B. ProCallus Fixator (90000 series)

ProCallus Fixator Kits
Complete with appropriate Compression-Distraction Unit and Allen Wrench 6mm.

1 90001 Long
(27.6cm between outermost screws when fixator body fully closed: extends by 8cm).

2 90000 Standard
(23.6cm between outermost screws when fixator body fully closed: extends by 4cm).

3 90028 Short
(21.6cm between outermost screws when fixator body fully closed: extends by 2cm).

Note: ProCallus Fixators are also available with Actuator and Allen Wrench 6mm. These are designated 90001C, 90000C and 90028C, respectively.

1. Ball-Jointed Modules

1. **90006 ProCallus Straight Clamp**
   Allows the fixator to act as its own template and enables screws to be inserted in a plane parallel to the diaphyseal axis of the bone.

2. **90007 ProCallus T-Clamp**
   Allows the fixator to act as its own template and enables screws to be inserted in a plane at right angles to the diaphyseal axis of the bone.

3. **90090 Elbow Extended Range Clamp**
   Acts as its own template for screw insertion in the ulna. It is used when a wider choice of angle for screw placement is necessary. See section “Elbow Fixator”.

4. **10054 Ball-Jointed Module for Independent Screw Placement**
   For iliac crest applications. Consisting of: 1 Bar with Ball-Joint and 2 Independent Screw Clamps. Enables screws to be placed freehand in chosen positions on the iliac crest. See section “Pelvic Fixator”.

5. **90046 RadioLucent Ankle Clamp**
   For left and right application. (See Manual PM 070 “Distal Tibial and Pilon Fractures with the RadioLucent Ankle Clamp” for application instructions). This module should be applied with its appropriate RadioLucent Ankle Pin Guide, see subsection 5. Templates. RadioLucent Ankle Clamp and RadioLucent Ankle Pin Guide are also available as a sterile kit, see subsection 2. Sterile Radiolucent Ankle Kit.

6. **80050 Hybrid Coupling with Ball-Joint**
   For fixator bodies 90000, 90001 and 90028. To be used with the Hybrid Fixation System.
Ball-Jointed Modules

7 10043 Metaphyseal Clamp
Consists of a horizontal and a vertical component, for screw placement in both epiphyseal and meta-diaphyseal regions of the bone.

8 10052 Torbay-Garches Clamp
For convergent screw placement in a plane at right angles to the diaphyseal axis of the bone, in cases where space is limited.

9 10042 Trauma-Garches Clamp
For convergent screw placement in a plane at right angles to the diaphyseal axis of the bone, in cases where space is limited.

10 10040 Angled Clamp
Allows screws to be inserted along the femoral neck at an angle of 125° to the longitudinal axis of the bone. Use special screw guide 11124, drill guide 11125 and drill bit kit 11007.

11 10023 Double-Coupling Clamp
For joining two D.A.F. or ProCallus units in series. Normally used for central dislocation of the hip.

Note: Modules 7 to 10 above should be applied using the appropriate template, see subsection 5. Templates.
2. Sterile Radiolucent Ankle Kit

1 99-90646 RadioLucent Ankle Clamp Kit, sterile
3. Non Ball-Jointed Modules

1 90022 ProCallus Articulated Body for the Hip
For arthrodiatasis.

2 90036 ProCallus Self-aligning Articulated Body
For progressive correction of angular deformity (hemicallotasis).

3 90037 Supplementary Screw Holder
(Bar, Clamps and Fixator Body Attachment)

4 90038 Supplementary Screw Holder Clamp

5 90035 ProCallus Self-aligning Articulated Body Assembly Kit
Consisting of:
1x90036  ProCallus Self-aligning Articulated Body
1x90018  ProCallus Standard Central Body Male Component
1x90016  ProCallus Central Body Locking Nut
2x90005  Bush
2x10004  Cam
1x90006  ProCallus Straight Clamp
1x90007  ProCallus T-Clamp
1x90015  ProCallus Micromovement Locking Nut
1x10008  Compression-Distraction Unit Standard, extend to 4cm
4. Components/Replacements

1. ProCallus Central Bodies
   Complete with 2 Cams, 2 Bushes, 1 ProCallus Micromovement Locking Nut and 1 ProCallus Central Body Locking Nut.
   - 90002 Standard
   - 90003 Long
   - 90029 Short

2. ProCallus Central Body Male Components
   - 90018 Standard
   - 90020 Long
   - 90031 Short

3. ProCallus Central Body Female Components
   - 90019 Standard
   - 90021 Long
   - 90032 Short

4. 90015 ProCallus Micromovement Locking Nut
5. 90016 ProCallus Central Body Locking Nut
6. 90005 Bush
7. 10004 Cam
8. 90014 ProCallus Clamp Screw
9. 90045 RadioLucent Ankle Clamp Articulation Locking Nut

10. Compression-Distraction Units
    - 10008 Standard Extends to 4cm.
    - 10009 Long Extends to 8cm.
    - 10030 Short Extends to 2.75cm.

11. ProCallus Actuators
    For early applied cyclic micromovement before patient can weightbear.
    - 90008 Standard Extends to 4cm.
    - 90009 Long Extends to 8cm.
    - 90030 Short Extends to 2.75cm.

12. 10033 Compression-Distraction Unit Silicone O-Rings (pack of 10)
5. Templates

1 11947 RadioLucent Ankle Pin Guide
To provide visualization of rotational axis of the tibio-talar joint and correct screw positioning.

2 99-11947 RadioLucent Ankle Pin Guide, sterile

3 11143 Metaphyseal Clamp Template

4 11152 Torbay-Garches RadioLucent Clamp Template

5 11142 Trauma-Garches Clamp Template

6 11140 Angled Clamp Template
6. Instrumentation

1 10017 Allen Wrench 6mm

2 10025 Torque Wrench 6mm
ONLY used for locking the cams of the ball-joints: it should be rotated clockwise until a click is heard.

3 11201 Fixator Self-Locking Manipulation Forceps
To distance surgeon’s hands from X-ray during fracture reduction.

11190 ProCallus Assembly Kit
Consisting of:
6x11102 Screw Guide, length 60mm
6x11103 Screw Guide, length 100mm
1x11106 Drill Guide Ø 3.2mm, length 40mm
1x11104 Drill Guide Ø 4.8mm, length 40mm
1x11116 Drill Guide Ø 3.2mm, length 80mm
1x11105 Drill Guide Ø 4.8mm, length 80mm
1x11004 Tapered Trocar

Note: See also instrumentation for bone screw insertion (section “Bone Screws”).
7. Sterilization Boxes

1 90970 ProCallus Instruments Steribox, empty
Can accommodate:
2x10017 Allen Wrench 6mm
2x1100301 Drill Bit, 200mm Ø 3.2mm
2x1100101 Drill Bit, 180mm Ø 4.8mm
2x1100201 Drill Bit, 240mm Ø 4.8mm
2x10012 Allen Wrench 3mm
1x11100 T-Wrench
1x11106 Drill Guide, 40mm Ø 3.2mm
1x11116 Drill Guide, 80mm Ø 3.2mm
1x11104 Drill Guide, 40mm Ø 4.8mm
1x11105 Drill Guide, 80mm Ø 4.8mm
6x11102 Screw Guide, 60mm
6x11103 Screw Guide, 100mm
1x10025 Torque Wrench
1x10200 Screw Covers (pack of 20)
1x11005 Drill Bit Kit, Stop Unit Ø 4.8mm
1x11006 Drill Bit Kit, Stop Unit Ø 3.2mm
1x11004 Tapered Trocar

2 90980 ProCallus System with Actuator Steribox, empty
Can accommodate:
1x90028C ProCallus Short Kit
1x90000C ProCallus Standard Kit
1x90001C ProCallus Long Kit
1x90007 ProCallus T-Clamp
1x91150 Universal T-Wrench
1x10043 Metaphyseal Clamp
1x90037 Supplementary Screw Holder
2x10017 Allen Wrench 6mm
1x11143 Metaphyseal Clamp Template

3 90990 ProCallus System Steribox, empty
Can accommodate:
1x90028 ProCallus Short Kit
1x90000 ProCallus Standard Kit
1x90001 ProCallus Long Kit
1x90007 ProCallus T-Clamp
1x91150 Universal T-Wrench

4 81990 XCaliber/ProCallus Hybrid System Rings Steribox, empty