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SURGICAL TECHNIQUE QUICK REFERENCE

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Assess soft-tissue load references with **joint reduced and capsule closed**. Only address soft-tissues after loads have been assessed in both **extension and flexion (10°-90°)**. After any tissue release, the **leg should be "cycled"** (taken through the range of motion) several times.
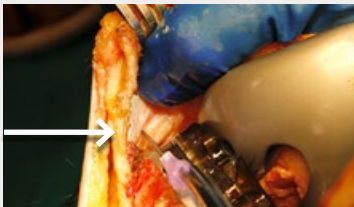
APPROACH TO VARUS KNEE

▶ TIGHT IN EXTENSION - MEDIALLY

SENSOR PRESENTATION:
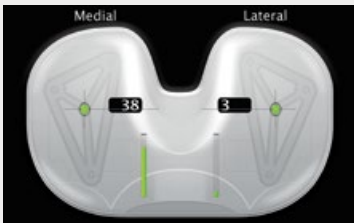
SURGICAL CONSIDERATION:

Evaluate MCL

Palpate fibers of MCL to assess tension. Release **posterior fibers of MCL** (both deep and superficial).
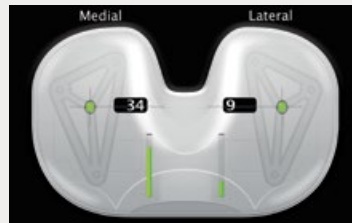

Evaluate Medial Posterior Capsule

Release medial posterior capsule and/or semimembranosus at tibial attachment site.

▶ TIGHT IN FLEXION - MEDIALLY
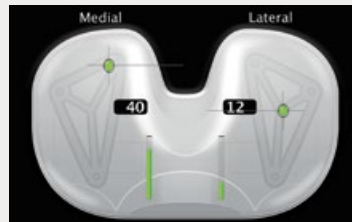
SENSOR PRESENTATION:
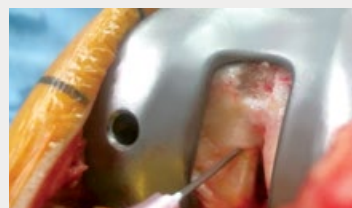

SURGICAL CONSIDERATION:

Condition 1. **Evaluate MCL**

Palpate fibers of MCL to assess tension. Release **anterior fibers of MCL** (both deep and superficial).

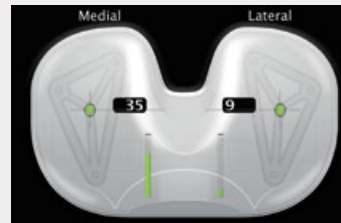**SENSOR PRESENTATION:**

SURGICAL CONSIDERATION:

Condition 2. **Evaluate PCL**

If medial femoral contact point exhibits excessive tension and posterior positioning, release **anterolateral bundle PCL fibers**.

▶ TIGHT IN FLEXION AND EXTENSION - MEDIALLY

SENSOR PRESENTATION:

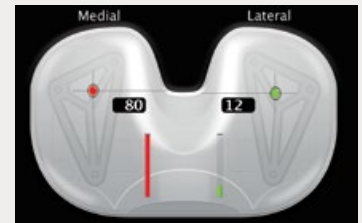**SURGICAL CONSIDERATION:**

Condition 1. **Loads 20-40 lbs.**

Extension Balancing:

- Posterior MCL fibers released if in tension; loads rechecked.

- Posterior medial capsule checked for tension and released, if needed; loads re-checked.
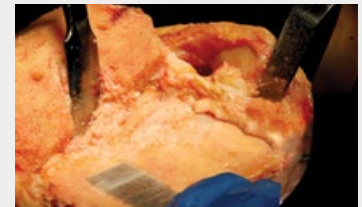
- If necessary, semimembranosus can be released.

Flexion Balancing:

- Anterior MCL fibers released if in tension; loads rechecked.

SENSOR PRESENTATION:

SURGICAL CONSIDERATION:

Condition 2. **Loads > 40 lbs.**

If loads beyond 40 lbs. are displayed, consider recutting the tibia plateau **to add additional varus** alignment.

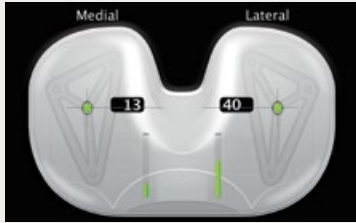## OrthoSensor®
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VERASENSE™ SURGICAL TECHNIQUE QUICK REFERENCE
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APPROACH TO VALGUS KNEE

▸ TIGHT IN EXTENSION - LATERALLY

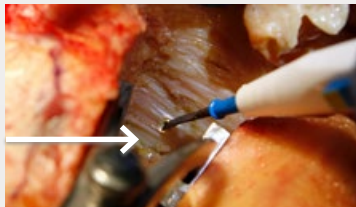**SENSOR PRESENTATION:**

Medial | Lateral
13 | 40

SURGICAL CONSIDERATION:

Evaluate Lateral Posterior Capsule & Arcuate

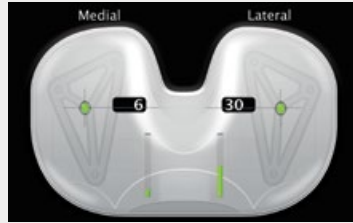Palpate **the lateral posterior capsule** and/or the **arcuate ligament** to assess tension; release as necessary.

Evaluate IT Band

If lateral posterior capsule/arcuate does not fully address tension, consider releasing tight fibers of the **IT band**.

▸ TIGHT IN FLEXION - LATERALLY

SENSOR PRESENTATION:

Medial | Lateral
6 | 30

SURGICAL CONSIDERATION:

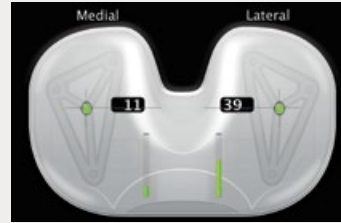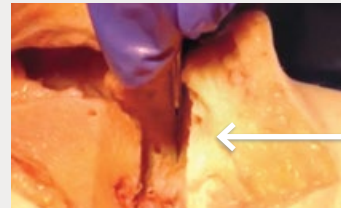**Evaluate Popliteus**

Release tight fibers of the **popliteus tendon**.

▸ TIGHT IN FLEXION AND EXTENSION - LATERALLY

SENSOR PRESENTATION:

Medial | Lateral
11 | 39

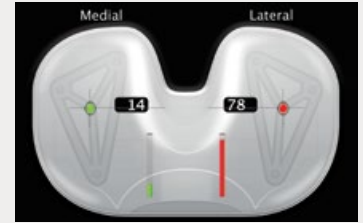**SURGICAL CONSIDERATION:**

Condition 1. **Loads 20-40 lbs.**

Extension Balancing:

- Release posterior lateral corner; recheck loads.
- Release posterior lateral capsule and arcuate complex; recheck loads.
- Consider releasing tight fibers of IT band, if necessary.

Flexion Balancing:

- If excessive loads are still uncorrected, then popliteus tendon is checked for tension and released.

SENSOR PRESENTATION:

Medial | Lateral
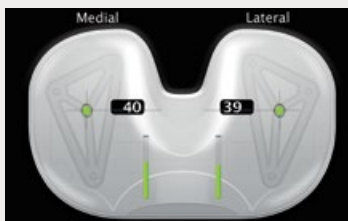14 | 78

SURGICAL CONSIDERATION:

Condition 2. **Loads >40 lbs.**

If necessary, you may **recut tibial plateau** to add more valgus.

TIGHT EXTENSION GAP
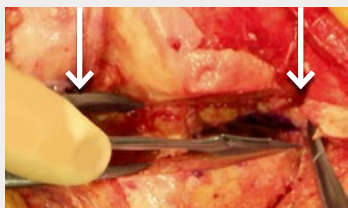
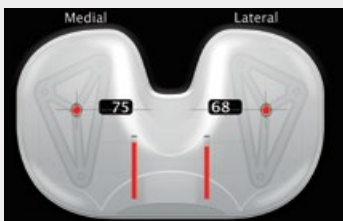### ▸ TIGHT ONLY IN EXTENSION - SYMMETRICALLY

SENSOR PRESENTATION:

Medial | Lateral
40 | 39

SENSOR PRESENTATION:

Medial | Lateral
75 | 68

SURGICAL CONSIDERATION:

Condition 1. **Loads 20-40 lbs.**

Release **posterior capsule.**

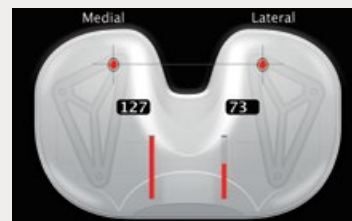**SURGICAL CONSIDERATION:**

Condition 2. **Loads >40 lbs.**

If necessary, consider **recutting distal femur**.

ADVERSE FLEXION GAP

▸ TIGHT ONLY IN FLEXION - SYMMETRICALLY
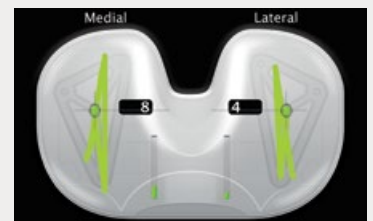
SENSOR PRESENTATION:

Medial | Lateral
127 | 73

SURGICAL CONSIDERATION:

Loads > 40 lbs.

Increase **tibial slope**.

▸ LOOSE AND/OR UNSTABLE FLEXION GAP

SENSOR PRESENTATION:

Medial | Lateral
8 | 4

SURGICAL CONSIDERATION:

Loads < 10 lbs.

Increase thickness of **shim**.