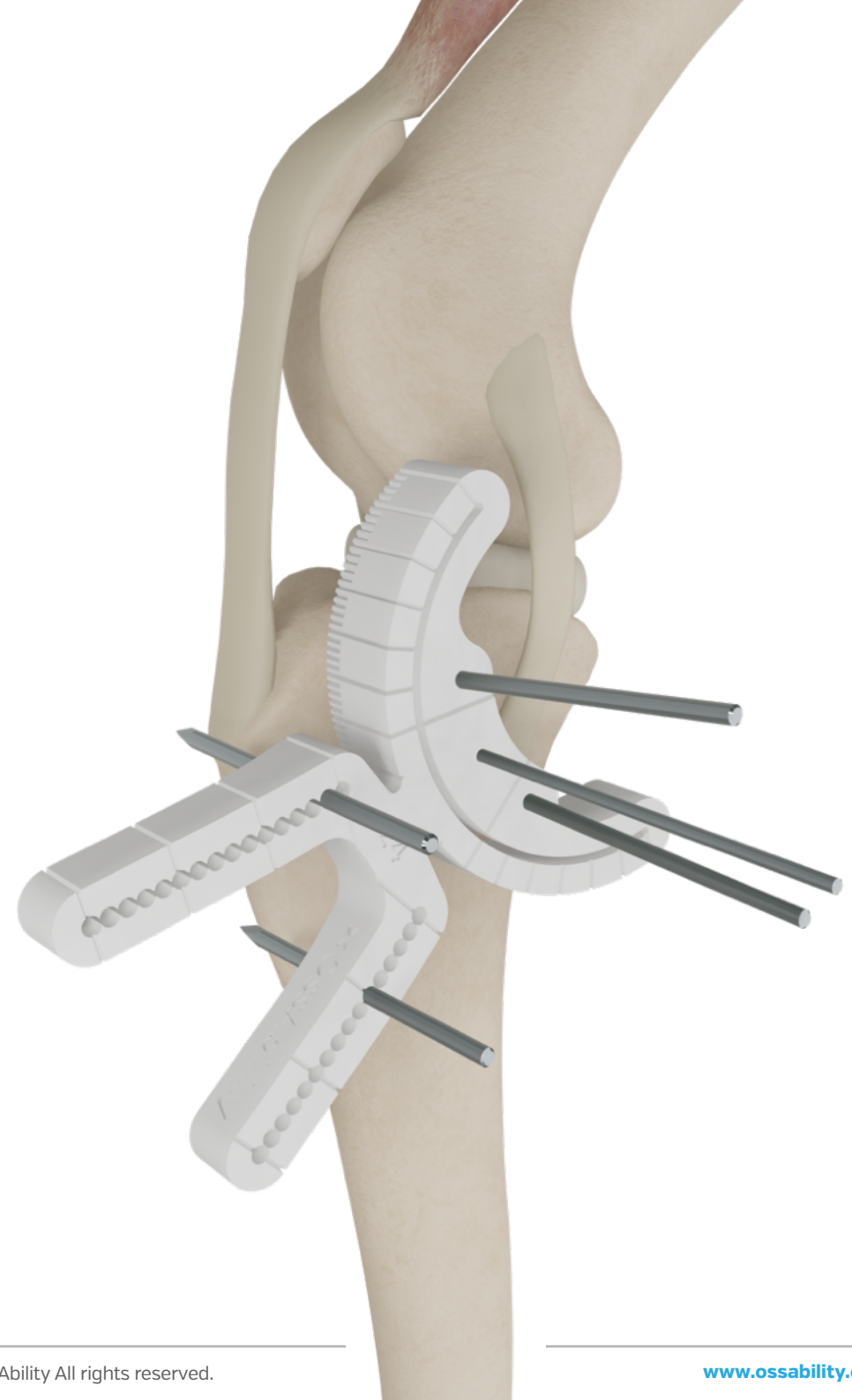


Guided TPLO

A step-by-step guide to performing Guided TPLO

For the treatment of cranial cruciate ligament (CCL) disease by tibial plateau levelling osteotomy.



Disclaimer

OssAbility Guided TPLO is intended for the treatment of cranial cruciate ligament (CCL) disease by tibial plateau levelling osteotomy.

The Guided TPLO system consists of an Osteotomy Guide that is configurable for an individual patient to control the position and orientation of the osteotomy, and rotational correction.

After rotation, the proximal segment is secured using a traditional TPLO plate and locking screws.

The Guided TPLO Surgical Technique describes the general principles of application.

The success of any treatment relies on careful pre-operative planning and accurate surgical technique.

OssAbility can assist you to identify products, methods of application, and potential risks to help you make an informed decision on the treatment of your patient.

Access Decision Support at support.ossability.com.

All clinical actions are the sole responsibility of the veterinarian providing treatment for the patient.

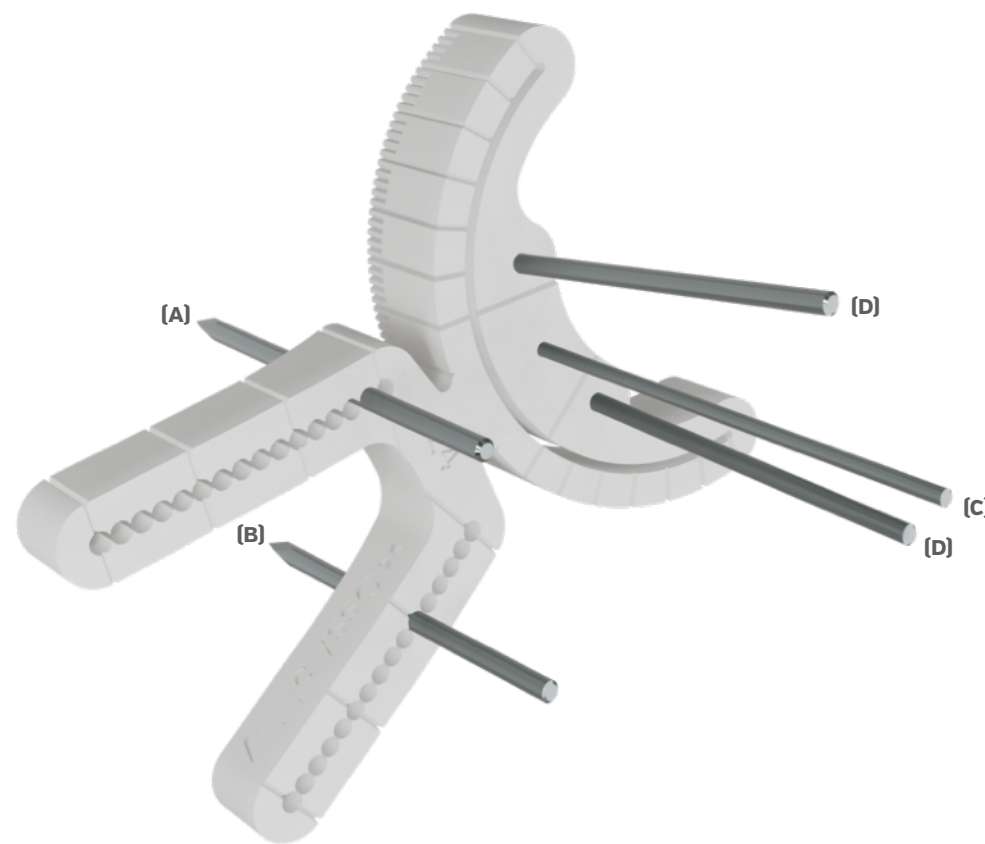
Step 1

Configure the TPLO Guide according to the pre-op plan

Insert a 2.0 mm single-trocar pin through each of the positioning arms at the predetermined positions (A & B) and extend by 30 mm.

Insert a 1.5 mm single-trocar pin through the central pin hole (C) and extend by 10 mm.

Insert a 2.0 mm single-trocar pin through each oblique locking pin hole and leave flush with the underside of the Guide (D).



Step 2

Apply the TPLO Guide to the patient according to the pre-op plan

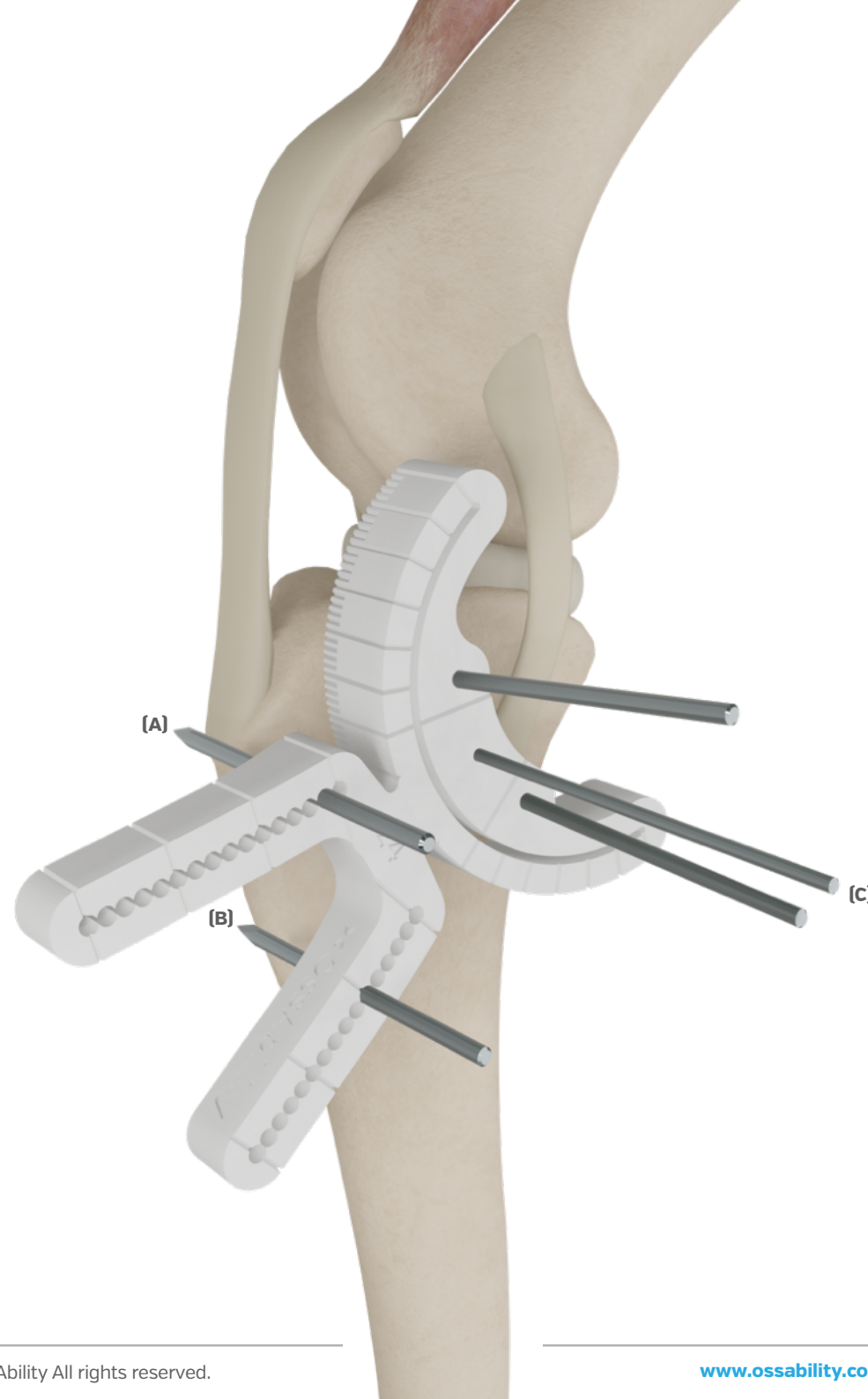
Score a reference line across the intended osteotomy, extending from the crest to the MCL.

Identify and mark the patellar tendon insertion.

Align the proximal positioning pin [A] to the mark. Ensure both positioning pins [A & B] are in contact with the bone.

Place the central pin [C] on the bone.

Hold the Guide by the central pin and check the positioning pins are still in contact with the bone.



Step 3

Drill the central pin

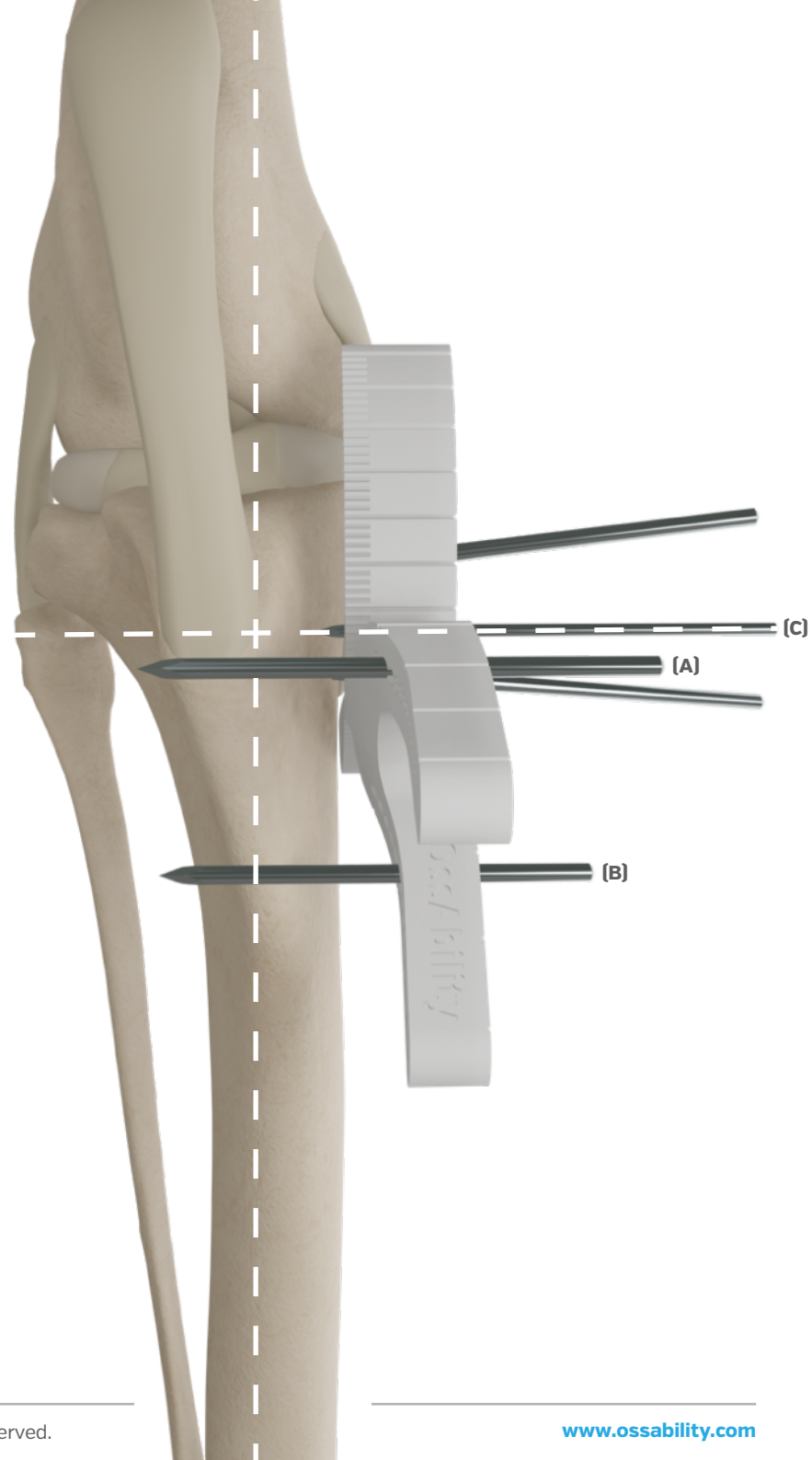
Check that the central pin [C] is perpendicular to the plane of stifle motion.

Apply gentle pressure to the Guide and positioning pins [A & B] to maintain contact with the bone.

Drill the central pin unicortically.

Press the Guide onto the bone.

Check that the central pin is perpendicular to the plane of stifle motion.



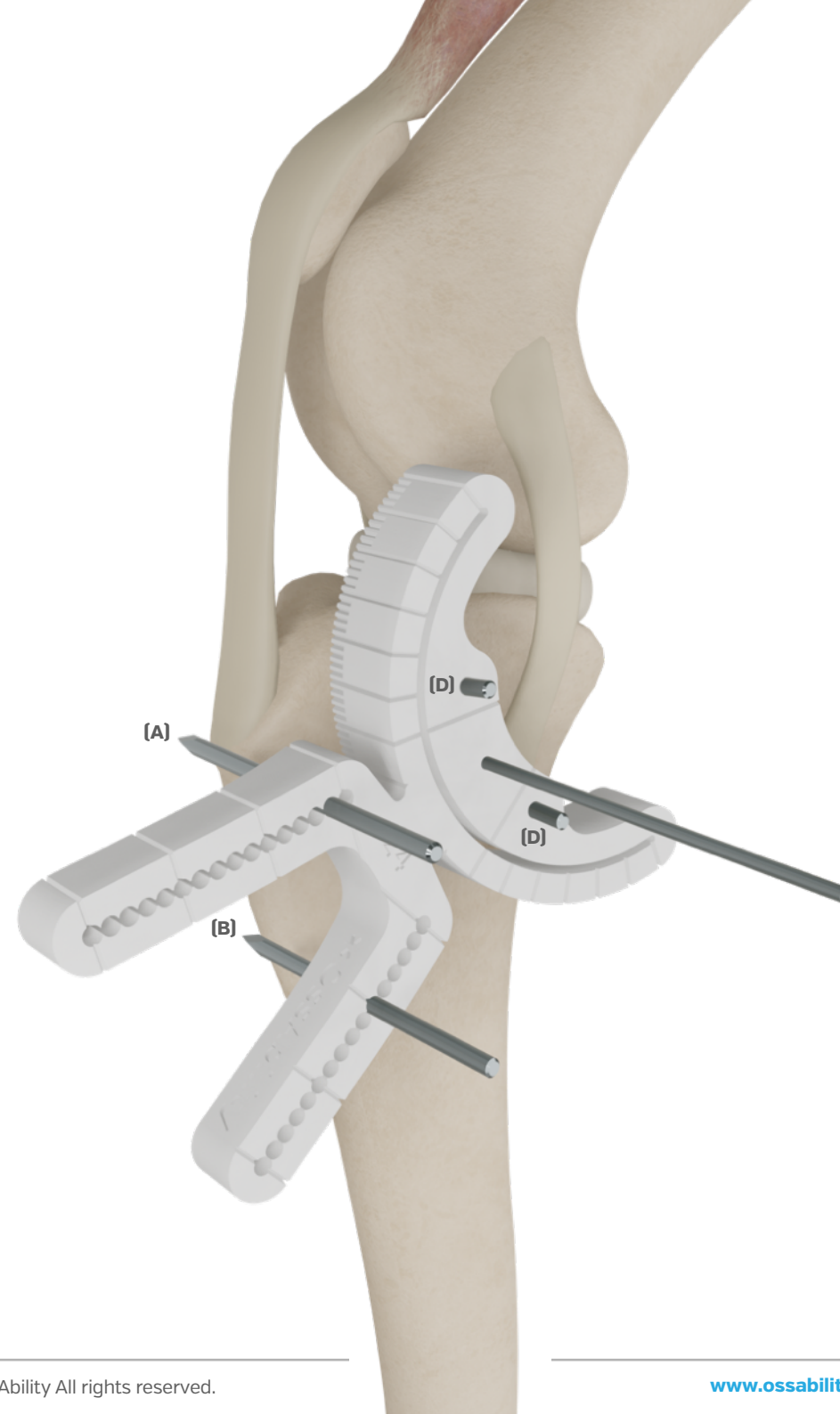
Step 4

Drill the oblique locking pins

Check the positioning pins [A & B] are in contact with the bone.

Drill the oblique locking pins [D] bicortically.

Trim the oblique locking pins to 5 mm.

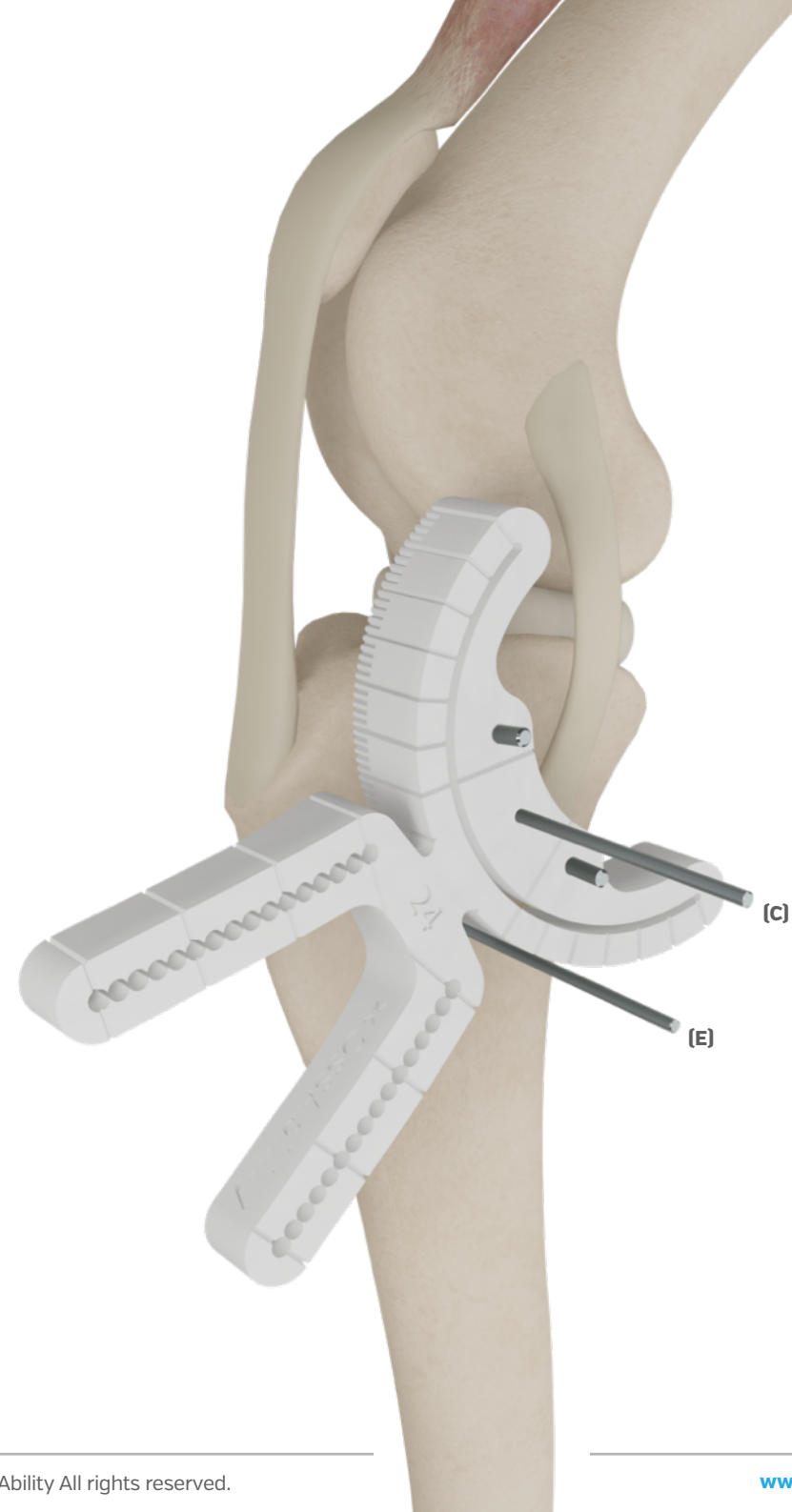


Step 5

Drill the stop pin

Remove the positioning pins.

Drill a 1.5 mm single-trocar stop pin bicortically at the planned rotation (E). Ensure the stop pin is parallel to the central pin (C) and is in contact with the Guide.

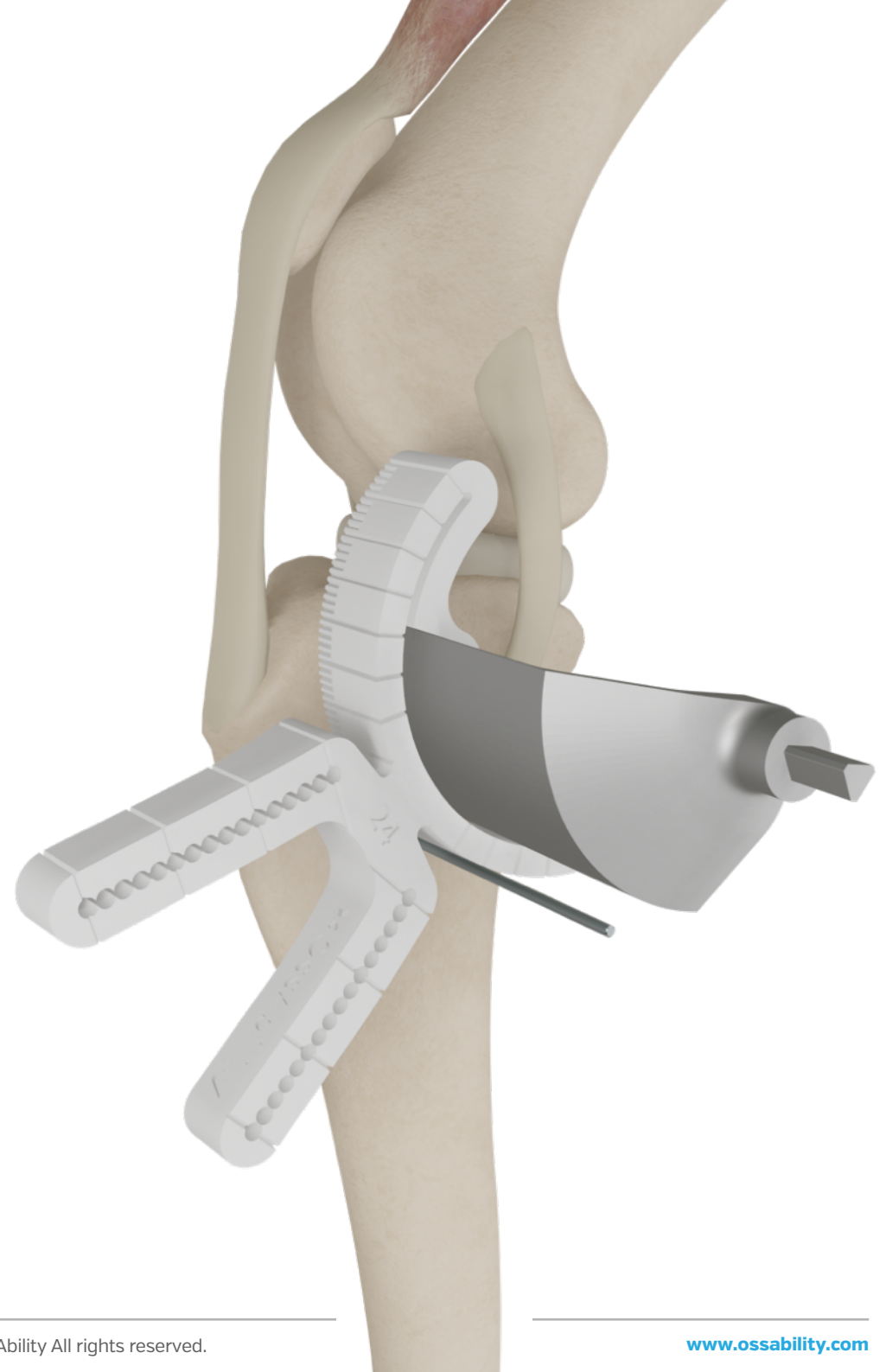


Step 6

Perform the osteotomy

Protect the patellar tendon using a Senn retractor.

Perform the osteotomy using a crescentic saw. Use copious saline lavage. Maintain blade alignment with the Guide. Ensure the saw blade does not extend beyond the bone.



Step 7

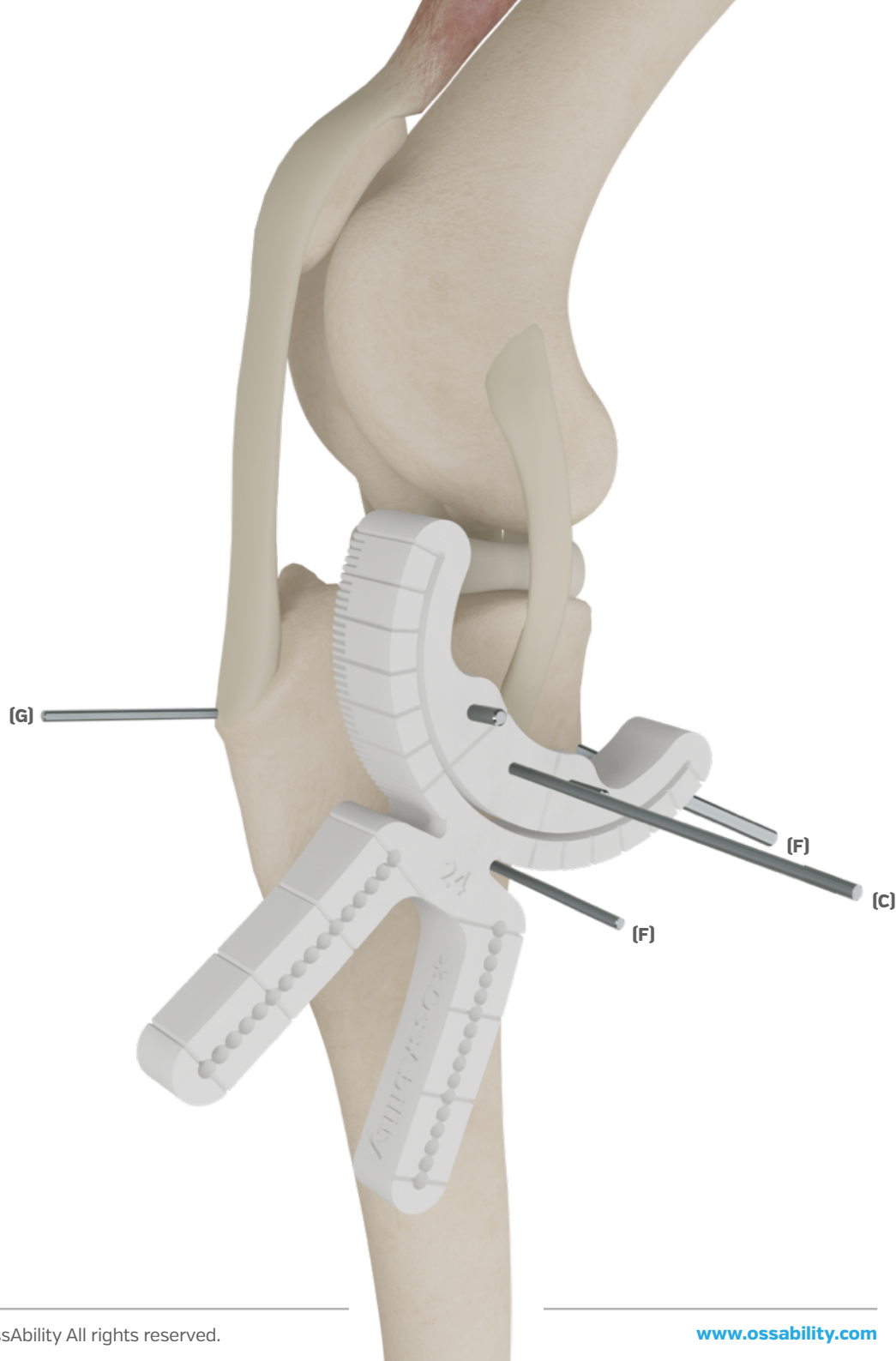
Rotate the proximal segment

Replace the central pin [C].

Rotate the proximal segment using the Guide until the Guide contacts the stop pin [E].

If required, use a 3.2 mm rotator pin to assist with rotation. Drill unicortically into the caudomedial cortex of the proximal segment, proximal to the locking pins [F].

Drill a 1.0–2.0 mm anti-rotation pin [G] bicortically through the crest and proximal segment, immediately proximal to the patellar tendon insertion.



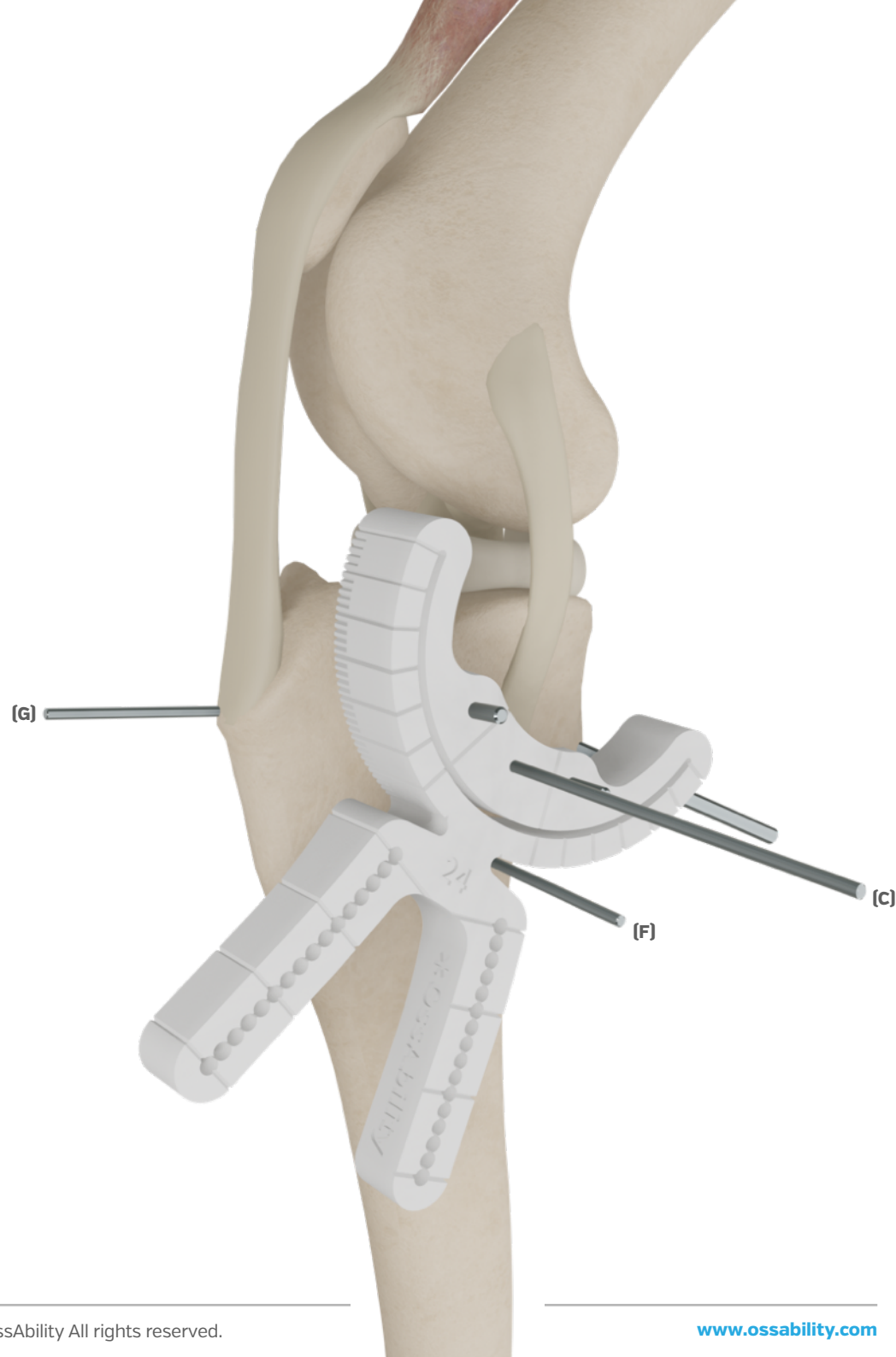
Step 8

Check stifle stability

Check the central pin [C] is parallel to the stop pin [E] and perpendicular to the plane of stifle motion.

Check limb alignment.

Check for cranial tibial thrust. If required, withdraw the anti-rotation pin [G] and increase rotation until resolved. Replace the anti-rotation pin.



Step 9

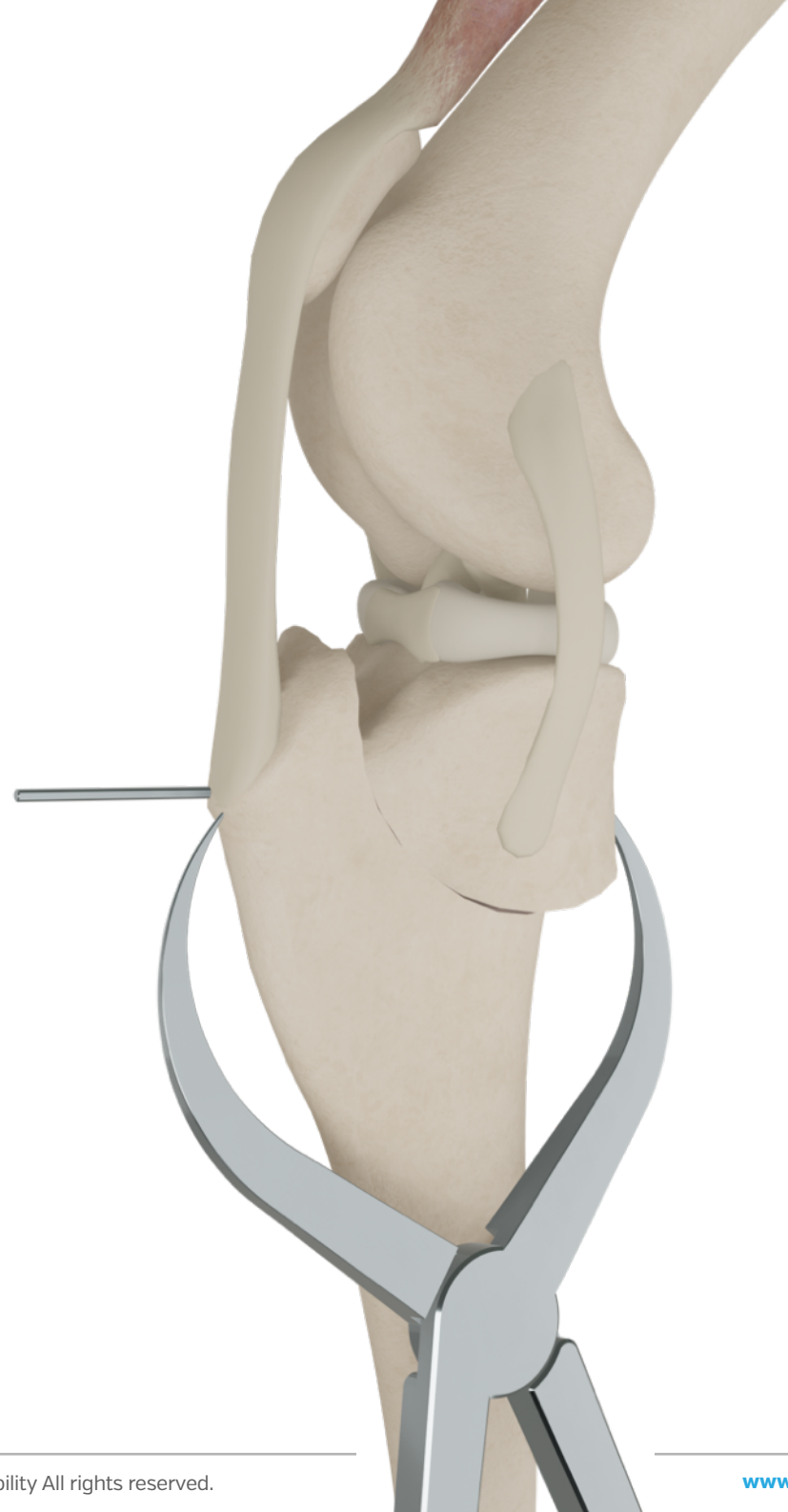
Remove the TPLO Guide

Remove the rotation pin, central pin and stop pin.

Remove the oblique locking pins.

Remove the Guide.

Compress the construct with pointed reduction forceps.



Step 10

Place the plate according to the pre-op plan

Position the plate on the tibia according to the pre-op plan.

Check the proximal screws are centred on the proximal segment.

Check the distal screws are centred on the diaphysis.

Drill and place the screws according to the specific plate selection.



Step 11

Compare the completed construct to the pre-op plan

Check the plate placement.

Remove the anti-rotation pin.

Perform post-op radiographs.

Check post-op tibial plateau angle.



Contact information

OssAbility Limited

Website www.ossability.com

Email info@ossability.com

Decision Support support.ossability.com

Guided TPLO Surgical Technique
Version 2.5

Products described in this document may be covered by patent.

© 2023 OssAbility Limited. All rights reserved.