TORNIER
TECHNOLOGY

TORNIER
AEQUALIS™ PERFORM™+ REVERSED
Glenoid

WEDGED AUGMENT SURGICAL TECHNIQUE

WRIGHT™
FOCUSED EXCELLENCE

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AEQUALIS™ PERFORM™ REVERSED Glenoid Overview

The AEQUALIS PERFORM REVERSED Glenoid is intended to replace the shoulder joint in order to relieve pain and to improve the mobility of the shoulder joint in relation to the preoperative state of health. The AEQUALIS PERFORM+ REVERSED Glenoid is based off the bone preserving AEQUALIS PERFORM anatomic glenoid system. The augmented system allows for the implantation of a baseplate, central and peripheral anchoring screws, and a glenosphere to be performed in a cannulated technique.

The AEQUALIS PERFORM+ REVERSED system features four augmented baseplates (25 mm Half Wedge or Full Wedge and 29 mm Half Wedge or Full Wedge). The wedged portion of the baseplates utilize Wright's ADAPTIS™ porous titanium technology and was designed to encourage bone ingrowth and may assist in fixation strength. These baseplates can be used to help correct glenoid defects in glenoid classifications suggested by Walch et al. and Sirveaux et al.1, 2 To minimize bone removal, below is a suggestion of the baseplate offerings compared to the clinical classifications:

Walch Classification	Sirveaux Classification	AEQUALIS PERFORM+ REVERSED Baseplate
B2	E2	Half Wedge Baseplates
C	E3	Full Wedge Baseplates

The AEQUALIS PERFORM REVERSED and AEQUALIS PERFORM+ REVERSED glenoids must be used in association with a Wright humeral component:

- humeral implants AEQUALIS ASCEND™ FLEX Convertible Shoulder System in reverse configuration
- or humeral implants AEQUALIS™ REVERSED, AEQUALIS™ REVERSED FRACTURE or AEQUALIS™ ADJUSTABLE REVERSED Shoulder System,
- or humeral implants AEQUALIS™ REVERSED

The Wright shoulder prostheses are intended for replacement of the shoulder joint to reduce pain and improve shoulder mobility for patients with designated indication.

Preoperative Planning

Pre-operative planning is performed utilizing x-rays including a true anterior/posterior view of the glenohumeral joint or axillary views. The use of a CT scan or MRI is recommended to better determine the orientation of the glenoid, the quality of glenoid bone stock and to evaluate the integrity of the rotator cuff.

A careful analysis of X-rays and CT scan views is recommended before surgery to evaluate the following parameters: osteophytes, anterior, superior, posterior, and inferior wear of the glenoid, as well as the location, orientation and depth of the glenoid vault and presence of subcortical cysts.

Glenoid Exposure

Exposure of the glenoid is one of the more technically difficult aspects of shoulder arthroplasty. The size of the patient, soft tissue contractures, bony morphology, and the sequelae of previous surgeries are some of the potential challenges to adequate exposure. A thorough understanding of the neuroanatomy and techniques for protecting the axillary nerve, in particular, are routinely used to achieve successful exposure. In brief, a standard deltopectoral approach is typically used, with retraction of the deltoid laterally and pectoralis and conjoined tendon medially. A superior approach may also be utilized. Humeral exposure is performed per surgeon preference with appropriate subscapularis techniques and humeral head resection. The proximal humerus is then retracted posteriorly and access to the glenoid is gained. Residual labral tissue is excised, biceps tendon is released, and the capsule is released from the glenoid anterior, inferiorly, and posteriorly. Special attention is given for protection of the axillary nerve inferiorly. Appropriate glenoid retractors are then inserted and additional exposure techniques can then be used as needed. Please reference the APPROACH™ Shoulder Arthroplasty Program for additional details.

Surgical Steps

AEQUALIS PERFORM+ REVERSED Surgical Steps

AEQUALIS PERFORM+ REVERSED instrumentation allows for use of different surgical techniques to better suit the clinical situation and surgeon preference. The instruments have been designed to increase the safety of the procedure and to assist the surgeon in obtaining accurate and reproducible results. The instrumentation only allows for a cannulated preparation referencing a guide pin positioned at a chosen orientation. To minimize bone loss during an augmented procedure the surgeon can utilize the augmented trials prior to reaming to determine what type of augment will be most appropriate for the patient. The augment option that preserves the most native glenoid bone should be utilized.

Note: These devices should not be used in cases of significant bone loss where poor quality or insufficient quantity of glenoid bone stock exists.

Half Wedge Augment

Sizing the Glenoid and Pin Placement

Two types of pin guides are available (circular or anatomic). (Figure 1) The circular guide has the same outer diameter as the glenoid baseplate in a 25 mm or 29 mm diameters. The anatomical pin guides come in four sizes (S=Small, M=Medium, L=Large, and XL=Extra-Large) that correspond to the varying patient anatomies. The anatomical pin guides have an inferior offset built in, which positions the pin 12 mm from the bottom of the guide.1 Two pin guide handles are offered in the instrument set, a 0° or 10° inferior tilt handle. The 0° pin guide handle can be used to prepare the baseplate perpendicular to the glenoid. The 10° pin guide handle can be used to place a 10° inferior tilt to the baseplate. The guides are assembled by rotating the distal end of the pin guide handle into the pin guide clockwise until it is fully seated. (Figure 2)

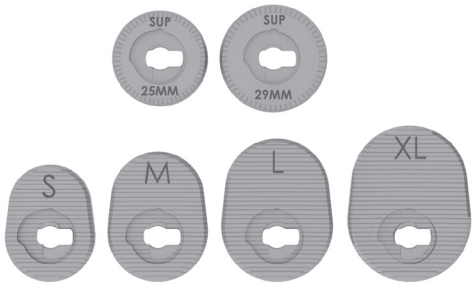


Figure 1

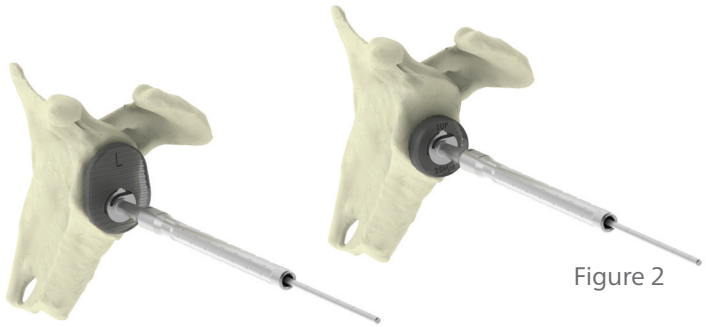


Figure 2

According to surgeon preference, exposure, and surgical approach, the offset pin guide handle can be attached to the straight pin guide handles by sliding the offset handle down the shaft of the straight handle until it snaps in place. (Figure 3) Use of the offset handle can provide better visualization as the guide pin is placed.

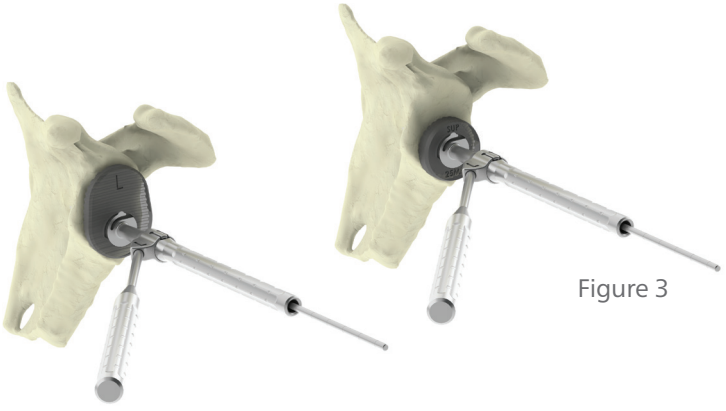


Figure 3

While referencing the face of the glenoid and appropriately seating the assembled pin guide on the inferior edge of the glenoid to reduce the risk of impingement, drill the 2.5 mm guide pin through the guide pin handle until bicortical fixation is achieved. Care should be taken when placing the pin on a glenoid with abnormal erosion. (Figure 4)

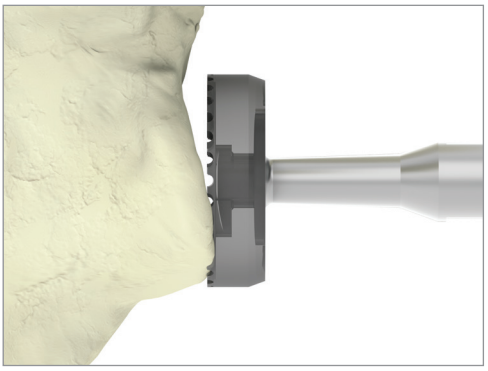


Figure 4

Once the 2.5 mm guide pin is fixed in the glenoid with bicortical fixation, remove the drill and the pin guide assembly. Finally, before reaming, check to ensure the guide pin is accurately placed on the glenoid and no adjustments are needed. It is important to check the guide pin condition after every step of the glenoid preparation. If the guide pin is damaged or bent, a new guide pin should be inserted.

Note: An optional trialing step to estimate glenoid position can be performed at this point using the guide pin and the glenosphere trials. (Figure 5)

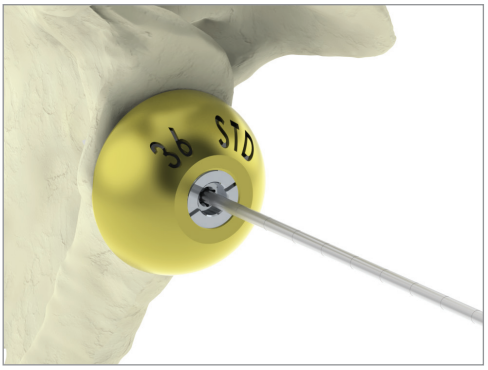


Figure 5

Resurfacing the Glenoid

To obtain complete seating and secure fixation of the glenoid baseplate, it is important to create a flat glenoid surface using the cannulated baseplate reamer of the same diameter of the baseplate that will be used. Half-moon reamers are provided standard in the AEQUALIS PERFORM REVERSED Standard instrument set. If preferred, full-moon reamers are available upon request.

Connect the appropriate reamer to power and select the reaming option on the drill. Slide the assembly onto the guide pin and ream.

Only the paleo glenoid, or surface that reassembles the natural glenoid shape, should be reamed flat to best fit the implant. Care should be taken to not completely ream the entire glenoid surface. It is recommended to start the reamer before contacting the glenoid surface and ream until the paleo glenoid surface is flat. (Figure 6)

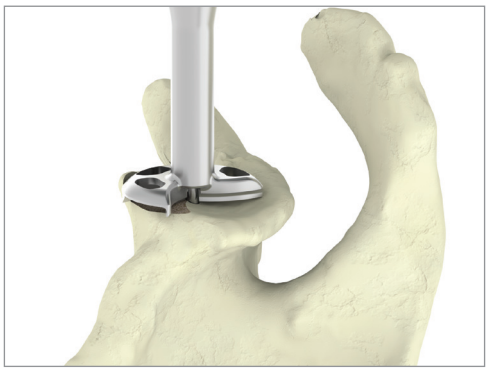


Figure 6

If insertion of reamer is difficult, remove or reposition retractors for greater exposure. A T-handle is provided in all of Wright's humeral instrument sets if manual reaming is desired. Preserve as much bone as possible to support good primary fixation.

Overly aggressive reaming should be avoided to minimize the risk of glenoid fracture.

Augment Reaming - Neo Reaming

After the paleo surface of the glenoid has been adequately prepared, ream the defected bone or the neo portion of the glenoid. When assembling the augment reamer (see instructions in the Appendix) make sure the angle indicator is positioned at the 35° angle before starting to ream. Choose the appropriately sized neo reamer and neo reamer depth stop size based on whether a 25 mm or 29 mm sized baseplate will be used. The arrow on the depth stop indicates the position that is 180° opposite of the deepest point of the wedge. This arrow corresponds to marking on several other instruments that will follow. An anatomical mark on the rim of the glenoid made with a bovie can also be created to keep the location identified through the duration of the surgery.

Begin by placing the neo reamer assembly over the guide pin and slide the assembly down to the face of the glenoid. Make sure that the appropriate size neo reamer depth stop is aligned with the paleo reamed surface. (Figure 7a-7b)

Note: It is imperative to maintain alignment with the guide pin and rotational position while neo reaming.

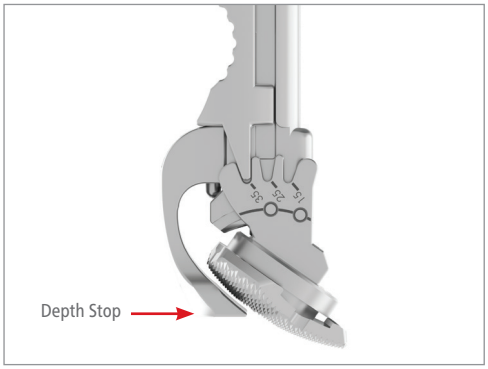


Figure 7a

The neo reamer is intended to be power driven only. Begin reamer rotation prior to contacting the glenoid surface then apply light pressure. This will help reduce the risk of fracture. Take extra care to keep the neo reamer axially aligned with the guide pin so that the depth stop sits flush on the paleo surface when reaming is complete.

Depending on the defect, you will need to progressively ream until the depth stop is seated on the paleo surface. This will be determined in the next step with the augment trials. Care should be taken to keep the reamer steady to maintain alignment if progressive reaming is necessary.

The goal of neo reaming is to obtain a bony surface that matches the backside of the glenoid component while removing as little bone as possible. Over aggressive reaming should be avoided to prevent possible glenoid fracture and improper fit of the implant.

Once neo reaming is complete, remove the neo reamer assembly from the guide pin and out of the joint. (Figure 8)

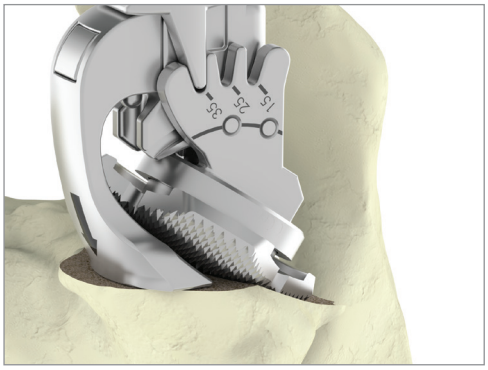


Figure 7b

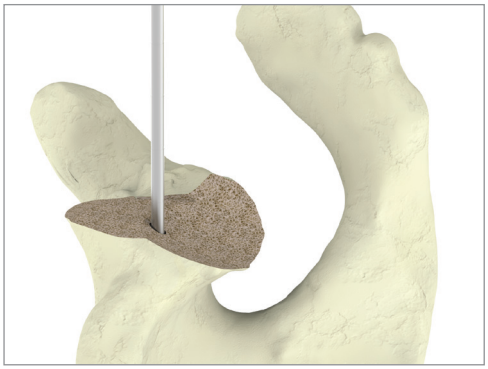


Figure 8

Augment Trial

With the neo surface prepared the corresponding augmented trial can be used to evaluate if proper neo reaming has been achieved. Make sure the trial being used to validate the fit is the appropriate size. The augmented trial should seat flush and stable on the reamed surface and match the location of the laser mark location of the depth stop above. If instability (rocking) or gaps are observed additional paleo and/or neo reaming may be required to correct. Recheck following any corrective reaming to ensure the final fit is flush and stable. (Figure 9)

Figure 9

Baseplate Post and Central Screw Drilling

The hole for the baseplate post is drilled over the guide pin using the cannulated 10 mm diameter drill bit. A positive stop on the drill bit ensures that drilling will not go too deep and allows for press-fit fixation of the post. Be sure to stop the post drill at the paleo surface. (Figure 10)

Remove the guide pin.

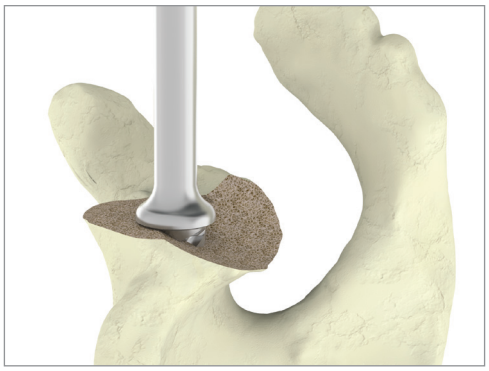


Figure 10

The surgeon determines the diameter of the central screw drill bit based on patient bone quality. It is recommended to start with the 6.5 mm diameter drill bit as the hole can be expanded if necessary. 9.5 mm diameter screws are recommended if inadequate fixation is achieved with 6.5 mm diameter screw secondary to poor bone quality or for revision cases.

Place the corresponding Half Wedge central screw drill guide into the hole in the glenoid face that was created using the baseplate post drill. Be certain that the wedge portion of the drill guide is placed in the neo reamed defect that was created to ensure proper stability while reaming. (Figure 11a-11b) Align the laser marked arrow on the drill guide to the location identified in the steps above. The central screw hole is drilled using a 6.5 mm or 9.5 mm diameter drill bit. Laser marks can be used to help approximate the final implant length. The drilling is performed under power. Palpation of the drill bit tip can be performed to confirm the drill bit has exited the anterior cortex.

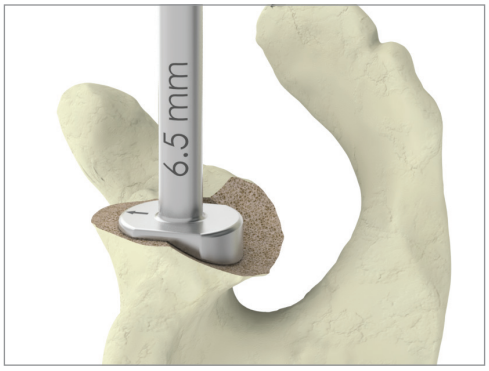


Figure 11a

Figure 11b

Sizing for Central Screw

To determine the final central screw length, the central screw depth gauge is used. (Figure 12) The gauge measures the recommended screw length. The actual prepared hole is approximately 3 mm less to allow for bicortical fixation.

To ensure an accurate evaluation of the final screw length, make sure the flat end of the depth gauge is contacting the paleo surface of the glenoid.

The length of the central screw is matched with the color and number that appears on the depth gauge. If you fall on a line above a color, choose the length below the line. (Figure 13)

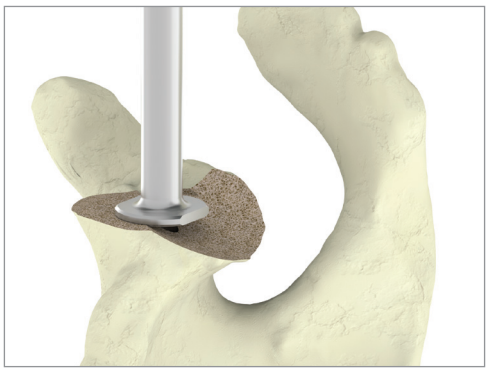


Figure 12

Figure 13

Central Screw Tap

Although the central screws are self-tapping, after measuring the central hole, the tap can be used to prepare the threads of the final implant and reduce the possibility of glenoid fracture in cases for hard bone. Tapping is recommended when using the 9.5 mm central screw in order to prevent glenoid fracture.

Tapping should be done manually by connecting it to a T-handle (Do not use with power). When tapping, it is important to maintain alignment to the axis of the previously drilled hole. There are laser markings on the tap to show depth. (Figure 14) The tapping depth should be chosen similar to the depth of the drilled central hole. Using the measurements of the central screw length, stop at the level of the corresponding laser mark.

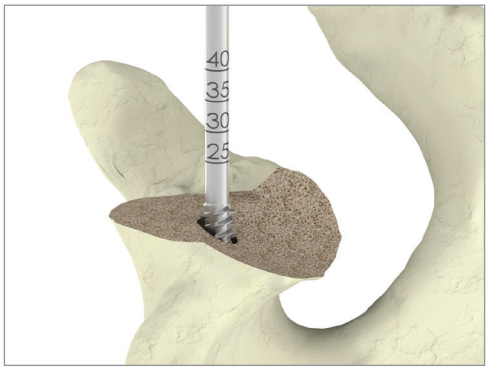


Figure 14

Baseplate Assembly and Insertion

The final baseplate is chosen according to the reamed glenoid surface (25 mm Half Wedge or 29 mm Half Wedge). Additionally, the final central screw is chosen according to the measured length using the central screw depth gauge.

Ensure that the inner shaft of the baseplate inserter is backed out to the point where it moves freely within the outer sleeve yet is still contained. While lining up the pegs on the inserter with the peg holes on the baseplate, snap the inserter onto the baseplate. Screw the inner shaft down the sleeve to capture the baseplate onto the inserter. Care should be taken to ensure that the two pegs on the inserter seat properly into their respective holes on the baseplate. (Figure 15a-15b)

Note: Assemble the inserter with the arrow of the inserter opposite of the wedged portion of the baseplate.

Figure 15a

Figure 15b

There is a 6.5 mm and 9.5 mm slot corresponding to the screw diameter. The hex head portion of the screw is orientated in the up position. (Figure 16)

The baseplate inserter with baseplate attached is placed onto the screw and turned in a counterclockwise manner. Turn the baseplate until it is fully seated onto the screw. There will be a slight drop of the baseplate indicating that it has fully seated. The baseplate will spin independently from the screw once seated. (Figure 17a-17b) The baseplate/screw can be removed from assembly tool.

It is important to continuously check the orientation of the baseplate relative to the prepared hole and reamed surface to ensure accurate implantation of the Half Wedge baseplate. The baseplate inserter also has a laser marked arrow that can be used to align with corresponding arrows from previous instruments.

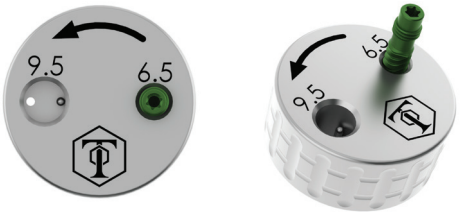


Figure 16

Figure 17a

Figure 17b

Insert the baseplate inserter screwdriver down the shaft of the baseplate inserter and engage the head of the central screw. To insert the assembled baseplate, place the screw into the central screw drill hole making sure to align the laser mark on the baseplate inserter to the location identified above. (Figure 18) Turn the central screw in a clockwise manner and screw the baseplate into the prepared glenoid until it has fully seated against the surface. There will be a slight audible clicking noise once the post begins to engage the prepared bone. This is normal and is due to the free-floating nature of the screw within the assembly.

Figure 18

Note: At the completion of glenoid component installation, the central locking screw of the glenosphere locks the central compression screw into the baseplate, creating a locked fixed angle implant.

Take care to ensure proper rotational orientation of the baseplate when screwing the baseplate down. (Figure 19) Once the baseplate is seated flush on the glenoid surface, the baseplate inserter can be detached from the baseplate.

Note: The baseplate should be seated completely onto the prepared glenoid surface. Avoid over-tightening or excessive advancement of the baseplate into the subchondral bone. Gaps between the baseplate and glenoid surface should also be avoided.

Note: If the 6.5 mm screw strips a 9.5 mm screw can be used. This is accomplished by removing the baseplate and installing the 9.5 mm screw in place of the 6.5 mm screw.

Figure 19

Note on Half Wedge Peripheral Screws:

The Half Wedge augmented baseplates contains one peripheral screw hole which is compression and located on the thick portion of the wedge. The other peripheral screw holes are multidirectional locking (see Appendix for peripheral screw angulations).

The remaining steps for peripheral screw insertion, peripheral reaming and glenosphere attachment can be performed by following the standard procedure in the AEQUALIS PERFORM REVERSED surgical technique.

Full Wedge Augment

Sizing the Glenoid and Pin Placement

Using a the same cannulated approach as described in steps 1-4 above, a single use 2.5 mm guide pin will be placed using a combination of pin guides and pin guide handles. Place the pin guide onto the glenoid surface making sure that its bottom surface is seated on the bone. Care should be taken when placing the pin in the glenoid that contains a defect. Make sure that the pin guide is placed onto the glenoid where the best possible position can be achieved. To limit any risk of impingement, it is important to properly position the pin guide referencing the inferior glenoid edge. (Figure 20)

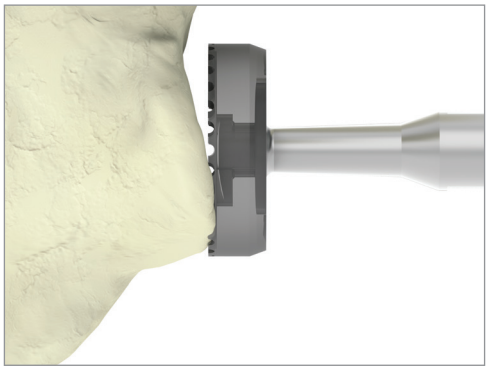


Figure 20

Pilot Hole Preparation

A pilot hole must be drilled in order for the Full Wedge augment reamer assembly to properly ream the neo surface of the glenoid. Drill until the positive stop has been reached. (Figure 21a-21b)

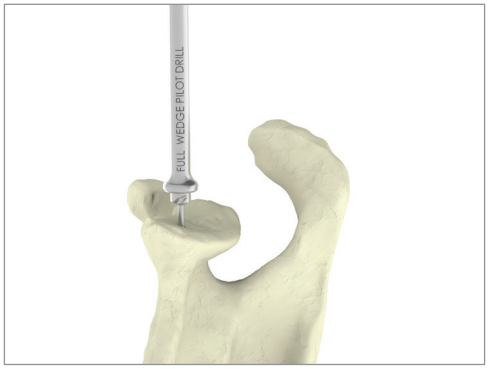


Figure 21a

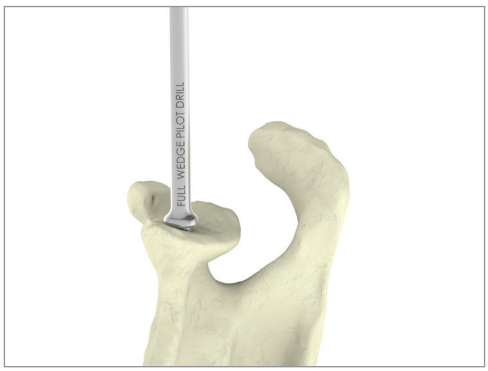


Figure 21b

Augment Reaming - Neo Reaming

When assembling the augment reamer, refer to the assembly instructions in the Appendix. Choose the appropriate neo reamer to match the baseplate diameter to be used, 25 or 29 mm.

Make sure the angle indicator is positioned at the 15° angle before first starting to ream. (Figure 22) The neo reamer is intended to be power driven only.

Note: The depth stop is not used for the Full Wedge preparation. Alignment can be determined by positioning the depth stop connection point opposite to the deepest portion of the defect.

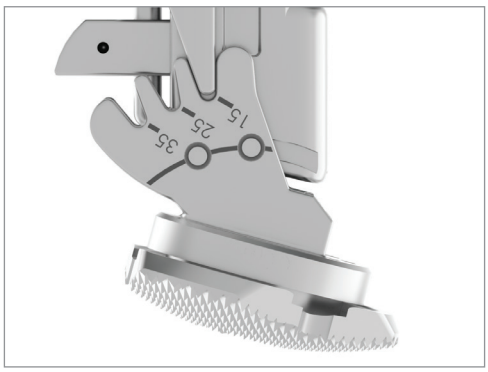


Figure 22

Place the neo reamer assembly over the guide pin and slide the assembly down to the face of the glenoid. Begin reamer rotation prior to contacting the glenoid surface then apply light pressure (let the cutter do the work). (Figure 23)

Note: It is imperative to maintain alignment with the guide pin and rotational alignment to the glenoid while neo reaming.

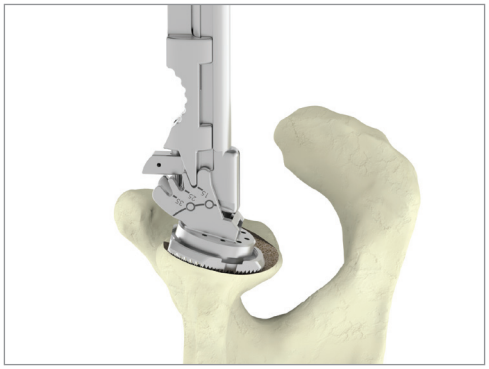


Figure 23

The goal of neo reaming is to obtain a bony surface that matches the backside of the glenoid component while removing as little bone as possible.

Once neo reaming is complete, remove the neo reamer assembly from the guide pin and out of the joint. (Figure 24)

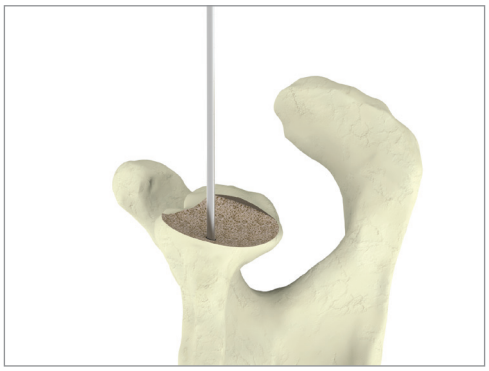


Figure 24

Augment Trial

With the neo surface prepared, the corresponding augmented trial can be used to evaluate if proper reaming has been achieved. Make sure the trial being used to validate the fit is the appropriate size. The augmented trial should seat flush and stable on the reamed surface and match the location of the laser mark location of the depth stop above. If instability (rocking) or gaps are observed additional neo reaming may be required to correct. Recheck following any corrective reaming to ensure the final fit is flush and stable. (Figure 25)

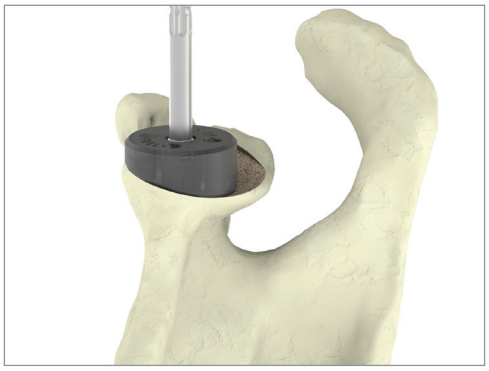


Figure 25

Baseplate Post and Central Screw Drilling

The hole for the baseplate post is drilled over the guide wire using the cannulated 10 mm diameter drill bit. A positive stop on the drill bit maintains drilling will not go too deep and ensures a press-fit fixation for the post. **Be sure to fully seat the post drill on the neo reamed surface of the glenoid.** (Figure 26)

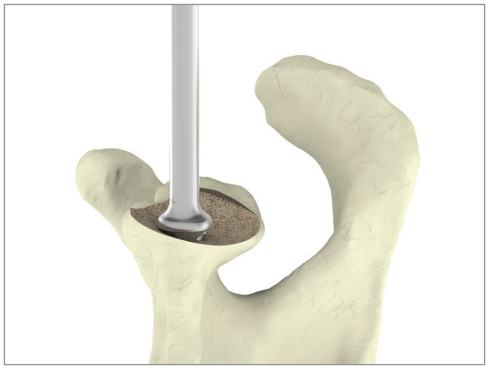


Figure 26

Remove the guide pin.

The surgeon determines the diameter of the central screw drill bit based on patient bone quality. It is recommended to start with the 6.5 mm diameter drill bit as the hole can be expanded if necessary. 9.5 mm diameter screws are recommended if inadequate fixation is achieved with 6.5 mm diameter screw secondary to poor bone quality or for revision cases.

Place the corresponding Full Wedge central screw drill guide into the hole in the glenoid face that was made by the baseplate post drill. Align the laser mark on the drill guide to the location identified in the steps above. Be certain that the wedge portion of the drill guide is placed in the neo reamed defect that was created to ensure proper stability while reaming. The central screw hole is drilled using a 6.5 mm or 9.5 mm diameter drill bit. Laser marks can be used to approximate the final implant length. (Figure 27) The drilling is performed under power over the guide wire. Palpation of the drill bit tip can be performed to confirm the drill bit has exited the cortex.

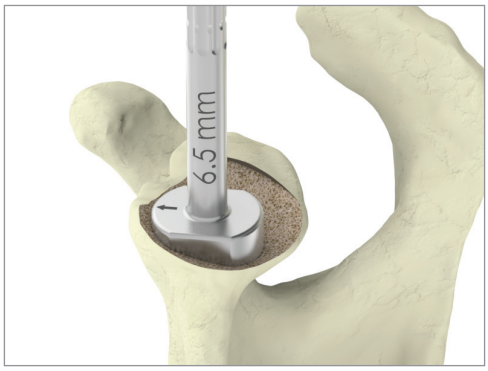


Figure 27

After the drill bit has penetrated the anterior cortex, the laser markings on the drill bit can be used in addition the depth gauge as a guide to determine the size central screw to be used when assembling the baseplate.

Sizing for Central Screw

To determine the final central screw length, the central screw depth gauge is used. (Figure 28a-28b) The gauge measures the recommended screw length. The actual prepared hole is approximately 3 mm less to allow for bicortical fixation.

To ensure an accurate evaluation of the final screw length, make sure the flat end of the depth gauge is contacting the neo reamed surface of the glenoid.

The length of the central screw is matched with the color and number that appears on the depth gauge. If you fall on a line above a color, choose the length below the line.

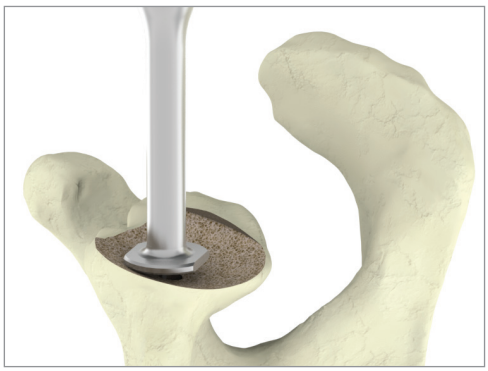


Figure 28a

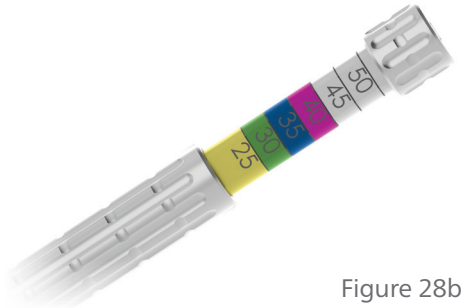


Figure 28b

Central Screw Tap

Although the central screws are self-tapping, after measuring the depth of the central hole, the tap can be used to prepare the threads of the final implant and reduce the possibility of glenoid fracture in cases for hard bone. Tapping is recommended when using the 9.5 mm central screw in order to prevent glenoid fracture.

Tapping should be done manually by connecting it to a T-handle (do not use with power). When tapping, it is important to maintain alignment to the axis of the previously drilled hole. There are laser markings on the tap to show depth. (Figure 29) The tapping depth should be chosen similar to the depth of the drilled central hole. Using the measurements of the central screw length, stop at the level of the corresponding laser mark.

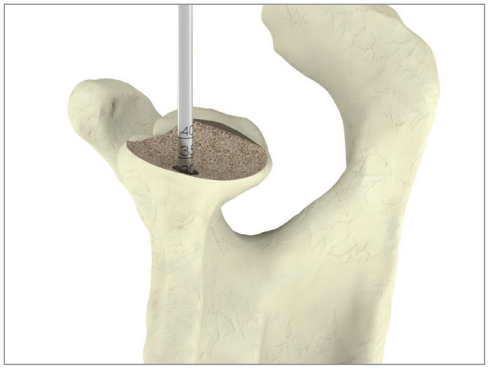


Figure 29

Baseplate Assemble and Insertion

The final baseplate is chosen according to the reamed glenoid surface (25 mm Full Wedge or 29 mm Full Wedge). Additionally, the final central screw is chosen according to the measured length using the central screw depth gauge.

Ensure that the inner shaft of the baseplate inserter is backed out to the point where it moves freely within the outer sleeve yet is still contained. While lining up the pegs on the inserter with the peg holes on the baseplate, snap the inserter onto the baseplate. Screw the inner shaft down the sleeve to capture the baseplate onto the inserter. Care should be taken to ensure that the two pegs on the inserter seat properly into their respective holes on the baseplate. (See Figure 15a-15b)

There is a 6.5 and 9.5 mm slot corresponding to the screw diameter. The hex head portion of the screw is orientated in the up position. (See Figure 16)

The baseplate inserter with baseplate attached is placed onto the screw and turned in a counterclockwise manner. Turn the baseplate until it is fully seated onto the screw. There will be a slight drop of the baseplate indicating that it has fully seated. The baseplate will spin independently from the screw once seated. (See Figure 17a-17b) The baseplate/screw can be removed from assembly tool.

Note: It is important to continuously check the orientation of the baseplate relative to the prepared hole and reamed surface to ensure accurate implantation of the Full Wedge baseplate to fit properly.

Insert the baseplate inserter screwdriver down the shaft of the baseplate inserter and engage the head of the central screw. To insert the assembled baseplate, place the screw into the central screw drill hole and turn the central screw in a clockwise manner. (Figure 30) Screw the baseplate into the prepared glenoid until it has fully seated against the surface. There will be a slight audible clicking noise once the post begins to engage the prepared bone. This is normal and is due to the free-floating nature of the screw within the assembly.

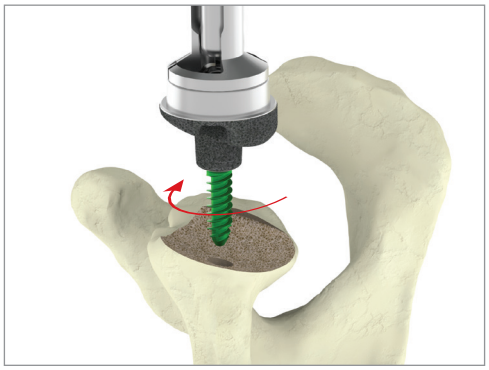


Figure 30

Note: At the completion of glenoid component installation, the central locking screw of the glenosphere locks the central compression screw into the baseplate, creating a locked fixed angle implant.

Take care to ensure proper rotational orientation of the baseplate when screwing the baseplate down. Once the baseplate is seated flush on the glenoid surface, the baseplate inserter can be detached from the baseplate. (Figure 31)

Figure 31

Note: The baseplate should be seated completely onto the prepared glenoid surface. Avoid over-tightening or excessive advancement of the baseplate into the subchondral bone. Gaps between the baseplate and glenoid surface should also be avoided.

Note: If the 6.5 mm screw strips a 9.5 mm screw can be used. This is accomplished by removing the baseplate and installing the 9.5 mm screw in place of the 6.5 mm screw.

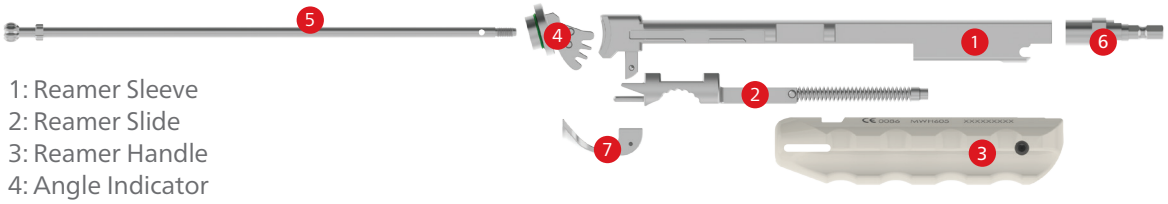
Note: Longer peripheral screws are required to account for the augmented offset from the bone. A minimum peripheral screw length of 26 mm should be used for the superior and inferior screws holes to ensure sufficient bone purchase.

Note on the Peripheral Screws:

The Full Wedge augmented baseplates contains one peripheral screw hole which is compression and located on the thick portion of the wedge. The other peripheral screw holes are multidirectional locking (See Appendix for peripheral screw angulations).

The remaining steps for peripheral screw drilling and insertion, peripheral reaming and glenosphere attachment can be performed by following the standard procedure in the AEQUALIS PERFORM REVERSED surgical technique.

Augment Reamer Assembly Instructions:



1: Reamer Sleeve
2: Reamer Slide
3: Reamer Handle
4: Angle Indicator
5: Cannulated Shaft
6: Drive End
7: Depth Stop

Step 1:

Connect the Reamer Sleeve and the Reamer Slide of the Neo Reamer making sure the nob on the Reamer Slide fits into the cut out section of the Reamer Sleeve. Once this connection is made, you will pull back on the trigger of the Reamer Slide until it is attached to Reamer Sleeve and the knob of the Reamer Slide is through the Reamer Sleeve. (Figures 32a-32b)

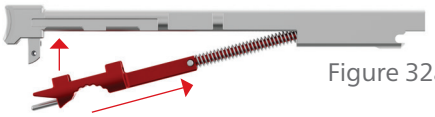


Figure 32a

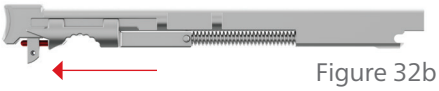


Figure 32b

Step 2:

Position the pin of the Reamer Handle into the"U" shaped slot of the Reamer Sleeve. Fully retract the Reamer Slide and pivot the Reamer Handle until it snaps onto the Reamer Sleeve. (Figures 33a-33b)

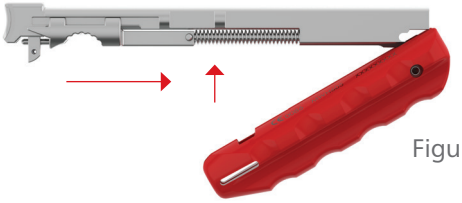


Figure 33a

Figure 33b

Step 3:

Retract the Reamer Slide and place the Angle Indicator into the slot of the Reamer Sleeve. Set the angle to 15º. (Figure 34)

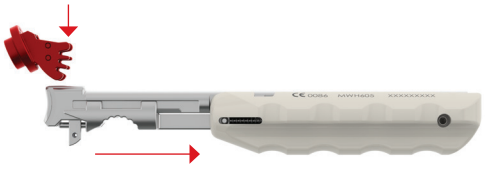


Figure 34

Step 4:

The Cannulated shaft is now placed through the top of the Angle Indicator and down the Reamer Sleeve of the assembly. Make sure before progressing to the next step of assembly that the Cannulated Shaft is flush at the entry point of the Angle Indicator. Once fully seated, pivot the Angle Indicator past the 15º position to a neutral position. This will lock the device for the next step. (Figures 35a-35b)

Figure 35a

Figure 35b

Step 5:

Thread the Drive End onto the Reamer Sleeve ensuring a tight connection. (Figures 36a-36b)

Figure 36a

Figure 36b

Step 6:

With the Angle Indicator still in the lock position, thread the Reamer Head onto the Reamer Sleeve. Much like the Drive End in step five, make sure this connection is tight. (Figure 37)

Figure 37

Note: When using the Augment reamer for the Full Wedge baseplate the assembly is complete. For the Half Wedge baseplate proceed to Step 7.

Step 7:

Pulling back once again on the trigger noted in previous steps, attach the Depth Stop to the reamer end of the instrument.

Once these steps are complete, the instrument is assembled properly and can be used for surgery. (Figures 38a-38c)

Figure 38a

Figure 38b

Figure 38c

Note: Disassembly instructions are the reverse of the assembly instructions.

Appendix

AEQUALIS PERFORM REVERSED Glenosphere and Baseplate Configuration Chart

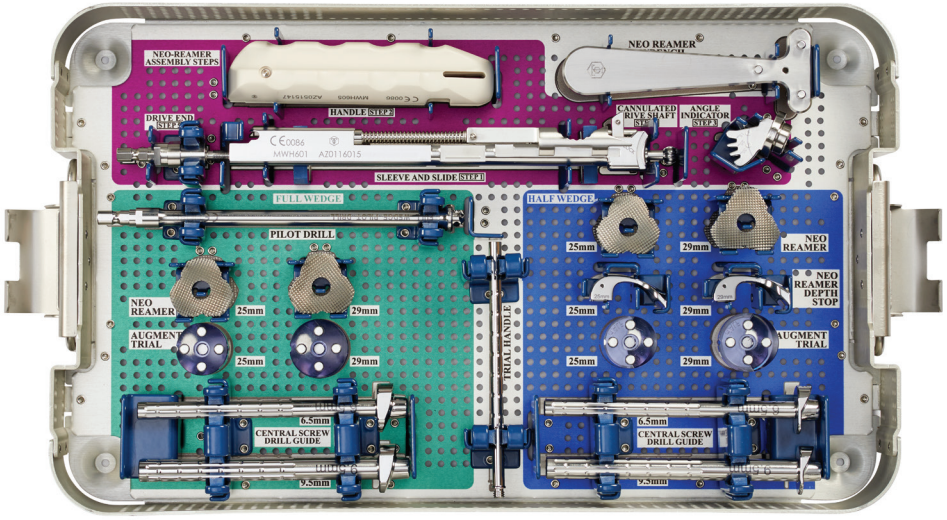
The AEQUALIS PERFORM REVERSED baseplates have been designed to be compatible with the AEQUALIS PERFORM REVERSED glenospheres. With the addition of the ADAPTIS porous titanium on the backside of the baseplate, certain combinations may have the potential to create an impingement with the humeral insert. For more information on the cleared combinations, refer to the configuration chart below. The boxes highlighted in orange indicate that there should be no impingement of the poly insert on the humeral side with the porous titanium on the baseplate.

	Glenosphere									
	Standard			Lateralized				Eccentric		
Baseplate	36 mm	39 mm	42 mm	33 mm (+3)	36 mm (+3)	39 mm (+3)	42 mm (+3)	36 mm (+2)	39 mm (+3)	42 mm (+4)
25 mm STD										
29 mm STD										
25 mm +3 LAT										
25 mm +6 LAT										
29 mm +3 LAT										
29 mm +6 LAT										
25 mm Half Wedge										
29 mm Half Wedge										
25 mm Full Wedge										
29 mm Full Wedge										

AEQUALIS PERFORM+ REVERSED Peripheral Screw Angulation

	Multidirectional Locking Screws		Compression Screws	
Baseplate	Superior - Inferior	Transverse	Superior - Inferior	Transverse
Half Wedge Baseplates	0-25°	±10°	0°	3°
Full Wedge Baseplates	0-25°	±6°	0°	3°

AEQUALIS PERFORM+ REVERSED Product Specifications



AEQUALIS PERFORM+ REVERSED Augment Instrument Tray (Ref. YKAD264)

Reference	Description	Reference	Description
MWH601	Neo Reamer Sleeve	MWJ168	Neo Reamer Depth Stop Half Wedge, 25 mm
MWH602	Neo Reamer Cannulated Drive Shaft	MWJ169	Neo Reamer Depth Stop Half Wedge, 29 mm
MWH603	Neo Reamer Angle Indicator	MWJ145	Augment Half Wedge Trial, 25 mm
MWH604	Neo Reamer Drive End	MWJ146	Augment Half Wedge Trial, 29 mm
MWH605	Neo Reamer Handle	MWJ147	Augment Full Wedge Trial, 25 mm
MWH606	Neo Reamer Slide	MWJ148	Augment Full Wedge Trial, 29 mm
MWH607	Neo Reamer Wrench	MWJ151	Central Screw Drill Guide Half Wedge, 6.5 mm
MWH630	Checker Handle	MWJ152	Central Screw Drill Guide Half Wedge, 9.5 mm
MWJ170	Neo Reamer, 25 mm Full Wedge	MWJ153	Central Screw Drill Guide Full Wedge, 6.5 mm
MWJ171	Neo Reamer, 29 mm Full Wedge	MWJ154	Central Screw Drill Guide Full Wedge, 9.5 mm
MWJ172	Neo Reamer, 25 mm Half Wedge	MWJ129	Full Wedge Pilot Drill, 8 mm
MWJ173	Neo Reamer, 29 mm Half Wedge		

IMPLANT

Wedged Augmented Baseplates

Reference	Description
DWJ514	Half Wedge Augment Baseplate (35°), 29 mm
DWJ504	Half Wedge Augment Baseplate (35°), 25 mm
DWJ515	Full Wedge Augment Baseplate (15°), 29 mm
DWJ505	Full Wedge Augment Baseplate (15°), 25 mm

Notes

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UDDT173 Jun-2017