MaxLock Extreme™

TRIBRID™ TECHNOLOGY FIXATION WITHOUT COMPROMISE







Surgical Technique



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Surgical technique

Step 1:

Please see the MaxLock Extreme[™] Surgical Techniques for surgical site preparation and plate selection.

Step 2:

The screw holes in the plates are compatible with a variety of screw options. The 3.5mm variable screws are available if a locked construct with variable angle screw trajectories is desired. The variable screws can only be used in a threaded locking hole.

Screws are chosen based on the size/type of indication and surgeon preference; a combination of screws may be used in the same plate. See the MaxLock Extreme[™] Surgical Techniques for non-locking and locking screw application.

Note: If inserting a non-locking screw after a variable screw, be sure that the plate sits no more than 1.5 mm off the bone.

CAUTION: In pediatric patients, avoid crossing the growth plate with any implants.

Step 3:

Use the pre-loaded disposable PEEK ring conical assembly (O-MXL35) to insert the PEEK Ring, made from PEEK-OPTIMA® polymer by Invibio, into the plate. Drive the PEEK Ring until the shoulder stops at the top surface of the plate.

Step 4:

Drill to the desired depth. Use the disposable PEEK ring conical assembly (O-MXL35) to determine the screw trajectory angle. Hold and stabilize the drill guide inserter while drilling. Use only the provided depth gauge (M-CAT60) to determine the screw length needed. Due to the PEEK Ring, 2mm will need to be subtracted from the depth gauge reading to determine the accurate screw length. For all screws used throughout the procedure, verify the screw length in the appropriate gauge on the screw caddy.



Step 3





Step 5:

To drive the variable screws, start with the solid 2.0mm ZP[™] Hex Driver (M-HCS38S). Stop driving with solid 2.0mm ZP[™] Hex Driver before the screw head is engaged in the PEEK Ring.

Step 6:

Finish screw insertion using the 3.5mm Depth Limiting Driver (M-VAR35), driving parallel to the surface of the plate and not along the screw trajectory. Drive the screws until the driver disengages. When driver is disengaged, the hex will remain engaged in the drive recess of the screw but will not continue to drive. The highest point of the screw should sit flush with the top surface of the ring.

Note: Do not over drive the variable screws. Only drive the screws until the highest point of the screw is flush with the top of the ring. Do not use power instruments when using the 3.5mm Depth Limiting Driver.

Note: MaxLock Extreme[™] plates allow for three screw options (non-locking, locking and variable) which can be used in any of the locking holes of the plate. Surgeons base their screw choice on patient needs and bone quality. If a surgeon inserts a PEEK Ring with a variable screw, and then decides to remove it due to the patient's needs, the plate is still usable and will not be damaged from the removal. Also note that the ring is no longer usable after the screw is removed.

Note: Only non-locking screws can be used in the slots of the MaxLock Extreme[™] Plates.

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Incorrect Driver Position

Special Note for Removal: To remove the PEEK Ring, first remove the screw using the solid 2.0mm ZP[™] Hex Driver (M-HCS38S). Insert the variable Removal Tool (M-VAR156-35) into the PEEK Ring and rotate counterclockwise to remove the ring. The ring is no longer usable and should be discarded.



Implants & Instruments

Variable Screw Set: YKAOH047

| Catalog # | Item Description | |
|-----------------------|--------------------------------------|---------|
| 3.5mm Variable Screws | | |
| O-VAR35-10 | ø3.5 \times 10mm Variable Screw | |
| O-VAR35-12 | ø3.5 \times 12mm Variable Screw | |
| O-VAR35-14 | ø3.5 × 14mm Variable Screw | 3 |
| O-VAR35-16 | $ø3.5 \times 16$ mm Variable Screw | |
| O-VAR35-18 | $ø3.5 \times 18$ mm Variable Screw | 1 |
| O-VAR35-20 | ø3.5 × 20mm Variable Screw | |
| O-VAR35-22 | ø3.5 × 22mm Variable Screw | 1 |
| O-VAR35-24 | $ø3.5 \times 24$ mm Variable Screw | 3 |
| O-VAR35-26 | ø3.5 × 26mm Variable Screw | 調 |
| O-VAR35-28 | $ø3.5 \times 28$ mm Variable Screw | |
| O-VAR35-30 | ø3.5 \times 30mm Variable Screw | • |
| O-MXL35 | 3.5mm PEEK Ring and Driver Assembly | |
| M-HCS38S | Solid 2.0mm ZP™ Hex Driver | |
| M-VAR35 | 3.5mm Depth Limiting Driver | |
| M-VAR35-R | 3.5mm Depth Limiting Driver Tip Repl | icement |
| M-VAR156-35 | PEEK Ring Removal Tool | |

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MaxLock Extreme[™] generic instruments and screws: YKAOH041

| Catalog # | Item Description | | | |
|--------------------------|---|--|--|--|
| 2.7mm Non-Locking Screws | | | | |
| O-MFT27-08 | MaxLock Extreme™ ø2.7 × 8mm Non-locking | | | |
| O-MFT27-10 | MaxLock Extreme™ ø2.7 × 10mm Non-locki | | | |
| O-MFT27-12 | MaxLock Extreme™ ø2.7 × 12mm Non-locki | | | |
| O-MFT27-14 | MaxLock Extreme™ ø2.7 × 14mm Non-locki | | | |
| O-MFT27-16 | MaxLock Extreme™ ø2.7 × 16mm Non-locki | | | |
| O-MFT27-18 | MaxLock Extreme™ ø2.7 × 18mm Non-locki | | | |
| O-MFT27-20 | MaxLock Extreme™ ø2.7 × 20mm Non-locki | | | |
| O-MFT27-22 | MaxLock Extreme™ ø2.7 × 22mm Non-locki | | | |
| O-MFT27-24 | MaxLock Extreme™ ø2.7 × 24mm Non-locki | | | |
| O-MFT27-26 | MaxLock Extreme™ ø2.7 × 26mm Non-locki | | | |
| O-MFT27-28 | MaxLock Extreme™ ø2.7 × 28mm Non-locki | | | |
| O-MFT27-30 | MaxLock Extreme™ ø2.7 × 30mm Non-locki | | | |
| 3.5mm Non-Locking Screv | vs | | | |
| O-MFT35-08 | MaxLock Extreme™ ø3.5 × 8mm Non-locking | | | |
| O-MFT35-10 | MaxLock Extreme™ ø3.5 × 10mm Non-locki | | | |
| O-MFT35-12 | MaxLock Extreme™ ø3.5 × 12mm Non-locki | | | |
| O-MFT35-14 | MaxLock Extreme™ ø3.5 × 14mm Non-locki | | | |
| O-MFT35-16 | MaxLock Extreme™ ø3.5 × 16mm Non-locki | | | |
| O-MFT35-18 | MaxLock Extreme™ ø3.5 × 18mm Non-locki | | | |
| O-MFT35-20 | MaxLock Extreme™ ø3.5 × 20mm Non-locki | | | |
| O-MFT35-22 | MaxLock Extreme™ ø3.5 × 22mm Non-locki | | | |
| O-MFT35-24 | MaxLock Extreme™ ø3.5 × 24mm Non-locki | | | |
| O-MFT35-26 | MaxLock Extreme™ ø3.5 × 26mm Non-locki | | | |
| O-MFT35-28 | MaxLock Extreme™ ø3.5 × 28mm Non-locki | | | |
| O-MFT35-30 | MaxLock Extreme™ ø3.5 × 30mm Non-locki | | | |
| O-MFT35-325 | MaxLock Extreme™ ø3.5 × 32.5mm Non-loci | | | |
| O-MFT35-35 | MaxLock Extreme™ ø3.5 × 35mm Non-locki | | | |
| O-MFT35-375 | MaxLock Extreme™ ø3.5 × 37.5mm Non-loci | | | |
| O-MFT35-40 | MaxLock Extreme™ ø3.5 × 40mm Non-locki | | | |
| O-MFT35-425 | MaxLock Extreme™ ø3.5 × 42.5mm Non-loci | | | |
| O-MFT35-45 | MaxLock Extreme™ ø3.5 × 45mm Non-locki | | | |
| O-MFT35-475 | MaxLock Extreme™ ø3.5 × 47.5mm Non-loci | | | |
| O-MFT35-50 | MaxLock Extreme™ ø3.5 × 50mm Non-locki | | | |
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Catalog #

Item Description

3.5mm Locking Screws

O-MFT35-08LS MaxLock Extreme[™] ø3.5 × 8mm Locking Screw O-MFT35-10LS MaxLock Extreme[™] ø3.5 × 10mm Locking Screw O-MFT35-12LS MaxLock Extreme[™] ø3.5 × 12mm Locking Screw O-MFT35-14LS MaxLock Extreme[™] ø3.5 × 14mm Locking Screw O-MFT35-16LS MaxLock Extreme[™] ø3.5 × 16mm Locking Screw O-MFT35-18LS MaxLock Extreme[™] ø3.5 × 18mm Locking Screw O-MFT35-20LS MaxLock Extreme[™] ø3.5 × 20mm Locking Screw O-MFT35-22LS MaxLock Extreme[™] ø3.5 × 22mm Locking Screw MaxLock Extreme[™] ø3.5 × 24mm Locking Screw O-MFT35-24LS O-MFT35-26LS MaxLock Extreme™ ø3.5 × 26mm Locking Screw O-MFT35-28LS MaxLock Extreme[™] ø3.5 × 28mm Locking Screw O-MFT35-30LS MaxLock Extreme[™] ø3.5 × 30mm Locking Screw O-MFT35-325LS MaxLock Extreme™ ø3.5 × 32.5mm Locking Screw O-MFT35-35LS MaxLock Extreme™ ø3.5 × 35mm Locking Screw O-MFT35-375LS MaxLock Extreme™ ø3.5 × 37.5mm Locking Screw O-MFT35-40LS MaxLock Extreme[™] ø3.5 × 40mm Locking Screw O-MFT35-425LS MaxLock Extreme™ ø3.5 × 42.5mm Locking Screw O-MFT35-45LS MaxLock Extreme™ ø3.5 × 45mm Locking Screw

4.0mm Non-Locking Screws

O-MFT40-08 ø4.0 × 8mm Non-locking Screw O-MFT40-10 ø4.0 × 10mm Non-locking Screw O-MFT40-12 ø4.0 × 12mm Non-locking Screw O-MFT40-14 ø4.0 × 14mm Non-locking Screw O-MFT40-16 ø4.0 × 16mm Non-locking Screw O-MFT40-18 ø4.0 × 18mm Non-locking Screw O-MFT40-20 ø4.0 × 20mm Non-locking Screw O-MFT40-22 ø4.0 × 22mm Non-locking Screw O-MFT40-24 ø4.0 × 24mm Non-locking Screw O-MFT40-26 ø4.0 × 26mm Non-locking Screw O-MFT40-28 ø4.0 × 28mm Non-locking Screw O-MFT40-30 ø4.0 × 30mm Non-locking Screw O-MFT40-325 ø4.0 × 32.5mm Non-locking Screw O-MFT40-35 ø4.0 × 35mm Non-locking Screw O-MFT40-375 ø4.0 × 37.5mm Non-locking Screw O-MFT40-40 ø4.0 × 40mm Non-locking Screw O-MFT40-425 ø4.0 × 42.5mm Non-locking Screw O-MFT40-45 ø4.0 × 45mm Non-locking Screw O-MFT40-475 ø4.0 × 47.5mm Non-locking Screw O-MFT40-50 ø4.0 × 50mm Non-locking Screw O-MFT40-55 ø4.0 × 55mm Non-locking Screw O-MFT40-60 ø4.0 × 60mm Non-locking Screw





| Catalog # |
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| M-MXS051 |
| M-MXL050 |
| M-CAT60 |
| M-MFT24-FDG |
| M-MFT24-KG |
| M-DRV057 |
| M-MFT057 |
| M-MXS056T |
| M-MFT19 |
| M-MFT072-24 |
| M-MFT072-27 |
| M-MFT35 |
| M-MFT40 |
| M-MFT171 |
| M-MFT19-C |
| M-MFT19-O |
| M-MFT24-C |
| M-MFT24-O |
| M-MFT27-C |
| M-MFT27-O |
| M-MFT35-C |
| |

M-MFT40-C

| Item Description | | |
|-----------------------------------|--|--|
| | | |
| Plate Bending Pliers | | |
| Bending Irons | | |
| CalcLock™ depth gauge – 60mm | | |
| Locking Guide – Ø2.4mm | | |
| 2.4mm QI™ Keyway Drill Guide | | |
| Ratcheting Handle | | |
| Non Ratcheting Handle | | |
| HexStar™ Tapered Driver – 3.5mm | | |
| Standard Drill Bit – Ø1.9mm | | |
| Standard Drill Bit – Ø2.4mm | | |
| Standard Drill Bit – Ø2.7mm | | |
| Lag Drill Bit – Ø3.5mm | | |
| Lag Drill Bit – Ø4.0mm | | |
| Drill Guide Handle | | |
| Drill Guide Tip - Ø1.9mm Centered | | |
| Drill Guide Tip - Ø1.9mm Offset | | |
| Drill Guide Tip - Ø2.4mm Centered | | |
| Drill Guide Tip - Ø2.4mm Offset | | |
| Drill Guide Tip - Ø2.7mm Centered | | |
| Drill Guide Tip - Ø2.7mm Offset | | |
| Drill Guide Tip - Ø3.5mm Centered | | |
| Drill Guide Tip - Ø4.0mm Centered | | |

Notes

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Prior to using any Tornier device, please review the instructions for use and surgical technique for a complete listing of indications, contraindications, warnings, precautions, potential adverse events, and directions for use.

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