RELIABLE
您可信赖的华森

Surgical technique
操作手册

锁定加压接骨板系列
LOC Plate series

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WASTON MEDICAL 华森

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前言
INTRODUCTION

1995 年 Tepic S 和 Perren SM 首次提出接骨板和螺钉锁定固定的概念，随着锁定接骨板的推出，这一理论成为近年接骨板内固定理论的最重要发展之一。与传统接骨板相比，锁定接骨板和螺钉形成的内固定支架可以提供高度稳定的内固定，避免初期及继发复位的丢失，对正常骨质或骨质疏松的骨质均可提供足够的稳定。同时，锁定接骨板和螺钉的成角稳定机制不依赖接骨板和骨的摩擦力提供稳定，接骨板和骨皮质无需紧密接触，降低了骨膜损伤，最大程度的减小了对骨血运的影响。由于锁定接骨板的这些优点，它日益成为临床创伤治疗当中不可缺少的内植物。

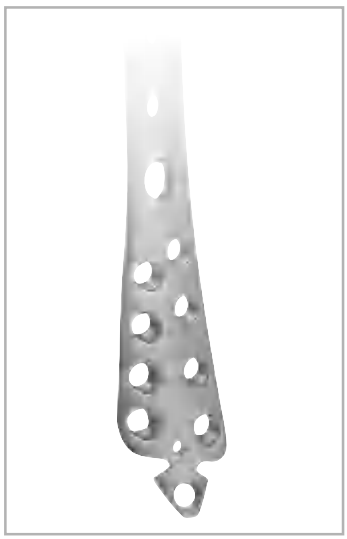
The locking screw concept was produced by Dr. Tepic S and Dr. Perren SM for the first time in 1995. With locking compression plate put in use, it became one of the most important developments for plate and screw internal fixation in recent years. Locking screws provide the ability to create a fixed-angle construct while utilizing familiar conventional plating techniques. The fixed-angle construct function like a internal fixators which maintain primary and secondary loss of reduction. This kind construct also provides improved fixation in osteopenic bone or multifragment fractures where traditional screw purchase is compromised. LCP constructs do not rely on plate-to-bone compression to maintain stability. Therefore, the periosteum will be protected and the blood supply to the bone preserved. With these distinguished improvements, the LCP become an implant category of increasing importance for trauma treatment.

适应症
INDICATIONS

锁定加压接骨板系统有很多不同的钢板种类，因此可以适应很多不同的骨折类型。
The LCP system applies to many different plate types and is therefore suitable for a large number of fracture types.

- 各种骨折
  Fractures
- 截骨术
  Osteotomies
- 骨不连
  Malunions, nonunions

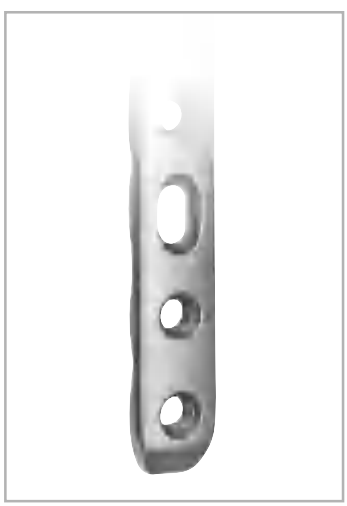
特点和优点
FEATURES & BENEFITS



- 独特的锁定钉孔设计
  The unique locking hole design.

- 同一钉孔可适用锁定螺钉或普通螺钉
  The locking holes allow placement of conventional cortex and cancellous bone screws or locking screws on the same hole*.

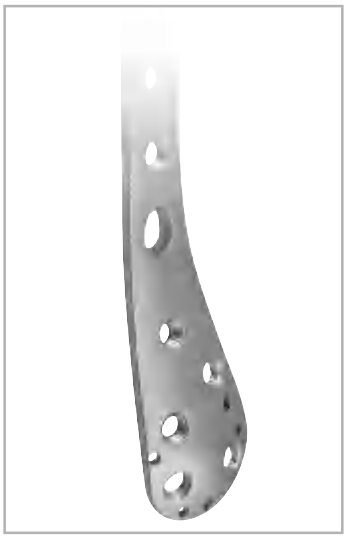
  * 并非所有锁定加压钢板均适用。
  Not for all locking compression plates.



- 结合钉孔
  Round holes.

- 可根据需要选择不同螺钉固定方式
  The Round holes allow placement of conventional cortex and cancellous bone screws on one side or threaded conical locking screws on the opposite side of each hole.

特点和优点（续）
FEATURES & BENEFITS (CONTINUED)



- 骨端钢板解剖型设计
  Periarticular plates anatomical design.

- 减少术中塑型需要，减低植入物对软组织刺激
  Periarticular plates are pre-contoured to create an anatomical fit that requires little or no additional bending and minimizes impinging on soft tissue.

- 六角型螺钉头设计
  Locking screw with HexDrive recess.

- 螺钉起子的扭力完全传递至螺钉，减少拧入／拧出螺钉时螺钉头滑丝可能
  The HexDrive recess provides improved torque transmission to the screw and minimizes the possibility of cross thread.

- 自攻螺纹
  Locking screw with self-tapping flutes.

- 减少术中操作步骤
  Less surgical steps

特点和优点（续）
FEATURES & BENEFITS (CONTINUED)

- 锁定螺钉采用皮质骨螺纹
  Cortical thread with large core diameter.

- 增加钉芯直径，更强的抗弯曲和剪切力
  The large core diameter improves bending and shears strength of the screw, and distributes the load over a larger area in the bone.

- 锁钉螺钉头双螺纹设计
  Special double-lead thread beneath the screw head engages and locks into the threaded holes of the plate.

- 锁紧锁钉螺钉更快、更容易
  Easier and faster locking the screws with the plates.

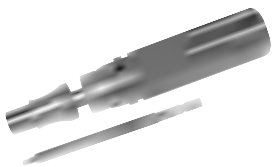
工具
INSTRUMENTS

15057/15058–001
骨钻(ø2.7/ø4.2)
Drill Bit (ø2.7/ø4.2)

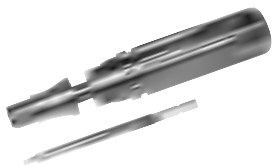
15057/15058–002
锁定接骨板专用丝锥(HA3.5/HA5.0)
Tap (HA3.5/HA5.0)

15057/15058–003
螺纹导向器(ø3.0/ø4.3)
Threaded Drill Guide (ø3.0/ø4.3)

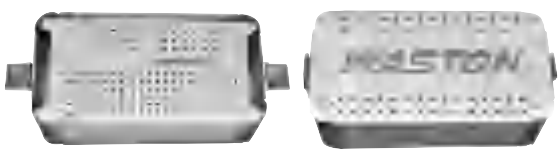
15058–007
锁紧环对抗导向器
Counter Torque Guide



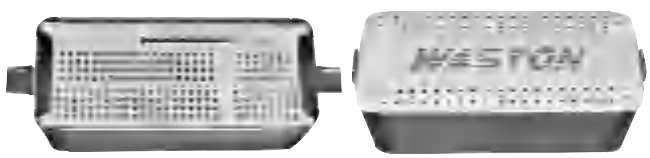
15057–004 上肢扭力扳手1.5(N.M)(SW2.5)
Torque Spanner 1.5 (N.M) (SW2.5)



15058–004 下肢扭力扳手3.5(N.M)(SW3.5)
Torque Spanner 3.5 (N.M) (SW3.5)



15057–000 上肢锁定螺钉盒
Small fragment locking screw case



15058–000 下肢锁定螺钉盒
Large fragment locking screw case

植入物
IMPLANTS

肱骨锁定接骨板
Humerus LOC plate

尺、桡骨锁定接骨板
Ulan & radius LOC plate

胫骨锁定接骨板
Tibia LOC plate

股骨锁定接骨板
Femur LOC plate

重建锁定接骨板
Reconstruction LOC plate

锁骨S型锁定接骨板(左/右)
S-clavicle LOC plate

弧形重建锁定接骨板
Curved reconstruction LOC plate

锁骨肩峰端锁定接骨板
Extremitas acromialis clavicle LOC plate

锁骨钩锁定接骨板
Clavicle hook LOC plate

肱骨近端锁定接骨板Ⅱ型 (左/右)
Proximal humeral LOC plate II

肱骨近端锁定接骨板III型
Proximal humeral LOC plateIII

肱骨远端内侧锁定接骨板
Distal media humeral LOC plate

肱骨远端背外侧锁定接骨板Ⅰ型
Distal lateral humeral LOC plate Ⅰ

肱骨远端背外侧锁定接骨板Ⅱ型
Distal lateral humeral LOC plate Ⅱ

尺骨鹰嘴锁定接骨板
Olecranon LOC plate

小T型锁定加压接骨板(头三孔)
Small T- LOC plate

小斜T型锁定接骨板 （左／右）
Small T- LOC oblique plate

桡骨远端掌侧锁定接骨板Ⅰ型
Distal medial radius LOC plate Ⅰ

桡骨远端掌侧锁定接骨板（可调型）
Distal medial radius LOC plate(Adjustable)

股骨近端外侧锁定接骨板Ⅰ型
Proximal lateral femoral LOC plate Ⅰ

股骨近端外侧锁定接骨板Ⅱ型
Diatal lateral femoral LOC plate Ⅱ

股骨远端外侧锁定接骨板
Distal lateral femoral LOC plate

股骨粗隆锁定接骨板
Femoral trochanter LOC plate

股骨颈锁定接骨板
Femoral neck LOC plate

DHS 鹅头钉锁定接骨板
Dynamic Hip Screw LOC plate

DCS 鹅头钉锁定接骨板
Dynamic Condylar Screw LOC plate

5.0mm 胫骨近端外侧锁定接骨板
5.0mm Proximal lateral tibial golf LOC plate

3.5mm 胫骨近端外侧锁定接骨板
3.5mm Proximal lateral tibial LOC plate

胫骨远端内侧锁定接骨板 II 型
Distal medial tibial LOC plate II

5.0mm 胫骨远端外侧锁定接骨板
5.0mm Distal lateral tibial LOC plate

3.5mm 胫骨远端外侧（围关节）锁定接骨板
3.5mm Distal lateral tibial LOC plate

T 型锁定接骨板I 型
T-LOC plate I

L型锁定接骨板 I 型
L-buttress LOC plate I

腓骨远端外侧锁定接骨板
Distal lateral fbular LOC plate

腓骨远端后外侧锁定接骨板
Distal fbular LOC plate

DS蝶形骶髂骨锁定接骨板
DS Butterfy-shaped Sacro-iliac LOC plate

跟骨锁定接骨板
Calcaneal LOC plate

FAST 微型锁定接骨板(高强度型)
FAST Mini LOC plate (High-strength)

FAST 微型锁定接骨板(柔韧型)
FAST Mini LOC plate (High-fexibility)

Φ2.5自攻螺钉 (全牙)
Self-tapping screw (fully threaded)

Φ2.5自攻锁定螺钉 (半牙)
Self-tapping screw (half-threaded)

HA3.5 / HA5.0锁定螺钉 (自攻自钻)
HA3.5 / HA5.0 Locking Screw(Self-tapping and Self-drilling)

Φ2.5锁定杆
Self-tapping screw

HA2.7 / HA3.5 / HA5.0 锁定螺钉 (梅花自攻)
HA2.7 / HA3.5 / HA5.0 Self-tapping screw (Self-tapping,Torx)

Φ2.5自攻螺钉 (全牙)
Self-tapping screw (fully threaded)

HB6.5 锁定螺钉 (六角 / 半牙)
HB6.5 locking screws (Hexagonal/Half-threaded)

HB6.5 空心锁定螺钉
HB6.5 cannulated locking screws

上 / 下肢填塞钉
Locking Spacer

操作技术
OPERATIVE TECHNIQUE

钢板选择
Plate selection

有不同长度和外形的锁定加压接骨板可供选择，如果必要可以用折弯模板来决定钢板的长度和外形。

The plates are available in various lengths. If necessary, use a bending template to determine plate length and configuration.

钢板折弯
Contouring

用普通钢板的折弯器来折弯锁定加压接骨板以匹配解剖。设计的钢板螺钉孔可以接受一定程度的变形。弯板时将折弯器放在非螺钉孔的部位，这样可以保证锁定螺纹不会被损坏。严重损坏螺纹会减低锁定效果。

Use the current bending instruments to contour the Locking Compression Plate to the anatomy.The plate holes have been designed to accept some degree of deformation. When bending the plate, place the bending irons on two consecutive holes. This ensures that the threaded holes will not be distorted. Significant distortion of the locking holes will reduce locking effectiveness.

复位和钢板临时固定
Reduction and temporary plate placement

钢板可用普通的复位钳等工具临时固定在骨面上。如果希望对骨折端加压应该把钢板的中部置于骨折线上。另外，钻头导向器可用来帮助稳定钢板在骨面。

The plate may be temporarily held in place with standard plate holding forceps. The middle of the plate should be positioned over the fracture site if compression of the fracture fragments is desired. Alternatively, the Drill Guide can be used as an aid to position the plate on the bone.

植入螺钉
Screw insertion

首先决定是用普通的皮质骨螺钉、松质骨螺钉还是锁定螺钉。也可以把他们结合在一起使用。如果皮质骨、松质骨和锁定螺钉结合在一起使用，应该先植入普通螺钉以把钢板拉向骨面。如果先植入锁定螺钉，应当小心钢板是否非常稳定地固定在骨面上，只有这样才能避免把螺钉锁到钢板上时钢板不会在骨面旋转。

Determine whether conventional cortex screws, cancellous bone screws or locking screws will be used for fixation. A combination of all may be used. If a combination of cortex, cancellous and locking screws is used, a conventional screw should be used first to pull the plate to the bone. If a locking screw is used first, care should be taken to ensure that the plate is held securely to the bone to avoid spinning of the plate about the bone as the locking screw is tightened to the plate.

加压孔和锁定孔中立位植入螺丝钉
Neutral insertion of a screw in Compression holes and locking holes

下压通用钻套或锁定专用钻套至加压孔和锁定孔的动力加压槽，它会自动处于中间位置，允许中立位钻孔。

When pressing the universal drill guide or special locking drill guide into the DCU portion of the compression holes, it will center itself and allow neutral predrilling.

动力加压，在加压孔偏心植入皮质骨螺钉
Dynamic compression, eccentric insertion of a cortex screw in compression hole

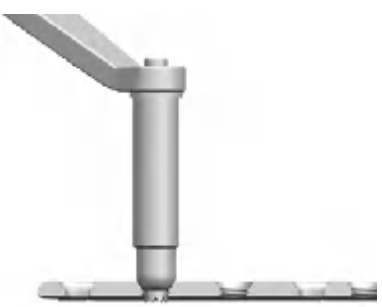
要钻动力加压孔，将通用钻套偏心放在加压孔的动力加压槽的边缘，不施加任何压力。拧紧皮质骨螺钉时将产生和 LC–DCP 钢板一样的动力加压。

To drill a hole for dynamic compression, place the universal drill guide eccentrically at the edge of the DCU portion of the compression hole, without applying pressure. Tightening of the cortex screws will result in dynamic compression corresponding to that of LC-DCP plates.

在锁定钉孔中立位植入普通螺钉
Neutral insertion of a conventional screw in locking hole

当下压通用钻套至独特设计的锁定钉孔，它会自动处于中间位置，允许中立位钻孔。

When pressing the universal drill guide into the unique design locking hole, it will center itself and allow neutral predrilling.



植入锁定螺钉
Insertion of the Locking Screws

锁定螺钉不是拉力螺钉。当要求精确解剖复位(如关节面)或骨折块间加压时用非锁定螺钉。植入第一枚锁定螺钉前,如果必要先施行解剖复位并用拉力螺钉固定骨折。植入锁定螺钉后将不可能进行解剖复位,除非松开锁定螺钉。

The locking screw is not a lag screw. Use nonlocking screws when requiring a precise anatomical reduction (e.g., joint surfaces) or interfragmentary compression. Before inserting the first locking screw, perform anatomical reduction and fix the fracture with lag screws, if necessary. After the insertion of locking screws, an anatomical reduction will no longer be possible without loosening the locking screw.

A 为 3.5 毫米,5.0 毫米螺钉选择合适的钻头导向器完全拧入钢板。不要试图用钻头导向器折弯钢板,这样可能损伤锁定螺纹。

Screw the appropriate Threaded Drill Guide for 3.5 mm, 5.0mm screws into an LCP plate hole until fully seated. Do not try to bend the plate using the Threaded Drill Guide because damage may occur to the threads.

A

B 用合适的钻头钻孔至理想深度(ø2.8 配 ø3.5 螺钉、ø4.3 配 ø5.0 螺钉)。

Use the appropriate Drill Bit (2.8 mm for 3.5 mm screws, 4.3mm for 5.0 mm screws) to drill to the desired depth.

B

植入锁定螺钉（续）
Insertion of the Locking Screws (CONTINUED)

C 取出钻头导向器
Remove the drill guide.

D 用测深器测量螺钉长度
Use the Depth Gauge to determine screw length.

D

E 植入锁定螺钉并用扭力限制扳手最终拧紧。当听到“咔哒”声时螺钉就安全地锁到钢板上。避免使用电动工具锁紧锁定螺钉。
Insert the locking screw and finally tighten using the Torque Limiting Screwdriver. The screw is securely locked to the plate when a “click” is heard. Never use power equipment to seat the locking screws into the plate without a Torque Limiting Screwdrive.

E

股骨近端外侧接骨板III操作技术
OPERATIVE TECHNIQUE FOR LATERAL PROXIMAL FEMUR PLATE III

A ø4.3钻头导向器钻入ø4.5骨钻
Insert ø4.3 Threaded Guide Wire through the Guide

B 使用测深尺测深,决定所需ø5.0锁定螺钉长度
Use the Depth Gauge to determine the ø5.0 screw length

股骨近端外侧接骨板III操作技术（续）
OPERATIVE TECHNIQUE FOR LATERAL PROXIMAL FEMUR PLATE III (CONTINUED)

C 拧入所需长度的 ø5.0 锁定螺钉
Insert desired ø5.0 locking screw

D 按照锁定钢板常规操作技术，在钢板干部使用 5.0 锁定螺钉或 4.5 皮质骨螺钉进行固定
Following LCP surgical technique, use ø5.0 locking screws or ø4.5 conventional screws for the staff fixation

术后处理
Postoperative treatment

锁定加压接骨板的术后处理同普通接骨板内固定程序。

Postoperative treatment with locking compression plates does not differ from conventional internal fixation procedures.

取出植入物
Implant removal

要取出锁定接骨板，首先拧松所有螺钉；然后毛底拧下螺钉：这样可以避免拧最后一枚锁定螺钉时钢板发生旋转。

To remove locking plates, unlock all screws form the plate; then remove the screws completely from the bone. This prevents simultaneous rotation of the plate when removing the last locking screw.

产品信息
PRODUCT ORDERING INFORMATION

植入物
IMPLANTS

肱骨锁定加压接骨板
Humerus LOC plate

产品编号 Product No.	孔数 Holes	长度 (mm) Length
10700–005	5	69
10700–006	6	82
10700–007	7	95
10700–008	8	108
10700–009	9	121
10700–010	10	134
10700–011	11	147
10700–012	12	160

尺、桡骨锁定加压接骨板
Ulna & radius LOC plate

产品编号 Product No.	孔数 Holes	长度 (mm) Length
10701–005	5	69
10701–006	6	82
10701–007	7	95
10701–008	8	108
10701–009	9	121
10701–010	10	134
10701–011	11	147
10701–012	12	160

胫骨锁定加压接骨板
Tibia LOC plate

产品编号 Product No.	孔数 Holes	长度 (mm) Length
10702–006	6	109
10702–007	7	127
10702–008	8	145
10702–009	9	163
10702–010	10	181
10702–012	12	217
10702–014	14	253

股骨锁定加压接骨板
Femur LOC plate

产品编号 Product No.	孔数 Holes	长度 (mm) Length
10703–007	7	128
10703–008	8	146
10703–009	9	164
10703–010	10	182
10703–012	12	218
10703–014	14	254
10703–016	16	290

重建锁定接骨板
Reconstruction LOC plate

产品编号 Product No.	孔数 Holes	长度 (mm) Length
10704–006	6	76
10704–007	7	88
10704–008	8	100
10704–009	9	112
10704–010	10	124
10704–012	12	148

弧形重建锁定接骨板
Curved reconstruction LOC plate

产品编号 Product No.	孔数 Holes	长度 (mm) Length
10743–006	6	73
10743–008	8	94
10743–010	10	116
10743–012	12	135

锁骨 S 型锁定接骨板 II 型
S-clavicle LOC plate II

产品编号 Product No.	孔数 Holes		长度 (mm) Length
10732—006	左 L	6	88
10732—106	右 R		
10732—008	左 L	8	114
10732—108	右 R		
10732—010	左 L	10	137
10732—110	右 R		

锁骨肩峰端锁定接骨板（左 / 右）
Extremitas acromialis clavicle LOC plate

	产品编号 Product No.		孔数 Holes	长度 (mm) Length
标准型	10733—003	左 L	3	61
	10733—103	右 R		
	10733—004	左 L	4	74
	10733—104	右 R		
	10733—005	左 L	5	87
	10733—105	右 R		
加长型	10733—006	左 L	6	100
	10733—106	右 R		
	10733—007	左 L	7	113
	10733—107	右 R		
	10733—008	左 L	8	126
	10733—108	右 R		

锁骨钩锁定接骨板
Clavicle hook LOC plate

产品编号 Product No.		孔数 Holes	长度 (mm) Length	高度 (mm) Height
10734—004	左 L	4	63.5	12
10734—104	右 R			
10734—204	左 L			15
10734—304	右 R			
10734—404	左 L			18
10734—504	右 R			
10734—005	左 L	5	79	12
10734—105	右 R			
10734—205	左 L			15
10734—305	右 R			
10734—405	左 L			18
10734—505	右 R			
10734—006	左 L	6	94.5	12
10734—106	右 R			
10734—206	左 L			15
10734—306	右 R			
10734—406	左 L			18
10734—506	右 R			
10734—007	左 L	7	110	12
10734—107	右 R			
10734—207	左 L			15
10734—307	右 R			
10734—407	左 L			18
10734—507	右 R			

肱骨近端锁定加压接骨板 II 型（左 / 右）
Proximal humeral LOC plate II

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10708—003	左 L	3	88
10708—103	右 R		
10708—005	左 L	5	120
10708—105	右 R		
10708—007	左 L	7	152
10708—107	右 R		
10708—009	左 L	9	184
10708—109	右 R		
10708—011	左 L	11	216
10708—111	右 R		

肱骨近端锁定接骨板III型
Proximal humeral LOC plate III

产品编号 Product No.	孔数 Holes	长度 (mm) Length
10735—003	3	90
10735—004	4	102
10735—005	5	114
10735—006	6	146
10735—008	8	178
10735—010	10	210
10735—012	12	242

肱骨远端内侧锁定接骨板
Distal medial humeral LOC plate

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10718—003	左 L	3	85
10718—103	右 R		
10718—005	左 L	5	111
10718—105	右 R		
10718—007	左 L	7	137
10718—107	右 R		
10718—009	左 L	9	163
10718—109	右 R		
10718—011	左 L	11	189
10718—111	右 R		
10718—013	左 L	13	215
10718—113	右 R		

肱骨远端背外侧锁定接骨板I 型
Distal lateral humeral LOC plate I

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10719—003	左 L	3	64
10719—103	右 R		
10719—005	左 L	5	90
10719—105	右 R		
10719—007	左 L	7	116
10719—107	右 R		
10719—009	左 L	9	142
10719—109	右 R		
10719—011	左 L	11	168
10719—111	右 R		
10719—013	左 L	13	194
10719—113	右 R		

肱骨远端背外侧锁定接骨板II 型
Distal lateral humeral LOC plate II

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10719—203	左 L	3	61
10719—303	右 R		
10719—205	左 L	5	87
10719—305	右 R		
10719—207	左 L	7	113
10719—307	右 R		
10719—209	左 L	9	139
10719—309	右 R		
10719—211	左 L	11	165
10719—311	右 R		
10719—213	左 L	13	191
10719—313	右 R		

尺骨鹰嘴锁定接骨板
Olecranon LOC plate

产品编号 Product No.	孔数 Holes	长度 (mm) Length
10717—003	3	62
10717—004	4	74
10717—005	5	86
10717—006	6	98
10717—007	7	110
10717—008	8	122

小T型锁定加压接骨板(头三孔)
Small T-LOC plate

产品编号 Product No.	孔数 Holes	长度 (mm) Length
10710—003	3	47
10710—004	4	58
10710—005	5	69
10710—006	6	80

小斜T 型锁定接骨板（左 / 右）
Small T-LOC oblique plate

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10711—003	左 L	3	46
10711—103	右 R		
10711—004	左 L	4	57
10711—104	右 R		
10711—005	左 L	5	68
10711—105	右 R		
10711—006	左 L	6	79
10711—106	右 R		

桡骨远端掌侧锁定接骨板 I 型（左/右）
Distal medial radius LOC plate I

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10709—003	左 L	3	52
10709—103	右 R		
10709—004	左 L	4	60
10709—104	右 R		
10709—005	左 L	5	68
10709—105	右 R		
10709—007	左 L	7	90
10709—107	右 R		

桡骨远端掌侧锁定接骨板（可调型）(左 / 右)
Distal medial radius LOC plate (Adjustable)

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10709—204	左 L	4	61
10709—304	右 R		
10709—205	左 L	5	69
10709—305	右 R		
10709—206	左 L	6	77
10709—306	右 R		

股骨近端外侧锁定接骨板 I 型（左 / 右）
Proximal lateral femoral LOC plate I

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10721—005	左 L	5	136
10721—105	右 R		
10721—007	左 L	7	172
10721—107	右 R		
10721—009	左 L	9	208
10721—109	右 R		
10721—011	左 L	11	244
10721—111	右 R		
10721—013	左 L	13	280
10721—113	右 R		

股骨近端外侧锁定接骨板 II 型（左 / 右）
Proximal lateral femoral (condylar) LOC plate II

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10716—005	左 L	5	136
10716—105	右 R		
10716—007	左 L	7	172
10716—107	右 R		
10716—009	左 L	9	208
10716—109	右 R		
10716—011	左 L	11	244
10716—111	右 R		
10716—013	左 L	13	280
10716—113	右 R		

股骨远端外侧锁定接骨板（左 / 右）
Distal lateral femoral (condylar) LOC plate

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10722—005	左 L	5	161
10722—105	右 R		
10722—007	左 L	7	201
10722—107	右 R		
10722—009	左 L	9	241
10722—109	右 R		
10722—011	左 L	11	281
10722—111	右 R		
10722—013	左 L	13	321
10722—113	右 R		

股骨粗隆锁定接骨板（左 / 右）
Femoral trochanter LOC plate

产品编号 Product No.		孔数 Holes
10741—005	左 L	5
10741—105	右 R	

股骨颈锁定接骨板（左 / 右）
Femoral neck LOC plate

产品编号 Product No.		孔数 Holes
10742—005	左 L	5
10742—105	右 R	

DHS 鹅头钉锁定接骨板
Dynamic Hip Screw LOC plate

产品编号 Product No.	角度 Angle	孔数 Holes	长度 (mm) Length
10747—004	135	4	83
10747—005		5	101
10747—006		6	119
10747—008		8	155
10747—010		10	191
10747—012		12	227

DCS 鹅头钉锁定接骨板
Dynamic Condylar Screw LOC plate

产品编号 Product No.	角度 Angle	孔数 Holes	长度 (mm) Length
10748—006	95	6	143
10748—008		8	175
10748—010		10	207
10748—012		12	239

5.0mm 胫骨近端外侧锁定接骨板（左 / 右）
5.0mm Proximal lateral tibial golf LOC plate

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10723—005	左 L	5	145
10723—105	右 R		
10723—007	左 L	7	185
10723—107	右 R		
10723—009	左 L	9	225
10723—109	右 R		
10723—011	左 L	11	265
10723—111	右 R		
10723—013	左 L	13	305
10723—113	右 R		

3.5mm 胫骨近端外侧（围关节）锁定接骨板Ⅱ型（左 / 右）
3.5mm Proximal lateral tibial LOC plate

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10739—204	左 L	4	108
10739—304	右 R		
10739—206	左 L	6	140
10739—306	右 R		
10739—208	左 L	8	172
10739—308	右 R		
10739—210	左 L	10	204
10739—310	右 R		
10739—212	左 L	12	236
10739—312	右 R		

胫骨远端内侧锁定接骨板II型（左 / 右）
Distal medial tibial LOC plate II

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10724—006	左 L	6	142
10724—106	右 R		
10724—008	左 L	8	168
10724—108	右 R		
10724—010	左 L	10	194
10724—110	右 R		

5.0mm 胫骨远端外侧锁定接骨板（左 / 右）
5.0mm Distal lateral tibial LOC plate

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10725—005	左 L	5	122
10725—105	右 R		
10725—007	左 L	7	158
10725—107	右 R		
10725—009	左 L	9	194
10725—109	右 R		
10725—011	左 L	11	230
10725—111	右 R		

3.5mm 胫骨远端外侧（围关节）锁定接骨板（左 / 右）
3.5mm Distal lateral tibial LOC plate

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10737—005	左 L	5	81
10737—105	右 R		
10737—007	左 L	7	107
10737—107	右 R		
10737—009	左 L	9	133
10737—109	右 R		
10737—011	左 L	11	159
10737—111	右 R		
10737—013	左 L	13	185
10737—113	右 R		

T 型锁定接骨板I 型
T-LOC plate I

产品编号 Product No.	孔数 Holes	长度 (mm) Length
10726—003	3	68
10726—004	4	84
10726—005	5	100
10726—006	6	116
10726—007	7	132
10726—008	8	148

L型锁定接骨板 I 型
L-buttress LOC plate I

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10727—003	左 L	3	73
10727—103	右 R		
10727—004	左 L	4	89
10727—104	右 R		
10727—005	左 L	5	105
10727—105	右 R		
10727—006	左 L	6	121
10727—106	右 R		

腓骨远端外侧锁定接骨板
Distal lateral fbular LOC plate

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10715—004	左 L	4	92
10715—104	右 R		
10715—006	左 L	6	116
10715—106	右 R		
10715—008	左 L	8	140
10715—108	右 R		
10715—010	左 L	10	164
10715—110	右 R		
10715—012	左 L	12	188
10715—112	右 R		

腓骨远端后外侧锁定接骨板
Distal fbular LOC plate

产品编号 Product No.	孔数 Holes	长度 (mm) Length
10740—005	5	110
10740—007	7	136
10740—009	9	162
10740—011	11	188
10740—013	13	214

DS蝶形骶髂骨锁定接骨板
DS Butterfy-shaped Sacro-iliac LOC plate

产品编号 Product No.	孔数 Holes
10746—006	6

跟骨锁定接骨板
Calcaneal LOC plate

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10730—057	左 L	15	57
10730—157	右 R		
10730—067	左 L	15	67
10730—167	右 R		

FAST 微型锁定接骨板
(高强度型)
FAST Mini LOC plate (High-strength)

产品编号 Product No.		孔数 Holes	长度 (mm) Length
10730—057	左 L	15	57
10730—157	右 R		
10730—067	左 L	15	67
10730—167	右 R		

FAST 微型锁定接骨板
(柔韧型)
FAST Mini LOC plate (High-fexibility)

产品编号 Product No.	孔数 Holes	型号 Type
10731008	8	直型
10731108	8	Y 型
10731208	8	斜 L 型左
10731308	8	斜 L 型右

Φ2.5自攻螺钉 (全牙)
Self-tapping screw (fully threaded)

产品编号 Product No.	直径 (mm) Dia	长度 (mm) Length
10753—(110 ～ 130)	Ø2.5	10 ～ 30(每 2mm 为一规格)

Φ2.5自攻锁定螺钉（半牙）
Self-tapping screw (half-threaded)

产品编号 Product No.	直径 (mm) Dia	长度 (mm) Length
10753—(210 ～ 230)	Ø2.5	10 ～ 30(每2mm为一规格)

Φ2.5自攻锁定螺钉（全牙）
Self-tapping screw (fully threaded)

产品编号 Product No.	直径 (mm) Dia	长度 (mm) Length
10758—(010 ～ 030)	Ø2.0	10 ～ 30(每2mm为一规格)

Φ2.0锁定杆
Self-tapping screw

产品编号 Product No.	直径 (mm) Dia	长度 (mm) Length
10753—(310 ～ 330)	Ø2.5	10 ～ 30(每2mm为一规格)

HA2.7 / HA3.5 / HA5.0 锁定螺钉（梅花自攻）
HA2.7 / HA3.5 / HA5.0 Self-tapping screw (Self-tapping,Torx)

产品编号 Product No.	直径 (mm) Dia	长度 (mm) Length
10750—(010 ～ 060)	HA2.7	10 ～ 40(每2mm为一规格) 45 ～ 60(每5mm为一规格)
10751—(112 ～ 160)	HA3.5	12 ～ 32/38/42(每2mm为一规格) 35 ～ 60(每5mm为一规格)
10755—(114 ～ 150) 10757—(055 ～ 110)	HA5.0	14 ～ 50(每2mm为一规格) 55 ～ 110(每5mm为一规格)

HA3.5 / HA5.0锁定螺钉（自攻自钻）
HA3.5 / HA5.0 Locking Screw(Self-tapping and Self-drilling)

产品编号 Product No.	直径 (mm) Dia	长度 (mm) Length
10752—(016 ～ 060)	HA3.5	16 ～ 60
10754—(022 ～ 080)	HA5.0	22 ～ 80

HB6.5 锁定螺钉（六角 / 半牙）
HB6.5 locking screws (Hexagonal/Half-threaded)

产品编号 Product No.	直径 (mm) Dia	长度 (mm) Length
10760—(060 ～ 120)	HB6.5	60 ～ 120

上 / 下肢填塞钉
Locking Spacer

产品编号 Product No.	直径 (mm) Dia	长度 (mm) Length
10756—(060 ～ 120)	HB6.5	60 ～ 120

HB6.5 空心锁定螺钉
HB6.5 cannulated locking screws

产品编号 Product No.	长度 (mm) Length
10751—210	4
10755—215	5

工具
INSTRUMENTS

上肢锁定接骨板增配手术器械包
Extra Instruments for Small bone LOC System

器械编号 Product No.	器械名称	Product Name	数量 Qty
15057—001	骨钻 (Ø2.7) 锁定	Drill Bit (Ø2.7) Loc	2
15057—002	丝锥 (HA3.5)	Tap (HA3.5)	1
15057—003	螺纹导向器 (Ø3.0)	Threaded Drill Guide (Ø3.0)	2
15057—004	上肢快换扭力扳手 1.5(N.M)	Quick Coupling Torque Spanner 1.5 (N.M)	1
15057—005	快换起子 (SW2.5)	Quick Coupling Screw Driver (SW2.5)	1
15057—000	上肢锁定螺钉盒	Small Fragment Locking Screw Case	1
*15057—006	上肢固定扭力扳手 1.5(N.M)	Torque Spanner 1.5 (N.M)	1
15057—008	T15 梅花起子	T15 Screwdriver (Torx)	1

带*为选配工具 Instruments with * are selectable

下肢锁定接骨板增配手术器械包
Extra Instruments for Large bone LOC System

器械编号 Product No.	器械名称	Product Name	数量 Qty
15058—001	骨钻 (Ø4.2) 锁定	Drill Bit (Ø4.2) Loc	2
15058—002	丝锥 (HA5.0)	Tap (HA5.0)	1
15058—003	螺纹导向器 (Ø4.3)	Threaded Drill Guide (Ø4.3)	2
15058—004	快换起子 (SW3.5)	Quick Coupling Screw Driver (SW3.5)	1
15058—005	下肢快换扭力扳手 3.5(N.M)	Quick Coupling Torque Spanner 3.5 (N.M)	1
15058—000	下肢锁定螺钉盒	Large Fragment Locking Screw Case	1
*15058—006	下肢固定扭力扳手 3.5(N.M)	Torque Spanner	1
*15058—007	锁紧环对抗导向器	Counter Torque Guide	1
15058—008	T25 梅花起子	T25 Screwdriver (Torx)	1

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NOTE

WASTON 华森 MEDICAL

常州华森医疗器械有限公司
CHANGZHOU WASTON MEDICAL APPLIANCE CO.,LTD

江苏省常州市武进高新区西湖路9号　　邮编 (Zip): 213164
9 Xihu Road, Wujin Hi-Tech Industry Zone, Changzhou, China

国内部 (Domestic Sales):
电话 (Tel) : (+86) 519-85110728
(+86) 519-86221101
E-mail: huasenmd@163.com
service@wastonmed.com

国际部 (International Sales):
电话 (Tel) : (+86) 519-86522226
(+86) 519-86531327
E-mail: wastonchina@yahoo.com
info@wastonmed.com

传真 (Fax): (+86) 519-85135555

www.wastonmed.com