USER MANUAL

OAKWORKS®

EC Procedure Chair

www.oakworksmed.com · 717.235.6807

made in the with US & imported

OAKWORKS® MEDICAL PRODUCTS

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PRODUCT USE DESCRIPTION

The Oakworks EC Procedure Chair is used to support the patient during examinations and 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 and on product labels, indicates that the chair and components are a Type B Applied Part pursuant to IEC 60601-1.

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

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

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

IMPORTANT SAFETY INSTRUCTIONS

CAUTION READ AND SAVE THESE INSTRUCTIONS

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

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 medical device. This chair must not be modified or incorporated into any other equipment.

As with any moving mechanism there are potential pinch points around and around 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.

IMPORTANT SAFETY INSTRUCTIONS

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.

- The Backrest and Leg Rest sections are not designed to support the entire weight of the patient. Do not sit on the Backrest or Leg rest sections.
- Be certain that the chair is completely lowered 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 chair by the cushions. This can damage the chair.
- When lowering the chair, make sure there is nothing underneath that can impede motion (like stools, cabinets, accessory parts, cleaners, etc)
- Use this medical device 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 medical device is used near children or disabled persons.
- Weight limit for footrest is 140 lbs. (64 kg)

WARNING

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

1. Unplug this product from the electrical outlet before cleaning.
2. Unplug from outlet before adding or removing parts.
3. Never operate this chair 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 Customer Service before use if you suspect damage
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

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

Electrical Shock Hazard - The power supply/control module is located on the scissors lift. No user serviceable parts are inside the control box. Refer servicing to qualified personnel. Unplug from wall prior to conducting service procedures.

EC Procedure Chair

STANDARD SPECIFICATIONS	
3 Section Top	29” (74cm) wide x 73” (185cm) long
Back rest	29” (74cm) wide x 39” (99cm) long
Seat	29” (74cm) wide x 23” (58cm) long
Leg rest	29” (74cm) wide x 10” (25cm) long
Leg rest (w/ stirrups option)	19”(48cm) wide x 10”(25cm) long
Motion 1	Powered 19”-37” (48-94 cm.) Height Range
Motion 2	Manual 0º - 80º Lift-Assist Backrest
Motion 3	Manual 0º - 90º Leg Rest
Foot Control	Height Motion
Weight Capacity	550 lbs. (250 kg.) (patient and accessories)
Product Weight	165 lbs. (75 kg.)
Padding	2.5” (6 cm.) *or* 4” (10 cm.) Comfort Foam
Chair Voltage	120V/60Hz or 230V/50Hz

OPTIONS
Stirrups
Side Rails
Arm Rest
Locking Twin Casters
2nd Foot Control
Hand Control
Non-USA electric system
ACCESSORIES
T-Rail Adapter
Quick Lock Head Rest & AeroCel Pad
Paper Roll Holder

For electrical specs, see Specifications section.

INSTALLATION

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

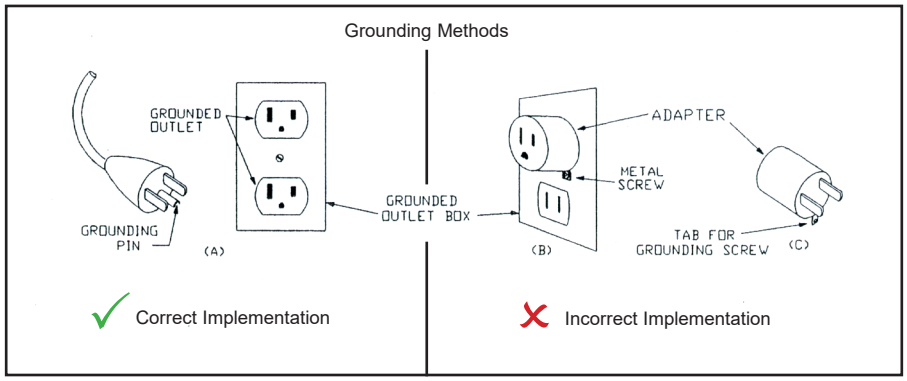
Arrange the power cord and control cords so that they will not create a tripping hazard and where the controls are located to your liking and are conveniently accessible.

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.



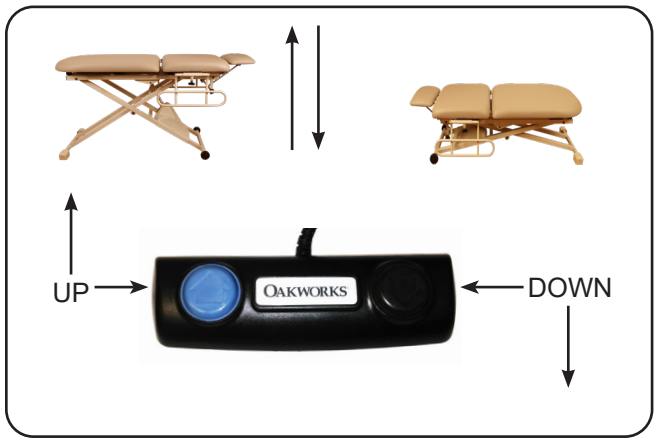
Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product - if it will not fit the outlet; have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

CONTROL OPERATIONS

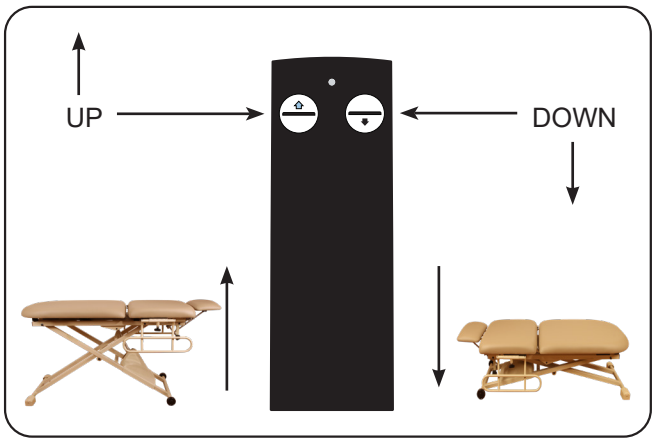
CAUTION Be sure the self-locking rubber feet are flat side down to ensure safety and stability.

The chair offer height positioning with electronic ease. Operate the Foot control or optional hand control as shown below to raise or lower the height of the chair.

FOOT CONTROL OPERATION



HAND CONTROL OPERATION (OPTIONAL)



ADJUSTING THE BACK REST SECTION

CAUTION Do not sit on the Backrest section.

TO RAISE THE BACKREST:

Raise the backrest by pressing the lever under the head section and lifting up to the desired height. It is recommended that patients take some of their weight off the back rest while you lift.

TO LOWER THE BACKREST:

Press the lever under the head section and push the backrest down.

ARTICULATING LEG REST USE

CAUTION Do not sit or stand on the articulating leg rest section. Do not use leg rest section in assisting the patient on or off the chair.

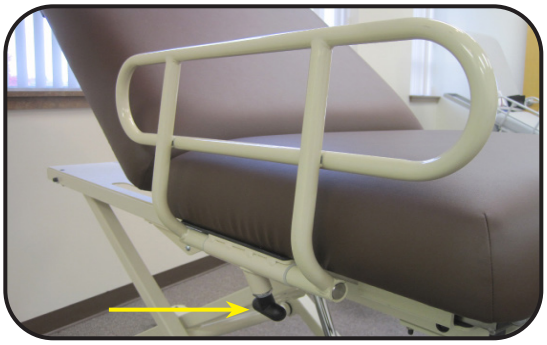
TO RAISE THE LEG REST:

Grasp the edge of the section and lift up until you have achieved the angle needed. Release and it will lock into place automatically.

TO LOWER THE LEG REST:

Twist and hold the knob under the leg rest and push leg rest down. Release the knob and the leg rest will stay in place.

SIDE RAIL & ARM REST USE



TO LOWER SIDE RAILS & ARM REST:

Push side rail or arm rest in lightly towards the center of the chair, then pull locking knob down towards the base. Fold side rails or arm rest down and under the chair.

TO RAISE SIDE RAILS & ARM REST:

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

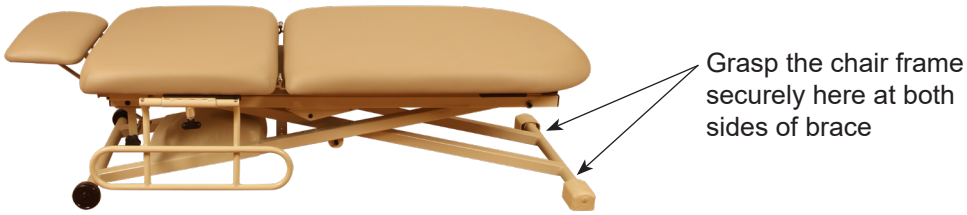
MOVING THE CHAIR

CAUTION

Before moving the Chair, disconnect the power cord from the power outlet. The chair weighs as much as 165 lbs. (75 kg.) Use caution when lifting the chair to move it. Two people are required to move the chair safely. DO NOT use the chair to transport a patient.

The chairs are equipped with two wheels at one end and two self-locking feet at the other. When ready to move the chair, first lower the chair to its lowest position. It is recommended to raise the back rest to a high position. Then be sure the power source is disconnected. Place the cord & all controls out of the way on top of your chair before moving the chair. Lay a towel or a cloth down on your chair top to protect the surface from any debris from the bottom of your foot control.

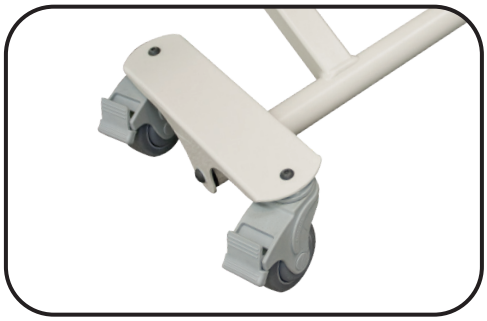
Two people are required to safely move the chair. Grasp the chair frame securely at the end with the molded rubber feet. Raise the chair to allow the wheels at the foot end to move freely. Bending at the knees before lifting to prevent back strain or possible injury.



Move the chair carefully to the next location, lower the chair and release. Check the self-locking feet to be sure they are flat side down. This position “locks” the chair and allows sturdy height adjustments. Place the foot controls in position on the floor. Connect the power cord to the outlet and test the foot control.

DUAL LOCKING CASTERS USE

All casters should be locked at all times during use with a patient.



LOCKING THE CASTERS:

1. Place your shoe on the end of the casters locking tab.
2. Press firmly downward until you hear a clicking noise and the caster is locked.

UN-LOCKING THE CASTERS:

1. Place your shoe on top of the casters locking tab.
2. Press firmly inward and downward until you hear a clicking noise and the caster is unlocked.

RETRACTABLE FOOT RESTS (STIRRUP) USE

CAUTION Pinch Point - Keep fingers away from pinch point.

1. Fully rase the leg rest.
2. Grasp Stirrup handle & pull out firmly while lifting slightly.
3. Rotate outward.

4. Fold out to fully open position.
5. Place feet in stirrups.
6. Lower leg rest.

7. Rotate stirrup to the desired angle.

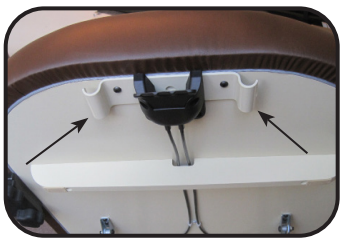
8. To reduce stirrup length, lift the handle slightly and push into desired position. Stirrup will automatically lock into nearest detent position.

To store stirrups, fold leg rest down, lift slightly, rotate towards the middle of the chair and push into the storage position.

QUICKLOCK FACE REST

CAUTION Do not put excessive weight or pressure on the Quicklock Face Rest. Do not extend the dowels of the Quicklock Face Rest more than 3" (7.6 cm.) from the Backrest

Double articulating action provides nearly limitless positioning options with the QuickLock™ Face Rest. The adjustable pad takes pressure off sensitive facial areas while providing superb support. The QuickLock™ Face Rest can be used in both prone and supine positioning and folds out of the way when not in use. Adjustments are made easily by loosening the cam locks, adjusting for height and angle and then locking the cam locks into the desired position.



Accessory attachment outlets

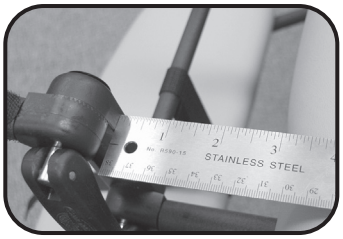
Insert dowels into Accessory attachment outlets.

Loosen Cam Locks & adjust face rest into place.

Tighten the Cam Locks.

The Face Rest can be used for either prone or supine positioning.

Important Safety Note:
Maximum Distance from edge of Chair = 3" (7.6 cm.)



RECOMMENDED CLEANERS/DISINFECTANTS

DANGER To reduce the risk of electric shock:
- Always unplug this furnishing from the electrical outlet before cleaning.

Reference the Recommended Cleaners and Disinfectant list (MMINML0008-EN) that came with the table. This information can also be found at www.oakworksmed.com under product information.

All cleaners and disinfectants have the ability to degrade the upholstery to some extent. However, following the recommended cleaner and disinfectant list and cleaning process will provided the best care for your table and support a long product life.

OAKWORKS® recommends a prepackaged wipe for cleaners/disinfectants to ensure best distribution of disinfectant for the required kill time, without leaving excess residue and/or overexposing components therefore minimizing the potential for damage to materials. Please read and follow disinfectants manufacturers' directions for cleaning and disinfection.

OAKWORKS® does NOT recommend the use of cleaners/disinfectants containing Hydrogen Peroxide, Acetic Acid, or Phenolics. These chemicals can cause damage to the appearance and/or material integrity of various components. Also, while the recommended cleaners/disinfectants list includes products containing Quaternary Ammonium compounds ("quats"), not all products containing quats are approved for use. Some contain additional detergents and/or surfactants which can damage some materials.

A note on Bleach: While a 10% sodium hypochlorite (household bleach) solution (EPA No.: 5813-100 or equivalent) can be an effective disinfectant and is dilute enough to be benign to most materials, it alone is not an effective cleaner and a separate product must be used for the initial cleaning steps of the procedure. Because of possible chemical incompatibilities between various cleaning products and bleach, utmost care must be taken by the user to avoid potential exposure to harmful or toxic by-products of the combination. Also, because bleach leaves a potentially corrosive residue as it evaporates, it must be rinsed with clean water after disinfection.

Use of non-approved cleaners or disinfectants may lead to damage to upholstery and other materials found on the table and will void the warranty.

CLEANING PROCESS

Follow the cleaners/disinfectant manufacturers' directions for use. Please note that cleaning and disinfecting an OAKWORKS® table is a two part process. First it must be cleaned of any visible soil, then it can be disinfected. OAKWORKS® recommends that the table be positioned in the flat position during the cleaning process. Please follow this procedure for best results:

1. Using an approved cleaner or mild liquid soap and water, clean any visible soil off of the table, working from the top to the bottom of the table. It is recommended that the upholstery be cleaned at least once a week to prevent disinfectant build up.
2. Rinse with clean water and dry with a clean cloth or towel.
3. Using an approved disinfectant, thoroughly disinfectant all surfaces of the tabletop and any high-contact areas such as handles, handsets, etc., making sure they remain wet for the disinfectant manufacturer's recommended contact time. Do not allow disinfectant to pool on the upholstery after the recommended contact time.
4. Wipe off any excess liquid with a cloth or towel and clean water.
5. Dry all surfaces with a clean cloth or towel.

Avoid using writing instruments or other similar instruments around the upholstery as it can cause permanent staining. If this does occur, do not wipe with an alcohol based cleaner. Instead, blot the stain with a clean cloth/ paper towel. Use a 10% bleach dilution to remove the stain. Follow this with a rinse of clean water.

INSPECTIONS

RECOMMENDED REGULAR INSPECTIONS (monthly or local standard)

- Check for damage to the power, hand control(s) and foot control(s) on all cables.
- Visually inspect components for obvious damage that could cause problems during operation.

RECOMMENDED PERIODIC INSPECTIONS (yearly or local standard)

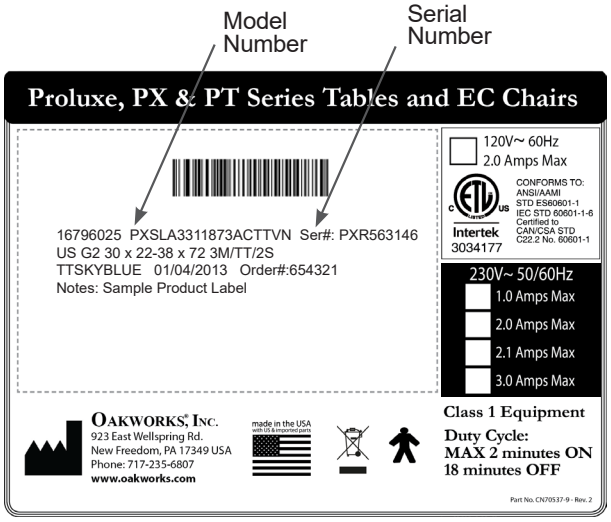
- Check for damage to the power, hands control and foot control cables and all visible wiring.
- Visually inspect components for obvious damage that could cause problems during operation.
- Check all mechanical functions using the hand control. Repeat using the foot control. Check for abnormal noises.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

WARRANTY

View complete warranty details at www.oakworks.com

EC PROCEDURE CHAIR

The model number and serial number are located on the underside of the foot section.



Model Numbers and Serial Numbers always start with a letter.

PRODUCT SPECIFICATIONS	
Chair Weight:	165 lbs. (75 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
Input Service	120 VAC/15 amp/60 Hz	230 VAC/10 amp/50/60 Hz
Current Draw	2.0 amps	1.0 amps
Voltage Output to Actuators	24 VDC	24 VDC
Electric Shock Protection	Class 1 Equipment	Class 1 Equipment
Top Applied Part	Type B Applied Part	Type B Applied Part
Ingress Protection Rating	IPX0	IPX0
Made of Operation	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 B	The chair is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations / flicker emissions IEC 61000-3-3	Complies	

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.			
Rated maximum output power of transmitter W	**Separation distance according to frequency of transmitter (m)**		
	150 kHz to 80 MHz $d = 1.2 \sqrt{P}$	80 MHz to 800 MHz $d = 1.2 \sqrt{P}$	800 MHz to 2.5 GHz $d = 2.3 \sqrt{P}$
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	7.8
100	12	12	23
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.			

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 ±1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV differential mode ±2 kV common mode	±1 kV differential mode ±2 kV common mode	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions 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 commercial or hospital environment. If the user of the chair requires continued operation during power mains interruptions, it is recommended that the chair be powered from an uninterruptible power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A / m	3 A / m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
NOTE U_T is the a.c. mains voltage prior to application of the test level.			

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	3 Vrms 150 kHz to 80 MHz	3Vrms	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 $d = 1.2 \sqrt{P}$
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2,5 GHz	3V/m	$d = 1.2 \sqrt{P}$ 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 deter-mined by an electromagnetic site survey, [a]should be less than the compliance level in each frequency range. [b] 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.			
[a] 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 [b] Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 1 V/m.			

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USER MANUAL

OAKWORKS®
EC Procedure Chair

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Intertek

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 MMMNST0039-EN / Med-RA-PM-87
Revision Level: 5
Revision Date: 10/08/2020

English, Printed in USA

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