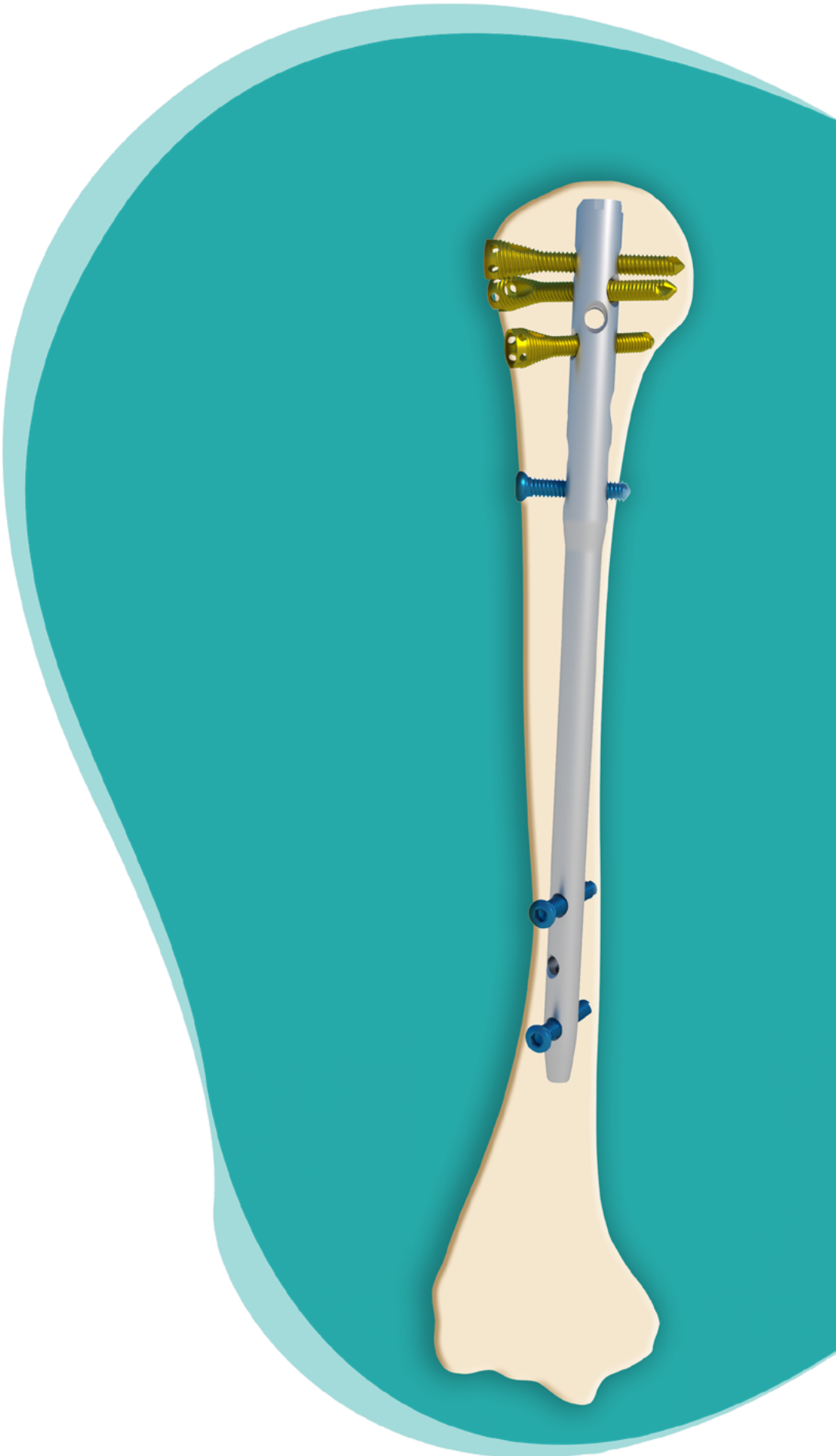
金属髓内固定系统
Metal Intramedullary Fixation System

肱骨多维锁定髓内钉

Multidimensional locking intramedullary nail of humerus



Fule 富乐®

Why choose Fule?
Our strengths

- The company is a national high-tech enterprise that integrates research and development, production, and sales of medical devices, with a fully intelligent processing equipment production line.
- The establishment of the Academician Expert Studio helps to enhance the R&D capabilities of Fule and further deepen the cooperation between industry, academia, and research; Approved postdoctoral research workstation.
- The hardware facilities are complete, the R&D team is excellent, and we work closely with clinical experts, obtaining more than 100 domestic and foreign patents.
- Based on the agent cooperation model, establish a nationwide sales and service network, supply products to nearly a thousand tertiary hospitals nationwide, and export to more than 20 overseas countries.

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Product advantages

- Design of straight nails for central insertion point

– Improved grip on high strength subchondral bone

–In typical three part fracture situations, it is possible to potentially avoid inserting through the fracture site.

–Leave space for the supraspinatus muscle with fewer blood vessels .

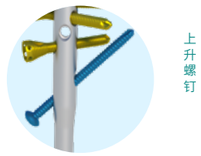
– The hollow intramedullary nails on the left and right sides have diameters of 7.0, 8.0, and 9.0mm, respectively.

– With threaded cross locking nail holes, it can maintain angle stability and reduce the situation of screw loosening and withdrawal

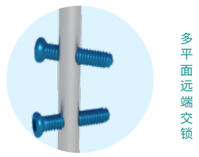
– Selection of ascending screws to provide support for humeral moment and reduce inversion angle

–Multi plane remote interlocking selection reduces internal plant swinging and improves stability.

Thread horizontal locking nail hole



Upward screw



Multi plane remote interlocking

Product advantages

- **4.5mm Multidimensional locking screw**

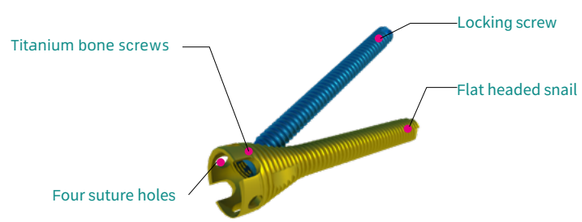
① Flat head screws can minimize the risk of secondary screw penetration as much as possible

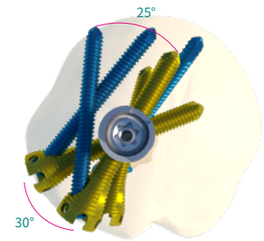
② Each screw has 4 suture holes to stabilize the attachment of the rotator cuff muscle group

③ The screw is a countersunk screw, which can reduce the protrusion of internal implant

④ The second type of 3.5mm locking screw can be used to improve stability, especially in cases of poor bone quality, such as in patients with osteoporosis

⑤ The 3.5mm locking nail provides support for the posterior medial area of the humerus, which has the highest bone density (BMD)





Product advantages

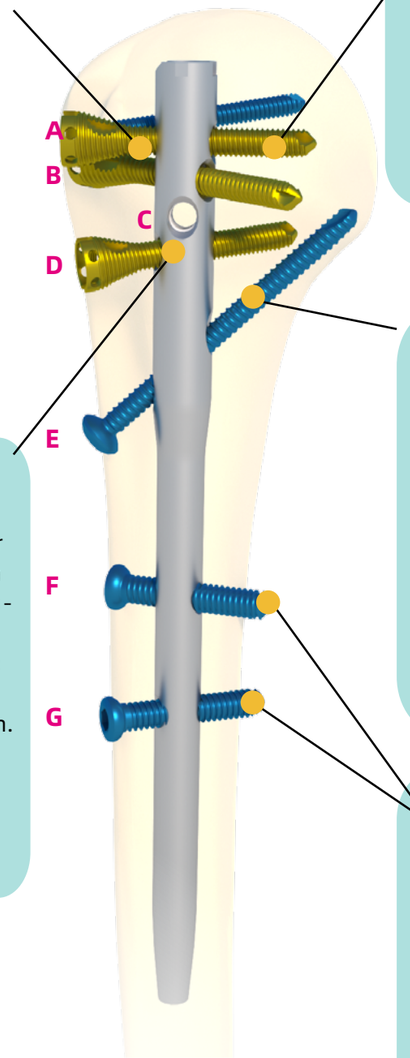
Proximal locking:
screw holeA、B、C、D

- In any fracture situation, three outer screws (screw holes A, B, and D) must be used as they can ensure the basic stability of the structure

Screw type: Multidimensional locking screw, diameter4.5mm, auratus

Locking screw(small nodules ，screw hole A、B、D)

- Additional locking screws can be inserted through the screw head of the outer screw to improve the stability of humeral head fixation, especially suitable for patients with osteoporosis.
- Screw type(Optional): Locking screw, diameter3.5mm, light blue



Front screw(small nodules ，screw hole C)

ctures with small nodular fractur e structure. It can be used for fra e blocks, if the fracture block is s - It can improve the stability of th ufficient to accommodate the sc rew head. Do not insert the 3.5m m locking screw into this position.

- Screw type: Multidimensional locking screw, diameter4.5mm, auratus

Upward screw：screw hole E

- The screw hole located in the middle serves as an ascending screw that provides support for the inner side of the humerus, increasing support for the inner wall of the humeral head.

- Screw type: Horizontal locking nail, diameter4.0mm, light blue

Remote locking nail：screw hole F、G

- There are two screw holes with different planes at the distal end, which can reduce the swinging of intramedullary nails in the humeral medullary cavity

- Screw type: Horizontal locking nail, diameter 4.0mm, light blue

Product advantages

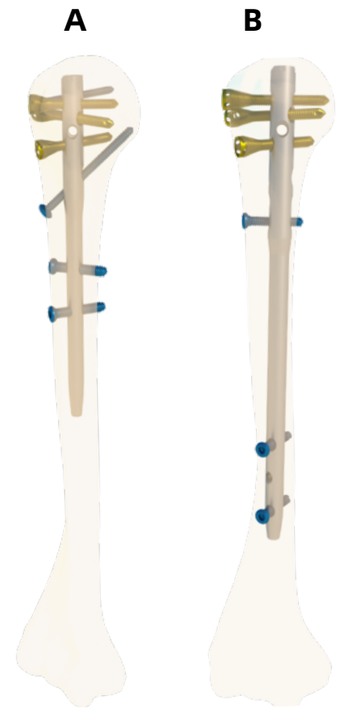
A Upward screw

- Upward screws can support the medial humeral moment area and are very useful for comminuted medial fracture fragments

B Pressure screw

- For transverse or short oblique fractures, transverse locking screws can be used to compress the fracture end

- The upward screw and the pressure screw cannot be used simultaneously



Remote locking nail

- Three distal locking screws are located in different planes, reducing the rotation of the main screw and increasing the stability of fixation

- The locking plane is located at a 25 degree angle between the front and back of the main nail and the diagonal direction

- Screw type：Horizontal locking nail,diameter 4.0mm，light blue

Instructions for use

【Indication】

Multidimensional locking intramedullary nails for humerus are specifically designed for proximal humeral fractures, including:

– Two part surgical neck fracture

– Three part fracture

– Four part fracture

Surgical procedure

【Step 1】 Preoperative planning

- Use a preoperative planning template to estimate the diameter and position of the main screw of the multi-dimensional locking intramedullary nail in the humerus.

- To estimate the diameter of the main nail, place the template on an anteroposterior X-ray of the uninjured humerus, and then measure the diameter of the medullary cavity by placing the template at the narrowest location.

- To estimate the position of the screw, place the template on X-ray images of the anterior posterior position of the uninjured humerus and the "Y" side of the scapula. If you plan to use an upward screw, set its insertion trajectory within the humeral moment. Check to ensure that the end of the proximal nail is inserted at least 2 to 3 millimeters. If this cannot be achieved, other fixed methods should be considered.

Surgical procedure

【Step 2】 Patient position

- Place the beach chair of the patient on the adjustable side table or armrest of the X-ray transparent operating table: ensure that the arms can be fully bent, exposing the humeral head to the front of the shoulder peak. Place the C-arm so that the entire humerus is presented in two planes, either at the patient's head or on the opposite side of the injured arm (Figure 2a).

Figure 2a

- Patients can also be supine on an operating table with fully transparent radiation. Place the C-arm so that the entire humerus is presented in two planes. Place the C-arm opposite the doctor, perpendicular to the longitudinal axis of the humeral shaft in the AP view (Figure 2b).

Figure 2b

- Rotate the C-arm 90 ° and project the ray b eam directly onto the joint socket to obtain a lateral view of the scapula in the "Y" directi on.

Surgical procedure

【Step 3】 Surgical approach

- Make a front outer incision. Splitting and stretching the deltoid muscle at the tendon junction between the anterior and middle one-third of the shoulder at the top of the anterior lateral peak.

- For complex fractures, the deltoid muscle can be separated from the anterior edge of the acromion, which can provide a better visual field.

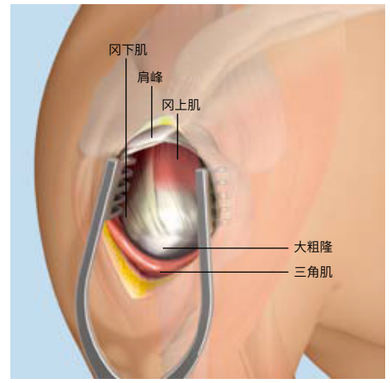


Figure 3a

Attention: Do not extend the incision too far to avoid iatrogenic damage to the axillary nerve. The axillary nerve can be located by gentle palpation or careful dissection. Suture marking can be performed to prevent the incision from expanding.

Surgical procedure

【Step 4】 Reduction of the fracture

- Through indirect reduction, traction suture , use of a dissector, or use of Schanz screws or Kirschner wires as controls.Use a rod to reduce the fracture.

- If necessary, a Kirschner wire can be used to temporarily fix the fractured fragment in place during the insertion process of the internal plant. Ensure that the Kirschner wire does not obstruct the insertion of the intramedullary nail.

- Check the reset condition under the C-arm.

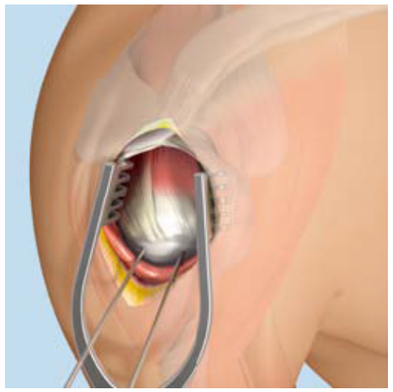


Figure 4a

Surgical procedure

【Step 5】 Decide on the nail insertion point

- The ideal insertion point is located at the top of the humeral head, aligned with the bone marrow cavity in AP and lateral views. Set this insertion point on the posterior lateral side of the biceps tendon, on the inner side of the groove between the greater tuberosity and the humeral head.

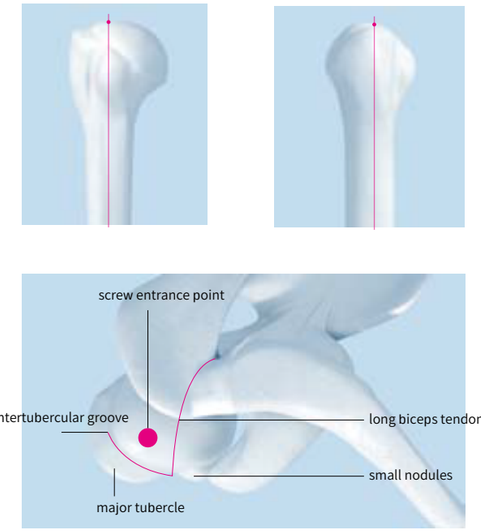


Figure 5a

Attention: If the acromion obstructs reaching ideal insertion point, slightly extend the shoulder and move the top of the humeral the head in front of the acromion.

Surgical procedure

【Step 6】 Insert guide rod (Used in combination with hollow drill bits)

- Select the nail insertion point and use a small universal chuck to insert the guide rod part.

  Observe the position of the guide rod in AP and lateral views.

- Make a longitudinal incision of 1 to 2 centimeters along the fibers of the supraspinatus tendon at the position of the guide rod. Use clamping suture technique and distractor to establish a pathway for the affected surgical site.

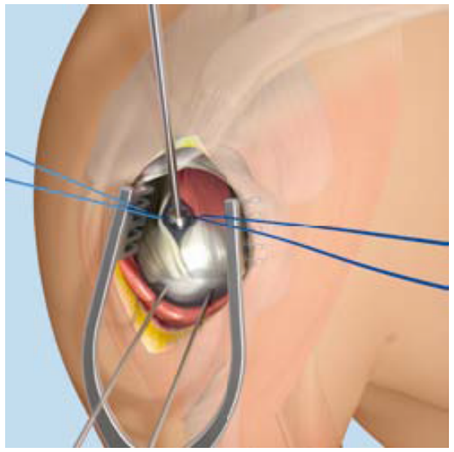


Figure 6a

Surgical procedure

【Step 7】 Decide on the nail insertion point A

- Push the guide rod forward until the depth stop is reached. Remove the small universal chuck (Figure 7a).

  Attention: Protect the blood supply to the rotator cuff area with few blood vessels at the insertion point above the humerus.

- Insert the hollow drill bit into the protective sleeve and pass it through the bone cortex through the guide rod. The depth of drilling into the bone marrow cavity. (Figure 7b)

  Remove the hollow drill bit, protective sleeve, and guide rod.

Figure 7a

Figure 7b

Surgical procedure

【Step 8】 Open the bone marrow cavity B

- Alternative method: Insert a Kirschner needle (for hollow cone drills)

If you prefer to use a hollow drill to open the bone marrow cavity, use a 2.5mm Kirschner wire instead of a guide rod for insertion.

- The hollow drill reaches the bone through the Kirschner wire. Twist the drill to the depth of the bone marrow cavity (Figure 8a).

Remove the Kirschner wire and drill bit.

Attention: If using a hollow cone drill, be careful not to shift the fracture end, especially for complex fractures.

Figure 8a

Surgical procedure

【Step 9】 Implantation of intramedullary nails

- **A**ssembly insertion tool

Place the insertion handle laterally and allow it to enter the intramedullary nail with the intramedullary nail. Use a combination wrench to secure the connection assembled through the above method.

Attention: The design of multi-dimensional locking intramedullary nails for the humerus is divided into two parts: left and right side. Intramedullary nails labeled as "R" (right) and "L" (left)

- Product images are for reference only

Figure 9a

Surgical procedure

【Step10】 Implantation of intramedullary nails

- Inserting intramedullary nails

- Insert the intramedullary nail and twist it to push it into the bone marrow cavity. Insert the handle sideways.

- Monitor the intramedullary nail passing through the fracture area and control it in two planes to avoid poor alignment.

If there is an epiphyseal fracture, push the intramedullary nail to the fracture site, reduce the fracture, and continue to push it into the shaft.

- Check the position of intramedullary nails in AP and lateral fluoroscopy

Figure 10a

Attention: The proximal end of the intramedullary nail must be inserted below the surface of the humeral head to avoid collision.

Surgical procedure

【Step11】 Intramedullary nail localization

- **A**ssembling the outer aiming arm

Insert the connecting screws into the aiming arm, ensuring that the aiming arm is facing correctly. Connect the aiming arm to the insertion handle and tighten the connecting screws.

Note: If used on the right humerus, make sure the aiming arm displays "R"; If used on the left humerus , make sure the aiming arm displays "L".

- If using a front screw (small protrusion) or an upward screw, connect the front aiming arm to the insertion handle and tighten the connecting screw.

Figure 11a

Figure 11b

Surgical procedure

【Step12】 Intramedullary nail localization

- Positioning intramedullary nails - adjusting insertion depth
- The proximal end should be inserted 2 to 3 millimeters below the cartilage to avoid collision risks and improve stability as much as possible. This determines the insertion depth of the internal plant.

Figure 12a

- Use C-arm clinical examination to examine the position of proximal intramedullary nails.

Surgical procedure

【Step13】 Intramedullary nail localization

- If using an upward screw, thread a 2.5mm Kirschner wire through the hole labeled "ASCEND" in the aiming arm. Adjust the position of the C-arm or patient's arm to ensure that the ring of the front aiming arm is aligned with the screw hole of the front screw in the intramedullary nail. The Kirschner needle will indicate the position of the upward screw.

Figure 13a

- Adjust the insertion depth of the intramedullary nail so that the ascending screw is located in the area of the humeral moment.

Attention: The proximal end should be inserted 2 to 3 millimeters below the cartilage to avoid collision risks and improve stability as much as possible. Use C-arm clinical examination to examine the position of proximal intramedullary nails.

Surgical procedure

【Step14】 Intramedullary nail localization

- Positioning intramedullary nails - adjusting rotation
- Insert a trocar assembly (protective sleeve, drill sleeve, and trocar) through the hole at the closest end of the lateral aiming arm (horizontal A).

Insert the second trocar assembly through the front hole of the lateral aiming arm (horizontal D).

The screws on level D should be placed as far forward as possible to avoid damaging the biceps longus tendon. This determines the rotation of the internal implant (Figure 14a).

Attention: Do not place any screws in the biceps groove.

- Push the trocar downwards against the bone surface. Remove the trocar needle.(Figure 14b)

Figure 14a

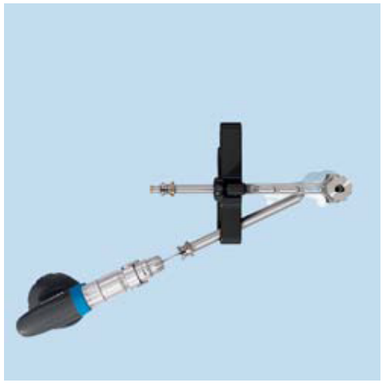


Figure 14b

Surgical procedure

【Step15】 Intramedullary nail localization

- Front screw (horizontal **C**)
- Make a small incision through blunt separation of soft tissue using a front screw (small protuberance). Then insert the second trocar assembly through the front aiming arm.

Figure 15a

Attention: Ensure that the end of the trocar touches the small tuberosity, which can effectively prevent stimulation of the biceps longus tendon or injury to the ascending branch of the anterior circumflex artery. If necessary, rotate the intramedullary nail slightly.

Surgical procedure

【Step16】 Proximal locking

- Drill holes and measure thelength of screws

- Insert a graduated drill bit and carefully drill until it reaches the plane of the subchondral bone. Use a C-arm to confirm the position of the drill bit.

- After drilling, read the required screw length data directly from the graduated drill bit on the back of the drilling sleeve. Firmly press the drill sleeve onto the leather to ensure accurate measurement.

- Remove the drill bit and drill sleeve.

Attention: Do not penetrate the joint surface.

Figure 16a

Surgical procedure

【Step17】 Proximal locking

- Using length probes for measurement

Length probes can also be used to measure the length of screws.

Assemble the length probe with its external sleeve.

Thread the length probe through the protective sleeve and push forward until resistance is felt in the subchondral space. Monitor under imaging equipment. Firmly press the outer part of the length probe onto the leather to ensure accurate measurement. After drilling, directly read the screw length data from the back of the outer sleeve of the length probe.

Figure 17a

Surgical procedure

【Step18】 Proximal locking

- Drilling holes on cortical bones
- For hard bones, use a conical drill bit to excessively drill holes on the lateral cortex, so that titanium bone screws are buried in the head.

Figure 18a

Surgical procedure

【Step19】 Proximal locking

- Insert titanium bone screws
- Assemble the screwdriver and its internal components together.(Figure 19a)

Pull back the screwdriver handle and connect it to a suitable titanium bone screw. Push the handle forward to lock the screw in place. Thread the screw through the protective sleeve until the screw is countersunk.

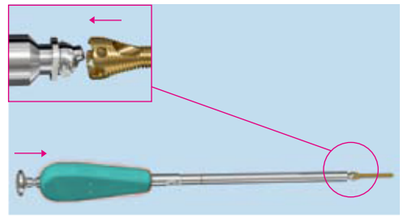


Figure 19a

- Ensure that the final position of the screwdriver handle is perpendicular to the intramedullary nail , with the arrow facing backwards. Confirm the position of the screws under the imaging device (Figure 19b).

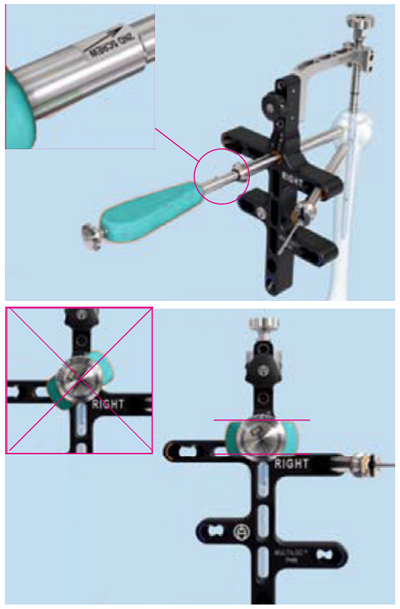


Figure 19b

- Pull back the handle and release the screwdriver.

Surgical procedure

【Step20】 Proximal locking

- **C**onnect the center sleeve with a **3.5**mm locking screw
- If the 3.5mm locking screw is combined with a titanium bone screw, the central sleeve needs to be assembled onto the T25 Stardrive screwdriver. Insert the assembled device into the protective sleeve. Rotate the screwdriver slightly until the center sleeve aligns with the screw slot. Push the screwdriver to lock the central sleeve into the titanium bone screw.

Figure 20a

Remove the screwdriver and protective sleeve.

Surgical procedure

【Step21】 Proximal locking

- Insert the remaining titanium bone screws
- For the remaining titanium bone screws, repeat the first 5 steps.

Using imaging equipment, carefully check the final position of all screws in different planes to ensure that they do not penetrate the joint surface.

If using an aiming arm, remove it.

Attention: In any fracture situation, three lateral screws (greater tuberosity of humerus, horizontal A, B, and D) must be used as they can ensure basic structural stability.

Surgical procedure

【Step22】 Proximal locking **-3.5mm** locking screw

- Positioning center sleeve

- Remove the side aiming arm.

- If this step was not completed before, a central sleeve needs to be connected to the screw (1).

Slowly tilt the center sleeve forward and lock the drill sleeve into the center sleeve by lightly clicking (2).Ensure that both handles of the drill bit are perfectly perpendicular to the intramedullary nail. If necessary, rotate component (3).

Figure 22a

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Surgical procedure

【Step23】 Proximal locking **-3.5mm** locking screw

- Drill holes and determine the length of screws

Insert the drill bit and carefully drill until it reaches the plane of the subchondral bone. Using image equipment, confirm the position of the drill bit.

After drilling, read the required screw length data directly from the drill bit on the back of the drill sleeve.

Remove the drill bit and drill sleeve.

Attention: Do not penetrate the joint surface.

Figure 23a

Surgical procedure

【Step24】 Proximal locking **-3.5mm** locking screw

- Use a length probe for measurement.

  （Length probes can also be used to measure the length of screws. ）

- Assemble the length probe with its external sleeve.

  Thread the length probe through the drill bit and push it forward until resistance is felt in the subchondral space. Use imaging equipment for monitoring. Read the screw length data on the open scale of the length probe.

- Remove the drill sleeve.

Attention: Do not change the position of the central sleeve.

Figure 24a

Surgical procedure

【Step25】 Proximal locking **-3.5mm** locking screw

- Insert a **3.5**mm locking screw

- Assemble the torque limiter, handle, and screwdriver rod together.

  Select a suitable length of 3.5mm locking screw and insert it through the center sleeve. Tighten the screws until a clicking sound is heard.

Figure 25a

- Remove the central sleeve.

Attention: When inserting the 3.5mm locking screw, the torque limiter must always be connected.

Surgical procedure

【Step26】 Proximal locking **-3.5mm** locking screw

- Insert the remaining **3.5**mm locking screws and assemble the lateral aiming arm

- Insert the remaining 3.5mm locking screws and repeat the first 4 steps.

- Carefully inspect the final position of all 3.5mm locking screws in different planes using imaging equipment to ensure that the screws do not penetrate the joint surface.

  Reassemble the lateral aiming arm onto the insertion handle and tighten the connecting screws.

Surgical procedure

【Step27】 Remote locking and upward screw (suitable for 160 specification)

- Insert sleeve needle assembly

- Insert the trocar assembly (protective sleeve, drill sleeve, and trocar) through a distal hole in the aiming arm. Make an incision on the skin and carefully separate it to the surface of the bone to avoid damage to the surrounding neural and vascular structures and soft tissue.

- Push the trocar assembly forward and push the trocar downwards against the surface of the bone. Remove the trocar needle.

Figure 27a

Surgical procedure

【Step28】 Remote locking and upward screw (suitable for 160 specification)

- Drill holes and determine the length of screws

- Insert a graduated drill bit and drill through two layers of leather until the tip of the drill bit just penetrates the inner leather. Confirm the position of the drill bit through imaging equipment.

- After drilling, read the required screw length data directly from the graduated drill bit on the back of the drilling sleeve. Firmly press the drill sleeve onto the leather to ensure accurate measurement.

Remove the drill bit and drill sleeve.

Figure 28a

Surgical procedure

【Step29】 Remote locking and upward screw (suitable for 160 specification)

- Upward screw **(**horizontal **E)**

- Insert a graduated drill bit and carefully drill until it reaches the plane of the subchondral bone.

  Confirm the position of the drill bit through imaging equipment.

Attention: Do not penetrate the joint surface.

Surgical procedure

【Step30】 Remote locking and upward screw (suitable for 160 specification)

- Using a depth finder to measure

- A depth gauge can also be used to determine the length of screws.

  Assemble the depth finder with its external casing.

Insert the depth gauge through the protective sleeve. Firmly press the outer part of the depth finder onto the leather to ensure accurate measurement. Read the screw length data on the depth gauge.

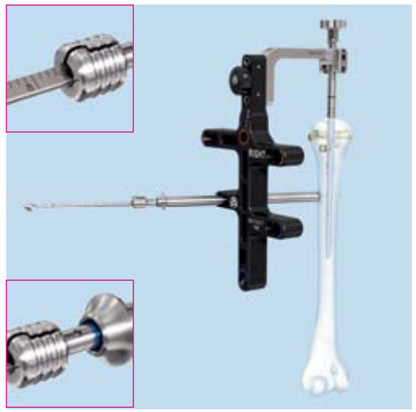

Figure 30a

Surgical procedure

【Step31】 Remote locking and upward screw (suitable for 160 specification)

- Insert a **4.0**mm locking screw

  Use a T25 Stardrive screwdriver to insert a 4.0mm locking screw of appropriate length through the protective sleeve.

- Insert the second 4.0mm locking screw

  To insert the second distal 4.0mm locking screw, repeat the first 5 steps.

Remove the side aiming arm.

Figure 31a

Surgical procedure

【Step32】 Remote locking and upward screw (suitable for 180 and above specifications)

- Insert sleeve needle assembly

- Insert the trocar assembly (protective sleeve, drill sleeve, and trocar) through a distal hole in the aiming arm. Make an incision on the skin and carefully separate it to the surface of the bone to avoid damage to the surrounding neural and vascular structures and soft tissue.

Push the trocar assembly forward and push the trocar downwards against the surface of the bone. Remove the trocar needle.

Figure 32

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Surgical procedure

【Step33】 Remote locking and upward screw (suitable for 180 and above specifications)

- Drill holes and determine the length of screws

Insert the drill bit and drill through two layers of leather until the tip of the drill bit just penetrates the inner leather. Confirm the position of the drill bit under the image enhancement device.

Figure 33

Surgical procedure

【Step34】 Remote locking and upward screw (suitable for 180 and above specifications)

- Using a depth finder to measure.

- Insert the depth gauge through the protective sleeve. Firmly press the outer part of the depth finder onto the leather to ensure accurate measurement. Read the screw length data on the depth gauge.

Figure 34

Surgical procedure

【Step35】 Remote locking and upward screw (suitable for 180 and above specifications)

- Insert a **4.0**mm locking screw

  Use a T25 Stardrive screwdriver to insert a 4.0mm locking screw of appropriate length through the protective sleeve.

Figure 35

Surgical procedure

【Step36】 Tail cap insertion

- Determine the length of the tail cap

- It is recommended to use a tail cap to prevent bone ingrowth to the end of the intramedullary nail, or to improve stability if the intramedullary nail is inserted too deeply.

- Slide the tailcap ruler over the near end groove of the inserted handle. Push the ruler down onto the bone and read the length of the tail cap directly from the ruler.

Remove the tail cap ruler, connecting screws, and insertion handle. If it is difficult to remove the connecting screws, a combination wrench can be used.

Figure 32a

Surgical procedure

【Step37】 Tail cap insertion

- Measurement using aiming arms and Kirschner needles

- Assemble the lateral aiming arm onto the insertion handle and tighten the connecting screws. Insert a 2.5mm Kirschner wire into the corresponding tailcap hole that passes through the proximal portion of the aiming arm. Estimate the extension length using AP images of the proximal end of intramedullary nails.

Remove the Kirschner wire and lateral aiming arm.

Figure 33a

Surgical procedure

【Step38】 Tail cap insertion

- Placing the tail cap.

  Use a T**25** screwdriver to tighten the tail cap **(**Figure **34**a**).**

- Inserting suture **(**optional**)**

The stability of bone grafting can be improved by inserting sutures. Insert one or more non absorbable sutures into the tendon attachment area of the supraspinatus, infraspinatus, and subscapularis muscles. Connect the suture to the MultiLoc screw using the provided suture holes (Figure 34b).

Figure 34a

Figure 34b

Surgical procedure

【Step39】 Internal plant removal (optional)

- Remove the tail cap

- Carefully separate soft tissues and observe all locked internal plants.

  Use a T25 screwdriver to remove the tail cap.

Lock the screw into the intramedullary nail.

Figure 35a

Surgical procedure

【Step40】 Internal plant removal (optional)

- Remove the **3.5**mm locking screw

  Assemble the screwdriver rod and handle, and remove all **3.5**mm locking screws **(**Figure **3**6a**).**

- Remove titanium bone screws

  Assemble the extraction rod and handle, and remove all titanium bone screws (Figure 36b)

.

Figure 36a

Figure 36b

Surgical procedure

【Step41】 Internal plant removal (optional)

- Remove the **4.0**mm locking screw

- Use a T25 screwdriver to remove all 4.0mm locking screws.

Figure 37a

Surgical procedure

【Step42】 Internal plant removal (optional)

- Remove the main nail

Before removing the intramedullary nail, ensure that all locking screws have been removed.

Remove the intramedullary nail. If encountering resistance, gently tap with a hammer to remove the intramedullary nail.

Figure 38a

Product information

- 【Intramedullary nail V】 (左-L,右-R)

Product code	Specification	Code	Specification	Code	Specification
20700002	Φ7x160 左	20700037	Φ8x210 左	20700061	Φ9x255 左
20700008	Φ7x160 右	20700040	Φ8x210 右	20700062	Φ9x255 右
20700009	Φ8x160 左	20700038	Φ9x210 左	20700071	Φ7x270 左
20700010	Φ8x160 右	20700039	Φ9x210 右	20700073	Φ7x270 右
20700011	Φ9x160 左	20700031	Φ7x225 左	20700069	Φ8x270 左
20700012	Φ9x160 右	20700032	Φ7x225 右	20700070	Φ8x270 右
20700053	Φ7x180 左	20700034	Φ8x225 左	20700067	Φ9x270 左
20700054	Φ7x180 右	20700033	Φ8x225 右	20700068	Φ9x270 右
20700051	Φ8x180 左	20700035	Φ9x225 左	20700078	Φ7x285 左
20700052	Φ8x180 右	20700036	Φ9x225 右	20700079	Φ7x285 右
20700049	Φ9x180 左	20700059	Φ7x240 左	20700076	Φ8x285 左
20700050	Φ9x180 右	20700060	Φ7x240 右	20700077	Φ8x285 右
20700047	Φ7x195 左	20700057	Φ8x240 左	20700074	Φ9x285 左
20700048	Φ7x195 右	20700058	Φ8x240 右	20700075	Φ9x285 右
20700045	Φ8x195 左	20700055	Φ9x240 左	20700083	Φ7x300 左
20700046	Φ8x195 右	20700056	Φ9x240 右	20700084	Φ7x300 右
20700043	Φ9x195 左	20700065	Φ7x255 左	20700081	Φ8x300 左
20700044	Φ9x195 右	20700066	Φ7x255 右	20700082	Φ8x300 右
20700041	Φ7x210 左	20700063	Φ8x255 左	20700072	Φ9x300 左
20700042	Φ7x210 右	20700064	Φ8x255 右	20700080	Φ9x300 右

- 【Titanium bone screws】

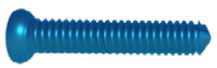
Product code	Specification	Code	Specification	Code	Specification
20100012	Φ4.5x20	20100004	Φ4.5x34	20100020	Φ4.5x48
20100011	Φ4.5x22	20100003	Φ4.5x36	20100019	Φ4.5x50
20100010	Φ4.5x24	20100002	Φ4.5x38	20100018	Φ4.5x52
20100009	Φ4.5x26	20100001	Φ4.5x40	20100017	Φ4.5x54
20100008	Φ4.5x28	20100013	Φ4.5x42	20100016	Φ4.5x56
20100007	Φ4.5x30	20100022	Φ4.5x44	20100015	Φ4.5x58
20100005	Φ4.5x32	20100021	Φ4.5x46	20100014	Φ4.5x60

Product information

【Interlocking screw Ⅶ】

Product code	Specification	Code	Specification	Code	Specification
20700912	ϕ3.5x26	20700917	ϕ3.5x36	20700922	ϕ3.5x46
20700913	ϕ3.5x28	20700918	ϕ3.5x38	20700923	ϕ3.5x48
20700914	ϕ3.5x30	20700919	ϕ3.5x40	20700924	ϕ3.5x50
20700915	ϕ3.5x32	20700920	ϕ3.5x42		
20700916	ϕ3.5x34	20700921	ϕ3.5x44		

【Titanium bone screws】 (Single line-单线)

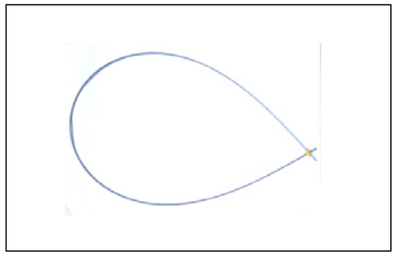


Code	Specification	Code	Specification	Code	Specification
3532040024	ϕ4.0x24 单线	3532040040	ϕ4.0x40 单线	3532040056	ϕ4.0x56 单线
3532040026	ϕ4.0x26 单线	3532040042	ϕ4.0x42 单线	3532040058	ϕ4.0x58 单线
3532040028	ϕ4.0x28 单线	3532040044	ϕ4.0x44 单线	3532040060	ϕ4.0x60 单线
3532040030	ϕ4.0x30 单线	3532040046	ϕ4.0x46 单线	3532040062	ϕ4.0x62 单线
3532040032	ϕ4.0x32 单线	3532040048	ϕ4.0x48 单线	3532040064	ϕ4.0x64 单线
3532040034	ϕ4.0x34 单线	3532040050	ϕ4.0x50 单线	3532040066	ϕ4.0x66 单线
3532040036	ϕ4.0x36 单线	3532040052	ϕ4.0x52 单线	3532040068	ϕ4.0x68 单线
3532040038	ϕ4.0x38 单线	3532040054	ϕ4.0x54 单线	3532040070	ϕ4.0x70 单线

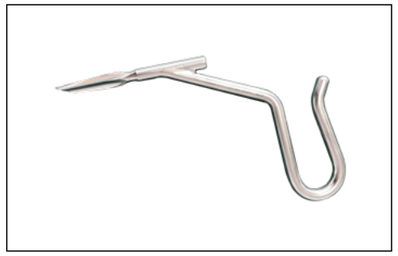
【UHC Hollow screw】

Code	Specification	Remarks	Code	Specification	Remarks
20600001	0	Φ3.0x8	20600004	10	Φ3.0x19
20600002	2	Φ3.0x11	20600005	15	Φ3.0x24
20600003	5	Φ3.0x14			

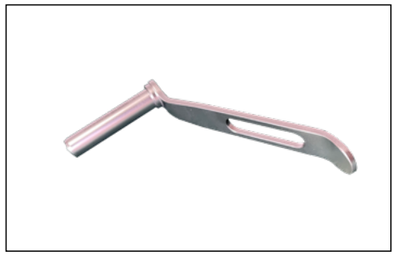
Tool information



● 2070001
Bone positioning needle (light rod)



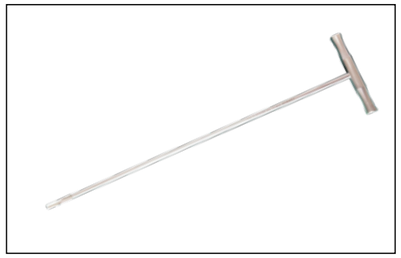
● 2070002
Open cone



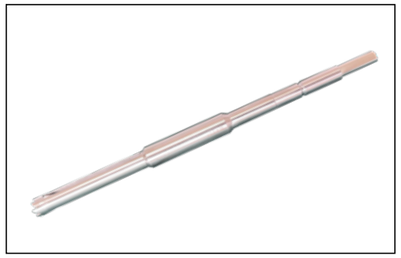
● 2070003
Guide drill (III)

● 425-210
Quick fit handle (T-shaped)

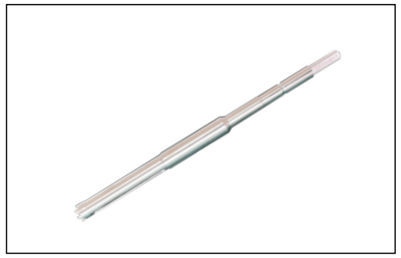
● 425-350
Puller (guide pin)



● 2070004
Bone pry

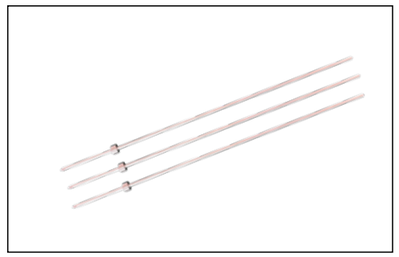


● 2070005
Medullary cavity enlargement drill (I)

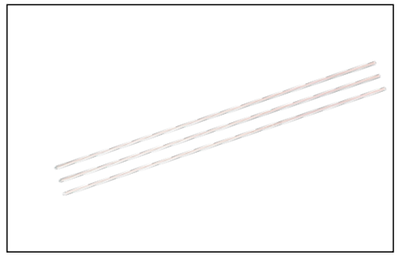


● 2070139
Medullary cavity enlargement drill (I)

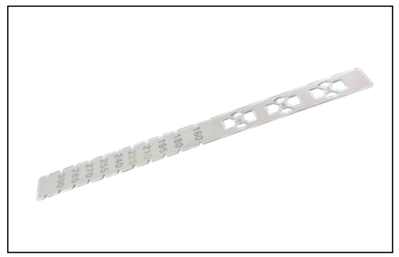
Tool information



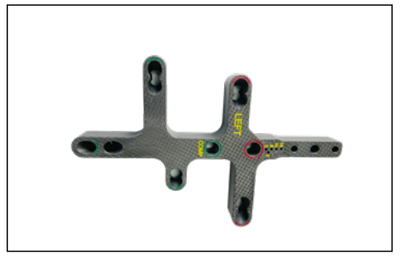
● 2070006
Bone positioning needle (light rod)



● 2070007
Bone positioning needle (light rod)



● 2070008
Template (III)

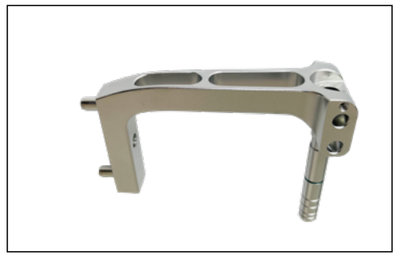


● 2070009
Orthopedic positioning frame (proximal sight I)

● 2070010
Quick connecting rod (short rod)

● 2070151
Quick connecting rod (short rod)

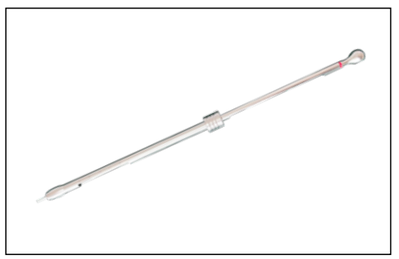
● 2070011
Orthopedic positioning frame (proximal sight I)



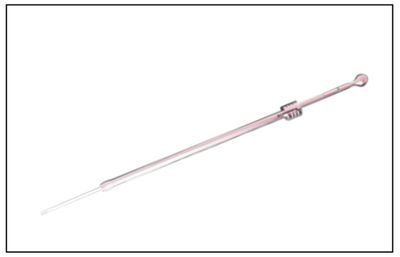
● 2070012
Orthopedic positioning frame (handle IV)

Tool information

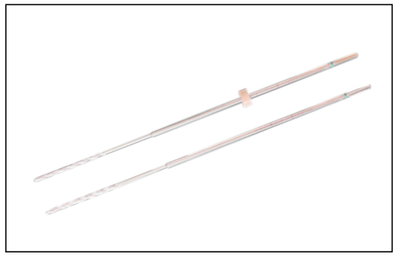
● 2070013
Quick connecting rod (handle)



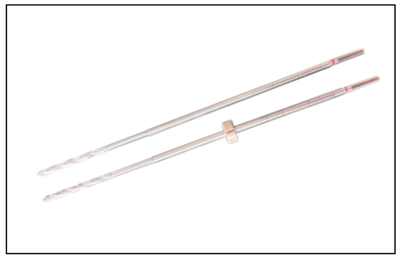
● 2070014
Sounder (III)



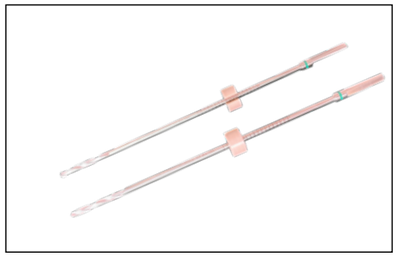
● 2070015
Sounder (III)



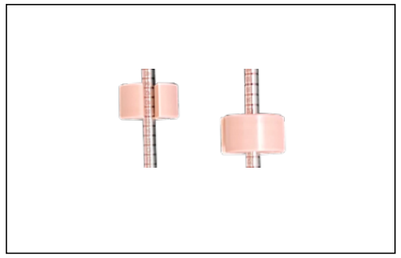
● 2070016
Orthopedic drill bits (versatile)



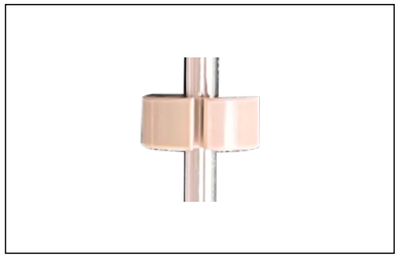
● 2070017
Orthopedic drill bits (versatile)



● 2070018
Orthopedic drill bits (versatile)

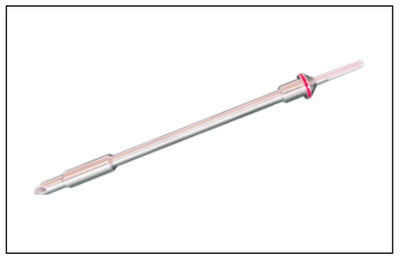


● 2070019
Orthopedic locator (limit I)



● 2070020
Orthopedic locator (limit I)

Tool information

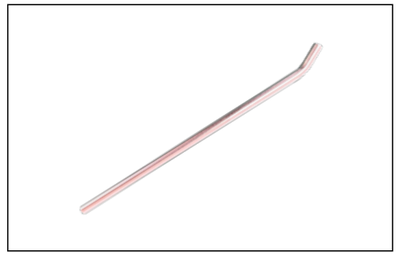


● 2070021
Orthopedic drill bit (countersunk)

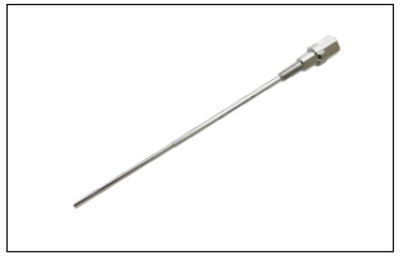
● 2070022
Sheath (IX)

● 2070023
Sheath（Ⅷ）

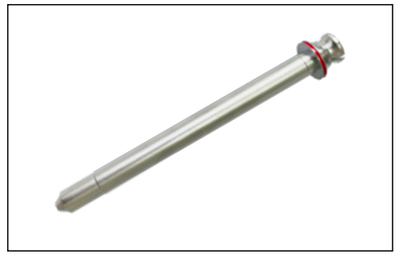
● 414-470
Orthopedic wrench (open end)



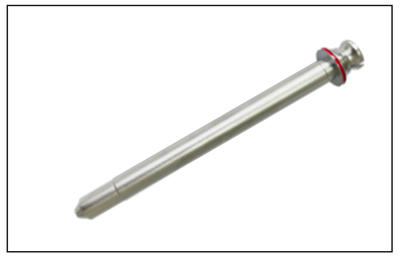
●425-610
Orthopedic wrench (rod type)



● 2070024
Quick connecting rod (pressurized)

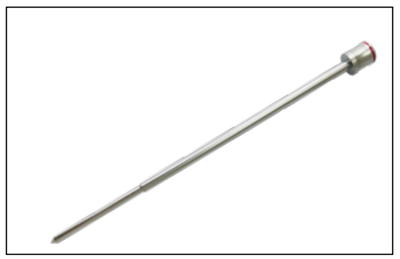


● 2070025
Sheath（Ⅰ）

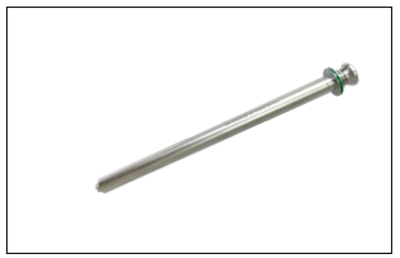


●2070026
Sheath（Ⅱ）

Tool information

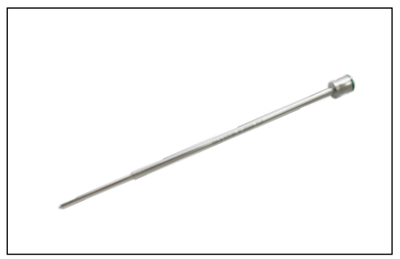


● 2070027
Bone cone

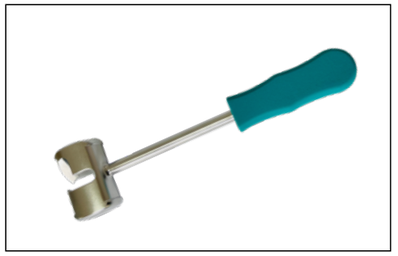


● 2070028
Sheath（Ⅰ）

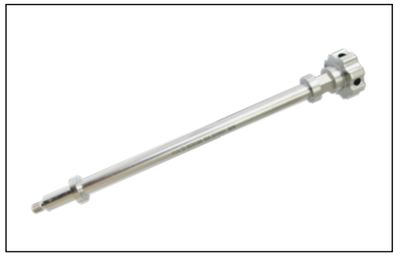
● 2070029
Sheath（Ⅱ）



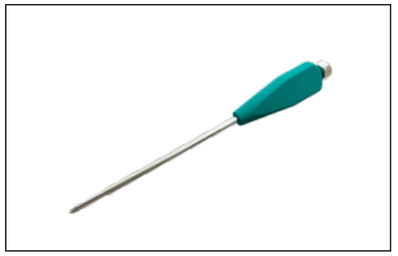
● 2070030
Bone cone



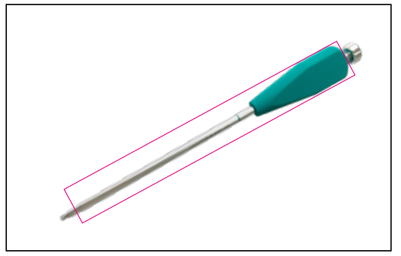
● 425-361
Bone hammer



● 2070031
Puller (slide hammer II)

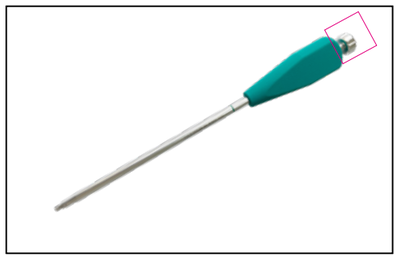


● 2070032
Orthopedic wrench (handle locking II)

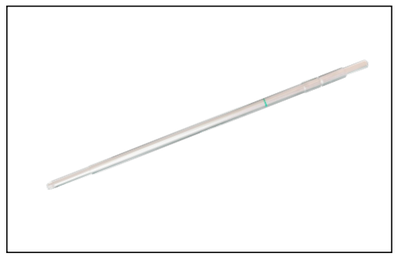


●2070033
Orthopedic wrench (handle locking II)

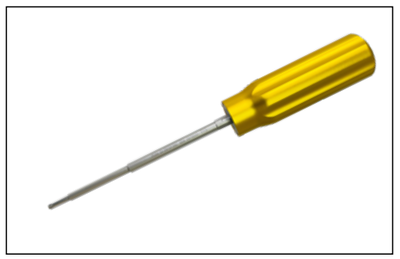
Tool information



●2070152
Quick connecting rod (pressurized)

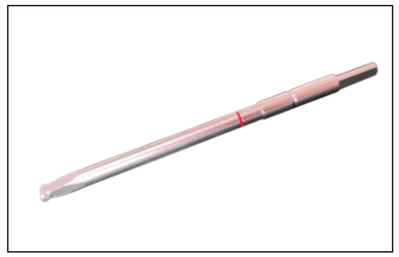


● 2070034
Orthopedic wrench (plum blossom quick change)



● 2070035
Orthopedic wrench (plum blossom)

● 2070036
Orthopedic wrench (handle locking II)



● 2070037
Orthopedic wrench

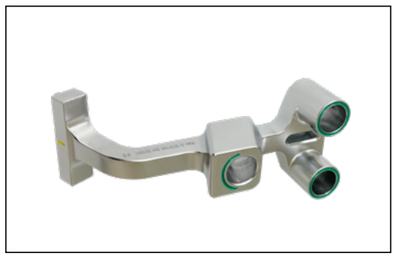
● 2070038
Driver (oblique)

● 2070039
Sounder (IV)

●2070040
Orthopedic positioning frame

FuleS富乐

Tool information



●2070041
Orthopedic Positioning Frame (Remote Sight III)