

# Evolutis

CREATEUR FABRICANT



*Dual  
Mobility  
Experience*



## Captiv<sup>®</sup> DM



Evolutis  
**MOTION INSIDE**

*Surgical  
Technique*

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## **Disclaimer**

*This document is intended to be read only by experienced orthopaedic surgeons familiar with the application of hip arthroplasty, and by individuals related to or acknowledged by Evolutis company.*

*This publication is intended as the recommended procedure for using the Evolutis Dual Mobility Acetabular Implants. It offers guidance only. Evolutis is the manufacturer of the device. As such and claiming no medical skill, Evolutis does not recommend a specific use of a product or a technique.*

*Each surgeon should consider the particular needs of the patient and make appropriate adjustments where necessary.*

*For any additional information related to the products, the indications and contra indications, the warnings and precautions of use, and the adverse effects, please refer to the INSTRUCTION FOR USE leaflet included in the packaging of implants. For further advice please contact your local representative.*

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## Acetabular reaming

After having resected the femoral head, measure its diameter with a caliper,

Remove osteophytes, chondral and fibrous tissues to perfectly expose the rim of the acetabulum,

Engage smallest diameter reamer on the reaming shaft and begin reaming the acetabular fossa holding the power tool in a vertical position (1),

Ream through the cartilage down to the true base of the acetabulum, Stop reaming when reamer reaches slightly bleeding hard bone,

Select the reamer 1 size under the diameter of the retrieved femoral head.

Introduce the reamer with the reamer shaft at 45° of vertical axis, and with anatomic anteversion (2).

Ream until the reamer reaches the same sub chondral bone level as 1st reamer,

Sequentially increase reamer size until the last size perfectly adapts to the acetabular margins (3),

Increment sizes cautiously in order never to reduce anterior and posterior bone margin thicknesses.



## Trial cup and final cup impaction

Select a trial cup the same diameter as the last reamer used,  
Screw the trial cup on the cup impactor screw (threaded inner shaft),  
Introduce the trial cup into the acetabulum (4),



Assess cup dimension and position in the acetabulum,  
The flexible trial cup is designed to assess bone contact and sphericity of reaming, it is not designed for stability testing, do not evaluate cup stability according to this test.



### Option 1: Straight cup impactor

Introduce the cup impactor screw into the cup impactor body up to the stop,

Select the cup impactor tip of the same diameter as the final cup,

Screw the cup impactor tip on the cup impactor thread until it just touches the conical end piece, not tight

Cup impactor screw

Body of cup impactor

Cup impactor tip

45° orientation guide

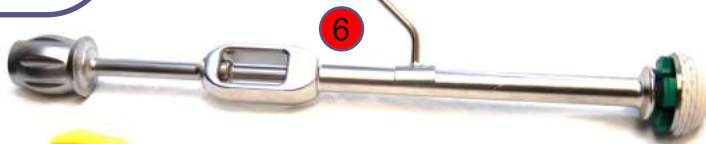


Open the sterile pack of the final cup and leave the cup into the foam packaging,

Position the cup impactor assembly and the impaction tip into the final cup (5),

Hold the outer body tight and screw the inner shaft firmly, which will tighten the impactor into the cup

Snap the 45° orientation guide on the cup impactor body (6).



Introduce the final cup into the acetabulum (7),

Hammer the cup into position, and test for stability,

Unscrew the inner impactor screw a little until the tip is loose in the cup, but still attached to the shaft,

Remove the cup impactor tip out from the final cup.



## Option 2: Curved impactor for cup

Select the cup holding disc of the same diameter as the final cup,

Set the trigger of the curved impactor for cup in the "open" position (8),

Slide and snap the curved impactor cup tip on the bottom end of the curved impactor (9),

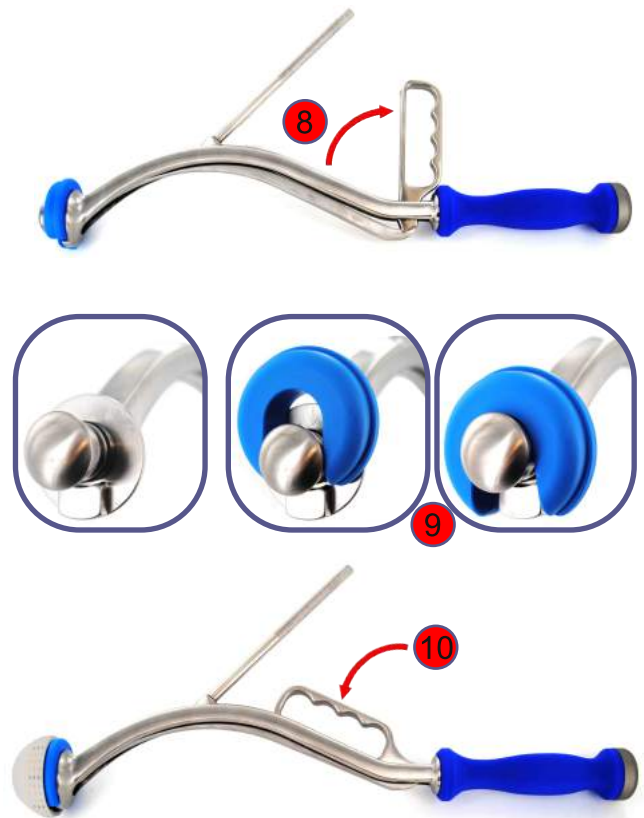
Open the sterile pack of the final cup and leave the cup into the foam packaging,  
Position the curved impactor and cup tip assembly into the final cup, check the orthogonality of the tip and the cup.

Lock tight the trigger of the curved impactor in the "closed" position (10),

Screw the 45° orientation guide on the cup impactor body,

Introduce the final cup into the acetabulum,  
Hammer the cup into position, and test for stability,

Set the trigger of the curved impactor for cup in the "open" position,  
Remove the cup impactor tip out from the final cup.



## Specific steps for the DM Cemented cup

Whenever implanting a Cemented version of the DM cup, it is **COMPULSORY** to proceed according to the following instructions:

- select the cup impaction tip (option 1: straight impaction shaft) or the expanding holding disc (option 2: curved impaction handle) of the size immediately inferior to the diameter of the cup to be implanted, and attach to the impaction handle. Example: for a Ø50 cup, select the Ø48 impaction tip or disc (a).



- place the impaction set inside the cup and expand moderately the tip or disc (screw action for a straight handle, pull the trigger for a curved handle).

- introduce a dose of cement into a clean and dry acetabulum.

- introduce the cup into the acetabulum, set the correct orientation plans (tilt and anteversion) with reference to the 45° orientation rod.

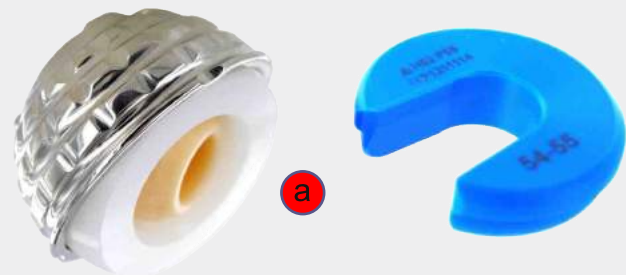
- hammer the cup in its final position (b).

- unscrew (straight handle) or release the trigger (curved handle) and **IMMEDIATELY** retrieve the impaction handle and the impaction tip out of the cup.



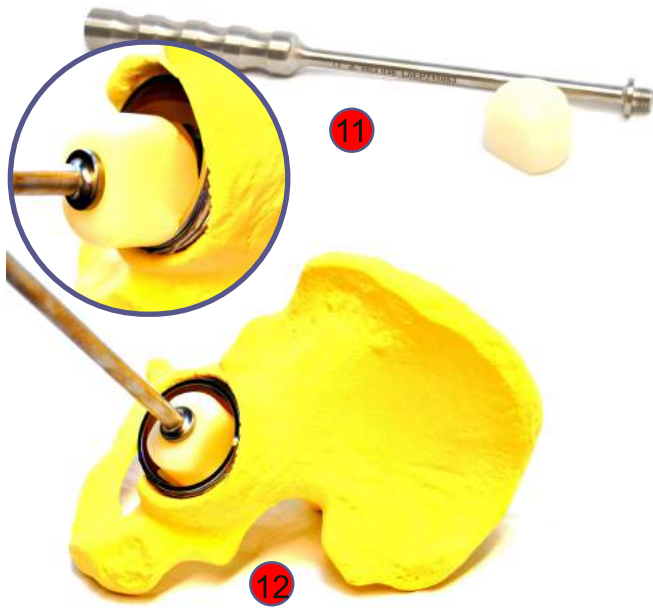
- attach the white cup impaction tip to the M10 impaction shaft.

- introduce the white cup impaction tip into the cup, and apply manual pressure to the cup until the cement is set (c).



**cup Ø57 = impaction tip Ø55**



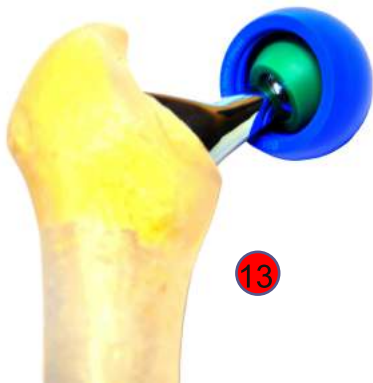


## Re-positioning and final impaction

In case the cup is misaligned in the acetabulum, but not firmly impacted, assemble the impaction spherical tip to the M10 impaction shaft,

Position one of the stepped edges on the edge of the cup and tap to re-orientate the cup to the final position (11).

Finalize cup impaction with the same tool (12).



## Trial liner reduction

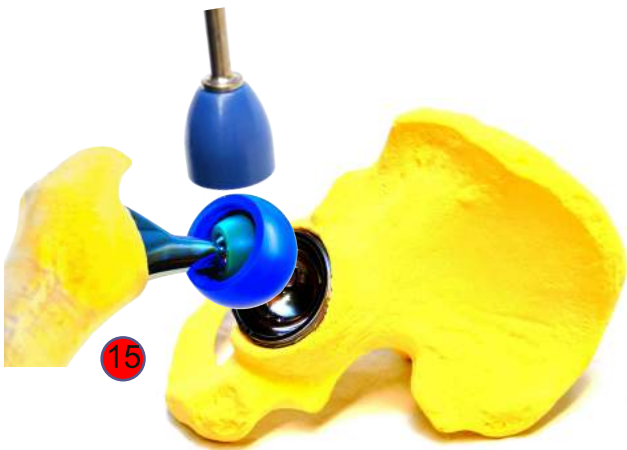
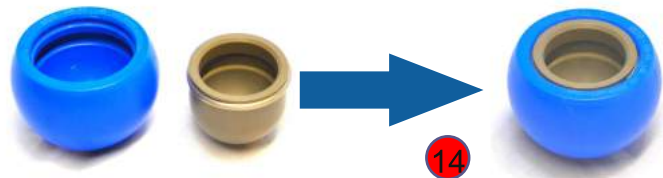
Select a trial liner of the same diameter as the final cup,

Standard liner is for Ø28mm trial head, and trial liner is non retentive.

Position the trial head on the trial or final femoral stem,

Position the trial liner over the trial femoral head (13),

In cases of 22.2mm ball head, place the grey Ø22.2mm trial head adaptor inside the Ø28mm blue trial liner (14).



Assemble the cup impaction tip to the M10 impaction shaft,



Reduce hip joint (15),

Undertake mobility and stability tests, select definitive head length (16).



## Introduction of the head in the final liner

Prepare the liner press:

- screw the liner press screw on the liner press body (17),
- snap the femoral head centralizer on the liner press screw tip,
- snap the concave liner pusher tip onto the fork of the liner press body (18).

Position and hold final liner on the concave liner pusher tip, liner opening facing upwards (19),

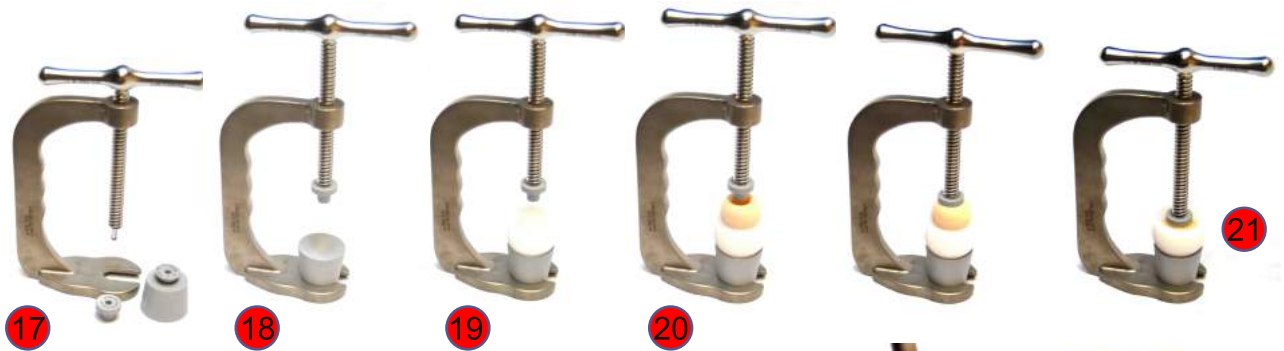
Position and hold final femoral head on top of the final liner, openings facing upwards (20),

Turn the liner press screw clockwise until the centralizer fits into the femoral head,

Continue turning clockwise until the femoral head snaps into the final liner (21),

The impaction is complete after the second "snap" sound (air escapes out of the liner).

Make sure the head is captured in the liner but free to move.



## Introduction of the final liner and reduction of the hip

Position the final liner and head assembly on the femoral Morse taper,  
Assemble the cup impaction tip to the M10 impaction shaft,



Impact the final liner and final head assembly with the cup impaction tip,

Reduce the hip joint while pushing the liner into the cup with the impaction tip (22),

Undertake final mobility and stability tests (23).



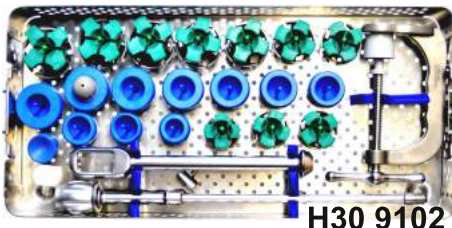
# References

## Cupules CAPTIV® Acetabular cups

Description	∅	Réf. Cat N°	Description	∅	Réf. Cat N°
HA ss ciment Press-Fit / C.less HA Press-Fit	44	H29 DM044	HA ss. ciment av. picots / C.less HA with spikes	44	H29 DM144
HA ss ciment Press-Fit / C.less HA Press-Fit	46	H29 DM046	HA ss. ciment av. picots / C.less HA with spikes	46	H29 DM146
HA ss ciment Press-Fit / C.less HA Press-Fit	48	H29 DM048	HA ss. ciment av. picots / C.less HA with spikes	48	H29 DM148
HA ss ciment Press-Fit / C.less HA Press-Fit	50	H29 DM050	HA ss. ciment av. picots / C.less HA with spikes	50	H29 DM150
HA ss ciment Press-Fit / C.less HA Press-Fit	52	H29 DM052	HA ss. ciment av. picots / C.less HA with spikes	52	H29 DM152
HA ss ciment Press-Fit / C.less HA Press-Fit	54	H29 DM054	HA ss. ciment av. picots / C.less HA with spikes	54	H29 DM154
HA ss ciment Press-Fit / C.less HA Press-Fit	56	H29 DM056	HA ss. ciment av. picots / C.less HA with spikes	56	H29 DM156
HA ss ciment Press-Fit / C.less HA Press-Fit	58	H29 DM058	HA ss. ciment av. picots / C.less HA with spikes	58	H29 DM158
HA ss ciment Press-Fit / C.less HA Press-Fit	60	H29 DM060	HA ss. ciment av. picots / C.less HA with spikes	60	H29 DM160
HA ss ciment Press-Fit / C.less HA Press-Fit	62	H29 DM062	HA ss. ciment av. picots / C.less HA with spikes	62	H29 DM162

## Inserts DM CAPTIV® DM Liners

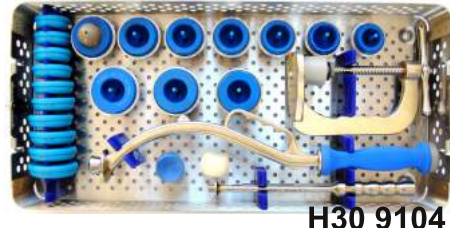
∅ de cupule ∅ of cup	Description	Tête / Head 22.2	∅	Tête / Head ∅ 28	Description	Tête / Head ∅ 28
44	Insert UHMWPE PEXEL UHMWPE liner	H51 M2245				
46	Insert UHMWPE PEXEL UHMWPE liner	H51 M2247		H51 M2847		
48	Insert UHMWPE PEXEL UHMWPE liner	H51 M2249		H51 M2849		
50	Insert UHMWPE PEXEL UHMWPE liner	H51 M2251		H51 M2851	Insert UHMWPE/Ceramic liner	H61 MA2850
52	Insert UHMWPE PEXEL UHMWPE liner	H51 M2253		H51 M2853	Insert UHMWPE/Ceramic liner	H61 MA2852
54	Insert UHMWPE PEXEL UHMWPE liner	H51 M2255		H51 M2855	Insert UHMWPE/Ceramic liner	H61 MA2854
56	Insert UHMWPE PEXEL UHMWPE liner	H51 M2257		H51 M2857	Insert UHMWPE/Ceramic liner	H61 MA2856
58	Insert UHMWPE PEXEL UHMWPE liner	H51 M2259		H51 M2859	Insert UHMWPE/Ceramic liner	H61 MA2858
60	Insert UHMWPE PEXEL UHMWPE liner	H51 M2261		H51 M2861	Insert UHMWPE/Ceramic liner	H61 MA2860
62	Insert UHMWPE PEXEL UHMWPE liner	H51 M2263		H51 M2863		



H30 9102



H03 9100



H30 9104

## Instrumentation CAPTIV® Instrument Set H30 9102

Description	Quantité Quantity	Réf. Cat N°	Description	Quantité Quantity	Réf. Cat N°
Plateau avec couvercle / Tray with Lid	1	H30 9002	Préhenseur de cotyle Ø50-51 cup impaction tip	1	H52 2251
Corps d'impacteur / Cup impactor (body)	1	H52 007	Préhenseur de cotyle Ø52-53 cup impaction tip	1	H52 2253
Vis d'impacteur / Cup impactor (Screw)	1	H52 008	Préhenseur de cotyle Ø54-55 cup impaction tip	1	H52 2255
Tige d'orientation Ø18 Orientation axis	1	H03 013	Préhenseur de cotyle Ø55-56 cup impaction tip	1	H52 2257
Presse à insert / Liner press	1	H52 033	Préhenseur de cotyle Ø57-58 cup impaction tip	1	H52 2259
Vis de presse à insert / Liner press screw	1	H52 030	Préhenseur de cotyle Ø59-60 cup impaction tip	1	H52 2261
Centreur de tête / Femoral head centralizer	1	H52 031	Préhenseur de cotyle Ø62-63 cup impaction tip	1	H52 2263
Embout poussoir d'insert / liner pusher tip	1	H52 035	Cotyle d'essai Ø44 trial cup	1	H03 0244
Réducteur d'essai Ø22.2 trial insert adaptor	1	H52 2228	Cotyle d'essai Ø46 trial cup	1	H03 0246
Manche impacteur M10 impaction shaft	1	H03 036	Cotyle d'essai Ø48 trial cup	1	H03 0248
Embout poussoir de cupule / Cup impaction tip	1	H03 037	Cotyle d'essai Ø50 trial cup	1	H03 0250
Sphère d'impaction / Impaction spherical tip	1	H62 005	Cotyle d'essai Ø52 trial cup	1	H03 0252
Insert d'essai Ø 22/44-45 trial liner	1	H52 M2245	Cotyle d'essai Ø54 trial cup	1	H03 0254
Insert d'essai Ø 28/46-47 trial liner	1	H52 M2847	Cotyle d'essai Ø56 trial cup	1	H03 0256
Insert d'essai Ø28/48-49 trial liner	1	H52 M2849	Cotyle d'essai Ø58 trial cup	1	H03 0258
Insert d'essai Ø28/50-51 trial liner	1	H52 M2851	Cotyle d'essai Ø60 trial cup	1	H03 0260
Insert d'essai Ø28/52-53 trial liner	1	H52 M2853	Cotyle d'essai Ø62 trial cup	1	H03 0262
Insert d'essai Ø28/54-55 trial liner	1	H52 M2855			
Insert d'essai Ø28/56-57 trial liner	1	H52 M2857			
Insert d'essai Ø28/58-59 trial liner	1	H52 M2859			
Insert d'essai Ø28/60-61 trial liner	1	H52 M2861			
Insert d'essai Ø28/62-63 trial liner	1	H52 M2863			
Préhenseur de cotyle Ø44-45 cup impaction tip	1	H52 2245			
Préhenseur de cotyle Ø46-47 cup impaction tip	1	H52 2247			
Préhenseur de cotyle Ø48-49 cup impaction tip	1	H52 2249			

Options	Quantité Quantity	Réf. Cat N°
Manche impacteur courbe / Curved impactor	1	H62 009
Vis pour manche courbe / Screw for curved imp.	1	H62 010
Poignée de vissage en T / T handle for screw	1	H62 003
Tige d'orientation Ø12 Orientation axis	1	H03 007
Instrum. fraises à cotyle / Grater Reamer set	1	H03 9100
Instrum. manche courbe / Curved handle inst. Se	1	H30 9104

### Important Notice:

The CAPTIV DM acetabular implants belong to the class III implantable medical device classification. The CAPTIV DM acetabular implants are indicated in total hip arthroplasty procedures (THA) and total hip revision procedures (THR) for the acetabular component. The surgeon is required to read the instructions for use included in the packaging of the implant, as well as the surgical technique manual initially delivered with the instrument set, or available for download on the [www.evolutisfrance.com](http://www.evolutisfrance.com) website.



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