Guided Growth™ System
Operative Technique

eight-Plate® and quad-Plate™
• Titanium and Stainless Steel Systems
1. Localizing Pin in Physis
Insert 1.6mm localizing pin in physis and verify position with fluoroscope.

2. Plate Holder Orientation
The Guided Growth plates come with a plate holder, which may be used to apply and secure the plates. If used, it is important to secure the plates at their narrowest point.

3. Plate Bender
The Guided Growth plates come pre-contoured (10 degrees) and should fit most anatomies. If the plate requires further contouring, the plate benders may be used. The plate contour should be such that the plate sits flush with the bone.
- Both titanium and stainless steel plates can be bent
- Do not bend more than 20° from parallel
- Do not reverse bend or bend repeatedly
- Ensure that the plate benders are fully engaged with the plate to reduce the chance of distortion or scratching of the plate.

4. Plate Orientation
Apply contoured Guided Growth plate over pin. Ensure that the orientation of the plate is correct in relation to the physis.
- eight-Plate and quad-Plate holes should be centered over physis.
5. Inserting the Guide Wires
Using the Drill Guide, first insert the Epiphyseal Guide Wire, followed by the Metaphyseal Guide Wire. It is not necessary for these two wires to be parallel; it is more important to avoid the physis. Remove the center Guide Wire and check position with fluoroscope.

6. Drilling the Epiphyseal and Metaphyseal Holes
Drill using the Drill Guide and the Cannulated Step Drill Bit to a depth of 5mm. First, drill the epiphyseal hole, then the metaphyseal hole.

7. Using Cannulated or Solid Screws
After pre-drilling using the Cannulated Step Drill, insert the epiphyseal cannulated or solid screw. Next, insert the metaphyseal screw. Screws do not need to be parallel but should never enter the physis. After removing the guide wires (if applicable), turn each screw 2-3 more times in an alternating manner.

8. Check with Fluoroscopy
Ensure via fluoroscopy the screws are fully seated and there is no gap between the screw-plate-bone interface. Failure to eliminate space between these interfaces may lead to 3-point bending and undue stress on the screw.
Caution: Federal law (USA) restricts this device to sale by or on the order of a physician.

Proper surgical procedure is the responsibility of the medical professional. Operative techniques are furnished as an informative guideline. Each surgeon must evaluate the appropriateness of a technique based on his or her personal medical credentials and experience. Please refer to the "Instructions for Use" supplied with the product for full information on indications for use, contraindications, warnings, precautions, adverse reactions information and sterilization.