

# Orthopaedic Implants

"Helping our animal friends one paw at a time"

# Small Animal Veterinary Surgical Technique

www.abmvet.co.uk

### **Veterinary Orthopedic Implant**

Abmvet is committed to providing customers with excellent quality products and superior customer service. Our company conducts business in an open and honest manner and rejects business practices that unnecessarily increase the cost of health treatment. Abmvet's products fulfill the requirement of ISO 13485. Our Quality Management System carries out all the necessary follow-ups at all levels of our products. Abmvet's products have been placed in quality on domestic and international markets. Abmvet's veterinary products that provide comprehensive medical solutions to help veterinarians treat patients successfully. Abmvet's products portfolio includes technically advanced implants and instruments: The Abmvet orthopedic implant is a titanium plate and screw system that fuses locking screw technology with conventional plating techniques. The set was designed to maximize treatment options when managing fractures requiring fragment fixation, as well as, to serve as the core system for additional anatomic implants.

Before the most appropriate method for treating a problem can be selected, the orthopedic problem must be identified and assessed. Developing surgical skills and familiarity with specialized instrumentation is necessary for performing most orthopedic procedures. Veterinarians should be aware of their limitations and refer complicated cases when necessary.

Trauma patients should have a thorough and complete physical evaluation. Serial examinations are important because serious or potentially lethal problems may not become evident for several hours or days after the injury.

### **Indications Biomechanical Principles**

Stabilization of fractures with bone plates and screws is a popular method of fracture fixation. Bone plates and screws offer a versatile method of fracture stabilization and can stabilize any long bone fracture. The bone plates and screws are used treat to animals with medium, and low fracture-assessment but they particularly high, scores, are useful low fracture-assessment scores. Screws may be used to reconstruct for animals with articular fractures without plate support in some cases. Screw resistance to bending load is determined by core diameter and increases by raising the radius to the fourth power. Screwholding power increases in a linear relationship with increasing diameter of the threads.

### **Veterinary Plate Overview**

screw plate systems have Locking some mechanical and application advantages over conventional plate systems. The screw head locks into the plate hole, allowing the plate and screws to act mechanically as a single unit. Additionally, the locking screw is not creating undue stress in the bone because it is in a neutral position. The result is an increase of the construct yield strength with the locking screws. Because the locking mechanism between the plate and the screw provides the fracture fixation, accurate contouring of the plate is unnecessary.

Bone plates are made of titanium; Bone plates are designated in several different ways, including plate length, screw size that the plate hole will accept, plate and screw hole configuration, and function. Plate length is designated by the number of plate holes. Each of the different plate sizes is available in a wide range of lengths.

### **Screws Overview**

Cortical and cancellous bone screws are made of titanium and self-tapping. A non-self-tapping screw requires that threads be cut into bone with a tap; a self-tapping screw has a cutting tip to cut threads into bone and flutes to accept bone debris. Cortical screws are fully threaded and designed for use in compact cortical bone. The pitch of the screw is greater than that of a cancellous screw. This allows a greater number of threads to engage the matrix of the relatively narrow-diameter cortical bone. Bone screws are used either to anchor bone plates to bone or to hold bone fragments in place. When used to anchor a bone plate to bone, these screws are called plate screws. The screws used to hold bone fragments in anatomic position and prevent them from collapsing into the marrow cavity are called position screws. Position screws can be inserted through a plate hole or placed in bone independent of the plate.

## Petite Mini Set

# Code	Description	Hole/Size	Qty	Image
MMP0100	Acetabular Plate 4 Holes	4	1	000
MMP0206	LC Combihole Plate 6 Holes 1,5 mm	6	1	0
MMP0207	LC Combihole Plate 7 Holes 1,5 mm	7	1	R
MMP0208	LC Combihole Plate 8 Holes 1,5 mm	8	1	B
MMP0209	LC Combihole Plate 9 Holes 1,5 mm	9	1	R
MMP0210	LC Combihole Plate 10 Holes 1,5 mm	10	1	
MMP0301	L Plate, Right 5 Holes	5	1	2
MMP0302	L Plate, Left 5 Holes	5	1	AN IN
		_		
MMP0401	Supracondylar Short Plate, Right 5 Holes	5	1	8
MMP0402	Supracondylar Sh <mark>ort Plate, Left 5 Holes</mark>	5	1	8
MMP0501	Supracondylar Long Plate, Right 10 Holes	10	1	and the second s
MMP0502	Supracondylar Long Plate, Left 10 Holes	10	1	ASS .
				0
				90
MMP0600	T Plate 4 Holes 1,2 mm	4	1	8
MMP0704	Reconstruction Plate 4 Holes 1mm	4	1	2
MMP0705	Reconstruction Plate 5 Holes 1mm	5	1	e e e e e e e e e e e e e e e e e e e
MMP0706	Reconstruction Plate 6 Holes 1mm	6	1	8
MMP0707	Reconstruction Plate 7 Holes 1mm	7	1	8
MMP0720	Reconstruction Cuttable Plate 20 Holes 1mm	20	1	8
MMP0804	Reconstruction Plate 4 Holes 1,5mm	4	1	8
MMP0805	Reconstruction Plate 5 Holes 1,5mm	5	1	8
MMP0806	Reconstruction Plate 6 Holes 1,5mm	6	1	8
MMP0807	Reconstruction Plate 7 Holes 1,5mm	7	1	8
MMP0820	Reconstruction Cuttable Plate 20 Holes 1,5mm	20	1	8
MMP0910	MIPO Plate 10 Holes	10	1	ß
MMP0912	MIPO Plate 12 Holes	12	1	Ø
MMP0914	MIPO Plate 14 Holes	14	1	A
MMP1007	Straight Plate, 7 Holes, 1,2mm	7	1	Ď
MMP1008	Straight Plate, 8 Holes, 1,2mm	8	1	E
MMP1107	Straight Plate, 7 Holes, 1,5mm	7	1	8
MMP1108	Straight Plate, 8 Holes, 1,5mm	8	1	8
MMP1200	T Combihole Plate 6 Holes 1,5 mm	6	1	

## Petite Mini Set

# Code	Description	Hole/Size	Qty	Image
MSL1906	Locking Cortical Screw 1,9 x 6 mm	6	10	
MSL1908	Locking Cortical Screw 1,9 x 8 mm	8	10	
MSL1910	Locking Cortical Screw 1,9 x 10 mm	10	10	
MSL1912	Locking Cortical Screw 1,9 x 12 mm	12	10	
MSL1914	Locking Cortical Screw 1,9 x 14 mm	14	10	
/ISL1916	Locking Cortical Screw 1,9 x 16 mm	16	10	
MSL1918	Locking Cortical Screw 1,9 x 18 mm	18	10	*
MSL1920	Locking Cortical Screw 1,9 x 20 mm	20	10	
MSL2006	Locking Cortical Screw 2,0 x 6 mm	6	10	
MSL2008	Locking Cortical Screw 2,0 x 8 mm	8	<mark>1</mark> 0	
MSL2010	Locking Cortical Screw 2,0 x 10 mm	10	10	
MSL2012	Locking Cortical Screw 2,0 x 12 mm	12	10	
MSL2014	Locking Cortical Screw 2,0 x 14 mm	14	10	
MSL2016	Locking Cortical Screw 2,0 x 16 mm	16	10	
MSL2018	Locking Cortical Screw 2,0 x 18 mm	18	10	•
MSL2020	Locking Cortical Screw 2,0 x 20 mm	20	10	
MSN2006	Non-Locking Cortical Screw 2,0 x 6 mm	6	10	
VSN2008	Non-Locking Cortical Screw 2,0 x 8 mm	8	10	<b>*</b>
MSN2010	Non-Locking Cortical Screw 2,0 x 10 mm	10	10	l l
MSN2012	Non-Locking Cortical Screw 2,0 x 12 mm	12	10	
MSN2014	Non-Locking Cortical Screw 2,0 x 14 mm	14	10	
MSN2016	Non-Locking Cortical Screw 2,0 x 16 mm	16	10	*
MSN2018	Non-Locking Cortical Screw 2,0 x 18 mm	18	10	
//SN2020	Non-Locking Cortical Screw 2,0 x 20 mm	20	10	
	Total		271	
	Instruments			
MTL0106	Screw Driver with Handle	T6 TORX	2	
MTL0108	Screw Driver with Handle	T8 TORX	2	
MTL0219	Drill Guide	For Ø1,9 Screw	1	
MTL0220	Drill Guide	For Ø2,0 Screw	1	11.12 12.5
MTL0315	Drill Bit	Ø1,5	2	XIX SV
			1	
VMC0000	Container			

## Austral Midi Set

# Code	Description	Hole/Size	Qty	Image
MSP0100	T Combihole Plate 6 Holes 2,5 mm	6	1	
MSP0200	Acetabular Plate 6 Holes 2,5 mm	6	1	000
MSP0306	LC-DCP Plate 6 Holes 2,5 mm	6	1	
MSP0308	LC-DCP Plate 8 Holes 2,5 mm	8	1	
MSP0310	LC-DCP Plate 10 Holes 2,5 mm	10	1	
MSP0312	LC-DCP Plate 12 Holes 2,5 mm	12	1	a a a a a a a a a a a a a a a a a a a
MSP0406	LC Combihole Plate 6 Holes 2,5 mm	6	1	
MSP0408	LC Combihole Plate 8 Holes 2,5 mm	8	1	
MSP0410 MSP0412 MSP0506	LC Combihole Plate 10 Holes 2,5 mm LC Combihole Plate 12 Holes 2,5 mm Straight Plate, 6 Holes, 2,5 mm	10 12 6 7	1 1 1	Ø
MSP0507 MSP0508 MSP0509	Straight Plate, 7 Holes, 2,5 mm Straight Plate, 8 Holes, 2,5 mm Straight Plate, 9 Holes, 2,5 mm	8	1 1 1	
MSP0510	Straight Plate, 10 Holes, 2,5 mm	10	1	80
MSP0604	Reconstruction Plate 4 Holes 2,5 mm	4	1	
MSP0605	Reconstruction Plate 5 Holes 2,5 mm	5	1	
MSP0606	Reconstruction Plate 6 Holes 2,5 mm	6	1	0000
MSP0607	Reconstruction Plate 7 Holes 2,5 mm	7	1	
MSP0608	Reconstruction Plate 8 Holes 2,5 mm	8	1	
MSP0609	Reconstruction Plate 9 Holes 2,5 mm	9	1	0
MSP0610	Reconstruction Plate 10 Holes 2,5 mm	10	1	

## Austral Midi Set

	Description		04-	lmono
# Code	Description	Hole/Size	Qty	Image
MSL2410	Locking Cortical Screw 2,4 x 10 mm	10	10	
MSL2412	Locking Cortical Screw 2,4 x 12 mm	12	10	
MSL2414	Locking Cortical Screw 2,4 x 14 mm	14	10	
MSL2416	Locking Cortical Screw 2,4 x 16 mm	16	10	
MSL2418	Locking Cortical Screw 2,4 x 18 mm	18	10	
MSL2420	Locking Cortical Screw 2,4 x 20 mm	20	10	•
MSL2710	Locking Cortical Screw 2,7 x 10 mm	10	10	
MSL2712	Locking Cortical Screw 2,7 x 12 mm	12	10	-
MSL2714	Locking Cortical Screw 2,7 x 14 mm	14	10	
MSL2716	Locking Cortical Screw 2,7 x 16 mm	16	10	
MSL2718	Locking Cortical Screw 2,7 x 18 mm	18	10	
MSL2720	Locking Cortical Screw 2,7 x 20 mm	20	10	
MSN2410	Non-Locking Cortical Screw 2,4 x 10 mm	10	10	
MSN2412	Non-Locking Cortical Screw 2,4 x 12 mm	12	10	<b>*</b>
MSN2414	Non-Locking Cortical Screw 2,4 x 14 mm	14	10	
MSN2416	Non-Locking Cortical Screw 2,4 x 16 mm	16	10	
MSN2418	Non-Locking Cortical Screw 2,4 x 18 mm	18	10	
MSN2420	Non-Locking Cortical Screw 2,4 x 20 mm	20	10	
MSN2422	Non-Locking Cortical Screw 2,4 x 22 mm	20	10	•
MSN2710	Non-Locking Cortical Screw 2,7 x 10 mm	10	10	<b></b>
MSN2712	Non-Locking Cortical Screw 2,7 x 12 mm	12	10	
MSN2712	Non-Locking Cortical Screw 2,7 x 12 mm	14	10	
MSN2714 MSN2716	Non-Locking Cortical Screw 2,7 x 14 mm	16	10	
MSN2718	Non-Locking Cortical Screw 2,7 x 18 mm	18	10	
MSN2710 MSN2720	Non-Locking Cortical Screw 2,7 x 10 mm	20	10	
WISIN2720	Total	20	272	
	Instrum	ents		
MTL0400	Screw Driver Handle		1	A
MTL0508	Screw Driver Bit	Torx 8	1	
MTL0520	Screw Driver Bit	Hex 2	1 👖	
MTL0224	Drill Guide	For Ø2,4 Screw	1	
MTL0227	Drill Guide	For Ø2,7 Screw	1 📻	
MTL0320	Drill Bit	Ø2,0	1	
MTL0322	Drill Bit	Ø2,25	1 000	
MSC0000	Container		1	
	Total		8	
	Austral Mi	di Set		

## Cross Mix Set

7

# Code	Description	Hole/Size	Qty	Image
MMP0100	Acetabular Plate 4 Holes 1.2 mm	4	1	<b>~</b>
MMX0104	Acetabular Plate 4 Holes 2,5 mm	4	1	
MSP0200	Acetabular Plate 6 Holes 2,5 mm	6	1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
MMP0206 MMP0207 MMP0209 MMP0210 MMX0206 MMX0207 MMX0208 MMX0209 MMX0210 MSP0406 MSP0406 MSP0408 MSP0410 MSP0412 MQP0306 MQP0310	LC Combihole Plate 6 Holes with 1,5 mm screw LC Combihole Plate 7 Holes with 1,5 mm screw LC Combihole Plate 8 Holes with 1,5 mm screw LC Combihole Plate 9 Holes with 1,5 mm screw LC Combihole Plate 10 Holes with 1,5 mm screw LC Combihole Plate 6 Holes with 2.0 mm screw LC Combihole Plate 7 Holes with 2.0 mm screw LC Combihole Plate 8 Holes with 2.0 mm screw LC Combihole Plate 9 Holes with 2.0 mm screw LC Combihole Plate 9 Holes with 2.0 mm screw LC Combihole Plate 10 Holes with 2.0 mm screw LC Combihole Plate 10 Holes with 2.0 mm screw LC Combihole Plate 10 Holes 2,5 mm LC Combihole Plate 8 Holes 2,5 mm LC Combihole Plate 10 Holes 2,5 mm LC Combihole Plate 10 Holes 3,5 mm LC Combihole Plate 8 Holes 3,5 mm LC Combihole Plate 10 Holes 3,5 mm	6 7 8 9 10 6 7 8 9 10 6 8 10 12 6 8 10	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
MQP0312 MMP0401	LC Combihole Plate 12 Holes 3,5 mm Supracondylar Short Plate, Right 5 Holes	12 5	1 1	° 🕻
MMP0402	Supracondylar Short Plate, Left 5 Holes	5	1	88
MMP0501	Supracondylar Long Plate, Right 10 Holes	10	1	Base
MMP0502	Supracondylar Long Plate, Left 10 Holes	10	1	8 90
MMP0600	T Plate 4 Holes 1,2 mm	4	2	8
MMP1200	T Combihole Plate 6 Holes 1,5 mm	6	1	
MSP0100	T Combihole Plate 6 Holes 2,5 mm	6	1	8
MQP0100	T Combihole Plate 6 Holes 3,5 mm	6	1	00000000000000000000000000000000000000
MMP0720	Reconstruction Cuttable Plate 20 Holes 1mm	20	1	8
MMP0820	Reconstruction Cuttable Plate 20 Holes 1,5mm	20	1	
MMX1025	Reconstruction Plate 10 Holes 2,5 mm	10	2	000
MMX1035	Reconstruction Plate 10 Holes 3,5 mm	10	2	000000000000000000000000000000000000000

## **Cross Mix Set**

# Code	Description	Hole/Size	Qty	Image
//SL1506	Locking Cortical Screw 1,5 x 6 mm	6	5	
ASL1508	Locking Cortical Screw 1,5 x 8 mm	8	5	
//SL1510	Locking Cortical Screw 1,5 x 10 mm	10	5	-
ASL1512	Locking Cortical Screw 1,5 x 12 mm	12	5	
//SL1514		14	5	
ASL1516	Locking Cortical Screw 1,5 x 16 mm	16	2	
ASL1518		18	2	
//SL1520	-	20	2	
ASL2006	Locking Cortical Screw 2,0 x 6 mm	6	5	
//SL2008	Locking Cortical Screw 2,0 x 8 mm	8	5	
MSL2010		10	5	
ASL2012	Locking Cortical Screw 2,0 x 12 mm	12	5	
//SL2014	Locking Cortical Screw 2,0 x 14 mm	14	5	
MSL2016	-	16	2	
MSL2018	Locking Cortical Screw 2,0 x 18 mm	18	2	
//SL2020	-	20	2	
//SL2410	5	10	5	
//SL2412	<b>.</b>	12	5	
//SL2414	•	14	5	_
MSL2416	-	16	5	
/SL2418	-	18	2	
/SL2420		20	2	
MSL2422	5	20	2	
MSL2710	<b>0</b>	10	5	
//SL2712	•	12	5	
MSL2714	-	14	5	
MSL2716	<b>u</b>	16	5	
MSL2718		18	2	
//SL2720	•	20	2	
MSL2722	-	20	2	
MSL2724		20	2	
ASL3510		14	5	
MSL3512	-	16	5	-
//SL3514	-	14	5	
ASL3516	Locking Cortical Screw 3,5 x 16 mm	16	5	
ASL3518	-	18	5	
ASL3520	Locking Cortical Screw 3,5 x 20 mm	20	5	
/ISL3522	Locking Cortical Screw 3,5 x 22 mm	22	2	
MSL3524	Locking Cortical Screw 3,5 x 24 mm	24	2	
ASL3526	Locking Cortical Screw 3,5 x 26 mm	26	2	
//SL3528	Locking Cortical Screw 3,5 x 28 mm	28	2	
ASL3530	Locking Cortical Screw 3,5 x 30 mm	30	2	
//SN1506	Non-Locking Cortical Screw 1,5 x 6 mm	6	2	
//SN1508		8	2	
//SN1510	Non-Locking Cortical Screw 1,5 x 10 mm	10	2	7
//SN1512		12	2	
//SN1514	<b>0</b>	14	2	
//SN1516		16	2	*
//SN1518	Non-Locking Cortical Screw 1,5 x 18 mm	18	2	
//SN1520	-	20	2	
//SN2006	Non-Locking Cortical Screw 2,0 x 6 mm	6	2	
//SN2008	-	8	2	7
//SN2010	-	10	2	
//SN2012	-	12	2	
//SN2014		14	2	₹
//SN2016		16	2	
	•	18	2	
//SN2018		20	2	
//SN2018 //SN2020	Non-Locking Cortical Screw 2,0 x 20 mm			
	-	10	2	
//SN2020	Non-Locking Cortical Screw 2,4 x 10 mm	10 12	2 2	-
//SN2020 //SN2410	Non-Locking Cortical Screw 2,4 x 10 mm Non-Locking Cortical Screw 2,4 x 12 mm			T
MSN2020 MSN2410 MSN2412	Non-Locking Cortical Screw 2,4 x 10 mm Non-Locking Cortical Screw 2,4 x 12 mm Non-Locking Cortical Screw 2,4 x 14 mm	12	2	
MSN2020 MSN2410 MSN2412 MSN2414	Non-Locking Cortical Screw 2,4 x 10 mm Non-Locking Cortical Screw 2,4 x 12 mm Non-Locking Cortical Screw 2,4 x 14 mm Non-Locking Cortical Screw 2,4 x 16 mm	12 14	2 2	T
MSN2020 MSN2410 MSN2412 MSN2414 MSN2414	Non-Locking Cortical Screw 2,4 x 10 mm Non-Locking Cortical Screw 2,4 x 12 mm Non-Locking Cortical Screw 2,4 x 14 mm Non-Locking Cortical Screw 2,4 x 16 mm Non-Locking Cortical Screw 2,4 x 18 mm	12 14 16	2 2 2	

## **Cross Mix Set**

# Code	Description	Hole/Size	Qty	Image
MSN2710	Non-Locking Cortical Screw 2,7 x 10 mm	10	2	
MSN2712	Non-Locking Cortical Screw 2,7 x 12 mm	12	2	7
MSN2714	Non-Locking Cortical Screw 2,7 x 14 mm	14	2	
MSN2716	Non-Locking Cortical Screw 2,7 x 16 mm	16	2	
MSN2718	Non-Locking Cortical Screw 2,7 x 18 mm	18	2	
MSN2720	Non-Locking Cortical Screw 2,7 x 20 mm	20	2	*
MSN2722	Non-Locking Cortical Screw 2,7 x 22 mm	22	2	
MSN2724		24	2	
MSN3510	Non-Locking Cortical Screw 3,5 x 10 mm	10	2	
	Non-Locking Cortical Screw 3,5 x 12 mm	12	2	<b>9</b>
	Non-Locking Cortical Screw 3,5 x 14 mm	14	2	1
	Non-Locking Cortical Screw 3,5 x 16 mm	16	2	1
	Non-Locking Cortical Screw 3,5 x 18 mm	18	2	1
	Non-Locking Cortical Screw 3,5 x 20 mm	20	2	1
MSN3522		22	2	
MSN3524 MSN3526	· · · · · · · · · · · · · · · · · · ·	24 26	2 2	
MSN3526 MSN3528	-	28	2	
MSN3530	Non-Locking Contical Screw 3,5 x 20 mm	28 30	2	
MONOSOO	Total		275	
			2.0	
	Instruments			
MTL0106	Screw Driver with Handle	T6 TORX	1	
MTL0400	Screw Driver Handle		1	
MTL0215	Drill Guide	For Ø1,5 Screw	1	
MTL0220	Drill Guide	For Ø2,0 Screw	1	
MTL0224	Drill Guide	For Ø2,4 Screw	1	
MTL0227	Drill Guide	For Ø2,7 Screw	1	14. ====
MTL0235	Drill Guide	For Ø3,5 Screw	1 -	
MTL0311	Drill Bit	Ø1,1	2	
MTL0315	Drill Bit	Ø1,5	2	
MTL0320	Drill Bit	Ø2,20	2	
MTL0322	Drill Bit	Ø2,25	2	
MTL0328	Drill Bit	Ø2,28	2	E *
MTL0508	Screw Driver Bit	Torx 8	1	
MTL0520	Screw Driver Bit	Hex 2	1	
MTL0525	Screw Driver Bit	Hex 2.5	1	
MMC0000	Container		1	
	Total		21	
	Cross Mix Sat			

Cross Mix Set

## Zenith Maxi Set

# Code	Description	Hole/Size	Qty	Image
MQP0100	T Combihole Plate 6 Holes 3,5 mm	6	1	1
				8
MQP0206	LC-DCP Plate 6 Holes 3,5 mm	6	1	۵
MQP0208	LC-DCP Plate 8 Holes 3,5 mm	8	1	
MQP0210	LC-DCP Plate 10 Holes 3,5 mm	10	1	2
MQP0212	LC-DCP Plate 12 Holes 3,5 mm	12	1	8
MQP0306	LC Combihole Plate 6 Holes 3,5 mm	6	1	0
MQP0308	LC Combihole Plate 8 Holes 3,5 mm	8	1	A
MQP0310	LC Combihole Plate 10 Holes 3,5 mm	10	1	8
MQP0312	LC Combihole Plate 12 Holes 3,5 mm	12	1	8
MQP0404	Reconstruction Plate 4 Holes 3,5 mm	4	1	
MQP0405	Reconstruction Plate 5 Holes 3,5 mm	5	1	
MQP0406	Reconstruction Plate 6 Holes 3,5 mm	6	1	8
MQP0407	Reconstruction Plate 7 Holes 3,5 mm	7	1	8
MQP0408	Reconstruction Plate 8 Holes 3,5 mm	8	1	8
MQP0409	Reconstruction Plate 9 Holes 3,5 mm	9	1	8
MQP0410	Reconstruction Plate 10 Holes 3,5 mm	10	1	

## Zenith Maxi Set

# Code	# Code Description Hole/Size Qty		Image	
MQP0100	T Combihole Plate 6 Holes 3,5 mm	6	1	
MQP0206	LC-DCP Plate 6 Holes 3,5 mm	6	1	
MQP0208	LC-DCP Plate 8 Holes 3,5 mm	8	1	8
MQP0210	LC-DCP Plate 10 Holes 3,5 mm	10	1	8
MQP0212	LC-DCP Plate 12 Holes 3,5 mm	12	1	8
MQP0306	LC Combihole Plate 6 Holes 3,5 mm	6	1	0
MQP0308	LC Combihole Plate 8 Holes 3,5 mm	8	1	B
MQP0310	LC Combihole Plate 10 Holes 3,5 mm	10	1	B
MQP0312	LC Combihole Plate 12 Holes 3,5 mm	12	1	C
MQP0404	Reconstruction Plate 4 Holes 3,5 mm	4	1	
MQP0405	Reconstruction Plate 5 Holes 3,5 mm	5	1	9
MQP0406	Reconstruction Plate 6 Holes 3,5 mm	6	1	ğ
MQP0407	Reconstruction Plate 7 Holes 3,5 mm	7	1	8
MQP0408	Reconstruction Plate 8 Holes 3,5 mm	8	1	8
MQP0409	Reconstruction Plate 9 Holes 3,5 mm	9	1	8
MQP0410	Reconstruction Plate 10 Holes 3,5 mm	10	1	
MSL3514	Locking Cortical Screw 3,5 x 14 mm	14	10	
MSL3516	Locking Cortical Screw 3,5 x 16 mm	16	10	-
MSL3518	Locking Cortical Screw 3,5 x 18 mm	18	10	I
MSL3520	Locking Cortical Screw 3,5 x 20 mm	20	10	
MSL3522	Locking Cortical Screw 3,5 x 22 mm	22	10	I
MSL3524	Locking Cortical Screw 3,5 x 24 mm	24	10	
MSL3526	Locking Cortical Screw 3,5 x 26 mm	26	10	
MSL3528	Locking Cortical Screw 3,5 x 28 mm	28	10	
MSL3530	Locking Cortical Screw 3,5 x 30 mm	30	10	
MSN3520	Non-Locking Cortical Screw 3,5 x 20 mm	20	10	
MSN3522	Non-Locking Cortical Screw 3,5 x 22 mm	22	10	
MSN3524	Non-Locking Cortical Screw 3,5 x 24 mm	24	10	
MSN3526	Non-Locking Cortical Screw 3,5 x 26 mm	26	10	
MSN3528	Non-Locking Cortical Screw 3,5 x 28 mm	28	10	<b>U</b>
MSN3530	Non-Locking Cortical Screw 3,5 x 30 mm	30	10	
	Total		166	

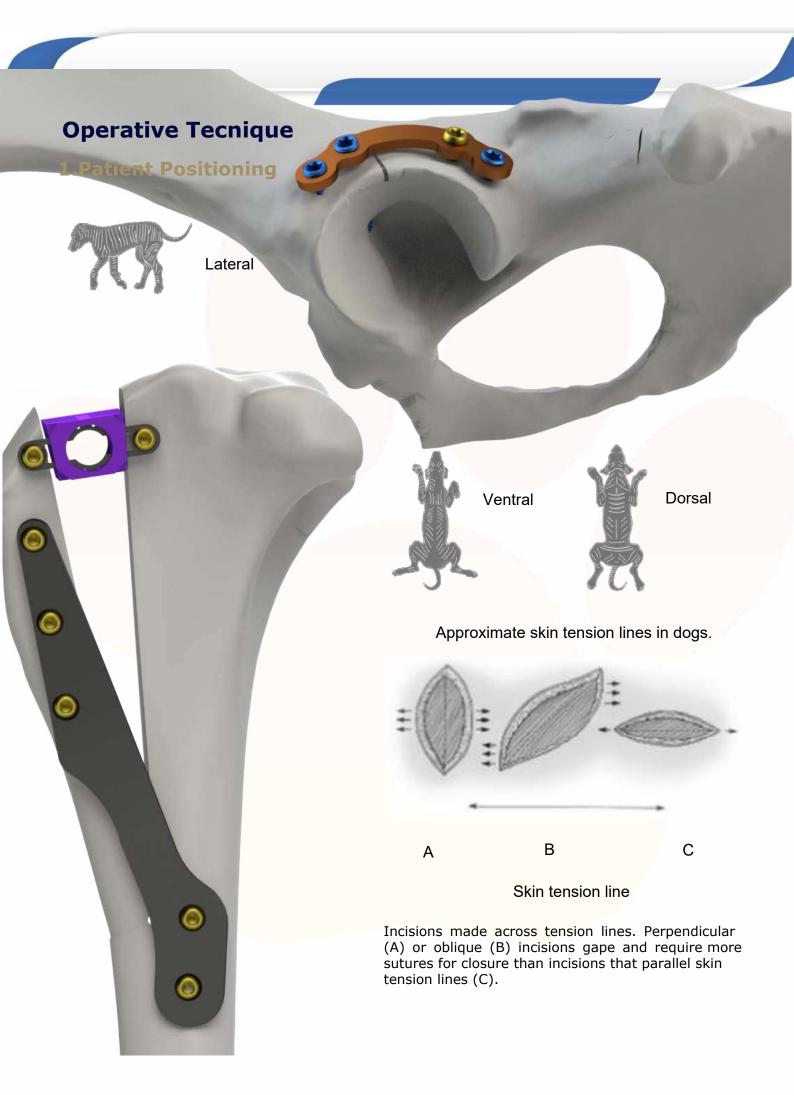
Instruments					
MTL0400	Screw Driver Handle			1	
MTL0525	Screw Driver Bit		Hex 2,5	2	- Annual I
MTL0235	Drill Guide		For Ø3,5 Screw	1	line."
MTL0330	Drill Bit		Ø3,0mm	2	
MQC0000	Container			1	10 OC
		Total		7	

Zenith Maxi Set

# Code	Description	Hole/Size	Qty	Image
MTC0310	TTA Implant 3,0 x 10 mm	3	1	
MTC0313	TTA Implant 3, <mark>0 x 13 mm</mark>	3	1	-
MTC0316	TTA Implant 3,0 x 16 mm	3	1	
MTC0319	TTA Implant 3,0 x 19 mm	3	1	
MTC4510	TTA Impl <mark>ant 4,5 x 10 mm</mark>	4.5	1	
MTC4513	TTA Impl <mark>ant 4,5 x 13 mm</mark>	4.5	1	<b>E</b>
MTC4516	TTA Implant 4,5 x 16 mm	4.5	1	
MTC0613	TTA Imp <mark>lant 6,0 x 13 mm</mark>	6	1	
MTC0616	TTA Implant 6,0 x 16 mm	6	1	
MTC0619	TTA Implant 6,0 x 19 mm	6	1	
MTC0622	TTA Implant 6,0 x 22 mm	6	1	
MTC7516	TTA Impla <mark>nt 7,5 x 16 mm</mark>	7.5	1	-
MTC7519	TTA Implant 7,5 x 19 mm	7.5	1	護
MTC7522	TTA Implant 7,5 x 22 mm	7.5	1	
MTC0916	TTA Implant 9,0 x 16 mm	9	1	200
MTC0919	TTA Implant 9,0 x 19 mm	9	1	
MTC0922	TTA Implant 9,0 x 22 mm	9	1	3
MTC0925	TTA Implant 9,0 x 25 mm	9	1	
MTC1019	TTA Implant 10,5 x 19 mm	10.5	1	-
MTC1022	TTA Implant 10,5 x 22 mm	10.5	1	
MTC1025	TTA Implant 10,5 x 25 mm	10.5	1	
MTC1219	TTA Implant 12,0 x 19 mm	12	1	
MTC1222	TTA Implant 12,0 x 22 mm	12	1	2 55
MTC1225	TTA Implant 12,0 x 25 mm	12	1	
MTC1228	TTA Implant 12,0 x 28 mm	12	1	
MTC1322	TTA Implant 13,5 x 22 mm	13.5	1	
MTC1325	TTA Implant 13,5 x 25 mm	13.5	1	
MTC1328	TTA Implant 13,5 x 28 mm	13.5	1	
MTC1525	TTA Implant 15,0 x 25 mm	15	1	
MTC1528	TTA Implant 15,0 x 28 mm	15	1	
MTC1531	TTA Implant 15,0 x 31 mm	15	1	

# Code	Description	Hole/Size	Qty	Image
MTC2020	Speacer Ø2,0 x 2 mm	Ø2,0	5	
MTC2040	Speacer Ø2,0 x 4 mm	Ø2,0	5	
MTC2060	Speacer Ø2,0 x 6 mm	Ø2,0	5	
MTC2420	Speacer Ø2,4 x 2 mm	Ø2,4	5	
MTC2440	Speacer Ø2,4 x 4 mm	Ø2,4	5	T
MTC2460	Speacer Ø2,4 x 6 mm	Ø2,4	5	
MTC2720	Speacer Ø2,7 x 2 mm	Ø2,7	5	9
MTC2740	Speacer Ø2,7 x 4 mm	Ø2,7	5	
MTC2760	Speacer Ø2,7 x 6 mm	Ø2,7	5	
MTC0101	TTA Plate, Right 1 mm x 35 L	1	1	٩
MTC0102	TTA Plate, Right 1 mm x 42 L	1	1	•
MTC0103	TTA Plate, Right 1 mm x 52 L	1	1	•
MTC1501	TTA Plate, Right 1,5 mm x 65 L	1.5	1	
MTC1502	TTA Plate, Right 1,5 mm x 78 L	1.5	1	
MTC2001	TTA Plate, Right 2,0 mm x 91 L	2	1	
MTC2002	TTA Plate, Right 2,0 mm x 104 L	2	1	•
MTC0111	TTA Plate, Left 1 mm x 35 L	1	1	0
MTC0112	TTA Plate, Left 1 mm x 42 L	1	1	Ĭ.
MTC0113	TTA Plate, Left 1 mm x 52 L	1	1	
MTC1511	TTA Plate, Left 1,5 mm x 65 L	1.5	1	
MTC1512	TTA Plate, Left 1,5 mm x 78 L	1.5	1	
MTC2011	TTA Plate, Left 2,0 mm x 91 L	2	1	
MTC2012	TTA Plate, Left 2,0 mm x 104 L	2	1	•

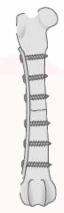
# Code	Description	Hole/Size	Qty	Image	
MSN2006	Non-Locking Cortical Screw 2,0 x 6 mm	6	5		
MSN2008	Non-Locking Cortical Screw 2,0 x 8 mm	8	5		
MSN2010	Non-Locking Cortical Screw 2,0 x 10 mm	10	5		
MSN2012	Non-Locking Cortical Screw 2,0 x 12 mm	12	5		
MSN2014	Non-Locking Cortical Screw 2,0 x 14 mm	14	5		
MSN2016	Non-Locking Cortical Screw 2,0 x 16 mm	16	5		
MSN2018	Non-Locking Cortical Screw 2,0 x 18 mm	18	5		
MSN2020	Non-Locking Cortical Screw 2,0 x 20 mm	20	5		
MSN2410	Non-Locking Cortical Screw 2,4 x 10 mm	10	5		
MSN2412	Non-Locking Cortical Screw 2,4 x 12 mm	12	5	-	
MSN2414	Non-Locking Cortical Screw 2,4 x 14 mm	14	5		
MSN2416	Non-Locking Cortical Screw 2,4 x 16 mm	16	5		
MSN2418	Non-Locking Cortical Screw 2,4 x 18 mm	18	5		
MSN2420	Non-Locking Cortical Screw 2,4 x 20 mm	20	5		
MSN2422	Non-Locking Cortical Screw 2,4 x 22 mm	22	5		
MSN2424	Non-Locking Cortical Screw 2,4 x 24 mm	24	5		
MSN2710	Non-Locking Cortical Screw 2,7 x 10 mm	10	5		
MSN2712	Non-Locking Cortical Screw 2,7 x 12 mm	12	5		
MSN2714	Non-Locking Cortical Screw 2,7 x 14 mm	14	5		
MSN2716	Non-Locking Cortical Screw 2,7 x 16 mm	16	5		
MSN2718	Non-Locking Cortical Screw 2,7 x 18 mm	18	5		
MSN2720	Non-Locking Cortical Screw 2,7 x 20 mm	20	5		
MSN2722	Non-Locking Cortical Screw 2,7 x 22 mm	22	5		
MSN2724	Non-Locking Cortical Screw 2,7 x 24 mm	24	5		
MSN2726	Non-Locking Cortical Screw 2,7 x 26 mm	26	5		
MSN2728	Non-Locking Cortical Screw 2,7 x 28 mm	28	5		
MSN2730	Non-Locking Cortical Screw 2,7 x 30 mm	30	5		
MSN2732	Non-Locking Cortical Screw 2,7 x 32 mm	32	5		
	Total		230		
	Instrument				
MTL0400	Screw Driver Handle		1		
MTL0520	Screw Driver Bit	2,0 HEX	1		
MTL0508	Screw Driver Bit	T8 TORX	1	E Boat	
MTL0315	Drill Bit	Ø1,5	1		
MTL0320	Drill Bit	Ø2,0	1		
MTL0322	Drill Bit	Ø2,25	1	111 Inning 188	
MTL0600	Saw Guide		1	//) 10-5- [ ( ( )	
MTL0701	Seperator	3-6	1	111	
MTL0702	Seperator	4,5-9	1		
MTL0703	Seperator	7,5-15	1		
MTL0800	Holder		1		
MTC0000	Container		1		
	Total		12		
Trot TTA SET					



#### 2.Plate and Screw Fixation

They are manufactured so that there is limited contact between the plate and bone to minimize interruption of blood flow. This is accomplished by undercutting the bottom surface of the plate between the screw holes. Undercutting the screw holes also evenly distributes the stress on the plate, eliminating the effect of the plate hole as a stress concentrator. The screw holes are based on the dynamic compression principle but differ in that the oblong screw hole is inclined from both ends of the screw hole toward the center, allowing compres-sion to be applied in either direction. Special drill guides are required.

#### Functions of a bone plate.



A, Compression plate.

Although bone plates are designated as to their intended function (compression, neutralization, and bridging or but-tress), depending on how they are applied to the bone, it is important to realize that the plate configuration (DCP plate, veterinary cuttable plate, and broad plate) does not change. A 3.5 broad DCP may serve as a compression plate, neutral-ization plate, or buttress plate, depending on how it is applied to the bone. A bone plate serves as a compression plate when compression is applied to the fracture line through proper application of the plate and screws.



B, Neutralization plate.

A bridging plate spans a fragmented section of bone and a but-tress plate holds a collapsed epiphysis in position. The most common application of a bridging plate is with fragmented diaphyseal fractures in which surgical reduction and stabili-zation of the bone fragments are not technically feasible (i.e., nonreducible fractures

C, Buttress plate.

The plate length should be sufficient to prevent premature loosening of plate and subsequent loosening of the plate from the bone surface. The minimum length screws of plate should allow purchase of six cortices in the main bone fragment above the fracture and six cortices in the main fragment below the fracture. Other plates useful in small animals include the reconstruction plate, veterinary cuttable plate, canine acetabular plate, advantageous for specific injuries. Reconstruction have These plates are plates deep indentations in the sides of the plate between plate holes. These plates may be contoured in three planes, making them especially useful for treating fractures of bones with complex three-dimensional geometry, such as the pelvis, the distal humerus and femur, or the mandible. Veterinary cut-table plates (VCPs) are available in two sizes, designated by the size screw that the plate hole will accept.

> The drill hole in the near cortex must be a glide hole (a hole equal in diameter to the outside diameter or thread diameter of the screw), whereas the drill hole in the far cortex must be a thread hole (a hole equal in diameter to the inner core diameter or shaft of the screw).

VCPs are often used in a stacked configuration to bridge comminuted fractures in smaller patients. Stacking two plates onto each other increases the strength and stiff-ness of the fixation compared with using a single plate. The canine acetabular plate is manufactured to conform to the dorsolateral surface of the canine acetabulum and is avail-able in two sizes. This plate is particularly useful in large and giant breeds because it is strong and stiff. The canine distal radial plate is made for distal radial and ulnar fractures in small breeds. Typically, this fracture has a very short distal segment, which makes it difficult to place an adequate number of plate screws. The canine distal radial plate has a T configuration, with the horizontal bar conforming to the epiphysis and/or metaphysis of the distal radius. The shape and size of the plate allow adequate plate screws to be placed in the short metaphyseal segment. Numerous plates are designed with locking screw technology.

#### Key Concepts for Applying Screws

- Reduce and secure the fracture before placing the lag screw.
- For optimal compression, place the screw perpendicular to the fracture.
- Drill the near cortex with a bit equal to the screw thread diameter.
- Drill the far cortex with a bit equal to the screw core diameter.
- When using a partially threaded screw, be sure the threads do not cross the fracture.

To insert screw, use a drill bit that corresponds to the outer diameter of the screw or thread diameter to create a glide hole through which the screw will pass without purchasing bone. When creating the glide hole, drill the bone using a drill guide to maintain alignment and protect soft tissue. Insert a drill sleeve into the glide hole in preparation for creating the thread hole in the far cortex (the drill sleeve insert centers the thread hole in the far cortex relative to the glide hole, which prevents stripping the thread hole on screw insertion).

After the glide hole and thread hole are made, use a countersink to prepare a site for the screw head in the cortex, and use a depth gauge to determine the appropriate-length screw to use. Tap the thread hole through a tap sleeve to maintain alignment and protect soft tissue. Insert the appropriate-length screw and tighten it with the fingers only on the screwdriver.

To insert a cortex screw with lag function, drill a glide hole in the near bone segment with a drill bit that has the diameter of the outside screw thread. Use the drill guide to protect soft tissue and align the drill bit.

Place an insert sleeve through the glide hole until the far bone segment is engaged. Drill a thread hole with a drill bit the same diameter as the core of the screw. The drill sleeve keeps the thread hole centered relative to the glide hole.

Use a countersink to cut a bevel in the cortical bone at the entrance of the glide hole. This increases the contact area between the bone and screw and decreases the amount of the screw head exposed. This step is not needed if the lag screw is placed through a plate hole.

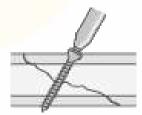
Determine the length of screw to be inserted with a depth gauge.



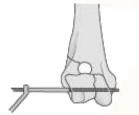
Use a tap to cut threads for the screw in the far bone segment. This step is unnecessary if selftapping screws are used.



Insert the screw and tighten it to create interfragmentary compression.



The threads of the screw will glide through the hole in the near cortex (glide hole) and purchase the bone in the far cortex (thread hole). As the screw is tightened, the screw head contacts the near cortex. As the threads purchase the far cortex, the fracture line is compressed. A lag screw can be placed through a plate hole by following the same procedure. Because the screw head rests against the bone plate, however, it is not necessary to countersink the near cortex. Fully threaded cancellous screws can also be inserted as lag screws, either through the plate or independent of the plate, by following the same procedures. The only difference in placement is the instrumentation needed to size. Partially threaded bone screws match the screw can also be used as lag screws. With partially threaded screws, drill the near and far cortices as thread holes.

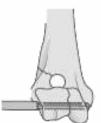


to insert a partially threaded cancellous bone screw, drill the near and far cortices as threaded holes.



Measure the depth of the hole.

For compression to occur, the threads must not be present at the fracture line. Note that the screw threads have crossed past the fracture line and that the smooth shaft of the screw lies within the fracture plane.



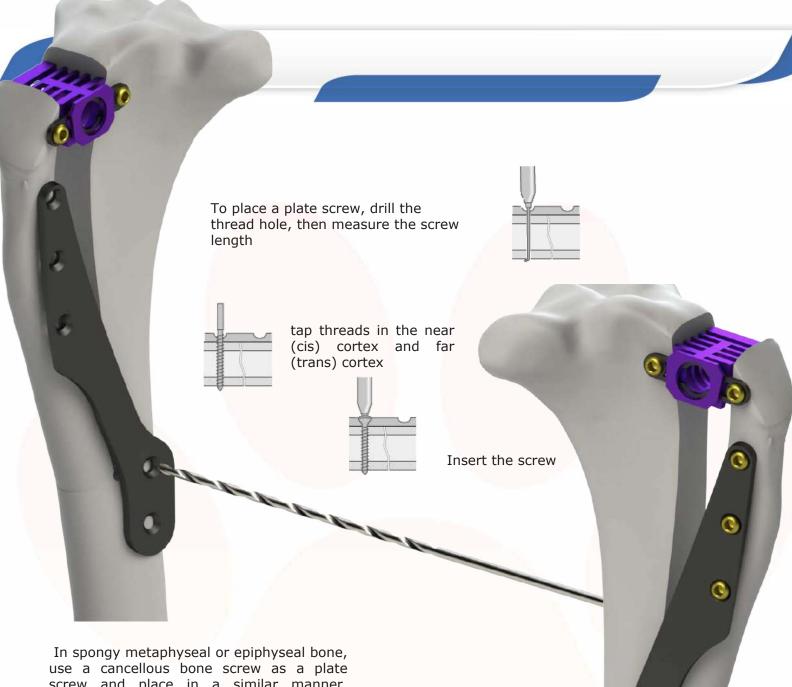
Tap the holes.

Insert the screw to compress the fracture.

Use a a drill bit corresponding to the inner core diameter (shaft) of the screw, before inserting the screw. Because the screw is only threaded, there are no threads to engage the bone on the near side of the fracture, and bone is purchased only in the far cortex. Position screw. Either a cortical screw or a fully threaded cancellous screw can function as a position screw.

Insert the screw, using bone-holding forceps to hold the fragments in position and prevent distraction at the fracture line. Gently tighten the screws until the screw head rests adjacent to the near cortex The screw holds the fragments in position while the bone-holding forceps is removed. Plate screw. Standard plate screws secure the plate to the bone by the force generated by the torque applied to the screw. When inserting a plate screw in the diaphysis, drill a thread hole through the near and far (cortices. Use the neutral drill guide to place the screw in the center of the plate hole.

Use the load or eccentric drill guide with the arrow pointed toward the fracture line to place the screw eccentrically initially and cause compression at the fracture line when the screw is tightened



screw and place in a similar manner. Locking screw. Locking screws must be accurately inserted perpendicular to the plate hole for the threads to match and secure the screw. Additionally, the fracture must be reduced and the plate positioned appropriately before the screw is inserted. Screw the threaded drill guide into the locking hole. Be sure the guide is secured. Drill with the appropriately sized drill bit. Remove the drill guide, and measure the hole to determine screw length. Locking screws may be used as monocortical or bicortical screws. If using a monocortical screw, take care that the screw does not contact the far cortex as this may interfere with securing the screw head. Use the screwdriver to seat the screw. Carefully tighten the screw, avoiding excessive force. Alternatively, use a power driver with a torque limiting attachment to seat the screw.

#### **Key Concepts for Applying Bone Plates**

C

- Select the appropriate plate size.
- Select a plate that spans the bone
- Accurately contour the plate.
- Place a minimum of three screws or secure six cortices above and below the fracture.
- Use a longer and stronger plate as a bridging plate or augment it with an IM pin.

Secure the plate to the bone with plate-holding forceps, ensuring that the ends of the plate lie over the bone. If the plate is contoured to conform accurately to the bone surface, the fracture line will load asymmetrically. nsert subsequent plate screws in holes in an alternating manner on either side of the fracture, working toward the plate ends. Adequate compression of the fracture is generally achieved with loading of the first two screws.

#### **Key Concepts for Applying Locking Plates**

- Plate contour is not critical.
- Locking screws must be perpendicular to the plate.
- Reduce the fracture before locking screws are tightened.
- Use a longer plate with fewer screws.

NOTE • If you desire greater compression, place an additional screw on each side of the fracture in the loaded position (insert the remaining screws in a neutral position).

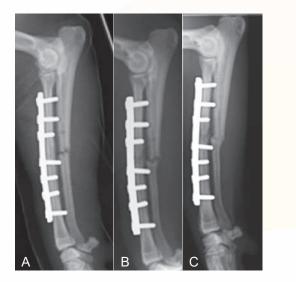


### **3. Postoperative Care**

plates and require minimal Bone screws postoperative main-tenance. Postoperative analgesia should provided (see Tables 32-5 and 32-6 on be pp. 1045-1048). Activity should be restricted to leash walking and physical rehabilitation until the fracture has healed. Physical rehabilitation encourages controlled limb use and optimal limb function after fracture healing (see Chapter 11). Generally, postoperative examina-tions should be done at 2 and 6 weeks after surgery and then every 6 weeks. The functional period of plates and screws is relatively long because of the interlocking hold of the screws with the bone. Most interfragmentary screws are left in place after bone healing. If plates are removed, removal should be delayed until at least 3 to 4 months after radiographic bone union. When bone plates are applied to long bone fractures in younger patients, they should be removed. Removal is also recommended when plates have been applied in areas with limited soft tissue covering, such as the radius and tibia, because cold conduction may cause discomfort. Plate removal should be performed aseptically with the patient under general anesthetic. Incise the skin overlying the plate screws and bluntly dissect through soft tissue to the head of the screw. Once all plate screws are removed, lift the plate from the bone surface at one end and extract it. Locking plate screws may become cold welded to the plate, making removal difficult and requiring the use of carbide drills or highspeed metal cutting tools.



Fracture healing is the biologic process after cartilage and bone disruption that restores tissue continuity necessary for function. The goals of fracture treatment are to (1) encour-age healing, (2) restore function to affected bone and surrounding soft tissue, and (3) obtain a cosmetically acceptable appearance. Each goal should be kept in mind when selecting treatment regimens and fixation devices (see sections on decision making and fixation systems).



Frac-ture healing varies depending on biologic factors (e.g., frac-ture location in cortical bone, cancellous bone, or physeal cartilage; cellular responses; circulation; and concurrent soft tissue injury) and mechanical factors (e.g., stability of bone segments and fragments after fixation device. The radiographic appearance of direct bone union is one of slowly increasing density of the fracture line with-out bridging periosteal and endosteal callus. Although the fracture line may be filled with bone density material within 6 to 8 weeks after fracture (reflecting the network of fibrous bone), the bone is not strong enough to withstand unprotected weight bearing until osteonal remod-eling is complete.

**A**, Fracture healing in a transverse radial fracture in mature dog treated with bone plate. **B** and **C**, The radiographic appearance of direct bone union is one of slowly increasing density of the fracture line without bridging periosteal and endosteal callus.

### 4. Implant Removal

Deciding when to remove fixation devices may be difficult. This decision is usually made after evaluating radiographs of healing fractures. Knowledge of radiographic appearance of bone healing associated with various fixation systems is mandatory for informed decision making. In general, fixa-tion systems can be removed when there is radiographic evidence of bone bridging all fracture lines on all views.

Fractures stabilized with casts heal by indirect bone for-mation; radiographically, this appears as bridging periosteal and

endosteal callus at fracture sites the large amounts of callus that generally form with this type of fixation serve as an internal support for bone remodel-ing. An exception to this is with distal radial and ulnar fractures in toy-breed dogs, in which large amounts of callus may not be produced. The cast should be removed once the callus has bridged the fracture lines on all radio-graphic views.

Bone healing with external fixators may be direct, indi-rect, or somewhere between these extremes, depending on fracture type, mechanical environment afforded by external fixators, and degree of bone reconstruction. In general, frac-tures stabilized with external fixators have less periosteal callus formation compared with similar fractures treated with casts. Also, fractures stabilized with external fixators develop more endosteal and bridging callus than periosteal callus. Radiographically, simple fractures that are anatomi-cally reduced and rigidly stabilized with external fixators (e.g., bilateral external fixators with multiple pins) heal with minimal periosteal or endosteal callus. This is radiographi-cally similar to the direct bone union response observed in fractures treated with plates and screws. As fixator stiffness decreases, increased callus is usually evident. When simple fractures are not anatomically reduced (e.g., with closed reduction) and fixators are not rigid, resorption of bone at fracture lines and callus formation are often evident. This apparently occurs as a normal response of healing bone to high strain when the increased strain is concentrated in a single fracture line.



Indirect bone healing occurs in fractures stabilized with a cast **(A)**. Initially the fracture gap increases in width as bone resorption occurs **(B)**. Periosteal callus starts at a distance from the fracture surface and increases in width as it approaches the fracture **(B)**. Eventually the callus resembles an arch spanning the fracture **(C)**. The fracture gap slowly becomes indistinct as the callus begins to overlay the fracture and as mineralization of the fibrocartilage occurs **(C)**. After the callus bridges the fracture, stability is achieved and bone remodeling occurs **(D)**.

### **Instrument Overview**

Bone plating sets are available that contain the instrumentation necessary to apply the implants. Drill guides and sleeves, taps, depth gauge, and screwdriver are used to insert screws. Bending and torquing irons are used to contour or shape the plates.

### **Petite Mini Set**

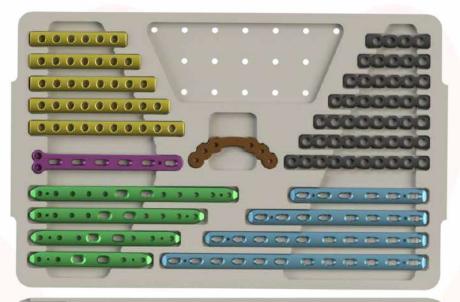


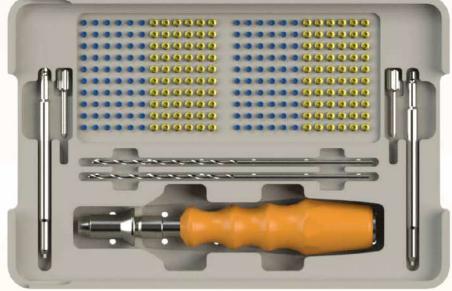
### Code Description

MTL0306Screw Driver with HandleT6 TORX2MTL0308Screw Driver with HandleT8 TORX2MTL0419Drill GuideFor Ø1,9 Screw1MTL0420Drill GuideFor Ø2,0 Screw1MTL0515Drill BitØ1,52MMY0000Container1

Qty

### **Austral Midi Set**



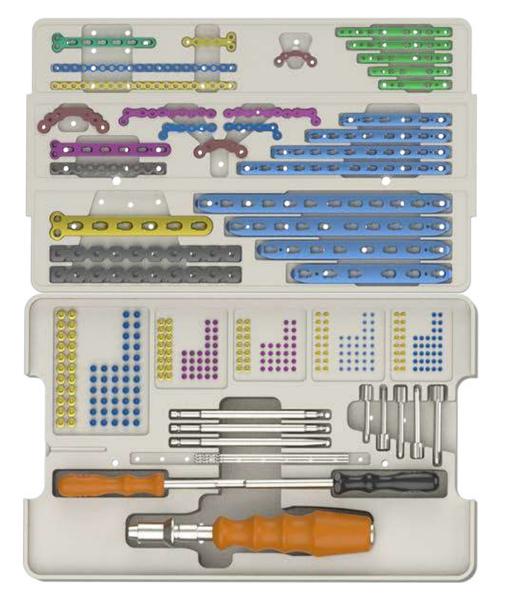


### Code Description

Qty

MTL0208 MTL0220 MTL0424 MTL0427 MTL0520	Screw Driver Handle Screw Driver Bit Torx 8 Screw Driver Bit Hex 2 Drill Guide For Ø2,4 Screw Drill Guide For Ø2,7 Screw Drill Bit Ø2,0 Drill Bit Ø2,25 Container	
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Code

### Description

Qty

MTL0106 MTL0400	Screw Driver with Handle Screw Driver Handle	T6 TORX	
MTL0215	Drill Guide	For Ø1,5 Screw	
MTL0220	Drill Guide	For Ø2,0 Screw	
MTL0224	Drill Guide	For Ø2,4 Screw	
MTL0227	Drill Guide	For Ø2,7 Screw	
MTL0235	Drill Guide	For Ø3,5 Screw	
MTL0311	Drill Bit	Ø1,1	
MTL0315	Drill Bit	Ø1,5	
MTL0320	Drill Bit	Ø2,20	
MTL0322	Drill Bit	Ø2,25	
MTL0328	Drill Bit	Ø2,28	
MTL0508	Screw Driver Bit	Torx 8	
MTL0520	Screw Driver Bit	Hex 2	
MTL0525	Screw Driver Bit	Hex 2.5	
MMC0000	Container		

5

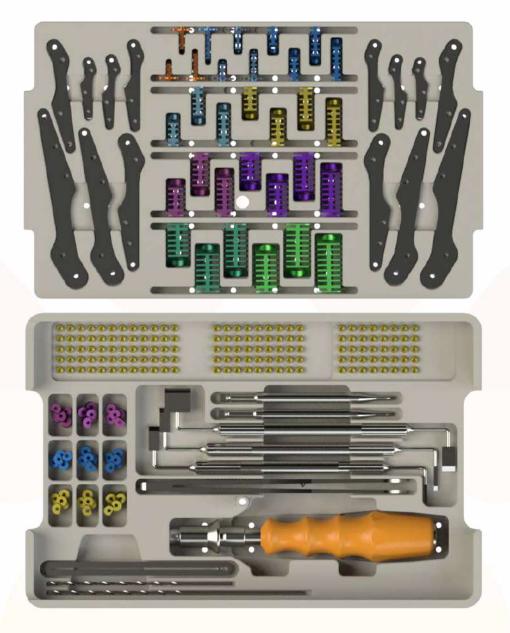
### Zenith Maxi Set



### Code Description

Qty

MTL0306	Screw Drive	er with Handle	T6 TORX	2
MTL0308	Screw Drive	er with Handle	T8 TORX	2
MTL0419	Drill Guide	For Ø1,9 Screw		1
MTL0420	Drill Guide	For Ø2,0 Screw		1
MTL0515	Drill Bit	Ø1,5		2
MMY0000	Container			1



Code	Description	Qty
MTL0100	Screw Driver Handle	1
MTL0220	Screw Driver Bit 2,0 HEX	1
MTL0235	Screw Driver Bit T8 TORX	1
MTL0515	Drill Bit Ø1,5	1
MTL0520	Drill Bit Ø2,0	1
MTL0522	Drill Bit Ø2,25	1
MTL0600	Saw Guide	1
MTL0701	Seperator 3-6	1
MTL0702	Seperator 4,5-9	1
MTL0703	Seperator 7,5-15	1
MTL0800	Forceps	1
MTY0000	Container	1

## **Pike Orthopaedic Set**

# Code	Description	Hole/Size	Qty	Image
MTL0408	AO Quick Coupling Torgue Limited Handle,0.8	0.8 Torque	1	
MTL0415	AO Quick Coupling Torgue Limited Handle,1.5	1.5 Torque	1	
MTL0800	Holder		1	
MTL0900	Retractor Small	Small	1	
MTL0902	Retractor Large	Large	1	
MTL1000	Hohmann Retractor Small	Small	1	
MTL1002	Hohmann Retractor Large	Large	1	
MTL1100	Mini Plate Bender, Mini	Mini	2	
MTL1200	Depth Gauge, 0-40mm	0-40mm	1	

## **Pike Orthopaedic Set**

# Code	Description	Hole/Size	Qty	Image
MTL1300	Sharp Hook		1	·
MTL1400	Small Reduction Forceps with Point, Small	Small	1	S
MTL1402	Small Reduction Forceps with Point, Large	Large	1	
MTL1500	Screw Forceps		1	
MTL1600	Weitlander Retractor		1	
MTL1700	Plate Holder		1	<pre>}</pre>
MTL1800	Small Reduction Forceps, Small	Small	1	
MTL1900	Plate Cutter		1	=
MTL2000	Small Plate Bender, Small	Small	2	
MTL2100	Drill Sleeve 2.5,3.5,	Ø2.5,3.5	1	1

## **Pike Orthopaedic Set**

# Code	Description	Hole/Size	Qty	Image
MTL2200	Small Self-Centering Bone Holding Forceps, Ø2.5,3.	5 Small	1	
MTL2301	Tray 1		1	
MTL2302	Tray 2		1	
MTL2303	Tray 3		1	
MICOOOO	Container		1	
	Total		26	

### Pike Orthopedic Instruments Set



### Who We Are

We have nearly 40 years of combined experience in machining, and insight for the production of our medical products to treat a variety of injuries and conditions in medical sector.

We fulfill the requirements of ISO 13485 and manufacturing of medical implants (Veterinary, and Spine&Trauma Solutions).

### **Our Goal**

Our main goal is to do our best to satisfy every customer who benefits of our products and services. We aim to do that by providing them timely, useful, and the best solutions.



### **Contact Us**

Our team of professional veterinary experts are eagerly awaiting to offer you the assistance you need for all of your companions requirements.



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