EFFICIENT... EFFECTIVE... 

Common Instruments for Biomet Hip Systems
Exact™ Hip Instrumentation was developed by Biomet engineers to address the needs of today's orthopedic community. The end result is a revolutionary concept in femoral component instrumentation that not only promotes intraoperative flexibility, but also meets the demands of efficiency, simplicity and consolidation.

- **Versatile** — Exact™ General Trays 1 & 2 are used in the implantation of hips from Biomet’s Alliance® Family, Mallory-Head® Family or Taperloc® System. Just add the appropriate broach/reamer/trial trays to General Trays 1 & 2.

- **Intraoperative Flexibility** — By providing common general instruments for Biomet hips, Exact™ Hip Instrumentation provides unparalleled intraoperative flexibility and familiarity for use in all primary and revision situations.

- **Precision Instrument Design** — Exact™ Hip Instrumentation has been designed with the most advanced CAD-CAM technology for optimal femoral canal preparation.

- **Precision Implant Fit** — Computer-Aided Design (CAD) combined with net forging technology to enhance implant-to-bone fit.

The first “intra-family” instrumentation system designed with the most advanced CAD-CAM engineering technology available.
**Exact™ Hip Instrumentation** — Versatility in its original form.

**Exact™ General Tray 1** was designed to simplify preoperative setup, as well as address the most common instrumentation needs found in primary and revision hip arthroplasty. Basic insertion needs for X-Series hips in the Alliance® Family as well as the Mallory-Head® Porous Primary and Taperloc® Porous Primary are met with a single tray.

The versatility of General Tray 1 is evident in the variety of instruments that will share one space in the tray. For example, surgeon preference is maximized as any one of the five different stem insertion handles that Biomet manufactures will fit into a single slot in General Tray 1. Several other instruments in the tray offer this same flexibility.
Exact™ General Tray 2 was created to address specific needs that arise during the operative procedure. Special emphasis has been placed on items that are most often used at the time of component extraction and revision.

A. Modular Head Removal Tool; B. Slap Hammer; C. Offset Punch; D. Universal Broken Thread Extractor; E. Taper Clamping Jaw—Universal Stem Extractor; F. Threaded 1/4-28 Stem/Rasp Extractor; G. 90 Degree Stem/Trial Extractor; H. Exact™ Threaded J-Hook Extractor.
The benefits and flexibility of General Trays 1 and 2 are realized with the surgeon’s selection of a femoral component. Instrument trays containing broaches, reamers and trials specific to that femoral component are used in conjunction with General Trays 1 & 2. These trays are color-coded for easy identification and more efficient surgical use.

Incremental, system specific head/neck trunions allow for proper reproduction of anatomic offsets and leg length. These improvements at trial reduction will allow up to 21 degrees greater range of motion, and reduce head/neck trial inventory by more than 80%.
**Exact™ Hip Instrumentation** features color codes specific to the femoral component selected. The combination of these trays, along with General Trays 1, 2 and the Exact™ cylindrical reamers will provide instrumentation needs for all primary and revision situations.

<table>
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<tr>
<th>Color</th>
<th>Instrumentation</th>
<th>General Instruments</th>
<th>General Tray 1</th>
<th>General Tray 2</th>
<th>Cylindrical Reamers (optional)</th>
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<td>SILVER</td>
<td>General Instruments</td>
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<td>RED</td>
<td>Mallory-Head® System</td>
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<td>GREEN</td>
<td>Taperloc® System</td>
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*Exact™ Hip Instrumentation features a color-coded midsection and clearly marked instruments allow easy and rapid identification (cases are designed with recognizable color coding on the cases to facilitate efficient surgical ease of use).*
Meticulous design combined with improved manufacturing techniques has allowed for advanced concepts in femoral component and instrumentation design.

Recent developments in three-dimensional solid modeling technologies allow for designs to be viewed and manipulated from all angles. The improved technology promotes accurate interpretation of compound planes and complex implant geometries, leading to the precise and consistent development of femoral components and related instrumentation.

This innovative manufacturing technology will enhance surgical efficiency and patient satisfaction.
Precision-ground, clearly marked Exact™ reamers are manufactured using the latest 3-D CAD-CAM technology and machinery.

State-of-the-art technology has allowed for a revolutionary new tooth pattern for the broaches to contour the femoral canal more precisely.
Technologically Advanced

In concert with the technological developments offered with Exact™ Hip Instrumentation, Mallory-Head®, Alliance® and Taperloc® Hips are now manufactured using 3-Dimensional CAD-CAM produced net forgings. Net forging technology will provide for a more precise fit for the implant. The “human variability” associated with previous manufacturing methods is greatly reduced, allowing for superior reproduction of the compound angles on the finished implant.

The Exact™ templating system offers a very precise mode for implant sizing and preoperative evaluation of anatomic offset. Vertical and medial scales correspond to appropriate reamer and resection guides to aid in leg length restoration. Tables are included on each template for quick offset reference. Taperloc®, Mallory-Head® and Alliance® X-Series templates are designed with recognizable color-coding for ease of identification.
X-Series implants refer to specific porous components found in the Alliance® Family of Hips. Biomet has been successful in optimizing a consistent press fit in correlation with the multiple geometries and configurations in the Alliance® Family. Designed for use with Exact™ Hip Instrumentation, X-Series implants maximize the effectiveness of net-forging technology while maintaining the specific features that surgeons prefer. This advanced technology will capitalize on the excellent clinical results1–8 of tapered stem geometries that are available to the surgeon to meet virtually every indication for hip reconstruction in cementless applications.

Uncompromising design to allow for an Exact fit!!!
References

7 Head WC, Mallory TH, Emerson RH; The Proximal Porous Coating Alternative for Primary Total Hip Arthroplasty. Orthopedics; September, 1999, pp. 813-815.

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