EXACTECH **KNEE**

Operative Technique

INTRODUCTION

This technique describes a method for balancing the medial and lateral collateral ligaments that reproducibly creates symmetric and equal flexion and extension gaps in order to optimize knee function.

SURGICAL STEPS

Follow the Optetrak Logic[®] CR/PS LPI Operative Technique for resection of the distal femur and the proximal tibia.

Note: The LBS III instruments referenced in this technique are only designed to be used with anterior referencing femoral finishing guides.

Position the **LBS III Tensor** between the femur and tibia in extension (*Figure 1*). Turn the Tensor handle until the ligaments are appropriately tensioned. It is important to recognize the tensor's three marks (*Figure 2, blue arrow*) representing the amount of tension on the ligaments, as tensing to the same mark throughout the procedure is necessary. The extension gap measurement (*Figure 2, red arrow*) can be a resultant of both the force exerted on the tensor and the anatomy of the joint. Evaluating the varus/valgus stability of the joint under tension can be completed prior to selecting a final gap measurement. The extension gap (mm) measurement and poly thickness (mm) measurement (*Figure 2, green arrow*) can be read directly from the Tensor.

The medial and lateral extension gap measurements (*Figure 2*) are independent; however, an ideal gap results in the same measurements on both sides and a rectangular extension gap. Adjustments may be made to the soft tissue or bone resections if the gap is not rectangular.

The poly thickness measurement is an average of the medial and lateral extension gap measurements. If the poly thickness measurement is less than 9mm, the extension gap can't accommodate an Optetrak[®] implant.

Remove the Tensor from the joint and assemble the **LBS III Sizer Link** to the Tensor (*Figure 3*). Position the assembly between the proximal tibia and the posterior femoral condyles in 90 degrees of flexion. Verify the Sizer Link is flush against the resected distal surface of the femur. Tense the ligaments by turning the tensor handle to the previously identified tension mark in extension.

Before proceeding to the next step, anatomical landmarks can be used to verify femoral rotation if desired (i.e. the Sizer Link should be perpendicular to the epicondylar axis and parallel with Whiteside's line).



OPTETRAK



Figure 1 Position Tensor in Extension

Figure 2 Tensor Markings



Green: Poly Thickness

Red: Extension Gap

Blue: Ligament Tension



Figure 3 Position Tensor with Sizer Link in Flexion





While the knee is in flexion and the tensor is in the joint, attach the **LBS III Sizer Scale** to the Sizer Link and Tensor (*Figure 4*). The Sizer Scale must be held in place by the surgeon and doesn't rigidly attach to the Sizer Link.

Verify that the Sizer Scale and Sizer Link are flush against the resected distal surface of the femur.

Attach the A/P Sizer Stylus to the Sizer Scale.

Consistent with the Optetrak Logic CR/PS LPI Operative Technique, slide the tip of the Sizer Stylus underneath the quadriceps and into the suprapatellar pouch. Palpate the position of the tip of the Sizer Stylus, trying to make it rest in the midportion of the femoral metaphysis.

After positioning the Sizer Stylus, the appropriate femoral size is determined from the alignment of the markings on the Sizer Link and Sizer Scale (*Figure 5*).

Verify that the Sizer Scale is flat against the distal femoral surface, and drill femoral rotation holes with the LPI Collar Drill (*Figure 6*).

Resume surgery following the Optetrak Logic CR/PS LPI Operative Technique.



Figure 4 Position Tensor with Sizer Scale in Flexion

Figure 5 Sizer Scale Markings



INSTRUMENT LISTING

Catalog Number	Part Description
207-80-10	LBS III Tensor
207-80-01	LBS III Sizer Link
207-80-02	LBS III Sizer Scale
213-41-06	A/P Sizer Stylus
213-49-00	LPI A/P Sizer Collar Drill, 4mm



Figure 6 Drill Rotational Alignment Holes

Exactech Inc., as the manufacturer of this device, does not practice medicine, and is not responsible for recommending the appropriate surgical technique for use on a particular patient.

352-377-1140 1-800-EXACTECH www.exac.com



712-28-30 LBS III OpTech Addendum 0614

A Great Day in the O.R."