

ENDOSKELETON™ TAS
NANOLOCK™
SURFACE TECHNOLOGY
INTERBODY FUSION
DEVICES



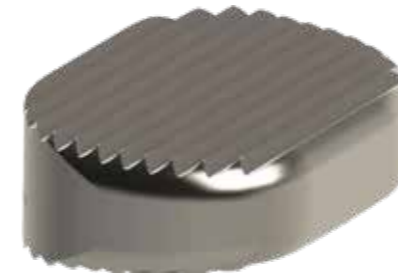
Surgical Technique

TABLE OF CONTENTS

Endoskeleton™ TAS nanoLOCK™ Surface Technology Interbody Fusion Devices

- 3** Instrument Overview
- 6** Directions for Use
- 6** Preoperative Planning
- 6** Patient Positioning
- 6** Surgical Approach
- 6** Disc Space Preparation
- 7** Trialing
- 7** Implant Graft Packing
- 7** Implant-Inserter Assembly
- 8** Implantation
- 8** Placement of Implant Screws
- 9** Additional Bone Graft
- 9** Closure
- 9** Removal and Revision
- 10** Ordering Information
- 20** Graft Volume Information
- 25** Important Product Information

INSTRUMENT OVERVIEW



Rasp
7° - 2106-7XXX
12° - 2112-7XXX



Rasp
16° - 2316-7XXX
20° - 2320-7XXX
24° - 2324-7XXX



Trial
7° - 2106-9XXX
12° - 2112-9XXX



Threaded Holder
2106-1003



Slap Hammer
2106-1002



Implant Holder Locking
2300-1015



TAS Hyperlordotic Two-Up
Anterolateral Inserter
2300-1310

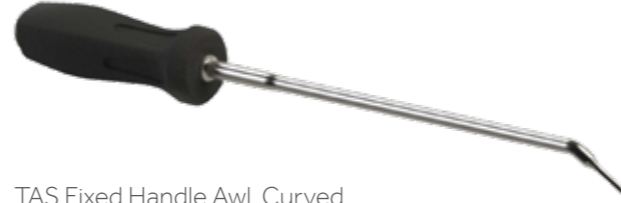


TAS Hyperlordotic One-Up
Anterolateral Inserter
2300-1311

INSTRUMENT OVERVIEW



TAS Fixed Handle Awl, Straight
2300-1110



TAS Fixed Handle Awl, Curved
2300-1120



Screwdriver T-Handle Non-ratchet
Square Drive 1/4"
2300-1039



Screwdriver Handle Non-ratchet
Square Drive 1/4"
2300-1038



TAS Square Drive Ratcheting
2300-1046



Awl Guide Assembly
2300-1036



Bone Awl, Universal Joint Assembly
2300-1035



Hex Driver Universal Joint Assembly
2300-1034

INSTRUMENT OVERVIEW



Swivel Hex Driver with Lead
2300-1302



Impactor
2106-1000



Implant Remover
2300-1012

DIRECTIONS FOR USE

The Endoskeleton™ TAS or Endoskeleton TAS Hyperlordotic Interbody Fusion Devices should only be implanted by surgeons who are experienced in the use of such implants and the required specialized spinal surgery techniques.

PREOPERATIVE PLANNING

Prior to surgery the operating room staff must inspect the surgical trays to be sure there is an adequate supply of each of the implant sizes, and each of the instruments. The surgical trays containing the nonsterile implants, trial spacers and instruments must be cleaned and sterilized prior to use. All components must be inspected to verify there are no defects or flaws in any of the components. A/P and lateral x-rays must be reviewed by the implanting surgeon to verify that the patient's vertebral body dimensions are of sufficient size to accommodate the Endoskeleton TAS or Endoskeleton TAS Hyperlordotic implant sizes.

PATIENT POSITIONING

The patient is brought to the operating room, transferred to the surgical table in the supine position and put to sleep under general anesthesia. An endotracheal tube is placed to facilitate breathing during surgery. A pad is placed under the lumbar spine to maintain lordosis. Arms are crossed over the chest to facilitate fluoroscopy. The surgical area is then cleaned and sterilely prepped and draped.

SURGICAL APPROACH

A vascular or general surgeon begins the procedure through a low transverse or paramedian incision. Access to the appropriate disc space is performed in the surgeon's usual manner. A pin is placed in the disc space and fluoroscopy is taken to confirm access of the correct level and confirm the position of the midline.

DISC SPACE PREPARATION

The annulus is identified and a rectangular portion of annulus is incised and removed. Perform a discectomy and expose bleeding punctate bone of the superior endplate of the inferior vertebra and the inferior endplate of the superior vertebra (Figure 1). Care should be taken to remove only cartilaginous endplate, and to leave the bony endplate intact. A rasp is available that is designed to match the footprint of the implant (Figure 2). Hyperlordotic implants (i.e., $\geq 16^\circ$) will utilize rasps for sizing.



Figure 1

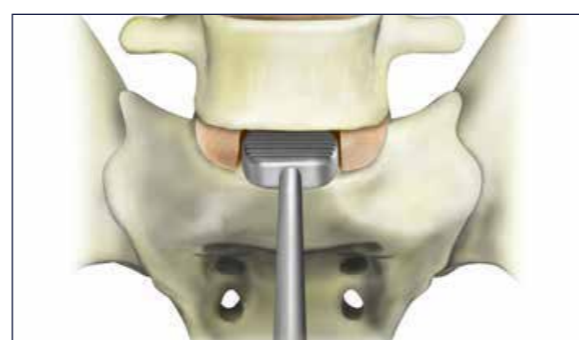


Figure 2

TRIALING

Using the implant trials, establish the correct height and footprint of the implant to be used such that the final position of the implant should ideally rest on the apophyseal ring and the anterior edge of the implant should barely be countersunk past the anterior edge of the vertebral bodies. The implant chosen is recommended to be 1 mm taller than the last trial used. Hyperlordotic implants (i.e., $\geq 16^\circ$) will utilize rasps for sizing.

IMPLANT GRAFT PACKING

Fill the implant with either autograft bone, allograft bone comprised of cancellous and/or corticocancellous bone, demineralized allograft with bone marrow aspirate, or a combination thereof (Figure 3).

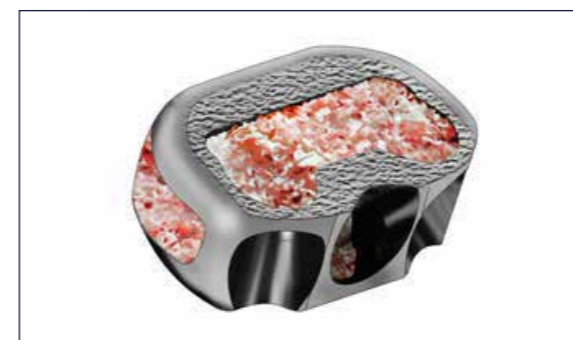


Figure 3

IMPLANT-INSERTER ASSEMBLY

To assemble the implant to the implant holder, match the male end of the holder to the female portion of the implant while connecting the latch to the corresponding slot on the inside of the implant (Figures 4 & 5).

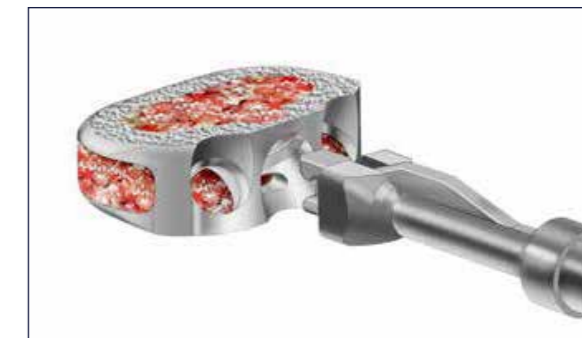


Figure 4



Figure 5

Note: Care should be taken not to attach the inserter to the implant with the latch on the implant's surface.

IMPLANTATION

Place the implant loaded with bone graft into the disc space (Figure 6). Detach the holder once the trailing edge of the implant is inside the disc space. Implant/screw orientation is at the discretion of the physician in that the implant has no "up" or "down" orientation.

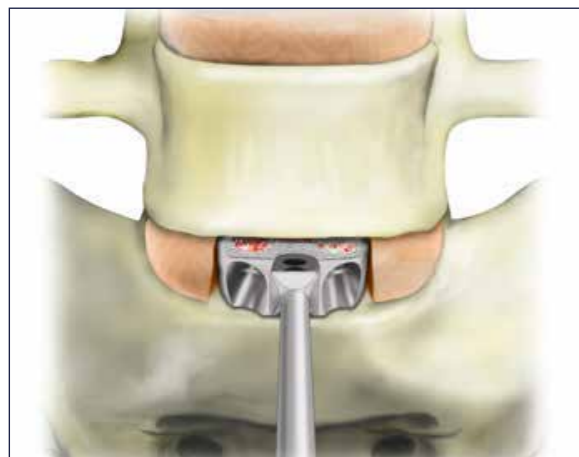


Figure 6

If necessary, adjust the position of the implant using the impactor instrument. The final position of the implant should ideally rest on the apophyseal ring and the anterior edge of the implant should barely be countersunk past the anterior edge of the vertebral bodies as shown in Figure 7.

Note: It is important to verify proper positioning of the implant via fluoroscopy prior to screw placement in case any adjustments need to be made.

Note: Attempting to pivot the implant with the implant inserter within the disc space may damage the instrument.



Figure 7

PLACEMENT OF IMPLANT SCREWS

Remove a small portion of the anterior vertebral body in order to gain full access to the implant screw sockets (Figure 8). Retain removed bone fragments for replacement after the screws are seated if desired.

Perforate the endplate using the awl instrument of choice for correct subsequent screw alignment. The alignment guide should be used to aid in selecting the appropriate trajectory and to center the perforation within the implant body's screw holes. A/P and lateral x-rays should be used to confirm desired trajectories (Figure 9). Assemble screws to the driver instrument of choice and insert screws into the perforated sites (Figure 10). Seat screws fully into implant body and verify proper position using fluoroscopy (Figure 11). Replacement of bone segments harvested for screw access can be replaced at this time if desired.

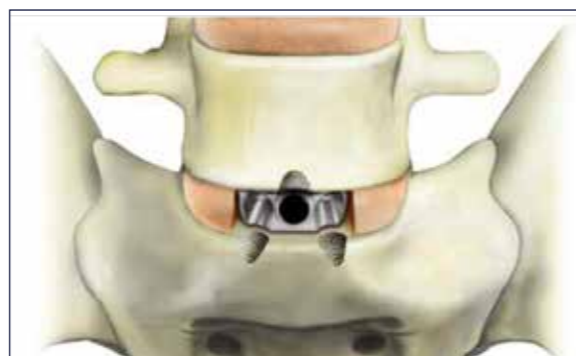


Figure 8

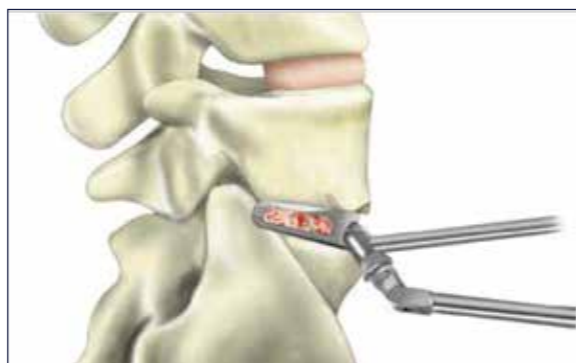


Figure 9



Figure 10

PLACEMENT OF IMPLANT SCREWS (continued)

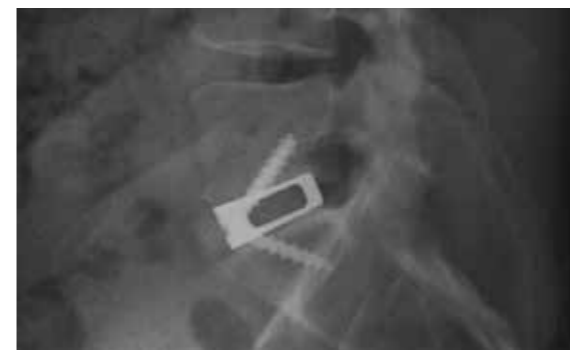


Figure 11

ADDITIONAL BONE GRAFT

Additional autograft, cancellous and/or corticocancellous allograft, demineralized allograft with bone marrow aspirate or a combination thereof should be placed in and around the cage.

CLOSURE

Remove the retractors to allow the vessels and muscles to relax toward their normal position and close in the usual manner.

REMOVAL AND REVISION

Removal or revision of the implant during the index procedure may be required to correct the size or position of the implant after reviewing the construct via fluoroscopy. If the implant needs to be adjusted or removed during the index procedure prior to screw placement, gently distract the disc space to disengage the implant from the endplates. To adjust the position of the implant more posteriorly, use the impactor tool. To adjust the position of the implant more anteriorly or remove it entirely, attach the implant inserter to the implant and then attach the slap hammer to the inserter to move the implant in an anterior direction. If necessary, screw removal can be facilitated using one of the screwdrivers. If the implant is removed, follow the directions listed above to reinsert the implant.

ENDOSKELETON™ TAS ORDERING INFORMATION

SPS01936 ENDOSKELETON™ TAS WITH NANOLOCK™ SURFACE TECHNOLOGY IMPLANTS (7 DEGREE IMPLANTS)		
CFN	DESCRIPTION	BOM Qty
2307-0110-N	TAS 7 Deg Lordotic Implant, Standard, 10mm	1
2307-0111-N	TAS 7 Deg Lordotic Implant, Standard, 11mm	1
2307-0112-N	TAS 7 Deg Lordotic Implant, Standard, 12mm	1
2307-0113-N	TAS 7 Deg Lordotic Implant, Standard, 13mm	1
2307-0114-N	TAS 7 Deg Lordotic Implant, Standard, 14mm	1
2307-0115-N	TAS 7 Deg Lordotic Implant, Standard, 15mm	1
2307-0116-N	TAS 7 Deg Lordotic Implant, Standard, 16mm	1
2307-0117-N	TAS 7 Deg Lordotic Implant, Standard, 17mm	1
2307-0210-N	TAS 7 Deg Lordotic Implant, Large, 10mm	1
2307-0211-N	TAS 7 Deg Lordotic Implant, Large, 11mm	2
2307-0212-N	TAS 7 Deg Lordotic Implant, Large, 12mm	2
2307-0213-N	TAS 7 Deg Lordotic Implant, Large, 13mm	1
2307-0214-N	TAS 7 Deg Lordotic Implant, Large, 14mm	2
2307-0215-N	TAS 7 Deg Lordotic Implant, Large, 15mm	1
2307-0216-N	TAS 7 Deg Lordotic Implant, Large, 16mm	1
2307-0217-N	TAS 7 Deg Lordotic Implant, Large, 17mm	1
2307-0310-N	TAS 7 Deg Lordotic Implant, X-Large, 10mm	1
2307-0311-N	TAS 7 Deg Lordotic Implant, X-Large, 11mm	1
2307-0312-N	TAS 7 Deg Lordotic Implant, X-Large, 12mm	1
2307-0313-N	TAS 7 Deg Lordotic Implant, X-Large, 13mm	1
2307-0314-N	TAS 7 Deg Lordotic Implant, X-Large, 14mm	1
2307-0315-N	TAS 7 Deg Lordotic Implant, X-Large, 15mm	1
2307-0316-N	TAS 7 Deg Lordotic Implant, X-Large, 16mm	1
2307-0317-N	TAS 7 Deg Lordotic Implant, X-Large, 17mm	1

ENDOSKELETON™ TAS ORDERING INFORMATION (cont.)

SPS01937 ENDOSKELETON™ TAS WITH NANOLOCK™ IMPLANTS (12 DEGREE IMPLANTS)		
CFN	DESCRIPTION	BOM Qty
2312-0110-N	TAS 12 Deg Lordotic Implant, Standard, 10mm	1
2312-0111-N	TAS 12 Deg Lordotic Implant, Standard, 11mm	1
2312-0112-N	TAS 12 Deg Lordotic Implant, Standard, 12mm	2
2312-0113-N	TAS 12 Deg Lordotic Implant, Standard, 13mm	1
2312-0114-N	TAS 12 Deg Lordotic Implant, Standard, 14mm	1
2312-0115-N	TAS 12 Deg Lordotic Implant, Standard, 15mm	1
2312-0116-N	TAS 12 Deg Lordotic Implant, Standard, 16mm	1
2312-0117-N	TAS 12 Deg Lordotic Implant, Standard, 17mm	1
2312-0210-N	TAS 12 Deg Lordotic Implant, Large, 10mm	1
2312-0211-N	TAS 12 Deg Lordotic Implant, Large, 11mm	1
2312-0212-N	TAS 12 Deg Lordotic Implant, Large, 12mm	2
2312-0213-N	TAS 12 Deg Lordotic Implant, Large, 13mm	2
2312-0214-N	TAS 12 Deg Lordotic Implant, Large, 14mm	2
2312-0215-N	TAS 12 Deg Lordotic Implant, Large, 15mm	2
2312-0216-N	TAS 12 Deg Lordotic Implant, Large, 16mm	1
2312-0217-N	TAS 12 Deg Lordotic Implant, Large, 17mm	1
2312-0310-N	TAS 12 Deg Lordotic Implant, X-Large, 10mm	1
2312-0311-N	TAS 12 Deg Lordotic Implant, X-Large, 11mm	1
2312-0312-N	TAS 12 Deg Lordotic Implant, X-Large, 12mm	2
2312-0313-N	TAS 12 Deg Lordotic Implant, X-Large, 13mm	2
2312-0314-N	TAS 12 Deg Lordotic Implant, X-Large, 14mm	2
2312-0315-N	TAS 12 Deg Lordotic Implant, X-Large, 15mm	2
2312-0316-N	TAS 12 Deg Lordotic Implant, X-Large, 16mm	1
2312-0317-N	TAS 12 Deg Lordotic Implant, X-Large, 17mm	1

ENDOSKELETON™ TAS ORDERING INFORMATION (cont.)

SPS01938 ENDOSKELETON™ TAS WITH NANOLOCK™ IMPLANTS (16, 20 & 24 DEGREE IMPLANTS)		
CFN	DESCRIPTION	BOM Qty
2316-0112-N	TAS 16 Deg Lordotic Implant, Standard, 12mm	2
2316-0114-N	TAS 16 Deg Lordotic Implant, Standard, 14mm	1
2316-0116-N	TAS 16 Deg Lordotic Implant, Standard, 16mm	1
2316-0118-N	TAS 16 Deg Lordotic Implant, Standard, 18mm	1
2316-0120-N	TAS 16 Deg Lordotic Implant, Standard, 20mm	1
2316-0212-N	TAS 16 Deg Lordotic Implant, Large, 12mm	2
2316-0214-N	TAS 16 Deg Lordotic Implant, Large, 14mm	2
2316-0216-N	TAS 16 Deg Lordotic Implant, Large, 16mm	2
2316-0218-N	TAS 16 Deg Lordotic Implant, Large, 18mm	1
2316-0220-N	TAS 16 Deg Lordotic Implant, Large, 20mm	1
2316-0312-N	TAS 16 Deg Lordotic Implant, X-Large, 12mm	1
2316-0314-N	TAS 16 Deg Lordotic Implant, X-Large, 14mm	2
2316-0316-N	TAS 16 Deg Lordotic Implant, X-Large, 16mm	2
2316-0318-N	TAS 16 Deg Lordotic Implant, X-Large, 18mm	1
2316-0320-N	TAS 16 Deg Lordotic Implant, X-Large, 20mm	1
2320-0114-N	TAS 20 Deg Lordotic Implant, Standard, 14mm	2
2320-0116-N	TAS 20 Deg Lordotic Implant, Standard, 16mm	1
2320-0118-N	TAS 20 Deg Lordotic Implant, Standard, 18mm	1
2320-0120-N	TAS 20 Deg Lordotic Implant, Standard, 20mm	1
2320-0214-N	TAS 20 Deg Lordotic Implant, Large, 14mm	1
2320-0216-N	TAS 20 Deg Lordotic Implant, Large, 16mm	1
2320-0218-N	TAS 20 Deg Lordotic Implant, Large, 18mm	1
2320-0220-N	TAS 20 Deg Lordotic Implant, Large, 20mm	1
2320-0314-N	TAS 20 Deg Lordotic Implant, X-Large, 14mm	1
2320-0316-N	TAS 20 Deg Lordotic Implant, X-Large, 16mm	2
2320-0318-N	TAS 20 Deg Lordotic Implant, X-Large, 18mm	1
2320-0320-N	TAS 20 Deg Lordotic Implant, X-Large, 20mm	1
2324-0116-N	TAS 24 Deg Lordotic Implant, Standard, 16mm	2
2324-0118-N	TAS 24 Deg Lordotic Implant, Standard, 18mm	1
2324-0120-N	TAS 24 Deg Lordotic Implant, Standard, 20mm	1
2324-0216-N	TAS 24 Deg Lordotic Implant, Large, 16mm	1
2324-0218-N	TAS 24 Deg Lordotic Implant, Large, 18mm	1
2324-0220-N	TAS 24 Deg Lordotic Implant, Large, 20mm	1
2324-0316-N	TAS 24 Deg Lordotic Implant, X-Large, 16mm	1
2324-0318-N	TAS 24 Deg Lordotic Implant, X-Large, 18mm	1
2324-0320-N	TAS 24 Deg Lordotic Implant, X-Large, 20mm	1

ENDOSKELETON™ TAS ORDERING INFORMATION (cont.)

SPS01942 ENDOSKELETON TAS™ WITH NANOLOCK™ INSTRUMENTS (1/2)		
CFN	DESCRIPTION	BOM Qty
2106-1002	Slap Hammer	1
2300-1034	TAS Hex U-Joint Screwdriver	1
2300-1035	TAS U-Joint Awl	1
2300-1036	TAS Awl Guide	1
2300-1038	TAS 1/4" Square Drive Non-Ratchet Screwdriver Handle	1
2300-1039	TAS 1/4" Square Drive Non-Ratchet Screwdriver T-Handle	2
2300-1046	TAS 1/4" Square Drive Ratchet Screwdriver Handle	2
2300-1110	TAS Fixed Handle Awl Straight	1
2300-1120	TAS Fixed Handle Awl Curved	1
2300-1301	TAS Hex Stragiht Screwdriver	1
2300-1302	TAS Hex Swivel Screwdriver	1

ENDOSKELETON™ TAS ORDERING INFORMATION (cont.)

SPS01943 ENDOSKELETON™ TAS WITH NANOLOCK™ INSTRUMENTS (2/2)		
CFN	DESCRIPTION	BOM Qty
2106-1000	TAS Impactor	1
2106-1003	TAS Threaded Holder	4
2300-1012	TAS Implant Remover	1
2300-1015	TAS Locking Implant Holder	2
2300-1102	TAS Reverse Threaded Extractor	1
2307-9008	TAS Distractor Head 8mm	1
2307-9009	TAS Distractor Head 9mm	1
2307-9010	TAS Distractor Head 10mm	1
2307-9011	TAS Distractor Head 11mm	1
2307-9012	TAS Distractor Head 12mm	1
2307-9013	TAS Distractor Head 13mm	1
2307-9014	TAS Distractor Head 14mm	1

ENDOSKELETON™ TAS ORDERING INFORMATION (cont.)

SPS01944 ENDOSKELETON™ TAS WITH NANOLOCK™ INSTRUMENTS (7 DEGREE RASPS & TRIALS)		
CFN	DESCRIPTION	BOM Qty
2106-7108	Rasp 7 Deg Lordotic, Standard, 8mm	1
2106-7109	Rasp 7 Deg Lordotic, Standard, 9mm	1
2106-7110	Rasp 7 Deg Lordotic, Standard, 10mm	1
2106-7111	Rasp 7 Deg Lordotic, Standard, 11mm	1
2106-7112	Rasp 7 Deg Lordotic, Standard, 12mm	1
2106-7113	Rasp 7 Deg Lordotic, Standard, 13mm	1
2106-7114	Rasp 7 Deg Lordotic, Standard, 14mm	1
2106-7115	Rasp 7 Deg Lordotic, Standard, 15mm	1
2106-7116	Rasp 7 Deg Lordotic, Standard, 16mm	1
2106-7208	Rasp 7 Deg Lordotic, Large, 8mm	1
2106-7209	Rasp 7 Deg Lordotic, Large, 9mm	1
2106-7210	Rasp 7 Deg Lordotic, Large, 10mm	1
2106-7211	Rasp 7 Deg Lordotic, Large, 11mm	1
2106-7212	Rasp 7 Deg Lordotic, Large, 12mm	1
2106-7213	Rasp 7 Deg Lordotic, Large, 13mm	1
2106-7214	Rasp 7 Deg Lordotic, Large, 14mm	1
2106-7215	Rasp 7 Deg Lordotic, Large, 15mm	1
2106-7216	Rasp 7 Deg Lordotic, Large, 16mm	1
2106-7308	Rasp 7 Deg Lordotic, X-Large, 8mm	1
2106-7309	Rasp 7 Deg Lordotic, X-Large, 9mm	1
2106-7310	Rasp 7 Deg Lordotic, X-Large, 10mm	1
2106-7311	Rasp 7 Deg Lordotic, X-Large, 11mm	1
2106-7312	Rasp 7 Deg Lordotic, X-Large, 12mm	1
2106-7313	Rasp 7 Deg Lordotic, X-Large, 13mm	1
2106-7314	Rasp 7 Deg Lordotic, X-Large, 14mm	1
2106-7315	Rasp 7 Deg Lordotic, X-Large, 15mm	1
2106-7316	Rasp 7 Deg Lordotic, X-Large, 16mm	1
2106-9108	Trial 7 Deg Lordotic, Standard, 8mm	1
2106-9109	Trial 7 Deg Lordotic, Standard, 9mm	1
2106-9110	Trial 7 Deg Lordotic, Standard, 10mm	1
2106-9111	Trial 7 Deg Lordotic, Standard, 11mm	1
2106-9112	Trial 7 Deg Lordotic, Standard, 12mm	1
2106-9113	Trial 7 Deg Lordotic, Standard, 13mm	1
2106-9114	Trial 7 Deg Lordotic, Standard, 14mm	1
2106-9115	Trial 7 Deg Lordotic, Standard, 15mm	1
2106-9116	Trial 7 Deg Lordotic, Standard, 16mm	1
2106-9117	Trial 7 Deg Lordotic, Standard, 17mm	1
2106-9208	Trial 7 Deg Lordotic, Large, 8mm	1
2106-9209	Trial 7 Deg Lordotic, Large, 9mm	1
2106-9210	Trial 7 Deg Lordotic, Large, 10mm	1
2106-9211	Trial 7 Deg Lordotic, Large, 11mm	1

ENDOSKELETON™ TAS ORDERING INFORMATION (cont.)

SPS01944 ENDOSKELETON™ TAS WITH NANOLOCK™ INSTRUMENTS (Cont.) (7 DEGREE RASPS & TRIALS)		
CFN	DESCRIPTION	BOM Qty
2106-9212	Trial 7 Deg Lordotic, Large, 12mm	1
2106-9213	Trial 7 Deg Lordotic, Large, 13mm	1
2106-9214	Trial 7 Deg Lordotic, Large, 14mm	1
2106-9215	Trial 7 Deg Lordotic, Large, 15mm	1
2106-9216	Trial 7 Deg Lordotic, Large, 16mm	1
2106-9217	Trial 7 Deg Lordotic, Large, 17mm	1
2106-9308	Trial 7 Deg Lordotic, X-Large, 8mm	1
2106-9309	Trial 7 Deg Lordotic, X-Large, 9mm	1
2106-9310	Trial 7 Deg Lordotic, X-Large, 10mm	1
2106-9311	Trial 7 Deg Lordotic, X-Large, 11mm	1
2106-9312	Trial 7 Deg Lordotic, X-Large, 12mm	1
2106-9313	Trial 7 Deg Lordotic, X-Large, 13mm	1
2106-9314	Trial 7 Deg Lordotic, X-Large, 14mm	1
2106-9315	Trial 7 Deg Lordotic, X-Large, 15mm	1
2106-9316	Trial 7 Deg Lordotic, X-Large, 16mm	1
2106-9317	Trial 7 Deg Lordotic, X-Large, 17mm	1

ENDOSKELETON™ TAS ORDERING INFORMATION (cont.)

SPS01945 ENDOSKELETON™ TAS WITH NANOLOCK™ INSTRUMENTS (12 DEGREE RASP™S & TRIALS)		
CFN	DESCRIPTION	BOM Qty
2112-7110	Rasp 12 Deg Lordotic, Standard, 10mm	1
2112-7111	Rasp 12 Deg Lordotic, Standard, 11mm	1
2112-7112	Rasp 12 Deg Lordotic, Standard, 12mm	1
2112-7113	Rasp 12 Deg Lordotic, Standard, 13mm	1
2112-7114	Rasp 12 Deg Lordotic, Standard, 14mm	1
2112-7115	Rasp 12 Deg Lordotic, Standard, 15mm	1
2112-7116	Rasp 12 Deg Lordotic, Standard, 16mm	1
2112-7210	Rasp 12 Deg Lordotic, Large, 10mm	1
2112-7211	Rasp 12 Deg Lordotic, Large, 11mm	1
2112-7212	Rasp 12 Deg Lordotic, Large, 12mm	1
2112-7213	Rasp 12 Deg Lordotic, Large, 13mm	1
2112-7214	Rasp 12 Deg Lordotic, Large, 14mm	1
2112-7215	Rasp 12 Deg Lordotic, Large, 15mm	1
2112-7216	Rasp 12 Deg Lordotic, Large, 16mm	1
2112-7310	Rasp 12 Deg Lordotic, X-Large, 10mm	1
2112-7311	Rasp 12 Deg Lordotic, X-Large, 11mm	1
2112-7312	Rasp 12 Deg Lordotic, X-Large, 12mm	1
2112-7313	Rasp 12 Deg Lordotic, X-Large, 13mm	1
2112-7314	Rasp 12 Deg Lordotic, X-Large, 14mm	1
2112-7315	Rasp 12 Deg Lordotic, X-Large, 15mm	1
2112-7316	Rasp 12 Deg Lordotic, X-Large, 16mm	1
2112-9108	Trial 12 Deg Lordotic, Standard, 8mm	1
2112-9109	Trial 12 Deg Lordotic, Standard, 9mm	1
2112-9110	Trial 12 Deg Lordotic, Standard, 10mm	1
2112-9111	Trial 12 Deg Lordotic, Standard, 11mm	1
2112-9112	Trial 12 Deg Lordotic, Standard, 12mm	1
2112-9113	Trial 12 Deg Lordotic, Standard, 13mm	1
2112-9114	Trial 12 Deg Lordotic, Standard, 14mm	1
2112-9115	Trial 12 Deg Lordotic, Standard, 15mm	1
2112-9116	Trial 12 Deg Lordotic, Standard, 16mm	1
2112-9117	Trial 12 Deg Lordotic, Standard, 17mm	1
2112-9208	Trial 12 Deg Lordotic, Large, 8mm	1
2112-9209	Trial 12 Deg Lordotic, Large, 9mm	1
2112-9210	Trial 12 Deg Lordotic, Large, 10mm	1
2112-9211	Trial 12 Deg Lordotic, Large, 11mm	1
2112-9212	Trial 12 Deg Lordotic, Large, 12mm	1
2112-9213	Trial 12 Deg Lordotic, Large, 13mm	1
2112-9214	Trial 12 Deg Lordotic, Large, 14mm	1
2112-9215	Trial 12 Deg Lordotic, Large, 15mm	1
2112-9216	Trial 12 Deg Lordotic, Large, 16mm	1
2112-9217	Trial 12 Deg Lordotic, Large, 17mm	1

ENDOSKELETON™ TAS ORDERING INFORMATION (cont.)

SPS01945 ENDOSKELETON™ TAS WITH NANOLOCK™ INSTRUMENTS (Cont.) (12 DEGREE RASPS & TRIALS)		
CFN	DESCRIPTION	BOM Qty
2112-9308	Trial 12 Deg Lordotic, X-Large, 8mm	1
2112-9309	Trial 12 Deg Lordotic, X-Large, 9mm	1
2112-9310	Trial 12 Deg Lordotic, X-Large, 10mm	1
2112-9311	Trial 12 Deg Lordotic, X-Large, 11mm	1
2112-9312	Trial 12 Deg Lordotic, X-Large, 12mm	1
2112-9313	Trial 12 Deg Lordotic, X-Large, 13mm	1
2112-9314	Trial 12 Deg Lordotic, X-Large, 14mm	1
2112-9315	Trial 12 Deg Lordotic, X-Large, 15mm	1
2112-9316	Trial 12 Deg Lordotic, X-Large, 16mm	1
2112-9317	Trial 12 Deg Lordotic, X-Large, 17mm	1

ENDOSKELETON™ TAS ORDERING INFORMATION (cont.)

SPS01946 ENDOSKELETON™ TAS WITH NANOLOCK™ INSTRUMENTS (16 & 20 DEGREE RASPS & TRIALS)		
CFN	DESCRIPTION	BOM Qty
2316-7110	Rasp 16 Deg Lordotic, Standard, 10mm	1
2316-7112	Rasp 16 Deg Lordotic, Standard, 12mm	1
2316-7114	Rasp 16 Deg Lordotic, Standard, 14mm	1
2316-7116	Rasp 16 Deg Lordotic, Standard, 16mm	1
2316-7118	Rasp 16 Deg Lordotic, Standard, 18mm	1
2316-7120	Rasp 16 Deg Lordotic, Standard, 20mm	1
2316-7210	Rasp 16 Deg Lordotic, Large, 10mm	1
2316-7212	Rasp 16 Deg Lordotic, Large, 12mm	1
2316-7214	Rasp 16 Deg Lordotic, Large, 14mm	1
2316-7216	Rasp 16 Deg Lordotic, Large, 16mm	1
2316-7218	Rasp 16 Deg Lordotic, Large, 18mm	1
2316-7220	Rasp 16 Deg Lordotic, Large, 20mm	1
2316-7310	Rasp 16 Deg Lordotic, Large, 10mm	1
2316-7312	Rasp 16 Deg Lordotic, X-Large, 12mm	1
2316-7314	Rasp 16 Deg Lordotic, X-Large, 14mm	1
2316-7316	Rasp 16 Deg Lordotic, X-Large, 16mm	1
2316-7318	Rasp 16 Deg Lordotic, X-Large, 18mm	1
2316-7320	Rasp 16 Deg Lordotic, X-Large, 20mm	1
2320-7112	Rasp 20 Deg Lordotic, Standard, 12mm	1
2320-7114	Rasp 20 Deg Lordotic, Standard, 14mm	1
2320-7116	Rasp 20 Deg Lordotic, Standard, 16mm	1
2320-7118	Rasp 20 Deg Lordotic, Standard, 18mm	1
2320-7120	Rasp 20 Deg Lordotic, Standard, 20mm	1
2320-7212	Rasp 20 Deg Lordotic, Large, 12mm	1
2320-7214	Rasp 20 Deg Lordotic, Large, 14mm	1
2320-7216	Rasp 20 Deg Lordotic, Large, 16mm	1
2320-7218	Rasp 20 Deg Lordotic, Large, 18mm	1
2320-7220	Rasp 20 Deg Lordotic, Large, 20mm	1
2320-7312	Rasp 20 Deg Lordotic, X-Large, 12mm	1
2320-7314	Rasp 20 Deg Lordotic, X-Large, 14mm	1
2320-7316	Rasp 20 Deg Lordotic, X-Large, 16mm	1
2320-7318	Rasp 20 Deg Lordotic, X-Large, 18mm	1
2320-7320	Rasp 20 Deg Lordotic, X-Large, 20mm	1

ENDOSKELETON™ TAS ORDERING INFORMATION (cont.)

SPS01947 ENDOSKELETON™ TAS WITH NANOLOCK™ INSTRUMENTS (24 DEGREE RASPS & TRIALS)		
CFN	DESCRIPTION	BOM Qty
2300-1310	TAS Hyperlordotic, Two-up, Anterolateral Inserter	1
2300-1311	TAS Hyperlordotic, One-up, Anterolateral Inserter	1
2324-7114	Rasp 24 Deg Lordotic, Standard, 14mm	1
2324-7116	Rasp 24 Deg Lordotic, Standard, 16mm	1
2324-7118	Rasp 24 Deg Lordotic, Standard, 18mm	1
2324-7120	Rasp 24 Deg Lordotic, Standard, 20mm	1
2324-7214	Rasp 24 Deg Lordotic, Large, 14mm	1
2324-7216	Rasp 24 Deg Lordotic, Large, 16mm	1
2324-7218	Rasp 24 Deg Lordotic, Large, 18mm	1
2324-7220	Rasp 24 Deg Lordotic, Large, 20mm	1
2324-7314	Rasp 24 Deg Lordotic, X-Large, 14mm	1
2324-7316	Rasp 24 Deg Lordotic, X-Large, 16mm	1
2324-7318	Rasp 24 Deg Lordotic, X-Large, 18mm	1
2324-7320	Rasp 24 Deg Lordotic, X-Large, 20mm	1

ENDOSKELETON™ TAS ORDERING INFORMATION (cont.)

SPS01951 ENDOSKELETON™ TAS BONE SCREWS (25 & 30 MM)		
CFN	DESCRIPTION	BOM Qty
2300-5525	TAS 5.5mm Diameter Standard Bone Screw 25mm	9
2300-5530	TAS 5.5mm Diameter Standard Bone Screw 30mm	9
2300-6525	TAS 6.5mm Diameter Standard Bone Screw 25mm	9
2300-6530	TAS 6.5mm Diameter Standard Bone Screw 30mm	9

ENDOSKELETON™ TAS ORDERING INFORMATION (cont.)

SPS01952 ENDOSKELETON™ TAS BONE SCREWS (20 MM)		
CFN	DESCRIPTION	BOM Qty
2300-5520	TAS 5.5mm Diameter Standard Bone Screw 20mm	9
2300-6520	TAS 6.5mm Diameter Standard Bone Screw 20mm	9

SPS01953 ENDOSKELETON™ TAS BONE SCREWS (35 MM)		
CFN	DESCRIPTION	BOM Qty
2300-5535	TAS 5.5mm Diameter Standard Bone Screw 35mm	9
2300-6535	TAS 6.5mm Diameter Standard Bone Screw 35mm	9

GRAFT VOLUME INFORMATION

Endoskeleton™ TAS

Endoskeleton™ TAS - 7° Lordotic				
M/L x A/P	Part Number	Anterior Height (mm)	Graft Volume (cc)	Posterior Height (mm)
32 x 21 STD	2307-0110-N	10	2.49	8.48
	2307-0111-N	11	2.83	9.48
	2307-0112-N	12	3.20	10.48
	2307-0113-N	13	3.52	11.48
	2307-0114-N	14	3.89	12.48
	2307-0115-N	15	4.21	13.48
	2307-0116-N	16	4.58	14.48
	2307-0117-N	17	4.89	15.48
36 x 24 LRG	2307-0210-N	10	3.46	8.11
	2307-0211-N	11	3.94	9.11
	2307-0212-N	12	4.45	10.11
	2307-0213-N	13	4.91	11.11
	2307-0214-N	14	5.42	12.11
	2307-0215-N	15	5.88	13.11
	2307-0216-N	16	6.39	14.11
	2307-0217-N	17	6.84	15.11
40 x 27 XL	2307-0310-N	10	4.69	7.74
	2307-0311-N	11	5.32	8.74
	2307-0312-N	12	6.00	9.74
	2307-0313-N	13	6.63	10.74
	2307-0314-N	14	7.31	11.74
	2307-0315-N	15	7.93	12.74
	2307-0316-N	16	8.60	13.74
	2307-0317-N	17	9.21	14.74

GRAFT VOLUME INFORMATION (cont.)

Endoskeleton™ TAS (cont.)

Endoskeleton™ TAS - 12° Lordotic				
M/L x A/P	Part Number	Anterior Height (mm)	Graft Volume (cc)	Posterior Height (mm)
32 x 21 STD	2312-0110-N	10	2.15	6.85
	2312-0111-N	11	2.48	7.85
	2312-0112-N	12	2.85	8.85
	2312-0113-N	13	3.18	9.85
	2312-0114-N	14	3.54	10.85
	2312-1115-N	15	3.86	11.85
	2312-1116-N	16	4.23	12.85
	2312-1117-N	17	4.54	13.85
36 x 24 LRG	2312-0210-N	10	2.97	6.22
	2312-0211-N	11	3.45	7.22
	2312-0212-N	12	3.93	8.22
	2312-0213-N	13	4.08	9.22
	2312-0214-N	14	4.55	10.22
	2312-0215-N	15	5.06	11.22
	2312-0216-N	16	5.52	12.22
	2312-0217-N	17	6.03	13.22
40 x 27 XL	2312-0310-N	10	3.8	5.59
	2312-0311-N	11	4.4	6.59
	2312-0312-N	12	5.03	7.59
	2312-0313-N	13	5.63	8.59
	2312-0314-N	14	6.26	9.59
	2312-0315-N	15	6.83	10.59
	2312-0316-N	16	7.4	11.59
	2312-0317-N	17	8.03	12.59

GRAFT VOLUME INFORMATION (cont.)

Endoskeleton™ TAS (cont.)

Endoskeleton™ TAS - 16° Lordotic				
M/L x A/P	Part Number	Anterior Height (mm)	Graft Volume (cc)	Posterior Height (mm)
32 x 21 STD	2316-0112-N	12	2.64	7.5
	2316-0114-N	14	3.37	9.5
	2316-0116-N	16	4.10	11.5
	2316-0118-N	18	4.84	13.5
	2316-0120-N	20	5.57	15.5
	36 x 24 LRG	2316-0212-N	12	3.05
2316-0214-N		14	3.82	8.7
2316-0216-N		16	4.57	10.7
2316-0218-N		18	5.32	12.7
2316-0220-N		20	6.10	14.7
40 x 27 XL		2316-0312-N	12	4.06
	2316-0314-N	14	5.44	7.8
	2316-0316-N	16	6.88	9.8
	2316-0318-N	18	8.22	11.8
	2316-0320-N	20	9.58	13.8

Endoskeleton™ TAS - 20° Lordotic				
M/L x A/P	Part Number	Anterior Height (mm)	Graft Volume (cc)	Posterior Height (mm)
32 x 21 STD	2320-0114-N	14	2.15	7.9
	2320-0116-N	16	3.71	9.9
	2320-0118-N	18	4.45	11.9
	2320-0120-N	20	5.18	13.9
36 x 24 LRG	2320-0214-N	14	3.90	6.8
	2320-0216-N	16	4.94	8.8
	2320-0218-N	18	5.96	10.8
	2320-0220-N	20	6.99	12.8
40 x 27 XL	2320-0314-N	14	4.86	5.8
	2320-0316-N	16	6.33	7.8
	2320-0318-N	18	7.71	9.8
	2320-0320-N	20	9.07	11.8

GRAFT VOLUME INFORMATION (cont.)

Endoskeleton™ TAS (cont.)

Endoskeleton™ TAS - 24° Lordotic				
M/L x A/P	Part Number	Anterior Height (mm)	Graft Volume (cc)	Posterior Height (mm)
32 x 21 STD	2324-0116-N	16	3.32	8.5
	2324-0118-N	18	4.05	10.5
	2324-0120-N	20	4.79	12.5
36 x 24 LRG	2324-0216-N	16	4.34	7.2
	2324-0218-N	18	5.36	9.2
	2324-0220-N	20	6.89	11.2
40 x 27 XL	2324-0316-N	16	5.35	5.9
	2324-0318-N	18	6.86	7.9
	2324-0320-N	20	8.21	9.9

Endoskeleton™ TAS - 7° Lordotic - Non-sterile				
M/L x A/P	Part Number	Anterior Height (mm)	Graft Volume (cc)	Posterior Height (mm)
32 x 21 STD	2307-0110	10	2.49	8.48
	2307-0111	11	2.83	9.48
	2307-0112	12	3.20	10.48
	2307-0113	13	3.52	11.48
	2307-0114	14	3.89	12.48
	2307-0115	15	4.21	13.48
	2307-0116	16	4.58	14.48
	2307-0117	17	4.89	15.48
36 x 24 LRG	2307-0210	10	3.46	8.11
	2307-0211	11	3.94	9.11
	2307-0212	12	4.45	10.11
	2307-0213	13	4.91	11.11
	2307-0214	14	5.42	12.11
	2307-0215	15	5.88	13.11
	2307-0216	16	6.39	14.11
	2307-0217	17	6.84	15.11
40 x 27 XL	2307-0310	10	4.69	7.74
	2307-0311	11	5.32	8.74
	2307-0312	12	6.00	9.74
	2307-0313	13	6.63	10.74
	2307-0314	14	7.31	11.74
	2307-0315	15	7.93	12.74
	2307-0316	16	8.60	13.74
2307-0317	17	9.21	14.74	

GRAFT VOLUME INFORMATION (cont.)

Endoskeleton™ TAS (cont.)

Endoskeleton™ TAS - 12° Lordotic - Non-sterile				
M/L x A/P	Part Number	Anterior Height (mm)	Graft Volume (cc)	Posterior Height (mm)
32 x 21 STD	2312-0110	10	2.15	6.85
	2312-0111	11	2.48	7.85
	2312-0112	12	2.85	8.85
	2312-0113	13	3.18	9.85
	2312-0114	14	3.54	10.85
	2312-1115	15	3.86	11.85
	2312-1116	16	4.23	12.85
	2312-1117	17	4.54	13.85
36 x 24 LRG	2312-0210	10	2.97	6.22
	2312-0211	11	3.45	7.22
	2312-0212	12	3.93	8.22
	2312-0213	13	4.08	9.22
	2312-0214	14	4.55	10.22
	2312-0215	15	5.06	11.22
	2312-0216	16	5.52	12.22
	2312-0217	17	6.03	13.22
40 x 27 XL	2312-0310	10	3.8	5.59
	2312-0311	11	4.4	6.59
	2312-0312	12	5.03	7.59
	2312-0313	13	5.63	8.59
	2312-0314	14	6.26	9.59
	2312-0315	15	6.83	10.59
	2312-0316	16	7.4	11.59
	2312-0317	17	8.03	12.59

The surgical technique shown is for illustrative purposes only. The technique(s) actually employed in each case will always depend upon medical judgment of the surgeon exercised before and during surgery as to the best mode of treatment for each patient

See the device manual for detailed information regarding the instructions for use, the implant procedure, indications, contraindications, warnings, precautions, and potential adverse events. For further information, contact your local Medtronic representative and/or consult the Medtronic website at medtronic.eu.

For applicable products, consult instructions for use on www.medtronic.com/manuals. Manuals can be viewed using a current version of any major internet browser. For best results, use Adobe Acrobat® Reader with the browser.

Titanspine is a Medtronic company

ENDOSKELETON™ NANOLOCK™ TT is CE marked by TitanSpine, and distributed™ by Medtronic.

Medtronic



Medtronic Sofamor Danek USA, Inc.
1800 Pyramid Place
Memphis, TN 38132

Telephone:
800 933 2635 (USA)
901 396 3133 (Outside USA)
Fax: 901 396 0356

Titanspine
6140 W.
Executive Drive
Suite A
Mequon
WI 53092
USA
Tel: (262) 242 7801

Medtronic International Trading Sarl
Route du Molliau 31
Case postale
1131 Tolochenaz
Switzerland
Tel: +41 (0) 21 802 70 00
Fax: +41 (0) 21 802 79 00

UC202014016 EE © 2020
Medtronic. All rights reserved.

medtronic.eu

www.titanspine.com