

RHAUSLER



Advanced
Cervical Vertebrae
Plating System

ADVANCED

Self-Retaining One-Step Locking Screwdriver: loads, inserts, tightens and locks the bone screws

To lock the bone screw into the plate, hold the screw driver handle with one hand and with the other hand grasp the spoked wheel of the hexed outer locking mechanism shaft. With a slight rotating down pressure, engage the hex of the outer shaft into the bone screw cam. Once fully engaged, rotate the cam locking mechanism 1/16th of a turn to the right (clockwise). The bone screw cam is now in the locked position, which captures the head of the bone screw in the plate screw holes. No additional hardware or instrumentation is required. If you desire to remove the bone screw from the plate, re-engage the screw driver into the bone screw and with slight down pressure, slide the screw driver hexed locking mechanism into the cam, and rotate the locking mechanism 1/16th to the left (counter-clockwise) to unlock the cam. The bone screw can now be removed from the plate. It is that simple.

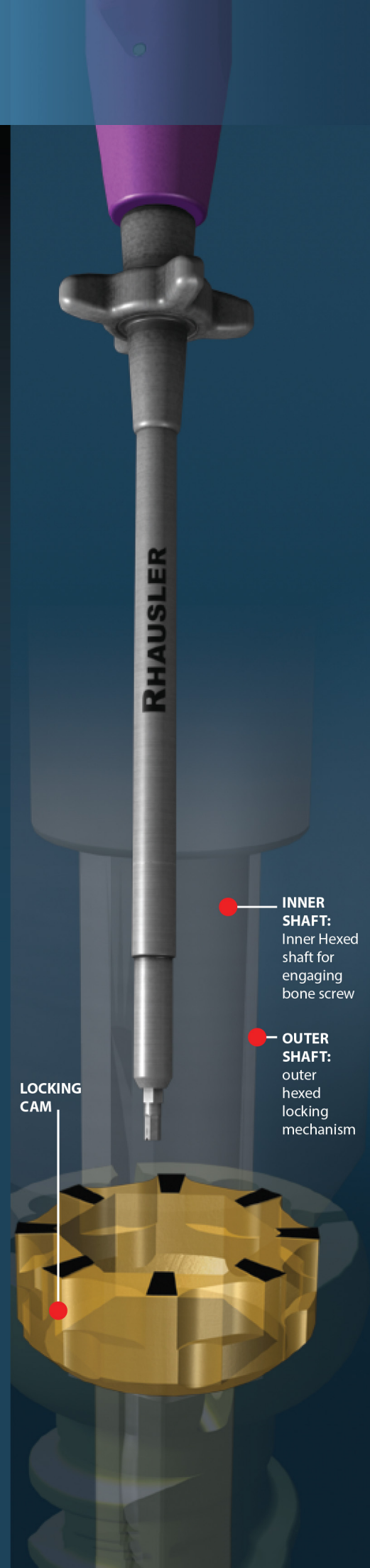
Locking Bone Screws

UNLOCKED

- Open notches and lines aligned
- Cam can be wiggled in the head of the bone screw

LOCKED

- Open notches and lines NOT aligned
- To Lock, turn screwdriver hexed cam locking mechanism 1/16th of a turn to the right (clockwise)
- Cam is fixed in place and cannot be wiggled from side to side



Flexibility

Rhausler Dynamic, Semiconstrained and QuickPlate Anterior Cervical Vertebrae Plating System

by design



“The Rhausler Medical Cervical Plating System allows the surgeon flexibility during the anterior cervical surgery to use either a QuickPlate, Semiconstrained, or a fully Dynamic cervical fixation plate. With these cervical plate features and stabilization philosophies included in the same set, intraoperative changes can be easily made based on the surgical findings. Since this system uses the same locking bone screws with the different plate options, only a few insertion/locking tools are required. This small instrument set results in a total system that is easy for both the nursing staff and the surgeon to master.”

– Fred H. Geisler, M.D., Ph.D

With Rhausler’s Cervical Plating Set you have the options of using the Dynamic, Semiconstrained or QuickPlate Cervical Plates, and Bone Screws with all the same associated insertion instruments.

The Rhausler Cervical Plate Designs each have unique features, while utilizing the same proven bone screw locking mechanism for each plate design. With the changing of one attachable Drill Guide all 3 plates can be implanted with the same Rhausler Cervical Plating Instrumentation:

The Bone Screw is retained inside the plate’s screw holes with one simple 1/16 turn of the CAM-Lock mechanism. The CAM-Lock keeps the shoulders of the screw retained, but free to translate and rotate, in the recess in the undercut shoulders of the screw hole in the plate. This allows the bone screw to have both linear dynamic and axial rotational movement in the Dynamic Plate, and axial rotational movement in the Semiconstrained and QuickPlate. These dynamic

motions allow the intra-discal bone graft to be mechanically loaded, according to Wolff’s Law.

Cervical Plates

The Dynamic Plate – *fully dynamic* in design, which allows for complete load sharing to the intra-discal graft. Each level can settle up to 3.0mm, providing a desirable healing arthrodesis environment. The Dynamic Plate has bone graft screw holes, which allow the surgeon to attach the cage or graft to the plate in single level fusions or corpectomies. *The Dynamic plate is 16mm wide at the top and 19mm at the bottom*, with stackable convex and concave ends for reoperations or multilevel plating.

The Semiconstrained Plate – *semi-dynamic* in design, to allow settling of each level up to 1.5mm, and the axial rotation of the bone screws restricts strain on the plate

and screws while allowing the intra-discal bone graft to be mechanically loaded. The Semiconstrained Plate has bone graft screw holes, which allow the surgeon to attach the cage or graft to the plate in single level fusions or corpectomies. *The Semiconstrained plate is 16mm wide at the top and 19mm at the bottom* with stackable convex and concave ends for reoperations or multilevel plating.

The QuickPlate – the slimmest in design, being *16mm wide on the top and bottom*. The screw holes have the same axial rotation function as the Semiconstrained Plate, which also allows the intra-discal bone graft to be mechanically loaded. *The QuickPlate has large graft viewing slots* for the observation of the cage or graft implant during and after placement of the plate and screws. The QuickPlate also has stackable convex and concave ends for reoperations or multilevel plating.



Convex, concave ends of the plates articulate with one and other for multi-level constructs and revisions. Trapezoidal shape contours to the vertebral body.



Intra-Operative lateral fluoroscopy of C3 to C7 ACDF using concave and convex ends of the Rhausler plates aiding the placement of four screws in the C5 body. This construct uses two dynamic plates and converts one 4-level ACDF into two 2-level ACDFs hinged at C5. This four level construct is dynamic to both linear and angular settling during bony healing



Rhausler's patented Cam Lock and Plate Design retain the bone screw shoulders in the Cam's locked position preventing bone screw back out after implantation of the plate.

One-Level Plates

Come in lengths 21 to 35mm

- A) Dynamic
- B) Semiconstrained
- C) QuickPlate

Two-Level Plates

Come in lengths 37 to 55mm

- D) Dynamic
- E) Semiconstrained
- F) QuickPlate

Three-Level Plates

Come in lengths 54 to 78mm

- G) Dynamic
- H) Semiconstrained
- I) QuickPlate

Four-Level Plates (not shown)

Come in Lengths 69 to 109mm
Dynamic and Semiconstrained only
Available upon request



Attachable Drill Guide method

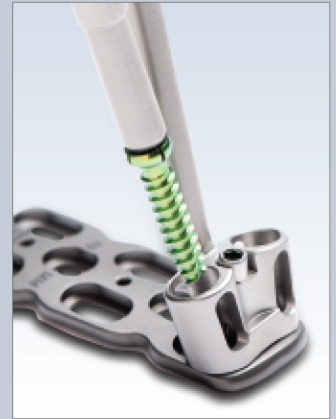
OPTION: A



1. The Drill Guide is attached to the Plate using the C-7025 Screw Driver



2. Use the appropriate depth Twist Drill through the Drill Guide



3. Next, a Self-Tapping Bone Screw to attach the Plate to the vertebral body

OPTION: B



1. The Universal Drill Guide can be used for bone screw placement

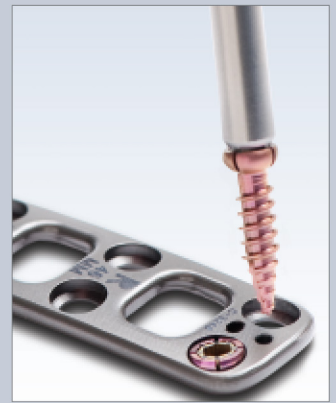


2. Remove Drill Guide, then use a Self-Tapping Bone Screw to attach the Plate to the vertebral body

OPTION: C



1. The Temp. Threaded Screw Tack can be used to hold the Plate in place. Use Awl to penetrate the cortical bone

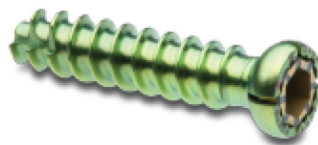


2. Remove Awl and use a Self-Drilling, Self-Tapping Bone Screw to attach the Plate to the vertebral body

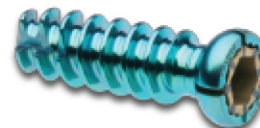
Color-coded Titanium Locking Bone Screws and Tacks

The Rhausler Locking Bone Screws each have their own color code to denote their style. They come in diameters of 3.75, 4.0 and 4.5mm as Self-Tapping and Self-Tapping Self-Drilling, and in lengths from 10 to 16mm. Our exclusive thread design provides maximum purchase of bone, and our patented Cam-Locking screw head design restricts the backing out of the screw after implantation. The placement of the bone screws and locking of the Cam-Locking mechanism can both be done with the same Self-Retaining One-Step Locking Screw Driver. This coaxial nature of the locking mechanism ensures that if the screw can be placed, then it can be locked.

Two styles of plate holding tacks are available, the Tack which fits into the center tack holes and the Threaded Screw Tack which fits into the plate's screw holes to secure the plate to the vertebral bodies.



Self-Tapping
4.0mm Bone Screw
Lengths of 10 to 16mm



Self-Tapping
4.5mm Oversized Bone Screw
Lengths of 10 to 16mm



Self-Tapping
2.6mm Temporary
Threaded Screw Tack
Length 11mm



Self-Tapping Self-Drilling
4.0mm Bone Screw
Lengths in 10 to 16mm



Self-Tapping
3.75mm Bone Graft Screw
Length 10mm



Plate Temporary Tack
1.4mm
Length 11mm

PRODUCTS

Cervical Titanium Plates

QuickPlates

ITEM#	DESCR	LEVEL	ITEM#	DESCR	LEVEL
C-3121	21 mm	1	C-3249	49 mm	2
C-3123	23 mm	1	C-3252	52 mm	2
C-3125	25 mm	1	C-3255	55 mm	2
C-3127	27 mm	1	C-3354	54 mm	3
C-3129	29 mm	1	C-3357	57 mm	3
C-3131	31 mm	1	C-3360	60 mm	3
C-3133	33 mm	1	C-3363	63 mm	3
C-3135	35 mm	1	C-3366	66 mm	3
C-3237	37 mm	2	C-3369	69 mm	3
C-3240	40 mm	2	C-3372	72 mm	3
C-3243	43 mm	2	C-3375	75 mm	3
C-3246	46 mm	2	C-3378	78 mm	3

Dynamic Plates

ITEM#	DESCR	LEVEL	ITEM#	DESCR	LEVEL
C-4121	21 mm	1	C-4363	63 mm	3
C-4123	23 mm	1	C-4366	66 mm	3
C-4125	25 mm	1	C-4369	69 mm	3
C-4127	27 mm	1	C-4372	72 mm	3
C-4129	29 mm	1	C-4375	75 mm	3
C-4131	31 mm	1	C-4378	78 mm	3
C-4133	33 mm	1	C-4469	69 mm	4
C-4135	35 mm	1	C-4473	73 mm	4
C-4237	37 mm	2	C-4477	77 mm	4
C-4240	40 mm	2	C-4481	81 mm	4
C-4243	43 mm	2	C-4485	85 mm	4
C-4246	46 mm	2	C-4489	89 mm	4
C-4249	49 mm	2	C-4493	93 mm	4
C-4252	52 mm	2	C-4497	97 mm	4
C-4255	55 mm	2	C-4501	101 mm	4
C-4354	54 mm	3	C-4505	105 mm	4
C-4357	57 mm	3	C-4509	109 mm	4
C-4360	60 mm	3			

Semiconstrained Plates

ITEM#	DESCR	LEVEL	ITEM#	DESCR	LEVEL
C-5121	21 mm	1	C-5363	63 mm	3
C-5123	23 mm	1	C-5366	66 mm	3
C-5125	25 mm	1	C-5369	69 mm	3
C-5127	27 mm	1	C-5372	72 mm	3
C-5129	29 mm	1	C-5375	75 mm	3
C-5131	31 mm	1	C-5378	78 mm	3
C-5133	33 mm	1	C-5469	69 mm	4
C-5135	35 mm	1	C-5473	73 mm	4
C-5237	37 mm	2	C-5477	77 mm	4
C-5240	40 mm	2	C-5481	81 mm	4
C-5243	43 mm	2	C-5485	85 mm	4
C-5246	46 mm	2	C-5489	89 mm	4
C-5249	49 mm	2	C-5493	93 mm	4
C-5252	52 mm	2	C-5497	97 mm	4
C-5255	55 mm	2	C-5501	101 mm	4
C-5354	54 mm	3	C-5505	105 mm	4
C-5357	57 mm	3	C-5509	109 mm	4
C-5360	60 mm	3			

Bone Screws

ITEM#	DESCRIPTION
C-6005	Rhausler 3.75 x 10 mm Ti Bone Graft Screw, Self-Tapping, Dark Gold
C-6010	Rhausler 4.0 x 10mm Ti Bone Screw, Self-Tapping Screw, Silver
C-6012	Rhausler 4.0 x 12 mm Ti Bone Screw, Self-Tapping, Light Blue
C-6014	Rhausler 4.0 x 14 mm Ti Bone Screw, Self-Tapping, Magenta
C-6016	Rhausler 4.0 x 16 mm Ti Bone Screw, Self-Tapping, Light Green
C-6110	Rhausler 4.0 x 10mm Ti Bone Screw, Self Drilling Self-Tapping Screw, Copper
C-6112	Rhausler 4.0 x 12 mm Ti Bone Screw, Self-Drilling, Self-tapping, Dark Blue
C-6114	Rhausler 4.0 x 14 mm Ti Bone Screw, Self-Drilling, Self-tapping, Pink
C-6116	Rhausler 4.0 x 16 mm Ti Bone Screw, Self-Drilling, Self-tapping, Gold
C-6210	Rhausler 4.5 x 10mm Ti Bone Screw Oversized Self-Tapping Screw, Green
C-6212	Rhausler 4.5 x 12 mm Ti Oversized Bone Screw, Teal
C-6214	Rhausler 4.5 x 14 mm Ti Oversized Bone Screw, Grape
C-6216	Rhausler 4.5 x 16 mm Ti Oversized Bone Screw, Sea Foam Green

Single Use Only [Ⓢ]

ITEM#	DESCRIPTION
C-7030	Rhausler 3.0 x 12mm Twist Drill, Single use only
C-7031	Rhausler Bone Screw Removal Tool, Single use only
C-7033	Rhausler 3.0mm Universal Twist Drill, Single use only
C-7034	Rhausler 2.0x14mm Twist Drill, Single use only
C-7038	Rhausler 3.0x14mm Twist Drill, Single use only
C-7039	Rhausler 2.0x12mm Twist Drill, Single use only
C-7041	Rhausler 2.0x16mm Twist Drill, Single use only
C-7043	Rhausler 3.0x16mm Twist Drill, Single use only
C-7046	Rhausler 2.0mm Universal Twist Drill, Single use only
C-6400	Rhausler Temporary Cervical Plate Tack, Single use only
C-6401	Rhausler Temp. Plate Holder, Threaded, Single use only

Instruments

ITEM#	DESCRIPTION
C-7015	Rhausler Tack Holder
C-7025	Rhausler Self-retaining One-step Locking Screw Driver
C-7028	Rhausler Handle for AO Shafts
C-7035	Rhausler Awl w/spring loaded tip
C-7036	Rhausler Awl
C-7045	Rhausler Caliper
C-7047	Rhausler Dual Drill Guide, Green, 0 Deg.
C-7052	Rhausler Single Drill Guide, Universal
C-7053	Rhausler Universal Drill Guide Spacer Set 10, 12,14 ,16, 18, 20mm
C-7056	Rhausler Plate Bender, w/Anvil
C-7075	Rhausler Bone Screw Caddy
C-7089	Rhausler Plate Caddy
C-7090	Rhausler Sterilization Tray
C-7100	Rhausler Drill Guide 12 Degrees,16mm Wide, f/Top of Plate, Purple
C-7101	Rhausler Drill Guide 12 Degrees,19mm Wide, f/Bottom of Plate, Blue
C-7102	Rhausler Drill Guide 0 Degrees,19mm Wide, f/Bottom of Plate, Orange
C-7103	Rhausler QuickPlate Drill Guide 0 Deg,16mm Wide, f/Btm of Plate, Yellow

Rhausler Instrument Sets are Patented

⚠ Caution: US Federal law restricts this device to sale by or on the order of a physician.



RHAUSLER

Manufactured for

Rhausler Inc., 39737 Paseo Padre Pkwy, Ste. D, Fremont, California 94538

Customer Service

Phone: 650-200-3466 Email: info@rhausler.com