Surgical Technique

smith&nephew

POLARCUP®

Dual Mobility System

POLARCUP◇
Dual Mobility System

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Nota Bene

The technique description herein is made available to the healthcare professional to illustrate the authors suggested treatment for the uncomplicated procedure. In the final analysis, the preferred treatment is that which addresses the needs of the specific patient.

The following technique is for informational and educational purposes only. It is not intended to serve as medical advice. It is the responsibility of treating physicians to determine and utilize the appropriate products and techniques according to their own clinical judgment for each of their patients. For more information on the POLARCUP, including its indications for use, contraindications, and product safety information, please refer to the product's label and the Instructions for Use packaged with the product.

Prior to performing this technique, please consult the Instructions for Use documentation provided with each device for additional health and safety information, including indications, contraindications, warnings and precautions.
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Preface

The POLARCUP® components based on Professor Bousquet's original design, together with the POLARSTEM® product range, offer an integrated system providing a three-component articulation.

Articulations

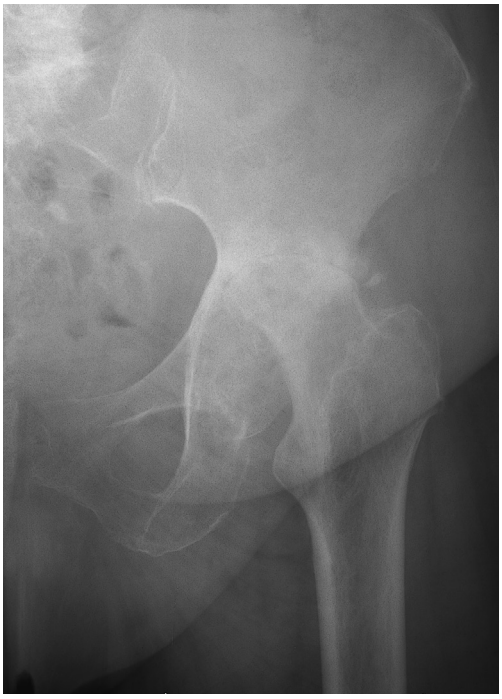
1 Insert/Shell Articulation
2 Ball Head/Insert Articulation
3 Neck/Insert Articulation

Although considered a curiosity at first, the principle of dual mobility has demonstrated proven advantages on the market for more than 40 years.

Both POLARCUP and POLARSTEM are the testament of the expertise and practice of the designer surgeons GROUPE GILES.

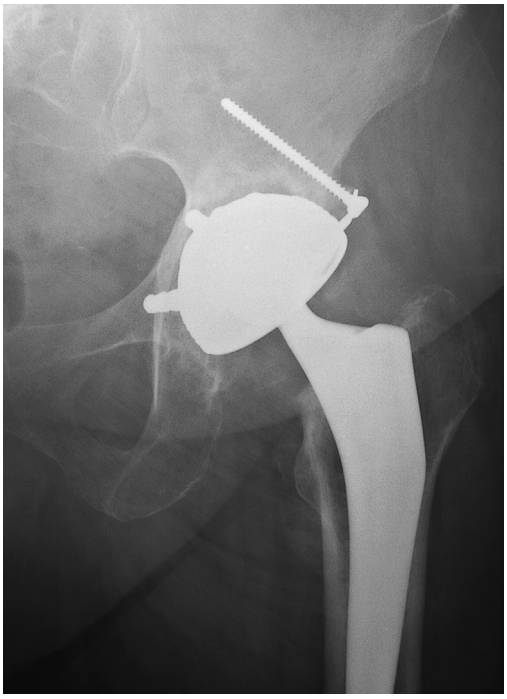
Case Study

Preoperative



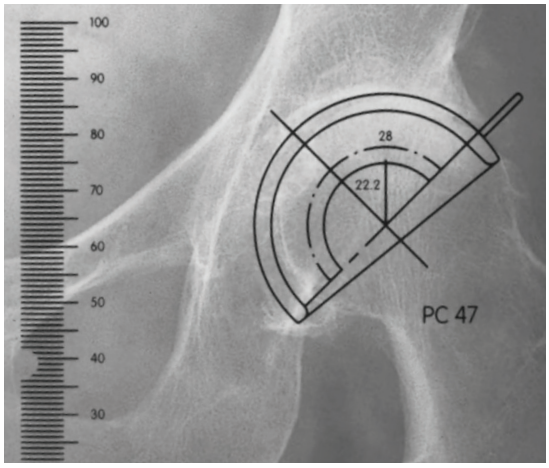
70 year old female patient with hip dysplasia

Postoperative



POLARCUP® with two pegs and one screw

Preoperative Planning



Use X-ray templates (Scale 1.15, Lit. no. 1571) or digital X-ray templates for preoperative planning to determine:

- the intended size of the implant
- the optimal shell position

Please note

Determining the precise size of a shell preoperatively using an X-ray template is only possible to a limited extent.

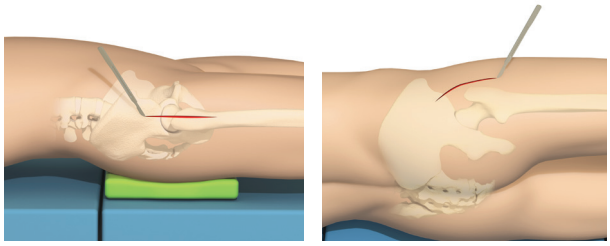
The correct shell size is ultimately determined using the definitive reamer size or the suitable size of trial shell intraoperatively.

Please contact your local Smith & Nephew sales representative or distributor to order X-ray templates or in case of any other product related question.

Precautions regarding Surgical Technique

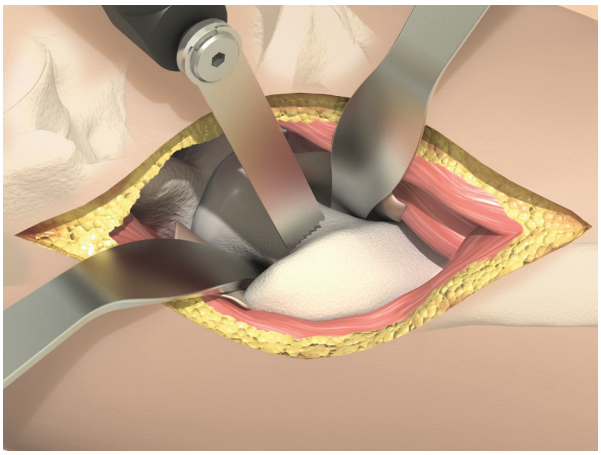
- Titanium plasma (Ti) or titanium plasma/hydroxyapatite (Ti/HA) implants must not be implanted with cement.
- If a ceramic head breaks, the Polyethylene (PE or XLPE) insert also has to be replaced.

Positioning and access



Access to the operative site is based on previously recorded patient data or the preference of the operating surgeon.

Removing the head of the femur

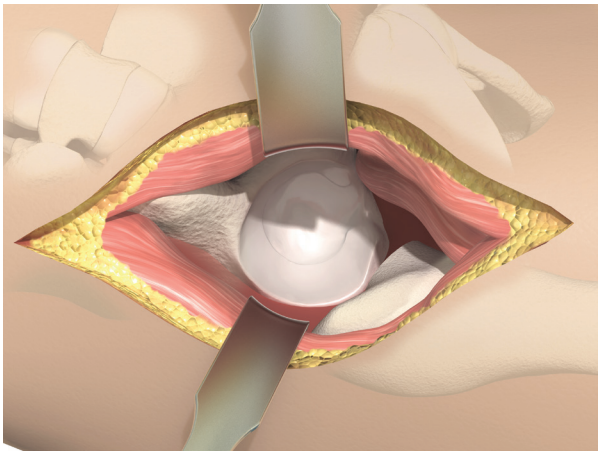


Osteotomy of the head of the femur is based on preoperative planning for the relevant stem system.

Important note

Avoid stems having necks with a roughened surface finish and/or stems with a geometric feature near the stem cone that could impinge with the insert, such as openings, or abrupt surface transitions. Ball heads with protruding collars (sizes 28 XL (+12) and 28 XXL (+16)) should also be avoided. These factors may significantly increase the risk of damaging the PE or XLPE insert. 28 XL (+12) heads with a sleeve or 22L (+8) heads must not be used with the POLARCUP®.

Preparing the acetabulum



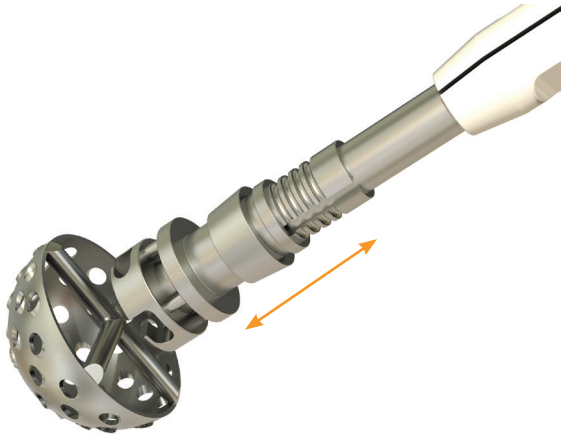
Open and if necessary complete resection of the joint capsule.

The acetabular labrum, transverse ligament and ligamentum teres are excised revealing an unobstructed view of the complete acetabulum with sufficient space for surgical instrumentation.

Remove osteophytes from the rim of the acetabulum and the acetabular fossa.

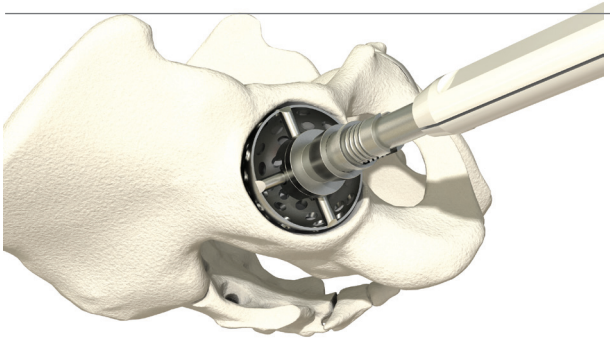
Clean the acetabular cavity and ensure haemostasis is achieved.

Assembling the reamer



Press the reamer down onto the drive shaft reamer - AO until it clicks into place (snap mechanism).

Reaming the acetabulum



Sequentially ream the acetabulum with hemispherical reamers horizontally in relation to the patients position. Start with the smallest reamer size to reach to acetabular floor.

Continue reaming increasing in 2mm increments, taking into consideration the final anteversion and inclination until the cartilage is completely removed and the subchondral bone is bleeding evenly.

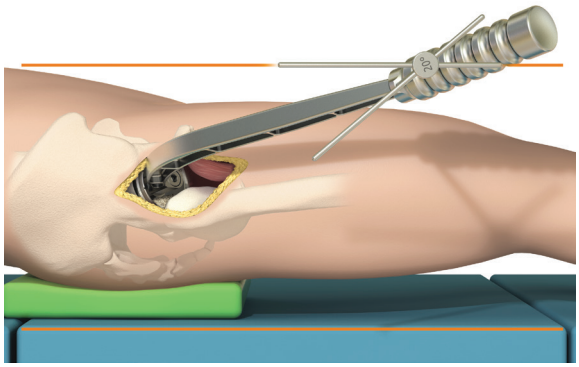
Instrument Tip
Gently rock the drive shaft reamer - AO back and forth approximately 5° for last size used only to ensure rim is accurate for the desired press-fit.

Important note

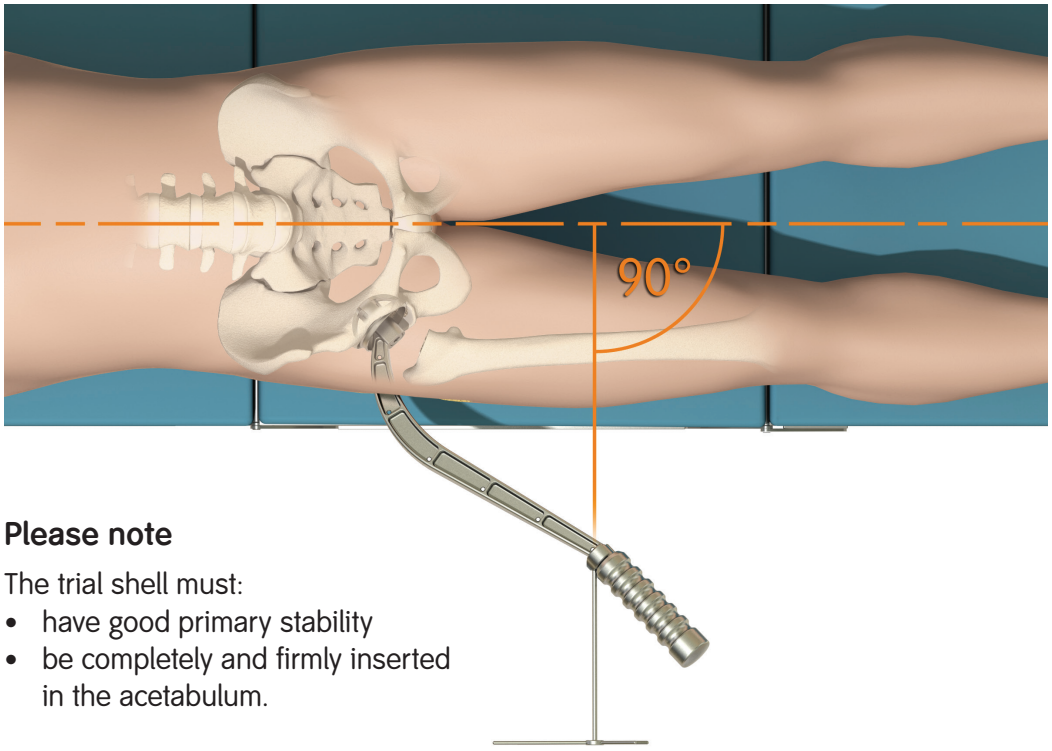
- For Ti or Ti/HA cementless implants ream line to line – e.g. size 51 mm reamer = size 51 mm implant.
- For Stainless Steel cemented implants ream at least 2 sizes larger than the implant size to allow for the cement mantle – e.g. size 55 mm reamer = size 51 mm implant.
- Avoid excessive reaming on the periphery to prevent excessive bone loss particularly on the anterior and posterior pillars of the acetabulum.
- In the occurrence of a head fracture use a reamer which is the same as the femoral head size or 2mm smaller, then ream further down to the acetabular floor.
- The bone dust in the final reamer can be used to fill the acetabulum if required.

Determining the implant size with the trial shell

Place the trial shell which is the same size as the last used reamer onto the trial shell handle nav (21000618/75023343), then fix the trial shell into place by tightening and adjusting with the pen-ball screwdriver (21000410/75000647). It is important to remember that the two collet holes on the base of the trial shell are different sizes and align with the trial shell handle nav.



Impact the trial shell into the reamed acetabulum, placing the 6° cover in a superior posterior position. The shell inclination must not be below 40° or above 50° and the anteversion must not be below 10° or above 20°.



Please note

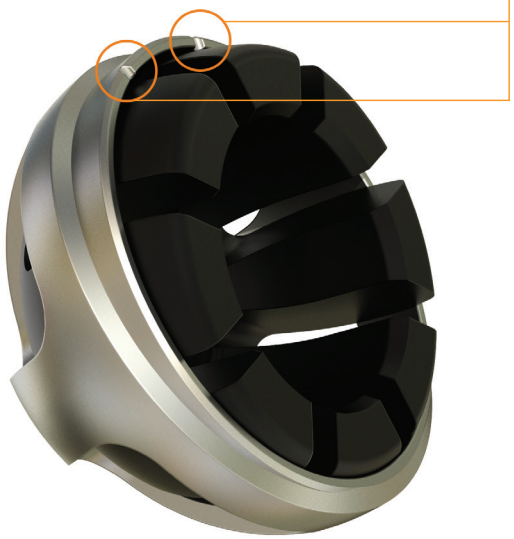
The trial shell must:

- have good primary stability
- be completely and firmly inserted in the acetabulum.

If the initial position is unstable, a larger shell diameter can be selected. If millimeter reamers are available, the next larger reamer size will allow a press fit of 1.7 mm or without further reaming, 2.7mm. The POLARCUP® has an equitorial press fit of 0.7 mm (53 mm = 53.7 mm).

Trial shell with insert

When using a POLARCUP® with flanges and pegs, the two marks on the trial shell indicate the position of the flange on the final implant.



After the trial shell handle nav is removed, a corresponding slotted trial insert (51 mm trial shell = 51 mm trial insert) is inserted into the trial shell to test the soft tissue tension and leg length using trial heads.

Please note

- The flanges can be broken off and no additional screws are required.
- If you are using the pegs please remove plugs before inserting into the acetabulum.
- Please refer to page 15 for all options with the POLARCUP with flanges and pegs.
- Trial heads should only be used with trial inserts, not the definitive insert.
- Head sizes 22S (0mm), 22M (+4mm), 28XS (-3mm), 28S (0mm), 28M (+4mm) and 28L (+8mm) can be used with POLARCUP.

Preparation of the acetabulum and shell positioning are the same for all versions of the POLARCUP.

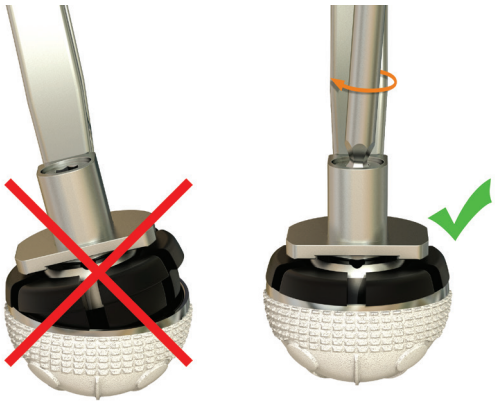
Important note

Please refer to Lit. no. 02963 for disassembly and cleaning instructions for the trial shell handle nav (75023343/21000618).

Inserting a non-cemented POLARCUP°

Standard Shell Positioner

Shell Impactor Curved



Screw the Ø 22mm (21000412/75000649) or 28mm (21000413/75000650) handle adaptor trial insert corresponding to the internal diameter of the trial insert onto the introducer (standard shell positioner - 21000671/75023819 or shell impactor curved - 21000411/75000648) and fit into the required trial insert.

Important note

Please refer to Lit. no. 21907 for disassembly cleaning and instructions for the Shell Impactor Curved (75000648/21000411).

Please note

NAV trial insert is preferred but you can also use slotted trial inserts. NAV inserts only work in combination with the 22mm handle adaptor trial insert.

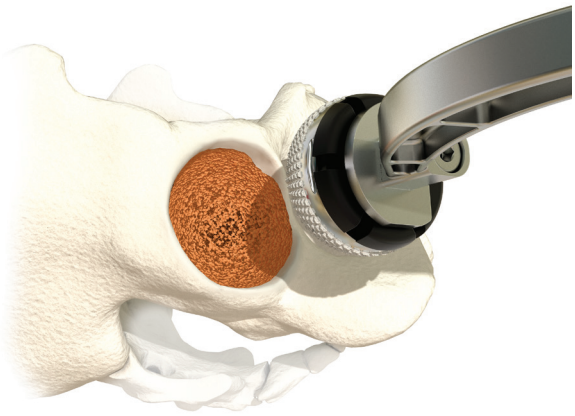
Insert the introducer with the corresponding handle adaptor and trial insert into the shell and fix by tightening and adjusting the screw (standard shell positioner with pen-ball screwdriver- 21000410/75000647 or shell impactor curved with screwdriver 3.5 21000670/75023818).

Ensure that the trial insert is not tilted when placing or fixing onto the shell otherwise optimal traction will not be achieved between the instruments.

Important note

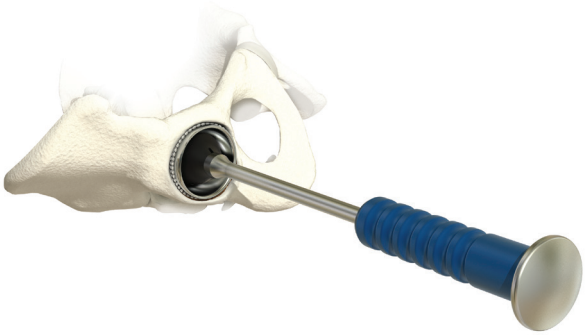
This surgical step is not final impaction.

Positioning a non-cemented POLARCUP◇



Position the shell ensuring that the 6° cover is in a superior posterior position outside of the acetabulum to avoid dislocation. Impact the shell into the acetabulum for fixation then unscrew and remove the introducer.

Impacting a non-cemented POLARCUP

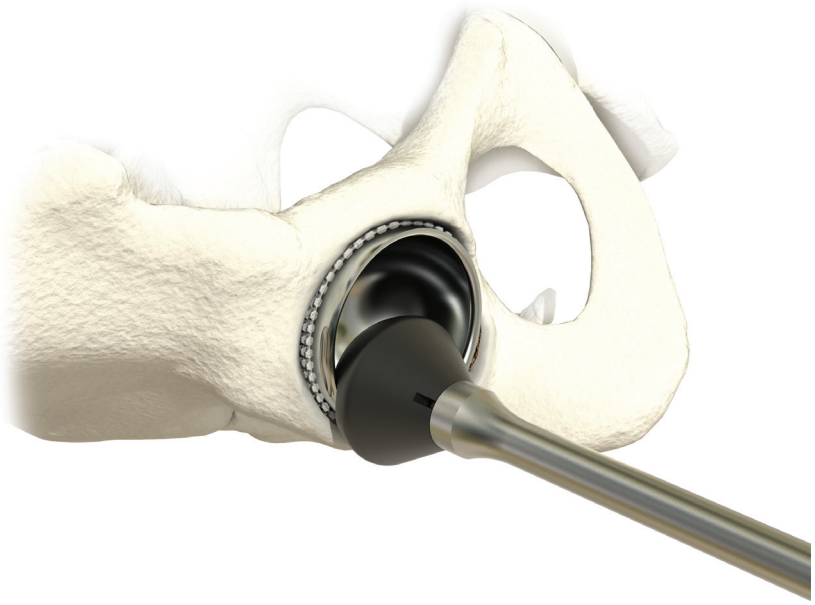


For final impaction, fit the impactor part for handle (21000621/75023346) onto the impactor handle (21000620/75023345) and position it in the centre of the shell. Then impact with a hammer.

Also use the impactor handle with the impactor part for handle (21000621/75023346) to correct the shell position if required.

Please note

The shell inclincation must not be below 40° or above 50° and the anteversion must not be below 10° or above 20°.



Non-cemented POLARCUP◇ with flanges and pegs

Flanges broken off using the flange cutter

Flanges bent over the acetabular rim without cortical screws

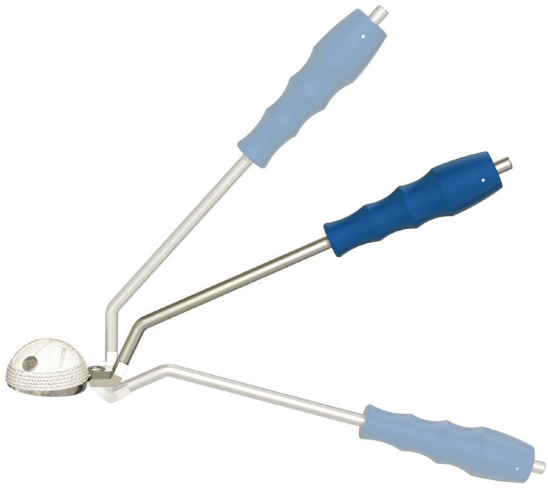
Flanges bent over the acetabular rim fixed with 1 or 2 cortical screws

Flanges bent over the acetabulum fixed with 1 or 2 cortical screws and 2 impacted anchoring pegs

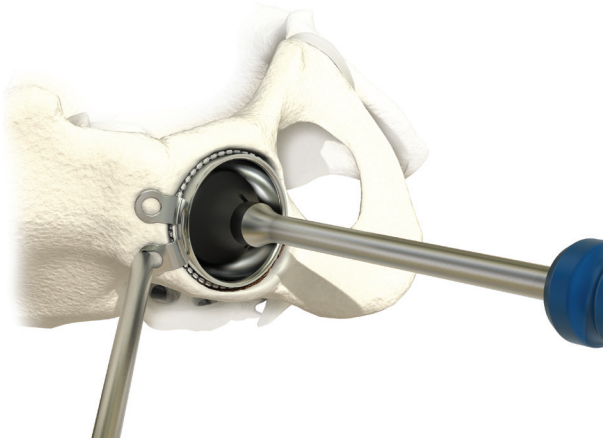
The Ti/HA POLARCUP with flanges and Pegs can be used in four different ways:

- As a standard press fit shell: break off the flanges (preoperative or intraoperatively).
- Bend around the upper edge of the acetabulum.
- For additional fixation: screw one or two screws through the flanges.
- For additional stabilization: impact two anchoring pegs (always use in pairs) and screw one or two screws through the flanges, at least one screw needs to be used with two anchoring pegs to maintain a tripod fixation.

Cutting off or bending the flanges



The flanges can be broken off with the flange cutter by inserting each flange into the end of the cutter and then bending up and down three or four times. The flange will break off automatically. A decision can be made to break the flanges off intraoperatively once it has been ensured that good primary stability is guaranteed using the trial shell.



Break off the flanges *in situ* with the flange cutter or bend them around the upper edge of the acetabulum, using a small metal impactor. Use the impactor handle with the impactor part for handle (21000620/75023345) and (21000621/75023346) to ensure a secure hold, preventing shell misplacement and micro movement which could have an adverse effect on primary stability.

Please note

For the right hip, the right flange should be in a twelve o'clock position. The shell is seated correctly when the flanges touch the upper edge of the acetabulum and the 6° cover is positioned correctly outside of the acetabulum.

Intraoperative fixation with screws

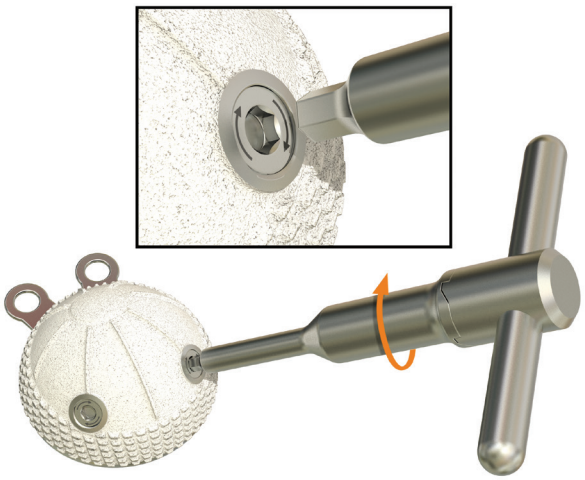
Bend the flanges around the edge of the acetabulum with a small metal impactor. While doing this make sure that the shell is properly kept in its desired final position.

Drill holes through the flanges with a 3.2mm twist drill (21000551/75017135). The screw length can be determined with the depth gauge (21000554/75017138). Insert the 4.5mm cortical screws into the edge of the acetabulum through the flange holes in a upwards direction, this will increase shell stability.

Important note

- Screws must only be inserted through flanges.
- Anchoring pegs cannot be replaced with screws.
- You can use one or two screws.

Intraoperative fixation with pegs and screws



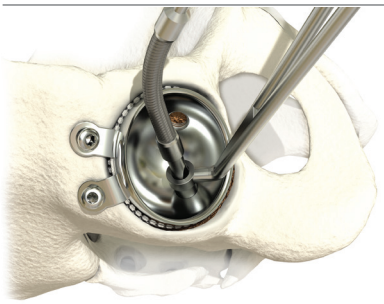
If the trial shell is not sufficiently positioned, screws and pegs can be used to support the primary stability of the implant.

Pegs: Release **the plugs by turning the T wrench in the direction indicated on the plug cover**. Then insert the shell in the acetabulum as described in the surgical technique above.

Important note

- Pegs are not pre-mounted onto the shell or packaged with the Ti/HA flanged shell, they need to be ordered separately.
- After removing plug covers anchoring pegs must be used.
- Plug covers cannot be reused after removal.
- Two anchoring pegs must always be used in combination with at least one screw to ensure a three point fixation and the prevention of tilting.

Intraoperative fixation with pegs and screws



Pre-drill the first hole with the flexible 6mm twist drill (21000552/75017136) using the drill socket (21000546/75017130). Place the first peg into the self-retaining peg impactor (21000674/75100195) and impact into the ischium or the pubis with a hammer.

The ends of the impactor (21000674/75100195) are shaped to match the hole in the peg and seal it after it has been fully inserted.

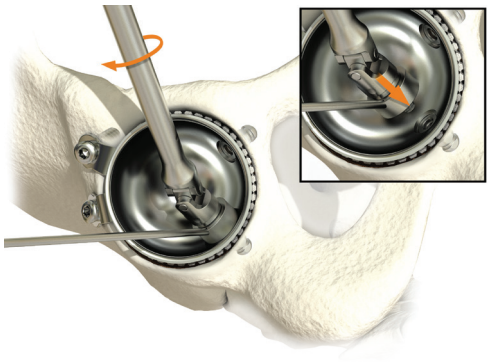
Then make the second hole and repeat the surgical technique described above.

As described above complete the fixation by bending the flanges around the upper edge of the acetabulum and inserting at least one screw through the flanges.

Important note

- Anchoring pegs must be hammered into the plug holes not screwed in.
- Two anchoring pegs must always be used in combination with at least one screw to ensure a three point fixation and the prevention of tilting.
- It is advisable to finish impacting the first peg before drilling the hole for the second peg since the position of the shell may change slightly after impacting.
- It is also advisable to start impacting both pegs before inserting the screws through the flanges.
- Two anchoring pegs are supplied in each pack.

If optimal fixation cannot be achieved due to poor bone quality or peripherial bone loss, it may be necessary to select a different shell size from originally planned. With poor bone quality, peripheral or pronounced bone loss using the next larger size may improve primary stability. This must be decided intraoperatively.



Removing the pegs

To remove the pegs, screw the peg extractor (21000625/75023350) into the thread of the peg and undo and remove by untightening.

Size compatability

REDAPT◇ Fully Porous Shell	POLARCUP Cemented
Size	**Size**
48mm*	NA
50mm*	NA
52mm*	NA
54mm*	NA
56mm	43mm
58mm	45mm
60mm	47mm
62mm	49mm
64mm	51mm
66mm	53mm
68mm	53mm
70mm	57mm
72mm	57mm
74mm	57mm
76mm	63mm
78mm	63mm
80mm	63mm

*These REDAPT Fully Porous Shell sizes can't be used with POLARCUP

Inserting a cemented POLARCUP◇

Prepare and ream the acetabulum as previously described if implanting directly into the acetabulum. The last reamer used must be at least two sizes larger than the implant size (e.g. size 55mm reamer = size 51mm implant) which produces a layer of cement of approximately 2mm all round.

The POLARCUP can be cemented directly into the acetabulum, a REDAPT Fully Porous Shell or a previously implanted reinforcement ring.

Important note

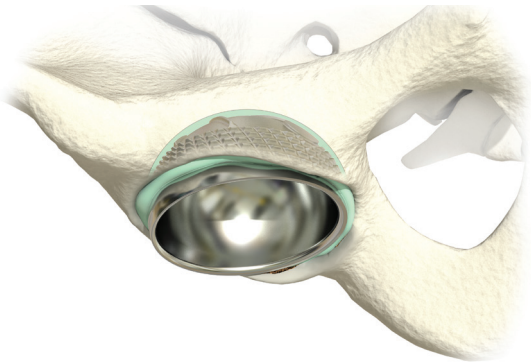
- When using a reinforcement ring its respective internal dimensions determine the combination options with POLARCUP.
- When using in combination with a REDAPT Fully Porous Shell please refer to the REDAPT Fully Porous Shell surgical technique (03109 71381752) for REDAPT Fully Porous Shell implantation technique and size compatibility matrix.

Surgical tip

Position the POLARCUP in the REDAPT Fully Porous Shell so that early impingement does not occur. This may require lateralization or angulation.

Important note for use with ECHELON◇

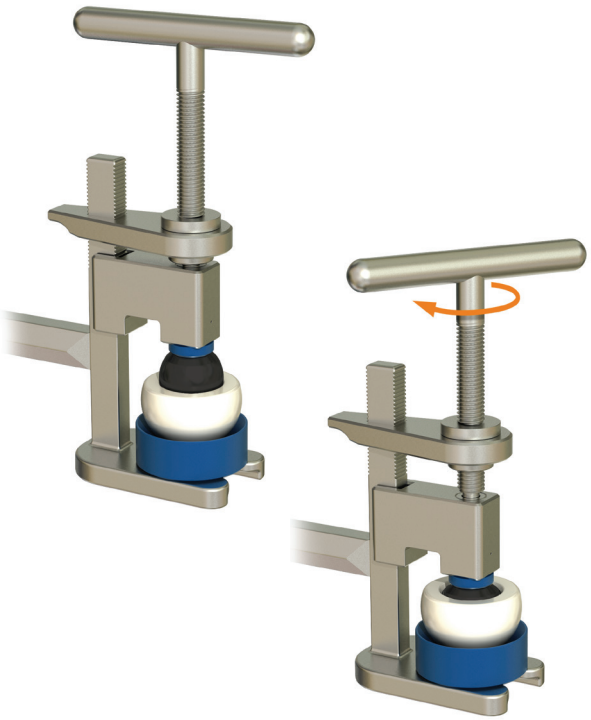
Either a lateralization of the POLARCUP Shell by 3mm from the REDAPT Fully Porous Shell or a reduction of the anteversion mismatch to 2.2° (instead of 10°) is needed to reach full range of motion when used in combination with the ECHELON femoral stem.



Applying the cement

The acetabulum must be washed out and dried before applying the cement. Follow the manufacturer's instructions for preparing, applying and curing the cement. The cemented POLARCUP should be placed and pressed in by hand. As described previously the impactor handle (21000620/75023345) with the impactor part for handle (21000621/75023346) can be used to correct shell position. Extreme caution must be taken to avoid damaging the cement.

Inserting the PE or XLPE insert



The PE or XLPE insert corresponding to the shell size (51 mm shell = 51 mm insert) is combined with the ball head by using the head/liner inserter (21000505/75017089).

Place the PE or XLPE insert on the plastic holder and put the ball head (OXINIUM®, ceramic or metal) on the hole of the insert. Push the top part of the instrument downwards until the head and PE or XLPE insert are enclosed.

Then turn the T handle until the ball head is completely locked together with the PE or XLPE insert and can move freely.

Please note
A quiet hissing sound of escaping air is heard.

It is advisable to position the upper part of the instrument as low as possible.

The following head sizes can be used with POLARCUP® in combination with the corresponding PE or XLPE insert:
22 S (+0mm), 22 M (+4mm)
28 XS (-3mm), 28 S (+0mm)
28 M (+4mm), 28 L (+8mm)

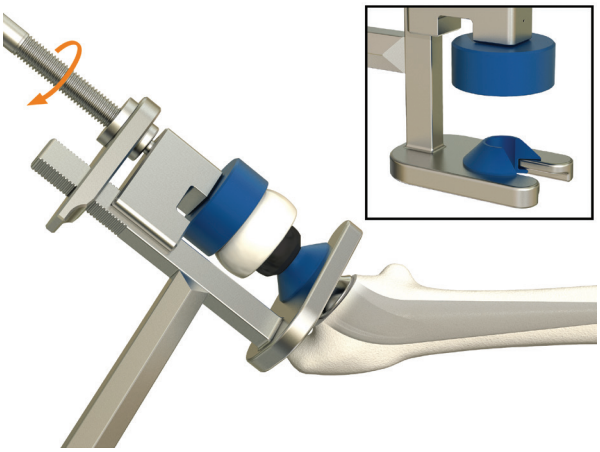
Important note

Please refer to Lit. no. 21627 for disassembly and cleaning instructions for the head/liner inserter (75017089/21000505).

Please note

If required:

- You can use the Slotted Trial Insert and Trial Femoral head in the definitive implanted POLARCUP.
- You cannot use the Global Femoral Trial Heads or any other Femoral Trial Heads in combination with the definitive PE or XLPE Insert.



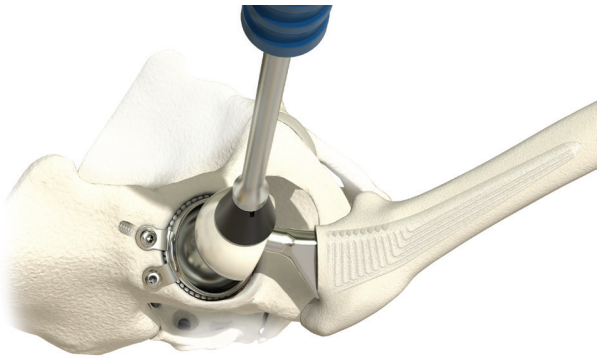
If the insert and the ball head have to be adjusted *in situ* (e.g. during revision of a monobloc stem) replace the plastic part underneath the head/liner inserter with the Neck Adaptor for Monobloc Stem (21000503/75017087). Then place the instrument on the neck of the monobloc stem, put the PE or XLPE insert onto the ball head and turn the T-handle until the head is completely locked into the PE or XLPE insert and moves freely.

Please note

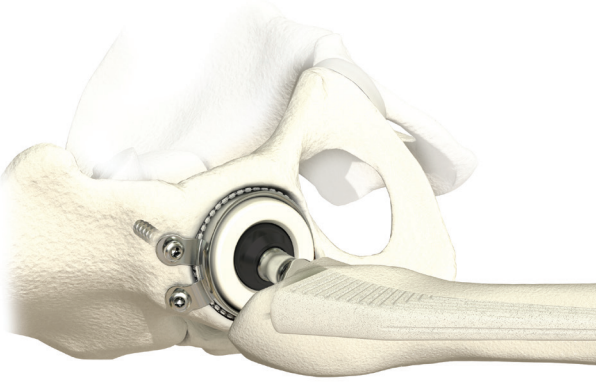
In rare cases it may be difficult to lock the insert onto the monobloc stem *in situ*.

It may then be helpful to place the PE or XLPE insert in hot sterile water for several minutes.

Inserting the PE or XLPE insert



Fit the PE or XLPE insert/ball head combination onto the stem cone manually and hammer in using the head impactor consisting of the impactor handle (21000620/75023345) and the reducer part for impactor (21000619/75023344). Then insert the PE or XLPE insert/ball head combination into the shell.



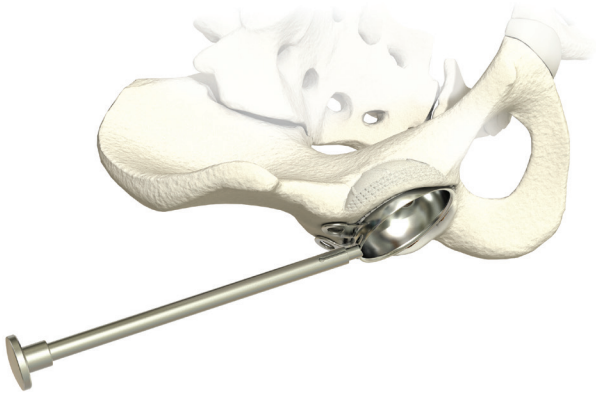
Important note

Ensure that no soft tissue affects the contact between the insert and the shell.

Avoid stems having necks with a roughened surface finish and/or stems with extraction holes, openings, or abrupt surface transitions near the stem cone. Ball heads with protruding collars (sizes 28 XL (+12) and 28 XXL (+16)) should also be avoided. These factors may significantly increase the risk of damaging the PE or XLPE insert. 28 XL (+12) heads with a sleeve or 22L (+8) heads must not be used with the POLARCUP®.

Removing a PE or XLPE Insert

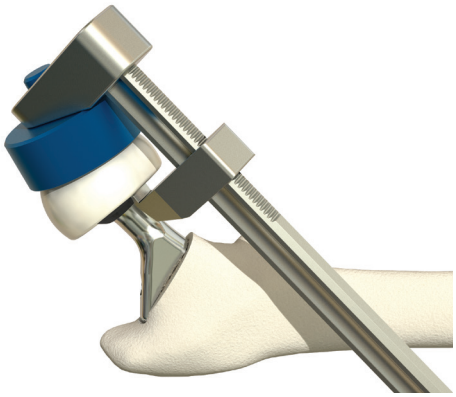
Removing the POLARCUP



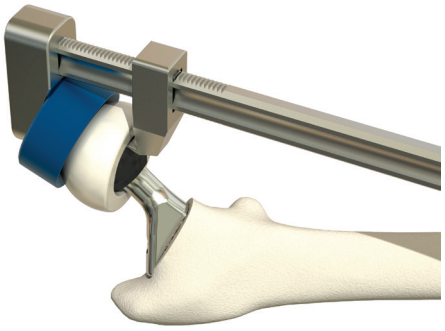
To remove the shell, dislocate the mobile PE or XLPE insert (with pressed in ball head).

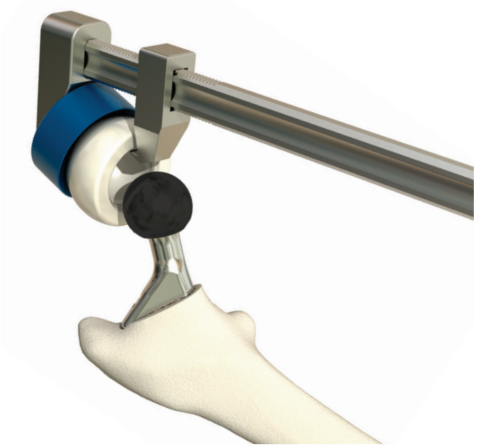
If the implant is not yet completely osteointegrated, knock the shell out using an osteotome inserted into the slot on the 6° cover. The shell can then be removed manually.

If the shell has been completely osteointegrated, separate it from the acetabulum with an osteotome and/or other suitable piece of equipment and remove manually.



Fit the insert extractor over the PE or XLPE insert.





Tighten ensuring the hook is secure under the PE or XLPE insert and the femoral head is secure on the stem. Leaver the extractor upwards to remove the PE or XLPE insert.

Please note

The insert extractor can be used with both monobloc and modular stems.

Important note

Please refer to Lit. no. 21906 for disassembly and cleaning instructions for the PE-Insert Extractor (75017083/21000499).

Postoperative Treatment

Postoperative follow up depends on what type of prosthesis have been implanted, cementless or cemented.

As a general rule the leg should be capable of weight-bearing after a short time. Full or partial weight-bearing with two crutches during the first six weeks is permissible if follow up is satisfactory.

Postoperative care and the duration of treatment will depend on the patient's condition and are determined by the surgeon.

Incidents related to any Smith & Nephew medical device should be reported to Smith & Nephew (complaints@smith-nephew.com) and to the competent authority of the country in which the user and/or patient is established.

Sterilization

Implants

All implants described in connection with this surgical technique are sterile as supplied by the manufacturer. The implants should not be re-sterilized.

Instruments

Surgical instruments and trials are not sterile when they are delivered. They are to be cleaned, inspected and sterilized before use as described in the guide “Processing (cleaning, disinfection and sterilization) of instruments from Smith & Nephew Orthopaedics AG” (Lit. No. 03389). Sterilization must also be conducted in accordance with the legal regulations and guidelines applicable in the country of use.

The following instruments have separate disassembling and cleaning instructions:

SAP no.	Item no.	Document name	Lit. no.
75023343	21000618	Disassembly and cleaning instruction - Handle to Trial Shell NAV	02963
75017089	21000505	Disassembly and cleaning instruction - Insert-Ball Head Press	21627
75017083	21000499	Disassembly and cleaning instruction - Extractor PE-Insert	21906
75000648	21000411	Disassembly and cleaning instruction - Shell Impactor curved Navigation	21907

Implants

Shells

Shell Ti-Plasma
(Made of Stainless Steel
M30NW w. Ti-Plasma coating)

SAP No.	Size Ø
75100406	43
75100407	45
75100408	47
75100409	49
75100410	51
75100411	53
75100412	55
75100413	57
75100414	59
75100415	61
75100416	63
75100417	65
75100418	67

Shell Ti-Plasma/HA with flanges
(Made of Stainless Steel
M30NW w. Ti-Plasma/HA coating)

SAP no.	Size Ø
75100436	43
75100437	45
75100438	47
75100439	49
75100440	51
75100441	53
75100442	55
75100443	57
75100444	59
75100445	61
75100446	63
75100447	65
75100448	67

Shell Cemented
(Made of Stainless Steel M30NW)

SAP No.	Size Ø
75100451	43
75100452	45
75100453	47
75100454	49
75100455	51
75100456	53
75100457	55
75100458	57
75100459	59
75100460	61
75100461	63

REDAPT® Fully Porous Shell

SAP no.	Size Ø
71354233	56mm
71354234	58mm
71354235	60mm
71354236	62mm
71354237	64mm
71354238	66mm
71354239	68mm
71354241	70mm
71354242	72mm
71354243	74mm
71354244	76mm
71354245	78mm
71354246	80mm

Implants

Inserts

XLPE insert Ø 22mm
(Made of X-linked UHMWPE)

SAP no.	Item no.	Ø	Size
75018942	11000588	22mm	43
75018943	11000589	22mm	45
75018944	11000590	22mm	47
75018945	11000591	22mm	49
75018946	11000592	22mm	51
75018947	11000593	22mm	53
75018948	11000594	22mm	55
75018949	11000595	22mm	57
75018950	11000596	22mm	59
75018951	11000597	22mm	61
75018952	11000598	22mm	63
75018953	11000599	22mm	65
75018954	11000600	22mm	67

XLPE insert Ø 28mm
(Made of X-linked UHMWPE)

SAP no.	Item no.	Ø	Size
75018955	11000601	28mm	47
75018956	11000602	28mm	49
75018957	11000603	28mm	51
75018958	11000604	28mm	53
75018959	11000605	28mm	55
75018960	11000606	28mm	57
75018961	11000607	28mm	59
75018962	11000608	28mm	61
75018963	11000609	28mm	63
75018964	11000610	28mm	65
75018965	11000611	28mm	67

PE insert Ø 22 and 28mm
(Made of UHMWPE)

SAP no.	Item no.	Ø	Size
75017207	11000515	22mm	43
75017208	11000516	22mm	45
75017220	11000528	28mm	47
75017221	11000529	28mm	49
75017222	11000530	28mm	51
75017223	11000531	28mm	53
75017224	11000532	28mm	55
75017225	11000533	28mm	57
75017226	11000534	28mm	59
75017227	11000535	28mm	61
75017228	11000536	28mm	63
75017229	11000537	28mm	65
75017230	11000538	28mm	67

Please note
Shell size; e.g. 51mm corresponds with same Insert size; e.g. 51mm

Implants

Anchoring pegs (pack of two) (Made of Stainless Steel 316LVM)

SAP no.	Item no.
75017231	11000539

Cortical screws (Made of Stainless Steel 316LVM)

SAP no.	Item no.	Ø	Length
75017232	11000540	4.5mm	40mm
75017233	11000541	4.5mm	44mm
75017234	11000542	4.5mm	48mm
75017235	11000543	4.5mm	52mm
75017236	11000544	4.5mm	55mm
75017237	11000545	4.5mm	60mm

Demo implants

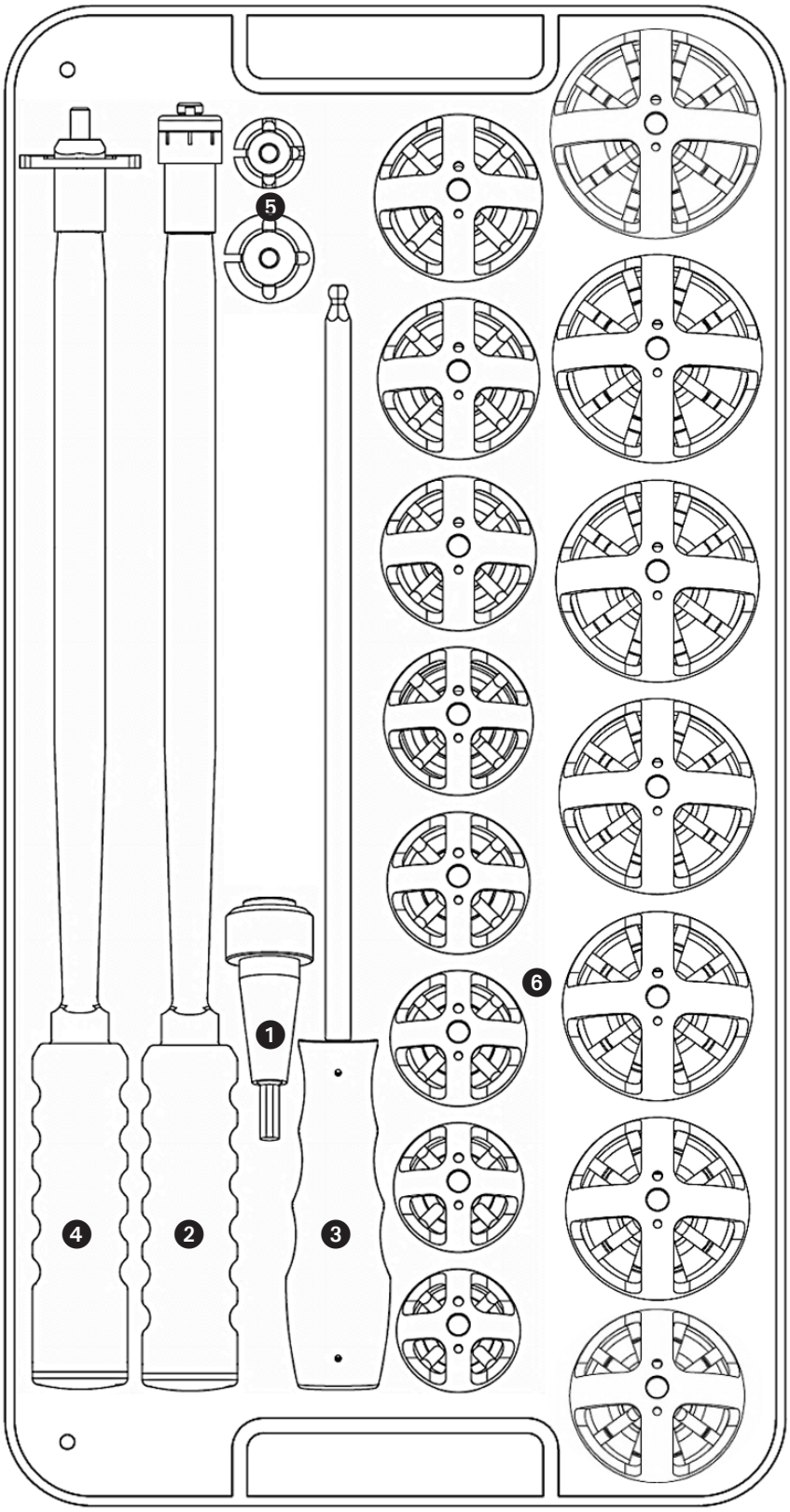
SAP no.	Designation	Size/Ø
75100661	Ti Plasma Shell	51
75100663	Ti/HA with flanges Shell	51
75100664	Cemented Shell	51
75017255	PE insert	51/28
75017256	Anchoring pegs	(2)
75017257	Cortical screw	4.5 x 48

POLARCUP◇ Standard 22 / 28mm

Basic Case I

Case set SAP/Item no.
28mm: 0940321/75210205
22mm: 0940322/75210215

	SAP no.	Item no.	Designation	Size/Ø
	75007661	990019	Easy Tray Lid Plastic	
	75100514	75100514	Basic Case I	
❶	75003240	130273	Adapter	
❷	75023343	21000618	Trial Shell Handle nav	
❸	75000647	21000410	Pen-ball Screwdriver	
❹	75023819	21000671	Shell Positioner	
❺	75000650	21000413	Handle Adaptor Trial Insert	28mm
❺	75000649	21000412	Handle Adaptor Trial Insert	22mm
❻	75017090	21000506	Trial shell	43
	75017091	21000507	Trial shell	45
	75017092	21000508	Trial shell	47
	75017093	21000509	Trial shell	49
	75017094	21000510	Trial shell	51
	75017095	21000511	Trial shell	53
	75017096	21000512	Trial shell	55
	75017097	21000513	Trial shell	57
	75017098	21000514	Trial shell	59
	75017099	21000515	Trial shell	61
	75017100	21000516	Trial shell	63
	75017101	21000517	Trial shell	65
	75017102	21000518	Trial shell	67
	75000651	21000414	Trial Insert, slotted	43/22
	75000652	21000415	Trial Insert, slotted	45/22
	75000653	21000416	Trial Insert, slotted	47/22
	75000654	21000417	Trial Insert, slotted	49/22
	75000655	21000418	Trial Insert, slotted	51/22
	75000656	21000419	Trial Insert, slotted	53/22
	75000657	21000420	Trial Insert, slotted	55/22
	75000658	21000421	Trial Insert, slotted	57/22
	75000659	21000422	Trial Insert, slotted	59/22
	75000660	21000423	Trial Insert, slotted	61/22
	75000661	21000424	Trial Insert, slotted	63/22
	75000662	21000425	Trial Insert, slotted	65/22
	75000663	21000426	Trial Insert, slotted	67/22
	75000664	21000427	Trial Insert, slotted	47/28
	75000665	21000428	Trial Insert, slotted	49/28
	75000666	21000429	Trial Insert, slotted	51/28
	75000667	21000430	Trial Insert, slotted	53/28
	75000668	21000431	Trial Insert, slotted	55/28
	75000669	21000432	Trial Insert, slotted	57/28
	75000670	21000433	Trial Insert, slotted	59/28
	75000671	21000434	Trial Insert, slotted	61/28
	75000672	21000435	Trial Insert, slotted	63/28
	75000673	21000436	Trial Insert, slotted	65/28
	75000674	21000437	Trial Insert, slotted	67/28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POLARCUP◇ Standard 22 / 28mm

Basic Case II

Case set SAP/Item no.
28mm: 0940321/75210205
22mm: 0940322/75210215

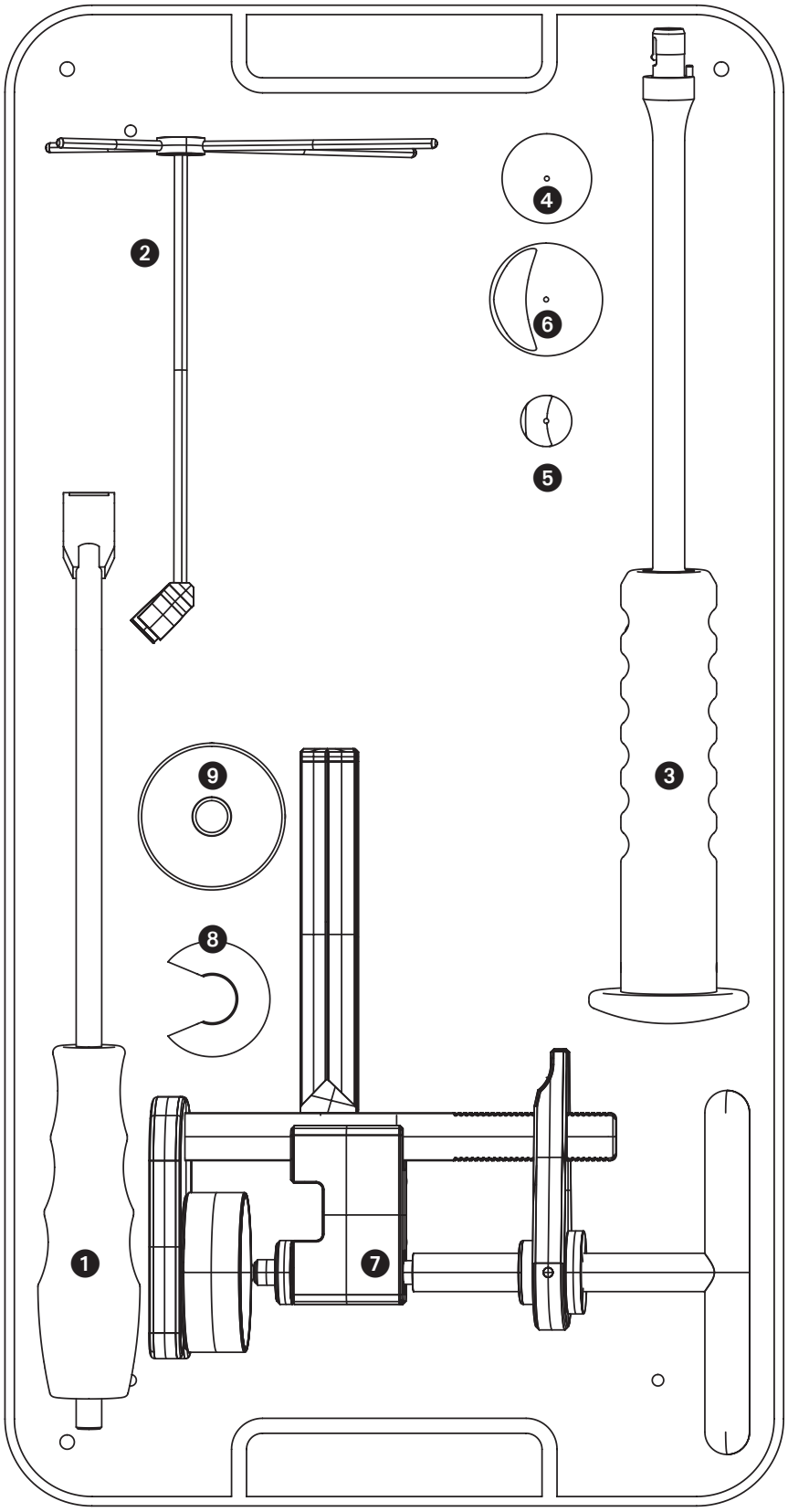
	SAP no.	Item no.	Designation
	75007661	990019	Easy Tray Lid Plastic
	75100515	75100515	Basic Case II
1	75017081	21000497	Flange Cutter
2	75009600	T7718	Sputnik for Precimed Impactor
3	75023345	21000620	Impactor Handle
4	75023344	21000619	Reducer Part for Impactor
5	75023714	21000666	Reducer Part for Impactor, Small
6	75023346	21000621	Impactor Part for Handle
7	75017089	21000505	Head/Liner Inserter
8	75017087	21000503	Neck Adaptor for Monobloc Stem
9	75017088	21000504	Insert Adaptor for Monobloc Stem

Global Femoral Trial Heads – compatible with POLARCUP:

SAP no.	Designation	Size/Ø
75100839	Trial Femoral Head	22 S/+0
75100840	Trial Femoral Head	22 M/+4
75100843	Trial Femoral Head	28 XS/-3
75100844	Trial Femoral Head	28 S/+0
75100845	Trial Femoral Head	28 M/+4
75100846	Trial Femoral Head	28 L/+8

Please note

If using Global Femoral Trial Heads with POLARCUP these can only be used with the Slotted Trial Insert or Nav Trial Insert and not with the definitive PE or XLPE Insert.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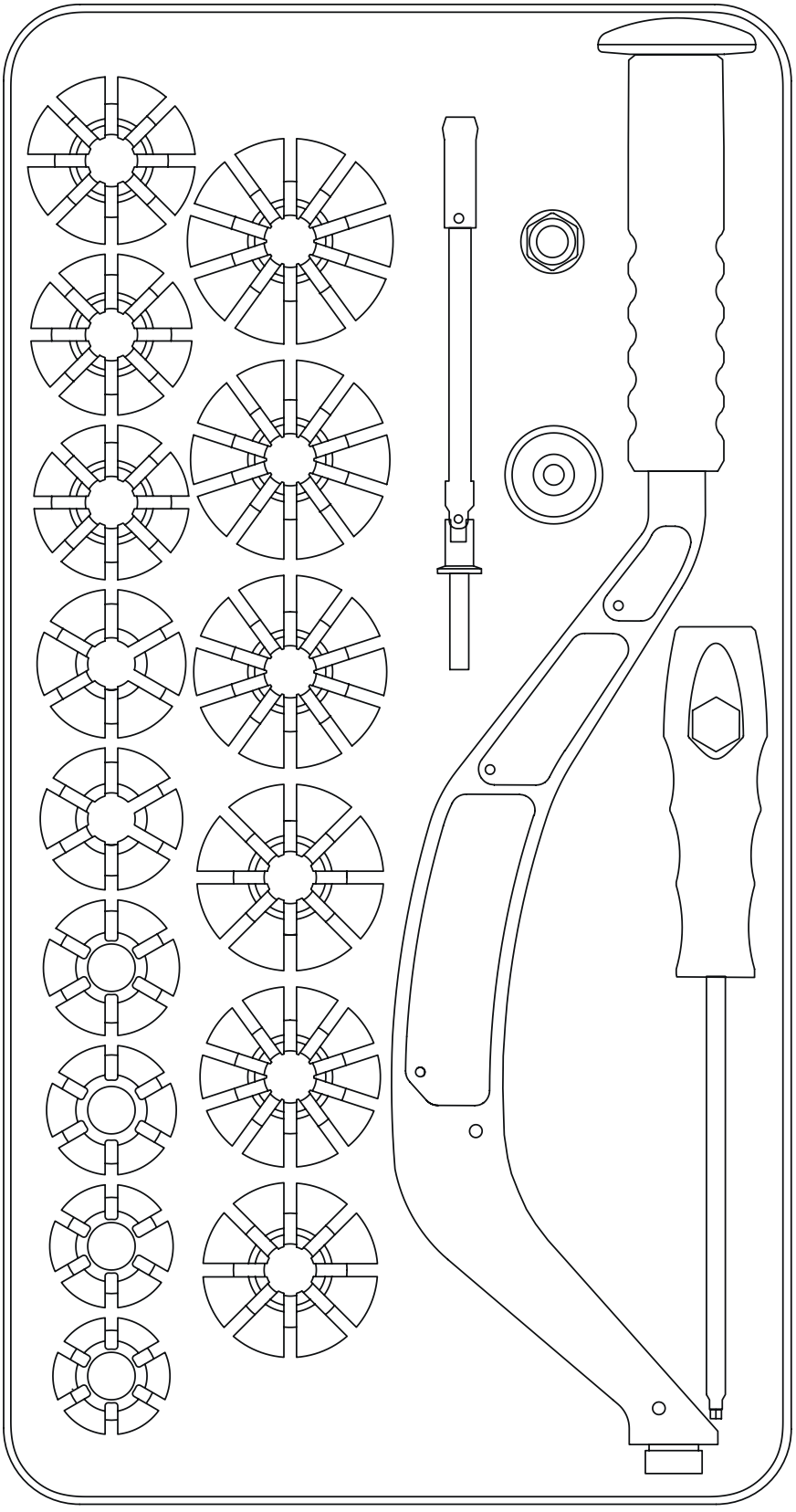
POLARCUP◇ NAV (Nav trial inserts)

Case set SAP no.
75210216/9040323

SAP no.	Item no.	Designation	Size
75007661	990019	Easy Tray Lid Plastic	
75100512	75100512	Case NAV	
75000649	21000412	Handle Adaptor Trial Insert	22mm
75000648	21000411	Shell Impactor Curved	
75023818	21000670	Screw Driver	3.5
75023356	21000631	Trial Insert nav.	43/22
75023357	21000632	Trial Insert nav.	45/22
75023358	21000633	Trial Insert nav.	47/22
75023359	21000634	Trial Insert nav.	49/22
75023360	21000635	Trial Insert nav.	51/22
75023361	21000636	Trial Insert nav.	53/22
75023362	21000637	Trial Insert nav.	55/22
75023363	21000638	Trial Insert nav.	57/22
75023364	21000639	Trial Insert nav.	59/22
75023365	21000640	Trial Insert nav.	61/22
75023366	21000641	Trial Insert nav.	63/22
75023367	21000642	Trial Insert nav.	65/22
75023368	21000643	Trial Insert nav.	67/22



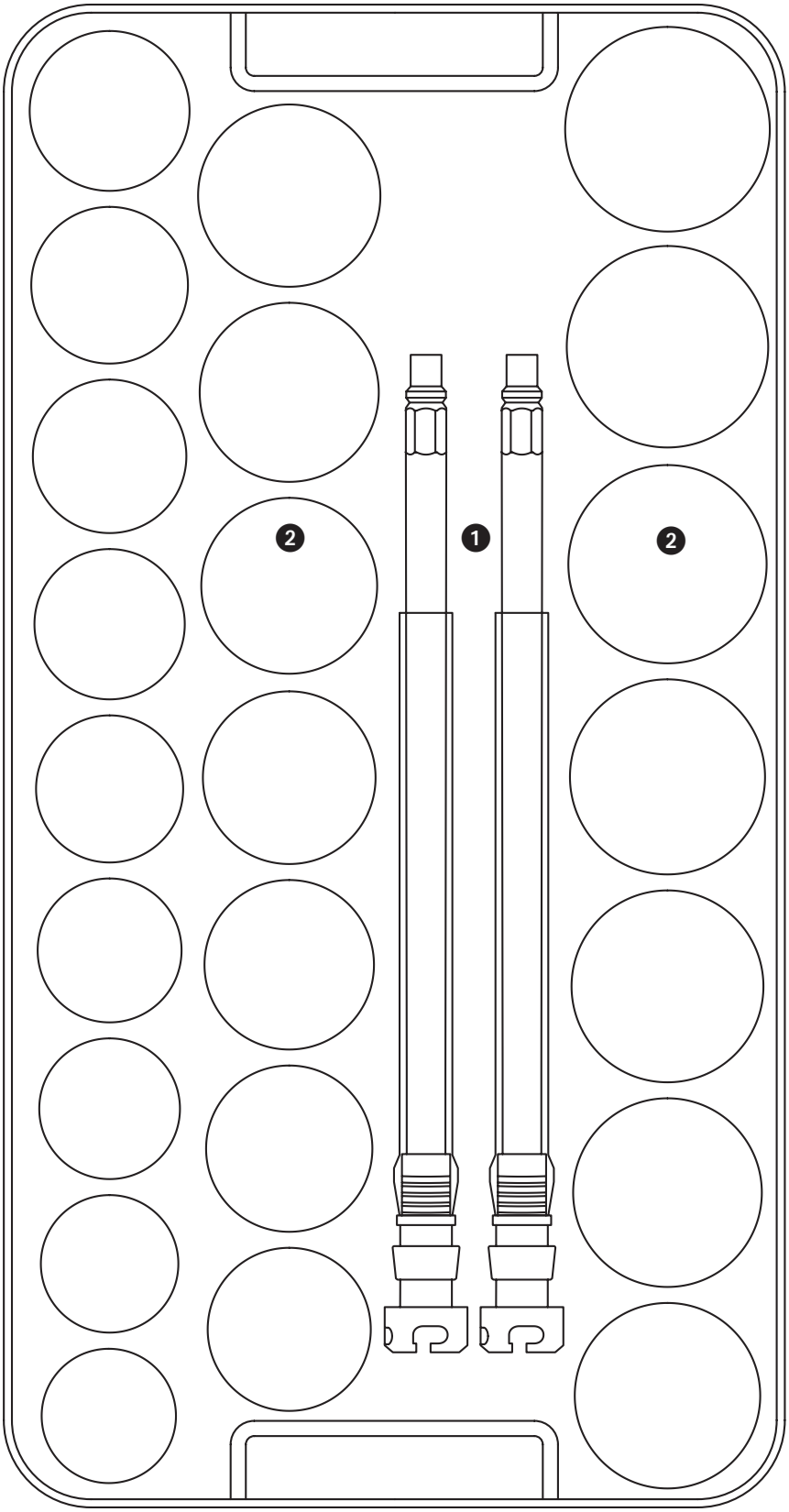
Standard reamers 1mm (shell 42-64mm)

Case set SAP/Item no.
09540332/75210247

	SAP no.	Item no.	Designation	Size
	75007661	990019	Easy Tray Lid Plastic	
	75100511	75100511	Case Reamer Shell Standard	
1	75003405	130870	Drive Shaft Reamer - AO	
2	75003408	130873	Reamer	42
	75003409	130874	Reamer	43
	75003410	130875	Reamer	44
	75003411	130876	Reamer	45
	75003412	130877	Reamer	46
	75003413	130878	Reamer	47
	75003414	130879	Reamer	48
	75003415	130880	Reamer	49
	75003416	130881	Reamer	50
	75003417	130882	Reamer	51
	75003418	130883	Reamer	52
	75003419	130884	Reamer	53
	75003420	130885	Reamer	54
	75003421	130886	Reamer	55
	75003422	130887	Reamer	56
	75003423	130888	Reamer	57
	75003424	130889	Reamer	58
	75003425	130890	Reamer	59
	75003426	130891	Reamer	60
	75003427	130892	Reamer	61
	75003428	130893	Reamer	62
	75003429	130894	Reamer	63
	75003430	130895	Reamer	64

Optional

	SAP no.	Item no.	Designation
	75007256	T7909	Offset Reamer Handle - AO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Optional standard reamers 1mm (39-41 and 65-67mm)

Case set SAP/Item no.
0940325/75210222

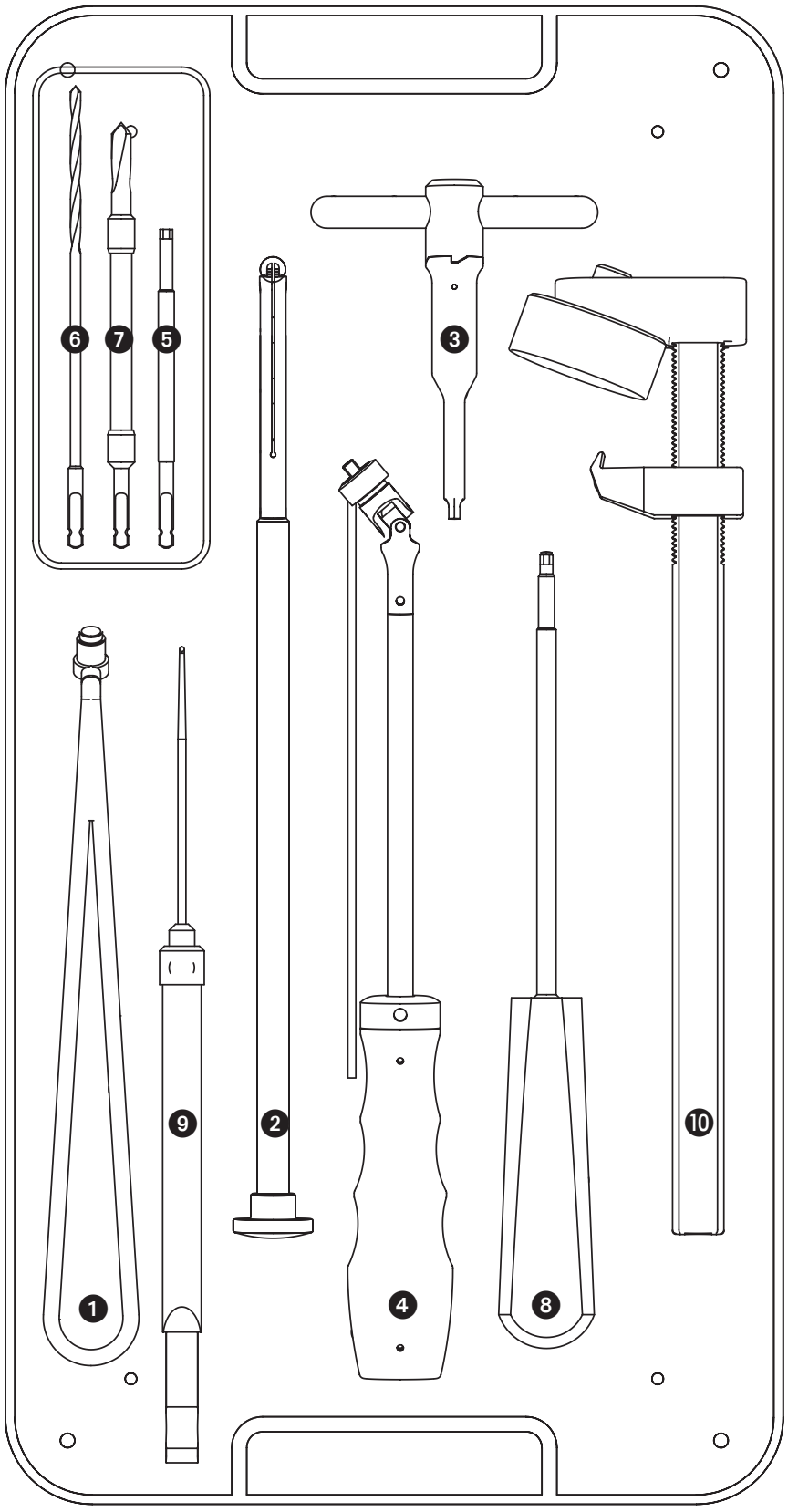
SAP no.	Item no.	Designation	Size
75007661	990019	Easy Tray Lid Plastic	
75100531	75100531	Case Reamer Shell optional	
75023397	130867	Reamer	39
75003406	130871	Reamer	40
75003407	130872	Reamer	41
75003431	130896	Reamer	65
75003432	130897	Reamer	66
75003433	130898	Reamer	67

POLARCUP◇ peg and screw accessories

Case set SAP/Item no.
094324/75210217

	SAP no.	Item no.	Designation	Size/Ø
	75007661	990019	Easy Tray Lid Plastic	
	75100513	75100513	Case Accessories	
❶	75017130	21000546	Drill Socket	6.0
❷	75100195	21000674	Peg Impactor Curved	
❸	75023347	21000622	T-Handle unidirectional	
❹	75023350	21000625	Peg Extractor	
❺	75017134	21000550	Screwdriver Bit Hexagonal*	3.5
❻	75017135	21000551	Twist Drill*	3.2
❼	75017136	21000552	Flexible Twist Drill*	6.0
❽	75017137	21000553	Screwdriver with Handle	3.5
❾	75017138	21000554	Depth Gauge for Screws	
❿	75017083	21000499	Extractor PE-Insert	

*these devices are designed to connect to a power tool with an AO interface.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Notes

Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets.
Please contact your Smith & Nephew representative or distributor if you have questions about the availability of Smith & Nephew products in your area.

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