

OT1000 SERIES ORTHOPEDIC SURGICAL TABLES

APPLICATION

The OT1000 Series Orthopedic Surgical Tables are mobile, power operated orthopedic tables. They provide flexible, easy-to-use, articulated posturing of the patient for reconstructive and reparative orthopedic procedures in a controlled, sterile operating room environment.

The OT1000 Series Orthopedic Surgical Tables are designed primarily for hip and lower extremity procedures: hip pinning, ender nailing, intramedullary nailing of the femur, tibia and fibula surgery.

Recommended patient population includes people up to 7 ft (2 m) and/or a body weight up to 500 lb (227 kg).

DESCRIPTION

The OT1000 Series Orthopedic Surgical Tables are designed to safely support a 500 lb (227 kg) patient. Intended users are medical surgeons, surgical nurses, anesthesiologists and technicians. All users are to be certified by their accrediting agencies to perform clinical or technical activities with this table.

OT1000 Series Orthopedic Surgical Tables are constructed of aluminum alloy, stainless steel and other high quality materials.

The STERIS OT1000 Series Orthopedic and Fracture Table is powered by either internal battery or facility electric through use of the patent-pending INTELLIPOWER® dual power system.

The table control system accepts positioning commands from two sources:

- 1. Primary Hand Control.
- 2. **Override Hand Control** functions as override to Primary Hand Control. Located in table base.

Overall size (W x L x H):

27.25 x 104.5 x 31 to 48" (692 x 2654 x 787 to 1219 mm).

The standard OT1000 Model table configuration includes:

- Power adjustable height, Trendelenburg/Reverse Trendelenburg, Lateral Slide and Lateral Tilt functions.
- Manual, adjustable head section.
- Pendant Hand Control.
- Mobile base with hydraulically operated selfcompensating floor locks.
- SWAN Technology



(Typical only - some details may vary.)

The OT1100 Model table configuration includes:

- The standard OT1000 Model table configuration.
- Drive Wheel

The OT1200 Model table configuration includes:

- The OT1100 Model table configuration.
- Anterior Approach and Arthroscopy (Femur Positioner) Unit
- Gross Traction Slide (Traction Unit) Assembly

STANDARDS

OT1000 Series Orthopedic Surgical Tables are in compliance with the following standards:

- **ANSI/AAMI ES60601-1:2005 (R2012),** Medical Electrical Equipment Part 1 General Requirements for Safety and Essential Performance.
- CAN/CSA C22.2 No. 60601-1-08, Medical Electrical Equipment Part 1.
- **ANSI/AAMI/IEC 60601-1-2: 2007,** Medical Equipment Part 1-2: Electromagnetic Compatibility.
- IEC 60601-2-46 ed. 2.0: 2010, Medical Electrical Equipment Part 2-46.
- **ANSI/AAMI/IEC 62366:2007,** Medical Device Software Life Cycle Processes.
- ANSCI/AAMI/IEC 62304:2006 Medical Device Application of usability engineering to medical devices.
- CE Marked to:
 - Medical Device Directive, 93/42/EEC and Amendment 2007/47/EC.
 - EMC 2004/108/EC
 - Low Voltage 2006/95/EC.

The Selections Checked Below Apply To This Equipment

OT1000 SERIES CONFIGURATION

- OT1000 Model (Standard)
- OT1100 Model
- OT1200 Model

ACCESSORY PACKAGES

- □ Standard Accessory Package
- Anterior Approach and Arthroscopy (Femur Positioner) Unit*
- □ Gross Traction Slide (Traction Unit) Assembly*

* Standard on OT1200 Models

Item _____ Location(s)_____



FEATURES

Table is approximately 105" (2654 mm) long. Lateral-Slide movable tabletop eliminates the need for patient reorientation and preconfiguration of the table. Unobstructed Imaging Length of 21-1/2" (546 mm) and 100% C-Arm access without table movement is available. For attaching accessories, the tabletop sections include a standard stainless-steel side rail on both sides – located where they do not obstruct the imaging area. Hook-and-loop fastener strips on the tabletop sections permit instant application and removal of the 2" (51 mm) thick, latex-free TLT mattress pad. The radiolucent Leg Spars and Sacral Rest sections enable viewing of the entire lower part of the anatomy (see illustration).

Electric column supports and raises/lowers tabletop. The bearings, hydraulic piping, hydraulic actuators for

Trendelenburg and tilt are located next to the column. These components are enclosed by five telescoping stainless-steel column shrouds. The stainless-steel shrouds are of two-piece construction for service accessibility.

Base structure is painted welded steel. The base cover is a twosection, stainless-steel enclosure with a bead-blasted finish. Four large diameter swivel casters and a drive wheel (OT1100 and OT1200 Models only) inside the base cover facilitate table relocation and movement. Four mechanical, hydraulically operated, floor-locks are supplied. The power supply assembly and floor lock actuators are also within the base. Table power cord is plugged into a receptacle on Power Panel (centered on the base head-end cover). Primary Hand Control also connects next to Power Panel. Primary Hand Control touch pads are: FLOOR UNLOCK, FLOOR LOCK, HEIGHT UP, HEIGHT DN, TREND, REVERSE TREND, TILT LEFT, TILT RIGHT, LATERAL SLIDE LEVEL TILT, LATERAL SLIDE UNLATCH, FEMUR UP, FEMUR DN, LEVEL ALL and STOP.

Backup Hand Control is stored in the base behind a cover plate. Included on Override Hand Control are: HEIGHT UP, HEIGHT DN, LATERAL SLIDE UNLATCH, TREND, REVERSE TREND, TILT RIGHT, TILT LEFT, FLOOR LOCK, FLOOR UNLOCK and STOP touch pads.

Electric controlled system provides powered tabletop positioning. The primary control system is a master computer located in the table base. This computer selects which outputs are to be actuated based on inputs from an auxiliary CPU in the pendant Hand Control. The Hand Control is a tethered pendant that hangs from standard side rails. Hand control provides user inputs (from touch pad switches via an auxiliary CPU) to the master computer. It also includes status LEDs and LCD screen (with status messages and tabletop position indicators).

Electrical System (the input ac electrical power) is fed by a detachable three-wire grounded power cord. An isolating transformer and a rectifier circuit convert the power to 24 Vdc for use by the operating and control systems. Fuses protect the circuits from overloads. If ac main power fails, the battery system automatically powers the table. *The batteries are continuously charging as long as the table is supplied with the appropriate ac voltage and the Main Power Switch on the Power Panel is in the ON position.*



Pendant Primary Hand Control is ergonomically designed. It is constructed of two-piece injection molded thermoplastic materials holding and sealing the auxiliary CPU and keypad. The Hand Control is the primary interface for table operation and the keypad is illuminated for easy table articulation identification when room is dark. Hand Control is equipped with a 7-1/2' (2.3 m) extended coiled cord. The Hand Control plugs into a receptacle located beside the Power Panel.

Membrane touch switches provide, through an auxiliary CPU, input signals to activate table functions and articulations. LED indicators, LCD Display (see illustration) and soft keys provide the following table operation information:

LCD Display includes:

- Power Symbol
- Interface Symbol
- Maintenance Symbol and Maintenace Code Symbol
- Floor Lock Symbol
- See Operator Manual Symbol
- Tabletop Positioning (Height, Trendelenburg Angle and Tilt Angle)

LEDs include:

- FLOOR LOCK and FLOOR UNLOCK
- UNLATCH Arrow when level tilt is required
- LEVEL TILT
- LIFT CONNECTED, Femur Control
- FOOT PEDAL CONNECTED, Femur Control
- LEVEL ALL

Touch Pads include:

- Floor Lock Activation (FLOOR LOCK/FLOOR UNLOCK)
- HEIGHT UP/ HEIGHT DN
- TREND/REVERSE TREND
- TILT LEFT/ TILT RIGHT
- FEMUR UP/FEMUR DN
- LEVEL ALL
- STOP



NOTE: The LCD Display values are approximate. Their accuracy may vary according to environmental conditions (e.g., altitude, humidity, temperature). Also, if a sensor is not operating properly, the value indicated may be incorrect. Check patient positioning visually before proceeding.

Backup (Override) Control System can be actuated at any time and allows table operation in the event of primary control or power malfunction. A pedal (foot pump to provide hydraulic power) and Override Hand Control (see illustration) comprise this system. The Hand Control is stored in the table base behind a cover plate. The foot pedal is located at the side of the table base. Included functions on Override Hand Control are: HEIGHT UP/DN, UNLATCH Lateral Slide, TREND/REVERSE TREND, TILT RIGHT/LEFT, FLOOR LOCK/UNLOCK and STOP.

FLOOR UNLOCK, HEIGHT UP/DN and Lateral Slide UNLATCH functions do not require foot pump actuation. A green LED on the Override Hand Control indicates the system is active and another indicates when a foot pump is required.

Drive Feature (OT1100 and OT1200 Models only) can be actuated at any time the table meets the minimum requirements (for Drive mode). Table drive feature is possible through a battery powered drive wheel. The user controls the table steering. Deceleration and stopping is accomplished by motor braking while moving forward. Forward and reverse directional controls are incorporated into the special **Drive Head Section** and allow for proportional speed control (see picture).



The Drive Feature offers the following functions when operating on a level surface:

- Table Speed: *Forward* ≤1.9 mph (≤3 km/h); *Reverse* ≤1.2 mph (≤2 km/h)
- Table Weight Capacity: 500 lb (227 kg)
- Stopping Distance (at 2 mph [3 km/h]): ≤2' (0.6 m) with motor braking in forward motion

Head Section is a manually operated tabletop section containing the user control features for the Drive feature. The Drive Head Section (see picture) incorporates two buttons: a drive engage/disengage (when user pushes button the drive wheel engages) and direction (forward and reverse). The Drive Head Section also incorporates a latch permitting the user to articulate the head section from level to -30 or -75°.

TABLE OPERATION

Press the desired position touch pad on the hand pendant to position/articulate the OT1000 Series Orthopedic Surgical Table tabletop (refer to Operator Manual).

The following pre-operative actions must be completed before the table can be used:

- **Power activation:** Use battery power or plug the table power cord into both table base and facility power receptacle. Toggle Main Power Switch to ON for facility ac power.
- **Turn the table on:** Press any button (except **STOP**) on the Hand Control to turn table ON.



• Lock the table: Press the FLOOR LOCK button on the Hand Control (note green LED) to order the floor locks into the "locked" position.

TABLE MOTION

Refer to illustration on Page 7 for the following ranges of table motion:

- Lateral Slide Motion: ± 4" (102 mm) from center
- Height Range: 31 to 48" (787 to 1219 mm) Patients up to 400 lb and 31 to 43" (787 to 1092 mm) Patients between 401 and 500 lb
- Trendelenburg Range: 15°
- Reverse Trendelenburg Range: 15°
- Tilt Range: 15°
- Head Section (Manual): DOWN: 30 or 75°

ACCESSORIES

Femur Positioner (Standard on OT1200 Models) – Provides a simple user interface to support the femur during anterior approach hip replacement procedures, when the patient is supine.

Traction Unit Assembly (Standard on OT1200 Models) – Designed to provide traction during applicable orthopedic surgical procedures. Fine Traction force is achieved from the screw thread mechanism housed within the Traction Unit Assembly. Gross Traction force is achieved by using optional Gross Traction Slide Mechanism. Smooth and precise control of applied traction as well as smooth and precisely controlled release of traction at the appropriate time is achieved with this accessory. Assembly is equipped with a quick connect mechanism enabling the use of various accessories like a traction boot, skeletal traction bow/block and skeletal traction block.

PREVENTIVE MAINTENANCE

Customers are encouraged to contact STERIS concerning our comprehensive preventive maintenance program. Under the terms of this program, preventive maintenance, adjustments and replacement of worn parts are provided on a scheduled basis to help ensure optimal equipment performance and help avoid untimely or costly interruptions. STERIS maintains a global staff of well equipped, factory-trained technicians to provide these services, as well as expert repair services. Please contact STERIS for details.

NOTES

- 1. Approximate Table Operating Weight: 1000 lb (454 kg).
- Patient Weight Capacity: 500 lb (227 kg) load; with the ability for all posturing and tabletop lateral slide (table height 43" [1092 mm]). Patients up to 400 lb table height 48" (1219 mm).
- 3. OT1000 Series Orthopedic Surgical Tables accessories have specific weight claims/capacities. Accessories may limit table patient weight capacity.
- 4. A patient grounding post/potential equalization terminal (male connector, DIN 42801) is provided with the table. The female connector for patient grounding is not furnished by STERIS.
- 5. **WARNING EXPLOSION HAZARD:** Table must not be used in the presence of flammable anesthetics.
- 6. **Suitable for intermittent operation**, three minutes per hour.
- For further product information refer to Operator Manual (10008511) or contact STERIS corporation.

UTILITY REQUIREMENTS

Power Source:

Battery/Electric-Powered Table

Line Power Input:

100, 120, 220 or 230-240 Vac (Jumper Selectable), 1 Ø, 50/60 Hz, 4.0 Amp

Environmental Use Conditions:

Temperature: 63 - 77°F (17 - 25°C)

Relative Humidity (RH): 20 - 80%

Atmospheric Pressure: 700 - 1060 hPa

Transportation and Storage Conditions:

Ambient Temperature: -40 - 158°F (-40 - 70°C) - Not to Exceed 15 Weeks

Relative Humidity (RH): 10 - 100% Non-Condensing Atmospheric Pressure: 500 - 1060 hPa Health Egunemit Galphan Egune



Reference the following equipment drawing for installation details

Equip. Dwg. No. 10026804

Equipment Drawing Title OT1000 Series Orthopedic Surgical Tables



CUSTOMER IS RESPONSIBLE FOR COMPLIANCE WITH APPLICABLE LOCAL AND NATIONAL CODES AND **REGULATIONS.**

The base language of this document is ENGLISH. Any translations must be made from the base language document.

For Further Information, contact:



Global Headquarters

STERIS Corporation 5960 Heisley Road Mentor, OH 44060-1834 • USA 440-354-2600 • 800-548-4873 www.steris.com