Maxi Sky 600, Maxi Sky 600 ECS Instructions for Use

ARJOHUNTLEIGH GETINGE GROUP

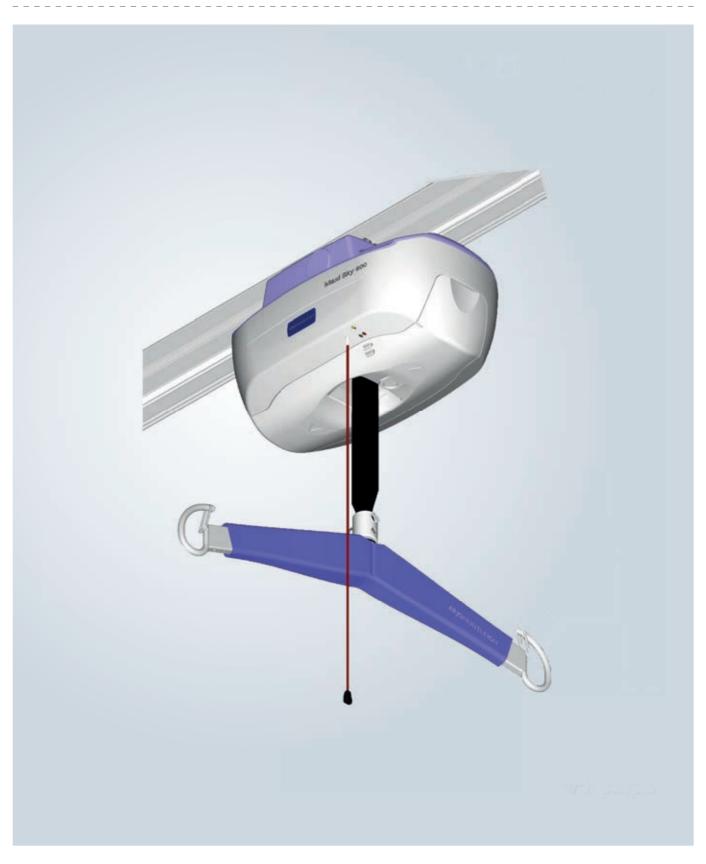




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General Information

Thank you for purchasing the Maxi Sky® 600 from ArjoHuntleigh.

Your Maxi Sky 600 lift is part of a series of quality products designed specially for home care, nursing homes and other health care uses.

We dedicated are serving your needs and providing the best products available along with training that will bring staff maximum your benefit from every ArjoHuntleigh product.

Foreword

Please read this manual in its entirety before using your *Maxi Sky 600* lift. The information in this manual is crucial to the proper use and maintenance of the *Maxi Sky 600*. It will help protect your product as well as ensure it performs to your satisfaction. Lifting and transferring a person always presents a potential risk. This manual contains safety related information that must be read and understood to help prevent injuries.

WARNING: ArjoHuntleigh strongly advises and warns that to avoid injuries that can be attributed to the use of inadequate parts, only parts designated by ArjoHuntleigh should be used on product and other appliances supplied by ArjoHuntleigh.

Unauthorized modifications on any ArjoHuntleigh product may affect its safety. ArjoHuntleigh will not be held responsible for any accidents, incidents or lack of performance that occur as a result of any unauthorized modification to its products.

Tested according to standards by CSA.

Service and Support

A service routine has to be done on your *Maxi Sky 600* lift by ArjoHuntleigh trained service personnel. This will ensure it remains safe and functional.

Please contact your local ArjoHuntleigh vendor for any of the following:

- If you require further information.
- Want to report an unexpected event, change in the performance or a malfunction.
- Need any help in setting up, using or maintaining your Maxi Sky 600.
- Need replacement parts.

Your ArjoHuntleigh vendor can offer support and service programs to maximize the longterm safety, reliability and value of the product.

Additional copies of this manual can be purchased from your local ArjoHuntleigh vendor. When ordering, include the *Instructions for Use* product number (see *front page*) and product identification number.

Manufacturer Information

This product has been manufactured by: ArjoHuntleigh AB Hans Michelsensgatan 10 211 20 Malmö,

Sweden

** : +46 (0) 10-335 45 00 ** : +46 (0) 413-138 76 ** : www.ArjoHuntleigh.com

General Information

Definitions Used in this Manual:

WARNING:

Means: Failure to understand and follow these instructions may result in injury to yourself and others.

CAUTION:

Means: Failure to follow these instructions may cause damage to the product.

NOTE:

Means: This is important information regarding the correct use of the product.

Intended Use

The Maxi Sky 600 lift is designed for lifting patients in a homecare setting, at nursing homes and other assisted living centers. Patient transferring is performed under the supervision of an appropriately trained caregiver staff in accordance with the instructions outlined in this manual. All other uses must be avoided.

The *Maxi Sky 600* must only be used for the purposes stated above, and must be installed by ArjoHuntleigh authorized personnel and in accordance with local codes.

Operational Life

The Maxi Sky 600 is designed and tested for a useful life of seven (7) years or 10,000 transfers—whichever comes first—subject to preventative maintenance as specified in the "Care and Maintenance" section in this manual. Time equivalence between the number of transfers versus the number of years is made clear in the table in Fig. 1.

Transfers per Day	Years (10,000 transfers)
4	7
6	4.5
8	3.5

Fig. 1

WARNING: The manufacturer cannot ensure full safety for a lift or an accessory of which the life span has been exceeded.

Use of such accessories may lead to a patient fall.

The red indicator light on the lift cassette will blink when it is about halfway to its useful life, and again to indicate the end of the useful life period.

The operating life of this equipment corresponds directly to the safe operating time period before a complete overhaul is required. Aging of the cassette, frequency of use (transfers per day), the weight of the patient and maintenance frequency are factors that have an impact on the *Maxi Sky 600* lift's life span. A transfer is defined as the displacement of a patient from one point to another. A transfer cycle includes a lifting and a descending action.

The expected operational life for fabric slings and fabric stretchers is approximately two years from date of purchase. This life expectancy only applies if the slings and stretchers have been cleaned, maintained and inspected in accordance with the ArjoHuntleigh Sling Application Guide, the Instructions for Use and the "Preventive Maintenance Schedule".

The expected life for other consumable products, such as batteries, fuses, lamps, slings, straps and cords is dependent upon the care and usage of the equipment concerned. Consumables must be maintained in accordance with published *Instructions for Use* and the "Preventive Maintenance Schedule".

How to Use this Manual

WARNING: Do not attempt to use this equipment without fully understanding the information contained in this manual.

Misuse of the *Maxi Sky 600* may lead to injury for the patient and/or the caregiver.

If anything is not completely understood, please contact your local ArjoHuntleigh agent for more details. Failure to comply with warnings in this manual may result in injuries.

Keep this manual with the lift cassette and refer to it as required. Make sure that all operators are regularly trained in the use of the equipment according to the information found therein.

General Information

Symbols Used

General Symbols	Key to symbols
	This symbol is accompanied by a date to indicate the date of manufacture and by the address of the manufacturer.
C€	This symbol indicates the products comply with the medical device directive 93/42/EEC.
c us	This symbol indicates the approval of the Canadian Standards Association.
REF	This symbol is accompanied by the manufacturer's catalogue number.
SN	This symbol is accompanied by the manufacturer's serial number.
ॐ ∏i	This symbol refers to the Instructions for Use.
X	This symbol indicates "separate collection" for all batteries and accumulators as per the WEEE Directive.
†	This symbol indicates a type BF applied part.
	This symbol indicates a risk of pinching.
\bigcirc	This symbol locates the emergency stop system on the lift cassette.
© <u>₿</u>	This symbol locates the emergency lowering system on the lift cassette.
SWL	Safe Working Load represents the maximum load the lifter is rated for safe operation.

General Symbols	Key to symbols
IP _{N1} N2	Degree of protection provided by enclosure. N ₁ : Ingress of particles, N ₂ : Ingress of water.
===	Direct current.
\sim	Alternating current.

Charger Related Symbol	Key to symbols
	This symbol indicates a class II electrical equipment: term referring to electrical equipment in which protection against electric shock does not rely on basic insulation only.

Definition of Acronyms

Acronym	Definition
DPS	Dynamic Positionning System
ECS	Enhanced Charging System
RTC	Return to charger
RTH	Return to Home
PDPS	Powered DPS
PPP	Preprogrammed Position
WEEE	Waste of Electronic and Electrical Equipment

Safety Instructions

General Instructions

Keep these Safety Instructions with the lift cassette at all times.

CAUTION: Do not drop the lift cassette. It may cause internal damage that is not easily seen. If the lift is suspected to be damaged, contact your local ArjoHuntleigh agent for servicing.

NOTE: ArjoHuntleigh lifts are specifically designed for KWIKtrakTM rail systems, ArjoHuntleigh slings and accessories.

Addendum for Rail System Other than KWIKtrak

ArjoHuntleigh could have adapted this lift cassette to be used with a rail system other than *KWIKtrak*.

If this is the case, an addendum (001-14250-**)* must be supplied with this Instruction for Use, please refer to the addendum for informations relevant to that specific rail system.

The addendum provides important informations relative to:

- Safe Working Load
- Rail System Limitations
- · description for specific parts.

Before using the *Maxi Sky 600*, make sure it is compatible with accessories installed on that rail system.

WARNING: Before using the *Maxi Sky 600* on a track system other than *KWIKtrak*, make sure you have read and understood the addendum supplied with this *Instruction For Use*.

Using the *Maxi Sky 600* with a non compatible track system may lead to patient fall.

Safe Working Load

The Maxi Sky 600 lift for KWIKtrak Rail System has been designed with a lifting capacity of 272 kg (600 lb)

WARNING: Installation or modification to installation shall always be done by ArjoHuntleigh's qualified technician.

Installation not complying to all safety rules coud lead to patient falling.

WARNING: The *Maxi Sky 600* lift is intended to be used for patients whose weight is within a specified safe working load. Do not attempt to lift more than the lowest weight limit indicated on the following:

- · the rail system;
- the Maxi Sky 600 lift cassette;
- on the spreader bar;
- on the accessories;
- · on the sling.

Overloading any of the listed items may lead to a rupture and cause a patient fall.

Important Safety Directions

Always ensure that:

- Always perform the recommended daily maintenance before using the lift. If there is anything you are not sure about, or if you notice any changes in the performance of your lift, contact your local ArjoHuntleigh agent.
- The product is used by trained staff as per instruction herein.

WARNING: A clinical assessment of the patient's suitability for transfer must be carried out by an health professional.

In certain cases, usage of a lift could affect patient's general condition.

- Special consideration is taken with a patient who is connected to electrodes, catheters or other medical devices.
- Violent impact during transfers is avoided.
- The lifting procedures outlined in this manual are followed.
- All controls and safety features are used only according to the rules specified in this manual. Never attempt to force a control or button on the lift.
- The charger is not stored in a shower, bath or other areas with high humidity.
- The sling is properly fastened.
- Any precautionary or instruction labels that cannot be easily read are replaced.

^{*.} Last two characters varies according to the manual language.

Safety Instructions

WARNING: ArjoHuntleigh warns of possible strangulation risks related to the lifting strap, the hand control cable or the emergency pull cord, and advises to take necessary precautions to prevent these.

WARNING: This product contains small parts that might present a chocking hazard to children if swallowed.

CAUTION: Keep all components of the lift clean and dry, and have electrical and mechanical safety checks done as instructed in the "Care and Maintenance" section of this manual.

CAUTION: Excessive exposure of the hand control to water (or other liquid) could cause malfunction of the device.

WARNING: Before each use, make sure all track end stoppers are in place and secured.

Absence of an end stopper could lead to patient fall.

Shock Prevention

- Do not touch or use a lift with bare conductors or a damaged power cord. Electrically live equipment can result in serious injuries. If the lift or charger has any exposed or damaged wires, contact your local ArjoHuntleigh agent immediately.
- Do not splash or expose the device to water or moisture.

Fire and Explosion Prevention

- Do not place or store the battery under direct sunlight or near a heat source.
- Do not expose the batteries or battery charger to flames.
- Do not use the charger in the presence of flammable anaesthetic gases.
- Do not short circuit the battery terminals.

Human and Environmental Safety Practices

- Should the battery casing crack and cause contents to come in contact with skin or clothing, rinse immediately with plenty of water.
- If contents come in contact with the eyes, rinse immediately with plenty of water and seek medical attention.
- Inhalation of the contents can cause respiratory irritation. Provide fresh air and medical attention.

For recycling and disposal of the lift casette
or the batteries, the rules according to the
WEEE directive as well as local laws and
regulations must be followed. If not they
may explode, leak and cause personal
injury. When returning batteries, insulate
their terminals with adhesive tape.
Otherwise, the residual electricity in used
batteries may cause fire or explosion.

Please consider that failure to properly dispose of this equipment and its parts according to local regulations may constitute an infraction as well as causing harm to the environment.

Battery and Battery Charger Safety Practices

NOTE: Following the instructions is important for the safe use of the battery.

WARNING: Do not operate the charger unit with a damaged cord or if the unit has been dropped or damaged.

Do not bend the power cord by force, or place a heavy object on it. This will damage the cord and may cause fire or electrical shock.

- Do not expose the battery charger to water.
- Do not expose the battery connector to water
- To avoid bodily injury, do NOT crush, puncture, open, dismantle or otherwise mechanically interfere with the battery.
- Be careful not to drop the batteries.
- Only use the charger that has been supplied with the equipment.
- Do not charge the batteries in an unventilated area.
- The charger must not be covered or exposed to dust.

Homecare Environment Considerations

WARNING: The *Maxi Sky 600* is not intended to be operated by children.

Serious injuries could occur.

NOTE: Cleaning actions are needed when the *Maxi Sky 600* is near animals. Pet hair trapped inside the device (through the strap opening) can reduce the product's performance.

Product Description

Maxi Sky 600 lift and Charger Station for KWIKtrak Rail System

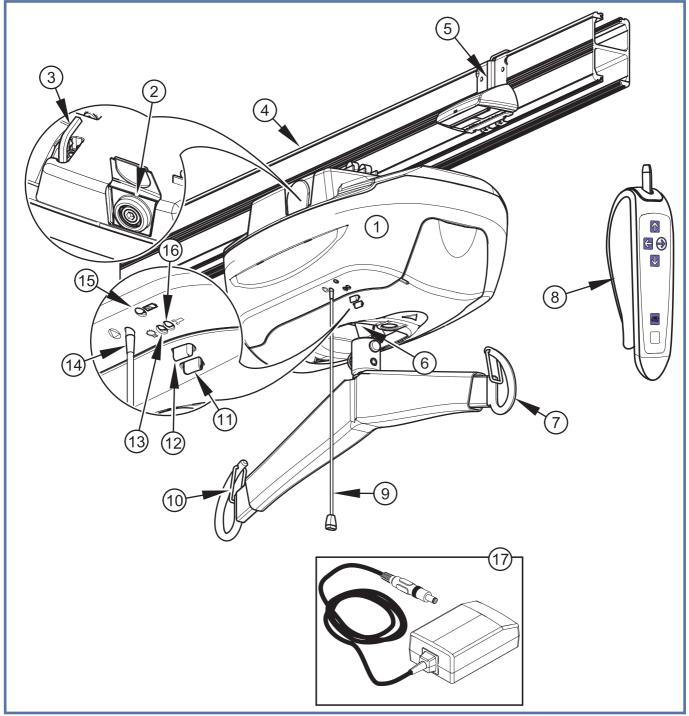


Fig. 2

Legend

- 1) Lift cassette
- 2) Emergency lowering mechanism
- 3) Allen key
- 4) KWIKtrak Rail
- 5) Charging station
- 6) Strap
- 7) Spreader bar
- 8) Hand Control
- 9) Red emergency pull cord

- 10) Safety latch
- 11) Up button
- 12) Down button
- 13) Green power light
- 14) Emergency switch plastic insert
- 15) Yellow charging light
- 16) Red maintenance/overload light
- 17) Wall-adapted charger

Product Description

Hand Control

The Maxi Sky 600 lift's hand control unit is used to operate the lift. Each function is described in Fig. 3. The UP and DOWN buttons raise or lower the spreader bar. With the four-function model, the LEFT and RIGHT buttons activate a lateral motor to move the lift along the rail. If you have a two-function model, the LEFT and RIGHT buttons will not function, and the lift must be moved manually.

The PROGRAMMING MODE button allows you to modify the functions of the lift. Refer to the "Maxi Sky 600 Ceiling Lift Programming" section for more information.

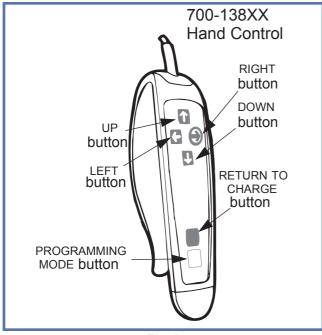


Fig. 3

ECS Rail System

(For Maxi Sky 600 ECS Only)

The *Maxi Sky 600* lift is also available for use with the *KWIKtrak* Enhanced Charging System (ECS). This rail system allows the cassette to benefit from continuous charging wherever it is on the rail. It eliminates the need to send the unit back to the charging station after the patient transfer.

With the ECS option, the "return to charge" (RTC) feature is thus no longer obligatory. However, this feature can still be used to store the cassette at the end of the rail, using a preprogrammed position station (PPP) until the next transfer.

Since the RTC is disabled by default, please refer to the "Maxi Sky 600 Ceiling Lift Programming" section of this document for instructions on how to enable this feature, that for the ECS is called the "return to home" (RTH) feature.

Please see the "How to Use the *Maxi Sky 600* Lift" section in this manual.

Chargers

The *Maxi Sky 600* units are equipped with a wall-adapted charger that can be customized to fit AC voltage outlets around the world (see Fig. 2).

Check the nameplate for input voltage and frequency requirements. These requirements differ by country. Do not attempt to use the lift in an area that has a different voltage and frequency requirement.

Note: Avoid positioning the charger such that access to the plug is limited making disconnection difficult.

Overheat Protection Device

The Maxi Sky 600 units are equipped with a safety system to prevent a misuse of the lift. If the lift is used above the amount specified by the duty cycle, a heat detection system will block the lifting of a load until the temperature of the transmission cools down. In the meantime, it will still be possible to activate the horizontal displacement and down functions.

When the overheat protection is engaged, the red light will stay on during the cooling period. In addition, a buzzer will sound if the UP button is pressed. The cooling period is between 10 to 30 minutes depending on ambient conditions.

Battery Information

The *Maxi Sky 600* uses two 12 volts sealed leadacid batteries. This battery type requires being fully charged at all time.

Batteries life is variable (2-3 years) and is influenced by: frequency of use, frequency of charging, temperature of operation / storage and storage time.

To prolong the batteries life, recharge them before the Low Battery indicator signal shows up.

To recharge the batteries, place the unit under the charging station. Check the battery status indicator to confirm that the batteries are charging.

NOTE: Batteries will not recharge when the emergency stop is applied.

NOTE: The unit will not lift or lower when it is in charging position.

Product Description

Accessories

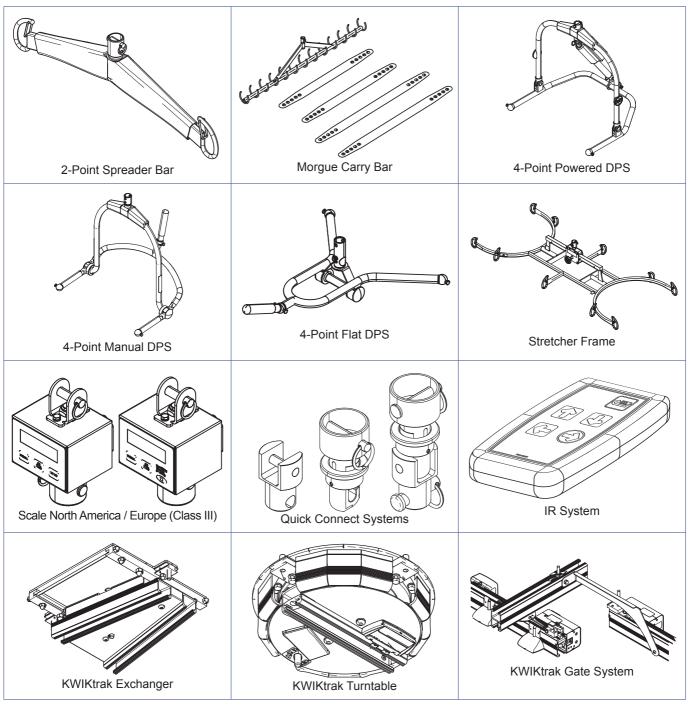


Fig. 4

WARNING: Only use compatible accessories supplied by ArjoHuntleigh.

Use of any other brand material may reduce performance of the unit and lead to injury.

Consult accessories' accompanied documents, when available.

Refer to your local ArjoHuntleigh agent for ordering.

How to use the Maxi Sky 600 Lift

Controls and Features

Emergency Lowering

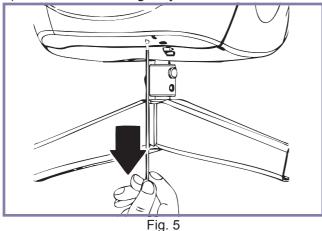
In the unlikely event of an electrical failure, the *Maxi Sky 600* lift has an emergency manual lowering feature.

CAUTION: The emergency lowering feature is to be used only in case of emergency.

If the lift malfunctions when a patient is being transferred, the emergency lowering device provides a safe way of getting the patient down onto a chair, bed or wheelchair.

Procedure:

1) Pull the red emergency cord.



2) Remove the 8 mm Allen key from the top of the lift.

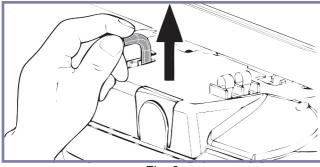


Fig. 6

3) Open the small side door to access the lowering mechanism.

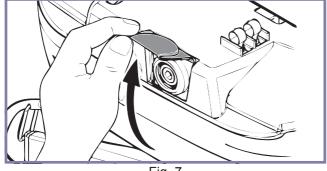


Fig. 7

4) Insert the Allen key deep into the axle.

5) Turn the Allen key counter-clockwise to slowly lower the patient.

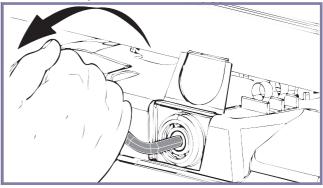


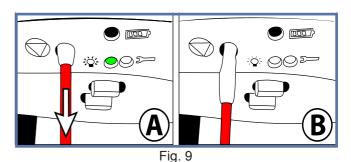
Fig. 8

Once the patient is lowered and secure within a chair, bed or wheelchair, call a qualified technician to inspect the lift.

Emergency Stop (red cord)

The emergency stop can be activated at any time to stop the functioning of the lift.

 To stop the lift in any emergency, gently pull the red emergency cord until you hear a "click" (see Fig. 9 - A). You will notice that the reset switch's plastic insert, at the very top of the red cord, has descended (see Fig. 9 - B). The green power light has also turned off. You may also notice that the patient begins to descend slowly when the emergency stop is activated. This is normal.



CAUTION: Do not pull the red emergency cord with excessive force. If the cord is jerked too hard, the lift may become inoperable.

2) To reactivate the lift, push up on the reset switch's plastic insert (for units equipped with infrared hand controls pull the red emergency cord again). A green light confirms that the Maxi Sky 600 lift is on and ready for use.

How to use the Maxi Sky 600 Lift

Return to Charge (RTC), Return to Home (RTH)

The RTC (or for the ECS, the RTH) function is disabled by default (with the exception of units equipped with infrared hand controls, whose RTC function is *enabled* by default). To activate this function, please refer to the "Maxi Sky 600 Ceiling Lift Programming" section in this manual.

To engage the RTC function, press on the return to charge button on the hand control for 3 seconds (1 second for infrared units). The spreader bar will raise all the way up to avoid any obstacles during the run. When the lift is at the charging station, the spreader bar lowers by itself to the preselected height so as to be easily accessible.

WARNING: DO NOT make use of the RTC function where there is a patient in the lift, as this could cause injuries to the patient.

NOTE: You can stop the return to charge at any time by pressing any button on the hand control or pulling on the red emergency cord.

WARNING: Extra care should be exercised when transferring a patient that weighs 20 kg (45 lb) or less. The weight detector within the unit that prevents the RTC from functioning when a patient is in the lift can only detect a minimum load of 20 kg (45 lb).

WARNING: Constant surveillance is required when using the RTC function to prevent the spreader bar from hit someone / something along the path.

Emergency Brake

The emergency brake is a safety feature that blocks the descent in the unlikely event of a transmission or motor failure.

WARNING: After an incident has occurred and the brake was deployed, never attempt to unlock the brake or press the UP button. This may disengage the brake and make the patient fall.

The emergency brake is intended for single activation and therefore can only be used once. Call your ArjoHuntleigh agent to arrange for the unit to be replaced.

Note that the emergency lowering device cannot be used when the emergency brake has deployed.

Indicator Lights

The lift and the charging system have many indicator lights. Refer to following table to understand their significance for the proper use and comprehension of the lift.

POWER INDICATOR						
(Green)	Flashing	Low batteries.				
- <u>`</u> ``	Solid	Lift cassette is on, ready to use.				
	BAT	TERIES STATUS				
(Yellow)	Flashing	Charging.				
Solid Charged.						
	MAINTENANCE					
(Red)	Contact your local ArjoHuntleigh technician in order to perform the necessary maintenance inspection.					
Solid		Lift is in "service mode" or is under overheat protection.				
		CHARGING				
Charging station	Solid green	Clip-on charging station power is on				
indicator	Solid red	Problem with charger; do not use the charger.				

Fig. 10

Spreader Bar Attachment

The spreader bar features an attachment which allows the caregiver to change it in a few steps without using any tools.

Attaching the Spreader Bar to the Lift

WARNING: Spreader bars must only be installed by a trained person. Before every use, always ensure that the strap is properly attached and that the attachment is secured with the split ring.

- 1) Insert the strap end onto the spreader bar attachment.
- 2) Insert the clevis pin through the attachment and the loop at the end of the strap.
- 3) Secure the clevis pin with the split ring.



Fig. 11

Clip Sling Compatibility

This section only applies to model equipped with a DPS spreader bar. Following is a list of typical ArjoHuntleigh clip slings that are compatible with the *Maxi Sky 600* lift.

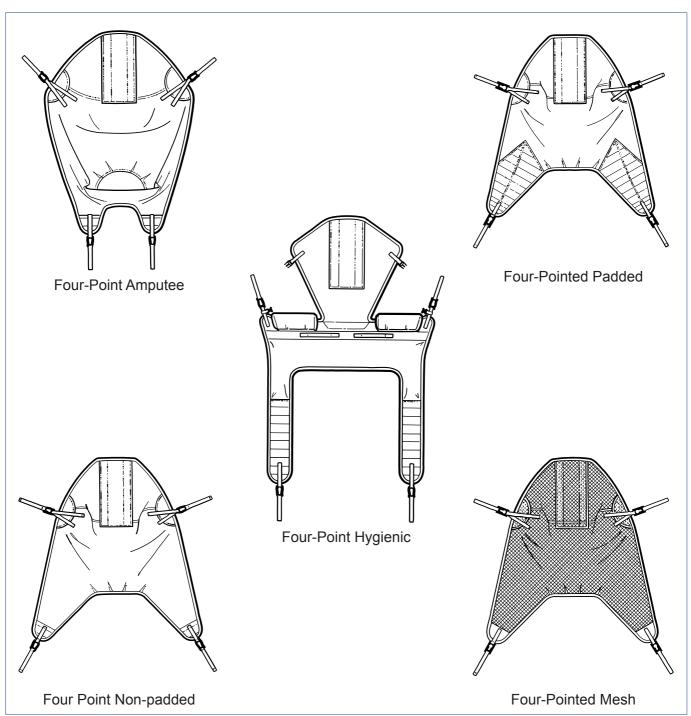


Fig. 12

NOTE: Other sling models are available. Contact your ArjoHuntleigh vendor for more information about clip slings and how to use them.

Slings Selection

The spreader bar that is attached to the *Maxi Sky 600* lift determines what slings can be used to transfer a patient.

All ArjoHuntleigh four-point clip slings must be used with a compatible DPS or PDPS.

All slings are color coded for size by having a different colored edge binding or attachment strap coloring:

- Grey or Teal Extra Extra Small XXS
- · White or Brown Extra Small XS
- Red Small S
- Yellow Medium M
- Green Large L
- Blue Extra Large XL
- Terracotta Extra Extra Large XXL

ArjoHuntleigh offers the option of a head support for many of our slings if it is considered necessary for a particular patient. A range of special purpose slings are available as accessories. For these or for special size slings, contact your ArjoHuntleigh agent.

Note: If ArjoHuntleigh *Flites* slings (disposable) are to be used with the *Maxi Sky 600* lift, then always refer to the separate *Flites Instruction for Use* in conjunction with current *Instructions for Use*.

Note: ArjoHuntleigh clip attachment slings with head support have two pockets in the head section which should contain plastic reinforcement inserts during use. Always ensure these reinforcement inserts have been fitted into the sling pockets before using the sling.

Operating the DPS

The DPS spreader bar is adjusted by raising or lowering the tilt handle. It will remain in position after the handle is released.



Fig. 13

Operating the PDPS

NOTE: The PDPS spreader bar must be used in conjunction with accompanied instructions and Instructions herien.

To position the PDPS spreader bar, press;

- the button to pivot the patient backward,
- the
 \undersette button to raise the patient upright.

Powered movement will continue until the travel limit has been reached, or until the button is released.

The spreader bar will remain firmly in position once powered movement has ceased.



Fig. 14

CAUTION: If using the powered DPS spreader bar in a wet environment, do not immerse it past the touch panel, as it could adversely affect the spreader bar's functions.

Attaching the Sling to the DPS/PDPS

Insert the clip attachment over the lug.

Secure the clip in place by pulling the sling down so that the lug is in the top portion of the clip hole.

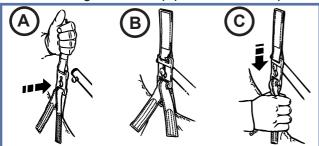


Fig. 15

For most residents, the straight attachment of the leg clips is recommended use (see Fig. 16).

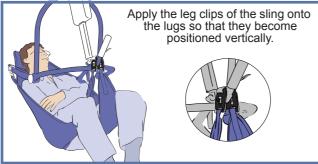


Fig. 16

If the resident is prone to kicking off the leg clip, the crossed attachment of the leg clips shall be applied, which will prohibit the clip from being kicked off (see Fig. 17).

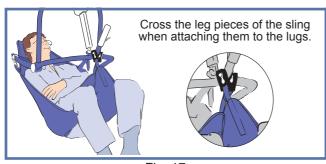
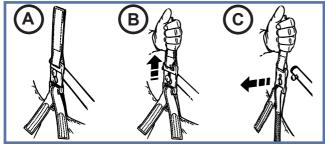


Fig. 17

Detaching the Sling from the DPS/PDPS

Pull the sling up to release the lock.

Pull sideways to remove the clip attachment from the lug.



Fia. 18

Transfering Patient Using Clip Slings

Before using the *Maxi Sky 600* ensure that:

- Always carry out the items marked as "Before every use" in the "Preventive Maintenance Schedule" before using the lift.
- To avoid the patient swinging excessively during lifting, the lift strap should be as vertical as possible, immediately prior lifting.

WARNING: A patient should never be left unattended during a transfer. Certain safety features can only be accessed by the caregiver and patient could get stuck in the event of a malfunction.

WARNING: This unit must never be operated by the patient but only by the caregiver. Patient could get stuck in the event of a malfunction.

WARNING: Always hold the spreader bar when near a patient. The spreader bar could hit the patient resulting in injury.

WARNING: Before raising the patient, always make sure the sling is not caught on any obstructions (for instance, the wheelchair brakes or armrests). Sling catching in such obstructions could result in patient fall.

WARNING: Always confirm that the sling remain attached as the weight of the patient is taken up. A wrongly fixed attachement could detach resulting in patient fall.

WARNING: Make sure that the spreader bar is correctly attached to the lift. An unsecured spreader bar attachement may lead to patient fall.

WARNING: Make sure the intended route of travel is clear to prevent the patient from bumping any obstruction.

CAUTION: Do not attempt to pull the cassette along the rail using the hand control cable. This will damage the cable and eventually ruin the function of the hand control.

NOTE: To ensure maximum patient comfort, do not allow the patient to hold onto the spreader bar.

Lifting Patient from a Seated Position

- 1) Place the sling around the patient so that the base of the sling sits slightly below the tail bone.
 - A MaxiSlide® or MaxiTube® positioning aid can be used to assist with placement of the sling.
- 2) Ensure that the head support area of the sling is behind the head covering it.



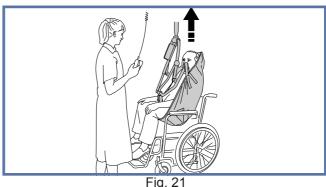
Fig. 19

- 3) Pull each leg strap under the thigh so that it emerges on the inside of the thigh.
- 4) Approach the patient with the lift, ensure that:
 - The spreader bar is in sitting position.
 - The wide part of the spreader bar is at or just below shoulder level.
 - The spreader bar is close enough to be able to connect the shoulder strap clips of the sling to the frame.
- 5) Connect the shoulder strap clips, then tilt the frame and attach the leg sections. If necessary, lower the spreader bar a little further, being careful not to lower it onto the patient.



Fig. 20

6) Raise the patient using the hand control, positioning him comfortably to a semi-reclined position for the transfer. The patient should not be lifted above the caregiver's eye level.



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- 7) Turn the patient to face the direction of travel, and keep at a normal chair height.
- 8) Proceed with the transfer.
- 9) Support the patient to stop excessive swinging and to give a feeling of added security.

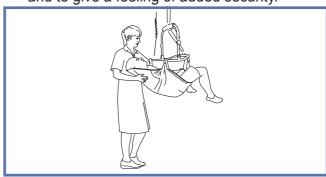


Fig. 22

Lowering Patient to a Seated Position

- 1) Once the patient has arrived at destination, reposition the patient according to the destination position.
- Lower the patient down onto the new location by making small adjustments during the descent.
- 3) When the patient's body weight is fully supported, detach the connections clips.
- 4) Move the lift away from the patient.
- 5) Remove the sling from under the patient.

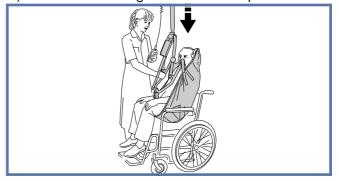


Fig. 23

Lifting Patient from a Supine Position

When lifting patient from a bed, make sure the bed is in correct working height before you start.

WARNING: Make sure that the bed safety side is installed to prevent the patient from falling.

- 1) Roll the patient onto their side.
- 2) Fold the sling in half and place it on the bed, land marking it, along the back of the patient so that the base of his spine is aligned with the base of the sling, making sure the sling extends to the top of the patient's head.



Fig. 24

3) Roll the patient back onto the sling and then slightly further in the opposite direction, so that the folded part of the sling can be unfolded.



Fig. 25

- 4) If possible, slightly raise the head of the bed.
- 5) 5) Approach the patient with the lift, and ensure that:
 - The spreader bar is in reclined position.
 - The spreader bar is close enough to be able to connect the shoulder strap clips of the sling to the frame.



Fig. 26

- 6) Lower the spreader bar taking care not to lower the frame onto the patient.
- 7) Connect the sling shoulder.

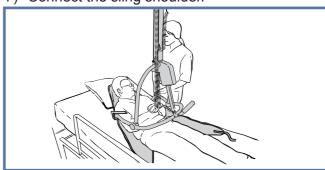


Fig. 27

8) Tilt the frame until connection of the leg strap clips is possible. The straps must be brought under the thighs. This may involve lifting one leg at a time, and may mean lowering the frame a little more.

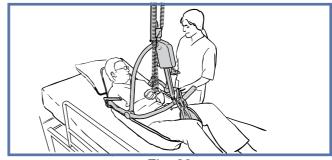


Fig. 28

9) Raise the patient using the hand control, positioning him comfortably to a semi-reclined position for the transfer. The patient should not be lifted above the caregiver's eye-level.



Fig. 29

- 10) Turn the patient to face the direction of travel, and keep at a normal chair height.
- 11) Proceed with the transfer.

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Clip Sling Applications

Lowering Patient to a Supine Position

- 1) Once the patient has arrived at destination reposition the patient according to the destination position.
- 2) Lower the patient down onto the new location by making small adjustments during the descent so that the patient is always in the best comfortable position.
- 3) When the patient's body weight is fully supported, detach the connections clips.
- 4) Move the lift away from the patient.
- 5) Remove the sling from under the patient.

Loop Sling Compatibility

This section only applies to model equipped with the 2-point spreader bar. Following is a list of typical ArjoHuntleigh loop slings that are compatible with the *Maxi Sky 600* lift.

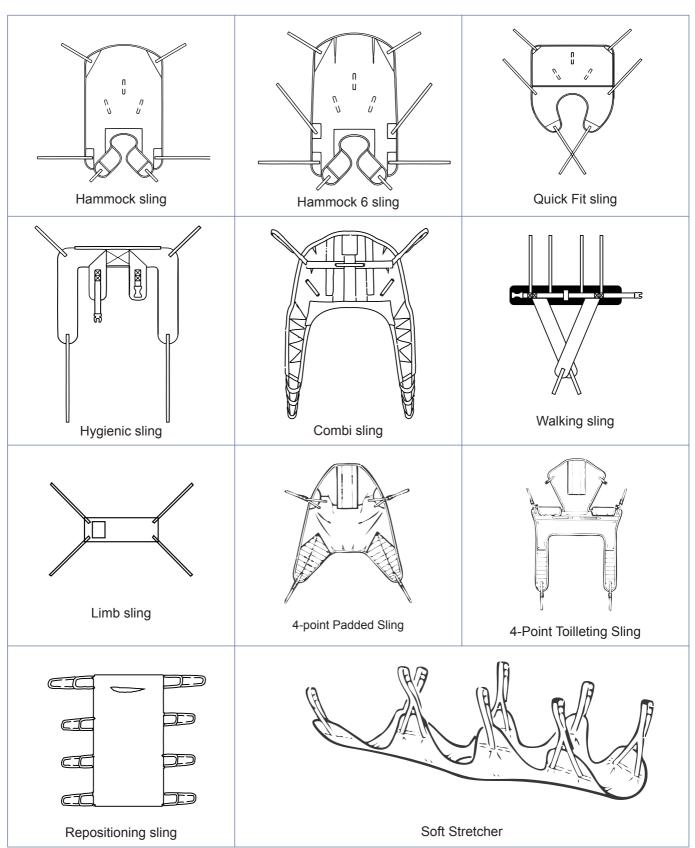


Fig. 30

NOTE: Other sling models are available. Please refer to your local ArjoHuntleigh agent for ordering.

Slings Selection

The spreader bar that is attached to the *Maxi Sky 600* lift determines what slings can be used to transfer a patient.

Loop slings must be used with the 2-point spreader bar.

All slings are color coded for size by having a different colored edge binding or attachment strap coloring:

- Grey or Teal Extra Extra Small XXS
- · White or Brown Extra Small XS
- · Red Small S
- Yellow Medium M
- Green Large L
- Blue Extra Large XL
- Terracotta Extra Extra Large XXL

The correct size sling will be able to support the patient's shoulders during the transferring procedure.

ArjoHuntleigh offers the option of a head support for many of our slings if it is considered necessary for a particular patient. A range of special purpose slings are available as accessories. For these or for special size slings, contact your ArjoHuntleigh agent.

Note: If ArjoHuntleigh *Flites* slings (disposable) are to be used with the *Maxi Sky 600* lift, then always refer to the separate *Flites Instruction for Use* in conjunction with current *Instructions for Use*.

Attaching the Sling to the Spreader Bar

Place the attachment loops onto the hooks.

Make sure the loops are positioned correctly and that the latches are closing the hooks as shown below.

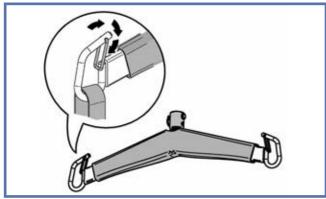


Fig. 31

Positioning the Patient

The specific sling loops chosen determine the position of the patient. Different loop combinations can be used to allow the patient to be lifted and transferred in positions ranging from semi-reclined to seated.

BODY POSITION ACCORDING TO SELECTION OF LOOP STRAPS							
SHOULDERS	SHOULDERS	LEGS HIPS*					
LEGS	000						
i,	3	1	1				
\	2	1	1				
\	1	1	1				
\	1	1	2				

*Hip loops only available on THA6i model

NOTE: Slings with more loops allow additional alternative positions.

Attachement Methods

Once the loop sling has been fitted around the patient, it can be configured in three ways. With each of the three methods described below, it is necessary to first connect each shoulder loop of the sling to both sides of the spreader bar.

Attachments Points

The attachment point designation shown here are only for the purpose of the explanations below.

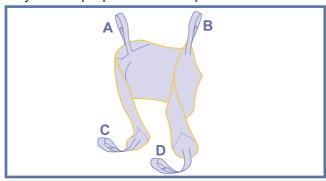


Fig. 32

Method 1 - Cross-through

(Legs closed with crossing straps)

This method is recommended for most general transfer.



Fig. 33

Method 2 - Hammock

(Bridge, legs closed)

This method can provide a comfortable cradle for amputee patient.

It is also a useful method for patients with contractures, making it difficult to bring a sling strap between the legs.



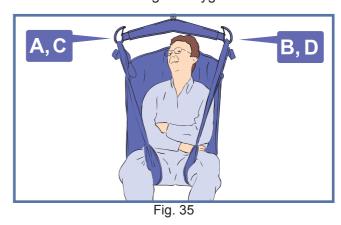
Fig. 34

WARNING: Method 2 might not be suitable for confused, combative or erratic patients as they can fall forward and get injured.

Method 3 - Abduction

(Legs opened with non-crossing straps)

In this method, legs are held in abduction which is convenient for toileting and hygiene care.



WARNING: Method 3 might not be suitable for patients with no upper body control as they can slide down and almost out of the sling.

Transfering Patient Using Loop Slings

Before using the Maxi Sky 600 ensure that:

- Always carry out the items marked as "Before every use" in the "Preventive Maintenance Schedule" before using the lift.
- To avoid the patient swinging excessively during lifting, the lift strap should be as vertical as possible, immediately prior to the lift.

WARNING: A patient should never be left unattended during a transfer. Certain safety features can only be accessed by the caregiver and patient could get stuck in the event of a malfunction.

WARNING: This unit must never be operated by the patient but only by the caregiver. Patient could get stuck in the event of a malfunction.

WARNING: Always hold the spreader bar when near a patient. The spreader bar could hit the patient resulting in injury.

WARNING: Before raising the patient, always make sure the sling is not caught on any obstructions (for instance, the wheelchair brakes or armrests). Sling catching in such obstructions could result in patient fall.

WARNING: Always confirm that the sling remain attached as the weight of the patient is gradually taken up. A wrongly fastened attachement could detach resulting in patient fall.

WARNING: Make sure that the spreader bar is correctly attached to the lift. An unsecured spreader bar attachement may lead to patient fall.

WARNING: Make sure the intended route of travel is clear to prevent the patient from bumping any obstruction.

CAUTION: Do not attempt to pull the cassette along the rail using the hand control cable. This will damage the cable and eventually ruin the function of the hand control.

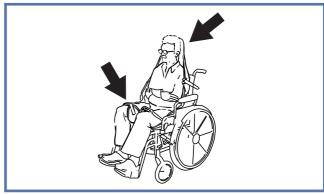
Lifting Patient from a Seated Position

 Place the sling around the patient so that the base of the sling sits slightly below the tail bone. A MaxiSlide® or MaxiTube® positioning aid can be used to assist with placement of the sling.



Fig. 36

- 2) Ensure that the head support area of the sling is behind the head covering it.
- 3) Pull each leg strap under the thigh so that it emerges on the inside of the thigh.



Fia 37

- 4) Approach the patient with the lift, ensure that:
 - The spreader bar is at or just below shoulder level.
 - The spreader bar is close enough to be able to fix all the sling loops onto the spreader bar hooks.
- 5) Connect the shoulder loops, and then the leg section using one of the three methods previously described.



Fig. 38

- 6) If necessary, lower the spreader bar a little further.
- 7) Raise the patient.
- 8) Turn the patient to face the direction of travel, and keep at a normal chair height.
- 9) Proceed with the transfer.

Lowering Patient to a Seated Position

- 1) Once arrived at destination, lower the patient down onto the new location.
- 2) When the patient's body weight is fully supported, detach the sling.
- 3) Move the lift away from the patient.
- 4) Remove the sling from under the patient.

Lifting Patient from a Supine Position

When lifting patient from a bed, make sure the bed is in correct working height before you start.

WARNING: Make sure that the bed safety side is installed to prevent the patient from falling.

- 1) Roll the patient onto their side.
- 2) Fold the sling in half and place on the bed land marking it, along the back of the patient so that the base of his spine is aligned with the base of the sling, making sure the sling extends to the top of the patient's head.



Fig. 39

- 3) Roll the patient back onto the sling and then slightly further in the opposite direction, so that the folded part of the sling can be unfolded.
- 4) If possible, slightly raise the head of the bed.
- 5) Approach the patient with the lift. Ensure that the spreader bar is close enough to be able to fix all the sling loops onto the spreader bar hooks
- 6) Connect the shoulder loops, and then the leg section using one of the three methods previously described.

- 7) Raise the patient.
- 8) Turn the patient to face the direction of travel, and keep at a normal chair height.
- 9) Proceed with the transfer.

Lowering Patient to a Supine Position

- 1) Once arrived at destination lower the patient down onto the new location.
- 2) When the patient's body weight is fully supported, detach the sling.
- 3) Move the lift away from the patient.
- 4) Remove the sling from under the patient.

Using Stretcher Frames and Stretchers

If any of the ArjoHuntleigh patient stretcher frames and stretchers are to be used with the *Maxi Sky 600* lift, always refer to the separate relevant stretcher frame and stretcher operating instructions supplements before use.

Use of Accessories

How to Use the Exchanger

Note: Following section applies only for *KWIKtrak* Rail System.

An exchanger allows the *Maxi Sky 600* unit access from one care area to another. Make sure that the lift is on by checking that green power indicator is lit.

Move the lift to the activation station and release the button on the hand control. Listen for a beep, then wait while the exchanger changes the path (see Fig. 40).

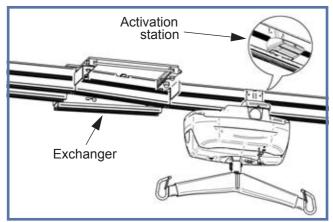


Fig. 40

Move the lift through the exchanger (see Fig. 41).

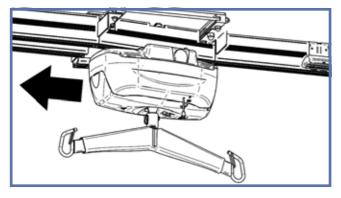


Fig. 41

If the exchanger fails to operate automatically, or if there is an emergency situation, manually engage the quick-release located underneath the exchanger (see Fig. 42). While holding it in the open position, slide the plate over to the new location, being careful not to place your hand or fingers in the path of the sliding plate.

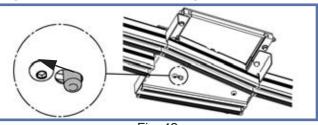


Fig. 42

Release the quick-release button and move the lift through the exchanger.

How to Use the Turntable

Note: Following section applies only for *KWIKtrak* Rail System.

Turntables enable the lift to change route in a multi-directional rail system. Make sure that the lift is on by checking that the green power indicator is lit.

Move the lift to the activation station and release the button on the hand control. Listen for a beep, then wait while the turntable changes the path (see Fig. 43).

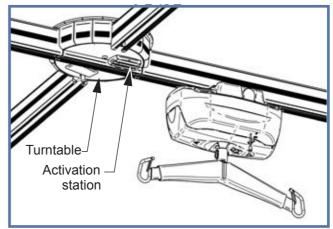


Fig. 43

Move the lift out from the turntable.

If the turntable fails to operate automatically, or if there is an emergency situation, manually engage the quick-release located underneath the turntable (see Fig. 44). While holding it in the open position, turn the plate over to the new location, being careful not to place your hand or fingers in the path of the rotating plate.

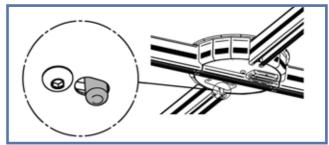


Fig. 44

Release the quick-release button and move the lift through the turntable.

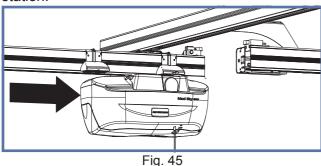
Use of Accessories

How to Use the Gate

The Gate is a security device which blocks the access between an X-Y rail system and a fixed rail system to prevent the lift from falling out of the rail when these two systems are not aligned.

Exiting the Gate

Move the lift in the X-axis to the extremity of the traversal rail in which the Gate is installed on the side of the traversal rail. The lift will be automatically in contact with the activation station.



Move both, the lift and the traversal rail in the Y-axis, to align the traversal rail with the oncoming rail. This action will be detected by the Gate, locking the two rails together, permitting the lift to pass through.

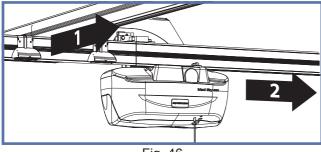
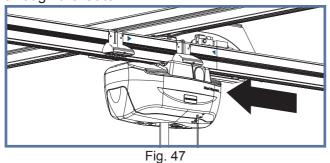


Fig. 46

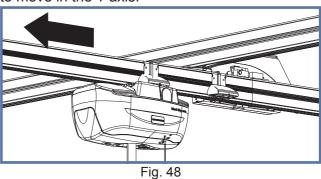
NOTE: The traversal rail will remain in the locked position, in order to release the traversal rail refer to the "Entering the Gate" section.

Entering the Gate

When entering the X-Y system from the oncoming rail, the traversal rail will be in place. Pass the lift through the Gate.



When the lift has passed the deactivation station, the Gate will release, permitting the traversal rail to move in the Y-axis.



Using the PPP Function (Pre-Programmed Positions)

Note: This function can only be activated by a qualified technician.

- Using the pre-programmed positions allows the unit to detect stations (positions) located along the rail path. The unit will go to the indicated position by using the hand control.
- 2) To do so, indicate to the unit the desired position to go. For an example, to go to the third station push three times on the PROG button followed by the direction (LEFT or RIGHT buttons).

Then the unit goes by itself to the requested station and stay on hold.

If the position you asked for is not correct, you may stop the lift at any time by pressing any button on the hand control. From this position, reprogram the lift to the new desired position. Count the number of stations from where you are and indicate the direction to go.

Maxi Sky 600 Ceiling Lift Programming

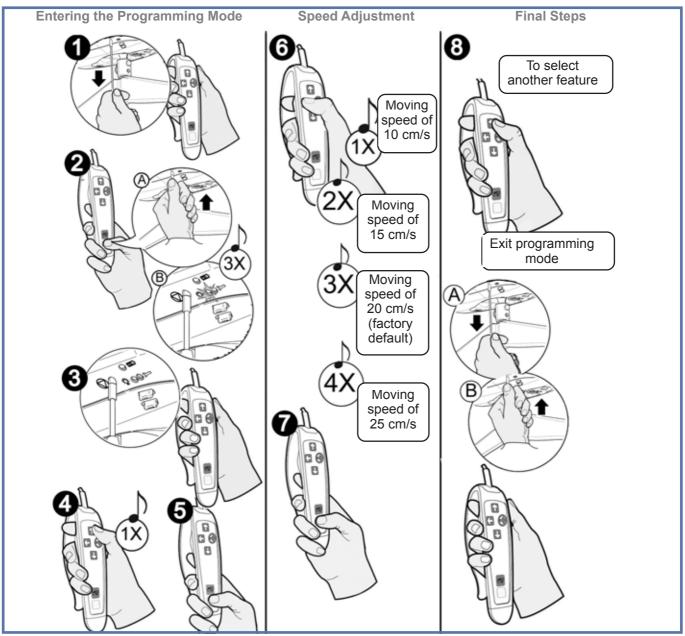


Fig. 49

Changing the Speed of Movement

- Turn the lift off by pulling on the red cord. The green LED will turn off.
- Press the PROG button on the hand control. At the same time, push up on the plastic insert switch (for units with infrared hand controls, pull the red emergency cord again). The green light will flash, and you will hear three beeps.
- The red LED will then illuminate. You can now release the PROG button.
- 4 Press once the UP button (you will hear one beep) for speed adjustment feature.
- **5** Now press the PROG button to confirm the selection.
- **6** Using the LEFT button, select one of four predetermined speeds.
- Now press the PROG button to confirm the selected speed.
- Press UP to continue within the programming mode, or to return to regular mode, pull on the red cord, then push up on the plastic insert switch (for units with infrared hand controls, pull the red emergency cord again).

Maxi Sky 600 Ceiling Lift Programming

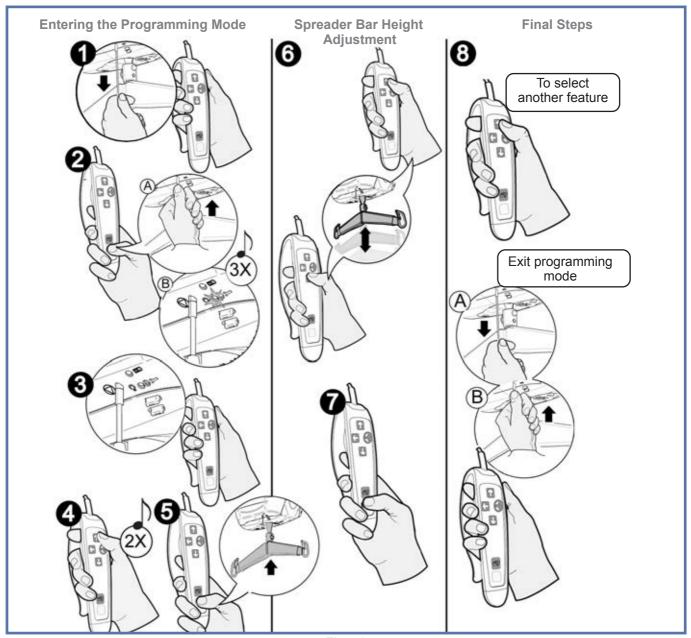


Fig. 50

Adjusting the Spreader Bar Height

- Turn the lift off by pulling on the red cord. The green LED will turn off.
- Press the PROG button on the hand control. At the same time, turn on the lift by pushing up on the plastic insert at the top of the red cord (for units with infrared hand controls, pull the red emergency cord again). The green light will flash, and you will hear three beeps.
- 3 The red LED will then illuminate. You can now release the PROG button.
- Press twice the UP button (you will hear two beeps)to change the spreader bar height.
- **6** Now press the PROG button to confirm the selection.
- **6** The strap will begin winding up. Once it is completely wound, press the UP and DOWN buttons to set the height the spreader bar's rises to once it is sent to the charging station.
- Now press the PROG button to confirm the selected height.
- Press UP to continue within the programming mode, or to return to regular mode, pull on the red cord to turn the unit off, then push up on the plastic insert to turn it on (for units with infrared hand controls, pull the red emergency cord again).

Maxi Sky 600 Ceiling Lift Programming

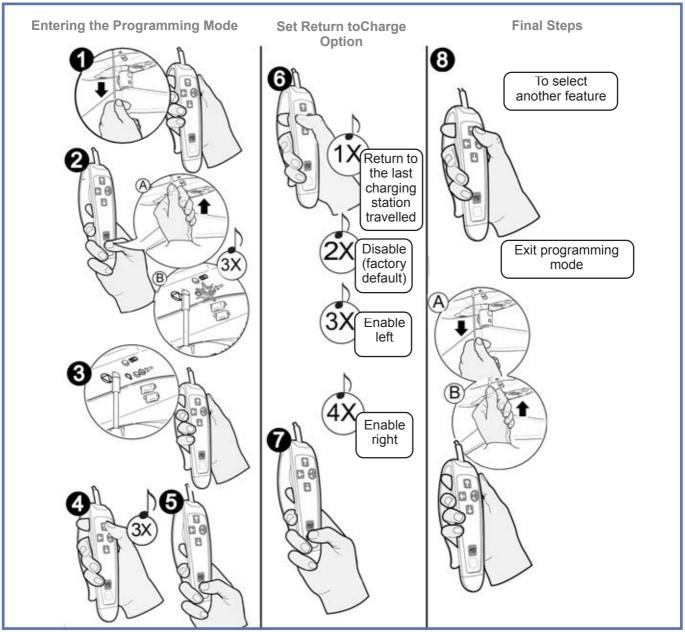


Fig. 51

Enable/Disable Return to Charge (RTC)

- Turn the lift off by pulling on the red cord. The green LED will turn off.
- Press the PROG button on the hand control. At the same time, push up on the plastic insert switch (for units with infrared hand controls, pull the red emergency cord again). The green light will flash, and you will hear three beeps.
- 3 The red LED will then illuminate. You can now release the PROG button.
- Press three times on the UP button (you will hear three beeps) to enable/disable the RTC.
- **5** Now press the PROG button to confirm the selection.
- **6** Using the left button, select one of the four predetermined selection.
- Now press the PROG button to confirm the selected return to charge.
- **3** Press UP to continue within the programming mode, or to return to regular mode, pull on the red cord, then push up on the plastic insert switch (for units with infrared hand controls, pull the red emergency cord again).

Care and Maintenance

Preventive Maintenance Schedule

The equipment is subjected to wear and tear, and the following maintenance instructions must be acted upon when specified to ensure that the equipment remains within its original manufacturing specifications. Care and maintenance must be carried out in accordance with the preventive maintenance schedule below.

WARNING: The maintenance described in the following checklist is the minimum that the manufacturer recommends. In some cases more frequent inspections should be carried out. Continuing to use this equipment without conducting regular inspections or when a fault is found will seriously compromise the safety of the user and of the patient. Service and preventative maintenance can be arranged with the manufacturer. Preventive maintenance specified in this manual can prevent accidents and reduce repair costs.

WARNING: Safety related maintenance and authorized service must be carried out by qualified personnel, fully trained in servicing procedures by ArjoHuntleigh, and equipped with correct tools and proper documentation including Parts List and Service Manual. Failure to meet these requirements could result in personal injuries and/or unsafe equipment.

User Inspections

	FREQUENCY					
Inspections for lift cassette and rail system	Initially	Before every use	Every two months or 500 cycles	Every four months or 1000 cycles	Every year or 2500 cycles	Every two years or 5000 cycles
Inspect for evidence of external damage, missing parts or broken panels.	х	Х				
Make sure that end stoppers and rail caps are in place and tightened.	X	X				
Inspect strap for wear, discoloration or loose threads.		Х				
Recharge batteries.		X				
Inspect wheels in rail for damage, rust or cracks. Replace if damaged.					Х	
Clean the rail and the clip-on charging station contacts.				X		
Overall inspection by authorized personnel.					Х	
Verify emergency stop cord.				Х		
Verify emergency lowering device.				Х		

Care and Maintenance

	FREQUENCY					
Inspections for spreader bar and slings	Initially	Before every use	Every two months or 500 cycles	Every four months or 1000 cycles	Every year or 2500 cycles	Every two years or 5000 cycles
Inspect all sling parts (attachments, fabric, stitch areas and strap) for signs of wear, discoloration, deterioration or loose threads.		Х				
Clean sling as indicated on the tag.			When no	ecessary		
Inspect the spreader bar on the strap of the lift for damage or cracks. Make sure all attachments are properly secured (e.g. split ring).		Х			Х	

Inspections by an Authorized Service Technician

	FREQUENCY					
Inspection for lift cassette	Initially	Before every use	Every two months or 500 cycles	Every four months or 1000 cycles	Every year or 2500 cycles	Every two years or 5000 cycles
Replace strap.						X
Inspect frame parts interlock and hardware for malfunction and make sure there are no parts missing.					Х	
Inspect gears for wear and lubricate as necessary.					Х	
Inspect connecting joints for proper attachment (trolley and spreader bar).					X	
Verify that the emergency brake on the drum is turning freely.					Х	
Verify the emergency brake.					Х	
Verify emergency lowering mechanism.					Х	
Verify alternative up and down buttons on cassette.					Х	
Load test with the SWL (safe working load).					Х	

	FREQUENCY					
Inspections for <i>KWIKtrak</i> * rails	Initially	Before every use	Every two months or 500 cycles	Every four months or 1000 cycles	Every year or 2500 cycles	Every two years or 5000 cycles
Torque end stoppers to 20 N. m. (15 lbf.ft).	Х				X	
Make sure that the bracket locking device is not visible.	X				X	
Make sure rail joints are closed and that the spring pins are centered.	Х				Х	
Make sure the rail is straight when it is not loaded.	Х				Х	
Make sure the adjusted load setting of the lift is equal or lower than the safe working load of the installation.	Х				x	
Check that the accessories (turntable and exchanger) are complete and correctly maintained.	Х				Х	
Make sure that the attachments (ceiling brackets, wall post, wall brackets) have not been displaced.	Х				×	
Inspect rail end stoppers. Inspect and tighten hardware (if necessary).					Х	
Load test with the SWL (safe working load) recommended.					Х	

^{*.} For rail system other than *KWIKtrak*, refer to the manufacturer instructions of the rail system.

NOTE: If the product does not work as intended, immediately contact your local ArjoHuntleigh agent for support.

Care and Maintenance

Cleaning the Lift

NOTE: It is recommended to clean the lift and its accessories between each patient use.

Removing visible residues:

- 1) Use a cloth soaked with water.
- 2) Remove visible residues from the lift and its accessories from top to buttom.

Cleaning:

- To clean the Maxi Sky 600 and its accessories, spray cleaning fluid on the product, and use a brush (to remove any deposits).
- 2) Use a clean damped cloth with clear water to wipe off all spots of cleaning fluids.
- If cleaning fluid cannot be removed on some hard-to-access parts, spray water on the affected part and wipe off with disposable towels/cloth. Repeat until all of the cleaning fluid has been removed.
- 4) Repeat steps 1 to 3 as necessary.
- 5) Let the parts dry.

NOTE: Pay special attention to areas pointed in Fig. 52. These are most likely to enclose germs. Use a smaller brush and/or cotton swab to reach them.

CAUTION: Do not drench the product, as this could damage electrical components and cause internal corrosion.

If a hot air dryer is used to dry the lift, the temperature must not exceed 80°C (176°F).

Do not use petroleum-based solvents, as this may damage plastic parts.

To ensure a better rolling surface for the trolley wheels, clean the inside of the rail every 4 months. To do so, insert a damp cloth in the opening and slide it from one end of the rail to the other.

Maxi Sky 600's Special Areas to Clean

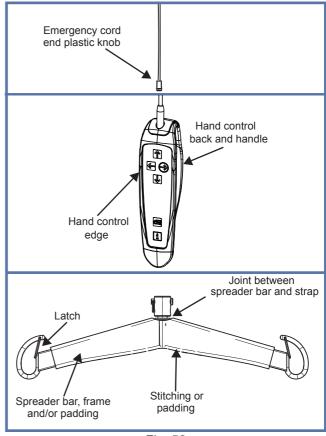


Fig. 52

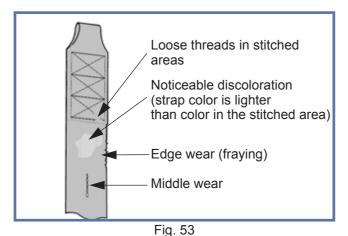
WARNING: To avoid eye and skin injuries, cleaning and disinfection products must be used in accordance with the instructions. Wear the appropriate eye, hand and clothing protection at all times when handling disinfectants.

Care and Maintenance

Strap Inspection

If the strap is damaged or shows signs of wear or discoloration, the acceptable load on the strap before rupture can drop rapidly and present a danger for the patient or caregiver. ArjoHuntleigh recommends a thorough inspection of the straps every 2 months as follows:

- 1) Completely unwind the strap.
- 2) Look for any signs of wear or discoloration (see Fig. 53).



WARNING: If there is any sign of wear as indicated above or any other visual defects, the strap must be changed.

Using the lift without changing a damaged strap may affect the safety of the caregiver or patient.

NOTE: The manufacturer recommends changing the strap at least every two years.

Handling and Storage

Avoid violent impacts while transporting the lift.

The lift should not remain stored for long periods of time without recharging the batteries.

NOTE: Even if the lift is not used, ArjoHuntleigh recommends charging the batteries at least every two weeks to prevent premature aging of batteries.

If you store or ship the *Maxi Sky 600* cassette, ensure that the power is turned off (green light) beforehand.

Battery Replacement

To replace batteries, contact your local ArjoHuntleigh agent.

Sling Inspection and Care

For maximum patient safety and hygiene, read the following instructions:

Regular Inspections

It is essential that the slings, their straps, loops and attachment clips are carefully inspected before each and every use. If the slings, loops or straps are frayed, or the clips damaged, the sling should be withdrawn from use immediately and replaced.

Sling Laundering

WARNING: The slings should be checked before and after use and, if necessary, washed according to instructions on the sling. This is especially important when using the same equipment for another patient. This minimizes the risk of cross infection.

Before washing the slings equipped with head support pockets, always remove the plastic reinforcement inserts. Always refit the inserts before reusing the sling.

Mechanical pressure should be avoided during the washing and drying procedure (e.g. rolling or pressing), as these can damage parts vital to the safe and comfortable operation of the sling.

NOTE: With regard to laundering, slings should not be classified as linen, but as an accessory to a patient transfer lifting and therefore classified as a medical device. Slings should be cleaned and disinfected only in strict accordance with the manufacturer's instructions.

Annual Inspection

As a minimum requirement, the *Maxi Sky 600* lift and its accessories must be inspected annually by ArjoHuntleigh's technical service.

WARNING: Failure to perform regular inspections may put patient/caregiver at risk due to reduced performance of the unit.

Troubleshooting

PROBLEM	TO CHECK
The red "service" light is on and flashing.	 Contact your local ArjoHuntleigh agent to do maintenance.
The red light is solid.	 The lift cassette is under its overheat protection. Wait between 10 to 30 minutes until the red light turns off and press on the "UP" button to use the lift cassette again.
The unit starts and stops repetitively.	 If the load is over a safe working load, the unit will not work due to the overload protection on the motor.
The lift cassette emits a beep during utilization. The unit may stop lifting but the lowering function can still be used.	 Batteries are low. Return the lift cassette to the charging station.
The charger indicator (yellow) on the lift cassette does not light up when the lift is on the charger.	 Check that the charger is plugged into a standard outlet, and that the outlet has power. The green light on the clip-on charging station indicates that it is functioning.
When returning to charge, the lift cassette passes the clip on the charging station, or goes in the wrong direction.	 Clean the contact blades of the charging station with mild detergent. Pass the lift cassette through the charging station manually once, then retry the return to charger function.
Batteries are always dead after only a few transfers (3 to 5).	 Verify the function of the lift charger and the contact plates on the clip-on charging station. Replace batteries with new ones. The life of the current batteries could be almost finished. It is important to always change both batteries at the same time. Contact your local ArjoHuntleigh agent to have the batteries replaced.
The yellow light on the unit is solid, yet the lift cassette will only perform one or two transfers.	 Contact your local ArjoHuntleigh agent to have batteries replaced.
The yellow light on the unit is solid, yet the lift will only work when there is no one on the lift. When you try to transfer someone, the lift stops.	Contact your local ArjoHuntleigh agent to have the batteries replaced.
The lift does not work when you press the buttons on the hand control.	 If the charging station light is on, move the lift away from the charging station in order to operate the lift. If the emergency stop is activated, gently push up on the reset switch plastic insert to turn the unit back on (for units with infrared hand controls, pull the red emergency cord again). Check if the buttons on the lift cassette are working. If so, the problem may be coming from the hand control. If not, check the charge on the lift. Slide the lift over the clip-on charging station. Verify if the yellow light turns on. If, after testing all of the above, the lift will not operate, contact your local ArjoHuntleigh agent.
The charging light on the lift cassette continues flashing yellow and the light does not turn solid even after recharging the unit overnight.	 If available, try another integrated clip-on charging station from another lift, or a spare one; clip it to the rail and charge the unit for 3 hours. If the yellow light is still flashing, contact your local ArjoHuntleigh agent. If, after testing all of the above, the lift will not operate, contact your local ArjoHuntleigh agent.

Troubleshooting

PROBLEM	TO CHECK
When you press the button to return the lift to its charger (4-way motor only), the lift goes past the charger.	 The charger either plugged in properly to an electrical outlet or is not working properly. Contact your local ArjoHuntleigh agent.
ECS: Cassette LED battery indicator does not light up.	 Push on the red cord plastic insert to turn the cassette on (for units with infrared hand controls, pull the red emergency cord). Verify that the electrical outlet has power. Verify that the charger is connected to the ECS cable adaptor on the fixed rail. Verify that all extensions used are connected. Contact your local ArjoHuntleigh agent.

Labels on the Lift

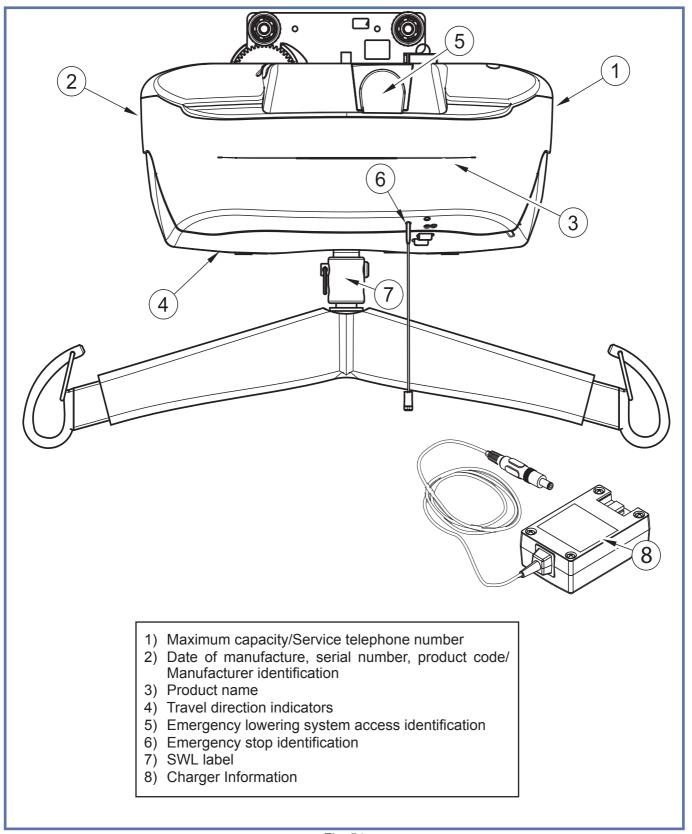


Fig. 54

Technical Specifications

PRODUCT INFORMATION	Maxi Sky 600		
Weight, complete (Four-function model)	12.7 kg (28 lb)		
Weight, complete (Two-function model)	11.4 kg (25 lb)		
Lifting capacity	200 kg (440 lb), 272 kg (600 lb)		
Strap length	2300 mm (90.6 in)		
Lifting speed	6.0 cm/s (2.4 in/s) without load) 3.5 cm/s (1.4 in/s) at 200 kg (440 lb)		
Maximum stroke (from ceiling)	2300 mm (90.6 in)		
Horizontal displacement speeds	10, 15, 20 and 25 cm/s. Speed is 20 cm/s (7.9 in/s) by default		
Horizontal axis motor	24 VDC, 62 watts		
Vertical axis motor	24 VDC, 110 watts		
Operating force of control	< 5 N		
ELECTRICAL			
Duty cycle	Max 10% (6 min./hour), 1 minute continuously		
Rating	24 VDC, 15 A max.		
Noise level for either raising or lowering, with or without load	61 dBA max.		
Medical equipment	Type BF protection against electrical shock in accordance with IEC 60601-1		
The <i>Maxi Sky 600</i> is compliant with CAN/CSA C22.2 No. 601.1 (SUP1+AM2), UL 60601 1, CAN/CSA-C22.2 No. 60601-1-08, ANSI/AAMI ES60601-1: 2005 and designed according to ISO 10535:2006.			

WARNING: Wireless communications equipment such as wireless home network devices, mobile phones, cordless telephones and their base stations, walkie-talkies, etc. can affect the *Maxi Sky 600* and should be kept at least 2.3 m away from it. Cables from potentially strong sources of electromagnetic fields should not be placed near the unit.

Battery type	Sealed rechargeable valve regulated lead acid battery Rating: 2 x 12 V (series connected 24 V total), 5 Ah		
Battery capacity	Provides up to 120 transfers with a load of 100 kg (220 lb), up to 70 transfers with a load of 200 kg (440 lb)		
Degree of protection - hand control	IPX7		
Degree of protection - Maxi Sky 600	IP21		
Lift - protection class - shock prevention	Internally powered equipment		
Battery Charger input	100-240 VAC, 50-60 Hz, 57 - 70 VA or 100-240 VAC, 50-60 Hz, 50 VA (see charger labeling)		
Battery Charger output	28.1 VDC, 1 A max, 28.1 VA or 24 VDC, 1 A max, 24 VA (see charger labeling)		
Battery Charger safety protection	Class 2, double insulated		
OPERATION AND STORAGE CONDITIONS			
A 11 44	a 11 a 1 10 00		

Ambient temperature range	Operation: 5 to 40 °C Storage: -25 to + 70 °C
Relative humidity range	Operation: 15% to 93% Storage: < 94%, non-condensing
Atmospheric pressure range	Operation: 700 hPa to 1060 hPa (2000 m Max) Storage: 500 hPa to 1060 hPa

WARNING: This equipment is not suitable in the presence of flammable anesthetic mixtures with air or oxygen, or with nitrous oxide.

RECYCLING	
Battery	Sealed lead-acid, rechargeable, recyclable
Package	Cardboard recyclable
The lift	Separated and recycled, according to the European Directive 2002/96/EG (WEEE).

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Technical Specifications

Lift Dimensions

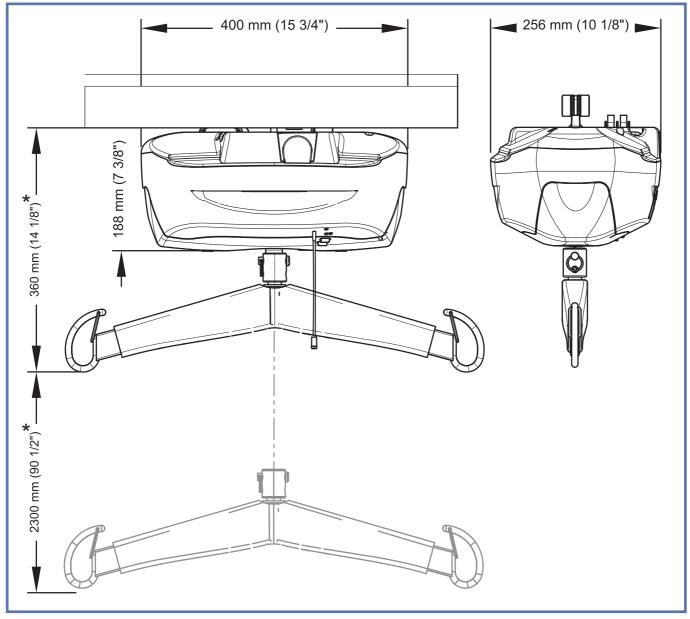


Fig. 55

Electromagnetic Compatibility

Electromagnetic Compliance

The *Maxi Sky 600* has been tested for compliance with current regulatory standards regarding its capacity to block EMI (electromagnetic interference) from external sources.

Nonetheless, some procedures can help reduce electromagnetic interferences:

- Use only ArjoHuntleigh cables and spare parts to avoid increased emissions or decreased immunity which can compromise the correct functioning of the equipment.
- Ensure that other devices in patient-monitoring and/or life-support areas comply to accepted emissions standards.
- Maximize the distance between electro-medical devices. High-powered devices may produce EMI that can affect the lift. Refer to separation distance table further on in this document.

For more information on how to manage the unit's RF electromagnetic environment, please consult the AMI TIR 18-1997 - Guidance on Electromagnetic Compatibility of Medical Devices for Clinical/Biomedical Engineers.

Electromagnetic Emissions

Guidance and Manufacturer's Declaration - Electromagnetic Emissions - For all Equipment and Systems

The *Maxi Sky 600* is intended for use in the electromagnetic environment indicated below. The customer or the user of the *Maxi Sky 600* should assure that it is used in such an environment.

Emissions test	Compliance	Electromagnetic environment - guidance		
RF emissions CISPR 11	Group 1	The Maxi Sky 600 uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.		
RF emissions CISPR 11	Class B			
Harmonic emissions	Not applicable	The Maxi Sky 600 is suitable for use in all establishments, including domestic establishments and those directly		
Voltage fluctuations/flicker emissions IEC 61000-3-3	Not applicable	connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.		

Electromagnetic Immunity

Guidance and Manufacturer's Declaration - Electromagnetic Immunity - For all Equipment and Systems

The *Maxi Sky 600* is intended for use in electromagnetic environment specified below. The customer or the user of the *Maxi Sky 600* should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance		
Electrostatic discharge (ESD)	±6 kV contact ±8 kV air	±6 kV contact ±15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.		
Electrical fast transient/burst IEC 61000-4-5	±2 kV for power supply lines ±1 kV for input/output lines	Not applicable	Mains power quality should be that of a typical commercial or hospital environment.		
Surge IEC 61000-4-5	±1 kV differential mode ±2 kV for input/output	Not applicable			
Voltage dips, short interruptions and voltage variations on power supply input lines	<5% <i>U</i> T (>95% dip in <i>U</i> T) for 0.5 cycle 40% <i>U</i> T (60% dip in <i>U</i> T) for 5 cycles 70% <i>U</i> T (30% dip in <i>U</i> T) for 25 cycles <5% <i>U</i> T (>95% dip in <i>U</i> T) for 5 sec.	Not applicable			
Power frequency (50/60 Hz) magnetic field	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercials or hospital environment.		
NOTE: UT is the AC mains voltage prior to application of the test level.					

Electromagnetic Compatibility

(continued)

Guidance and Manufacturer's Declaration - Electromagnetic Immunity - For Equipment and Systems that are Not Life-Supporting			
Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
			Portable and mobile RF communications equipment should be used no closer to any part of the <i>Maxi Sky 600</i> , including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 Mhz	Not applicable	Recommended separation distance $I = \left[\begin{array}{c} 3.5 \\ \overline{V1} \end{array} \right] \sqrt{P}$
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	10 V/m 80 MHz to 2.5 GHz	$d = \left[\frac{3.5}{10} \right] \sqrt{.}$ 80 MHz to 800 MHz
			$d = \left[\frac{7}{10}\right] \sqrt{P}$ 800 MHz to 2.5 GHz
			where <i>P</i> is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and <i>d</i> is the recommended separation distance in meters. Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, ^(a) should be less than the compliance level in each frequency range. ^(b) Interference may occur in the vicinity of equipment marked with the following symbol:

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

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

(a) Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the *Maxi Sky 600* is used exceeds the applicable RF compliance level above, the *Maxi Sky 600* should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the *Maxi Sky 600*.

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

Electromagnetic Compatibility

(continued)

Recommended Separation Distance Between Portable and Mobile RF Communications Equipment and the *Maxi Sky 600*for Equipment and Systems that are not Life-Supporting

Recommended separation distances between portable and mobile RF communications equipment and the *Maxi Sky 600*.

The *Maxi Sky 600* is intended for use in electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the *Maxi Sky 600* can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communication equipment (transmitters) and the *Maxi Sky 600* as recommended below, according to the maximum output power of the communications equipment.

	Separation distances according to frequency of transmitter m				
Rated maximum output power of transmitter	150 kHz to 80 MHz $d = \left[\frac{3.5}{V1} \right] \sqrt{P}$	80 MHz to 800 MHz $d = \left[\frac{3.5}{10} \right] \sqrt{P}$	800 MHz to 2.5 GHz $d = \left[\frac{7}{10} \right] \sqrt{P}$		
0.01	Not applicable	0.12	0.23		
0.1	Not applicable	0.38	0.73		
1	Not applicable	1.2	2.3		
10	Not applicable	3.8	7.3		
100	Not applicable	12	23		

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

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

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

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ARJOHUNTLEIGH GETINGE GROUP

ArjoHuntleigh focuses on patient handling and hygiene, disinfection, DVT prevention, medical beds, therapeutic surfaces and diagnostics.



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