Surgical Technique
With Navigation
4-in-1 Instrumentation

AMPLITUDE

SCORE® / SCORE® AS
Primary Total Knee System
Mobile bearing

Overview of SCORE® / SCORE® AS TKS

- The SCORE® TKS is a PCL-sacrificing, mobile bearing implant in rotation for primary knee arthroplasty.
- The stability is provided by sagittal and frontal congruency through the extension to the flexion.
- The SCORE® TKS is available in cemented and cementless version.
- The SCORE® AS TKS is coated with Titanium Nitride (TiN) to minimise allergic reactions (cemented components only).

Overview of SCORE® / SCORE® AS TKS

1. Femoral component:

Anterior cut at 6°

Thickness: 8 mm

Posterior cut at 2°

Radius of curvature reducing over 100° in order to increase flexion

Component in Cobalt Chrome. Dual coated cementless component (80 µm plasma-sprayed titanium + 80 µm HAP). Cemented* component is micro-blasted.

* SCORE® AS femoral component in Cobalt Chrome, coated with 4 µm Titanium Nitride (TiN). Cemented component only.

Articulating surface with mirror finish

Constant radius of curvature from complete extension up to 100° flexion

Anterior edge respecting the anatomy design

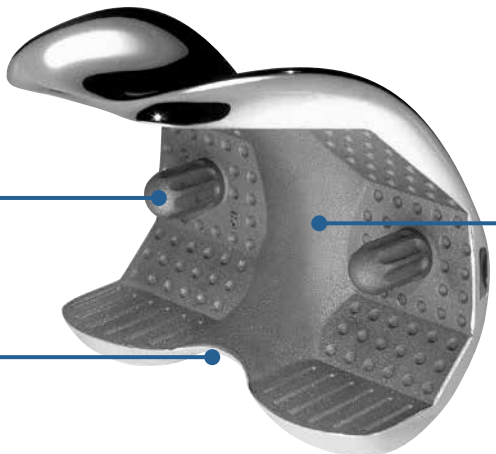
Notch on each side for grasping

Trochlear groove is offset laterally by 6° allowing a better stress distribution

Anatomic trochlea with a single radius of curvature

2 stabilisation pegs
Ø 8 mm x 13 mm
Not HAp coated in cementless version

Trochlea closed in posterior guaranteeing the largest possible contact surface of the condyle with the insert



Optimal shape of the intercondylar box

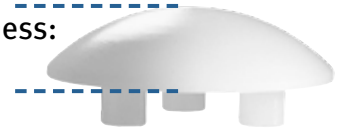
- ✓ For medio-lateral and sagittal stabilisations with regard to the insert: the contact surface is increased
- ✓ Reduced pressure on the patella

Overview of SCORE® TKS

The polyethylene patellar implant are available in three versions:

Resurfacing patella with cement

Thickness: 8 mm

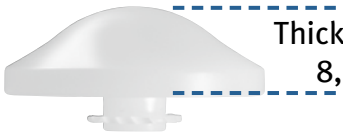


Inserted patella cemented

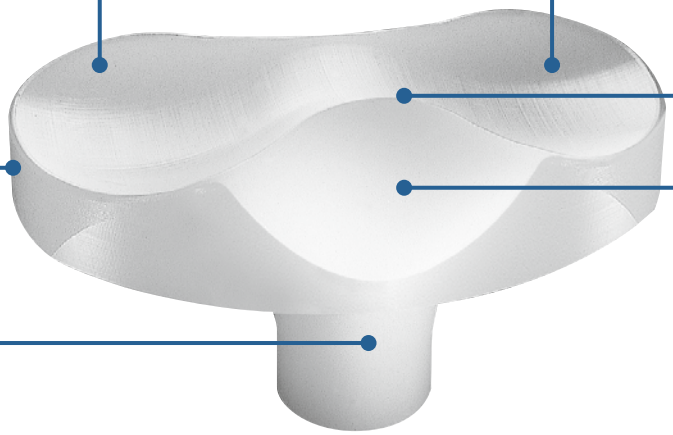
Thickness: 7 mm

Inserted patella cementless

Thickness: 8,5 mm

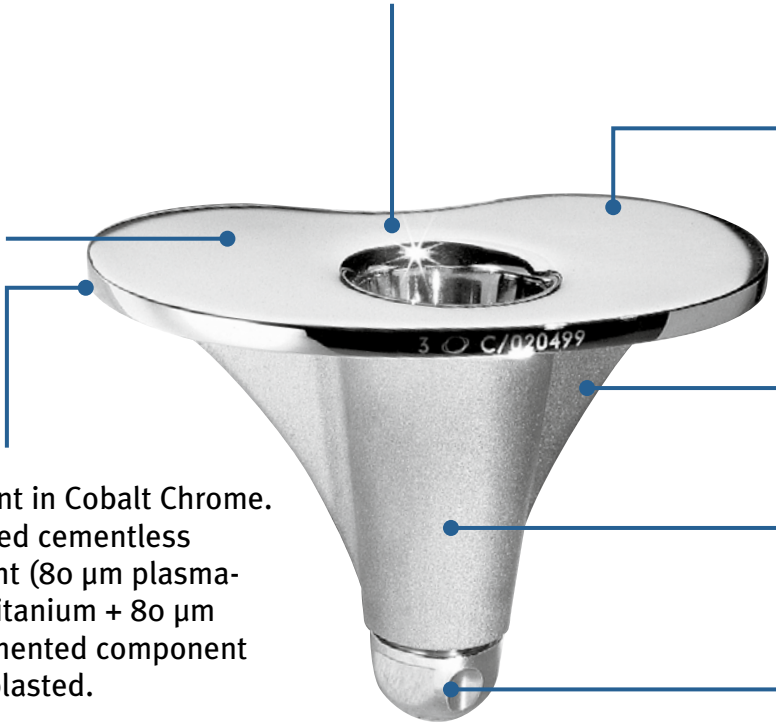


2. Tibial component:
Rotative mobility of the tibial insert:



Overview of SCORE® TKS

Tibial baseplate:



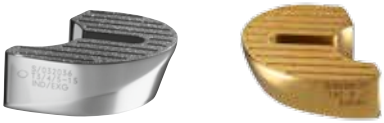
* SCORE® AS tibial component in Cobalt Chrome, coated with 4 µm Titanium Nitride (TiN). Cemented component only.

Possibility of using (e.g. in cases of uni revision, or TKA, or after osteotomy):

SCORE® / SCORE® AS

- Tibial extension stems:
  - Ø 10 to 16 mm
  - Length 75 to 200 mm

- Tibial half-wedges:
  - Thickness 5 mm
  - Thickness 10 mm
  - Thickness 15 mm



- Offset connectors:
  - 2 mm
  - 4 mm
  - 6 mm

Overview of SCORE® TKS

3. SCORE® implant product range:

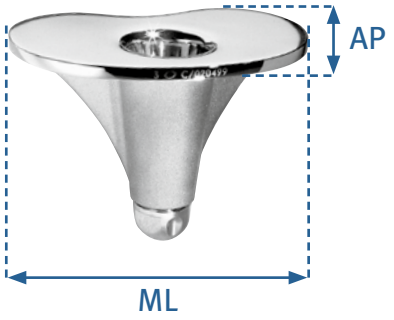
- **Femoral components:**
  - Cemented condyles: 7 sizes
  - Uncemented condyles: 7 sizes

Δ AP: increment between sizes: 2.66 mm

Δ ML: increment between sizes: 3.3 mm

- **Patellar components:**
  - Resurfacing patella with cement: Ø 30, 33 and 36 mm
  - Inserted patella cemented: Ø 23, 26 and 29 mm
  - Inserted patella cementless: Ø 23, 26 and 29 mm

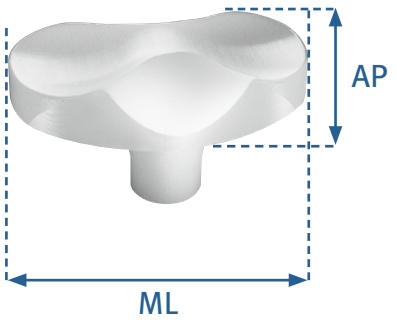
- **Tibial components:**
  - Cemented tibial baseplate: 7 sizes
  - Uncemented tibial baseplate: 7 sizes



Increment between sizes: 2.3 mm

Increment between sizes: 3.5 mm

  - Tibial inserts: 7 sizes
    5 thickness (10, 12, 14, 16 and 20 mm)

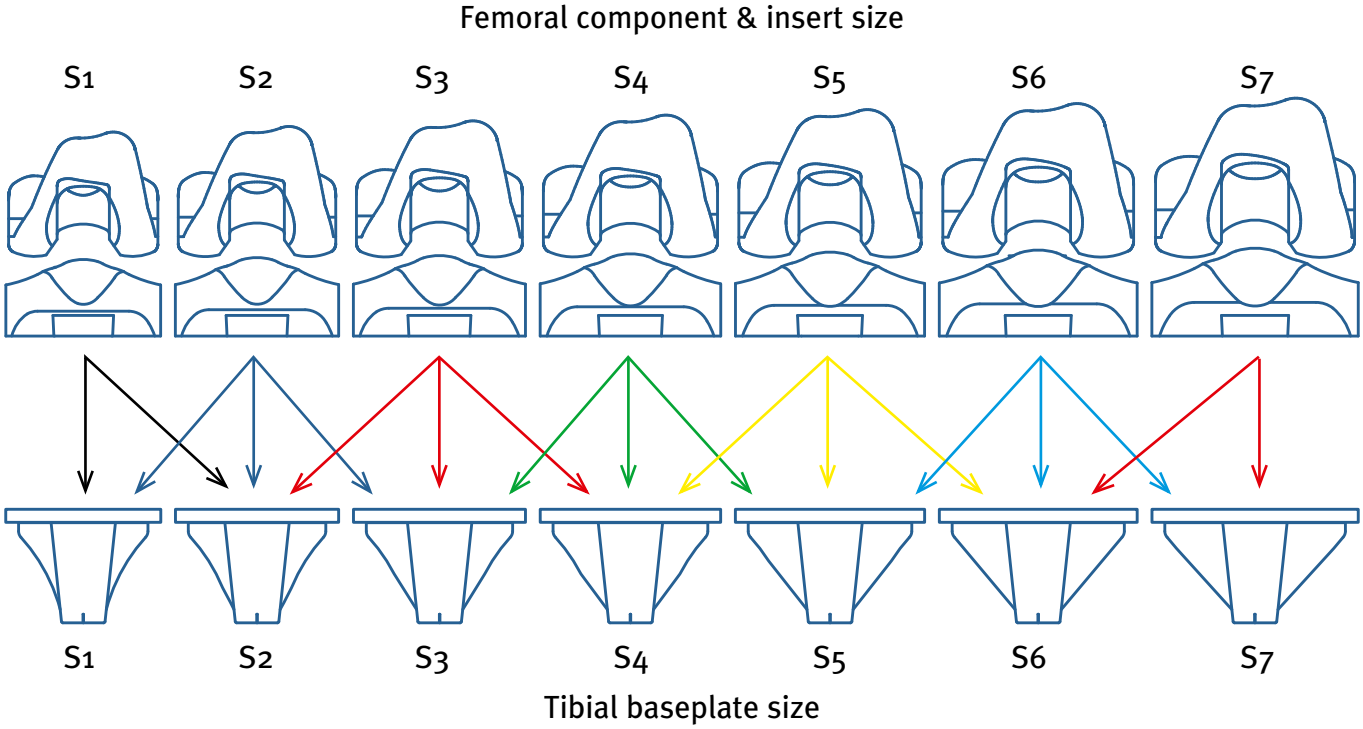


Increment between sizes: 2.1 mm

Increment between sizes: 3.3 mm

Overview of SCORE® TKS

4. Components compatibility:

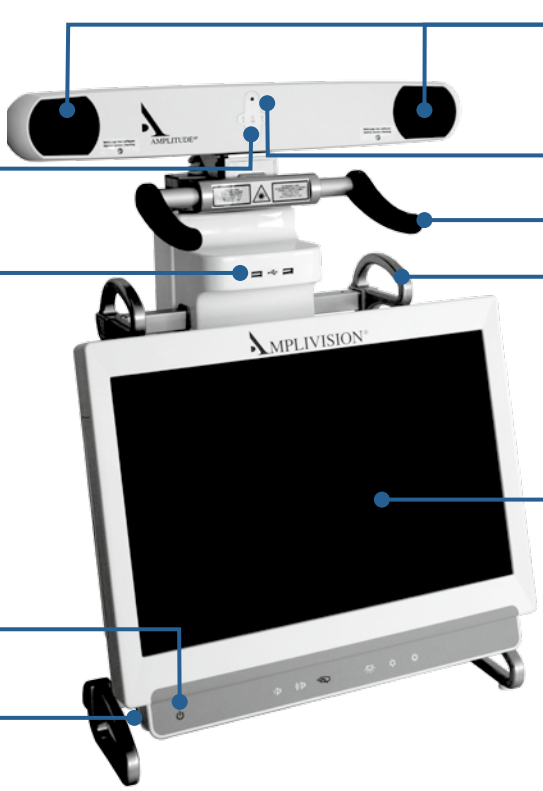


The SCORE® femoral implant is compatible with the whole range of patellar implants.

Workstation components

Front:

V2 Workstation

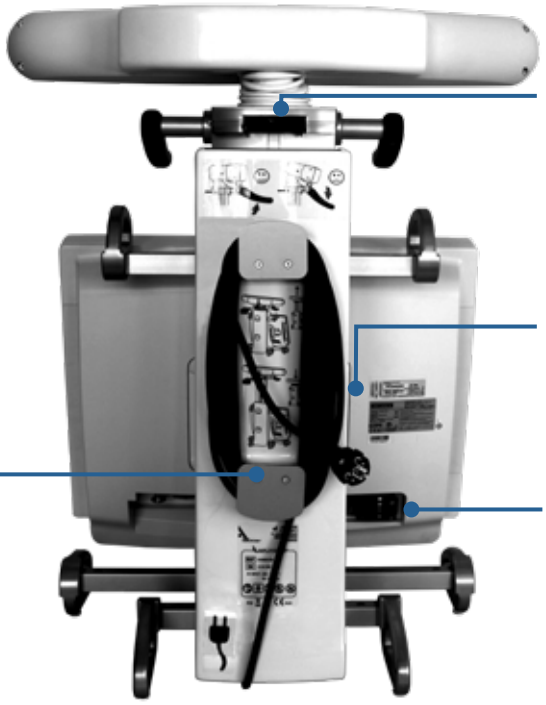


V3 Workstation

Workstation components

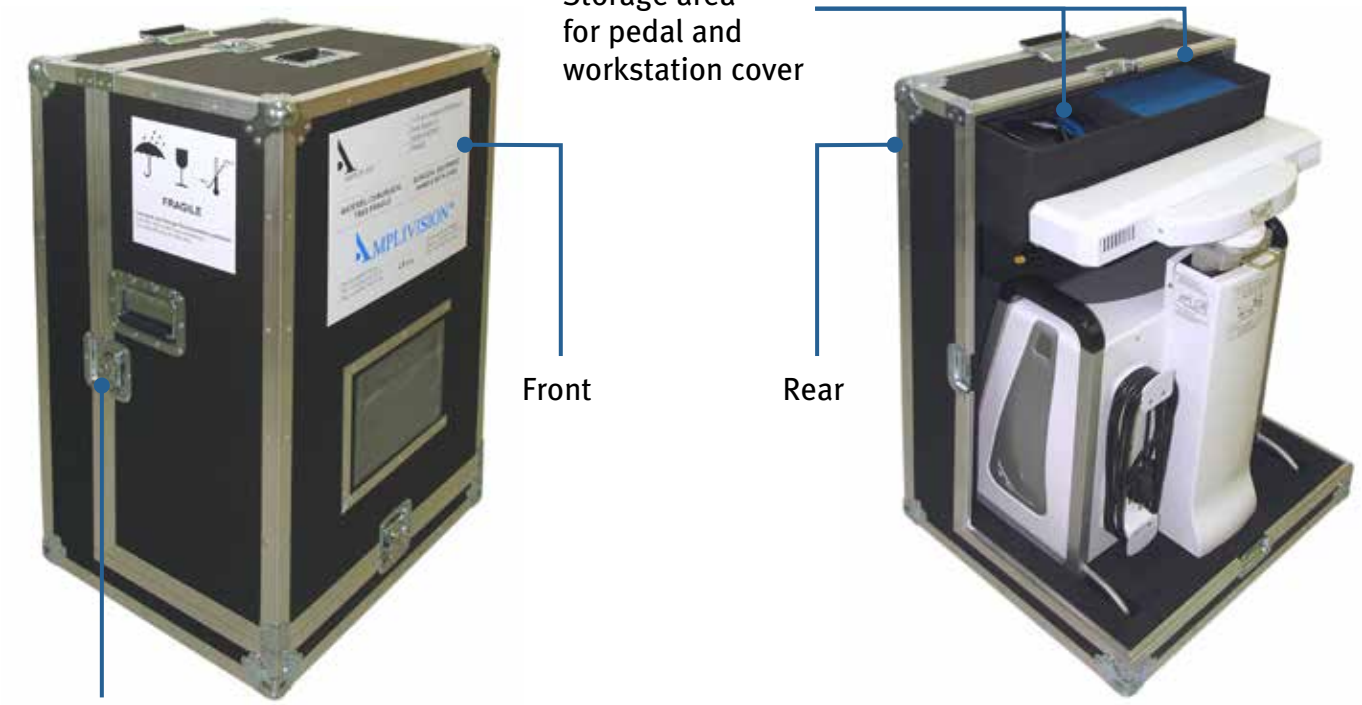
Rear:

V2 Workstation

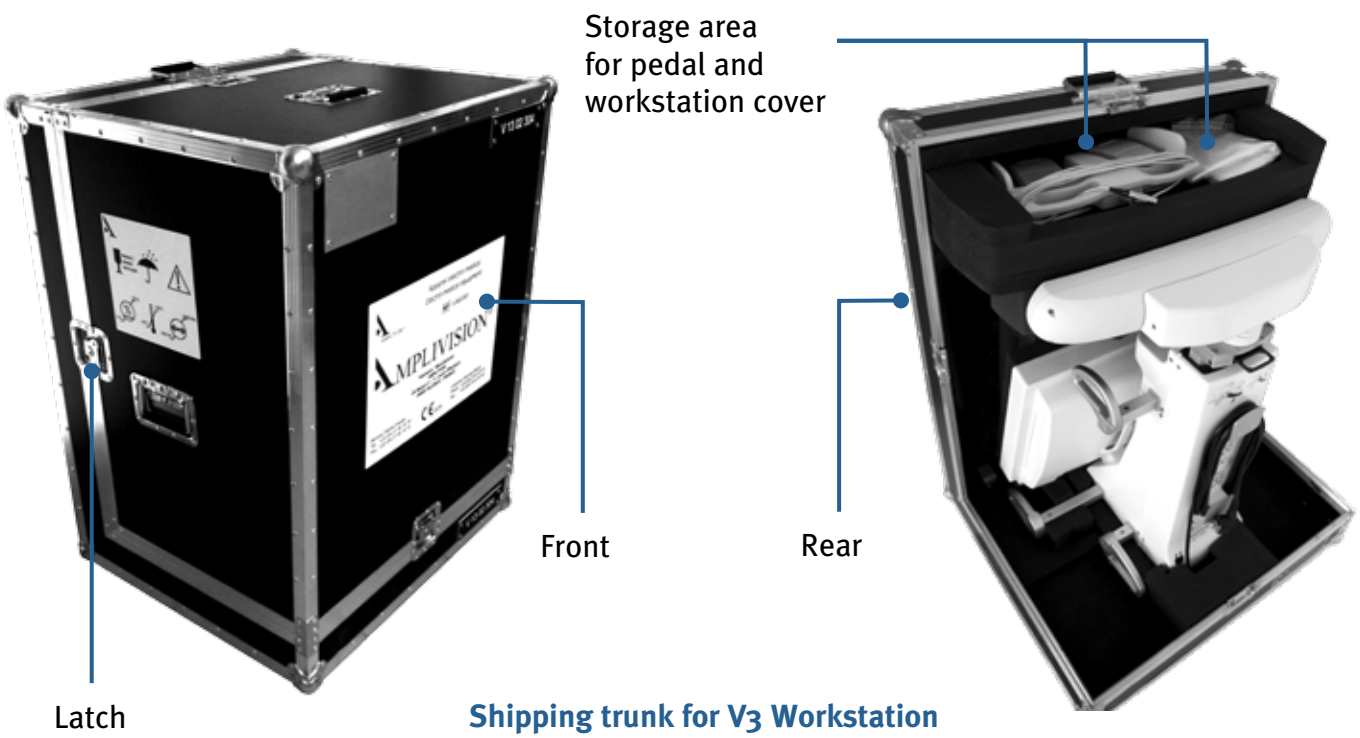


V3 Workstation

Preparation phase



Shipping case for V2 Workstation



Shipping trunk for V3 Workstation

Pedals for V2 Workstation

Pedals for V3 Workstation

Preparation phase

- Unlock the four latches on the shipping trunk.
- Open the front panel and take out the workstation, pedal and pedal cover.
- Place the workstation on a stable table or operating room cart.
- Clean the workstation according to the instructions in the user manual or in the software.

NOTE: - The workstation user manual is found in the shipping trunk.
- It is also available under the Options Menu function in the software (see page 15).

- Connect the pedal to the back of the V2 Workstation or to the side of the V3 Workstation (refer to photos for location of ports) and slide it into its protective cover (found in the trunk).
- Plug in the workstation's power cord.

Preparation phase

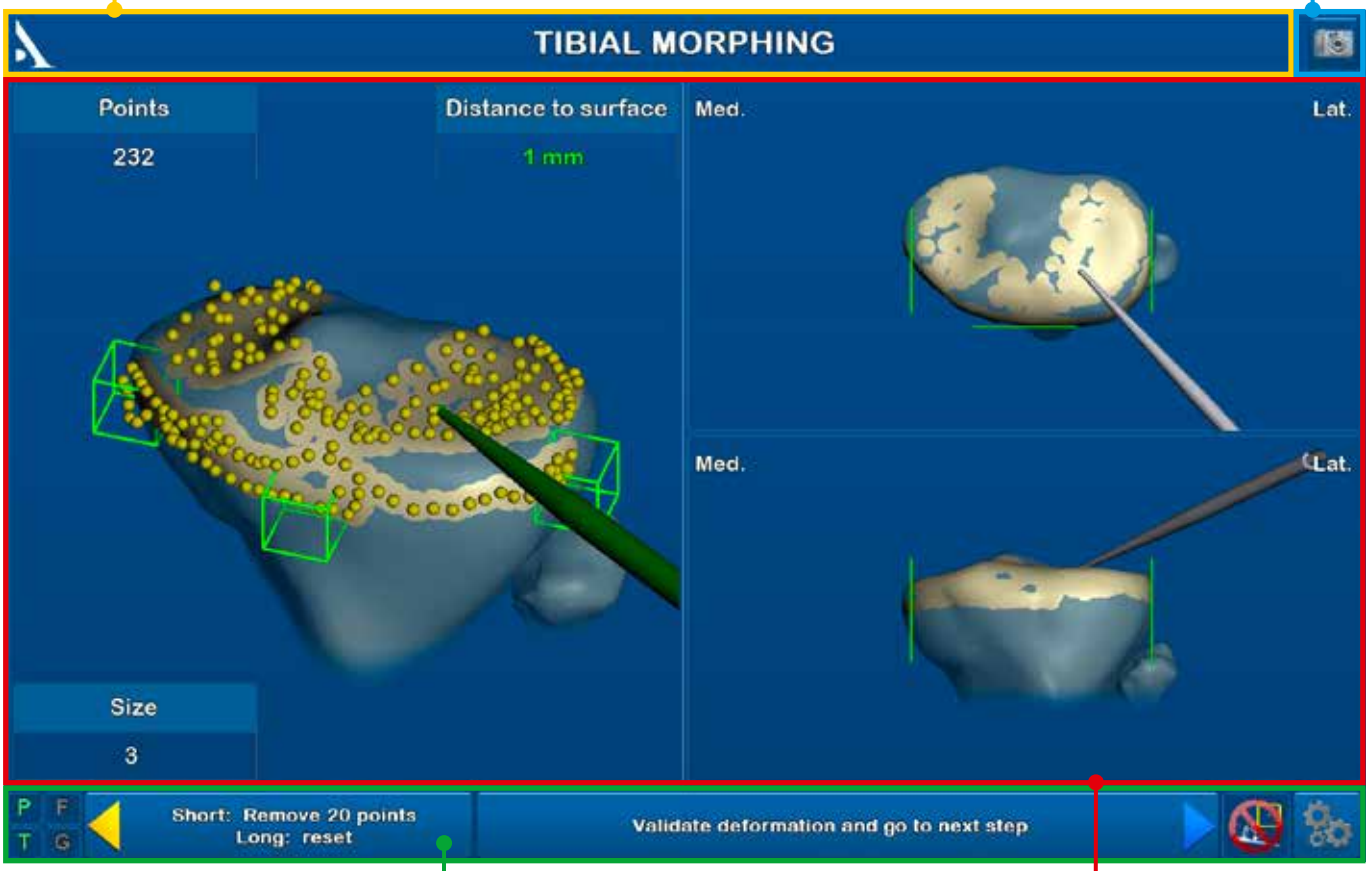
Locked position

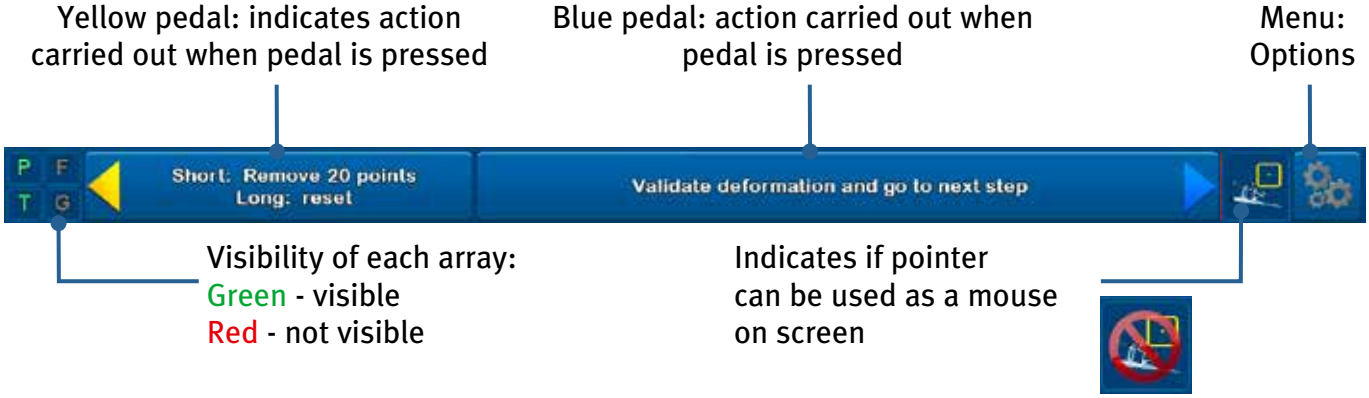
Unlocked position

Preparation phase

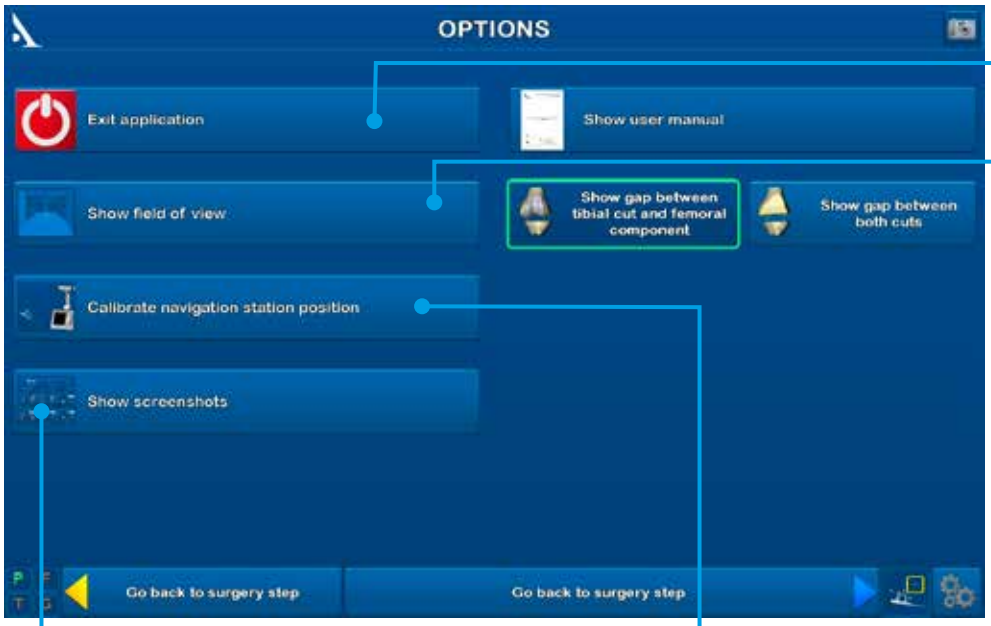
- Position the workstation so that it is at least 1.5 m from the patient.
- Set the camera head in neutral position (maximum height, no rotation).
- Unlock the adjustable tower: lift the locking lever and let the tower rise freely until it reaches its maximum height.
- Press the power button:
  - V2 Workstation: move the green button on rear of workstation to « I » position;
  - V3 Workstation: press the power button at lower right portion of screen  ; it will turn green when the power is on.

Screen layout





Options menu description



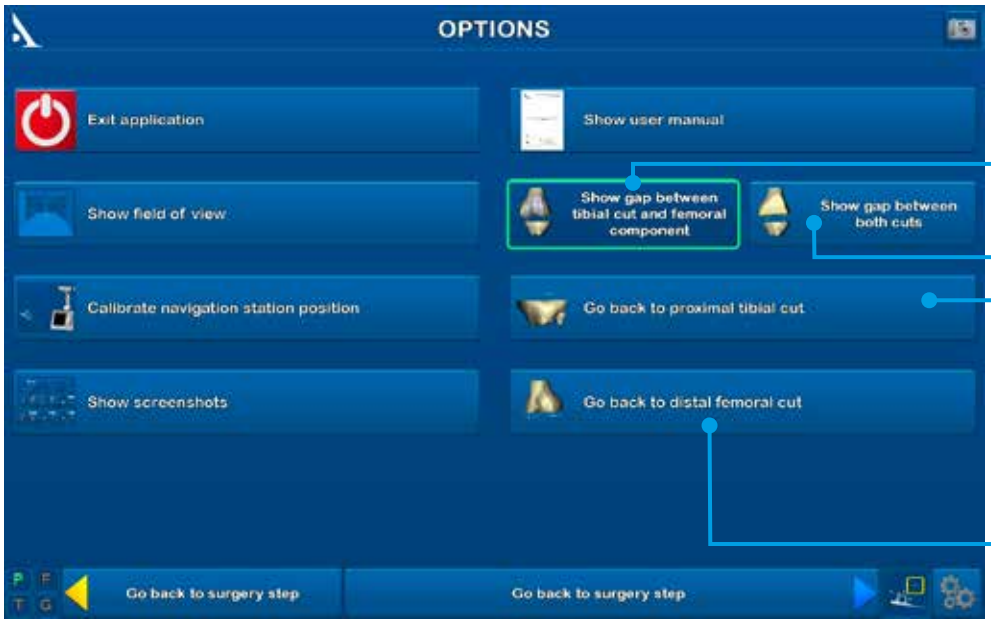
The «Exit Application» button will only be active during the final step.
To exit the application before the final step, go to the «Options» menu to select it.

Show camera field of view to locate arrays

View all the validated steps during the surgery

Reset navigation station position relative to surgeon position

During the gap management step:

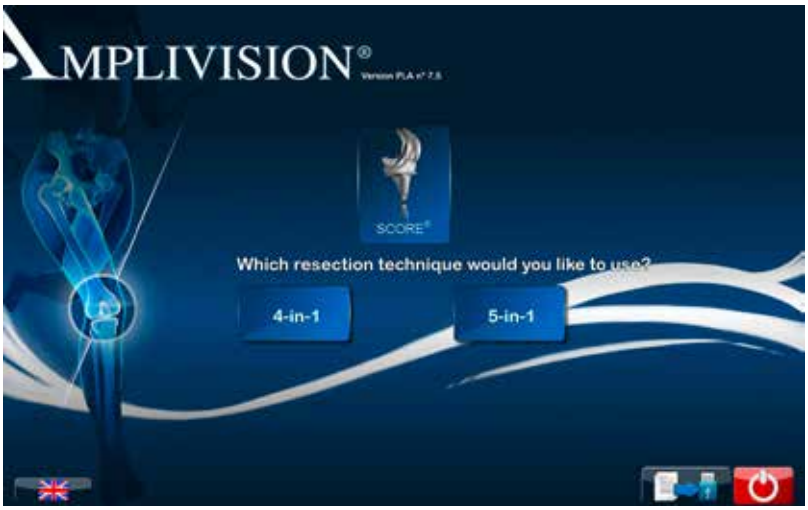


Display gaps between tibial cut and virtual femoral component

Display gaps between tibial cut and femoral cut

Return to proximal tibial cut navigation step

Return to distal femoral cut navigation step


AMPLIVISION®
SCORE®
Which resection technique would you like to use?
4-in-1
5-in-1


INFORMATION
SURGEON
SCORE
PATIENT
Name
4-IN-1
First Name
BIRTH DATE
Day
Month
Year
OPERATED SIDE
LEFT
RIGHT
1 2 3 4 5 6 7 8 9 0
Q W E R T Y U I O P
Aa A S D F G H J K L
Z X C V B N M * -
Go to previous step
Go to the next step


SELECT SURGICAL PROTOCOL
Order of cuts:
1 - Tibial cut
2 - Distal femoral cut
Order of trial acquisition:
1 - Trial femoral component
2 - Trial tibial component
Go to previous step
Go to the next step

Preparation phase

- Press the touch screen to select the preferred system language.

- Select «Knee», then select the ANATOMIC® implant and the 4-in-1 protocol.

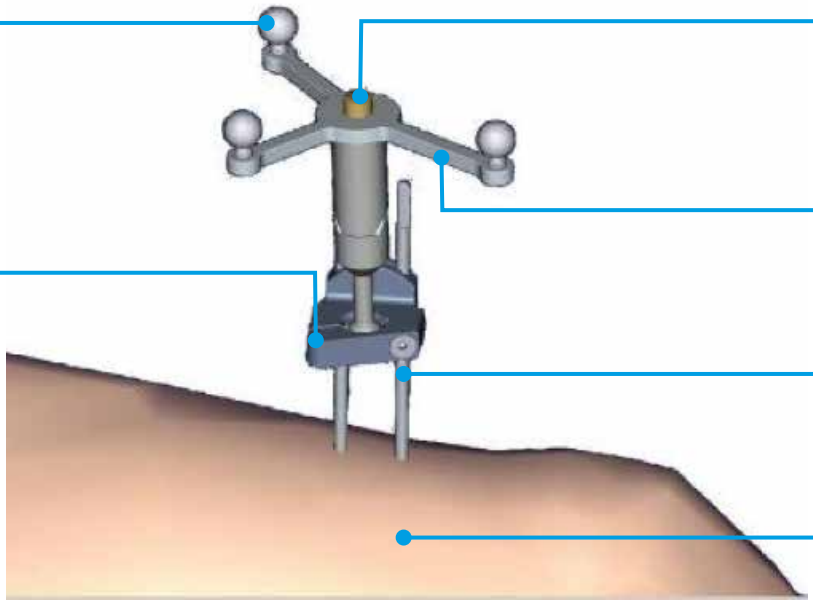
- On the «Information» page, input the required information using the virtual keyboard.
  - Surgeon name
  - Patient name
  - Patient date of birth (optional)
  - Operated side (select right or left)

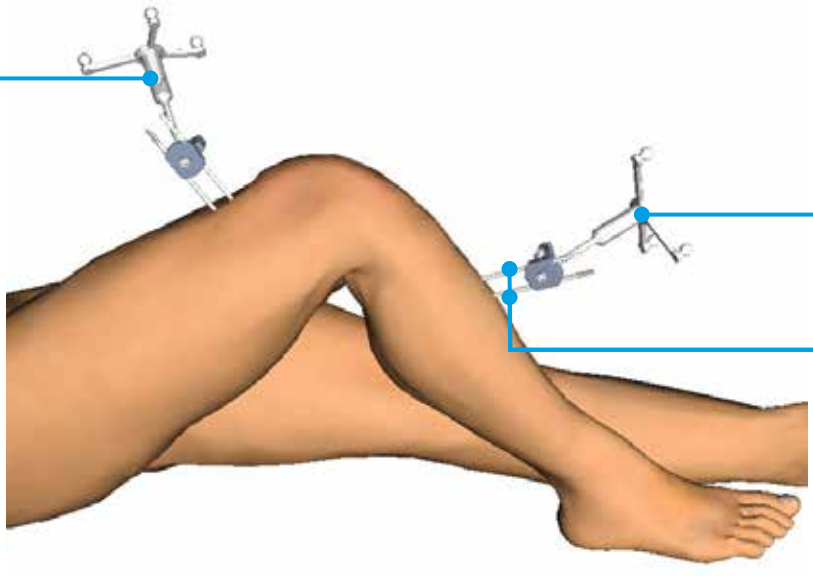
- To go to the next step, press the blue pedal or the blue arrow on the screen.

- To go to the previous step, press the yellow pedal or yellow arrow on the screen.

- Configuring the surgery-related options:
  - Order in which distal femoral and tibial cuts are performed
  - Order in which trial implants are acquired


Marker


Spherical Markers
Release button
Array
Array fixation support
Fixation pins
Femur


Femur array
Tibia array
Fixation pins

Preparation phase

- Clip the round markers to the arrays:
  - 3 for the Tibia (T) array
  - 3 for the Femur (F) array
  - 4 for the Pointer (P) array
  - 3 for the Guide (G) array

- The pins must be placed on the anteromedial side of the femur and tibia (when the surgeon stands on the lateral side) and must not interfere with tap placement. They can be inserted either percutaneously or through an incision.

NOTE: If the femoral pin is being inserted percutaneously, make sure the knee is flexed to prevent damaging muscle fibres.

- Insert the first pin: go through the proximal cortex and then into, but not through, the distal cortex.

- Place the array fixation support on the first pin to get the proper spacing for the second pin.

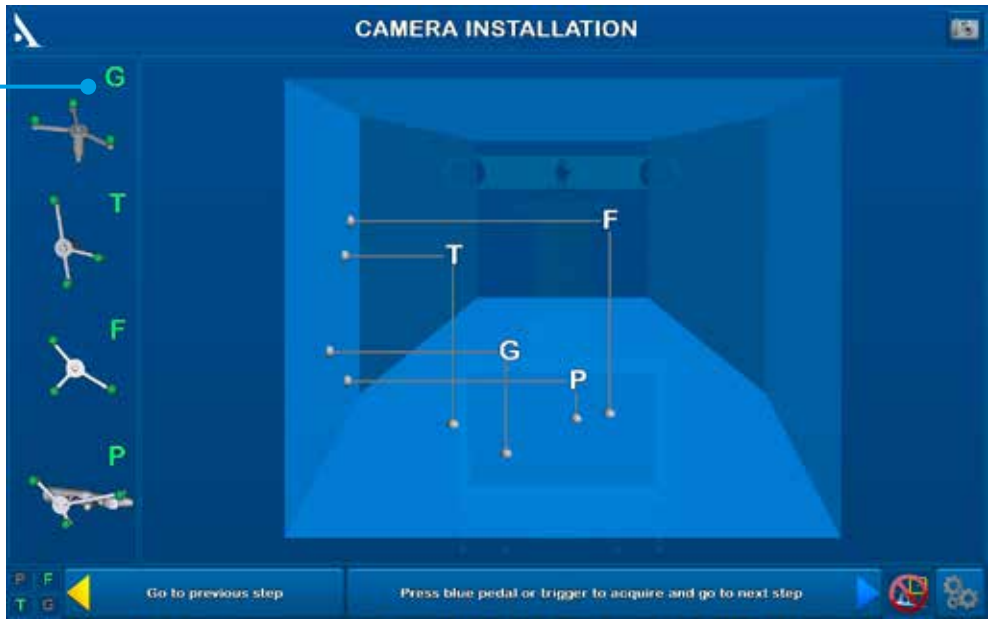
- Clip the F array on the moveable part of the support, making sure the arrows are aligned correctly. If the array needs to be removed during the procedure, it can be returned to the same position on the support.

- Orient the array towards the camera head and lock the fixation support.

- **Position and secure the arrays so they are always visible to the camera head, whether the knee is flexed or extended.**

Important: Once the knee joint has been opened and exposed with the retractors provided, any osteophytes must be removed in order to acquire correct joint surfaces, otherwise the implant selected may be too large or too small.

3D view
of arrays



Workstation setup

Setting up the camera:

- Position the camera head so the letters corresponding to the F and T arrays are in the middle of the field of view.

The laser located in the positioning handles on the camera head (V2 Workstation) or between the two optical sensors (V3 Workstation) makes this adjustment easier.

- Confirm that the P array is visible.

- On the left side of the screen, a 3D view of the arrays indicates why a array may not be visible:
  - Any marker that is not visible on a array will be red, as will the letter associated with this array.
  - The array will be green if it is fully visible.

- The array's visibility may be compromised by interfering infrared sources (sunlight, hot lights, dirty markers).

Calibrating the user and screen position:

- Aim the pointer at the centre of the AMPLIVISION® screen and press the trigger to confirm.

- From this step on, the AMPLIVISION® system can be controlled with:
  - the pointer, by pressing the trigger to confirm,
  - the pedal,
  - the touchscreen of the AMPLIVISION® workstation.

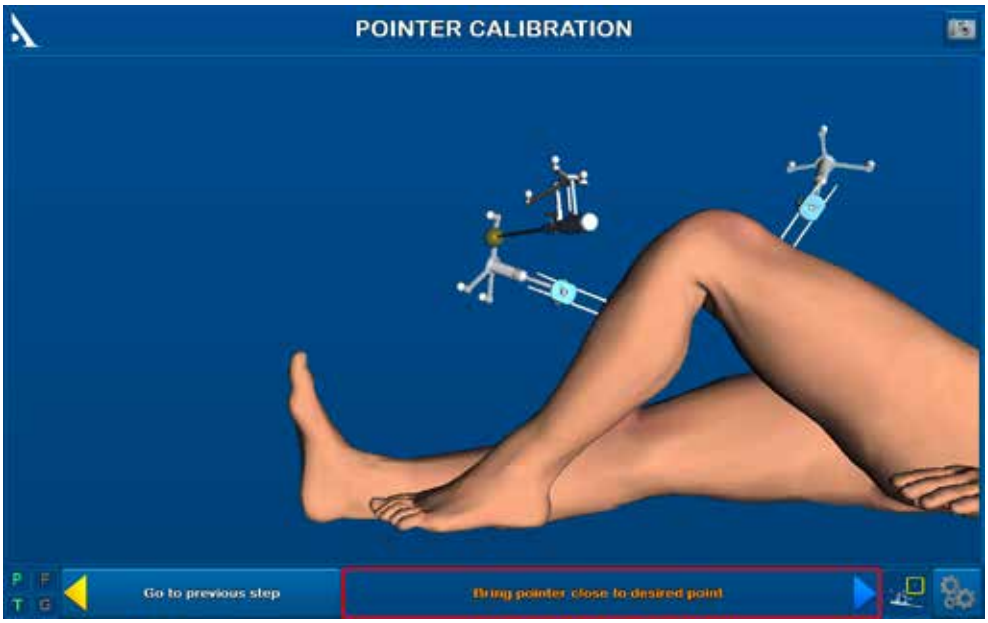
- The system will capture screenshots when
  - the user validates a step,
  - the user presses the screen capture button at the upper-right corner of the screen.

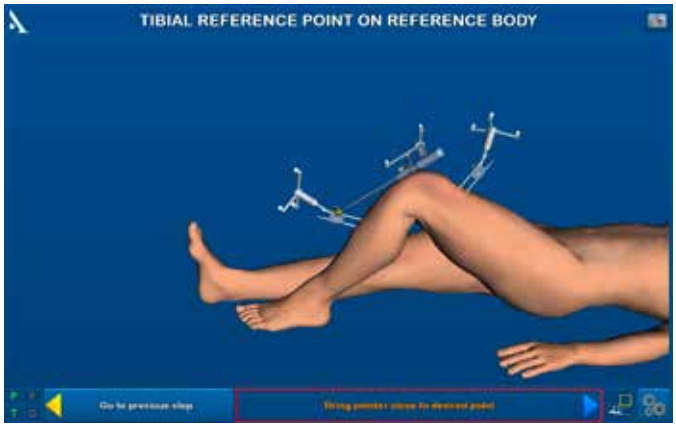
COMMENTS:

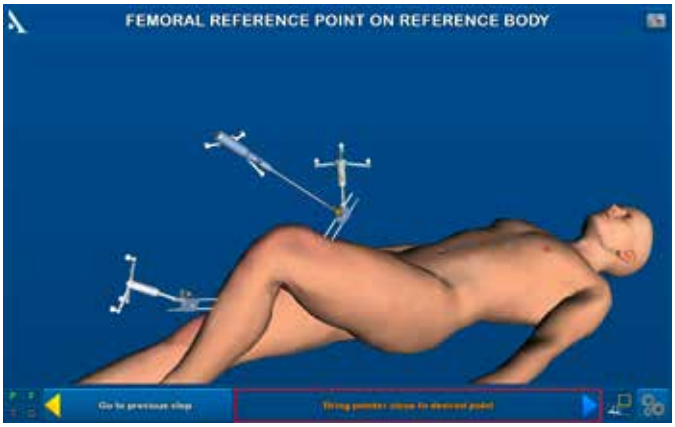
- The user must make sure the arrays used in this step are fully visible.

- These steps can be saved to a USB drive at the end of the procedure.

- The camera position may be recalibrated at any time:
  - Press the «Options» button
  - Press the «Calibrate AMPLIVISION® workstation position» button
  - Validate the new position; the system will automatically return to the current surgical step.


POINTER CALIBRATION
Go to previous step
Bring pointer close to desired point


TIBIAL REFERENCE POINT ON REFERENCE BODY


FEMORAL REFERENCE POINT ON REFERENCE BODY

Calibrating the pointer and arrays

Calibrating the pointer:

To define exactly the position of the pointer tip,

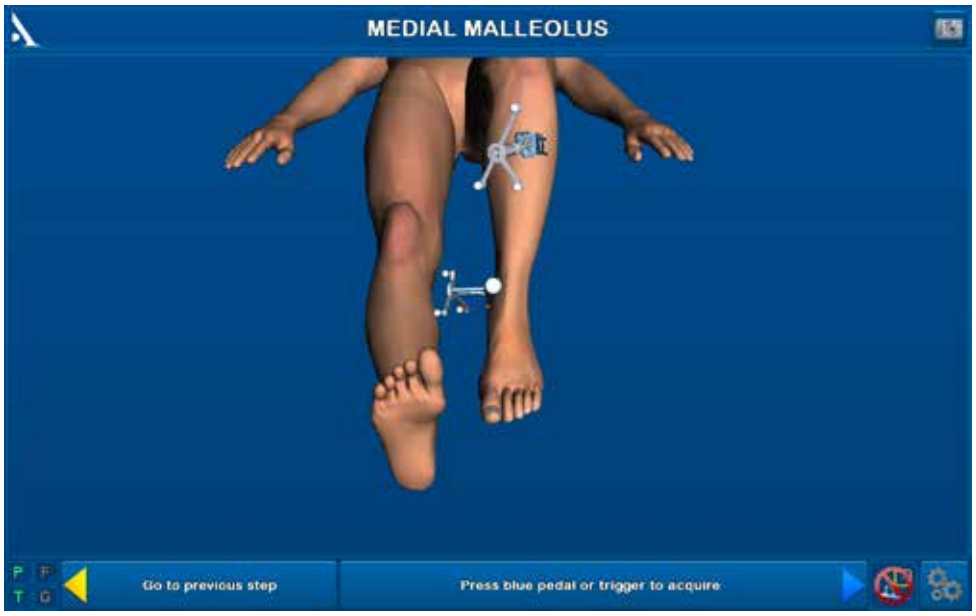
- Calibrate the pointer by placing its tip in the conical calibration mark on one arm of the T array and press trigger to confirm.
- Without lifting the pointer tip, change the pointer's orientation slightly and then confirm again.

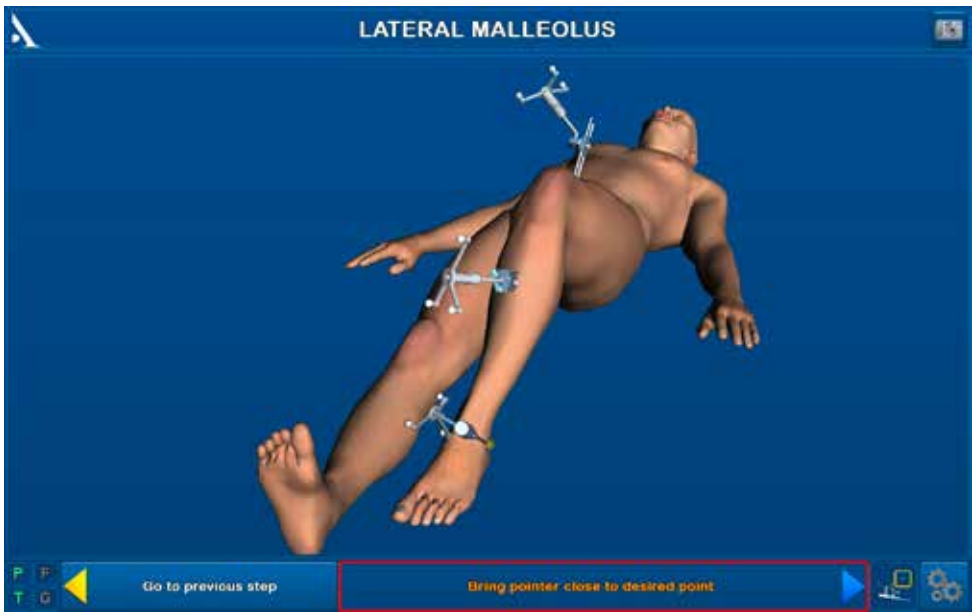
Tibia reference point on array:

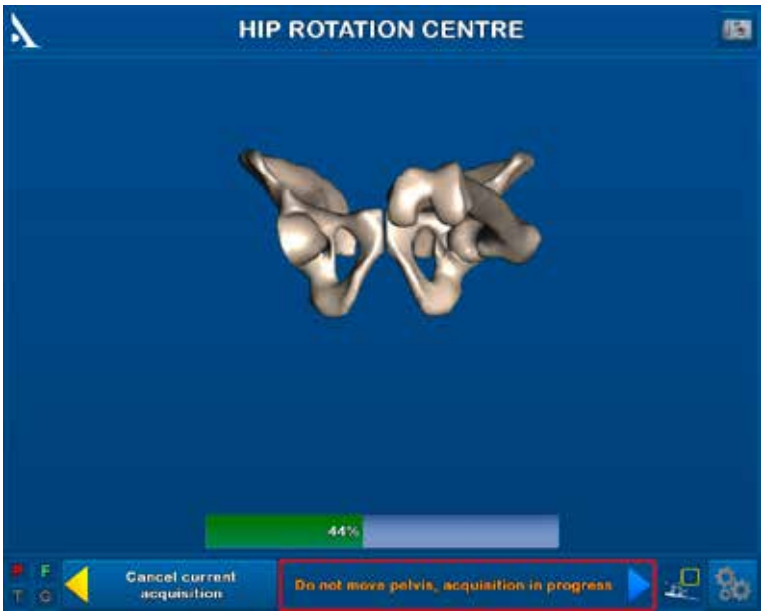
- This step validates the final position of the T array on its fixation support. At any point during the procedure, the surgeon can check if the array position has changed by using this reference point.
- Place the pointer tip in one of the two conical calibration marks on the T array support and confirm.

Femur reference point on array:

- Repeat these same steps with the F array support.
- At any time during the procedure, place the pointer tip on the previously acquired tibia and/or femur reference point. The words «Femur OK» and/or «Tibia OK» will appear in the lower left corner of the screen if the array has not moved relative to its support.
- If the array has moved, the surgeon can continue the procedure without navigation or return to the reference point step.
- However, there is no way to check if the array–fixation support combination has moved. If in doubt, continue the procedure without navigation.


MEDIAL MALLEOLUS
Go to previous step
Press blue pedal or trigger to acquire


LATERAL MALLEOLUS
Go to previous step
Bring pointer close to desired point


HIP ROTATION CENTRE
44%
Cancel current acquisition
Do not move pelvis, acquisition in progress

Ankle centre acquisition

Medial malleolus:

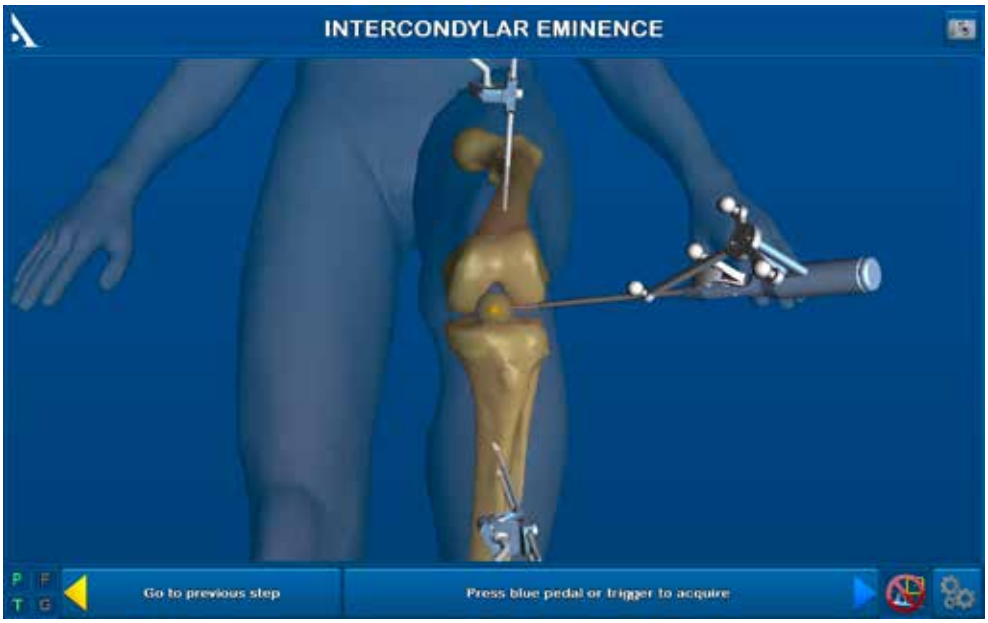
- Place the pointer tip on the most medial point of the medial malleolus.
- Press the trigger on the pointer to confirm.

Lateral malleolus:

- Place the pointer tip on the most lateral point of the lateral malleolus.
- Press the trigger to confirm.

Hip centre acquisition:

- Extend the patient's leg and grasp his/her ankle.
- Press the blue arrow (or blue pedal) to start the data acquisition.
- Move the leg in a small circle (15 cm knee displacement) until the system has acquired 100% of the points it needs.
- Once the acquisition is finished, the system will calculate the hip centre. If the result is acceptable, the system automatically goes to the next step. If it is not acceptable, the system will prompt the user to restart the acquisition. During this step, the system will beep once when the acquisition starts and once when it ends. A status bar shows the progress being made during the acquisition.


INTERCONDYLAR EMINENCE
P F
T G
Go to previous step
Press blue pedal or trigger to acquire


TIBIAL SAGITTAL AXIS
P F
T G
Go to previous step
Move pointer closer to joint

Coordinate reference system: Tibial acquisition

Centre of the tibia:

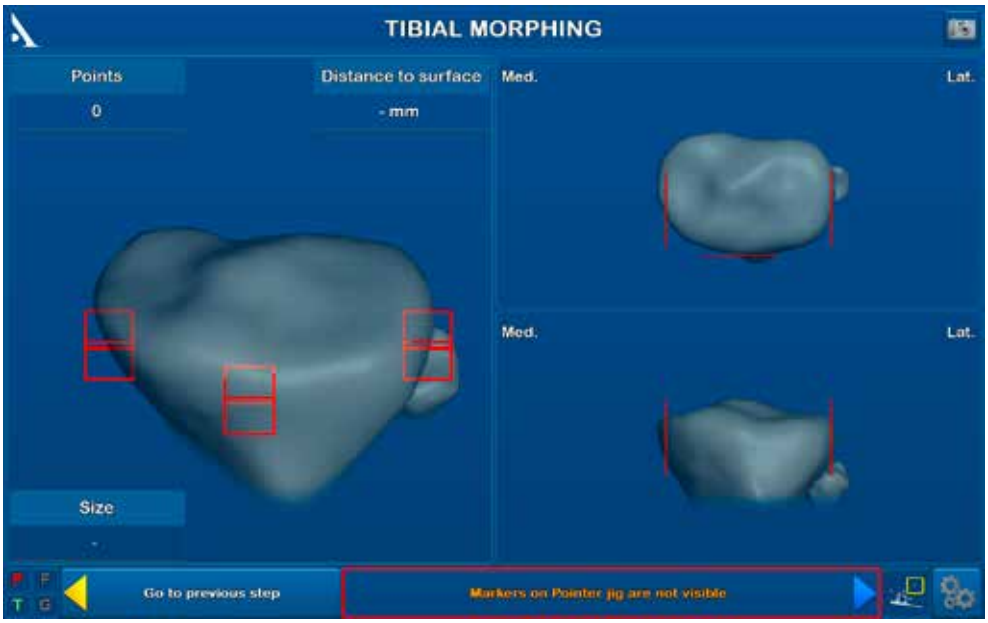
- Place the pointer tip on the middle of the intercondylar eminence on the axis of the tibial shaft.
- Press the trigger to confirm.

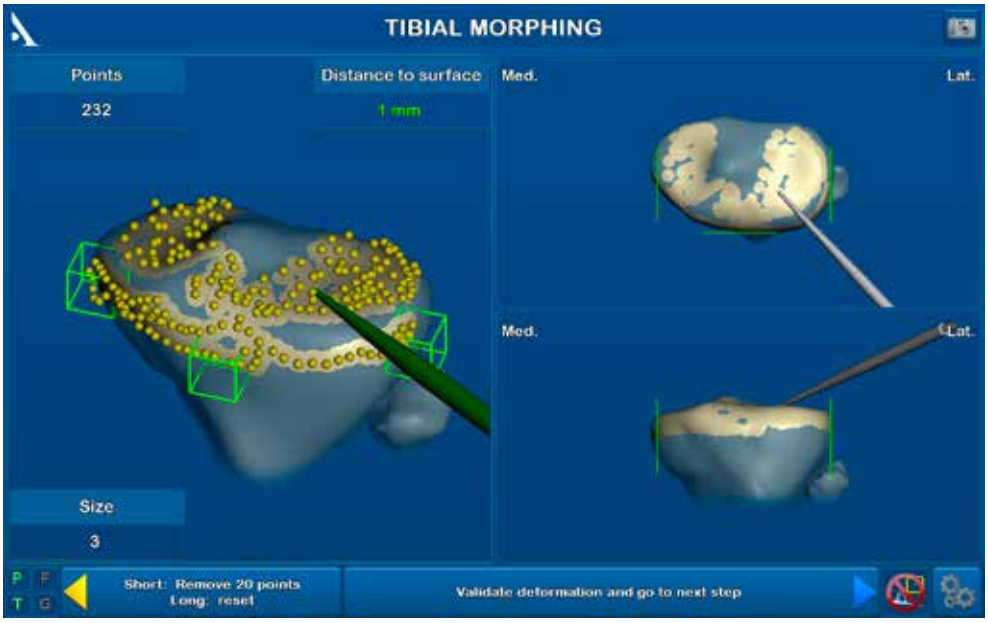
Tibial sagittal axis:

- Place the pointer tip on the intercondylar eminence and turn the body of the pointer.
- Once it corresponds to the desired sagittal plane orientation, confirm its position.

Note:

- The tibial axis is defined using the ankle centre (middle of both malleoli) and the point defining the centre of the tibia.
- Using the tibial axis and the sagittal axis, the AMPLIVISION® system calculates the sagittal plane and estimates the frontal and transverse planes.


TIBIAL MORPHING
Points
0
Distance to surface
- mm
Med.
Lat.
Med.
Lat.
Size
Go to previous step
Markers on Pointer jig are not visible


TIBIAL MORPHING
Points
232
Distance to surface
1 mm
Med.
Lat.
Med.
Lat.
Size
3
Short: Remove 20 points
Long: reset
Validate deformation and go to next step

Tibial acquisition

The goal of this step is to acquire the tibial bone surface and then verify its accuracy.

- The acquisition process is initiated by pressing the trigger on the pointer and ends when the trigger is released. The system will beep to indicate the start and end of the acquisition.

- Place the pointer tip on the bone surface. Hold down the trigger while moving the tip along the surfaces that need to be acquired:
  - Medial and lateral articular surfaces (used to determine height of cut)
  - Contour of tibial plateau at the articular surface (used to estimate implant size), as well as at the level of the planned tibial cut (anterior cortex, medial and/or lateral). This provides a good representation of the contact area between the chosen tibial baseplate and bone cut.

- At any time, the surgeon may release the trigger, move the pointer tip to another location and then press the trigger again to continue the acquisition.

IMPORTANT: Make sure the pointer tip is always in contact with the tibial bone surface when the trigger is pressed.

- The system will continuously acquire points and draw a contour map of the surface in real time. A counter in the upper-left corner shows how many points have been acquired.

- The software will not proceed to the next step until the anterior part and one of the two lateral parts are green.

Verification of contours:

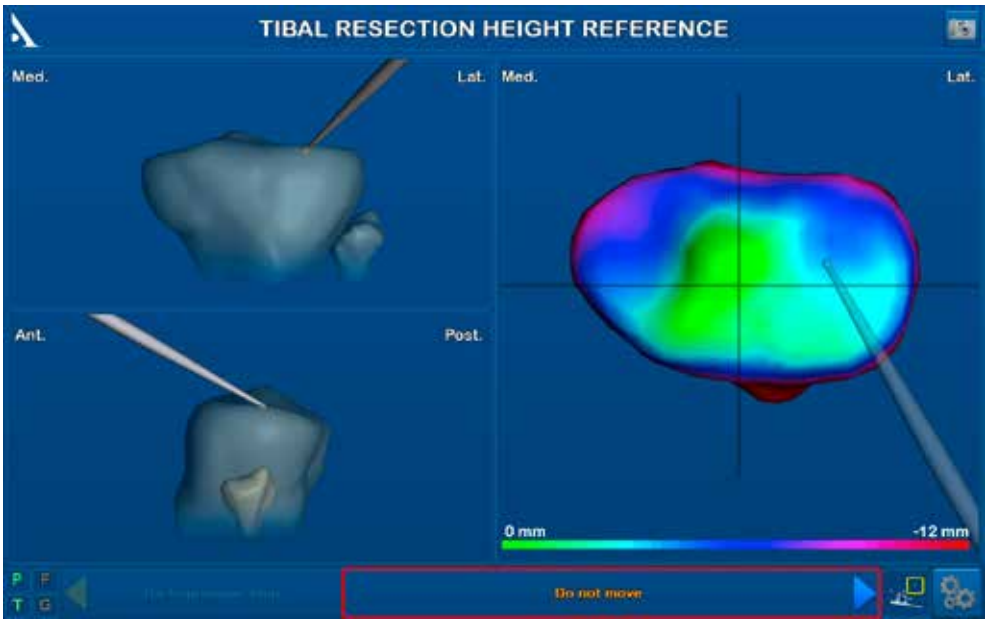
- Release the trigger and place the pointer tip on the acquired bone surface. The DISTANCE TO SURFACE value is shown: this distance is the error between the palpated point and the same point on the digitised 3D model (accuracy of contours). The number will be green if this distance is equal to or less than 1 mm, and red if it is not.

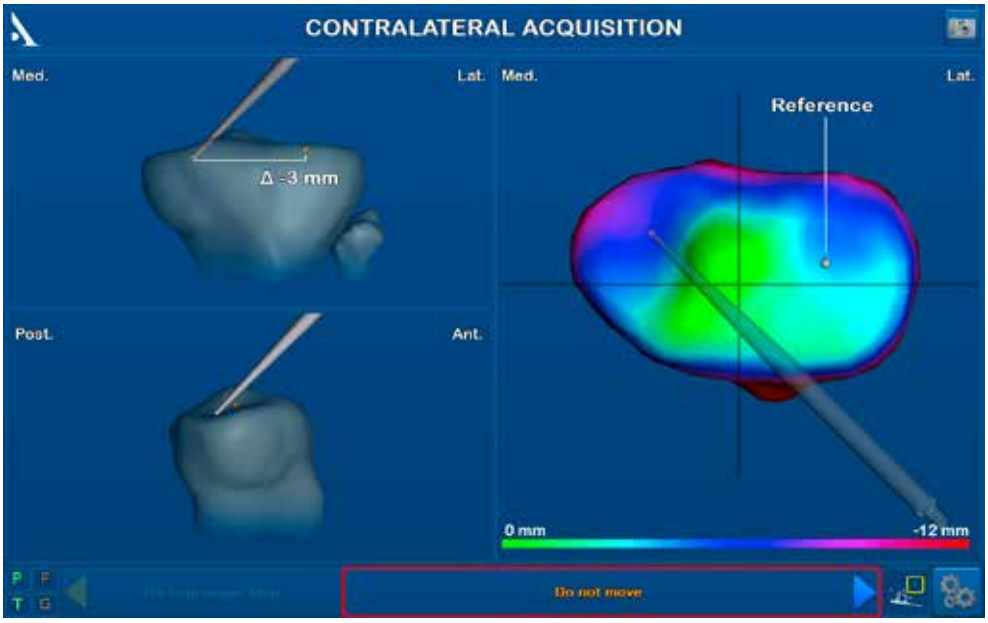
Removal of acquired points:

- The last 20 acquired points can be deleted by pressing the yellow pedal.

- Press and hold down the yellow pedal (for at least 2 seconds) to erase all the acquired points.

- If the contour accuracy is satisfactory, confirm this step and go to the next step.


TIBAL RESECTION HEIGHT REFERENCE
Med.
Lat.
Ant.
Post.
Med.
Lat.
0 mm
-12 mm
Do not move


CONTRALATERAL ACQUISITION
Med.
Lat.
Δ -3 mm
Post.
Ant.
Med.
Lat.
Reference
0 mm
-12 mm
Do not move

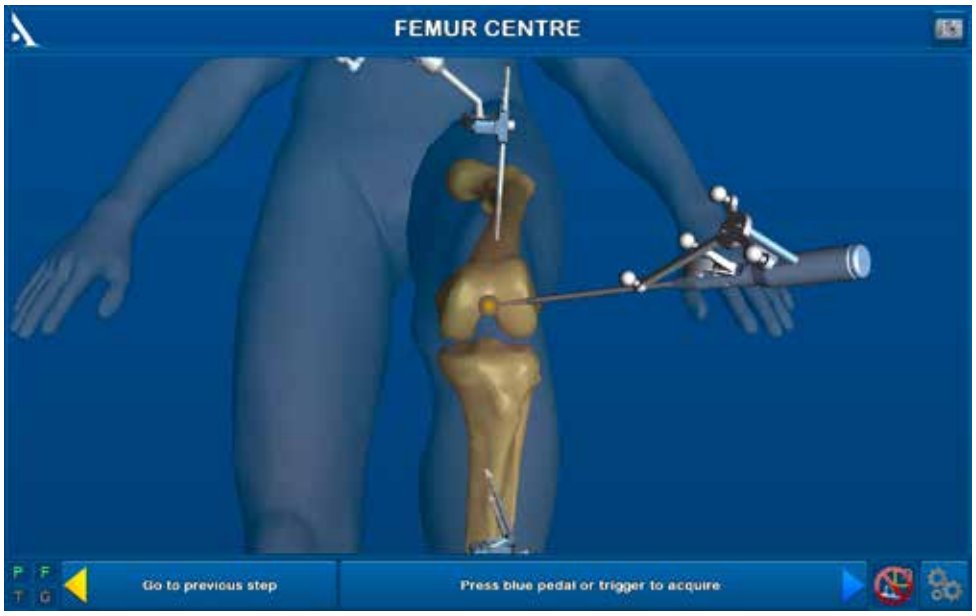
Tibial planning

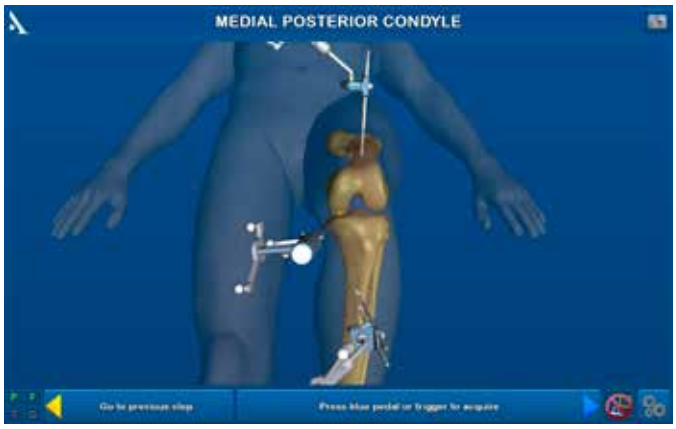
Reference point for tibial resection height:

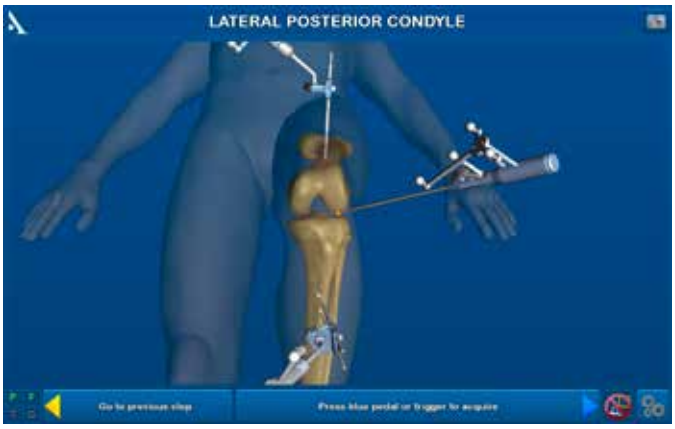
- Select and acquire the reference point that will be used to define the resection height, e.g. a point on the healthy side.
- Use the information from the heat map showing the healthiest areas (highest points) in green tints and the most worn areas (lowest points) in red tints.

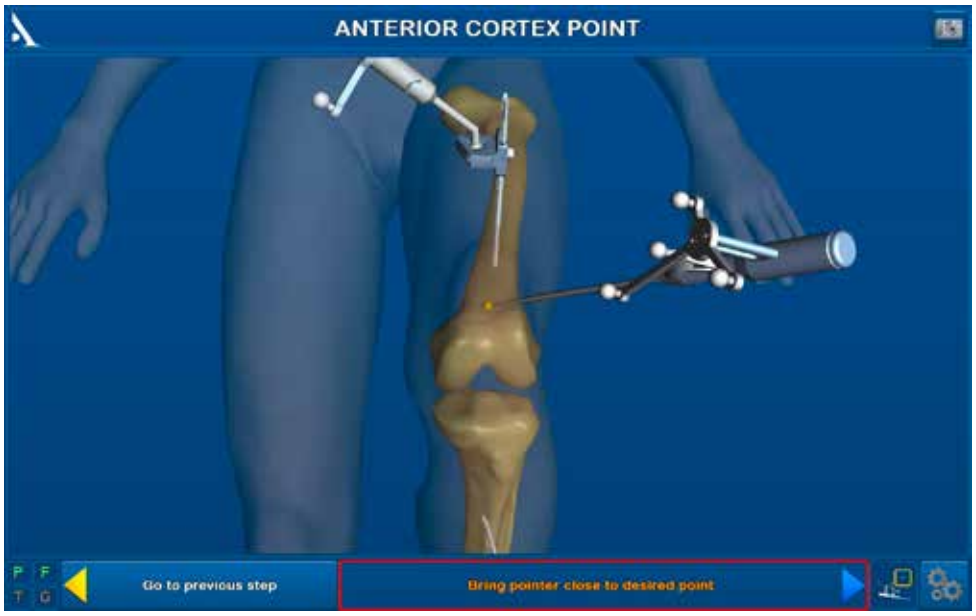
Controlateral acquisition:

- Select and acquire a contralateral point that will be used to measure the distance relative to the reference point for the resection height.
- The distance between the previously acquired reference point for tibial resection height and the contralateral point s shown in white.


FEMUR CENTRE
Go to previous step
Press blue pedal or trigger to acquire


MEDIAL POSTERIOR CONDYLE


LATERAL POSTERIOR CONDYLE


ANTERIOR CORTEX POINT
Go to previous step
Bring pointer close to desired point

Acquisition fémorale

Top of intercondylar notch:

- Place the pointer tip at the top of the femur's intercondylar notch and along the femoral shaft axis, then confirm.

Medial and lateral posterior condyles:

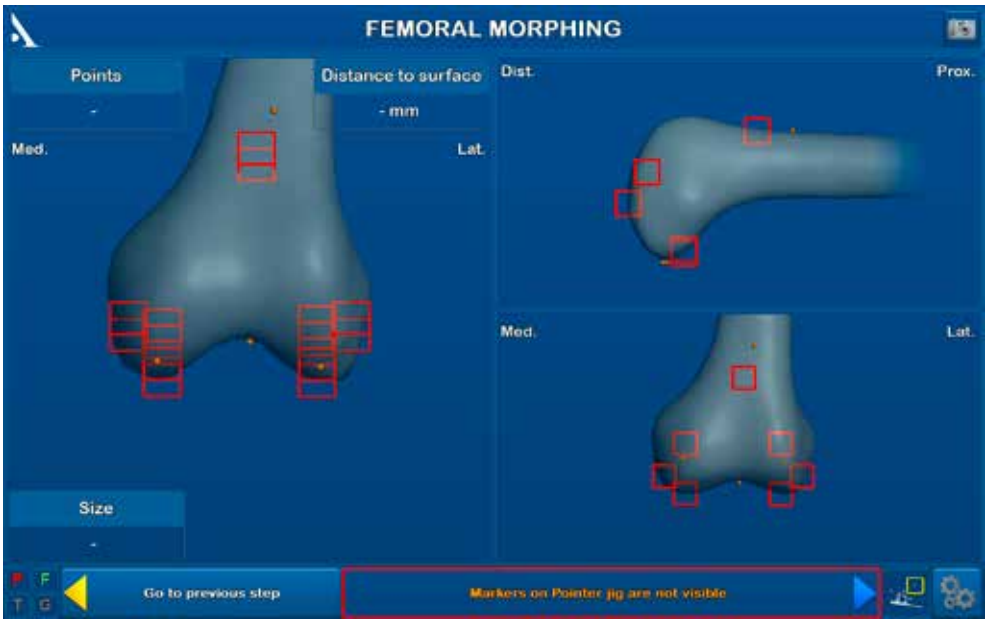
- Place the pointer tip at the top of the medial posterior condyle and validate; do the same for the top of the lateral posterior condyle.

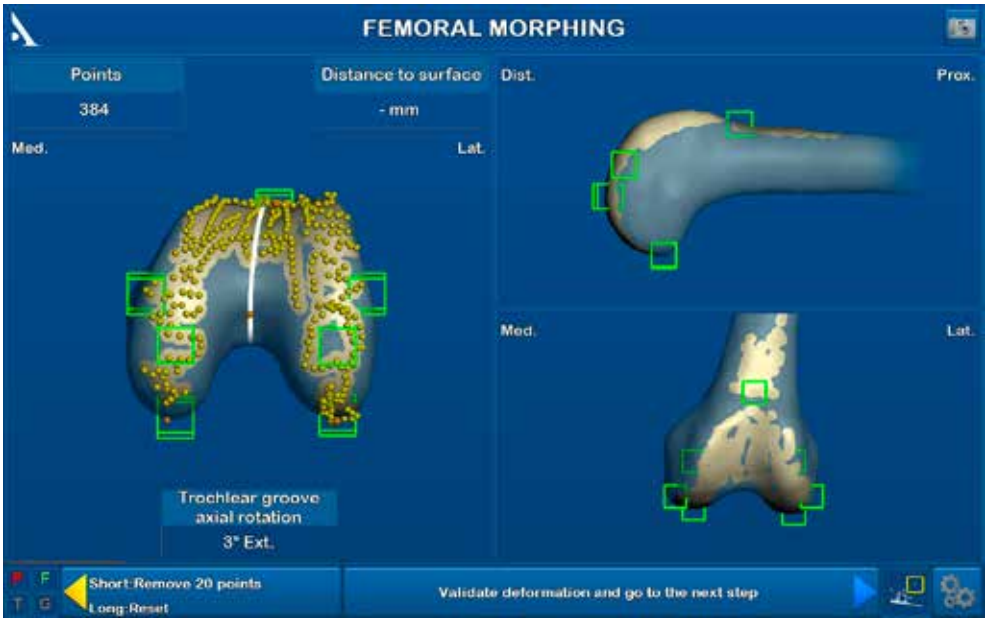
NOTE:

- The femur's mechanical axis is calculated using the hip centre and top of the intercondylar notch.
- Using the femur's mechanical axis and the posterior condylar axis, the AMPLIVISION® system calculates the frontal femoral plane and estimates the sagittal and transverse planes.
- The points at the top of the posterior condyles are recalculated during the condyle digitisation. The planes are then recalculated to make them more accurate.

Anterior cortex:

- Place the pointer tip on the anterior femoral cortex and validate.


FEMORAL MORPHING
Points
-
Distance to surface
- mm
Med.
Lat.
Dist.
Prox.
Med.
Lat.
Size
-
Go to previous step
Markers on Pointer jig are not visible


FEMORAL MORPHING
Points
384
Distance to surface
- mm
Med.
Lat.
Dist.
Prox.
Med.
Lat.
Trochlear groove
axial rotation
3° Ext.
Short:Remove 20 points
Long:Reset
Validate deformation and go to the next step

Femoral acquisition

Digitisation of femoral articular surface

The goals of this step are to acquire the femoral bone surface and verify its accuracy.

- Place the pointer tip on the bone surface. Press and hold trigger then move the tip along the surface being acquired.
- It is best to draw the contour of the femur carefully.
- At any time, the surgeon may release the trigger, move the pointer tip to another location and then press the trigger again to continue the acquisition.

Important: Make sure the pointer tip is always in contact with the tibial bone surface when the trigger is pressed.

- The acquisition process is initiated by pressing the trigger on the pointer and ends when the trigger is released. The system will beep to indicate the start and end of the acquisition.
- A counter in the upper-left corner shows how many points have been acquired.
- Once the minimum number of points needed for the seven «regions of interest» (anterior, distal medial, distal lateral, posterior medial, posterior lateral, medial epicondyle, lateral epicondyle), the red cubes will become green. Make sure the green bars shown on the right side of the screen remain in contact with the bone surface.
- The system will continuously acquire points and draw a contour map of the surface in real time.
- As points are acquired at the base of the trochlear groove, Whiteside's line will be shown in white, along with the trochlea's axial rotation.

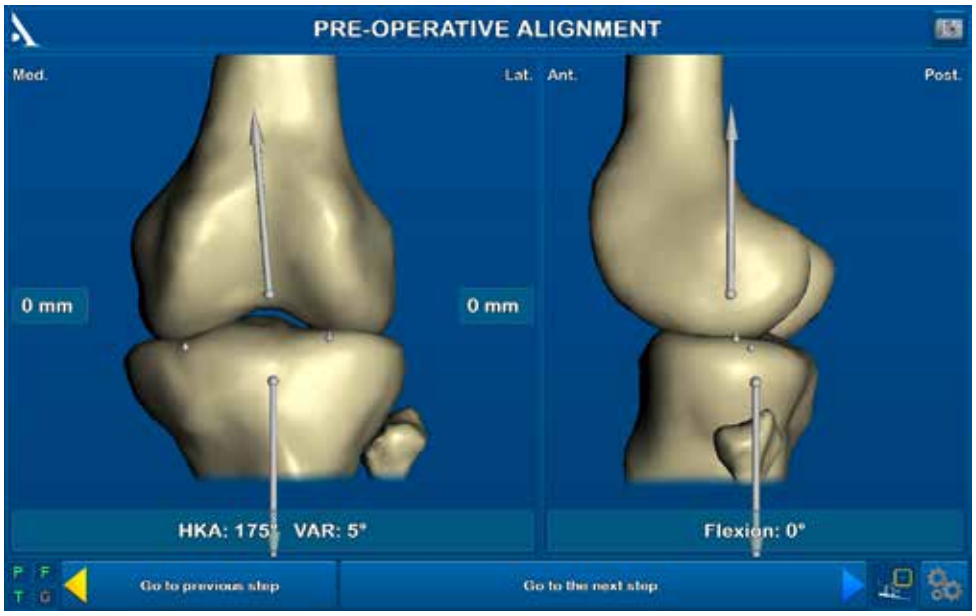
NOTE: The minimum number of points needed to determine the femoral component size is shown by cubes (point at one of the cubes until it flashes and press the trigger).

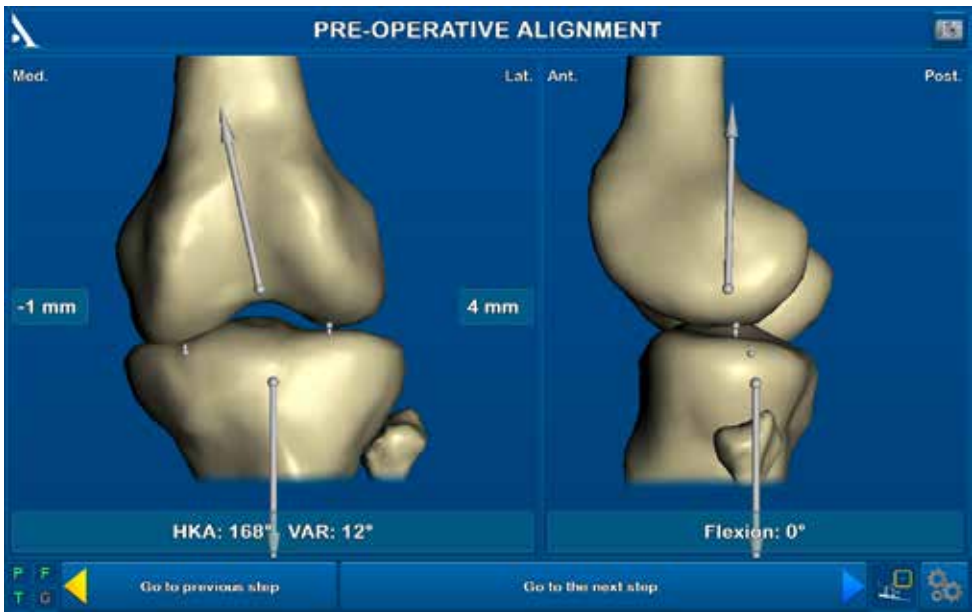
Verification of contours:

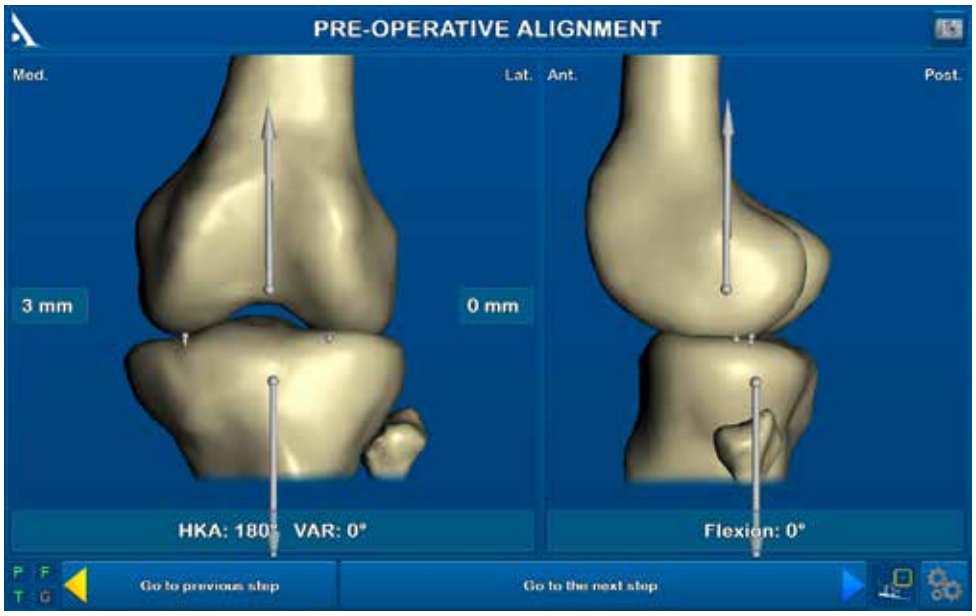
- Release the trigger and place the pointer tip on the acquired bone surface. The DISTANCE TO SURFACE value is shown: this distance is the error between the palpated point and the same point on the digitised 3D model (accuracy of contours). The number will be green if this distance is equal to or less than 1 mm and red if not.

Removal of acquired points:

- The last 20 acquired points can be deleted by pressing the yellow pedal.
- Press and hold down the yellow pedal (for at least 2 seconds) to erase all the acquired points.
- If the contour accuracy is satisfactory, validate this step and go to the next step.


PRE-OPERATIVE ALIGNMENT
Med.
Lat.
Ant.
Post.
0 mm
0 mm
HKA: 175°
VAR: 5°
Flexion: 0°
Go to previous step
Go to the next step


PRE-OPERATIVE ALIGNMENT
Med.
Lat.
Ant.
Post.
-1 mm
4 mm
HKA: 168°
VAR: 12°
Flexion: 0°
Go to previous step
Go to the next step

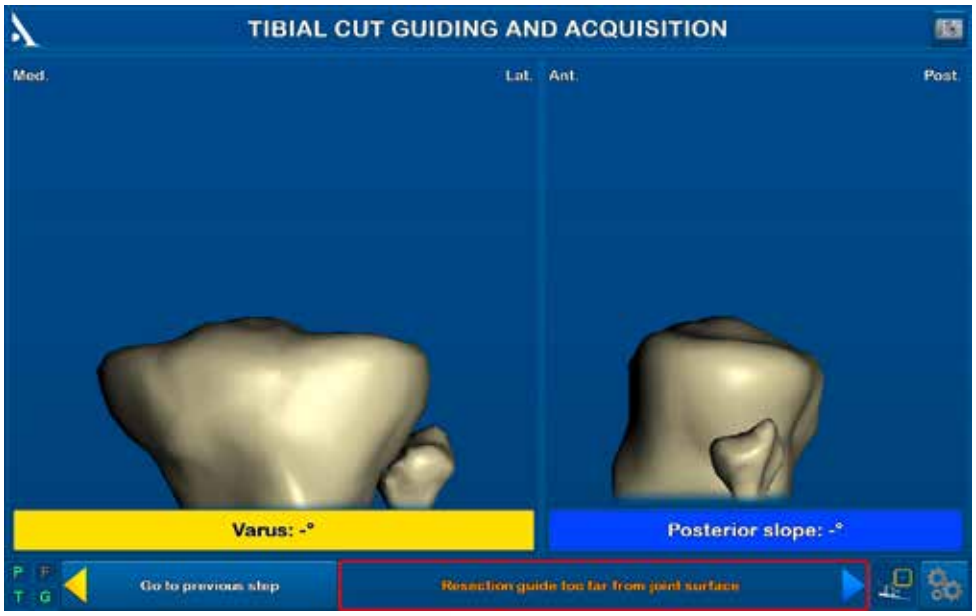

PRE-OPERATIVE ALIGNMENT
Med.
Lat.
Ant.
Post.
3 mm
0 mm
HKA: 180°
VAR: 0°
Flexion: 0°
Go to previous step
Go to the next step

Femoral acquisition

Measuring the pre-operative HKA angle:

- Extend the leg so that there is no load on it.
- View the pre-operative HKA angle.
- An initial estimate of joint laxity will be displayed (projection of points acquired on tibial articular surfaces onto the femur).
- Validate with the knee extended. This pre-operative HKA angle will be recorded in the postoperative report.

NOTE: With the leg extended, a varus or valgus load can be placed on the leg to determine whether the pre-operative deformity can be reduced. This should be performed before moving to the next step.

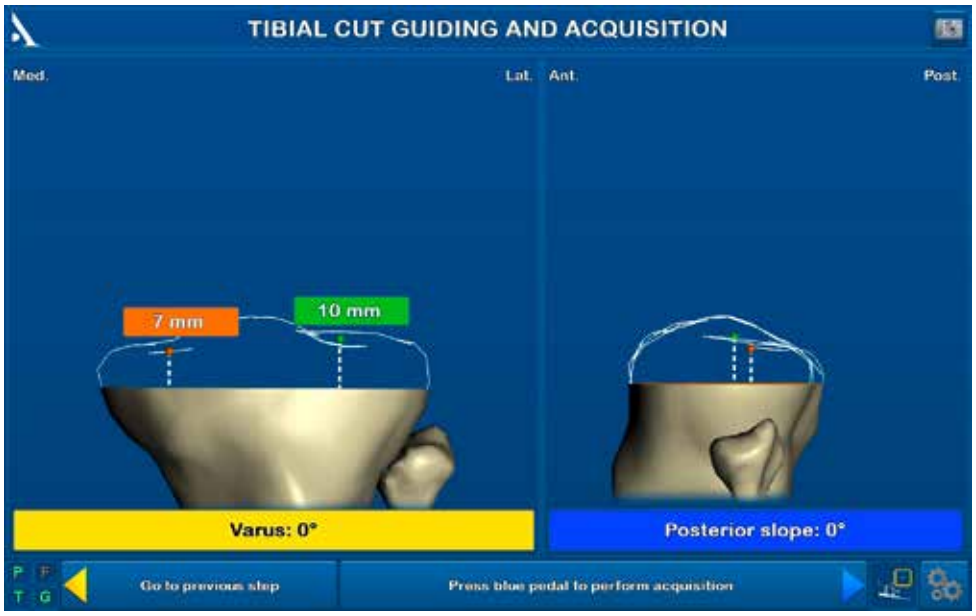


OR

Semi-assisted resection guide

Universal Alignment Guide

TIBIAL CUT NAVIGATION



Tibial cut guiding and acquisition

This step consists of two functions:

- Navigation of tibial resection plane.
- Acquisition of the cut.

Tibial cut guiding:

This step can be performed using either:

- the universal alignment guide, or
- the semi-assisted resection guide.

If using the universal alignment guide:

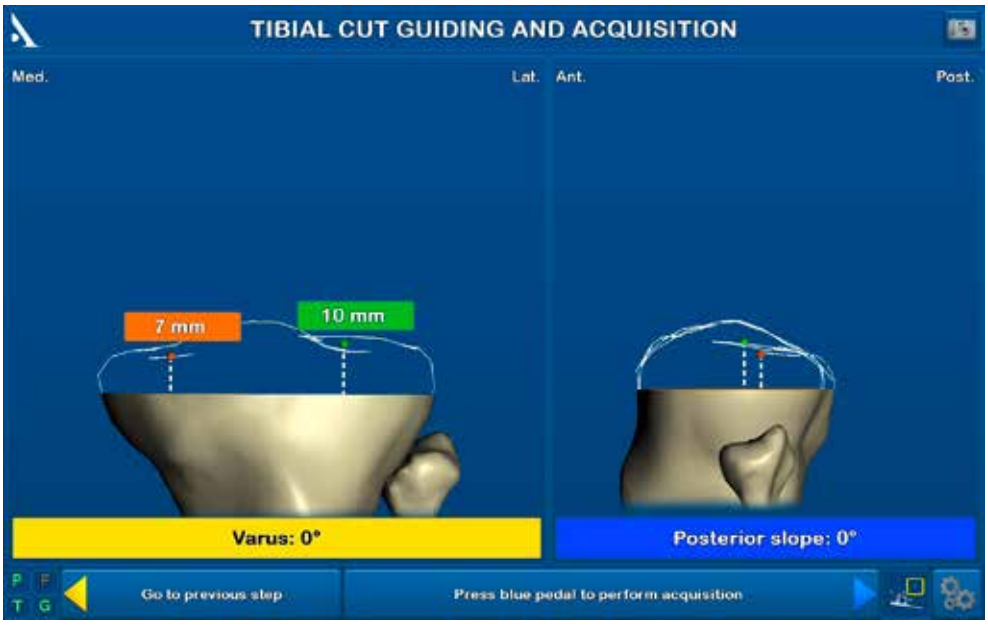
- Secure the G array to the universal alignment guide.
- Position the alignment guide's plate in the tibial resection guide's slot.
- Adjust the positioning until the guide is in the position needed to perform the tibial cut. The resection height is shown in the green rectangle on the screen, the contralateral bone cut in the orange rectangle, the varus/valgus in the yellow rectangle and the slope in the blue rectangle.
- Once the resection guide's position is set, put two pins in the guide's «O» holes and then remove the universal alignment guide from the slot in the resection guide, but do not confirm the step.
- Place the resection guide on the two pins, secure it with three headed pins, and then perform the tibial cut.
- Remove the resection guide.

If using the semi-assisted resection guide:

- Secure the G array to the semi-assisted resection guide.
- Adjust the positioning to get close to the position needed to perform the tibial cut. Place a headless pin in the alignment hole to stabilise the guide.
- Adjust the parameters to obtain the desired settings. The resection height is shown in the green rectangle on the screen, the contralateral bone cut in the orange rectangle, the varus/valgus in the yellow rectangle and the slope in the blue rectangle.
- Once the resection guide's position is set, put two pins in the guide's «O» holes.
- Secure the semi-assisted resection guide and perform the tibial cut.
- Remove the guide but do not confirm the step.

TIBIAL CUT ACQUISITION

Universal Alignment Guide

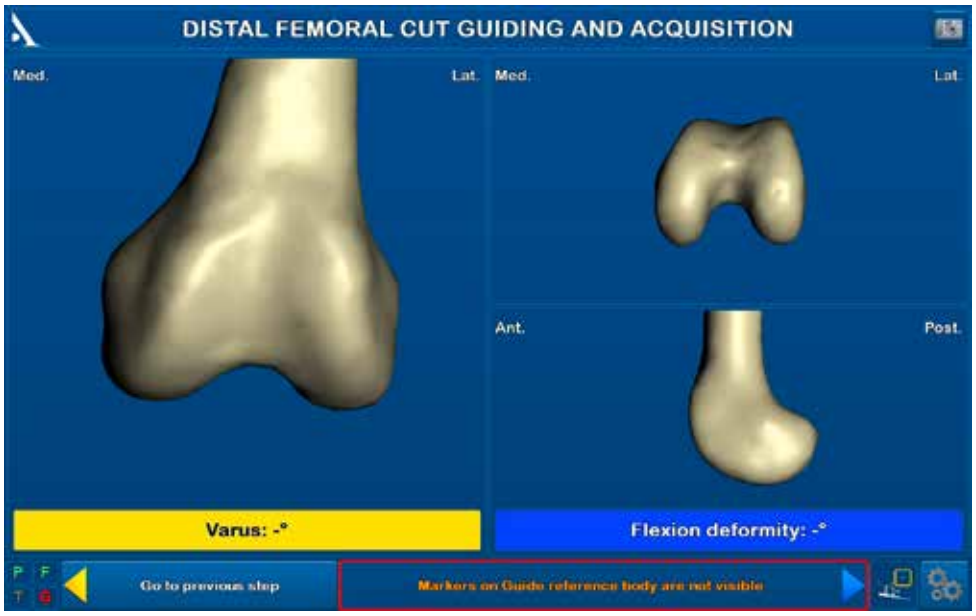


Tibial cut guiding and acquisition

Tibial cut acquisition:

This step is performed with the universal alignment guide.

- Place the universal alignment guide (with the G array on it) on the tibial cut and confirm this step to acquire the cut.

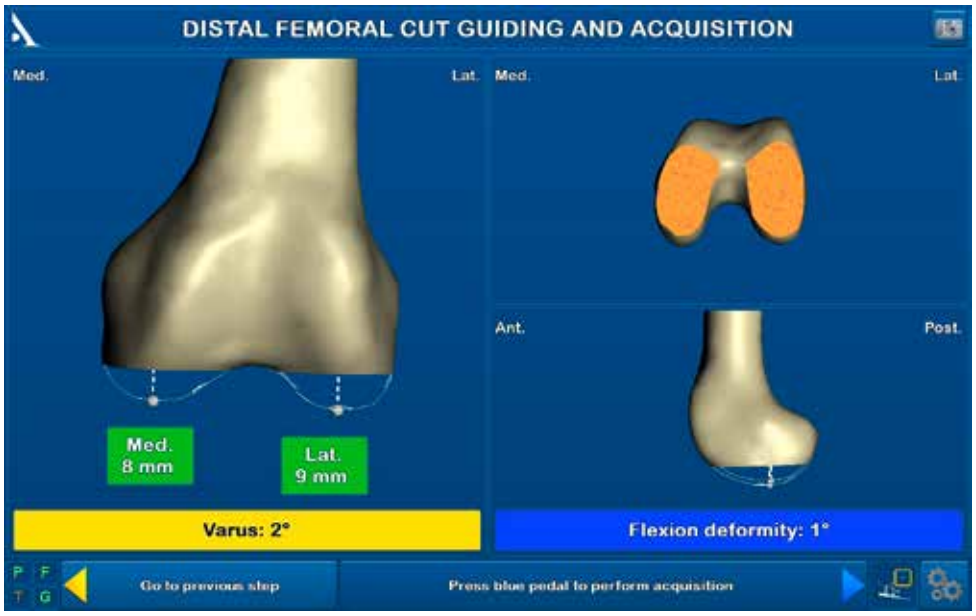


OR

Semi-assisted resection guide

Universal Alignment Guide

DISTAL CUT NAVIGATION



Distal cut guiding and acquisition

This step consists of two functions:

- Navigation of distal resection plane.
- Acquisition of the cut.

Distal cut guiding:

This step can be performed using either:

- the universal alignment guide, or
- the semi-assisted resection guide.

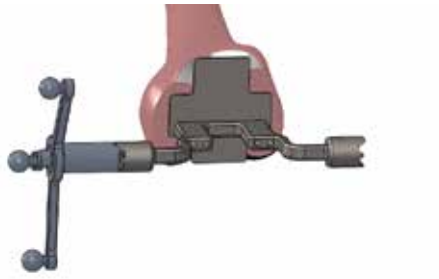
If using the universal alignment guide:

- Secure the G array to the universal alignment guide.
- Position the alignment guide's plate in the distal resection guide's slot.
- Adjust the positioning until the guide is in the position needed to perform the distal cut. The resection height is shown in the green rectangle on the screen, the varus/valgus in the yellow rectangle and the flexion in the blue rectangle.
- Once the resection guide's position is set, put two pins in the guide's «O» holes and then remove the universal alignment guide from the slot in the resection guide, but do not confirm the step.
- Place the resection guide on the two pins, secure it with converging pins, and then perform the tibial cut.
- Remove the resection guide.

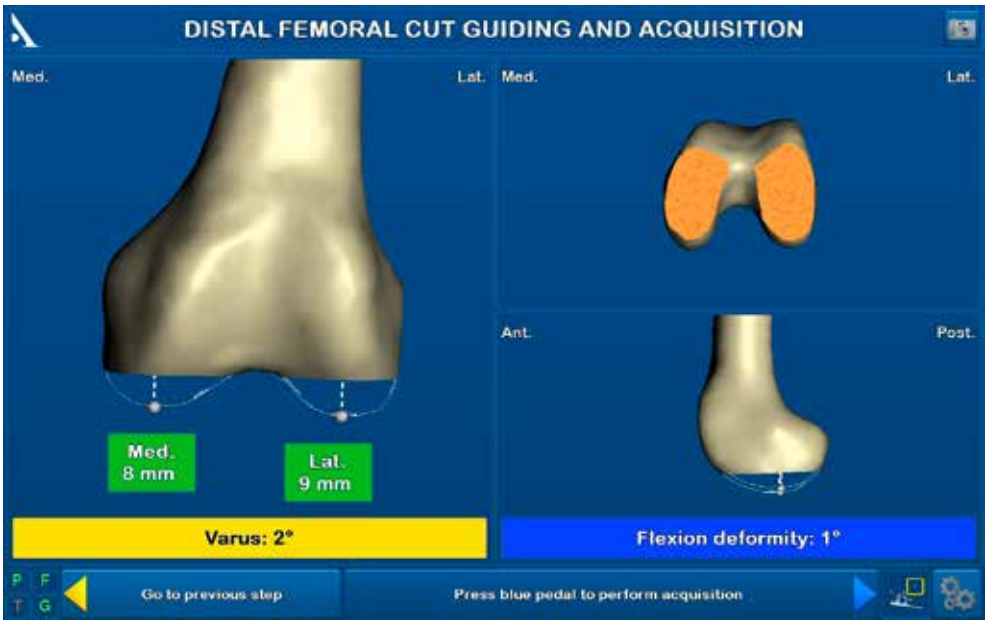
If using the semi-assisted resection guide:

- Secure the G array to the semi-assisted resection guide.
- Adjust the positioning to get close to the position needed to perform the distal cut. Place a headless pin into the alignment hole to stabilise the guide.
- Adjust the parameters to obtain the desired settings. The resection height (which can be adjusted using the green thumb knob) is shown in the green rectangle on the screen, the varus/valgus in the yellow rectangle and the flexion in the blue rectangle.
- Once the resection guide's position is set, put two pins in the guide's «O» holes.
- Secure the guide and perform the distal cut.
- Remove the guide but do not confirm the step.

DISTAL CUT ACQUISITION



Universal Alignment Guide

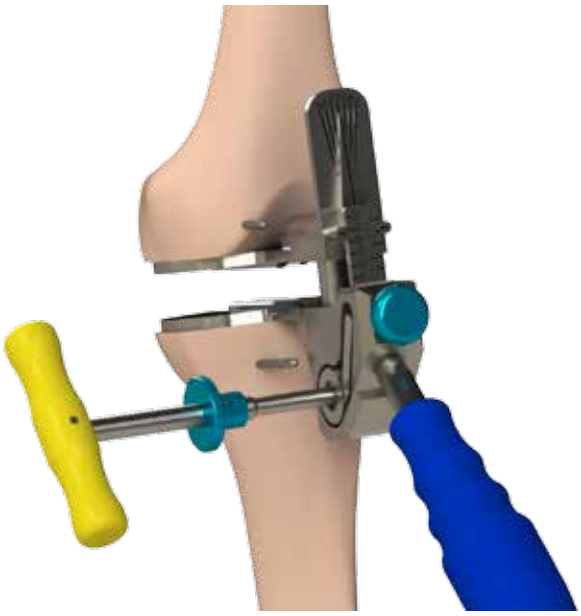


Distal cut guiding and acquisition

Distal cut acquisition:

This step is performed with the universal alignment guide.

- Place the universal alignment guide (with the G array on it) on the distal cut and confirm this step to acquire the cut.



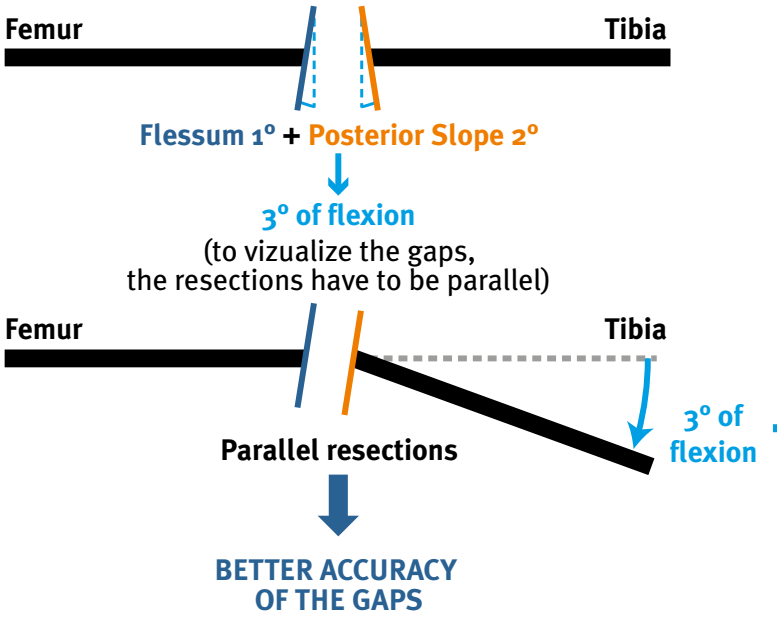

EXTENSION GAP MANAGEMENT
Med.
Notching: 0 mm
Lat.
Posterior cuts
Med : 9 mm
Lat.: 7 mm
10 mm
10 mm
Femoral component size (tibia 3)
3
-
+
Flexion: 1° (Flex. : 1°)
Ligament-based HKA: 180°
Bone-based HKA: 179°
Displacement
0 mm
Rotation
0°
Position
0 mm
P F
T G
Go to previous step
Press blue pedal to confirm extension gap

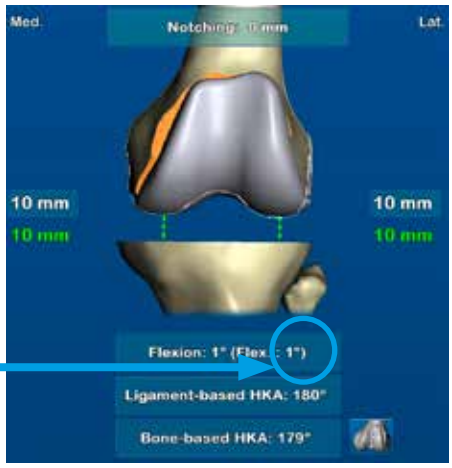

EXTENSION GAP MANAGEMENT
Med.
Notching: 0 mm
Lat.
Posterior cuts
Med : 9 mm
Lat.: 7 mm
10 mm
10 mm
10 mm
10 mm
Femoral component size (tibia 3)
3
-
+
Flexion: 1° (Flex. : 1°)
Ligament-based HKA: 180°
Bone-based HKA: 179°
Displacement
0 mm
Rotation
0°
Position
0 mm
P F
T G
Go to previous step
Press blue pedal to confirm extension gap

Management of extension gaps

- Extend the knee so that it is as close as possible to the value shown in parentheses on the screen.

NOTE: For example, if the tibial cut has a 2° posterior slope and the distal femoral cut is in 1° flexion, then the leg needs to be placed in 3° flexion for the resection planes to be parallel and the extension gaps to be shown:





- Put tension on the ligaments and look at:
  - the medial and lateral gap between tibial cut and virtual femoral component,
  - the ligament-based HKA,
  - the bone-based HKA.

NOTE:

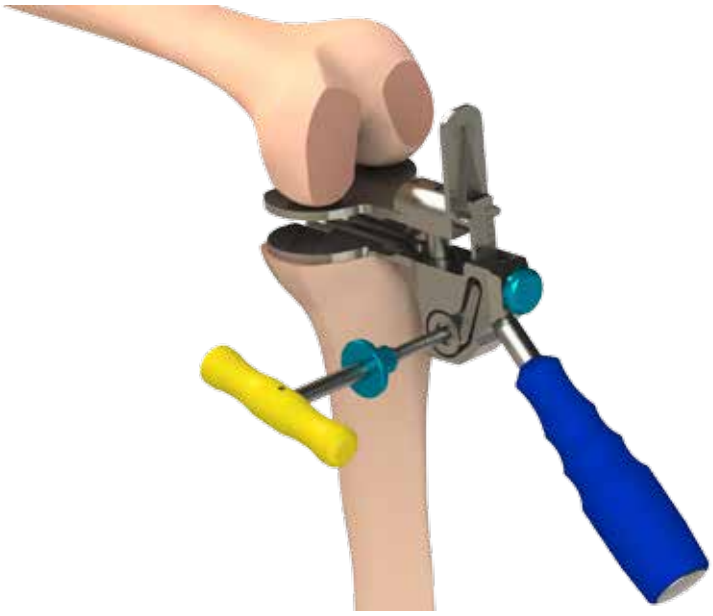
- The **ligament-based HKA** takes into account the laxity of the medial and lateral collateral ligaments. The given value corresponds to the resulting value when tension is placed on the ligaments in forced varus and/or valgus (dynamic HKA).
- The **bone-based HKA** takes into account ONLY the orientation of the distal femoral and tibial cuts in the frontal plane. The angle shown corresponds to the resulting angle if the cuts touched each other (static HKA).

- Once the gaps are balanced, press the blue pedal. The gap values will be saved (the numbers will turn white).

NOTE: Soft tissues can be released as needed to balance the gaps.

IMPORTANT! The gaps can be viewed without the virtual implants (see page 50).

IMPORTANT! The original and the implant's Whiteside's line can also be displayed (see page 50).




FLEXION GAP MANAGEMENT
Med.
Notching : 0 mm
Lat.
Med.
Posterior cuts
Med : 9 mm
Lat.: 7 mm
Lat.
10 mm
10 mm
10 mm
12 mm
Femoral component size (tibia 3)
3
-
+
Flexion: 90° (Flex. : 93°)
Ligament-based HKA: 177°
Bone-based HKA: 179°
Displacement
0 mm
Rotation
0°
Position
0 mm
P F
T G
Go to previous step
Short:Press blue pedal to confirm flexion gap and go to the next step
Long:Gap automatic calculation


FLEXION GAP MANAGEMENT
Med.
Notching : 1 mm
Lat.
Med.
Posterior cuts
Med : 8 mm
Lat.: 6 mm
Lat.
10 mm
10 mm
10 mm
10 mm
Femoral component size (tibia 3)
3
Flexion: 90° (Flex. : 93°)
Ligament-based HKA: 179°
Bone-based HKA: 179°
Post. displacement
1 mm
External rotation
2°
Int.
Ext.
Position
0 mm
P F
T G
Go to previous step
Short:Press blue pedal to confirm flexion gap and go to the next step
Long:Gap automatic calculation

Management of flexion gaps

- Flex the knee so that it is as close as possible to the value shown in parentheses (see explanation on page 47).

- Place tension on the ligaments and evaluate the medial and lateral gaps between the tibial cut and the virtual femoral component.

- Adjust the various parameters to move the virtual femoral component until the desired gap is achieved. Check:
  - the thickness of the posterior cuts
  - the anterior cut (notching)
  - the trochlea's position.

NOTE: The notching value in extension on the left side of the screen corresponds to the point where the trochlea exits on the cut. A notching value of 1 mm means that this point is 1 mm below the anterior cortex. The goal is to have the trochlea on the cortex – a value of 0 mm.

- Press the  button to directly transfer the extension gaps to the flexed knee.

  The femoral component will be automatically positioned so it reproduces the extension gaps; the gaps and the « = » will turn green. Even at this point, each parameter can still be modified as needed.

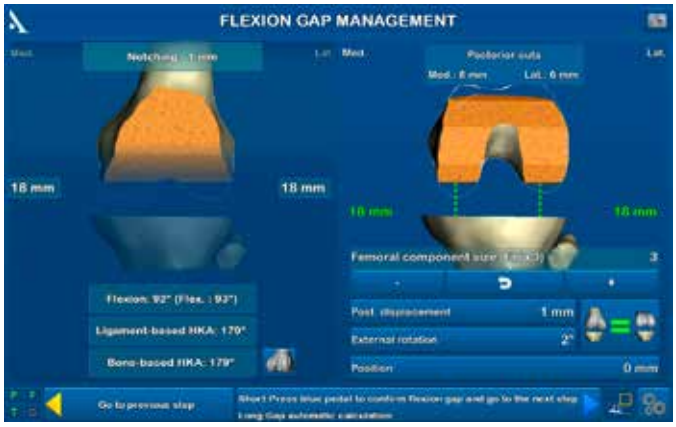
- Once the gaps are balanced, press the blue pedal to confirm the settings.

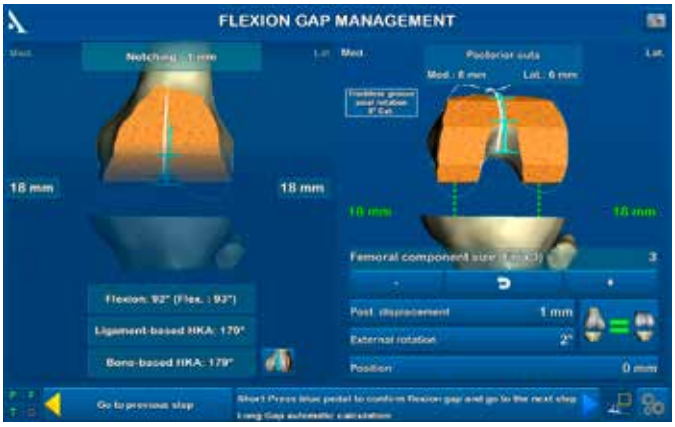
IMPORTANT! The gaps can be viewed without the virtual prosthesis (see page 50).

IMPORTANT! The original and prosthetic Whiteside's lines can also be displayed (see page 50).


FLEXION GAP MANAGEMENT
Notching : 1 mm
Posterior cuts
Med. : 8 mm
Lat. : 6 mm
10 mm
10 mm
10 mm
10 mm
Femoral component size (tibia 3) 3
Post. displacement 1 mm
External rotation 2°
Int.
Ext.
Position 0 mm
Flexion: 90° (Flex. : 92°)
Ligament-based HKA: 179°
Bony-based HKA: 179°
Go to previous step
Short Press blue pedal to confirm flexion gap and go to the next step
Long Gap automatic calculation


FLEXION GAP MANAGEMENT
Notching : 1 mm
Posterior cuts
Med. : 8 mm
Lat. : 6 mm
10 mm
10 mm
10 mm
10 mm
Femoral component size (tibia 3) 3
Post. displacement 1 mm
External rotation 2°
Int.
Ext.
Position 0 mm
Flexion: 92° (Flex. : 93°)
Ligament-based HKA: 179°
Bony-based HKA: 179°
Go to previous step
Short Press blue pedal to confirm flexion gap and go to the next step
Long Gap automatic calculation


FLEXION GAP MANAGEMENT
Notching : 1 mm
Posterior cuts
Med. : 8 mm
Lat. : 6 mm
18 mm
18 mm
18 mm
18 mm
Femoral component size (tibia 3) 3
Post. displacement 1 mm
External rotation 2°
Position 0 mm
Flexion: 92° (Flex. : 93°)
Ligament-based HKA: 179°
Bony-based HKA: 179°
Go to previous step
Short Press blue pedal to confirm flexion gap and go to the next step
Long Gap automatic calculation


FLEXION GAP MANAGEMENT
Notching : 1 mm
Posterior cuts
Med. : 8 mm
Lat. : 6 mm
18 mm
18 mm
18 mm
18 mm
Femoral component size (tibia 3) 3
Post. displacement 1 mm
External rotation 2°
Position 0 mm
Flexion: 92° (Flex. : 93°)
Ligament-based HKA: 179°
Bony-based HKA: 179°
Go to previous step
Short Press blue pedal to confirm flexion gap and go to the next step
Long Gap automatic calculation

Gap management
Display options

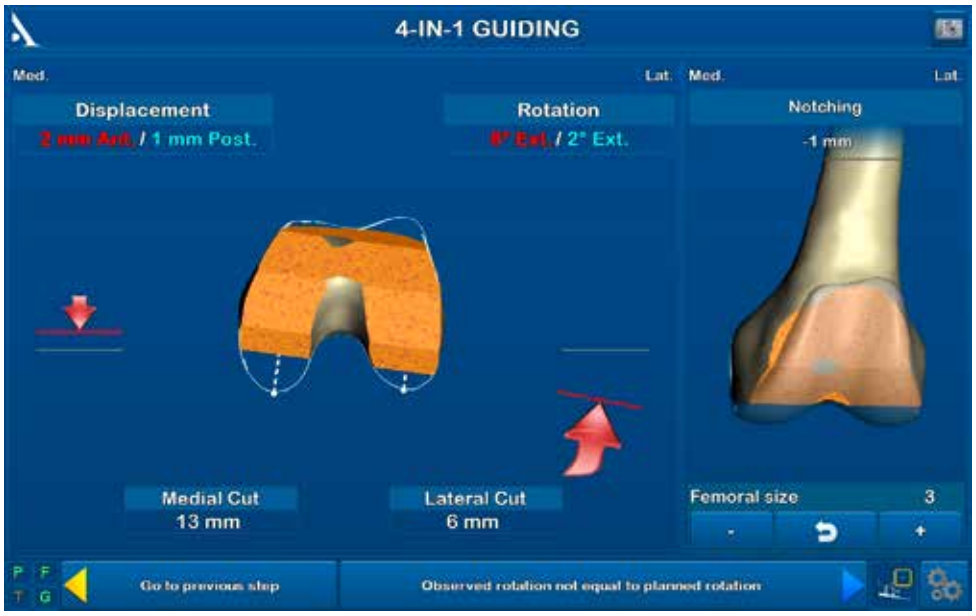
Whiteside's line:

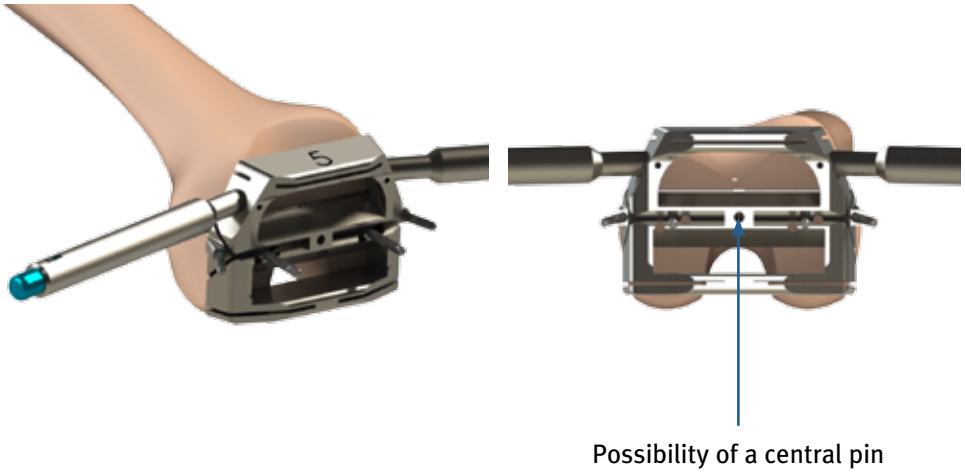
Press the  button in the middle lower portion of the screen. The original Whiteside's line is shown in white, along with the trochlea's axial rotation. The implant's Whiteside's line is shown in blue.

Gaps without the virtual implants:

Go to the « Options » menu and press « Show gaps between cuts 

.





Possibility of a central pin

Navigation with 4-in-1 resection guide

Step is done with the universal alignment guide.

- Select the 4-in-1 resection guide that corresponds to the planned size.

NOTE: During this step, the femoral component's position can be evaluated relative to the anterior cut according to the chosen size (right side of screen), which can still be changed.

- Place the universal alignment guide (with the G array on it) in the anterior or posterior slot on the 4-in-1 resection guide.

- Set the 4-in-1 resection guide against the distal cut and position it to match the following planned parameters:
  - femur size,
  - anteroposterior position,
  - femoral rotation.

- Two values are shown for each parameter:
  - The planned value is in blue – this is the target value.
  - The navigated value remains red as long as the guide is not in the correct position. It will turn green when the value is within ± 1 mm or ± 1° of the planned value.

- The arrows can be used to adjust the position of the resection guides to match the planned values.

- Once the 4-in-1 resection guide is in the desired position, secure the guide with two pins.

- Confirm its position by pressing the blue pedal.

NOTE: The resection guide's position can be confirmed even if the values on the screen (in red) do not correspond exactly to the planned values.

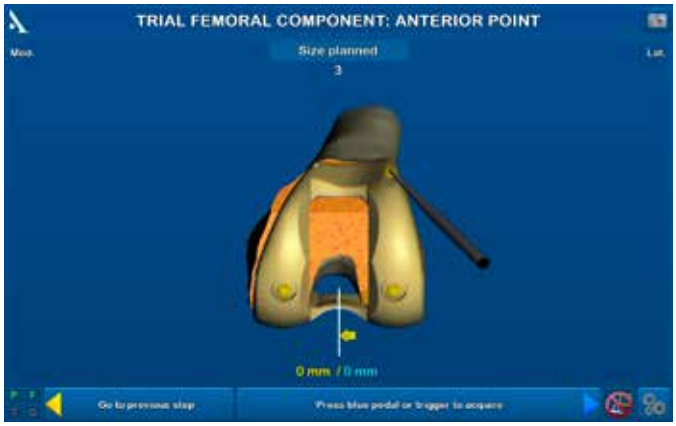
- Secure the sides of the resection guide with headless pins or collared threaded pins.

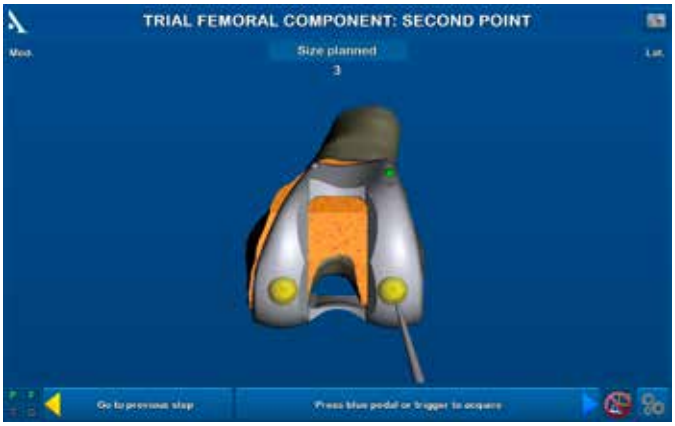
- In patients with osteoporosis, better fixation can be achieved by adding a pin in the intercondylar notch, connect the two handles on the cutting guide for better hold while inserting the pins.

- Make the anterior and posterior cuts using a medium AMPLITUDE® saw blade that matches the instrumentation set and motorized handpiece.

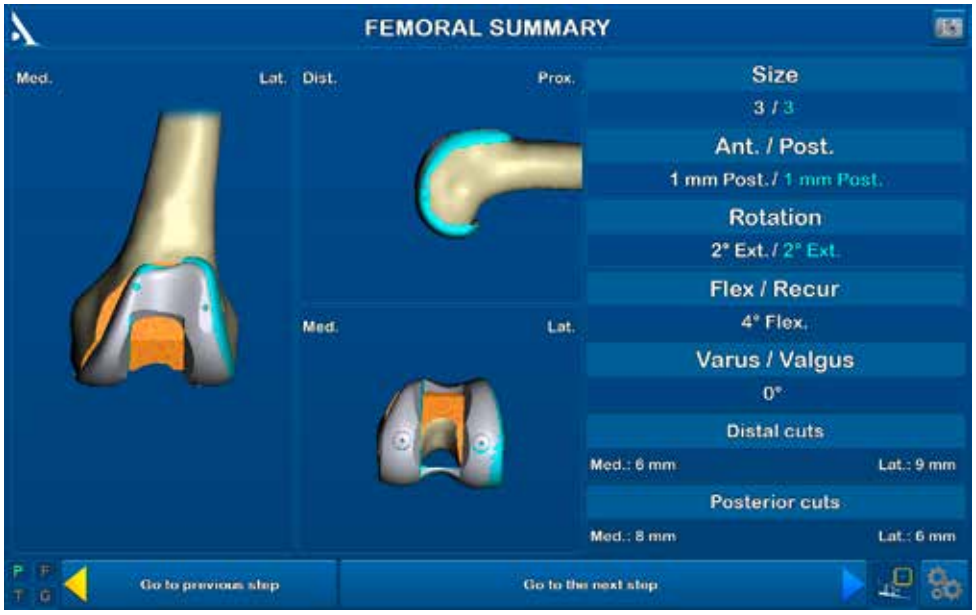
- Remove the distal pins using the pin extractor.

- Make the 2 chamfer cuts.


TRIAL FEMORAL COMPONENT: ANTERIOR POINT
Med.
Size planned
3
Lat.
0 mm / 0 mm
Go to previous step
Press blue pedal or trigger to acquire


TRIAL FEMORAL COMPONENT: SECOND POINT
Med.
Size planned
3
Lat.
Go to previous step
Press blue pedal or trigger to acquire


TRIAL FEMORAL COMPONENT: THIRD POINT
Med.
Size planned
3
Lat.
Go to previous step
Press blue pedal or trigger to acquire

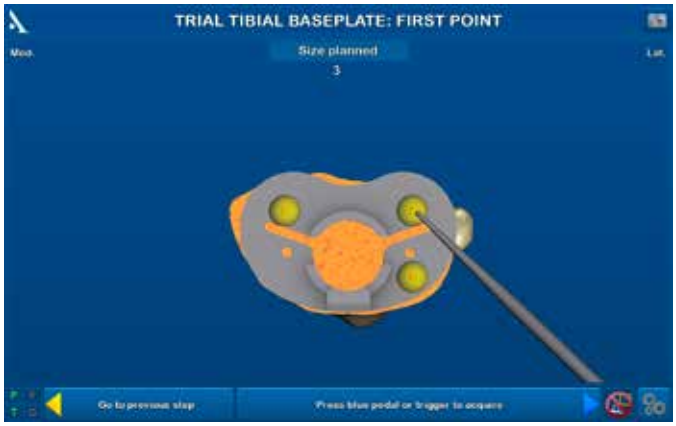

FEMORAL SUMMARY
Med.
Lat.
Dist.
Prox.
Med.
Lat.
Size
3 / 3
Ant. / Post.
1 mm Post. / 1 mm Post.
Rotation
2° Ext. / 2° Ext.
Flex / Recur
4° Flex.
Varus / Valgus
0°
Distal cuts
Med.: 6 mm
Lat.: 9 mm
Posterior cuts
Med.: 8 mm
Lat.: 6 mm
Go to previous step
Go to the next step

Placement of trial femoral component

- Select the trial femoral component of the same size as the 4-in-1 resection guide used in the previous steps (the planned size is shown on the upper part of the screen) and of the same operated side.
- Place the pointer tip on the conical mark located on the front of the trial femoral component. The mediolateral distance between the planned position and the trial component's true position will be shown.
- Finish impacting the trial component using the femoral component impactor and universal handle.
  Use the drill bit with stop to make pilot holes for the two anchoring pegs. Insert the two trial pegs.
- Any posterior osteophytes can be removed using the osteotome that matches the trial femoral component size.
- Place the pointer tip into each of the three conical marks on the trial component and confirm the position of each with the blue pedal or trigger.

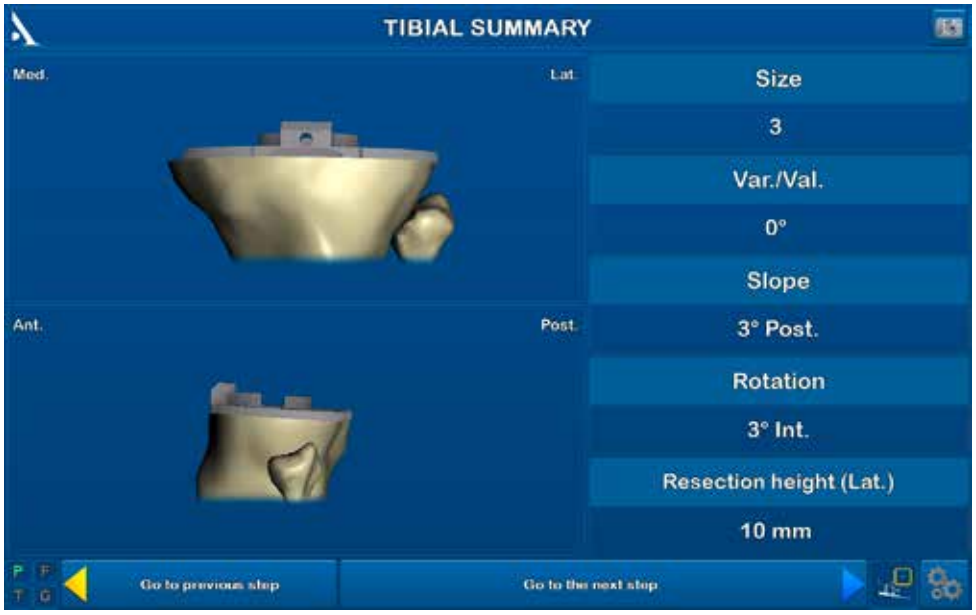
Femoral summary

- The trial implant's position (grey) is superimposed over the planned implant position (blue).
- The size and final position of the trial femoral component are shown in white; the planned values are in blue.


TRIAL TIBIAL BASEPLATE: FIRST POINT
Med.
Size planned
3
Lat.
Go to previous step
Press blue pedal or trigger to acquire


TRIAL TIBIAL BASEPLATE: SECOND POINT
Med.
Size planned
3
Lat.
Go to previous step
Press blue pedal or trigger to acquire


TRIAL TIBIAL BASEPLATE: THIRD POINT
Med.
Size planned
3
Lat.
Go to previous step
Press blue pedal or trigger to acquire

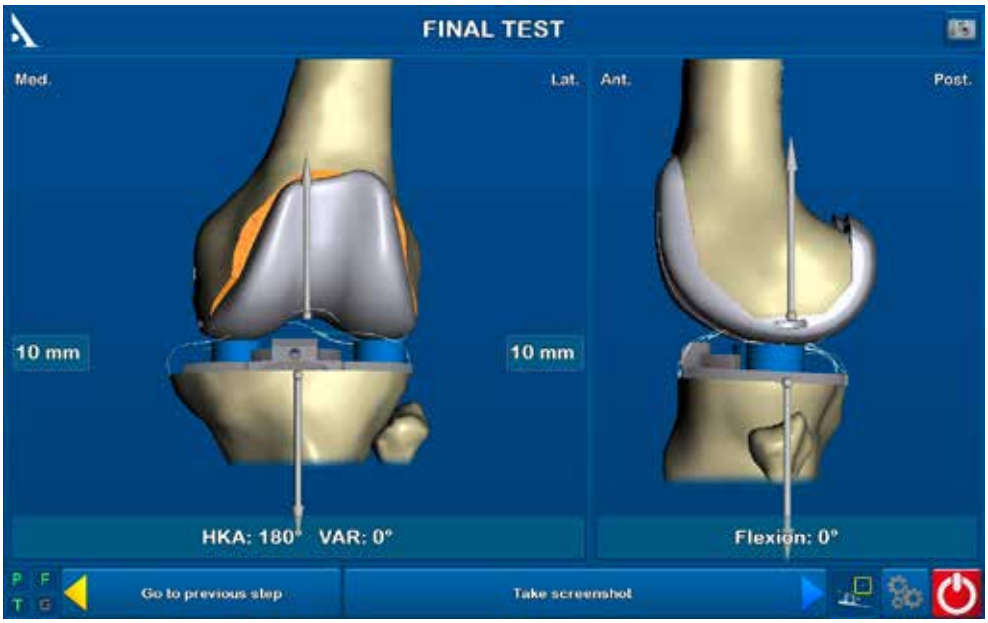

TIBIAL SUMMARY
Med.
Lat.
Size
3
Var./Val.
0°
Slope
Ant.
Post.
3° Post.
Rotation
3° Int.
Resection height (Lat.)
10 mm
Go to previous step
Go to the next step

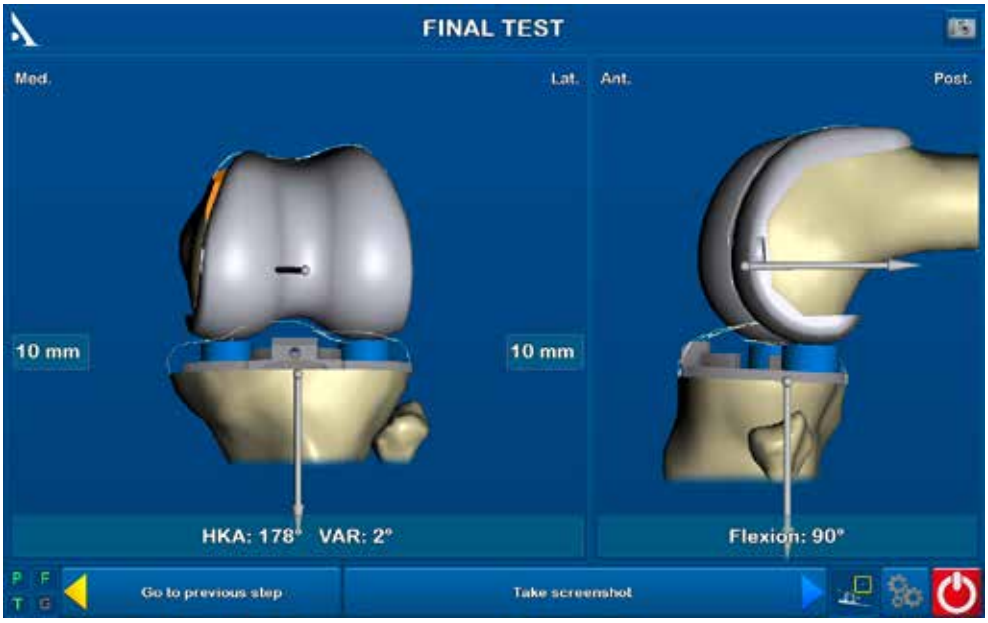
Placement of trial tibial component

- Select the appropriate tibial baseplate (the planned size is shown on the screen) and secure it to the baseplate handle.
- Assemble the universal handle with the trial baseplate.
- Position and secure the trial baseplate with two, 30-mm long headed pins.
- Using the pointer, acquire the position of the three calibration marks located on the baseplate to identify its position on the tibia.

Tibial summary

- The size and final position of the trial tibial component are shown.


FINAL TEST
Med.
Lat.
Ant.
Post.
10 mm
10 mm
HKA: 180° VAR: 0°
Flexion: 0°
P F
T G
Go to previous step
Take screenshot


FINAL TEST
Med.
Lat.
Ant.
Post.
10 mm
10 mm
HKA: 178° VAR: 2°
Flexion: 90°
P F
T G
Go to previous step
Take screenshot

Trial implants

In extension:

- Install a trial insert of the same thickness as the gaps shown during ligament balancing.
- Extend the leg.
- The HKA angle, and medial and lateral gaps with the trial components in place will be displayed.

In flexion:

- Flex the knee.
- The flexion gaps with the trial components will be displayed.
- During these steps, pressing the blue pedal (or blue arrow) saves the information on the screen (regardless of flexion angle).
- All navigation steps have been completed.

Tibial plateau preparation

Important: remove the 2 headless pins left in the tibia.

- Position the appropriate sized routing guide onto the trial baseplate.
- Ream using the tibial reamer to the stop(same for all sizes).
- Impact the appropriate sized tibial stem punch.
  (In case of a sclerotic bone or after osteotomy, prepare first with an osteotome).


8 mm

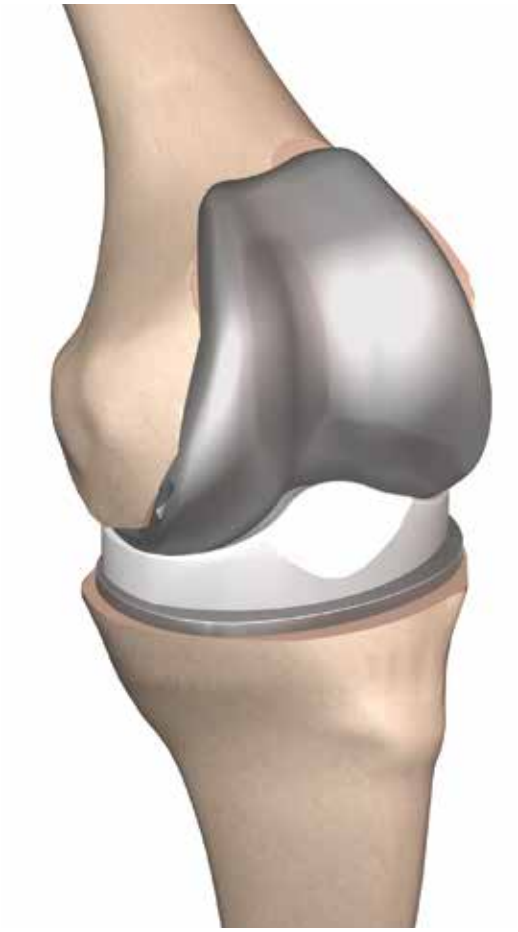
Patellar preparation
Patellar resection option

After clearing the area around the patella,

- Place the clamp so the two lugs are on the anterior side of the patella.
- With the clamp jaws open, bring the 8 mm probe into contact with the articular surface using the adjustment knob.
- Lock the clamp.
- Evaluate remaining bone.
- Push the saw blade into the slot to perform the cut.
- Use the drilling templates to determine the size of patellar component needed: 30, 33 or 36 mm.
- Centre and impact the drilling template.
- Make the pilot holes for the three pegs.
- Set the trial patellar component into place using the patellar clamping forceps.
- Test the articulation in the trochlea.
- Insert the chosen patellar component.

Patellar preparation
Patellar reaming option

- Trim away any peripheral osteophytes.
- Center the trial inset patella on the central ridge of the articular surface of the native patella. The appropriate size (Ø 23, 26 or 29 mm) is determined based on the following criteria:
  - Superior-to-inferior length of the articular surface
  - Width of the patella's medial articular facet
  - The size must be slightly smaller (by about 2 mm) than the superior-to-inferior length of the articular surface and must be slightly inside the medial edge of the medial articular facet
- Assemble the clamp corresponding to the chosen patellar implant size onto the locking patellar reaming forceps and lock it into place.
- Position the forceps. The inferior jaw on the reaming forceps must rest against the anterior side of the patella. The clamp must rest against at least one of the patella's two articular facets.
- Use the thumb knob to tighten the reaming forceps.
- Assemble the reamer for inset patella of the same size as the chosen clamp onto the power tool.
- Ream the patella until the stop is reached.
- Use the clamp for trial patella to place the trial cemented patellar implant or the trial uncemented patellar implant of the selected size into the native patella.
- Test the articulation of the patella in the trochlea.
- Assemble the patella binding clamp onto the locking patellar reaming forceps and lock it into place.
- Insert the chosen patellar component.



Placing definitive implants

- On the selected tibial baseplate (with or without cement), tighten the stem or, if required, the extension stem using the wrench.
- Position the baseplate with the tibial baseplate impactor.
- Place the polyethylene insert with the size corresponding to the femur and the thickness validated during testing.
- Assemble the femoral implant (with or without cement) of the selected size on the femoral holder(anterior position).
- Place the femoral implant, and complete the impaction using the femoral impactor.

Warning: if a cemented femoral implant is used, it is recommended to apply little cement on the posterior condyles and no cement on the posterior area of the notch, due to the implant design.


OPTIONS
Exit application
Show gap between tibial cut and femoral component
Show gap between both cuts
Show field of
Calibrate nav
Show screens
Do you really want to exit?
NO
YES
Go back to surgery step
Go back to surgery step


FIELD OF VIEW
Copy report to USB device?
NO
YES
Go to previous step
Go to previous step

Saving the surgery report

- Press the  button to exit the application:
  - It is available immediately after the last step of the «Post-operative alignment» procedure or
  - it can be found on the «Options» page at any point during the procedure.

- The message «Do you really want to exit?» will appear. Press «Yes» to confirm.

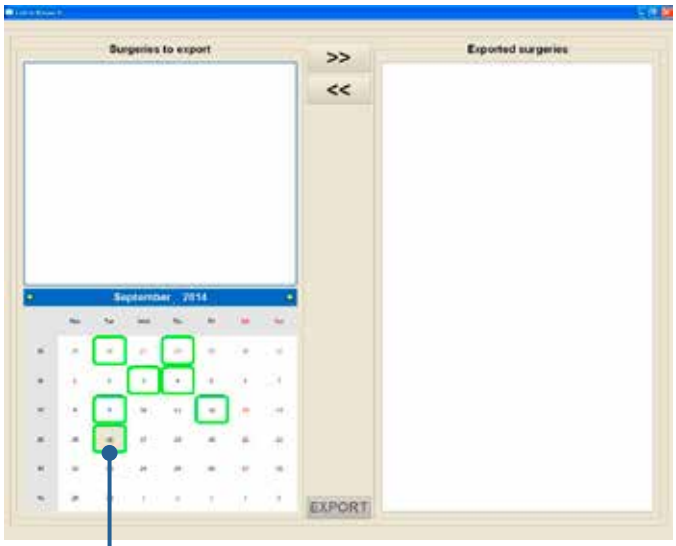
- This confirms that you want to exit the application.

- The message «Copy report to USB drive?» will appear.

- Indicate whether you want to create a backup copy of the surgery report by pressing the «Yes» or «No» button.

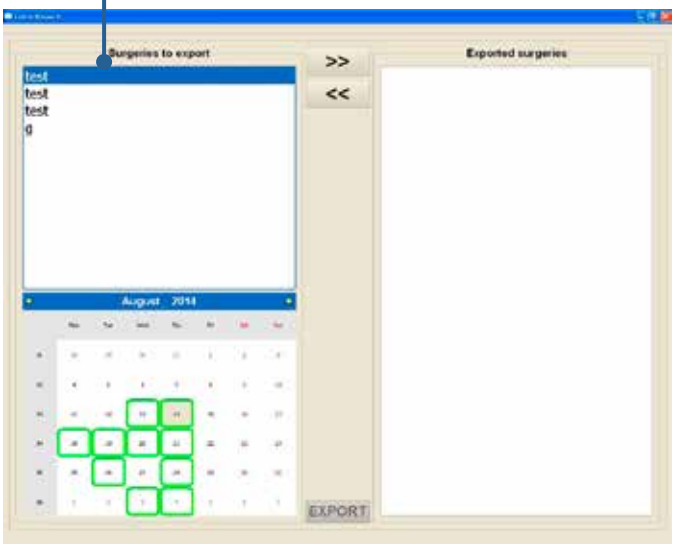
- A message will appear asking you to insert a USB drive. Insert the USB drive in the slot on the screen (see V2 and V3 workstation descriptions for slot locations) and confirm that you would like to backup the report.

- In the surgery report, a file named «report.html» contains the following elements:
  - Patient name and surgeon name,
  - Bone contour maps,
  - Bone resection planning pages,
  - Implant size and position planning pages,
  - Postoperative validation pages.

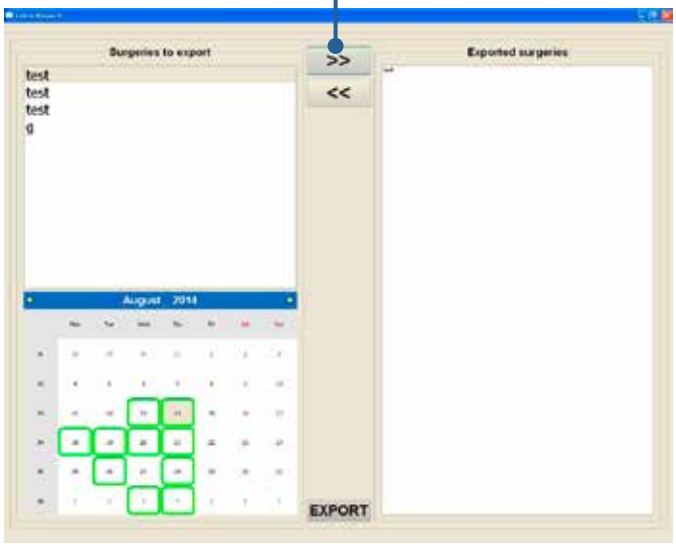

Surgeries to export
>>
<<
Exported surgeries
September 2014
EXPORT

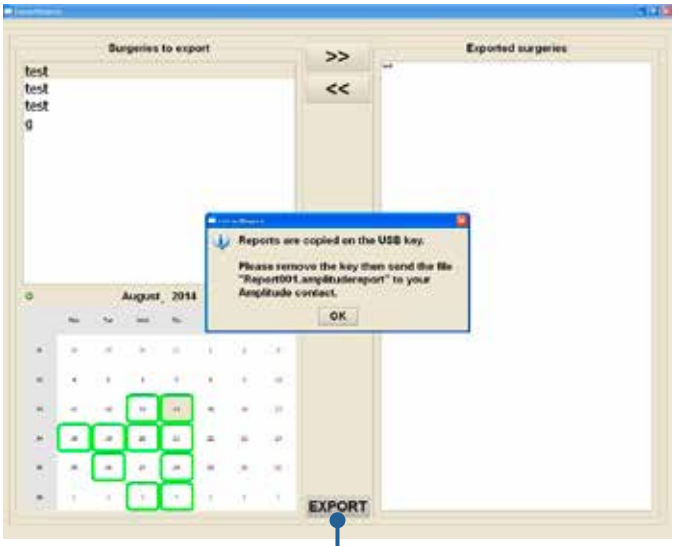
1

2


Surgeries to export
test
test
test
g
>>
<<
Exported surgeries
August 2014
EXPORT

3


Surgeries to export
test
test
test
g
>>
<<
Exported surgeries
August 2014
EXPORT


Surgeries to export
test
test
test
g
>>
<<
Exported surgeries
Reports are copied on the USB key.
Please remove the key then send the file "Report001.amplitudereport" to your Amplitude contact.
OK
August 2014
EXPORT

4

Opening a saved surgery report

If a saved surgery report is not transferred to a USB drive, it can still be retrieved at a later date.

- Turn on the AMPLIVISION® workstation.
- When the AMPLIVISION® welcome screen appears, press the  button on the lower right of the screen.
- The message «Do you want to extract patient data?» will appear. Press «OK».
- A calendar will appear. The dates on which surgery reports were saved will be highlighted in green. Select the dates corresponding to the procedure(s). For each date, AMPLIVISION® lists available reports in the «Surgeries to export» window.
- Use the touch screen to select the reports to be exported and then press the >> button to move them to the «Exported surgeries» window.
- Insert the USB drive and press the EXPORT button to copy these reports to it. A message will appear when the operation is complete.

Important: To ensure confidentiality, the exported reports are saved in an encrypted file format, «Report001.amplitudereport» on the USB drive. Contact AMPLITUDE® to obtain access to the desired report.

Storing the workstation

- Press the  button at the lower right corner of the screen.
- Confirm that you want to shut down the system.
- The system will shut down.
- Disconnect the power cord and wind it around the power cord holder located on the back of the workstation.
- Disconnect the pedal.
- Set the camera head in neutral position (maximum height, no rotation).
- Clean the workstation and pedal according to the instructions in the user manual.
- Lock the adjustable tower: lower the locking handle and firmly push down on it to completely lower the tower.
- Put the workstation back into the shipping trunk.
- Place the pedal and covers in the shipping trunk.
- Lock the four latches on the shipping trunk.

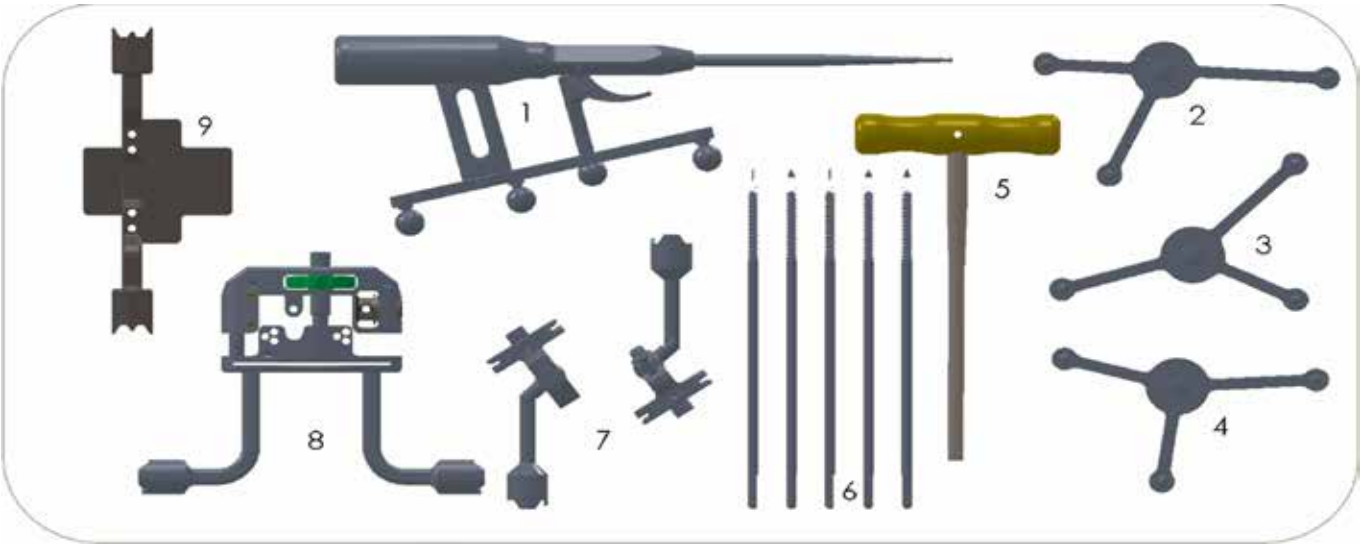
Instrumentation set

- In addition to the **ANATOMIC®** 4-in-1 instrumentation, the following are required:
  - **AMPLIVISION®** Navigation Station,
  - Sterile, single-use markers (14 per pack),
  - the **AMPLIVISION® Universal Navigation Set**.

Sterile markers:

The arrays must be equipped with markers to be visible to the camera. These markers are attached through the nipples on the array (3 for the F, T and G arrays and 4 for the pointer P).

Universal Navigation Set

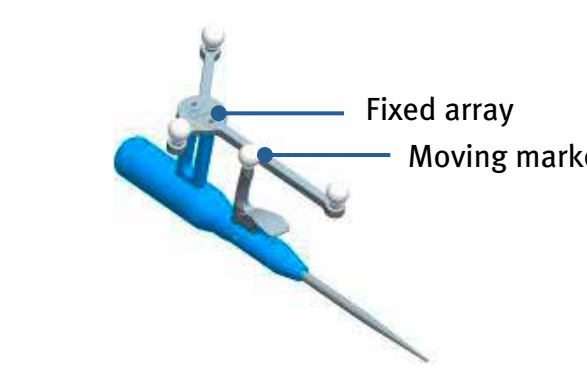


Item	Name	Product No.	Qty
1	Probe	2-0215700	1
2	T array, tibia navigation	2-0215800	1
3	F array, femur navigation	2-0117400	1
4	G array, guide navigation	2-0117500	1
5	H5 Screwdriver	2-0200800	1
6	Fixation pins Ø4 length 150 mm	2-0208700	5
7	Inclined fixation system, navigation geometry	2-0117200	2
8	Semi-assisted resection guide	2-0232500	1
9	Universal alignment guide	2-0229000	1

Instruments

Probe:

- This instrument is used to acquire specific points and areas on the patient's anatomical structures. It is also used to remotely control certain active elements on the screen. The pointer must be fitted with four markers, one of them being on the trigger.



Semi-assisted resection guide:

- The semi-assisted resection guide is used to make the distal cut and the tibial cut, once its position has been established. There are two attachment points for the G array (one on each side). The array can only be assembled in one direction into each attachment point.

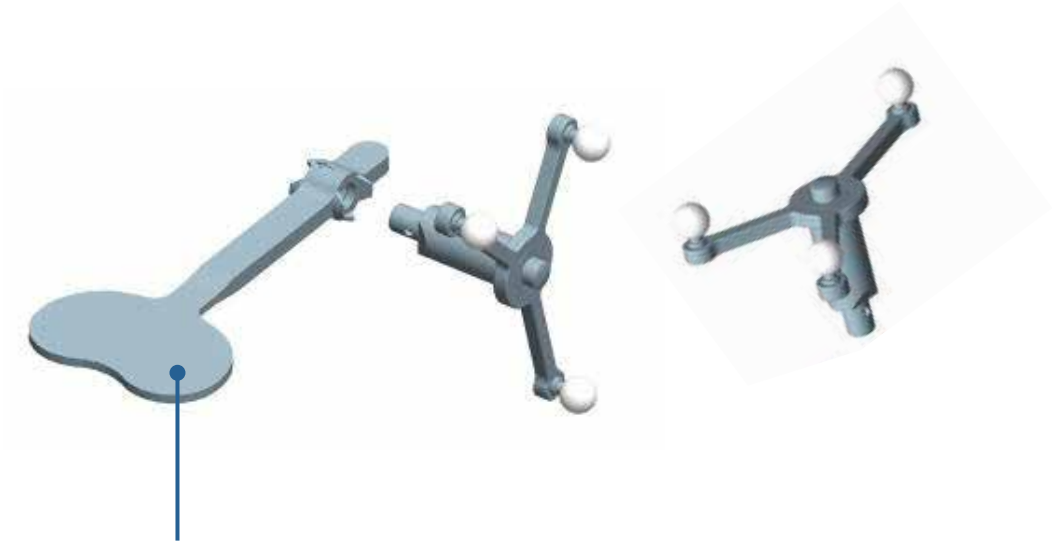
Universal Alignment Guide:

- The universal alignment guide is inserted into slots in the resection guide to navigate the position of these guides. It is also used to acquire the cuts once they have been made. There are two attachment points for the G array (one on each side). The array can only be assembled in one direction into each attachment point.

Instruments

Measuring plate:

- The tibial cut measuring plate has one or two attachment points for the G array (one on each side). The array can only be assembled in one direction into each attachment point.



Measuring plate for tibial resection plane

The 4-in-1 SCORE® without navigation instrumentation consists of 6 trays:

One common
One for tibial resection
One for tibial trials
One for 4-in-1 femoral resections
One for femoral trials

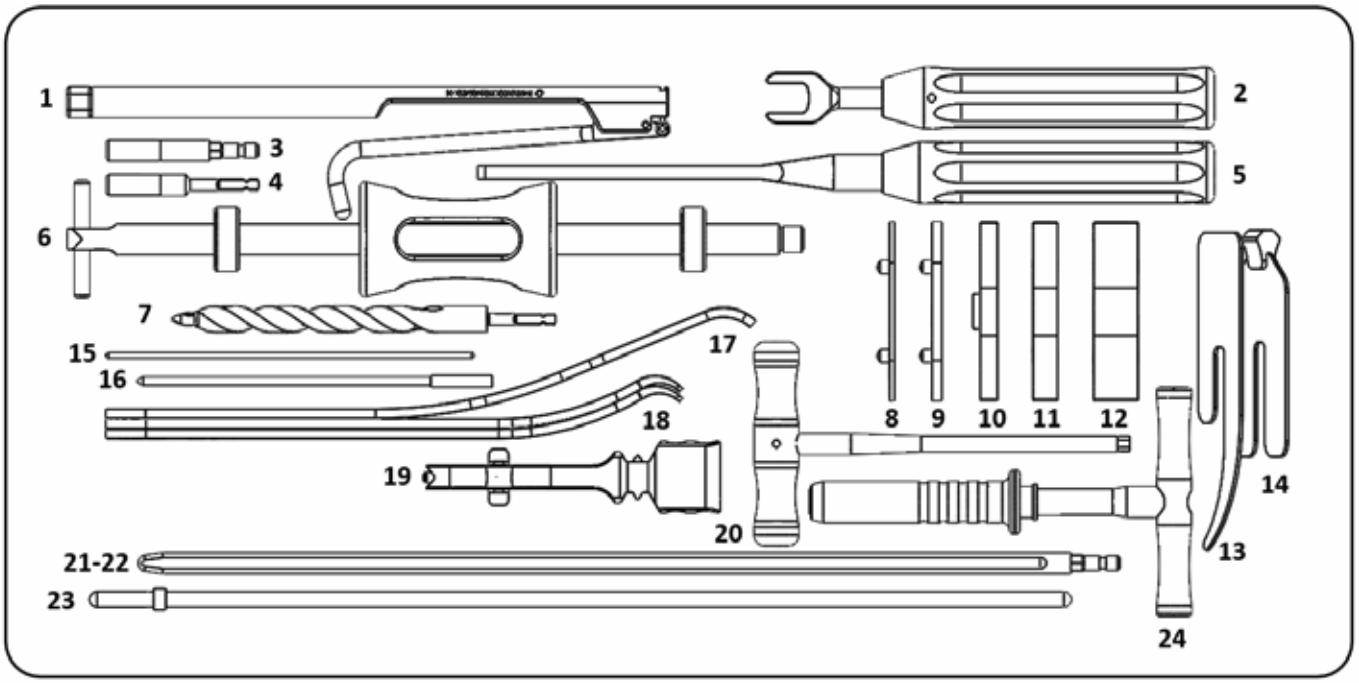
And either of:

One for patellar resection
One for patellar reaming

In addition:

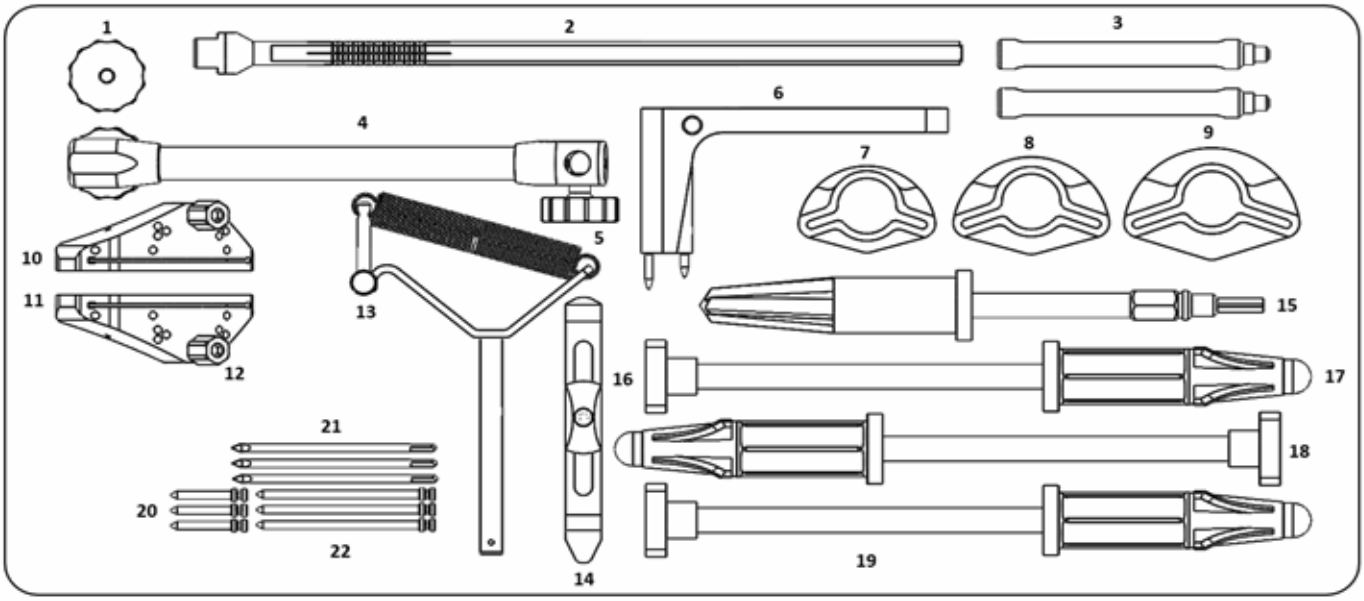
One for tibial revision
Sterile large saw blades
Sterile medium saw blades

Common Set



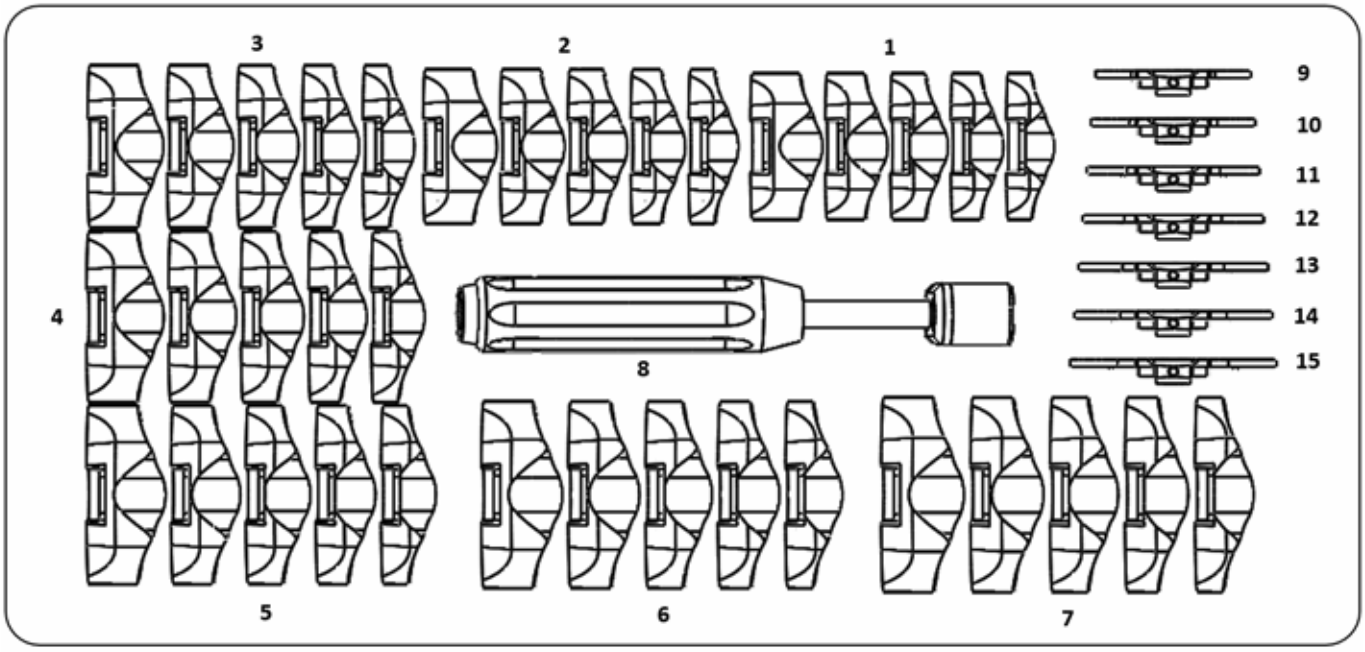
Item	Name	Product No.	Qty
1	Pin extractor	2-0201500	1
2	Tibial stem wrench	2-0205500	1
3	Universal quick release adaptor for pin	2-0201100	1
4	AO quick release adaptor for pin	2-0201200	1
5	Flat rasp	2-0206800	1
6	Slap hammer	2-0206900	1
7	Intramedullary drill bit	2-0200100	1
8	Spacer thickness 2 mm for spacer	2-0207002	1
9	Spacer thickness 4 mm for spacer	2-0207004	1
10	Spacer thickness 7 mm	2-0200707	1
11	Spacer thickness 10 mm	2-0200710	1
12	Spacer thickness 18 mm	2-0200718	1
13	Resection gauge	2-0204500	1
14	Alignment gauge	2-0206300	1
15	Headless Pin Ø 2 Length 150 mm	2-0103000	2
16	Drill bit Ø3.2 length 145 mm	2-0102400	1
17	Hohmann retractor 265 mm 24 mm	2-0207200	1
18	Hohmann retractor 240 mm 18 mm	2-0207100	2
19	Universal handle	2-0216400	1
20	H5 Screwdriver	2-0200800	1
21	Intra-medullary rod length 250 mm	2-0200200	1
22	Intra-medullary rod length 400 mm	2-0200300	1
23	Extramedullary alignment rod	2-0200600	2
24	T wrench	2-0200400	1

Tibial Resection Set



Item	Name	Product No.	Qty
1	Thumb knob for tibial bracket	2-0202100	1
2	Tibial slide bar	2-0201900	1
3	Removable handle for punch guide	2-0206200	2
4	Extramedullary alignment guide	2-0201700	1
5	Wheel for extramedullary aiming column	2-0201800	2
6	Tibial bracket	2-0202000	1
7	Punch guide for tibial baseplate size	2-0202612	1
8	Punch guide for tibial baseplate size 3/4/5	2-0202635	1
9	Punch guide for tibial baseplate size 6/7	2-0202667	1
10	Tibial resection guide – Left	2-0202300	1
11	Tibial resection guide – Right	2-0202200	1
12	Wheel for resection guide	2-0203800	2
13	Malleolar clamp	2-0201600	1
14	Tibial stylus	2-0202400	1
15	Reamer for tibial extension stem	2-0202700	1
16	Punch for tibial extension stem - size	2-0202812	1
17	Standard trial stem	2-0208900	3
18	Punch for tibial extension stem - size 3/4/5	2-0202835	1
19	Punch for tibial extension stem - size 6/7	2-0202867	1
20	Headed pin length 30 mm	2-0201301	3
21	Headless pin lenght 80 mm	2-0201400	3
22	Headed pin length 70 mm	2-0201302	3

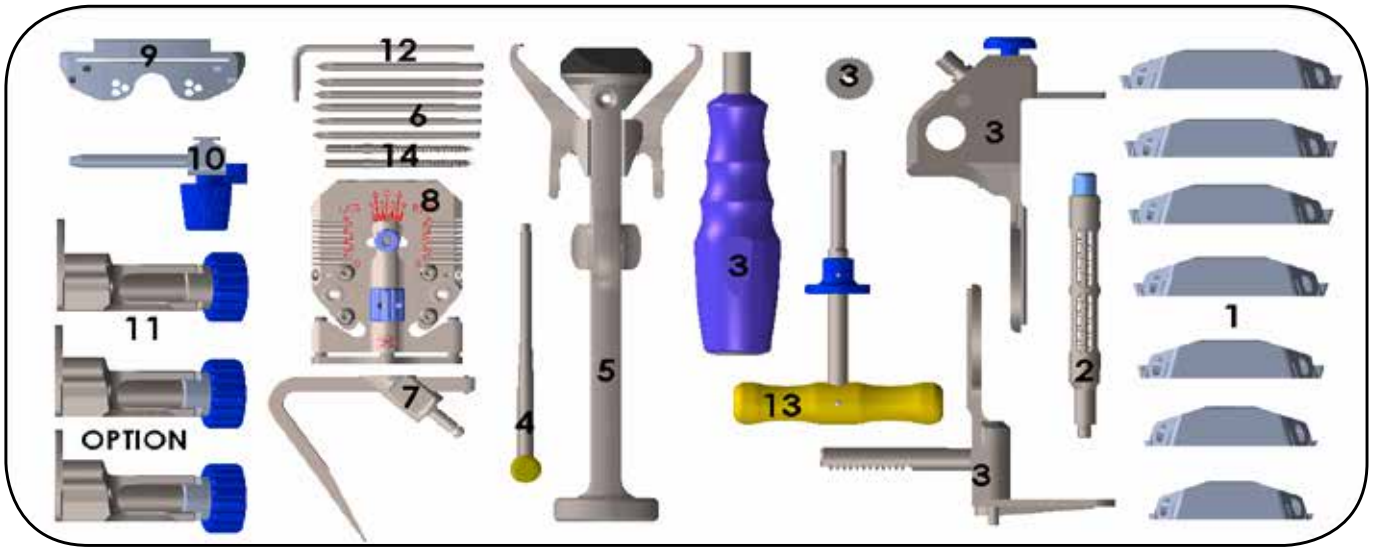
Tibial Trials Set



Item	Name	Product No.	Qty
1	Trial insert Size 1 thickness 10 mm	2-0202911	1
1	Trial insert Size 1 thickness 12 mm	2-0202921	1
1	Trial insert Size 1 thickness 14 mm	2-0202931	1
1	Trial insert Size 1 thickness 16 mm	2-0202941	1
1	Trial insert Size 1 thickness 20 mm	2-0202951	1
2	Trial insert Size 2 thickness 10 mm	2-0202912	1
2	Trial insert Size 2 thickness 12 mm	2-0202922	1
2	Trial insert Size 2 thickness 14 mm	2-0202932	1
2	Trial insert Size 2 thickness 16 mm	2-0202942	1
2	Trial insert Size 2 thickness 20 mm	2-0202952	1
3	Trial insert Size 3 thickness 10 mm	2-0202913	1
3	Trial insert Size 3 thickness 12 mm	2-0202923	1
3	Trial insert Size 3 thickness 14 mm	2-0202933	1
3	Trial insert Size 3 thickness 16 mm	2-0202943	1
3	Trial insert Size 3 thickness 20 mm	2-0202953	1
4	Trial insert Size 4 thickness 10 mm	2-0202914	1
4	Trial insert Size 4 thickness 12 mm	2-0202924	1
4	Trial insert Size 4 thickness 14 mm	2-0202934	1
4	Trial insert Size 4 thickness 16 mm	2-0202944	1
4	Trial insert Size 4 thickness 20 mm	2-0202954	1
5	Trial insert Size 5 thickness 10 mm	2-0202915	1
5	Trial insert Size 5 thickness 12 mm	2-0202925	1
5	Trial insert Size 5 thickness 14 mm	2-0202935	1
5	Trial insert Size 5 thickness 16 mm	2-0202945	1
5	Trial insert Size 5 thickness 20 mm	2-0202955	1

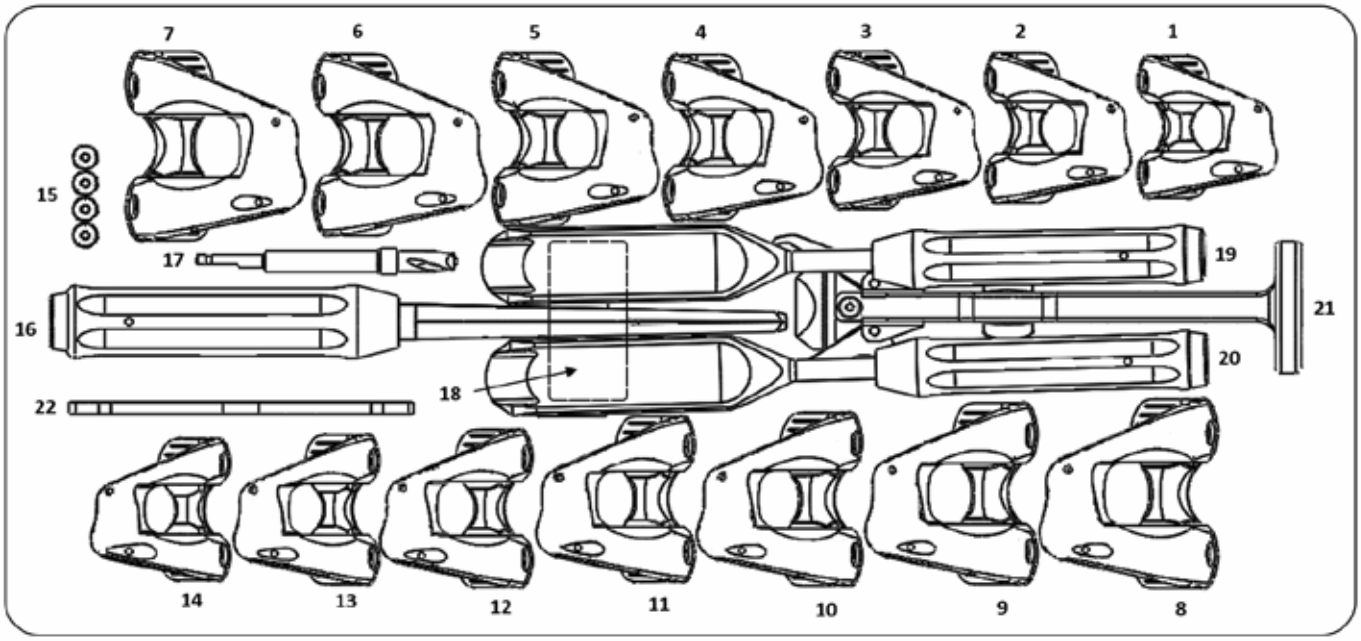
Item	Name	Product No.	Qty
6	Trial insert Size 6 thickness 10 mm	2-0202916	1
6	Trial insert Size 6 thickness 12 mm	2-0202926	1
6	Trial insert Size 6 thickness 14 mm	2-0202936	1
6	Trial insert Size 6 thickness 16 mm	2-0202946	1
6	Trial insert Size 6 thickness 20 mm	2-0202956	1
7	Trial insert Size 7 thickness 10 mm	2-0202917	1
7	Trial insert Size 7 thickness 12 mm	2-0202927	1
7	Trial insert Size 7 thickness 14 mm	2-0202937	1
7	Trial insert Size 7 thickness 16 mm	2-0202947	1
7	Trial insert Size 7 thickness 20 mm	2-0202957	1
8	Baseplate impactor	2-0203000	1
9	Trial baseplate navigated Size 1	2-0208601	1
10	Trial baseplate navigated Size 2	2-0208602	1
11	Trial baseplate navigated Size 3	2-0208603	1
12	Trial baseplate navigated Size 4	2-0208604	1
13	Trial baseplate navigated Size 5	2-0208605	1
14	Trial baseplate navigated Size 6	2-0208606	1
15	Trial baseplate navigated Size 7	2-0208607	1

4-in-1 Femoral Resection Set



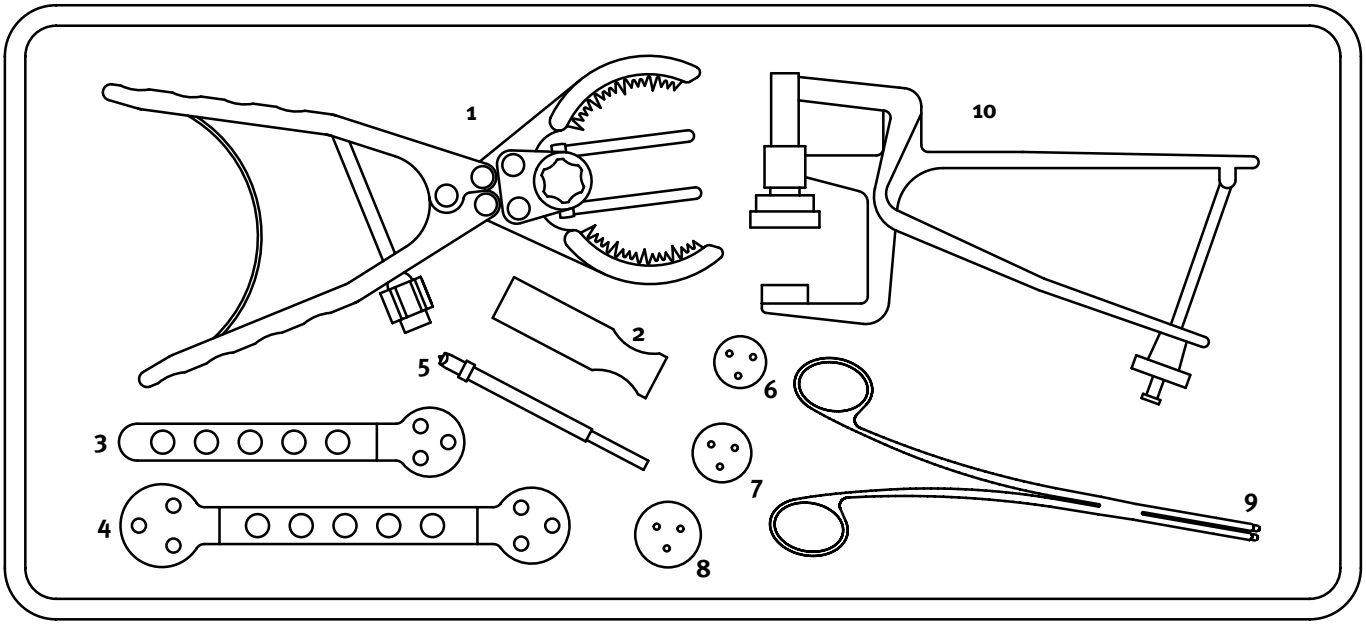
Item	Name	Product No.	Qty
1	4-in-1 Femoral resection guide - Size 1	2-0226401	1
1	4-in-1 Femoral resection guide - Size 2	2-0226402	1
1	4-in-1 Femoral resection guide - Size 3	2-0226403	1
1	4-in-1 Femoral resection guide - Size 4	2-0226404	1
1	4-in-1 Femoral resection guide - Size 5	2-0226405	1
1	4-in-1 Femoral resection guide - Size 6	2-0226406	1
1	4-in-1 Femoral resection guide - Size 7	2-0226407	1
2	Removable hand holds	2-0226500	2
3	V2 Extra-articular ligament balancer	2-0233200	1
4	Screwdriver H3.5	2-0225500	1
5	Femoral condyle holder	2-0204400	1
6	Headless pin, Ø 3.2 length 65 mm	2-0201402	6
7	4-in-1 probe	2-0229900	1
8	4-in-1 pin positioner	2-0229800	1
9	Distal resection guide - 8 mm	2-0226900	1
9	Distal resection guide - 10 mm	2-0228900	1
10	Distal slide bar	2-0226800	1
11	Adjustable varus-valgus barrel 0°	2-0226600	1
11	Adjustable varus-valgus barrel 3°	2-0226603	1
11	Adjustable varus-valgus barrel 6°	2-0226606	1
12	Wrench H2.5	2-0228200	1
13	Snap screwdriver H5	2-0233100	1
14	Collared threaded pin, Ø 3.2 length 57 mm	2-0238857	2

Femoral Trials Set



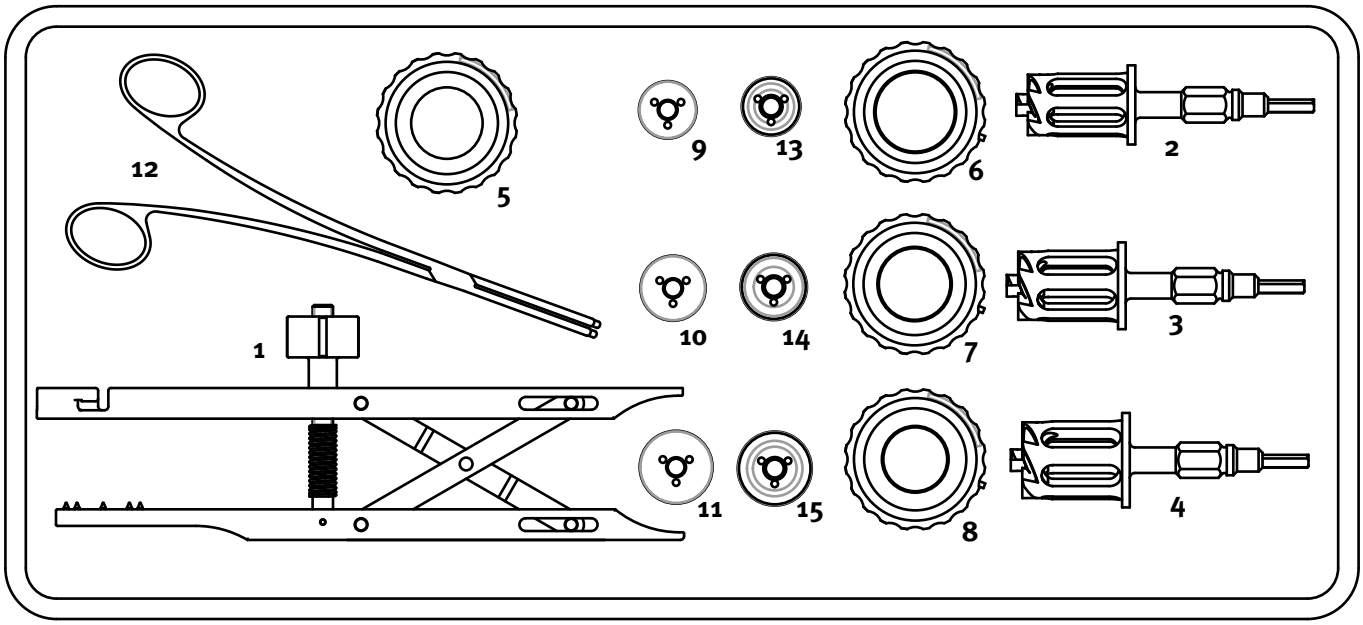
Item	Name	Product No.	Qty
1	Trial openwork femoral component -Navigated - Right Size 1	2-0208501	1
2	Trial openwork femoral component -Navigated - Right Size 2	2-0208502	1
3	Trial openwork femoral component -Navigated - Right Size 3	2-0208503	1
4	Trial openwork femoral component -Navigated - Right Size 4	2-0208504	1
5	Trial openwork femoral component -Navigated - Right Size 5	2-0208505	1
6	Trial openwork femoral component -Navigated - Right Size 6	2-0208506	1
7	Trial openwork femoral component -Navigated - Right Size 7	2-0208507	1
8	Trial openwork femoral component -Navigated - Left Size 1	2-0208511	1
9	Trial openwork femoral component -Navigated - Left Size 2	2-0208512	1
10	Trial openwork femoral component -Navigated - Left Size 3	2-0208513	1
11	Trial openwork femoral component -Navigated - Left Size 4	2-0208514	1
12	Trial openwork femoral component -Navigated - Left Size 5	2-0208515	1
13	Trial openwork femoral component -Navigated - Left Size 6	2-0208516	1
14	Trial openwork femoral component -Navigated - Left Size 7	2-0208517	1
15	Trial peg for trial femoral component – Navigation	2-0206600	4
16	Cutting gauge	2-0206500	1
17	Drill for peg holes	2-0204000	1
18	Femoral component impactor	2-0204300	1
19	Femoral Rasp Size 1/2/3	2-0204113	1
20	Femoral Rasp Size 4/5/6/7	2-0204147	1
21	Femoral condyle holder	2-0204400	1
22	Intercondylar control gauge	2-0215200	1

Patellar Resection Set



Item	Name	Product No.	Qty
1	Patellar resection forceps	2-0206700	1
2	Patellar resection gauge	2-0208400	1
3	Drilling template Ø 30	2-0204900	1
4	Drilling template Ø 33 and Ø 36	2-0205000	1
5	Drill bit for resurfacing patella	2-0205100	1
6	Trial resurfacing patella Ø 30	2-0205330	1
7	Trial resurfacing patella Ø 33	2-0205333	1
8	Trial resurfacing patella Ø 36	2-0205336	1
9	Clamp for trial patella or locking ring	2-0104600	1
10	Patellar clamping forceps	2-0206100	1

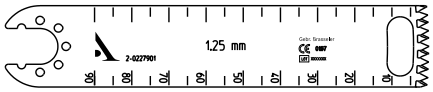
Patellar Reaming Set



Item	Name	Product No.	Qty
1	Stop reaming patellar forceps	2-0216600	1
2	Reamer for inset cementless patellar Ø 23	2-0216523	1
3	Reamer for inset cementless patellar Ø 26	2-0216526	1
4	Reamer for inset cementless patellar Ø 29	2-0216529	1
5	Binding clamp for stop reaming patellar forceps	2-0216800	1
6	Clamp for stop reaming patellar forceps Ø 23	2-0216723	1
7	Clamp for stop reaming patellar forceps Ø 26	2-0216726	1
8	Clamp for stop reaming patellar forceps Ø 29	2-0216729	1
9	Trial inset patellar implant - cemented Ø 23 mm	2-0205223	1
10	Trial inset patellar implant - cemented Ø 26 mm	2-0205226	1
11	Trial inset patellar implant - cemented Ø 29 mm	2-0205229	1
12	Clamp for trial patella or locking ring	2-0104600	1
13	Trial inset patellar implant - cementless Ø 23	2-0216923	1
14	Trial inset patellar implant - cementless Ø 26	2-0216926	1
15	Trial inset patellar implant - cementless Ø 29	2-0216929	1

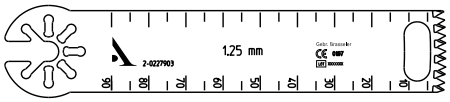
Large saw blades

SYNTHES AO / SODEM large saw blade
Sterile Product No. 2-0227901



STRYKER large saw blade
Sterile Product No. 2-0227902

ZIMMER / HALL / LINVATEC large saw blade
Sterile Product No. 2-0227903

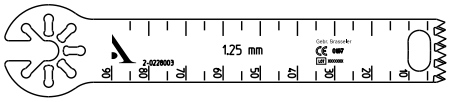


Medium saw blades

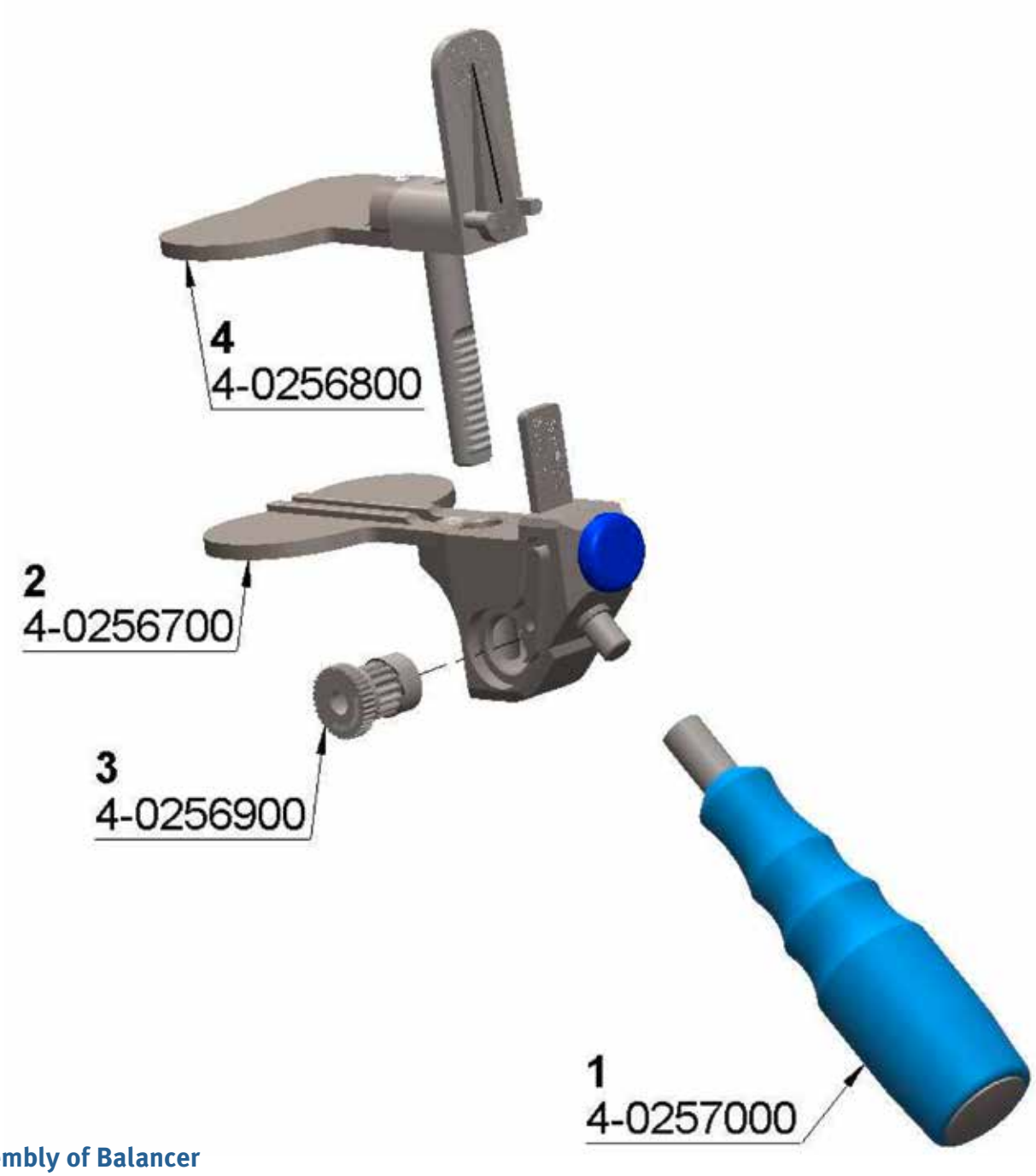
SYNTHES AO / SODEM medium saw blade
Sterile Product No. 2-0228001

STRYKER medium saw blade
Sterile Product No. 2-0228002

ZIMMER / HALL / LINVATEC medium saw blade
Sterile Product No. 2-0228003



Assembly and Disassembly of Balancer



Assembly of Balancer

1 - Pick up the removable handle (4-0238200).

2 - Screw the removable handle onto the tibial housing (4-0237900).

3 - Place the gear wheel (4-0238100) into the lateral opening on the tibial housing.

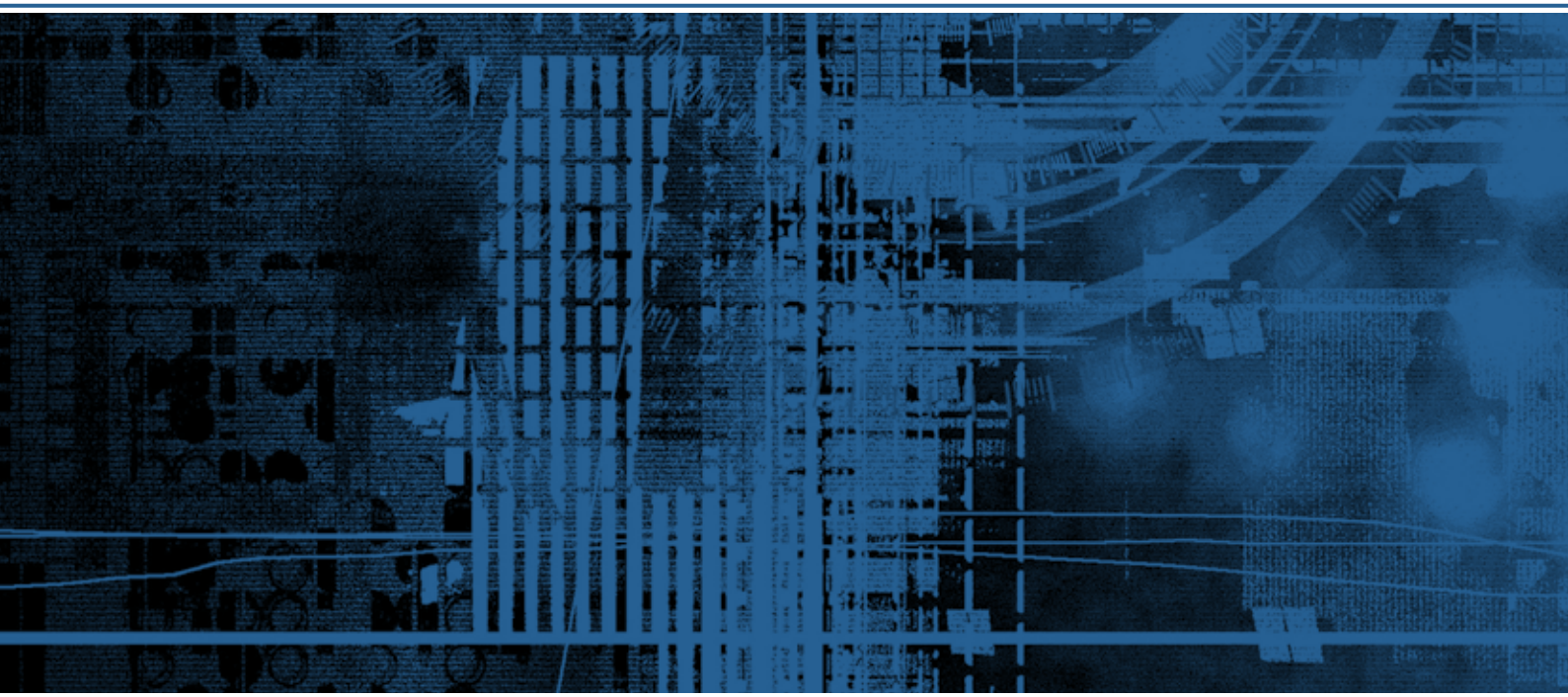
4 - Press the blue button and insert the femoral housing (4-0238000) on top of the tibial housing.

Disassembly of Balancer

- Repeat the above steps in the reverse order.

Notes

Reference: TO.G.GB.015/2.0



AMPLITUDE

Customer Service – France :
Porte du Grand Lyon,
01700 Neyron – France
Tel. : +33 (0)4 37 85 19 19
Fax : +33 (0)4 37 85 19 18

E-mail : amplitude@amplitude-ortho.com

Customer Service – Export :
11, cours Jacques Offenbach, Zone Mozart 2,
26000 Valence – France
Tel. : +33 (0)4 75 41 87 41
Fax : +33 (0)4 75 41 87 42

Internet : www.amplitude-ortho.com