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User Manual

450 Chair & 450W Table



450 CHAIR



450W TABLE

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APPLICABLE MODEL(S)

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

PART NUMBER	DESCRIPTION	EFFECTIVE S/N
4500001	450L Procedure Chair, 115V	140721001 - Current
4500002	450L Procedure Chair, 230V	140721001 - Current
4500003	450H Procedure Chair, 115V	140721001 - Current
4500004	450H Procedure Chair, 230V	140721001 - Current
4500005	450WL Procedure Table, 115V	140721001 - Current
4500006	450WL Procedure Table, 230V	140721001 - Current
4500007	450WH Procedure Table, 115V	140721001 - Current
4500008	450WH Procedure Table, 230V	140721001 - Current
4500020	450L Procedure Chair w/Swivel Base, 115V	140721001 - Current
4500021	450L Procedure Chair w/Swivel Base, 230V	140721001 - Current
4500022	450H Procedure Chair w/Swivel Base, 115V	140721001 - Current
4500023	450H Procedure Chair w/Swivel Base, 230V	140721001 - Current
4500024	450WL Procedure Table w/Swivel Base, 115V	140721001 - Current
4500025	450WL Procedure Table w/Swivel Base, 230V	140721001 - Current
4500026	450WH Procedure Table w/Swivel Base, 115V	140721001 - Current
4500027	450WH Procedure Table w/Swivel Base, 230V	140721001 - Current
4500028	450L Procedure Chair w/Mobile Base, 115V	140721001 - Current
4500029	450L Procedure Chair w/Mobile Base, 230V	140721001 - Current
4500030	450H Procedure Chair w/Mobile Base, 115V	140721001 - Current
4500031	450H Procedure Chair w/Mobile Base, 230V	140721001 - Current
4500032	450WL Procedure Table w/Mobile Base, 115V	140721001 - Current
4500033	450WL Procedure Table w/Mobile Base, 230V	140721001 - Current
4500034	450WH Procedure Table w/Mobile Base, 115V	140721001 - Current
4500035	450WH Procedure Table w/Mobile Base, 230V	140721001 - Current

REVISION HISTORY TABLE

DATE	REVISION	CO#/ECO#	DETAILS
11/21/2014	A	CO-0035	Initial release
11/06/2017	B	CO-143	Updated Safety Lockout Procedures
12/6/2019	C	CO-0187	Revised Proposition 65 Warning

User Manual

MTI 450 Chair & 450W Table

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/table 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*

SN	*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*
N	*Connection point for the neutral conductor* *Point de connexion pour le conducteur neutre*
L	*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 autorisé.

⚠ 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'autre 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

Turn the lockout switch to the off position to prevent unintentional chair movements caused by electromagnetic interference or radio frequency interference from other equipment or from accidental

activation of the chair controls. Failure to do so may result in personal injury. Turning the lockout switch off will not prevent non-powered motion.

Tourner l'interrupteur de verrouillage sur la position arrêt pour prévenir des mouvements non intentionnels de l'équipement causés par l'interférence électromagnétique ou des interférences radio-fréquence d'un autre équipement ou par une activation accidentelle des commandes de chaise. Tout manquement à ces directives peuvent provoquer des blessures graves. Le fait de désactiver le verrouillage n'empêche pas le mouvement non alimenté.

⚠ 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, appuie-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 can expose you to chemicals including nickel, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov and see www.mti.net/faqs for details on California Proposition 65.

Ce produit peut vous exposer à des agents chimiques, y compris le nickel, identifiés par l'État de Californie comme pouvant causer le cancer. Pour de plus d'informations, prière de consulter www.P65Warnings.ca.gov et voir www.mti.net/faqs pour les détails sur le Proposition de Californie 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 atteint 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 (115V Models) or 230V outlet (230V Models). 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) (modèles 115V) ou sur une prise de 230V (modèles 230 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

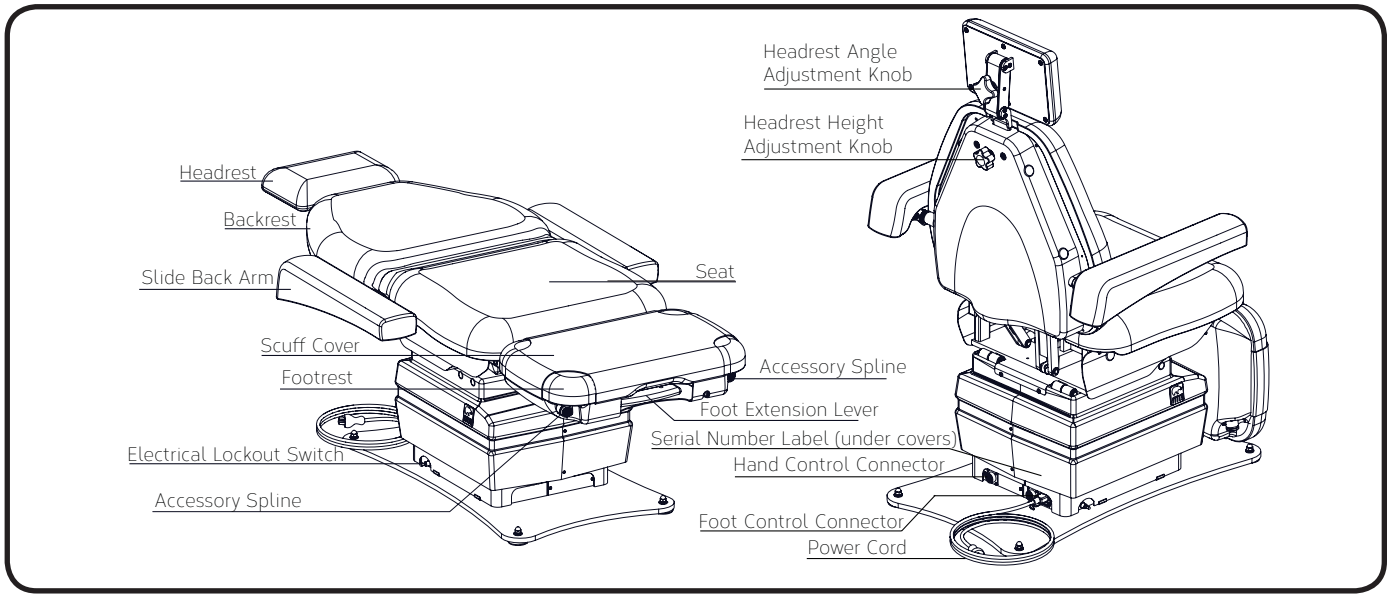
Description of 450 Chair and 450W Table

450 - A Quad-Power Exam Chair including power lift, back, tilt and foot with a 650 lb (295 kg) lift capacity and an extendable footrest. The chair is 24" (61.0 cm) wide with a 19" (48.3 cm) or 21" (53.3 cm) minimum height. The chair is used for positioning a patient for exams and procedures.

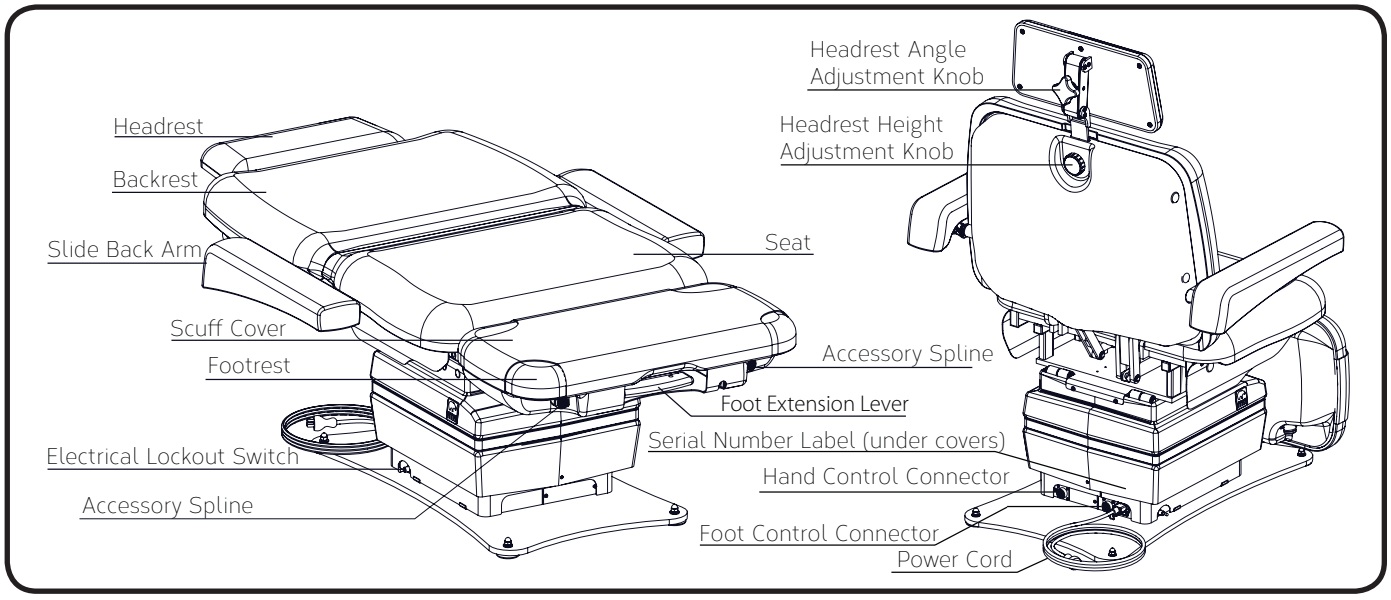
450W - A Quad-Power Exam Table including power lift, back, tilt and foot with an 800 lb (363 kg) lift capacity and an extendable footrest. The table is 30" (76.2 cm) wide with a 19" (48.3cm) or 21" (53.3 cm) minimum height. The table is used for positioning a patient for exams and procedures.

The 450 chairs and 450W tables may both be generally referred to as "chairs" for convenience in this manual.

450 CHAIR



450W TABLE



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 connaissement, prendre une photo, et signalez les dommages dûs au transporteur immédiatement. Demander une inspection par le transporteur en cas de dommage caché est noté.

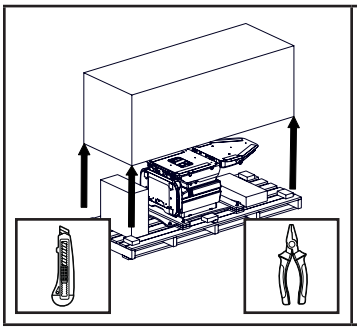
Required Tools

	7/16" Wrench 5/8" Wrench		Wire cutters		Utility Knife		Flat Head Screwdriver
	Phillips Screwdriver (#2)		5/64" Allen Wrench				

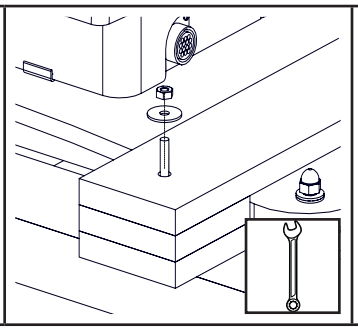
Explanation of Instructions

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.

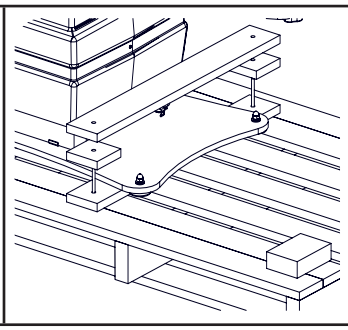
Unpacking and Set-up



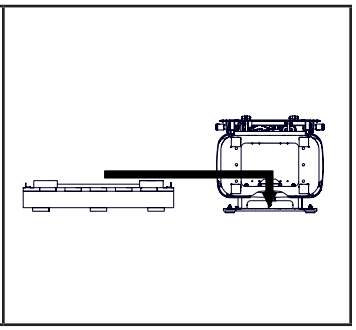
1. Remove shipping straps, shipping box, and other boxes from the pallet.



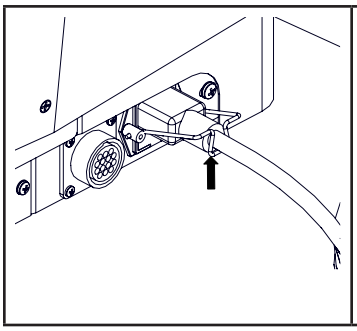
2. Remove (4) shipping bolts with 7/16" end wrench.



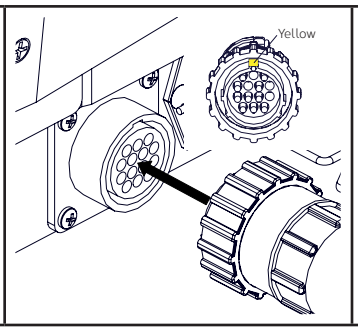
3. Remove braces from the top of baseplate. Braces will vary for swivel/mobile bases.



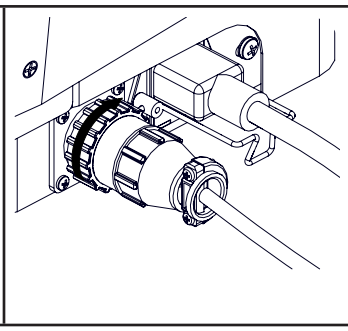
4. Slide chair off pallet. To move equipment, lift only from the equipment's main structure. Recycle or re-use pallet.



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.

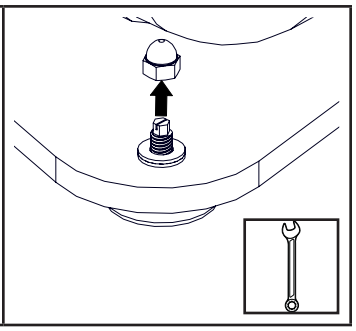


6. Install control(s) by aligning pins and tabs of the male control plug with chair receptacle by positioning the yellow mark on the plug body to the 12 o'clock position relative to the receptacle at the lower rear of the chair base.

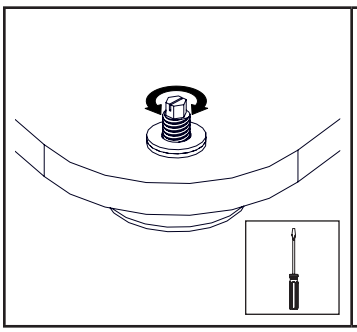


7. Secure the plug by rotating the locking ring clockwise until it engages. Rotate it until it stops.

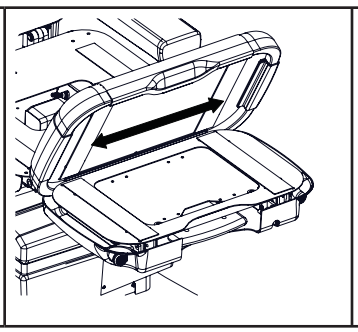
Steps 8 through 9 do not apply to mobile base chairs.



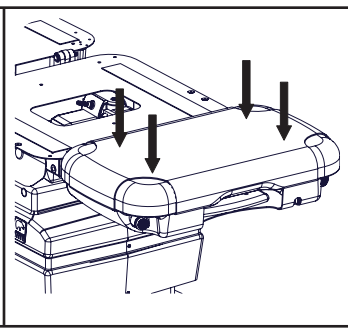
8. If chair base plate needs to be leveled, remove (4) acorn nuts from the top of the glides with a 5/8" wrench, otherwise proceed to step 10.



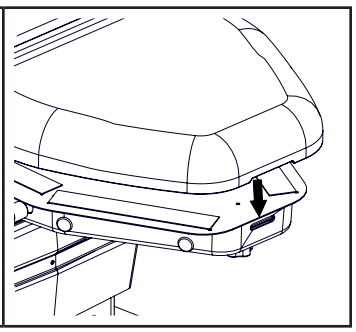
9. Adjust individual glides to level the chair, as needed, using a screwdriver. Reattach the acorn nuts.



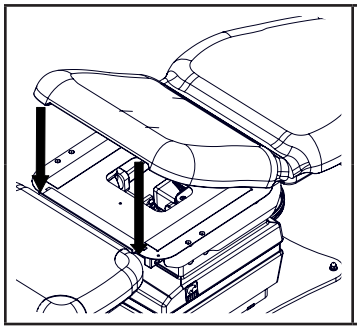
10. Install the upholstery by centering the foot cushion and aligning the back edge of the cushion against the chair's footrest.



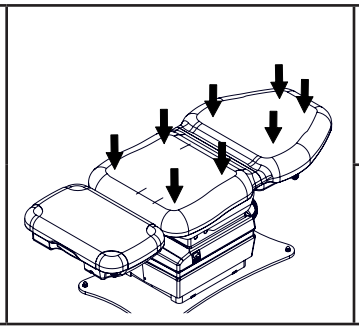
11. Rotate the cushion into place and press cushion onto the footrest by firmly pressing downward on the cushion.



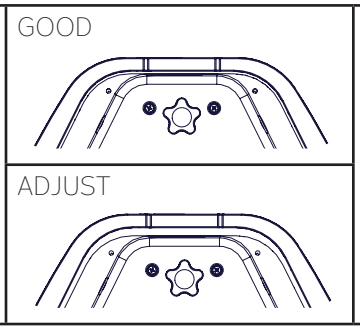
12. Align the back portion of the back/seat cushion with the top edge of the back of the chair. Press cushion down.



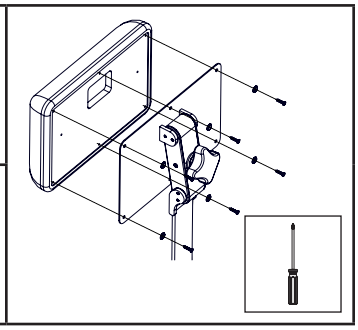
13. Align the seat portion of the back/seat cushion with the front edge of the seat of the chair. Press cushion down.



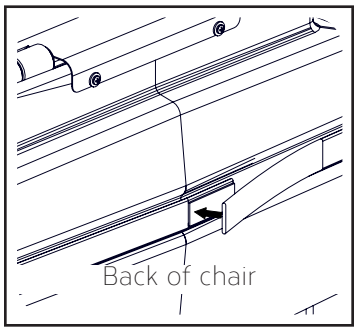
14. Press cushions onto the chair back/seat by firmly pressing downward on the cushion.



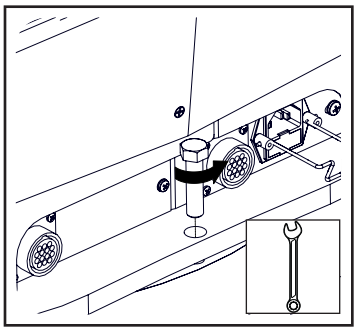
15. Raise the back of the chair and verify alignment of back cushion. Adjust if necessary.



16. Attach headrest cushion to hearest mechanism with (6) screws and washers using a #2 phillips screwdriver.



17. Wrap the decorative base strap around the plastic base cover and attach Velcro®.



18. Swivel base chairs only. Remove swivel bolt with 9/16" wrench.

Keep the bolt for use while the chair is not powered.

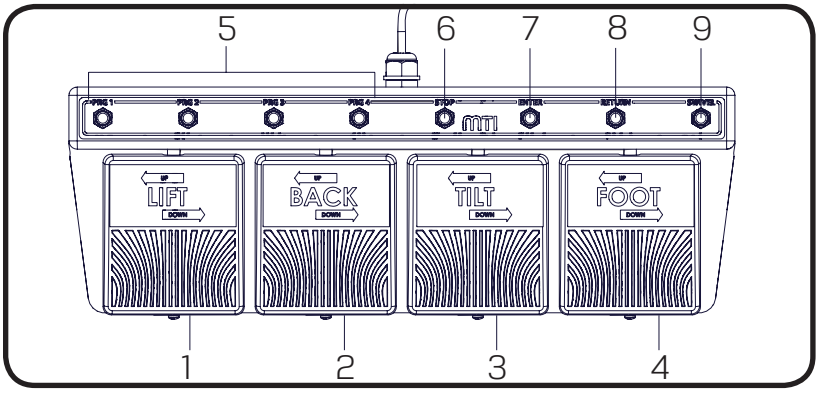
OPERATION

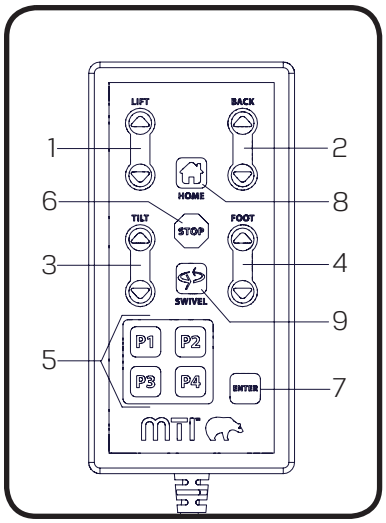
Operating Conditions

	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

Foot Control/Hand Control





ITEM	DESCRIPTION	FUNCTION
1	Lift Pedal/Button	Raises or lowers the chair top by pressing the desired direction
2	Back Pedal/Button	Raises or lowers the backrest by pressing the desired direction
3	Tilt Pedal/Button	Decreases or increases the angle of the seat by pressing the desired direction
4	Foot Pedal/Button	Raises or lowers the footrest by pressing the desired direction
5	Program Buttons (4)	Moves the chair to a user programmed position
6	Stop Button	Stops all movement of chair
7	Enter Button	Press this button followed by a program button to save the current position of the chair as a programmed position.
8	Return Button	Returns the chair to the home position (Lift Down, Tilt Down, Back Up, and Foot Down)
9	Swivel Button	Pressing and releasing the swivel button within two seconds will allow the chair to swivel for six seconds or until the swivel or any other button is pressed. Pressing and holding the swivel button for longer than two seconds will allow the chair to swivel until the button is released. See "Swivel Base Operation" on page 14 for more details.

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.

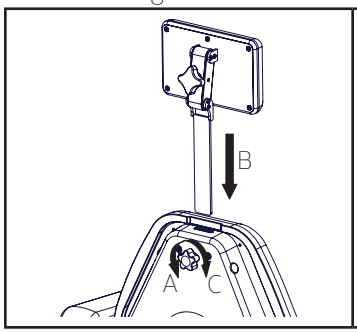
NOTICE/AVIS

Swivel button is present on foot control for swivel base chairs only.

Bouton pivotant est présente sur la pédale de commande pour les chaises avec une base pivotante seulement.

Headrest Operation

Articulating and Non-Articulating Headrests

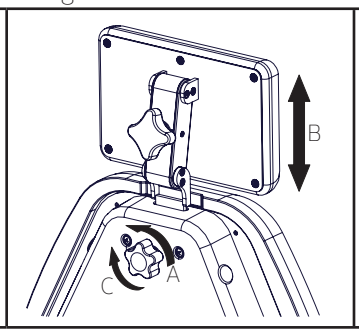


1. To install the headrest:

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, using caution to not overtighten the knob.

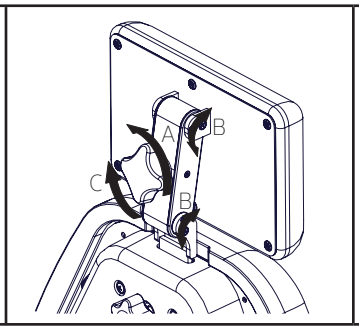


2. To adjust the height of the headrest:

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, using caution to not overtighten the knob.

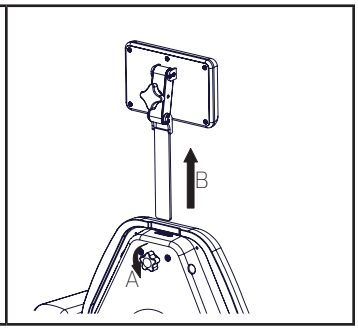


3. To adjust the angle of the headrest (Articulating only):

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, using caution to not overtighten the knob.

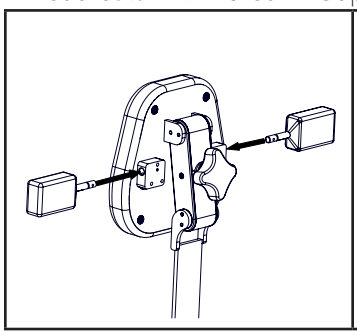


4. To remove a headrest:

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

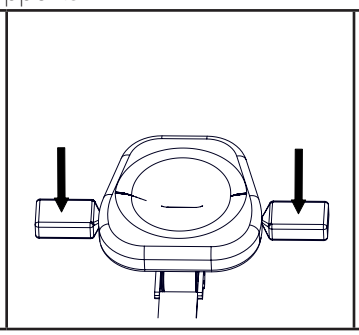
B. Pull the headrest completely out of the back.

Headrests with Forearm Supports



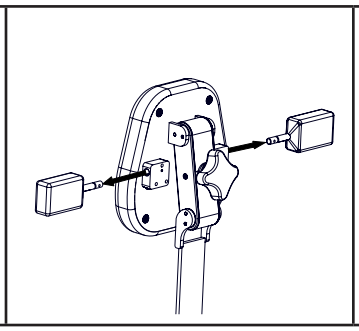
1. To attach forearm supports on the headrest:

Insert the rod of the forearm support into the headrest.



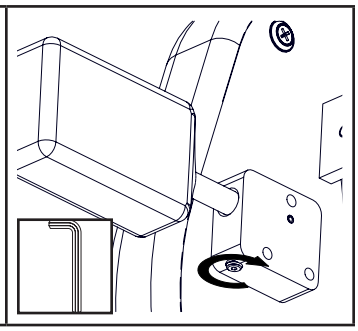
2. To use forearm supports:

Place forearms on the foam pads.



3. To remove forearm supports on headrest:

Pull the forearm support out.

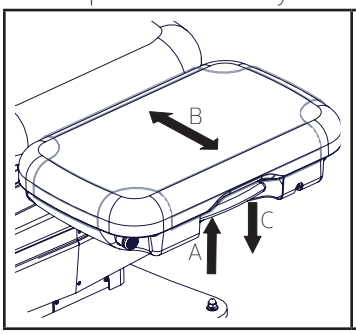


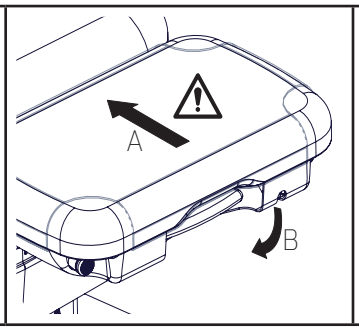
4. To adjust tightness of the forearm support:

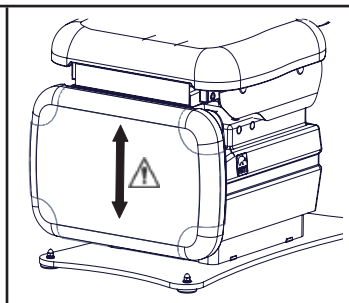
Tighten the set screw on the bottom side of the holding block by turning clockwise with a 5/64" Allen Wrench. Do not overtighten the set screw.

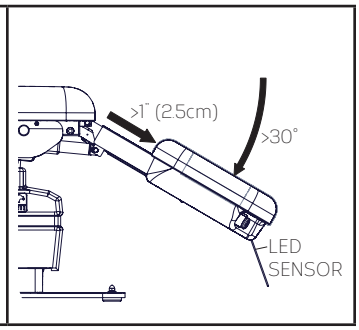
Footrest Extension

The following instructions illustrate the operation of the extendable footrest. The 450 and 450W chairs are equipped with an LED Operational Safety Sensor in the footrest which is designed to provide health care workers with operational safety of the chair.









1. To position the footrest:

A. Squeeze the lever towards the cushion.

B. Pull/push the footrest out/in to the desired position.

C. Release the lever.

⚠ WARNING/ AVERTISSEMENT

Retract the footrest (A) before pressing the return or a program button where the footrest (B) may hit the ground.

Rétracter le repose-pieds (A) avant d'appuyer sur le bouton de retour ou de programme où le repose-pied (B) peut toucher le sol.

⚠ WARNING/ AVERTISSEMENT

Use caution when adjusting the footrest while it is in the vertical position.

Soyez attentive pendant l'ajustement du repose-pieds lorsque qu'il est à la position verticale.

NOTICE/AVIS

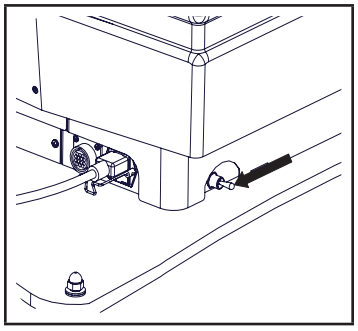
When the angle between the seat and the footrest is greater than 30 degrees and the footrest is extended, an LED proximity sensor is activated.

Lorsque l'angle entre le siège et le repose-pieds est supérieur à 30 degrés et le repose-pied est en extension, un capteur de proximité LED est activée.

The sensor will lock out all motion of the chair if the sensor is triggered by an object or the floor. In order to move the chair again, move the obstacle, or push in the footrest.

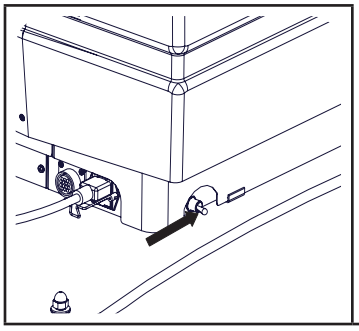
Electrical Lockout

The electrical lockout cuts power to all motors to eliminate possible EMI (electromagnetic interference) and RFI (radio frequency interference). This switch also resets the circuit board.



1. To lock out control of the chair.

A. Switch the toggle switch to the OFF position (pointing toward the backrest of the chair).



2. To enable control of the chair.

A. Switch the toggle switch to the "ON" position (pointing toward the footrest of the chair).

! NOTICE/AVIS

The toggle switch will not lock out non-powered motion such as footrest extension.

L'interrupteur à bascule ne sera pas verrouiller le mouvement non-motorisé tel que l'extension de repose-pieds.

Mobile Base Operation

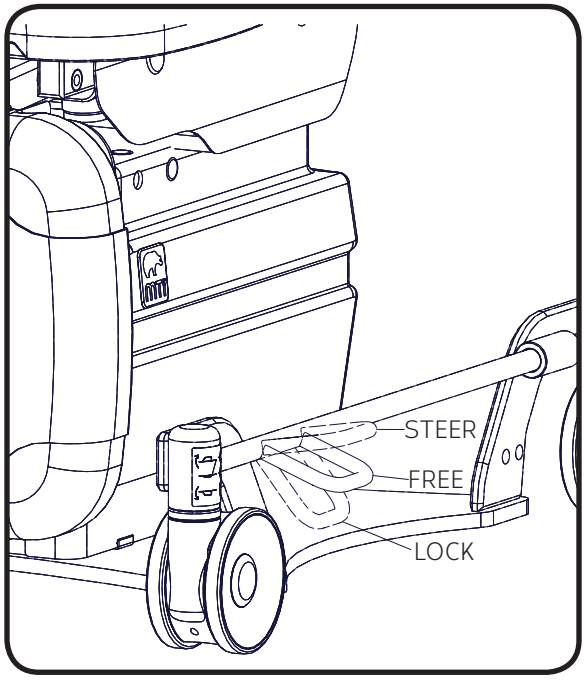
The mobile base is a factory installed option for the 450 and 450W Model chairs.

The two casters on the patient's right side and the rear caster on the patient's left side of the chair are Total Lock Casters. The front caster on the patient's left side is the Steering Caster.

In the FREE or STEER position, the Total Lock Casters will roll and swivel. In the LOCK position, the Total Lock Casters will not roll or swivel.

In the STEER position, the Steering Caster will roll but not swivel. In the FREE position, the Steering Caster will swivel and roll. In the LOCK position, the Steering Caster will not roll or swivel.

There are three modes for the offset locking bars. See image on right.



STEERING MODE: When the left-hand locking bar is in the STEER position and the right-hand locking bar is in the FREE or STEER position; the (3) Total Lock Casters will roll and swivel freely and the (1) Steering Caster will roll but will not swivel. This mode is used for transport as the Steering Caster acts as a steering wheel to aid in easy transport.

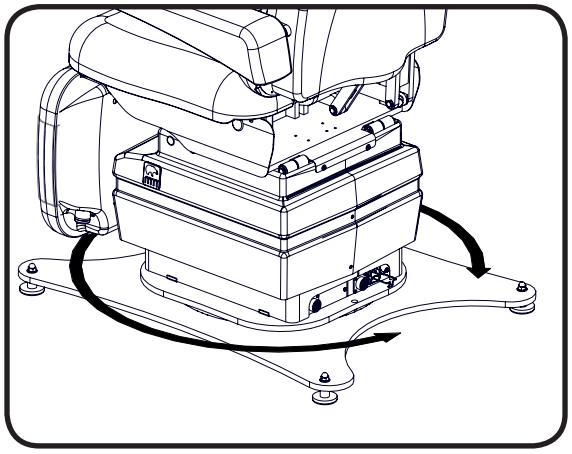
FREE MODE: When both offset locking bars are in the FREE position; all (4) casters will roll and swivel freely. This position is used when you need to pull the chair away from an object in a perpendicular direction, or turn the chair with a zero radius.

LOCKED MODE: When both offset locking bars are in the LOCK position; all (4) casters will not roll or swivel. This position is used to prevent unwanted movement of the chair.

Swivel Base Operation

The swivel base is a factory installed option for the 450 and 450W Model chairs. See also "Controls" on page 10 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 450 and 450W 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 the 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. The chair enters swivel mode until the swivel button is released.
3. Swivel the chair to the desired location.
4. The chair 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.

Le pivot va déverrouiller si l'équipement perd son alimentation.

LIST OF ACCESSORIES

DESCRIPTION	USE	RESTRICTIONS
Accessory Rail Mounting Bracket	Bracket to mount various devices such as hyfrecators and lights	Requires Base Rails Not compatible with Bed Rails
Arm, Deluxe 8-way 18" IV/Surgery (Floating or seat mounted)	Provides an articulating surface for patient's arms	Seat mounted requires seat rails
Arm, Standard 8-way, 18" IV/Surgery (Floating or seat mounted)	Provides an articulating surface for patient's arms	Seat mounted requires seat rails
Arm, Deluxe 8-way Back Rail Mounted 24" IV/Surgery	Provides an articulating surface for patient's arms	Requires Back Rails
Arm, Standard 8-way Back Rail Mounted 24" IV/Surgery	Provides an articulating surface for patient's arms	Requires Back Rails
Arms, Slide Back Floating (set)	Used by patient to rest their arms during exams/procedures	
Arms, Slide Back Floating w/ 2" Risers (set)	Used by patient to rest their arms during exams/procedures	
Arm, Standard 4-way Removable Patient Arm (Floating and Seat Mtd)	Used by patient to rest their arms during exams/procedures	Seat mounted requires seat rails
Base Mount 1/2" Post	Provides an additional base mount to facilitate moving 1/2" posts to other side of chair	
Bed Rails, Swing Up/Down (Floating)	Provides a vertical surface to secure patient	
Bed Rails, Swing Up/Down (Mounted to Slide Back Floating Arms)	Provides a vertical surface to secure patient	Requires Arms, Slide Back Floating
Body Strap	Used for securing a patient to the chair during procedures	
Casters with individual locks	Provides field installable casters to make chair	Not available on mobile or swivel base 450 Chairs. Not available on 450W Tables.
Corded Hand Control w/Mount	Provides an additional control for the chair and mount for hanging the hand control	
Debris Tray	Inserts in foot section for collection of debris during procedures	Only inserts into the spline mount on the patient's left hand side.
Hand Control Caddy, Flexible	Used to hold a hand control	Requires Seat or Base Rails
Hand/Arm Surgery Table	Provides an articulating surface for patient's arms	Requires Back Rails
Hand/Forearm Procedure Table (Floating or seat mounted)	Provides an articulating surface for patient's arms	Seat mounted requires seat rails
Headrest, Articulating Oval, Deep Oval, Prosthetic, Round, Horseshoe/ Donut	Provides a dual articulating surface with various pillow shapes/sizes to support patient's head	

LIST OF ACCESSORIES

DESCRIPTION	USE	RESTRICTIONS
Headrest, Non-Articulating Oval, Rectangular	Provides a surface with oval or rectangular pillow shapes which do not articulate.	
Headrest, Oval Articulating with Drape Support	Provides a dual articulating oval cushion to support the patient's head with an adjustable drape support rod.	
Headrest Stabilizer Cushion	Supports/stabilizes patient's head during procedure.	Deep Oval Articulating Headrest for removable wrist supports
IV Rod, Base Mounted	Provides an adjustable IV rod	
IV Rod and Holder, Post Mounted	Provides an adjustable IV rod mounted to a 1/2" Post.	1/2" Post
IV Rod and Holder, Base Mounted	Provides an adjustable IV rod mounted to Base Rails.	Base Rails
Leg Wrapping Support	Used for wrapping a patient's foot and leg.	
Leveling Glides, 2"	Provides taller leveling glides than standard.	Not available on mobile or swivel base chairs.
Light, Lumerus LED	Provides lighting during patient procedures.	Requires Base Mounted Post or Base Mounted Mayo Tray w/Light Adapter
Mayo Tray with Light Adapter, Base Mounted (RH/LH)	Combines a mayo tray and light on one mount.	Must be mounted on opposite side of Visual Block.
Mayo Tray, Base Mounted (RH/LH)	Provides a tray for the placement of small instruments and other items.	Must be mounted on opposite side of Visual Block.
Monitor Tray, Post Mounted	Mounts a patient monitor for viewing during procedures.	Requires Base Mounted Post
Oxygen Tube/Drape Support, Rigid	Used to supply oxygen to the patient and/or a rigid drape support	Requires Back Rails
Outlet Kit, Duplex, 115V (RH/LH)	Provides 115V power for accessories	Left and Right hand versions Not ambidextrous
Paper Roll Holder	Used for mounting a paper roll to the back of the chair.	18" (45.7 cm) for 450 21" (53.3 cm) for 450W
Post, Base Mounted (RH/LH)	Used in combination with a Monitor, Tray, or Light	Must be mounted on opposite side of Visual Block.
Power Cord with 90 degree plug, 3'	Provides a 3' power cord with a 90 degree plug	Not available on mobile or swivel base chairs.
Rail Clamp	Provides a clamp that can lock onto 1-1/8" x 3/8" size rails and accepts 5/8" post	

LIST OF ACCESSORIES

DESCRIPTION	USE	RESTRICTIONS
Rails, Back (set)	Provides standard hospital rails to the back of the chair for mounting accessories	
Rails, Base	Provides a rail for mounting an IV pole or accessory bracket	Cannot be used with Base Mounted Mayo Tray or Base Mounted post.
Rails, Seat (set)	Provides standard hospital rails to the seat of the chair for mounting accessories	
Restraint Strap, Leg	Provides a strap to secure the patient's legs	
Restraint Strap, Body with snaps or Velcro®	Provides a strap to secure the patient's body	Strap with snaps mounts to seat frame. Strap with Velcro® requires seat rails and fastens around seat rails
Slant Mount, Foot Control	Provides a slanted surface to mount a foot control at the rear of the chair	Cannot be used with Swivel Base Option.
Steering Handles, Back Rail Mounted Removable	Used for moving the chair	Requires Back Rails
Stirrups (LH/RH)	Used to position patients' legs during procedures	Requires Seat Rails
Syringe Bracket Holder	Provides a dovetail mount to attach a syringe holder to an IV/Surgery Arm	
Visual Block Curtain, Seat Mounted	A seat mounted curtain to shield procedures from the patient's view	Must be mounted on opposite side of Base Mounted Mayo Tray or Base Mounted Post
Wrist Support, Crescent or U Shaped	Provides an adjustable support for wrists during a procedure	Deep Oval Articulating Headrest for removable wrist supports

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

Upholstery

Upholstery should be cleaned weekly with a mild liquid soap and water mixture. Afterwards, wipe upholstery with a 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 & 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 25 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.

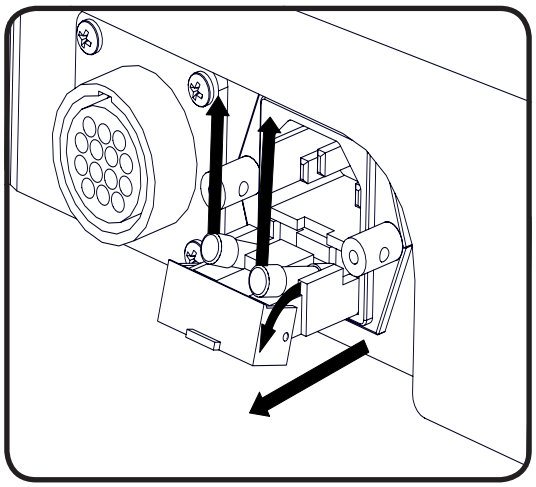


Figure 1

Upholstery Flap Replacement Instructions

Introduction

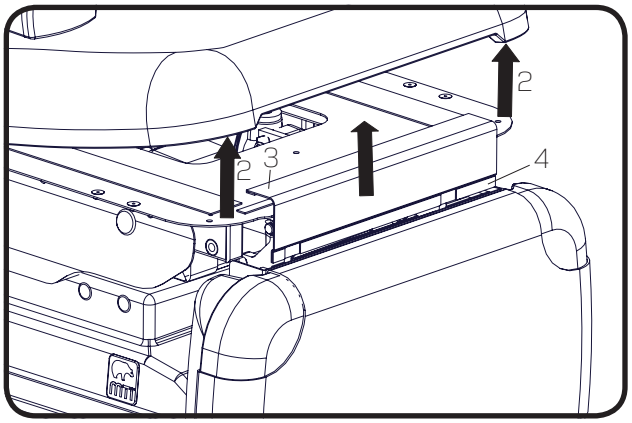
These instructions illustrate how to replace the upholstery flap located between the foot and seat sections in the 450 and 450W Procedure chair.

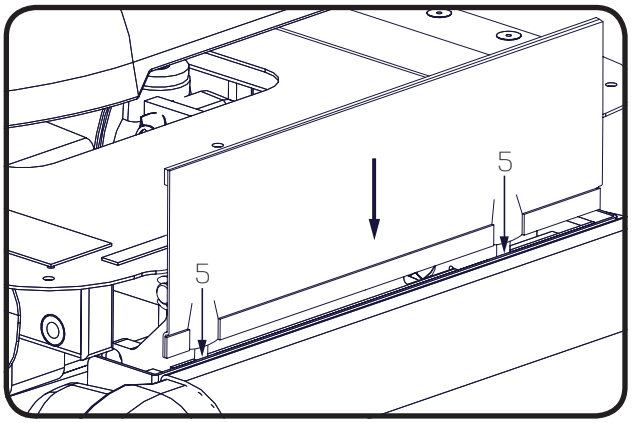
Required Tools

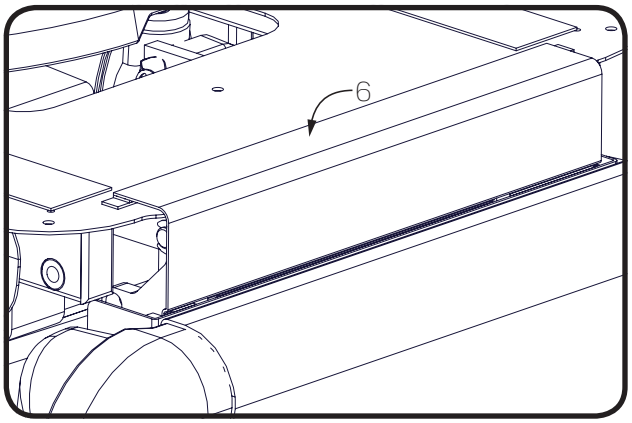
#2 Phillips screwdriver, flashlight (optional)

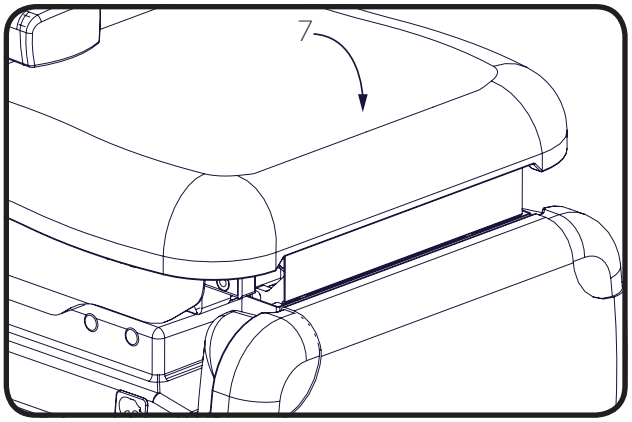
Procedure

1. Lower the foot section.
2. Remove or pull up on the seat portion of the upholstery.
3. Pull the upholstery flap off the seat.
4. Pull the upholstery flap off the foot.
5. Center the replacement flap with the foot section. Tuck the fabric in between the frame and top of the foot section frame, while avoiding attaching the Velcro®. When it has been tucked in all the way, fold the flap over the front of the foot and press the Velcro® together.
6. Lightly stretch the flap over the edge of the seat and secure the flap to the Velcro® on the seat.
7. Reattach the seat upholstery.









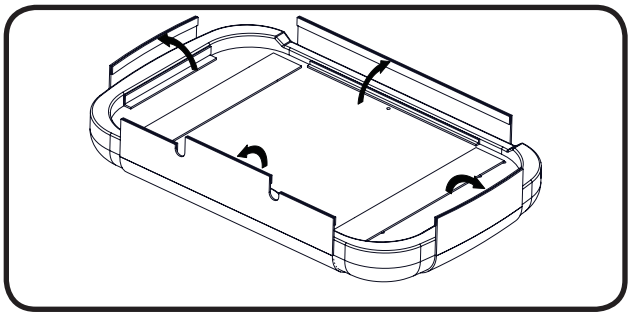
Scuff Cover Replacement Instructions

Introduction

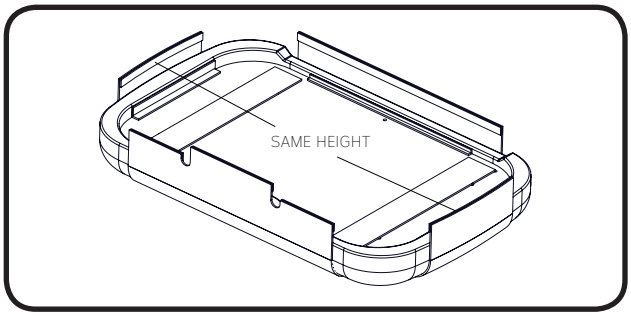
These instructions illustrate how to replace the scuff cover for a 450 and 450W Procedure chair.

Procedure

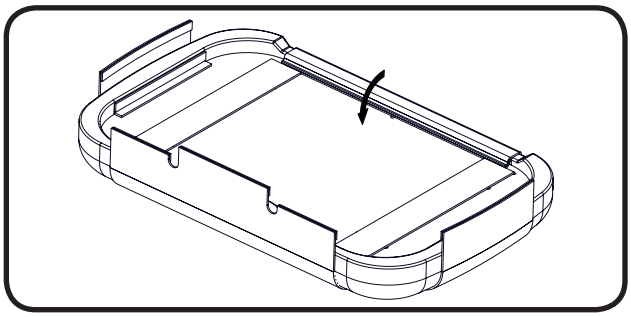
1. To remove the scuff cover, pull off the foot section and pull up the Velcro® on the underside.



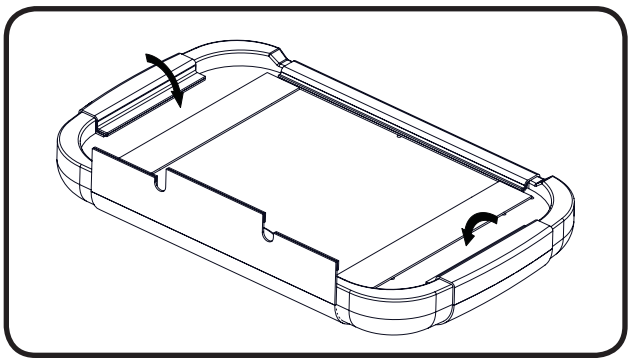
2. To attach the new scuff cover, place the scuff cover on a flat surface. Center the upholstery on the scuff cover. Check if it is centered by folding up the sides of the scuff cover.



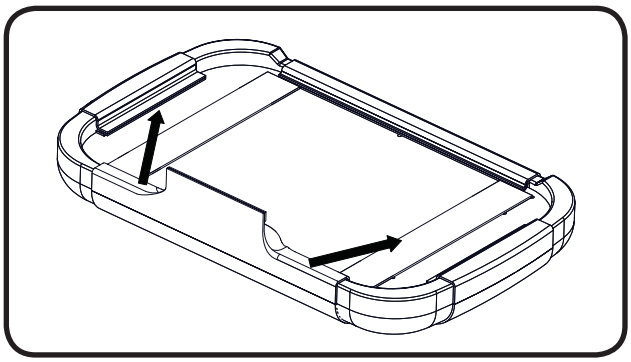
3. Attach the longest edge of the scuff cover to the foot cushion.



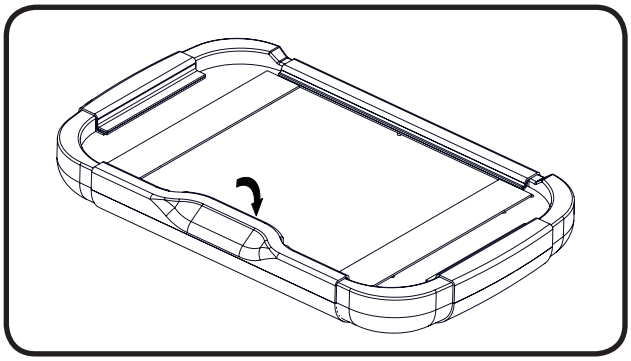
4. Attach the sides of the scuff cover to the upholstery cushion.



5. Stretch the two outside tabs of the 3 tab side of the scuff cover by pulling up and away from the center of the cushion and secure them to the Velcro®.



6. Stretch the center tab of the 3 tab side of the scuff cover over the edge of the cushion and secure it to the Velcro®.



7. Reattach the foot section upholstery by following "Unpacking and Set-up" on page 8.

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 motor will not function.	Electrical lockout switch is off	Flip the Electrical Lockout Switch. See "Electrical Lockout" on page 13
6	Chair will not function.	Fuses have blown	Verify fuses are not burnt. Replace fuse(s) if necessary. See "Fuse Replacement Instructions" on page 19.
7	Chair motor will not function.	Proximity sensor is triggered	Check for red proximity sensor light on footrest of the chair. If light is on, push in the footrest all the way. May encounter some resistance for the last 1" of travel. See "Footrest Extension" on page 12 for details regarding proximity sensor.
8	Chair will not function	Circuit board isn't functioning correctly	Contact Customer Service
9	Chair will not function or a function is erratic.	Controls are not securely connected	Verify each control is securely connected to the chair. See "Unpacking and Set-up" on page 8 for instructions how to securely connect controls

TROUBLESHOOTING GUIDE

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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
10	Back, Tilt, Lift or Foot 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. For chairs with a circuit board revision AG (June 2014) and after, flip the electrical lockout switch to "OFF" position, wait 2 seconds, and then flip the it on. See "Electrical Lockout" on page 13. For chairs with a circuit board revision AD and prior, unplug the chair from power and wait one minute and plug back in.
11	Back, Tilt, Lift or Foot functions will not function	Motor is not functioning or circuit board isn't functioning correctly	Contact Customer Service
12	The circuit board has to be reset often	Possible faulty circuit board	Contact Customer Service
13	The footrest is retracted and the footrest will stop before going home	Possible foot section wiring harness failure	Contact Customer Service
14	The footrest is extended, the angle of the footrest is horizontal, and the red proximity sensor light is on	Possible foot section wiring harness failure	Contact Customer Service
15	The footrest is angled down more than 30 degrees from the seat and the footrest is extended, the chair locks up and no command will move it and the red proximity sensor light is not on	Possible foot section wiring harness failure	Contact Customer Service
16	Swivel will not lock	Wiring, switch, and/or circuit board is not functioning correctly	Contact Customer Service
17	Foot section doesn't lock or is difficult to operate	Foot section slide or lock mechanism is damaged	Contact Customer Service

SPECIFICATIONS

DESCRIPTION	SPECIFICATION
Lifting Capacity	450: 650 lbs (295.45 kg)
	450W: 800 lbs (362.87 kg)
Weight of 450 Chair (Including Upholstery kit and foot control)*	w/Standard Base: 369 lbs. (167 kg)
	w/Mobile Base: 375 lbs. (170 kg)
	w/Swivel Base: 418 lbs. (190 kg)
Weight of 450W Table (Including Upholstery kit and foot control)*	w/Standard Base: 389 lbs. (176 kg)
	w/Mobile Base: 412 lbs. (187 kg)
	w/Swivel Base: 443 lbs. (201 kg)
Table Top Range	High Version: 21" (53.3 cm) to 37" (94.0 cm) Low Version: 19" (48.3 cm) to 30.5" (77.5 cm) w/Swivel Base adds 1.75" (4.5 cm) w/Mobile Base adds .8" (2.3 cm)
Back Section Range	0° (horizontal) to + 85° ± 5°
Table Top Tilt Range	0° to 30°
Foot Section Range	0° (horizontal) to + 90° ± 5°
Foot Extension	9"
Foot Control	Rated Drip Proof
Hand Control	Rated Drip Proof
General Dimensions (w/o headrest and footrest extended)	450: 24" (61 cm) wide x 68" (172.7 cm) long
	450W: 30" (76.2 cm) wide x 68" (172.7 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.	

NOTES

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