Ordering Information

**iBalance HTO Instrument Set (AR-13400S) includes:**

- Steel Rule, 120 mm  AR-13410
- Cobb Elevator  AR-13411-01
- Posterior Elevator  AR-13411-02
- NV Shield, left, SM/MD  AR-13412-01
- NV Shield, right, SM/MD  AR-13412-02
- NV Shield, left, LG/XL  AR-13412-03
- NV Shield, right, LG/XL  AR-13412-04
- Fastener & Lock Washer  AR-13413
- NV Shield Handle  AR-13414
- Hex Driver  AR-13415
- Adjustable Cone, left  AR-13416-01
- Adjustable Cone, right  AR-13416-02
- Reducer Guide, left  AR-13417-01
- Reducer Guide, right  AR-13417-02
- Alignment Handle  AR-13418
- Hinge Pin Aimer  AR-13419-01
- Hinge Pin Aimer, Collet Nut  AR-13419-02
- Biplanar Alignment Mount  AR-13420-01
- Biplanar Alignment Bar  AR-13420-02
- Multi-Tool  AR-13421
- Fixation Pin  AR-13422
- Tissue Protector  AR-13423
- Hinge Pin Drill, AO Connection  AR-13424-01
- Hinge Pin Drill, Chuck Connection  AR-13424-02
- Hinge Pin Drill Stop  AR-13424-03
- Keyhole Reamer  AR-13425
- Keyhole Provisional Pin  AR-13426
- Cutting Guide, left, SM/MD  AR-13427-01
- Cutting Guide, right, SM/MD  AR-13427-02
- Cutting Guide, left, LG/XL  AR-13427-03
- Cutting Guide, right, LG/XL  AR-13427-04
- Medial Osteotome, beveled  AR-13429-01
- Osteotome Handle  AR-13429-02
- Opening Jack, back arm  AR-13430-01
- Opening Jack, front arm  AR-13430-02
- Opening Jack Fastener  AR-13430-03
- Opening Jack Turn Key  AR-13430-04
- Correction Guide, SM/MD  AR-13431-01
- Correction Guide, LG/XL  AR-13431-02
- Graft Tamp  AR-13432
- Anchor Drill Guide  AR-13433
- Anchor Drill, Chuck Connection  AR-13434-01
- Anchor Drill, AO Connection  AR-13434-02
- Anchor Depth Gauge  AR-13435
- Anchor Tap Guide  AR-13436
- Cortical Bone Tap, 4.5 mm AR-13437
- Driver Handle  AR-13438
- Anchor Driver  AR-13439
- iBalance Instrument Case  AR-13400C

**iBalance Implants:**

- iBalance HTO Implant, SM 12˚ AR-13400S-12
- iBalance HTO Implant, SM 6˚/MD 5˚ AR-13400M-05
- iBalance HTO Implant, SM 7˚/MD 6˚ AR-13400M-06
- iBalance HTO Implant, SM 8˚/MD 7˚ AR-13400M-07
- iBalance HTO Implant, SM 9˚/MD 8˚ AR-13400M-08
- iBalance HTO Implant, SM 10˚/MD 9˚ AR-13400M-09
- iBalance HTO Implant, SM 11˚/MD 10˚ AR-13400M-10
- iBalance HTO Implant, SM 12˚/MD 11˚ AR-13400M-11
- iBalance HTO Implant, SM 13˚/MD 12˚ AR-13400M-12
- iBalance HTO Implant, SM 14˚/MD 13˚ AR-13400M-13
- iBalance HTO Implant, MD 14˚ AR-13400M-14
- iBalance HTO Implant, MD 15˚ AR-13400M-15
- iBalance HTO Implant, LG 5˚ AR-13400L-05
- iBalance HTO Implant, LG 6˚/XL 5˚ AR-13400L-06
- iBalance HTO Implant, LG 7˚/XL 6˚ AR-13400L-07
- iBalance HTO Implant, LG 8˚/XL 7˚ AR-13400L-08
- iBalance HTO Implant, LG 9˚/XL 8˚ AR-13400L-09
- iBalance HTO Implant, LG 10˚/XL 9˚ AR-13400L-10
- iBalance HTO Implant, LG 11˚/XL 10˚ AR-13400L-11
- iBalance HTO Implant, LG 12˚/XL 11˚ AR-13400L-12
- iBalance HTO Implant, LG 13˚/XL 12˚ AR-13400L-13
- iBalance HTO Implant, LG 14˚/XL 13˚ AR-13400L-14
- iBalance HTO Implant, LG 15˚/XL 14˚ AR-13400L-15

**iBalance Anchors:**

- iBalance HTO Anchors, cancellous, 20 mm – 32 mm AR-13401-20 – 32
- iBalance HTO Anchors, cortical, 24 mm – 52 mm AR-13402-24 – 52

**Suggested Bone Substitute:**

- OSferion Osteotomy Wedge, 7 mm x 30 mm AR-13370-1
- OSferion Osteotomy Wedge, 10 mm x 30 mm AR-13370-2
- OSferion Osteotomy Wedge, 12 mm x 35 mm AR-13370-3
- OSferion Osteotomy Wedge, 15 mm x 35 mm AR-13370-4
In conjunction with fluoroscopy, the Biplanar Alignment Guide aligns the iBalance HTO instrumentation to the A/P slope plane and sagittal plane of the tibia. The 4.5 mm bi-cortical hole defines the lateral end of the osteotomy cut, acting as a stress reliever, and dramatically reduces lateral cortex fracture. The Hinge Pin creates lateral border of the “safety envelope” during cutting.

An innovative “safety envelope” (the safety field that protects soft tissue structures, created by the Hinge Pin, the Patellar Tendon Protector, and the NV Shield) insures confident cuts with a sagittal saw. It protects/isolates all soft tissues so patellar tendon and neurovascular structures are safe.

The iBalance HTO medial PEEK implant creates a stable construct by supporting the osteotomy opening along the posterior/medial and anterior/medial cortices of the tibia. The implant’s construct, coupled with a very substantial lateral bone bridge provided by the hinge pin, provides postoperative stability. Therefore, during load-bearing, the plantigrade foot is not allowed to rotate posteriorly (i.e., decrease A/P slope) or anteriorly (i.e., increase A/P slope).

The iBalance HTO implant and anchors are intended for permanent implantation and negate the need for a second surgery to remove hardware due to overlying soft tissue irritation.

**HTO Instrumentation**

Making a historically artistic technique, guided, safe and reproducible

**Compression**

- Supporting a stress of 10 MN (2,270 lbf) in compression
- Resisted prolonged cyclic testing of 7500N (+1,600 lbf) for 5 million cycles without failure
- Implant shape attributes to functional posterior and anterior cortices of the proximal tibia
- Designed to improve progressive weight-bearing

**Shear**

- 1.25 X
- 1.25 X
- 1.25 X
- 1.25 X

**Bone Growth**

- PEEK material more closely matches modulus of bone versus metal implants
- Allows microstrain transfer to stimulate new bone growth
- Intended for progressive weight-bearing and facilitates return to 100% weight-bearing

**Safety**

- An “innovative ‘safety envelope’” that protects soft tissue structures, created by the hinge pin, the Patellar Tendon Protector, and the NV Shield, ensures consistent cuts with a sagittal saw. It prevents all soft tissues in lateral tendon and neurovascular structures are safe.

**Step-by-Step Technique**

Allows predictable surgery times

- **Compression**
  - Supporting a stress of 10 MN (2,270 lbf) in compression
  - Resisted prolonged cyclic testing of 7500N (+1,600 lbf) for 5 million cycles without failure
- **Shear**
  - 1.25 X
  - 1.25 X
  - 1.25 X
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**Step-by-Step Technique**

Allows predictable surgery times

- **Compression**
  - Supporting a stress of 10 MN (2,270 lbf) in compression
  - Resisted prolonged cyclic testing of 7500N (+1,600 lbf) for 5 million cycles without failure
- **Shear**
  - 1.25 X
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  - 1.25 X
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**Bone Growth**

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- Allows microstrain transfer to stimulate new bone growth
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**Safety**

- An “innovative ‘safety envelope’” that protects soft tissue structures, created by the hinge pin, the Patellar Tendon Protector, and the NV Shield, ensures consistent cuts with a sagittal saw. It prevents all soft tissues in lateral tendon and neurovascular structures are safe.
In conjunction with fluoroscopy, the Biplanar Alignment Guide aligns the iBalance HTO instrumentation to the A/P slope plane and sagittal plane of the tibia. The 4.5 mm bi-cortical hole defines the lateral end of the osteotomy cut, acting as a stress reliever, and dramatically reduces lateral cortex fracture. The Hinge Pin creates lateral border of the “safety envelope” during cutting.

An innovative “safety envelope” (the safety field that protects soft tissue structures, created by the Hinge Pin, the Patellar Tendon Protector, and the NV Shield) insures confident cuts with a sagittal saw. It protects/isolates all soft tissues so patellar tendon and neurovascular structures are safe.1

The iBalance HTO medial PEEK implant creates a stable construct by supporting the osteotomy opening along the posterior/medial and anterior/medial cortices of the tibia. The implant’s construct, coupled with a very substantial lateral bone bridge provided by the hinge pin, prevents postoperative instability. Therefore, during load-bearing, the tibial plateau is not allowed to rotate posteriorly (i.e. decrease A/P slope) or anteriorly (i.e. increase A/P slope).

The iBalance HTO implant and anchors are designed for permanent implantation and negate the need for a second surgery to remove implants due to overlying soft tissue irritation.

The iBalance HTO System is ideal for any surgeon who desires to master high tibial osteotomies.

- Instrumented, guided-system approach, precise cuts with sagittal saw versus osteotomes
- Accurate correction through precise instrumentation
- Step-by-step surgical technique (LT0122) that references the patient’s anatomy
- Guided instrumentation allows the same cut every time, making HTO reproducible a reality

The step-by-step guided technique of the iBalance HTO System builds surgeon confidence through predictability and reproducibility. The iBalance HTO System is ideal for any surgeon aiming to achieve high tibial osteotomies.

Precision and accuracy yield predictability

- Instrumented, guided-system approach, precise cuts
- Accurate correction through precise instrumentation
- Step-by-step surgical technique (LT0122) that references the patient’s anatomy
- Guided instrumentation allows the same cut every time, making HTO reproducibility a reality

Opening Jack

- Opens the osteotomy in a controlled manner, enabling weight bearing and load transfer in the proper sequence to strengthen and aid in the preservation of microarchitectural bone of the lateral cortex
- Allows surgeon to easily seat the implant into the osteotomy

Superior Strength Through PEEK

- Supporting sinostasis of 128 kN (179,000 lbf) in compression
- Endurable endurance of 456 kN (102,000 lbf) for 5 million cycles without failure
- Implant shape is attributed to inducing the posterior and anterior cortices of the tibia
- Designed to improve progressive weight-bearing
- Retained,figurative design mimics bone tissues and osteotomy alignment

Arthroscopically sized for the patient

- Implant profile flush with bone providing minimal soft tissue irritation
- Built-in slope preserving angles
- Provided as an injectable solution in the macroporous angular correction

Size Options

- PEEK thicknesses closely matches modulus of bone versus metal implants
- All instruments to stimulate new bone growth
- Immediate permanent implantation and facilitates union in 3-6 months
- Clenched 1/4” wedge and 3/8”width
- Implant profile flush with 50% prior to implantation

Bone Growth

- PEEK materials macroporous and hardening, resorbable bone cement
- Provided as an easy-to-use kit including Quickset, an injectable bone cement

Step-by-Step Technique

- Allows predictable surgery times

The step-by-step guided technique of the iBalance HTO System builds surgeon confidence through predictability and reproducibility. The iBalance HTO System is ideal for any surgeon aiming to achieve high tibial osteotomies.

Precision and accuracy yield predictability

- Instrumented, guided-system approach, precise cuts
- Accurate correction through precise instrumentation
- Step-by-step surgical technique (LT0122) that references the patient’s anatomy
- Guided instrumentation allows the same cut every time, making HTO reproducibility a reality

- Opens the osteotomy in a controlled manner, enabling weight bearing and load transfer in the proper sequence to strengthen and aid in the preservation of microarchitectural bone of the lateral cortex
- Allows surgeon to easily seat the implant into the osteotomy
In conjunction with fluoroscopy, the Biplanar Alignment Guide aligns the iBalance HTO instrumentation to the A/P slope plane and sagittal plane of the tibia. The 4.5 mm bi-cortical hole defines the lateral end of the osteotomy cut, acting as a stress reliever, and dramatically reduces lateral cortex fracture. The Hinge Pin creates lateral border of the “safety envelope” during cutting.

An innovative “safety envelope” (the safety field that protects soft tissue structures, created by the Hinge Pin, the Patellar Tendon Protector, and the NV Shield) insures confident cuts with a sagittal saw. It protects/isolates all soft tissues so patellar tendon and neurovascular structures are safe.1

The iBalance HTO medial PEEK implant creates a stable construct by supporting the osteotomy opening along the posterior/medial and anterior/medial cortices of the tibia. The implant’s construct, coupled with a very substantial lateral bone bridge provided by the hinge pin, promotes postoperative stability. Therefore, during load-bearing, the tibial plateau is not allowed to rotate posteriorly (i.e. decrease A/P slope) or anteriorly (i.e. increase A/P slope).

The iBalance HTO implant and anchors are intended for permanent implantation and negate the need for a second surgery to remove cumbersome hardware such as overlying soft tissue irritation.


top left: iBalance HTO System

top right: Opening Jack

Opening Jack allows surgeon to easily seat the implant into the osteotomy

The step-by-step guided technique of the iBalance HTO System builds surgeon confidence through predictability and reproducibility. The iBalance HTO System is ideal for any surgeon interested in mastering high tibial osteotomies.

Precision and accuracy yield predictability

• Instrumented, guided system approach, precise cuts with sagittal saw versus osteotomes
• Accurate correction through precise instrumentation
• Step-by-step surgical technique (LT0122) that references the patient’s anatomy
• Guided instrumentation allows the same cut every time, making HTO reproducibility a reality

Safety

An innovative “safety envelope” (the safety field that protects soft tissue structures, created by the hinge pin, the Patellar Tendon Protector, and the NV Shield) insures confident cuts with a sagittal saw. If postoperative 4.5 mm bi-cortical holes in pertinent tendon and neurovascular structures are safe.2

1 Jingoo Kim, MD; Robert Allaire, MD; Christopher D. Harner, MD, Vascular Safety During High Tibial Osteotomy - A Cadaveric Angiographic Study, The American Journal of Sports Medicine, 2010, 38:810 (originally published online March 3, 2010).

*data on file

The step-by-step guided technique of the iBalance HTO System builds surgeon confidence through predictability and reproducibility. The iBalance HTO System is ideal for any surgeon interested in mastering high tibial osteotomies.

Precision and accuracy yield predictability

• Instrumented, guided system approach, precise cuts
• Accurate correction through precise instrumentation
• Step-by-step surgical technique (LT0122) that references the patient’s anatomy
• Guided instrumentation allows the same cut every time, making HTO reproducibility a reality

Opening Jack

• Open the osteotomy in a controlled manner, enabling minimal over-resection and avoiding micro fractures in the tibia
• Provides a mechanism to introduce and aide in the prevention of micro fractures of the lateral cortex
• Allows surgeon to easily seat the implant into the osteotomy.
Ordering Information

**iBalance HTO Instrument Set (AR-13400S) includes:**

- Steel Rule, 120 mm AR-13410
- Cobb Elevator AR-13411-01
- Posterior Elevator AR-13411-02
- NV Shield, left, SM/MD AR-13412-01
- NV Shield, right, SM/MD AR-13412-02
- NV Shield, left, LG/XL AR-13412-03
- NV Shield, right, LG/XL AR-13412-04
- Fastener & Lock Washer AR-13413
- NV Shield Handle AR-13414
- Hex Driver AR-13415
- Adjustable Base, left AR-13416-01
- Adjustable Base, right AR-13416-02
- Rectangular Guide, left AR-13417-01
- Rectangular Guide, right AR-13417-02
- Alignment Handle AR-13418
- Hinge Pin Aimer AR-13419-01
- Hinge Pin Aimer, Collet Nut AR-13419-02
- Biplanar Alignment Mount AR-13420-01
- Biplanar Alignment Bar AR-13420-02
- Multi-Tool AR-13421
- Fixation Pin AR-13422
- Tissue Protector AR-13423
- Hinge Pin Drill, AO Connection AR-13424-01
- Hinge Pin Drill, Chuck Connection AR-13424-02
- Hinge Pin Drill Stop AR-13424-04
- Keyhole Reamer AR-13425
- Keyhole Provisional Pin AR-13426
- Cutting Guide, left, SM/MD AR-13427-01
- Cutting Guide, right, SM/MD AR-13427-02
- Cutting Guide, left, LG/XL AR-13428-01
- Cutting Guide, right, LG/XL AR-13428-02
- Medial Osteotome, beveled AR-13429-01
- Osteotome Handle AR-13429-02
- Opening Jack, back arm AR-13430-01
- Opening Jack, front arm AR-13430-02
- Opening Jack Fastener AR-13430-03
- Opening Jack Turn Key AR-13430-04
- Correction Guide, SM/MD AR-13431-01
- Correction Guide, LG/XL AR-13431-02
- Graft Tamp AR-13432
- Anchor Drill Guide AR-13433
- Anchor Drill, Chuck Connection AR-13434-01
- Anchor Drill, AO Connection AR-13434-02
- Anchor Depth Gauge AR-13435
- Anchor Tap Guide AR-13436
- Cortical Bone Tap, 4.5 mm AR-13437
- Driver Handle AR-13438
- Anchor Driver AR-13439
- iBalance Instrument Case AR-13400C

**iBalance Implants:**

- iBalance HTO Implant, SM 12˚ AR-13400S-12
- iBalance HTO Implant, SM 6˚/MD 5˚ AR-13400M-05
- iBalance HTO Implant, SM 7˚/MD 6˚ AR-13400M-06
- iBalance HTO Implant, SM 8˚/MD 7˚ AR-13400M-07
- iBalance HTO Implant, SM 9˚/MD 8˚ AR-13400M-08
- iBalance HTO Implant, SM 10˚/MD 9˚ AR-13400M-09
- iBalance HTO Implant, SM 11˚/MD 10˚ AR-13400M-10
- iBalance HTO Implant, SM 12˚/MD 11˚ AR-13400M-11
- iBalance HTO Implant, SM 13˚/MD 12˚ AR-13400M-12
- iBalance HTO Implant, SM 14˚/MD 13˚ AR-13400M-13
- iBalance HTO Implant, SM 15˚/MD 14˚ AR-13400M-14
- iBalance HTO Implant, MD 14˚ AR-13400M-14
- iBalance HTO Implant, MD 15˚ AR-13400M-15
- iBalance HTO Implant, LG 5˚ AR-13400L-05
- iBalance HTO Implant, LG 6˚/XL 5˚ AR-13400L-06
- iBalance HTO Implant, LG 7˚/XL 6˚ AR-13400L-07
- iBalance HTO Implant, LG 8˚/XL 7˚ AR-13400L-08
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- iBalance HTO Implant, LG 12˚/XL 11˚ AR-13400L-12
- iBalance HTO Implant, LG 13˚/XL 12˚ AR-13400L-13
- iBalance HTO Implant, LG 14˚/XL 13˚ AR-13400L-14
- iBalance HTO Implant, LG 15˚/XL 14˚ AR-13400L-15

**iBalance Anchors:**

- iBalance HTO Anchors, cancellous, 20 mm – 32 mm AR-13401-20 – 32
- iBalance HTO Anchors, cortical, 24 mm – 52 mm AR-13402-24 – 52

**Suggested Bone Substitute:**

- OSferion Osteotomy Wedge, 7 mm x 30 mm AR-13370-1
- OSferion Osteotomy Wedge, 10 mm x 30 mm AR-13370-2
- OSferion Osteotomy Wedge, 12 mm x 35 mm AR-13370-3
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Ordering Information

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- Graft Tamp  AR-13432
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- Anchor Drill, Chuck Connection  AR-13434-01
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- iBalance Instrument Case  AR-13400C

iBalance Implants:

- iBalance HTO Implant, SM 12˚ AR-13400S-12
- iBalance HTO Implant, MD 14˚ & 15˚ AR-13400L-14 & 15
- iBalance HTO Implant, LG 5˚ AR-13400L-05
- iBalance HTO Implants, LG 6˚/XL 5˚ – LG 15˚/XL 14˚ AR-13400L-06 – 15

Suggested Bone Substitute:

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For more information go to: http://iBalance.arthrex.com