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is intended for healthcare professionals only.**

UHR®

Universal Head Bipolar System

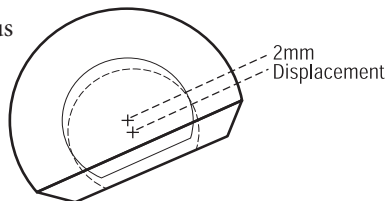


The Stryker Orthopaedics® UHR® Universal Head is a leader among bipolar component designs. Released in 1979 and patented in 1980, the UHR® Universal Head introduced two important design concepts to the field of orthopaedics. The first was dynamic valgus, a neutral alignment of the head during component loading that minimized wear on the locking mechanism. The second was the development of a one-piece, positive locking mechanism that provided enhanced security against component disassembly. Both of these developments revolutionized bipolar designs.

Today, the UHR® Universal Head retains all the same design features and benefits, and has established effectiveness with 20+ years of positive clinical use.^{1,2,3,4,5,6} No other bipolar design can make that claim. Time proven design, easy-to-use instrumentation and versatility regarding femoral component selection make the UHR® Universal Head the logical choice for your hemiarthroplasty requirements.

Dynamic Valgus Alignment

The concept of dynamic valgus alignment was introduced by Stryker Orthopaedics® to provide increased head coverage during component loading. A two millimeter displacement toward the dome of the UHR® Universal Head minimizes inner bearing articulation from occurring on the locking mechanism, thus sparing the mechanism from undue wear.*



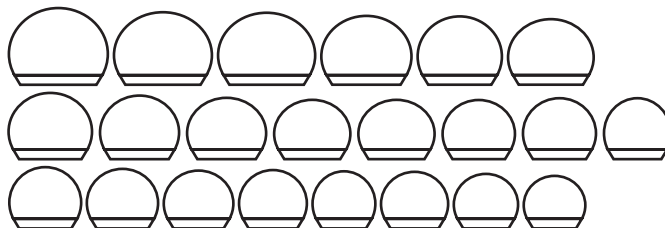
Bipolar without dynamic valgus alignment.



UHR® Universal Head with dynamic valgus alignment.

Optimal Fit

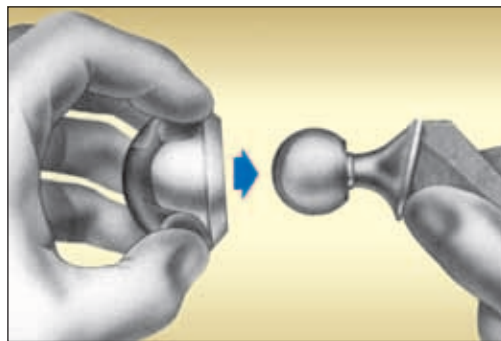
A large array of component sizes allows precise patient matching for optimal patient fit. Outer diameters from 41 to 72 millimeters allow the surgeon to meet the unique challenges posed in revision.



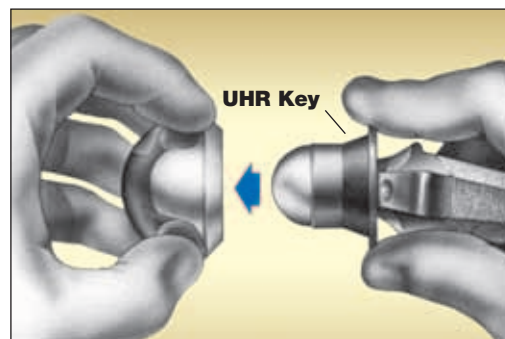
UHR® Universal Heads are available in an array of sizes, 41 to 72mm, allowing for precise patient matching.

One-Piece Locking Mechanism

Patented in 1980, this positive-locking design is easy to use, yet provides enhanced security against component disassembly. Laboratory tests show that the UHR® Universal Head can be assembled by hand with less than four pounds of force, while disassembly requires more than 200 pounds of extraction force without the patented key.**



UHR® Universal Head requires less than 4 lbs. of hand pressure for assembly.



Disassembly of UHR® Universal Head using the patented key. 200 lbs. of force is required without its use.

* Perez, Fausto - Technical assessment, explanation of dynamic valgus concept.

** R&D Internal Tech Report - RD830624, Technical Report - MT 00035, 00083

Beveled Lip

The outer bevel decreases the likelihood of cup impingement on bony structures thereby increasing the likelihood for successful closed reduction (**Figure 1**).

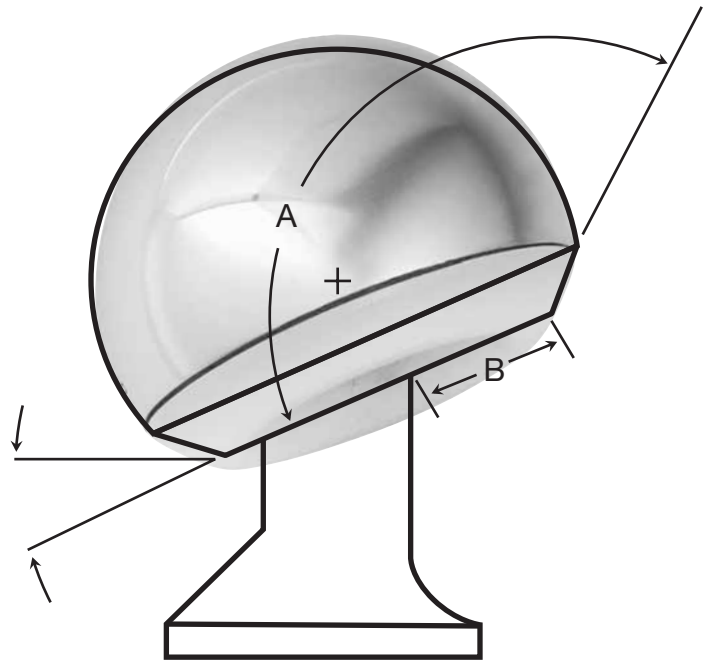
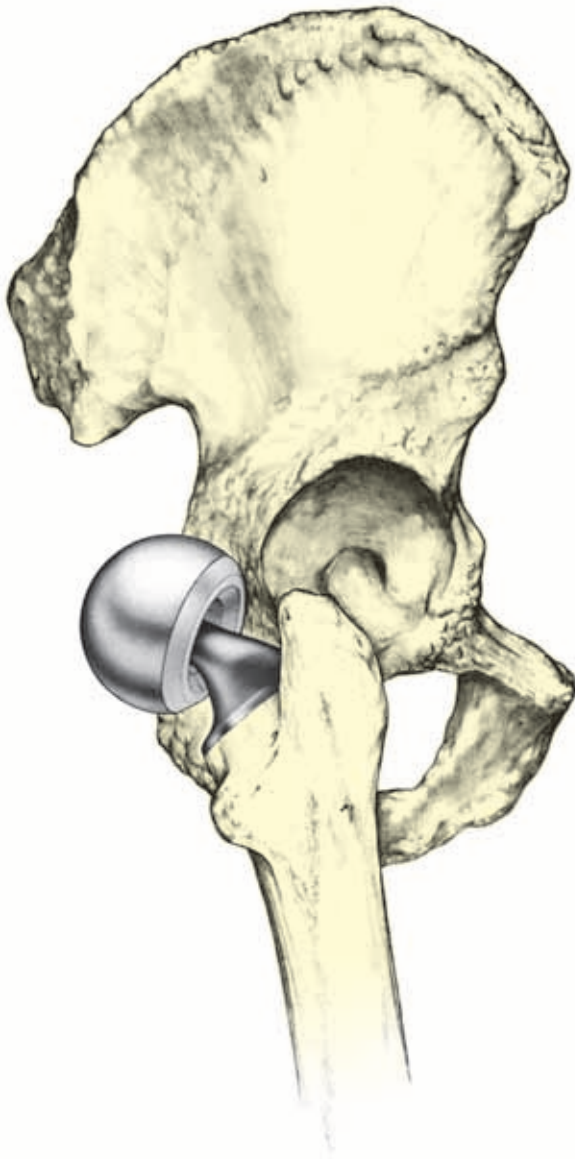


Figure 2.

The UHR® component features a reduced corner angle “A” and reduced step “B”.

The probability of cup impingement occurring is a function of the natural geometry of the pelvis and the geometry of the bipolar prosthesis. The UHR® Universal Head incorporates both a reduced ‘step’ and a smoother corner angle (Figure 2). Together, these criteria provide a component that is less likely to lock onto the bony rim of the pelvis and less difficult to unlock should it become unavoidable.

Clinical History

Over 20 years of clinical use have made the Stryker Orthopaedics® UHR® Universal Head the premier bipolar system available today.^{1,2,3,4,5,6} The UHR® Universal Head shows superior results when compared to traditional endoprosthetic devices.^{5,7,8}

Compatibility

The UHR® Universal Head component will mate with any Stryker Orthopaedics® femoral component and bearing head of comparable OD. An extensive implant matrix enables the surgeon to precisely match patient demand with the appropriate implant style.

UHT™ Universal Bipolar & Unipolar Instrument System – Top Tray



Catalog#	Description
1150-2338	Bipolar/Unipolar Trial, 38mm
1150-2340	Bipolar/Unipolar Trial, 40mm
1150-2341	Bipolar/Unipolar Trial, 41mm
1150-2342	Bipolar/Unipolar Trial, 42mm
1150-2343	Bipolar/Unipolar Trial, 43mm
1150-2344	Bipolar/Unipolar Trial, 44mm
1150-2345	Bipolar/Unipolar Trial, 45mm
1150-2346	Bipolar/Unipolar Trial, 46mm
1150-2347	Bipolar/Unipolar Trial, 47mm
1150-2348	Bipolar/Unipolar Trial, 48mm
1150-2349	Bipolar/Unipolar Trial, 49mm
1150-2350	Bipolar/Unipolar Trial, 50mm
1150-2351	Bipolar/Unipolar Trial, 51mm
1150-2352	Bipolar/Unipolar Trial, 52mm
1150-2353	Bipolar/Unipolar Trial, 53mm
1150-2354	Bipolar/Unipolar Trial, 54mm
1150-2355	Bipolar/Unipolar Trial, 55mm
1150-2356	Bipolar/Unipolar Trial, 56mm
1150-2358	Bipolar/Unipolar Trial, 58mm
1150-2361	Bipolar/Unipolar Trial, 61mm
1150-2364	Bipolar/Unipolar Trial, 64mm
1150-2368	Bipolar/Unipolar Trial, 68mm
1150-2372	Bipolar/Unipolar Trial, 72mm
1150-2414	Trial Head, V40™ -4mm
1150-2413	Trial Head, V40™ -3mm
1150-2400	Trial Head, V40™ STD
1150-2404	Trial Head, V40™ +4mm
1150-2408	Trial Head, V40™ +8mm
1150-2412	Trial Head, V40™ +12mm
1150-2416	Trial Head, V40™ +16mm
1150-2512A	Trial Head, C-Taper -2.5mm
1150-2513A	Trial Head, C-Taper -3mm
1150-2500A	Trial Head, C-Taper STD
1150-2503A	Trial Head, C-Taper +2.5mm
1150-2505A	Trial Head, C-Taper +5mm
1150-2508A	Trial Head, C-Taper +7.5mm
1150-2510A	Trial Head, C-Taper +10mm
1150-2600	Uni Adapter Sleeve

UHR® Bipolar Existing Instruments

Catalog#	Description
HI-UHRK-26	26mm UHR® Head Removal Key
HI-UHRK-28	28mm UHR® Head Removal Key

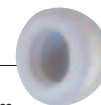
UHT™ Universal Bipolar & Unipolar Instrument System – Bottom Level

Catalog#	Description
1150-2000	Instrument Case and Lid
1150-2100	Trial Head Handle
1150-2200	Cork Screw
1150-2700	Femoral Head Caliper

Unitrax® Bipolar Existing Instruments

Catalog#	Description
6842-6-120	Sleeve to Head Disassembly Tool
6842-6-105	V40™ Sleeve Removal Chuck
6842-6-106	C-Taper Sleeve Removal Chuck
6842-6-125	Sleeve to Trunion Disassembly Tool
6842-6-110	Unitrax® Sleeve Impactor

UHR® Universal Head System Comprehensive Size Array



Outer Diameters	Inner Diameters 26mm	28mm
41mm	UH1-41-26	
42mm	UH1-42-26	
43mm	UH1-43-26	
44mm	UH1-44-26	UH1-44-28
45mm	UH1-45-26	UH1-45-28
46mm	UH1-46-26	UH1-46-28
47mm	UH1-47-26	UH1-47-28
48mm	UH1-48-26	UH1-48-28
49mm	UH1-49-26	UH1-49-28
50mm	UH1-50-26	UH1-50-28
51mm	UH1-51-26	UH1-51-28
52mm	UH1-52-26	UH1-52-28
53mm	UH1-53-26	UH1-53-28
54mm	UH1-54-26	UH1-54-28
55mm	UH1-55-26	UH1-55-28
56mm	UH1-56-26	UH1-56-28
58mm	UH1-58-26	UH1-58-28
61mm	UH1-61-26	UH1-61-28
64mm	UH1-64-26	UH1-64-28
68mm	UH1-68-26	UH1-68-28
72mm	UH1-72-26	UH1-72-28

References

- Green S, Moore T, Proano F. Bipolar prosthetic replacement for the management of unstable intertrochanteric hip fractures in the elderly. *Clinical Orthopaedics and Related Research*. November 1987; 224:169-177.
- Bowman AJ Jr, Walker MW, Kilfoyle RM, O'Brien PI, McConville JF. Experience with the bipolar prosthesis in hip arthroplasty: A clinical study. *Orthopedics*. April 1985; 8(4): 460-467.
- Nottingham RL. Treatment of a femoral neck fracture with a Universal Hip Replacement: A case report. *Osteonics Clinical Case Reports*. 1983.
- Bernasek TL. Prosthetic replacement for extracapsular fractures of the hip. *Techniques in Orthopaedics*. 1989; 4(2): 49-55.
- Takaoka, K, et al. Bipolar prosthetic replacement for the treatment of avascular necrosis of the femoral head. *Clinical Orthopaedics and Related Research*. April 1992; 277: 121-127.
- Bochner RM, Pellicci PM, Lyden JP. Bipolar hemiarthroplasty for fracture of the femoral neck: Clinical review with special emphasis on prosthetic motion. *Journal of Bone and Joint Surgery*. August 1988; 70A(7): 1001-1010.
- Sarmiento A, Gerarard F. Total hip arthroplasty for failed endoprostheses *Clinical Orthopaedics and Related Research*. Nov/Dec. 1978; 137: 112-117.
- Austin-Moore Good results in femoral neck fractures. *Orthopaedic Review*. July 1983 Vol. XII No.7: 84.

Refer UHT™ Bipolar & Unipolar Instrument System Technique (Lit. No. LSP45) for protocol.

Note:

The UHT™ Bipolar & Unipolar Instrument System accommodates:
 - C-taper or V-40™ trial heads
 - C-taper or V-40™ Unitrax sleeve removal chucks
 - 26mm or 28mm UHR head removal keys

The information presented in this brochure is intended to demonstrate the breadth of Stryker product offerings. Always refer to the package insert, product label and/or user instructions before using any Stryker product. Surgeons must always rely on their own clinical judgment when deciding which treatments and procedures to use with patients. Products may not be available in all markets. Product availability is subject to the regulatory or medical practices that govern individual markets. Please contact your Stryker representative if you have questions about the availability of Stryker products in your area.

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Literature Number: LUHRB
 MS/GS 1.5m 08/05

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325 Corporate Drive
 Mahwah, NJ 07430
 t: 201-831-5000
 www.stryker.com