Introduction

The NCB PT (Non-Contact Bridging for the Proximal Tibia) is an optimal plate solution for the treatment of complex fractures of the proximal tibia.

The system allows for polyaxial screw placement (30°) with subsequent screw locking. Before locking, the screws can act as lag screws and be used for fracture reduction; a benefit which is not offered with standard locking systems.

In the locked mode, NCB PT Plate late acts as an internal fixator without contact between the plate and the bone surface reducing the risk of periosteal blood supply impairment.

The surgical technique is based on the well-known standard plate osteosynthesis technique which gives to surgeon the feeling for bone quality during drilling and tightening of the screws. In the last step all screws can be locked and made angularly stable.

The instrumentation includes a fully radiolucent targeting device for a minimally invasive surgical technique (MIS).

Materials: NCB Plates and Screws are made of Ti6Al4V, ISO 5832-3, ASTM F136

- Locking cap Ø 8 mm
- Blind screw insert
- Spacer 1 to 3 mm

Implants are available with 2 or 3 proximal holes, left and right. Plate length varies from 5 to 9 shaft holes for the 2-proximal hole plate and between 3 and 13 shaft holes for the 3-proximal hole plate.
**Plate Design**

Two versions of the NCB PT Plate are available: 2-proximal and 3-proximal holes.

Due to the angular freedom of the screws the whole plateau area can be covered with both plates. The 2-proximal holes plate is recommended when soft tissue coverage is a greater concern. The 3-proximal holes plate is recommended when there is a higher concern for supporting the tibial plateau (e.g. severe intra-articular comminution).

Plate head has 6° posterior tilt to match the lateral tibial contour.

**Screw Selection**

- Spherical screw head with standard 3.5 mm hexagonal drive
- Self-tapping screw tip (solid screws)
- Self-drilling and self-tapping screw tip (cannulated screws)
- Double-lead thread for fast screw insertion in cortical bone

**Standard Screws**  
(included in the screw set)

- Cancellous screw ∅ 5.0 mm self-tapping, L 50–90 mm; 5 mm L 95 & 100mm (not in set)

**Cannulated Screws**  
(option)

- Cannulation for 1.6 mm K-wire

- Cancellous screw ∅ 4.5 mm self drill L 50–100 mm; 5 mm

**Zimmer® MotionLoc® Screws**  
(option)

- Cortical screw ∅ 4.0 mm self tapping, L 14–50 mm; 2 mm L 50–90 mm; 5 mm L 95 & 100mm (not in set)

- Cortical screw self tapping ∅ 4 mm; L 24–46; 2 mm
Cable Fixation Options

The following products from the Zimmer® Cable-Ready® Cable Grip System are compatible with all plates in the NCB Proximal Tibia System except for the 3 hole length tibial NCB plate with 3 proximal holes (REF 02.02261.203 and 02.02261.303)**. See data sheet REF 97-2232-015-00 for more specific instructions.

** Cable Assembly Cerclage, 1.8mm
- Sterile
- Material: CoCr
REF 00-2232-002-28
REF 00-2232-004-18

* Cable Assembly Cerclage, 1.8mm
- Sterile
- Material: CoCr
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** Cable Assembly Cerclage, 1.8mm
- Sterile
- Material: CoCr
REF 00-2232-002-28
REF 00-2232-004-18

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NCB Locking Plate
Cable Button, 2.5mm, Hex Drive
- Sterile
- Material: Ti6Al4V
REF 47-2232-060-00 Color: Gold*
REF 47-2232-060-01 Color: Blue

Application
This Cable Button is threaded directly into the NCB Plate hole to provide a positioning point for the Cable.

Instructions
To insert, use the 2.5mm hex screwdriver to thread the cable button into the plate hole. Do not fully tighten to allow the slots in the button to align with the cable.

To remove, use the 2.5mm hex screwdriver to unthread the cable button from the plate hole.

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Hex Button, 3.5mm
- Sterile
- Material: C.P. Titanium
REF 00-2232-002-35

Application
This Hex Button fits into the standard hex in the screw head (3.5mm hex). Therefore, it can be inserted into the NCB Screw head, or into the NCB Locking Cap.

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Cable Fixation Options
Cable Fixation with
Cable Button
Cable Fixation with
Hex Button

* Not available in Europe, Middle East and Africa.
** The 3 hole length tibial NCB plate with 3 proximal holes (REF 02.02261.203 and 02.02261.303) is a product of BAAT Medical BV and is distributed by Zimmer only in Europe, Middle East, and Africa.
MIS Radiolucent Targeting Device

MIS* operation technique with a fully radiolucent targeting device.

In the metaphyseal region the targeting device ensures divergent screw alignment for increased pull-out resistance.

System Features

- Polyaxial screw placement with subsequent locking option;
- Anatomically contoured plate with asymmetrical plate cross section to facilitate anterolateral soft tissue coverage;
- Plate head has 6° posterior tilt to match the lateral tibial contour;
- Placement of divergent screws to increase pull-out resistance;
- MIS Approach with a fully radiolucent targeting device;
- NCB Cancellous Screws can be used as lag screws to improve fracture reduction;
- Use of conventional plating technique;
- Feeling of bone quality during inserting and tightening of screws;
- The 2-proximal holes tibial plate is available in 3 lengths, from 5 holes (132 mm) to 9 holes (212 mm);
- The 3-proximal holes tibial plate is available in 3 lengths, from 3 holes (92 mm) to 13 holes (292 mm).

Note: Do not use the MIS device with the 3 hole length tibial NCB plate with 3 proximal holes (REF 02.02261.203 and 02.02261.303)**.

* MIS Minimally Invasive Solutions Technique by Zimmer
** The 3 hole length tibial NCB plate with 3 proximal holes (REF 02.02261.203 and 02.02261.303) is a product of BAAT Medical BV and is distributed by Zimmer only in Europe, Middle East, and Africa.
Indications

The NCB Polyaxial Locking Plate System is indicated for temporary internal fixation and stabilization of fractures and osteotomies of long bones.

Note: The NCB Proximal Tibia plate from the NCB Polyaxial Locking Plate System is specifically designed for the proximal tibia.

Contraindications

- All concomitant diseases that may impair the fixation of the implant and/or the success of the intervention.
- Lack of bone substance or poor bone quality which makes stable seating of the implant impossible.
- Acute or chronic, local or systemic infections.
- Allergy to the implanted material.
- Severe muscular, neural or vascular diseases that endanger the extremities involved.

Fracture Classification

Comprehensive classifications for proximal tibial fractures are the OTA and the Schatzker classifications.

Stabilization with locking plates is recommended for most of the 41-A and C type of fracture according to the OTA classification for long bone.

This includes comminuted fractures, intra-articular and extra-articular condylar fractures.

Schatzker Classification

Note: Be sure to check for proper Regulatory approvals in your country prior to using any products found in this surgical technique. Some devices may not be currently licensed with Health Canada. Some device compatibilities may not be approved for use by Health Canada.
Sample Cases

Case 1: 41-C1 fracture
(OTA classification)
Case 2: 41-A2 fracture
(OTA classification,
MIS surgical procedure)
Preoperative Planning and Patient Positioning

Select the appropriate length and type of the NCB PT Plate using X rays and the X ray template (REF 06.01365.000).

Based on the fracture type and the specific patient condition determine the surgical approach (i.e., open technique or MIS) to be performed.

Place the patient in a supine position. Lower the contralateral leg slightly to make sure that lateral and AP X ray views can be obtained clearly.

Support the knee while allowing the leg to move freely.

**Note:** Do not use the x-ray template with the 3 hole length tibial NCB plate with 3 proximal holes (REF 02.02261.203 and 02.02261.303)**.

** The 3 hole length tibial NCB plate with 3 proximal holes (REF 02.02261.203 and 02.02261.303) is a product of BAAT Medical BV and is distributed by Zimmer only in Europe, Middle East, and Africa.
Open Technique

Incision
A lateral incision is recommended for extra-articular and laterally based type 41-B fractures, according to the OTA classification.

For type 41-C fractures according to the OTA classification with a complete articular fracture, a straight anterolateral incision or short medial and lateral incisions are recommended.

To facilitate fracture healing do not strip the periosteum.

Fracture Reduction
Restore the articular surface (if needed) and reduce the fracture prior to inserting the plate. Bone fragments can be secured with 2.0 mm K-wires (REF 290.20.280). Make sure that K-wires do not interfere with the future location of the plate and screws.

Note: Check fragment position with an image intensifier.

Optional: Bone Spacers
Two bone spacers can be used in the diaphysis to avoid contact of the plate with the bone surface reducing the risk of periosteal blood supply impairment.

The spacers are available in sizes of 1 mm, 2 mm and 3 mm (REF 02.0x150.311 to 313).

Note: Insert adequate bone spacers into the plate before plate insertion using a 3.5mm hex screwdriver. Spacers are single use only and they can be removed after locking the screws.
**Insertion of NCB PT Plate**
Insert the plate (REF 02.02261.xxx) between the anterior tibialis muscle and the periosteum.

The plate should be placed as close as possible to the cartilage.

Temporarily fix the plate proximally and distally with 2.0 mm K-wires through the small holes in the plate.

Check the plate position and the fracture alignment with an image intensifier in both planes. Make sure the leg axis has been restored.

**Note:** The plate is anatomically shaped. Do not bend or contour the plate to avoid damage of the locking mechanism.

**Insertion of NCB Screws**
A maximum of thirty degrees of screw angulation is allowed in all plate holes. Use the NCB Drill Guide to avoid excessive screw angulation with consequent failure of the locking mechanism.

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**Note:** The ∅ 4 mm NCB MotionLoc Screws are also compatible with all plates in the Proximal Tibia Plate System except for the 3 hole length tibial NCB plates with 3 proximal holes (REF 02.02261.203 and 02.02261.303)**. See Zimmer MotionLoc surgical technique (REF 97-3161-002-00 or 97-3161-004-00)* for more specific instructions.

**Cancellous Screws**
For the 5.0 mm cancellous screws (REF 02.0x152.xxx) use the NCB Drill Guide 2.5 mm (REF 02.00024.010). To ensure correct use of the drill guide, press the drill guide into the plate hole in a perpendicular position and then tilt it into the preferred position. The drill guide needs to be in constant contact with the bottom ring of the hole.

Use the 2.5 mm drill bit (REF 103.25.180) for the 5.0 mm cancellous screws.

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* 97-3161-002-00 is for countries where NCB MotionLoc screws are approved to be used with only NCB plates and 97-3161-004-00 is for countries where NCB MotionLoc screws are approved to be used with both NCB as well as NCB Periprosthetic plates. See NCB MotionLoc package insert for approved plate/MotionLoc screw combinations.

** The 3 hole length tibial NCB plate with 3 proximal holes (REF 02.02261.203 and 02.02261.303) is a product of BAAT Medical BV and is distributed by Zimmer only in Europe, Middle East, and Africa.
Use the NCB Depth Gauge (REF 02.00024.005) to determine the appropriate screw length.

Insert NCB Cancellous Screws using the NCB PT Hexagonal Screwdriver, (REF 02.00024.124) and apply compression if needed. Cancellous screws are partially threaded and can be used as lag screws.

Depending on fracture type, in the epiphyseal and metaphyseal areas, screws should be tightened to reduce the fracture and obtain close contact between the plate and the bone in order to buttress the fracture.

**Note:** Tighten the bone screws by hand only.

Repeat this procedure to insert all the necessary NCB Cancellous Screws.

It is recommended that the most proximal cancellous screws be placed parallel to the tibia plateau.

Check the fracture reduction, plate position and the leg axis with an image intensifier.

To secure the angular stability insert the NCB Locking Caps (REF 02.03150.300) on all the cancellous screws used. Tighten the locking caps with the NCB Torque Screwdriver, 6 Nm (REF 02.00024.021) until a clicking sound is heard.

**Note:** Always use the torque screwdriver to tighten the locking caps and make sure the screwdriver is not tilted during its usage. Failure to do so could damage the hex drive and might complicate extraction of the implant.

Remove the proximal K-wire.

Determine screw length with the NCB Depth Gauge

Use the NCB PT Hexagonal Screwdriver to hand tighten the screw and apply compression (if needed)

Possible setting of the most proximal cancellous screws

Insert the locking caps using the NCB Torque Screwdriver to achieve 6 Nm
Optional

Cannulated Cancellous Screws
NCB Cannulated Cancellous Screws are self-drilling and self-tapping. These screws can be precisely placed over the NCB Guide Wire, \( \varnothing \) 1.6 mm. A cannulated drill bit can be used to pre-drill hard cortical bone.

Insertion of the \( \varnothing \) 1.6 mm NCB Guide Wire
Use the NCB Drill Guide to avoid excessive angulation of the cannulated screws with consequent failure of the locking mechanism.

For the 4.5 mm cannulated cancellous screws (REF 02.0158.0xx) insert the NCB PT Drill Guide \( \varnothing \) 3.3/1.6 mm (REF 02.00024.192) into the NCB Drill Guide \( \varnothing \) 3.3 mm (REF 02.00024.111).

Press the drill guide into the plate hole, tilt it in the preferred position and insert the NCB Guide Wire with threaded tip (REF 02.01362.116).

Note: use only the NCB Guide Wire (REF 02.01362.116) \( \varnothing \) 1.6 mm, \( L = 190 \) mm. Failure to do so misleads the screw length measurement.
Insertion of the Cannulated Cancellous Screws

Remove the NCB Drill Guide Ø 3.3 mm (REF 02.00024.111) and NCB PT Drill Guide Ø 3.3/1.6 mm (REF 02.00024.192) and determine the screw length from the measurement with the NCB PH/PT Measuring Device (REF 02.00024.219) along the NCB Guide Wire.

For hard cortical bone it is possible to use the Ø 3.3 mm NCB PT Cannulated Drill Bit (REF 02.00024.233).

**Note:** use the Ø 3.3 mm NCB PT Cannulated Drill Bit (REF 02.00024.233) only for the first lateral cortex, to make sure that the NCB Guide Wire does not fall out.

Use the cannulated hexagonal screwdriver (REF 02.00024.120) to insert the cannulated self-drilling screws over the 1.6 mm NCB Guide Wire.

To achieve the final angular stability remove the NCB Guide Wire and tighten the locking cap with the torque screwdriver 6 Nm (REF 02.00024.021) until the clicking sound is heard.

**Note:** it is important to remove the NCB Guide Wire (REF 02.01362.116) prior to inserting the locking cap (REF 02.0x150.300) because the axial directions for the cannulated screws and locking cap may be different.
Cortical Screws
Bicortical insertion is recommended.
For the 4.0 mm cortical screws (REF 02.0x155.0xx) use the NCB Drill Guide 3.3 mm (REF 02.00024.111) with the 3.3 mm drill bit (REF 02.00024.118).
In case of hard cortical bone tap the cortex with the NCB Tap (REF 02.00024.040). Remove the NCB Drill Guide 3.3 mm when using the NCB Tap.

Measure the screw length and insert NCB Cortical Screw using the NCB Hexagonal Screwdriver (REF 02.00024.124).

**Note:** Tighten the bone screws by hand only.

Repeat this procedure to insert all the needed NCB Cortical Screws.

Insert the NCB Locking Caps (REF 02.x150.300) to secure the angular stability as described for the cancellous screws.

Remove the distal K-wire after completing screw insertions.
MIS Technique

MIS is recommended for simple and/or extra-articular fractures. An open approach is recommended in the proximal area to restore the articular surface.

Plate Hole Numbering System

To target the correct plate holes there is a numbering system on the targeting devices (REF 02.00024.08x)

Screw holes in the proximal and metaphyseal areas are indicated with Greek letters (α, β, γ, δ and ε).
Screw holes in the shaft area are indicated with Roman numbers (1 to 13 according to plate length).

Note: Do not use the MIS device with the 3 hole length tibial NCB plate with 3 proximal holes (REF 02.02261.203 and 02.02261.303)**.

Incision and Fracture Reduction

A lateral incision should start proximal to Gerdy's tubercle and should be extended for about 50 mm distally.

Note: Incision length will vary according to the type of fracture.

Reduce the fracture as described in the open technique. Take care that K-wires used to temporarily stabilize the fracture do not interfere with the future plate location.

** The 3 hole length tibial NCB plate with 3 proximal holes (REF 02.02261.203 and 02.02261.303) is a product of BAAT Medical BV and is distributed by Zimmer only in Europe, Middle East, and Africa.
**Targeting Device Assembly**

Use the *NCB PT* right Targeting Device (REF 02.00024.080) for *NCB PT* Right Plates (REF 02.02261.xxx) and the *NCB PT* Left Targeting Device (REF 02.00024.081) for *NCB PT* Left Plates (REF 02.02261.xxx).

Center the targeting device in the specific indentations on the plate.

Insert and screw in the *NCB PT* Connection Bolt (REF 02.00024.083) in the “δ” hole of the targeting device.

**Note:** To guarantee accurate assembly of the plate/targeting device, insert the *NCB PT* Stabilization Bolt (REF 02.00024.084) into the targeting device hole corresponding to the last plate hole. Screw the *NCB* Stabilization Bolt into the plate and insert the safety lock pin (REF 02.00024.076) from the anterior side.

Once the assembly of the plate/targeting device has been accomplished, tighten the *NCB* Connection Bolt (REF 02.00024.083) with the screwdriver.

Remove the safety lock pin and the *NCB PT* Stabilization Bolt in order to insert the plate.

**Insertion and Preliminary Fixation of NCB PT Plate**

Under the image intensifier insert the plate between the anterior tibialis muscle and the periosteum: keep the distal end of the plate in continuous contact with the bone surface during insertion.

The plate should be placed as close as possible to the joint line.
Insert a 2.0 mm K-wire through one of the small proximal holes for temporary fixation of the plate.

Make a stab incision at the most distal plate hole.

Insert the NCB PT Stabilization Bolt (REF 02.00024.084), the NCB PT K-Wire Guide (REF 02.00024.092) and the NCB PT Trocar (REF 02.00024.093) into the corresponding hole on the targeting device.

Screw the NCB PT Stabilization Bolt (REF 02.00024.084) into the plate and insert the safety lock pin (REF 02.00024.076) as described previously.

Center the distal part of the plate on the bone using the image intensifier, remove the NCB PT Trocar and insert a 2.0 mm K-wire to fix the plate.
Insertion of NCB Screws in the Proximal Area
Use the same procedure as described in the open technique.

Repeat the procedure to insert the appropriate number of proximal screws.

Note: Check the fracture reduction and plate position under an image intensifier.

Lock the screws as described in the open technique.

Only the most proximal screws can be inserted with open technique when the targeting device is on.

The screw numbered “δ” needs to be inserted when the targeting device is removed at the end of surgery.

The screw numbered “δ” can be inserted using the corresponding hole on the targeting device following the procedure described below.
**Insertion of NCB Screws in the Shaft**

Make a stab incision to access the plate hole and insert the tissue protection sleeve assembly (REF 02.00024.090 to 093).

Screw the NCB PT Drill Guide (REF 02.00024.091) into the plate and then the NCB PT soft tissue protection sleeve (REF 02.00024.090) into the targeting device.

Remove the NCB PT Trocar and NCB PT K-Wire Guide and insert the NCB PT Drill Bit 3.3 mm (REF 02.00024.133) when the 4.0 mm cortical screw is used.

Use the scale on the drill bit shaft or the NCB PT Depth Gauge (REF 02.00024.007) to determine the appropriate screw length.
Remove the NCB PT Drill Guide and insert the appropriate screw using the NCB PT Hexagonal Screwdriver (REF 02.00024.124).

**Note:** The screw is completely inserted when the marker on the screwdriver reaches the soft tissue protection sleeve.

Insert and tighten the locking cap (REF 02.03150.300) with the NCB Torque Screwdriver, 6 Nm (REF 02.00024.021) until a clicking sound is heard.

**Note:** Always use the torque screwdriver to tighten the locking caps and make sure the screwdriver is not tilted during its usage. Failure to do so could damage the hex drive and might complicate extraction of the implant.

Remove the NCB PT Soft Tissue Protection and insert the NCB Screw Marker (REF 02.00024.077) to indicate that the screw is placed and locked in the hole.

Repeat the described procedure to insert additional screws.
To place the most distal screw, exchange the NCB Stabilization Bolt with the NCB PT Drill Guide and protection sleeve and follow the procedure described above.

Unscrew the connecting bolt to remove the targeting device.

**Note:** when using the long plate (i.e. 13 holes) the last three distal screws may interfere with the Superficial Peroneal nerve. Therefore, it is recommended a slightly longer stab incision to visualize and avoid damage to the Superficial Peroneal nerve.

### Implant Removal

To remove the NCB PT Plate, first remove all the locking caps. Then loosen all the NCB Bone Screws without completely removing them (this prevents rotation of the bone plate when removing the last screw). Then, completely remove all the bone screws.

**Note:** make sure that the tip of the NCB PT Screwdriver (REF 02.00024.124) is correctly placed in the hex drive of the locking caps and/or NCB Screws. Failure to do so could damage the hex drive and complicate the extraction of the implant.

**Removal Tips**

- Re-assemble the NCB Targeting Device to remove the shaft screws if the MIS approach was used for implantation. The targeting device ensures that the axial direction used during implantation is considered.

- In case of difficulties in loosing the NCB Screws, tighten the screws slightly before loosening them.
Ordering Information – Implants

NCB® PT 2-proximal hole plate set

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NCB® PT 3-proximal hole plate set

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<tr>
<td>–</td>
<td>13</td>
<td>292</td>
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NCB® PT 3-proximal hole plate (optional)
3 and 13 hole lengths

**STERILE**

Materials: NCB Plates and Screws are made of Ti6Al4V, ISO 5832-3, ASTM F136

* Indicates the quantity in the plate sets.

** The 3 hole length tibial NCB plate with 3 proximal holes (REF 02.02261.203 and 02.02261.303) is a product of BAAT Medical BV and is distributed by Zimmer only in Europe, Middle East, and Africa.
### NCB® Proximal Tibia System – Surgical Technique

**NCB® Cancellous Screw**, thread length 32 mm

<table>
<thead>
<tr>
<th>Quantity*</th>
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<th>mm</th>
<th>Color</th>
<th>REF (Non Sterile)</th>
<th>REF (Sterile)</th>
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</table>

**Materials:** NCB Plates and Screws are made of Ti6Al4V, ISO 5832-3, ASTM F136

*Indicates the quantity of non sterile implants in the standard graphic case.
Compatible Zimmer Products with the NCB Proximal Tibia System** (optional)

NCB® MotionLoc® Screws, Ø 4.0mm Cortical, Self Tapping, Ti6Al4V

<table>
<thead>
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<th>L (mm)</th>
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<th>REF (Non Sterile)</th>
<th>REF (Sterile)</th>
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Cable Fixation Options

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<th>Description</th>
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<tr>
<td>47-2232-060-00*</td>
<td>NCB Polyaxial Locking Plate Cable Button, Gold, 2.5mm Hex Drive, Material: Ti6Al4V</td>
</tr>
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<td>47-2232-060-01</td>
<td>NCB Polyaxial Locking Plate Cable Button, Blue, 2.5mm Hex Drive, Material: Ti6Al4V</td>
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<td>00-2232-002-35</td>
<td>Hex Buttons, 3.5mm Hex, Material: C.P. Titanium</td>
</tr>
<tr>
<td>00-2232-004-28</td>
<td>Cable-Ready Cable Assembly Cerclage, Ø 1.8mm, L 914mm, Material: CoCr</td>
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<tr>
<td>00-2232-004-18</td>
<td>Cable-Ready Cable Assembly Cerclage, Ø 1.8mm, L 635mm, Material: CoCr</td>
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</tbody>
</table>

Materials: NCB Plates and Screws are made of Ti6Al4V, ISO 5832-3, ASTM F136

* Not available in Europe, Middle East and Africa.

** The MotionLoc screws and Cable Fixation options are compatible with all plates in the NCB Proximal Tibia System except for the 3 hole length tibial NCB plate with 3 proximal holes (REF 02.02261.203 and 02.02261.303)

*** The 3 hole length tibial NCB plate with 3 proximal holes (REF 02.02261.203 and 02.02261.303) is a product of BAAT Medical BV and is distributed by Zimmer only in Europe, Middle East, and Africa.
**Graphic Case**

NCB® PT Standard Graphic Case
for open technique; includes
REF 02.00024.801/.802/.803/.804/.805

REF
with content
ZS 02.00024.800
empty
ZS 02.00024.810

NCB® PT Graphic Case, module
ingredients
REF 02.00024.803

NCB® PT Graphic Case, module
screw rack
REF 02.00024.805

NCB® PT Graphic Case, module
cannulated screws and implants
REF 02.00024.804

NCB® PT Graphic Case, lid
REF 02.00024.801

NCB® PT Graphic Case base (Inox)
REF 02.00024.802
**Standard Instruments**

1. **NCB® Drill Bit, with quick coupling**
   - Quantity: 1
   - L mm: 195
   - ∅ mm: 4.3
   - REF: 02.00024.002

2. **NCB® Depth Gauge**
   - Quantity: 1
   - L mm: 110
   - ∅ mm: 5.0/4.5/4.0
   - REF: 02.00024.005

3. **NCB® Drill Guide ∅ 2.5 mm for screws ∅ 5.0 cancellous**
   - Quantity: 1
   - ∅ mm: 2.5
   - REF: 02.00024.010

4. **NCB® Drill Guide 4.3 screws 5.0**
   - Quantity: 1
   - ∅ mm: 4.3
   - REF: 02.00024.011

5. **NCB® Torque Screwdriver, 6 Nm**
   - Quantity: 1
   - L mm: 280
   - ∅ mm: 3.5
   - REF: 02.00024.021

6. **NCB® PT Tab 4 mm, with quick coupling**
   - Quantity: 1
   - ∅ mm: 4.0
   - REF: 02.00024.040

7. **NCB® PT Hexagonal Screwdriver, shaft**
   - Quantity: 1
   - L mm: –
   - ∅ mm: 3.5
   - REF: 02.00024.027

8. **Two-fluted drill bit, with quick coupling**
   - Quantity: 1
   - L mm: 180
   - ∅ mm: 154
   - REF: 103.25.180

9. **Kirschner wire, stainless steel**
   - Quantity: 5
   - L mm: 280
   - ∅ mm: 2.0
   - REF: 290.20.280

*Indicates the quantity in the standard graphic case.
MIS Instruments

NCB® PT Graphic Case, for MIS instruments

| REF         | ZS 02.00024.850 | empty 02.00024.806 |

Assembly pin

Quantity**

1 02.00002.001

NCB® PT Depth Gauge

Quantity**

1 02.00024.007

Safety lock pin for targeting device

Quantity**

2 02.00024.076

NCB® Screw Marker for targeting device

Quantity**

8 02.00024.077

** Indicates the quantity in the MIS graphic case module.
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<tr>
<th>Item Description</th>
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<tr>
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<td>1</td>
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</tr>
<tr>
<td>NCB® PT Soft Tissue Protection sleeve Ø 10.0/8.2 mm</td>
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<tr>
<td>NCB® PT Trocar</td>
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<td>NCB® PT K-Wire Guide Ø 5.2/2 mm</td>
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** Indicates the quantity in the MIS graphic case module.
Cannulated Options (Screws and Instruments)

Cannulated Screws and Instrument Set

**NCB® PH Guide Wire with threaded tip**
Quantity*** L mm mm REF
5 190 1.6 02.01362.116

**NCB® PH/PT Measuring Device for cannulated screws**
Quantity*** REF
1 02.00024.219

**NCB® PH Hexagonal Screwdriver**
cannulated short hex
Quantity*** L mm Ø mm REF
2 245 3.5 02.00024.120

**NCB® PT Cannulated Drill Bit with quick coupling**
Quantity*** Ø mm REF
1 3.3 02.00024.233

**NCB® PT Drill Guide 3.3/1.6 mm**
Quantity*** REF
2 02.00024.192

<table>
<thead>
<tr>
<th>Quantity***</th>
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</tbody>
</table>

Cannulated Screws and Instrument Set

**NCB® Cannulated Cancellous Screw**
Ø 4.5 mm, self-drill 24 mm thread length

Materials: NCB Plates and Screws are made of TiAl6V4, ISO 5832-3, ASTM F136

*** Indicates the quantity of instruments / non sterile implants included in the Ref. Number ZS 02.00024.840
NCB®-PT Proximal Lateral Tibial Osteosynthesis Plate, with Polyaxial Locking Screws

These reference numbers must correspond to those of the prostheses to be implanted.

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Notes
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