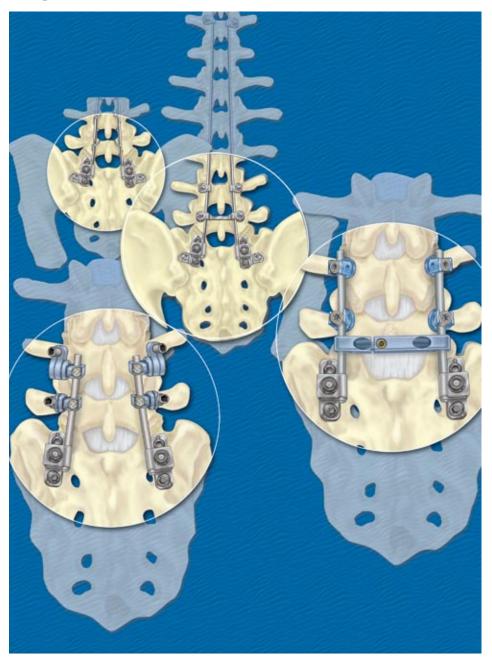


COLORADO 2[™] Spinal System Sacral and Sacroiliac Fixation

Surgical Technique



The COLORADO 2™ Spinal System provides increased stabilization for sacral fixation using sacral plates and triangular screw placement.

COLORADO 2™ Spinal System Sacral and Sacroi

INDICATIONS

- Degenerative disc disease
- Failed previous fusion fracture
- Pseudoarthrosis
- Spinal deformities (scoliosis, kyphosis, lordosis)
- Spinal stenosis
- Spondylolisthesis
- Tumor resection





SACRAL FIXATION

After resection of the L5 inferior facet, the S1 pedicles are targeted and prepared as close as possible to the sacral plateau. Preparation of the pedicle should be slightly convergent $(5^{\circ}-10^{\circ})$.

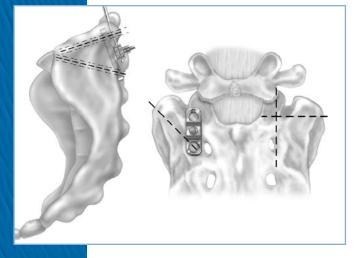
An anatomically-designed Iliosacral Plate is positioned with the plate holder.

"The COLORADO 2™ System provides me with a strong, low-profile system for treatment of patients with spinal deformity. In most lumbosacral fusions I prefer not to immobilize the SI joint. Therefore, I use the two-hole plate, which does not require screws to cross the SI joint."

> Reginald Knight, MD Creighton University School of Medicine Omaha, NE

"The COLORADO 2^m Iliosacral Plate is an easy-to-use anatomic plate that provides fixation to the sacrum in lumbar-sacral fixation."

Ensor Transfeldt, MD Twin Cities Spine Center Minneapolis, MN



The triangulation of the screws provides pullout resistance.

The first (S1) screw is inserted into the cortical bone of the promontory. The S1 screw is placed first, but not completely tightened, to prevent plate tilting.

SACRAL FIXATION

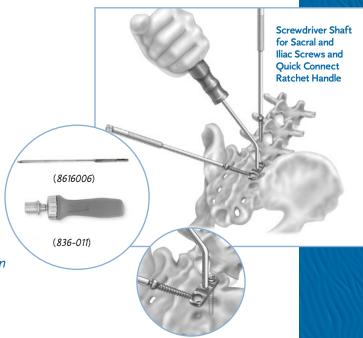
(continued)

The second (sub S1) screw should be placed with bicortical fixation to increase its anchorage. This screw is angled cephalad and lateral through the plate toward the sacral ala. Careful preparation is mandatory in order to respect the anterior structures.

Then final tightening of both screws is completed.

"COLORADO 2™ iliosacral fixation has become my standard for deformity cases requiring instrumentation to the sacropelvis in all but my smallest patients. The 'holding power' is more secure in all directions compared to the Galveston method."

> Peter Newton, MD Children's Hospital San Diego, CA



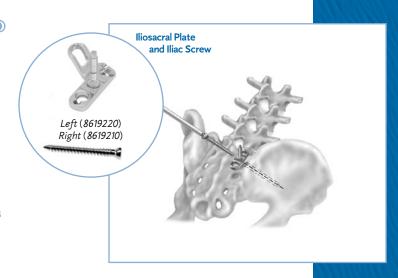
SACROILIAC FIXATION

To improve the anchorage in case of pelvic obliquity or revision, the use of the sacroiliac plate is recommended.

Identical positioning of both sacral screws is applied. The third iliac screw is placed within the two iliac cortices using the same screwdriver shaft as the sacral screws. The order of screw introduction is as follows:

1) S1 screw, 2) iliac screw, 3) sub S1 screw.

In many cases a notch must be made with a rongeur in the posterior iliac wing to insert the extension of the Iliosacral Plate.



LOCKING SCREWS

Break-off locking screws can easily be added to help secure the sacral screws.

The nut and screwdriver shaft and handle or the dual-purpose nut driver are used to tighten the screw.

Final break-off is done using the nut-breaking wrench, retaining the break-off part.



COLORADO 2™ SPINAL SYSTEM SACRAL AND SACROILIAC FIXATION PRODUCT ORDERING INFORMATION

IMPLANTS

Stainless Steel	Titanium	Description	Qty in set
		Description Description	
8619110	8638110	Right Sacral Plate	2
8619120	8638120	Left Sacral Plate	2
8619210	8638210	Right Iliosacral Plate	2
8619220	8638220	Left Iliosacral Plate	2
8614110		5.0mm Connector (SS Only)	0
8624110	8634110	5.5mm Connector	4
8664110	8674110	6.35mm Connector	4
8664111	8674111	Set Screw for 6.35mm Rod/Connector	6
8619300	8639300	Set Screw for Sacral Plate	8
8614111	8634111	Break-Off Nut	6
8612230	8632230	Sacral Screw 6.5mm X 30mm	4
8612235	8632235	Sacral Screw 6.5mm X 35mm	4
8612240	8632240	Sacral Screw 6.5mm X 40mm	4
8612245	8632245	Sacral Screw 6.5mm X 45mm	4
8612250	8632250	Sacral Screw 6.5mm X 50mm	4
8612255	8632255	Sacral Screw 6.5mm X 55mm	4
8612260	8632260	Sacral Screw 6.5mm X 60mm	4
8612265	8632265	Sacral Screw 6.5mm X 65mm	4
8612270	8632270	Sacral Screw 6.5mm X 70mm	4
8612330	8632330	Sacral Screw 7mm X 30mm	2
8612335	8632335	Sacral Screw 7mm X 35mm	2
8612340	8632340	Sacral Screw 7mm X 40mm	2
8612345	8632345	Sacral Screw 7mm X 45mm	2
8612350	8632350	Sacral Screw 7mm X 50mm	2
8612355	8632355	Sacral Screw 7mm X 55mm	2
8612360	8632360	Sacral Screw 7mm X 60mm	2
8612365	8632365	Sacral Screw 7mm X 65mm	2
8612370	8632370	Sacral Screw 7mm X 70mm	2
8612055	8632055	Iliac Screw 7mm X 55mm	4
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IMPLANTS (continued)

Stainless Steel	Titanium	Description	Qty in set
8612060	8632060	Iliac Screw 7mm X 60mm	4
8612065	8632065	Iliac Screw 7mm X 65mm	4
8612070	8632070	Iliac Screw 7mm X 70mm	4
8612075	8632075	Iliac Screw 7mm X 75mm	4
8612080	8632080	Iliac Screw 7mm X 80mm	4

INSTRUMENT SET

8616002	8616002	Nut Breaking Wrench	1
8616001	8616001	Dual-Purpose Nut Driver	1
8616003	8616003	Threaded End Breaker	1
8616006	8616006	Shaft for Sacral and Iliac Screw Driver	1
8616007	8616007	Plate Holder	1
8616008	8616008	Shaft for Dismantling	1
8616036	8616036	Screw Holder	1
8616021	8616021	Nut and Screw Driver Shaft	1
836-011	836-011	Quick Connect Ratcheting Handle	1
836-010	836-010	Quick Connect Modular Handle	1
8616034	8616034	Screw Gauge	1
8616165	8616165	6.5mm Tap	1
8616170	8616170	7.0mm Tap	1
	8616001 8616003 8616006 8616007 8616008 8616036 8616021 836-011 836-010 8616034	8616001 8616001 8616003 8616003 8616006 8616006 8616007 8616007 8616008 8616008 8616036 8616036 8616021 8616021 836-011 836-011 836-010 836-010 8616034 8616034 8616165 8616165	8616001 8616001 Dual-Purpose Nut Driver 8616003 8616003 Threaded End Breaker 8616006 8616006 Shaft for Sacral and Iliac Screw Driver 8616007 8616007 Plate Holder 8616008 8616008 Shaft for Dismantling 8616036 Screw Holder 8616021 Nut and Screw Driver Shaft 836-011 836-011 Quick Connect Ratcheting Handle 836-010 836-010 Quick Connect Modular Handle 8616034 8616034 Screw Gauge 8616165 6.5mm Tap

CASES AND TRAYS

862720	8647200	Screw Tray	1	
862720	8647205	Screw Tray Lid	1	
862721	8647210	Connector Tray, 5.5mm	1	
866721	8677210	Connector Tray, 6.35mm	1	
862721	8647215	Connector Tray Lid	1	
862722	0 8647220	Instrument Tray	1	
862718	8647180	COLORADO 2™ System Sacral Case	1	
862719	8647190	COLORADO 2™ System Sacral Case Lid	1	

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