

# User Manual

## 424, 423, & 421 Chairs



424 CHAIR



421 CHAIR



423 CHAIR



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## APPLICABLE MODEL(S)

This manual is for the following part numbers and serial numbers:

PART NUMBER	DESCRIPTION	EFFECTIVE S/N
4000085	421L Exam Chair, 115V	020203012-Current
4000086	421L Exam Chair, 230V	020203012-Current
4000103	421H Exam Chair, 115V	020203012-Current
4000104	421H Exam Chair, 230V	020203012-Current
4000158	423H Exam Chair, 115V	020203012-Current
4000159	423H Exam Chair, 230V	020203012-Current
4000160	423L Exam Chair, 115V	020203012-Current
4000161	423L Exam Chair, 230V	020203012-Current
4000162	423H-LRX Exam Chair, 115V	020203012-Current
4000163	423H-LRX Exam Chair, 230V	020203012-Current
4000164	423L-LRX Exam Chair, 115V	020203012-Current
4000165	423L-LRX Exam Chair, 230V	020203012-Current
4000208	424H Exam Chair, 115V	020203012-Current
4000209	424H Exam Chair, 230V	020203012-Current
4000210	424L Exam Chair, 115V	020203012-Current
4000211	424L Exam Chair, 230V	020203012-Current
4000212	424H-LRX Exam Chair, 115V	020203012-Current
4000213	424H-LRX Exam Chair, 230V	020203012-Current
4000214	424L-LRX Exam Chair, 115V	020203012-Current
4000215	424L-LRX Exam Chair, 230V	020203012-Current

## REVISION HISTORY TABLE

DATE	REVISION	CO#/ECO#	DETAILS
3/17/2017	C	CO-0061	Update Manual to latest revision of chairs & new manual format

# User Manual

## MTI 424, 423, & 421 Chairs

### GENERAL INFORMATION

#### **Purpose of this Manual**

This manual covers the safety, installation, instructions for use, and maintenance of this equipment. It is intended that it be used by the service professional installing the equipment and by the medical professionals who have been trained to use it. No repair information is included with this manual, because no operator repairs are intended.

#### **Intended Use**

This equipment is intended to be used as a chair for general examinations and procedures performed by medical professionals.

### PRODUCT INFORMATION

Date of Purchase: \_\_\_\_\_

Model Number: \_\_\_\_\_

Serial Number: \_\_\_\_\_

*(see "EQUIPMENT FEATURES" on page 6 for location of serial number label)*

## Symbols and Warnings

This manual contains Notices, Cautions, and Warnings, which are meant to call attention to particular parts or sections of this manual. Since safety is our first concern, this manual should be read by all personnel who will be operating this medical equipment. Failure to comply with the following warnings and cautions will void the warranty.

## Symboles et Avertissements

Ce manuel contient des avis, des précautions et des avertissements qui sont destinés à attirer l'attention sur des pièces ou des sections de ce manuel particulier. Parce que la sécurité est notre première préoccupation, ce manuel doit être lu par tout le personnel qui sera d'utiliser cet équipement médical. Défaut de se conformer avec les avertissements et les précautions de ce guide d'instruction annulera la garantie.

### WARNINGS/AVERTISSEMENTS

Are used to call attention to a condition, practice, or procedure which could cause personal injury if not followed correctly. Please become familiar with all warnings and observe them at all times.

Sont utilisés pour attirer l'attention sur une condition, pratique ou procédure qui pourrait causer des blessures s'il n'est pas suivi correctement. S'il vous plaît se familiariser avec tous les avertissements et les observer à tout moment.

### CAUTIONS/PRECAUTIONS















Are used to call attention to a condition, practice, or procedure which could cause product damage if not used correctly.












Sont utilisés pour attirer l'attention sur une condition, pratique ou procédure qui pourrait causer des dommages au produit s'il n'est pas utilisé correctement.

### NOTICES/AVIS

Are used to call attention to helpful information regarding a condition, practice, or procedure.

Sont utilisés pour attirer l'attention sur des informations utiles concernant une condition, pratique ou de procédure.

	Class 1, Type B, Medical Equipment
	Proper shipping orientation for the product Orientation d'embarquement correct pour le produit
	Product is fragile; be careful in handling Le produit est fragile. Soyez prudent lors de la manipulation
	Protective earth ground Terre électrique de protection
	Alternating current Le courant alternatif
	Unit duty cycle of 10% Example: (1) minute on (9) minutes off. Unité rapport cyclique du 10%
	Product must be kept dry Le produit doit rester sèche
	Upper and lower limits of temperature Limites haute et basse de la température
	Maximum stacking height of palletized units. Hauteur maximale de la pile d'unités sur palettes.
	Indicates the presence of a dangerous voltage/shock hazard Indique le présence de voltage dangereux/ de choc
	Follow instructions for use Suivez les instructions pour l'utilisation
	Consult operating instructions Consultez les instructions d'utilisation
	Manufacturer of product Fabricant de produits
	Date on which the product was manufactured Date de fabrication

	Identifies the manufacturer's serial number Identifie le numéro de série du fabricant
	Upper and lower limits of relative humidity Limites haute et basse de humidité relative.
	Upper and lower limits of atmospheric pressure Limites haute et basse de la pression atmosphérique
	Location of fuses Emplacement de fusibles
	(WEEE) Waste of Electrical and Electronic Equipment Déchets d'équipements électriques et électroniques
	ETL listing mark Marque ETL Listé
	UL listing mark Marque UL Listé
	European Conformity mark Marque Conformité Européenne
	Connection point for the neutral conductor Point de connexion pour le conducteur neutre
	Live conductor Conducteur sous tension
	Hospital Grade (green dot) De qualité hôpital (point vert)

## Safety Instructions

### **WARNING/AVERTISSEMENT**

Read this manual before installation and use.

Lisez ce manuel avant l'installation et l'utilisation.

### **WARNING/AVERTISSEMENT**

No modification of this equipment is allowed.

Aucune modification de cet équipement est autorisée.

### **WARNING/AVERTISSEMENT**

Do not operate equipment in the presence of flammable anesthetics.

Ne pas faire fonctionner l'équipement en présence d'anesthésiques inflammables.

### **WARNING/AVERTISSEMENT**

When the equipment is in motion from a programmable position or auto return, injury may occur if the equipment is not attended to until it comes to a complete stop.

Lorsque l'équipement est en mouvement à cause d'une position programmable or retour automatique, blessure peut se produire si l'équipement n'est pas regardé jusqu'à ce qu'il arrive à un arrêt complet.

### **WARNING/AVERTISSEMENT**

Verify equipment, patient, and other objects are in a safe condition before operating the equipment.

Vérifiez l'équipement, patient, et d'autres objets sont dans un état sûr avant d'utiliser l'équipement.

### **WARNING/AVERTISSEMENT**

Verify controls, cords, and other parts of the equipment do not create a tripping or other safety hazard for operator or patient.

Vérifiez les contrôles, les cordons et les autres parties de l'équipement ne créent pas un risque de trébuchement ou d'autres risques d'accident pour l'opérateur ou le patient.

### **WARNING/AVERTISSEMENT**

Backrest, seat, footrest, armrest, headrest, and other parts of the equipment should only be used for their intended purpose. MTI is not responsible for use of components outside of their intended use.

*Le repose-dos, reste de siège, repose pieds, accoudoirs, appui-tête et d'autres parties de l'équipement ne doivent être utilisés conformément à leur utilisation prévue. MTI n'est pas responsable de l'utilisation des composants au dehors de leur utilisation prévue.*

### **⚠ WARNING/AVERTISSEMENT**

*This product contains chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm. See <http://www.mti.net/FAQs.aspx> for details on California Proposition 65.*

*Ce produit contient des produits chimiques reconnus par l'État de Californie pour causer le cancer et / ou des anomalies congénitales ou d'autres problèmes de reproduction. Voir <http://www.mti.net/FAQs.aspx> pour plus de détails sur la California Proposition 65.*

## **Electromagnetic Interference**

This equipment is designed and built to minimize electromagnetic interference with other devices. However, if interference is noticed between another device and this equipment, do one or more of the following:

1. Plug the equipment into an isolated circuit.
2. Remove the interfering device from the room.
3. Increase the separation between the equipment and the interfering device.
4. Contact MTI if the electromagnetic interference persists.

## **Electrical Requirements**

### **⚠ WARNING/AVERTISSEMENT**

*To avoid risk of electrical shock, this equipment must be connected to a supply mains with protective earth.*

*Pour éviter tout risque de choc électrique, cet équipement doit être branché sur une prise électrique avec la terre électrique de protection.*

### **⚠ WARNING/AVERTISSEMENT**

*Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked "Hospital Only" or "Hospital Grade".*

*Mise à la terre fiabilité ne peut être atteinte lorsque l'équipement est connecté à un réceptacle équivalent marqué "Hôpital Uniquement" ou "de Qualité Hôpital".*

### **⚠ WARNING/AVERTISSEMENT**

*When using endocardial catheters or high frequency surgical/procedure devices, use non-conductive material to insulate the patient from metal portions of the equipment. Failure to comply may result in electric shock or burns to patient.*

*Lors de l'utilisation de cathéters endocavitaires ou dispositifs chirurgicale / procédure haute fréquence, utiliser un matériau non conducteur pour isoler le patient des parties métalliques de l'équipement. Le non-respect peut entraîner un choc électrique ou de brûlures pour le patient.*

### **⚠ WARNING/AVERTISSEMENT**

*Connecting electrical equipment to a multiple socket-outlet effectively leads to creating a medical electronic system and can result in a reduced level of safety.*

*Connexion d'un équipement électrique à une prise de courant multiple crée un système électronique médicale, et peut entraîner une baisse du niveau de sécurité.*

### **⚠ WARNING/AVERTISSEMENT**

*Equipment must be positioned in normal use such that the power cords can be easily accessed to unplug.*

*L'équipement doit être positionné en utilisation normale telle que les cordons d'alimentation peuvent être facilement accessibles à débrancher.*

### **⚠ WARNING/AVERTISSEMENT**

*Equipment must be connected to an appropriate power source when loss of power source would result in an unacceptable risk.*

*L'équipement doit être relié à une source d'alimentation appropriée en cas de perte de la source d'alimentation entraînerait un risque inacceptable.*

### **⚠ WARNING/AVERTISSEMENT**

*Do not use a two-three plug adapter to plug the equipment into a two conductor outlet, as grounding reliability is not maintained.*

*Ne pas utiliser un adaptateur non de prise de terre pour brancher l'équipement sur une prise à deux conducteurs, la fiabilité de la terre n'est pas maintenue.*

**⚠ WARNING/AVERTISSEMENT**

Do not plug this equipment into a low power or auxiliary outlet. This equipment must be connected to a 115 Volt (V) outlet. If this equipment is connected to an insufficient power source, it will cause irreparable damage to this device's electronics.

Ne branchez pas cet équipement sur une prise de faible puissance ou une prise auxiliaire. Cet équipement doit être branché sur une prise de 115 Volt (V). Si cet équipement est connecté à une source d'alimentation insuffisante, il causera des dommages irréparables à l'électronique de cet appareil.

**⚠ CAUTION/PRÉCAUTION**

An appropriately rated surge protector must be used to protect the printed circuit board. Warranty is void if this surge protector is not used.

Un protecteur de surtension correctement classé doit être utilisé pour protéger la carte de circuit imprimé. La garantie est nulle si, ce protecteur de surtension n'est pas utilisé.

**! NOTICE/AVIS**




Removing the power supply cord at the equipment input or wall receptacle will simultaneously isolate both poles of the power supply.

Retrait du cordon d'alimentation à l'équipement ou à la prise murale se isoler simultanément les deux pôles de l'alimentation.

**Contraindications**

None.

**Transportation and Storage Conditions**

	Ambient Temperature	+10°C to +40°C (+50°F to +104°F)
	Relative Humidity	30% to 75% (non-condensing)
	Atmospheric Pressure	700hPa to 1060hPa (0.69atm to 1.05atm)

**Disposal of Equipment**

At the end of product life, the equipment, accessories, and other consumable goods may have become contaminated due to normal medical use. Consult local codes and ordinances for proper disposal of equipment, accessories and other consumable goods.

## EQUIPMENT FEATURES

### Description of 424 Exam Chair

The 424 Exam Chair is a Tri-Power Exam Chair including power lift, back, and tilt with a 650 lb (295 kg) lift capacity. The 424 chair is 19.5" (49.5 cm) wide. Minimum seat height is 19" (48.3 cm) for low models or 21" (53.3 cm) for high models. The 424 includes 3-function hand-switches in the back of the chair. The foot and back have coordinated motion. The foot comes with a flip-up footrest. The chairs are used for positioning a patient for exams and procedures. The 424-LRX does not come with a footrest and includes an extended legrest. Swivel motion is standard on all 424 chairs.

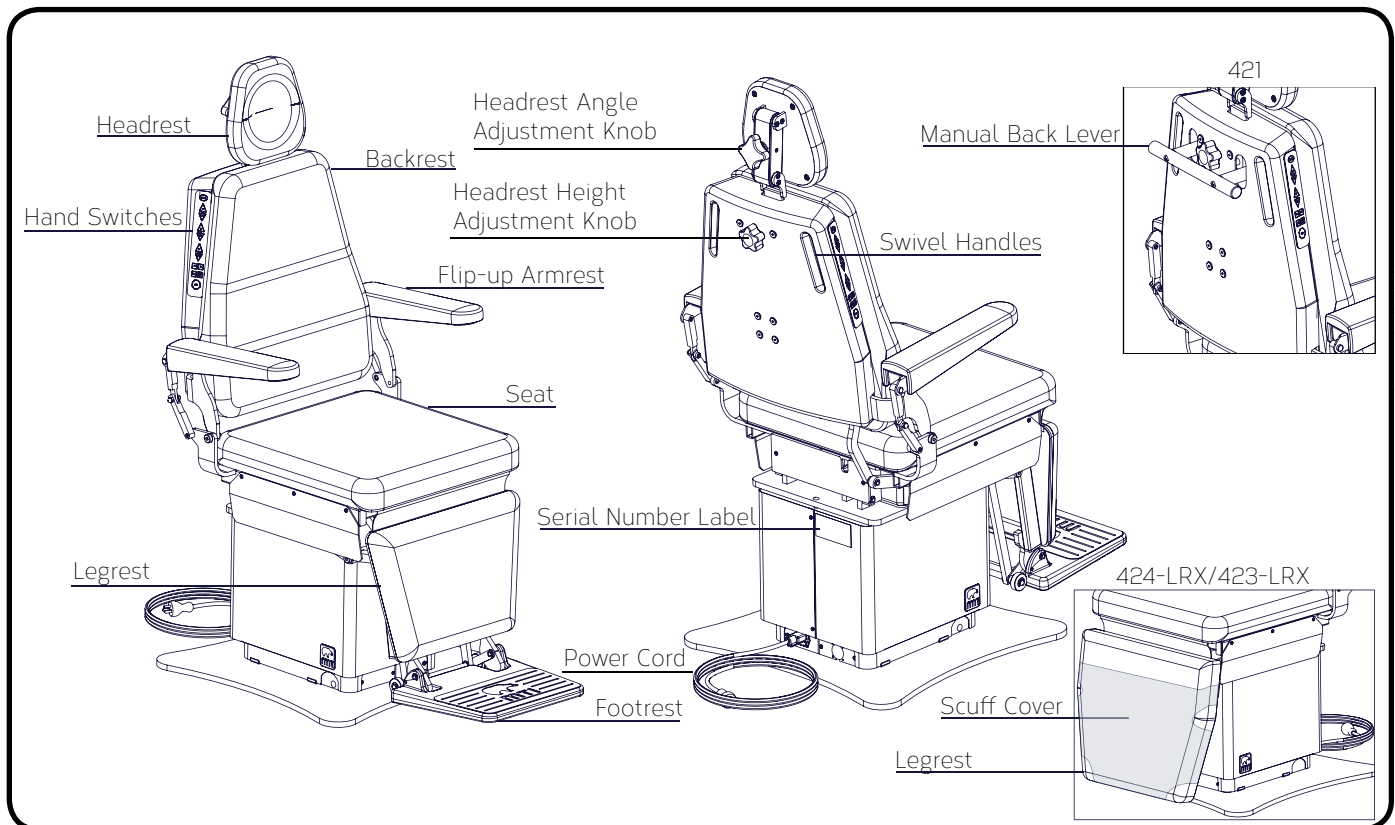
### Description of 423 Exam Chair

The 423 Exam chair is a Dual-Power Exam Chair including power lift and back, with a 650 lb (295 kg) lift capacity. The 423 chair is 19.5" (49.5 cm) wide. Minimum seat height is 19" (48.3 cm) for low models or 21" (53.3 cm) for high models. The 423 includes 2-function hand-switches in the back of the chair. The foot and back have coordinated motion. The tilt is fixed at 2 degrees. The foot comes with a flip-up footrest. The 423-LRX does not come with a footrest and includes an extended legrest. Swivel motion is standard on all 423 chairs.

### Description of 421 Exam Chair

The 421 Exam chair is a Single-Power Exam Chair. The chair includes power lift with a 650 lb (295 kg) lift capacity. The back is manually controlled with support of a gas spring. The 421 chair is 19.5" (49.5 cm) wide. Minimum seat height is 19" (48.3 cm) for low models or 21" (53.3 cm) for high models. The 421 includes 2-function hand-switches in the back of the chair, however the back down and back up buttons are non-functional. The foot and back have coordinated motion. The tilt is fixed at 2 degrees. The foot comes with a flip-up footrest. Swivel motion is standard on all 421 chairs.

424/423/421 EXAM CHAIR



## INSTALLATION

### **WARNING/AVERTISSEMENT**

*This equipment is heavy. Get help to remove it from the shipping pallet. Use proper lifting procedures when lifting to avoid serious back injury.*

*Cet équipement est lourd. Obtenir de l'aide pour le retirer de la palette d'expédition. Utilisez les procédures propre de levage pour le soulever pour éviter grave blessure au dos.*

### **WARNING/AVERTISSEMENT**

*After equipment is installed, verify that the programmable positions are in safe and known positions.*

*Après l'équipement est installé, vérifier que les positions programmables sont dans des positions sûres et connues.*

### **CAUTION/PRÉCAUTION**

*To move equipment, lift only from the equipment's main structure.*

*Pour déplacer l'équipement, soulevez seulement de la structure principale de l'équipement.*

### **NOTICE/AVIS**

*If this product has been exposed to low temperatures, allow adequate time for it to warm to room temperature before putting it into service.*





*Si ce produit a été exposé à de basses températures, laisser suffisamment de temps pour lui permettre de se réchauffer à température ambiante avant de le mettre en service.*

### **NOTICE/AVIS**

*Inspect the shipping boxes for visible damage. Record on bill of lading, photograph, and report any damage to the carrier immediately. Request an inspection by the carrier if any concealed damage is noted.*

*Inspectez les boîtes d'expédition pour les dommages visibles. Fiche sur le connaissance, prendre une photo, et signalez les dommages dûs au transporteur immédiatement. Demander une inspection par le transporteur en cas de dommage caché est noté.*

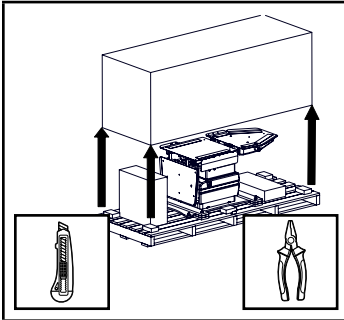
## Required Tools

	7/16" Wrench 9/16" Wrench		Wire cutters		Utility Knife		Phillips Screwdriver (#2)
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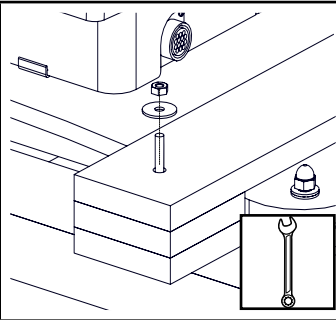
## Explanation of Instructions

Instructions have steps which are designated by a number. Each step may also have sub-steps designated by a letter. For example, an instruction to operate a feature may have 4 steps (1-4) and each of those steps may have sub-steps (A-B) to be performed before moving on to the next step.

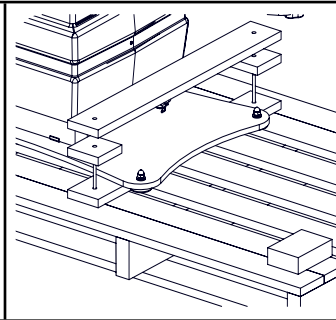
## Unpacking and Set-up



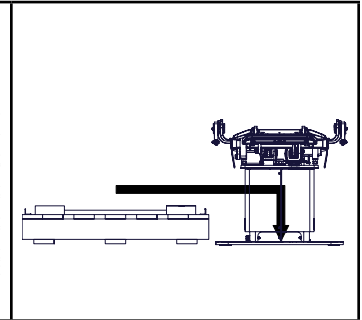
1. Remove shipping straps, shipping box, and other boxes from the pallet.



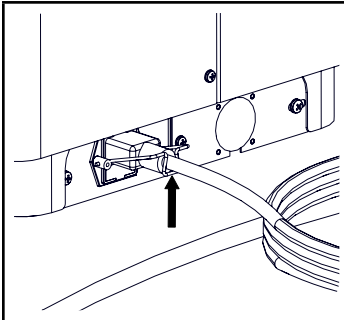
2. Remove (4) shipping bolts with 7/16" end wrench.



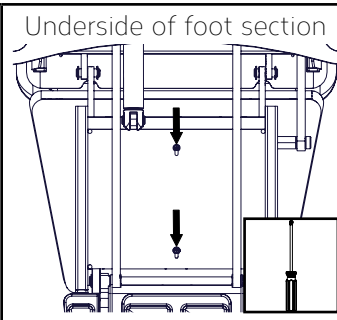
3. Remove braces from the top of the baseplate.



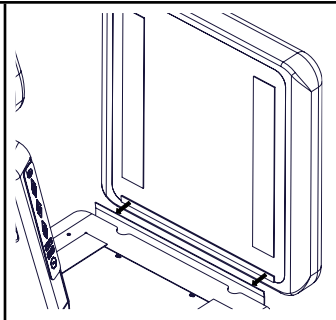
4. Slide chair off pallet. To move equipment, lift only from the equipment's main structure. Recycle or re-use pallet.



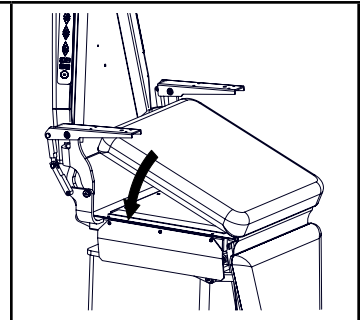
5. Insert power cord at the base of the chair and secure with the clip. Plug the power cord into the provided surge protector. Plug the surge protector into an appropriately marked receptacle.



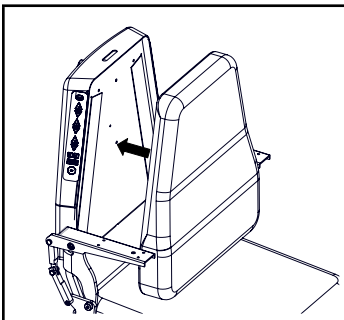
6. Raise the foot section (press the back down button or use manual handle for 421 models). Attach the upholstery flap to the foot cushion. Align the screws on the foot cushion with the slotted holes in the foot section, slide the cushion in place, and tighten the screws from underneath.



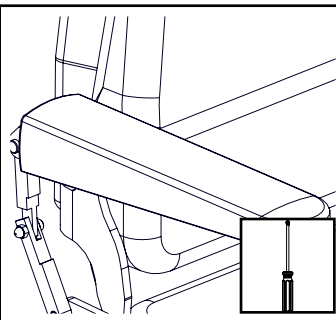
7. Attach the flap on the top of the foot cushion to the Velcro® on the seat cushion.



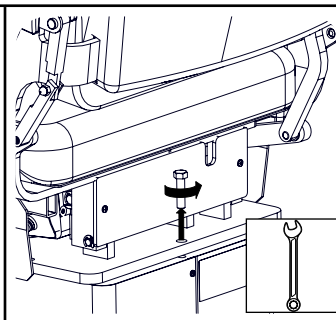
8. Align the seat cushion with the seat section of the chair and press into place. Verify the cushion is centered.



9. Align the back cushion with the back section of the chair and press into place. Verify the cushion is centered.






10. Attach the flip-up arm upholstery following the instructions provided in the upholstery kit.

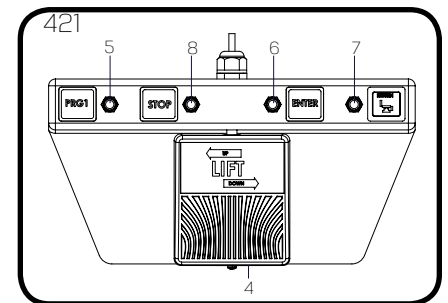
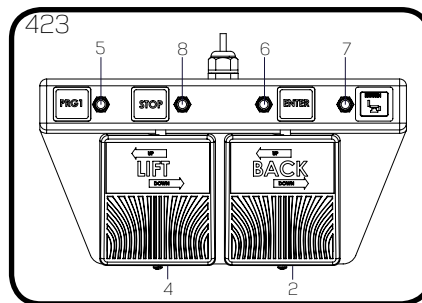
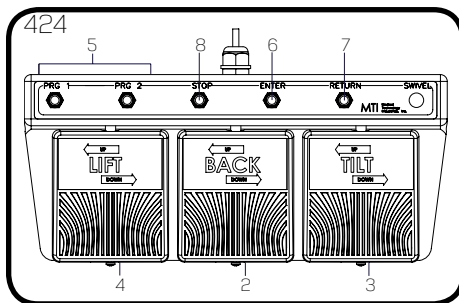
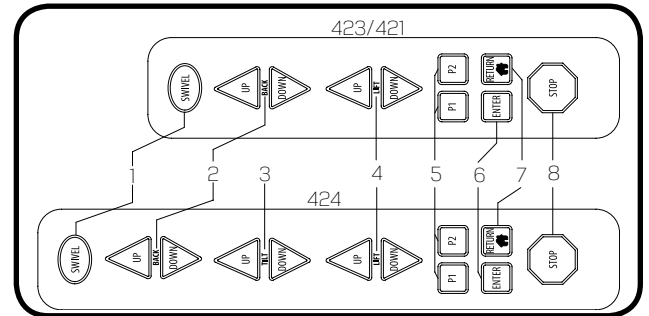


11. Remove the swivel bolt in the back of the chair with a 9/16" end wrench. Keep bolt for use while chair is not powered.

## OPERATION

### Operating Conditions

	Ambient Temperature	+10°C to +40°C (+50°F to +104°F)
	Relative Humidity	30% to 75% (non-condensing)
	Atmospheric Pressure	700hPa to 1060hPa (0.69atm to 1.05atm)



### Controls

#### Hand Switches/Foot Controls

ITEM	DESCRIPTION	FUNCTION
1	Swivel Button	Press and release swivel button within two seconds will allow chair to swivel for six seconds or until the swivel or any other button is pressed. Press and hold the swivel button for longer than two seconds will allow the chair to swivel until the button is released. See "Swivel Operation" on page 11 for more details.
2	Back Buttons/Pedal	Raises or lowers the backrest by pressing the desired direction. Button is non-functional on the 421 Chair.
3	Tilt Buttons/Pedal	424 Only: Decreases or increases the angle of the seat by pressing the desired direction
4	Lift Buttons/Pedal	Raises or lowers the chair top by pressing the desired direction
5	Program Buttons	Moves the chair to a user programmed position
6	Enter Button	Press this button followed by a program button to save the current position of the chair as a programmed position.
7	Return Button	Returns the chair to the home position (Lift Down, Tilt Down, Back Up, and Foot Down)
8	Stop Button	Stops all movement of chair

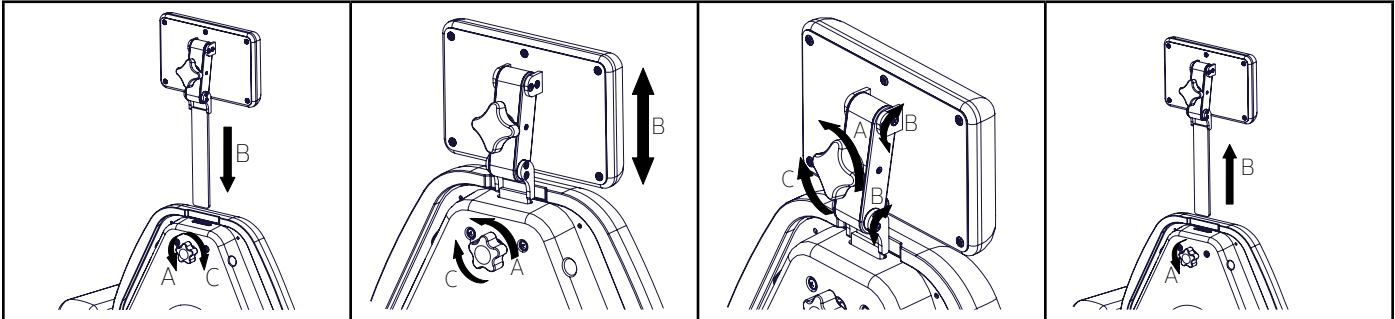
### NOTICE/AVIS

For additional safety, any button will stop all motions except for the same button that was pressed to initiate movement.

Pour plus de sécurité, n'importe quel bouton peut arrêter tous les mouvements à l'exception du bouton même qui a été pressé de commencer le mouvement.

## Headrest Operation

Articulating and Non-Articulating Headrests



1. To install the headrest:

A. To loosen, turn the knob on the back of the chair counterclockwise.

B. Insert the headrest through the slot in the top of the backrest.

C. To secure, turn the knob clockwise.

2. To adjust the height of the headrest:

A. To loosen, turn the knob on the back of the chair counterclockwise.

B. Adjust the height of the headrest.

C. To secure, turn the knob clockwise.

3. To adjust the angle of the headrest (Articulating only):

A. To loosen, turn the knob on the back of the headrest counterclockwise.

B. Adjust the position and angle of the headrest.

C. To secure, turn the knob clockwise.

4. To remove a headrest:

A. To loosen, turn the knob on the back of the chair counterclockwise.

B. Pull the headrest completely out of the back.

## Manual Backrest Operation

This section only applies to the 421 Model Exam Chair.

To position the backrest, pull up or down on the lever on the back of the chair, position the backrest to the desired location, then release the lever (Figure 1).

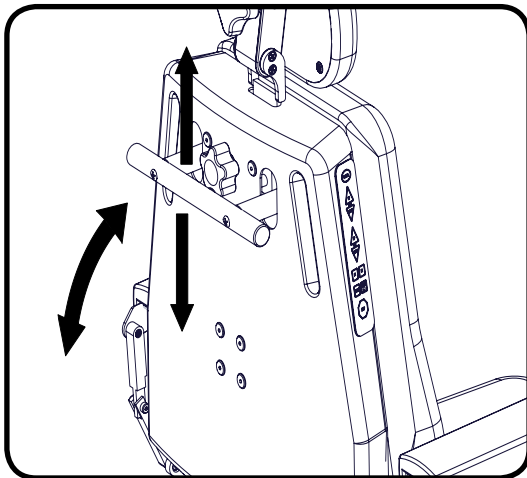


Figure 1

## Flip-up Armrest Operation

To raise the armrest: press the joint of the arm backwards while lifting the front of the arm (Figure 2).

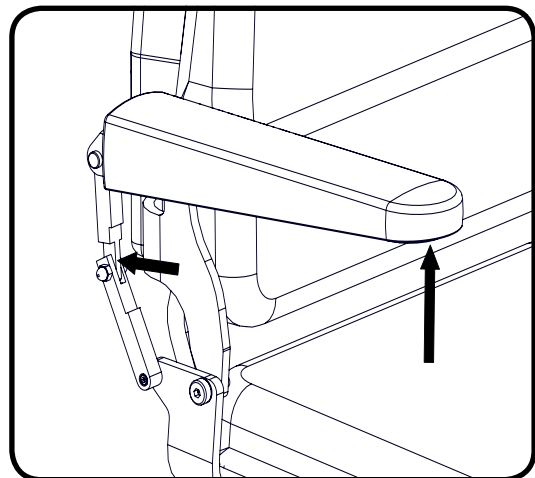


Figure 2

To lower the armrest, swing the arm down. The joint will lock in place when fully lowered.

## Swivel Operation

The swivel is a factory installed feature for the 421/423/424 Model chairs. See also "Controls" on page 9 of this manual. Swivel mode is the condition when the swivel lock is unlocked and the chair can swivel freely.

There are two methods to operate the swivel on the 421/423/424 Model chairs. Follow the step(s) below for the desired method.

Method 1: Auto engage mode is a swivel mode which will unlock the swivel for 6 seconds and automatically engage the lock after 6 seconds.

1. Press the swivel button on the control and release it within two seconds.
2. Swivel enters swivel mode for 6 seconds.
3. Swivel the chair to the desired location.
4. After 6 seconds swivel lock will automatically engage.
  - If the chair is in swivel mode and the swivel button is pressed again, the swivel lock immediately engages.
  - If the chair is in swivel mode and any other command button is pressed, the swivel lock immediately engages.

Method 2: Press and hold mode is a swivel mode where the swivel will unlock as long as you hold down the swivel button on the control. Once you release the swivel button, the swivel lock will engage.

1. Press and hold swivel button on the control for longer than two seconds.
2. Swivel enters swivel mode until swivel button is released.
3. Swivel the chair to the desired location.
4. Stays in swivel mode as long as the swivel button is held down and immediately engages swivel lock upon button release.

### NOTICE/AVIS

*The swivel will lock if the swivel is unlocked and another button is pressed.*

*Le pivot se bloque si le pivot est déverrouillé et un autre bouton est pressé.*

### NOTICE/AVIS

*The swivel will unlock if the chair loses power. If power is lost, install the swivel bolt removed in step 11 of the Set-up instructions on page 8.*

*Le pivot va déverrouiller si l'équipement perd son alimentation. Si l'alimentation est perdue, installez le boulon pivotant retiré à l'étape 11 des instructions de configuration à la page 8.*

## LIST OF ACCESSORIES

DESCRIPTION	USE	RESTRICTIONS
Auto-swivel Disengagement Kit	Provides a switch to manually unlock swivel for free swivel motion.	Installed on front of chair base on patient's right hand side only.
Foot Control w/ Wiring Harness	Provides the chair with the ability to control its motion with a foot control.	Factory installed option only
Headrest, Articulating Oval, Deep Oval, Prosthetic, Round, Horseshoe/ Donut	Provides a dual articulating surface with various pillow shapes/sizes to support a patient's head.	
Headrest, Non-Articulating Oval, Rectangular	Provides a surface with oval or rectangular pillow shapes which do not articulate.	
IV Rod and Holder	Provides an adjustable IV rod mounted to a 1" post.	Requires a 1" Post Accessory.
Light, LED Exam (Chair Back Mounted)	Provides lighting during patient procedures.	Cannot be used with Paper Roll Holder.
Light, LED Exam (Post Mounted)	Provides lighting during patient procedures.	Requires a 1" Post Accessory.
Mayo Tray, 1" Post Mounted	Provides a 1" post with a tray for the placement of small instruments.	Mounts on patient's left hand side only
Mayo Tray, 1" Post Mounted with Light mount	Provides a 1" post with a tray for the placement of small instruments and a mount for an exam light.	Mounts on patient's left hand side only
Paper Roll Holder	Used for mounting a paper roll to the back of the chair. LRX Chairs can be mounted on chair back or footrest extension.	Accepts 18" (45.7 cm) wide paper. Not compatible with back mounted exam light.
Post, 1"	Provides a post for mounting an exam light.	Mounts on patient's left hand side only
Power Cord with 90 degree plug, 3'	Provides a 3' power cord with a 90 degree plug	
Restraint Strap, Leg	Provides a strap to secure the patient's legs.	

## MAINTENANCE

### **WARNING/AVERTISSEMENT**

*There are no user serviceable parts inside. Refer all servicing to a qualified service technician.*

*Aucune pièce interne ne peut être réparée par l'utilisateur. Adressez-vous à un technicien qualifié.*

### **WARNING/AVERTISSEMENT**

*After equipment is serviced, verify programmable positions are safe and known positions.*

*Après l'équipement est révisé, vérifier les positions programmables sont des positions sûres et connues.*

### **WARNING/AVERTISSEMENT**

*The Control of Hazardous Energy (lockout/tagout) §1910.147 procedure must be followed to disable equipment, preventing the release of hazardous energy while performing servicing and maintenance activities.*

*La procédure de La Maîtrise des Énergies Dangereuses (lockout/ déconsignation) § 1910.147 doit être suivie pour désactiver l'équipement, empêchant la libération des énergies dangereuses lors de l'exécution des activités de maintenance et d'entretien.*

### **CAUTION/PRÉCAUTION**

*This equipment may be damaged by solvents and dyes. Immediately remove any fluids spilled on the equipment.*

*Cet équipement peut être endommagé par des solvants et des colorants. Retirer immédiatement tout liquide renversé sur l'équipement.*

### **CAUTION/PRÉCAUTION**

*Avoid contact with sharp or pointed objects. Do not place hard surface objects on the upholstery surfaces as temporary indentations or impressions in the upholstery cover will result. Prolonged contact with a hard or irregular shaped object may make the impression semi-permanent.*

*Éviter le contact avec des objets pointus ou tranchants. Ne placez pas d'objets de surfaces dures sur les surfaces de capitonnage d'ameublement, comme des empreintes temporaires ou des impressions dans le couvercle du capitonnage en résulteront. Un contact prolongé avec un objet en forme de disque ou irrégulière peut faire l'impression semi-permanente.*

### **CAUTION/PRÉCAUTION**

*Any sprayed disinfectant or cleaning solution should be wiped up immediately after application and not let to stand. A small sample area should be tested before any large application of any cleaner/disinfectant.*

*Tout désinfectant pulvérisé ou solution de nettoyage doivent être essuyés immédiatement après l'application et ne pas laisser reposer. Une petite zone de l'échantillon doit être testé avant toute application complète d'un nettoyant/désinfectant.*

### **CAUTION/PRÉCAUTION**

*Avoid prolonged direct sunlight exposure to preclude color change of the plastic.*

*Évitez l'exposition directe au soleil prolongée pour empêcher le changement de couleur des éléments en plastique.*

### **NOTICE/AVIS**

*MTI recommends cleaning the equipment frequently.*

*MTI recommande de nettoyer l'équipement fréquemment.*

## Cleaning and Disinfection

### **⚠ WARNING/AVERTISSEMENT**

*Avoid spraying any liquid on or around the hand switches mounted to the backrest. Excessive moisture will cause malfunction of the hand switches and equipment. Failure to comply may result in undesired or unplanned movement of the equipment.*

*Évitez de pulvériser un liquide sur ou autour des interrupteurs à main montés sur le dossier. Une humidité excessive entraînera un dysfonctionnement des interrupteurs à main et de l'équipement. Le non-respect peut entraîner des mouvements indésirables ou imprévus de l'équipement.*

### **Upholstery**

Upholstery should be cleaned weekly with a mild liquid soap and warm water mixture. Afterwards, wipe upholstery with clean damp cloth.

MTI's standard policy on disinfecting MTI medical equipment is to use a 10% sodium hypochlorite (bleach) and 90% water solution. If stronger or other disinfecting and cleaning solutions are used, the surface is at risk to be damaged or possibly cause discoloring, cracking, or other types of damage to the surface. See current CDC Guideline for Disinfection and Sterilization in Healthcare Facilities.

MTI understands that many customers prefer to use a pre-mixed disinfecting solution in a spray or wipe. It is MTI's recommendation not to use sprays because over time the overspray will cause damage to the surfaces if not immediately wiped up. MTI recommends hand towels or wipes to avoid the possibility of overspray. Once the approved contact time has been obtained, remove and dry excess liquid remaining on the surface.

See "MTI Cleaning Solution Recommendation Letter" for more details on disinfecting solutions which have been tested on MTI's products. It is available for download at <http://www.mti.net/downloads.aspx> in the Product Support Bulletins folder, found under the Resources tab on our website. In the U.S. & Canada call (888) 520-4998 or International call (801) 875-4998 to request a copy.

### **Painted and Plastic Surfaces**

All painted metal parts have been electrostatically painted and the paint is baked on for durability. These surfaces should be wiped down with a quality grade cleaner and a soft cloth or a damp cloth with mild soap once a week.

## Preventative Maintenance

Periodically inspect the following areas:

1. All fasteners and pins should be in place and tightened securely.
2. Lubricate pins and moving joints as needed with lithium grease.
3. Power cord should be free of cuts or other visible damage.
4. All mechanical functions should operate properly.

Have an authorized service technician inspect your equipment once a year.

## Fuse Replacement Instructions

1. Unplug the chair.
2. Open the fuse drawer below the female connection for the power cord.
3. Remove the burnt fuse(s). (Needle nose pliers or hemostats may be needed.)
4. Insert new fuse(s) with same type of fuse removed in step 3. (See figure 1 below) See "SPECIFICATIONS" on page 17 for fuse type.
5. Close the fuse drawer.
6. Reinsert the power cord into the base of the chair and secure it with the retainer clip.

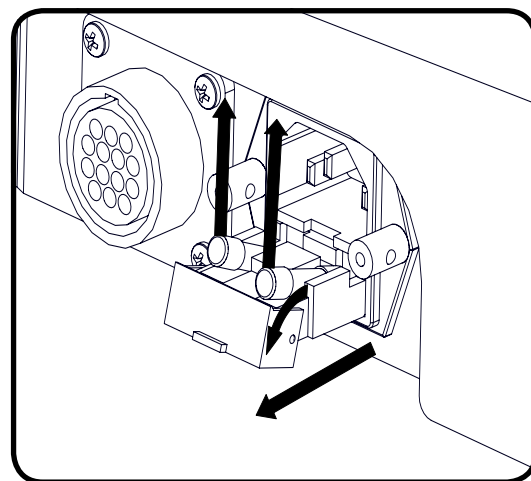


Figure 1

## Scuff Cover Replacement Instructions (LRX Models)

1. Remove the foot cushion from the chair by loosening the two screws on the underside of the foot using a Phillips screwdriver. (See also "Unpacking and Set-up" on page 8.)
2. Remove the scuff cover from the foot section (attached with Velcro®).
3. Place the replacement scuff cover on a flat surface.
4. Place the foot cushion on top of the scuff cover, centered left to right. (See "Figure 1" on page 15.)
5. Align the edge of the Velcro® on the bottom edge of the scuff cover with the foot cushion. Stretch the scuff cover over the bottom edge.
6. Slide the foot cushion on the scuff cover to tighten.
7. Stretch the sides and attach the Velcro® in 2 places on each side.
8. Reattach the foot cushion to the chair. (See also "Unpacking and Set-up" on page 8 for installation instructions.)

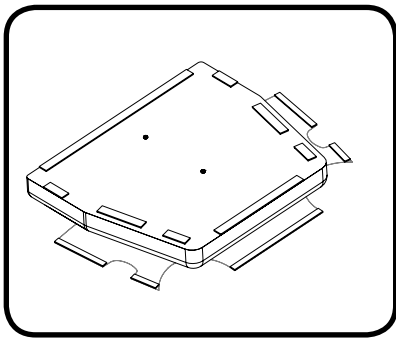


Figure 1

## Calls for Service

Equipment's model and serial number information are required when calling for service.

Serial number is indicated by the **SN** symbol located on the serial number tag.

If service is required, contact MTI

U.S. & Canada 888-520-4998

International 801-875-4998

Fax (801) 952-0548

customer.service@mti.net

Monday-Friday 8:00 am - 5:00 pm (MST)

www.mti.net

## LIMITED WARRANTY

Medical Technology Industries, Inc. (hereinafter referred to as MTI), shall repair or replace products of its manufacture, which prove to be defective in material and/or workmanship for a period of twelve (12) months from the date of shipment to the customer (the "Warranty Period"). MTI will, at its option, provide parts to the customer or repair the defective part at MTI's factory or authorized repair facility. Except as it may otherwise specifically agree in writing, MTI shall not be liable for transportation or labor charges for repairs or adjustments or other work done on any of its products by MTI's authorized dealers or service organizations.

Customer shall notify MTI of any alleged claim or defect within fourteen (14) days from the date customer discovers, or upon reasonable inspection should have discovered, such alleged claim or defect (but in any event before the expiration of the Warranty Period). All repair parts are warranted for Ninety (90) calendar days from the date of shipment to the customer. Warranty is non-cumulative.

This warranty does not apply to any part or product which upon examination by MTI or its authorized agents indicates the product has been repaired or altered in any way by persons other than MTI or its authorized agents, has been misused, abused or used in a manner contrary to any instructions issued by MTI. Any parts or products claimed under this warranty must be properly packaged by customer and returned to MTI's factory with no liability to MTI for the parts, products or transportation charges thereon.

In no event, shall MTI have any liability for consequential, indirect, incidental, special, exemplary, punitive or enhanced damages, lost profits or diminution in value arising out of or relating to a product defect or the repair or replacement of any products manufactured or sold by it.

THE FOREGOING LIMITED WARRANTY IS MADE IN LIEU OF ALL WARRANTIES EXPRESSED OR IMPLIED, AND MTI MAKES NO OTHER WARRANTY WHATSOEVER WITH RESPECT TO THE PRODUCTS INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

## TROUBLESHOOTING GUIDE

### NOTICE/AVIS

For more information on this equipment, including circuit diagrams, parts and service manuals, and other descriptions, please contact MTI.

Pour plus d'informations sur cet équipement, y compris des schémas de circuits, les manuels de service et pièces, et autres descriptions, s'il vous plaît contacter MTI.

#	SYMPTOM	PROBLEM CAUSE	SOLUTION
1	Chair will not function.	Chair power cord is not plugged in.	Verify power cord is securely connected at both ends.
2	Chair will not function.	Facility power receptacle problem.	Check facility's power receptacle with a known working device of same voltage specifications.
3	Chair will not function.	Facility power receptacle problem.	Check facility circuit breaker to verify it is not tripped.
4	Chair will not function.	Facility supply voltage is incorrect voltage.	Verify voltage is per specifications on chair serial number/product tag.
5	Chair will not function.	Fuses have blown	Verify fuses are not burnt. Replace fuse(s) if necessary. See "Fuse Replacement Instructions" on page 14.
6	Chair will not function or a function is erratic.	Controls are not securely connected.	Verify each control is securely connected to the chair.
7	Chair will not function or a function is erratic.	Circuit board isn't functioning correctly.	Contact Customer Service.
8	Lift function is slower than usual and only goes up about halfway.	One of the lifting column motors is not functioning or circuit board isn't functioning correctly.	Contact Customer Service.
9	Back, Tilt, or Lift functions will not function.	Circuit board has disabled motor(s). The controller may disable individual motor(s) to prevent motor damage in the event that a failure in the circuit board is detected or unusual motor operation has occurred.	Reset circuit board. Unplug the chair from power and wait one minute and plug it back in. Note: The back button on the 421 model chairs is non-functional.
10	Back, Tilt, or Lift functions will not function.	Motor is not functioning or circuit board isn't functioning correctly.	Contact Customer Service.
11	The circuit board has to be reset often.	Possible faulty circuit board.	Contact Customer Service.
12	Swivel will not lock.	Wiring, switch, and/or circuit board is not functioning correctly.	Contact Customer Service.

## SPECIFICATIONS

DESCRIPTION	SPECIFICATION
Lifting Capacity	650 lbs (295.45 kg)
Weight of Chair* 424H/424L 424H-LRX/424L-LRX 423H/423L 423H-LRX/423L-LRX 421H/421L	322 lbs (146 kg)/318 lbs(144 kg) 308 lbs (140 kg)/304 lbs (138 kg) 306 lbs (139 kg)/302 lbs (137 kg) 292 lbs (133 kg)/ 288 lbs (131 kg) 314 lbs (143 kg)/310 lbs (141 kg)
Shipping Weight of Chair* 424H/424L 424H-LRX/424L-LRX 423H/423L 423H-LRX/423L-LRX 421H/421L	409 lbs (186 kg)/405 lbs (184 kg) 395 lbs (179 kg)/391 lbs (177 kg) 393 lbs (178 kg)/389 lbs (176 kg) 379 lbs (172 kg)/375 lbs (170 kg) 401 lbs (182 kg)/397 lbs (180 kg)
Table Top Range	Low models: 19" (48.3 cm) to 30.5" (77.5 cm) High models: 21" (53.3 cm) to 37" ( 94.0 cm)
Back Section Range	0° (horizontal) to 82° ± 5°
Table Top Tilt Range	424: 0° to 15°
General Dimensions (with headrest retracted)	26" (66 cm) wide x 72.5" (184.2 cm) long
Power Cord	Plugs: U.S.A. standard 3 prong and IEC 60320-C13
Electrical Ratings:	115 VAC ± 10%, 4 amps, 60 HZ 230 VAC ± 10%, 2 amps, 50 HZ
Fuse Replacement	PC Board: 32 V, 20 A, Fast Acting, 6.3 mm x 32 mm At power cord inlet: 250 V, 4 Amp, Slo-Blow, on 115 V, 5mm x 20mm 250 V, 2 Amp, Slo-Blow, on 230 V, 5mm x 20mm
Duty Cycle	Intermittent Operation, 10% Duty Cycle Example: (1) minute on (9) minutes off
Classification	Class 1, Type B Equipment, Ordinary Equipment, Intermittent Operation
Listing/Approvals	ETL, UL 60601-1, 1st Edition, CAN/CSA-C22.2 No. 601.1-M90, CE
*Weight and dimensions may vary depending on accessories purchased and international shipment weights and dimensions may vary.	







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