Columbus®/VEGA System®

All Poly Tibia Plateau Columbus CR DD and VEGA System PS Knee Arthroplasty Surgical Technique

Aesculap Orthopaedics

AESCULAP®
Implant Systems

Columbus®/VEGA System®

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1. Indications for Use and Contraindications

CAUTION: Federal Law (USA) restricts this device to sale by or on the order of a physician.
Rx Only

The Columbus® Knee System offers a wide implant range which enables the surgeon to choose the right option per case.

Indications for Use:

The Columbus Knee System is indicated for use in reconstruction of the diseased knee joint caused by osteoarthritis, rheumatoid arthritis, post-traumatic arthritis, the need to revise failed arthroplasties or osteotomies where pain, deformity or dysfunction persist, and for patients suffering from correctable valgus or varus deformity and moderate flexion contracture.

Posterior Stabilized (PS) components are also for absent or non-functioning posterior cruciate ligament and severe anteroposterior instability of the knee joint.

The Columbus Knee is designed for use with bone cement.

For more information about indications and contraindications, please refer to the instructions for use posted on www.aesculapimplantsystems.com.

Contraindications:

Contraindications include, but are not limited to:

- Joint conditions that can be treated by reconstructive surgery (e.g. osteotomy)
- Acute or chronic infections near the joint, or systemic infections
- Secondary diseases that could influence joint functionality
- Systemic diseases and metabolic disorders
- Severe osteoporosis or osteomalacia
- Severely damaged bone structures that could prevent stable implantation of implant components
- Bone tumors in the region of implant fixation
- Bone malformations, axial misalignments or other bone conditions that rule out implantation of a prosthetic joint
- Predictable overload of the joint implant (e.g. due to adiposity)
- Dependency on pharmaceutical drugs, drug abuse, or alcoholism
- Fever, infection or inflammation (systemic or local)
- Pregnancy
- Mental illness
- Severe osteopenia (or any other medical or surgical finding) that would preclude any benefit from the implants
- Combination with implant components from other manufacturers
- Inadequate patient compliance
- Foreign body sensitivity to the implant materials
- All cases not listed under indications

1. Indications for Use and Contraindications *(continued)*

The VEGA System® PS is indicated for nearly all patients who are candidates for a primary TKA.

Indications for Use:

The VEGA System is indicated for use in reconstruction of the diseased knee joint caused by osteoarthritis, rheumatoid arthritis, post-traumatic arthritis, the need to revise failed arthroplasties or osteotomies where pain, deformity or dysfunction persist, and for patients suffering from correctable valgus or varus deformity and moderate flexion contracture.

Posterior Stabilized (PS) components are also for absent or non-functioning posterior cruciate ligament and severe anteroposterior instability of the knee joint.

The VEGA Knee System is designed for use with bone cement.

For more information about indications and contraindications, please refer to the instructions for use posted on www.aesculapimplantsystems.com.

Contraindications:

Contraindications include, but are not limited to:

- Joint conditions that can be treated by reconstructive surgery (e.g. osteotomy)
- Acute or chronic infections near the joint, or systemic infections
- Secondary diseases that could influence joint functionality
- Systemic diseases and metabolic disorders
- Severe osteoporosis or osteomalacia
- Severely damaged bone structures that could prevent stable implantation of implant components
- Bone tumors in the region of implant fixation
- Bone malformations, axial misalignments or other bone conditions that rule out implantation of a prosthetic joint
- Predictable overload of the joint implant (e.g. due to adiposity)
- Dependency on pharmaceutical drugs, drug abuse or alcoholism
- Fever, infection or inflammation (systemic or local)
- Pregnancy
- Mental illness
- Severe osteopenia (or any other medical or surgical finding) that would preclude any benefit from the implants
- Combination with implant components from other manufacturers
- Inadequate patient compliance
- Foreign body sensitivity to the implant materials
- All cases not listed under indications

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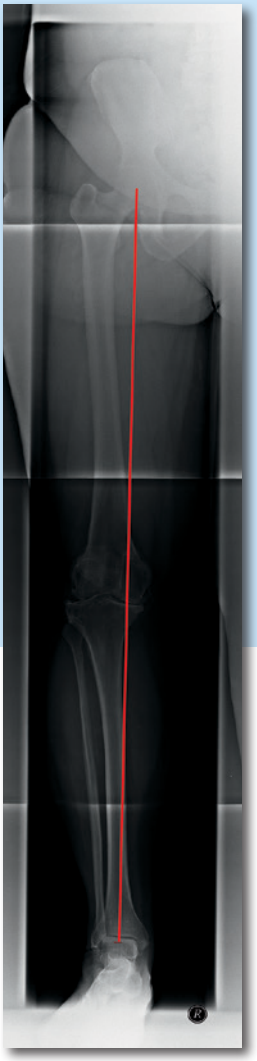
2. Preoperative Planning



For every Total Knee Arthroplasty, careful preoperative X-ray planning is recommended in order to determine precisely the following parameters:

- Varus/Valgus deformity
- Angle between the anatomical and mechanical femoral axes
- Entry point(s) of the intramedullary alignment rods (manual IM technique)
- Joint line level
- Femur resection heights
- Tibia resection heights
- Component sizing
- Implant positioning
- Potential areas of bone loss and location of osteophytes

The following X-ray images are required to conduct the radiographic analysis:

- Knee joint in A/P projection: knee extended, centered over the distal patella
- Knee joint in lateral projection: knee in 30° flexion, centered above the distal patella
- Image of the whole leg (from hip to ankle) in monopodal stance
- Patella-tangential image (Merchant View) with the knee at 30°flexion

The angle between the mechanical and anatomical femur axes is measured with the combination template for axis measurements. The center of the joint, the joint line and the mechanical femur axis can be measured. To determine the tibia resection, the template showing representations of the tibial components is superimposed over and aligned with the X-ray image. The resection height is given at a 10-20 mm graduation. A complete set of radiographic templates is provided for the preoperative determination of the appropriate implant sizes. The localization of the osteophytes facilitates their removal, improving the mobility of the joint.

The Columbus® knee system provides a complete set of radiographic templates in different magnitudes (1.1 and 1.15).

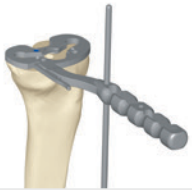
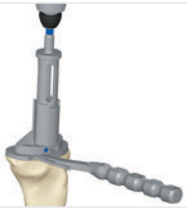
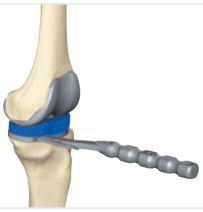
The results of the preoperative planning should be documented in the patient's file and available during the operative procedure for reference.

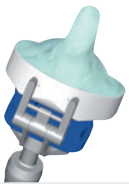
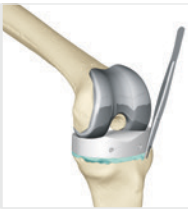
3. Overview All Poly Tibia Surgical Technique

Attention: This All Poly Tibia Addendum refers to the Surgical Technique DOC1172 for the Columbus® IQ instrumentation and the Surgical Technique DOC1033 for the VEGA System®.

Note: All Poly Tibia specific instruments in the All Poly Tibia instrument set (exception: NQ1097R, NQ205R) are marked with "All Poly Tibia".

Fig. 1

Surgical Workflow		
1	Rotational alignment of the tibial preparation plateau	
2	Preparation of the tibial keel	
3	Preparation of the tibial keel	
4	Trial reduction in extension and flexion	

Surgical Workflow		
5	Preparation of the final All Poly Tibia implant	
6	Final implantation of the All Poly Tibia implant	
	Optional: Use of the All Poly Tibia implant holder	
7	Cement removal	

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All Poly Tibia Plateau Columbus CR DD and VEGA System PS Knee Arthroplasty Surgical Technique

4. Detailed All Poly Tibia Surgical Technique

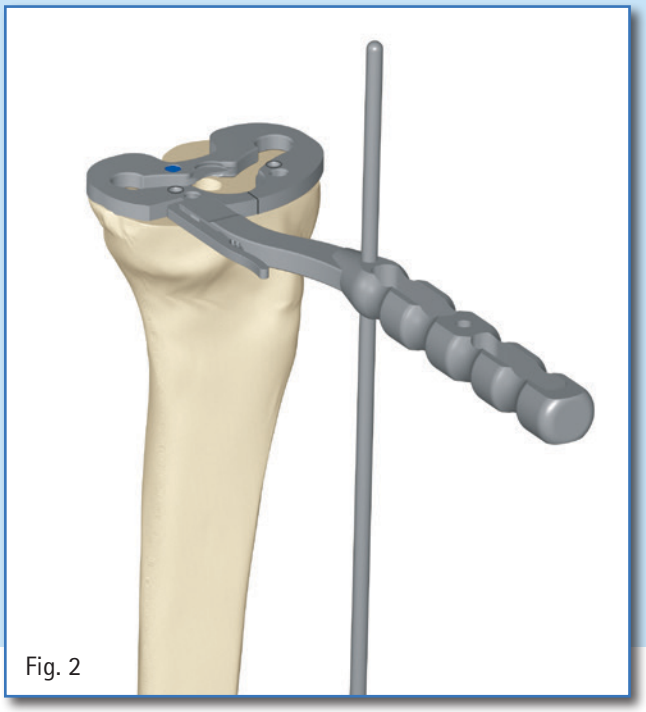


Fig. 2

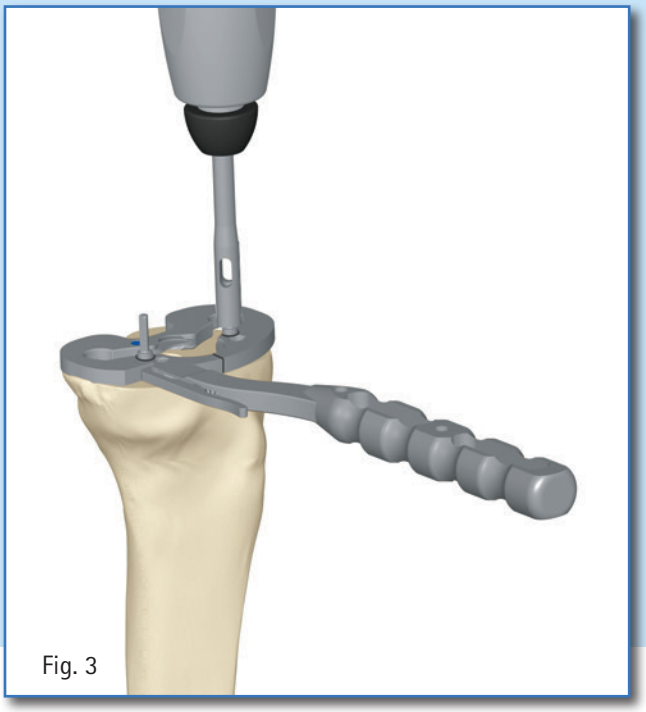
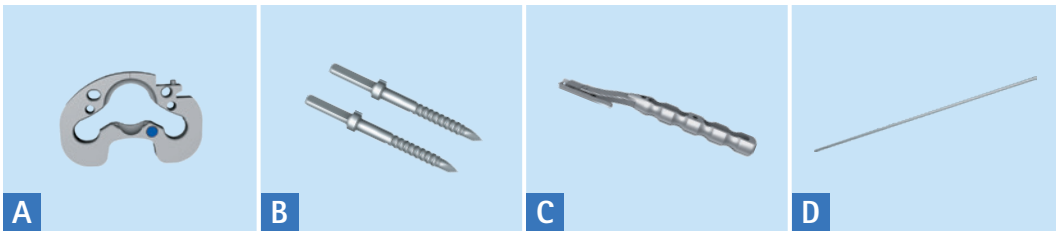


Fig. 3

4.1 Tibial Keel Preparation

- Determine the size of the tibia by placing the different All Poly Tibia trial/preparation plateau sizes onto the created surface. Try to obtain an optimal transverse rotational alignment of the All Poly Tibia trial/preparation plateau while avoiding ML and AP overhang.
- Place the chosen All Poly Tibia trial/preparation plateau flush onto the tibial resection and assess the rotation with the help of the EM rod inserted through the plateau holder. References for the rotation are the mid-third of the anterior tuberosity and the second toe axis of the leg. These two landmarks do not often coincide with the mechanical axis of the tibia, and the surgeon should consider the rotation with respect to the tubercle to maintain extensor mechanism alignment. The plateau is fixed by two short headed pins in the marked holes.
- Another option is to build the tibial and femoral trial implant with the adequate trial gliding surface. By exercising flexion extension movements combined with slight rotational stresses, the All Poly Tibia trial/preparation plateau will find a natural position under the femur trial component. This position is marked anteriorly using the electric cautery right where the plateau has a central anterior laser marking. Care should be taken to assess the stability of the extensor mechanism before accepting this "free float" alignment of the All Poly Tibia trial/preparation plateau.



A: All Poly Tibia trial/preparation plateau NQ270R-NQ275R; B: Short headed pins; C: Plateau holder NQ378R; D: Alignment rod long NP471R

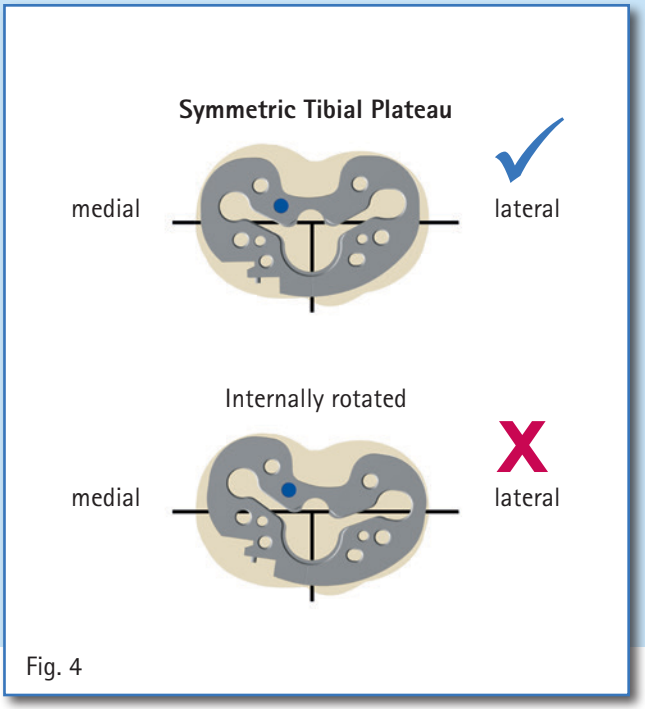


Fig. 4

Note: *Columbus® and VEGA System® All Poly Tibia implants have a symmetrical tibial plateau. Complete coverage cannot be obtained if the correct tibial rotation is considered. An internal rotation of the tibial plateau should be avoided.*

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All Poly Tibia Plateau Columbus CR DD and VEGA System PS Knee Arthroplasty Surgical Technique

4. Detailed All Poly Tibia Surgical Technique *(continued)*

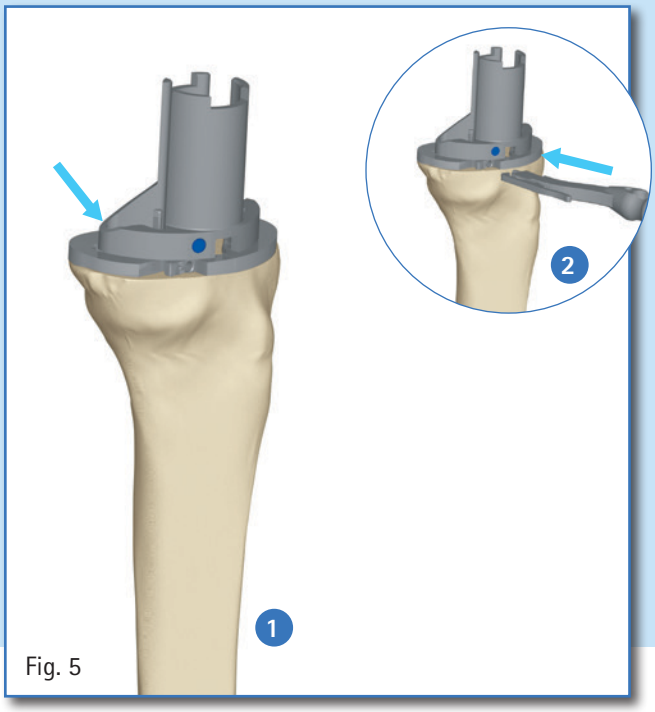


Fig. 5

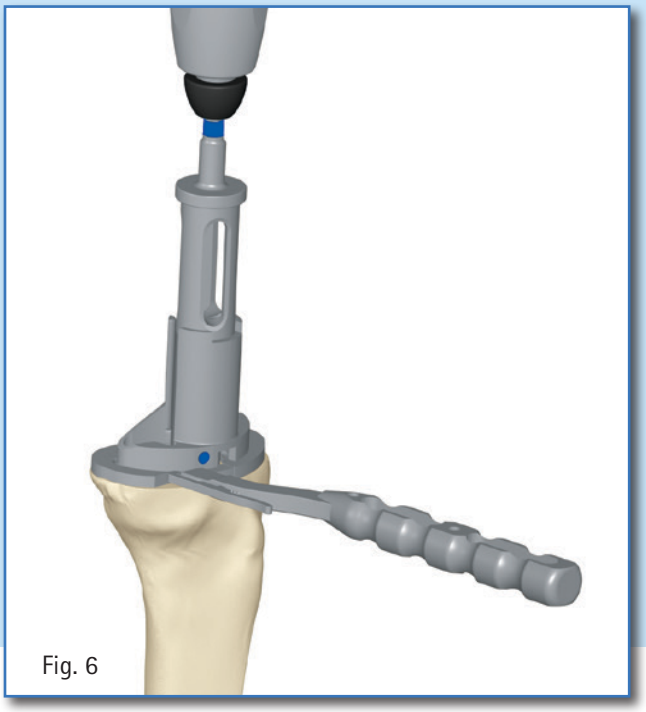
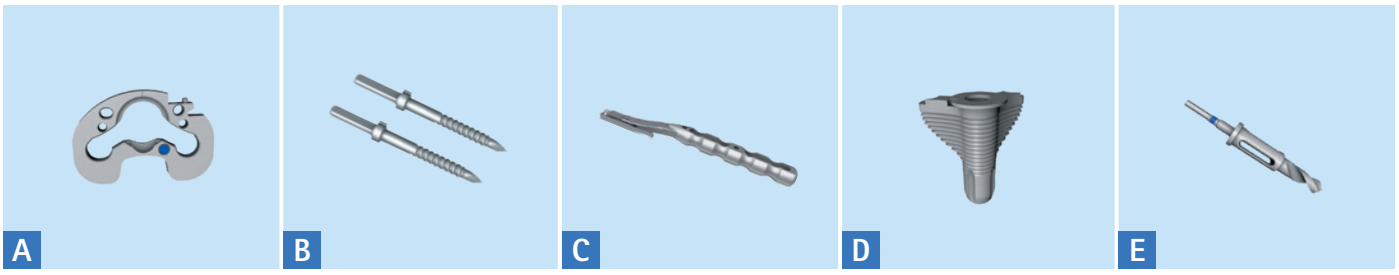


Fig. 6

- Remove the holder. Place the All Poly Tibia broach/trial keel guide on the All Poly Tibia trial/preparation plateau by engaging the posterior teeth first.
- The anterior part can be maintained steadily by locking the holder back in place.
- The drill with stop is first used to prepare the bone for the keel chisel. Choose the drill that corresponds to the tibia size to prepare the correct keel length and diameter.
- There is one drill available for implant sizes T0-T2 and one for implant sizes T3-T5.

  14 mm - T0 - T2
  16 mm - T3 - T5



A: All Poly Tibia trial/preparation plateau NQ270R-NQ275R; B: Short headed pins; C: Plateau holder NQ378R; D: All Poly Tibia broach/trial keel NQ278R/NQ279R; E: All Poly Tibia drill with stop NQ268R/NQ269R

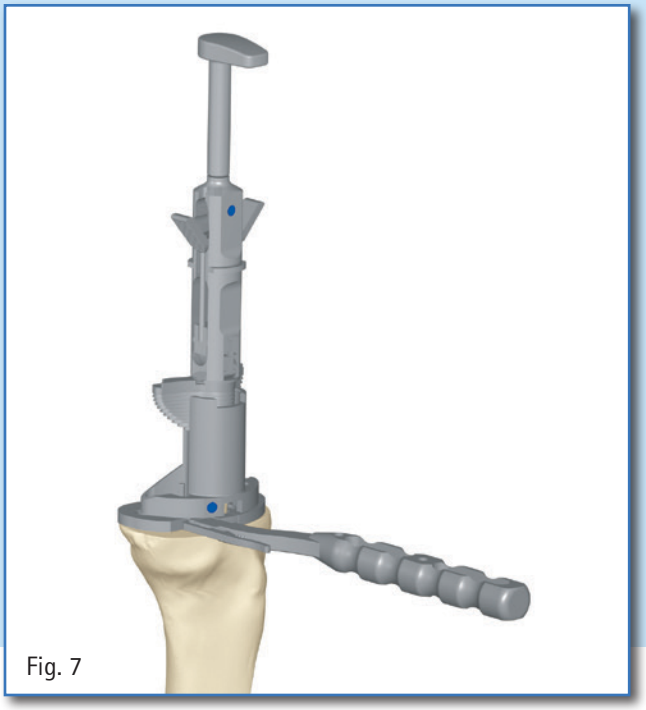


Fig. 7

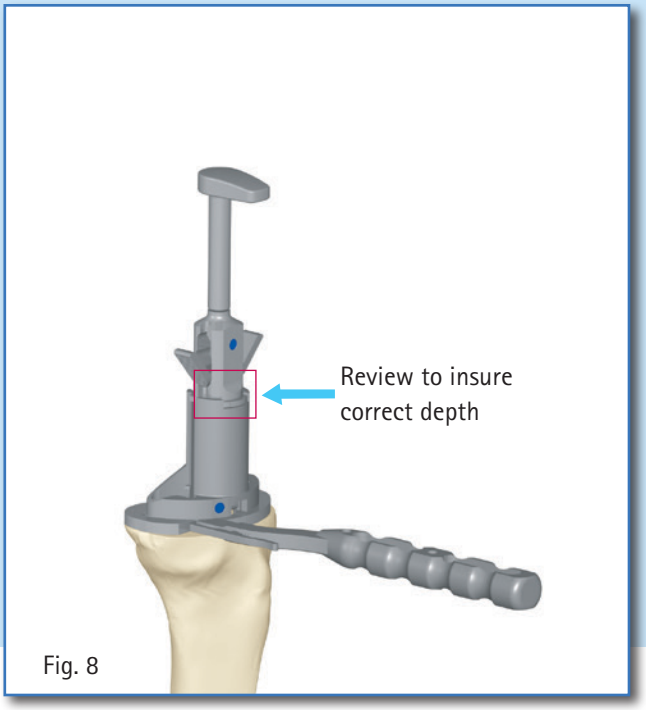
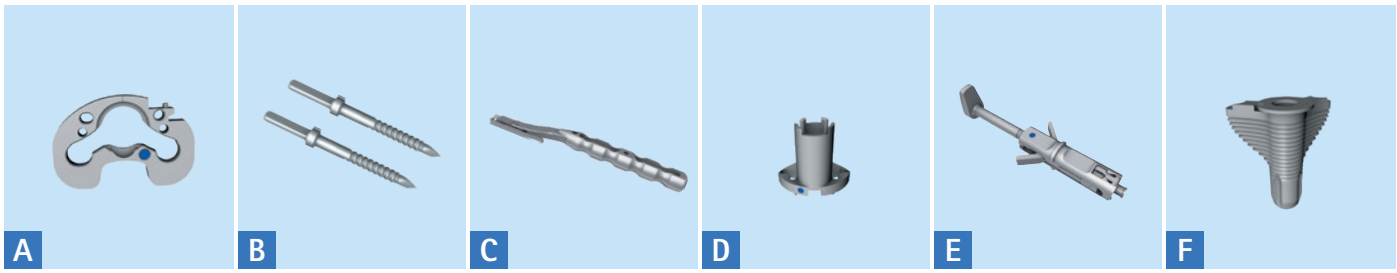


Fig. 8

4.2 Preparation of the Tibial Keel

- After drilling, perform the tibial keel stem preparation by using the All Poly Tibia broach / trial keel T0-T2 or T3-T5 connected to the keel impactor / extractor. The All Poly Tibia broach/trial keel is attached to the impactor / extractor. Ensure connection between both components is secure. Place assembly through the guiding tower and hammer until correct depth is achieved. Remove handle by rotating counterclockwise.
- By removing the keel impactor / extractor and the All Poly Tibia broach / trial keel guide, the trial gliding surface and the trial femoral component of the VEGA System® or the Columbus® standard instrumentation set can be attached for a trial reduction.



A: All Poly Tibia trial / preparation plateau NQ270R-NQ275R; B: Short headed pins; C: Plateau holder NQ378R; D: All Poly Tibia broach / trial keel guide NQ277R; E: Keel impactor / extractor NQ1097R; F: All Poly Tibia broach / trial keel NQ278R / NQ279R

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4. Detailed All Poly Tibia Surgical Technique *(continued)*

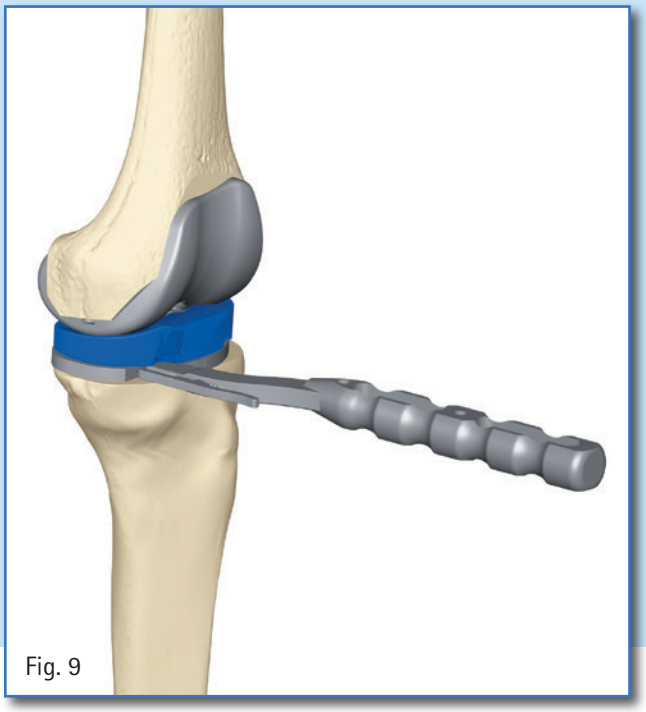
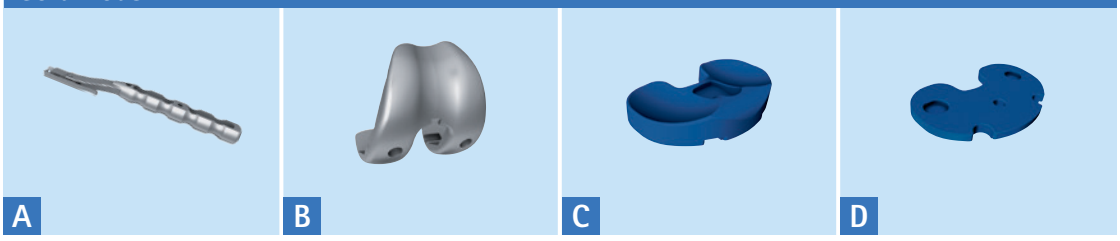


Fig. 9

4.3 Trial Reduction

- Place the trial femoral and tibial implants onto the prepared bony surfaces.
- Place the trial gliding surface corresponding to the gap measurements with the spacer or the distractor between both trial implants.
- The DD gliding surfaces for Columbus All Poly Tibia and the PS gliding surfaces for VEGA System All Poly Tibia are available in heights 10 to 16 mm. A 6 mm trial spacer is supplied to reach the height of 16 mm.

Columbus DD



A: Tibial trial/prep. plateau holder NQ378R; B: Columbus trial femur NQ451R-NQ458R, NQ461R-NQ468R, NQ1052R-NQ1057R, NQ1062R-NQ1067R; C: Columbus DD trial gliding surface NQ505-NQ557; D: Columbus DD trial spacer 6 mm NQ504-NQ554

VEGA System

E: VEGA System trial femur NS301RM-NS308RM; NS311RM-NS318RM; F: VEGA System trial femoral box NS821R-NS828R; G: VEGA System PS trial gliding surface NS270-NS297; H: VEGA System PS trial spacer 6 mm NS274-NS299; I: VEGA System PS tibial peg NS365R

Fig. 10

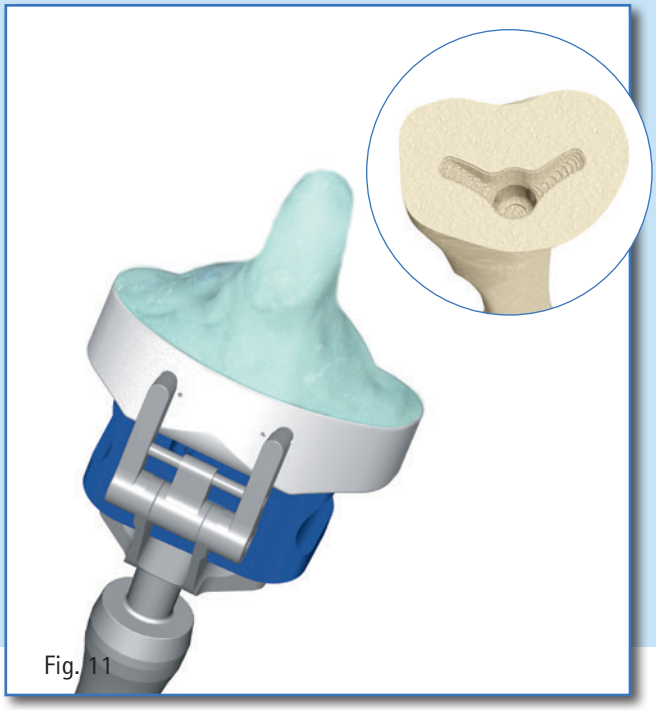


Fig. 11

4.4 Preparation of the Final All Poly Tibia Implant

- Completely cover the tibial keel with cement to ensure stable anchorage of the All Poly Tibia. The All Poly Tibia instruments ensure a minimum of 1 mm cement mantle around the whole keel. For the optimal positioning of the tibia component in the bone as well as an allover cement mantle, the use of a centralizer (NK094 for T0-T2 / NK096 for T3-T5) is recommended.

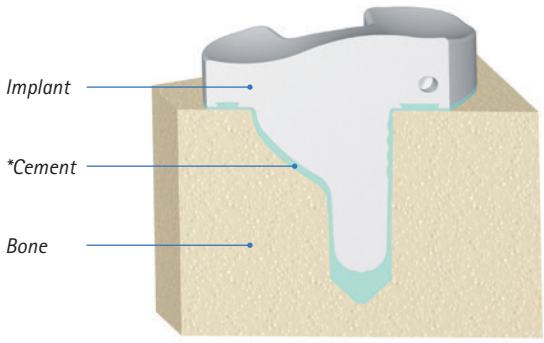


Fig. 12: Cement mantle for All Poly Tibia is minimum of 1 mm around the whole keel

4. Detailed All Poly Tibia Surgical Technique *(continued)*

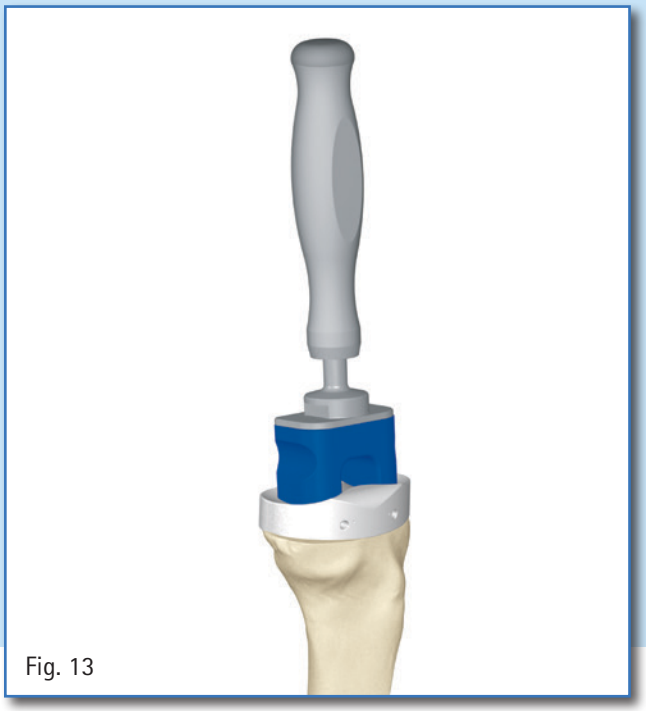


Fig. 13

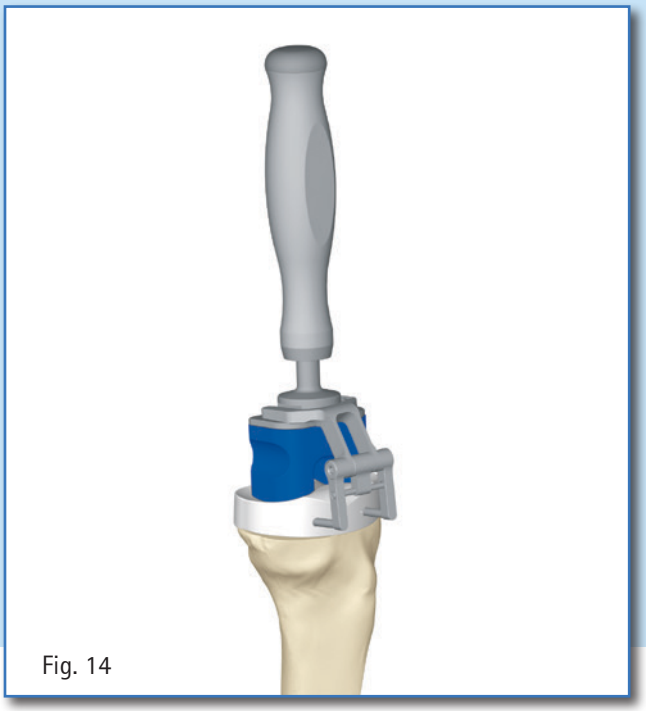
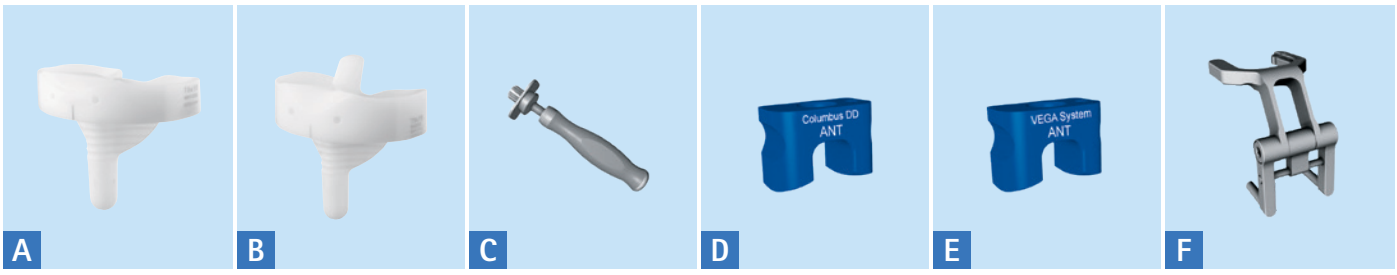


Fig. 14

4.5 Final Implantation of the All Poly Tibia Implant

- Insert the final All Poly Tibia implant with the impactor. For easier positioning, the optional All Poly Tibia fixation clamp can be used to connect the All Poly Tibia impactor with the implant. The All Poly Tibia fixation clamp also supports rotational stability during impaction.

Note: *There are two different impactor inserts for Columbus and VEGA System to allow a high congruency between impactor and implant and to avoid any damage of the articulating surface during impaction.*



A: All Poly Tibia Columbus CR DD NN1200; B: All Poly Tibia VEGA System PS NX300; C: All Poly Tibia impactor NQ205R; D: All Poly Tibia Columbus insert NQ206; E: All Poly Tibia VEGA System insert NQ207; F: All Poly Tibia fixation strap for implant NQ209R

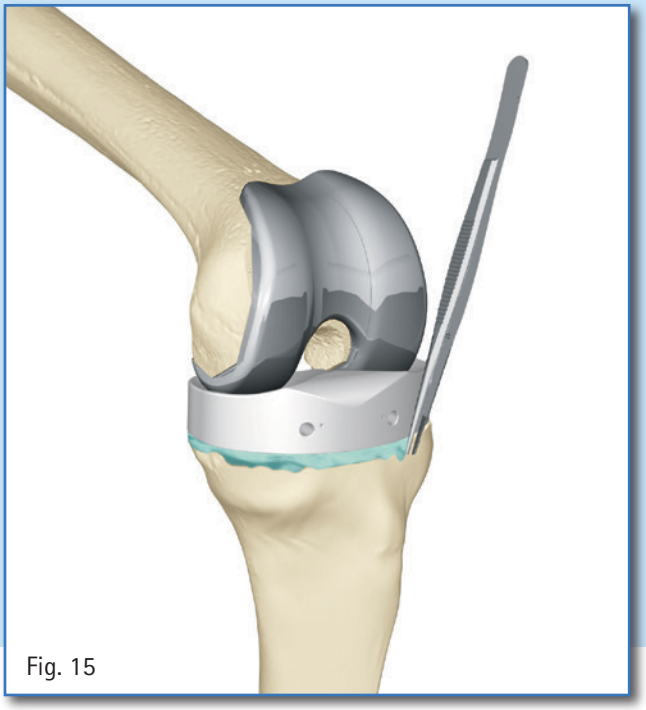


Fig. 15

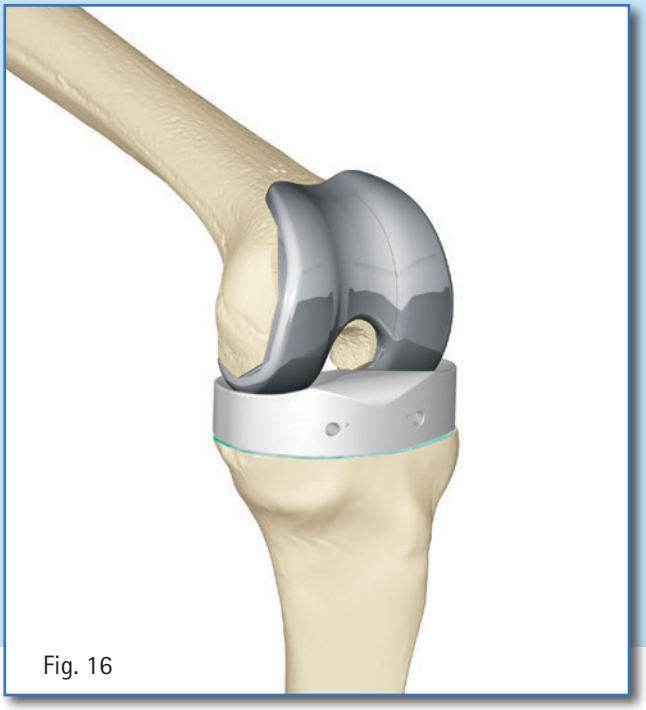
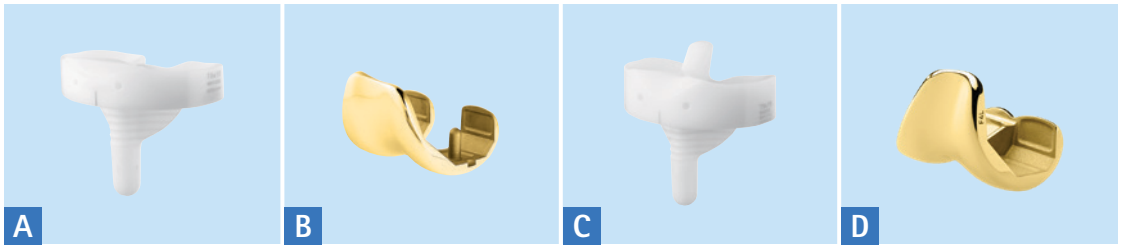


Fig. 16

- Be certain to completely remove all excess cement that protrudes from the implant bone interface. Any remnants of overhanging cement can impinge on surrounding soft tissue or can provide a source of debris that can serve as a generator of third body wear and may contribute to the demise of the fixation earlier than expected.



A: All Poly Tibia Columbus® CR DD NN1200-NN1253; B: Columbus CR femur implant NN001K/Z-NN018K/Z; C: All Poly Tibia VEGA System® PS NX300-NX353; D: VEGA System PS femur implant NX004K/Z-NX038K/Z

E: Forceps; F: All Poly Tibia tibial impactor NQ205R; G: All Poly Tibia Columbus insert NQ206; H: All Poly Tibia VEGA System insert NQ207; I: All Poly Tibia fixation strap for implant NQ209R

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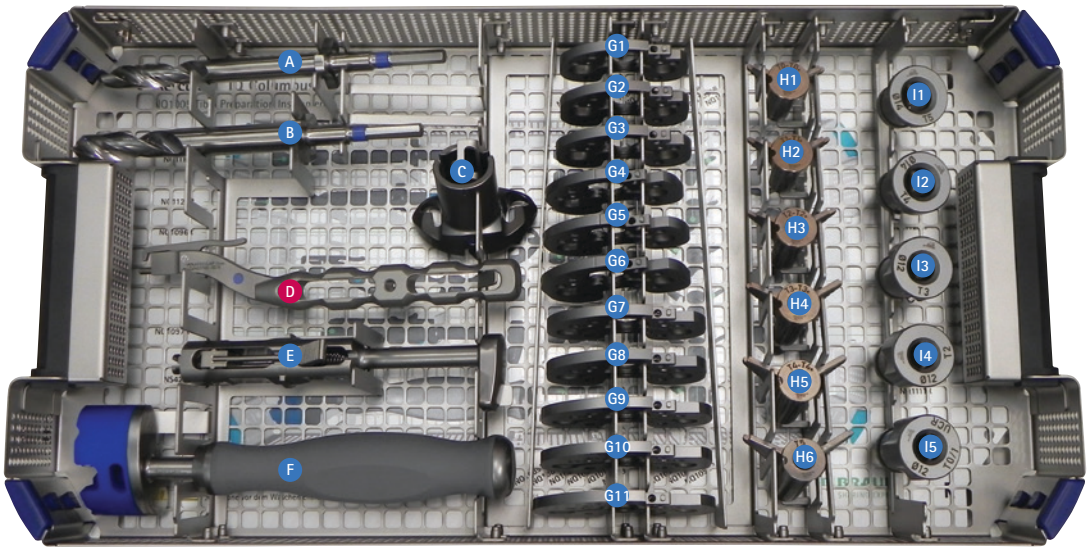
5. Cementing Technique

- Regardless of what fixation method is utilized, it is critical that correct techniques are employed to help avoid complications and early failure. Even with accurate resection, it is important to ensure that components are fully seated, as it is easy for this to be obscured when cementing is taking place. Varus-valgus alignment can be significantly affected by unequal medial-lateral cement mantles and poorly seated components. There can be a tendency to place femoral components in relatively flexed positions if specific care is not taken.
- It should also be noted that when definitive components are cemented in, they may prove more stable and seat better than the trials, which are often a little loose. It is therefore worthwhile to recheck the balancing and stability at this point so that further adjustments can be made if necessary. It has been possible to relate poor cementing techniques to early and continuous component migration. This in turn is of positive prognostic significance when predicting aseptic loosening, so proper attention to the cementation steps must be taken.
- Preparation of the bony surfaces and cancellous bone should be performed with pulsatile-type lavage with the knee under a pressure tourniquet. This step allows for optimal cement penetration and interlocking to the bony prepared surfaces and also removes bone debris that can serve as third body particles that increase polyethylene wear after surgery.
- The surfaces should be properly dried prior to cementation and appropriate exposure of all bony surfaces achieved. All of the surfaces should be pressurized for optimal cement penetration. Emphasizing the importance of effective cementation of the posterior femoral condylar surfaces is also recommended since it can have a significant effect on the longevity of the fixation of the femoral implant. A further point worth noting is that holding the knee out in full extension while cement is hardening is used to compress components down and possibly improve cement intrusion.
- Care should be taken to completely remove all excess cement that protrudes from the implant bone interface. Any remnants of overhanging cement can impinge on surrounding soft tissue or can provide a source of debris that can serve as a generator of third body wear and may contribute to the demise of the fixation earlier than expected.

6. Compatibility All Poly Tibia Instruments – Columbus® IQ – ST1020

To avoid confusion, please remove the instruments in red to use during the procedure and place trays with the instruments not needed to the side.



Columbus IQ Set Tibial Preparation

Index	Qty.	Item No.	Description
A	1	NQ1116R	Drill with Stop 12 mm
B	1	NQ1126R	Drill with Stop 14 mm
C	1	NQ1096R	Columbus IQ Guide for Keel Rasp/Trial Keel
D	1	NQ378R	Columbus Tibial Trial/Preparation Plateau Holder
E	1	NQ1097R	Columbus IQ Keel Impactor/Extractor
F	1	NS425	Tibial IQ Plateau Impactor

Index	Qty.	Item No.	Description
G1-11	1 ea.	NQ1079R – NQ1089R	Columbus IQ Tibial Trial/Preparation Plateau T0 – T5
H1-6	1 ea.	NQ1090R – NQ1095R	Columbus IQ Keel Rasp/Trial Keel T0/0+ – T5
I1-5	1 ea.	NQ1111R – NQ1125R	Columbus IQ Tibial Drill Sleeve D 12 mm T0/1+ – T5
	1	NQ1015R	Tray Tibial Preparation

If your customer has **Columbus IQ instruments**, the only instrument you will need from tibial preparation tray is NQ378R Tibial Trial Preparation Plateau Holder.

Columbus®/VEGA System®

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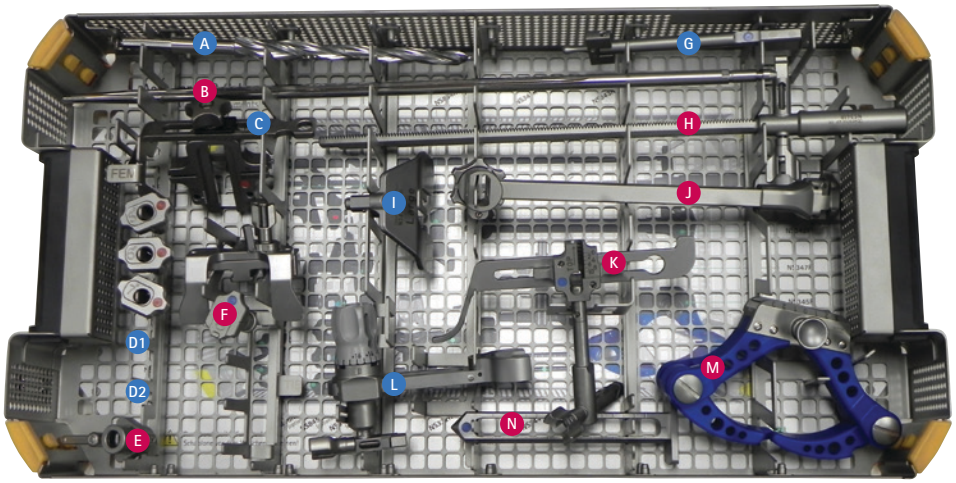
6. Compatibility All Poly Tibia Instruments - Columbus IQ - ST1020

To avoid confusion, please remove the instruments in red to use during the procedure and place trays with the instruments not needed to the side.



Columbus IQ Set General Instruments

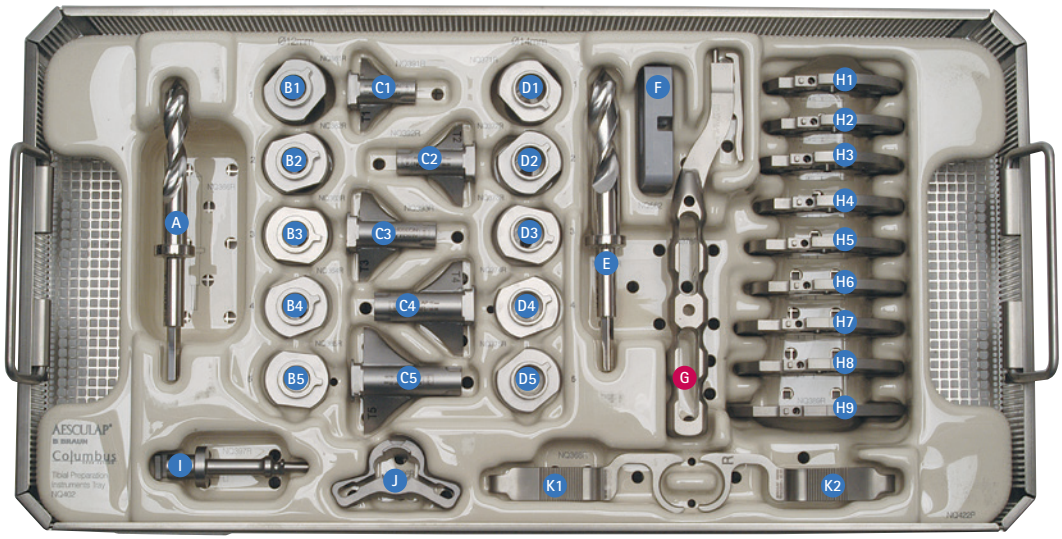
Index	Qty.	Item No.	Description
A	1	NS330R	IQ Stepped Drill for Intramedullary Alignment Rod
B	1	NS331R	IQ Intramedullary Alignment Rod D 8.0 mm
C	1	NS340R	Manual Femoral Alignment Block
D1-2	1 ea.	NS578R – NS579R	IQ Femoral Orientation Sleeve 8°, 9° *(pictures not available)*
E	1	NS847R	IQ Tibial Stylus for Orientation Sleeves
F	1	NS843R	IQ IM Tibial Orientation Sleeve 0°
G	1	NS343R	IQ Tibial Alignment System Proximal Fixation
H	1	NS341R	IQ Holding Rod for Tibial Cutting Guide
I	1	NS834R	IQ Distal Femoral Contact Plate Large
J	1	NS342R	IQ Tibial Alignment System Handle
K	1	NS347R	IQ Tibial Stylus
L	1	NS332R	IQ Intramedullary Alignment System
M	1	NS345R	IQ Tibial Alignment System Bimalleolar Clamp
N	1	NS344R	IQ Tibial Alignment System Support for Bimalleolar Clamp
	1	NQ1012R	Tray Manual Instruments

If your customer has **Columbus IQ instruments**, you will need the following instruments from the general instrument tray:

- NS331R - IQ Intramedullary Alignment Rod
- NS847R - IQ Tibial Stylus for Orientation Sleeves
- NS843R - IQ IM Tibial Orientation Sleeve
- NS341R - IQ Holding Rod for Tibial Cutting Guide
- NS342R - IQ Tibial Alignment System Handle
- NS347R - IQ Tibial Stylus
- NS345R - IQ Tibial Alignment System Bimalleolar Clamp
- NS344R - IQ Tibial Alignment System Support for Bimalleolar Clamp

6. Compatibility All Poly Tibia Instruments – Columbus IQ – ST0448

To avoid confusion, please remove the instruments in red to use during the procedure and place trays with the instruments not needed to the side.



Tibial Preparation – ST0448

Index	Qty.	Item No.	Description
A	1	NQ366R	Drill 12 mm
B1-5	1 ea.	NQ361R, NQ362R, NQ363R, NQ364R, NQ365R	Drill Sleeve 12 mm T1, T2, T3, T4, T5
C1-5	1 ea.	NQ391R, NQ392R, NQ393R, NQ394R, NQ395R	Keel Chisel T1, T2, T3, T4, T5
D1-5	1 ea.	NQ371R, NQ372R, NQ373R, NQ374R, NQ375R	Drill Sleeve 14 mm T1, T2, T3, T4, T5
E	1	NQ376R	Drill 14 mm
F	1	NQ562	Tibial Impactor
G	1	NQ378R	Tibial Trial/Preparation Plateau Holder
H1-9	1 ea.	NQ381R, NQ382R, NQ383R, NQ384R, NQ385R, NQ386R, NQ387R, NQ388R, NQ389R	Tibial Trial T1, T1+, T2, T2+, T3, T3+, T4, T4+, T5
I	1	NQ397R	Keel Chisel AdAll Poly Tibiaer
J	1	NQ396R	Keel Chisel Guide
K1-2	1 ea.	NQ368R, NQ369R	Drill Sleeve Locking Key Left, Right
		NQ422P	Tray

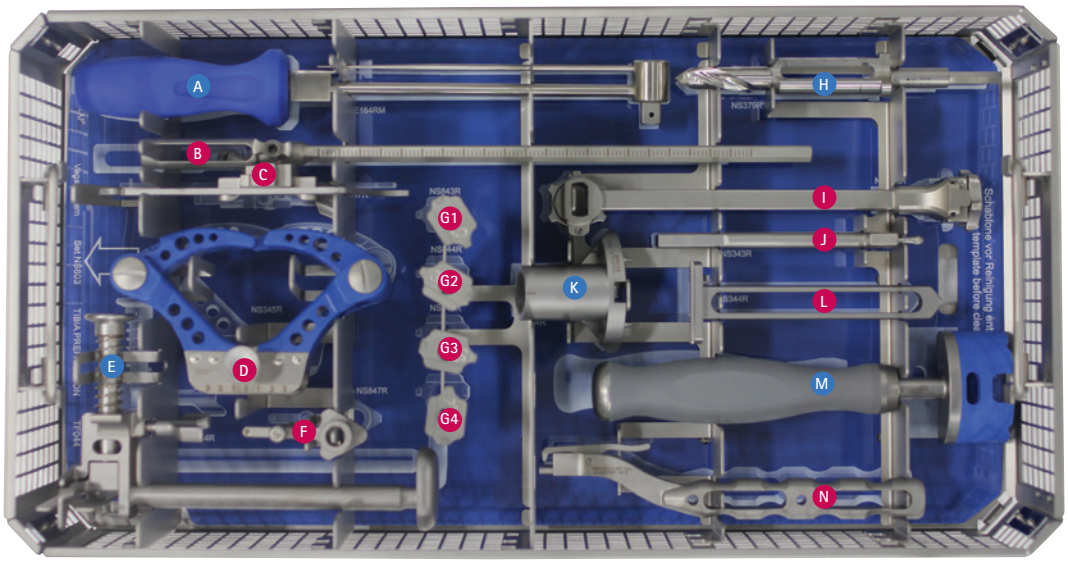
If your customer has **Columbus**® instruments, the only instrument you will need from the tibial preparation tray is NQ378R Tibial Trial/Preparation Plateau Holder.

Columbus®/VEGA System®

All Poly Tibia Plateau Columbus CR DD and VEGA System PS Knee Arthroplasty Surgical Technique

6. Compatibility All Poly Tibia Instruments – VEGA

To avoid confusion, please remove the instruments in red to use during the procedure and place trays with the instruments not needed to the side.



NS803 – Tibial Preparation Instruments – Bottom Tray

Index	Qty.	Item No.	Description
A	1	NE184RM	Torque Wrench
B	1	NS341R	Holding Rod for Tibial Cutting Guide
C	1	NS347R	Tibial Stylus
D	1	NS345R	Bimalleolar Clamp
E	1	NS374R	Tibial Plateau Holder
F	1	NS847R	Tibial IM Stylus for Orientation Sleeves
G1-G4	1 ea.	NS843R-NS846R	Tibial IM Orientation Sleeve 0°, 3°, 5°, 7°
H	1	NS379R	Drill with Stop 12 mm
I	1	NS342R	Tibial Alignment System Handle
J	1	NS343R	Proximal Fixation
K	1	NS364R	Guide for Keel Chisel
L	1	NS344R	Support for Bimalleolar Clamp
M	1	NS425	Tibial Plateau Impactor
N	1	NQ378R	Tibial Trial/Preparation Plateau Holder
	1	TF044	Graphic Template for Tibial Preparations

NS803 – Tibial Preparation Instruments – Top Insert

Index	Qty.	Item No.	Description
A1-11	1 ea.	NS349R-NS359R	Tibial Trial/Preparation Plateau T0, T0+, T1, T1+, T2, T2+, T3, T3+, T4, T4+, T5
B1-2	1 ea.	NS361R-NS362R	Keel Chisel/Trial Keel T0-T2+, T3-T5
C	1	NS360R	PS Holder / Keel Rasp

If your customer has **VEGA System® instruments** and wants to use the All Poly Tibia instruments, the following instruments should be removed for use to avoid confusion. The unneeded additional instruments and tray should be placed to the side.

- Remove NS803 and keep all red marked instruments:
  - NS341R - Holding Rod for Tibial Cutting Guide
  - NS347R - Tibial Stylus
  - NS345R - Bimalleolar Clamp
  - NS847R - Tibial IM Stylus for Orientation Sleeves
  - NS344R - Support Bimalleolar Clamp
  - NQ378R - Tibial Trial/Preparation Plateau Holder
  - NS343R - Tibial Alignment System Proximal Fixation
  - NS342R - Tibial Alignment System Handle
  - NS843R-NS846R - Tibial IM Orientation Sleeve 0°, 3°, 5°, 7°

7. All Poly Tibia Implant Dimensions

Keel length:

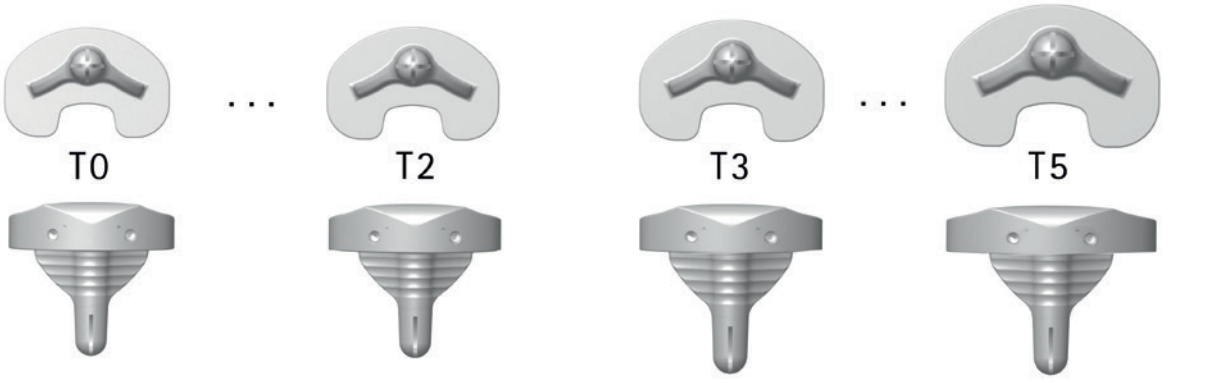


Fig. 17

	VEGA System® All Poly Tibia	Columbus® All Poly Tibia
Shape of the Tibial Fin	Design based on VEGA System metal backed tibia	Design based on VEGA System metal backed tibia
Keel Length/Height	Sizes T0-T2 40 mm; Sizes T3-T5 48 mm	Sizes T0-T2 40 mm; Sizes T3-T5 48 mm
Tibial Stem Diameter	Sizes T0-T2 12 mm; Sizes T3-T5 14 mm	Sizes T0-T2 12 mm; Sizes T3-T5 14 mm
Articulating Surface	Identical to VEGA System PS Standard gliding surfaces	Identical to Columbus CR DD gliding surfaces

Columbus®/VEGA System®

All Poly Tibia Plateau Columbus CR DD and VEGA System PS Knee Arthroplasty Surgical Technique

7. All Poly Tibia Implant Dimensions *(continued)*

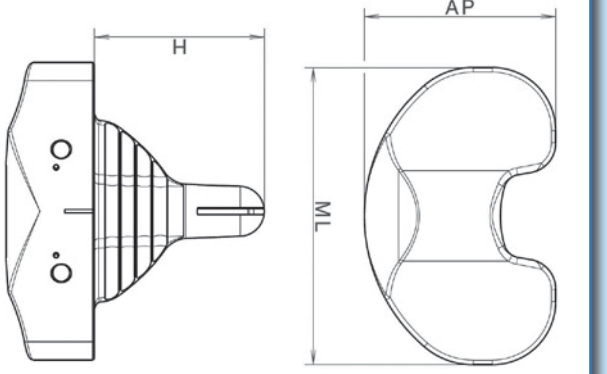


Fig. 18: Dimensions of Columbus® CR DD All Poly Tibia Components

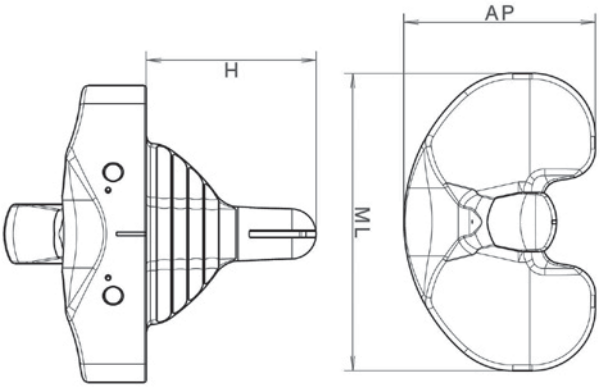


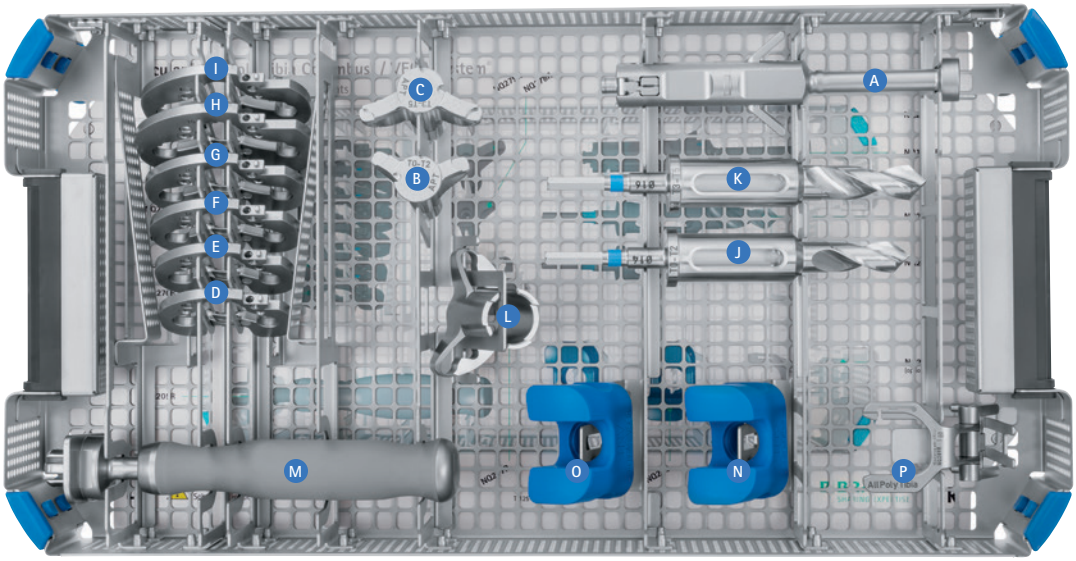
Fig. 19: Dimensions of VEGA System® PS All Poly Tibia Components

The AP/ML dimensions of the All Poly Tibia sizes are identical to the AP/ML dimensions of the Columbus CR DD and the VEGA System PS gliding surfaces.

Dimensions in mm

Size	T0	T1	T2	T3	T4	T5
ML	62	65	70	75	80	85
AP	41	43	45	48	51	56
H	40	40	40	48	48	48

8. All Poly Tibia Instrumentation Set – ST0586



NQ200 – All Poly Tibia Instrumentation Set – ST0586

Index	Qty.	Item No.	Description
A	1	NQ1097R	Columbus® IQ Keel Impactor/Extractor
B	1	NQ278R	All Poly Tibia Broach/Trial Keel T0-T2
C	1	NQ279R	All Poly Tibia Broach/Trial Keel T3-T5
D	1	NQ270R	All Poly Tibia Trial/Preparation Plateau T0
E	1	NQ271R	All Poly Tibia Trial/Preparation Plateau T1
F	1	NQ272R	All Poly Tibia Trial/Preparation Plateau T2
G	1	NQ273R	All Poly Tibia Trial/Preparation Plateau T3
H	1	NQ274R	All Poly Tibia Trial/Preparation Plateau T4
I	1	NQ275R	All Poly Tibia Trial/Preparation Plateau T5
J	1	NQ268R	All Poly Tibia Drill with Stop T0-T2
K	1	NQ269R	All Poly Tibia Drill with Stop T3-T5
L	1	NQ277R	All Poly Tibia Broach/Trial Keel Guide
M	1	NQ205R	All Poly Tibia Impactor
N	1	NQ206	All Poly Tibia Insert Columbus CR DD for NQ205R
O	1	NQ207	All Poly Tibia insert VEGA System PS for NQ205R
P	1	NQ209R	All Poly Tibia Implant Fixation Clamp for NQ205R (optional)

Columbus®/VEGA System®

All Poly Tibia Plateau Columbus CR DD and VEGA System PS Knee Arthroplasty Surgical Technique

9. Order Information

Columbus All Poly Tibia Implants

Item No.	Description
NN1200	All Poly Tibia Columbus CR DD T0 10 mm
NN1201	All Poly Tibia Columbus CR DD T0 12 mm
NN1202	All Poly Tibia Columbus CR DD T0 14 mm
NN1203	All Poly Tibia Columbus CR DD T0 16 mm
NN1210	All Poly Tibia Columbus CR DD T1 10 mm
NN1211	All Poly Tibia Columbus CR DD T1 12 mm
NN1212	All Poly Tibia Columbus CR DD T1 14 mm
NN1213	All Poly Tibia Columbus CR DD T1 16 mm
NN1220	All Poly Tibia Columbus CR DD T2 10 mm
NN1221	All Poly Tibia Columbus CR DD T2 12 mm
NN1222	All Poly Tibia Columbus CR DD T2 14 mm
NN1223	All Poly Tibia Columbus CR DD T2 16 mm
NN1230	All Poly Tibia Columbus CR DD T3 10 mm
NN1231	All Poly Tibia Columbus CR DD T3 12 mm
NN1232	All Poly Tibia Columbus CR DD T3 14 mm
NN1233	All Poly Tibia Columbus CR DD T3 16 mm
NN1240	All Poly Tibia Columbus CR DD T4 10 mm
NN1241	All Poly Tibia Columbus CR DD T4 12 mm
NN1242	All Poly Tibia Columbus CR DD T4 14 mm
NN1243	All Poly Tibia Columbus CR DD T4 16 mm
NN1250	All Poly Tibia Columbus CR DD T5 10 mm
NN1251	All Poly Tibia Columbus CR DD T5 12 mm
NN1252	All Poly Tibia Columbus CR DD T5 14 mm
NN1253	All Poly Tibia Columbus CR DD T5 16 mm

9. Order Information *(continued)*

VEGA System® All Poly Tibia Implants

Item No.	Description
NX300	All Poly Tibia VEGA System PS T0 10 mm
NX301	All Poly Tibia VEGA System PS T0 12 mm
NX302	All Poly Tibia VEGA System PS T0 14 mm
NX303	All Poly Tibia VEGA System PS T0 16 mm
NX310	All Poly Tibia VEGA System PS T1 10 mm
NX311	All Poly Tibia VEGA System PS T1 12 mm
NX312	All Poly Tibia VEGA System PS T1 14 mm
NX313	All Poly Tibia VEGA System PS T1 16 mm
NX320	All Poly Tibia VEGA System PS T2 10 mm
NX321	All Poly Tibia VEGA System PS T2 12 mm
NX322	All Poly Tibia VEGA System PS T2 14 mm
NX323	All Poly Tibia VEGA System PS T2 16 mm
NX330	All Poly Tibia VEGA System PS T3 10 mm
NX331	All Poly Tibia VEGA System PS T3 12 mm
NX332	All Poly Tibia VEGA System PS T3 14 mm
NX333	All Poly Tibia VEGA System PS T3 16 mm
NX340	All Poly Tibia VEGA System PS T4 10 mm
NX341	All Poly Tibia VEGA System PS T4 12 mm
NX342	All Poly Tibia VEGA System PS T4 14 mm
NX343	All Poly Tibia VEGA System PS T4 16 mm
NX350	All Poly Tibia VEGA System PS T5 10 mm
NX351	All Poly Tibia VEGA System PS T5 12 mm
NX352	All Poly Tibia VEGA System PS T5 14 mm
NX353	All Poly Tibia VEGA System PS T5 16 mm

Centralizer

Item No.	Description
NK094	Centralizer 14 mm for Tibia Size T0-T2
NK096	Centralizer 16 mm for Tibia Size T3-T5

Columbus®/VEGA System®

All Poly Tibia Plateau Columbus CR DD and VEGA System PS Knee Arthroplasty Surgical Technique

10. All Poly Tibia Implant Matrix – Columbus CR DD

Columbus CR Femur cemented

Types:	F1	F2N	F2	F3N	F3	F4N	F4
Left CoCr	NN001K	NN800K	NN002K	NN801K	NN003K	NN899K	NN004K
Left AS	NN001Z	NN800Z	NN002Z	NN801Z	NN003Z	NN899Z	NN004Z
Right CoCr	NN011K	NN810K	NN012K	NN811K	NN013K	NN909K	NN014K
Right AS	NN011Z	NN810Z	NN012Z	NN811Z	NN013Z	NN909Z	NN014Z

Columbus CR Femur cemented *(continued)*

Types:	F5N	F5	F6N	F6	F7	F8
Left CoCr	NN900K	NN005K	NN901K	NN006K	NN007K	NN008K
Left AS	NN900Z	NN005Z	NN901Z	NN006Z	NN007Z	NN008Z
Right CoCr	NN910K	NN015K	NN911K	NN016K	NN017K	NN018K
Right AS	NN910Z	NN015Z	NN911Z	NN016Z	NN017Z	NN018Z

Columbus CR Femur cementless

Types:	F1	F2N	F2	F3N	F3	F4N	F4
Left CoCr	NN021K	NN820K	NN022K	NN821K	NN023K	NN919K	NN024K
Right CoCr	NN031K	NN830K	NN032K	NN831K	NN033K	NN929K	NN034K

Columbus CR Femur cementless *(continued)*

Types:	F5N	F5	F6N	F6	F7	F8
Left CoCr	NN920K	NN025K	NN921K	NN026K	NN027K	NN028K
Right CoCr	NN930K	NN035K	NN931K	NN036K	NN037K	NN038K

All Poly Tibia Columbus CR DD

Types:	T0	T1	T2	T3	T4	T5
10 mm	NN1200	NN1210	NN1220	NN1230	NN1240	NN1250
12 mm	NN1201	NN1211	NN1221	NN1231	NN1241	NN1251
14 mm	NN1202	NN1212	NN1222	NN1232	NN1242	NN1252
16 mm	NN1203	NN1213	NN1223	NN1233	NN1243	NN1253

Centralizer

Types:	
T0–T2 14 mm	NK094
T3–T5 16 mm	NK096

Patella 3-peg

Types:	P1	P2	P3	P4	P5
F1–F8	NX041	NX042	NX043	NX044	NX045

All Poly Tibia Implant Matrix – VEGA System® PS

VEGA System PS Femur cemented

Types:	F1	F2N	F2	F3N	F3	F4N	F4
Left AS	NX004Z	NX005Z	NX006Z	NX007Z	NX008Z	NX009Z	NX010Z
Right AS	NX024Z	NX025Z	NX026Z	NX027Z	NX028Z	NX029Z	NX030Z

VEGA System PS Femur cemented *(continued)*

Types:	F5N	F5	F6N	F6	F7	F8
Left AS	NX011Z	NX012Z	NX013Z	NX014Z	NX016Z	NX018Z
Right AS	NX031Z	NX032Z	NX033Z	NX034Z	NX036Z	NX038Z

All Poly Tibia VEGA System PS

Types:	T0	T1	T2	T3	T4	T5
10 mm	NX300	NX310	NX320	NX330	NX340	NX350
12 mm	NX301	NX311	NX321	NX331	NX341	NX351
14 mm	NX302	NX312	NX322	NX332	NX342	NX352
16 mm	NX303	NX313	NX323	NX333	NX343	NX353

Centralizer

Types:	
T0–T2 14 mm	NK094
T3–T5 16 mm	NK096

Patella 3-peg

Types:	P1	P2	P3	P4	P5
F1–F8	NX041	NX042	NX043	NX044	NX045

Aesculap Implant Systems, LLC | 3773 Corporate Parkway | Center Valley, PA | 18034
Phone 866-229-3002 | Fax 610-984-9096 | www.aesculapimplantsystems.com

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