

Item Catalogue

NUPCO CODE: 4229660310900 | SN: 345

NUPCO ITEM DESCRIPTION

SET, COMPLETE INSTRUMENTATION STAINLESS STEEL SCREW CANNULATED PARTIAL THREADED 3.5MM TO 4.5 MM, WITH NECESSARY CASE AND RELATED DRILL BITS AND TAPS

VENDOR PRODUCT DESCRIPTION

Acumed 4.0 mm and OsteoMed ExtremiFix 4.5 mm instrumentation for partial-threaded cannulated screws

SKU CODES INCLUDED FOR THIS NUPCO CODE

- 80-3962
- 80-3963
- 80-2081
- 80-3956
- 80-3964
- 80-3961
- 80-2038
- 80-2039
- 80-3960
- 80-2042
- 80-2246
- 80-3957
- 80-2075
- 80-2074
- 80-0600
- 80-0398
- 80-3923
- 80-3924
- 80-3925
- 316-1803
- 316-1805
- 316-1601
- 316-1602
- 316-1603
- 316-1604
- 316-1612
- 316-1614
- 316-1610
- 316-1615
- 320-2800

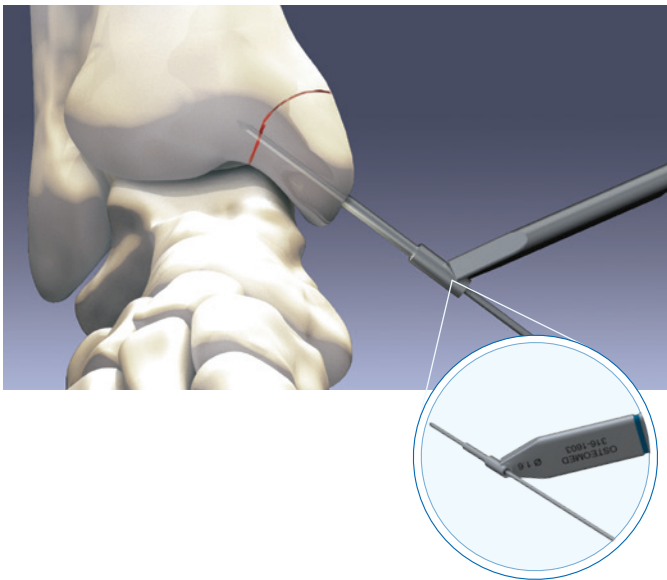
Surgical Technique

Medial Malleolar Fracture

1. Insert Guide Wire

Place the guide wire/drill guide through a stab incision and insert the guide wire into the bone to the appropriate depth. Use image intensification to verify the guide wire placement. Proper position of guide wire is critical for screw placement.

When placing more than one screw, ensure that subsequent guide wires do not interfere with other implants.



4.5 mm Screws

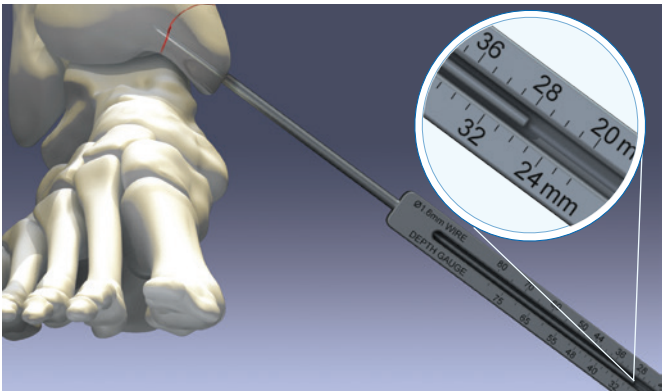
Part Number	Description
316-1601	1.6 mm x 180 mm Smooth Guide Wire
316-1602	1.6 mm x 180 mm Threaded Guide Wire
316-1603	1.6 mm/3.1 mm Guide Wire/Drill Guide

5.5 mm Screws

316-1601	1.6 mm x 180 mm Smooth Guide Wire
316-1602	1.6 mm x 180 mm Threaded Guide Wire
316-1618	1.6 mm/3.7 mm Guide Wire/Drill Guide

2. Screw Length Measurement

Place depth gauge over the guide wire until the depth gauge tip is positioned directly against the bone. The proximal end of the guide wire will indicate the screw length required. Subtract any anticipated interfragmentary compression resulting from screw insertion.



4.5 mm Screws and 5.5 mm Screws

316-1601	1.6 mm x 180 mm Smooth Guide Wire
316-1602	1.6 mm x 180 mm Threaded Guide Wire
316-1614	4.5/5.5 mm Depth Gauge

Surgical Technique

Medial Malleolar Fracture (Cont.)

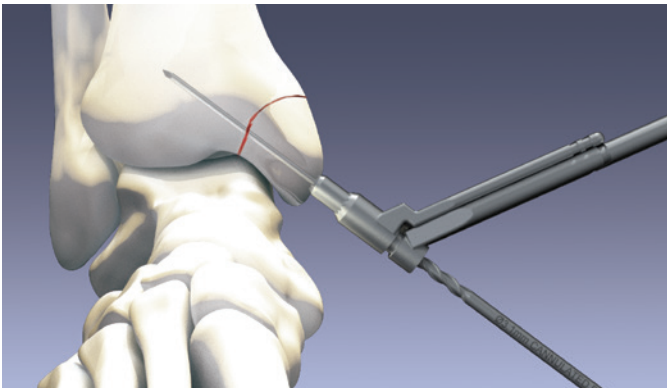
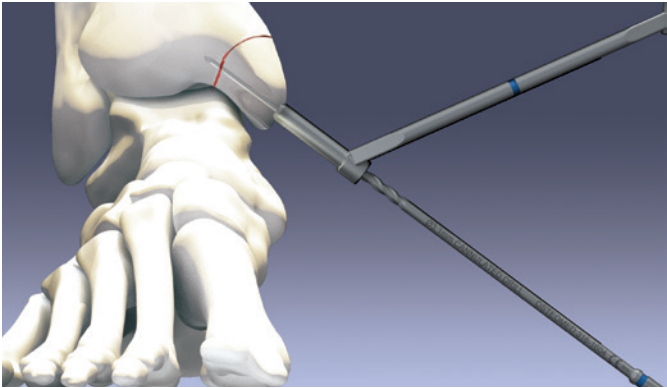
3. Pre-drilling and Tapping (Optional)

The ExtremiFix Midsize I Large Cannulated Screws are self-drilling and self-tapping. In dense cortical bone, pre-drilling and tapping is recommended.

Place the guide wire/drill guide over the guide wire and drill to the desired depth. Drilling should not go beyond the tip of the guide wire.

When tapping, insert the cannulated bone tap over the guide wire and manually rotate the bone tap until desired depth is reached.

Note: The proximal cortex drill sleeve has been designed to nest with the guide wire/drill guide. Contersinking can be performed with or without the proximal cortex drill sleeve. If using the proximal cortex drill sleeve, assemble the proximal cortex sleeve and guide wire/drill guide prior to drilling.



***Optional** - Proximal cortex drill sleeve and guide wire/drill guide assembly.*

4.5 mm Screws

Part Number	Description
316-1603	1.6 mm/3.1 mm Guide Wire/Drill Guide
316-1604	3.1 mm Cannulated Drill, Standard AO Quick Release
316-1612	4.5 mm Cannulated Tap, Standard AO Quick Release
316-1621	4.5/5.5 mm Proximal Cortex Drill Sleeve

5.5 mm Screws

316-1618	1.6 mm/3.7 mm Guide Wire/Drill Guide
316-1605	3.7 mm Cannulated Drill, Standard AO Quick Release
316-1613	5.5 mm Cannulated Tap, Standard AO Quick Release
316-1621	4.5/5.5 mm Proximal Cortex Drill Sleeve

Surgical Technique

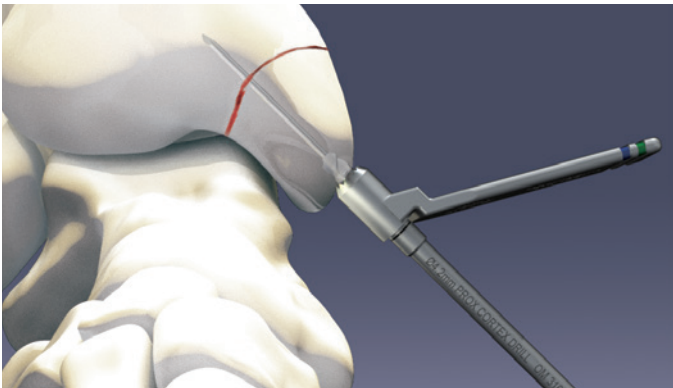
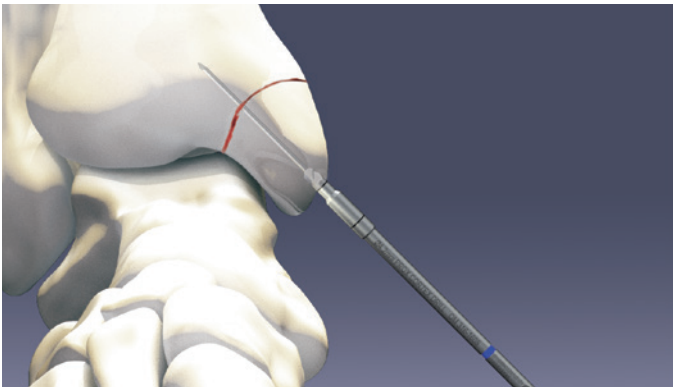
Medial Malleolar Fracture (Cont.)

4. Countersinking

Countersinks are available for both headed and headless screws. Countersinking should be performed manually. Place the cannulated countersink or proximal cortex drill over the guide wire to create a recess on the proximal cortex.

Note: Overall screw length is measured from the top of the screw head to the tip of the screw. The head height should be considered when countersinking.

Note: Refer to page 4 regarding countersink options for headed and headless screws and technical details.



***Optional** - Proximal cortex drill used with the Proximal cortex drill sleeve.*

4.5 mm and 5.5 mm Headless Screws

Part Number	Description
316-1608	4.2 mm Cannulated Proximal Cortex Drill, Standard AO Quick Release
316-1609	5.1 mm Cannulated Proximal Cortex Drill, Standard AO Quick Release
316-1621	4.5/5.5 mm Proximal Cortex Drill Sleeve

4.5 mm and 5.5 mm Headed Screws

316-1610	4.5/5.5 mm Cannulated Countersink, Standard AO Quick Release
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Surgical Technique

Medial Malleolar Fracture (Cont.)

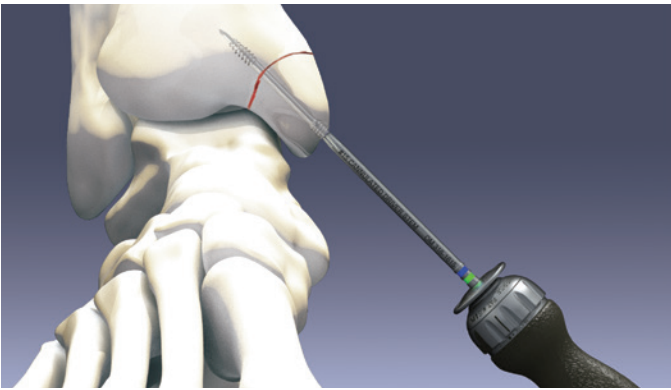
5. Screw Placement

Select the appropriate screw length and insert screw over the guide wire using the cannulated driver stem and ratcheting handle. Advance the screw head until fully seated with the surface of the bone.

When inserting headless screws in an oblique orientation, it may be necessary to drive the screw further to prevent screw head prominence.

When placing headed screws, a washer may be used to provide additional contact area with the bone. Washers are laser marked to indicate which side must be in contact with the screw head.

Final screw placement should be checked using image intensification. Repeat as necessary for additional screws.



4.5 mm Screws and 5.5 mm Screws

Part Number	Description
316-1615	#15 Self-Retaining Cannulated Driver, Standard AO Quick Release
320-2800	Ratcheting Driver Handle

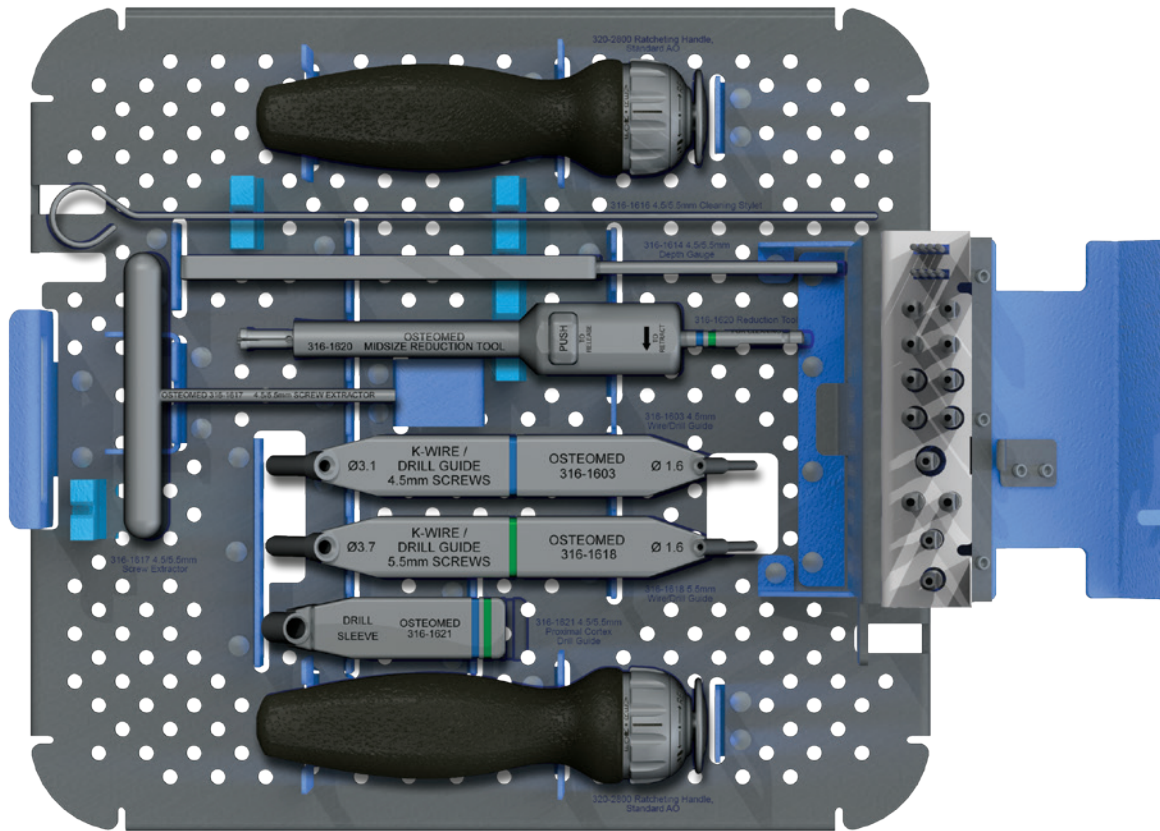
REDUCTION TOOL - Headless screws can be inserted using the system’s reduction tool. Refer to pages 5-6 for reduction tool instructions.

Midsized Reduction Tool

316-1620	4.5/5.5 mm Headless Compression Screw Reduction Tool
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Ordering Information

Midsize Instrumentation



316-1805 ExtremiFix Midsize, 4.5mm/5.5mm ORIF Instrument Tray (Top View)



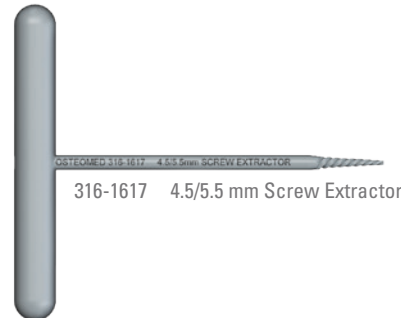
316-1603 1.6 mm/3.1 mm Guide Wire and Drill Guide



316-1618 1.6 mm/3.7 mm Guide Wire and Drill Guide



316-1621 4.5/5.5 mm Proximal Cortex Drill Sleeve



316-1617 4.5/5.5 mm Screw Extractor



316-1614 4.5/5.5 mm Depth Gauge



316-1620 4.5/5.5 mm Headless Compression Screw Reduction Tool



320-2800 Ratcheting Driver Handle, Standard AO

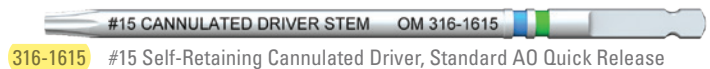
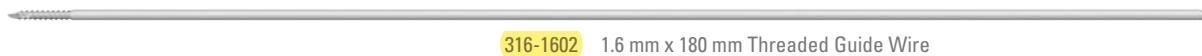
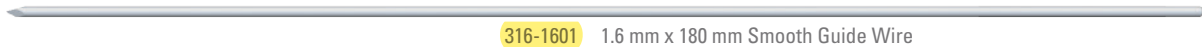
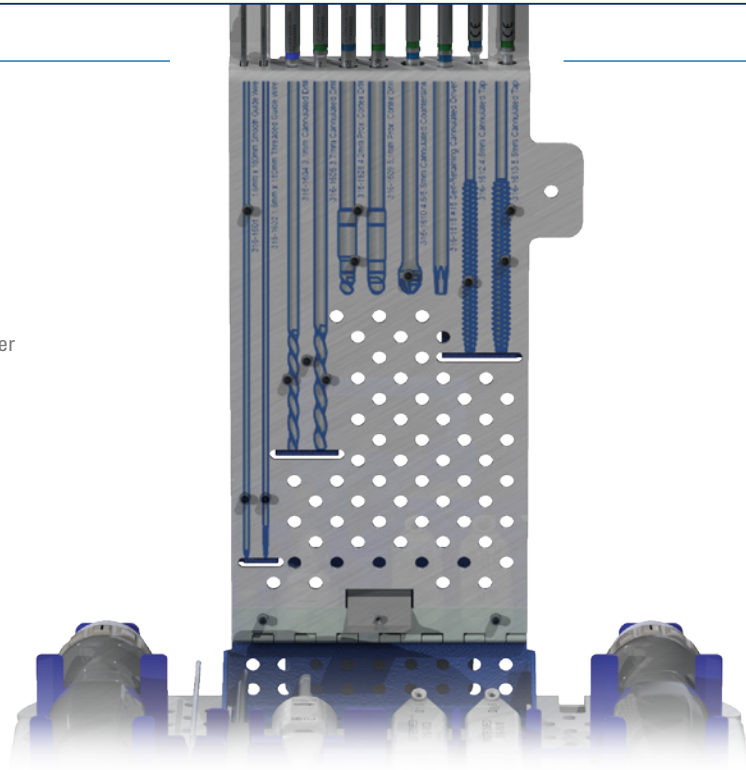


316-1616 4.5/5.5 mm Cleaning Stylet

Ordering Information

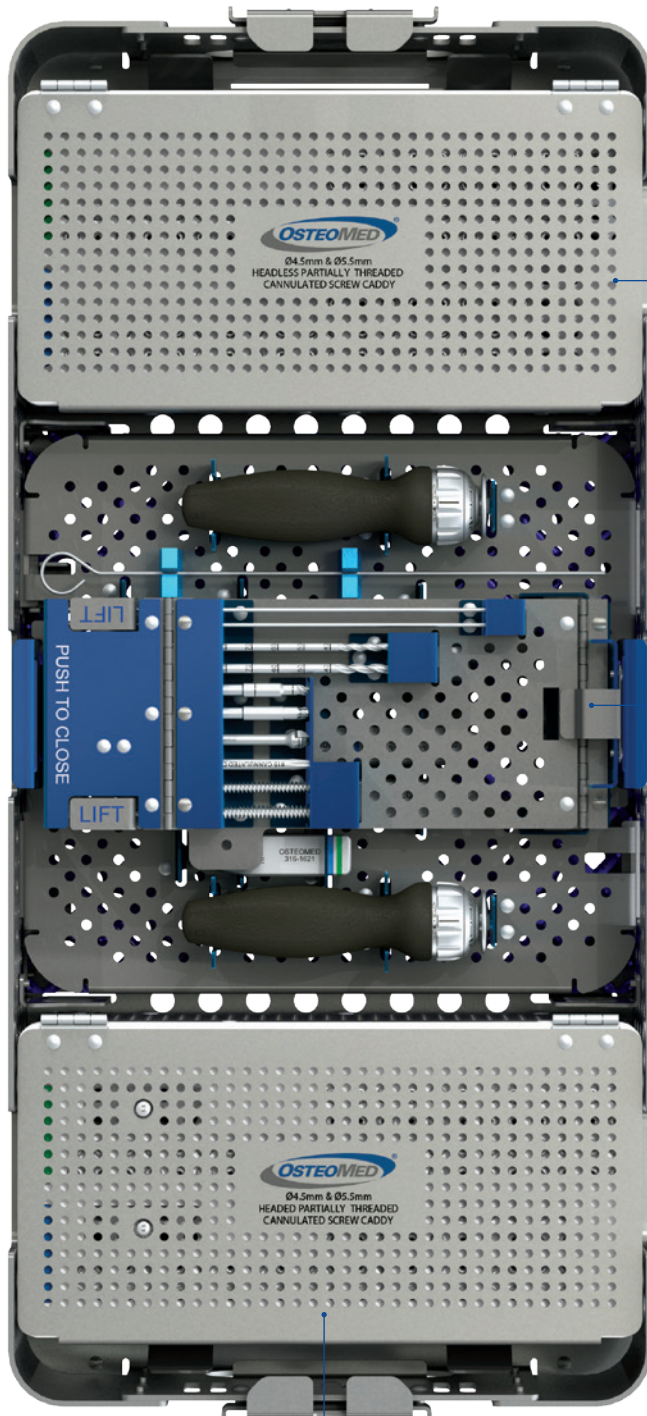
Midsize Instrumentation

316-1805 ExtremiFix Midsize, 4.5mm/5.5mm Drill and Driver Organizer (Open View)



System Tray

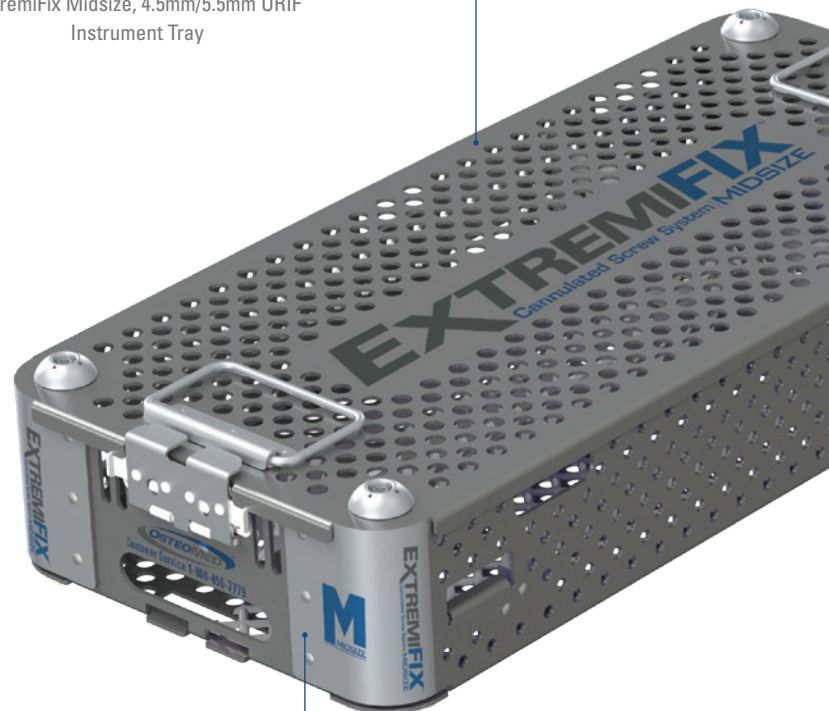
Midsize Instrument Tray



316-1804
ExtremiFix Midsize, 4.5 mm/5.5 mm
Headless Screw Module

316-1805
ExtremiFix Midsize, 4.5mm/5.5mm ORIF
Instrument Tray

316-1803
ExtremiFix Midsize, 4.5 mm/5.5 mm
Headed Screw Module



316-1801
ExtremiFix Midsize, 4.5mm/5.5
mm Screw System Tray Lid

316-1802
ExtremiFix Midsize, 4.5mm/5.5
mm Screw System Tray Base

System Features [continued]

4.0 mm Cannulated Screw Instrument Specifications

	1.3 mm Threaded Guide Wire, 150 mm (80-2038)	Offered for provisional fixation and over-the-wire screw placement
	1.3 mm Smooth Guide Wire, 150 mm (80-2039)	Offered for provisional fixation and over-the-wire screw placement
	2.5 mm Short Cannulated Hex Driver (80-3956)	Laser marked for use with the modular cannula system
	4.0 mm Cannulated Tap (80-2081)	Provided for patients with hard bone and can be used according to surgeon preference
	5.3 mm Cannulated Countersink (80-2042)	The shorter length countersink is designed to improve control compared with competitors' longer devices, and features a textured portion for improved grip over competitive smooth-shaft countersinks when used by hand.
	2.5 mm Screw Driver Sleeve (80-3957)	Designed for retrieval of 4.0 mm screw, and retention on screw driver, from caddy to over-the-wire placement

Instrument Overview

Flip-up Caddy Instruments



1.3 mm Threaded Guide Wire, 150 mm
(80-2038)



1.3 mm Smooth Guide Wire, 150 mm
(80-2039)



1.3 mm Wire Depth Gauge
(80-3960)



2.7 mm Cannulated Drill, Quick Connect
(80-2075)



Cannula Handle
(80-3961)



1.3 mm Wire Cannula
(80-3962)



2.7 mm Drill Cannula
(80-3963)



4.0 mm Screw Cannula
(80-3964)



2.5 mm Short Cannulated Hex Driver
(80-3956)



5.3 mm Cannulated Countersink
(80-2042)



4.0 mm Cannulated Tap
(80-2081)



1.25 mm Cleaning Stylet
(80-2246)



Large Screw Holding Forceps
(MS-45210)



2.5 mm Screw Driver Sleeve
(80-3957)



1.3/2.7 mm Double Drill Sleeve
(80-2079)



1.3 mm Parallel Guide Base
(80-3778)



1.3 mm Parallel Guide Drop-in Cannula
(80-3781)



Small Ratchet Handle with Quick Release Connection
(80-0398)



2.5 mm Solid Hex Driver, Quick Connect
(80-2074)



2.5 mm Easyout, Quick Release
(80-0600)

4.0 mm Cannulated Screw System Surgical Technique



Introduction

The self-drilling, self-tapping flutes of the 4.0 mm Cannulated Screws make pre-drilling and pre-tapping unnecessary in most cases. The set includes a 2.7 mm Cannulated Drill, Quick Connect (80-2075) and a 4.0 mm Cannulated Tap (80-2081) for use in dense bone if needed.

Two options are included in the system to retrieve the 4.0 mm screws from the screw caddy.

1. Large Screw Holding Forceps (MS-45210)
2. 2.5 mm Screw Driver Sleeve (80-3957), designed for use with the 2.5 mm Short Cannulated Hex Driver (80-3956)

Three optional cannula instrument systems are offered for soft tissue protection and for use where clinically appropriate.

1. 1.3/2.7 mm Double Drill Sleeve (80-2079)
2. A modular locking tissue protection system with Cannula Handle (80-3961), 1.3 mm Wire Cannula (80-3962), 2.7 mm Drill Cannula (80-3963), and 4.0 mm Screw Cannula (80-3964)
3. 1.3 mm Parallel Guide Base (80-3778) with 1.3 mm Parallel Guide Drop-in Cannula (80-3781) where two parallel wires are needed

Note: The TripleTwist™ Cannula System is not designed to be used in conjunction with the 1.3 mm Parallel Guide Drop-in Cannula offered in this system.

Warning: Take care to avoid damage to surrounding vital tissues.

Note: Cannula systems are not compatible with washer usage.



2.7 mm
Cannulated Drill,
Quick Connect
(80-2075)



4.0 mm
Cannulated Tap
(80-2081)



Large Screw
Holding Forceps
(MS-45210)



2.5 mm Screw
Driver Sleeve
(80-3957)



2.5 mm Short
Cannulated Hex
Driver
(80-3956)



1.3/2.7 mm Double
Drill Sleeve
(80-2079)



Cannula Handle
(80-3961)



1.3 mm Wire
Cannula
(80-3962)



2.7 mm Drill
Cannula
(80-3963)



4.0 mm Screw
Cannula
(80-3964)



1.3 mm Parallel
Guide Base
(80-3778)



1.3 mm Parallel
Guide Drop-in
Cannula
(80-3781)

Medial Malleolar Fracture Surgical Technique [continued]

Figure 3

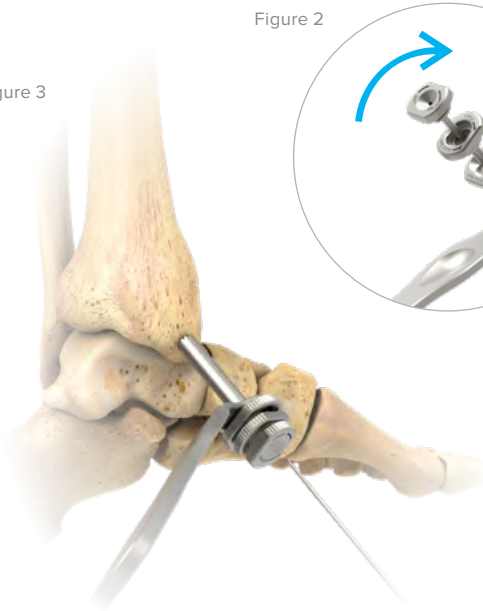


Figure 2



3 Guide Wire Placement

Caution: Take care to avoid damage to surrounding vital tissues. The 1.3 mm Parallel Guide Drop-in Cannula (80-3781) is not designed for use with the TripleTwist™ Cannula System.

Several cannula options are offered for soft tissue protection and for use where clinically appropriate.

Note: Cannulas are not compatible with washer usage.

Single and double guide wire placement are as follows:

Single Guide Wire Placement

- ▶ Optional: 1.3/2.7 mm Double Drill Sleeve (80-2079)
- ▶ Optional: Modular locking tissue protection system includes a Cannula Handle (80-3961), 4.0 mm Screw Cannula (80-3964), 2.7 mm Drill Cannula (80-3963), and 1.3 mm Wire Cannula (80-3962)

Loading Instructions for optional modular locking cannula system:

Select the appropriate cannulas to be used with the system. Lock the largest selected cannula into the handle by twisting clockwise. One by one, insert and lock sequential cannulas into the system (Figure 2).

Note: Ensure all cannulas are locked in place prior to use.

Note: The TripleTwist™ Cannula System is not designed to be used in conjunction with the 1.3 mm Parallel Guide Drop-in Cannula offered in this system.

Insert the 1.3 mm Threaded Guide Wire, 150 mm (80-2038) or the 1.3 mm Smooth Guide Wire, 150 mm (80-2039) through the cannula to the appropriate depth so that it is perpendicular to the fracture line and occupies the future position of the lag screw (Figure 3). Evaluate guide wire placement under fluoroscopy.



1.3/2.7 mm Double Drill Sleeve (80-2079)



Cannula Handle (80-3961)



4.0 mm Screw Cannula (80-3964)



2.7 mm Drill Cannula (80-3963)



1.3 mm Wire Cannula (80-3962)



1.3 mm Threaded Guide Wire, 150 mm (80-2038)



1.3 mm Smooth Guide Wire, 150 mm (80-2039)

Extra- and Intra-articular Fractures of the Distal Humerus [continued]

Figure 2

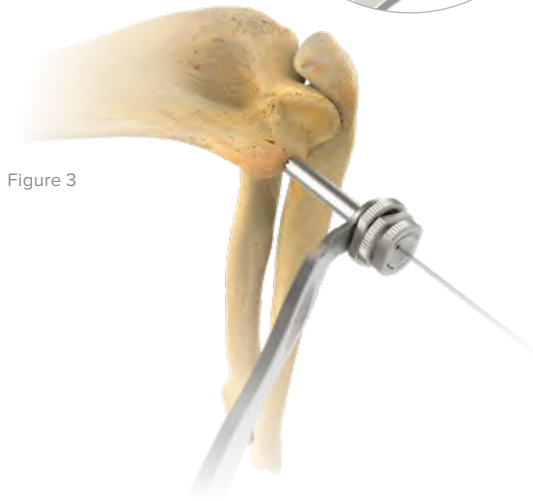
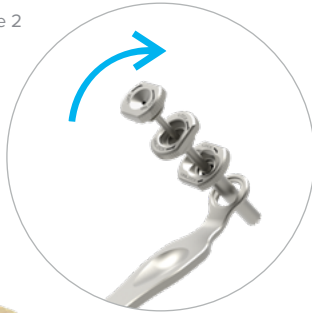


Figure 3

3 Guide Wire Placement

Caution: Take care to avoid damage to surrounding vital tissues. The 1.3 mm Parallel Guide Drop-in Cannula (80-3781) is not designed for use with the TripleTwist™ Cannula System.

Several cannula options are offered for soft tissue protection and for use where clinically appropriate.

Note: Cannulas are not compatible with washer usage.

Single Guide Wire Placement

- Optional: 1.3/2.7 mm Double Drill Sleeve (80-2079)
- Optional: The modular locking tissue protection system includes a Cannula Handle (80-3961), 4.0 mm Screw Cannula (80-3964), 2.7 mm Drill Cannula (80-3963) and 1.3 mm Wire Cannula (80-3962).

Loading Instructions for optional modular, locking cannula system:

Select the appropriate cannulas to be used with the system. Lock the largest selected cannula into the handle by twisting clockwise. One by one, insert and lock sequential cannulas into the system (Figure 2).

Note: Ensure all cannulas are locked in place prior to use.

Note: The TripleTwist™ Cannula System is not designed to be used in conjunction with the 1.3 mm Parallel Guide Drop-in Cannula offered in this system.

Insert the 1.3 mm Threaded Guide Wire, 150 mm (80-2038) or the 1.3 mm Smooth Guide Wire, 150 mm (80-2039) through the cannula to the appropriate depth so that it is perpendicular to the fracture line and occupies the future position of the lag screw (Figure 3). Evaluate the guide wire placement under fluoroscopy.



1.3/2.7 mm Double Drill Sleeve (80-2079)



Cannula Handle (80-3961)



4.0 mm Screw Cannula (80-3964)



2.7 mm Drill Cannula (80-3963)



1.3 mm Wire Cannula (80-3962)



1.3 mm Threaded Guide Wire, 150 mm (80-2038)



1.3 mm Smooth Guide Wire, 150 mm (80-2039)

Ordering Information

Tray Components

4.0 mm Cannulated Screw Instruments

1	Large Screw Holding Forceps	MS-45210	7	Cannula Handle	80-3961
2	2.5 mm Screw Driver Sleeve	80-3957	8	1.3 mm Parallel Guide Base	80-3778
3	1.3/2.7 mm Double Drill Sleeve	80-2079	9	1.3 mm Parallel Guide Drop-in Cannula	80-3781
4	4.0 mm Screw Cannula	80-3964	10	1.25 mm Cleaning Stylet	80-2246
5	2.7 mm Drill Cannula	80-3963	11	Small Ratchet Handle with Quick Release Connection	80-0398
6	1.3 mm Wire Cannula	80-3962	12	4.0 mm Cannulated Screw Instrument Tray 1	80-3923

Ordering Information [continued]

Tray Components

4.0 mm Cannulated Screw Instruments		
1	1.3 mm Threaded Guide Wire, 150 mm	80-2038
2	1.3 mm Smooth Guide Wire, 150 mm	80-2039
3	1.3 mm Wire Depth Gauge	80-3960
4	2.7 mm Cannulated Drill, Quick Connect	80-2075
5	2.5 mm Short Cannulated Hex Driver	80-3956
6	5.3 mm Cannulated Countersink	80-2042
7	4.0 mm Cannulated Tap	80-2081
8	2.5 mm Solid Hex Driver, Quick Connect	80-2074
9	2.5 mm Easyout, Quick Release	80-0600
10	4.0 mm Cannulated Screw Instrument Tray 1	80-3923