acumed®

Anatomic Radial Head Solutions

With Second Generation Head Design

Surgical Technique

a Marmon Medical | Berkshire Hathaway Company

Acumed® is a global leader of innovative orthopaedic and medical solutions.

We are dedicated to developing products, service methods, and approaches that improve patient care.

Acumed® Anatomic Radial Head Solutions

The Acumed Anatomic Radial Head System is designed to provide an anatomic implant to replace the patient's native radial head. Designed in conjunction with Shawn W. O'Driscoll, MD, PhD, the Acumed Anatomic Radial Head System includes 290 head and stem combinations including standard stems, long stems, an anatomically shaped radial head, and system-specific instrumentation to help streamline the surgeon's experience in the operating room.

Indications for Use:

Replacement of the radial head for degenerative or post-traumatic disabilities presenting pain, crepitation, and decreased motion of the radiohumeral and/or proximal radio ulnar joint with joint destruction and/or subluxation, resistance to conservative treatment.

- Primary replacement after fracture of the radial head
- Symptomatic replacement after radial head resection
- Revision following failed radial head arthroplasty

In addition to the Anatomic Radial Head System, this set may include the Acutrak 2® Mini and Micro instruments and the Locking Radial Head Plate System at the base of the tray to provide multiple solutions all in one set. For the Acutrak 2 Headless Compression Screw System surgical technique, please reference part number SPF00-02. For the Locking Radial Head Plate System surgical technique, please reference part number ELB00-02.

	Definition
Warning	Indicates critical information about a potential serious outcome to the patient or the user.
Caution	Indicates instructions that must be followed in order to ensure the proper use of the device.
Note	Indicates information requiring special attention.

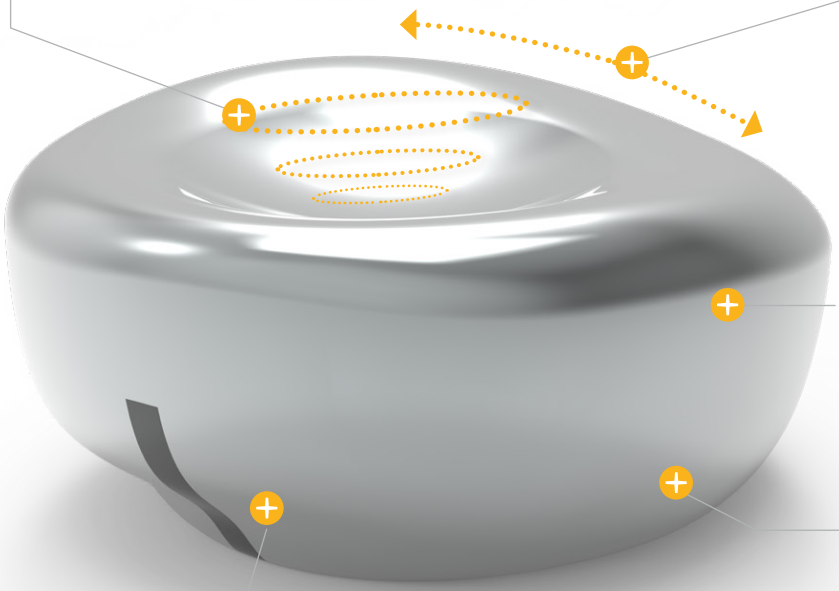
Table of Contents

System Features

Radial Head Implants

The dish depth increases with head diameter, which is designed to help improve radiocapitellar wear characteristics over the current generation Acumed Anatomic Radial Head[2]

The implant's medial surface is contoured to better replicate the lateral trochlear ridge facet, which may help avoid cartilage erosion[1,2]



Contouring of the medial side of the head has been further defined to track against the lateral side of the ulna

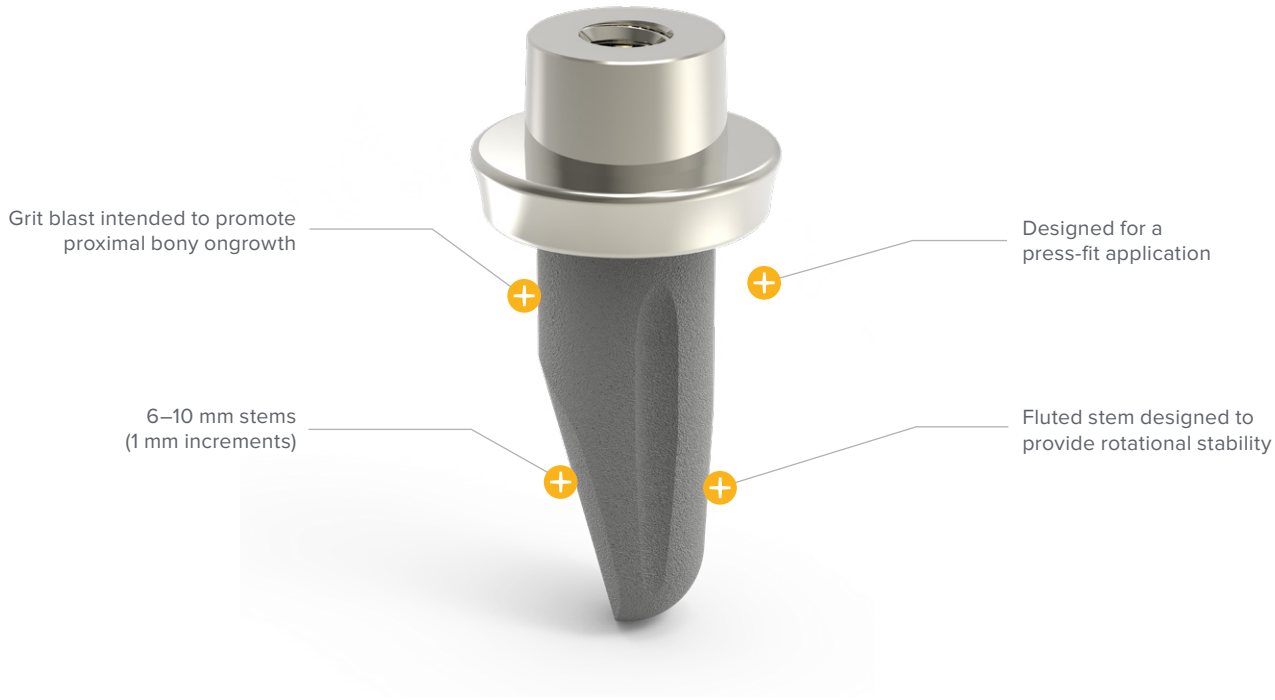
20–28 mm left and right specific heads

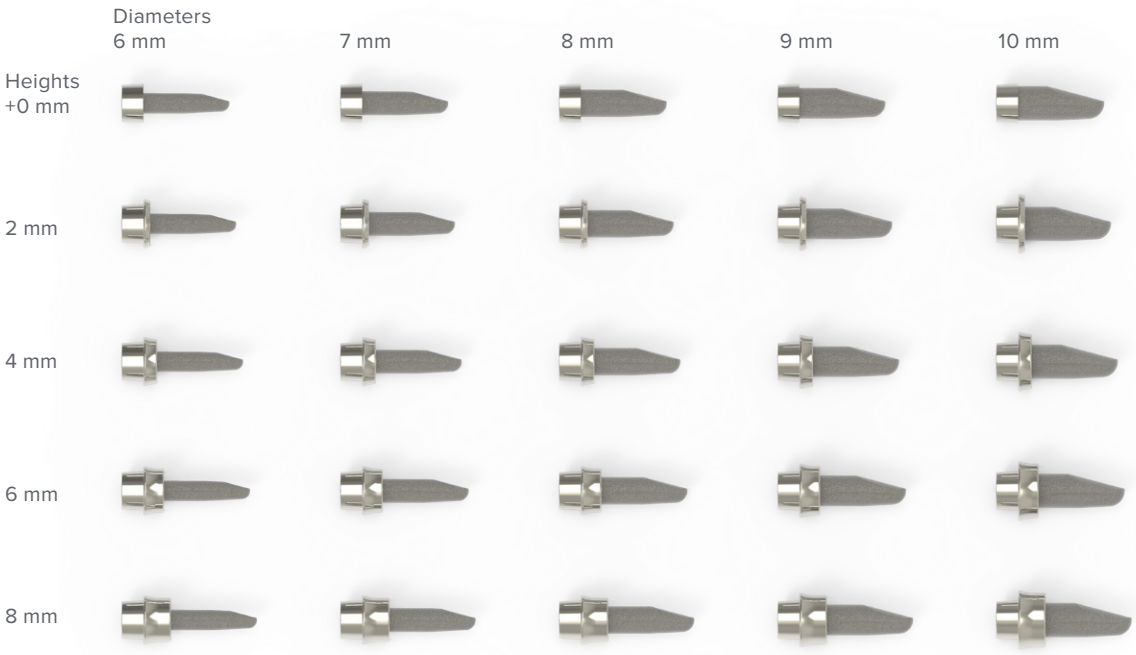
With the annular ligament in mind, an S-shaped contour was built into the lateral side of the radial head prosthesis

Head Implants: 20–28 mm
(5001-02XXX-S)

System Features [continued]

Standard Stem Implants

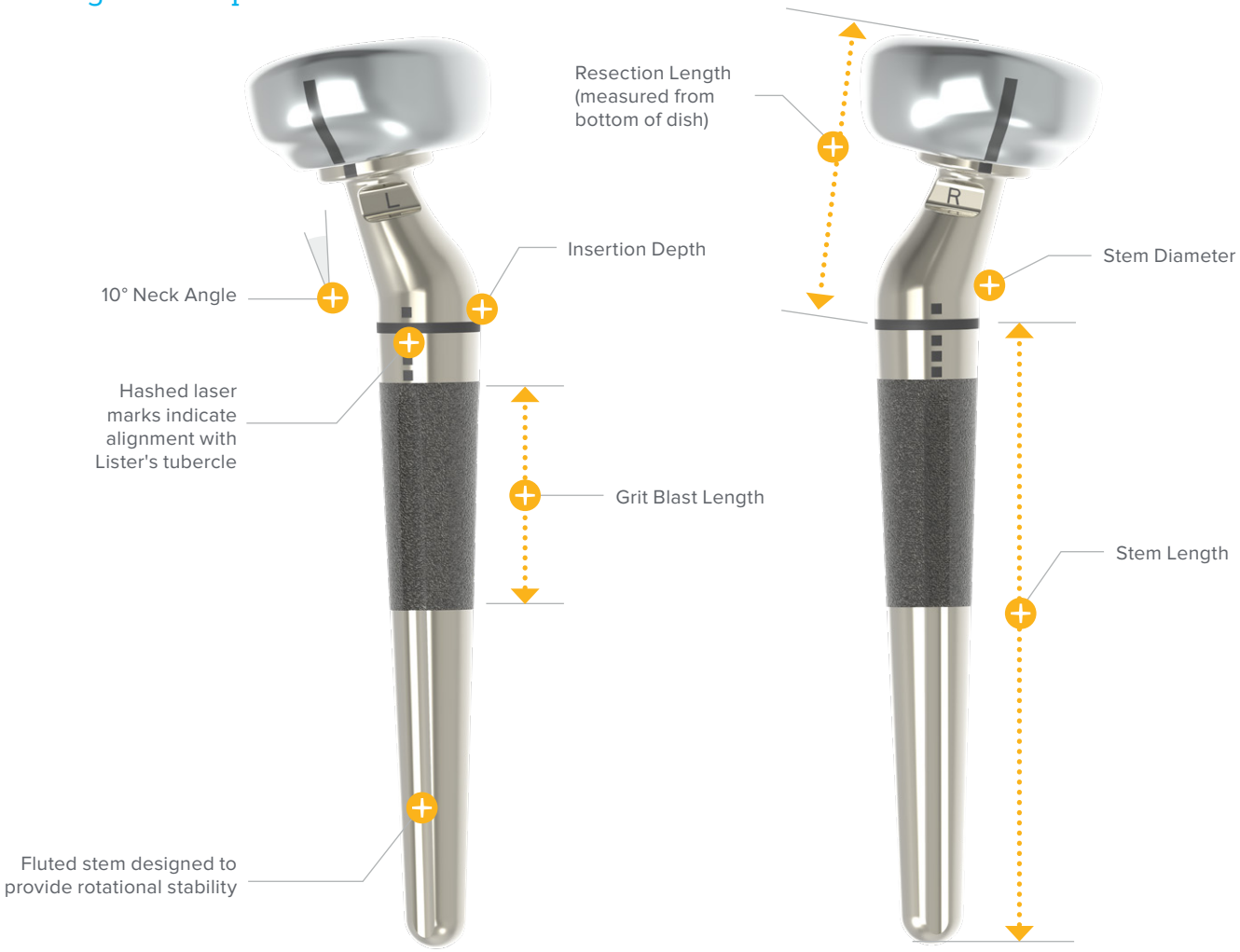




Standard Stem Implants: 6–10 mm diameters
(TR-SXXXX-S)

System Features [continued]

Long Stem Implants



Long Stem Implants: 6–12 mm diameters, (2 mm increments)
(TR-SLXX-S)

Stem Diameter	Resection Length	Stem Length	Grit Blast Length
6 mm	19 mm	50 mm	18 mm
8 mm	22 mm	55 mm	20 mm
10 mm	25 mm	60 mm	22 mm
12 mm	28 mm	65 mm	24 mm

System Features [continued]

Head and Stem Trials

Trial Head: 20–28 mm
(TR-TH2XX)
Left trial heads are blue, right trial heads are green

Standard Stem Trials: 6–10 mm (1 mm increments)
(TR-TSXX)

Long Stem Trials: 6–12 mm (2 mm increments)
(TR-TSLXXX)
Left trial stems are blue, right trial stems are green

Anatomic Radial Head—Standard Stem Surgical Technique

Shawn W. O'Driscoll, MD, PhD

Figure 1

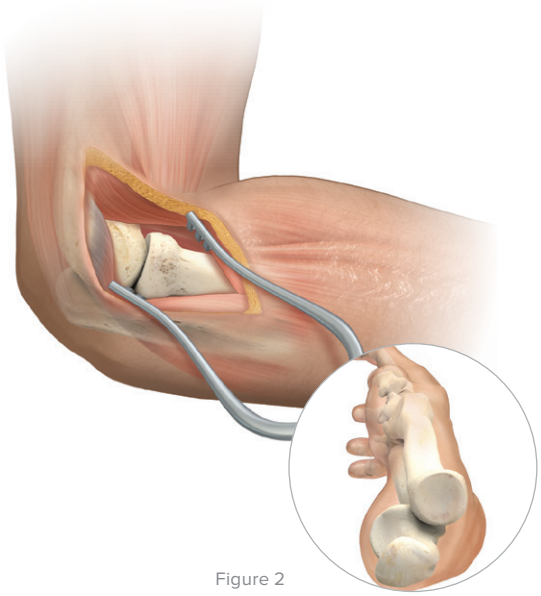
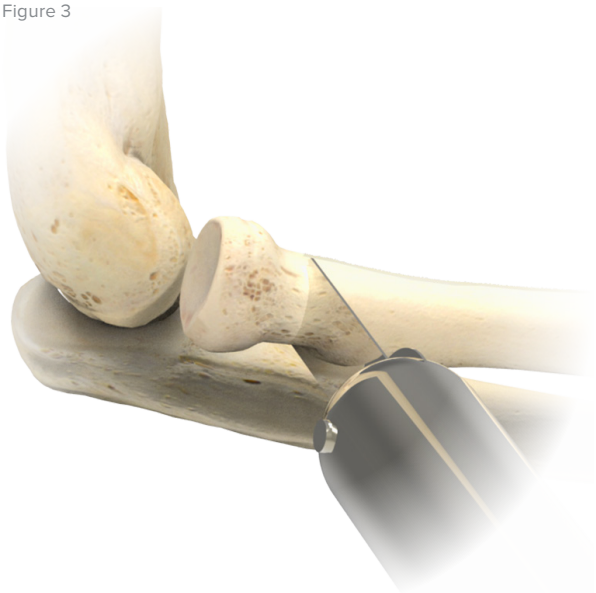


Figure 2

1 Incision and Dissection

There are several exposure options, depending on the integrity of the lateral soft tissues. In fracture-dislocations, the exposure is through the traumatic opening in the ligament complex. For delayed reconstructions, and in those acute cases in which the lateral collateral ligament is intact, the Kaplan interval permits the ligament to be left intact. The deep incision is placed in a line from the lateral epicondyle toward Lister's tubercle, with the forearm in neutral rotation. Proximally, the extensor carpi radialis longus (ECRL) origin is released with the anterior capsule to permit direct access to the front of the radial head.

Figure 3



2 Radial Head Resection

Resect the radial head with a microsagittal saw at the distal limit of the fracture, or as proximal as possible without leaving a significant neck defect. A maximum length of 17 mm of the radius can be replaced. This 17 mm includes the radius length reamed with the collar reamer in Step 4. If longer than 17 mm resection is needed, long stems are available.

Anatomic Radial Head—Standard Stem
Surgical Technique [continued]

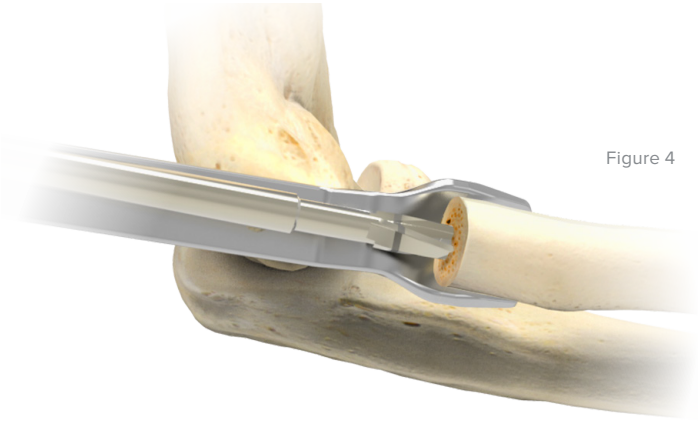


Figure 4

3 Determine Stem Diameter

Use the 5.5 mm Quick Release Awl (TR-0206) to initially enter the canal. Assemble the Bone Graft Ratcheting T-Handle (BG-8043) to the Standard Stem Reamer 6 mm (80-1606) and prepare the canal for the stem using sequentially larger reamers (80-1607 through 80-1610) until "cortical chatter" and a tight fit are achieved. The proper reaming depth is achieved when the laser mark band on the reamer is flush with the level of resection. A Radius Retractor (80-1509) is available to elevate the radius. The proper reaming depth is achieved when the laser mark band is even with the level of resection.

Note: The standard stem reamers are 0.5 mm undersized from the implants.

Warning: The Standard Stem Reamers (80-16XX) are not intended to be used under power. Using the reamers under power may result in fracturing the radial canal.

Note: Confirm the fit by rotating the reamer inside the forearm. If the forearm rotates when the reamer is turned, a sufficiently tight fit has been achieved.

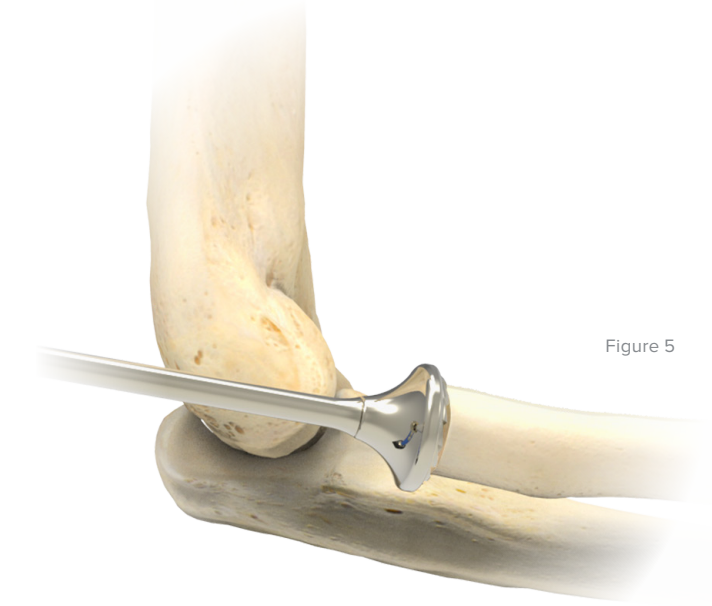


Figure 5

4 Ream With Collar Reamer

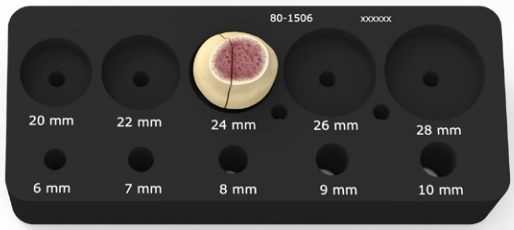
Select the Collar Reamer (TR-CRAXX) that matches the stem diameter determined by the reamer in the previous step. Power ream the collar to create a surface with at least 60% of the radial shaft in contact with the reamer.

Caution: Avoid fracturing the radial neck, which can occur if the reamer catches on irregular bone in the fracture surface.

The potential of such fracturing can be lessened by reaming initially in the reverse direction, such that the reamer acts more as a power rasp. If there is concern about risk of fracture (eg: if a notch exists), a provisional cerclage wire may be placed around the neck and removed after inserting the prosthesis.

Anatomic Radial Head—Standard Stem
Surgical Technique [continued]

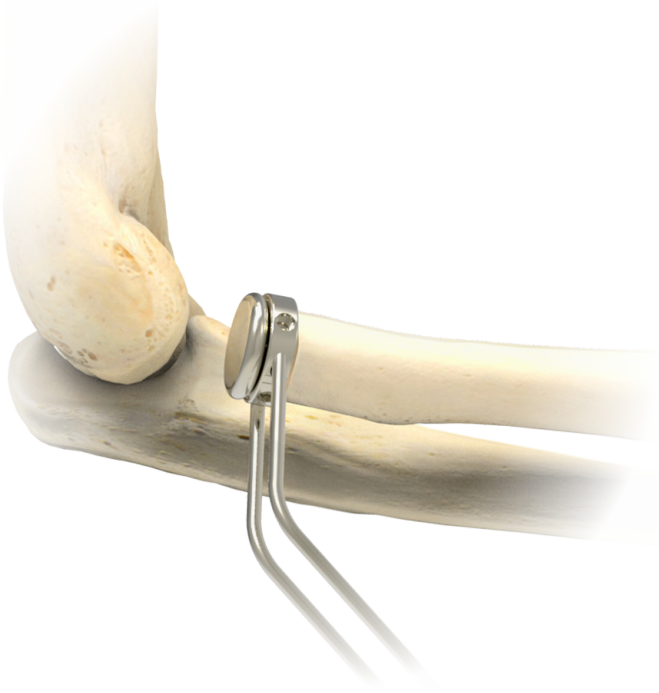
Figure 6



5 Determine Head Diameter

Determine head diameter by placing the resected head upside down in the sizing pockets on the Morse Taper Impactor Block (80-1506). If between sizes, select the smaller diameter.

Figure 7



6 Determine Neck Height

Determining the appropriate neck height is critical to restoring the joint space. It must be done with the ulnohumeral joint reduced, which can best be performed by compressing the olecranon against the distal humerus with the elbow flexed 90 degrees.

Assemble the Height Gauge (TR-TG02) and 6.0 mm Stem Gauge Assembly (TR-TGA06). The height gauge needs to be completely compressed. Insert the 6.0 mm Stem Gauge Assembly into the bone canal.

Note: It is critical that the coronoid contacts the trochlea during this process.

The technique involves not only confirming the correct length, but also confirming that a shorter length is too short and a longer length is too long.

Warning: If between sizes, select the shorter height. Implantation of components that are too large may result in a joint that is "overstuffed."

Anatomic Radial Head—Standard Stem
Surgical Technique [continued]

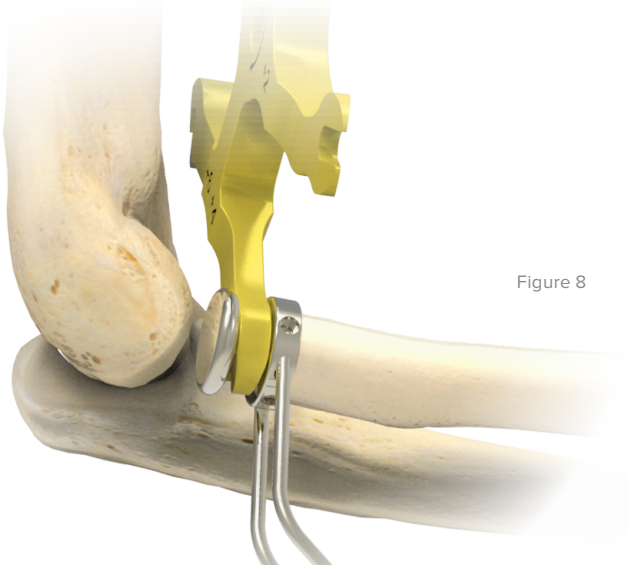


Figure 8

7 Select Trial Implants and Assemble

Starting with the +0 end of the ARH Standard & Optional Trial Gauge (80-0832), sequentially increase the height by inserting the end of the gauge under the telescoping head of the assembly, 6 mm Stem Gauge Assembly (TR-TGA06) and Height Gauge (TR-TG02), until the head reaches the capitellum.

Note: It is critical that the coronoid contacts the trochlea during this process. The coronoid separated from the trochlea is an indicator that the collar is too large.

The number on the trial gauge (+0, 2, 4, 6, 8 mm) will correspond to the collar height on the stem.

Figure 9

Figure 10

8 Select Trial Implants and Assemble

After selecting the Trial Head (TR-TH2XX) and Trial Stem (TR-TSXX or TR-TSXXX), align laser marks on the head and stem and assemble using hand pressure. The stem laser mark is indicated Left or Right ("L" or "R") for proper orientation. If the trial head and stem are difficult to connect, apply saline solution prior to connecting.

Note: Left-specific trials are blue and right-specific trials are green.

Anatomic Radial Head—Standard Stem
Surgical Technique [continued]

Figure 11

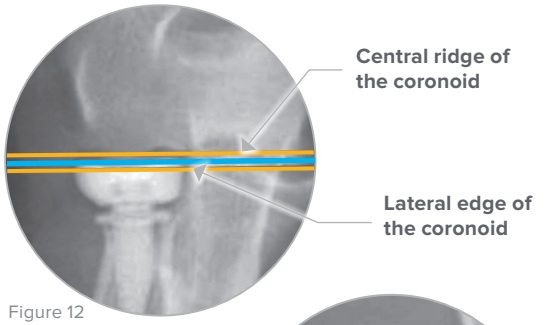


Figure 12

Figure 13

9 Trial Implant Insertion

Insert the trial implant into the radius. Ensure that the laser marks on the head and stem are aligned with the lateral aspect of the radius when the forearm is in neutral position. Lister's tubercle may also be used as a landmark for laser mark orientation. Proceed in determining if the trials are the appropriate sizes. Consider using the contralateral X-ray as a reference point.

Check for proper articulation with the capitellum and the coronoid (figures 12 and 13). The line along the articular margin of the radial head (blue line) should fall between parallel lines that pass through the central ridge and lateral edge of the coronoid (gold lines).[3] Check for proper articulation with the capitellum and the coronoid. The coronoid needs to be in contact with the trochlea to ensure proper positioning of the trial.

Warning: Trial components are NOT designed to be implanted.

Note: The trial stem diameters are 0.5 mm undersized from the reamers for ease of insertion.

Figure 14

Figure 15

Figure 16

10 Implant Assembly

After determining the correct size head and stem with the trials, place the implant stem into the appropriate size hole in the Morse Taper Impactor Block (80-1506). Align laser marks and impact the head and stem, then lock the Morse taper using the Head Impactor (TR-MS05) and a mallet.

Anatomic Radial Head—Standard Stem
Surgical Technique [continued]

Figure 17

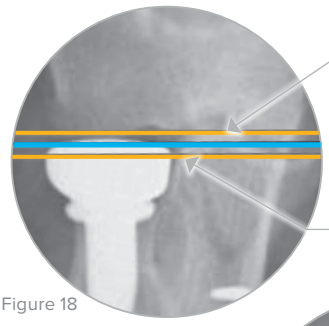


Figure 18

Figure 19

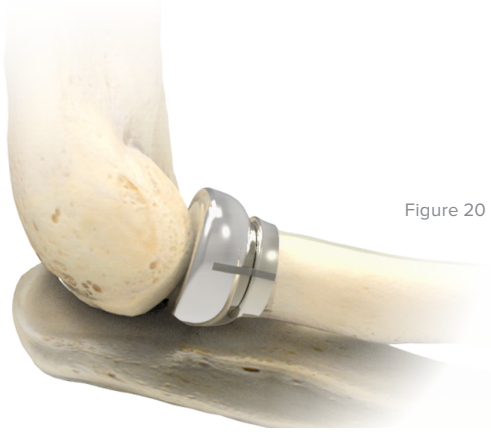


Figure 20

11 Implant Insertion

Insert the implant into the radius using the Head Impactor (TR-MS05) and a mallet. Ensure that the laser mark on the head is aligned with the lateral aspect of the radius when the forearm is in neutral position. Lister's tubercle may also be used as a landmark for laser mark orientation.

- Proceed in determining if the implants are the appropriate sizes. Consider using the contralateral X-ray as a reference point.
- Check for proper articulation with the capitellum and the coronoid (figures 18 and 19). The line along the articular margin of the radial head (blue line) should fall between parallel lines that pass through the central ridge and lateral edge of the coronoid (gold lines).[3]

Cement Option: If desired, the prosthesis may be cemented into position. The same anatomic landmarks as previously described are used to ensure proper alignment. Select an implant that is one size smaller than the reamer to allow for a 0.5 mm cement mantle. A higher viscosity cement should be used to allow precoating of the stem prior to implantation. The precoat is applied while the cement is malleable. Prior to stem insertion, malleable cement may be inserted into the radial canal. Insert into its anatomic position and hold the elbow in a flexed position while the cement hardens. Check for cement extrusion around the radial neck and remove if present. Once the cement is firm and cooled (per the cement IFU), the elbow can be moved freely as needed.

Optionally, a cement restrictor (not available through Acumed) may be inserted approximately 1 cm distal to the tip of the implant to prevent extravasation down the intramedullary canal of the radius and to improve the cement mantle.

12 Postoperative Protocol

Note: The following protocol may be replaced with an alternative protocol at the performing surgeon's discretion.

Postoperative management is determined by the overall management of the elbow and limb, as though the radial head had never been fractured. For isolated fractures of the radial head and neck without ligament injury, early motion is commenced in flexion and extension as well as pronation and supination. This usually begins within the first few days after surgery.

Note: An ARH Removal Tool Shaft (80-2018) is available in the system for stem removal if needed. For removal instructions, reference the Anatomic Radial Head and Stem Removal technique on page 17.

Anatomic Radial Head—Long Stem Surgical Technique

Shawn W. O'Driscoll, MD, PhD

Reference Chart		
Stem Diameter	**Resection Length**	**Long Stem Length**
6 mm	19 mm	50 mm
8 mm	22 mm	55 mm
10 mm	25 mm	60 mm
12 mm	28 mm	65 mm

Introduction

This technique typically requires two resection steps to accommodate the 10° neck/shaft angle and proportional change in neck length with stem diameter. The first resection clears a path to insert the reamer and the second resection establishes the appropriate insertion depth for the final stem size. If using the 6 mm stem, only one resection is required. If the reamer's final size is larger than 6 mm (8, 10, or 12 mm), a second cut and subsequent reaming to the instrument's laser mark band accommodates the respective size of the implant stem. Refer to the Reference Chart for the amount of resection that corresponds with the long stem's diameter and length.

1 Incision and Dissection

There are several exposure options, depending on the integrity of the lateral soft tissues. In fracture-dislocations, the exposure is through the traumatic opening in the ligament complex. For delayed reconstructions, and in those acute cases in which the lateral collateral ligament is intact, the Kaplan interval permits the ligament to be left intact. The deep incision is placed in a line from the lateral epicondyle toward Lister's tubercle, with the forearm in neutral rotation. Proximally, the extensor carpi radialis longus (ECRL) origin is released with the anterior capsule to permit direct access to the front of the radial head.

Note: Stem removal can be very difficult if a fully porous coated surface is well ingrown with bone. Slap hammers and vice grips are useful. If revising an Acumed Anatomic Radial Head and Stem, an ARH Removal Tool Shaft (80-2018) is available for the stem. A removal technique is available on page 17. After stem removal, find the radial canal distal to the end of the primary stem before reaming. This can be done with a small pointed device such as a Rush reamer.

Note: Image intensification (fluoroscopy) can be helpful in avoiding cortical perforation.

Figure 1

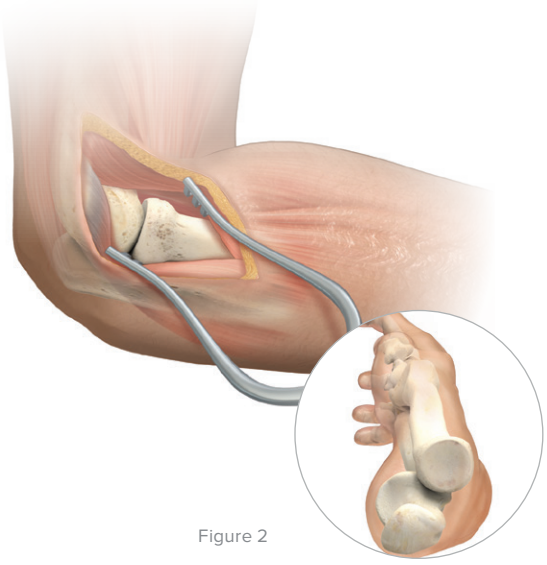


Figure 2

Anatomic Radial Head—Long Stem
Surgical Technique [continued]

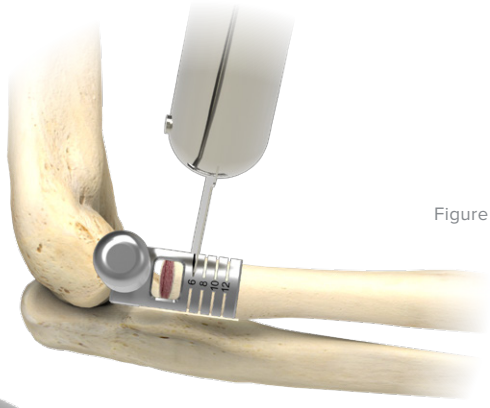


Figure 3

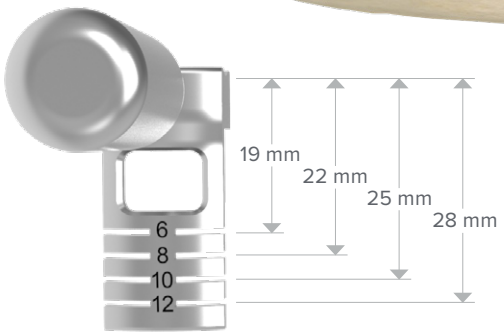


Figure 4

2 Radial Head/Neck Resection

1. Place the Long Stem Resection Guide (80-1512) against the capitellum and in line with the radial neck.
2. Score the bone with a blade. If there is no bone at the 6 mm level, proceed with sequential reaming.
3. Resect at the 6 mm level within the resection guide using an Osteotomy Saw Blade Hub Style L or S (ZMS-3514 or SM-3514) or .6 mm thick blade. This resection level will remove enough neck to allow the reamers to be directly inserted into the radial canal.

Note: The long stem reamers are 0.25 mm undersized from the implants.

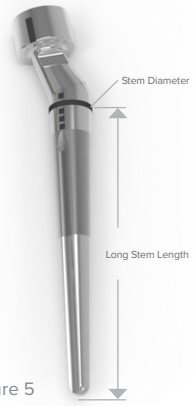


Figure 5

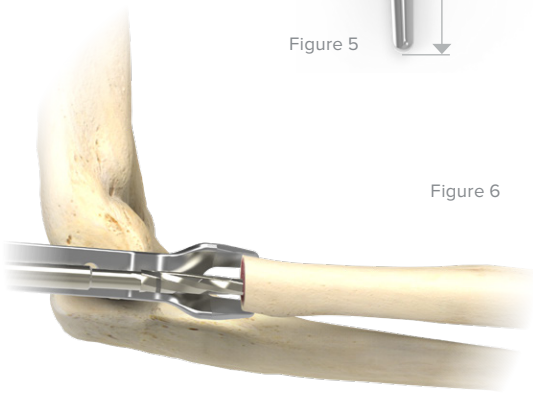


Figure 6

3 Determine Stem Diameter

The Radius Retractor (80-1509) is available to elevate the radius. Use the 5.5 mm Quick Release Awl (TR-0206) to initially enter the canal.

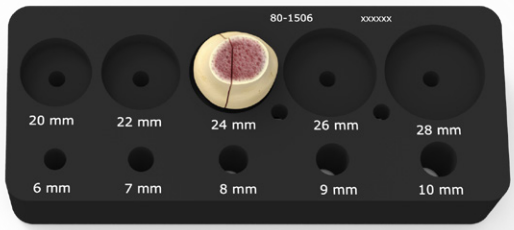
1. Starting with the 6 mm Long Stem Reamer (80-1706), prepare the canal for the stem using sequentially larger reamers until “cortical chatter” and a tight fit are achieved.
2. If the final reamer diameter size is greater than 6 mm, re-cut the radial neck using the Long Stem Resection Guide and microsagittal saw to the length corresponding to the final reamer diameter size.
3. Re-insert the final size reamer until the laser mark band is even with the level of resection.

Note: Confirm the fit by rotating the reamer inside the forearm. If the forearm rotates when the reamer is turned, a sufficiently tight fit has been achieved.

Warning: The Long Stem Reamers (80-17XX) are not intended to be used under power. Using them under power may result in over-reaming or fracturing the radial canal.

Anatomic Radial Head—Long Stem
Surgical Technique [continued]

Figure 7



4 Determine Head Diameter

Determine head diameter by placing the resected head upside down in the sizing pockets on the Morse Taper Impactor Block (80-1506). If between sizes, select the smaller diameter.

Figure 8

5 Select Trial Implants And Assemble

After selecting the Trial Head (TR-TH2XX) and Trial Morse Taper Long Stem (TR-TSLXXX), align the laser marks on the head and stem and assemble using hand pressure. The stem laser mark is indicated Left or Right ("L" or "R") for proper orientation. If the trial head and stem are difficult to connect, apply saline solution prior to connecting.

Note: Left-specific trials are blue and right-specific trials are green.

Anatomic Radial Head—Long Stem
Surgical Technique [continued]

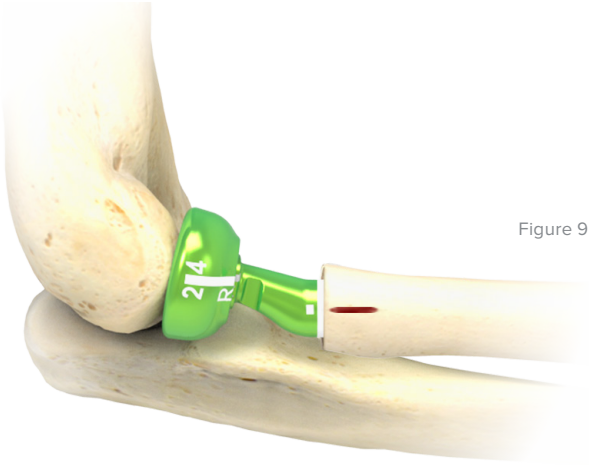


Figure 9

6 Trial Implant Insertion

Rotate the forearm to a neutral rotation. Mark the lateral aspect of the radial neck with the cautery (in line with Lister's tubercle). The stem laser mark is indicated Left or Right ("L" or "R") for proper orientation. Insert the trial into the radius. Insert to the level of the laser mark (line around stem body) or when the appropriate reduction is achieved.

Note: If restoration length is too long, additional reaming and reinsertion of the trial is suggested.

Ensure the dotted laser mark on the stem is aligned with the cautery mark. The Morse Taper Long Stem Alignment Guide (80-2127) can be used to help with alignment during insertion. Check for proper articulation with the capitellum and the coronoid. The coronoid needs to be in contact with the trochlea to ensure proper positioning of the trial.

Note: Trial components are NOT designed to be implanted.

Note: The long stem trials are the same diameter as the reamers.

Caution: Do NOT impact the trial long stem into the canal. If the trial cannot be placed at the insertion line without impaction, then recheck the reaming depth or resection cut.

Figure 10

7 Implant Assembly

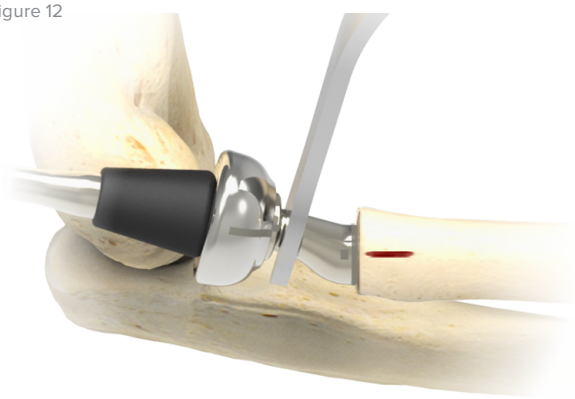
After determining the correct size head and stem with the trials, place the implant stem into the long stem impaction site on the Morse Taper Impactor Block (80-1506). Align laser marks and assemble the head and stem using hand pressure, then lock the Morse taper engagement between the head and stem using the Head Impactor (TR-MS05) and a mallet.

Note: The implants are identified by stem diameter only. The Left and Right designations are marked on the stem.

Figure 11

Anatomic Radial Head—Long Stem
Surgical Technique [continued]

Figure 12



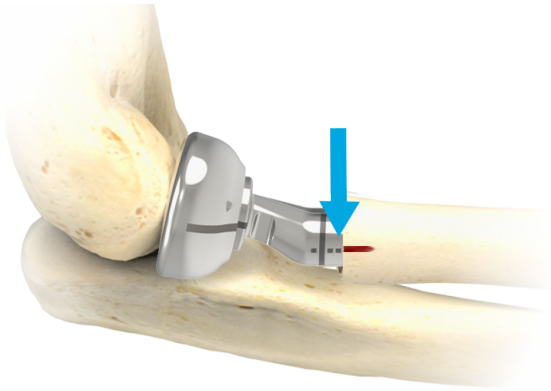
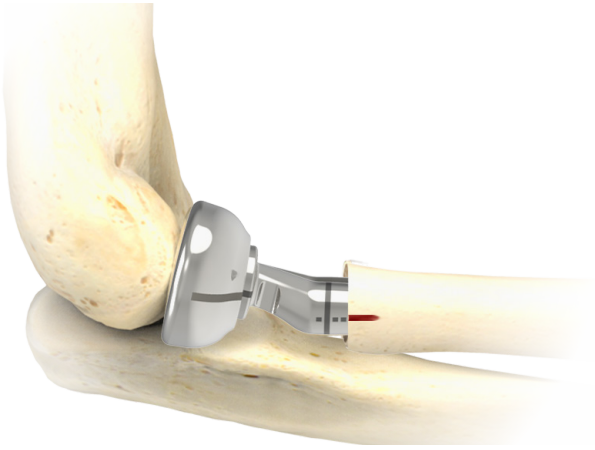


Figure 13



8 Implant Insertion

Insert the implant into the radius using the Head Impactor (TR-MS05) and a mallet. Insert to the level of the laser mark (line around stem body) or when the appropriate reduction is achieved. Ensure that the dotted laser mark on the stem is aligned with the cautery marking on the lateral aspect of the radius when the forearm is in neutral rotation. The Morse Taper Long Stem Alignment Guide (80-2127) can be used to help with alignment during insertion. Check for proper articulation with the capitellum and the coronoid. Lister's tubercle may also be used as a landmark for laser mark orientation.

Note: The long-stem implants are 0.25 mm larger than the reamers and trials.

Cement Option: If desired, the prosthesis may be cemented into position. The same anatomic landmarks as previously described are used to ensure proper alignment. Select an implant that is one size smaller than the reamer to allow for a 1 mm cement mantle. A higher viscosity cement should be used to allow precoating of the stem prior to implantation. The precoat is applied while the cement is malleable. Prior to stem insertion, malleable cement may be inserted into the radial canal. Insert into its anatomic position and hold the elbow in a flexed position while the cement hardens. Insert to the level of the second dot below the laser mark (line around the stem body) or when the appropriate reduction is achieved. Check for cement extrusion around the radial neck and remove if present. Once the cement is firm and cooled (per the cement IFU), the elbow can be moved freely as needed.

Optionally, a cement restrictor (not available through Acumed) may be inserted approximately 1 cm distal to the tip of the implant to prevent extravasation down the intramedullary canal of the radius and to improve the cement mantle.

9 Postoperative Protocol

Note: The following protocol may be replaced with an alternative protocol at the performing surgeon's discretion.

Postoperative management is determined by the overall management of the elbow and limb, as though the radial head had never been fractured. For isolated fractures of the radial head and neck without ligament injury, early motion is commenced in flexion and extension as well as pronation and supination. This usually begins within the first few days after surgery.

Note: An ARH Removal Tool Shaft (80-2018) is available in the system for stem removal if needed. For removal instructions, reference the Anatomic Radial Head and Stem Removal technique on page 17.

Anatomic Radial Head and Stem Removal
Surgical Technique

Shawn W. O'Driscoll, MD, PhD

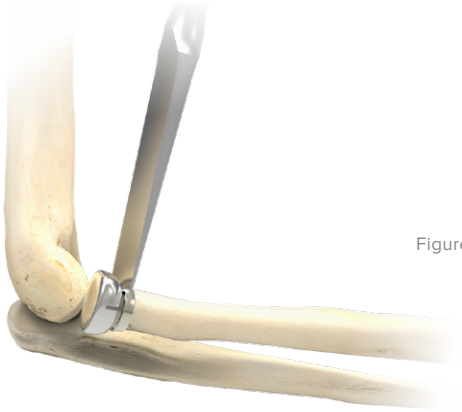


Figure 1

1 Head Removal

To remove the radial head prosthesis from the standard stem, place an osteotome in the Morse taper gap between the head and the stem and tap with a mallet.

If removing a +0 mm collar standard stem (TR-SXX00-S) where there is no Morse taper gap, attach a vice grip to the head and then attach a slap hammer to the vice grip. Use the slap hammer to separate the implant head from the stem.

To remove the radial head prosthesis from a long stem (TR-SLXX-S), use the same vice grip technique as above.

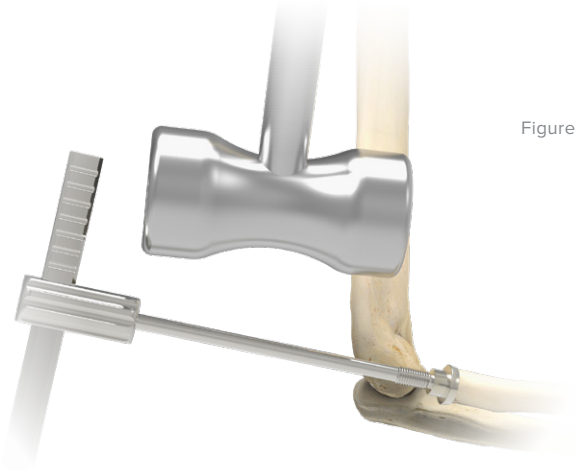
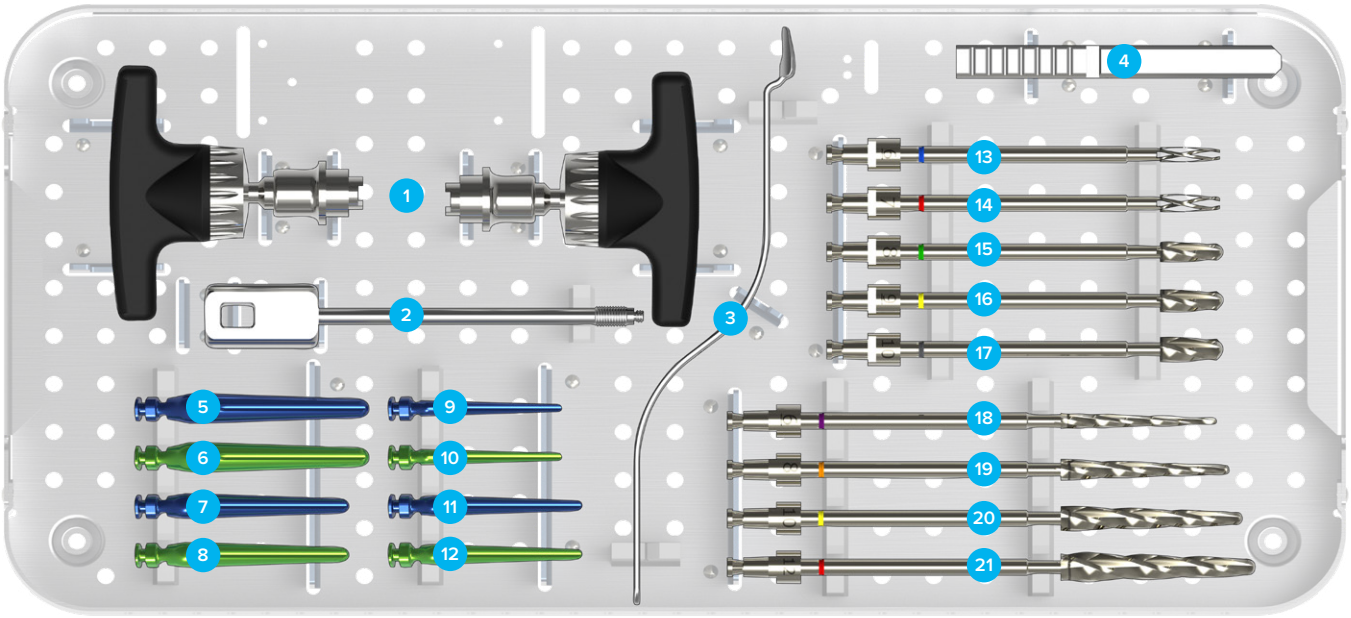


Figure 2

2 Stem Removal

To remove a standard stem or a long stem from the canal, thread the ARH Removal Tool Shaft (80-2018) in to the stem. Insert the Cross Bar (80-1771) through the handle of the ARH Removal Tool Shaft. Using a mallet, tap the cross bar until the stem is removed from the canal.

Ordering Information



Tray Components

Instruments

1	Bone Graft Ratcheting T-Handle	BG-8043
2	ARH Removal Tool Shaft	80-2018
3	Radius Retractor	80-1509
4	Cross Bar	80-1771

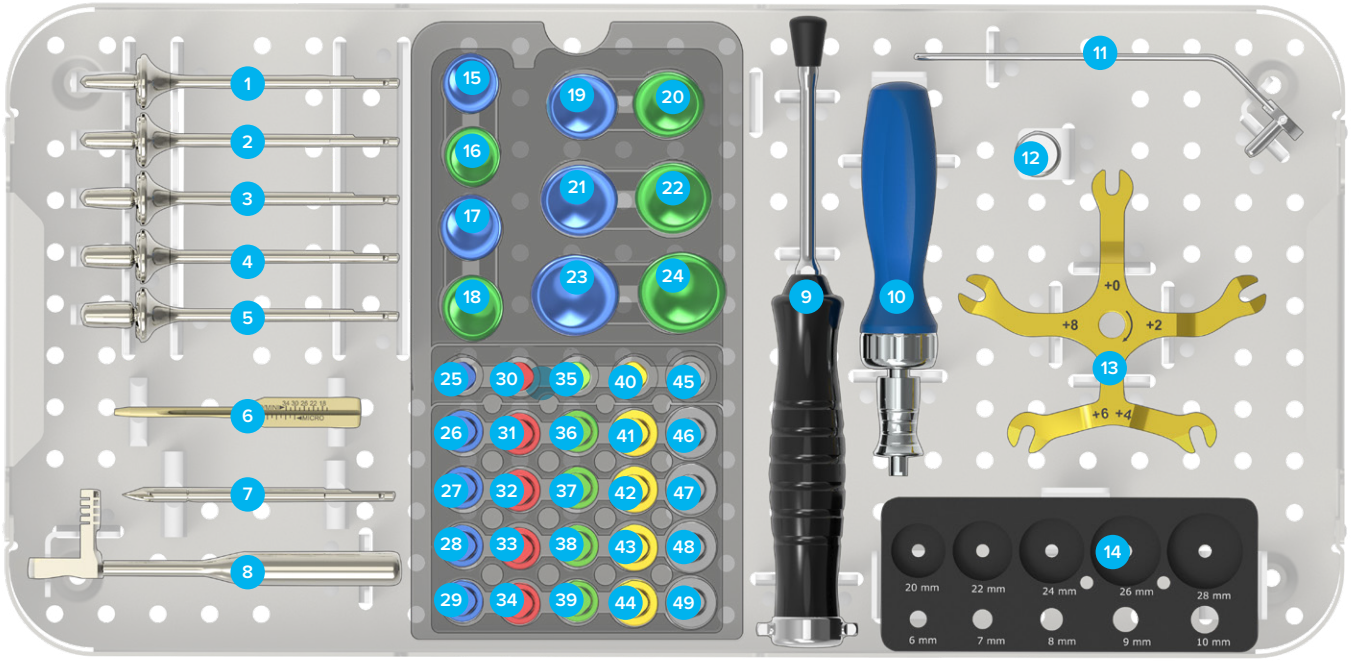
Long Stem Trials

5	12 mm Trial Morse Taper Long Stem, Right	TR-TSL12R
6	12 mm Trial Morse Taper Long Stem, Left	TR-TSL12L
7	10 mm Trial Morse Taper Long Stem, Right	TR-TSL10R
8	10 mm Trial Morse Taper Long Stem, Left	TR-TSL10L
9	6 mm Trial Morse Taper Long Stem, Left	TR-TSL06L
10	6 mm Trial Morse Taper Long Stem, Right	TR-TSL06R
11	8 mm Trial Morse Taper Long Stem, Left	TR-TSL08L
12	8 mm Trial Morse Taper Long Stem, Right	TR-TSL08R

Long Stem Trials

13	Standard Stem Reamer 6 mm	80-1606
14	Standard Stem Reamer 7 mm	80-1607
15	Standard Stem Reamer 8 mm	80-1608
16	Standard Stem Reamer 9 mm	80-1609
17	Standard Stem Reamer 10 mm	80-1610
18	Long Stem Reamer 6 mm	80-1706
19	Long Stem Reamer 8 mm	80-1708
20	Long Stem Reamer 10 mm	80-1710
21	Long Stem Reamer 12 mm	80-1712

Ordering Information [continued]



Tray Components

Instruments

1	6 mm Collar Reamer	TR-CRA06
2	7 mm Collar Reamer	TR-CRA07
3	8 mm Collar Reamer	TR-CRA08
4	9 mm Collar Reamer	TR-CRA09
5	10 mm Collar Reamer	TR-CRA10
6	AT2 Screw Sizer	AT2-SMCZ
7	5.5 mm Quick Release Awl	TR-0206
8	Long Stem Resection Guide	80-1512
9	Head Impactor	TR-MS05
10	Medium Ratcheting Driver Handle	80-0663
11	6 mm Stem Gauge Assembly	TR-TGA06
12	Height Gauge	TR-TG02
13	ARH Standard & Optional Trial Gauge	80-0832
14	Morse Taper Impactor Block	80-1506

Ordering Information [continued]

Tray Components

Head Trials

15	20 mm Trial Head, Left	TR-TH20L	20	24 mm Trial Head, Right	TR-TH24R
16	20 mm Trial Head, Right	TR-TH20R	21	26 mm Trial Head, Left	TR-TH26L
17	22 mm Trial Head, Left	TR-TH22L	22	26 mm Trial Head, Right	TR-TH26R
18	22 mm Trial Head, Right	TR-TH22R	23	28 mm Trial Head, Left	TR-TH28L
19	24 mm Trial Head, Left	TR-TH24L	24	28 mm Trial Head, Right	TR-TH28R

Standard Stem Trials

25	6 mm x 0 mm Trial Stem	TR-TS60	40	9 mm x 0 mm Trial Stem	TR-TS90
26	6 mm x 2 mm Trial Stem	TR-TS62	41	9 mm x 2 mm Trial Stem	TR-TS92
27	6 mm x 4 mm Trial Stem	TR-TS64	42	9 mm x 4 mm Trial Stem	TR-TS94
28	6 mm x 6 mm Trial Stem	TR-TS66	43	9 mm x 6 mm Trial Stem	TR-TS96
29	6 mm x 8 mm Trial Stem	TR-TS68	44	9 mm x 8 mm Trial Stem	TR-TS98
30	7 mm x 0 mm Trial Stem	TR-TS70	45	10 mm x 0 mm Trial Stem	TR-TS100
31	7 mm x 2 mm Trial Stem	TR-TS72	46	10 mm x 2 mm Trial Stem	TR-TS102
32	7 mm x 4 mm Trial Stem	TR-TS74	47	10 mm x 4 mm Trial Stem	TR-TS104
33	7 mm x 6 mm Trial Stem	TR-TS76	48	10 mm x 6 mm Trial Stem	TR-TS106
34	7 mm x 8 mm Trial Stem	TR-TS78	49	10 mm x 8 mm Trial Stem	TR-TS108
35	8 mm x 0 mm Trial Stem	TR-TS80			
36	8 mm x 2 mm Trial Stem	TR-TS82			
37	8 mm x 4 mm Trial Stem	TR-TS84			
38	8 mm x 6 mm Trial Stem	TR-TS86			
39	8 mm x 8 mm Trial Stem	TR-TS88			

Ordering Information [continued]

Sterile Implants*

ARH Solutions Head Implants

ARH Solutions Head 20 mm, Left	5001-0220L-S
ARH Solutions Head 20 mm, Right	5001-0220R-S
ARH Solutions Head 22 mm, Left	5001-0222L-S
ARH Solutions Head 22 mm, Right	5001-0222R-S
ARH Solutions Head 24 mm, Left	5001-0224L-S
ARH Solutions Head 24 mm, Right	5001-0224R-S
ARH Solutions Head 26 mm, Left	5001-0226L-S
ARH Solutions Head 26 mm, Right	5001-0226R-S
ARH Solutions Head 28 mm, Left	5001-0228L-S
ARH Solutions Head 28 mm, Right	5001-0228R-S

ARH Head Implants

20 mm Head, Left	TR-H200L-S
20 mm Head, Right	TR-H200R-S
22 mm Head, Left	TR-H220L-S
22 mm Head, Right	TR-H220R-S
24 mm Head, Left	TR-H240L-S
24 mm Head, Right	TR-H240R-S
26 mm Head, Left	TR-H260L-S
26 mm Head, Right	TR-H260R-S
28 mm Head, Left	TR-H280L-S
28 mm Head, Right	TR-H280R-S

Standard Stem Implants

6 mm x 0 mm Stem	TR-S0600-S
6 mm x 2 mm Stem	TR-S0602-S
6 mm x 4 mm Stem	TR-S0604-S
6 mm x 6 mm Stem	TR-S0606-S
6 mm x 8 mm Stem	TR-S0608-S
7 mm x 0 mm Stem	TR-S0700-S
7 mm x 2 mm Stem	TR-S0702-S
7 mm x 4 mm Stem	TR-S0704-S
7 mm x 6 mm Stem	TR-S0706-S
7 mm x 8 mm Stem	TR-S0708-S
8 mm x 0 mm Stem	TR-S0800-S
8 mm x 2 mm Stem	TR-S0802-S
8 mm x 4 mm Stem	TR-S0804-S
8 mm x 6 mm Stem	TR-S0806-S
8 mm x 8 mm Stem	TR-S0808-S
9 mm x 0 mm Stem	TR-S0900-S
9 mm x 2 mm Stem	TR-S0902-S
9 mm x 4 mm Stem	TR-S0904-S
9 mm x 6 mm Stem	TR-S0906-S
9 mm x 8 mm Stem	TR-S0908-S
10 mm x 0 mm Stem	TR-S1000-S
10 mm x 2 mm Stem	TR-S1002-S
10 mm x 4 mm Stem	TR-S1004-S
10 mm x 6 mm Stem	TR-S1006-S
10 mm x 8 mm Stem	TR-S1008-S

***Please note:** Implants are provided sterile-packed, separate from the system tray.

Ordering Information [continued]

Sterile Implants*

Long Stem Implants

6 mm Morse Taper Long Stem	TR-SL06-S	10 mm Morse Taper Long Stem	TR-SL10-S
8 mm Morse Taper Long Stem	TR-SL08-S	12 mm Morse Taper Long Stem	TR-SL12-S

Additional Components

Instruments

Morse Taper Long Stem Alignment Guide	80-2127	ARH Long Stem X-ray Template	90-0039

Tray

ARH Solutions Base	80-2000	ARH Upgrade Tray Instruments Level 2	80-2003
ARH Solutions Lid	80-2001	ARH Standard & Optional Trial Caddy Base	80-0833
ARH Upgrade Tray Instruments Level 1	80-2002	ARH Standard & Optional Trial Caddy Lid	80-0857

Optional Components

Osteotomy Saw Blade Hub Style L**	ZMS-3514	Osteotomy Saw Blade Hub Style S**	SM-3514

***Please note:** Implants are provided sterile-packed, separate from the system tray.

**Not available in all markets.

Note: To learn more about the full line of Acumed innovative surgical solutions, please contact your authorized Acumed distributor, call 888.627.9957, or visit www.acumed.net.

References

1. Sahu D, Holmes DM, Fitzsimmons JS, Thoreson AR, Berglund LJ, An KN, O'Driscoll SW. Influence of radial head prosthesis design on radiocapitellar joint contact mechanics. *J Shoulder Elbow Surg.* 2014;23(4):456-462.
2. Bachman DR, Thaveepunsan S, Park S, Fitzsimmons JS, An KN, O'Driscoll SW. The effect of prosthetic radial head geometry on the distribution and magnitude of radiocapitellar joint contact pressures. *J Hand Surg Am.* 2015;40(2):281-288.
3. Doornberg JN, Linzel DS, Zurakowski D, Ring D. Reference points for radial head prosthesis size. *J Hand Surg Am.* 2006;31(1):53-57.

Notes:

Notes:

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