

APPLICATION

The Amsco 3085 SP Surgical Table is a mobile, electrohydraulically operated surgical table designed to support all general surgical procedures including urology, neurology, and orthopedics with the addition of the 3080/3085 Orthopedic Extension.

DESCRIPTION

Amsco 3085 SP Surgical Tables are available in either electric- or battery-powered configurations.

Amsco 3085 SP Surgical Tables are rated to support 1,000 lb (454 kg) patients in NORMAL patient orientation. Exceptions to the 1,000 lb (454 kg) limit are as follows:

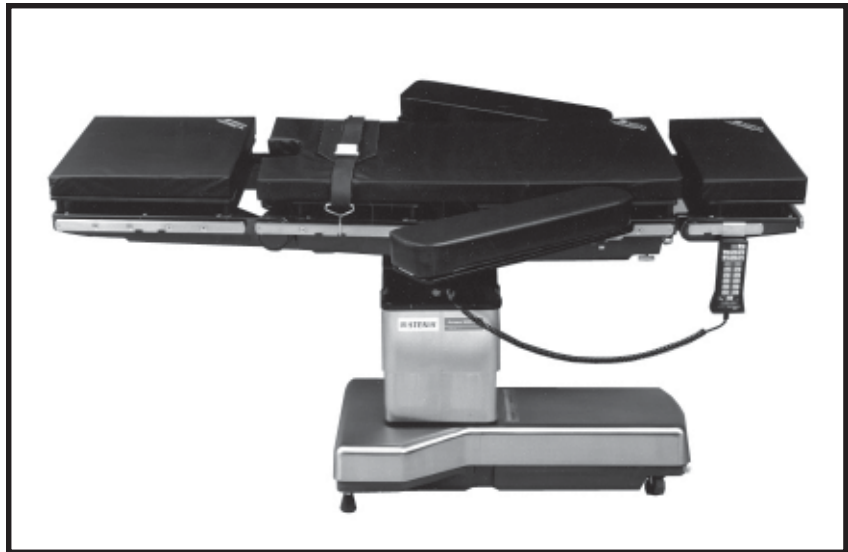
- A 500 lb (227 kg) rating applies to side tilt in NORMAL patient orientation.
- A 500 lb (227 kg) rating applies to all REVERSE patient orientation.
- A 400 lb (181 kg) rating applies to the 3080/3085 Orthopedic Extension accessory.
- A 400 lb (181 kg) rating applies to the Fem/Pop Board.
- A 500 lb (227 kg) rating applies to the Amsco Shoulder Table.

NOTE: When performing surgery requiring a headrest accessory in a REVERSED patient orientation, do not exceed the 400 lb (181 kg) patient weight limit.

STANDARDS

Amsco 3085 SP Surgical Table is in compliance with national and international safety standards for electromedical equipment and meets the applicable requirements of the following standards:

- **Underwriters Laboratories (UL) Standard 2601-1 – 1st Ed.**, as certified by ETL Testing Laboratories, Inc.
- **Standard CSA-C22.2 No. 601.1-M90**, Standard for Electro-Medical Equipment, as certified by ETL Testing Laboratories, Inc.
- **EN 60601-1: 1993, Amendment 2, 1995, Electrical Safety**, as certified by ETL Testing Laboratories, Inc.



(Typical only - some details may vary.)

- **IEC 601-1-2: 2001, Electromagnetic Compatibility**, as certified by ETL Testing Laboratories, Inc.
- **EN 55011: Group I, Class B, Emissions Testing**, as certified by ETL Testing Laboratories, Inc.
- **EN 60601-2-46 – 1st Ed.**, as certified by ETL Testing Laboratories, Inc.
- **CE marked to the Medical Device Directive, 93/42/EEC**
- **FDA Good Manufacturing Practices Regulations 21CFR820 for Medical Devices**
- **Class 1 Equipment**
- **Type B Equipment**
- **Suitable for continuous use**
- **IPX-4** (Fluid Ingress Protection)

FEATURES

Microprocessor Controlled Hydraulic System provides tabletop articulation. Tables feature auxiliary override (backup) systems for the control and hydraulic systems.

Control System uses microprocessor technology to control the hydraulic pump motor and solenoid valves. The primary control system consists of a “master” and a “slave” computer. The master computer is located on the column

The Selections Checked Below Apply To This Equipment

VOLTAGE

- 100 VAC, 50/60 Hz
- 120 VAC, 50/60 Hz
- 220 VAC, 50/60 Hz
- 230/240 VAC, 50/60 Hz

POWER SOURCE

- Electric-Powered Table
- Battery-Powered Table

¹HERMES-Ready is a trademark of Computer Motion

OPTIONS

- Foot Control
- HERMES®-Ready¹ Voice Activation System*
- Operating Room Control System (ORCS) ACT Interface**

ACCESSORIES

Refer to separate product literature.

* This option for Amsco 3085 SP HERMES®-Ready¹ tables only.

** This option for Amsco 3085 SP ACT Enabled™ tables only.

PAD CONFIGURATION

- 2" (51 mm) TLT Pads and X-Ray Top (standard)
- 2" (51 mm) Traditional Foam Pads (replacement option only)
- 2" (51 mm) TLT Pads only

Item _____

Location(s) _____

and selects which outputs are to be actuated based on inputs from the hand control, optional foot control, optional HERMES®-Ready¹ Voice Activation System, optional ACT Enabled™ interface to Operating Room Control Systems (ORCS), and table sensors. The slave computer is located in the hand control and provides user inputs (from touch pad switches) to the master computer. It also receives feedback signals and turns on the proper status LEDs. A sealed 24 VDC battery is used for power backup. A secondary and separate override control system allows operation of basic table functions should the primary microprocessor system become inoperative. Battery-powered auxiliary control switches provide complete override capability during an emergency situation.

Hydraulic System provides the motive force for all powered articulations of the table. A 24-VDC electric motor drives a 0.25 gpm (0.946 lpm) nominal, 1740 psi (120 bar) nominal capacity pump. Solenoid valves direct fluid to hydraulic cylinders. Hydraulic oil pressure is limited by a relief valve. All hoses are constructed of flexible thermoplastic, and all hose and port connections are sealed with O-rings. Load holding valves are built into all manifold ports feeding each cylinder, except for the side tilt cylinder which has internal load holding valves. A filter is provided to maintain oil cleanliness. A manual foot-operated pump is provided for table operation in case of power failure (solenoid valves would be operated from 24-VDC battery). For added patient safety, the 3085 SP Surgical Table features a locking side-tilt cylinder design to prevent unanticipated lateral movement. The side-tilt cylinder incorporates a mechanical lock to back up this hydraulic system, eliminating lateral movement until hydraulic pressure is at the desired level.

Hand Control is constructed of injection-molded black plastic (two-piece, sealed) and is the primary control for table operation. It has a 2' (610 mm) long coiled cord (10' [3 m] long when extended) with molded strain reliefs on each end. Hand control plugs into a color-coded receptacle located on the control column top. Membrane touch switches provide input signals to a self-contained PC board to activate all table functions and articulations. LED indicators provide table operation information and control diagnostic signals.

NOTE: For HERMES-Ready or ACT Enabled hand controls, the strain relief is blue. The standard hand control has a red strain relief. These hand controls are NOT interchangeable.

Base is cast iron with textured enamel finish. The top is enclosed by a two-section, welded, stainless-steel cover that also forms a shroud for the lower portion of the column. Four swivel casters facilitate easy table relocation and movement. Three floor locks (tripod principle) are self-compensating up to 1/4" (6 mm). Patient grounding/potential equilization post and line power input plug with protective fuses are located at the head end of the base. Manual foot pedal (hydraulic backup), floor lock override rocker switch and four protective circuit breakers are located on the side of the base. Hydraulic pump/motor assembly, power control assembly and control batteries are located within the base. Motor batteries and motor battery charger are also located within the base on battery-powered 3085 SP Surgical Tables.

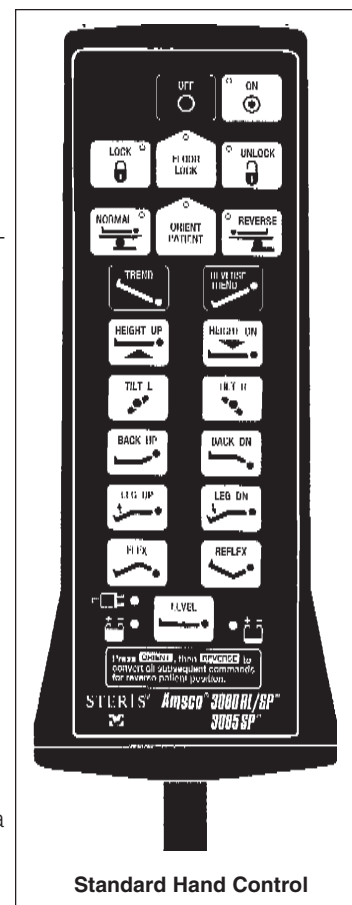
Column is offset from the center of the base and includes tabletop lift cylinder, support column with bearing-mounted saddle frame, hydraulic plumbing, electrical wiring and table control microprocessor assembly. These components are fully enclosed by four telescoping stainless-steel shrouds. Each shroud section is of two-piece construction for service accessibility. At the top of the column, receptacles are provided for the hand control and optional foot control on one side, and emergency override control switches located on the opposite side. A column bellows shields user from mechanical interfaces at the top of the column, and seals the area for fluid ingress protection.

Superstructure includes a manual gear drive for

kidney elevator, and hydraulic lines and cylinders required to articulate the tabletop. The superstructure is bearing-mounted to the column. Tabletop section frames are constructed of cast aluminum and finished with textured paint. Hydraulic positioning mechanisms are located inboard from frame sides to help prevent entanglement of drapes.

Tabletop is 20" (508 mm) wide and divided into four hinged sections: headrest, back, seat, and leg. All sections are constructed of a radiolucent material, and drilled holes are provided for attachment of optional radiographic top sections. The seat section includes a perineal cutout. All tabletop sections (except the headrest) are electrohydraulically positioned by solenoid-valve-actuated hydraulic cylinders. The headrest section is positioned by a manual, spring-loaded ratchet mechanism. A hook fastener tape strip on the longitudinal centerline of the tabletop sections permits instant application and removal of 2" (51 mm) thick mattress pads. Stainless-steel side rails extend the full length of table (including superior edge of headrest), and are notched to receive optional accessories. Side rails will accommodate certain previous-design STERIS table accessories, plus exclusive 3085 table accessories.

Headrest Section is attached to the back section for NORMAL patient orientation, or can be attached to leg section for REVERSE patient orientation. Headrest section can be raised or lowered 0-90° from horizontal and locked in 15° increments. The spring-loaded handle is located under the outer end of section for easy access.



Standard Hand Control

Kidney Elevator is centrally located between the back and seat sections, and is manually raised and lowered with a ratchet that flips up into stored position when not in use. The ratchet operates a dual rack-and-pinion mechanism through a jointed drive shaft. The kidney elevator is constructed of stainless steel. Maximum height of elevator is 4" (102 mm) above tabletop.

OPTIONS

Foot Control is available for any 3085 SP Surgical Table. Unit is used in conjunction with the hand control to provide the surgeon with Trendelenburg/ Reverse Trendelenburg, Raise/Lower, and Side Tilt control during surgical procedures. Unit includes three foot actuated rocker switches, a stainless-steel protective guard, and coiled cord extending to 10' (305 cm) length.

HERMES-Ready Voice Activated Control is available on Amsco 3085 SP HERMES-Ready Surgical Tables. Used in conjunction with the HERMES hand control, and HERMES control center (sold separately by Computer Motion), this option provides the surgeon with voice-activated control of control functions performed by the hand control. Unit includes HERMES hand control, and HERMES interface kit with 20' (610 cm) cable.

ACT (Advanced Control Technology) Interface is available for Amsco 3085 SP ACT Enabled Surgical Tables. This interface enables the networking of the Amsco 3085 SP Surgical Table with various Operating Room Control Systems (ORCS). The ACT Enabled table, STERIS ACT Enabled Hand Control, and ORCS (not provided by STERIS) provide surgeons with direct control of table operation using simple verbal commands and/or touch screen displays. Unit includes ACT Enabled hand control, and ORCS interface kit with 20' (610 cm) cable.

TABLE OPERATION

The 3085 SP Surgical Table is primarily operated by the hand control. The hand control provides the following:

- Power ON/OFF touch pads with ON indicator LED
- Power mode/condition indicator LEDs (AC line, battery, and low battery)
- Floor lock function and actuate touch pads
- Patient orientation function and actuate touch pads
- Position actuate touch pads

The tabletop is articulated by pressing the desired position actuate touch pad on the hand control (or optional foot control pedals).

The following pre-operative actions must be completed before positioning touch pads will function:

- **Electric-powered tables** – table plugged into an appropriate voltage AC receptacle.
- **Battery-powered tables** – batteries properly charged.
- Power turned ON.
- Floor Locks LOCKED.

Adjust tabletop position as follows:

- Confirm patient orientation.
- Press the desired position actuate touch pad on the hand control.
- Release the actuate touch pad when desired position has been reached to automatically stop tabletop and lock it in position.

The range of tabletop nominal movements are as follows:

- **Trendelenburg** – 25° maximum from horizontal.
- **Reverse Trendelenburg** – 25° maximum from horizontal.
- **Height** – 27" (686 mm) minimum to 44" (1118 mm) maximum.
- **Side Tilt** – 18° maximum to right or to left of horizontal.
- **Back** – up 55° maximum (80° in REVERSE orientation) or down 25° maximum (105° in REVERSE orientation) from horizontal.
- **Leg** – up 80° maximum (55° in REVERSE orientation) or down 105° maximum (25° in REVERSE orientation) from seat section.
- **Flex** – back section down 20° maximum with seat section down 25° maximum from horizontal.
- **Reflex** – back section up 25° maximum with seat section up 35° maximum from horizontal.

NOTE: Flex and Reflex position controls are disabled when in REVERSE patient orientation.

- **Return-to-level** – The tabletop can be returned to level by pressing the LEVEL touch pad. The table will move in anatomically correct increments until it reaches level.*

* For patients over 400 lbs (181 kg) in the reversed position with the table in full tilt and full patient-reverse Trendelenburg position, proper operation of the return-to-level function may be inhibited.

Auxiliary Override Systems allow table operation in the event of primary control malfunction. Table control system automatically actuates NORMAL patient orientation and shuts down primary control when override switches are actuated.

- **Electric pump power available** – Articulate table using toggle switches located on control column.
- **No electric pump power available** (Manual Hydraulic Pump) – Articulate table using toggle switches located on control column (or hand or optional foot control selectors) in conjunction with manual hydraulic pump.
- **Floor lock overrides** – A floor lock override rocker switch is located on the side of the table base, behind the manual foot-operated pump.

PREVENTIVE MAINTENANCE

A global network of skilled service specialists can provide periodic inspections and adjustments to help ensure low-cost peak performance. STERIS representatives can provide information regarding annual maintenance agreements.

ENGINEERING DATA

Approximate Operating Weight: 737 lbs (334 kg)

Image Amplification Coverage:

- » Head End – 28" (712 mm) with headrest on (plus 3.0" [76 mm] max. extension of headrest)
- » Foot End – 33" (839 mm) without headrest; 45" (1143 mm) with headrest (no extension permitted)
- » Width – 14.5" (369 mm) average

NOTES

1. Separate ground wire to ground the patient or equalize potential is not furnished by STERIS.

2. WARNING – EXPLOSION

HAZARD: Table must not be used in the presence of flammable anesthetics.

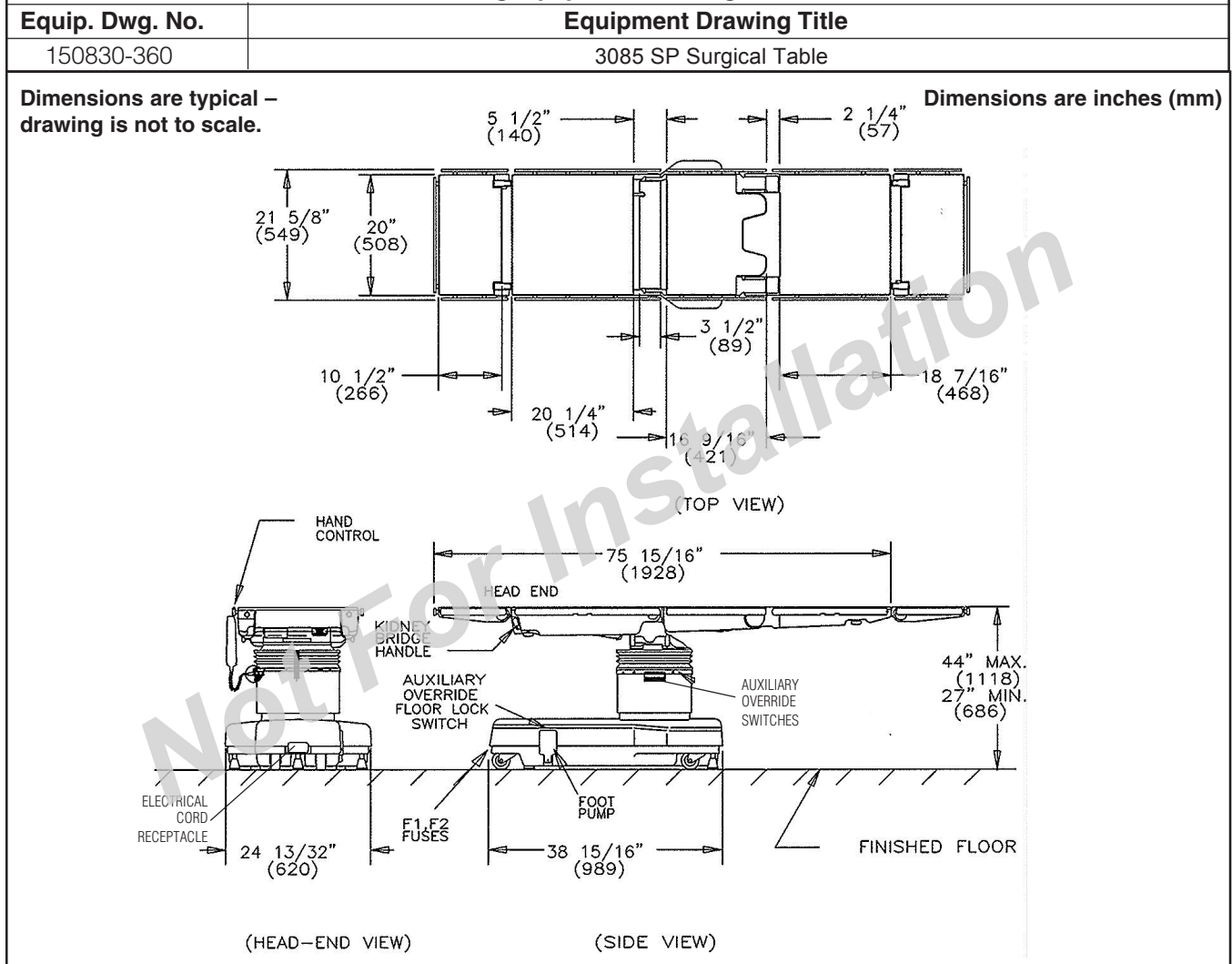
UTILITY REQUIREMENTS

Electricity:

100 V, 50/60 Hz, 5.0 Amp; 120 V, 50/60 Hz, 4.5 Amp; 220 V, 50/60 Hz, 3.0 Amp; or 230/240 V, 50/60 Hz, 2.5 Amp.

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

Reference the following equipment drawing for installation details.



For further information, please contact:

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made from the base language document.**