissue that may prevent proper placement of the femoral or tibia guide.



\*Available in the US only

## Tibial Surgical Technique

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1. Position the tibia cut guide on medial tibia plateau while holding the guide using downward pressure (Fig. 1).

**Technique tip:** Dry the tibial plateau before positioning the tibia cut guide.

**Technique tip:** Externally rotating the tibia will expose more of the proximal surface and reduce any interference with the femur.



Figure 1

Verify a unique and stable fit of the cut guide on the tibia. Apply pressure on top of the tibia guide to hold in position. Verify contact with bone through the windows and around the contact surface of the guide (Fig. 2).

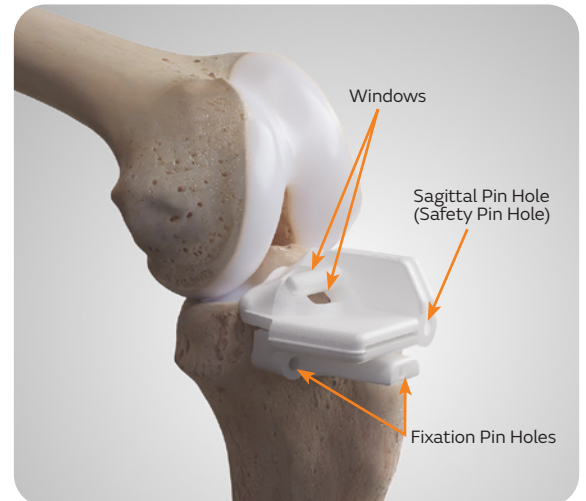


Figure 2

2. Place a headless pin through the hole in the sagittal cut slot (Fig. 3). Verify the guide location has not changed. Check the bone contact through the windows and around the perimeter of the guide.

**Technique tip:** It is recommended that one person hold the guide to ensure the least amount of movement while a second person drills.

**Technique tip:** Use caution when inserting the pin to avoid exiting the bone posteriorly.



Figure 3

## Tibial Surgical Technique

3. Insert a 45mm headed pin through the center hole. Then insert a 45mm headed pin through the medial hole. Verify the guide did not move while placing the headed pins (Fig. 4).

**Technique tip:** Do not over torque the headed pins, this can lead to movement of the guide position. Reduce speed when the pin head is nearly seated against the guide.



Figure 4

4. Slide the ZUK UNI Spacer Block Alignment Tower onto the tibia guide to verify the alignment of the planned proximal cut with the drop rod. The rod should be parallel with the tibial crest in the frontal plane (Fig. 5).

**Note:** Spacer Block Alignment Tower EU000936 should be used for all cases performed outside of the US.

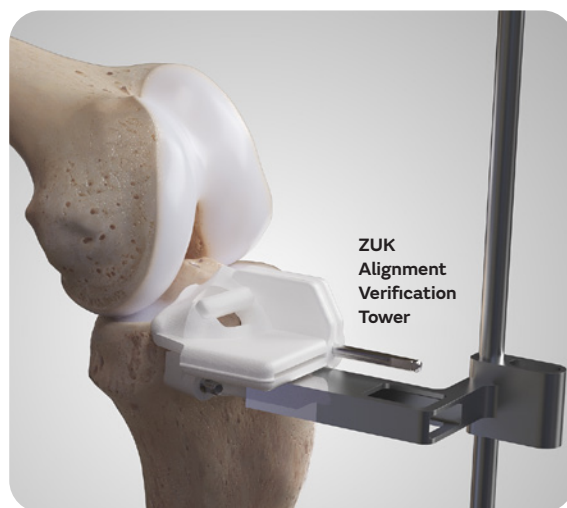


Figure 5

5. Perform the proximal cut through the proximal tibia cut slot using a narrow oscillating saw (1.27mm thick, 12.5mm wide) (Fig. 6). The saw blade will make contact with the pin on the lateral side. Do not insert the saw blade more posteriorly than the pre-operatively planned saw blade excursion depth.

**Technique tip:** In order to maintain guide stability, it is recommended to perform the proximal cut first.

**Technique tip:** The VISIONAIRE  UNI preoperative plan will display the saw blade excursion depth and can be monitored when using an oscillating saw with depth markings.



Figure 6

## Tibial Surgical Technique (continued)

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6. Perform the sagittal cut through the sagittal tibia cut slot using a reciprocating saw (1.19mm thick saw blade). The blade will stop on the pin at the distal end of the cut (Fig. 7).



Figure 7

7. Remove the pins and cut guide from the tibia (Fig. 8).

Remove the medial tibia plateau. If required, complete the proximal cut to ensure complete removal of tibia plateau.



Figure 8

## Femoral Surgical Technique

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8. Position the femoral guide on the medial femoral condyle with the knee in approximately 45° of flexion. Apply posterior pressure to the femoral cut guide and verify the unique and stable fit of the cut guide. Verify contact with bone through the windows and around the contact surface of the guide (Fig. 9).

**Technique tip:** Dry the femoral condyle surface before positioning the femoral guide.



Figure 9

9. Insert a 45mm headed pin through the medial hole (Fig. 10).

**Technique tip:** The medial femoral surface should be fixated first to minimize movement.

**Technique tip:** It is recommended that one person hold the guide to ensure the least amount of movement while a second person drills. Apply pressure on the distal and anterior positions of the guide.

**Technique tip:** Do not over torque the headed pin, this can lead to movement of the guide position. Reduce speed when the pin head is nearly seated against guide.



Figure 10

10. Ensure the femoral guide has not moved and is in contact with the bone through the window.

Drill through the distal rotation pin cylinder with a 3.2mm drill bit (Fig. 11). Do not insert the pin into the rotation hole.

**Technique tip:** Drilling the rotation pin hole prior to inserting the lateral fixation pin will avoid colliding with the lateral pin.



Figure 11



## Femoral Surgical Technique (continued)

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11. Insert a 45mm headed pin through the lateral hole to complete the guide fixation (Fig. 12).
12. Perform the distal cut through the distal femoral cut slot using a narrow oscillating saw (1.27mm thick, 12.5mm wide). Do not insert the saw blade more posteriorly than the preoperatively planned saw blade excursion depth (Fig. 13).

**Technique tip:** Ensure the saw blade is parallel with the cut slot to avoid moving the femoral guide.

**Technique tip:** Rotate the blade to cover the entire cut surface. If any remaining uncut bone remains, finish the resection by hand.

**Technique tip:** The VISIONAIRE<sup>◇</sup> UNI preoperative plan will display the saw blade excursion depth and can be monitored if using an oscillating saw with depth markings.



Figure 12



Figure 13

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## Femoral Surgical Technique (continued)

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### 13. Remove the pins and the femoral cut guide (Fig. 14).

Remove the distal bone resection.

Based on the preoperatively planned femoral size, place the Femoral Finishing guide onto the distal femur cut.

Locate the previously drilled rotation hole and line it up to the appropriately sized Femoral Finishing guide. Insert a pin through the hole into the pre-drilled hole.

Adjust the femoral rotation by rotating the Femoral Finishing guide around the pin. The posterior surface of the femoral finishing guide should be parallel to the tibia cut. An under hang of 2–3mm is visible when the component is sized properly (Fig. 15).

**Technique tip:** If rotation is not satisfactory, remove the pin and follow standard placement of the Femoral Finishing guide.



Figure 14

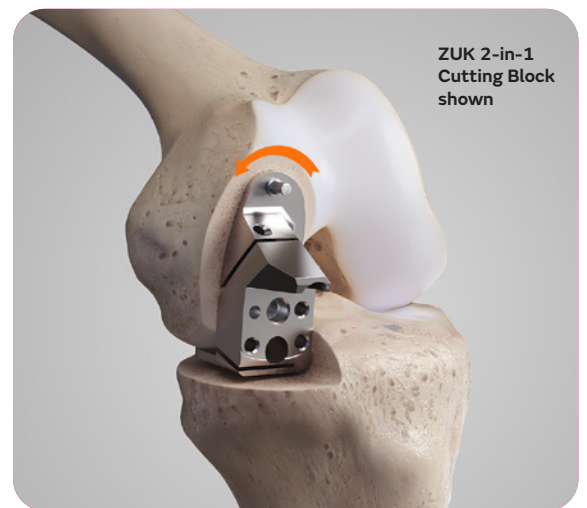


Figure 15

### 14. Fixate the Femoral Finishing guide to the femur and finish the femur according to the appropriate surgical technique depending on the selected implant. The surgical techniques that can be referenced include the ZUK UNI\* High Flex Knee Spacer Block Surgical Technique, JOURNEY<sup>◇</sup> UNI Surgical Technique, or JOURNEY II UNI Surgical Technique.

\*Available in the US only

## Check overall alignment

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15. Check overall alignment using a spacer block with the desired poly thickness and a full leg drop down rod (if preferred).

## Tibial Finishing Surgical Technique

16. Verify the approved size on the case report with the corresponding tibial sizer or trial (Fig. 16).

Finish the knee according to the appropriate surgical technique depending on the selected implant. The surgical techniques that can be referenced include the ZUK UNI\* High Flex Knee Spacer Block Surgical Technique, JOURNEY<sup>◇</sup> UNI Surgical Technique, or JOURNEY II UNI Surgical Technique.

**Technique tip:** It is recommended that a pulse lavage is used on the femur and tibia cut surfaces before cementing.

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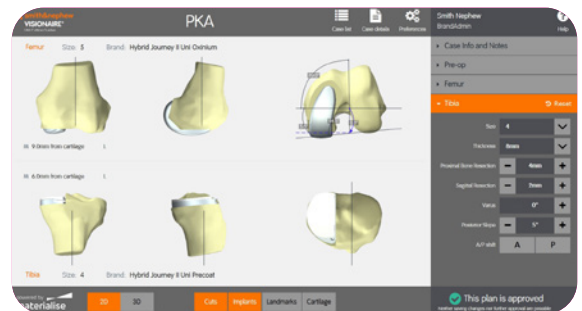


Figure 16

# Catalog Information

Cat. No.	Description
<b>VISIONAIRE™ UNI Cutting Guide Part Numbers</b>	
V0500001	Nonsterile VISIONAIRE UNI Cutting Guide
V0500002	Nonsterile VISIONAIRE UNI Bone Model
<b>ZUK UNI Part Numbers</b>	
00-5785-079-00	Alignment Rod
00-5791-071-00	3.2mm Drill Bit
00-5843-032-00	Spacer Block Alignment Tower (Available in the US Only)
00-5843-01x-(01-02)	ZUK Femoral Finishing Guide
00-5791-060-xx (8-14)	Concave Tibial Spacer
00-5843-041-0x	Tibial Sizer
<b>JOURNEY™ UNI Part Numbers</b>	
7401-2905	Quick Connect 1/8" Drill Bit
7401-34xx (53-86)	JOURNEY UNI 2-in-1 Femoral Block
7401-34xx (73-77)	JOURNEY UNI Gap Stick
7401-34xx (81-83)	JOURNEY UNI Tibial Sizer
<b>JOURNEY II UNI Part Numbers</b>	
7193-51xx (47-53)	JOURNEY II UNI Femur A-P Cutting Block
7193-51xx (73-78)	JOURNEY II Tibia Size/Prep
<b>SPEED PINS</b>	
7401-3489	SPEED PIN Quick Connect
7401-3471	(45mm Rimmed)
7401-3480	(65mm Non-Rimmed)
<b>UNI Alignment Tower for International Markets Part Number</b>	
EU000936	Spacer Block Alignment Tower

If 7401-3471 (45mm) pins are too short use 7401-3480 (65mm) pins instead.

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1450 Brooks Road  
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Plymouth, MI 48170  
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**Materialise Belgium:**  
Technologielaan 15  
3001 Leuven  
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[www.smith-nephew.com](http://www.smith-nephew.com)

Telephone: 1-901-396-2121  
Information: 1-800-821-5700  
Orders/Inquiries: 1-800-238-7538