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OIC Anatomic Small Fragment Locking Plate System
Surgical Technique Guide

ortemiz

Table of Contents

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 specific needs of the patient.

System Overview

INTRODUCTION

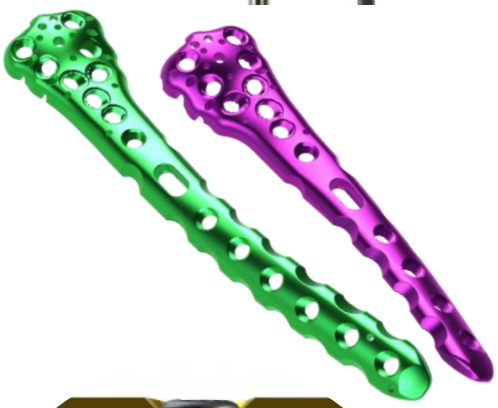
The OIC Small Fragment Locking Plate system has been developed to combine conventional plating techniques with variable angle locking screw technology. Pre-contoured plates feature multiple screw options for all fracture patterns. The OIC system provides for lag screw fixation for comminuted patterns, non-locking screws to obtain compression across simple patterns and locking fixation in osteopenic bone and multi-fragmentary fracture patterns. Variable angle locking screws add versatility not available in many other systems.

PLATE FEATURES

- Pre-contoured anatomic plates
- Color coded plates and instruments for easy identification:
  - Right – Rose
  - Left – Lime
  - Neutral - Gold
  - 2.5mm specific instruments feature a GOLD BAND
  - 3.5mm specific instruments feature a WHITE BAND
- Variable angle (15°) and fixed angle locking options in each hole
- Options for locking and non-locking fixation in each hole
- Prox-Humerus Plates ONLY: Unique convergent and divergent
- screw trajectories create exceptional pull-out strength

SCREW FEATURES

- 2.5mm & 3.5mm locking and non-locking screws
- Hexalobe socket for improved torque insertion and socket strength
- Self-tapping threads remove need for tapping instrument
- Buttressed threads improve pull out strength in cancellous bone
- Rounded head minimizes sharp edges and soft tissue irritation
- Head shape allows variability in screw trajectory up to 15°
- Self-retaining screwdriver/socket interface

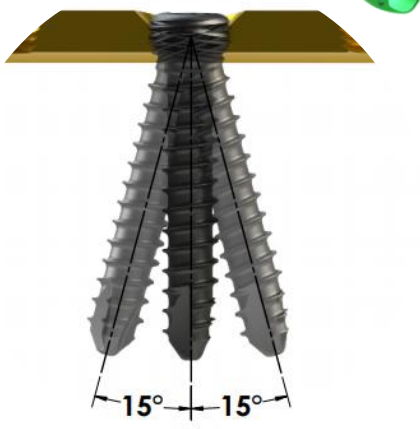


2.5mm
08-50mm

T8

3.5mm
08-80mm

T15



INSTRUMENTS

Drill Guides

Drill guides are offered in locking and in hand-held formats. Drill bits feature calibration marks indicating drill depth. Hand-held drill guides feature a fixed angle end and a variable angle end with 15° of angulation. Locking drill guides feature internal threads allowing for stacking of guides when extra length is needed.

Plate Bending

OIC plates are pre-contoured to fit most bones and common fractures. When variation is needed, French press benders and universal plate bending irons are available. Bending irons feature thin and standard sized slots to accommodate bending of all OIC plates. When bending, avoid bending plates at screw holes receiving screws.

Torque Limiter

When inserting screws on power, torque limiters are provided to prevent over-insertion of screws. Torque limiters should only be used for insertion of screws. After using the torque limiter, screws should be hand tightened according to AO operating principles.

Lag (Interfragmentary) Screw Fixation

Lag screw drill guides allow for effective over-drilling and controlled centered drilling for interfragmentary screw fixation. Drill guides are color coded for easy drill identification. Countersink and washers are available to improve concentric loading and surface area of lag screws.

Indications and Warnings

INDICATIONS FOR USE

The OIC Small Fragment Locking Plate System is indicated for the fixation of fractures, fusions, mal-unions, non-unions or osteotomies for the clavicle, humerus, radius, ulna, metacarpal, tibia, fibula, malleolus and metatarsal.

CONTRAINDICATIONS

- Sensitivity to implant material
- Active or latent infection
- Osteoporosis
- Insufficient quantity or quality of bone/soft tissue

WARNINGS

For safe and effective use of this implant, the surgeon must be thoroughly familiar with the implant, the method of application, instruments, and the recommended surgical technique for this device. The device is not designed to withstand the stress of weight bearing, load bearing, or excessive activity. Device breakage or damage can occur when the implant is subjected to increased loading associated with delayed union, nonunion, or incomplete healing. Improper insertion of the device during implantation can increase the possibility of loosening and migration. The patient must be cautioned, preferably in writing, about the use, limitation, and possible adverse effects of this implant including the possibility of the device failing as a result of loose fixation, stress, excessive activity, or weight bearing or loading bearing, particularly if the implant experiences increased loads due to delayed union, nonunion, or incomplete healing. The patient must be warned that failure to follow postoperative care instructions can cause the implant and/or treatment to fail. Once applied, the implant should never be reused. Although it may appear undamaged, previous stresses may have created imperfections that could reduce its service life. Once applied, the implant should never be reused. Although it may appear undamaged, previous stresses may have created imperfections that could reduce its service life.
Even with anatomic reduction, lack of fracture gap and appropriate construct creation, initial weight bearing restrictions are indicated. In order to prevent loss of correction and premature plate failure, it is recommended that partial weight bearing be instituted for 6-12 weeks followed by advancement to full weight bearing only when radiographs confirm significant callus and bony healing.

For safe and effective use of this implant, the surgeon must be thoroughly familiar with the implant, the method of application, instruments, and the recommended surgical technique for this device. The device is not designed to withstand the stress of weight bearing, load bearing, or excessive activity. Device breakage or damage can occur when the implant is subjected to increased loading associated with delayed union, nonunion, or incomplete healing. Improper insertion of the device during implantation can increase the possibility of loosening and migration. The patient must be cautioned, preferably in writing, about the use, limitation, and possible adverse effects of this implant including the possibility of the device failing as a result of loose fixation, stress, excessive activity, or weight bearing or load bearing, particularly if the implant experiences increased loads due to delayed union, nonunion, or incomplete healing.

Indications and Warnings

WARNINGS AND PRECAUTIONS

The patient must be warned that failure to follow postoperative care instructions can cause the implant and/or treatment to fail. Osteoporotic patients are also at risk for loss of fixation and construct failure due to the poor quality of their bone.

Once applied, the implant should never be reused. Although it may appear undamaged, previous stresses may have created imperfections that could reduce its service life.

Even with anatomic reduction, lack of fracture gap and appropriate construct creation, initial weight bearing restrictions are indicated. In order to prevent loss of correction and premature plate failure, it is recommended that partial weight bearing be instituted for 6-12 weeks followed by advancement to full weight bearing only when radiographs confirm significant callus and bony healing.

Instruments shall be inspected for wear or damage prior to usage.

Protect implant appliances against scratching and nicking, which may cause stress concentrations leading to failure. In no case should an implant be sharply or reverse bent, notched, gouged, reamed, scratched or cut.

The OIC Locking Small Fragment Plate System has not been evaluated for safety in the MR environment. It has not been tested for heating or unwanted movement in the MR environment. The safety of OIC Small Fragment Plates in the MR environment is unknown. Performing an MR exam on a person who has this medical device may result in injury or device malfunction.

The system is to be used only in skeletally mature adult patients.

ADVERSE EFFECTS

Fracture of the implant due to excessive activity, prolonged loading upon the device, incomplete healing, or excessive force exerted on the implant during insertion. Implant migration and/or loosening. Metal sensitivity or histological or allergic reaction resulting from implantation of a foreign material. Pain, discomfort, or abnormal sensations due to the presence of an implant. Nerve damage resulting from surgical trauma. Necrosis of bone or bone resorption. Necrosis of tissue or inadequate healing.

SURGICAL TECHNIQUE

Screw Insertion

1 DRILLING

When inserting an OIC screw (2.5mm, 3.5mm, 4.0mm) into a plate, pre-drilling is required. For fixed angle drilling, securely attach either the thread-in drill guide (LG-0018, LG-0028) or the hand-held drill guide (DG-1818, DG-2828) into the receiving screw hole. The conical shape of the “plate/fixed” end of the hand-held drill guide lines up axially with screw trajectory. The thread-in drill guide may be threaded in by hand or with the respective screwdriver (01-T08085, 01-T15110). The screwdriver self retains with each drill guide to improve handling when removing from tray. With the preferred drill guide in place, drill through plate and bone to the far cortex with the respective drill bit (DR18-110, DR28-XXX). Drill depth can be measured by reading the drill calibration marks off the top of the drill guide.

When drilling for a Ø4.0mm cancellous screw, drill choice is left to the discretion of the surgeon between Ø1.8mm, Ø2.5mm, and Ø2.8mm drills.

2 MEASURING

Following drilling, the drill and subsequent screw depth may be measured using the drill bit calibration marks, or by using the appropriate depth gauge (01-SF01, 01-SF09). Drill bit calibration marks are calibrated to the end of drill guides. Depth gauge nozzles fit snug in screw holes up to bone.

3 SCREW INSERTION

With screw length determined, insert the screw using the respective screwdriver (01-T08085 for 2.5mm screws, 01-T15110 for 3.5mm and 4.0mm screws).

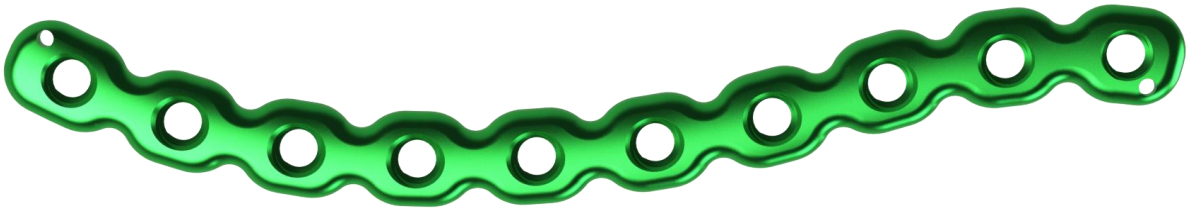
4 SCREW INSERTION (VARIABLE ANGLE)

The same locking screws (LS-25XX, LS-35XX) used for fixed angle fixation can be placed up to 15 degrees in any direction. This is achieved through cross-threading the screws into the plate. Screws can be re-inserted at different angles up to 3 times without compromising the mechanical stability of the locking feature. To place locking screws at a variable angle, place the "bone/variable" side of the hand-held drill guide through the screw hole at the desired angle. Drill using the appropriate drill bit. Color-coded instrumentation allows for easy drill and guide identification. Drill depth and screw size can be measured using the calibration marks on the drill bit or depth gauge. Insert the appropriate length screw using the respective screwdriver.

NOTE: *To limit the risk of cold welding and stripping of the screw head/driver, care should be taken to* ***avoid over-tightening by using Torque Limiters (01-SF21, 01-SF22).***

SURGICAL TECHNIQUE

Clavicle



1 PATIENT POSITIONING

Patients should be positioned according to surgeon preference in either the beach chair or supine position on a radiolucent table. Fluoroscopic imaging can be utilized from the ipsilateral or contralateral side although contralateral imaging allows more room for the operating surgeon. AP and cephalic tilt views are recommended. Adequate image quality should be confirmed prior to surgical preparation. In some cases, a small bump or towel roll can be placed posteriorly to aid reduction. The endotracheal or LMA tube should exit the opposite side of the mouth and head should be turned away from operative side to improve exposure and visualization. The operative field should include the sternal notch, operative clavicle and shoulder. Whether or not to prep the entire upper extremity is left to surgeon discretion.

2 APPROACH

A superior approach should be performed centered over the fracture site. The platysma is then divided to expose the supraclavicular nerves which can be transected or preserved at surgeon discretion. The clavicle periosteum is then visible. Care should be taken not to strip comminuted fragments. For distal clavicle fractures, the acromioclavicular joint should be identified and ligaments should not be disrupted during exposure. K-wires can be utilized for temporary fixation of comminuted fragments. Lag screws should be placed across oblique fracture lines when able. Both 3.5mm and 2.5mm non-locking screws are available for this purpose.

3 IMPLANT SELECTION

The plate is made to sit along the superior aspect of the clavicle and are available in midshaft and distal/lateral options. Midshaft plates use 3.5mm screws exclusively, while distal/lateral plates utilize 2.5mm screws distal/laterally and 3.5mm screws medially. Select appropriate plate dependent on fracture pattern and patient anatomy. Right plates are colored Rose, Left plates are colored Lime, and Neutral plates are colored Gold. The Plate length should be determined based on fracture pattern. Many anatomic variants exist so plate contour may need to be adjusted. This can be accomplished utilizing bending irons, plate bending press or pliers according to standard techniques.

4 PLATE INSERTION

Hold plate in position with reduction forceps or K-wires as needed. Ensure proper contour prior to screw insertion. Check plate position fluoroscopically to verify adequate length and expected screw position without violation of sternoclavicular or acromioclavicular joints.

5 SCREW INSERTION

Insert screws according to technique shown on pages 7-9.

6 WOUND CLOSURE AND POST-OP PROTOCOL

Layered wound closure is recommended. Approximate trapezial and deltoid fascia over plate to reduce plate prominence. Close platysma and follow with subcuticular closure. Provide patients with a sling for comfort and initiate immediate range of motion. Weight-bearing is left to surgeon discretion.

7 OPTIONAL: PLATE REMOVAL

If the plate requires removal, use the appropriate included drivers to remove all non-locking screws from the plate. Locking screws should be the last screws removed to prevent rotation of plate during removal. The plate may be freely removed after all screws have been removed.

SURGICAL TECHNIQUE

Proximal Humerus

1 PATIENT POSITIONING

Patients should be positioned according to surgeon preference in either the beach chair or supine position on a radiolucent table. Fluoroscopic imaging can be utilized from the ipsilateral or contralateral side although contralateral imaging allows more room for the operating surgeon. The endotracheal or LMA tube should exit the opposite side of the mouth and head should be turned away from operative side to improve exposure and visualization. The entire extremity and shoulder girdle should be draped free to allow for fracture reduction and exposure.

2 EXPOSURE AND REDUCTION

As with any fracture, anatomic restoration of length, angulation and rotation is the goal. Fractures should be reduced utilizing standard reduction techniques. Care should be taken to avoid additional stripping of the periosteum. K-wires can be utilized for temporary fixation of comminuted fragments. Lag screws should be placed across oblique fracture lines when able. Both 2.5mm and 3.5mm non locking screws are available for this purpose. In some cases, k-wires can also be placed through holes provided in the plate for provisional plate fixation. Tuberosity fragments can be manipulated with sutures which can later be passed through suture holes in plate for definitive fixation. Confirm reduction on AP and lateral views prior to hardware placement.

3 IMPLANT SELECTION

Select appropriate plate dependent on fracture pattern and patient anatomy. Right plates are colored Rose and Left plates are colored Lime. Plate length should be determined based on fracture pattern. Plate should be inserted on reduced bone when able. In some cases, the plate will need to be utilized as a reduction tool if fracture instability or comminution does not allow for prior reduction. Hold plate in position with reduction forceps or K-wires as needed. Ensure proper contour prior to screw insertion. Check plate position fluoroscopically to verify adequate length and expected screw position without violation of sternoclavicular or acromioclavicular joints.

A distal screw targeting guide is available to assist with proximal screw and instrument placement and can be utilized at surgeon discretion. *The drill guide should be attached to plate prior to plate insertion.* To insert the guide, place against plate and tighten the attachment bolt with T15 screwdriver. **The distal screw targeting guide must be removed after all screws are inserted.**

4 SCREW INSERTION

Insert screws according to technique found on pages 7-9.

5 WOUND CLOSURE AND POST-OP PROTOCOL

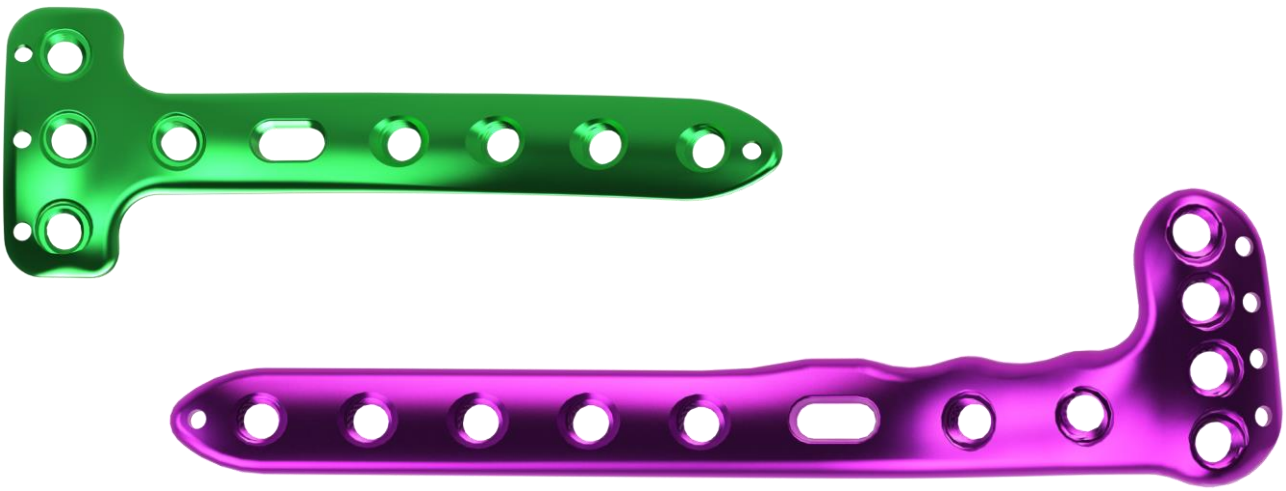
Layered wound closure is recommended. Approximate trapezial and deltoid fascia over plate to reduce plate prominence. Close platysma and follow with subcuticular closure. If needed, suture can be placed through the suture holes after the plate has been implanted. Provide patients with a sling for comfort and initiate immediate range of motion. Weight-bearing is left to surgeon discretion.

6 OPTIONAL: PLATE REMOVAL

If the plate requires removal, use the appropriate included drivers to remove all non-locking screws from the plate. Locking screws should be the last screws removed to prevent rotation of plate during removal. The plate may be freely removed after all screws have been removed.

SURGICAL TECHNIQUE

Proximal Tibia



1 PATIENT POSITIONING

Patients should be positioned in the supine position on a radiolucent table. Bumps or prefabricated positioners may be utilized to optimize leg position for a lateral, medial or combined approach depending on fracture pattern. Fluoroscopic imaging can be utilized from the ipsilateral or contralateral side although contralateral imaging allows more room for the operating surgeon. AP and lateral views are recommended. Adequate image quality should be confirmed prior to surgical preparation. A tourniquet can be helpful but its use is left to individual surgeon discretion. The entire extremity should be draped free to allow for fracture reduction and exposure.

2 APPROACH

PosteroMedial Approach to Tibial Plateau – Patient is positioned supine on a radiolucent table. Incision is made centered over the posteromedial portion of the proximal tibia. An arthrotomy of the knee in not required unless a meniscal injury in need of repair is present. The pes anserine attachments are divided and tagged for future repair. Care must be taken to preserve the insertion of the MCL. The fracture site is exposed and reduced anatomically with a large pointed reduction clamp. The posteromedial plate of appropriate length is selected and applied in a position which best supports the fracture fragments.

AnteroLateral Approach to Tibial Plateau – Patient is positioned supine on a radiolucent table. An S shaped incision is made with its midportion over Gerdy's tubercle and above the fibular head. Split the IT band in line with its fibers. Just below the joint line, an inframeniscal incision is made to allow for joint visualization and meniscal repair if indicated. Elevate the articular fragments and reduce to anatomic alignment.

3 IMPLANT SELECTION

Lateral and posteromedial plates are available and may be used independently or in conjunction with one another. Select appropriate plate dependent on fracture pattern and patient anatomy. Right plates are colored Rose and Left plates are colored Lime. Plate length should be determined based on fracture pattern. Ideally, at least three screws on either side of the fracture is preferable.

4 PLATE INSERTION

Plate should be inserted on reduced bone when able. In some cases, the plate will need to be utilized as a reduction tool if fracture instability or comminution does not allow for prior reduction. Hold plate in position with reduction forceps or K-wires as needed. Ensure proper contour prior to screw insertion. Check plate position fluoroscopically to verify adequate length and expected screw position without violation of the articular surface.

5 SCREW INSERTION

Insert screws according to technique found on pages 7-9.

6 WOUND CLOSURE AND POST-OP PROTOCOL

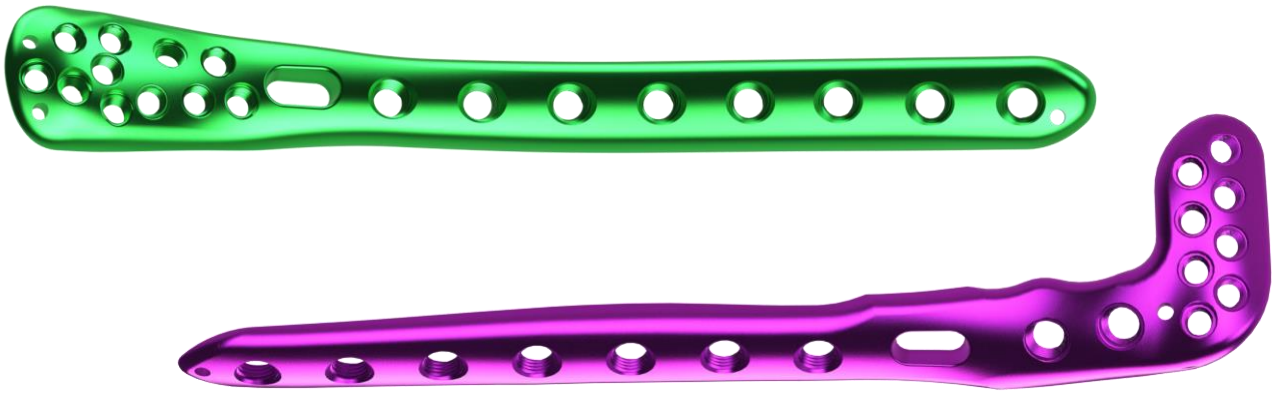
Confirm reduction and hardware position prior to closure with fluoroscopic imaging and direct visualization. Both AP and lateral views can be helpful. Make sure all screws are of appropriate length, plate does not impinge , no intra-articular hardware is present, and no flexion or extension deformity exists.

Layered wound closure is recommended. Repair the pes anserine tendons if they were not preserved during the approach and close fascia over plate. Sutures for meniscal repair can be placed through proximal K-wire holes in plate. Approximate fascia over plate to reduce plate prominence.

Provide patients with a brace for comfort and initiate immediate range of motion. Weight-bearing is left to surgeon discretion, however, full weight bearing restrictions are advised in highly comminuted fractures where the bone fragments have substantial gaps and the construct is unstable.

7 OPTIONAL: PLATE REMOVAL

If the plate requires removal, use the appropriate included drivers to remove all non-locking screws from the plate. Locking screws should be the last screws removed to prevent rotation of plate during removal. The plate may be freely removed after all screws have been removed.



SURGICAL TECHNIQUE

Distal Tibia

1 PATIENT POSITIONING

Patients should be positioned according to surgeon preference in the supine position on a radiolucent table. Bumps or prefabricated positioners may be utilized to optimize leg position for a posterolateral, lateral, anterolateral, medial or combined approach depending on fracture pattern. Fluoroscopic imaging can be utilized from the ipsilateral or contralateral side although contralateral imaging allows more room for the operating surgeon. A tourniquet can be utilized at the surgeon's discretion. The entire extremity should be draped free to allow for fracture reduction and exposure.

2 APPROACH

For *medial plates*, patient is positioned supine on a radiolucent table and incision is centered over the malleolus and taken proximally as far as is needed for fracture exposure. Care should be taken to avoid injury to the saphenous vein and nerve. Keep dissection on bone to avoid injury to the Tibialis Posterior Tendon.

For *anterolateral plates*, patient is positioned supine on a radiolucent table. Incision is centered over the ankle. Care should be taken to avoid injury to the cutaneous branches of the superficial peroneal nerve. Extensor retinaculum is divided and the interval between the EHL and EDL tendons is developed, retracting the neurovascular bundle medially with the EHL. The distal tibia fracture can then be addressed utilizing standard techniques and bone graft as needed. The anterolateral plate can then be applied and holes filled accordingly.

3 IMPLANT SELECTION

Medial and anterolateral plates are available and may be used independently or in conjunction with one another. Plate length should be determined based on fracture pattern. Ideally, at least three screws on either side of the fracture is preferable. Right plates are colored Rose and Left plates are colored Lime.

4 PLATE INSERTION

Plate should be inserted on reduced bone when able. In some cases, the plate will need to be utilized as a reduction tool if fracture instability or comminution does not allow for prior reduction. Hold plate in position with reduction forceps or K-wires as needed. Ensure proper contour prior to screw insertion. Check plate position fluoroscopically to verify adequate length and expected screw position without violation of the articular surface.

5 SCREW INSERTION

Insert screws according to technique found on pages 7-9.

6 WOUND CLOSURE AND POST-OP PROTOCOL

Confirm reduction and hardware position prior to closure with fluoroscopic imaging and direct visualization. AP, mortise and lateral views should be utilized. Ankle should be placed through full range of motion to confirm absence of intra-articular hardware. Syndesmosis should be tested under fluoroscopic guidance to ensure stability. Weight-bearing is left to surgeon discretion, however, full weight bearing restrictions are advised in highly comminuted fractures where the bone fragments have substantial gaps and the construct is unstable.

7 OPTIONAL: PLATE REMOVAL

If the plate requires removal, use the appropriate included drivers to remove all non-locking screws from the plate. Locking screws should be the last screws removed to prevent rotation of plate during removal. The plate may be freely removed after all screws have been removed.

SURGICAL TECHNIQUE

ANKLE

1 PATIENT POSITIONING

Patients should be positioned according to surgeon preference in the supine position on a radiolucent table. Bumps or prefabricated positioners may be utilized to optimize leg position for a posterolateral, lateral, anterolateral, medial or combined approach depending on fracture pattern. Fluoroscopic imaging can be utilized from the ipsilateral or contralateral side although contralateral imaging allows more room for the operating surgeon. A tourniquet can be utilized at the surgeon's discretion. The entire extremity should be draped free to allow for fracture reduction and exposure.

2 APPROACH

For fixation of fibular fractures, the patient is positioned supine on a radiolucent table. The skin incision should be made just posterior to the subcutaneous lateral border of the fibula. Care should be taken to avoid injury to the superficial peroneal nerve. Distally, the skin incision can be taken down to bone while more proximally the interval between the peroneus longus and tertius is utilized.

3 IMPLANT SELECTION

Plate length should be determined based on fracture pattern. At least three screws on either side of the fracture is preferable. Lateral Distal Fibula Plates, Hook Plates, Low-Profile 1/3 Tubular Plates, 4.0mm Cancellous Screws, and 4.0mm Cannulated Screws can be utilized at the surgeon's discretion.

4 PLATE INSERTION

Plate should be inserted on reduced bone when able. In some cases, the plate will need to be utilized as a reduction tool if fracture instability or comminution does not allow for prior reduction. Hold plate in position with reduction forceps or K-wires as needed. Ensure proper contour prior to screw insertion. Check plate position fluoroscopically to verify adequate length and expected screw position without violation of the articular surface.

If desired, the Hook Plate Impactor (01-SF27) can be used to set the sharp teeth into the bone fragment when utilizing the Hook Plate. Reduce fracture and insert a 3.5mm Non-locking Screw in the distal portion of the slot in the Hook Plate. Do not fully tighten. Place the tip of the Impactor inside the "home-run screw" hole and align it with the axial direction of the plate. Gently hit the Impactor with a mallet to insert the teeth. Another 3.5mm Non-locking screw can then be inserted through the "home-run hole" to achieve the desired reduction/compression.

5 SCREW INSERTION

Insert screws according to technique found on pages 7-9.

6 WOUND CLOSURE AND POST-OP PROTOCOL

Confirm reduction and hardware position prior to closure with fluoroscopic imaging and direct visualization. AP, mortise and lateral views should be utilized. Ankle should be placed through full range of motion to confirm absence of intra-articular hardware. Syndesmosis should be tested under fluoroscopic guidance to ensure stability. Weight-bearing is left to surgeon discretion, however, full weight bearing restrictions are advised in highly comminuted fractures where the bone fragments have substantial gaps and the construct is unstable.

7 OPTIONAL: PLATE REMOVAL

If the plate requires removal, use the appropriate included drivers to remove all non-locking screws from the plate. Locking screws should be the last screws removed to prevent rotation of plate during removal. The plate may be freely removed after all screws have been removed.

Catalog Information

Implants

DISTAL CLAVICLE PLATES

CPD-04087L	Left 4H x 87mm	CPD-04087R	Right 4H x 87mm
CPD-06101L	Left 6H x 101mm	CPD-06101R	Right 6H x 101mm
CPD-08126L	Left 8H x 126mm	CPD-08126R	Right 8H x 126mm
CPD-10151L	Left 10H x 151mm	CPD-10151R	Right 10H x 151mm

MIDSHAFT CLAVICLE PLATES

CPM-06076N	Neutral 6H x 76mm		
CPM-08100L	Left 8H x 100mm	CPM-08100R	Right 8H x 100mm
CPM-10123L	Left 10H x 123mm	CPM-10123R	Right 10H x 123mm

PROXIMAL HUMERUS PLATES

PHP-03100L	Left 3H 27 x 100mm	PHP-03100R	Right 3H 27 x 100mm
PHP-05124L	Left 5H 27 x 124mm	PHP-03100R	Right 5H 27 x 124mm
PHP-07148L	Left 7H 27 x 148mm	PHP-07148R	Right 7H 27 x 148mm

Instrument

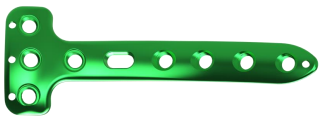
SCREW TARGETING GUIDES

01-PHP01L	Left Prox Humerus Targeter	01-PHP01R	Right Prox Humerus Targeter

Implants

LATERAL PROXIMAL TIBIA PLATES

LPT-04075L	Left 4H x 75mm	LPT-04075R	Right 4H x 75mm
LPT-06100L	Left 6H x 100mm	LPT-06100R	Right 6H x 100mm
LPT-08125L	Left 8H x 125mm	LPT-08125R	Right 8H x 125mm
LPT-10150L	Left 10H x 150mm	LPT-10150R	Right 10H x 150mm
LPT-13188L	Left 13H x 188mm	LPT-13188R	Right 13H x 188mm



POSTERIOR-MEDIAL PROXIMAL TIBIA PLATES

PMPT-04067L	Left 4H x 67mm	PMPT-04067R	Right 4H x 67mm
PMPT-06091L	Left 6H x 91mm	PMPT-06091R	Right 6H x 91mm

ANTERIOR LATERAL DISTAL TIBIA PLATES

ALDT-04069L	Left 4H x 69mm	ALDT-04069R	Right 4H x 69mm
ALDT-06095L	Left 6H x 95mm	ALDT-06095R	Right 6H x 95mm
ALDT-08120L	Left 8H x 120mm	ALDT-08120R	Right 8H x 120mm
ALDT-10145L	Left 10H x 145mm	ALDT-10145R	Right 10H x 145mm
ALDT-13182L	Left 13H x 182mm	ALDT-13182R	Right 13H x 182mm

MEDIAL DISTAL TIBIA PLATES

MDT-03089L	Left 3H x 89mm	MDT-03089R	Right 3H x 89mm
MDT-06127L	Left 6H x 127mm	MDT-06127R	Right 6H x 127mm
MDT-08152L	Left 8H x 152mm	MDT-08152R	Right 8H x 152mm
MDT-10177L	Left 10H x 177mm	MDT-10177R	Right 10H x 177mm
MDT-13214L	Left 13H x 214mm	MDT-13214R	Right 13H x 214mm
MDT-16252L	Left 16H x 252mm	MDT-16252R	Right 16H x 252mm

Implants

LATERAL DISTAL FIBULA PLATES

DFIB-03065	Neutral 3H x 65mm	DFIB-07109	Neutral 7H x 109mm
DFIB-04077	Neutral 4H x 77mm	DFIB-09131	Neutral 9H x 131mm
DFIB-05087	Neutral 5H x 87mm	DFIB-11153	Neutral 11H x 153mm

HOOK PLATES

HP-04063	Neutral 4H x 63mm

LOW-PROFILE 1/3 TUBULAR PLATES

LP13-02030	Neutral 2H x 30mm	LP13-03042	Neutral 4H x 42mm
LP13-04054	Neutral 2H x 30mm	LP13-05066	Neutral 5H x 66mm
LP13-06078	Neutral 6H x 78mm	LP13-07090	Neutral 7H x 90mm
LP13-08102	Neutral 8H x 102mm	LP13-10126	Neutral 10H x 102mm
LP13-12150	Neutral 12H x 150mm		

1/3 TUBULAR PLATES

13TP-04050	Neutral 4H x 50mm	13TP-08098	Neutral 8H x 98mm
13TP-05062	Neutral 5H x 62mm	13TP-10122	Neutral 10H x 122mm
13TP-06074	Neutral 6H x 74mm	13TP-12146	Neutral 12H x 146mm
13TP-07086	Neutral 7H x 86mm		

3.5MM COMPRESSION PLATES

C35-04067	Neutral 4H x 67mm	C35-08125	Neutral 8H x 125mm
C35-05084	Neutral 5H x 84mm	C35-10157	Neutral 10H x 157mm
C35-06096	Neutral 6H x 96mm	C35-12183	Neutral 12H x 1mm
C35-07113	Neutral 7H x 113mm	C35-14215	Neutral 14H x 153mm

3.5mm Compression Plate, standard 1/3 Tubular Plate, Screw, and Instrument options included in Small Fragment Base Tray. All other plates located in individual trays.

Implants

2.5MM LOCKING SCREWS

T8

LS-2510	2.5mm x 10mm
LS-2512	2.5mm x 12mm
LS-2514	2.5mm x 14mm
LS-2516	2.5mm x 16mm
LS-2518	2.5mm x 18mm
LS-2520	2.5mm x 20mm
LS-2522	2.5mm x 22mm
LS-2524	2.5mm x 24mm
LS-2526	2.5mm x 26mm
LS-2528	2.5mm x 28mm
LS-2530	2.5mm x 30mm
LS-2532	2.5mm x 32mm
LS-2534	2.5mm x 34mm
LS-2536	2.5mm x 36mm
LS-2538	2.5mm x 38mm
LS-2540	2.5mm x 40mm
LS-2542	2.5mm x 42mm
LS-2544	2.5mm x 44mm
LS-2546	2.5mm x 46mm
LS-2548	2.5mm x 48mm
LS-2550	2.5mm x 50mm

2.5MM CORTEX SCREWS

T8

ST-2510	2.5mm x 10mm
ST-2512	2.5mm x 12mm
ST-2514	2.5mm x 14mm
ST-2516	2.5mm x 16mm
ST-2518	2.5mm x 18mm
ST-2520	2.5mm x 20mm
ST-2522	2.5mm x 22mm
ST-2524	2.5mm x 24mm
ST-2526	2.5mm x 26mm
ST-2528	2.5mm x 28mm
ST-2530	2.5mm x 30mm
ST-2532	2.5mm x 32mm
ST-2534	2.5mm x 34mm
ST-2536	2.5mm x 36mm
ST-2538	2.5mm x 38mm
ST-2540	2.5mm x 40mm
ST-2542	2.5mm x 42mm
ST-2544	2.5mm x 44mm
ST-2546	2.5mm x 46mm
ST-2548	2.5mm x 48mm
ST-2550	2.5mm x 50mm

4.0MM CANCELLOUS SCREWS

T15

CN-4030	4.0mm x 30mm
CN-4035	4.0mm x 35mm
CN-4040	4.0mm x 40mm
CN-4045	4.0mm x 45mm
CN-4050	4.0mm x 50mm
CN-4055	4.0mm x 55mm

Cancellous Screws located in Ankle Tray

Implants

3.5MM LOCKING SCREWS

T15

LS-3510	3.5mm x 10mm
LS-3512	3.5mm x 12mm
LS-3514	3.5mm x 14mm
LS-3516	3.5mm x 16mm
LS-3518	3.5mm x 18mm
LS-3520	3.5mm x 20mm
LS-3522	3.5mm x 22mm
LS-3524	3.5mm x 24mm
LS-3526	3.5mm x 26mm
LS-3528	3.5mm x 28mm
LS-3530	3.5mm x 30mm
LS-3532	3.5mm x 32mm
LS-3534	3.5mm x 34mm
LS-3536	3.5mm x 36mm
LS-3538	3.5mm x 38mm
LS-3540	3.5mm x 40mm
LS-3542	3.5mm x 42mm
LS-3544	3.5mm x 44mm
LS-3546	3.5mm x 46mm
LS-3548	3.5mm x 48mm
LS-3550	3.5mm x 50mm
LS-3555	3.5mm x 55mm
LS-3560	3.5mm x 60mm
LS-3565	3.5mm x 65mm
LS-3570	3.5mm x 70mm
LS-3575	3.5mm x 75mm
LS-3580	3.5mm x 80mm
LS-3585	3.5mm x 85mm

3.5MM CORTEX SCREWS

T15

ST-3510	3.5mm x 10mm
ST-3512	3.5mm x 12mm
ST-3514	3.5mm x 14mm
ST-3516	3.5mm x 16mm
ST-3518	3.5mm x 18mm
ST-3520	3.5mm x 20mm
ST-3522	3.5mm x 22mm
ST-3524	3.5mm x 24mm
ST-3526	3.5mm x 26mm
ST-3528	3.5mm x 28mm
ST-3530	3.5mm x 30mm
ST-3532	3.5mm x 32mm
ST-3534	3.5mm x 34mm
ST-3536	3.5mm x 36mm
ST-3538	3.5mm x 38mm
ST-3540	3.5mm x 40mm
ST-3542	3.5mm x 42mm
ST-3544	3.5mm x 44mm
ST-3546	3.5mm x 46mm
ST-3548	3.5mm x 48mm
ST-3550	3.5mm x 50mm
ST-3555	3.5mm x 55mm
ST-3560	3.5mm x 60mm
ST-3565	3.5mm x 65mm
ST-3570	3.5mm x 70mm
ST-3575	3.5mm x 75mm
ST-3580	3.5mm x 80mm
ST-3585	3.5mm x 85mm

HOLE COVERS

T15

LS-3500	3.5mm Hole Cover

WASHERS

35-WSHR	3.5mm Washer Use only with 3.5 non-locking screws (ST-35XX)

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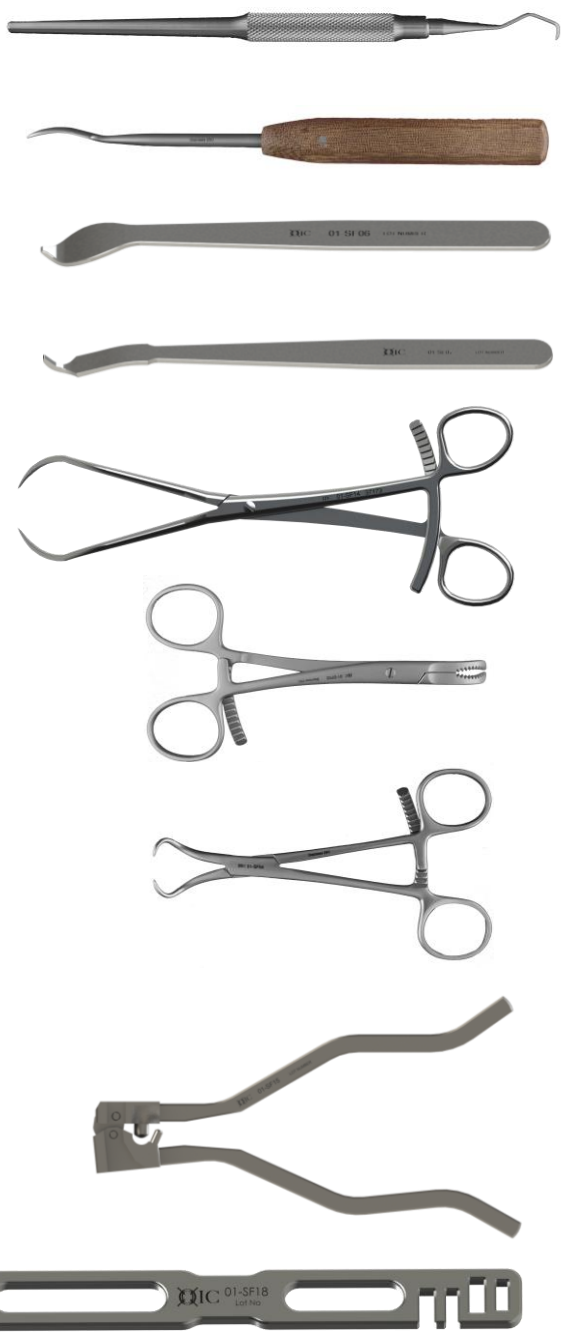
Instruments

Catalog Information

01-SF02	Sharp Hook
01-SF05	Periosteal Elevator
01-SF06	Mini Bennet Retractors
01-SF07	Mini Hohmann Retractors
01-SF14	Reduction Clamp
01-SF03	Lobster Claw Reduction Forceps
01-SF17	Pointed Reduction Forceps
01-SF15	Bending Pliers
01-SF18	Universal Bending Irons



Instruments

Catalog Information

KW125-150	1.25mm K-Wires	
KW160-150	1.6mm K-Wires	
KW200-150	2mm K-Wires	
PW160-080	1.6mm Provisional Wires	
01-SF08	Screw Countersink	
01-4006	Small Screwdriver Handle	
01-SF10	Standard Screwdriver Handle	
DG-1818	Ø1.8mm Hand-Held Drill Guide	
DG-2828	Ø2.8mm Hand-Held Drill Guide	
LG-0018	Ø1.8mm Thread-In Drill Guide	
LG-0028	Ø2.8mm Thread-In Drill Guide	
DR18-110	Ø1.8mm X 110mm Drill Bit	
DR28-155C	Ø2.8mm X 155mm Drill Bit	
DR28-200OIC	Ø2.8mm X 200mm Drill Bit	

Instruments

Catalog Information

01-SF01	2.5mm Depth Gauge	
01-SF19	3.5mm Medium Depth Gauge	
01-SF09	3.5mm Large Depth Gauge	
01-T08085	T8 x 85mm Screwdriver	
01-T15110	T15 x 110mm Screwdriver	
01-SF22	0.8Nm Torque Limiter	
01-SF21	1.5Nm Torque Limiter	
DG-1825	Ø1.8mm/Ø2.5mm Hand-Held Drill Guide	
DG-2835	Ø2.8mm/Ø3.5mm Hand-Held Drill Guide	
01-SF20	Ø1.8mm ID/Ø2.5mm OD Tophat	
01-SF23	Ø2.8mm ID/Ø3.5mm OD Tophat	
DR25-110	Ø2.5mm x 110mm Drill Bit	
DR35-110	Ø3.5mm x 110mm Drill Bit	
01-SF27	Hook Plate Impactor	

CAUTION: FEDERAL LAW RESTRICTS THIS DEVICE TO SALE BY OR ON THE ORDER OF A PHYSICIAN

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