

**7.0MM
CANNULATED
SCREWS**

Titanium and Stainless Steel



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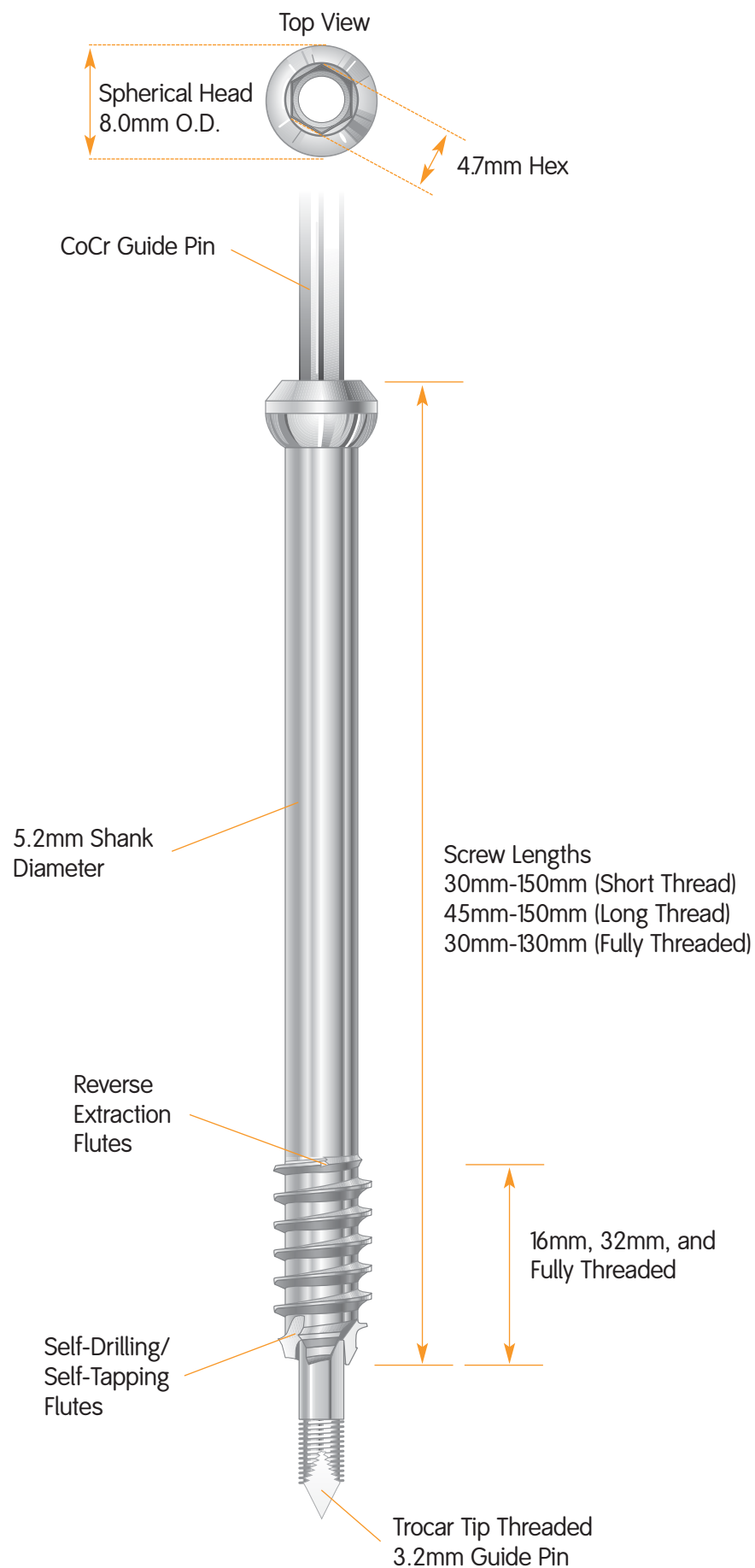
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Nota Bene: This technique description herein is made available to the healthcare professional to illustrate the author's suggested treatment for the uncomplicated procedure. In the final analysis, the preferred treatment is that which addresses the needs of the patient.

WARNING: This device is not approved for screw attachment or fixation to the posterior elements (pedicles) of the cervical, thoracic, or lumbar spine.

Design Features

7.0mm Cannulated Screw
Stainless Steel and Titanium



Surgical Technique

Insert Stacked Sleeves Through Soft Tissues

The percutaneous stacked sleeve assembly is inserted through the soft tissues and placed against the cortex. All of the surgical steps can be performed through the stacked sleeves, which include the 8.0mm Screw/ Tap Sleeve, 5.2mm Drill Sleeve, 3.2mm Guide Pin Sleeve, and 3.2mm Trocar (Figure 1).

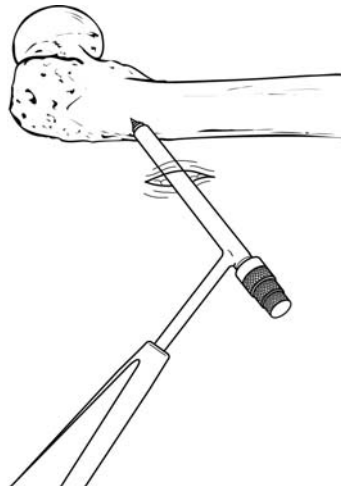


Figure 1

Insert Guide Pin

The Trocar is removed. The 3.2mm Guide Pin is then inserted through the Guide Pin Sleeve and advanced into bone (Figure 2).

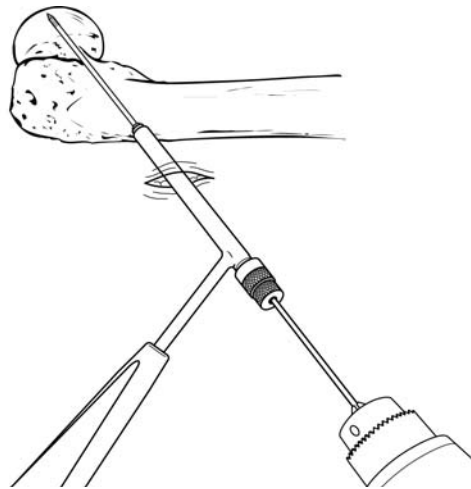


Figure 2

Insert Parallel Pins

The stacked sleeve assembly is removed. The Double-Barrel Pin Guide is placed over the initial guide pin and firmly seated against the lateral cortex for placement of a second guide pin. Additional pins can be inserted by referencing off of any previously placed pin (Figure 3).

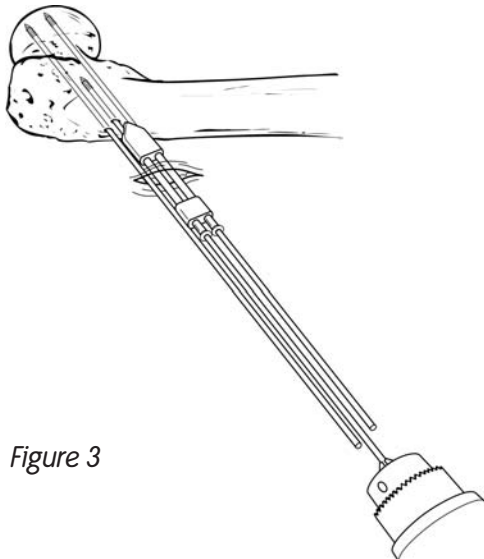


Figure 3

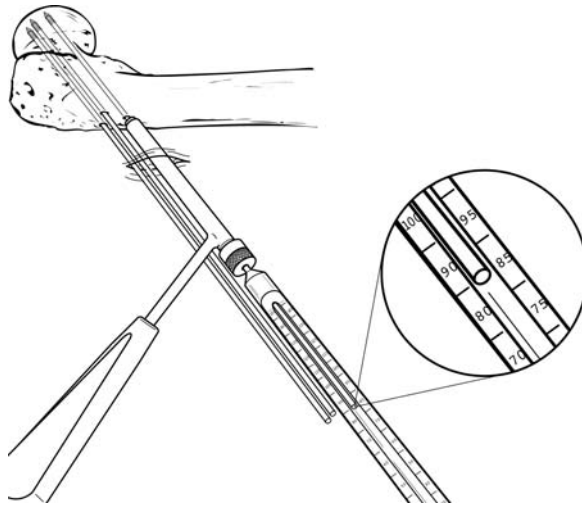


Figure 4

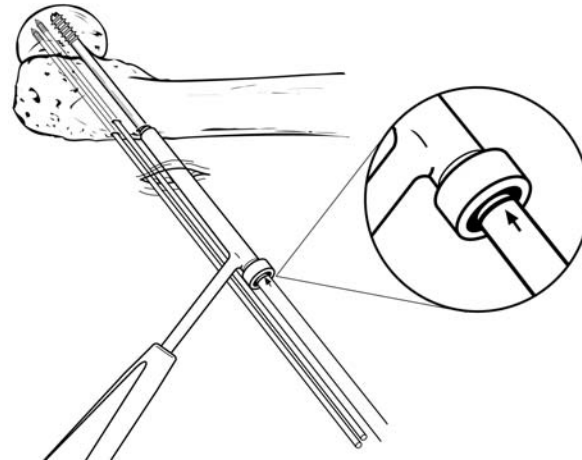


Figure 5

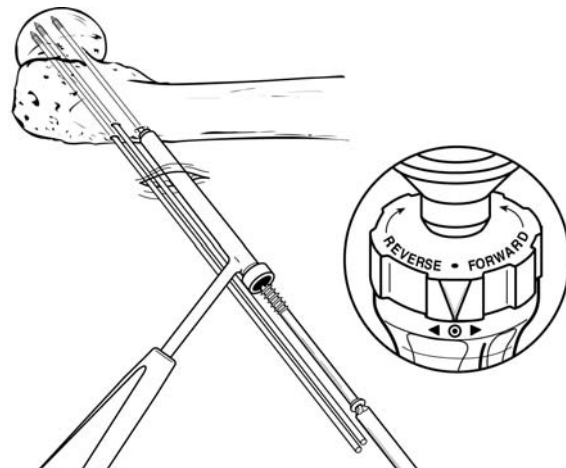


Figure 6

Measure

The 8.0mm Screw/Tap Sleeve with 5.2mm Drill Sleeve is placed over the guide pin. The Direct Measuring Gauge is placed over the guide pin and through the 5.2mm Drill Sleeve. The gauge is positioned directly against bone for accurate measurement. Screw length measurement is read from the back of the guide pin.

Note: The Measuring Gauge is calibrated to display the length from the cortex to the tip of the guide pin. If you plan to bring the Reamer and screw just to the beginning of the threads on the guide pin, then subtract 10mm from the length taken from the Measuring Gauge. If the screw head is to be countersunk, subtract an additional 5mm from the length of the screw (*Figure 4*).

Insert Screw

The 5.2mm Drill Sleeve is removed. Using the Captive Hex Driver, the appropriate length screw is placed over the guide pin, through the 8.0mm Screw/Tap Sleeve, and into bone. The Captive Hex Driver can be utilized with the Power Adaptor(s), the Quick-Release Teardrop Handle (*Figure 5*), or the Ratcheted Instrument Handle (*Figure 6*). The dial on the Ratcheted Instrument Handle can be positioned for three different modes: no ratchet, ratchet forward, or ratchet reverse.

Note: The screw is fully seated in the bone when the ring beneath the arrow on the Captive Hex Driver is aligned with the back of the 8.0mm Screw/Tap Sleeve.

Surgical Technique Options

Drilling and Tapping

In dense bone, predrilling and pretapping are recommended to facilitate screw insertion. Drilling 10mm short of the screw measurement prevents the reamer from engaging the threaded tip of the guide pin thus avoiding accidental removal of the guide pin. The 5.2mm Cannulated Drill and 7.0mm Cannulated Tap are used with the Power Adaptor and instrument handle, respectively. Drilling is performed through the 5.2mm Drill Sleeve; tapping is performed through the 8.0mm Screw/Tap Sleeve (*Figure 7*).

Note: The calibrations on the drill and the tap are read directly from the back of their respective sleeves.

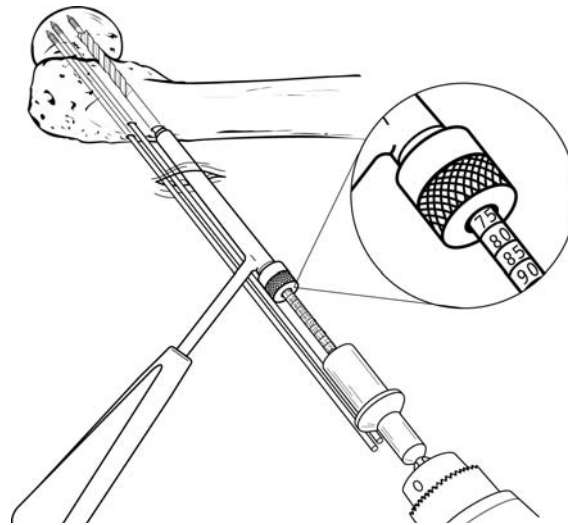


Figure 7

Multiple Parallel Pin Guide

The Multiple Parallel Pin Guide can be used to place parallel pins through a larger incision. When adjacent holes are used, the spacing of the holes in the instrument prevents the screw heads from overlapping. Use of nonadjacent holes will prevent washers from overlapping (*Figure 8*).

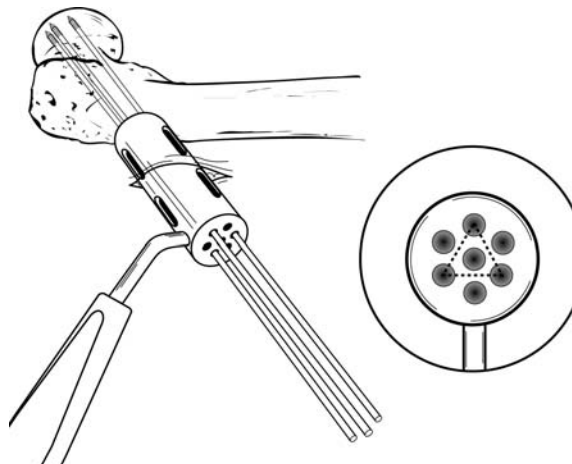


Figure 8

Washer Sleeve

The Washer Sleeve is provided so that screws with washers can be placed percutaneously. The Washer Sleeve slips over the outside of the 8.0mm Screw/Tap Sleeve and is seated against bone (*Figure 9*).

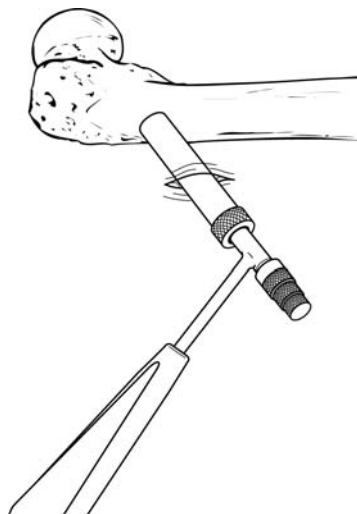


Figure 9

Screw Extraction

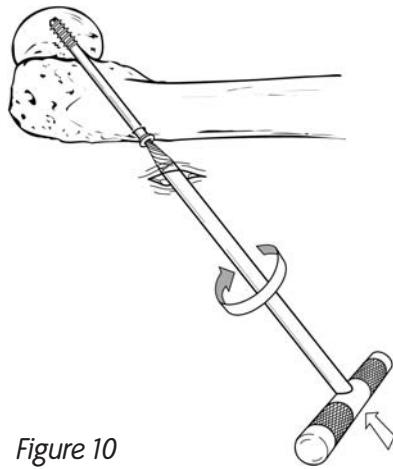
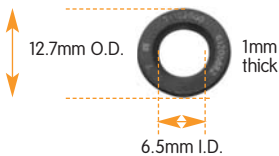


Figure 10

Screw Extraction

Screw extraction should be performed with the Reverse Twist Hex, 4.7mm. However, if complications arise during screw extraction, the screw can be removed with the Screw Extractor. The extractor is tapped lightly into the cannulation of the screw and turned counterclockwise to facilitate removal.

Implants



7.0mm Cannulated Screws

Titanium (Sterile Packaged)

Cat. No.	Screw Length	Thread Length
7110-7030	30mm	16mm
7110-7035	35mm	16mm
7110-7040	40mm	16mm
7110-7045	45mm	16mm
7110-7050	50mm	16mm
7110-7055	55mm	16mm
7110-7060	60mm	16mm
7110-7065	65mm	16mm
7110-7070	70mm	16mm
7110-7075	75mm	16mm
7110-7080	80mm	16mm
7110-7085	85mm	16mm
7110-7090	90mm	16mm
7110-7095	95mm	16mm
7110-7100	100mm	16mm
7110-7105	105mm	16mm
7110-7110	110mm	16mm
7110-7115	115mm	16mm
7110-7120	120mm	16mm
7110-7125	125mm	16mm
7110-7130	130mm	16mm
7110-7135	135mm	16mm
7110-7140	140mm	16mm
7110-7145	145mm	16mm
7110-7150	150mm	16mm
7110-8045	45mm	32mm
7110-8050	50mm	32mm
7110-8055	55mm	32mm
7110-8060	60mm	32mm
7110-8065	65mm	32mm
7110-8070	70mm	32mm
7110-8075	75mm	32mm
7110-8080	80mm	32mm
7110-8085	85mm	32mm
7110-8090	90mm	32mm
7110-8095	95mm	32mm
7110-8100	100mm	32mm
7110-8105	105mm	32mm
7110-8110	110mm	32mm
7110-8115	115mm	32mm
7110-8120	120mm	32mm
7110-8125	125mm	32mm
7110-8130	130mm	32mm
7110-8135	135mm	32mm
7110-8140	140mm	32mm
7110-8145	145mm	32mm
7110-8150	150mm	32mm

7.0 mm Cannulated Screws

Titanium — Fully Threaded (Sterile Packaged)

Cat. No.	Thread Length
7110-9030	30mm
7110-9035	35mm
7110-9040	40mm
7110-9045	45mm
7110-9050	50mm
7110-9055	55mm
7110-9060	60mm
7110-9065	65mm
7110-9070	70mm
7110-9075	75mm
7110-9080	80mm
7110-9085	85mm
7110-9090	90mm
7110-9095	95mm
7110-9100	100mm
7110-9105	105mm
7110-9110	110mm
7110-9115	115mm
7110-9120	120mm
7110-9125	125mm
7110-9130	130mm

7.0mm Washer

Titanium (Sterile Packaged)

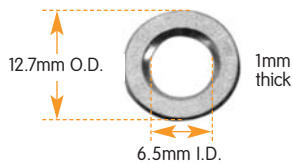
Cat. No. 7110-2000

7.0mm Cannulated Screws

Stainless Steel (Sterile Packaged)



16mm
Thread Length
Shown



7.0mm Cannulated Screws

Stainless Steel — Fully Threaded
(Sterile Packaged)

Cat. No.	Screw Length	Thread Length
7112-7030	30mm	16mm
7112-7035	35mm	16mm
7112-7040	40mm	16mm
7112-7045	45mm	16mm
7112-7050	50mm	16mm
7112-7055	55mm	16mm
7112-7060	60mm	16mm
7112-7065	65mm	16mm
7112-7070	70mm	16mm
7112-7075	75mm	16mm
7112-7080	80mm	16mm
7112-7085	85mm	16mm
7112-7090	90mm	16mm
7112-7095	95mm	16mm
7112-7100	100mm	16mm
7112-7105	105mm	16mm
7112-7110	110mm	16mm
7112-7115	115mm	16mm
7112-7120	120mm	16mm
7112-7125	125mm	16mm
7112-7130	130mm	16mm
7112-7135	135mm	16mm
7112-7140	140mm	16mm
7112-7145	145mm	16mm
7112-7150	150mm	16mm
7112-8045	45mm	32mm
7112-8050	50mm	32mm
7112-8055	55mm	32mm
7112-8060	60mm	32mm
7112-8065	65mm	32mm
7112-8070	70mm	32mm
7112-8075	75mm	32mm
7112-8080	80mm	32mm
7112-8085	85mm	32mm
7112-8090	90mm	32mm
7112-8095	95mm	32mm
7112-8100	100mm	32mm
7112-8105	105mm	32mm
7112-8110	110mm	32mm
7112-8115	115mm	32mm
7112-8120	120mm	32mm
7112-8125	125mm	32mm
7112-8130	130mm	32mm
7112-8135	135mm	32mm
7112-8140	140mm	32mm
7112-8145	145mm	32mm
7112-8150	150mm	32mm

Cat. No.	Thread Length
7112-9030	30mm
7112-9035	35mm
7112-9040	40mm
7112-9045	45mm
7112-9050	50mm
7112-9055	55mm
7112-9060	60mm
7112-9065	65mm
7112-9070	70mm
7112-9075	75mm
7112-9080	80mm
7112-9085	85mm
7112-9090	90mm
7112-9095	95mm
7112-9100	100mm
7112-9105	105mm
7112-9110	110mm
7112-9115	115mm
7112-9120	120mm
7112-9125	125mm
7112-9130	130mm

7.0mm Washer

Stainless Steel
(Sterile Packaged)

Cat. No. 12-1680

Cannulated Screw Sets

7.0mm Cannulated Screw TI Implant Set

Set No. 7110-0008

	Part No.	Description	Set Qty.
16mm Thread Length	7110-7030	30mm	1
	7110-7035	35mm	1
	7110-7040	40mm	1
	7110-7045	45mm	1
	7110-7050	50mm	2
	7110-7055	55mm	2
	7110-7060	60mm	2
	7110-7065	65mm	2
	7110-7070	70mm	2
	7110-7075	75mm	2
	7110-7080	80mm	4
	7110-7085	85mm	4
	7110-7090	90mm	4
	7110-7095	95mm	4
	7110-7100	100mm	4
	7110-7105	105mm	2
	7110-7110	110mm	2
	7110-7115	115mm	1
	7110-7120	120mm	1
	7110-7125	125mm	1
	7110-7130	130mm	1
32mm Thread Length	7110-8045	45mm	1
	7110-8050	50mm	1
	7110-8055	55mm	1
	7110-8060	60mm	1
	7110-8065	65mm	2
	7110-8070	70mm	2
	7110-8075	75mm	2
	7110-8080	80mm	2
	7110-8085	85mm	2
	7110-8090	90mm	2
	7110-8095	95mm	2
	7110-8100	100mm	2
	7110-8105	105mm	2
	7110-8110	110mm	1
	7110-8115	115mm	1
	7110-8120	120mm	1
	7110-8125	125mm	1
	7110-8130	130mm	1
7.0mm Washer	7110-2000		6
Sterilization Tray	71119115		1

7.0mm Cannulated Screw Instrument Set

Set No. 7111-0002

Part No.	Description	Set Qty.
7111-0500	3.2mm X 300mm Tip Threaded Guide Pin	6
7111-9001	Scr/Tap Slv w/ Handle - 8.0mm Inner Dia	1
7111-9005	Washer Sleeve, 12.7mm Inner Dia	1
7111-9011	Ratcheted Instrument Handle	1
7111-9014	Screw Extractor for Cannulated Screws	1
7111-9100	Multiple Pin Guide	1
7111-9101	Double-Barrel Pin Guide w/ 3.2mm Cannulation	1
7111-9102	Drill Sleeve, 5.2mm Inner Dia	1
7111-9103	Guide Pin Sleeve, 3.2mm Inner Dia	1
7111-9104	3.2mm Trocar	1
7111-9105	7.0mm Cannulated Screw Measuring Gauge	1
7111-9106	5.2mm Cannulated Drill	1
7111-9107	7.0mm Cannulated Tap	1
7111-9108	Captive Hex 4.7mm Cannulated	1
7111-9109	Cannulated Countersink w/ Handle 3.2mm	1
7111-9110	Reverse Twisted Hex 4.7mm, Solid	1
7111-9111	3.2mm X 304mm Stylet	1
7111-9112	7.0mm Cannulated Screw Instrument Tray	1
7111-9114	Clean Brush-7.0mm Cannulated Screw	1
7117-0043	Sharp Hook	1

Cannulated Screw Sets

7.0mm Cannulated Screw Instrument Set

Set No. 7112-2003

	Part No.	Description	Set Qty.
16mm Thread Length	7112-7030	30mm	1
	7112-7035	35mm	1
	7112-7040	40mm	1
	7112-7045	45mm	1
	7112-7050	50mm	2
	7112-7055	55mm	2
	7112-7060	60mm	2
	7112-7065	65mm	2
	7112-7070	70mm	2
	7112-7075	75mm	2
	7112-7080	80mm	4
	7112-7085	85mm	4
	7112-7090	90mm	4
	7112-7095	95mm	4
	7112-7100	100mm	4
	7112-7105	105mm	2
	7112-7110	110mm	2
	7112-7115	115mm	1
	7112-7120	120mm	1
	7112-7125	125mm	1
	7112-7130	130mm	1
32mm Thread Length	7112-8045	45mm	1
	7112-8050	50mm	1
	7112-8055	55mm	1
	7112-8060	60mm	1
	7112-8065	65mm	2
	7112-8070	70mm	2
	7112-8075	75mm	2
	7112-8080	80mm	2
	7112-8085	85mm	2
	7112-8090	90mm	2
	7112-8095	95mm	2
	7112-8100	100mm	2
	7112-8105	105mm	2
	7112-8110	110mm	1
	7112-8115	115mm	1
	7112-8120	120mm	1
	7112-8125	125mm	1
	7112-8130	130mm	1
6.5mm Washer	12-1680		6
Sterilization Implant Tray	7111-9113		1

Catalog



3.2mm x 300mm Guide Pin,
(CoCr), Sterile

Cat. No. 7111-0500



3.2mm x 300mm Guide Pin,
(Stainless Steel), Sterile

Cat. No. 7111-1000

(Not Shown)



Multiple Parallel Pin Guide

Cat. No. 7111-9100



Double-Barrel Pin Guide, 3.2mm

Cat. No. 7111-9101



5.2mm Drill Sleeve

Cat. No. 7111-9102



3.2mm Guide Pin Sleeve

Cat. No. 7111-9103



3.2mm Trocar

Cat. No. 7111-9104



Washer Sleeve, 12.7mm ID

Cat. No. 7111-9005



Direct Measuring Gauge

Cat. No. 7111-9105



5.2mm Cannulated Drill

Cat. No. 7111-9106

Catalog



7.0mm Cannulated Tap

Cat. No. 7111-9107



Captive Hex Driver, 4.7mm

Cat. No. 7111-9109



Cannulated Countersink, 3.2mm

Cat. No. 7111-9011



Racheted Instrument Handle

Cat. No. 7111-9011



Quick-Release Teardrop Handle

Cat. No. 7111-0081



Reverse Twist Hex, 4.7mm

Cat. No. 7111-9110



Screw Extractor

Cat. No. 7111-9014



Sharp Hook

Cat. No. 7117-0043

Catalog



3.2mm Stylet

Cat. No. 7111-9111



Cleaning Brush

Cat. No. 7111-9114



Hall/Jacobs Male, Small Hudson Female, Power Adaptor

Cat. No. 7111-9012



Trinkle Male, Small Hudson Female, Power Adaptor

Cat. No. 7111-9020



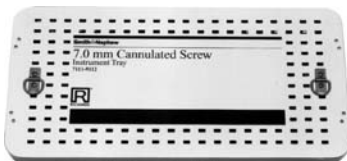
Large Hudson Male, Small Hudson Female, Power Adaptor

Cat. No. 7111-9021



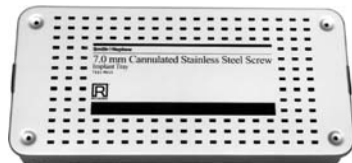
Small AO Male, Small Hudson Female, Power Adaptor

Cat. No. 7111-9022



Instrument Tray

Cat. No. 7111-9112



Implant Tray, Stainless Steel

Cat. No. 7111-9113



Implant Tray, Titanium

Cat. No. 7111-9115

Orthopaedics

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