WalterLorenz® Surgical Assist Arm

Total & Partial Knee Arthroplasty

Procedural Setup Guide
Table of Contents

Introduction ........................................................................................................................................... 1

Total Knee Arthroplasty ......................................................................................................................... 2
  Setup & Surgery Preparation .............................................................................................................. 3
  Common Retractors & Setup ............................................................................................................... 4

Partial Knee Arthroplasty (Fixed Bearing) ............................................................................................ 6
  Setup & Surgery Preparation .............................................................................................................. 7
  Common Retractors & Setup ............................................................................................................... 8

Partial Knee Arthroplasty (Mobile Bearing) .......................................................................................... 10
  Setup & Surgery Preparation ............................................................................................................. 11
  Common Retractors & Setup ............................................................................................................. 12

WalterLorenz Surgical Assist Arm Universal Instrument Tray Layout .............................................. 14
WalterLorenz Surgical Assist Arm

The WalterLorenz Surgical Assist Arm is a table-mounted, bionic electromechanical arm and is designed for controlled retraction and/or positioning of instruments. The device connects to any standard OR table rail and may be adjusted to multiple heights and positions depending on the procedure and set-up required. Once setup, Walter is easy to maneuver and position by depressing the activation button twice and holding to unlock the device, allowing it to move with 7 degrees of freedom.

Manual instruments such as retractors, forceps, and elevators may be connected to the WalterLorenz Surgical Assist Arm via one of two methods:

1. A proprietary direct connection to the End Effector or
2. utilizing a Universal Instrument Holder

WalterLorenz Surgical Assist Arm Anatomy

1. Wrist
2. Elbow
3. Distal Arm
4. Proximal Arm
5. Control Box with User Interface Keypad

User Interface Keypad

Unlock Button
Battery Indicator
Power Button

This guide intends to instruct on the optimal use of the WalterLorenz Surgical Assist Arm in a Total and Partial Knee Arthroplasty. This technique utilizes the general orthopedic retractors, although you may easily substitute for your preferred instruments.

This guide should be used in conjunction with the WalterLorenz Surgical Assist Arm Product Manual 01-50-1645 or 01-50-1720, see packaging of your device for the appropriate manual) available on www.walterlorenzarm.com.

This guide shows instruments in configurations intended for a LEFT knee procedure. Therefore many configurations will need to be flipped around for a right-side procedure.
The WalterLorenz Surgical Assist Arm is a table-mounted, bionic electromechanical arm and is designed for controlled retraction and/or positioning of instruments. The device connects to any standard OR table rail and may be adjusted to multiple heights and positions depending on the procedure and set-up required. Once setup, Walter is easy to maneuver and position by depressing the activation button twice and holding to unlock the device, allowing it to move with 7 degrees of freedom.

Manual instruments such as retractors, forceps, and elevators may be connected to the WalterLorenz Surgical Assist Arm via one of two methods:

1. A proprietary direct connection to the End Effector
2. Utilizing a Universal Instrument Holder

User Interface

Keypad
Unlock Button
Battery Indicator
Power Button

Total Knee ARTHROPLASTY
WalterLorenz Surgical Assist Arm Setup and Positioning:

Attach the WalterLorenz Arm clamp to the bed rail at the patient’s iliac crest on the operative side. Orient the WalterLorenz Arm base pole perpendicular to the floor. Rotate the WalterLorenz Arm such that the button display faces the patient’s head. Tighten the clamp to secure the positioning of the pole. Use the long distal arm, and position the arm across the patient’s body. See figures 1 and 2.

Note: The positioning will vary based on the patient size and the surgeon’s preference.

Note: For complete WalterLorenz Arm assembly and draping instructions, please see the WalterLorenz Surgical Assist Arm Product manual available on www.walterlorenzarm.com.
Common Retractors & Setup

Note: These are common retractors utilized in Total Knee Arthroplasty. The surgeon can interchange universal attachments and retractors as desired and needed throughout the procedure.
Common Retractors & Setup

Before surgery begins, attach WalterLorenz Arm Universal attachments to retractors that will be used in the case.

Universal Forceps Holder Assembly (Figure 6)

1. Turn the large knob on the top of the holder counter-clockwise until the jaws are wider than the handle of the instrument

2. Slide the instrument into one of the grooves

3. Turn the knob clockwise to tighten the holder to the instrument handle

Flat Universal Instrument Holder Assembly (Figure 7)

1. Turn the knob on the holder counter-clockwise until the jaws are wider than the handle of the instrument

2. Slide the instrument into the opening of the jaws

3. Turn the knob clockwise to tighten the holder to the instrument handle
Partial Knee ARTHROPLASTY (Fixed Bearing)
WalterLorenz Surgical Assist Arm Setup
and Positioning:

Attach the WalterLorenz Arm clamp to the bed rail at the patient’s iliac crest on the operative side. Orient the WalterLorenz base pole perpendicular to the floor. Rotate the WalterLorenz Arm such that the button display faces the patient’s head. Tighten the clamp to secure the positioning of the pole. Use the long distal arm, and position the arm across the patient’s body. See figures 1 and 2.

Note: For the WalterLorenz Arm assembly and draping instructions, please see the WalterLorenz Product manual available on www.walterlorenzarm.com

Note: The positioning of the WalterLorenz Arm will vary based on the patient size and the surgeon’s preference.
Common Retractors & Setup

Note: These are common retractors utilized in Partial Knee Arthroplasty. The surgeon can interchange universal attachments and retractors as desired.
Common Retractors & Setup

Before surgery begins, attach WalterLorenz Arm Universal attachments to retractors that will be used in the case.

**Universal Forceps Holder Assembly (Figure 5)**

1. Turn the large knob on the top of the holder counter-clockwise until the jaws are wider than the handle of the instrument.
2. Slide the instrument into one of the grooves.
3. Turn the knob clockwise to tighten the holder to the instrument handle.

**Flat Universal Instrument Holder Assembly (Figure 6)**

1. Turn the knob on the holder counter-clockwise until the jaws are wider than the handle of the instrument.
2. Slide the instrument into the opening of the jaws.
3. Turn the knob clockwise to tighten the holder to the instrument handle.
Partial Knee Arthroplasty (Mobile Bearing)
**WalterLorenz Surgical Assist Arm Setup and Positioning:**

Attach the WalterLorenz Arm clamp to the bed rail at the patient’s lower leg on the operative side. Orient the WalterLorenz Arm base pole perpendicular to the floor. Rotate the WalterLorenz Arm such that the button display faces the patient’s head. Tighten the clamp to secure the positioning of the pole. Use the long distal arm, and position the arm across the patient’s body. See figures 1 and 2.

**Note:** For the WalterLorenz Arm assembly and draping instructions, please see the WalterLorenz Arm product manual available on www.walterlorenzarm.com

**Note:** The positioning will vary based on the patient size and the surgeon’s preference.
Common Retractors & Setup

Note: These are common retractors used in Partial Knee Arthroplasty. The surgeon can interchange universal attachments and retractors as desired.
Common Retractors & Setup (cont.)

Before surgery begins, attach the WalterLorenz Arm Universal attachments to retractors that will be used in the case.

**Universal Forceps Holder Assembly** (Figure 5)

1. Turn the knob on the top of the holder counter-clockwise until the jaws are wider than the handle of the instrument.
2. Slide the instrument into one of the grooves.
3. Turn the knob clockwise to tighten the holder to the instrument handle.

**Flat Universal Instrument Holder Assembly** (Figure 6)

1. Turn the knob on the holder counter-clockwise until the jaws are wider than the handle of the instrument.
2. Slide the instrument into the opening of the jaws.
3. Turn the knob clockwise to tighten the holder to the instrument handle.

**Note:** This attachment works best for retractors with thick, round handle that are not compatible with other attachment styles.
WalterLorenz Surgical Assist Arm Universal Instrument Tray Layout

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal Instrument Tray</td>
<td>Universal Instrument Tray</td>
<td>WAL300</td>
</tr>
<tr>
<td>*End Effector</td>
<td>*End Effector</td>
<td>WAL119</td>
</tr>
<tr>
<td>*Forceps Universal Holder</td>
<td>*Forceps Universal Holder</td>
<td>WAL304</td>
</tr>
<tr>
<td>Small Universal Holder</td>
<td>Small Universal Holder</td>
<td>WAL302</td>
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<td>*Flat Universal Holder</td>
<td>*Flat Universal Holder</td>
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<tr>
<td>Scope Holder</td>
<td>Scope Holder</td>
<td>WAL315</td>
</tr>
<tr>
<td>Large Inline Universal Holder</td>
<td>Large Inline Universal Holder</td>
<td>WAL317</td>
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<tr>
<td>Large 90 Universal Holder</td>
<td>Large 90 Universal Holder</td>
<td>WAL316</td>
</tr>
<tr>
<td>*Torque Relief Tool</td>
<td>*Torque Relief Tool</td>
<td>WAL318</td>
</tr>
</tbody>
</table>

*These tools are commonly used in Total and Partial Knee Arthroplasty.