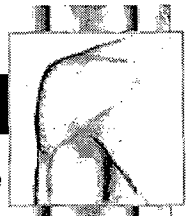
SUMMARY



GB

SAFETY RECOMMENDATIONS

Select your language
SEE PAGE 36

- Before use, please read this document.
- The physician defines the protocol and ensures that it is correctly implemented (adjustments, session durations and frequency of use).
- We recommend that you lock the hand control when you give it to the patient.
- For optimum safety, always give the hand control to the patient before starting the system.
- Explosion hazard: KINETEC Centura is not designed for use in the presence of flammable anesthetics.
- Check that the electrical socket is in good condition and is suitable for the splint power supply cord. The latter complies with current standards and has a grounding socket. The plug may be connected to any standard socket. The socket must however have a grounded pin.
  To connect the power supply, only use the original cable supplied with the machine. Check that the cables remain free around the device so that they do not get damaged.

Manual N°: 467896270 – Updated April 2002
KINETEC Centura – Series 2

CE 0459

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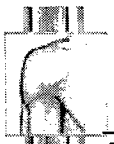

DESCRIPTION

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DEFINITION

The KINETEC Centura is a upper extremity PASSIVE mobilization device enabling the following movements:

- Extension 20° Flexion 180°.
- Adduction 20° Abduction 160°.
- Internal Rotation 60° External Rotation 90°.
- Synchronized Abduction + Rotation
  Adduction 20° Abduction 160°.
  Internal Rotation 30° External Rotation 90°.
- Horizontal Abduction from –30° to 110° (available on Centura 5)

• Indications

- Total shoulder replacement.
- Repeated dislocation of the humerus.
- Rotator cuff injury.
- Upper humerus fractures
- Scapula fractures.
- Acromioplasty.
- Capsulotomy.
- Arthrolysis.
- Synovectomy for Rheumatoid Arthritis.
- All type of shoulder styffness joint.

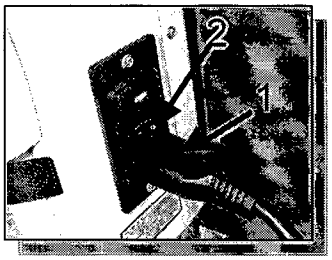
• Clinical Benefits

- Breaks the cycle of trauma, inflammation and the loss of range of motion.
- Prevents joint stiffness.
- Speeds the recovery of post-operative range of motion.
- Maintains the quality of the articular surface.
- Reduces pain and edema.
- Promotes articular cartilage healing.
- Reduces hospitalization time
- Reduces the need for pain medication.

• Contraindications

- Unstable fractures.
- Spastic paralyses.
- Uncontrolled infection.
- The machine are not adapted for patients height more 2m(6'7") or under 1.4m(4'7")

ELECTRICAL CONNECTION



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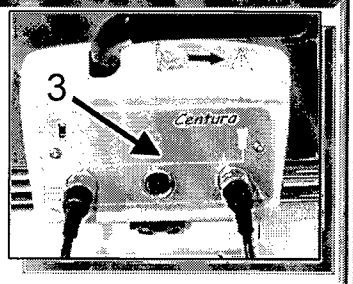
KINETEC Centura is a type B class I device.
Before connecting the device to the power supply, check that the mains voltage matches that shown on the plate (100-240 V~ / 50-60 Hz) below switch ON (2).

Connect the power supply cable (1).

IMPORTANT

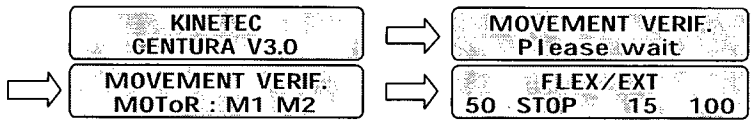
Check that the electrical socket is in good condition and is suitable for the splint power supply cord. The latter complies with current standards and has a grounding socket. The plug may be connected to any standard socket. The socket must however have a grounded pin.
To connect the power supply, only use the original cable supplied with the machine.
Check that the cables remain free around the device so that they do not get damaged.



The cables (motors and hand control) can be plugged in any of the connectors

Starting the unit

Switch on (2).
While the unit begins an auto diagnostic, the display shows the following:



Your KINETEC Centura is ready to be used.

SAFETY

The physician defines the protocol and ensures that it is correctly implemented (adjustments, session durations and frequency of use).
The patient must know the start/stop/reverse function on the control handle. Hand control must be accessible to patient at all times.See page 8.
KINETEC Centura complies with Directive 93/42/CEE and UL 2601.

EXPLOSION HAZARD:
KINETEC Centura is not designed for use in the presence of flammable anesthetics.

In case of electromagnetic interference with other devices move the device.
KINETEC Centura is in compliance with standards in force (IEC 601.1.2), electromagnetic compatibity standard for medical devices.

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DESCRIPTION • COMPONENTS

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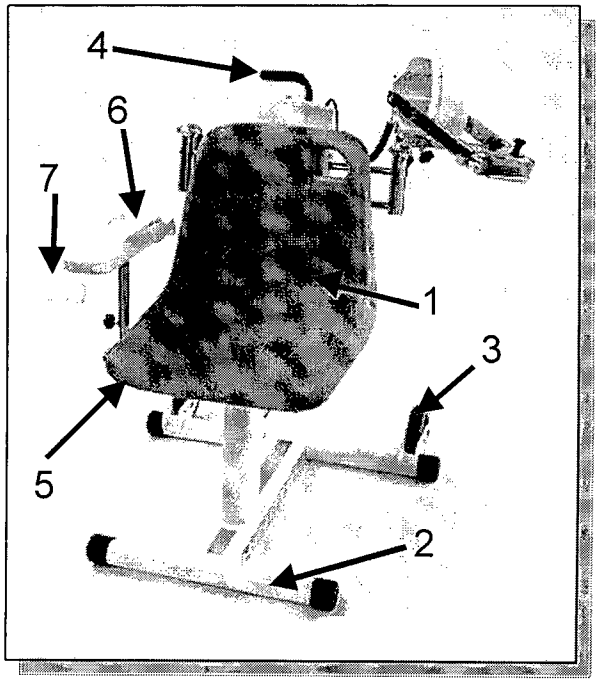
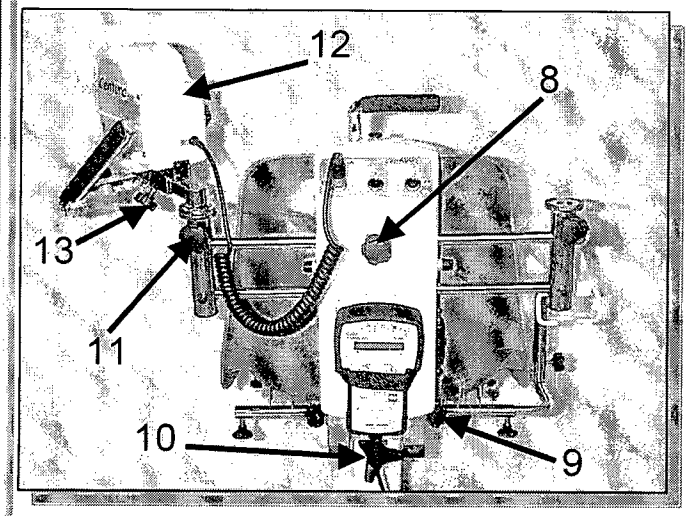
KINETEC Centura consists of the following components:

1 – Chair
2 – Frame
3 – Wheels
4 – Transport handle
5 – Arm rest knobs
6 – Arm rest
7 – Hand control support





8 – Locking of the right/left sliding
9 – Locking of the up/down sliding
10 – Chair locking knob
11 – Locking of the abduction motor
12 – Abduction motor
13 – Shoulder depth sliding lock

DESCRIPTION

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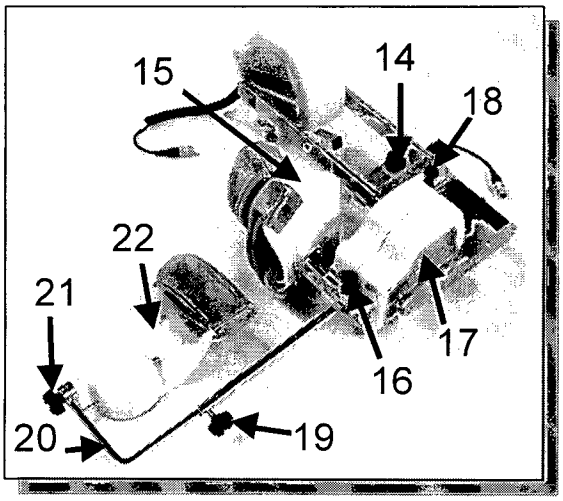
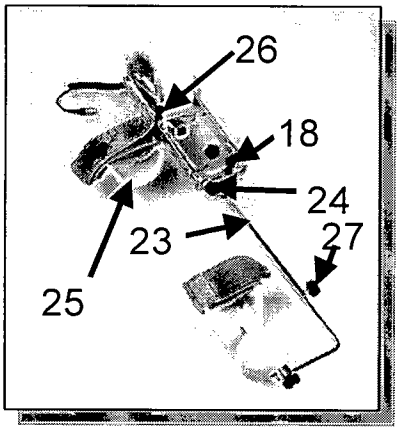
Abduction associated with rotation splint



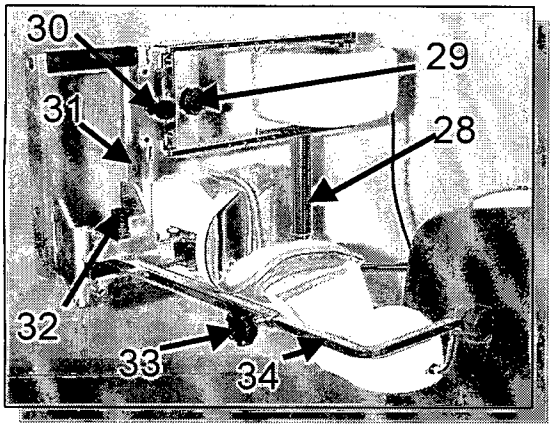
14 – Arm length setting lock
15 – 90° elbow splint
16 – 90°elbow splint lock
17 – Rotation motor
18 – Rotation motor lock
19 – Forearm length setting lock
20 – Forearm slider
21 – Right/left bean swivel lock
22 – Forearm splint

Abduction or flexion splint



18 – Swiveling splint support lock
23 – Swiveling splint support
24 – Elbow flexion setting lock
25 – Arm splint
26 – Arm splint lock
27 – Forearm length setting lock

Horizontal Abduction splint (available on Centura 5)



28 – Horizontal abduction column
29 – Arm length setting lock
30 – Elbow splint support lock
31 – Elbow support older
32 – 90°elbow splint lock
33 – Forearm length setting lock
34 – Forearm slider

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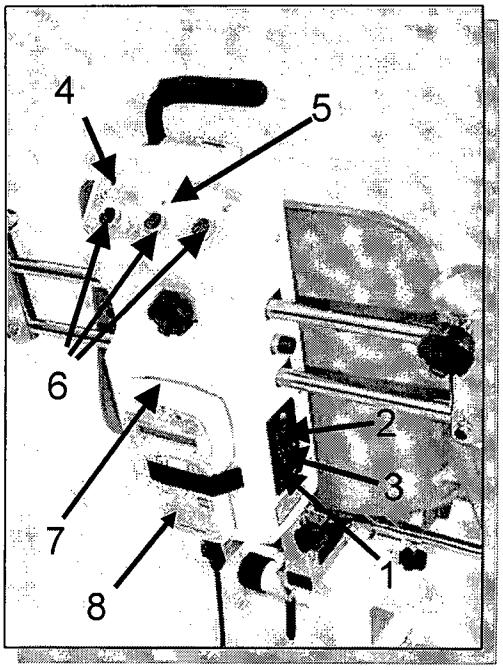
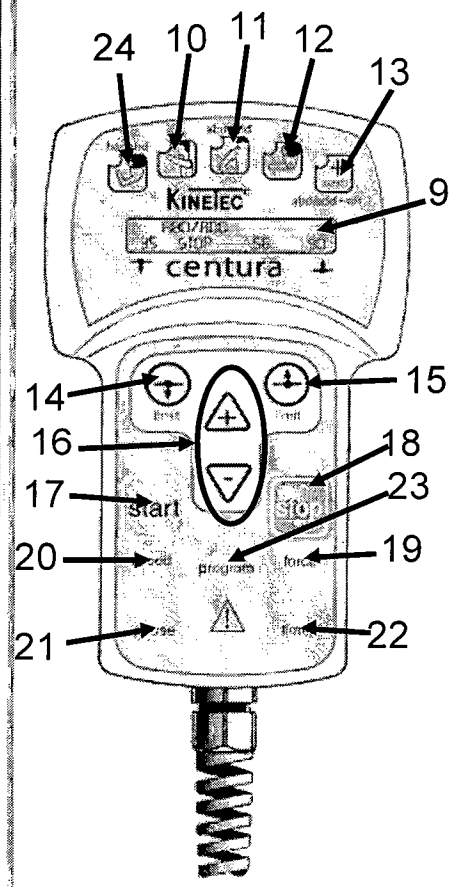
DESCRIPTION • ELECTRICAL

GB

1 – Supply cable connector switch
2 – Fuse
3 – ON/OFF switch
4 – Hand control lock switch
5 – Defect or power light
6 – Motor or hand control connectors
7 – Hand control location for transport
8 – Hand control





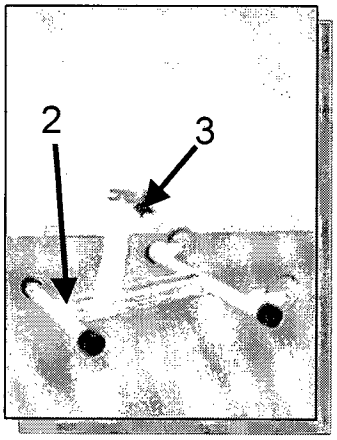
9 – Liquid-crystal display
10 – Flexion/extension
11 – Abduction/adduction
12 – Rotation
13 – Abduction/adduction synchronized with rotation
14 – Lower limits setting
15 – Upper limits setting
16 – Increase / decrease
17 – START
18 – STOP
19 – FORCE
20 – SPEED
21 – PAUSE
22 – TIMER
23 – PROGRAM access
24 – Horizontal abduction

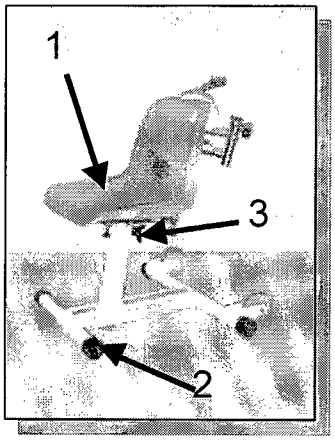
ASSEMBLY & TRANSPORT

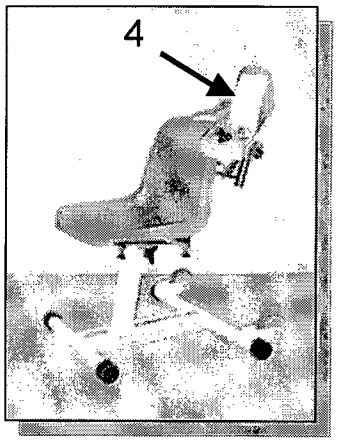
Base assembly

Remove all the components from their packaging.
Unscrew the chair locking knob (3).
Position the chair (1) on the base (2) with the back of the chair at the wheel and screw the chair locking knob (3) to secure it in place.

Place the elevation motor (4) on right or left, depending on the limb be moved.







The other components to be used depend on the selected movement.

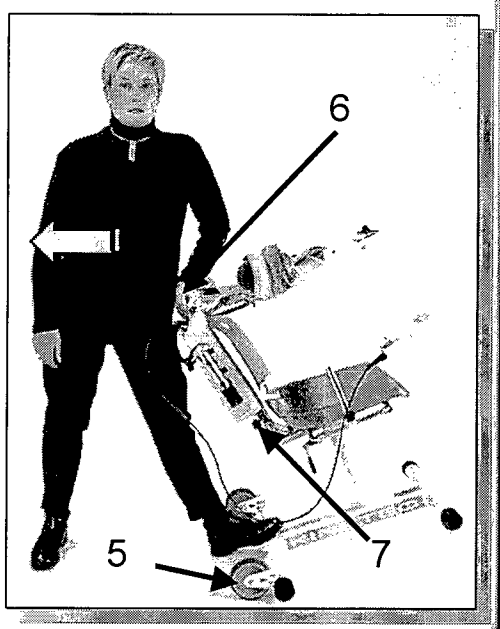
Unit transport

For easy transport of the unit, it features 2 wheels (5) and a handle (6).

Place the arm support as close as possible to the chair to limit the overall dimensions and help balance the unit.

Place your foot as indicated to balance the unit.

You can adjust the height of the handle with knob (7).



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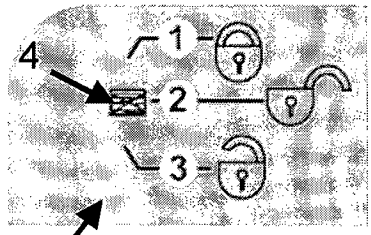
USE OF THE HAND CONTROL

Locking the hand control setting

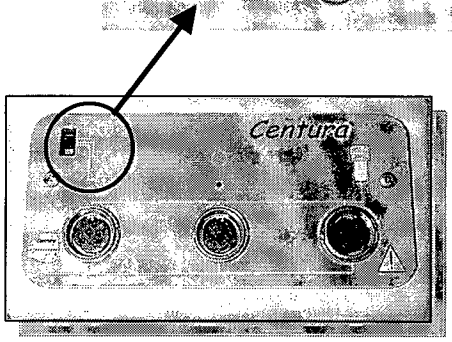
The hand control allows the patient to control the machine as appropriate.



The switch (4) has 3 positions:

LOCKED POSITION (1)

The operational settings can be read and the START/STOP/REVERSE function operated.



UNLOCKED POSITION (2)

All adjustments are possible.

HALF-LOCKED POSITION (4)

It is possible to switch the program and modify the upper and lower movement limits. The START/STOP/REVERSE function is always accessible.

Double locking

Simultaneously press the  and  keys to lock the hand control.

The display reads LOCK. To unlock the hand control, simultaneously press the same keys.
The displays reads UNLOCK.
You can not change the parameters, if you try the display reads:
LOCK 1: if locked with only the switch (4)
LOCK 2: if only double locked
LOCK 12: if locked with the switch (4) and double locked.

We recommend that you lock the hand control when you give it to the patient.

START/STOP/REVERSE function

As with all KINETEC systems, KINETEC Centura is equipped with a START/STOP/REVERSE function.
When the unit is running, the display reads RUN

Press the  key of the hand control. The movement stops. The display reads STOP

Press the  key of the hand control. The movement starts in the opposite direction and the display reads RUN.

Caution:
For optimum safety, always give the hand control to the patient before starting the system.

USE OF THE HAND CONTROL

Reset time function

This function allows one to read the running time since the last resetting of the counter.

Beginning	Keys to press	Display	Remarks
To stop the unit	stop	FLEX/EXT 50 STOP 15 100	Check if the locking switch is in the following position or
Press simultaneously on the 2 keys	limit limit	RESET TIME 125H Reset: limit low	The display indicates the running time since the last resetting.
To reset the counter, press the key	limit	RESET TIME 125H Reset is done	The counter is now reset.
Or After 5 seconds, the reset function switches off and the running time remains in the memory.		FLEX/EXT 50 STOP 15 100	

How to choose a movement

First switch the machine off stop and put the switch in the position in order to change the movement.

You can select a movement by pressing the appropriate button. The LED is on.
When a movement is first selected, the system returns to the original parameters of the movement (default settings).

Default settings:

	Abduction	Flexion/Extension	Rotation	Abduction + Rotation		Horizontal* abduction
• Lower limit	30°	30°	0°	30°	0°	-30°
• Upper limit	90°	100°	60°	100°	60°	60°
• Speed	2	2	2	2		2
• Load	6	6	6	6		6
• Extension pause	0	0	0	0		0
• Flexion pause	0	0	0	0		0
• Timer	0	0	0	0		0

Possible values for each parameter:

	Abduction	Flexion/Extension	Rotation	Abduction + Rotation		Horizontal abduction*
• Lower limit	20° to 155°	20° to 175°	-60° to 85° extern	20° to 155°	-30° to 85° extern	-30° to 105°
• Upper limit	25° to 160°	25° to 180°	-55°to 90° extern	25° to 160°	-25° to 90° extern	-25° to 110°
• Speed	1 to 5 (from 30° to 120° per minute)					
• Load	1 to 6					
• Extension pause	0 to 900 seconds (15 minutes)					
• Flexion pause	0 to 900 seconds (15 minutes)					
• Timer	No time (00H00) to 24H00					

* Available on Centura 5 or in option.

GB

USE OF THE HAND CONTROL

How to adjust the parameters of single movements

Beginning	Keys to press	Display	Remarks
To stop the unit	stop	ROTATION 0 STOP 0 60	Check if the locking switch is in the following position: 
To choose the movement	abd/add	Abd/add 30 STOP 90 90	The display shows the new movement selected and the default settings of the upper and lower limits of this movement.
Or	rot	Rotation 0 STOP 0 60	
Or	flex	FLEX/EXT 30 STOP 89 100	
Or	hor abd	ABD HOR 30 STOP 50 60	The display shows "not available" if you d'ont have the horizontal abduction module.
To display the lower limit of the movement	limit	FLEX/EXT 30 STOP 89 100	The value blinks.
To change the lower limit if necessary	+ or -	FLEX/EXT 50 STOP 89 100	The new value blinks.
To validate the new value, press another key or wait more than 3 seconds	limit	FLEX/EXT 50 STOP 89 100	While the value blinks press the + or - key to change if necessary.
	timer	FLEX/EXT NO TIMER	
	speed	FLEX/EXT SPEED 02	
	force	FLEX/EXT LOAD :	
Or to display pause	pause	FLEX/EXT PAUSE HIGH 0S	The pause value in upper limit of movement blinks.
To change pause value in upper limit of movement if necessary	+ Or -	FLEX/EXT PAUSE HIGH 10S	The new pause value in upper limit of movement blinks.
To validate and display the pause value in lower limit of movement	pause	FLEX/EXT PAUSE LOW 0S	The pause value in lower limit of movement blinks.
To change the pause value in lower limit of movement if necessary	+ Or -	FLEX/EXT PAUSE LOW 10S	The new pause value in lower limit of movement blinks.
To validate the new value press another key or wait more than 3 seconds. The display shows the selected movement.		FLEX/EXT 30 STOP 89 100	The unit is ready to start with the new parameters.

USE OF THE HAND CONTROL

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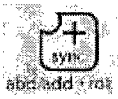
How to set the synchronized movement parameters

Beginning	Keys to press	Display	Remarks
To stop the unit			Check if the locking switch is in the following position: 
To select the combined movement			The indication "ABD" blinks and the display shows the values for the abduction movement. To change it, proceed as for a single movement.
To press a second time on the key			The indication "ROT" blinks and the display shows the values for the rotation movement. To change it, proceed as for a single movement.

Synchronization rules:

- The degress of rotation are lower than or equal to the degrees of abduction.
- 1° of abduction means 1° of rotation.
- When the degrees of rotation are lower than the degrees of abduction, the synchronization applies to the upper degrees of the movement.

Example : abduction from 30° to 100°
rotation from 50° to 90°

Comments:

- Speed, load, pauses and timer are the same for both of the movement components. The setting is the same as for a single movement.
- Pauses can be set at the lower and/or the upper limits of the abduction movement.
- You will have successive displays of abduction movement limits, or associated rotation movement, by repeatedly pressing the synchronized movement button.
- You cannot change the settings while the machine is running.

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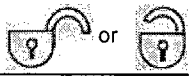
USE OF THE HAND CONTROL

Using Programs program

The KINETEC Centura allows you to store up to 16 programs, including the type of movement, ROM, speed, load, pauses and timer.

The original parameter values of the program are empty.
These values can be modified and recorded at any time (see 'How to enter a program' p 14).

To select a program:

Beginning	Keys to press	Display	Remarks
To stop the unit	stop	FLEX/ext 30 STOP 89 100	Check if the locking switch is in the following position: 
To access the program mode	program	PROGRAM 1 EMPTY	The program number blinks.
To change the program if necessary	+ or -	PROGRAM 3 0 ROTATION 90	The new program number blinks.
To exit and validate the selected program	start	ROTATION 0 STOP 0 60	The current parameters have been recorded in program 3.
To exit without validation of selected program	stop	FLEX/ext 30 STOP 89 100	Back to the starting parameters.
Start the unit	start	FLEX/EXT 30 RUN 89 100	The value change at the speed of the movement.

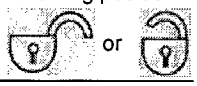
Comments:

- The values show in the 'Display' column are examples. They actually depend on the stored programs.
- The current movement parameters can be changed while using that program but no data will be stored in the original program. See the programming mode (p 14) to modify programs.

USE OF THE HAND CONTROL

Reading the values of a program: example SPEED

GB

Beginning	Keys to press	Display	Remarks
To stop the unit	stop	ROTATION 0 STOP 0 90	Check if the locking switch is in the following position: 
To access the program mode	program	PROGRAM 1 0 ROTATION 90	The program number blinks.
To change the program if necessary	+ or -	PROGRAM 3 0 ROTATION 90	The new program number blinks.
To read the speed value	speed	PROGRAM 3 SPEED 5	Displaying the speed value.
After 15 seconds or after pressing on another key		PROGRAM 3 0 ROTATION 90	
To exit and validate the selected program	start	ROTATION 0 STOP 0 90	The current parameters have been recorded in program 3.
Start the unit	start	ROTATION 0 RUN 0 90	The value change at the speed of the movement.

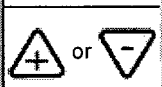
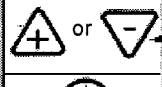
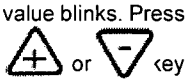
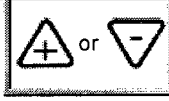
Comments:

- The values showed in the 'Display' column are examples. They actually depend on the stored programs.
- The current movement parameters can be changed while using that program but no data will be stored in the original program. See the programming mode (p 14) to modify programs.

GB

USE OF THE HAND CONTROL

How to modify programs PROGRAM MODE:

Beginning	Keys to press	Display	Remarks
To switch off the unit			Check if the locking switch is in the following position: 
To press the two keys at the same time to switch the unit on		KINETEC CENTURA V3.0	Welcome text during 3 seconds.
Then		PROGRAM 1 EMPTY	The program number blinks.
To change the program if necessary		PROGRAM 10 EMPTY	The new program number blinks.
To choose the movement		PROGRAM 10 30 ABD/ADD 90	The display indicates the selected movement, the program number blinks again.
Or		PROGRAM 10 0 ROTATION 60	
Or		PROGRAM 10 30 FLEX/EXT 700	
Or		PROGRAM 10 30 SYNC ABD 700	
Or		PROGRAM 10 30 ABD HOR 00	The display shows "not available" if you d'ont have the horizontal abduction module.
To display the lower limit of the movement		PROGRAM 10 30 SYNC ABD 100	The value blinks.
To change the lower limit of the movement if necessary		PROGRAM 10 50 SYNC ABD 100	The new value blinks.
To validate the new value, press another key		PROGRAM 10 50 SYNC ABD 100	The value blinks. Press the  key to change if necessary.
	timer	PROGRAM 10 TIMER 00H15	
	speed	PROGRAM 10 SPEED : 1	
	force	PROGRAM 10 LOAD :	
Or display pauses	pause	PROGRAM 10 PAUSE HIGH 0	The pause value in upper limit of movement blinks.
To change pause value in upper limit of movement if necessary		PROGRAM 10 PAUSE HIGH 10	The new pause value in upper limit of movement blinks.

USE OF THE HAND CONTROL

How to modify programs PROGRAM MODE (continued)

GB

Beginning	Keys to press	Display	Remarks
To validate and display the pause lower limit of movement	pause	PROGRAM 10 PAUSE low 0	The pause value in lower limit of movement blinks.
To change the pause lower limit of movement if necessary	+ or -	PROGRAM 10 PAUSE low 20	The new pause value in lower limit of movement blinks.
To validate and display of the combined rotation setting	+ sync abd/add+rot	PROGRAM 10 0 sync rot 60	The program number blinks and the display indicates the rotation values combined with abduction.
To change the lower limit of the movement	limit	PROGRAM 10 0 sync rot 60	The value blinks.
To change the lower limit if necessary	+ or -	PROGRAM 10 10 sync rot 60	The new value blinks.
To validate and display the upper limit of the movement	limit	PROGRAM 10 10 sync rot 60	The value blinks.
To change the upper limit if necessary	+ or -	PROGRAM 10 10 sync rot 75	The new value blinks. (see page 11 for more information about combined movement)
To record the program 10	program	PROGRAM 10 Save: + clear: -	
Then	+	PROGRAM 10 SAving PROGRAM 11 empty	The program 10 has been recorded and the display indicates the next program so you can change another program.
OR To cancel the program	-	PROGRAM 10 clearing PROGRAM 11 empty	The program 10 has been cancelled and the display indicates the next program so you can change another program.
To exit program mode, switch off and switch on the unit.	O I	KINETEC CENTURA V3.0	To use the modified program see page 12.

USE OF THE HAND CONTROL

Comments:

- When a program has been deleted, the display shows | PROGRAM 11 EMPTY |
- The values shown in the 'Display' column are examples. They actually depend on the stored programs.

Program table:

Program number	Movement type	Lower limit	Upper limit	Speed	Load	Pause on upper limit	Pause on lower limit	Timer
		limit	limit	speed	force	pause	pause	timer
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

USE OF THE HAND CONTROL

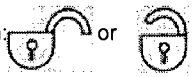
How to define the upper and lower movement limits

GB

• At the start of a session

The MANUAL MODE is a way to set within the tolerance of a patient at the beginning of a session.

Proceed as below:

Beginning	Keys to press	Display	Remarks
Switch the unit on	O I	KINETEC CENTURA V3.0 MOVEMENT VERIF. PLEASE WAIT MOVEMENT VERIF. MOTEoR: M1 M2 FLEX/EXT 50 STOP 15 100	Check if the locking switch is in the following position:  or
To select the MANUAL MODE for upper limits by continually holding pressure on the key	 continuous press	FLEX/EXT 50 MANUaL 15 100	The unit is moving to the upper limit of the movement.
To set the pain level when reached, immediately press	 limit	FLEX/EXT 50 MANUaL 150 150	The new upper value limit of the movement is recorded.
To select the manual mode for lower limits	 continuous press	FLEX/EXT 50 MANUaL 100 50	The unit is moving to the lower limit of the movement
To set the pain level when reached, immediately press	 limit	FLEX/EXT 25 MANUaL 25 150	The new lower value limit of the movement is recorded.
To start the session with the new movement limits	start	FLEX/EXT 25 run 30 150	The angle display changes with current movement.

Specific rules for synchronized movement:

- You can only change the upper limit of the movement through the manual mode and only beyond the synchronization point.

Comments:

- The values shown in the 'Display' column are examples. They actually depend on the stored programs.

USE OF THE HAND CONTROL

• During the session

The BY-PASS MODE is a way to record the pain threshold of a patient during a session.

Beginning	Keys to press	Display	Remarks
The unit is running	start	FLEX/EXT 25 RUN 30 150	The angle display changes with current movement. Check if the locking switch is in the following position: 
To select the BY-PASS MODE	 continuous press	FLEX/EXT 25 BYPASS 160 150	The unit exceeds the recorded upper limit.
To set the new pain level when reached, immediately press	 limit	FLEX/EXT 25 BYPASS 160 160	The new upper value limit of the movement is recorded.
To select the BY-PASS mode for lower limits	 continuous press	FLEX/EXT 25 BYPASS 20 160	The unit is moving to the lower limit of the movement.
To set the new pain level when reached, immediately press	 limit	FLEX/EXT 20 BYPASS 20 160	The new lower value limit of the movement is recorded.
Continue the session with the new movement limits.		FLEX/EXT 20 BYPASS 50 160	The angle display changes with current movement.

Specific rules for synchronized movement:

- You can only change the upper limit of the movement through the manual mode and only beyond the synchronization point.

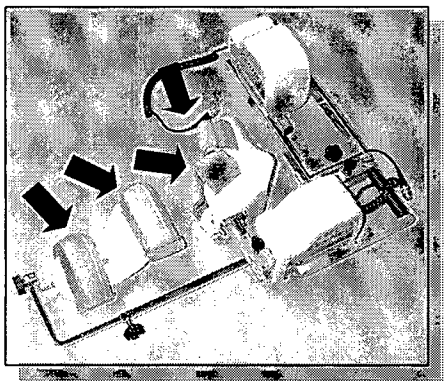
Comments:

- The values shown in the 'Display' column are examples. They actually depend on the stored programs.

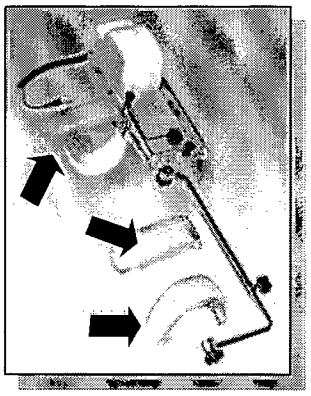
How to use the pads

GB

KINETEC Centura is delivered with 7 straps:
Part number to order the complete set: 4650001397



- 4 straps on the abduction combined with the rotation or horizontal abduction splint.

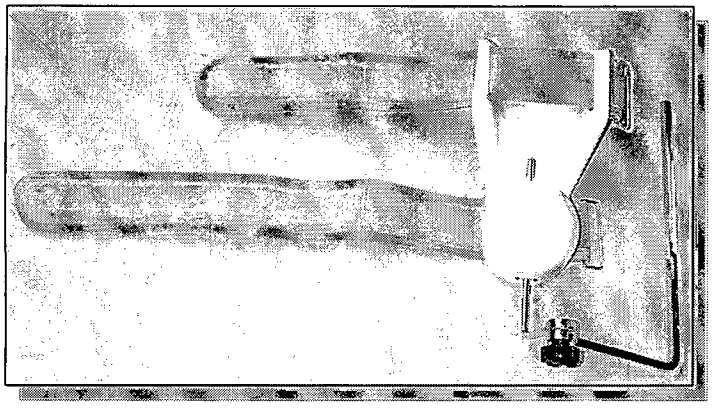


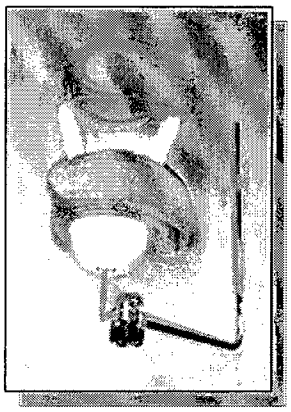
- 3 straps on the abduction or flexion splint.

All these straps are used the same way (see pictures).

Do not tighten the straps too much.

To meet optimal hygiene, clean the straps after each patient.





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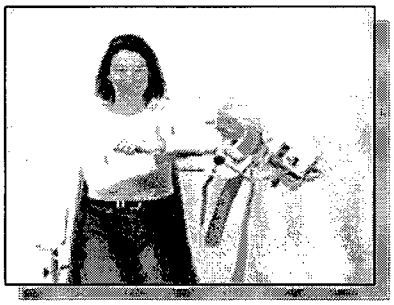
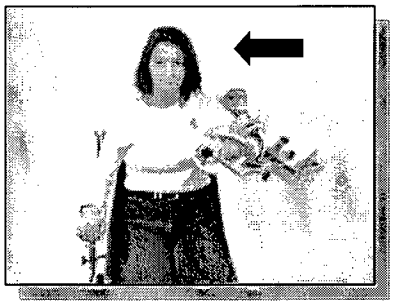
INSTRUCTIONS FOR USE

Patient set up

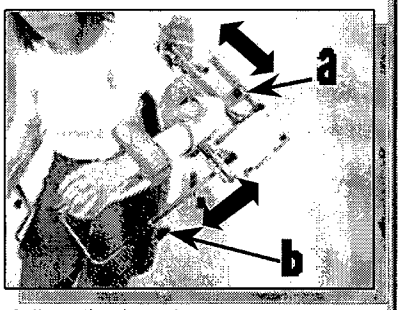
Make sure the straps are clean.
Put the unit in the position that is the most comfortable for the patient.



Position the patient in the chair in a comfortable position and supporting the affected arm.



Slide the arm supports toward the patient and put the arm in the supports.
Secure pads.



Adjust the lengths:
a - arm
b - forearm.

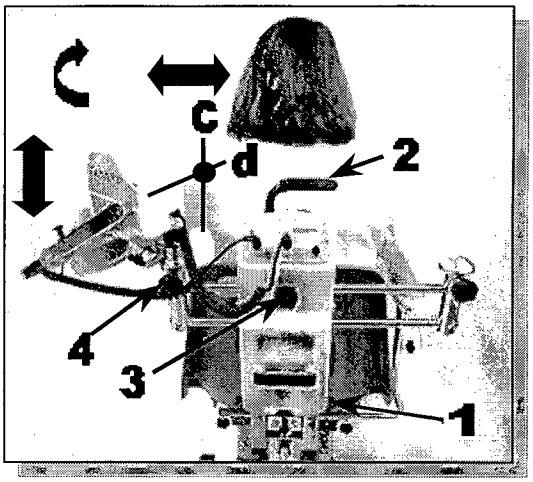
Adjusting the shoulder joint axis

c – Vertical adjustment:
- Loosen the 2 knobs (1).
- With the handle (2), adjust the height of the entire mechanism.
- Tighten the 2 knobs (1).

d – Side to side adjustment:
- Loosen the knob (3)
- Slide the entire mechanism
- Tighten the knob (3)

e – Scapula plan choice
- Loosen the knob (4)
- Rotate the arm support
- Tighten the knob (4).

• Adjust the arm rest.



Starting the unit

• Adjustment of the rotation position:

- Press  and find the right position with the MANUAL MODE (see page 17)

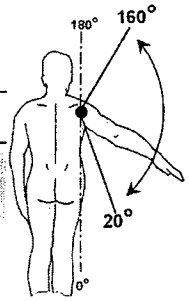
• Choice of the abduction/adduction motion:

- Press  nd adjust your parameters (see page 10).

- Or select a program  (see page 12).

INSTRUCTIONS FOR USE

Adjustments for ABDUCTION/ADDUCTION with fixed ELBOW EXTENSION / FLEXION

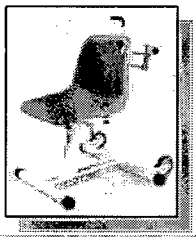


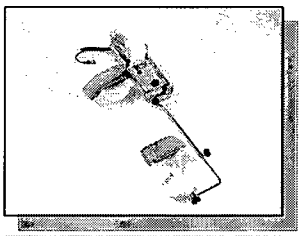
The KINETEC Centura provides motion from 20° to 160° of abduction.

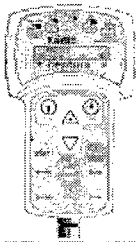
During this motion the elbow flexion settings are fixed.

Parts needed

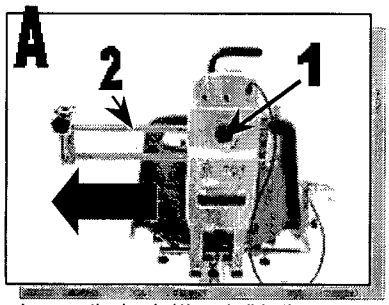
- Chair
- Abduction or flexion splint
- Hand control



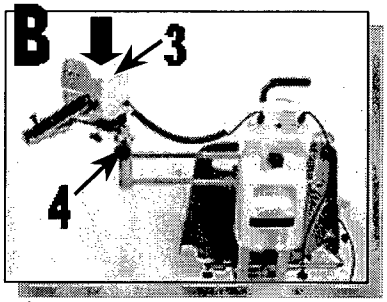




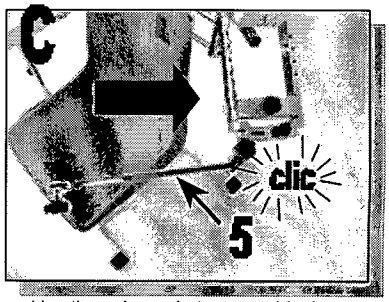
Assembling the parts



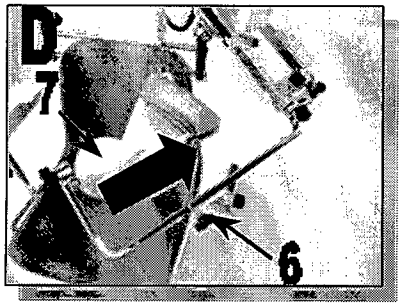
Loosen the knob (1) and slide the motor support(2) to the right or the left .
Plug in the hand control.



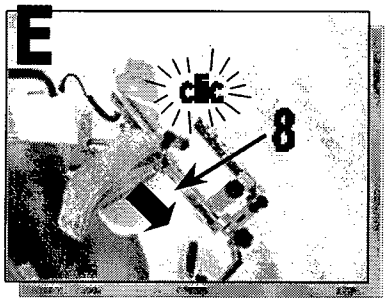
Assemble the abduction motor (3) and tighten the screw (4).
Plug in the motor.



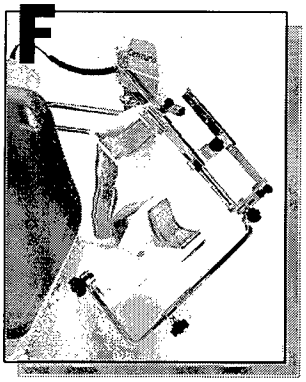
Use the color code to assemble the forearm splint (red for right, blue for left).
The assembly is secure when you hear a 'click'.



Use the color code to assemble the forearmsplint (7). Tighten the knob (6).



Position arm splint (8).
The assembly is secure when you hear a 'click'



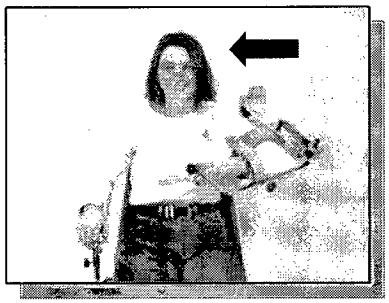
The KINETEC Centura is shown assembled for left shoulder mobilization.

INSTRUCTIONS FOR USE

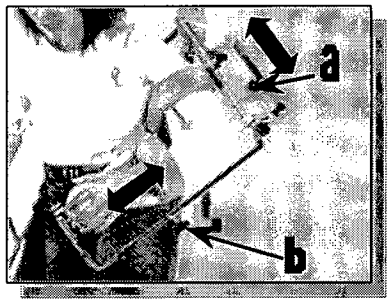
Patient set up

Make sure the straps are clean.
Put the unit in the position that is the most comfortable for the patient.

Position the patient in the chair in a comfortable position and supporting the affected arm.



Slide the arm supports toward the patient and put the arm in the supports.
Secure pads.



Adjust the lengths:
a - arm
b - forearm.

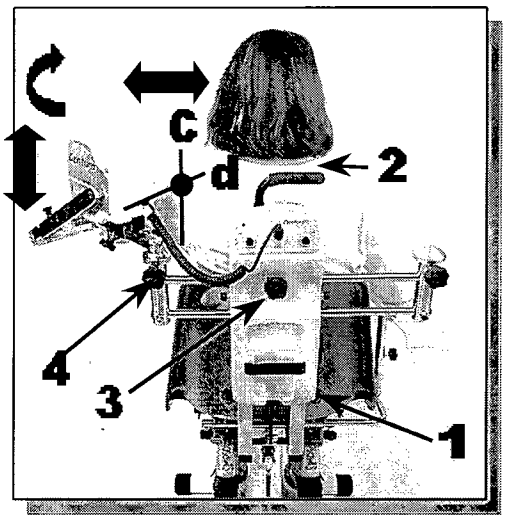
Adjusting the shoulder joint axis

c – Vertical adjustment:
- Loosen the 2 knobs (1).
- With the handle (2), adjust the height of the entire mechanism.
- Tighten the 2 knobs (1).

d – Side to side adjustment:
- Loosen the knob (3)
- Slide the entire mechanism
- Tighten the knob (3)

e – Scapula plan choice
- Loosen the knob (4)
- Rotate the arm support
- Tighten the knob (4).

• Adjust the arm rest.



Starting the unit

• Adjustment of the elbow flexion position:

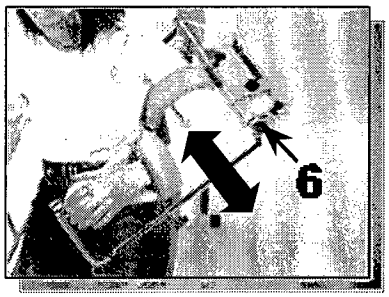
- Unscrew the knob (6) and adjust the flexion as appropriate.

• Choice of the abduction/adduction motion:

- Press 

and adjust your parameters (see page 10)

- Or select a program program (see page 12).



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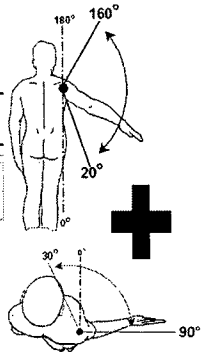
INSTRUCTIONS FOR USE

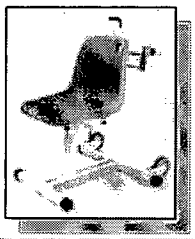
Adjustments for ABDUCTION/ADDUCTION with ASSOCIATED ROTATION

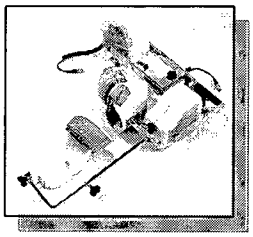


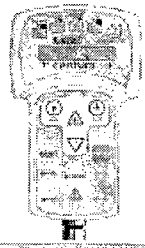
The KINETEC Centura provides motion from 20° to 160° of abduction associated with 120° of rotation in maximum.

Parts needed

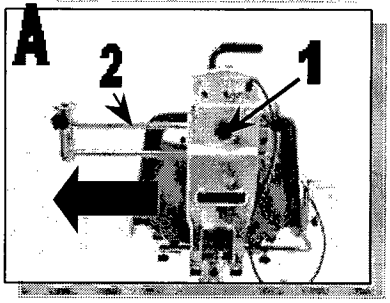
- Chair
- Abduction with associated rotation splint
- Hand control



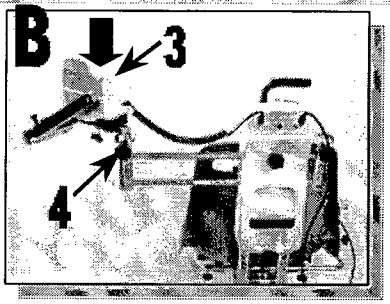




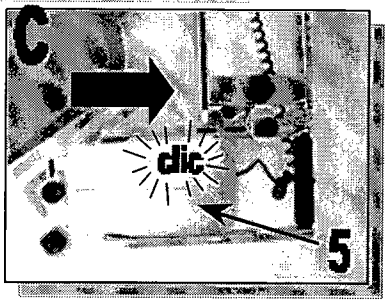
Assembling the parts



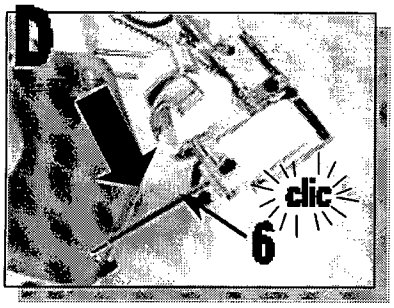
Loosen the knob (1) and slide the motor support (2) to the right or the left.
Plug in the hand control.



Assemble the abduction motor (3) and tighten the screw (4).
Plug in the motor.

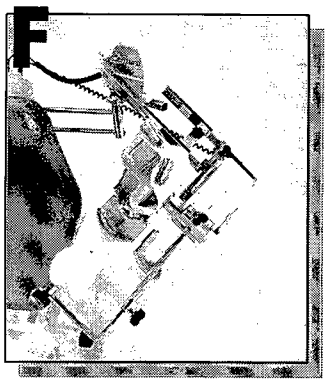


Use the color code to assemble the rotation motor (red for right, blue for left). The assembly is secure when you hear a 'click'.
Plug in the motor.



Use the color code to assemble the elbow splint (6). The assembly is secure when you hear a 'click'.

Use the color code to assemble the forearm splint (7). Tighten the knob (8).



The KINETEC Centura is shown assembled for left shoulder mobilization.

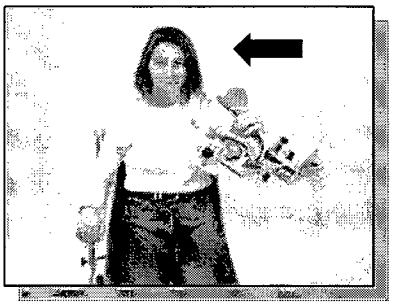
INSTRUCTIONS FOR USE

GB

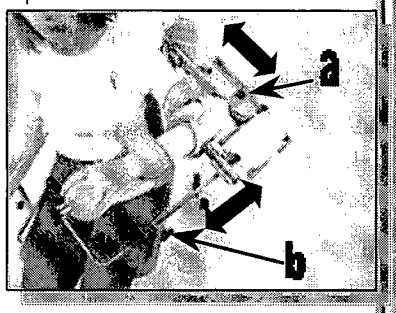
Patient set up

Make sure the straps are clean.
Put the unit in the position that is the most comfortable for the patient.

Position the patient in the chair in a comfortable position and supporting the affected arm.



Slide the arm supports toward the patient and put the arm in the supports.
Secure pads.



Adjust the lengths:
a - arm
b - forearm.

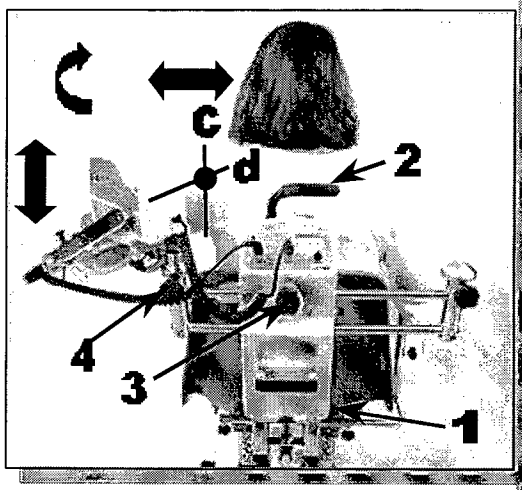
Adjusting the shoulder joint axis

c – Vertical adjustment:
- Loosen the 2 knobs (1).
- With the handle (2), adjust the height of the entire mechanism.
- Tighten the 2 knobs (1).

d – Side to side adjustment:
- Loosen the knob (3)
- Slide the entire mechanism
- Tighten the knob (3)

e – Scapula plan choice
- Loosen the knob (4)
- Rotate the arm support
- Tighten the knob (4).

• Adjust the arm rest.



Starting the unit

• Choice of the abduction/adduction associated with rotation motion:

- Press  and adjust your parameters (see page 11).

- Or select a program  (see page 12).

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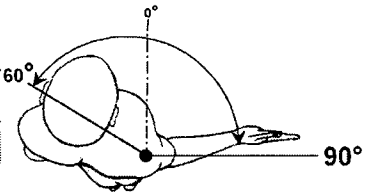
INSTRUCTIONS FOR USE



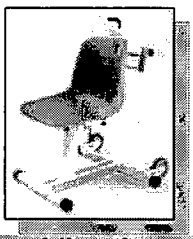
Adjustments for EXTERNAL ROTATION motion

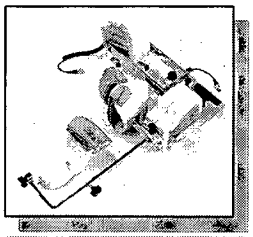
The KINETEC Centura provides motion from 60° of internal rotation to 90° of external rotation.

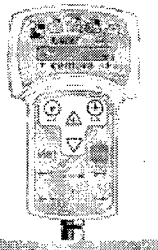
During this motion the abduction settings are fixed.

Parts needed

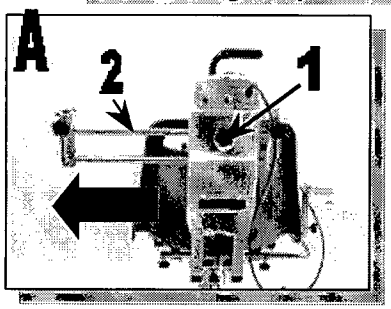
- Chair
- Abduction rotation splint
- Hand control



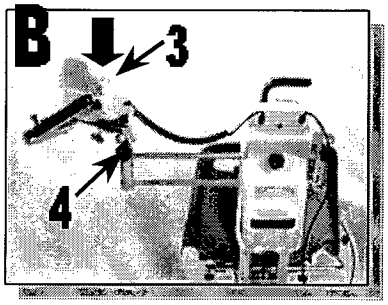




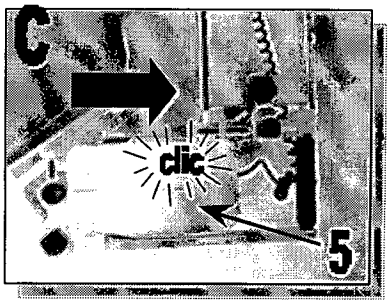
Assembling the parts



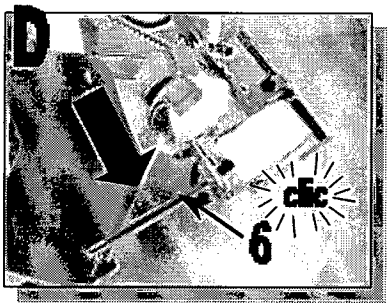
Loosen the knob (1) and slide the motor support (2) to the right or the left.
Plug in the hand control.



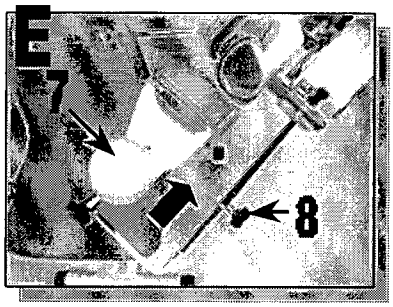
Assemble the abduction motor (3) and tighten the screw (4).
Plug in the motor.



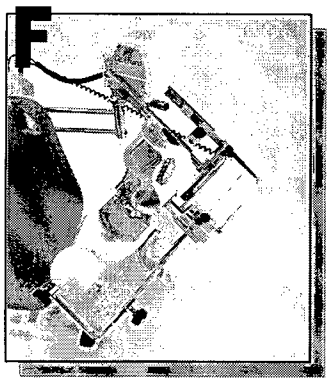
Use the color code to assemble the rotation motor (red for right, blue for left). The assembly is secure when you hear a 'click'.
Plug in the motor.



Use the color code to assemble the elbow splint (6). The assembly is secure when you hear a 'click'.



Use the color code to assemble the forearm splint (7). Tighten the knob (8).



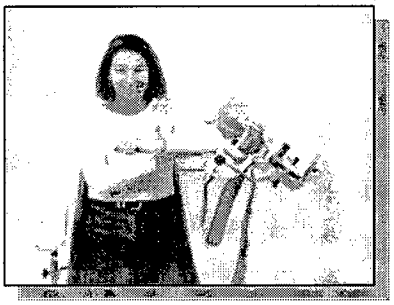
The KINETEC Centura is shown assembled for left shoulder mobilization.

INSTRUCTIONS FOR USE

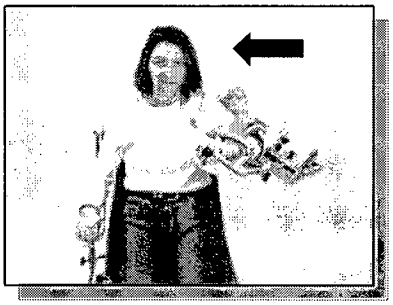
GB

Patient set up

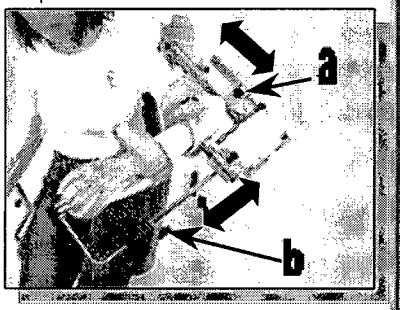
Make sure the straps are clean.
Put the unit in the position that is the most comfortable for the patient.



Position the patient in the chair in a comfortable position and supporting the affected arm.



Slide the arm supports toward the patient and put the arm in the supports.
Secure pads.



Adjust the lengths:
a - arm
b - forearm.

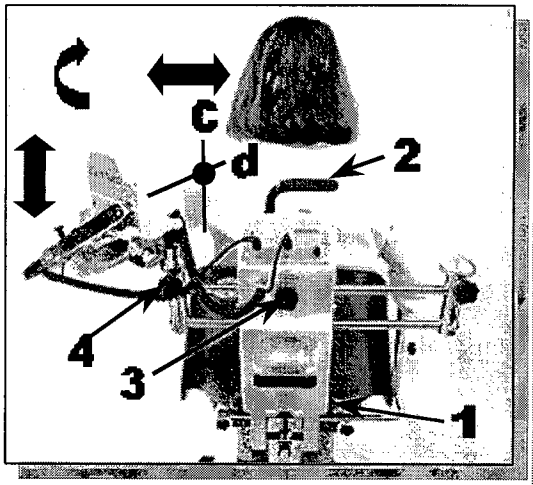
Adjusting the shoulder joint axis

c – Vertical adjustment:
- Loosen the 2 knobs (1).
- With the handle (2), adjust the height of the entire mechanism.
- Tighten the 2 knobs (1).

d – Side to side adjustment:
- Loosen the knob (3)
- Slide the entire mechanism
- Tighten the knob (3)

e – Scapula plan choice
- Loosen the knob (4)
- Rotate the arm support
- Tighten the knob (4).

• Adjust the arm rest.



Starting the unit

Adjustment of the abduction position:

- Press  and find the right position with the MANUAL MODE (see page 17)

• Choice of the rotation motion:

- Press 

and adjust your parameters (see page 11).

- Or select a program 

(see page 12).

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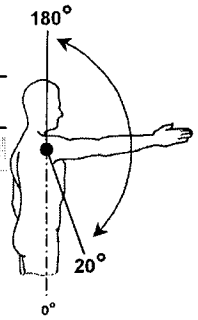
INSTRUCTIONS FOR USE

Adjustments for EXTENSION / FLEXION

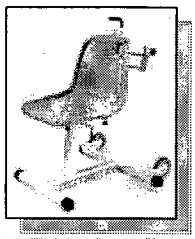


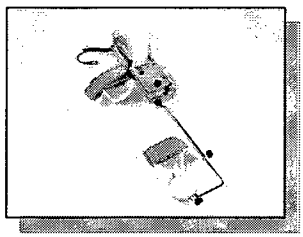
The KINETEC Centura provides motion from 20° to 180° of flexion.

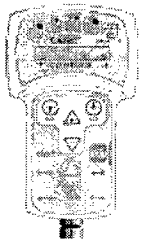
During this motion the elbow flexion settings are fixed.

Parts needed

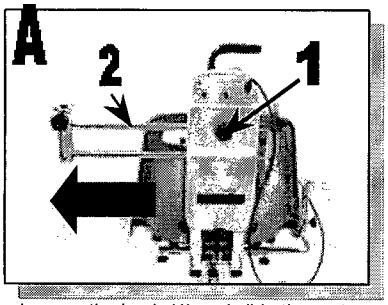
- Chair
- Abduction or flexion splint
- Hand control



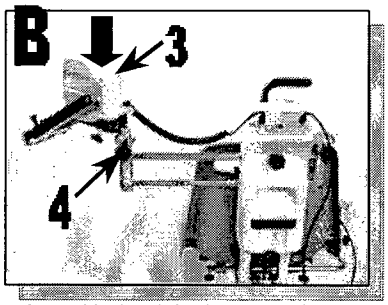




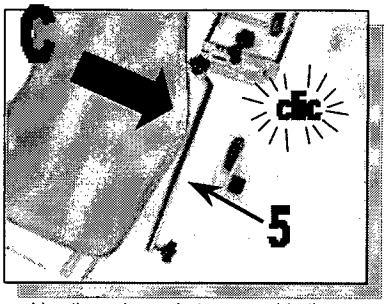
Assembling the parts



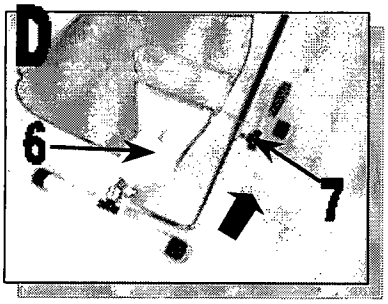
Loosen the knob (1) and slide the motor support (2) to the right or the left.
Plug in the hand control.



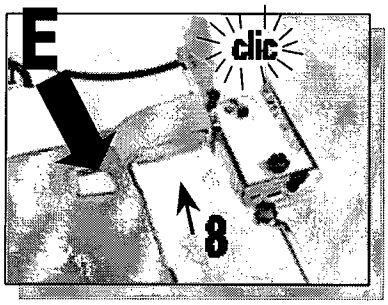
Assemble the abduction motor (3) and tighten the screw (4).
Plug in the motor.



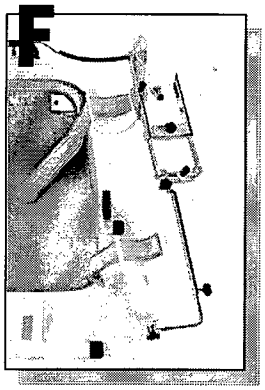
Use the color code to assemble the forearm support (red for right, blue for left).
The assembly is secure when you hear a 'click'.



Use the color code to assemble the forearmsplint (6). Tighten the knob (7).



Position arm splint (8).
The assembly is secure when you hear a 'click'



The KINETEC Centura is shown assembled for left shoulder mobilization.

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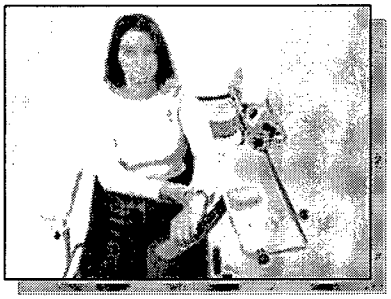
INSTRUCTIONS FOR USE

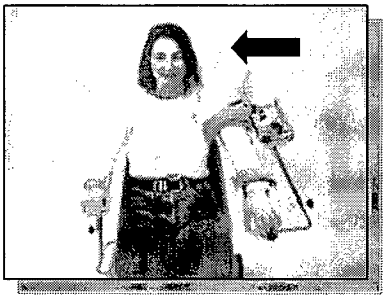
GB

Patient set up

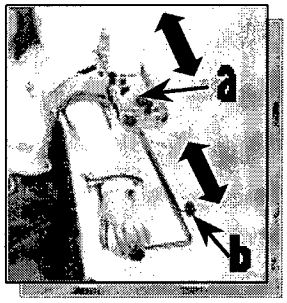
Make sure the straps are clean.
Put the unit in the position that is the most comfortable for the patient.



Position the patient in the chair in a comfortable position and supporting the affected arm.



Slide the arm supports toward the patient and put the arm in the supports.
Secure pads.



Adjust the lengths:
a - arm
b - forearm.

Adjusting the shoulder joint axis

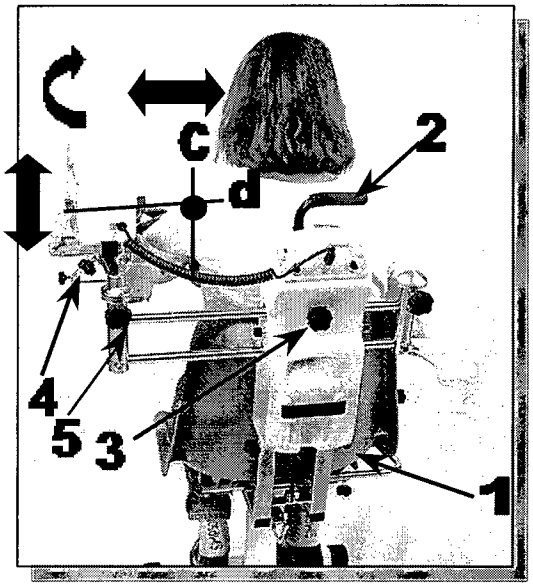
c – Vertical adjustment:
- Loosen the 2 knobs (1).
- With the handle (2), adjust the height of the entire mechanism.
- Tighten the 2 knobs (1).

d – Side to side adjustment:
- Loosen the knob (3)
- Slide the entire mechanism
- Tighten the knob (3).

e – Shoulder depth adjustment:
- Loosen the knob (4).
- Slide the entire mechanism.
- Tighten the knob (4).

f – Scapula plan choice
- Loosen the knob (5)
- Rotate the arm support
- Tighten the knob (5).

• Adjust the arm rest.



Starting the unit

• Choice of flexion/extension:

- Press 

and adjust your parameters (see page 10).

- Or select a program 

(see page 12).

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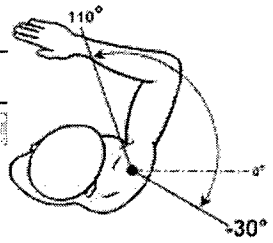
INSTRUCTIONS FOR USE

Adjustments for HORIZONTAL ABDUCTION

GB

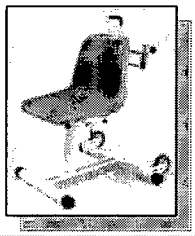


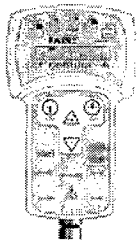
Available on Centura 5 or in option,
Contact your nearest KINETEC distributor.

The KINETEC Centura provides motion from -30° to 110° of horizontal abduction.

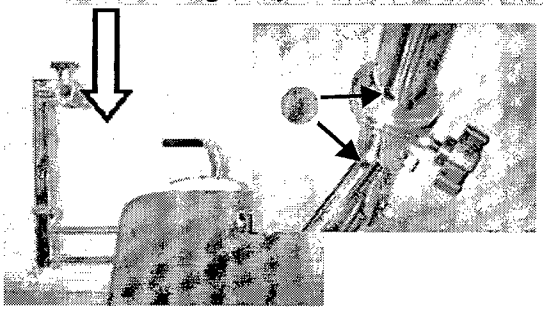
Parts needed

- Chair
- Horizontal abduction splint
- Hand control

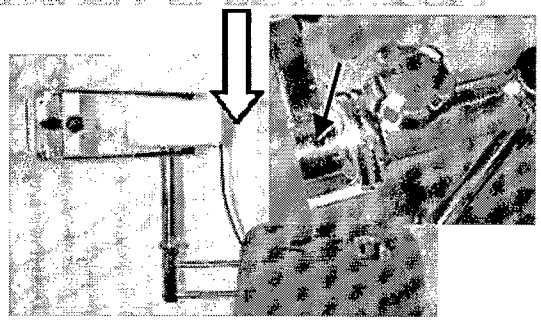




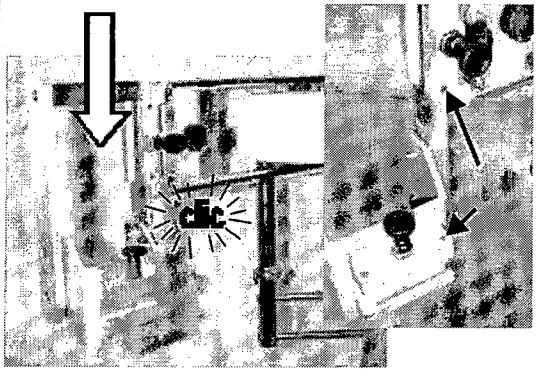
Assembling the parts



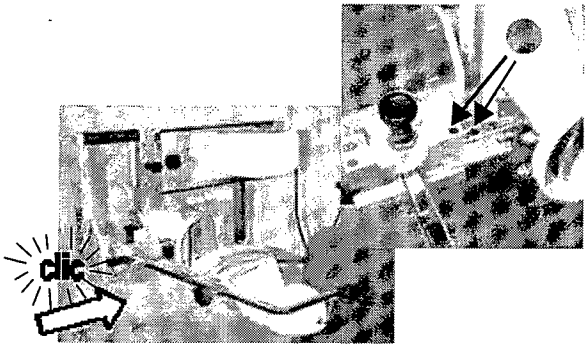
Assemble the horizontal abduction column to the unit. Use the colour code to turn the column in the right position. Fasten the screw.



Assemble the motor M1 to the column. You need to see the red point on the M1 part for a right side set up (blue for left). Several positions are possible to adjust the plan of the motion (horizontal to more or less inclined).



Insert the elbow support holder into the extremity of the M1 part. The required colour point (red for right and blue for left) needs to be positioned internally. For safety reason, this part cannot be removed from the lower part and must be so lifted when removed.

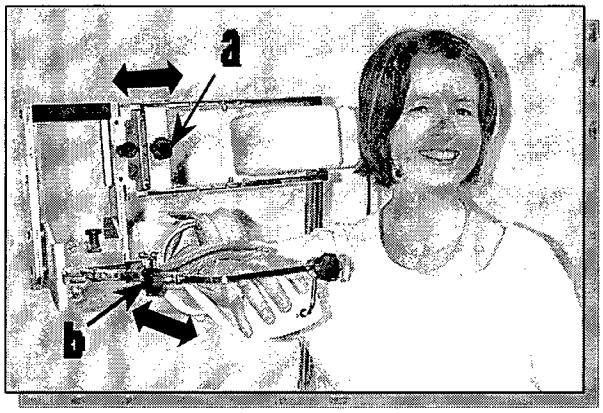


Insert the elbow splint into the elbow support holder respecting the colour code.

INSTRUCTIONS FOR USE

Patient set up

Make sure the straps are clean.
Put the unit in the position that is the most comfortable for the patient.



Position the patient in the chair in a comfortable position and supporting the affected arm.

Slide the arm supports toward the patient and put the arm in the supports.
Secure pads.

Adjust the lengths:
a - arm
b - forearm.

Adjusting the shoulder joint axis

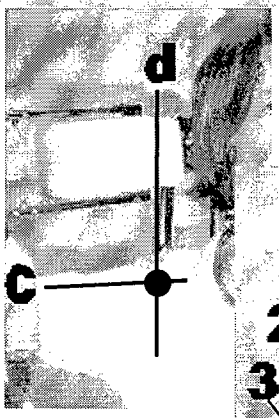
c – Vertical adjustment:
- Loosen the 2 knobs (1).
- With the handle (2), adjust the height of the entire mechanism.
- Tighten the 2 knobs (1).

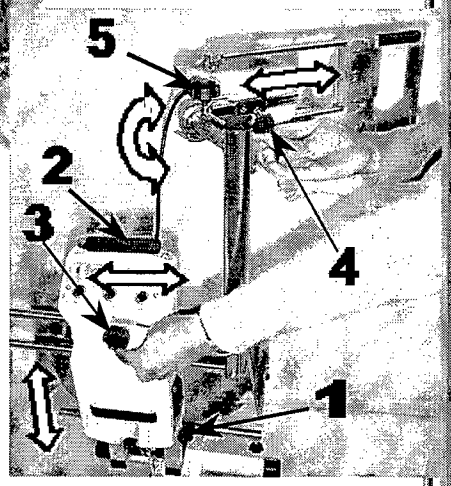
d – Side to side adjustment:
- Loosen the knob (3)
- Slide the entire mechanism
- Tighten the knob (3).

e – Shoulder depth adjustment:
- Loosen the knob (4).
- Slide the entire mechanism.
- Tighten the knob (4).

f – Plan of the motion: from horizontal to inclined
- Loosen the knob (5)
- Rotate the arm support
- Tighten the knob (5).

- Adjust the arm rest.





Starting the unit

- Choice of Horizontal abduction:
  - Press  and adjust your parameters (see page 10).
  - Or select a program program (see page 12).

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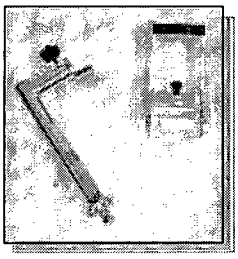
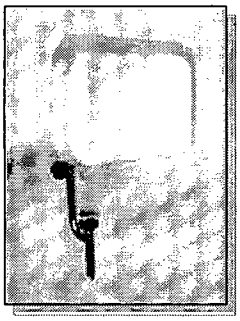
OPTIONS



Horizontal abduction Module

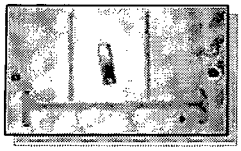
Seat height adjuster

Shoulder fixation



Head rest

Recharger



Scales kit

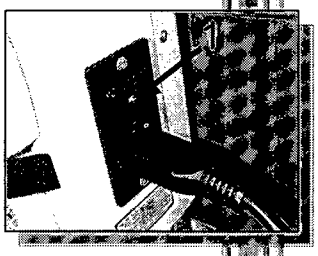
Transport bag

GB

MAINTENANCE

After 2,000 hours of operation, KINETEC Centura requires a few lubrication and maintenance operations (lubrication of the joints, pointer stops and ballscrews). The need for maintenance is indicated by display of the message SERV. MOTOR when the system is switched on.
Despite that warning, you can continue to use your KINETEC by pressing START, but you should contact your nearest KINETEC technician to have the maintenance operations conducted as soon as possible.
When the system is no longer in operating order, kindly return it to us with the accessories for destruction.

TROUBLE SHOOTING



A spare parts list and technical catalog are available to you on request from your KINETEC distributor.
If, after connecting the power supply cable to the power supply and switching on KINETEC Centura:

- The display does not indicate any information:
  - Check that the electrical socket is live using another device.
  - Replace the fuse(s) of the connector with fuses of the same type and caliber: 2 fuses T 750 mA 250V (6.3 x 32) (KINETEC order: 4610007434).
  - If the display still does not indicate any information, contact your nearest KINETEC technician.

If, after switching on your KINETEC:

- Your KINETEC does not work and the display indicates 50 STOP 25 115, Press START again.
- Your KINETEC still does not function:
  Contact your nearest KINETEC technician.
- Your KINETEC does not function and the display indicates:
  ANGULAR POSI.: angle measurement function failure,
  or NO MOVEMENT: no movement,
  or BAD WAY: motor rotation failure,
  or LOAD MAXI: abnormal consumption,
  or POWER SUPPLY: power failure;

Contact your nearest KINETEC technician if the same message is displayed after having switched the device off, then on, and started it by pressing START.

CLEANING

Before conducting any cleaning operation, SWITCH OFF the unit and disconnect the power supply.

Use a DISINFECTANT (PROPANOL/ISOPROPANOL or ALDEHYDE-based solution). Spray the disinfectant on the SURFACES (plastic shells and metal components).

In order to ensure optimal hygiene, you are advised to clean the covers for each new patient. All the consumables enable hazard-free disposal.

Recommendations to obtain a maximum hygiene of the pads:

- Sterilization of the pads (if necessary) :
  Sterilizer at 134 °C during 18 minutes.

- Desinfection of the pads:
  Washing at 30 ° C with use of a disinfection solution during the rising cycle.
  Example of product which can be used :
  Solution " Baclinge" at 0.125 % or "Souplanios" at 0,125% from ANIOS Laboratory.
  A complete list of distributors in your country is available on request.

PRODUCT INFORMATION

TECHNICAL SPECIFICATIONS

Product
Weight: 22 Kg /48lb
Splint dimensions:
56x100x76cm / 22"x39"x30"
Angular limits: see page 2
Speeds: from 30 to 120°/min
Patient height: from 1,40 to 2m
4'7" to 6'7"

Electricity
Power supply: 100-240 V~
Frequency: 50-60 Hz
Power consumption: 50 VA
Device of type B class I
IP 20.
Fuse T 750mA 250V 6.3x32mm
KINETEC order: 4610007434

Environment
- Storage/transport conditions:
Temperature: -40 to 70°C / -40 to 160°F
Relative humidity: up to 90%
- Operating conditions:
Room temperature: 10 to 40°C / 50 to 105°F
Relative humidity: up to 80%

SYMBOLS USED

	TYPE B device (protection against electric shocks)
	Caution (consult the accompanying documents)
	STOP (power off)
	ON (power on)
start	Start movement
stop	Stop movement
program	Program access
speed	Speed
timer	Timer
force	Force
pause	Pause
	Increase
	Decrease

	Lower limit
	Upper limit
	Flexion movement
	Rotation movement
	Abduction movement
	Combined movement
	Horirontal abduction movement
	Hand control locked
	Hand control unlocked
	Hand control half locked
	Switch on LED and defect signal when the LED blinks
~	Alternative current

WARRANTY

The KINETEC warranty is strictly limited to the replacement free of charge or repair in the plant of the component or components found to be defective.
KINETEC guarantees its joint passive mobilization systems for 1 year against all defects of manufacture from the date of purchase by the consumer.
KINETEC is the only organization able to assess the application of the warranty to its systems.
The warranty will be considered null and void if the device has been used abnormally or under conditions of use other than those indicated in the user's manual.
The warranty will also be considered null and void in the event of deterioration or an accident due to negligence, inappropriate surveillance or inappropriate maintenance, or due to transformation of the equipment or an attempt to repair the equipment.

DECLARATION "CE" DE CONFORMITE
"EC" DECLARATION OF CONFORMITY

Nous
We

AbilityOne Kinetec
(nom du fabricant ou de son mandataire dans la Communauté Européenne)
(Name of manufacturer or his representative established within the European Community)
Zone Industrielle de Tournes-Cliron - TOURNES - F 08090

déclarons sous notre seule responsabilité que le produit
declare on our own responsibility that product

KINETEC d'épaule CENTURA
SHOULDER KINETEC model CENTURA
(nom, type ou modèle, (éventuellement n° de lot, d'échantillon ou de série, sources et nombre d'exemplaires))
(Brand name, model, (N° of lot or series if necessary))

satisfait aux dispositions des Directives du Conseil :
complies with the assessment criteria of Council's Directives:

- **n° 93/42/CEE du 14 juin 1993 - DISPOSITIFS MEDICAUX (selon l'annexe II)**
- *n° 93/42/CEE of June 14, 1993 - MEDICAL DEVICES (Annex II)*
  obligatoire à partir du 14 Juin 1998 / *mandatory date : June 14, 1998*

- **n° 89/336/CEE du 3 mai 1989 - COMPATIBILITE ELECTROMAGNETIQUE**
- *n° 89/336/CEE of May 3, 1989 - ELECTROMAGNETIC COMPATIBILITY*
  obligatoire à partir du 1er janvier 1996 / *mandatory date : January 1, 1996*

et que le système qualité du fabricant est conforme aux normes ou autres documents normatifs suivants :
and the quality system of the manufacturer is in conformity with the following standard (s) :

EN 46001/96 - ISO 9001/94
Certificat n° 0214/46001/9001/1 délivré par le Gmed le 15/10/97
Certificate n° 0214/46001/9001 established by Gmed on 15/10/97

Attestation de conformité à l'annexe II.3 délivrée par le Gmed N°0214/B2P3/1
Certificate for approval of full Quality Assurance System - Annexe II.3 – N° 0214/B2P3/1 established by Gmed

Information complémentaire : **Fiche Produit Centura du 04/04/2002**
Additional information : *Product file Centura dated 04/04/2002*

Année d'apposition du Marquage CE : **2000**
Year in which CE mark was affixed : **2000**

Tournes, le 4 Avril 2002
Tournes, April 4th, 2002
(lieu et date / *place and date*)

CE 0459

P. SONNET
Directeur Général / *General Manager*
(Nom, titre et signature du signataire autorisé)
(Name, function and sign of authorised people)

CENTURA – REV2

KINETEC
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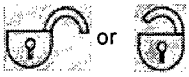
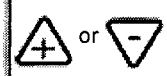
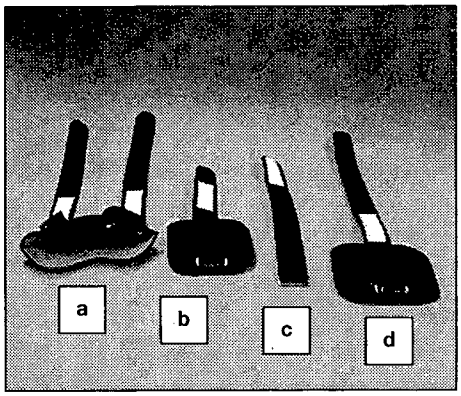
SELECT YOUR LANGUAGE

GB

Beginning	Keys to press	Display	Remarks
Switch ON the unit		KINETEC CENTURA V3.0 VERIFICATION MVT ATTENDEZ S.V.P VERIFICATION MVT MOTEUR: M1 M2 FLEX/EXT 30 STOP 89 100	Check if the locking switch is in the following position 
Press the 2 keys in the same time	speed force	Language FRENCH	The display indicate the language selectionned
To change the language		Language ENGLISH	The English language is selectionned. English French German Italian Spanish
To validate the new language.	 limit	OK Switch on/off	To exit and confirm the new language, switch OFF and Switch ON the unit..

Pads for Kinetec* Centura* Shoulder CPM Machine:

5315-0130

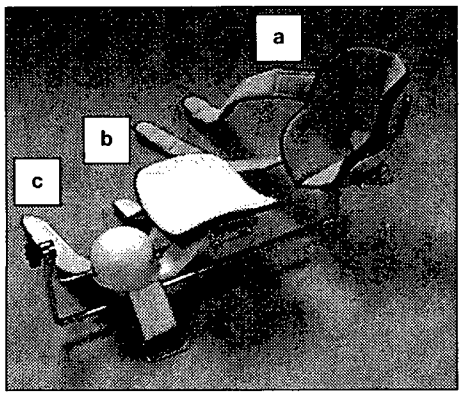


- **Components**

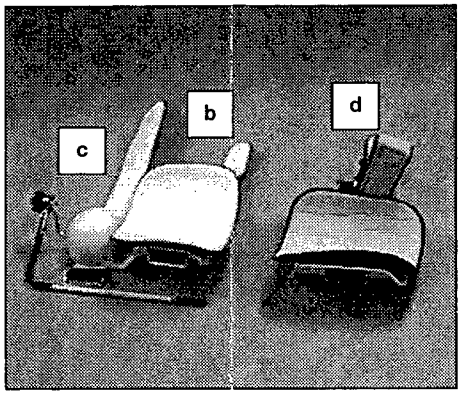
COMPONENTS

The following pads and straps (labeled at left) are included in the pad kit:

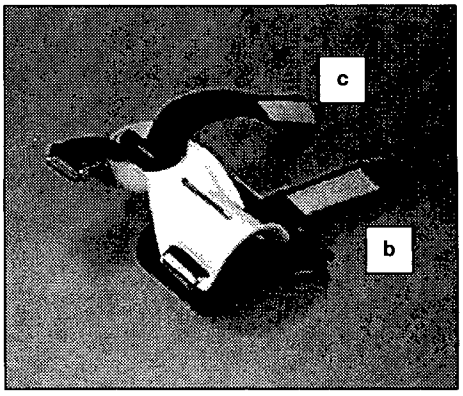
a. elbow pad
b. wrist pad
c. hand strap
d. biceps pad



- **Abduction/adduction**
- **Rotation**
- **Synchronized abduction/adduction with rotation**



- **Flexion/extension**



- **Hand strap and wrist pad attachment**

SETTING UP THE MACHINE

Each set-up requires only some of the pads, as follows:

- Set-up for abduction/adduction requires pads **a**, **b**, and **c**.
- Set-up for rotation requires **a**, **b**, and **c**.
- Set-up for synchronized abduction/adduction with rotation requires **a**, **b**, and **c**.
- Set-up for flexion/extension requires **b**, **c**, and **d**.

Attach the pads and straps to the CPM machine as follows:

a. Elbow pad–Position it in the elbow support with the seam distal and the straps and D-rings toward the elbow support. Thread the straps and D-rings through the slots in the elbow support.

b. Wrist pad- Position it on the wrist support with the strap and D-ring toward the wrist support. Thread the strap and D-ring through the slots in the wrist support.

c. Hand strap–Turn the hand support so the rod is up. With the hook material on the strap facing up, thread the D-ring end of the strap under the rod.

d. Biceps pad–Position it on the biceps support with the strap and D-ring toward the biceps support. Thread the strap and D-ring through the slots in the biceps support.

After patient has been placed in the supports, secure straps by threading them through the D-rings and securing the hook closures. **Be sure the straps are snug but not so tight that they impair circulation.**

The pads are intended for single-patient use only.

GROUPEMENT POUR L'ÉVALUATION DES DISPOSITIFS MÉDICAUX

Certificate 2/3 N° : 0214 / B2P3 / 1

Delivered at Fontenay-aux-Roses on November 12TH, 1997

EC CERTIFICATE

APPROVAL OF FULL QUALITY ASSURANCE SYSTEM

ANNEX II point 3 DIRECTIVE 93/42/EEC concerning medical devices

Device(s) category :	**Immobilization, mobilization and testing devices of the human joints**
Identification of device(s) :	**See EC declaration of conformity of the manufacturer authenticated by G-MED**
Manufacturer(name and address) :	**SMITH & NEPHEW - KINETEC S.A. Zone Industrielle de Tournes - Cliron BP 19 F - 08090 TOURNES**
E.U. Responsible :	**SMITH & NEPHEW - KINETEC S.A. Zone Industrielle de Tournes - Cliron BP 19 F - 08090 TOURNES**

The G-MED certifies that, on the basis of the results contained in the file referenced 30273304, the quality assurance system - for design, production and final inspection - of medical devices designated above is in conformance with the requirements of the directive 93/42/EEC, annex II point 3.

This certificate is valid until : November 12TH, 2002 (included)

CE 0459

E. GRIMAUD
G-MED General Manager

In compliance with clause 17, CE marking shall be accompagnied by our identification number 0459
This certificate is issued under the following conditions

1 It is valid only to the designated device(s) listed above
2 Copies are available upon request by the manufacturer

REVISION A/ AAT2DAN2/ LE 1994-12 21

33 AVENUE DU GÉNÉRAL LECLERC BP [illegible]
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