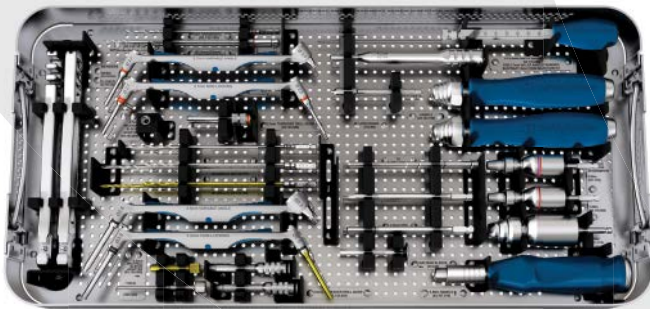


2.7 mm/3.5 mm Non-locking, Locking, and  
Variable Angle Locking Technology

# Universal Small Fragment System

## Surgical Technique



**DePuy Synthes**

PART OF THE *Johnson & Johnson* FAMILY OF COMPANIES

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# Universal Small Fragment System

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The Universal Small Fragment System is a streamlined system of new and existing instruments, coupled with existing standard and anatomic implants to support small fragment procedures. The system consists of two components: 1) A core set of instruments, screws, and standard implants; and 2) modular anatomic implant trays for the supported small fragment anatomy. In addition, the core set can support all 2.7 mm/3.5mm DePuy Synthes non-locking, LCP®, and VA LCP® plating technologies.

This innovative system from DePuy Synthes is designed to allow existing and future 2.7 mm/3.5 mm implants to be supported with one core set of instruments, which reduces operating room complexity and improves workflow efficiency. Compared to existing systems, the signature benefits of the Universal Small Fragment system include:

- Improved instrument and system ease of use by operating room teams and hospital staff
- Improved efficiency through reduction in instruments and trays needed for small fragment procedures
- Reduction in hospital costs associated with maintaining equipment

The Universal Small Fragment System is an Earthwards® Distinguished Solution and is the first platform for DePuy Synthes Trauma to demonstrate leadership position towards sustainability. Sustainability may be achieved through streamlined design, in-tray washing and eliminating the need to use additional sets per procedure.

# AO Principles

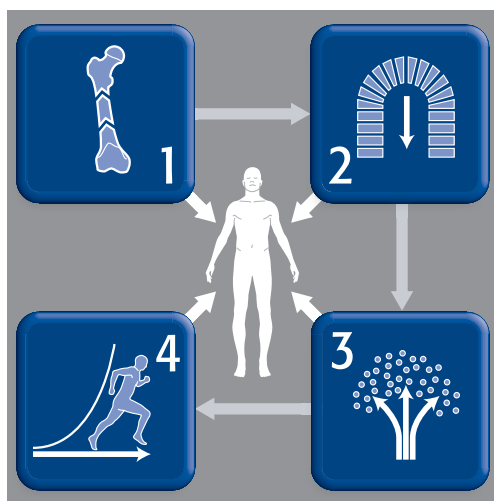
In 1958, the AO formulated four basic principles, which have become the guidelines for internal fixation.<sup>1,2</sup>

## Anatomic reduction

Fracture reduction and fixation to restore anatomical relationships.

## Early, active mobilization

Early and safe mobilization and rehabilitation of the injured part and the patient as a whole.



## Stable fixation

Fracture fixation providing absolute or relative stability, as required by the patient, the injury, and the personality of the fracture.

## Preservation of blood supply

Preservation of the blood supply to soft tissues and bone by gentle reduction techniques and careful handling.

1. Müller ME, Allgöwer M, Schneider R, Willenegger H. *Manual of Internal Fixation*. 3rd ed. Berlin, Heidelberg, New York: Springer-Verlag; 1991.  
2. Rüedi TP, RE Buckley, CG Moran. *AO Principles of Fracture Management*. 2nd ed. Stuttgart, New York: Thieme; 2007.

# Intended Use

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## Intended Use:

The Universal Small Fragment System assists the surgeon in the fixation of implants for small fragment fractures where 2.7 mm/3.5 mm non-locking, LCP and VA LCP plating technology is utilized. It is not intended for use in craniomaxillofacial and spine. For specific indications or surgical technique of specific 2.7 mm/3.5 mm plating technology, refer to the desired anatomic plate surgical technique guide. For a listing of surgical techniques that may be serviced by this system, please refer to the *Supported Plating Systems* Section of this document.

## How to Use this Surgical Technique Guide:

New instruments designed for this system may be used in place of previously designed instruments without change to surgical technique.

The Surgical Technique section of this document

- Illustrates new instruments
- Describes function of new instruments
- Clarifies comparables for new instrument

While new instruments are being introduced with the Universal Small Fragment System, no changes have been made to the surgical technique of the plates for which they are designed to be used.

## Precautions:

- **Instruments and screws may have sharp edges or moving joints that may pinch or tear user's glove or skin.**
- **Handle devices with care and dispose of worn bone cutting instruments in an approved sharps container.**
- **When using sterile packed implants and instruments, use proper operating room aseptic technique.**

---

## MR Information

Refer to the corresponding plate labeling for additional instructions or information essential to safe use in the MR environment.

---

# Surgical Preparation and Fracture Reduction

## 1. Surgical preparation and fracture reduction

### Instruments

03.133.202	Periosteal Elevator 6 mm Curved Blade
292.12	1.25 mm Kirschner Wire with Trocar Point 150 mm
292.16	1.6 mm Kirschner Wire with Trocar Point 150 mm
292.20	2.0 mm Kirschner Wire with Trocar Point 150 mm
319.391	Sharp Hook-Small Taper
398.40	Reduction Forceps with Points Narrow-Ratchet 132 mm
398.41	Reduction Forceps with Points Broad-Ratchet
399.19	Small Hohmann Retractor 8 mm Short Narrow Tip 160 mm
399.49	Hohmann Retractor 15 mm 160 mm
399.99	Reduction Forceps with Serrated Jaw-Ratchet 144 mm



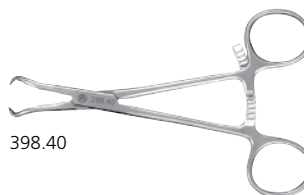
03.133.202



292.12



319.391



398.40



398.41



399.19



399.49



399.99

### Patient positioning

Place patient based on anatomic location and desired surgical approach. Recommended positioning for the anatomical plates can be found in each respective anatomical plate surgical technique guides. A list of existing systems supported by the Universal Small Fragment System is available in the *Supported Plating Systems* section of this document.

# Surgical Preparation and Fracture Reduction (continued)

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## **Preparation of surgical site**

The Periosteal Elevator (03.133.202) may be used to prepare the surgical site or clear the periosteum as needed and directed by the anatomic plate surgical technique guide.

## **Precaution: Do not strike the back of the Periosteal Elevator**

## **Fracture reduction**

Reduce the fracture using necessary visualization with or without fluoroscopy. Provide fixation with K-wire or reduction forceps, as needed.

## **Alternative/Indirect fracture reduction**

Reduce the fracture indirectly using the plate by means of non-locking screws (for lag screw technique: to generate inter-fragmentary compression, use cancellous bone or cortical bone screws).

## **Comparable instruments:**



399.36

# Implant Selection and Fit

## 2. Implant selection and fit

### Plate selection

Both anatomic and standard plates are available in various technology types and sizes. Use desired technique to determine proper plate type and size.

### Plate Bending Irons

#### Instruments

03.133.200 Plate Bending Iron Closed, for 2.7/3.5 mm Plates

03.133.201 Plate Bending Iron Open, for 2.7/3.5 mm Plates



03.133.200



03.133.201



### Comparable instruments:



329.04



329.05



329.07



## Plate contouring

Use the bending irons to contour the plates to the anatomy. The closed bending iron can be used to hold the plate during contouring. The open bending iron can be positioned at any location on the plate.

### Notes:

- **Pre-bending/contouring can be a useful technique to achieve adequate compression across the entire fracture surface.**
- **For more information on plate bending techniques, please refer to the AO Principles of Fracture Management – Plating Bending and AO Manual of Fracture Management – Internal Fixators.<sup>3</sup>**
- **Refer to system specific surgical technique guides for warnings and precautions related to plate bending. A list of existing systems supported by the Universal Small Fragment System is available in the *Supported Plating Systems* section of this document.<sup>4</sup>**



In-plane bending



Out-of-plane and torsional bending

3. M. Wagner and R. Frigg, AO Manual of Fracture Management–Internal Fixators, New York: Thieme, 2006.

4. Thomas P. Rüedi, et al, ed., AO Principles of Fracture Management, New York: Thieme, 2000.

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## Precautions:

- The plate holes have been designed to accept some degree of deformation. When bending, be careful not to distort locking holes. Significant distortion of the locking holes will reduce locking effectiveness.
- Do not bend the periarticular section of the anatomical plate.
- Reverse bending, bending the plate at the same place multiple times, or using incorrect instrumentation for bending may weaken the plate and lead to premature plate failure (e.g., breakage).
- Do not bend the plate beyond what is required to match the anatomy.
- Do not bend the plate using the threaded drill guide. Damage may occur to the plate hole threads.

## Plate positioning

Position the plate on the bone, and preliminarily fix it. If axial dynamic compression is used, ensure that the middle of the plate is over to the fracture line.

## Secure plate to bone

Determine combination of screws to be used for fixation. If a combination of locking and cortex screws will be used, cortex screws should be inserted first to ensure that the plate has appropriate bone contact.

















# Screw Hole Preparation and Measurement

## 3. Screw hole preparation and measurement

### Screw insertion

Determine which screws are required for fixation. A combination of all those listed may be used; however a non-locking screw should be used first to pull the plate to the bone.

The Screw Reference Chart (right) is available on the Universal Small Fragment Screw Rack (60.133.150) to aid selecting proper instrumentation for respective screw types and sizes.

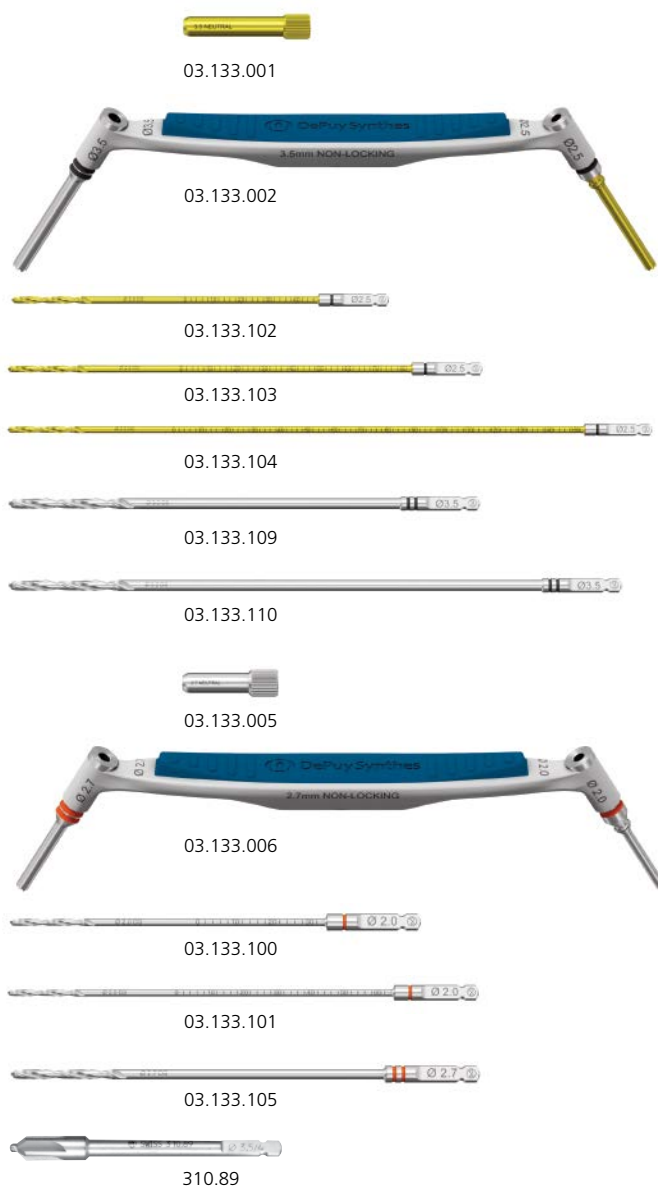
Screw Reference Chart				
Screw Size (mm)	Screw Type	Drill Bit (mm)	Torque Limit (Nm)	Driver Options
2.7	Variable Angle Locking	2.0	1.2	 T8
	Locking		0.8	 T8
	Metaphyseal		1.2	 T8
	Cortex		Do Not Use	 T8  2.5 mm
	Lag Technique Cortex	① 2.7 ② 2.0	Do Not Use	 T8  2.5 mm
3.5	Variable Angle Locking	2.8	2.5	 T15
	Locking		1.5	 T15
	Cortex	2.5	Do Not Use	 T15  2.5 mm
	Lag Technique Cortex	① 3.5 ② 2.5	Do Not Use	 T15  2.5 mm
4.0	Cancellous	2.5	Do Not Use	 2.5 mm

# Screw Hole Preparation and Measurement (continued)

## 2.7 mm and 3.5 mm Non-Locking Drill Guides and Drill Bits

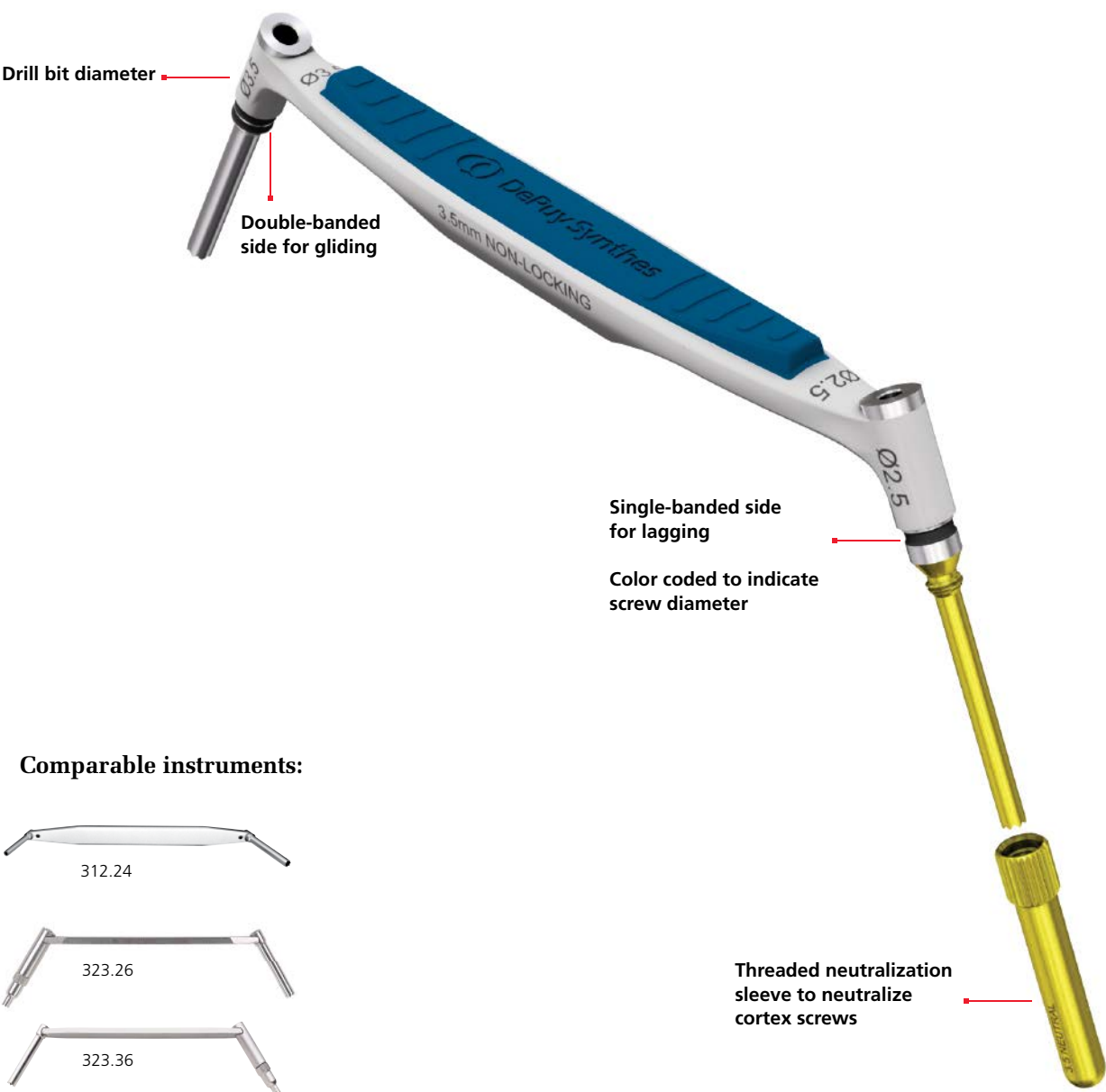
### Instruments

03.133.001	3.5 mm Neutral Sleeve Adapter
03.133.002	3.5 mm Non-Locking Drill Guide
03.133.005	2.7 mm Neutral Sleeve Adapter
03.133.006	2.7 mm Non-Locking Drill Guide
03.133.100*	2.0 mm Drill Bit/Quick Coupling 110 mm, 30 mm Calibration
03.133.101*	2.0 mm Drill Bit/Quick Coupling 140 mm, 60 mm Calibration
03.133.102*	2.5 mm Drill Bit/Quick Coupling 135 mm, 45 mm Calibration
03.133.103*	2.5 mm Drill Bit/Quick Coupling 170 mm, 80 mm Calibration
03.133.104*	2.5 mm Drill Bit/Quick Coupling 240 mm, 150 mm Calibration
03.133.105*	2.7 mm Drill Bit/Quick Coupling 125 mm
03.133.109*	3.5 mm Drill Bit/Quick Coupling 150 mm
03.133.110*	3.5 mm Drill Bit/Quick Coupling 195 mm
310.89	Countersink for 3.5 mm Cortex and 4.0 mm Cancellous Bone Screws



\*Drill bits are available in both non-sterile and sterile packaging. To determine part number for the sterile-packaged drill bit, affix "S" to the end of the part number. E.g., the corresponding part number for the 2.0 mm Drill Bit/Quick Coupling 110 mm, 30 mm calibration delivered in sterile package is 03.133.100S.

# Screw Hole Preparation and Measurement (continued)



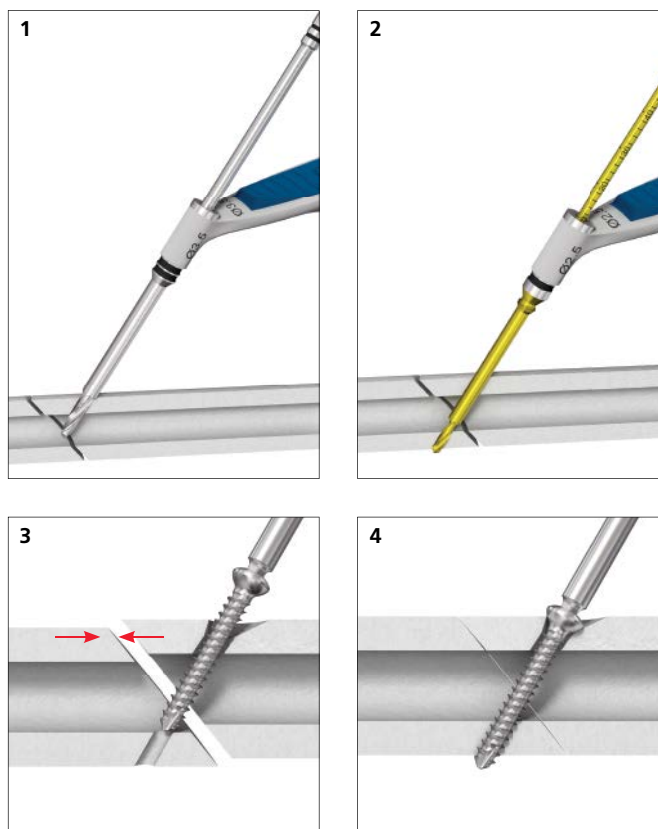
# Screw Hole Preparation and Measurement (continued)

## Lag screw technique

Interfragmentary compression is accomplished by using a lag screw. This is important in fractures which require a precise reduction of the joint surfaces. Lag screws can be placed either independently or with a plate. Countersinking the near cortex may be required to limit screw head prominence when used independently. Placement of the screw should be as perpendicular as possible to the fracture line.

To lag with a 3.5 mm cortex screw, use the 3.5 mm end (double-banded end) of the 3.5 mm Non-Locking Drill Guide (03.133.002) with a 3.5 mm drill bit to drill the near cortex. (Step 1) Insert the 2.5 mm end of the guide (single-banded end) fully into the hole previously drilled. Use a 2.5 mm drill bit to drill through the far cortex. (Step 2) Measure and insert the desired 3.5 mm cortex screw. (Steps 3 and 4)

To lag with a 2.7 mm cortex screw, use the 2.7 mm end (double-banded end) of the 2.7 mm Non-Locking Drill Guide (03.133.006) with a 2.7 mm drill bit to drill the near cortex. Insert the 2.0 mm end of the drill guide (single-banded end) fully into the hole previously drilled. Use a 2.0 mm drill bit to drill through the far cortex. Measure and insert the desired 2.7 mm cortex screw.



3.5 mm lag screw technique  
without plate

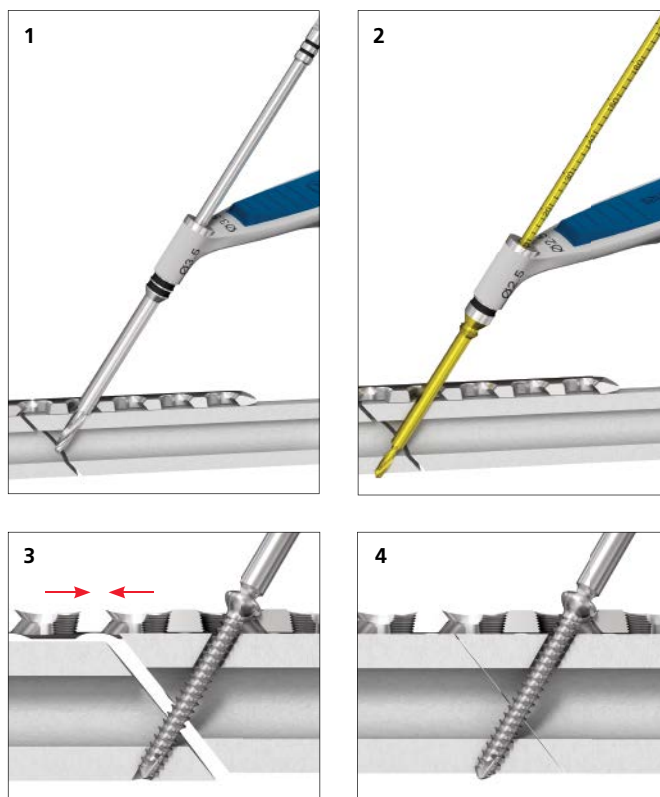
# Screw Hole Preparation and Measurement (continued)

To lag with a plate, insert the appropriate drill end in a standard plate hole and follow above steps accordingly.

## Notes:

- Lag screw fixation with or without plates should only be done after accurate fracture reduction has taken place.
- Apply light pressure to ensure the non-locking drill guide is fully seated on either the bone or on the plate.
- Color bands indicate screw diameter application (Black: 3.5 mm, Orange 2.7 mm).
- The number of bands on non-locking drill guide indicate drilling types (single-banded: lagging drill guide; double-banded: gliding drill for lag technique) and coordinates with the bands on drill bits.
- Drill bits are single patient use.
- A torque limiting attachment is not needed for cortex screws.

**Precaution:** Do not measure with the calibration on drill bits when using lag screw technique.



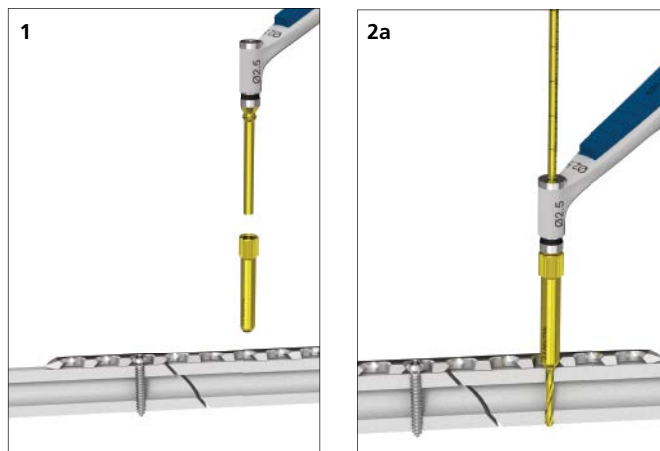
3.5 mm lag screw technique with plate

# Screw Hole Preparation and Measurement (continued)

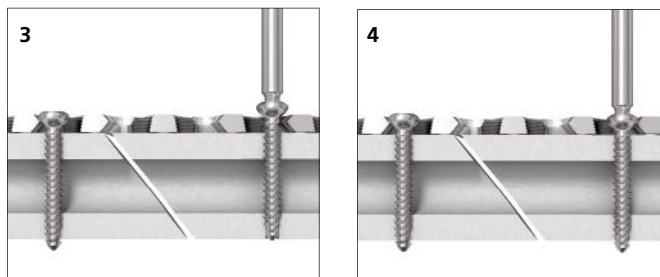
## Neutral (i.e., centered) insertion

For neutral (i.e., centered) screw placement, thread the appropriate neutral sleeve adaptor onto the drill guide and place tip in the center of the Dynamic Compression Unit (DCU) screw hole. (Steps 1 and 2a) The 3.5 mm neutral sleeve adaptor threads onto the 2.5 mm end of the 3.5 Non-Locking Drill Guide. The 2.7 mm neutral sleeve adaptor threads onto the 2.0 mm end of the 2.7 mm Non-Locking Drill Guide. Compression will not occur (Steps 3 and 4) across the fracture.

The 2.0 mm and 2.5 mm Drill Bits are calibrated so that depth measurements can be read directly from the drill bit shaft. (2b)



Neutral (i.e., centered) insertion using a neutral sleeve adapter.  
Shown for 3.5 mm screw insertion



Screw insertion in neutral position using neutral sleeve adapter  
(no compression)



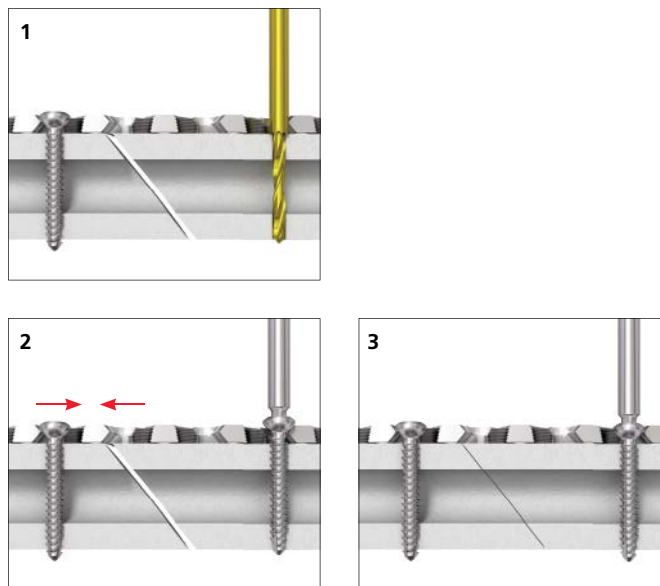
# Screw Hole Preparation and Measurement (continued)

## Compression screw technique

Dynamic compression can be achieved by eccentric insertion of a cortex screw. To drill a hole for dynamic compression using a 2.7 mm cortex screw, place the 2.0 mm end of the drill guide tip eccentrically at the edge of the Dynamic Compression Unit (DCU) portion of the plate hole away from the fracture without neutral sleeve adapter (Step 1). Compression will occur as the cortex screw is inserted (Steps 2 and 3).

For 3.5 mm cortex screw, use the 2.5 mm end of the drill guide tip eccentrically and repeat steps above for dynamic compression using a 3.5 mm cortex screw.

The 2.0 mm and 2.5 mm Drill Bits are calibrated so that depth measurements can be read directly from the drill bit shaft.



Compression screw technique

## Precautions:

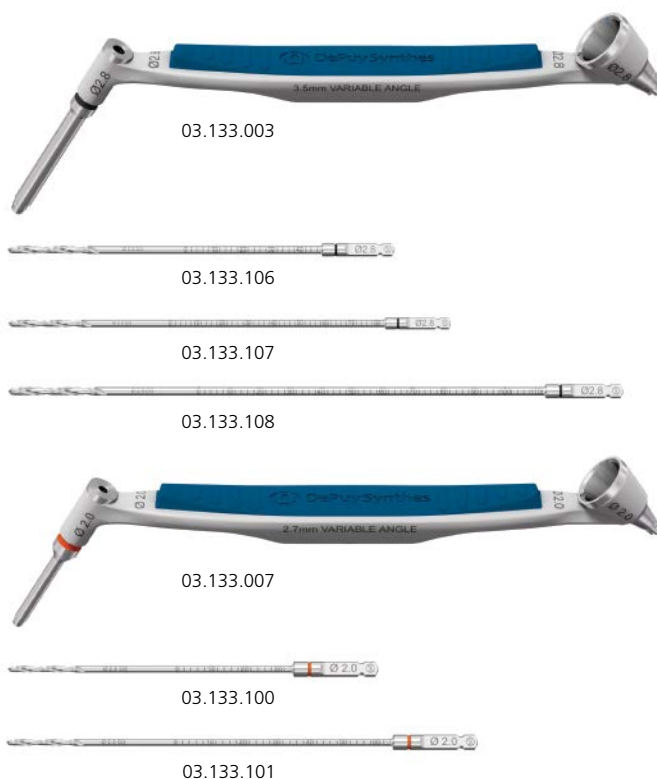
- **Non-Locking Drill Guides should not be used for screw insertion in locking and variable angle locking screw holes.**
- **Neutral (i.e., centered) sleeve adaptors are not designed for use with LCP Locking holes or variable angle locking holes. They should be used only with non-threaded holes or the non-threaded portion of Combi holes.**
- **Avoid excessive angulation when using the Neutral Sleeve Adapter in the non-threaded holes and stay nominal to the central axis of the hole.**
- **Ensure the drill bits do not contact the side of the plate holes.**

# Screw Hole Preparation and Measurement (continued)

## 2.7 mm and 3.5 mm Variable Angle drill guides and drill bits

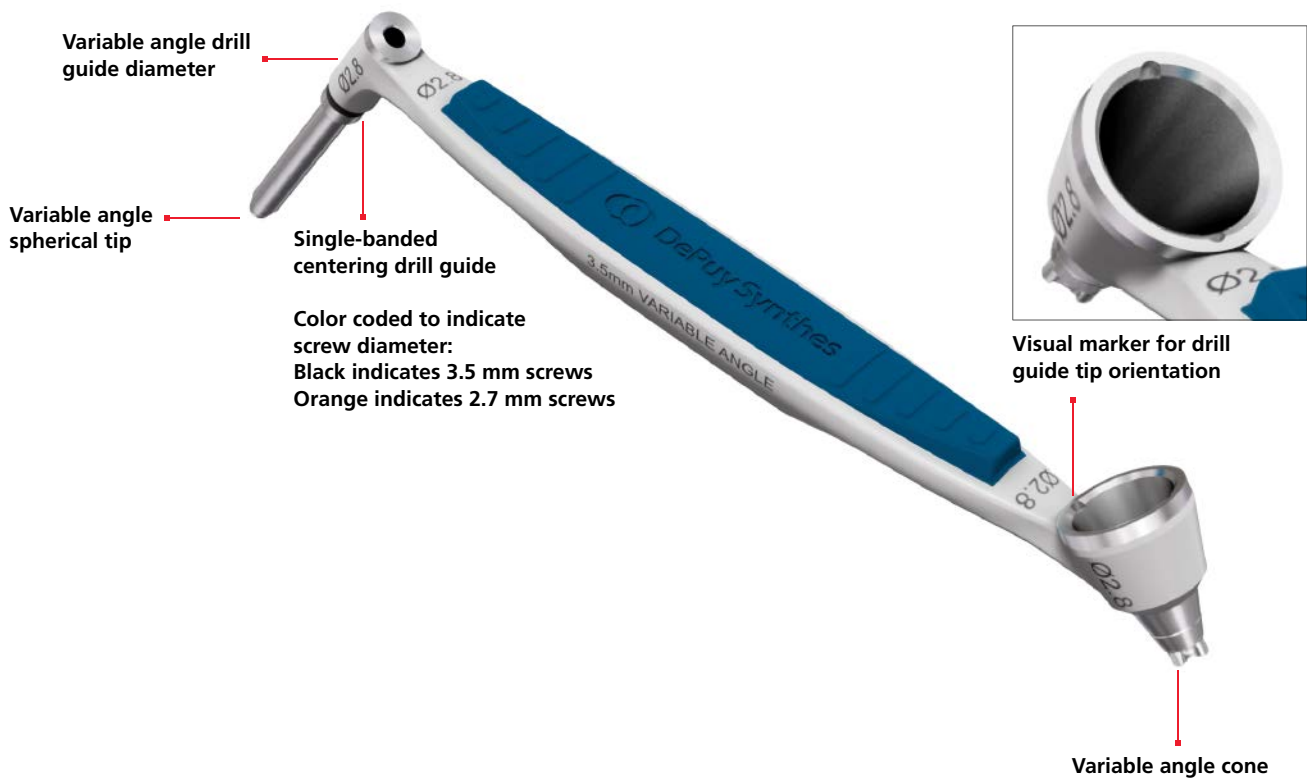
### Instruments

03.133.003	3.5 mm Variable Angle Drill Guide
03.133.007	2.7 mm Variable Angle Drill Guide
03.133.100*	2.0 mm Drill/Bit Quick Coupling 110 mm, 30 mm Calibration
03.133.101*	2.0 mm Drill/Bit Quick Coupling 140 mm, 60 mm Calibration
03.133.106*	2.8 mm Drill/Bit Quick Coupling 135 mm, 45 mm Calibration
03.133.107*	2.8 mm Drill Bit/Quick Coupling 170 mm, 80 mm Calibration
03.133.108*	2.8 mm Drill Bit/Quick Coupling 200 mm, 110 mm Calibration



\*Drill bits are available in both non-sterile and sterile packaging. To determine part number for the sterile-packaged drill bit, affix "S" to the end of the part number. E.g., the corresponding part number for the 2.0 mm Drill Bit/Quick Coupling 110 mm, 30 mm calibration delivered in sterile package is 03.133.100S.

# Screw Hole Preparation and Measurement (continued)



## Comparable instruments:



03.211.002



03.211.003



03.211.004



03.127.002



03.127.004



03.127.005



03.127.006

# Screw Hole Preparation and Measurement (continued)

## Variable angle drilling

Before inserting the first locking screw, perform anatomical reduction. After the insertion of locking screws, compression of the plate will no longer be possible without loosening the locking screw.

Locking screws can be used to increase the rigidity of some fracture repairs and to indirectly support subchondral bone. For variable angle locking screws, insert the variable angle locking drill guide into the variable angle locking screw hole. The drill guide features a variable angle cone on one side and a variable angle spherical tip on the other.

When using the cone end in the desired VA LCP® plate, press firmly to ensure the drill guide tip keys into the cloverleaf portion of the variable angle locking screw hole securely. The notches on top of the cone are visual markers for the drill guide tip orientation. The cone will provide a secure window of 30° angulation.

When using the spherical tip end, gently press the instrument into the variable angle hole. The lip portion of the spherical tip end engages with the cloverleaf portion of the hole to provide tactile feedback of the angulations. Continue to provide light pressure while holding the drill guide at the desired angle. The spherical tip end of the drill guide provides freedom to choose angulation. To ensure a precise 15° angulation, use the cone end of the Variable Angle drill guide.

Use 2.8 mm drill bits with the 3.5 mm Variable Angle Drill Guide. Use 2.0 mm drill bits with the 2.7 mm Variable Angle Drill Guide. The drill bits are calibrated so that depth measurements can be read directly from the drill bit shaft when using the spherical tip end only; calibrations do not apply for the Variable Angle Drill Guide cone.



# Screw Hole Preparation and Measurement (continued)

---

## Notes:

- Color bands indicate screw diameter application (Black: 3.5 mm, Orange 2.7 mm).
- When drilling, the tip of the drill guide should remain fully seated in the plate hole.
- The drill bit angle may be verified under fluoroscopy to ensure the desired angle has been achieved.
- When using the Variable Angle Drill Guides, inserting the screw at the nominal angle will ensure lowest possible profile construct.
- Drill guides are not self-retaining.
- For 2.7 mm Variable Angle Drill Guide, use 2.0 mm drill bits.
- For 3.5 mm Variable Angle Drill Guide, use 2.8 mm drill bits.
- Calibrated drill bits should not be used to measure screw length through the cone portion of the Variable Angle Drill Guides.

**Precaution:** Avoid applying excessive force on drill guides.

# Screw Hole Preparation and Measurement (continued)

## Threaded Drill Guides and Drill Bits for VA LCP and LCP

### Instruments

03.133.004	2.8 mm Threaded Guide for 3.5 mm Screw
03.133.008	2.0 mm Threaded Guide for 2.7 mm Screw
03.133.100*	2.0 mm Drill Bit/Quick Coupling 110 mm, 30 mm Calibration
03.133.101*	2.0 mm Drill Bit/Quick Coupling 140 mm, 60 mm Calibration
03.133.106*	2.8 mm Drill Bit/Quick Coupling 135 mm, 45 mm Calibration
03.133.107*	2.8 mm Drill Bit/Quick Coupling 170 mm, 80 mm Calibration
03.133.108*	2.8 mm Drill Bit/Quick Coupling 200 mm, 110 mm Calibration
314.116	StarDrive Screwdriver Shaft/T15
314.467	StarDrive Screwdriver Shaft/T8
323.023	1.6 mm Wire Sleeve



03.133.004



03.133.106



03.133.107



03.133.108



03.133.008



03.133.100



03.133.101



314.116



314.467



323.023

\*Drill bits are available in both non-sterile and sterile packaging. To determine part number for the sterile-packaged drill bit, affix "S" to the end of the part number. E.g., the corresponding part number for the 2.0 mm Drill Bit/Quick Coupling 110 mm, 30 mm calibration delivered in sterile package is 03.133.100S.

# Screw Hole Preparation and Measurement (continued)

Used in either a locking or a variable angle locking screw hole at nominal angle

Color coded to indicate screw diameter  
Black for 3.5 mm  
Orange for 2.7 mm

(Internal) Recess to allow StarDrive screwdriver insertion

## Comparable instruments:



313.353



312.648



03.127.001

# Screw Hole Preparation and Measurement (continued)

## Insertion of 2.7 mm and 3.5 mm variable angle locking screws and/or locking screws

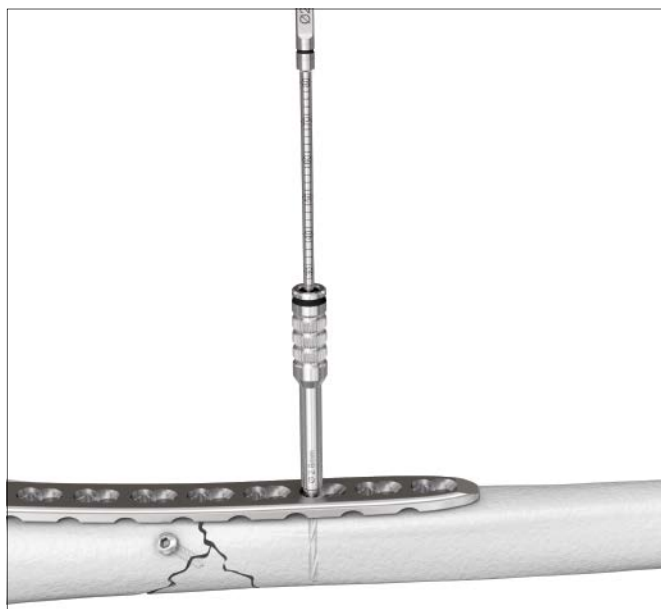
Before inserting the first locking screw, perform anatomical reduction and fix the fracture with lag screw technique, if necessary. After the insertion of a locking and/or variable angle locking screw, compression of the plate will no longer be possible without first loosening the locking and/or variable angle locking screw.

For insertion of 3.5 mm locking and variable angle locking screws at the nominal angle, screw the 2.8 mm Threaded Guide (03.133.004) onto the plate hole perpendicularly until fully seated. To ease threading, engage the drill guide with the plate hole by making a quarter turn counterclockwise until the starting thread of the drill guide engages the threads of the plate hole. Turn clockwise once threads are engaged. Use 2.8 mm drill bits to drill through the threaded drill guide. The drill bits are calibrated and depth measurements can be read directly from the drill bit shaft.

For insertion of 2.7 mm locking and variable angle locking screws at the nominal angle, screw the 2.0 mm Threaded Guide (03.133.008) onto the plate screw hole perpendicularly until fully seated. To ease threading, engage the drill guide with the plate hole by making a quarter turn counterclockwise until the starting thread of the drill guide engages the threads of the plate hole. Turn clockwise once threads are engaged. Use 2.0 mm drill bits to drill through the threaded drill guide. The drill bits are calibrated and depth measurements can be read directly from the drill bit shaft.

The screwdriver handle may be used to insert the threaded drill guides. StarDrive screwdriver shafts can be inserted into the back of the threaded drill guides. For the 2.8 mm Threaded Guide, use StarDrive screwdriver shaft T15 (314.116). For 2.0 mm Threaded Guide, use StarDrive screwdriver T8 (314.467).

Since the direction of a locking screw is determined by plate design, final screw position may be verified with a K-wire prior to insertion. An optional 1.6 mm wire sleeve can be inserted into the 2.8 mm Threaded Guide to aid inserting a 1.6 mm K-wire. Guide wire insertion may be important when the plate has been contoured or applied in metaphyseal regions around joint surfaces.



Drill bits are calibrated so that depth measurements can be read directly from the drill guide shaft.



---

**Notes:**

- Color bands indicate screw diameter application (Black: 3.5 mm, Orange: 2.7 mm).
- Locking screws should not be used for lag screw technique. Use non-locking screws when requiring a precise anatomical reduction (e.g., joint surfaces) or interfragmentary compression.
- The threaded guide can only be threaded at the nominal angle to the plate screw hole for locking and variable angle locking screw holes.
- Make a quarter turn counterclockwise to engage the threaded drill guide threads to plate hole threads.

**Precautions:**

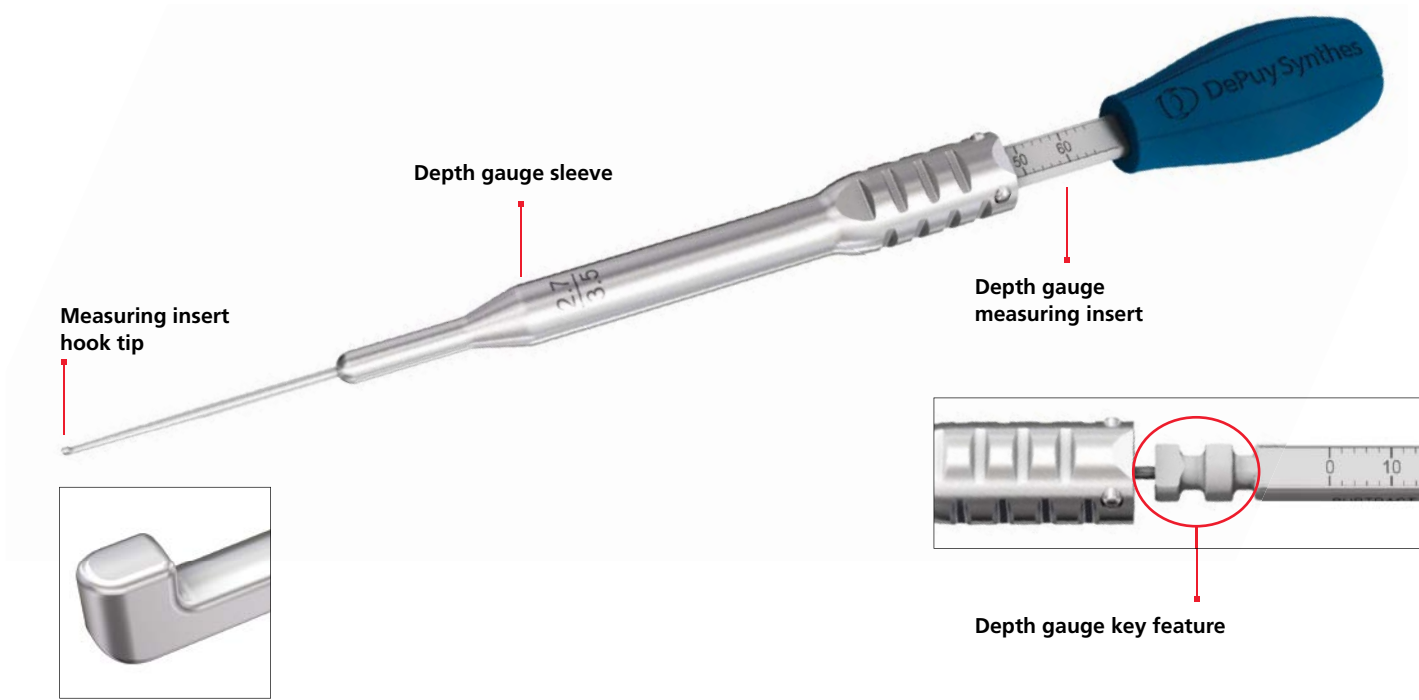
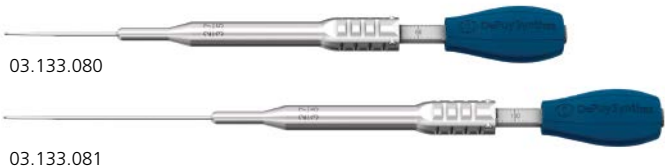
- Avoid overtorquing when threading the drill guide into locking and variable angle locking screw holes.
- Overtorquing can give a false impression of guide seating. Overtorquing and cross threading may cause screw hole damage.
- Improper placement of threaded drill guide can lead to locking screws not locking into the locking plate hole.
- Do not bend the plate using the threaded drill guide. Damage may occur to the plate hole threads.

# Screw Hole Preparation and Measurement (continued)

## Depth measurement

### Instruments

03.133.080	2.7/3.5 mm Depth Gauge 0 to 60 mm
03.133.081	2.7/3.5 mm Depth Gauge 40 to 100 mm



### Comparable instruments:



# Screw Hole Preparation and Measurement (continued)

The 2.7/3.5 mm Depth Gauge is available in two length measurements ranging from 0 to 60 mm (03.133.080) and from 40 to 100 mm (03.133.081). The depth gauge consists of two parts: a metal sleeve and the measuring insert with hook tip.

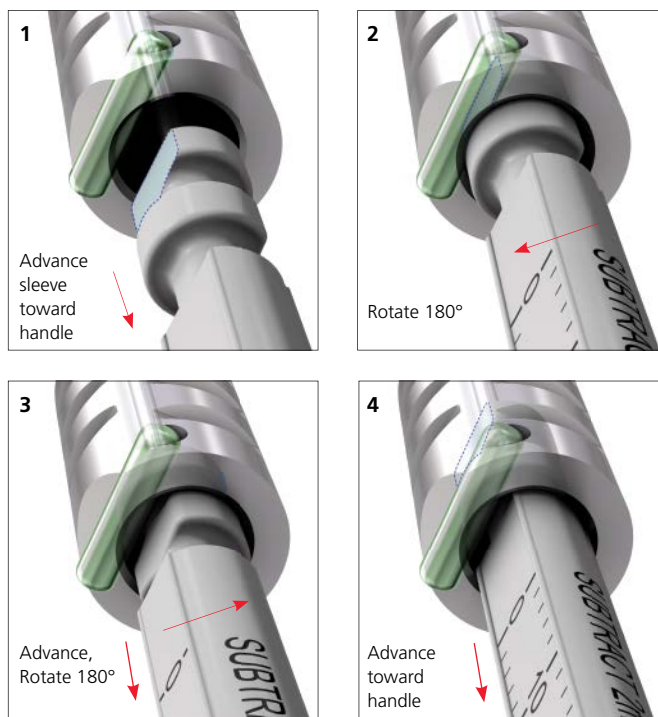
The measuring insert with hook tip has been designed with a key feature appearing at the end of the measuring segment of the measuring insert to ensure that the metal sleeve stays on the depth gauge during use.

## Depth Gauge Assembly

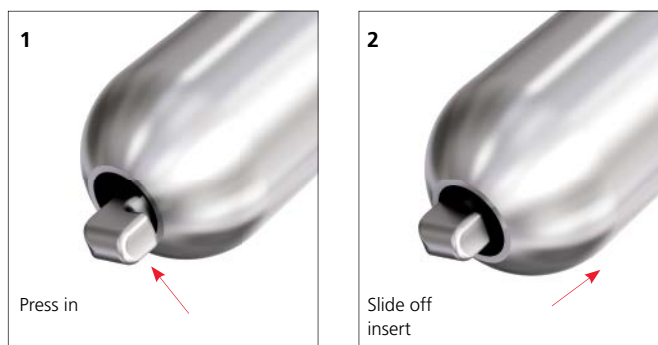
The depth gauge appears in the Insertion Tray disassembled into two pieces: the metal sleeve and the measuring insert with hook tip. To assemble, insert the measuring insert through the sleeve. Match the depth gauge key to the top of the depth gauge sleeve D-shape and gently advance towards the measuring insert handle until it stops (1). Rotate 180 degrees in one direction while gently advancing toward the handle until a stop is felt (2). Turn another 180 degrees in the opposite direction with gentle pressure applied on the sleeve towards the handle (3). Advance the remainder of the insert down the depth gauge sleeve until the sleeve meets the depth gauge handle (4).

## Depth Gauge Disassembly

To disassemble, advance the sleeve away from the handle until it stops at the hook tip. Push in hook tip to slide sleeve over the hook. The sleeve will stop at the key feature. Reverse steps for assembly described above to complete disassembly. (1 and 2).



Depth gauge assembly



Final steps to depth gauge disassembly

# Screw Hole Preparation and Measurement (continued)

## Measurement using Depth Gauge

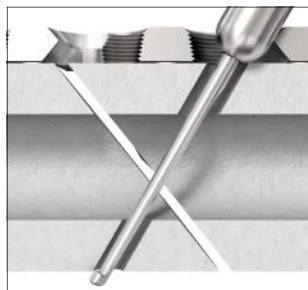
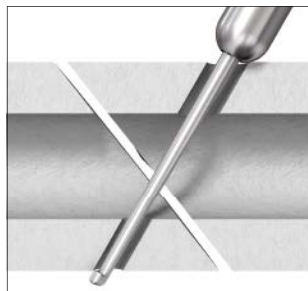
For measuring, insert the depth gauge tip through the drilled hole and measure. For bi-cortical measuring, insert the depth gauge tip through both cortices and hook onto the far cortical bone by pulling the knob up until it stops. Depth marks are provided on both sides and length is read from the top edge of the metal sleeve from either side.

**For the 2.7 mm locking and variable angle locking screws only, subtract 2 mm from the reading of the depth gauge to compensate for varying depth gauge to plate screw hole interfaces.**

### Notes:

- Depth gauge must be disassembled for cleaning and sterilization.
- When measuring for 2.7 mm locking or variable angle locking screws, subtract 2 mm from the reading from the Depth Gauge. No subtraction is required for 3.5 mm screws and 2.7 mm non-locking screws.
- Maximum measurement for the 2.7/3.5 mm Depth Gauge 0 to 60 mm (03.133.080) is 66 mm.
- Maximum measurement for the 2.7/3.5 mm Depth Gauge 40 to 100 mm (03.133.081) is 106 mm.

**Precaution:** Use care in carefully pushing in depth gauge measuring insert hook tip. Hook tip may be sharp and may pinch or tear user's glove or skin.



# Screw Insertion

## 4. Screw insertion

### Instruments

03.133.150	Universal Screwdriver Handle
03.133.175	2.5 mm Hex Driver Shaft, Self-Retaining Length 100 mm Quick Coupling
314.116	StarDrive Screwdriver Shaft/T15
314.467	StarDrive Screwdriver Shaft/T8
511.776	Torque Limiting Attachment 0.8 Nm
03.110.002	Torque Limiting Attachment 1.2 Nm
511.773	Torque Limiting Attachment 1.5 Nm
03.127.016	Torque Limiting Handle 2.5 Nm
314.06	Holding Sleeve



03.133.150



03.133.175



314.116



314.467



511.776



03.110.002



314.06



### Comparable instruments:



314.03



314.115



311.43



314.02

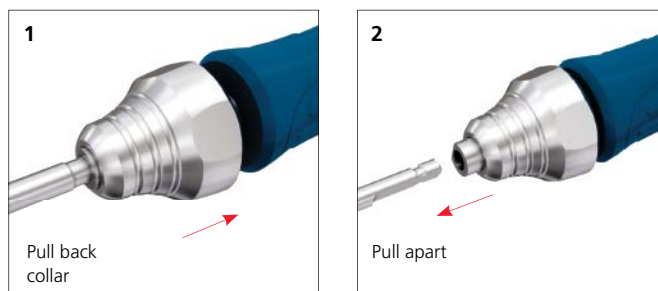
# Screw Insertion (continued)

## Manual insertion

To manually insert a non-locking screw, attach the appropriate screwdriver shaft onto the Universal Screwdriver Handle (03.133.150). Insert the screwdriver tip into the recess of the desired screw to retrieve it from the screw rack. Advance the screw until it is fully seated.

To manually insert a locking screw, attach the appropriate torque limiting attachment (TLA) onto the universal screwdriver handle and insert desired screwdriver shaft. For example, for 3.5 mm variable angle locking screws, the 2.5 Nm Torque Limiting handle is used to achieve final torque. Insert the screwdriver tip into the recess of the desired screw to retrieve it from the screw rack. Ensure the screw trajectory is not intersecting the other screw trajectories. Advance the screw and lock it in the plate. The TLA will provide an audible click once torque value is reached indicating that the screw is seated and locked.

After use, screw driver shaft must be disassembled from the handle prior to cleaning and sterilization. To disassemble, retract collar on screwdriver (1). Gently advance the driver shaft away from universal screwdriver handle (2).



## Notes:

- **Carefully tighten the locking screw, as excessive force is not necessary to produce effective screw-to-plate locking.**
- **The self-retaining 2.5 mm hex driver shaft will not retain screws with 2.7 mm or 3.5 mm low profile heads.**
- **Screwdriver shaft must be removed from the universal screwdriver handle prior to cleaning and sterilization.**

**Precaution: Use the Holding Sleeve (314.06) along with the 2.5 mm hex shaft if the self-retaining hex driver shaft does not retain screw during removal from the screw rack.**

# Screw Insertion (continued)

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## Power insertion

To insert screw under power, attach the appropriate screwdriver shaft to the desired power instrument.

For locking screws, attach the appropriate torque limiting attachment (TLA) along with the screwdriver shaft to the desired power instrument. Refer to Screw Reference Chart on page 10 for appropriate torque limiting attachment (TLA) to use.

### Notes:

- **Always use a torque limiting attachment (TLA) when inserting variable angle locking and locking screws.**
- **Do not lock the screws at full speed to reduce the risk of stripping the head. This can make it difficult to remove the implant.**
- **For long screws and thick cortical bone, ensure sufficient cooling during insertion.**
- **Recheck each locking screw before closing to verify that the screws are securely locked to the plate.**
- **Locking Screw heads must be flush with the plate in the locked position before they can be considered fully seated.**
- **Variable angle locking screw heads will not be flush unless placed at a nominal angle.**

**Precaution:** Speed of drilling and speed of screw insertion directly correlate to temperature at the bone interface. High temperatures could impact screw to bone interface and may impact clinical outcome.



# Surgical Closure Procedure

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## 5. Surgical closure procedure

### Closure

Inspect construct by rechecking each screw before closing to verify that the screws are secure. Thoroughly irrigate the wound prior to closure. Use fluoroscopy to check fracture reduction, plate placement, screw trajectory, and screw length.

### Notes:

- **Locking screw heads must be flush with the plate in the locked position before they can be considered fully seated.**
- **Variable angle locking screw heads will not be flush unless placed at a nominal angle.**



# Post-Op Support and Implant Removal

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## 6. Post-Op support and implant removal

### **Postoperative treatment**

Postoperative treatment with VA LCP® and LCP® plating technology does not differ from conventional internal fixation procedures.

### **Implant removal**

Please refer to the specific anatomic implant surgical technique for instruments for implant removal. A list of existing systems supported by the Universal Small Fragment System is available in the *Supported Plating Systems* section of this document.

# Universal Small Fragment System Configuration

## Available sets within the Universal Small Fragment System

		Stainless Steel		Titanium	
Universal Small Fragment System Set Description Detail		Set Number	Sterile Pack Set Number	Set Number	Sterile Pack Set Number
Core Set	<ul style="list-style-type: none"> <li>• Auxiliary Tray</li> <li>• Insertion Tray</li> <li>• Reduction Tray</li> <li>• Screw Rack</li> <li>• Standard Plate Tray</li> </ul>	01.133.201		01.133.401	
Core Set Without Drill Bits	<ul style="list-style-type: none"> <li>• Auxiliary Tray</li> <li>• Insertion Tray Without Drill Bits</li> <li>• Reduction Tray</li> </ul>	01.133.003		01.133.003	
Standard Plate Set	<ul style="list-style-type: none"> <li>• 2.7 mm LCP Straight</li> <li>• 3.5 mm LCP Straight</li> <li>• 3.5 mm LCP T-Plate</li> <li>• K-Wires</li> <li>• One-Third Tubular</li> </ul>	01.133.207		01.133.407	
Screw Rack	<ul style="list-style-type: none"> <li>• 2.7 mm Cortex</li> <li>• 2.7 mm Locking</li> <li>• 2.7 mm Metaphyseal</li> <li>• 2.7 mm Variable Angle Locking</li> <li>• 3.5 mm Cortex</li> <li>• 3.5 mm Locking</li> <li>• 3.5 mm Variable Angle Locking</li> <li>• 4.0 mm Cancellous</li> <li>• Washers</li> </ul>	01.133.208		01.133.408	
Shoulder/Clavicle Implant Set	<ul style="list-style-type: none"> <li>• LCP Superior Anterior Clavicle and Superior Anterior Clavicle with Extension</li> <li>• LCP Superior Clavicle and Superior Clavicle with Extension</li> <li>• LCP Periarticular Proximal Humerus</li> <li>• LCP Proximal Humerus</li> <li>• VA LCP Anterior Clavicle</li> </ul>	01.133.211	01.133.211S	01.133.411	01.133.411S
Elbow Implant Set	<ul style="list-style-type: none"> <li>• LCP Distal Humerus</li> <li>• LCP Hook</li> <li>• VA LCP DHP Posterolateral and Posterolateral with Support</li> <li>• VA LCP Lateral DHP</li> <li>• VA LCP Medial DHP and Medial DHP with Extension</li> <li>• VA LCP Olecranon</li> <li>• VA LCP Proximal Olecranon</li> </ul>	01.133.212	01.133.212S	01.133.412	01.133.412S
VA LCP Proximal Tibia Implant Set	<ul style="list-style-type: none"> <li>• 3.5 mm Variable Angle Locking Long Screws</li> <li>• 3.5 mm Cortex Long Screws</li> <li>• Depth Gauge 40 mm to 100 mm</li> <li>• Drill Bits</li> <li>• VA LCP Proximal Tibia Small and Large Bend</li> </ul>	01.133.213	01.133.213S		
LCP Proximal Tibia Implant Set	<ul style="list-style-type: none"> <li>• 3.5 mm Locking Long Screws</li> <li>• 3.5 mm Cortex Long Screws*</li> <li>• Depth Gauge 40 mm to 100 mm</li> <li>• Drill Bits</li> <li>• LCP Proximal Tibia Standard and Low Bend</li> <li>• LCP Medial Proximal Tibia</li> <li>• LCP Posterior Medial Proximal Tibia</li> </ul>	01.133.214	01.133.214S	01.133.414	01.133.414S
VA LCP Distal Tibia Implant Set	<ul style="list-style-type: none"> <li>• VA LCP Anterolateral Distal Tibia</li> <li>• VA LCP Medial Distal Tibia</li> <li>• VA LCP Posterolateral Distal Tibia</li> </ul>	01.133.215	01.133.215S		
LCP Distal Tibia Implant Set	<ul style="list-style-type: none"> <li>• LCP Anterolateral Distal Tibia</li> <li>• LCP Hook</li> <li>• LCP Medial Distal Tibia Low Bend</li> </ul>	01.133.216	01.133.216S	01.133.416	01.133.416S
VA LCP Distal Fibula Implant Set	<ul style="list-style-type: none"> <li>• VA LCP Lateral Distal Fibula</li> </ul>	01.133.217	01.133.217S		
LCP Distal Fibula Implant Set	<ul style="list-style-type: none"> <li>• LCP Hook</li> <li>• LCP Lateral Distal Fibula</li> </ul>	01.133.218	01.133.218S	01.133.418	01.133.418S

\*3.5 mm Cortex Screws in 65–90 mm only available in Stainless Steel.

# Core Set (01.133.201, 01.133.401)

## Stainless Steel and Titanium

### Trays

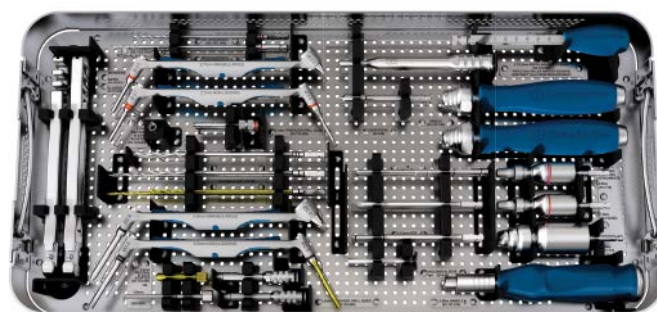
60.133.100	Universal Small Fragment Insertion Tray
60.133.102	Universal Small Fragment Standard Plate Tray
60.133.103	Auxiliary Tray (1/3 Width)
60.133.130	Universal Small Fragment Reduction Tray
60.133.150	Universal Small Fragment Screw Rack

### Outer Case and Lid

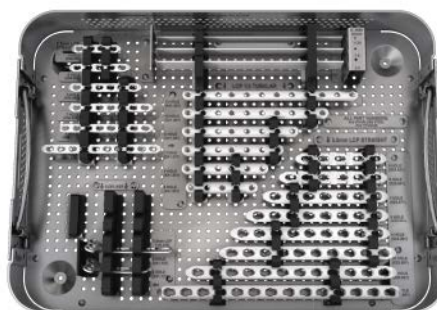
60.133.000	Outer Case Lid (3/3 Width)
60.133.003	Outer Case 3 High (3/3 Width)

### Optional Tray Lids

60.133.109	Tray Lid (3/3 Width)
60.133.110	Tray Lid (2/3 Width)
60.133.111	Tray Lid (1/3 Width)



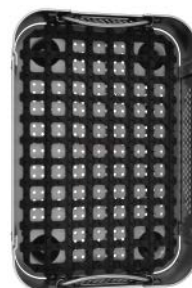
Insertion Tray



Standard Plate Tray



Reduction Tray



Auxiliary Tray



Screw Rack (shown without lid)



Outer Case Lid



Outer Case 3 High

# Core Set Without Drill Bits (01.133.003)

## Trays

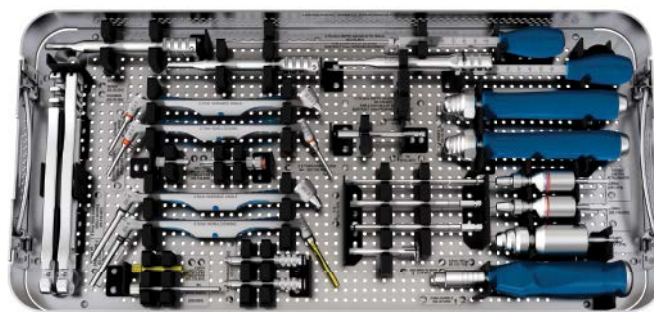
- 60.133.118 Universal Small Fragment Insertion Tray Without Drill Bits
- 60.133.103 Auxiliary Tray (1/3 Width)
- 60.133.130 Universal Small Fragment Reduction Tray

## Outer Case and Lid

- 60.133.000 Outer Case Lid (3/3 Width)
- 60.133.002 Outer Case 2 High (3/3 Width)

## Optional Tray Lids

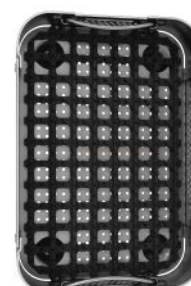
- 60.133.109 Tray Lid (3/3 Width)
- 60.133.111 Tray Lid (1/3 Width)



Insertion Tray w/o Drill Bits



Reduction Tray



Auxiliary Tray



Outer Case Lid



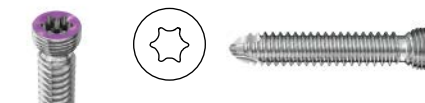
Outer Case 2 High

# Screw Rack Set (01.133.208, 01.133.408)

## Stainless Steel and Titanium

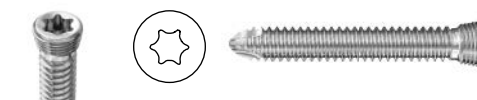
### 2.7 mm Variable Angle Locking Screw, Self-Tapping, T8 StarDrive Recess

Stainless Steel	Titanium	Description
02.211.010–060	04.211.010–060	10 mm–60 mm (2 mm increments)



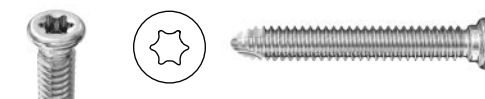
### 2.7 mm Locking Screw, Self-Tapping, T8 StarDrive Recess

Stainless Steel	Titanium	Description
202.210–250	402.210–250	10 mm–50 mm (2 mm increments)
202.255–260	402.255–260	55 mm, 60 mm



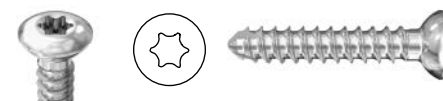
### 2.7 mm Metaphyseal Screw, Self-Tapping, T8 StarDrive Recess

Stainless Steel	Titanium	Description
02.118.510–560	04.118.510–560	10 mm–60 mm (2 mm increments)



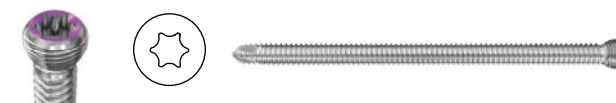
### 2.7 mm Cortex Screw, Self-Tapping, T8 StarDrive Recess

Stainless Steel	Titanium	Description
202.870–900	402.870–900	10 mm–40 mm (2 mm increments)
202.962–963	404.962–963	42 mm, 44 mm
202.965–967	404.965–967	46 mm–50 mm (2 mm increments)
202.968–969	404.968–969	55 mm, 60 mm



### 3.5 mm Variable Angle Locking Screw, Self-Tapping, T15 StarDrive Recess

Stainless Steel	Titanium	Description
02.127.110–160	n/a	10 mm–60 mm (2 mm increments)



# Screw Rack Set (01.133.208, 01.133.408)

## Stainless Steel and Titanium (continued)

### 3.5 mm Locking Screw, Self-Tapping, T15 StarDrive Recess

Stainless Steel	Titanium	Description
212.101–118	412.101–118	10 mm–42 mm (2 mm increments)
212.119	412.119	45 mm
212.134–136	412.134–136	44 mm, 46 mm
212.120–122	412.120–122	48 mm–52 mm (2 mm increments)
02.212.054–058	04.212.054–058	54 mm–58 mm (2 mm increments)
212.123–124	412.123–124	55 mm, 60 mm



### 3.5 mm Cortex Screw, Self-Tapping, 2.5 mm Hex Recess

Stainless Steel	Titanium	Description
204.810–840	404.810–840	10 mm–40 mm (2 mm increments)
204.842–848		42 mm–48 mm (2 mm increments)
204.845–860	404.845–855	45 mm–55 mm (5 mm increments)



### 4.0 mm Cancellous Screw, Fully Threaded, 2.5 mm Hex Recess

Stainless Steel	Titanium	Description
206.010–030	406.010–030	10 mm–30 mm (2 mm increments)
206.035–060	406.035–060	35 mm–60 mm (5 mm increments)



# Screw Rack Set (01.133.208, 01.133.408)

## Stainless Steel and Titanium (continued)

### Washers

Stainless Steel	Titanium	Description
219.980	419.980	7.0 mm Washers



### Push Pins

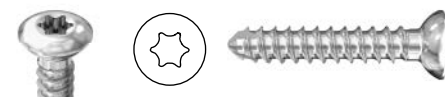
60.116.507	Screw Type Push Pin/Cortex
60.116.513	Screw Type Push Pin/Locking
60.116.521	Screw Type Push Pin Variable Angle Locking
60.116.527	Screw Type Push Pin/Metaphyseal

Screws available in sterile and non-sterile packaging. Affix "S" to the end of the part number to obtain part number sterile packed screw.

Additional screws are available from the screw families above, but are not configured in the Universal Small Fragment Screw Rack. The screws below and on page 39 are available with the system in sterile package.

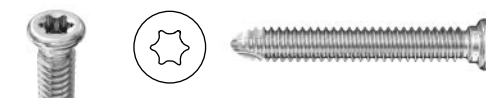
### 2.7 mm Cortex Screw, Self-Tapping, T8 StarDrive Recess

Stainless Steel	Titanium	Description
02.202.962S	n/a	62 mm
02.202.964S	n/a	64 mm
02.202.966S	n/a	66 mm
02.202.968S	n/a	68 mm
02.202.975S	n/a	75 mm
02.202.980S	n/a	80 mm



### 2.7 mm Metaphyseal Screw, Self-Tapping, T8 StarDrive Recess

Stainless Steel	Titanium	Description
02.118.562S	04.118.562S	62 mm
02.118.564S	04.118.564S	64 mm
02.118.566S	04.118.566S	66 mm
02.118.568S	04.118.568S	68 mm
02.118.570S	04.118.570S	70 mm
02.118.575S	04.118.575S	75 mm
02.118.580S	04.118.580S	80 mm





# Screw Rack Set (01.133.208, 01.133.408)

## Stainless Steel and Titanium (continued)

### 3.5 mm Variable Angle Locking Screw, Self-Taping, T15 StarDrive Recess

Stainless Steel	Titanium	Description
02.127.165S	n/a	65 mm
02.127.170S	n/a	70 mm
02.127.175S	n/a	75 mm
02.127.180S	n/a	80 mm



### 3.5 mm Locking Screw, Self-Taping, T15 StarDrive Recess

Stainless Steel	Titanium	Description
212.125S	412.125S	65 mm
212.126S	412.126S	70 mm
212.127S	412.127S	75 mm
212.128S	412.128S	80 mm



### 3.5 mm Cortex Screw, Self-Tapping, 2.5 mm Hex Recess

Stainless Steel	Titanium	Description
204.865S	n/a	65 mm
204.870S	n/a	70 mm
204.875S	n/a	75 mm
204.880S	n/a	80 mm



### 4.0 mm Cancellous Screw, Fully Threaded, 2.5 mm Hex Recess

Stainless Steel	Titanium	Description
206.065S	406.065S	65 mm
206.070S	406.070S	70 mm
206.075S	406.075S	75 mm
206.080S	406.080S	80 mm





# Standard Plate Set (01.133.207, 01.133.407)

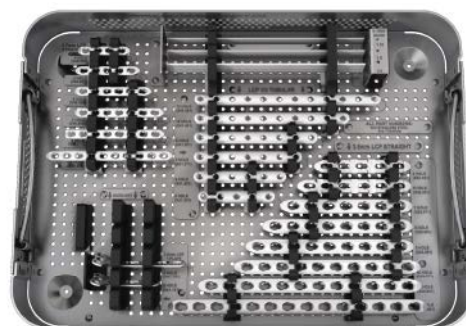
LCP® Stainless Steel and Titanium

## Graphic Case

60.133.102	Universal Small Fragment Standard Plate Tray
60.133.110	Tray Lid 2/3 Width

## Implants

Stainless Steel	Titanium	Description
223.551	423.551	3.5 mm LCP, 5 holes
223.561	423.561	3.5 mm LCP, 6 holes
223.571	423.571	3.5 mm LCP, 7 holes
223.581	423.581	3.5 mm LCP, 8 holes
223.591	423.591	3.5 mm LCP, 9 holes
223.601	423.601	3.5 mm LCP, 10 holes
223.621	423.621	3.5 mm LCP, 12 holes
223.641	423.641	3.5 mm LCP, 14 holes
241.131	441.131	3.5 mm LCP T-Plate, 3 holes
241.151	441.151	3.5 mm LCP T-Plate, 5 holes
241.351	441.351	3.5 mm LCP One-third Tubular Plate, 5 holes
241.361	441.361	3.5 mm LCP One-third Tubular Plate, 6 holes
241.371	441.371	3.5 mm LCP One-third Tubular Plate, 7 holes
241.381	441.381	3.5 mm LCP One-third Tubular Plate, 8 holes
241.401	441.401	3.5 mm LCP One-third Tubular Plate, 10 holes
241.421	441.421	3.5 mm LCP One-third Tubular Plate, 12 holes
249.680	449.680	2.7 mm LCP Plate, straight, 4 holes
249.681	449.681	2.7 mm LCP Plate, straight, 5 holes
249.682	449.682	2.7 mm LCP Plate, straight, 6 holes
249.683	449.683	2.7 mm LCP Plate, straight, 7 holes
247.372	447.372	2.7 mm LCP Plate, straight, 8 holes
247.374	447.374	2.7 mm LCP Plate, straight, 10 holes



Additional standard plates are available from the plate families above, but are not configured in the Universal Small Fragment Standard Plates Tray.

# Shoulder/Clavicle Implant Set (01.133.211, 01.133.411)

LCP® and VA LCP®, Stainless Steel and Titanium

## Graphic Case

60.133.106	Universal Small Fragment Shoulder/Clavicle Anatomy Tray
60.133.109	Tray Lid 3/3 Width

## Implants

### 3.5 mm LCP Superior Anterior Clavicle Plate with Lateral Extension

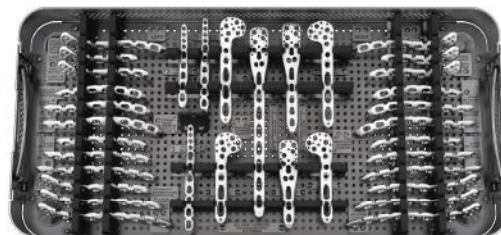
Stainless Steel	Titanium	Holes	Length	Detail
02.112.010	04.112.010	4	81 mm	Right
02.112.011	04.112.011	4	81 mm	Left
02.112.012	04.112.012	5	94 mm	Right
02.112.013	04.112.013	5	94 mm	Left
02.112.008	04.112.008	6	108 mm	Right
02.112.009	04.112.009	6	108 mm	Left

### 3.5 mm LCP Superior Anterior Clavicle Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.112.026	04.112.026	6	94 mm	Right
02.112.027	04.112.027	6	94 mm	Left
02.112.028	04.112.028	7	110 mm	Right
02.112.029	04.112.029	7	110 mm	Left
02.112.030	04.112.030	8	120 mm	Right
02.112.031	04.112.031	8	120 mm	Left

### 2.7 mm/3.5 mm VA LCP Anterior Clavicle Plate

Stainless Steel	Titanium	Holes	Length
02.112.046	04.112.046	9	89 mm
02.112.047	04.112.047	10	101 mm
02.112.048	n/a	11	113 mm



# Shoulder/Clavicle Implant Set (01.133.211, 01.133.411)

LCP® and VA LCP®, Stainless Steel and Titanium (continued)

## 3.5 mm LCP Superior Clavicle Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.112.080	04.112.080	6	85 mm	Right
02.112.081	04.112.081	6	85 mm	Left
02.112.082	04.112.082	7	100 mm	Right
02.112.083	04.112.083	7	100 mm	Left
02.112.084	04.112.084	8	115 mm	Right
02.112.085	04.112.085	8	115 mm	Left



## 3.5 mm LCP Superior Clavicle Plate with Lateral Extension

Stainless Steel	Titanium	Holes	Length	Detail
02.112.090	04.112.090	6	105 mm	Right
02.112.091	04.112.091	6	105 mm	Left
02.112.092	04.112.092	7	120 mm	Right
02.112.093	04.112.093	7	120 mm	Left
02.112.094	04.112.094	8	130 mm	Right
02.112.095	04.112.095	8	130 mm	Left



## 3.5 mm LCP Periarticular Proximal Humerus Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.123.020	04.123.020	2	91 mm	Right
02.123.021	04.123.021	2	91 mm	Left
02.123.040	04.123.040	3	109 mm	Right
02.123.041	04.123.041	3	109 mm	Left



## 3.5 mm LCP Proximal Humerus Plate

Stainless Steel	Titanium	Holes	Length	Detail
241.901	441.901	3	90 mm	Standard
241.903	441.903	5	114 mm	Standard
241.921	441.921	8	196 mm	Long



Plates configured for 60.133.106 Universal Small Fragment Shoulder/Clavicle Anatomy Tray. Affix "S" to the end of the part number to obtain part number for sterile packaged implant.

Additional plates are available from the plate families above, but are not configured in the Universal Small Fragment Shoulder/Clavicle Anatomy Tray. The plates on pages 43 and 44 are available with the system in sterile package.

# Shoulder/Clavicle Implant Set (01.133.211, 01.133.411)

LCP® and VA LCP®, Stainless Steel and Titanium (continued)

## 3.5 mm LCP Superior Anterior Clavicle Plate with Extension

Stainless Steel	Titanium	Holes	Length	Detail
02.112.006S	04.112.006S	3	69 mm	Right
02.112.007S	04.112.007S	3	69 mm	Left
02.112.018S	04.112.018S	7	123 mm	Right
02.112.019S	04.112.019S	7	123 mm	Left
02.112.020S	04.112.020S	8	135 mm	Right
02.112.021S	04.112.021S	8	135 mm	Left



## 2.7 mm/3.5 mm VA LCP Anterior Clavicle Plate

Stainless Steel	Titanium	Holes	Length
02.112.045S	04.112.045S	7	77 mm
02.112.049S	04.112.049S	12	124 mm



## 3.5 mm LCP Periarticular Proximal Humerus Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.123.022S	04.123.022S	4	127 mm	Right
02.123.023S	04.123.023S	4	127 mm	Left
02.123.042S	04.123.042S	5	145 mm	Right
02.123.043S	04.123.043S	5	145 mm	Left
02.123.024S	04.123.024S	6	163 mm	Right
02.123.025S	04.123.025S	6	163 mm	Left
02.123.026S	04.123.026S	8	199 mm	Right
02.123.027S	04.123.027S	8	199 mm	Left
02.123.028S	04.123.028S	10	235 mm	Right
02.123.029S	04.123.029S	10	235 mm	Left
02.123.030S	04.123.030S	12	271 mm	Right
02.123.031S	04.123.031S	12	271 mm	Left
02.123.032S	04.123.032S	14	307 mm	Right
02.123.033S	04.123.033S	14	307 mm	Left



# Shoulder/Clavicle Implant Set (01.133.211, 01.133.411)

LCP® and VA LCP®, Stainless Steel and Titanium (continued)

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## 3.5 mm LCP Proximal Humerus Plate, Long

Stainless Steel	Titanium	Holes	Length
241.918S	441.918S	5	142 mm
241.919S	441.919S	6	160 mm
241.920S	441.920S	7	178 mm
241.922S	441.922S	9	214 mm
241.923S	441.923S	10	232 mm
241.924S	441.924S	11	250 mm
241.925S	441.925S	12	268 mm



## 3.5 mm LCP Medial Anterior Clavicle Plates

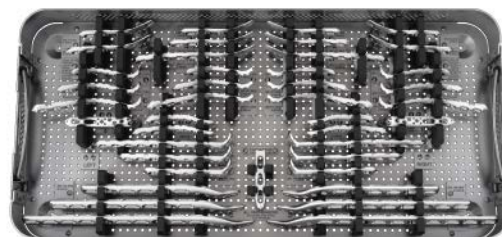
Stainless Steel	Titanium	Holes	Length
02.112.040S	04.112.040S	6	79 mm
02.112.041S	04.112.041S	7	91 mm
02.112.042S	04.112.042S	8	102 mm

# Elbow Implant Set (01.133.212, 01.133.412)

LCP® and VA LCP®, Stainless Steel and Titanium

## Graphic Case

60.133.105	Universal Small Fragment Elbow Anatomy Tray
60.133.109	Tray Lid 3/3 Width



## Implants

3.5 mm LCP Extra-articular Distal Humerus Plate

	Stainless Steel	Titanium	Holes	Length	Detail
02.104.006		04.104.006S	6	158 mm	Right
02.104.026		04.104.026S	6	158 mm	Left
02.104.008		04.104.008S	8	194 mm	Right
02.104.028		04.104.028S	8	194 mm	Left
02.104.010		04.104.010S	10	230 mm	Right
02.104.030		04.104.030S	10	230 mm	Left



3.5 mm LCP Hook Plate

	Stainless Steel	Titanium	Holes	Length
02.113.103		04.113.103	3	62 mm



2.7 mm/3.5 mm VA LCP Posterolateral Distal Humerus Plate

	Stainless Steel	Titanium	Holes	Length	Detail
02.117.203		04.117.203	3	75 mm	Right, short
02.117.303		04.117.303	3	75 mm	Left, short
02.117.204		04.117.204	4	88 mm	Right, medium
02.117.304		04.117.304	4	88 mm	Left, medium
02.117.207		04.117.207	7	127 mm	Right, long
02.117.307		04.117.307	7	127 mm	Left, long



2.7 mm/3.5 mm VA LCP Posterolateral Distal Humerus Plate with Lateral Support

	Stainless Steel	Titanium	Holes	Length	Detail
02.117.003		04.117.003	3	75 mm	Right, short
02.117.103		04.117.103	3	75 mm	Left, short
02.117.004		04.117.004	4	88 mm	Right, medium
02.117.104		04.117.104	4	88 mm	Left, medium



# Elbow Implant Set (01.133.212, 01.133.412)

LCP® and VA LCP®, Stainless Steel and Titanium (continued)

## 2.7 mm/3.5 mm VA LCP Lateral Distal Humerus Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.117.801	04.117.801	1	69 mm	Right, short
02.117.901	04.117.901	1	69 mm	Left, short
02.117.802	04.117.802	2	82 mm	Right, medium
02.117.902	04.117.902	2	82 mm	Left, medium



## 2.7 mm/3.5 mm VA LCP Medial Distal Humerus Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.117.401	04.117.401	1	69 mm	Right, short
02.117.501	04.117.501	1	69 mm	Left, short
02.117.402	04.117.402	2	82 mm	Right, medium
02.117.502	04.117.502	2	82 mm	Left, medium
02.117.404	04.117.404	4	108 mm	Right, long
02.117.504	04.117.504	4	108 mm	Left, long



## 2.7 mm/3.5 mm VA LCP Extended Medial Distal Humerus Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.117.601	04.117.601	1	72 mm	Right, short
02.117.701	04.117.701	1	72 mm	Left, short
02.117.602	04.117.602	2	85 mm	Right, medium
02.117.702	04.117.702	2	85 mm	Left, medium
02.117.604	04.117.604	4	111 mm	Right, long
02.117.704	04.117.704	4	111 mm	Left, long



## 2.7 mm/3.5 mm VA LCP Proximal Olecranon Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.107.002	04.107.002	2	73 mm	Right
02.107.102	04.107.102	2	73 mm	Left



## 2.7 mm/3.5 mm VA LCP Olecranon Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.107.202	04.107.202	2	90 mm	Right
02.107.302	04.107.302	2	90 mm	Left
02.107.204	04.107.204	4	116 mm	Right
02.107.304	04.107.304	4	116 mm	Left
02.107.206	04.107.206	6	142 mm	Right
02.107.306	04.107.306	6	142 mm	Left



# Elbow Implant Set (01.133.212, 01.133.412)

LCP® and VA LCP®, Stainless Steel and Titanium (continued)

Plates configured for 60.133.105 Universal Small Fragment Elbow Anatomy Tray. Affix "S" to the end of the part number to obtain part number for sterile packaged implant.

Additional plates are available from the plate families, but are not configured in the Universal Small Fragment Elbow Anatomy Tray. The plates below and on page 48 are available with the system in sterile package.

## 3.5 mm LCP Extra-articular Distal Humerus Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.104.012S	04.104.012S	12	266 mm	Right
02.104.032S	04.104.032S	12	266 mm	Left
02.104.014S	04.104.014S	14	302 mm	Right
02.104.034S	04.104.034S	14	302 mm	Left



## 2.7 mm/3.5 mm VA LCP Posterolateral Distal Humerus Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.117.209S	04.117.209S	9	153 mm	Right, extra long
02.117.309S	04.117.309S	9	153 mm	Left, extra long
02.117.211S	04.117.211S	11	179 mm	Right
02.117.311S	04.117.311S	11	179 mm	Left
02.117.213S	04.117.213S	13	205 mm	Right
02.117.313S	04.117.313S	13	205 mm	Left



## 2.7 mm/3.5 mm VA LCP Posterolateral Distal Humerus Plate with Lateral Support

Stainless Steel	Titanium	Holes	Length	Detail
02.117.007S	04.117.007S	7	127 mm	Right, long
02.117.107S	04.117.107S	7	127 mm	Left, long
02.117.009S	04.117.009S	9	153 mm	Right, extra long
02.117.109S	04.117.109S	9	153 mm	Left, extra long
02.117.011S	04.117.011S	11	179 mm	Right
02.117.111S	04.117.111S	11	179 mm	Left
02.117.013S	04.117.013S	13	205 mm	Right
02.117.113S	04.117.113S	13	205 mm	Left



## 2.7 mm/3.5 mm VA LCP Olecranon Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.107.208S	04.107.208S	8	169 mm	Right
02.107.308S	04.107.308S	8	169 mm	Left





# Elbow Implant Set (01.133.212, 01.133.412)

LCP® and VA LCP®, Stainless Steel and Titanium (continued)

## 2.7 mm/3.5 mm VA LCP Lateral Distal Humerus Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.117.805S	04.117.805S	5	121 mm	Right, long
02.117.905S	04.117.905S	5	121 mm	Left, long
02.117.807S	04.117.807S	7	147 mm	Right, extra long
02.117.907S	04.117.907S	7	147 mm	Left, extra long
02.117.809S	04.117.809S	9	173 mm	Right
02.117.909S	04.117.909S	9	173 mm	Left
02.117.811S	04.117.811S	11	199 mm	Right
02.117.911S	04.117.911S	11	199 mm	Left



## 2.7 mm/3.5 mm VA LCP Medial Distal Humerus Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.117.406S	04.117.406S	6	134 mm	Right, extra long
02.117.506S	04.117.506S	6	134 mm	Left, extra long
02.117.408S	04.117.408S	8	160 mm	Right
02.117.508S	04.117.508S	8	160 mm	Left
02.117.410S	04.117.410S	10	186 mm	Right
02.117.510S	04.117.510S	10	186 mm	Left



## 2.7 mm/3.5 mm VA LCP Extended Medial Distal Humerus Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.117.606S	04.117.606S	6	137 mm	Right, extra long
02.117.706S	04.117.706S	6	137 mm	Left, extra long
02.117.608S	04.117.608S	8	163 mm	Right
02.117.708S	04.117.708S	8	163 mm	Left
02.117.610S	04.117.610S	10	189 mm	Right
02.117.710S	04.117.710S	10	189 mm	Left

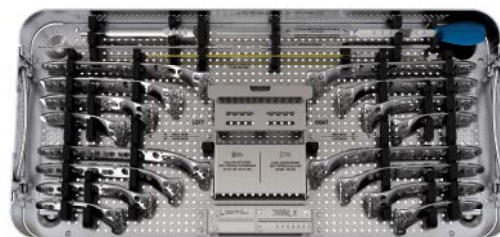


# VA LCP Proximal Tibia Implant Set (01.133.213)

VA LCP®, Stainless Steel

## Graphic Case

- 60.133.107 Universal Small Fragment VA LCP  
Proximal Tibia Anatomy Tray
- 60.133.109 Tray Lid 3/3 Width



## Instrument

- 03.133.081 2.7/3.5 mm Depth Gauge  
40 to 100 mm

## Implants

3.5 mm VA LCP Proximal Tibia Plate, Small Bend

Stainless Steel	Holes	Length	Detail
02.127.210	4	87 mm	Right
02.127.211	4	87 mm	Left
02.127.220	6	117 mm	Right
02.127.221	6	117 mm	Left
02.127.230	8	147 mm	Right
02.127.231	8	147 mm	Left
02.127.240	10	177 mm	Right
02.127.241	10	177 mm	Left



3.5 mm VA LCP Proximal Tibia Plate, Large Bend

Stainless Steel	Holes	Length	Detail
02.127.310	4	87 mm	Right
02.127.311	4	87 mm	Left
02.127.320	6	117 mm	Right
02.127.321	6	117 mm	Left
02.127.330	8	147 mm	Right
02.127.331	8	147 mm	Left
02.127.340	10	177 mm	Right
02.127.341	10	177 mm	Left



# VA LCP Proximal Tibia Implant Set (01.133.213)

## VA LCP®, Stainless Steel (continued)

### 3.5 mm Cortex Screws, Self-Tapping

Stainless Steel    Length

204.865	65 mm
204.870	70 mm
204.875	75 mm
204.880	80 mm
204.885	85 mm
204.890	90 mm



### 3.5 mm Variable Angle Locking Screws, Self-Tapping, T15 Stardrive

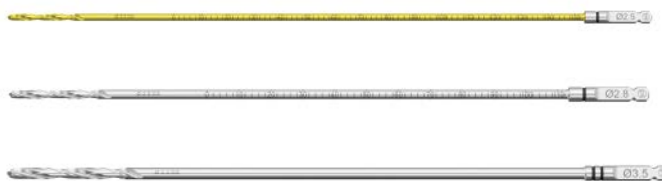
Stainless Steel    Length

02.127.165	65 mm
02.127.170	70 mm
02.127.175	75 mm
02.127.180	80 mm
02.127.185	85 mm
02.127.190	90 mm



Drill Bits                  Diameter      Length

03.133.104	2.5 mm/QC	240 mm, 150 mm Calibration
03.133.108	2.8 mm/QC	200 mm, 110 mm Calibration
03.133.110	3.5 mm/QC	195 mm (no calibration)



Plates configured for 60.133.107 Universal Small Fragment VA LCP Proximal Tibia Anatomy Tray. Affix "S" to the end of the part number to obtain part number for sterile packaged implant.


Additional plates are available from the plate families above, but are not configured in the Universal Small Fragment VA LCP Proximal Tibia Anatomy Tray. The plates on page 51 are available with the system in sterile package.

# VA LCP Proximal Tibia Implant Set (01.133.213)


VA LCP®, Stainless Steel (continued)

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## 3.5 mm VA LCP Proximal Tibia Plate, Small Bend

Stainless Steel	Holes	Length	Detail
02.127.250S	12	207 mm Right	
02.127.251S	12	207 mm Left	
02.127.260S	14	237 mm Right	
02.127.261S	14	237 mm Left	

## 3.5 mm VA LCP Proximal Tibia Plate, Large Bend

Stainless Steel	Holes	Length	Detail
02.127.350S	12	207 mm Right	
02.127.351S	12	207 mm Left	
02.127.360S	14	237 mm Right	
02.127.361S	14	237 mm Left	

# LCP Proximal Tibia Implant Set (01.133.214, 01.133.414)

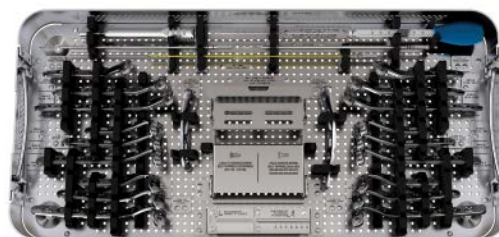
LCP®, Stainless Steel and Titanium

## Graphic Case

60.133.131	Universal Small Fragment LCP Proximal Tibia Anatomy Tray
60.133.109	Tray Lid 3/3 Width

## Instrument

03.133.081	2.7/3.5 mm Depth Gauge 40 to 100 mm
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## Implants

### 3.5 mm LCP Proximal Tibia Plate

Stainless Steel	Titanium	Holes	Length	Detail
239.934	439.934	4	81 mm	Right
239.935	439.935	4	81 mm	Left
239.936	439.936	6	107 mm	Right
239.937	439.937	6	107 mm	Left
239.938	439.938	8	133 mm	Right
239.939	439.939	8	133 mm	Left



### 3.5 mm LCP Medial Proximal Tibia Plate

Stainless Steel	Titanium	Holes	Length	Detail
239.954	439.954	4	93 mm	Right
239.955	439.955	4	93 mm	Left
239.956	439.956	6	119 mm	Right
239.957	439.957	6	119 mm	Left
239.958	439.958	8	145 mm	Right
239.959	439.959	8	145 mm	Left



### 3.5 mm LCP Proximal Tibia Plate Low Bend

Stainless Steel	Titanium	Holes	Length	Detail
02.124.200	04.124.200	4	76 mm	Right
02.124.201	04.124.201	4	76 mm	Left
02.124.204	04.124.204	6	102 mm	Right
02.124.205	04.124.205	6	102 mm	Left
02.124.208	04.124.208	8	128 mm	Right
02.124.209	04.124.209	8	128 mm	Left



# LCP Proximal Tibia Implant Set (01.133.214, 01.133.414)

LCP®, Stainless Steel and Titanium (continued)

## 3.5 mm LCP Posteromedial Proximal Tibia Plate

Stainless Steel	Titanium	Holes	Length
02.120.702	04.120.702	2	79 mm
02.120.704	04.120.704	4	105 mm



## 3.5 mm Cortex Screws, Self-Tapping

Stainless Steel	Titanium	Length
204.865	n/a	65 mm
204.870	n/a	70 mm
204.875	n/a	75 mm
204.880	n/a	80 mm
204.885	n/a	85 mm
204.890	n/a	90 mm

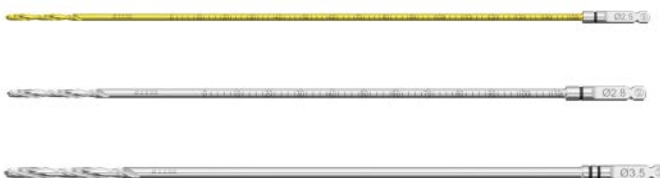


## 3.5 mm Locking Screws, Self-Tapping, with Stardrive Recess

Stainless Steel	Titanium	Length
212.125	412.125	65 mm
212.126	412.126	70 mm
212.127	412.127	75 mm
212.128	412.128	80 mm
212.129	412.129	85 mm
212.130	412.130	90 mm



Drill Bits	Diameter	Length
03.133.104	2.5 mm/QC	240 mm, 150 mm Calibration
03.133.108	2.8 mm/QC	200 mm, 110 mm Calibration
03.133.110	3.5 mm/QC	195 mm (no calibration)



Plates configured for 60.133.131 Universal Small Fragment LCP Proximal Tibia Anatomy Tray. Affix "S" to the end of the part number to obtain part number for sterile packaged implant.

Additional plates are available from the plate families above, but are not configured in the Universal Small Fragment LCP Proximal Tibia Anatomy Tray. The plates on pages 54 and 55 are available with the system in sterile package.

# LCP Proximal Tibia Implant Set (01.133.214, 01.133.414)

LCP®, Stainless Steel and Titanium (continued)

## 3.5 mm LCP Proximal Tibia Plate

Stainless Steel	Titanium	Holes	Length	Detail
239.940S	439.940S	10	159 mm	Right
239.941S	439.941S	10	159 mm	Left
239.942S	439.942S	12	185 mm	Right
239.943S	439.943S	12	185 mm	Left
239.944S	439.944S	14	211 mm	Right
239.945S	439.945S	14	211 mm	Left
239.946S	439.946S	16	237 mm	Right
239.947S	439.947S	16	237 mm	Left



## 3.5 mm LCP Medial Proximal Tibia Plate

Stainless Steel	Titanium	Holes	Length	Detail
239.960S	439.960S	10	171 mm	Right
239.961S	439.961S	10	171 mm	Left
239.962S	439.962S	12	197 mm	Right
239.963S	439.963S	12	197 mm	Left
239.964S	439.964S	14	223 mm	Right
239.965S	439.965S	14	223 mm	Left
239.966S	439.966S	16	249 mm	Right
239.967S	439.967S	16	249 mm	Left
239.968S	439.968S	18	275 mm	Right
239.969S	439.969S	18	275 mm	Left
239.970S	439.970S	20	301 mm	Right
239.971S	439.971S	20	301 mm	Left



## 3.5 mm LCP Proximal Tibia Plate Low Bend

Stainless Steel	Titanium	Holes	Length	Detail
02.124.212S	04.124.212S	10	154 mm	Right
02.124.213S	04.124.213S	10	154 mm	Left
02.124.216S	04.124.216S	12	180 mm	Right
02.124.217S	04.124.217S	12	180 mm	Left
02.124.220S	04.124.220S	14	206 mm	Right
02.124.221S	04.124.221S	14	206 mm	Left
02.124.224S	04.124.224S	16	232 mm	Right
02.124.225S	04.124.225S	16	232 mm	Left



# LCP Proximal Tibia Implant Set (01.133.214, 01.133.414)

LCP®, Stainless Steel and Titanium (continued)

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3.5 mm LCP Posteromedial Proximal Tibia Plate

Stainless Steel	Titanium	Holes	Length
02.120.706S	04.120.706S	6	131 mm
02.120.708S	04.120.708S	8	157 mm
02.120.710S	04.120.710S	10	183 mm





# VA LCP Distal Tibia Implant Set (01.133.215)

VA LCP®, Stainless Steel

## Graphic Case

60.133.108	Universal Small Fragment VA LCP Distal Tibia Anatomy Tray
60.133.109	Tray Lid 3/3 Width

## Implants

2.7 mm/3.5 mm VA LCP Medial Distal Tibia Plate

Stainless Steel	Holes	Length	Detail
02.118.002	4	112 mm	Right
02.118.003	4	112 mm	Left
02.118.004	6	142 mm	Right
02.118.005	6	142 mm	Left
02.118.006	8	172 mm	Right
02.118.007	8	172 mm	Left
02.118.008	10	202 mm	Right
02.118.009	10	202 mm	Left

2.7 mm/3.5 mm VA LCP Anterolateral Distal Tibia Plate

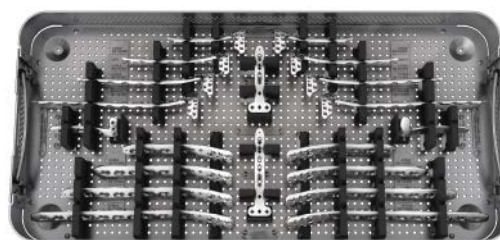
Stainless Steel	Holes	Length	Detail
02.118.202	4	82 mm	Right
02.118.203	4	82 mm	Left
02.118.204	6	112 mm	Right
02.118.205	6	112 mm	Left
02.118.206	8	142 mm	Right
02.118.207	8	142 mm	Left
02.118.208	10	172 mm	Right
02.118.209	10	172 mm	Left

2.7 mm/3.5 mm VA LCP Distal Tibia L-Plate

Stainless Steel	Holes	Length	Detail
02.118.302	4	72 mm	Right
02.118.303	4	72 mm	Left

2.7 mm/3.5 mm VA LCP Distal Tibia T-Plate

Stainless Steel	Holes	Length
02.118.306	4	72 mm
02.118.307	6	90 mm



# VA LCP Distal Tibia Implant Set (01.133.215)

## VA LCP®, Stainless Steel (continued)

Plates configured for 60.133.108 Universal Small Fragment VA LCP Distal Tibia Anatomy Tray. Affix "S" to the end of the part number to obtain part number for sterile packaged implant.

Additional plates are available from the plate families, but are not configured in the Universal Small Fragment VA LCP Distal Tibia Anatomy Tray. The plates below are available with the system in sterile package.

### 2.7 mm/3.5 mm VA LCP Medial Distal Tibia Plate

Stainless Steel	Holes	Length	Detail
02.118.010S	12	232 mm	Right
02.118.011S	12	232 mm	Left
02.118.012S	14	262 mm	Right
02.118.013S	14	262 mm	Left
02.118.014S	16	292 mm	Right
02.118.015S	16	292 mm	Left



### 2.7 mm/3.5 mm VA LCP Anterolateral Distal Tibia Plate

Stainless Steel	Holes	Length	Detail
02.118.210S	12	202 mm	Right
02.118.211S	12	202 mm	Left
02.118.212S	14	232 mm	Right
02.118.213S	14	232 mm	Left
02.118.214S	16	262 mm	Right
02.118.215S	16	262 mm	Left
02.118.216S	18	292 mm	Right
02.118.217S	18	292 mm	Left



### 2.7 mm/3.5 mm VA LCP Distal Tibia L-Plate

Stainless Steel	Holes	Length	Detail
02.118.304S	6	90 mm	Right
02.118.305S	6	90 mm	Left



# LCP Distal Tibia Implant Set (01.133.216, 01.133.416)

LCP®, Stainless Steel and Titanium

## Graphic Case

60.133.112	Universal Small Fragment LCP Distal Tibia Anatomy Tray
60.133.109	Tray Lid 3/3 Width

## Implants

### 3.5 mm LCP Anterolateral Distal Tibia Plate

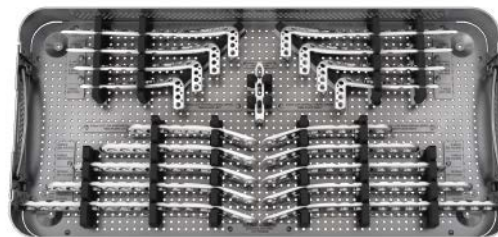
Stainless Steel	Titanium	Holes	Length	Detail
241.442	441.442	7	106 mm	Right
241.443	441.443	7	106 mm	Left
241.444	441.444	9	132 mm	Right
241.445	441.445	9	132 mm	Left
241.446	441.446	11	158 mm	Right
241.447	441.447	11	158 mm	Left
241.448	441.448	13	184 mm	Right
241.449	441.449	13	184 mm	Left

### 3.5 mm LCP Hook Plate

Stainless Steel	Titanium	Holes	Length
02.113.103	04.113.103	3	62 mm

### 3.5 mm LCP Medial Distal Tibia Plate Low Bend

Stainless Steel	Titanium	Holes	Length	Detail
02.112.514	04.112.514	6	135 mm	Right
02.112.515	04.112.515	6	135 mm	Left
02.112.518	04.112.518	8	161 mm	Right
02.112.519	04.112.519	8	161 mm	Left
02.112.522	04.112.522	10	187 mm	Right
02.112.523	04.112.523	10	187 mm	Left
02.112.526	04.112.526	12	213 mm	Right
02.112.527	04.112.527	12	213 mm	Left
02.112.530	04.112.530	14	239 mm	Right
02.112.531	04.112.531	14	239 mm	Left



Plates configured for 60.133.112 Universal Small Fragment LCP Distal Tibia Anatomy Tray. Affix "S" to the end of the part number to obtain part number for sterile packaged implant.

Additional plates are available from the plate families above, but are not configured in the Universal Small Fragment LCP Distal Tibia Anatomy Tray. The plates on page 59 are available with the system in sterile package.

# LCP Distal Tibia Implant Set (01.133.216, 01.133.416)

LCP®, Stainless Steel and Titanium (continued)

## 3.5 mm LCP Anterolateral Distal Tibia Plate

Stainless Steel	Titanium	Holes	Length	Detail
241.440S	441.440S	5	80 mm	Right
241.441S	441.441S	5	80 mm	Left
241.450S	441.450S	15	210 mm	Right
241.451S	441.451S	15	210 mm	Left
241.452S	441.452S	17	236 mm	Right
241.453S	441.453S	17	236 mm	Left
241.454S	441.454S	19	262 mm	Right
241.455S	441.455S	19	262 mm	Left
241.456S	441.456S	21	288 mm	Right
241.457S	441.457S	21	288 mm	Left



## 3.5 mm LCP Medial Distal Tibia Plate Low Bend

Stainless Steel	Titanium	Holes	Length	Detail
02.112.510S	n/a	4	109 mm	Right
02.112.511S	n/a	4	109 mm	Left



# VA LCP Distal Fibula Implant Set (01.133.217)

VA LCP®, Stainless Steel

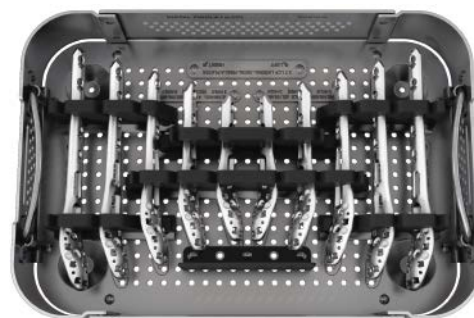
## Graphic Case

60.133.132	Universal Small Fragment VA LCP Distal Fibula Anatomy Tray
60.133.111	Tray Lid 1/3 Width

## Implants

2.7 mm/3.5 mm VA LCP Lateral Distal Fibula Plate

Stainless Steel	Holes	Length	Detail
02.118.400	3	79 mm	Right
02.118.401	3	79 mm	Left
02.118.402	4	92 mm	Right
02.118.403	4	92 mm	Left
02.118.404	5	105 mm	Right
02.118.405	5	105 mm	Left
02.118.406	6	118 mm	Right
02.118.407	6	118 mm	Left
02.118.408	7	131 mm	Right
02.118.409	7	131 mm	Left



Plates configured for 60.133.132 Universal Small Fragment VA LCP Distal Fibula Anatomy Tray. Affix "S" to the end of the part number to obtain part number for sterile packaged implant.

Additional plates are available from the plate families above, but are not configured in the Universal Small Fragment VA LCP Distal Fibula Anatomy Tray. The plates below are available with the system in sterile package.

2.7 mm/3.5 mm VA LCP Lateral Distal Fibula Plate

Stainless Steel	Holes	Length	Detail
02.118.410S	9	157 mm	Right
02.118.411S	9	157 mm	Left
02.118.412S	11	183 mm	Right
02.118.413S	11	183 mm	Left
02.118.414S	13	209 mm	Right
02.118.415S	13	209 mm	Left
02.118.416S	15	235 mm	Right
02.118.417S	15	235 mm	Left



# LCP Distal Fibula Implant Set (01.133.218, 01.133.418)

LCP®, Stainless Steel and Titanium

## Graphic Case

60.133.133	Universal Small Fragment LCP Distal Fibula Anatomy Tray
60.133.111	Tray Lid 1/3 Width

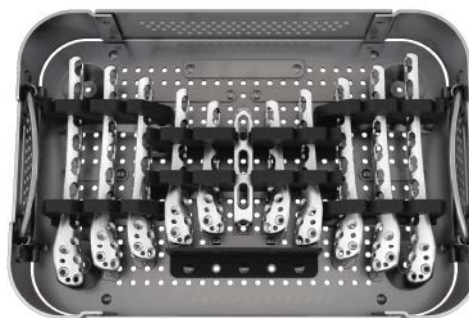
## Implants

2.7 mm/3.5 mm LCP Lateral Distal Fibula Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.112.136	04.112.136	3	73 mm	Right
02.112.137	04.112.137	3	73 mm	Left
02.112.138	04.112.138	4	86 mm	Right
02.112.139	04.112.139	4	86 mm	Left
02.112.140	04.112.140	5	99 mm	Right
02.112.141	04.112.141	5	99 mm	Left
02.112.142	04.112.142	6	112 mm	Right
02.112.143	04.112.143	6	112 mm	Left
02.112.144	04.112.144	7	125 mm	Right
02.112.145	04.112.145	7	125 mm	Left

3.5 mm LCP Hook Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.113.103	04.113.103	3	62 mm	



Plates configured for 60.133.133 Universal Small Fragment LCP Distal Fibula Anatomy Tray. Affix "S" to the end of the part number to obtain part number for sterile packaged implant.

Additional plates are available from the plate families above, but are not configured in the Universal Small Fragment LCP Distal Fibula Anatomy Tray. The plates below are available with the system in sterile package.

2.7 mm/3.5 mm LCP Lateral Distal Fibula Plate

Stainless Steel	Titanium	Holes	Length	Detail
02.112.148S	n/a	9	151 mm	Right
02.112.149S	n/a	9	151 mm	Left
02.112.152S	n/a	11	177 mm	Right
02.112.153S	n/a	11	177 mm	Left
02.112.156S	n/a	13	203 mm	Right
02.112.157S	n/a	13	203 mm	Left
02.112.160S	n/a	15	229 mm	Right
02.112.161S	n/a	15	229 mm	Left



# Instruments

292.12 1.25 mm Kirschner Wire with Trocar Point 150 mm



292.16 1.6 mm Kirschner Wire with Trocar Point 150 mm

292.20 2.0 mm Kirschner Wire with Trocar Point 150 mm

310.89 Countersink for 3.5 mm Cortex and 4.0 mm Cancellous Bone Screws



314.06 Holding Sleeve



314.116 StarDrive Screwdriver Shaft Quick Coupling/T15



314.467 StarDrive Screwdriver Shaft T8 105 mm



319.391 Sharp Hook-Small Taper



# Instruments (continued)

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323.023 1.6 mm Wire Sleeve



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398.40 Reduction Forceps with Points  
Narrow-Ratchet 132 mm



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398.41 Reduction Forceps with Points  
Broad-Ratchet



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399.19 Small Hohmann Retractor 8 mm  
Short Narrow Tip 160 mm



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399.49 Hohmann Retractor 15 mm 160 mm



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399.99 Reduction Forceps with Serrated  
Jaw-Ratchet 144 mm





# Instruments (continued)

511.773 Torque Limiting Attachment 1.5 Nm with Quick Coupling



511.776 Torque Limiting Attachment 0.3 Nm with Quick Coupling



03.110.002 Torque Limiting Attachment 1.2 Nm with Quick Coupling



03.127.016 2.5 Nm Torque Limiting Handle with Quick Coupling



03.133.001 3.5 mm Neutral Sleeve Adapter for 3.5 Non-Locking Drill Guide



03.133.002 3.5 mm Non-Locking Drill Guide



03.133.003 3.5 mm Variable Angle Drill Guide



# Instruments (continued)

03.133.004 2.8 mm Threaded Guide for 3.5 mm Screw, VA and LCP



03.133.005 2.7 mm Neutral Sleeve Adapter for 2.7 Non-Locking Drill Guide



03.133.006 2.7 mm Non-Locking Drill Guide



03.133.007 2.7 mm Variable Angle Drill Guide



03.133.008 2.0 mm Threaded Guide for 2.7 mm Screw, VA and LCP



03.133.080 2.7/3.5 mm Depth Gauge 0 to 60 mm



03.133.081 2.7/3.5 mm Depth Gauge 40 to 100 mm



# Instruments (continued)

03.133.100 2.0 mm Drill Bit/Quick Coupling  
110 mm, 30 mm Calibration



03.133.101 2.0 mm Drill Bit/Quick Coupling  
140 mm, 60 mm Calibration



03.133.102 2.5 mm Drill Bit/Quick Coupling  
135 mm, 45 mm Calibration



03.133.103 2.5 mm Drill Bit/Quick Coupling  
170 mm, 80 mm Calibration



03.133.104 2.5 mm Drill Bit/Quick Coupling  
240 mm, 150 mm Calibration



03.133.105 2.7 mm Drill Bit/Quick Coupling 125 mm



03.133.106 2.8 mm Drill Bit/Quick Coupling  
135 mm, 45 mm Calibration



03.133.107 2.8 mm Drill Bit/Quick Coupling  
170 mm, 80 mm Calibration



03.133.108 2.8 mm Drill Bit/Quick Coupling  
200 mm, 110 mm Calibration



# Instruments (continued)

03.133.109      3.5 mm Drill Bit/Quick Coupling 150 mm



03.133.110      3.5 mm Drill Bit/Quick Coupling 195 mm



03.133.150      Universal Screwdriver Handle



03.133.175      2.5 mm Hex Driver Shaft, Self-Retaining  
Length 100 mm with Quick Coupling



03.133.200      Plate Bending Iron Closed for  
2.7/3.5 mm Plates



03.133.201      Plate Bending Iron Open for  
2.7/3.5 mm Plates



03.133.202      Periosteal Elevator 6 mm Curved Blade



Drill bits are available in both non-sterile and sterile packaging. To determine part number for the sterile-packaged drill bit, affix "S" to the end of the part number.

## Sterile Packaged Instruments

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### Drill Bits

Part Number	Description
03.133.100S	2.0 mm Drill Bit/Quick Coupling, Length 110 mm, 30 mm Calibration, Sterile
03.133.101S	2.0 mm Drill Bit/Quick Coupling, Length 140 mm, 60 mm Calibration, Sterile
03.133.102S	2.5 mm Drill Bit/Quick Coupling, Length 135 mm, 45 mm Calibration, Sterile
03.133.103S	2.5 mm Drill Bit/Quick Coupling, Length 170 mm, 80 mm Calibration, Sterile
03.133.104S	2.5 mm Drill Bit/Quick Coupling, Length 240 mm, 150 mm Calibration, Sterile
03.133.105S	2.7 mm Drill Bit/Quick Coupling, Length 125 mm, Sterile
03.133.106S	2.8 mm Drill Bit/Quick Coupling, Length 135 mm, 45 mm Calibration, Sterile
03.133.107S	2.8 mm Drill Bit/Quick Coupling, Length 170 mm, 80 mm Calibration, Sterile
03.133.108S	2.8 mm Drill Bit/Quick Coupling, Length 200 mm, 110 mm Calibration, Sterile
03.133.109S	3.5 mm Drill Bit/Quick Coupling, Length 150 mm, Sterile
03.133.110S	3.5 mm Drill Bit/Quick Coupling, Length 195 mm, Sterile

# Supported Plating Systems

Reference to Surgical Technique Guides for existing plating systems supported by the Universal Small Fragment System.

## General

Literature	Literature Number
3.5 mm Curved Locking Compression Plates (LCP) Technique Guide	DSUSTRM10161164
3.5 mm LCP Hook Plate Technique Guide	DSUSTRM09161097
Small Fragment Locking Compression Plate (LCP) System Technique Guide	DSUSTRM10161165(1)
Modular Mini Fragment LCP – 2.7 mm Plating System Technique Guide	J7545E
LCP Metaphyseal Plate Technique Guide	J5218E

## Shoulder/Clavicle

Literature	Literature Number
2.7 mm/3.5 mm VA LCP Anterior Clavicle Plate Technique Guide	DSUSTRM10140270(1)
3.5 mm LCP Superior and Superior Anterior Clavicle Plates Technique Guide	J8647
3.5 mm LCP Clavicle Hook Plates Technique Guide	DSUSTRM10161127
3.5 mm LCP Periarticular Proximal Humerus Plate Technique Guide	DSUSTRM10161134
3.5 mm LCP Proximal Humerus Plates Technique Guide	DSUSTRM10161133

## Elbow

Literature	Literature Number
3.5 mm LCP Distal Humerus Plates Technique Guide	DSUSTRM10161132
3.5 mm LCP Extra-articular Distal Humerus Plate Technique Guide	DSUSTRM10161131
3.5 mm LCP Hook Plate Technique Guide	DSUSTRM09161097
3.5 mm LCP Olecranon Plates Technique Guide	DSUSTRM09161096
2.7 mm/3.5 mm VA LCP Elbow System Technique Guide	DSUSTRM10161130

## Proximal Tibia

Literature	Literature Number
3.5 mm LCP Medial Proximal Tibia Plates Technique Guide	DSUSTRM10161148
3.5 mm LCP Posteromedial Proximal Tibia Plate Technique Guide	J8804
3.5 mm LCP Proximal Tibia Plates Technique Guide	DSUSTRM10161147
3.5 mm VA LCP Proximal Tibia Plate System Technique Guide	DSUSTRM10161144

## Distal Tibia and Fibula

Literature	Literature Number
2.7 mm/3.5 mm VA LCP Ankle Trauma System Technique Guide	DSUSTRM10161154
2.7 mm/3.5 mm LCP Distal Fibula Plates Technique Guide	DSUSTRM10161123
3.5 mm LCP Anterolateral Distal Tibia Plates Technique Guide	DSUSTRM10161159
3.5 mm LCP Distal Tibia T-Plates Technique Guide	DSUSTRM10161160
3.5 mm LCP Hook Plate Technique Guide	DSUSTRM09161097
3.5 mm LCP Medial Distal Tibia Plates Technique Guide	DSUSTRM10161155
3.5 mm LCP Low Bend Medial Distal Tibia Plates Technique Guide	DSUSTRM10161161

# Instrument Cross Reference

## Compatibility List

Previously designed instruments are compatible with instruments in the Universal Small Fragment System and may be used with the system. Below is a listing of instruments evaluated as compatible with new instruments in the Universal Small Fragment System.

### Drill Bits

Diameter	P/N	Overall Length (mm)	Shaft Length (mm)	Universal Small Fragment P/N	Overall Length (mm)	Shaft Length (mm)	Calibrated Length (mm)
2.0 mm	310.19	100	75	03.133.100	110	85	30
	310.21	125	100	03.133.101	140	115	60
	310.534	110	85				
	315.19	100	75				
	315.21	125	100				
	323.062	140	115				
	03.119.001	100	70				
	03.119.014	125	95				
	SD310.210	200	175				
2.5 mm	310.23	180	155	03.133.102	135	110	45
	310.25	110	85	03.133.103	170	145	80
	315.23	180	155	03.133.104	240	215	150
	315.25	110	85				
	03.119.002	110	80				
	SD310.230	180	155				
2.7 mm	310.26	100	75	03.133.105	125	100	—
	310.28	125	100				
	315.26	110	75				
	315.28	125	100				
	03.119.015	100	70				
2.8 mm	310.288	165	135	03.133.106	135	110	45
	03.119.029	165	135	03.133.107	170	145	80
				03.133.108	200	175	110
3.5 mm	310.35	110	85	03.133.109	150	125	—
	310.37	195	170	03.133.110	195	170	—
	315.05	225	200				
	03.119.003	100	80				

**Precaution: Calibrated drill bits not listed above are not designed to measure with the Universal Small Fragment Drill Guides and may lead to inaccurate depth readings.**

# Instrument Cross Reference

## Compatibility List (continued)

### Depth Gauge

Existing P/N	Universal Small Fragment P/N	Universal Small Fragment Description
319.01	03.133.080	2.7/3.5 mm Depth Gauge 0 to 60 mm
319.09	03.133.081	2.7/3.5 mm Depth Gauge 40 to 100 mm

### Drill Guides

Existing US P/N	Universal Small Fragment P/N	Universal Small Fragment Description
323.26	03.133.005	2.7 mm Neutral Sleeve Adapter for 2.7 Non-locking Drill Guide
	03.133.006	2.7 mm Non-locking Drill Guide
312.24	03.133.006	2.7 mm Non-locking Drill Guide
323.36	03.133.001	3.5 mm Neutral Sleeve Adapter for 3.5 Non-locking Drill Guide
	03.133.002	3.5 mm Non-locking Drill Guide
03.211.004	03.133.008	2.0 mm Threaded Guide for 2.7 mm Screw, VA and LCP
312.648	03.133.004	2.8 mm Threaded Guide for 3.5 mm Screw, VA and LCP
03.127.001	03.133.004	2.8 mm Threaded Guide for 3.5 mm Screw, VA and LCP
03.211.002	03.133.007	2.7 mm Variable Angle Drill Guide
	03.133.008	2.0 mm Threaded Guide for 2.7 mm Screw, VA and LCP
03.211.003	03.133.007	2.7 mm Variable Angle Drill Guide
03.127.002	03.133.003	3.5 mm Variable Angle Drill Guide
	03.133.004	2.8 mm Threaded Guide for 3.5 mm Screw, VA and LCP
03.127.004	03.133.003	3.5 mm Variable Angle Drill Guide
03.127.005		
03.127.006		



# Instrument Cross Reference

## Compatibility List (continued)

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### Plate Bending Irons

Existing P/N	Universal Small Fragment P/N	Universal Small Fragment Description
329.04	03.133.200	Plate Bending Iron Closed for 2.7/3.5 mm Plates
	03.133.201	Plate Bending Iron Open for 2.7/3.5 mm Plates
329.05	03.133.200	Plate Bending Iron Closed for 2.7/3.5 mm Plates
	03.133.201	Plate Bending Iron Open for 2.7/3.5 mm Plates
329.07	03.133.200	Plate Bending Iron Closed for 2.7/3.5 mm Plates
	03.133.201	Plate Bending Iron Open for 2.7/3.5 mm Plates

### Screwdrivers

Existing P/N	Universal Small Fragment P/N	Universal Small Fragment Description
314.03	03.133.175	2.5 mm Hex Driver Shaft, Self-Retaining Length 100 mm with Quick Coupling
311.43	03.133.150	Universal Screwdriver Handle
314.02	03.133.175	2.5 mm Hex Driver Shaft, Self-Retaining Length 100 mm with Quick Coupling
	03.133.150	Universal Screwdriver Handle
314.115	314.116	StarDrive Screwdriver T15
	03.133.150	Universal Screwdriver Handle

### Periosteal Elevator

Existing P/N	Universal Small Fragment P/N	Universal Small Fragment Description
399.36	03.133.202	Periosteal Elevator 6 mm Curved Blade

# Additional Resources

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## **Surgical Approach and Fracture Management Technique**

AO Surgery Reference (<https://www2.aofoundation.org/wps/portal/surgery>)

DePuy Synthes Insitute (<http://www.depuysynthesinstitute.com/>)

## **Technique Guides**

DePuy Synthes US ([www.depuysynthes.com/hcp/trauma](http://www.depuysynthes.com/hcp/trauma))

## **Cleaning, Disinfecting, and Sterilization Information**

DePuy Synthes US Processing Reusable Medical Devices

[https://www.e-ifu.com.elfu# GP3030](https://www.e-ifu.com.elfu#GP3030)

## **Other Resources**

DePuy Synthes App (iPhone)

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