Walter Lorenz®
Surgical Assist Arm
Total Hip Arthroplasty

Procedural Setup Guide
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**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, the WalterLorenz Arm 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

This guide intends to instruct on the optimal use of the WalterLorenz Surgical Assist Arm in a Total Hip Arthroplasty. This technique utilizes 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).

This guide shows instruments in configurations intended for a LEFT hip 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, the WalterLorenz Arm 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

**Anterior HIP APPROACH**
Setup & Surgery Preparation

WalterLorenz Surgical Assist Arm Setup and Positioning

Attach the WalterLorenz Arm clamp to the bed rail at the patient’s iliac crest on the non-operative side, across from the surgeon. Orient the WalterLorenz Arm base pole perpendicular to the floor and insert the pole into the clamp as far down in the clamp as possible. Rotate the WalterLorenz Arm base such that the button display faces out from the table and is perpendicular to the edge of the table. Tighten the clamp to secure the positioning of the pole. Using the long distal arm, position the arm in the surgical field (Figures 1 & 2).

Note: For the complete WalterLorenz Arm assembly and draping instructions, please see the WalterLorenz 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: Common retractor styles for Anterior Hip Replacement are shown, however the surgeon can interchange universal attachments and retractors as desired.
Before surgery begins, attach the WalterLorenz Arm Universal attachments to retractor that will be used in the case.

**Universal Forceps Holder Assembly (Figure 7)**
1. Turn the large knob on the top of the holder counterclockwise 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 8)**
4. Turn the knob on the holder counterclockwise until the jaws are wider than the handle of the instrument.
5. Slide the instrument into the opening of the jaws.
6. Turn the knob clockwise to tighten the holder to the instrument handle.

**Large Inline Universal Holder Assembly (Figure 9)**
1. Turn the knob counterclockwise to extend the inner metal circle.
2. Insert the handle of the desired retractor into the metal circle.
3. Turn the knob clockwise to tighten the metal inner circle around the handle of the retractor.

**Note:** This attachment works best for retractors with thick, round handles that are not compatible with other attachment styles.
Setup & Surgery Preparation

WalterLorenz Surgical Assist Arm Setup and Positioning

Attach the WalterLorenz Arm clamp to the bed rail to the left of the surgeon. Orient the WalterLorenz Arm base pole perpendicular to the floor and insert the pole into the clamp as far down in the clamp as possible. Rotate the WalterLorenz Arm base such that the button display faces out from the table and is perpendicular to the edge of the table. Tighten the clamp to secure the positioning of the pole. Using the long distal arm, position the arm in the surgical field (Figures 1 & 2).

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

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

Note: Common retractor styles for Posterior Hip Replacement are shown, however the surgeon can interchange universal attachments and retractors as desired.
Before surgery begins, attach the 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 counterclockwise 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)**
4. Turn the knob on the holder counterclockwise until the jaws are wider than the handle of the instrument
5. Slide the instrument into the opening of the jaws
6. Turn the knob clockwise to tighten the holder to the instrument handle

**Large Inline Universal Holder Assembly (Figure 8)**
1. Turn the knob counterclockwise to extend the inner metal circle
2. Insert the handle of the desired retractor into the metal circle
3. Turn the knob clockwise to tighten the metal inner circle around the handle of the retractor

**Note:** This attachment works best for retractors with thick, round handles 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><strong>End Effector</strong></td>
<td>WAL119</td>
</tr>
<tr>
<td><strong>End Effector</strong></td>
<td><strong>Forceps Universal Holder</strong></td>
<td>WAL304</td>
</tr>
<tr>
<td>Small Universal Holder</td>
<td><strong>Flat Universal Holder</strong></td>
<td>WAL302</td>
</tr>
<tr>
<td><strong>Flat Universal Holder</strong></td>
<td><strong>Scope Holder</strong></td>
<td>WAL315</td>
</tr>
<tr>
<td><strong>Scope Holder</strong></td>
<td><strong>Large Inline Universal Holder</strong></td>
<td>WAL317</td>
</tr>
<tr>
<td><strong>Large Inline Universal Holder</strong></td>
<td><strong>Large 90 Universal Holder</strong></td>
<td>WAL316</td>
</tr>
<tr>
<td><strong>Large 90 Universal Holder</strong></td>
<td><strong>Torque Relief Tool</strong></td>
<td>WAL318</td>
</tr>
</tbody>
</table>

*These tools are commonly used in Total Hip Arthroplasty.