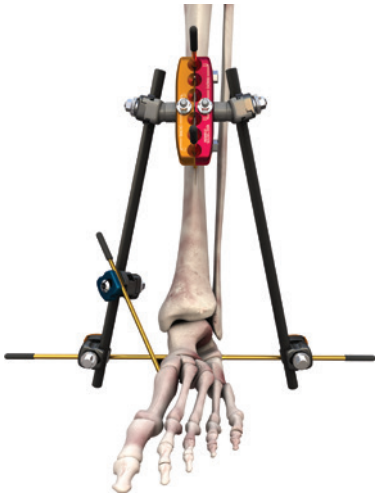
Surgical Technique

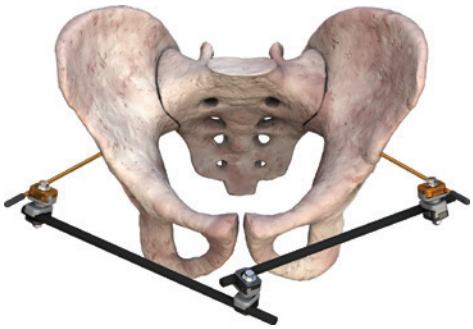
smith&nephew

JET-X◇

External Fixator

Ankle Spanning, Knee Spanning, Long Bone and Pelvic





JET-X◇ External Fixation System

Ankle Spanning, Knee Spanning, Long Bone and Pelvic Surgical Technique

Contents

Nota Bene

The technique description herein is made available to the healthcare professional to illustrate the author's suggested treatment for the uncomplicated procedure. In the final analysis, the preferred treatment is that which addresses the needs of the specific patient. For more information on the products in this surgical technique, including indications for use, contraindications, effects, precautions and warnings, please consult the products' Instructions for Use (IFU).

System features

Designed for flexibility in frame construction and ease of use

- Freedom Clamps provide the ability to angle pins up to 50° and also allow linear reduction of fractures with true translation of long bone fragment ends.
- Quick Clamps designed to allow for rapid application, stability, and single point tightening
- Cartridge clamp design is positive locking to prevent passive release of pins or bars – even when clamps are loosened[4]
- Four and Six Hole Pin Clamps utilize several attachment posts, offering multiple construct alternatives for optimum stability.[2,3]
- The four hole and six hole clamps offer several attachment posts to maximize construct alternatives
- Various clamps and bar lengths give the surgeon the versatility to assemble the necessary frame constructs
- Self-drilling, self-tapping JET-X◊ Half Pins
- Stainless steel pins with TiN* coating to reduce friction, which may minimize heat during insertion[5-7]
- Tapered minor/constant major diameter of half pins provide radial compression during insertion which may prevent loosening[3,8,9]

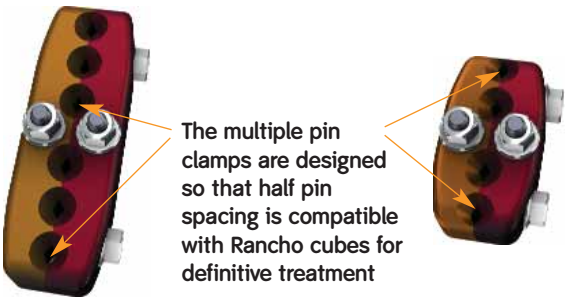
*TiN = Stainless Steel Half Pins with a Titanium Nitride coating
**American Society for Testing and Materials

Freedom
Bar-to-Pin Clamp

Freedom
Bar-to-Bar Clamp

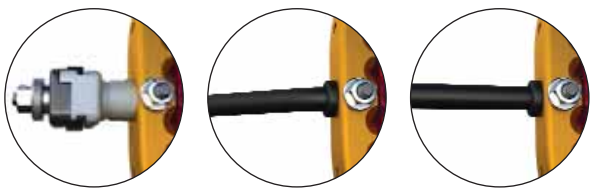
Quick
Bar-to-Pin Clamp

Quick
Bar-to-Bar Clamp



The multiple pin clamps are designed so that half pin spacing is compatible with Rancho cubes for definitive treatment

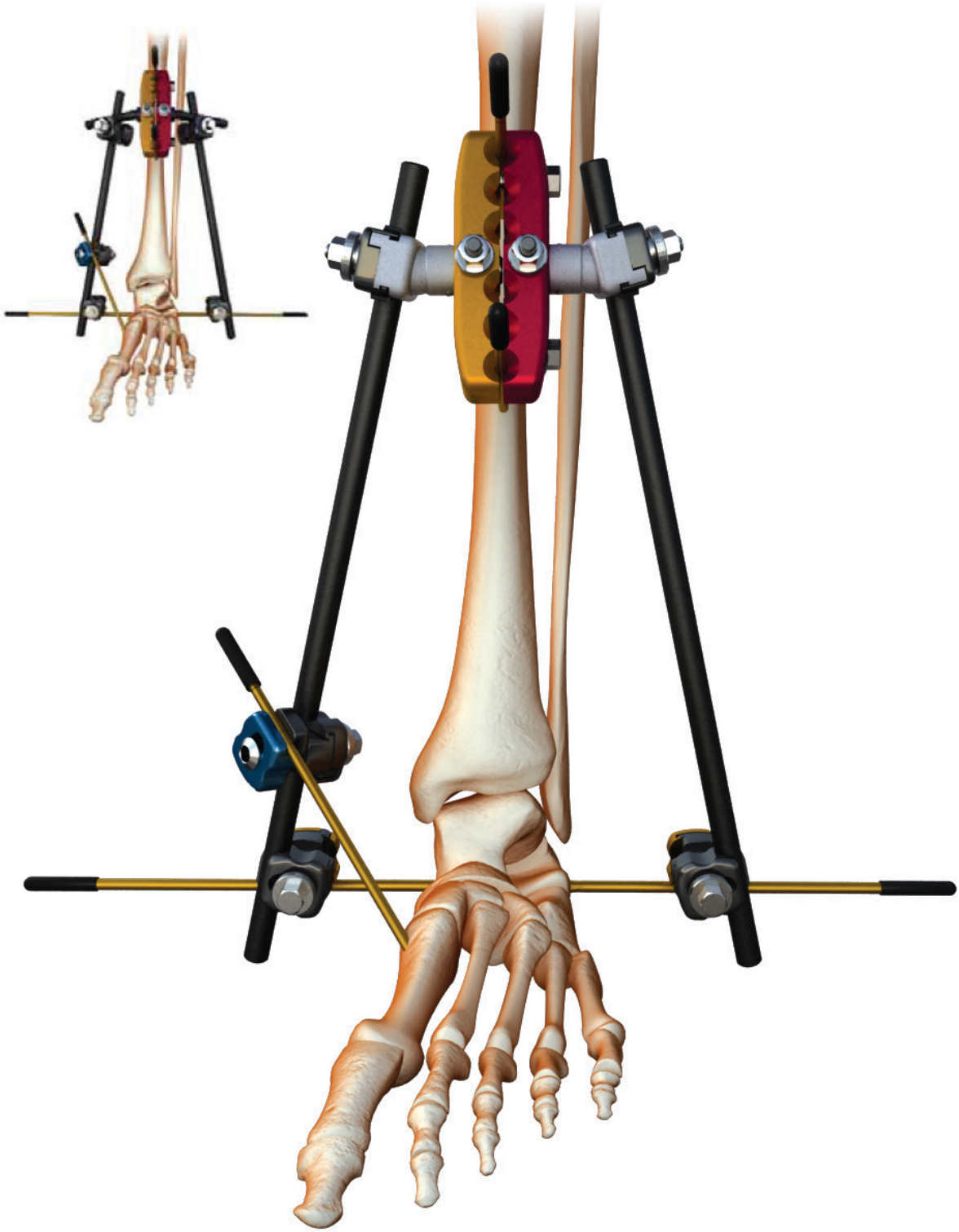
The four hole and six hole clamps offer several attachment posts to maximize construct alternatives



Freedom Post | 30° Post | Straight Post

Stainless steel pin with TiN coating

Ankle Spanning Surgical Technique



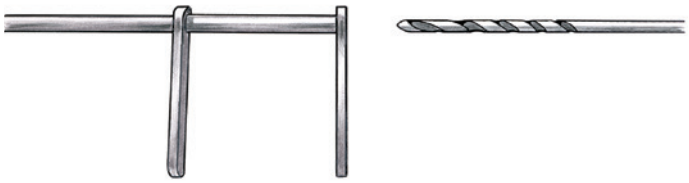
Introduction

Temporary or definitive stabilization of pilon fractures.
Adjunct to internal fixation for treatment of fractures.

JET-X◇ External Fixator Ankle Spanning Surgical Technique

Pin insertion

Make a stab incision at the desired pin site. Dissect down to bone using a small elevator, being careful to elevate the periosteum, so that the drill and pin avoid as much soft tissue as possible. Insert the 3.5mm Drill Sleeve into the 5mm Tissue Protector and place the sleeve combination through the stab incision to bone.



Note Pre-drilling is optional when using the JET-X Half Pins, which are self-drilling and self-tapping.

Using the 3.5mm drill, pre-drill the bone, using the C-arm to assist in pre-drilling. Measure using the drill and sleeve combination to determine pin thread length. Remove the drill sleeve and insert the appropriate 5mm Half Pin attaining bicortical purchase.

Pin placement/ frame construction

The working construct is a delta frame using a Multiple Pin Clamp.

Calcaneal pin placement

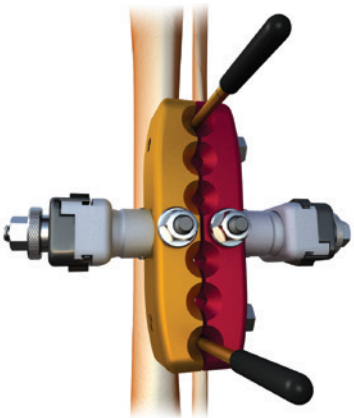
Place a centrally threaded half pin (traction pin) through the calcaneus in the safe zone from medial to lateral. Position this pin parallel to the ankle joint or perpendicular to the mechanical axis of the tibia. The pin should be positioned in the tuberosity, posterior to the sagittal axis line to produce a dorsiflexion moment with distraction. Confirm pin placement using the C-arm.

Note Construct shown utilizes the Quick Clamp. Freedom clamps may also be used for frame construction.

Tibial pin placement

Place the tibial pins in the AP plane. Direct AP or anteromedial are optimal placements. If treatment is to progress to ORIF, proximal half pins should be placed outside the planned area of fixation and zone of injury.

Use the Multiple Pin Clamp and Tissue Protectors to insert half pins and ensure proper spacing. Allow for planned future fixation and avoid zone of injury.

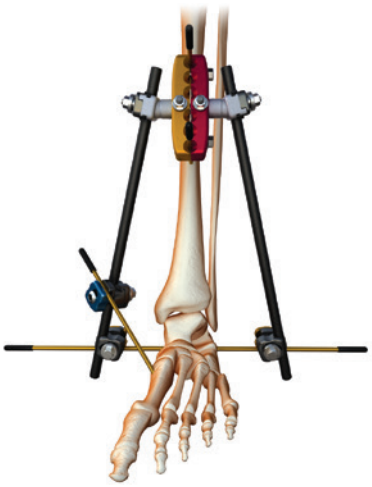


Select the appropriate posts and snap them into the Multiple Pin Clamp. Add a Pin to Bar Clamp to the calcaneal traction pin and attach carbon fiber bars. Reduce the fracture and tighten all clamps using the 10mm Ratchet Wrench or AO T-Handle Connector with 10mm Socket.

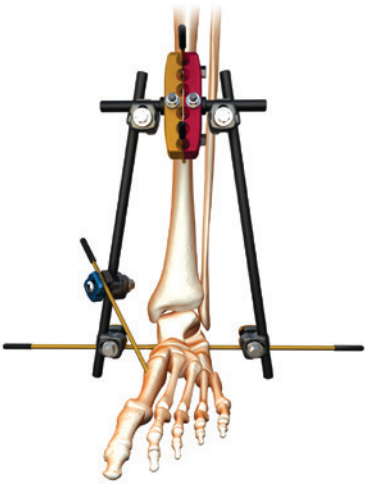
Note Construct shown with Freedom Post attachments. A Straight Post or 30° Angled Post could be used but would require an additional Bar to Bar Clamp.

Metatarsal pin placement
An additional metatarsal pin can be placed to incorporate the foot. Place the desired half pin size (3mm or 4mm) into the base of the first metatarsal at a slight angle into the anterior medial aspect. This is done to avoid tethering of the extensor tendons. Attach the pin to the bar using a Quick or Freedom Bar to Pin Clamp.

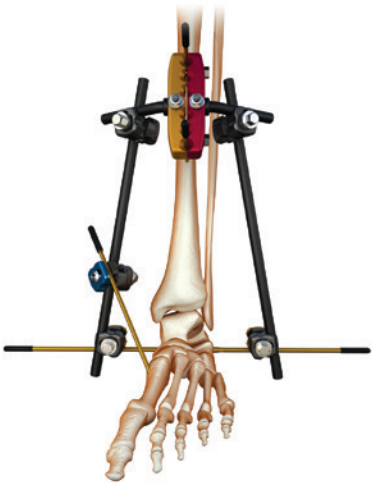
Note Construct shown utilizes the 10.5mm to 4mm Quick Clamp and 4mm TiN Half Pin.



Optional frame constructs



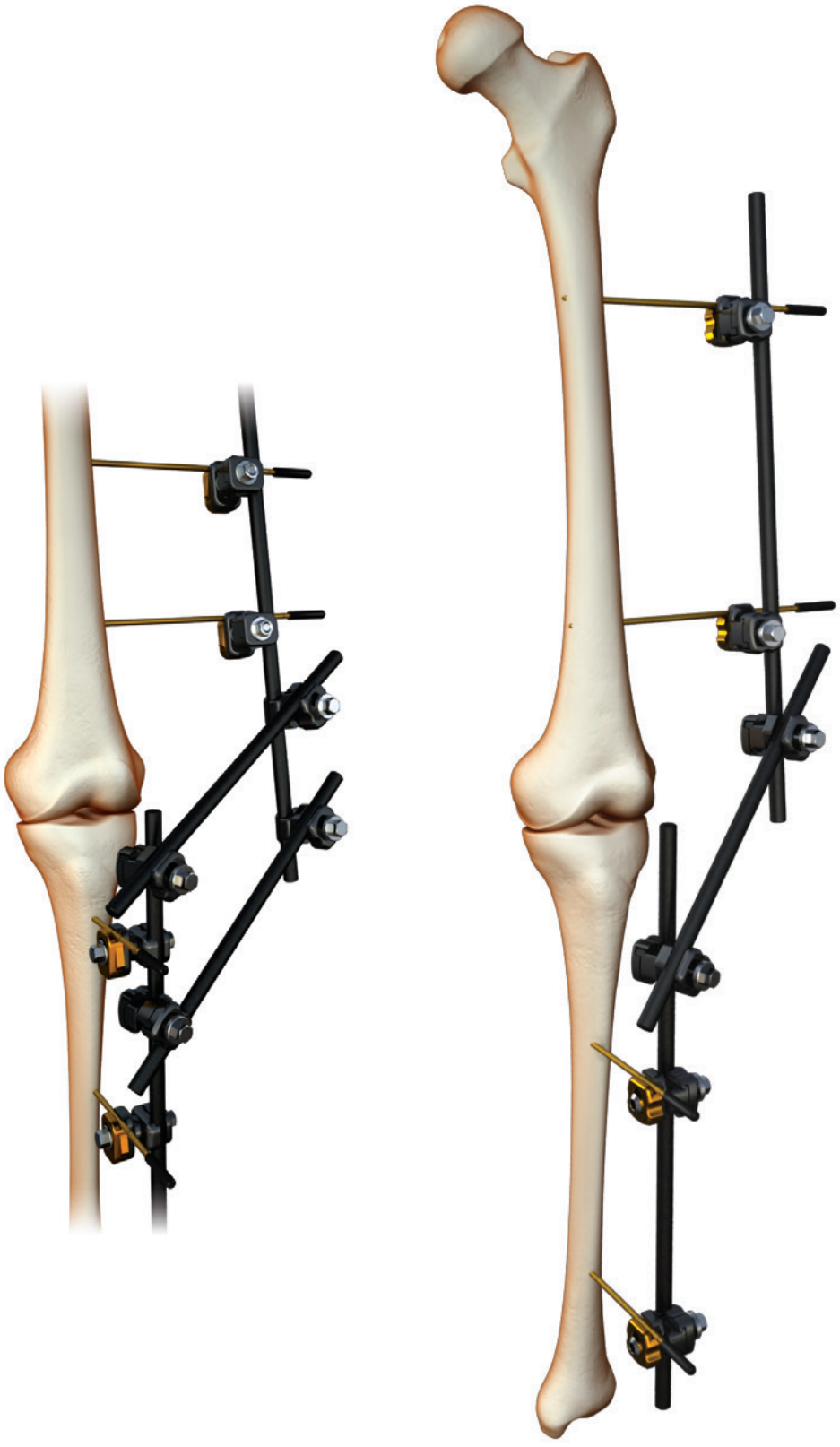
Construct shown utilizes the six hole Multiple Pin Clamp with straight posts and the 10.5mm to 4mm Quick Clamp with a 4mm TiN pin in the first metatarsal



Construct shown utilizes the six hole Multiple Pin Clamp with 30° posts and the 10.5mm to 4mm Quick Clamp with a 4mm TiN pin in the first metatarsal

Construct shown utilizes four 10.5mm Bar to 5mm Pin Clamps and the 10.5mm to 4mm Quick Clamp with a 4mm TiN pin in the first metatarsal

Knee Spanning Surgical Technique



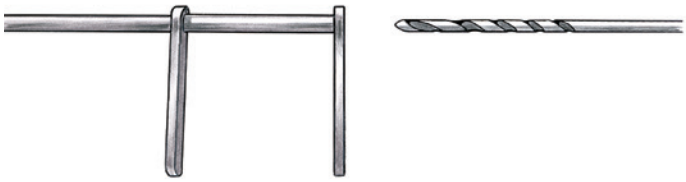
Introduction

Temporary stabilization of fractures and severe soft tissue injuries, such as tibial plateau, supracondylar femur, extensor mechanism disruption and knee dislocation.

JET-X◇ External Fixator Knee Spanning Surgical Technique

Pin insertion

Make a stab incision at the desired pin site. Dissect down to bone using a small elevator, being careful to elevate the periosteum, so that the drill and pin avoid as much soft tissue as possible. Insert the 3.5mm Drill Sleeve into the 5mm Tissue Protector and place the sleeve combination through the stab incision to bone.



Note Pre-drilling is optional when using the JET-X Half Pins, which are self-drilling and self-tapping.

Using the 3.5mm Drill, pre-drill the bone, using the C-arm to assist in pre-drilling. Measure using the drill and sleeve combination to determine pin thread length. Remove the drill sleeve and insert the appropriate 5mm Half Pin attaining bicortical purchase.

Pin placement/ frame construction

Tibial pins

Place initial half pin just distal to the zone of injury and distal to planned future fixation. The pin should be placed AP, just medial to the anterior tibial crest.

The second tibial pin should be inserted distally at the diaphyseal-metaphyseal junction to obtain maximum pin spread. Attach Quick or Freedom Bar to Pin Clamps to each tibial pin.

Choose a bar of appropriate length to end at the level of patella. Attach this bar to the Bar to Pin Clamps. This bar is placed approximately two finger breadths above skin level to allow for swelling of the soft tissue.

Femoral pins

(Frame option #1)

Insert two half pins straight anterior through the quadriceps. Use maximum pin spread for construct stability. Attach Quick or Freedom Bar to Pin Clamps to each pin.

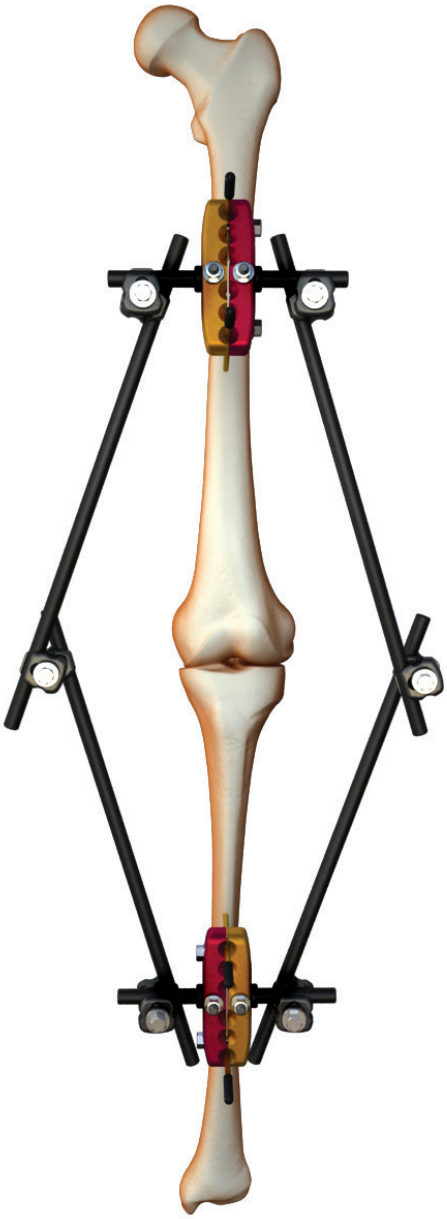
Choose a bar that is long enough to cross the proximal end of the tibial bar. Attach this bar to the Bar to Pin Clamps. This bar should be placed approximately two finger breadths above skin level to allow for swelling of the soft tissue.

Connector bars

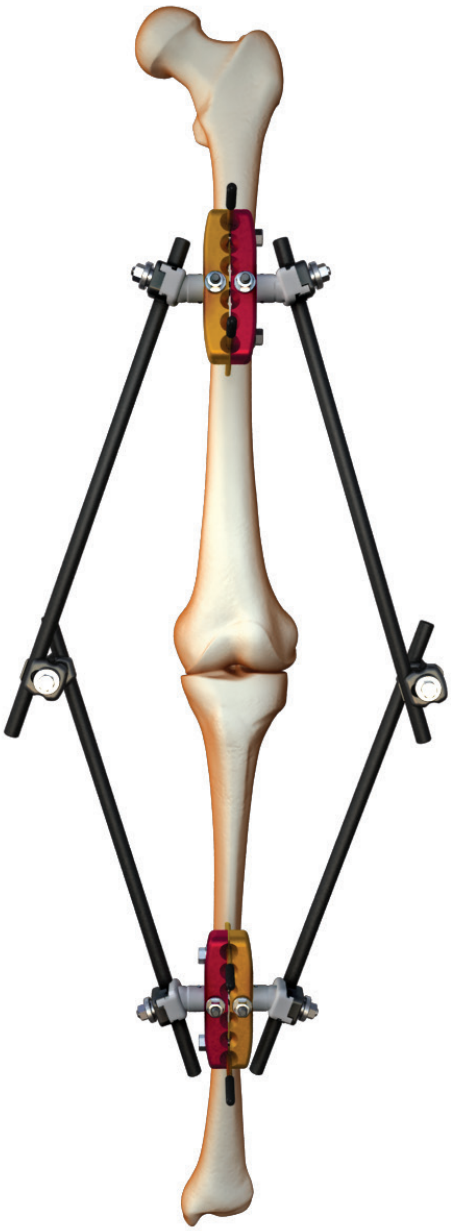
Attach Quick or Freedom Bar to Bar Clamps to the tibial and femoral bars. Attach a third bar to these clamps. Distract the leg and reduce the fracture. Verify reduction by C-arm and tighten all clamps.

Note For additional stability, bars can be double stacked.

Optional frame constructs

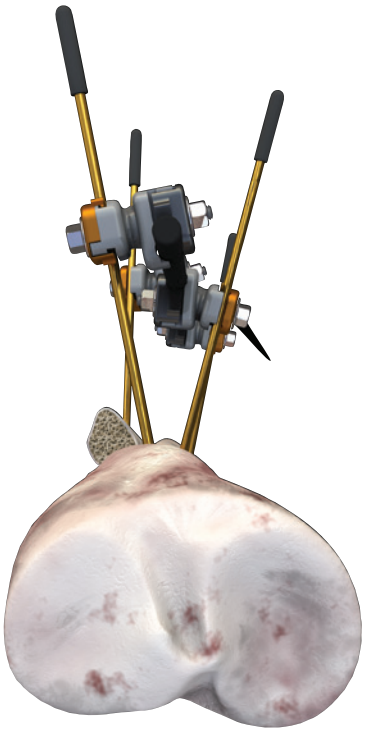


Construct shown utilizes the six hole Multiple Pin Clamp with Straight Posts in the proximal and distal portions.



Construct shown utilizes the six hole Multiple Pin Clamp with Freedom Posts in the proximal and distal portions.

Long Bone Surgical Technique



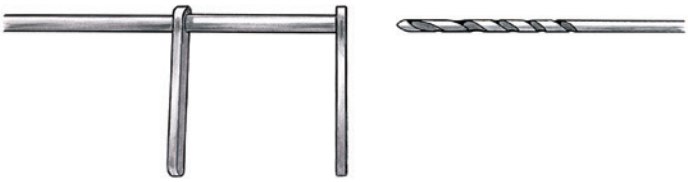
Introduction

Pseudoarthrosis of long bones. First stage stabilization of fractures that will be treated definitively with ORIF.

JET-X◇ External Fixator Long Bone Surgical Technique

Pin insertion

Make a stab incision at the desired pin site. Dissect down to bone using a small elevator, being careful to elevate the periosteum, so that the drill and pin avoid as much soft tissue as possible. Insert the 3.5mm Drill Sleeve into the 5mm Tissue Protector and place the sleeve combination through the stab incision to bone.

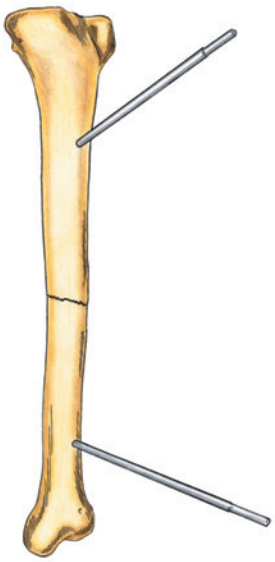


Note Pre-drilling is optional when using JET-X Half Pins, which are self-drilling and self-tapping.

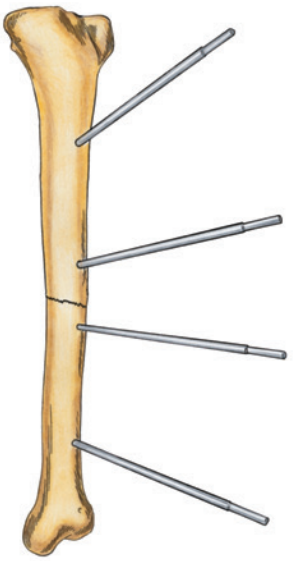
Using the 3.5mm Drill, pre-drill the bone, using the C-arm to assist in pre-drilling. Measure using the drill and sleeve combination to determine pin thread length. Remove the drill sleeve and insert the appropriate 5mm Half Pin attaining bicortical purchase.

Pin placement

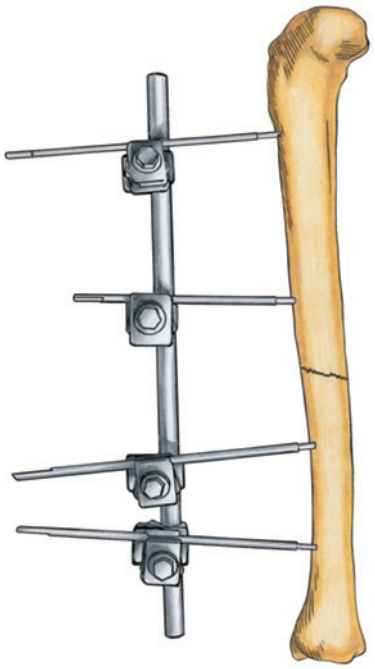
A simple stable frame is achieved by placing four pins with maximal spread along the length of the bone. Correct pin placement should provide for one pin on either side of the fracture as **far** from the fracture line as can be achieved.



Place two additional pins as **close** as possible on either side of the fracture.

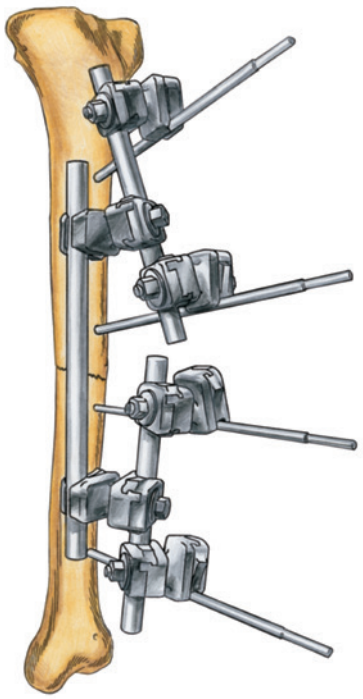


Using Freedom Bar to Pin Clamps, snap the pin clamps onto the pins. Snap the appropriate length bar(s) into the bar clamps.



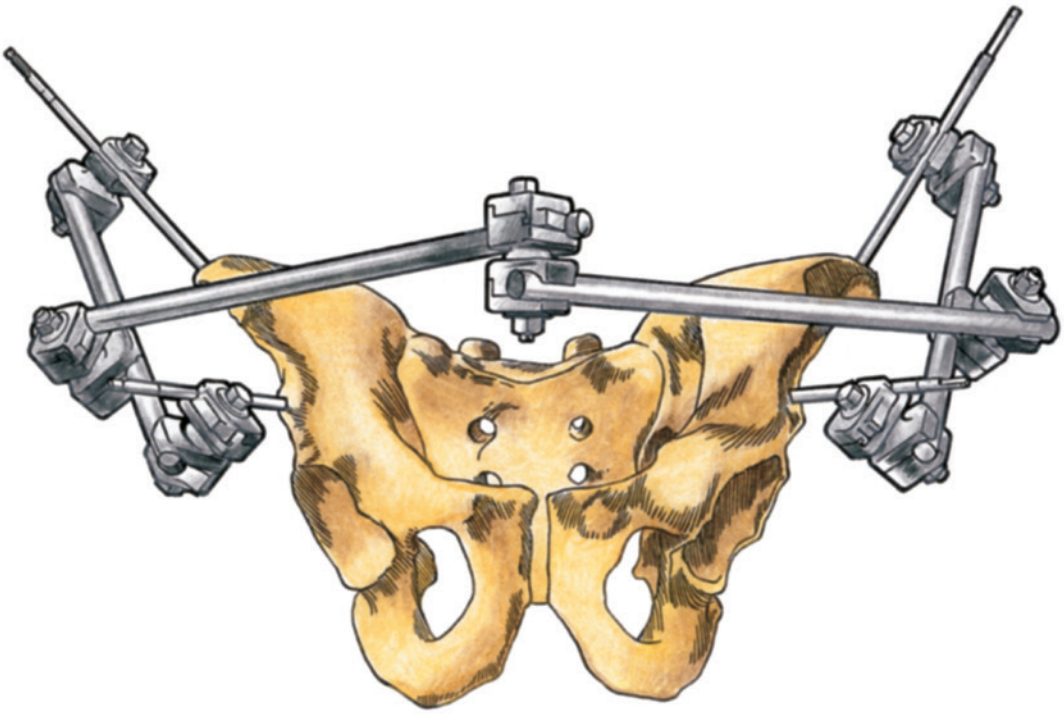
If fracture reduction is satisfactory, the wide adjustability of the clamps allows for one connecting bar to be snapped into all four Freedom Bar to Pin Clamps. Once tightened, the reduction is maintained.

If reduction is difficult to maintain, the proximal and distal pin couples can each be connected with separate short bars. Using both bars as reduction tools, the fracture can be manipulated to achieve reduction and stability. Freedom Bar to Bar Clamps are then attached to each short bar, and a long bar is then snapped into place to connect the proximal and distal fracture blocks.



After assembly of the needed frame, tighten the pin side of the Freedom Bar to Pin Clamps using a 10mm wrench. This will only lock the clamp to the pin, leaving the ball component free to move to aid in reduction. Reduce the fracture and tighten the bar side of the Bar to Pin Clamps and the Bar to Bar Clamps.

Pelvic Surgical Technique



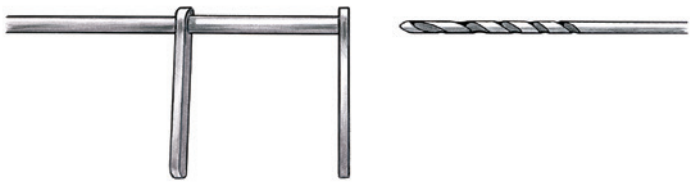
Introduction

Open and closed fracture fixture such as unstable open book pelvic fractures, unstable anterior pelvic ring with bilateral rami fracture not amenable to internal fixation.

JET-X◇ External Fixator Pelvic Surgical Technique

Pin insertion

Make a stab incision at the desired pin site. Dissect down to bone using a small elevator, being careful to elevate the periosteum, so that the drill and pin avoid as much soft tissue as possible. Insert the 3.5mm Drill Sleeve into the 5mm Tissue Protector and place the sleeve combination through the stab incision to bone.

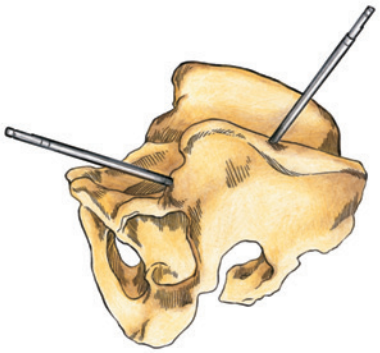


Note Pre-drilling is optional when using JET-X Half Pins, which are self-drilling and self-tapping.

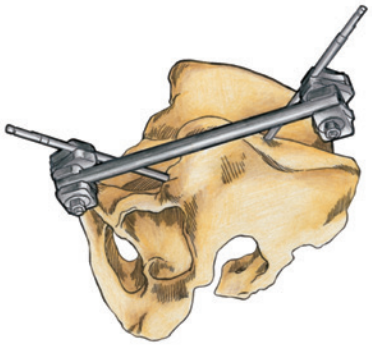
Using the 3.5 mm Drill, pre-drill the bone, using the C-arm to assist in pre-drilling. Measure using the drill and sleeve combination to determine pin thread length. Remove the drill sleeve and insert the appropriate 5mm Half Pin attaining bicortical purchase.

Pin placement/ frame construction

Two half pins should be inserted on each side of the pelvis. One pin is inserted at each anterior inferior iliac spine under C-arm guidance directed obliquely toward the PSIS and/or greater sciatic notch (best available bone).

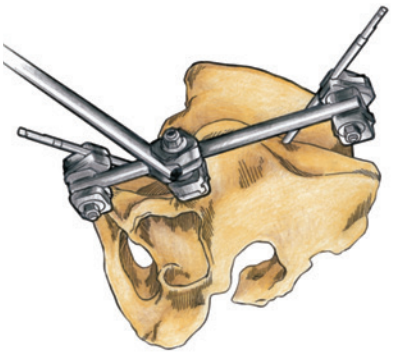


A second pin is inserted just cephalad to the ASIS on each side between the inner and outer tables. Using Freedom Bar to Pin Clamps, snap the pin clamps onto the four pins. Snap the appropriate length bar(s) into the Bar to Pin Clamps and secure the pin portion of the clamp using a 10mm wrench. Check for soft tissue clearance with leg flexed to 90°.

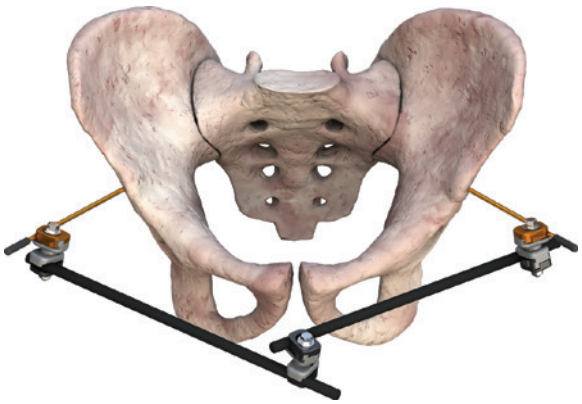


Apply a Bar to Bar Clamp by snapping the clamp onto each bar between fixation pins. Attach one bar of the appropriate length into the Bar to Bar Clamp on each side of the pelvis. These two bars should be connected by a Bar to Bar Clamp, anterior to the pelvis.

Align the bars depending on need for access to abdomen or need for sitting. The pelvis is manually compressed on each iliac wing until adequately reduced. Once the frame is positioned appropriately, tighten both sides of the Bar to Bar Clamps.



Using the Bar to Bar Clamps, add an additional cross bar or double stack as needed. Simply snap the bars into the cartridge mechanism of the clamp.



Optional frame construct
Construct shown utilizes two bars, one Bar to Bar Clamp, and two Bar to Pin Clamps.

Catalog Information

JET-X◇ BAR – External Fixation Devices

Freedom Clamps – Aluminum, Titanium and Stainless Steel on Tightening Bolts

	Description
7106-4001	10.5mm Bar to 5mm Pin
7106-4002	10.5mm Bar to 10.5mm Bar
7106-4010	10.5mm Bar to 4mm Pin
7106-2722*	10.5mm Bar to Ring
7106-4019**	10.5mm Bar to 6mm Pin

Quick Clamps – Aluminum and Stainless Steel on Tightening Bolts

	Description
7106-7372	10.5mm Bar to 5mm Pin
7106-7374	10.5mm Bar to 10.5mm Bar
7106-7373	10.5mm Bar to 6mm Pin

4 Hole Pin Clamp
Cat. No. 7106-7375

6 Hole Pin Clamp
Cat. No. 7106-7376

*In addition to other rings, also works with TAYLOR SPATIAL FRAME® 2/3, Half and Full Rings
**Option accept both bar to pin and bar to bar

JET-X◇ BAR – External Fixation Devices

Straight Post
Cat. No. 7106-7379

30° Angled Post
Cat. No. 7106-7381

Freedom Post
Cat. No. 7106-7382

Bar Caps
Cat. No. 7106-2008

Bars

	Description
7106-2100	100mm Bar
7106-2150	150mm Bar
7106-2160	L Bar
7106-2180	V Bar
7106-2200	200mm Bar
7106-2250	250mm Bar
7106-2300	300mm Bar
7106-2350	350mm Bar
7106-2400	400mm Bar
7106-2500	500mm Bar*
7106-2600	600mm Bar*
7106-4006	Add-A-Bar Coupler

100mm Bar

L Bar

V Bar

*Sterile packaged components

JET-X◇ BAR – External Fixation Devices

Freedom Ankle Clamp
Cat. No. 7106-2721

Distractor Clip, Package Quantity 2
Cat. No. 7106-3002

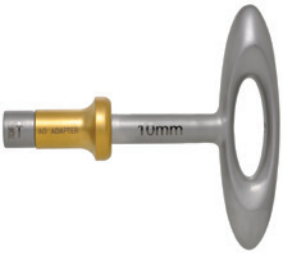
JET-X BAR – Instruments

AO to Hall Adaptor*
Cat. No. 7106-3004

10mm Ratchet Wrench
Cat. No. 7106-7322

Quick Clamp Bar to Pin Drill Guide
Cat. No. 7106-7324

AO T-Handle Connector with
10mm Socket
Cat. No. 7106-7326



*Will work with TRIGEN® SURESHOT® Hexdriver

JET-X◇ BAR – Instruments

5mm/6mm Long Trocar
Cat. No. 7106-7306

5mm/6mm Short Trocar
Cat. No. 7106-7307

5mm/6mm Extra Short Trocar
Cat. No. 7106-7308

Tissue Protector Handle
Cat. No. 7106-7310

5mm/6mm Tissue Protector
for Long Half Pin
Cat. No. 7106-7312

5mm/6mm Tissue Protector
for Short Half Pin
Cat. No. 7106-7313

5mm/6mm Tissue Protector
for Extra Short Half Pin
Cat. No. 7106-7314

Drill for Extra Short 5mm Half Pin
Cat. No. 7106-7317

Drill for Short 5mm Half Pin
Cat. No. 7106-7318

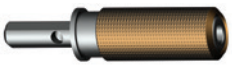
Drill for Long 5mm Half Pin
Cat. No. 7106-7319

Drill for Short 6mm Half Pin
Cat. No. 7106-7320

Drill for Long 6mm Half Pin
Cat. No. 7106-7321

Original JET-X◇ BAR – Instruments

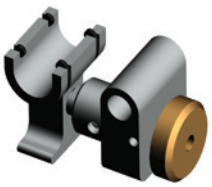
AO to Trinkle Adaptor
Cat. No. 7106-3005



Add-A-Bar Coupler
Cat. No. 7106-2006

AO T-Handle Connector
with 10mm Socket
Cat. No. 7106-3001

5mm Bar to Pin Guide
Cat. No. 7106-3010



6mm Bar to Pin Drill Guide
Cat. No. 7106-3024

JET-X◇ MINI – External Fixation Devices

Freedom Clamps

	Description
7106-2009	6mm Bar to 5mm Pin
7106-4010	10.5mm Bar to 4mm Pin
7106-4011	6mm Bar to 4mm Pin

	Description
7106-4012	6mm Bar to 6mm Pin
7106-4019	10.5mm Bar to 6mm Pin

Quick Clamps

	Description
7106-7371	10.5mm Bar to 4mm Pin
7106-7373	10.5mm Bar to 6mm Pin
7106-7377	6mm Bar to 4mm Pin

	Description
7106-7378	6mm Bar to 6mm Pin
7106-7380	6mm Bar to 5mm Pin

Double Pin Clamp with Ball Joint
Cat. No. 7106-2016

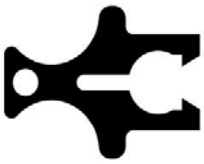
Bars

	Description
7106-5075	6mm x 75mm
7106-5110	6mm x 110mm
7106-5150	6mm x 150mm

	Description
7106-5180	6mm V Bar
7106-5185	6mm x 185mm
7106-5225	6mm x 225mm

Mini Bar

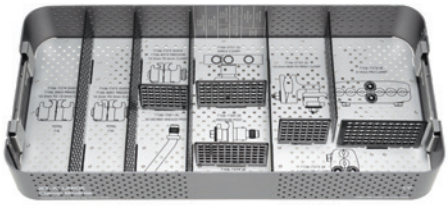
Distractor Clip
Cat. No. 7106-3213



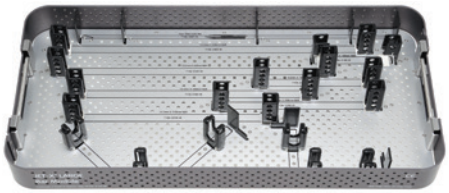
AO T-Handle Connector with 8mm Socket
Cat. No. 7106-7305

JET-X◇ BAR – Sterilization Cases/Trays

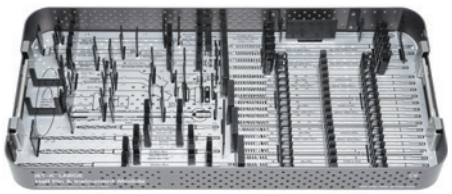
Large Clamp Module Tray
Cat. No. 7106-7350



Large Bar Module Tray
Cat. No. 7106-7351



Large Partial Half Pin and Instrument Module Tray
Cat. No. 7106-7352



Auxillary Instrument Modules Sterilization Case with Lid
Cat. No. 7106-7354

JET-X◇ BAR – Sterilization Cases/Trays

Large Unilateral Inner Tray Lid
Cat. No. 7106-7355

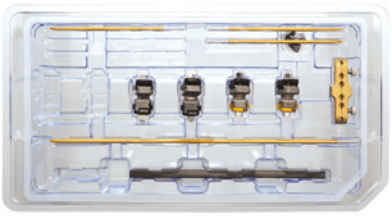
Large Unilateral Outer Tray Lid, Short Tray
Cat. No. 7106-7358

Large Unilateral Outer Tray Lid, Tall Tray
Cat. No. 7106-7359

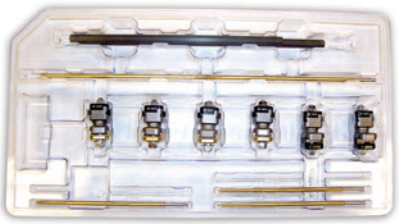
Half Pin Module Sterilization Case with Lid
Cat. No. 7106-7360

JET-X◇ BAR – Kits

Ankle Spanning Kit –
Multiple Clamp with TiN Half Pin, Sterile*
Kit No. 7106-2701

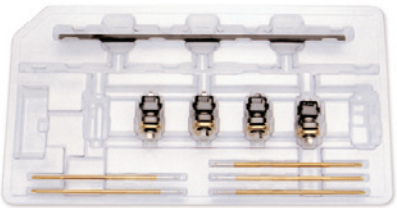


Ankle Spanning Kit –
Single Clamp with TiN Half Pin, Sterile*
Cat. No. 7106-2702

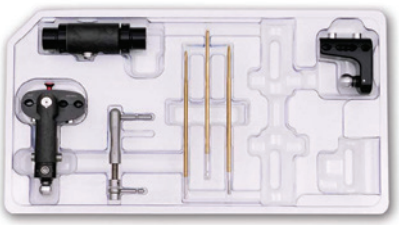


Travel Traction Kit –
600mm Bar with TiN Traction Pin, Sterile*
Cat. No. 7106-2703

Tibia Kit –
350mm Bar with TiN Half Pin, Sterile*
Cat. No. 7106-2705



Ankle Spanning Kit –
Standard Central Body with TiN Half Pins,
Sterile*
Cat. No. 7105-1701



Sterile Kit for JET-X MINI Bar Distal Radius Kit
Cat. No. 7106-4701

Original JET-X◇ MINI – Instruments

AO T-Handle Connector with 10mm Socket
Cat. No. 7106-3001

10mm Ratchet
Cat. No. 7106-3003

3.5mm Drill with AO Connector
Cat. No. 7106-3006

Drill for 3mm Short Half Pins
Cat. No. 7106-3203

Drill for 4mm Short Half Pins
Cat. No. 7106-3204

Combination Mini Drill Sleeve/ Tissue Protector
Cat. No. 7106-3205

8mm Ratchet Wrench
Cat. No. 7106-3210

Drill Guide
Cat. No. 7106-3211

4mm Trocar
Cat. No. 7106-3212

Multiple Pin Clamp
Cat. No. 7106-4015

JET-X◇ Half Pins – Implants

Titanium Nitride Extra Short Half Pins, Non-Sterile

	Thread Diam	Shank Diam	Thread Length	Shank Length*
7106-5304	5mm	5mm	30mm	65mm
7106-5354	5	5	35	65

	Thread Diam	Shank Diam	Thread Length	Shank Length*
7106-5404	5mm	5mm	40mm	65mm
7106-5454	5	5	45	65

Titanium Nitride Short Half Pins, Non-Sterile

	Thread Diam	Shank Diam	Thread Length	Shank Length*
7106-3108	3mm	4mm	10mm	65mm
7106-3158	3	4	15	65
7106-3208	3	4	20	65
7106-3258	3	4	25	65
7106-4158	4	4	15	95
7106-4208	4	4	20	95
7106-4258	4	4	25	95
7106-4308	4	4	30	95
7106-4358	4	4	35	95

	Thread Diam	Shank Diam	Thread Length	Shank Length*
7106-5308	5mm	5mm	30mm	110mm
7106-5358	5	5	35	110
7106-5408	5	5	40	110
7106-5458	5	5	45	110
7106-5508	5	5	50	110
7106-5558	5	5	55	110
7106-5608	5	5	60	110
7106-5658	5	5	65	110
7106-5708	5	5	70	110

Titanium Nitride Long Half Pins, Non-Sterile

	Thread Diam	Shank Diam	Thread Length	Shank Length*
7106-5309	5mm	5mm	30mm	160mm
7106-5359	5	5	35	160
7106-5409	5	5	40	160
7106-5459	5	5	45	160
7106-5509	5	5	50	160
7106-5559	5	5	55	160
7106-5609	5	5	60	160

	Thread Diam	Shank Diam	Thread Length	Shank Length*
7106-5659	5mm	5mm	65mm	160mm
7106-5709	5	5	70	160
7106-6409	6	6	40	160
7106-6459	6	6	45	160
7106-6509	6	6	50	160
7106-6559	6	6	55	160
7106-6609	6	6	60	160

*Pin length does not include AO Connector or threads. AO Connector length is 23.65mm

JET-X◇ Half Pins – Implants

Titanium Nitride Cannulated Half Pin with 1.6mm Guide Wire, Sterile*

	Thread Diam	Shank Diam	Thread Length	Shank Length**
7106-5400	5mm	5mm	40mm	110mm

Titanium Nitride Half Pin with 1.6mm Cannulation, Sterile

	Thread Diam	Shank Diam	Thread Length	Shank Length**
7106-5407S	5mm	5mm	40mm	110mm

Titanium Nitride Short Traction Pin, Sterile

	Thread Diam	Shank Diam	Thread Length	Shank Length**
7106-5504S	7mm	5mm	50mm	223mm

Titanium Nitride Long Traction Pin, Sterile

	Thread Diam	Shank Diam	Thread Length	Shank Length**
7106-5507S	7mm	5mm	50mm	375mm

Titanium Traction Pin, Sterile

	Thread Diam	Shank Diam	Thread Length	Shank Length**
7105-5503	5mm	5mm	50mm	375mm

*Not currently available in the US

**Pin length does not include AO Connector or threads; AO Connector length is 23.65mm

JET-X◇ BAR – Sets

Combination (Freedom/Quick) Set
Set No. 7106-7452

	Description	Qty
7106-2721	Freedom Ankle Clamp	1
7106-2722	Freedom Clamp 10.5mm to Ring	2
7106-4001	Freedom Clamp 10.5mm Bar to 5mm Pin	8
7106-4002	Freedom Clamp 10.5mm Bar to 10.5mm Bar	8
7106-4019	Freedom Clamp 10.5mm Bar to 6mm Pin	2
7106-7350	Clamp Module	1
7106-7355	Inner Tray Lid	1
7106-7372	Quick Clamp 10.5mm Bar to 5mm Pin	8
7106-7373	Quick Clamp 10.5mm Bar to 6mm Pin	2
7106-7374	Quick Clamp 10.5mm Bar to 10.5mm Bar	8
7106-7375	4 Hole Pin Clamp	2
7106-7376	6 Hole Pin Clamp	2
7106-7379	Straight Post	2
7106-7381	30° Angled Post	2
7106-7382	Freedom Post	6

Large Bar Set
Set No. 7106-7453

	Description	Qty
7106-2100	100mm Bar	2
7106-2150	150mm Bar	3
7106-2160	L Bar	2
7106-2180	V Bar	1
7106-2200	200mm Bar	3
7106-2250	250mm Bar	3
7106-2300	300mm Bar	4
7106-2350	350mm Bar	4
7106-2400	400mm Bar	4
7106-5507	TiN 5mm x 50mm Traction Pin	3
7106-7351	Bar Module	1

JET-X◇ BAR – Sets

Large Instrument Set

Set No. 7106-7454

	Description	Qty
102907	Wrench, 10mm Flex Head	1
7106-3004	AO to Hall Adapter	1
7106-7306	Trocar, 5mm/6mm Long	1
7106-7307	Trocar, 5mm/6mm Short	1
7106-7308	Trocar, 5mm/6mm Extra Short	1
7106-7310	Tissue Protector Handle	2
7106-7312	5mm/6mm Tissue Protector for Long Half Pin	2
7106-7313	5mm/6mm Tissue Protector for Short Half Pin	2
7106-7314	5mm/6mm Tissue Protector for Extra Short Half Pin	2
7106-7317	Drill for Extra Short 5mm Half Pin	2
7106-7318	Drill for Short 5mm Half Pin	2
7106-7319	Drill for Long 5mm Half Pin	2
7106-7320	Drill for Short 6mm Half Pin	2
7106-7321	Drill for Long 6mm Half Pin	2
7106-7322	10mm Ratchet Wrench	1
7106-7324	Quick Clamp Bar to Pin Drill Guide	1
7106-7326	AO T-Handle Connect with 10mm Socket	1
7106-7352	Large Partial Half Pin Instrument Module	1
7106-7358	Outer Tray	1

JET-X◇ Half Pins – Sets

Short Half Pin Set
Set No. 7106-7455

	Description	Qty
7106-5308	TiN 5mm x 30mm	8
7106-5358	TiN 5mm x 35mm	8
7106-5408	TiN 5mm x 40mm	8
7106-5458	TiN 5mm x 45mm	6
7106-5504	TiN 5mm x 50mm Short Traction Pin	2
7106-6409	TiN 6mm x 40mm	4
7106-6509	TiN 6mm x 50mm	4

Long Half Pin Set
Set No. 7106-7456

	Description	Qty
7106-5309	TiN 5mm x 30mm	8
7106-5359	TiN 5mm x 35mm	8
7106-5409	TiN 5mm x 40mm	6
7106-5459	TiN 5mm x 45mm	6
7106-5504	TiN 5mm x 50mm Short Traction Pin	2
7106-6409	TiN 6mm x 40mm	4
7106-6509	TiN 6mm x 50mm	4

JET-X◇ Half Pins – Sets

Complete 5mm /6mm Half Pin Add On Set

Set No. 7106-7457

	Description	Qty
7105-1039	1.6mm x 240mm Wire	1
7106-5304	TiN 5mm x 30mm Extra Short	2
7106-5354	TiN 5mm x 35mm Extra Short	2
7106-5404	TiN 5mm x 40mm Extra Short	2
7106-5407	TiN 5mm x 40mm 1.6mm Cann Half Pin	1
7106-5454	TiN 5mm x 45mm Extra Short	2
7106-5508	TiN 5mm x 50mm Short Half Pin	2
7106-5509	TiN 5mm x 50mm Long Half Pin	2
7106-5558	TiN 5mm x 55mm Short Half Pin	2
7106-5559	TiN 5mm x 55mm Long Half Pin	2
7106-5608	TiN 5mm x 60mm Short Half Pin	2
7106-5609	TiN 5mm x 60mm Long Half Pin	2
7106-5658	TiN 5mm x 65mm Short Half Pin	2
7106-5659	TiN 5mm x 65mm Long Half Pin	2
7106-5708	TiN 5mm x 70mm Short Half Pin	2
7106-5709	TiN 5mm x 70mm Long Half Pin	2
7106-6409	TiN 6mm x 40mm	2
7106-6459	TiN 6mm x 45mm	2
7106-6509	TiN 6mm x 50mm	2
7106-6559	TiN 6mm x 55mm	2
7106-6609	TiN 6mm x 60mm	2
7106-7360	Half Pin Module Sterile Case with Lid	1

Auxiliary Instrument Set

Set No. 7106-7458

	Description	Qty
7106-3002	Distractor Clip	2
7106-3005	AO to Trinkle Adapter	1
7106-3009	Distraction Instrument	1
7106-3010	5mm Bar To Pin Guide	1
7106-3011	1.6mm Wire Guide	1
7106-3013	3.5mm/1.6mm Cannulated Drill	1
7106-3017	5mm Cannulated Pin Tissue Protector	1
7106-3018	3.5mm Cannulated Pin Drill Sleeve	1
7106-7354	Auxiliary Instrument Case with Lid	1

JET-X◇ MINI – Sets

MINI Distal Radius Set

Set No. 7106-7459

	Description	Qty
102915	Box Wrench, SBF 8mm	1
290058	Protective Caps, Red for Threaded 4mm Pin	6
7106-2016	Mini Double Pin Clamp with Ball Joint	2
7106-3152	Half Pin, 3mm x 15mm	2
7106-3202	Half Pin, 3mm x 20mm	2
7106-5225	6mm x 225mm Bar	1
7106-7327	2.0mm Drill	1
7106-7328	Double Pin Drill Sleeve	2
7106-7329	Double Pin Drill Guide	1
7106-7330	Pin Driver	1
7106-7362	Module Tray	1
7163-1186	Mini Connector	1

JET-X◇ MINI – Sets

MINI Instrument and Clamp Set

Set No. 7106-7462

	Description	Qty
102915	Box Wrench SBF	1
7106-3004	AO to Hall Adapter	1
7106-3108	TiN Half Pin 3mm x 10mm	4
7106-3158	TiN Half Pin 3mm x 15mm	4
7106-3208	TiN Half Pin 3mm x 20mm	4
7106-3258	TiN Half Pin 3mm x 25mm	4
7106-4010	Freedom Clamp, 10.5mm to 4mm Pin	2
7106-4011	Freedom Clamp, 6mm to 4mm Pin	3
7106-4012	Freedom Clamp, 6mm to 6mm Bar	3
7106-4019	Freedom Clamp, 10.5mm to 6mm Pin	2
7106-4158	TiN Half Pin 4mm x 15mm	4
7106-4208	TiN Half Pin 4mm x 20mm	4
7106-4258	TiN Half Pin 4mm x 25mm	4
7106-4308	TiN Half Pin 4mm x 30mm	4
7106-4358	TiN Half Pin 4mm x 35mm	4
7106-5075	6mm x 75mm Bar	2
7106-5110	6mm x 110mm Bar	2
7106-5180	V-Bar 6mm	1
7106-5185	6mm x 185mm Bar	2
7106-5225	6mm x 225mm Bar	4
7106-7305	AO T-Handle Connector with 8mm Socket	1
7106-7309	Trocar	1
7106-7310	Tissue Protector Handle	2
7106-7311	Tissue Protector	2
7106-7315	Drill for 3mm Half Pin	2
7106-7316	Drill for 4mm Half Pin	2
7106-7322	10mm Ratchet Wrench	1
7106-7323	8mm Ratchet Wrench	1
7106-7325	Quick Clamp Bar to in Drill Guide	1
7106-7361	Tray	1
7106-7371	Quick Clamp 10.5mm to 4mm Pin	2
7106-7373	Quick Clamp 10.5mm to 6mm Pin	2
7106-7377	Quick Clamp 6mm to 4mm Pin	3
7106-7378	Quick Clamp 6mm to 6mm Bar	3

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