

*Opera*TM



Operating and Product Care Instructions



The vertical and horizontal lines printed in the margins adjacent to the text/illustrations in these instructions are for ARJO use only and should be disregarded by the reader.

Some of the information contained in these instructions may become outdated, due to improvements made to the product in the future. If you have any questions regarding these instructions or your lift, please contact ARJO.

The policy of ARJO is one of continuous development, and therefore reserve the right to change specifications without notice.

ARJO strongly advise and warn that only ARJO Company Designated Parts, which are designed for the purpose, should be used on equipment and other appliances supplied by ARJO, to avoid injuries attributable to the use of inadequate parts.

The ARJO Company's Conditions of sale make specific provision confirming no liability in such circumstances.

"Opera", "Flites" and "Lock and Load" are trademarks of the ARJO Group

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Foreword

Thank you for purchasing ARJO equipment

The *Opera* is part of a series of quality products designed especially for hospitals, nursing homes and other healthcare uses.

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

Please contact us if you have any questions about the operation or maintenance of your ARJO equipment.

The touch panel label on the dual control panel displays several instruction symbols. The letter (i) shown on the open book icon indicates “information”, and is an instruction to always read the operating instructions before use (see Fig. 1).

The expected operational life of the *Opera* is 10 years, provided that it has been regularly serviced and maintained as recommended in these instructions.

The expected operational life of the consumable parts, i.e. batteries, slings etc., is dependent on usage (also, see the section titled “Care of the *Opera*”).

All references to the patient in these instructions refer to the person being lifted, and references to the attendant refer to the person who operates the lift.

References to the left and right of the lift in these instructions are as viewed when you are standing at the rear of the *Opera*, facing forward, i.e. when viewed from the dual control panel (see Fig. 1).


The lifting operations in these instructions are described as if you are lifting a patient from a chair. The same operations can be performed effectively when lifting a patient from a wheelchair or a sitting position on a bed, although a second attendant should support the patient if the patient lacks sitting balance.


All operations in these instructions are described as if the attendant were using the control handset. Each operation described can be controlled using the control handset and/or the dual switch panel, located at the rear of the mast.


Safety Instructions

Before using the *Opera*, familiarize yourself with the various parts and controls, as illustrated in Fig. 1 and other illustrations. Then please read this entire manual thoroughly before using the *Opera*. The information in the manual is crucial to the proper operation and maintenance of the equipment, and will help protect your product and ensure that the equipment performs to your satisfaction. Some of the information in this booklet is important for your safety and must be read and understood to help prevent possible injury. If there is anything in the manual that is confusing or difficult to understand, please call ARJO (the telephone number appears on the last page of this manual).

Symbols used adjacent to the text in these instructions:


 **Danger:** Electrical hazard warning. Failure to understand and obey this warning may result in electrical shock.

 **Warning:** Failure to understand and obey this warning may result in injury to you or to others.


 **Caution:** Failure to follow these instructions may cause damage to one or all parts of the system or equipment.


• **Note:** This information is important for the correct use of this system or equipment.

This product has been designed and manufactured to provide you with trouble free use. However, this product does contain components that, with regular use, are subject to wear.

 **Warning:** SOME OF THESE PARTS ARE CRITICAL TO ENSURE THE SAFETY IN OPERATING THE *OPERA* AND MUST BE EXAMINED AND SERVICED ON A REGULAR BASIS AND REPLACED AS NEEDED.

Also, see the section titled “Care of the *Opera*”.


 **Warning :** Use only ARJO slings and stretchers that have been specifically designed for the *Opera*.

 **Warning :** Do not load the *Opera* beyond the approved lifting capacity of the lowest rated attachment/accessory.


The *Opera* may be used on gentle slopes with caution.


Care should be taken when manually lifting alternative/optional components, i.e. stretcher frames, spreader bars etc., to avoid injury.

Do not attempt to manually lift the complete lift.

 **Caution:** Although manufactured to a high standard the *Opera* and accessories should not be left for extended periods in humid or wet areas.

Do not, under any circumstances, spray the *Opera* or accessories with water, i.e. under the shower (this excludes slings or ARJO approved wet environment equipment).

 **Warning:** It is advisable to familiarize yourself with and understand the operation of the various controls and features of the *Opera* and ensure that any action or check specified is carried out before lifting a patient.

 **Warning:** The *Opera* has been designed as a mobile lift for raising and transporting patients in hospitals and care facility environments, and should only be used for this purpose.

The *Opera* can be supplied with a variety of optional attachments, which may not be described in these instructions. If the *Opera* has been fitted with an alternative/optional sub-assembly, i.e. a stretcher, etc., always refer to the separate relevant operating instructions supplement, as well as these instructions, before operating the lift.

This product is intended to be operated entirely by an attendant. No functions regarding the control of this product should be performed by the patient. A second attendant may be required with certain patients.

Product Description/Function

Parts referred to in this manual

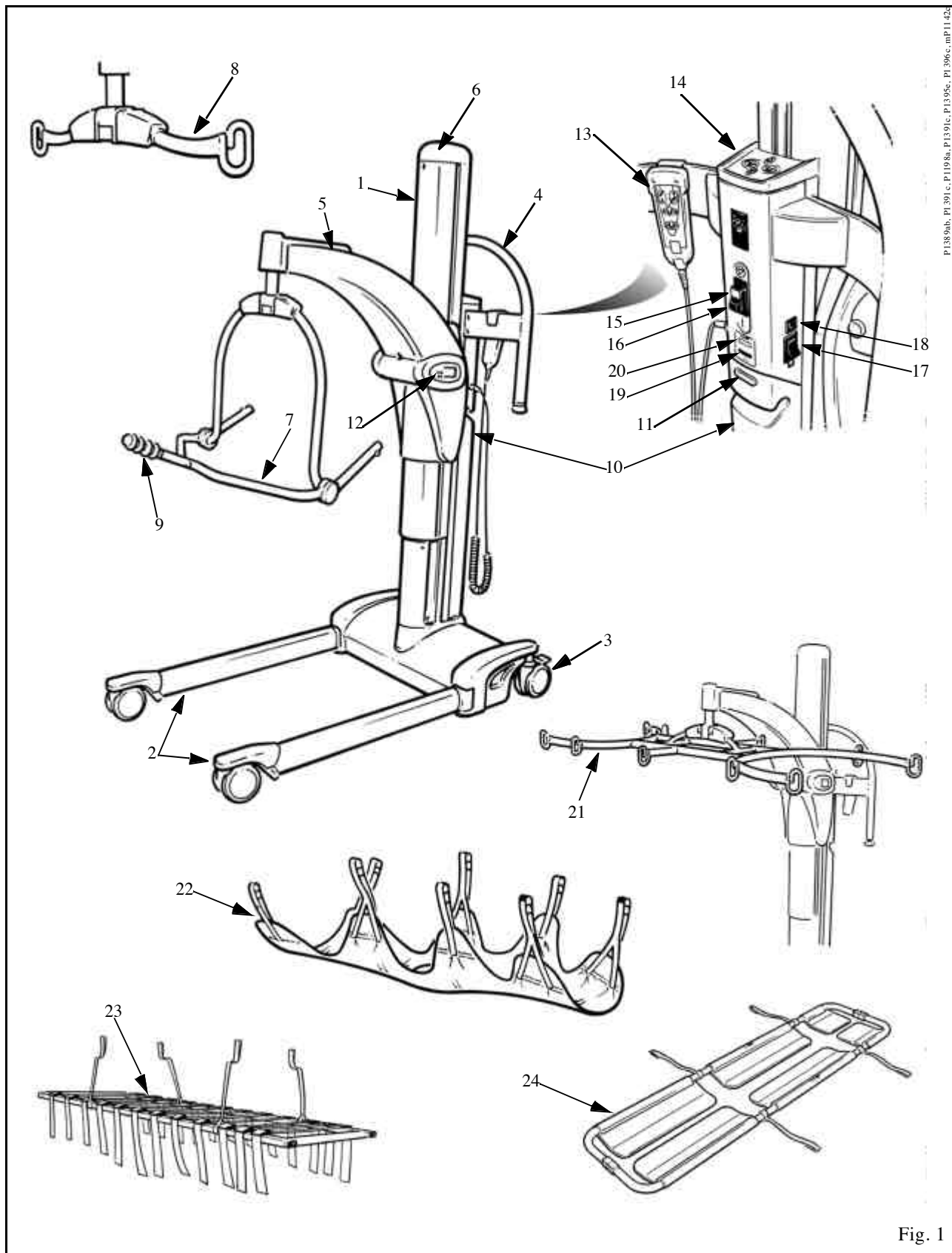


Fig. 1

Product Description/Function

Fig. 1 Key

1. Mast
2. Adjustable chassis legs
3. Braked castors
4. Lift maneuvering handle
5. Jib
6. Mast top cover
7. 4-Point spreader bar
8. 2-Point spreader bar (if supplied)
9. Patient positioning handle
10. Lift battery pack
11. Battery release button
12. Patient scale (if fitted)
13. Control handset
14. Dual control panel
15. Emergency stop button
16. Reset button
17. System failure lower override
18. System cut-out switch
19. Battery discharge indicator
20. Service indicator
21. Stretcher frame (if supplied)
22. Soft stretcher (if supplied)
23. Strap stretcher (if supplied)
24. Scoop stretcher (if supplied)

Product Description/Function

Slings

- **Note :** All Opera slings will support 420lbs. Note: the extra extra large sling will support 440 lbs. All slings are coded for size with a different colored edge binding as follows:
Brown - Extra small - XS
Red - Small - S
Yellow - Medium - M
Green - Large - L
Blue - Extra Large - XL
White - Extra Extra Large - XXL

A circular label is fitted to the lift jib for quick color-to-size reference (see the section titled "Labels").

A range of special purpose slings is available as accessories. For these or for special size slings, contact your ARJO representative.



Warning : Only use ARJO supplied slings and stretchers that are designed to be used with the *Opera*. The sling profiles illustrated (see Fig. 2) will help to identify the various ARJO slings and fabric stretchers available.

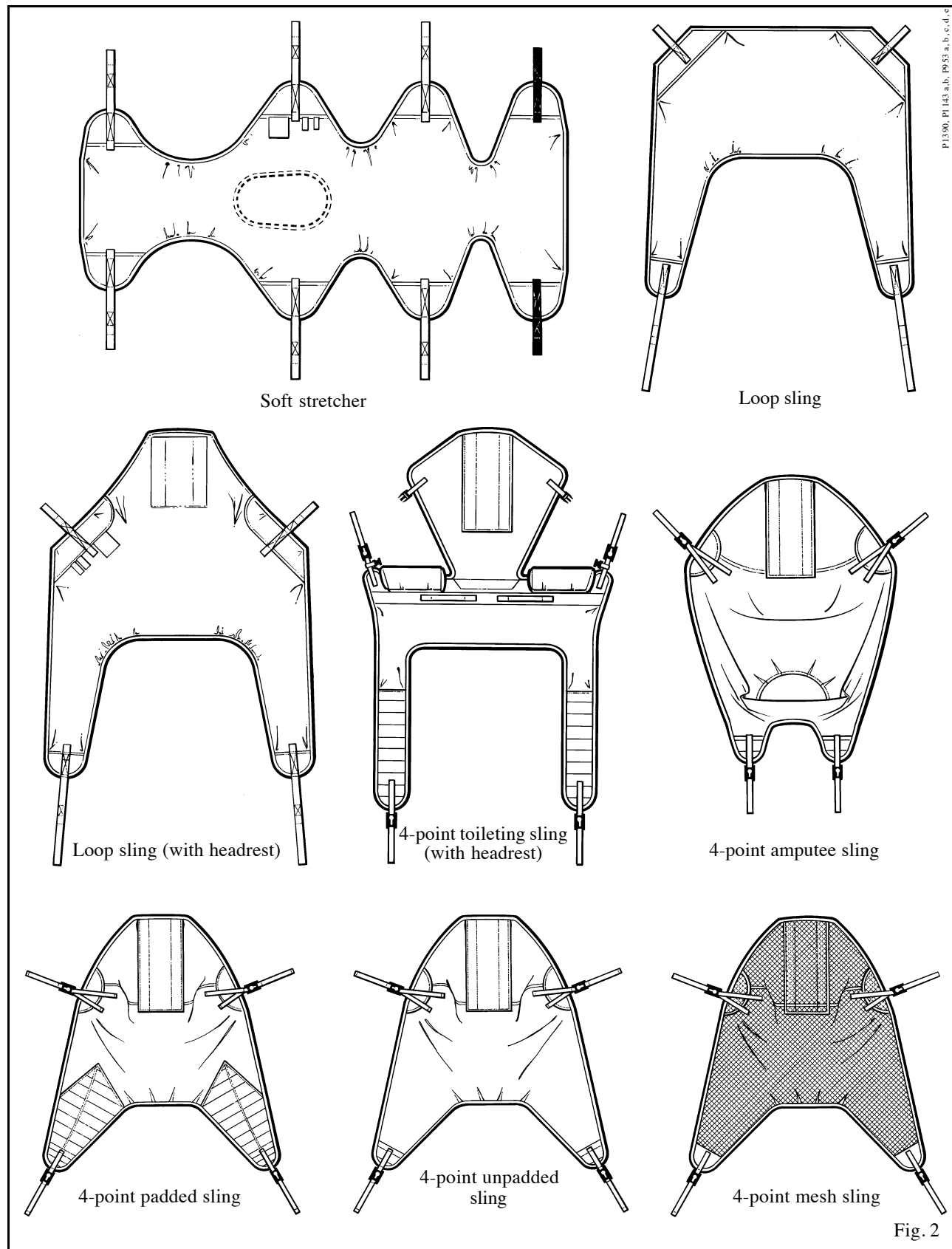
If Flites from ARJO (disposable slings) are to be used with the *Opera*, always refer to the separate operating instructions for Flites (literature reference part No. MAX01720), as well as these instructions, before using them.



Warning: ARJO slings with head support have two pockets at the head section which should contain plastic reinforcement pieces during use. Always ensure that these reinforcement pieces have been inserted into the sling pockets before using the sling.

Product Description/Function

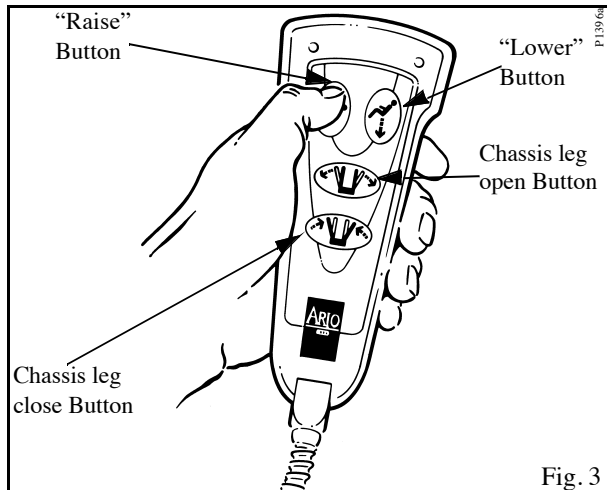
ARJO standard sling profiles that can be used with the Opera



Product Description/Function

Controls and Features

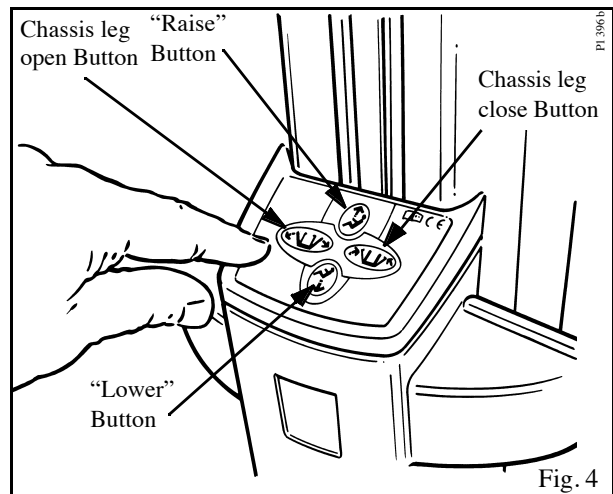
Control Handset (see Fig. 3): To raise and lower the jib and to open and close the chassis legs, press the appropriate button on the control handset. Note: icons with direction arrows are printed on each button for quick reference.



If the pressure is released during any function, powered motion will cease immediately. Do not drop the handset into water, i.e. the bath, etc., although if this does happen, no harm will come to the patient or attendant.

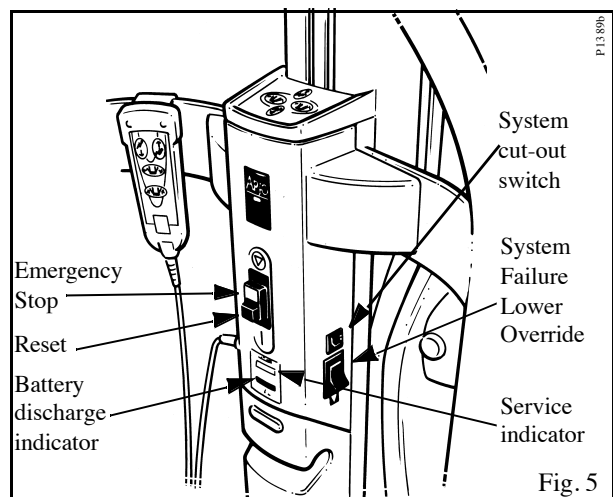
When it is not in use, keep the handset conveniently ready for use by hooking it over the handle support at the rear of the mast.

Dual Control Panel (see Fig. 4): An additional feature fitted to the *Opera* is a mast mounted dual switch panel. This operates in parallel with the control handset to enable powered operations to be controlled from the lift mast, as well as remotely by using the handset. As with the handset, icons with direction arrows are printed on each button for quick reference.



Emergency Stop Button (Red) (see Fig. 5): If, in an emergency, you have to immediately stop any powered movement (other than by releasing pressure on the control handset button or dual switch panel button), press the "emergency stop button" located on the rear of the mast.

Once the emergency stop button has been pressed, the green reset button will have to be re-engaged. This is done by pressing it in before any powered movement can be utilized.



Reset button (green) (see Fig. 5): This is adjacent to the emergency stop button. It is used to reset the "power on" status after the emergency stop button has been pressed. It is also used to reset if the automatic overload fuse has engaged, which is indicated by the reset button projecting outward slightly. If the fuse has engaged and, once reset, engages again, do not use the lift and contact the ARJO Service Department.

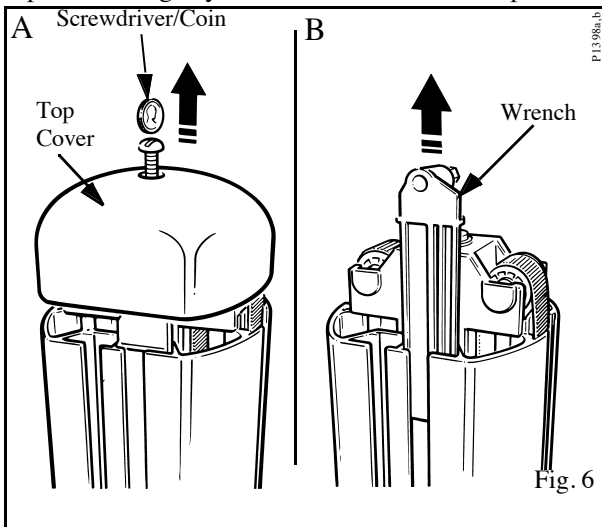
Product Description/Function

System Failure Lower Override (see Fig. 5): This can be used in the event of main control failure. If the control handset or dual switch panel fail to operate the lift, with a patient still supported by the sling or stretcher, a provision for lowering has been made using the “System Failure Lower Override switch” located to the right of the controls console. A green and white identification label is positioned near the switch for quick and easy recognition. If pressure is released from the switch during use, lowering will stop.



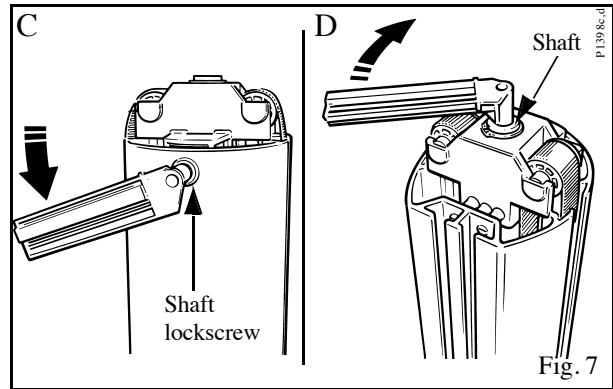
Warning: The Lower Override switch will only engage while the green reset button is in. Only use this switch in an emergency. Do not use it for normal lowering.

System Failure Wind Down Facility (see Figs. 6 & 7): If the electrical power fails due to battery power loss or another electrical malfunction, the jib can be lowered. **To do this, first remove the battery pack.** Then use a coin or screwdriver to slacken and remove the screw that retains the mast top cover. Slightly lift the rear side of the top cover



approximately 3/16 inch and slide the cover forward. Then lift it off the mast. Identify and remove the hexagonal wrench located inside the mast. Use the wrench to slacken the shaft lock screw located at the top front of the mast (see Fig. 7c) and turn it three full turns anti-clockwise. Identify the hexagonal hole in the shaft center inside the mast (see Fig. 7d) and use the wrench to turn the shaft clockwise and lower the patient.

- **Note:** One full clockwise rotation of the shaft lowers the mast jib by 3/8 inch.



Warning: If the mast is in a high position and the wind-down facility has to be used, always ensure that suitable and safe measures are taken to gain access to the top cover.

Hold the hexagonal wrench securely in the shaft. Do not release hand contact with the wrench as this could result in loss of control during the lowering procedure.

Once the patient has been lowered and removed from the lift, ensure that the components are re-assembled by reversing the above procedure.

- **Note:** To enable the shaft lock screw to be tightened by three full turns, the shaft may have to be rotated slightly to make alignment possible. To achieve this, identify the alignment mark on the top of the shaft and then rotate the shaft until the mark aligns with the axis of the lock screw.

If the system failure lower override switch or wind down facility has to be operated, do not use the lift and contact the ARJO Service Department.

System Cut-Out Switch (see Fig. 5): If the lift functions fail to operate when the buttons on the control handset or dual switch panel are pressed.

Check that the “green” reset button is pressed in and that the battery pack is fully charged. If the lift still fails to operate, check the system cut-out switch, located to the right of the controls console above the lower override switch. If the cut-out has engaged, the switch will protrude from its mount. Press the switch in to reset it.

Product Description/Function



Warning: If the system cut-out switch engages again, do not use the lift and contact the ARJO Service Department.

Automatic cut out (not an operator control but a function built into the lift electronics):

If the lift is overloaded (by lifting a patient heavier than permitted), an automatic “cut-out” engages to prevent the lift lifting a load in excess of one and a half times the maximum rated load. This will stop the lift motion automatically.

If this occurs, when pressure is released from the lift button on the handset or dual control the electronics will, after a short delay, reset and enable the patient to be lowered only, when either of the “lower” buttons is pressed. Remove the patient from the lift.

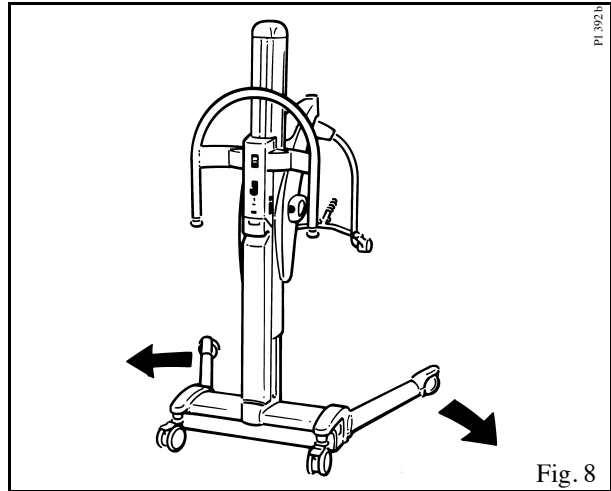
Automatic stop function (not an operator control but a function built into the lift electronics):

Great care should be taken not to lower the spreader bar or stretcher on to the patient or any other obstruction. If this should happen, the motor will stop and downward movement will be held by the obstruction. If this occurs, immediately release the pressure from the “lower” button, operate the “raise” button until the spreader bar/stretcher is clear, then remove the obstruction.

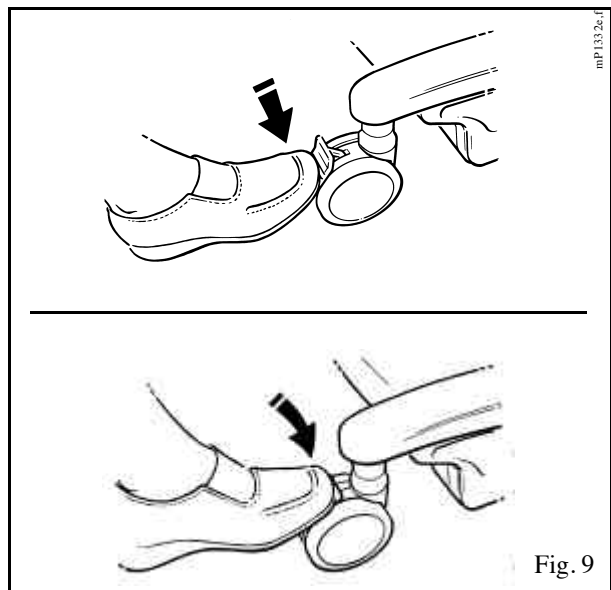
Battery Discharge Indicator (see Fig. 5): This is a small LED display which shows the charge condition of the lift battery (also, see the section titled “Battery Charging” for a complete description).

Service Indicator (see Fig. 5): This is a small LCD display which shows the total duration of powered operation (in hours) of the lifting and lowering procedure. This is primarily intended to assist service engineers.

Adjustable width chassis legs (see Fig. 8): Press the appropriate button on either the control handset or the dual control panel on the lift to open the chassis legs to any variable width. When pressure is released from the button, the movement will stop and the chassis legs will remain securely in position. Always transport the chassis legs in the narrow (closed) position.



Chassis castor Brakes (see Fig. 9): The chassis rear castors have brakes which can be foot operated if required, i.e. when leaving the patient unattended, or to keep the *Opera* in position.



Jib and spreader bars/stretcher frame (see Fig. 1): If the *Opera* has not been supplied with a “dedicated” or permanently attached powered patient positioning 4-point spreader bar (PPP), it will be supplied with the “Lock and Load” system jib. This jib is fitted with a carrier able to accommodate any of the *Opera* jib attachments, i.e. the 2- or 4-point spreader bars, stretcher frame, etc. (see the section titled “Using the *Opera*” for full instructions on fitting or changing the attachments).

Before Approaching the Patient:

Ensure that the battery pack supplied is fully charged before use (to charge it, see the instructions in the section titled “Lift Battery Charging”). When the battery pack is fully charged, remove it from the charger unit and insert it into the battery position of the *Opera* located at the rear of the mast (see Fig. 1). To do this, first locate the recess across the bottom of the battery with the protrusion at the bottom of the battery position. Then pivot the battery into position until the retaining catch engages. An electrical connection will be made automatically.

Ensure that the green reset button (located on the control console below the dual control panel) is pressed in (see Fig. 5).

Ensure that a selection of sling types and sizes is easily available for all types of lift likely to be performed with the *Opera*.

The attendant should always tell the patient what they are going to do, and have the correct size sling ready. When possible, always approach the patient from the front.



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

If required, the chassis legs may be opened to maneuver around a chair or wheelchair.

Powered opening “V” chassis:

Select the appropriate button on the control handset or dual switch panel and keep it pressed until the required width is achieved. To close the legs, press the appropriate button. The movement will stop if the pressure is released, whether opening or closing.



Warning: When opening or closing the legs on a powered chassis, do not allow anyone to stand in the way of the moving chassis legs.

Transport the *Opera* with the chassis legs in the parallel (closed) position only.

Opera “Lock and Load” System

(see Figs. 10 & 11)

If the *Opera* has not been supplied with a “dedicated” or permanently attached powered patient positioning (PPP) spreader bar, it will be supplied with the “Lock and Load” System jib. If

you need to fit or change the attachment, i.e. spreader bar or stretcher frame, proceed as follows:

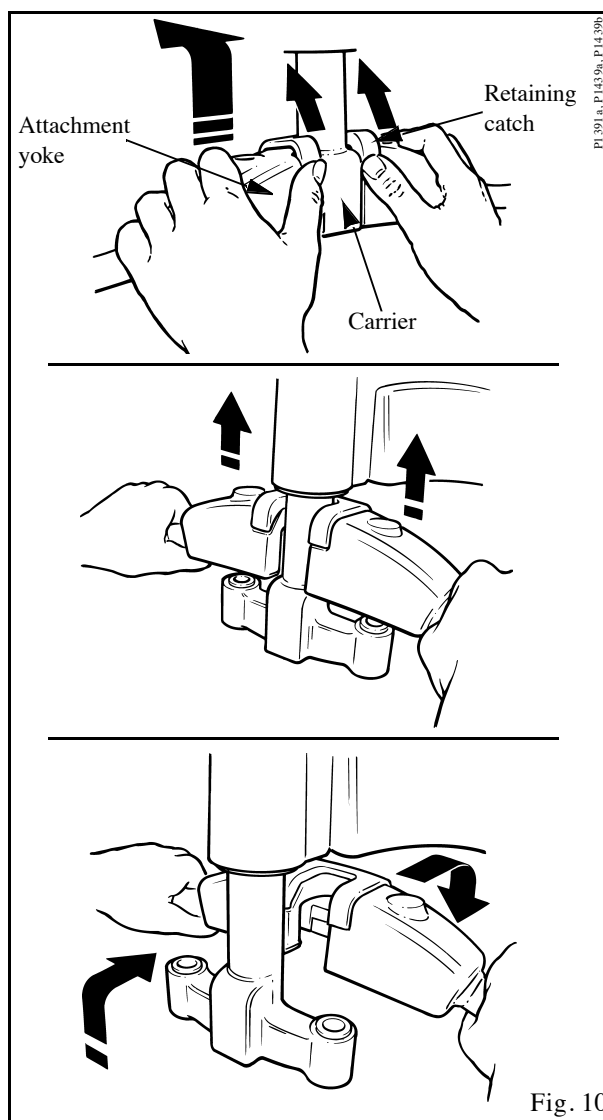


Fig. 10

To remove an existing attachment, hold the unit carefully and depress the retaining catch on the attachment yoke (see Fig. 10) to release the attachment. Lift the yoke upward and away from the carrier and store it carefully for future use. Select the attachment required. Then carefully lift the unit up and allow the recess in the yoke to fit around the carrier shaft. Ensure that the yoke drops down over the carrier and the retaining catch engages (see Fig. 11). To check the locking, try to lift the yoke without depressing the retaining catch.

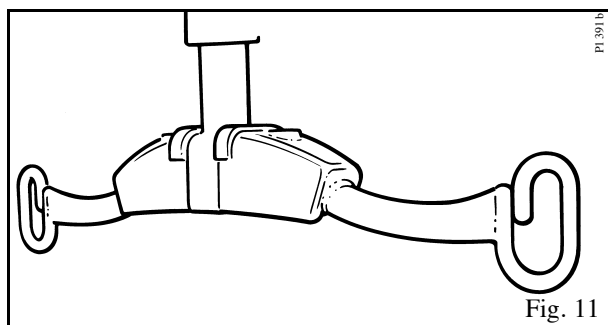


Fig. 11



Warning: Care must be taken when the weight of the unit comes away from the jib.

For larger attachments, or if you are in doubt about being able to lift and hold the attachment securely, use more than one person for the operation, or support the attachment on a bed or chair.

Using the 4-point spreader bar

Ensure that the spreader bar is securely connected to the jib before commencing the lift (“Lock and Load” system jib only).

To Lift from a Chair

Place the sling around the patient so that the base of his/her spine is covered and the head support piece is behind the head. Pull each leg piece under the thigh so that it emerges on the inside of the thigh (see Fig. 12).

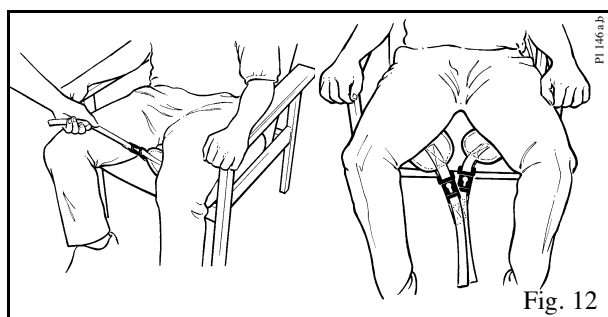


Fig. 12

Ensure that the positioning handle on the spreader bar is facing away from the patient, and that the wide part of the spreader bar is located at the patient’s shoulder level (see Fig. 13).

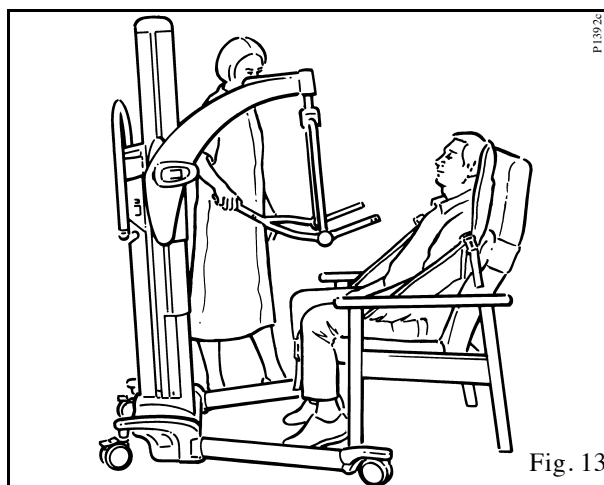


Fig. 13

Ensure that the *Opera* is close enough to be able to attach the shoulder clips of the sling to the spreader bar. To achieve this you may have to put the patient’s feet on or over the chassis.

Once the *Opera* is in position, attach the shoulder strap attachment clips to the pegs on the spreader bar (see Fig. 14).

- **Note:** The chassis rear castors have brakes which can be foot operated when required (see Fig. 9). Do not apply the castor brakes at this stage, as the position of the patient will adjust to his/her own center of gravity when lifted.

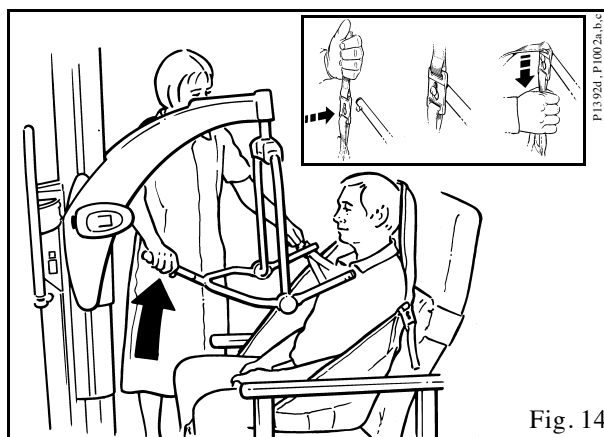


Fig. 14



Warning: Apply the castor brakes when leaving the patient unattended or to keep the *Opera* in position on a sloping surface.

Press down on the positioning handle of the spreader bar and attach the leg strap attachment clips to it (see Fig. 15).

Using the Opera



Fig. 15

If necessary, use the handset control to lower the spreader bar, being careful not to lower it on to the patient. If this should happen, there is a built-in cut-out device which will prevent any further downward movement. Do not continue to press the handset lowering button.

- **Note :** *If the handset button is released during lifting or lowering, powered motion will stop immediately.*



Warning: IMPORTANT: Always check that the sling attachment clips are fully in position before and during the lifting cycle, and in tension as the patient's weight is gradually taken up.

Raise the patient by operating the handset control. Move the lift away from the chair, then carefully lift the positioning handle until the patient is reclined in the sling - the head support will now come into use (see Fig. 16). This is the most comfortable position for transportation, as it reduces pressure on the patient's thighs. The angle of recline can be adjusted for increased comfort if the patient is restless.

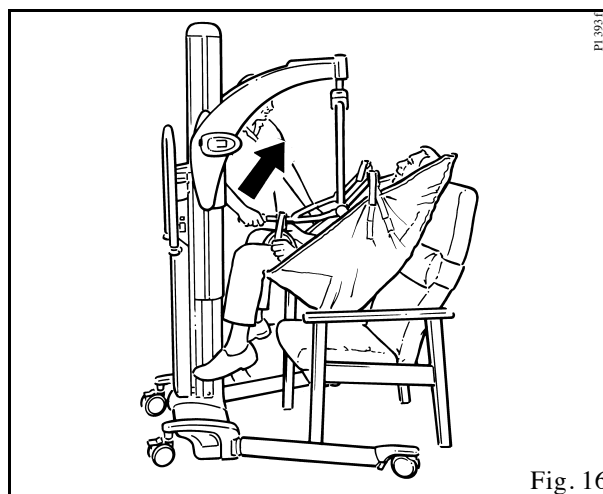


Fig. 16

Before transportation, turn the patient to face the attendant at approximately normal chair height (see Fig. 17). This gives confidence and dignity and also improves the mobility of the Opera.

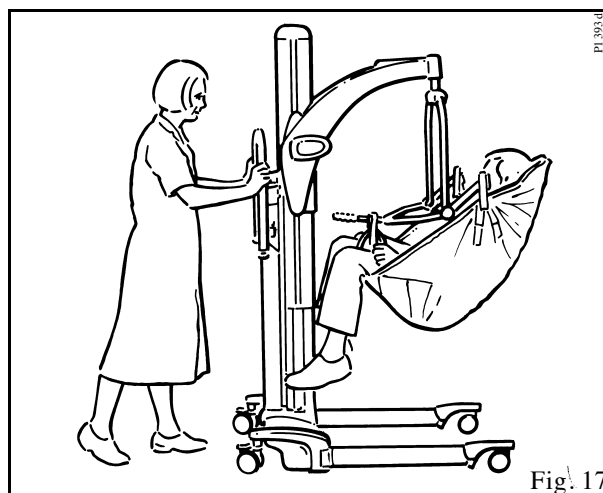


Fig. 17

Remember to release the brakes, if they have been applied, before attempting to transport the patient.

When lowering the patient back into a chair or when transferring from bed to chair, push down on the positioning handle to place the patient in a comfortable sitting position. This avoids further lifting strain. Take care not to push down too quickly, as this may jerk the patient's head forward.



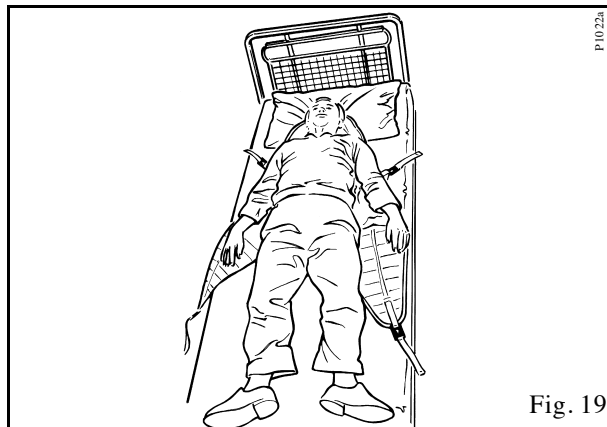
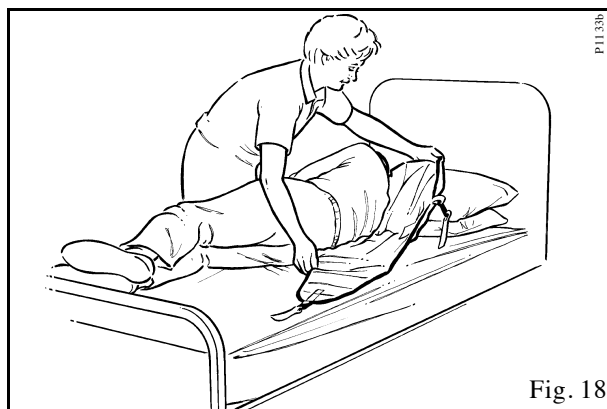
Warning: When lowering the lift, ensure that the patient's or attendant's legs and feet are clear of the moving mast.

Using the *Opera*

To Lift from a Bed

Before lifting a patient from a bed, ensure that there is sufficient clearance underneath, to accommodate for the *Opera* chassis legs.

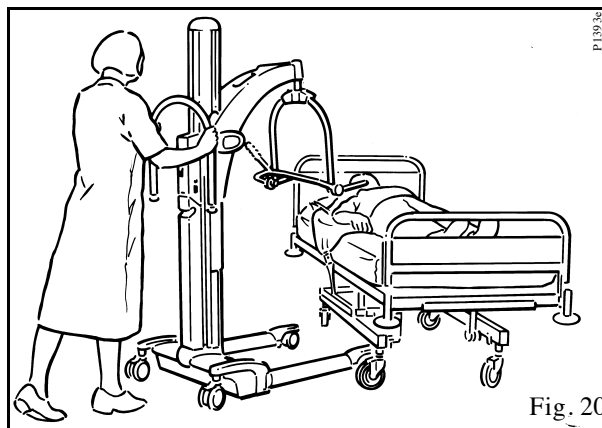
To position the patient on the sling, roll the patient toward you. Then fold the sling in half and place it behind the patient's back (see Fig. 18). Position the sling carefully so that when rolled back, the patient will lie centrally on the sling (see Fig. 19). Check that the head support area of the sling covers the patient's neck.



- Note :** When rolling the patient back onto the sling, roll the patient slightly in the opposite direction so that the folded part of the sling can be brought out.

Alternatively, the patient can be brought into a sitting position. This is detailed in the section titled "To Lift From A Chair".

Approach the bed with the open side of the spreader bar toward the patient's head (see Fig. 20).

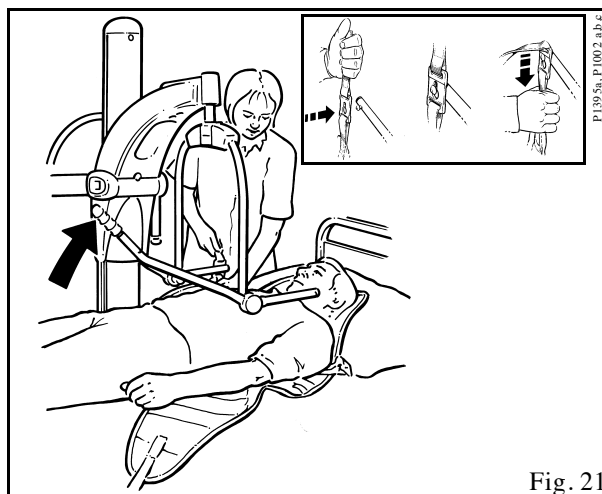


Use the adjustable width chassis to make adjustments to chassis leg widths to assist maneuverability around obstructions, i.e. bed legs.

Position the *Opera* so that the spreader bar is just above, and centrally situated over the patient.



Warning: Care must be taken not to lower the spreader bar on to the patient.



Use the positioning handle to tilt the spreader bar until the shoulder attachment points can be connected to the sling shoulder strap attachment clips (see Fig. 21).

Press down on the positioning handle until connection of the sling leg pieces is possible (see Fig. 22). The leg pieces must be brought under the thighs to connect up. This may involve lifting one leg at a time to connect. The spreader bar may need to be lowered, using the handset control.

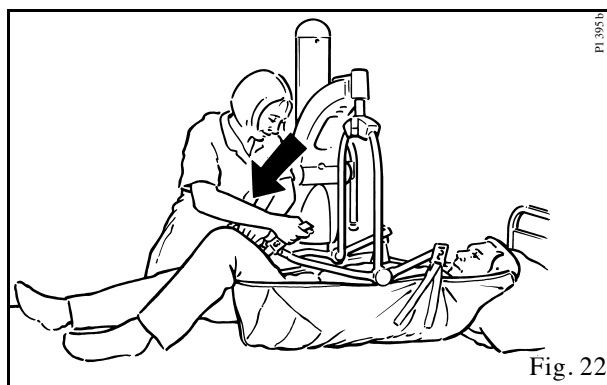


Fig. 22

When lifting from the bed, some attendants prefer to connect the leg pieces first. This particularly applies to patients with large thighs. In this case, raise the hip and knee into maximum flexion and attach the leg strap attachment clips. Then tilt the spreader bar toward the shoulders for connection.



Warning: IMPORTANT: Always check that the sling attachment clips are fully in position before and during the lifting cycle, and in tension as the patient's weight is gradually taken up.

Lift the patient using the handset control, and adjust the patient to a comfortable position for transfer (see Fig. 23). The specially designed sling together with its integral head support, enables one person to carry out the complete lifting function without additional help.

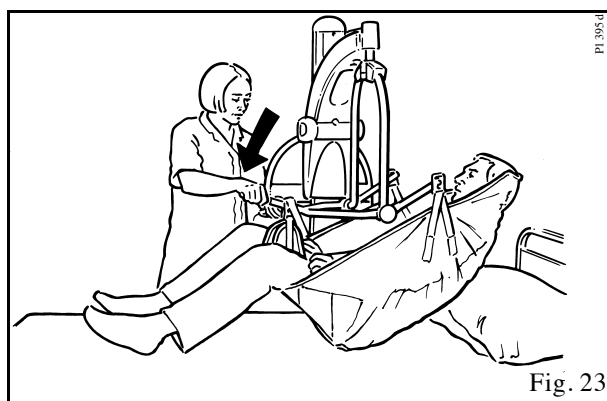


Fig. 23

If returning the patient to a bed, adjust the sling position as necessary to move the patient into the desired position above the bed, then lower the patient using the handset control.



Warning: When lowering the lift, ensure that the patient's or attendant's legs and feet are clear of the moving mast.

Only when the patient's body weight is fully supported by the bed may the sling leg connection clips be detached, followed by the shoulder connections.

Move the *Opera* away before removing the sling from under the patient. If transferring the patient to a chair, refer to the section titled "To Lift from a Chair".

To Raise from the Floor

Put the sling around the patient, by using the rolling or sitting-up method. Depending on the circumstances, space and/or position of the patient, approach the patient with the open part of the chassis. Open the chassis legs if necessary, and lift the patient's legs over the chassis as shown in Fig. 24.

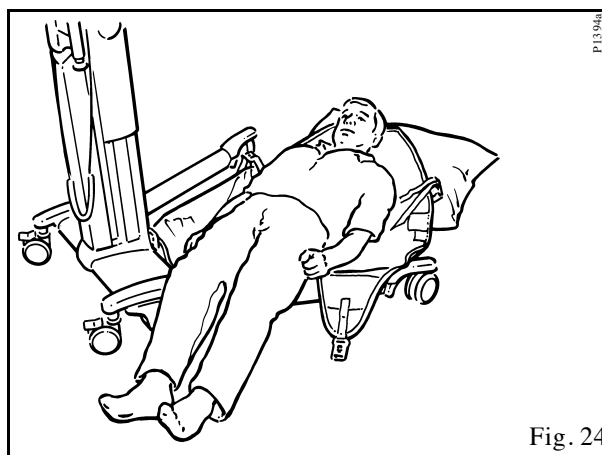


Fig. 24

The patient's head and shoulders could be raised on pillows for comfort, if required, but this is not essential when connecting the sling to the spreader bar.

With the open part of the spreader bar pointing down toward the shoulders, attach the shoulder strap attachment clips as shown in Fig. 25 and inset.

Using the *Opera*

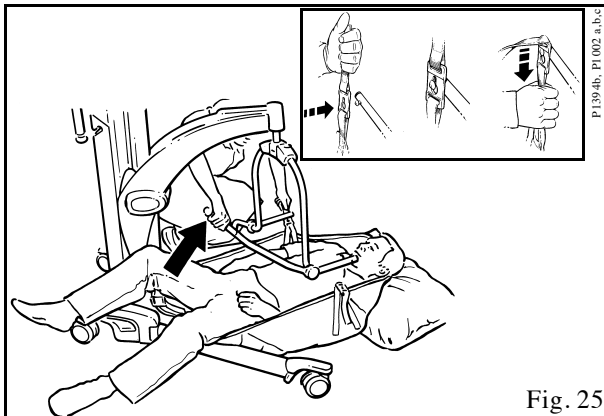


Fig. 25

Once connected, raise the hip and knee into maximum flexion, and push down on the positioning handle in order to connect the leg strap attachment clips as shown in Fig. 26. This will raise the patient's head and shoulders slightly.

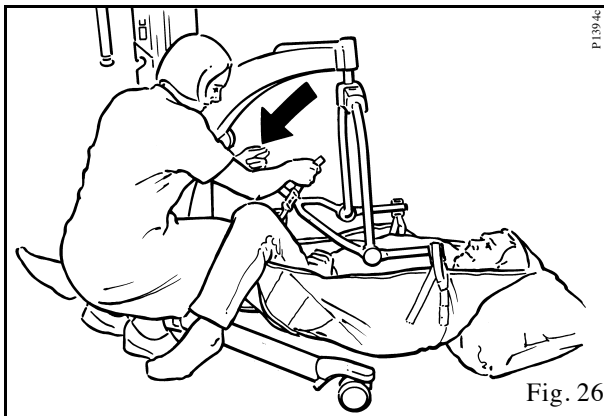


Fig. 26



Warning: IMPORTANT: Always check that the sling attachment clips are fully in position before and during the lifting cycle, and in tension as the patient's weight is gradually taken up.

When lifting from the floor, some attendants prefer to connect the leg pieces first. This particularly applies to patients with large thighs. In this case, raise the hip and knee into maximum flexion, and attach the leg straps first. Then tilt the spreader bar toward the shoulders to enable the shoulder straps to be connected.

When all the straps have been properly connected, raise the patient from the floor in a semi-recumbent position. Support the head to offer comfort and reassurance to the patient. Once raised from the floor, ensure that the patient's legs are clear of the chassis before continuing to lift (see Fig. 27). The leg sections of the sling will tend to be fairly high

in the crotch, so straighten them out for added comfort. The patient may be positioned in a chair, or placed on a bed. If the patient is prone to extensor spasm, he/she may be lifted by the *Opera*, but special attention should be paid to support of the legs during the early part of the lift.

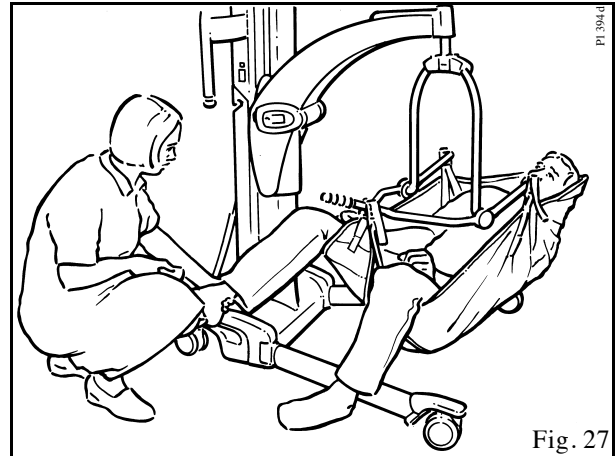


Fig. 27

When lifting a patient with leg amputations, use the double amputee sling (available as an accessory from ARJO). This sling is specially designed to accommodate for the differing patient center of gravity.



Warning: When lowering the lift ensure that the patient's or attendant's legs and feet are clear of the moving mast.

Transportation of a patient should always be done with the chassis legs parallel (closed) as this will make maneuverability easier, especially through doorways. The patient should be positioned facing the attendant (see Fig. 17). Apply the chassis brakes if leaving the patient unattended.

At the Toilet

To toilet a patient, use the toilet sling with head rest. The toilet sling is fitted in a similar manner to the standard 4-point sling, except that the sling is not taken to the base of the patient's spine but fitted so that the top of the head support piece of the sling is level with the top of the patient's head (see Fig. 28), as a guide to positioning.

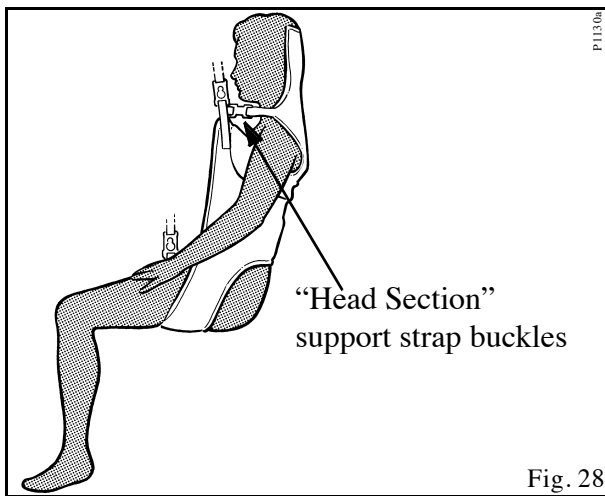


Fig. 28

The ARJO toilet sling has been specially designed to help support patients while toileting.



Warning: It is essential to familiarize yourself with the correct method of use before any attempt is made to lift a patient.

Always ensure that the patient has sufficient trunk and head control to be safely lifted in the toilet sling. If in doubt, use the standard type sling.

To provide the best possible access when toileting, the sling has a wide commode opening and because of this it is essential that:

- the correct size sling is chosen, relative to the weight and height of the patient; and
- both of the patient's arms are positioned outside the sling, over the padded areas but under the "head section" support straps (see Fig. 28). This will help to prevent the patient from sliding through the sling.

- Note:** It is advisable to release the "head section" support strap buckles before fitting the sling. Once the sling is around the patient, reconnect the support strap buckles, while ensuring that the patient's arms are positioned over the sling.



Warning: Always ensure that the patient, when suspended, is in an upright sitting position as shown in Fig. 28.

When used in accordance with these instructions,

the toileting sling provides a very effective method of toileting dependent patients.

Once the patient has been lifted and transported to the toilet, position the lift so that the patient is positioned above the toilet seat.



Warning: When lowering the lift, ensure that the patient's or attendant's legs and feet are clear of the moving mast.

Apply the chassis brakes.

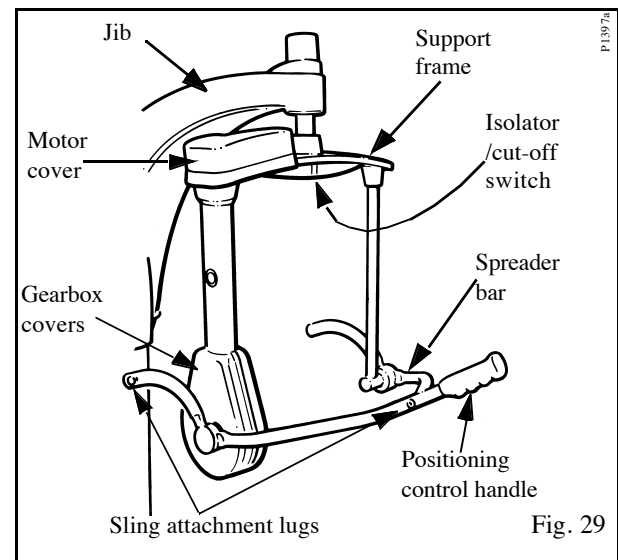
Unbutton and/or remove the patient's garments and lower the patient to a comfortable sitting position.



Warning: Always use the toilet sling with caution. Encourage the patient to hold tightly to the sling to avoid sliding out. Do not use the toilet sling for lifting and transportation apart from toilet visits.

Powered Patient Positioning Spreader Bar (if fitted)

If the lift has been fitted with a Powered Patient Positioning (PPP) spreader bar, use this type of spreader bar (including sling positioning with patient, sling connection to the spreader bar, and patient handling) as you would the non-powered 4-point spreader bar described previously in these instructions.



The fundamental difference is that the PPP spreader bar has the added advantage of enabling the patient positioning manoeuvre to be performed by the attendant with minimal physical strain.

Using the *Opera*

Rotate the PPP spreader bar manually and in the same way as the manual patient positioning spreader bar.



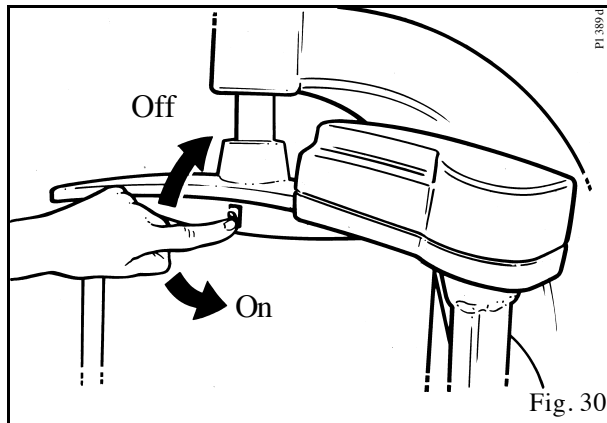
Warning: Before using the lift when it is fitted with the PPP spreader bar, familiarize yourself with the various parts as illustrated in Fig. 29. Then read and thoroughly understand the following operating instructions.

The PPP spreader bar must be used in accordance with the following instructions and in conjunction with the operating instructions previously described for the manually operated (non-powered) 4-point spreader bar.

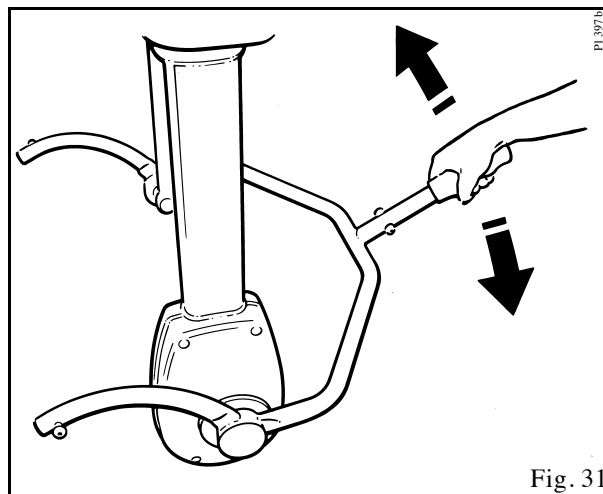
The lifting capacity of the lift when fitted with the PPP spreader bar remains the same as that of the non-powered patient positioning spreader bar version.

The PPP spreader bar is fully waterproof and is classified by ARJO as a wet environment unit. It has a blue and white circular label attached to it to qualify this (see the section titled “Labels”). The label signifies that the lower end of the unit may be immersed in bath water.

To operate the powered patient positioning function, ensure that the isolator/cut off switch is in the on position (see Fig. 30).



When you are ready to perform the patient positioning function (as described previously), hold the positioning handle and apply a lifting or lowering action as necessary (see Fig. 31).



- **Note:** A slight pivoting movement of the handle may be noticed. This is correct, and is how the direction sensing device operates.

Powered movement will continue in the direction of hand pressure until the limit of travel has been reached or until pressure is released from the handle.



Warning: To stop any powered movement, release the pressure from the handle or press the isolator/cut-off switch.

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

- **Note:** The isolator/cut-off switch can remain in the ON position indefinitely if required. It will not drain any power from the battery.



Warning: Before and during operation of the powered patient positioning spreader bar, ensure that all obstructions are clear of the spreader bar, support frame and jib.

Patient positioning function cut-out fuse

If an obstruction is encountered during upward or downward movement, an automatic cut-out fuse will operate to protect the system. The fuse will reset quickly once powered movement has ceased, and the obstruction or lift should then be moved to prevent this re-occurring. If the patient positioning function cut-out fuse engages again, do not use the lift and contact the ARJO Service Department.

Care Of the Powered Patient Positioning Spreader Bar

For general care, refer to the section titled “Care”. Refer in particular to the paragraphs relating to cleaning, plastic parts, labels, etc.

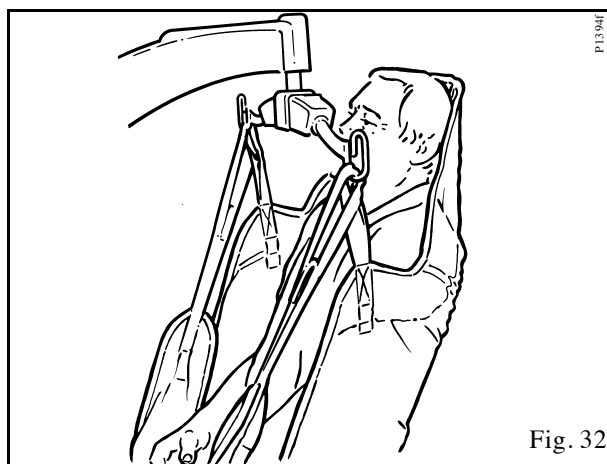


Warning: The motor and gearbox covers house moving parts. Care must be taken not to damage these covers. If the covers become damaged, do not use the lift and replace the cover/s before re-using the lift.



Warning: Apart from cleaning, no user maintenance is required, but some components may need to be serviced or replaced periodically. This should be carried out by an ARJO qualified service engineer. For more information contact ARJO. Also, see “Servicing Advice” in the section titled “Care”.

Using the 2-point spreader bar



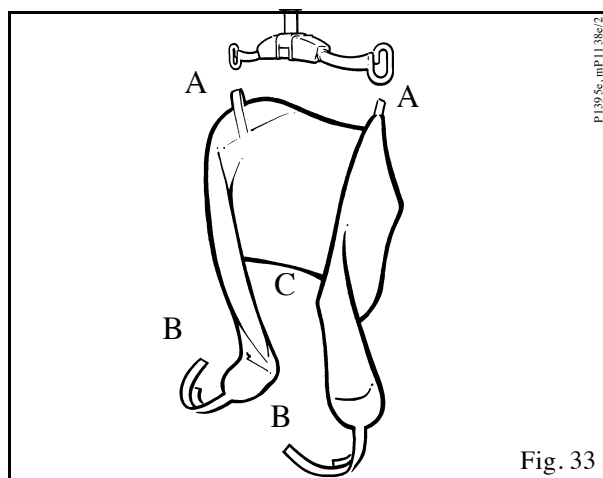
Warning: Before attaching the sling, ensure that the spreader bar is rotated into position so the eventual lift will resemble Fig. 32.

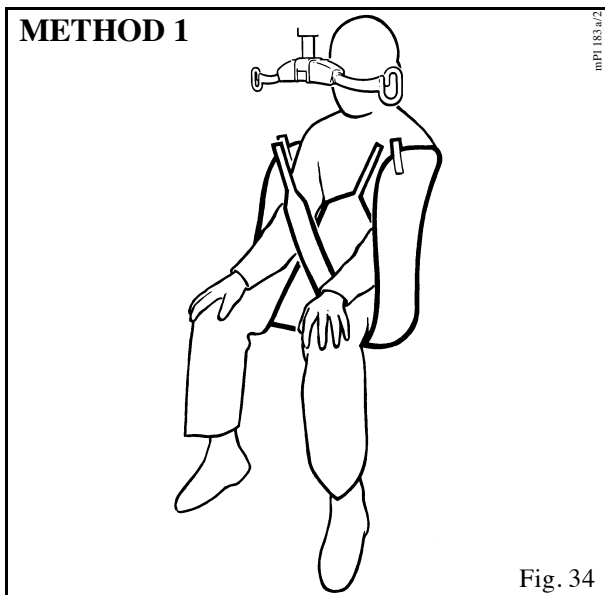
The slings to be used with the 2-point spreader bar are the ARJO loop slings (see Fig. 2). They are available in four sizes (small, medium, large and extra large) and are all color-coded. A range of more specialized slings are available. Please contact ARJO for details.

The loop sling is available with or without head support. A bathing mesh sling is also available in all the four sizes with or without head support.

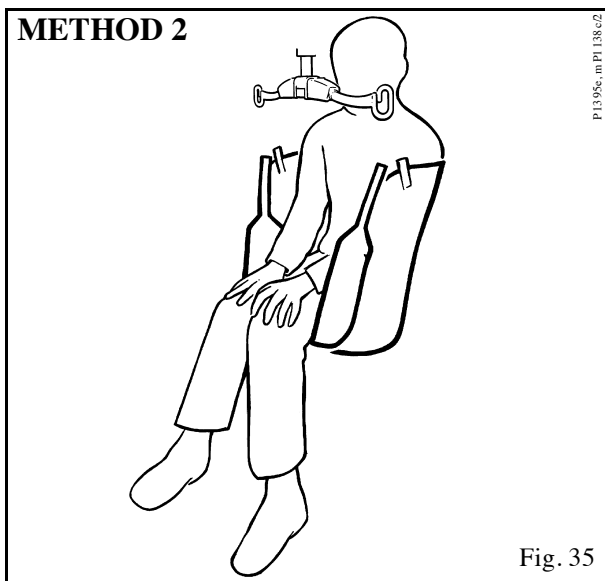
To Lift from a Chair

Method 1 - Ease the patient forward, if necessary, and slide the sling down the patient’s back until seam “C” (see Fig. 33) reaches the base of the spine. Take attachment points “B” and loop the tails of the sling underneath the patient’s thighs. Ensure that the sling pieces are not twisted underneath the patient. Hook the loops on to the “opposite side” outer hooks on the spreader bar (see Fig. 34).

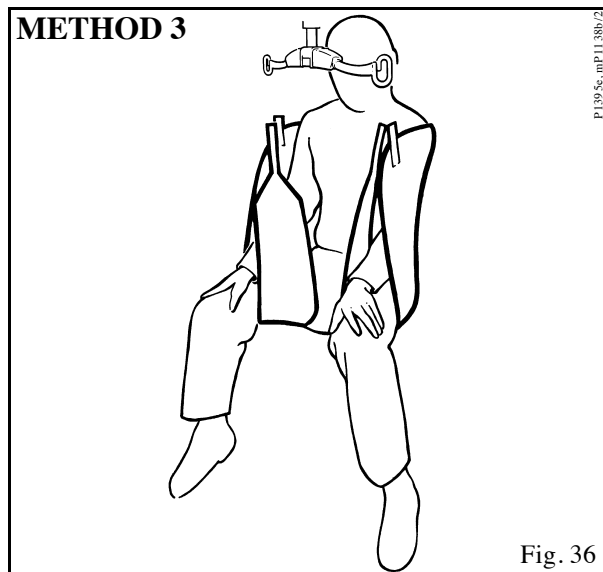




Method 2 - Repeat method 1, but before attaching points “B” to the outer hooks on the spreader bar, pass each tail portion of the sling under both thighs and out the other side (see Fig. 35).



Method 3 - Repeat method 1, but loop a tail portion of the sling under each thigh and attach it to the same side hook as the shoulder attachment (left straps to left hook and right straps to right hook). This method holds the legs in abduction, and is useful for toileting (see Fig. 36).



Once the sling has been positioned and attached securely to the spreader bar, a lift can be performed using the control handset. For general patient maneuvering and transportation see also the section titled “Using the 4-point spreader bar”.



Warning: Always check that all the sling attachment loops are in position before and the lifting cycle, and in tension as the patient’s weight is gradually taken up.

When lowering the lift, ensure that the patient’s or attendant’s legs and feet are clear of the moving mast.

Apart from the methods listed above, the 2-point spreader bar with loop slings is also extremely useful for lifting patients who have contracted legs, where the patient’s leg position prohibits the use of the 4-point spreader bar. Attach the sling in the normal manner as described in the section titled “To Lift from a Bed”.

To Lift from a Bed

Place the sling under the patient as if it were a drawsheet. Flex the patient’s legs and bring the sling leg pieces under the thighs. Attach the sling to the spreader bar by using any of the methods 1-3 above.



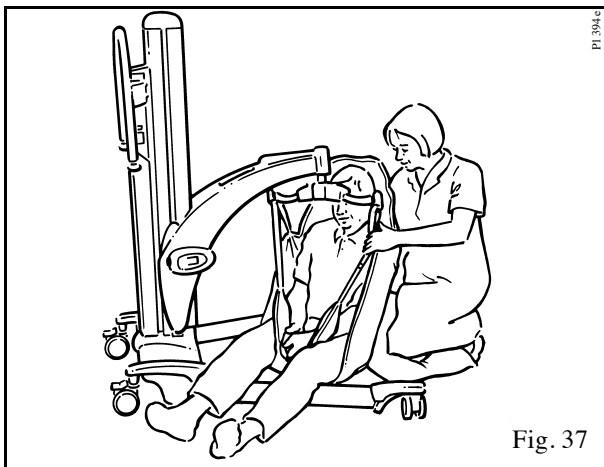
Warning: IMPORTANT: Check that all four points of the sling are securely connected before lifting.

Using the *Opera*

To Lift from the Floor

(Some attendants prefer to use a larger sling for this operation.)

Raise and support the patient into a sitting or half-sitting position. Feed the sling down the patient's back and bring the leg pieces of the sling into position. Raise the patient's legs over the chassis and bring the lift into position as shown in Fig. 37. With the jib set as low as possible, attach the shoulder loops. Bend the patient's knees up to connect the leg pieces.



Warning: Check that all the loops are securely attached before performing the lift.

When lifting or lowering a patient who is supported by a sling, it is not necessary to use the brakes. This allows the lift to move to the correct position relative to the patient's center of gravity.



Warning: Apply the castor brakes when leaving the patient unattended, or to keep the *Opera* in position on a sloping surface.

When the patient has been returned to the bed he/she may be reclined before the sling is detached.



Warning: When lowering the jib, ensure that the patient's or attendant's legs and feet are clear of the moving mast.

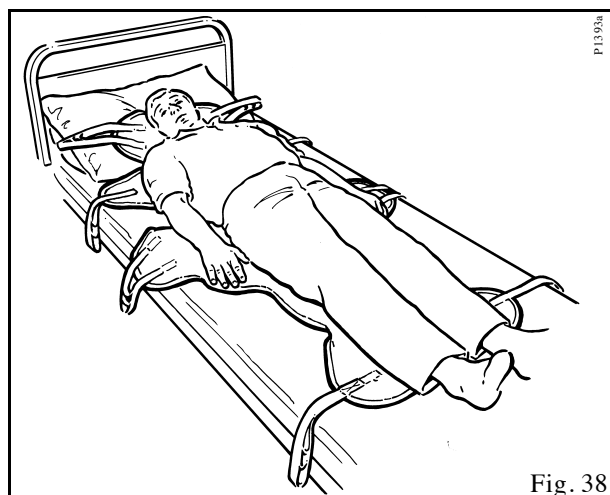
Using the Soft Stretcher

The soft stretcher is intended for use with the stretcher frame and is available in two sizes: large and extra large. It is also supplied in both polyester and polyester mesh. Both types are available with or without a commode hole. To lift a patient with the stretcher frame and soft stretcher, proceed as follows:

Identify the head of the soft stretcher by means of the label sewn to the head end.



Warning: Position the soft stretcher sling as shown in Fig. 38, by rolling the patient as if inserting a drawsheet. Ensure that the top section of the sling (indicated by the label attached to the sling) is under the patient's head, with the top edge of the sling level with the top of the head. With the stretcher frame as high as possible (but not so high that it contacts the patient if it swings), move the lift until the frame is directly over the patient. The frame is symmetrical and can be used either way round (see Fig. 39). Lower the stretcher frame carefully over, and just clear of the patient, aligning the center of the frame approximately over the patient's navel. Connect all the sling loops securely (see Fig. 40). Note: The attachment straps have several connection loops. Choose whichever loop is the best to enable the patient to lie in the most comfortable position (see Fig. 41).



Using the *Opera*

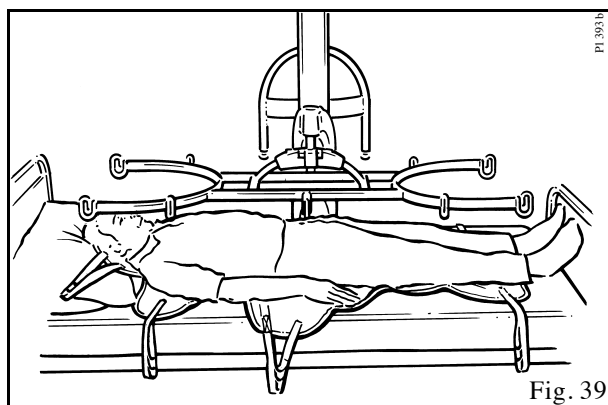


Fig. 39

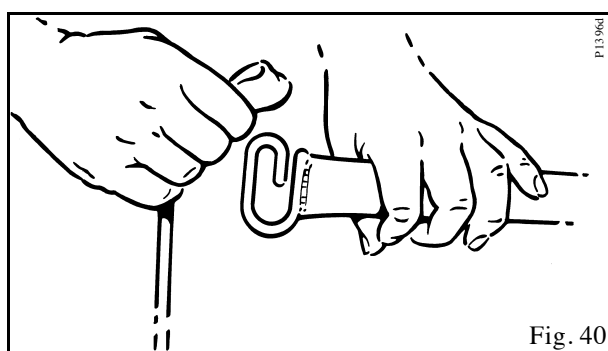


Fig. 40



Warning: It is essential to keep the patient at approximately normal bed height to ensure stability and maintain patient/attendant contact.

When lowering the jib, ensure that the patient's or attendant's legs and feet are clear of the moving mast.

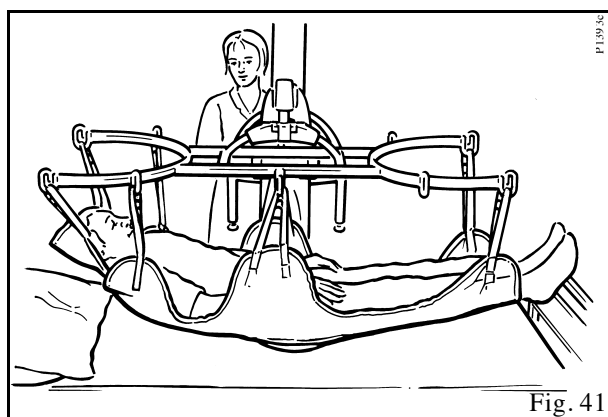


Fig. 41

Raise and withdraw the patient from the bed. If preferred, rotate the stretcher frame until the patient's feet are in proximity to the mast (see Fig. 42). In this position, the complete unit may be transported through wide doorways. Alternatively,

leave the patient at 90° to the mast. In this position the lift and patient can be moved through the doorway sideways.

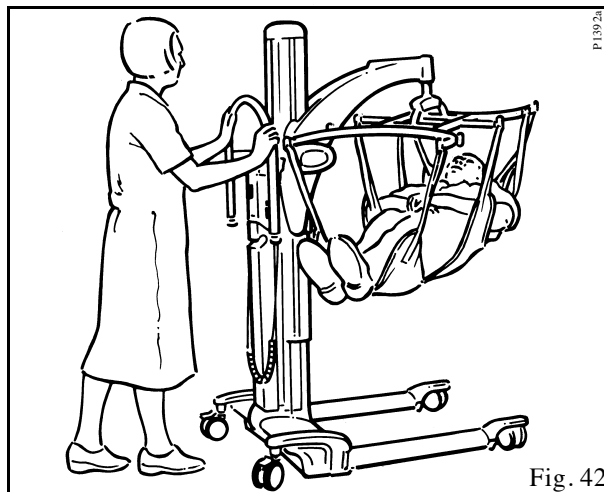


Fig. 42



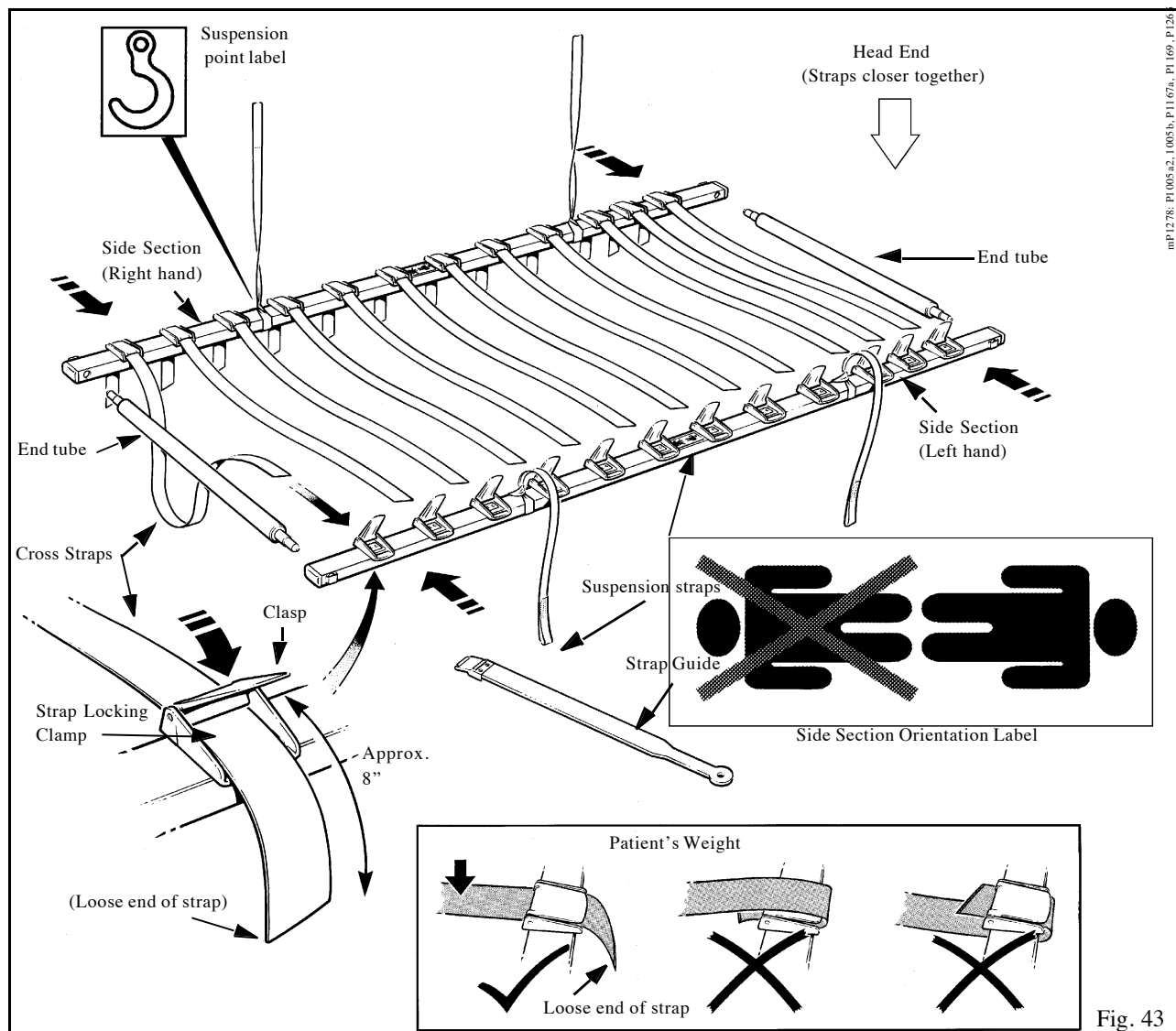
Warning: Only use soft stretchers that have every attachment strap colored blue.

Note: The "head end" straps have a black tab stitched to them to enable correct usage with other ARJO stretcher frames.

Do not use any other type of soft stretcher sling with the *Opera*.

The stretcher frame is classified by ARJO as a wet environment unit, and has a blue and white circular label attached to it to qualify this (see the section titled "Labels"). This label signifies that the unit may be immersed in bath water or used for showering.

Using the Strap Stretcher



mP1278: P1.005.a2, 1.005.b, P11.67.a, P1.169, P.126

Fig. 43

First, attach the 12 cross straps to one of the side sections (see Fig. 43) by pushing each strap through a locking clamp. Lock them by pressing the clasp down. Initially leave approximately 8 inches of strap outside the clamp (see inset to Fig. 43).

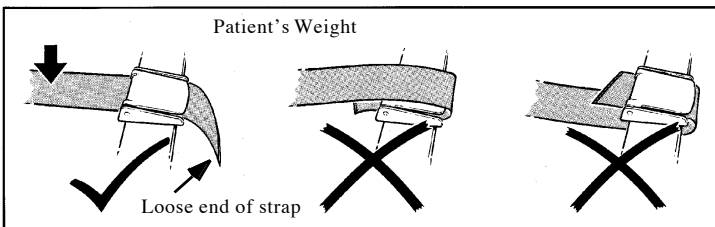


Warning: Red and green indicator arrow labels indicate the correct positions for frame assembly. Note that the three closely positioned strap clamps must be positioned at the head end of the patient (a label on each side section also indicates this).

Ensure that the patient to be lifted is free of bed covers. Place one end tube above the patient's head and one below the feet. Next place the "unstrapped"

side section to the side of the patient (clamps uppermost) (see Fig. 44) and push each end tube through the corresponding holes in the side sections (matching the colored arrowed labels).

Hold the "strapped" side section so that the longer length of the straps hangs toward the patient. Place it on the bed beside the patient, with the longer length of the straps folded under the side section (see Fig. 45). Connect the end tubes as before (matching the colored arrowed labels).



Using the *Opera*

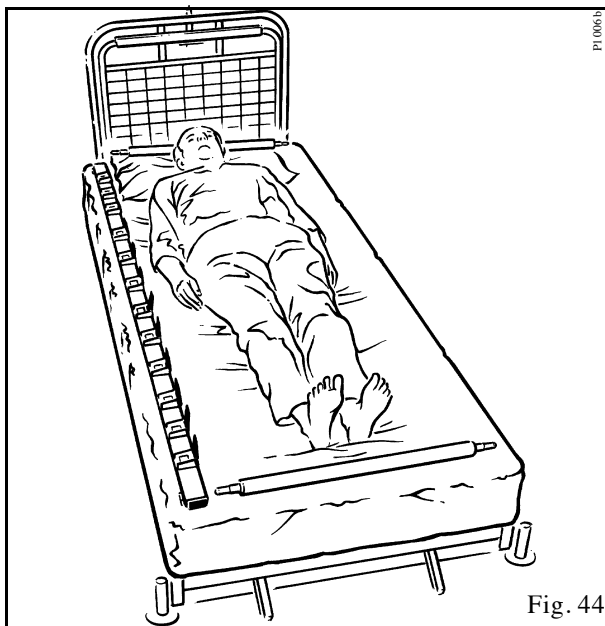


Fig. 44

Slide any strap under the patient by lifting the patient's head and legs. For straps underneath the patient, use the strap guide as follows.

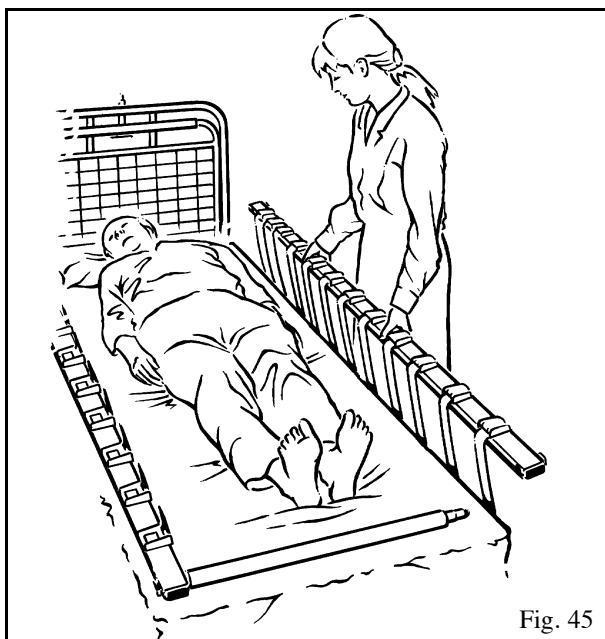


Fig. 45

Thread the long section of the strap that is to go under the patient through the strap guide as shown inset in Fig. 46. Then gently push the strap and guide under the patient (see Fig. 46) until the strap can be pulled clear and connected through the opposite strap clamp. Slide the guide back out from under the patient. Keep the guide under the positioned strap.

- **Note:** If desired, the straps may be passed under the pillow, thereby leaving it under the patient's head for added comfort (see Fig. 47).

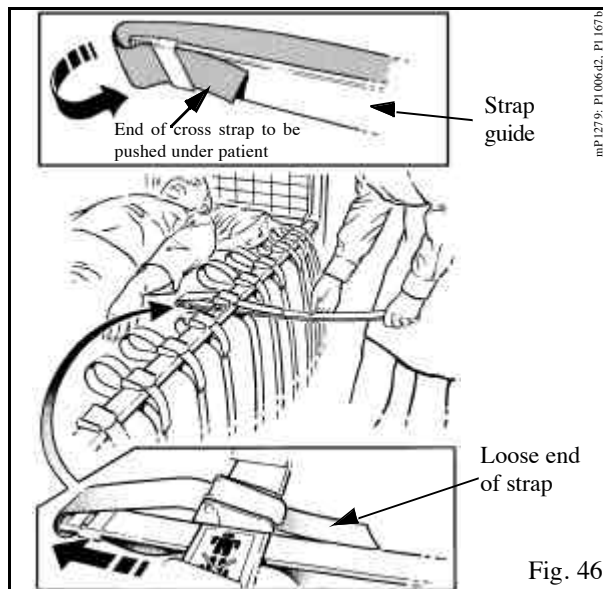


Fig. 46



Warning: Especially with obese patients, care must be taken not to trap any skin under the buttocks when feeding the strap guide under the patient.

Continue until all the straps are under the patient and through the clamps. Ensure that each strap is pulled tightly and locked into position by pressing each clasp down (see Figs. 43 and 48).

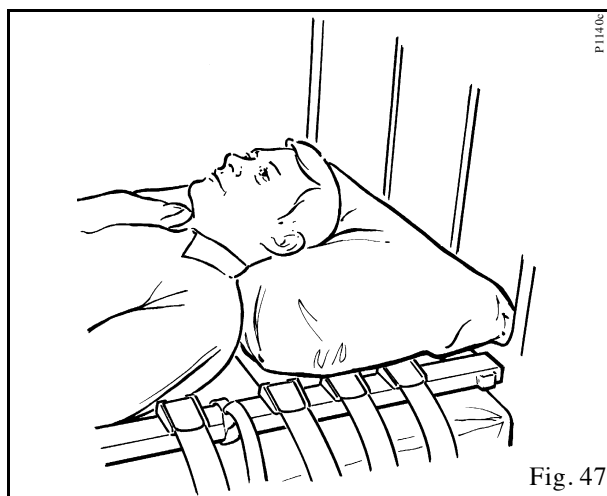
All cross straps must enter directly into the clamps, and must not be passed around the side section (see Fig. 43)

Check that both end tubes are fully located into each side section (with the correct matching arrow labels).



Warning: If they are not already attached, fix the four suspension straps in the positions indicated by labels on the side sections (see Fig. 49).

Using the *Opera*

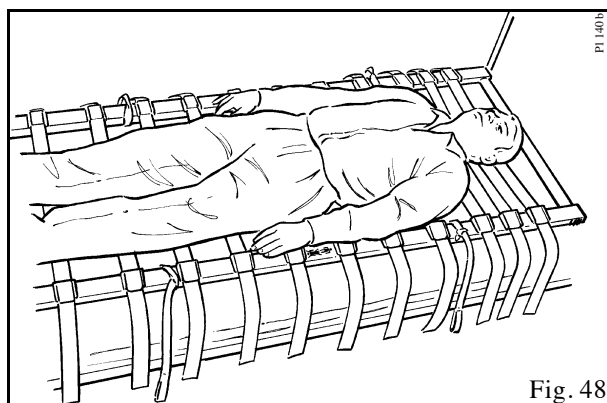


Warning: Before a patient is lifted, it is essential that all the cross straps are locked into the clamps and positioned correctly (as shown in Fig. 43), and that all suspension straps are securely attached to the correct support hooks on the stretcher frame.

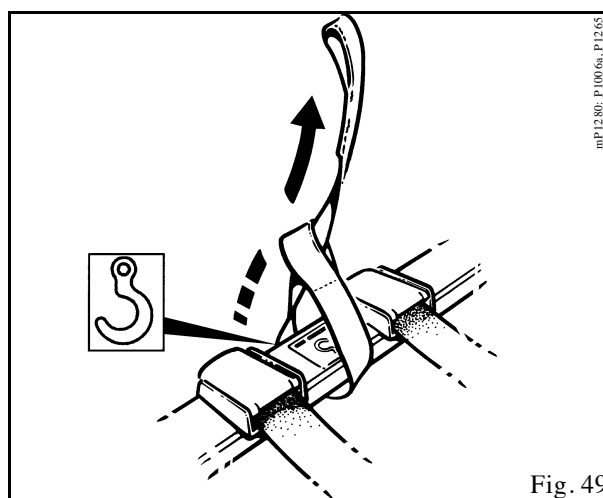
Bring the lift toward the bed and position the stretcher frame centrally over the patient, so that the suspension straps can be securely attached over the hooks. These are indicated with a hook icon label (see Fig. 50).

The strap or scoop stretcher should hang symmetrically from the stretcher frame.

IMPORTANT: Always check that all the stretcher suspension straps are in position before and during the lifting cycle, and in tension as the patient's weight is gradually taken up.



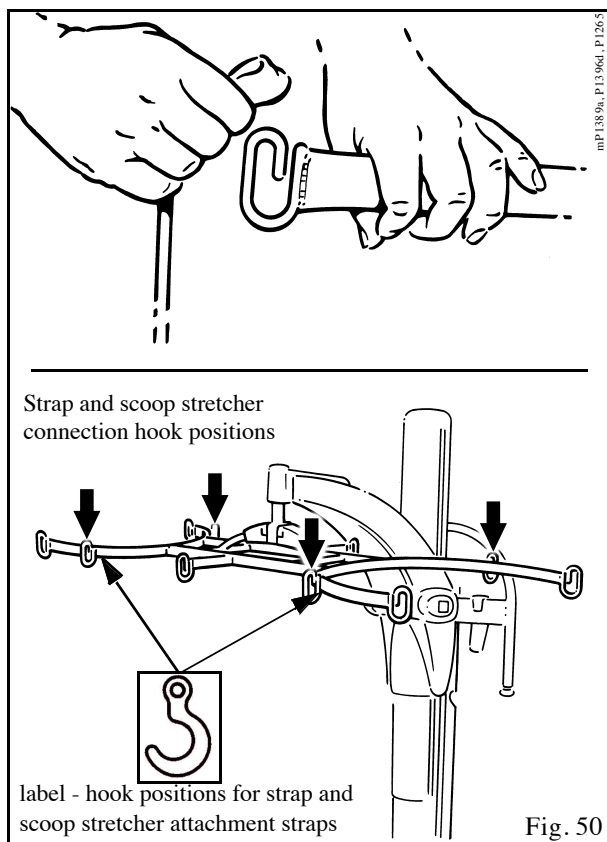
Once connected, lift the patient clear of the bed and rotate the stretcher frame until the patient's feet are in proximity to the mast. In this position, the complete unit may be transported through wide doorways. Alternatively, leave the patient at 90° to the mast. In this position, the lift and patient can be moved through a doorway sideways.



Warning: It is essential to keep the patient at approximately bed height, to ensure stability and maintain patient/attendant contact.

When lowering the jib, ensure that the patient's or attendant's legs and feet are clear of the moving mast.

Using the *Opera*



- **Note:** Individual patient support straps can be loosened if attention to the patient is required.



Warning: To ensure that the patient is securely supported, do not remove too many straps at one time.

When the patient is returned and lowered on to the bed, the strap stretcher may be removed, once it is disconnected from the stretcher frame. To do this, loosen all the clamps on one side section and gently pull each strap underneath the patient. Disconnect and remove the frame and store it carefully for future use.

Patient Scale (if fitted)

See separate supplementary operating instructions.

Lift Battery Charging

The *Opera* uses a battery discharge indicator, located on the rear side of the controls console (see Fig. 1). The display shows ten levels of battery state ranging from fully charged on the right to very low on the left (green, through amber, to red)



Danger: The charger is for indoor use only.

Only use the charger unit in a dry environment. Do not use it in a bathroom.

Do not expose the charger unit or battery pack to rain or spray and do not immerse it in water.

Only use the ARJO battery that is supplied for use with the *Opera*.

Use the battery charger only for batteries for the *Opera*.

Use the battery charger for lead acid batteries only.

Under no circumstances should the charger be used to attempt to recharge non-rechargeable batteries.

Do not attempt to open or tamper with the charger unit in any way. For any repair the charger must be sent to the manufacturer.

The main electricity socket must be easily accessible. If a fault occurs, switch off the power and remove the connection plug from the socket.

Only use ARJO components that have been specifically designed for the purpose when charging batteries.



Warning: To avoid overheating, the charger must not be covered while in use.

Do not allow smoking or naked flames in the vicinity of the battery.

Do not expose the charger unit to dust.

Do **NOT** charge batteries in a sealed container.

Do **NOT** place batteries near, or dispose of them in a fire.

Do **NOT** short circuit a battery.



Warning: Do **NOT** store batteries at temperatures in excess of 60°C (140°F).

Do **NOT** crush, puncture, open, dismantle or otherwise mechanically interfere with batteries.

If the battery casing becomes cracked and the electrolyte comes into contact with skin or clothing, wash immediately with water.

If the electrolyte contacts the eyes, wash them immediately with copious amounts of water, and seek medical attention.

When disposing of batteries, contact the appropriate local authority for advice.

The abbreviation “Pb” shown adjacent to the recycling and trash bin symbols on the battery pack label is the element symbol for lead. It indicates that the battery contains lead and therefore should not be disposed of in the normal manner but instead recycled.

For more details of caring for the lift battery, refer to the literature titled “Battery Care”, ARJO Part No. KDX01660.INT.

- **Note:** *The battery discharge indicator has an energy saving function which automatically switches off the display if a function button has not been pressed for at least 30 seconds. As soon as a button is pressed to engage any function, the display will re-start.*

It is recommended that the battery be removed from the lift and recharged when the display reaches the yellow range, but lifting is possible until the display shows the red flashing light. At this point the battery must be recharged as soon as possible.

Recharging the battery pack before it is totally discharged will prolong its life.

The lift is fitted with an audible warning device that will sound when the battery discharge indicator reaches the red light range. The audible warning will start when a function button is pressed and will sound for approximately thirty seconds. Press the emergency stop button to temporarily silence this function. Then remove and replace the battery with a fully charged one to silence the alarm until a low battery condition re-activates it.

Lift Battery Charging

To ensure that the *Opera* is always ready for use, it is recommended that a freshly charged battery pack be always available.

It may be considered good protocol to have a freshly charged battery ready for the start of every work shift.

- **Note:** Whichever level the indicator has reached, once a fully charged battery is re-inserted into the lift, the display will return to the green fully charged position. But if a partially charged battery is inserted, the level at which the indicator had reached will remain, even though the recently inserted battery may be in a better state of charge than indicated. To achieve a true indication of battery state, a fully charged battery must be inserted into the lift to reset the indicator.

Place the battery pack on the charge as follows:



Caution: Ensure that the main power to the charger unit is switched off before connecting the battery.



Warning: Always ensure that the cable connection plugs that fit into the charger and into the battery are fully inserted before switching on the main electricity.

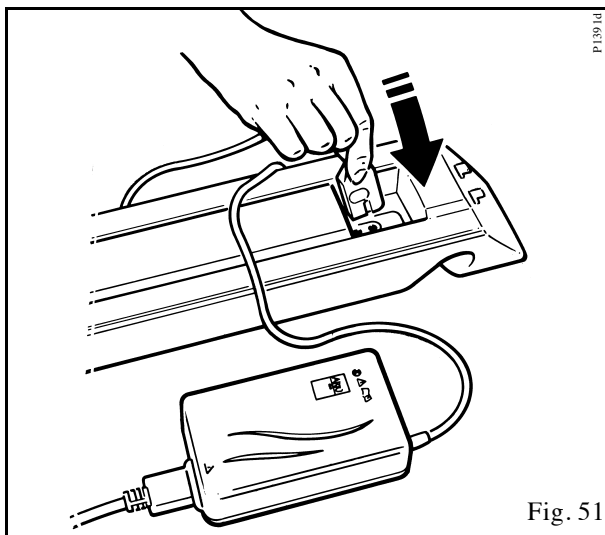


Fig. 51

- **Note:** The cable that connects the main electricity supply to the charger is supplied as a detachable item. If using the battery charger for the first time, or if the cable has been unplugged from the charger, connect the cable fully into the charger before connecting it to the main power.

When the LED on the battery discharge indicator displays amber, complete your lift cycle. Then take the lift to a convenient location and remove the battery pack. To do this, hold the grip position of the battery and press the release catch situated above it. Pivot the battery away and lift it clear. Take the battery to the battery charger unit and ensure that the battery is positioned securely. Then insert the battery connector from the charger into the corresponding connector in the back of the battery (see Fig. 55) and switch on the main power. An orange light will be displayed on the charger unit when the battery is totally discharged. This will change to a yellow light as the battery approaches full charge capacity, and finally to a green light when the battery is fully charged.

A discharged battery should be left approximately 8 hours to totally recharge (also, see the document titled “ARJO Battery Care”).



Warning: Hold the pack firmly to ensure that it does not drop and become damaged, or cause injury.

- **Note:** The battery pack may be left connected to the charger unit when it is fully charged without being damaged by overcharging.



Caution: Always disconnect the main supply before disconnecting the battery charger unit.

When the battery pack is fully charged, disconnect the main power, remove the battery pack from the charger and insert it back into the *Opera* battery position.

Ensure that the green reset button (located on the rear of the mast) is pressed in (see Fig. 1).

The *Opera* is now ready for use.

Sling care and cleaning:



Warning: The slings should be checked before and after use with each patient and, if necessary, washed according to the instructions on the sling. This is especially important when using the same equipment for another patient, to minimize the risk of cross infection. Also, refer to the Sling Instruction sheet MAX.01510.INT.

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

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

The strap stretcher cross straps and suspension straps should be checked and, if necessary, washed. Washing and drying temperatures must not exceed 80°C (176°F). Wash using normal detergents. Do not iron. Also, refer to the Sling Instruction sheet MAX.01510.INT.

It is essential that the sling attachment cords, the slings, their straps and attachment clips are carefully inspected before each use. If the slings, cords or straps are frayed or the clips are damaged, do not use the sling or attachment cord and replace them.

Lift care and cleaning:



Warning: It is recommended that patient lifts and accessories are regularly cleaned and/or disinfected between each patient use if necessary, or daily as a minimum. If the lift and/or equipment needs cleaning, or is suspected of being contaminated, follow the cleaning and/or disinfection procedures recommended below before re-using the equipment.

To clean the lift and accessories, wipe them down with a damp cloth using warm water and add "ARJO CEN-KLEEN IV™"-disinfectant/cleaner.

- **Note:** "ARJO CEN-KLEEN IV™" - disinfectant/cleaner is available from ARJO.



Caution: Do not soak the product, as this could cause problems with electrical components or 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.



Warning: To disinfect contaminated lifts and accessories, use the preferred method of wiping the product completely with "hard surface disinfectant wipes" that are supplied impregnated with a 70% v/v solution of Isopropyl Alcohol.

- **Note:** A rubbing action will be necessary when using the wipes to effectively disinfect the surfaces.



Warning: IMPORTANT: Cleaning and disinfection products must be used in accordance with the manufacturers instructions. Wear the appropriate eye, hand and clothing protection at all times when handling disinfectants.

- *Note: 70% v/v Isopropyl Alcohol wipes have been proved to be effective against MRSA and several other micro-organisms under light soiling conditions.*

The following checks should be carried out daily.

Ensure that the battery pack is always fully charged.



Warning: Ensure that the castors are firmly secured to the chassis.

Carefully inspect all parts, in particular where there is personal contact with the patient's body. Ensure that no cracks or sharp edges have developed which could injure the patient's skin or become unhygienic.

Check that all external fittings are secure and that all screws and nuts are tight.

Ensure that all instruction labels are firmly attached and in a readable condition.

Periodic Testing

To be carried out at weekly intervals.

Periodic testing of the operational functions is advisable from time to time to ensure that everything operates satisfactorily.

Test for full and efficient movement of the lift/lower mechanism: Raise and lower the jib using the control handset. Also test it with the dual switch panel.

Automatic Stop Function: With the jib well above its lowest position and the lift positioned over an empty bed, use the handset control to lower the jib on to the bed. If the jib lowering is restricted, the motor will stop. Release the control handset lower button after a second or two and raise the jib using the control handset. Repeat the test using the dual switch panel. This is to check the correct functioning of the automatic stop.

Emergency Stop: Test the emergency stop function by operating the control handset to lift or lower the jib. While operating it, press in the emergency stop button (see Fig. 5). Powered movement should stop immediately.

Reset to the normal function by pressing the green reset button (see Fig. 5). Repeat this test using the dual switch panel. Reset to the normal function. Repeat for the chassis legs opening/closing function, and reset the button.

System Failure Lower Override: To test this function, ensure that the jib is well above its lowest position and engage the system failure lower override switch (see Fig. 5). The jib will lower without operating the control handset or dual control panel. The lower override function will still operate even with the handset control cable unplugged.

Adjustable Width Chassis Function: Open and close the chassis legs using the control handset and dual switch panel to check for full and efficient movement.

General Lift Condition: A general visual inspection of all external parts should be carried out. All functions should be tested for correct operation to ensure that no adverse damage has occurred during use.



Warning: If in doubt about the correct functioning of the *Opera*, do not use it and contact the ARJO Service Department.

Servicing Advice



Warning: ARJO recommends that the *Opera* is maintained at regular intervals. See the *Opera* Preventive Maintenance Schedule (ARJO Literature Part No. PMS011/*Opera*).

With regular use, the following items are subject to wear: slings, batteries, straps, castors. These items must be regularly checked as described previously, and replaced as needed.

Care of the *Opera*

A parts list and circuit diagrams are available from ARJO on request.



Warning: Spare parts, if required, are available from ARJO.

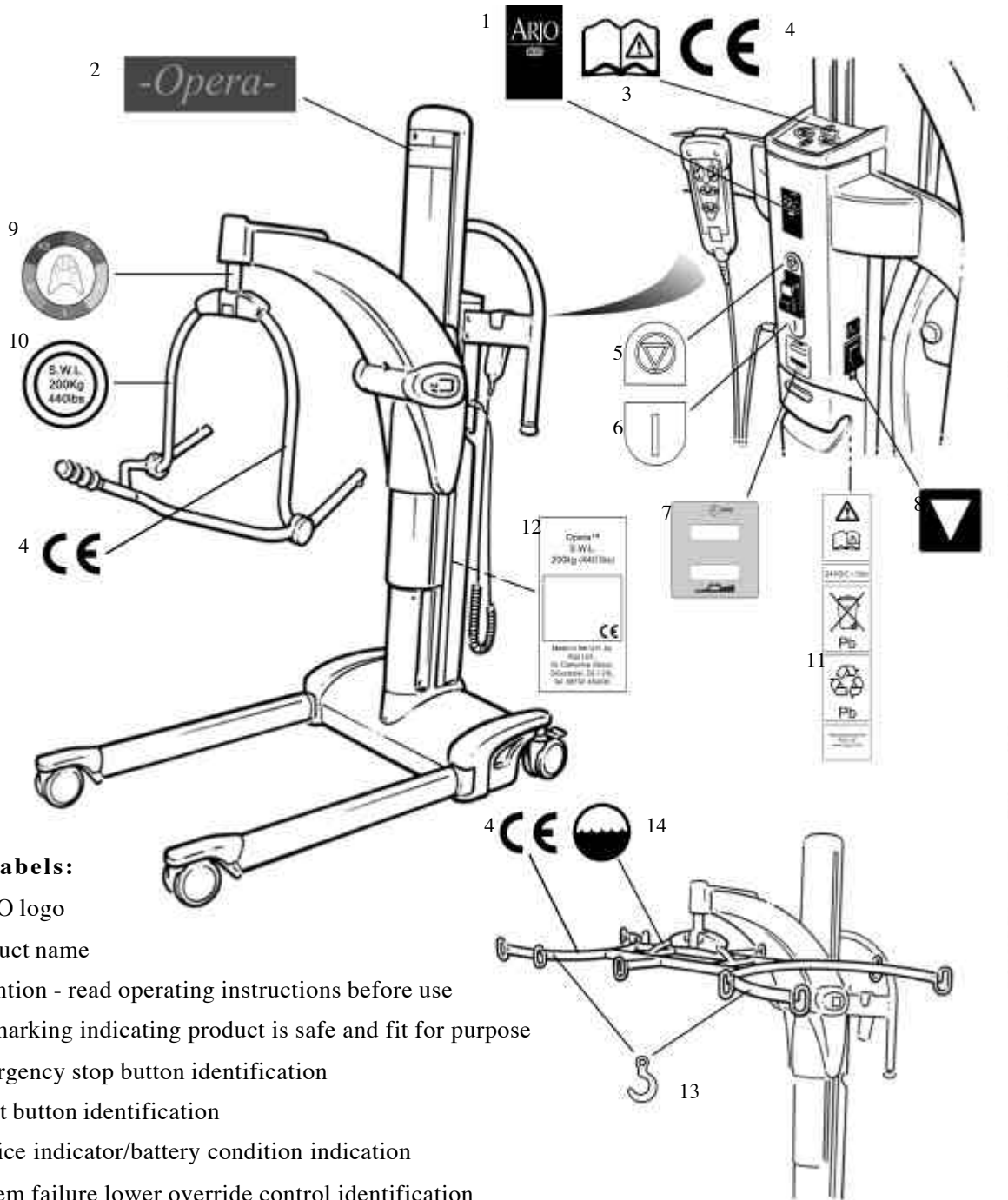
Special tools are required for certain component replacement.



Warning: The simplest, safest and most effective way to maintain your product, is to have it methodically and professionally serviced by an ARJO approved engineer using ARJO approved spare parts.

For information on service and maintenance contracts, please contact your local ARJO distributor.

Labels



Key to labels:

1. ARJO logo
2. Product name
3. Attention - read operating instructions before use
4. CE marking indicating product is safe and fit for purpose
5. Emergency stop button identification
6. Reset button identification
7. Service indicator/battery condition indication
8. System failure lower override control identification
9. Sling size guide
10. Safe working load of individual component
11. Battery instruction/recycling information
12. Safe working load of lift
13. Stretcher attachment point (4-point attachment stretchers only)
14. ARJO wet environment product identification

Fig. 52

Technical Specification

Component Weights

	lbs
Opera (mast with “Lock and Load” jib) - without battery	81.3
Opera (mast with “Lock and Load” scale jib) - without battery .	88.4
Opera (mast with PPP jib with 4-point spreader bar) - without battery .	102.3
Opera (mast with PPP scale jib with 4-point spreader bar) - without battery	109.3
”V” opening chassis	46.5
4-point spreader bar “Lock and Load” system.....	13.2
2-point spreader bar “Lock and Load” system.....	4.6
Stretcher frame	15.
Scoop stretcher	21.3
Strap stretcher	29.9
Battery pack.....	10.8

Electrical

Battery type and part number	(Rechargeable - lead acid) KPA0100
Battery capacity	5Ah
Battery charger part number	KPA0101.US
Handset - Protection class	IP67
Lift nominal voltage	24V DC

Medical Equipment: type ⚡ protection against electrical shock in accordance with IEC 601-1).
ARJO patient handling products meet the requirements of Electromagnetic Compatibility (EMC) as stated in clause 12.5 of the Medical Devices Directive 93/42/EEC.

	Duty cycle	Max volts	Max amps
Mast Lift Actuator	15% (9 min/hr)	24	8
”V” Chassis Actuator	10% (6 min/hr)	24	4.5

Scale

Power supply	6 Volt DC (4 x AA Batteries)
Battery life.....	120 hrs
Accuracy.....	4 - 265lbs ± 0.2lb
Accuracy.....	10 - 440lbs ± 0.5lb
Protection class.....	IP 53

Environment

Air humidity/storage	80% @ 20°C (68°F)
Usage temperature range (ambient).....	+5°C (41°F) to +35°C (95°F)
Optimum usage temperature (ambient).....	+20°C (68°F) to +25°C (77°F)
Storage and transportation temperature (ambient)	-10°C (14°F) to +45°C (113°F)

Technical Specification

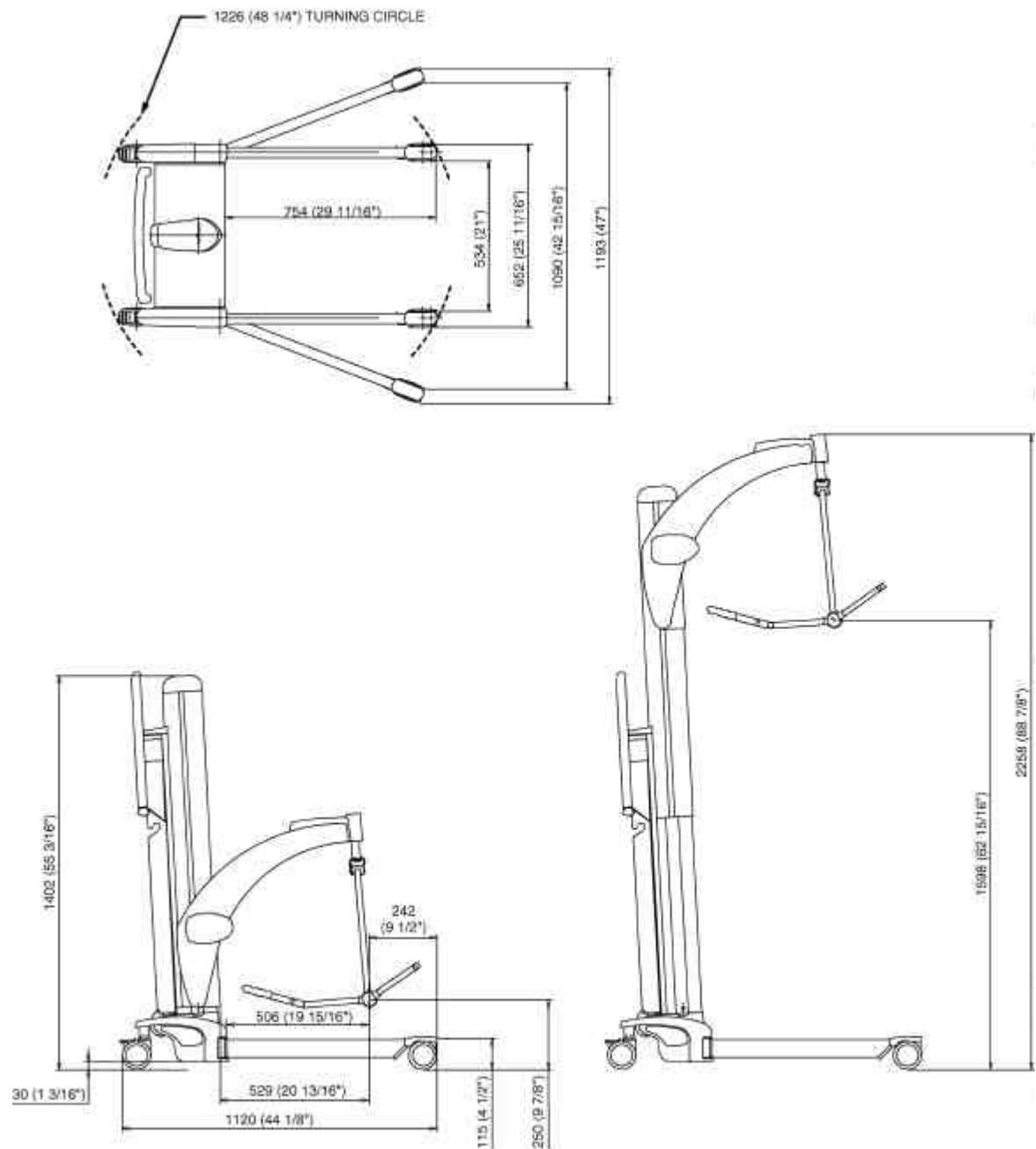
The *Opera* should not hold a weight in excess of the capacity of the lowest rated attachment fitted to it (see the table below for lift and attachments maximum lifting capacities).

MAXIMUM CAPACITIES OF *OPERA*

All slings	-	440lbs
Lift + “ <i>Lock and Load</i> ” jib + 4-point spreader bar	-	440lbs
Lift + “ <i>Lock and Load</i> ” jib + 2-point spreader bar	-	440lbs
Lift + “ <i>Lock and Load</i> ” jib + stretcher frame + strap stretcher	-	352lbs
Lift + “ <i>Lock and Load</i> ” jib + stretcher frame + soft stretcher	-	352lbs
Lift + “ <i>Lock and Load</i> ” jib + stretcher frame + scoop stretcher	-	352lbs
Lift + Dedicated jib with 4-point PPP spreader bar	-	440lbs
Lift + 200mm Extended “ <i>Lock and Load</i> ” jib + 4-point spreader bar	-	286lbs
Lift + 200mm Extended dedicated jib with 4-point PPP spreader bar	-	286lbs

The capacities given are correct for the lift configurations listed, but some accessories/additional/optional sub-assemblies may reduce the maximum capacity. Always refer to the maximum weight limit printed on the label fixed to the lowest rated fitted attachment.

Technical Specification



Dimensions in millimetres (equivalent in inches)

ARJO strongly advise and warn that only ARJO Designated Parts, which are designed for the purpose, should be used on equipment and other appliances supplied by ARJO, to avoid injuries attributable to the use of inadequate parts.

ARJO's Conditions of sale make specific provision confirming no liability in such circumstances.

ARJO's policy is one of continuous development, and we therefore reserve the right to change specifications without notice.

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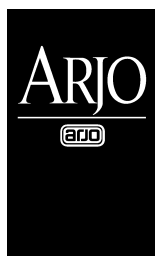
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