

# TL-HEX Trauma

TrueLok Hexapod System™

## Place, Reduce, Lock

- Stable ▪ Versatile ▪ Simple
- Time saving ▪ Suitable for DCO
- Beneficial in periarticular fractures



TL-HEX TrueLok Hexapod System® Trauma is indicated for temporary and definitive stabilization of closed and open fractures when majority of fracture reduction can be achieved rapidly



## Step 1 Place



Apply two TL-HEX rings in any desired position

Secure the rings to the limb with either wires and/or half pins

Engage on the ring and partially tighten two quick adjust struts



### Wire Insertion

Apply three wires for optimal stability



### Half Pin Insertion

Use post when half pin orientation is oblique to ring plane

Versatile

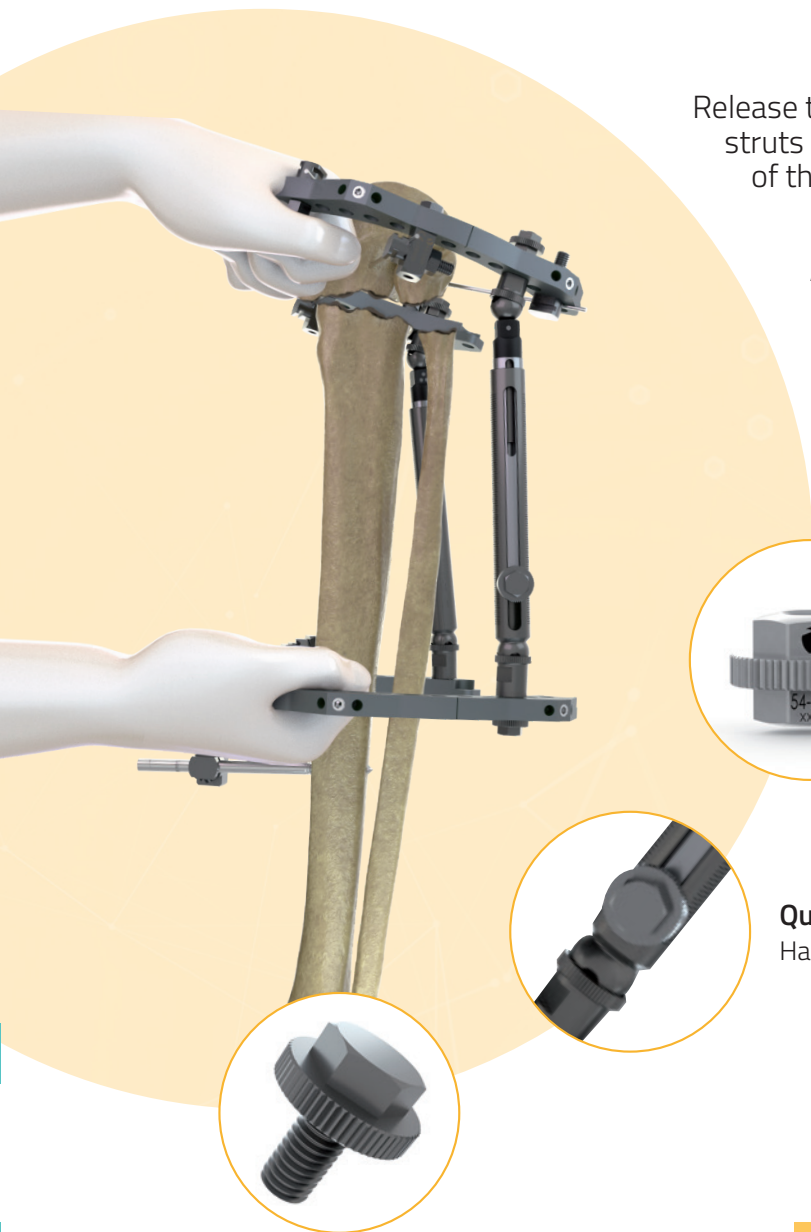
Frame can be mounted with no limitation in shape and components

Beneficial in periarticular fractures

The application of minimally invasive wires is one effective option with proven outcomes\*

# 3 Steps for Tr

## Step 2 Reduce



Release the speed nuts and bolts on the struts in order to perform manual reduction of the fracture

After achieving a satisfactory reduction, tighten all nuts and bolts with the proper wrench



**Speed Nuts**  
Hand tightening



**Quick Adjust Strut**  
Hand tightening speed bolt



**Speed Bolt**  
Hand tightening

Simple

Universal components reduce the number of parts needed in surgery

Suitable for Damage Control

No instrumentation needed to stabilize reduction, just hand-tightening



# auma Frame

## Step 3 Lock



Add a third quick adjust strut for definitive stabilization (fourth strut can be added at surgeon's discretion)

Turn the plastic bushing of the struts if final micrometric adjustment and compression are needed



### Quick Adjust Strut

Plastic bushing allows micro-adjustments of the total length of the strut

Stable

Minimum three quick adjust struts needed to guarantee frame stability

Suitable for Damage Control

Free positioning of quick adjust struts, no specific position on the ring is needed

In case further post-operative reduction is required, add TL-HEX TrueLok Hexapod System struts to the Trauma frame

In case of two 5/8 rings with the opening on the same side, add a 3/8 ring to one of the rings to allow for conversion to the TL-HEX Hexapod frame

Use the TL-HEX software to achieve final reduction



For detailed information, please refer to the complete operative technique (TL-1405-OPT).

Time saving

Quick adjust struts don't interfere with hexapod struts: they can be easily mounted on the frame outside the OR, if needed.

## \*References

- *Bycondilar tibial plateau fractures treated with fine wire circular fixation*, Ferreira N, Marias L.C.- Strat Traum Limb Recon (2014) 9:25–32.
- *High tibial plateau fractures treated with hybrid external fixation*, Babis GC, Evangelopoulos DS, Kontovazenitis P, Nikolopoulos K, Soucacos PN - Journal of Orthopaedic Surgery and Research 2011.
- *Distal tibial fractures treated with hybrid external fixation*, Babis GC, Kontovazenitis P, Evangelopoulos DS, Tsailas P, Nikolopoulos K, Soucacos PN - Injury, 2010 Mar;41(3):253-8.
- *Management of distal tibial intra-articular fractures with circular external fixation*, Lovisetti G, Agus MA, Pace F, Capitani D, Sala F - Strat Traum Limb Recon (2009) 4:1–6.
- *Combined Percutaneous internal and external fixation of complex tibial plafond fractures*, Faldini C, Manca M, Digennaro V, Leonetti D, Nanni M, Romagnoli M, Biagini C - G.I.O.T. 2006; 32:33-39.
- *Treatment of high energy tibial plateau fractures*, Narayan B, Harris C, Nayagam S - Strat Traum Limb Recon 2006; 1:18-28.
- *The use of trans-articular and extra-articular external fixator for management of distal tibial intra-articular fractures*, El-Shazly M, Dalby-Ball J, Burton M, Saleh M - Injury, Int. J. Care Injured 32 (2001) S-D-99-S-D-106.

# TL-HEX Trauma Tray

## 30110129 TRAUMA TRAY EMPTY

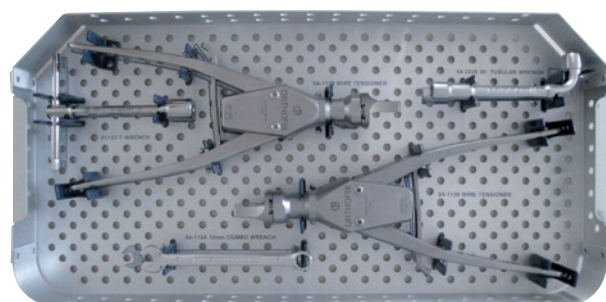
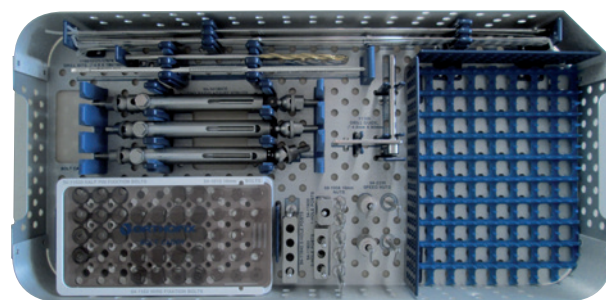
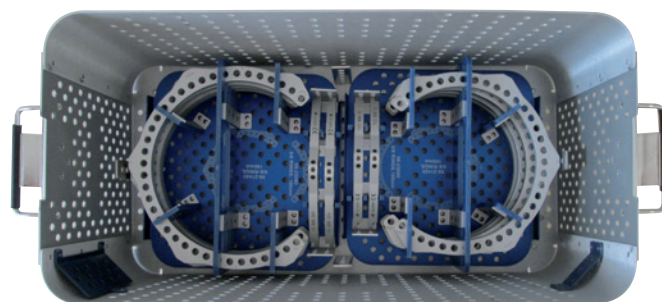
Can accommodate:

Part #	Description	Qty
30110129	Trauma Tray, TL-HEX, empty	1
56-23060	3/8 Ring, 160mm, TL-HEX	2
56-21420	Modular 5/8 Ring, 160mm, TL-HEX	4
56-23080	3/8 Ring, 180mm, TL-HEX	2
56-21440	Modular 5/8 Ring, 180mm, TL-HEX	4
50-10190	TrueLok Plus Long Quick Adjust Strut	6
92050	Transfixing Pin, Thread L 50mm Shaft Ø 4mm, Thread Ø 5mm	1
54-1215	TL, Wire, W/Stopper, 1.8mm x 400mm	6
54-1216	TL, Wire, Bayonet, 1.8mm x 400mm	2
54-11600	TL+ One Hole Post	3
54-11620	TL+ Three Hole Post	3
54-11640	TL+ Five Hole Post	3
54-11530	TL+ Universal Half Pin Fixation Bolt 4mm - 6mm	15
OR		
54-11540	TL 8mm Half Pin Bolt	15
54-1152	TL, Bolt, Wire Fixation, Universal	20
54-1010	TL, Bolt, 16mm	16
50-1008	TL, Nut, Stainless Steel, 10mm	30
54-2235	M6 X 1 Hex, Speednut, TrueLok System	12
17976	Drill Bit, 4.8mm x 180mm	1
OR		
1100101	Drill Bit, 4.8mm x 180mm Tin Coated - Quick Connect	1
11.105	Drill Guide Ø 4.8mm Length 80mm	1
91150	Universal T-Wrench	1
54-2226	TL, 90 Degree Tubular Wrench	1
54-1154	TL, Wrench, Combo, 10mm	1
54-1139	TL PLUS Wire Tensioner With Tip	2

## MATERIAL OUT OF THE TRAY

Part #	Description
54-2233***	Truelok Plus Speed Bolt Thread 16mm
50-10180***	Truelok Plus Medium Quick Adjust Strut
56-21400***	Modular 5/8 Ring, 140mm, TL-HEX
56-21460***	Modular 5/8 Ring, 200mm, TL-HEX
56-23040***	3/8 Ring, 140mm, TL-HEX
56-23100***	3/8 Ring, 200mm, TL-HEX
99-56-22020	Double Row Footplate, 140mm, TL-HEX, Sterile
99-56-22040	Double Row Footplate, 160mm, TL-HEX, Sterile
99-56-22060	Double Row Footplate, 180mm, TL-HEX, Sterile
99-56-22080	Double Row Footplate, 200mm, TL-HEX, Sterile

For detailed information on available half pins, please refer to PC-XCS and XC-1902-PL flyers.



The **TL-HEX Trauma Empty Tray (30110129)** is available\*\* to accommodate all the instruments and implantable material necessary for the surgery, so it is ideal for emergency applications when saving time is a priority.

The **TrueLok Dynamization Module (54-24100)** can be used to dynamize an existing frame towards the end of treatment or at any stage where dynamization of the fracture callus or regenerate is required.

\*\* Please contact Orthofix for availability.

\*\*\* Also available single-packed sterile.

They can be ordered using the above code number preceded by 99- (e.g. 99-56-21400)



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CE 0123 **Rx Only**

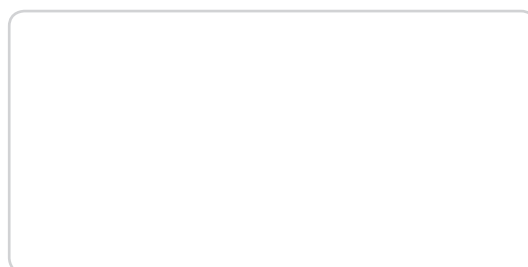
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