CAPTURE Screw System

DESCRIPTION
The CAPTURE Screw System is comprised of five types of screws used for bone fixation of the hand and foot, following trauma or osteotomy. Available screws and instrumentation are packaged as a single system and organized around the five types of screws described below:

- The AS-Series (Solid Screws) is a non-cannulated, threaded bone screw which is offered in 2.0, 2.5, 3.0 & 4.0 mm diameters with lengths of 6-50 mm.
- The AC-Series (Cannulated Screws) is a cannulated, threaded bone screw which is offered in 2.0, 2.5, 3.0 & 4.0 mm diameters with lengths of 6-50 mm.
- The AH-Series (Headless Screws) is a cannulated, dual thread, headless bone screw which is offered in 2.5 & 3.0 mm diameters with lengths of 10-34 mm.
- The AQ-Series (QuickSnap Screws) is a snap-off solid core screw which is offered in 2.0, 2.5, 3.0 & 4.0 mm diameters with lengths of 8-22 mm.
- The AD-Series (Digital Screws) is a cannulated, threaded bone screw which is offered in 2.0, 2.5, 3.0 mm diameters with lengths of 6-50 mm.

The system includes instruments (drill bits, drill guides, guide wires, depth gauges, bone clamps, forceps and screwdrivers) to facilitate the placement of the screws.

MATERIAL
All CAPTURE screws are made from Titanium Alloy (ASTM F-136). The instrumen
tation is made from titanium and stainless steel.

INDICATIONS
The CAPTURE Screw System implants (screws) are intended for fixation of fractures, non-unions, arthrodeses, and osteotomies of the small bones in the hand and foot. The implants and guide wires are intended for single use only.

These implants are not intended for attachment or fixation to the posterior elements (pedicles) of the cervical, thoracic or lumbar spine.

CONTRAINDICATIONS
Use of the CAPTURE Screw System is contraindicated in cases of active or suspected infection or in patients who are immunocompromised; in patients with allergies to Titanium; or in patients with certain metabolic diseas/es. It is further contraindicated in patients exhibiting disorders which would cause the patient to ignore the limitations of internal fixation.

WARNINGs
- Re-operation to remove or replace implants (screws) may be required at any time due to medical reasons or device failure. If corrective action is not taken, complications may occur.
- Use of an undersized screw in areas of high functional stresses may lead to implant fracture and failure.
- Plates and screws, wires, or other appliances of dissimilar metals should not be used together near the implant site.
- Instruments, guide wires, and screws are to be treated as sharps.
- All CAPTURE implants and guide wires are intended for single use only.

MAINTENANCE DEVICE EFFECTIVENESS
- The surgeon should have specific training, experience, and thorough familiarity with the use of cannulated, non-cannulated, headless, and snap-off screws.
- The surgeon must exercise reasonable judgment when deciding which screws to use for specific indications.
- CAPTURE screws are not intended to endure excessive abnormal functional stresses.
- All CAPTURE Screw System screws and instrumentation may be required for each surgery. Failure to use dedicated, unique CAPTURE instruments for every step of the implantation technique may compromise the implant’s ability to maintain primary fixation, leading to premature device failure and subsequent patient injury. Failed devices may require re-operation and removal.
- Carefully inspect the screws prior to use. Inspect the instruments before and after each procedure to assure they are in proper operating condition. Instruments which are faulty, damaged, or suspect should not be used.
- It is recommended to use these products in a sterile environment.
- For best results and to ensure proper working condition, after cleaning the Rachet Nuts, a non-silicone lubricant should be used per the manufacturer’s instructions.

INSTRUCTIONS FOR USE: AS-SERIES SOLID SCREWS
1. Place a bone clamp to create the necessary compression across the osteotomy or fusion site (when applicable). Note: This step is very important if bone is very dense and in arthrodeses, as the axial force necessary for inserting the AS-Series screw could temporarily distort the fragments at the fracture/arthrodesis line.
2. Using the appropriately sized drill bit, drill a pilot hole the correct length through the bone fragments. The drill guide may be used to aid in the placement of the drill and to protect soft tissue.
3. Using the appropriately sized depth gauge, measure the length from the proximal cortex to the distal cortex to determine the proper screw length.
4. Use the appropriately sized countersink to create a recess in the bone. Place the desired AS-Series screw from the screw tray. Insert the screw into the pilot hole.
5. Remove the desired AS-Series screw from the screw tray. Insert the screw into the pilot hole.
6. Drive the screw using the manual driver or K-wire driver until the distal head is flush with the bone.
7. Tap the manual driver or K-wire driver in the opposite angle of the screw direction to snap the Shank.
8. If necessary, use the 3-prong manual driver to drive the screw to the desired depth.
9. Remove and discard the guide wire.

INSTRUCTIONS FOR USE: AH-SERIES HEAdLESS SCREWS
1. Place a bone clamp to create the necessary compression across the osteotomy or fusion site (when applicable). Note: This step is very important if bone is very dense and in arthrodeses, as the axial force necessary for inserting the AH-Series screw could temporarily distort the fragments at the fracture/arthrodesis line.
2. Insert a guide wire to the correct length under image intensification.
3. Insert the guide wire in 5-10mm increments to avoid bending the wire.
4. Slide the depth gauge over the guide wire until the tip contacts bone. Measure the desired screw length by measuring the end of the guide wire in relation to the mark on the depth gauge.
5. For 3.0mm & 4.0mm screws in dense cortical bone, pre-drilling the rear cortex with a 2.5mm drill may be recommended to reduce the axial force necessary for inserting the screw.
6. Use the screw forceps to remove the desired cannulated screw from the screw tray. Insert the screw over the guide wire.
7. Use the ratcheting screwdriver and driver shaft, drive the AC-Series screw into bone until the desired compression is achieved.
8. If the screw meets unusual resistance, remove guide wire and continue driving the screw.
9. Remove and discard the guide wire.

INSTRUCTIONS FOR USE: AQ-SERIES QUICKSNAP SCREWS
1. After making the appropriate bone cuts, use a guide wire to guide a 1mm deep pilot hole that penetrates the proximal cortex.
2. Load the appropriate AQ-Series screw into the 3-prong manual driver or into a K-wire driver.
3. Drive the screw using the manual driver or K-wire driver until the distal head is flush with the bone.
4. Tap the manual driver or K-wire driver in the opposite angle of the screw direction to snap the Shank.
5. If necessary, use the 3-prong manual driver to drive the screw to the desired depth.
6. Important: If the screw shank snaps off prior to completion, engage the 3-prong driver over the remaining screw head to finish driving the screw.

INSTRUCTIONS FOR USE: AD-SERIES DIGITAL SCREWS
1. Perform an incision, of the surgeon’s choice, over the proximal phalanx or PI joint. Reflect the soft tissues surrounding the PI joint to completely expose it for resection. Complete the resection of the PI joint in preparation for PIJ joint fusion.

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