Surgical Technique

Biconvex
Patellar Preparation
Primary Total Knee Arthroplasty
Contents
Introduction ...............................................................2
Instrument assembly .................................................3
Biconvex patellar preparation ....................................4
Component trialing ....................................................5
Implantation ..............................................................5

Nota Bene
The technique description herein is made available to the healthcare professional to illustrate the authors’ suggested treatment for the uncomplicated procedure. In the final analysis, the preferred treatment is that which addresses the needs of the patient.

Additional LEGION Total Knee System surgical technique brochures are available for the other LEGION Components.
Introduction

The LEGION™ Total Knee System has been designed to offer the orthopaedic surgeon solutions to address intraoperative situations. Implant function is directly related to accurate surgical technique. LEGION instrumentation has been developed to be an easy-to-use system that will assist the surgeon in obtaining accurate and reproducible knee alignment.

The instrumentation can be used in minimally invasive or standard exposures. While it has been the designers’ objective to develop accurate, easy-to-use instrumentation, each surgeon must evaluate the appropriateness of the following technique based on his or her medical training, experience and patient evaluation.
Instrument assembly

**Patellar reamer guide**

Determine the appropriate diameter patellar implant, and select the correctly-sized patellar reamer collet and slide it into place on the patellar reamer guide (Figure 1).

**Depth gauge and reamer assembly**

1. Attach the **blue** patellar depth gauge to the reamer guide (Figure 2).

2. Attach the matching sized patellar reamer dome and patellar depth stop to the patellar reamer shaft (Figures 3 and 4). Lower the assembly through the patellar reamer guide until the reamer dome contacts the patella.

<table>
<thead>
<tr>
<th>Reamer Collet</th>
<th>Reamer Guide</th>
<th>Patellar Depth Stop</th>
<th>Biconvex Dome</th>
</tr>
</thead>
<tbody>
<tr>
<td>23mm</td>
<td>7144-0510</td>
<td>7144-0311</td>
<td>7144-0634</td>
</tr>
<tr>
<td>26mm</td>
<td>7144-0512</td>
<td>7144-0326</td>
<td>7144-0636</td>
</tr>
<tr>
<td>29mm</td>
<td>7144-0514</td>
<td>7144-0328</td>
<td>7144-0638</td>
</tr>
<tr>
<td>32mm</td>
<td>7144-0516</td>
<td>7144-0324</td>
<td>7144-0640</td>
</tr>
</tbody>
</table>

**Figure 1**

**Figure 2**

**Figure 3**

**Figure 4**
1. Attach the patellar reamer guide to the patella. Tighten the patellar reamer guide on the patella (Figure 5).

2. Use the patellar calipers to measure the thickness of the patella (Figure 6).

3. Using the depth gauge and reamer assembly, swing the patellar depth gauge around so that the "claw" surrounds the patellar reamer shaft.

4. Lower the patellar depth stop by pushing the gold button until it contacts the patellar depth gauge. The patellar depth stop will automatically lock in place (Figure 7).

5. Remove the depth gauge.

6. Ream the patella until the depth stop engages the patellar reamer guide.
Component trialing

1 Place the blue patellar trial into the prepared patella (Figure 8).

2 Perform a trial range of motion to assess patellar tracking. Medial/lateral placement of the femoral trial can be adjusted to optimize patellar tracking (Figure 9).

Implantation

**Patellar implantation**

1 Assemble the patellar cement clamp to the patellar reamer guide.

2 Apply bone cement to the patella.

3 Place the patellar implant onto the patella and clamp into the bone (Figure 10). Remove excess cement.

<table>
<thead>
<tr>
<th>Biconvex Patellar Trial</th>
<th>Reamer Guide 7144-0311</th>
<th>Cement Clamp 7144-0322</th>
</tr>
</thead>
<tbody>
<tr>
<td>23mm 7143-0566</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26mm 7143-0568</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29mm 7143-0570</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32mm 7143-0572</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 8

Figure 9

Figure 10