OAKWORKS® 100 Series Procedure Chair





Notice

The information contained in this document is subject to change without notice and should not be construed as a commitment by OAKWORKS®, Inc.

OAKWORKS®, Inc. assumes no responsibility for any errors that may appear in this document nor does it make expressed or implied warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

OAKWORKS®, Inc. shall not be liable for incidental or consequential damages in connection with or arising out of the furnishing, performance, or use of this document and the program material which it describes.

Printed in USA

All rights are reserved. No part of this document may be photocopied, reproduced or translated to another language without prior written consent of OAKWORKS®, Inc.

OAKWORKS® is a registered trademark of OAKWORKS®, Inc.

TABLE OF CONTENTS

Product Use Description1
Important Safety Instructions
Symbol Identification
Safety Instructions1-2
Product Description & Photo
100 Series Procedure Chair
Installation
Grounding4
Directions for Use
Foot Control Operations
Hand Control Operations
Arm Rest Use
Retractable Foot Rest (stirrup) Use
Adjustable Head Rest Use
T-Rail Adapter
Manual Adjustable 4 Position Leg Rest Use
Procedure Tray Use
Cleaning & Disinfection9
Inspections & Maintenance9
Warranty Information9
Model Number & Serial Number10
Specifications
Product Specifications
Environmental Conditions
Electrical Specifications
Guidance and manufacturer's declaration -
Electromagnetic emissions
Guidance and manufacturer's declaration -
Electromagnetic immunity
Contact Information back cover

PRODUCT USE DESCRIPTION / IMPORTANT SAFETY INSTRUCTIONS

PRODUCT USE DESCRIPTION

The Procedure Chair is a powered positioning examination chair and table used to support the patient during medical procedures. It is intended to be operated by a healthcare professional in a medical environment. No special training is required but a review of the following Safety Instructions is important for the safety of the operator and patient. The healthcare professional should read and understand this entire manual before use with a patient. There are no known contraindications to the use of this equipment.

SYMBOL IDENTIFICATION



This symbol, when used in this manual and on product labels, represents a caution warning. Be sure to read and comply with all precautions and warnings.



This symbol, when used in this manual and on product labels, warns against an electrical shock hazard. Be sure to observe and comply with all warnings.



This symbol, when used in this manual or on product labels, indicates a Protective Earth (Ground) Terminal.



This symbol, when used in this manual or on product labels, indicates that the product should be protected from moisture. The humidity specifications for Transport & Storage are listed in the environmental conditions section of this manual.



This symbol is used to indicate that the operator should consult the user manual.



This symbol, when used in this manual and on product labels, indicates that the table and components are a Type B Applied Part pursuant to IEC 60601-1: 2005.



This symbol, when used in this manual or on product labels, indicates alternating current (AC).



This symbol, when used in this manual or on product labels, indicates direct current (DC).

IMPORTANT SAFETY INSTRUCTIONS



CAUTION

READ AND SAVE THESE INSTRUCTIONS

The Fowler (Backrest) and Leg Rest sections are not designed to support the entire weight of the patient. Do not sit on the Fowler or Leg rest sections.

Medical Electrical Equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in this manual.

Portable and mobile RF communications equipment can affect Medical Electrical Equipment.

The use of accessories, transducers, and cables other than those specified by the manufacturer, may result in increased emissions or decreased immunity of the Chair.

IMPORTANT SAFETY INSTRUCTIONS

The chair should not be used adjacent to or stacked with other equipment and that if adjacent or stacked use is necessary, the chair should be observed to verify normal operation in the configuration in which it will be used.

The chair is designed to be a stand alone chair. This chair must not be modified or incorporated into any other equipment.

As with any moving mechanism there are potential pinch points around and underneath the chair. It is the responsibility of the operator of this equipment to insure that bystanders are not in the area below or around this equipment during operation.

Proper operation of this equipment is very important for the safety of the operator, patient, and any other individuals in the area of this equipment. Directions for use of this equipment are described in this manual. The operator should read these sections carefully.

Weight Limit: (patient and accessories) 550 lbs./250 kg. Do not exceed.

Be certain that the chair is completely lowered without any tilt being present prior to discharging an ambulatory patient. The patient may lose balance and fall.

This chair is not suitable for use in the presence of flammable anesthetic mixture with air or oxygen or nitrous oxide.

Do not lift the chair by the decorative skirt. This will can damage the cahir.

When lowering the chair or using the Trendelenburg functions, make sure there is nothing underneath the table top that can impede motion (like stools, cabinets, accessory parts, cleaners, etc.).

Use this furnishing only for its intended use as described in these instructions. Do not use attachments not recommended by the manufacturer.

Close supervision is necessary when this furnishing is used near children or disabled persons.

The Oakworks Procedure Chair have two lifting columns that raise and lower the chair. Some chairs have one or two actuators that allow the client to be positioned for both client and therapist comfort. Each of these devices has a duty cycle of approximately 10%, meaning 2 minutes of operation within a 20 minute period. Exceeding this duty cycle can damage this equipment.



WARNING

To reduce the risk of burns, fire, electric shock or injury to persons:

- 1. Unplug this furnishing from the electrical outlet before cleaning.
- 2. Unplug from outlet before adding or removing parts.
- 3. Never operate this furnishing if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Contact Oakworks Customer Service before use.
- 4. Keep the cord away from heated surfaces.
- 5. Never drop or insert any object into any opening.
- 6. Do not use outdoors.
- 7. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.



DANGER

For procedures where accidental table motion is a safety concern, the foot control must be locked out.

Risk of electric shock - Connect this furnishing to a properly grounded outlet only. See Grounding Instructions in this manual.

Electrical Shock Hazard. The power supply/control module is located under the chair. No user serviceable parts are inside the control box. Refer servicing to qualified personnel. Unplug wall plug prior to contact with any cables connected to the power supply.

PRODUCT DESCRIPTION



STANDARD SPECIFICATIONS				
Motion I	Powered 19" - 35" (48.3-88.9 cm.) Height Range	Patient Capacity	550 lbs. (250 kg.) (patient and accessories)	
Motion 2	Powered I5°/5° Trendelenburg/Reverse Trendelenburg 3 Section Top		74" (188cm.) long <i>(80" (203.2 cm.) long with</i> Head Rest extended) x 27" (68.6 cm.) wide	
Motion 3	Powered 80° Backrest/Fowler	Backrest/Fowler	26" (66 cm.) long x 27" (68.6cm.) wide	
Motion 4	Manual 4 position Leg Rest	Seat Section	24" (61 cm.) long x 27" (68.6 cm.) wide	
Foot Control	All powered motions	Leg Rest Section	13" (33 cm.) long x 22" (55.9 cm.) wide	
Adjustable Head Rest	10" (25.4 cm.) long x 10" (25.4 cm.) wide	Padding	2.5" (6.4 cm.) thick multi-layered	
Paper Roll Holder	Accommodates 21" (53.3 cm.) roll (roll not included)	Upholstery	Premium, PVC free TerraTouch™	
		Table Weight*	300 lbs. (136 kg.)	
Table Voltage Options	120V/60Hz or 230V/50Hz	Safety Listings:	FDA, cETLus, CE marked	
OPTIONS / ACCESSORIES				
Hand Control	All powered motions	Retractable Foot Rests	Adjustable footrests to accommodate any	
Arm Rests	Increased stability and security for patients	(Stirrups)	patient or procedure	
T-Rail Adapter	Attaches to one or both sides of the back rest	Procedure Tray	12.25" x 10.25" (31 x 26cm), 2 Quarts/1.9 Liters	

BASE	MODEL	AESTHETIC MODEL	
100	Base Model	100A Aesthetic Upgrade Model	
101	Base Model w/ Arm Rests	101A Aesthetic Upgrade Model w/ Arm Rests	
120	Base Model w/ Retractable Foot Rests (Stirrups)	120A Aesthetic Upgrade Model w/ Retractable Foot Rests (Stirru	
121	Base Model w/ Arm Rests & Retractable Foot Rests (Stirrups)	Aesthetic Upgrade Model w/ Arm Rests & Retractable Foot Rests (Stirrups)	
The base model has a black powder coated base and black acrylic thermaform cover for the sub-top.		The aes	sthetic model features a thermaformed base and extended sub-top.

For electrical specs, see Specifications section.

INSTALLATION

The Procedure Chair come completely assembled and ready to use. Plug the cord into a functioning outlet that is rated for the chair. (see Grounding below)

Arrange the power cord and control cords so that they will not create a tripping hazard and where the controls are located to your liking and are conveniently accessible.

Be sure access to plug is not blocked for disconnecting the chair from power.

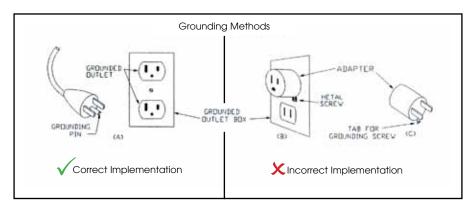
GROUNDING



DANGER

Risk of Electric Shock - Connect this furnishing to a properly grounded outlet only.

This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electrical current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding pin. The pin must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances. See U.S. sample below.



Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product - if it will not fit the outlet; have a proper outlet installed by a qualified electrician.

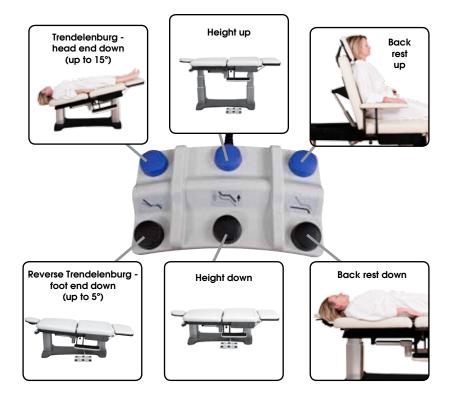
FOOT CONTROL OPERATIONS



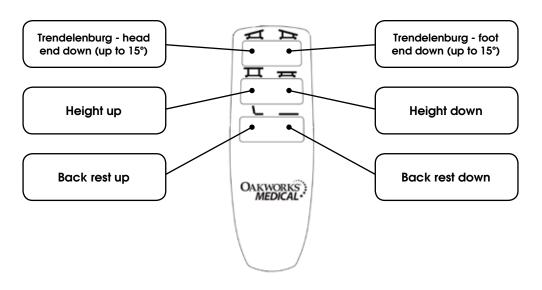
CAUTION

Do not sit on the Fowler (Backrest) or Leg Rest sections. Do not leave the patient unattended. When lowering the chair or using the Trendelenburg functions, make sure there is nothing that can impede motion (like stools, cabinets, accessory parts, cleaners, etc.)

The Multi-function Foot Control and optional Hand Control operate all functions of the chair with the touch of a button. Follow the directions below to access these functions.

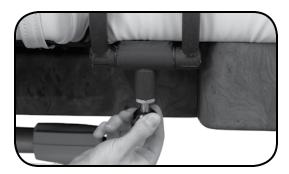


HAND CONTROL OPERATIONS (OPTIONAL)



DIRECTIONS FOR USE

ARM REST USE



TO LOWER THE ARM RESTS

Push arm rest in lightly towards the center of the table, then pull locking knob down towards the table base. Fold arm rests down and under the table.



TO RAISE THE ARM RESTS

Grasp arm rest and rotate to the raised position. When fully up, the arm rest will lock into position. Check that the arm rest is locked by applying light outward pressure.

RETRACTABLE FOOT RESTS (STIRRUP) USE



CAUTION

Pinch Point - Keep fingers away from pinch point.



1. Fully lower the manual adjustable foot rest to allow access to the stirrup.



2. Grasp Stirrup handle & pull out firmly while lifting slightly. **Pull fully out.**

To store stirrups, lift slightly, rotate towards the middle of the table and

fold the foot rest down. Then lift slightly and push into the storage position.



3. Fold out to fully open position.



4. To rotate stirrup to the desired angle, lift slightly and move to the desired position. There are 3 detent positions. Stop lifting and move slightly left or right for the nearest detent position.

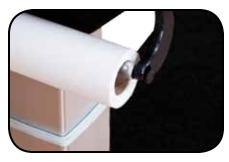


5. To reduce stirrup length, lift the handle slightly and push into desired position. Stirrup will automatically lock into nearest detent position.

PAPER ROLL HOLDER



To load the paper, locate the two paper holder support arms located on the under side of back rest.



Insert rod through paper roll and place rod into the holes in the support arms.



Pull paper and thread through the straps across the upholstered top to keep in place.

Note: The paper "hold down" strap is attached with Velcro®. This allows strap tension adjustment if necessary.

ADJUSTABLE HEAD REST USE



CAUTION

Do not extend dowels more than 4" (10.2 cm.) from the back rest section.

The head rest angle is adjusted using a single cam locking handle. The head rest distance from the table is adjusted by using a knob.

To adjust the position of the head rest follow these steps:





TO ADJUST HEAD REST ANGLE



Turn knob counter-clock-wise to unlock the cam.



Move head rest platform to the desired position.



Turn knob clockwise to lock the cam.

TO ADJUST HEAD REST POSITION



Loosen knob by turning counter-clockwise.



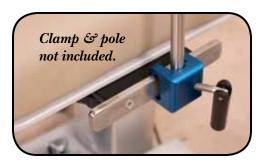
Pull up on the head rest to expose the dowels.



Firmly tighten the knob by turning clockwise to avoid slipping when in use.

T-RAIL ADAPTER USE





The T-Rail Adapter can be attached at designated locations on the back rest section, allowing the use of any t-rail accessory. Attach or remove using the knobs shown.

MANUAL ADJUSTABLE FOUR POSITION LEG REST USE



CAUTION

Do not sit on the Fowler (Backrest) or Leg Rest. (Max Capacity 150 lbs. (68 kg.))



TO RAISE THE LEG REST

Raise the leg rest by pulling it up from the lower center end of the table to the proper position for the procedure. Use a slow or medium speed. If you raise the leg rest too fast, the height locking mechanism will not engage. The leg rest will lock into the closest height position.



TO LOWER THE LEG REST

Raise the leg rest above horizontal to unlock the latch. Lower the leg rest to the fully down position.

For intermediate positions, follow directions "TO RAISE THE LEG REST."

PROCEDURE TRAY USE



CAUTION

Make sure the Leg Rest is fully lowered before using the procedure tray. Do not sit or push on the Procedure Tray when extended from the seat. Maximum Weight rating of 15 lbs. (6.8 kg.)





Slide out the Procedure Tray by pulling on the center slot of the tray holder until the tray stops. After a procedure is performed, remove the Procedure Tray with both hands at the side notches from the tray holder. Discard fluids, clean and place back into tray holder.

CLEANING AND DISINFECTING INSTRUCTIONS

If fluid spill under the seat cushion, follow these instructions:



1. Remove the seat pad by pulling up from the edge. The pad is held on by Velcro.



2. Pull out the 2 pins on both sides of the metal plate near the end of the Procedure tray holder. Slide the tray holder and Procedure Tray out from the seat section.



3. Unscrew the 4 black handles at the corners of the metal plate. Slide the metal plate off from the seat section and disinfect all surfaces.

CLEANING & DISINFECTION / INSPECTIONS / WARRANTY

CLEANING & DISINFECTION



WARNING

Before cleaning with any liquid cleaner be sure to unplug the power cord from the outlet.

Use a 10% sodium hypochlorite (bleach) solution or *Recommended Disinfectants* on all surfaces. Clean all sides of each upholstered section. Follow the directions on the disinfectant and wipe off excess.

Recommended Disinfectants

Protex, MadaCide, Accell TB, Virox®

Note: Damage caused by unapproved substances will not be covered under the warranty.

DO NOT use citrus based cleaners or other strong cleaners, such as alcohol, acetone, higher concentrations of bleach or other products that contain high concentrations of these substances.

DO NOT expose the fabric to temperatures below 50°F/10°C or above 104°F/40°C.

DO NOT expose the fabric to direct sunlight, adhesives, liquids, or abrasive materials.

INSPECTIONS & MAINTENANCE

RECOMMENDED REGULAR INSPECTIONS (monthly or local standard)

- Check for damage to the power, hand control or foot control cables.
- Visually inspect components for obvious damage that could cause problems during operation.

RECOMMENDED PERIODIC INSPECTIONS (yearly or local standard)

- Check for damage to the power, hands control or foot control cables and all visible wiring.
- Visually inspect components for obvious damage that could cause problems during operation.
- Check all mechanical functions using the hand control. Repeat using the foot control. Check for abnormal noises.
- Replace any missing or illegible labels.
- Check that all fasteners are present and fastened securely.
- Check table grounding.
- Clean unusual buildup of dirt on the chair and/or parts of the chair not normally cleaned on a regular basis.
- Check for tears or cracks in the upholstery.

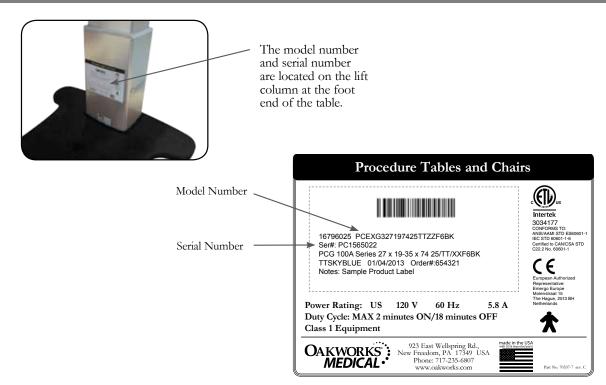
MAINTENANCE

- No specific maintenance tasks are required.
- Oakworks medical tables/chairs are designed and built to provide many years of dependable service. Please follow local regulations and laws when disposing of the electrical components used in this chair.
- For all Customer Service related problems refer to the Service Manual

WARRANTY

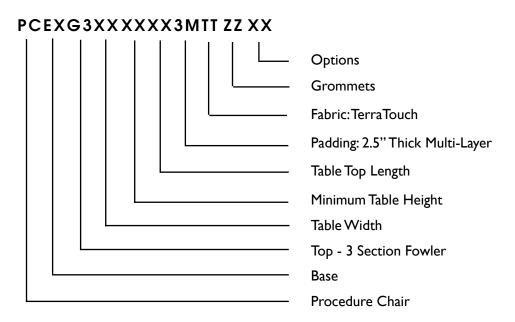
View complete warranty details at www.oakworks.com

MODEL & SERIAL NUMBERS



Model Numbers and Serial Numbers always start with a letter.

MODEL NUMBER DESCRIPTION



SPECIFICATIONS

PRODUCT SPECIFICATIONS				
North America Europe				
Weight	273 lbs.	124 kg.		
Shipping Weight	409 lbs.	186 kg.		
Lifting Capacity	550 lbs.	250 kg.		

ENVIRONMENTAL CONDITIONS			
Conditions	Temperature	Humidity	Atmospheric Pressure
Normal Use 50° (10°C) to 104° (40°C)		20% to 60% RH	98 to 105 kPa
Storage & Transport	-20° (-29°C) to 135° (57°C)	20% to 95% RH	98 to 105 kPa

ELECTRICAL SPECIFICATIONS				
Designed for:	North America Europe		Japan	
Input Service	120 VAC/15 amp/60 Hz	220 VAC/10 amp/50/60 Hz	100 VAC/20 amp/50 Hz	
Maximum Momentary Current Consumption	4.0 amps	2.0 amps	5.0 amps	
Voltage Output to Actuators	24 VDC	24 VDC 24 VDC		
Electric Shock Protection	Class 1 Equipment	Class 1 Equipment	Class 1 Equipment	
Tabletop Applied Part	Type B Applied Part	Type B Applied Part	Type B Applied Part	
Ingress Protection Rating	IPX0	IPX0	IPX0	
Made of Operation	Intermittent Operation MAX 2 minutes ON 18 minutes off	Intermittent Operation MAX 2 minutes ON 18 minutes off	Intermittent Operation MAX 2 minutes ON 18 minutes off	

Guidance and manufacturer's declaration - electromagnetic emissions

The chair is intended for use in the electromagnetic environment specified below. The customer or the user of the chair should assure that it is used in such an environment.

Emissions Test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	The chair uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class A	The chair is suitable for use in all establishments
Harmonic emissions IEC 61000-3-2	Class A	other than domestic and those directly con- nected to the public low-voltage power supply
Voltage fluctuations / flicker emissions IEC 61000-3-3	Complies	network that supplies buildings used for domestic purposes.

Recommended separation distances between portable and mobile RF communications equipment and the chair

The chair is intended for use in the electromagnetic environment in which radiated RF disturbances are controlled, the customer or the user of the chair can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the chair as recommended below, according to the maximum output of the communications equipment.

1 1				
Dada di sa surina con a colored	Separation distance according to frequency of transmitter (m)			
Rated maximum output power of transmitter	150 kHz to 80 MHz	80 MHz to 800 MHz	800 MHz to 2.5 GHz	
W	W $d = 1.2 \sqrt{P}$		<i>d</i> = 2.3 √ <i>P</i>	
0.01 0.12		0.12	0.23	
0.1 0.38		0.37	0.73	
1 1.2		1.2	2.3	
10 3.8		3.8	7.3	
100 12		12	38	

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer, transmitter manufacturer.

NOTE 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

SPECIFICATIONS

Guidance and manufacturer's declaration - electromagnetic immunity

The chair is intended for use in the electromagnetic environment specified below. The customer or the user of the chair should assure that it is used in such an environment.

Immunity Test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance	
Electrostatic discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.	
Electrical fast transient/ burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines Not applicable	Mains power quality should be that of a typical com- mercial or hospital environ- ment.	
Surge IEC 61000-4-5	±1 kV line(s) to line(s) ±2 kV line(s) to earth	±1 kV line(s) to line(s) ±2 kV line(s) to earth	Mains power quality should be that of a typical com- mercial or hospital environ- ment.	
Voltage dips, short inter- ruptions and voltage variations on power supply input lines IEC 61000-4-11	<5 % UT (>95 % dip in UT) for 0,5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT) for 5 sec	<5 % UT (>95 % dip in UT) for 0,5 cycle 40 % UT (60 % dip in UT) for 5 cycles 70 % UT (30 % dip in UT) for 25 cycles <5 % UT (>95 % dip in UT) for 5 sec	Mains power quality should be that of a typical com- mercial or hospital environ- ment. If the user of the chair requires continued opera- tion during power mains interruptions, it is recom- mended that the chair be powered from an uninter- ruptible power supply or a battery.	
Power frequency (50/60 Hz) magnetic field IEC 3 A / m 61000-4-8		3 A / m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.	

Guidance and manufacturer's declaration - electromagnetic immunity

The chair is intended for use in the electromagnetic environment specified below. The customer or the user of the chair should assure that it is used in such an environment.

Immunity Test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3 Vrms 150 kHz to 80 MHz 3 V/m 80 MHz to 2,5 GHz	3Vrms 3V/m	Portable and mobile RF communications equipment should be used no closer to any part of the chair, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = 1.2 \sqrt{P}$ $d = 1.2 \sqrt{P}$ $d = 1.2 \sqrt{P}$ 80 MHz to 800 MHz $d = 2.3 \sqrt{P}$ 800 MHz to 2,5 GHz Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, ashould be less than the compliance level in each frequency range. Interference may occur in the vicinity of equipment marked with the following symbol:

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

[•] Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the chair is used exceeds the applicable RF compliance level above, the chair should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the chair.

THIS PAGE IS INTENTIONALLY LEFT BLANK

THIS PAGE IS INTENTIONALLY LEFT BLANK

OAKWORKS® 100 Series Procedure Chair

CONTACT INFORMATION:

OAKWORKS® Inc.

923 East Wellspring Road New Freedom, PA 17349

Phone: 717-235-6807 FAX: 717-235-6798

www.oakworksmed.com





3034177

CONFORMS TO:
ANSI/AAMI STD ES60601-1
IEC STD 60601-1 3RD EDITION
IEC STD 60601-1-2 3RD EDITION
IEC STD 60601-1-6 3RD EDITION
CERTIFIED TO CAN/CSA STD C22.2 NO. 60601-1
CB TEST CERTIFICATE AND REPORT

Manual Part Number MMMNST0032-EN Revision level: B



