

**SKEMA<sup>®</sup>FORM**

**EXAMINATION COUCH**  

---

**INSTRUCTIONS MANUAL**





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REGULATION (EU) 2017/745 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL  
of 5 April 2017 concerning medical devices

## 1. CODES

- MI370X** LYTUS Electric examination couch, 62 cm
- MI371X** LYTUS Electric examination couch, 62 cm, with castors
- MI380X** LYTUS Electric examination couch 68 cm
- MI381X** LYTUS Electric examination couch, 68 cm, with castors
- MI382X** LYTUS Electric examination couch with backrest section moved by gas spring 68 cm
- MI383X** LYTUS Electric examination couch with backrest section moved by gas spring 68 cm, with castors
- MI385X** LYTUS Hydraulic examination couch, 68 cm
- MI386X** LYTUS Hydraulic examination couch, 68 cm, with castors
- MI390X** LYTUS Electric examination couch, 90 cm
- MI391X** LYTUS Electric examination couch, 90 cm, with castors
- MI395X** LYTUS Hydraulic examination couch, 90 cm
- MI396X** LYTUS Hydraulic examination couch, 90 cm, with castors
- MI392X** LYTUS Electric examination couch with backrest section moved by gas spring 90 cm
- MI393X** LYTUS Electric examination couch with backrest section moved by gas spring 90 cm, with castors

X: Different pad colors

## 2. INTRODUCTION

Thank you for purchasing a SKEMA examination couch by Moretti S.p.A.

The se products are designed and manufactured to meet all your needs for a practical, correct and safe use. This manual contains small suggestions for proper use of the device you have chosen and valuable advice for your security. You may read the complete manual before using the product, in case of doubts please contact your dealer, who will help and advise you properly.

## 3. INTENDED USE

Moretti examination beds are intended for patient diagnosis, treatment and monitoring.



### WARNING!

- Do not use the product for a purpose not indicated in this manual
- Moretti S.p.A declines all responsibilities for any consequences resulting from an incorrect use of this product and from unauthorized alteration to the frame of the product
- The manufacturer reserves the right to change the information contained in this document without previous notice

## 4. DECLARATION OF CONFORMITY

Moretti S.p.A. declares under its sole responsibility that the product made and traded by Moretti S.p.A. and belonging to the group of PROFESSIONAL EXAMINATION COUCHES - LYTUS complies with the provisions of the regulation 2017/745 on MEDICAL DEVICES of 5 April 2017. For this purpose, Moretti S.p.A. guarantees and declares under its sole responsibility what follows:

1. The devices satisfy the requirements of general safety and performance requested by the Annex I of regulation 2017/745 as laid down by the Annex IV of the above mentioned regulation.

2. The devices ARE NOT MEASURING INSTRUMENTS.
3. The devices ARE NOT MADE FOR CLINICAL TESTS.
4. The devices are packed in NON-STERILE BOX.
5. The devices belong to class I in accordance with the provisions of Annex VIII of the above mentioned regulation
6. Moretti S.p.A. provides to the Competent Authorities the technical documentation to prove the conformity to the 2017/745 regulation, for at least 10 years from the last lot production.

**Note:** Complete product codes, the manufacturer registration code (SRN), the UDI-DI code and any references to used regulations are included in the EU declaration of conformity that Moretti S.p.A. releases and makes available through its channels.

#### 4.1 Applicable regulations and directives

In order to satisfy safety standards for users, Moretti S.p.A. complies with the following standards:

UNI CEI EN 60601-2-52:2016 Electro-medical equipment. Part 2-52. Special requirements for the basic safety and essential performance of medical beds

UNI EN 12182:2012 Products intended for the assistance of people with disabilities

### 5. GENERAL WARNINGS

For a correct use of the product, please refer to the present manual

- Keep the packed examination bed away from heat sources
- SERVICE LIFE- the examination bed service life is determined by wear of parts not repairable and/or replaceable and in any case not exceed 10 years
- ALWAYS pay close attention to the presence of moving parts that could cause entrapment limbs and injuries
- DO NOT allow children to play on or operate the bed
- The user and/or the patient will have to report any serious accident that have occurred related the device to the manufacturer and appropriate authority of the State which the user and/or patient belongs to.

### 6. SYMBOLS



Product code



Unique Device Identification



CE mark



Manufacturer



Batch Lot



Read the instruction manual



Medical Device



Conditions of disposal



Attention, should read the instructions



Production dates



Waste Electrical & Electronic Equipment (WEEE)

**IPX6**

Degree of protection against dusts and liquids



B Type



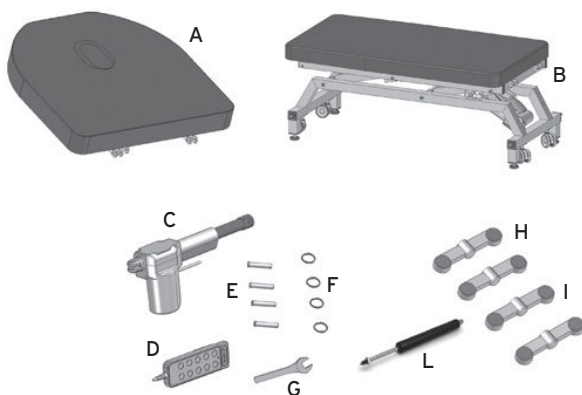
Double insulation class



Maximum permissible load

## 7. GENERAL DESCRIPTION

### 7.1 Parts view



#### Description

- A. Padded headrest
- B. Padded examination bed frame
- C. Headrest actuator (only on MI380X-MI381X-MI390X-MI391X models)
- D. Remote control (only on MI37XX-MI380X-MI381X--MI382X-MI383X- MI390X-MI391X -MI392X-MI393X models)
- E. Linchpins to assemble headrest and actuator (only on MI38X-MI39X models)
- F. Ring shape stoppers (only on MI38X-MI39X models)
- G. Tool for tips height regulation
- H. Double pedal system - left side (only on MI371X-MI381X-MI383X-MI386X-MI391X-MI393X-MI396X models)
- I. Double pedal system - right side (only on MI371X-MI381X-MI383X-MI386X-MI391X-MI393X-MI396X models)
- L. Gas spring for headrest (only on MI385X-MI386X-MI395X-MI396X-MI382X-MI383X-MI392X-MI393X models)

## 8. ASSEMBLING



### WARNING!

Perform these operations with an operator aid, be careful to avoid personal injuries or property damages during bed movements

### 8.1 Bed assembling

- Remove the product from the packaging and make sure that the content matches the model you requested and that the parties have not been damaged during transport. In the contrary case contact your dealer immediately
- Proceed with the assembling of the headrest (only for MI38XX-MI39XX models) and the actuator to the bed frame using the accessory kit of pins (REF.E), secure them with the ring shape pins (REF.F) as shown in Fig.1

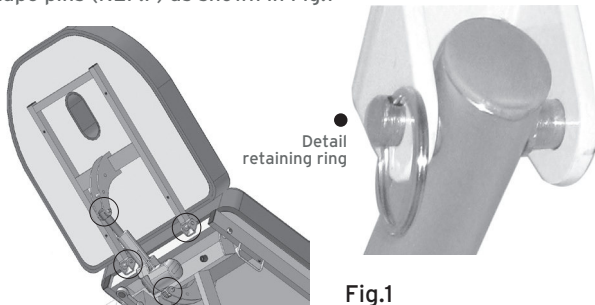


Fig.1

### 8.2 Pedal assembling (only for MI371X-MI381X-MI383X-MI386X-MI391X-MI393X-MI396X)

Assemble the pedal control wheel (REF.H,I) with the letter reference on same pedal (L = left, R = right) arranging them as in Fig.2

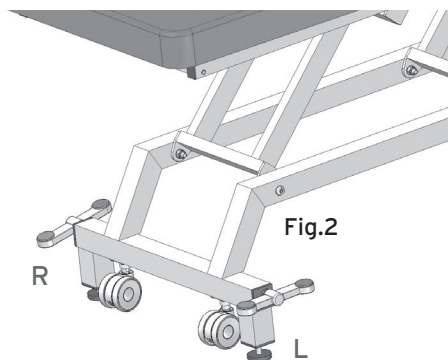


Fig.2

- Presser foot adjustment

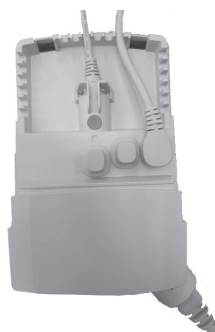


Adjust the presser foots to allow a correct operation of castors pedal control mechanism; to do this, adjust the presser foot height in such a way that the distance shown in the figure does not exceed 10mm

Your bed is correctly assembled and ready for use.

### 8.3 Actuator and Control Unit connection (for MI37XX)

Carry out the electrical connection of the lift actuator and of the remote control to the control unit, as show in Fig. 4 and Fig. 4a.



Lock the plug connector from control unit on the actuator through the fastener as indicated in Fig.5



#### 8.4 Control unit and actuator Connection (MI38XX-MI39XX)

- Assembly the control unit on the appropriate support below the bed plan lifting pantograph as shown in Fig.6

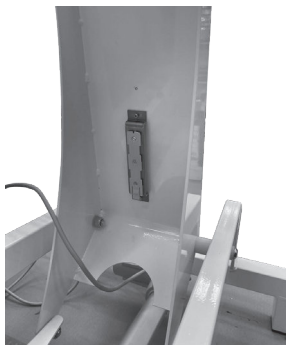


Fig.6

- Connect the cables of actuators and remote control to the control unit as shown in Fig.7.

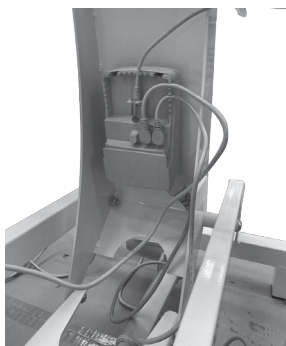


Fig.7

NOTE: Fig.7 refers to connection mode of cables (electric supply, remote control, two actuators) to control box for MI380X-MI381X-MI390X-MI391X models; for MI382X-MI383X-MI392X-MI393X models, where only a single actuator is present, the installation mode of the control box is identical, but the connection mode of cables (electric supply, remote control, one actuator) is shown in Fig.4a.

#### 8.5 Assembling and connection of accessory footswitch kit MR332 (for MI37XX-MI382X-MI383X-MI392X-MI393X), MR333 (for MI380X-MI381X-MI390X-MI391X)

MR332 and MR333 accessories components view and list:

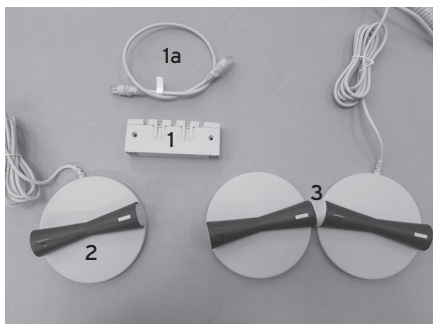
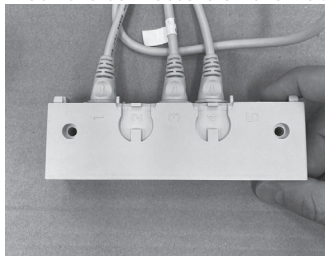


Fig.8

MR332 accessory; included components: 1, 1a, 2  
MR333 accessory; included components: 1, 1a, 3

**Assembling procedure:**

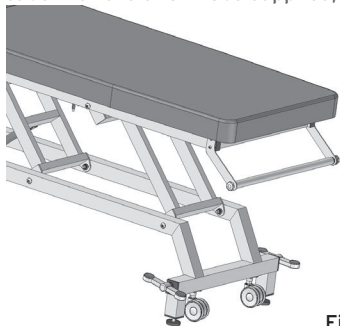
- Remove the plastic cover that locks the connectors on the control unit
- Disconnect the electrical connector of the remote control on the control unit (if already installed) and replace it with the cable provided with the Hub
- Insert the cover for connectors lock on the control unit
- Connect to the Hub: the just installed cable coming from the control unit, the cable from the footswitch, the cable from the remote control.
- Lock the connectors on the Hub with the plastic fastener.


**Fig.9**
**8.6 Paper roll holder**

**8.6.1 Paper roll holder foot side MIA391 (for MI37XX), MIA392 (for MI38X) and MIA393/ MIA394 (for MI39X)**

**Assembling procedure:**

Fix the two brackets on the end of the bed frame using 4 screws in the kit. Connect the holder tube with the two knobs supplied, as shown in Fig.10a


**Fig. 10a**

**8.6.2 Paper roll holder head side MIA396 (for MI38XX) and MIA395/MIA397 (for MI39X)**

**Assembling procedure:**

Remove the hole caps at the upper ends of the headrest frame tubes. Insert the two tubes with brackets (of the accessory) inside the tubes of the frame whose cap has been removed, fix the brackets inserted on the headrest frame using the two screws supplied; Insert the roll holder tube between the two brackets and fix it with the brackets at the ends using the handwheels provided, as shown in Fig.10b

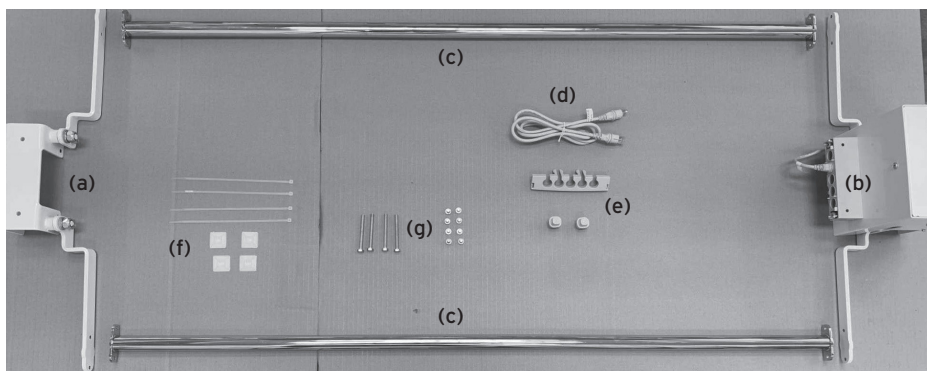

**Fig. 10b**

### 8.7 Accessory (optional): MIA300 Perimeter Bars set for electrical bed height adjustment

Suitable for electric models: MI37X, MI38X, MI39X.

Components included:

- a) 1 U-shaped plate with mounted levers and relative screws
- b) 1 U-plate with mounted levers and installed bar control system and relative screws
- c) 2 Perimeter bars (right and left)
- d) 1 connection cable between hub and control unit
- e) covers for connection hub (already pre-installed in ref.b)
- f) cable gland with clamps for hub-control unit connection cable
- g) fixing screws for the U-shaped plates and the two perimeter bars



1. Install the assembly ref.A by placing the U-shaped plate on the crossbar in correspondence with the electric actuator and attach it to the frame by connecting the appropriate holes with supplied screws (ref.g). Pay attention to the positioning of the bracket: it must be centered respect to the available space.

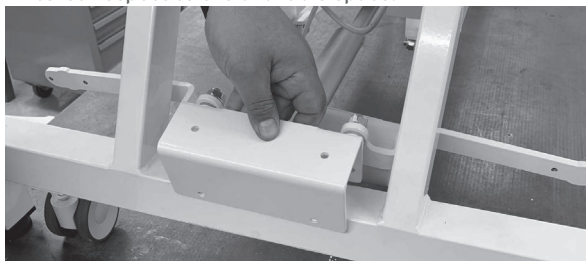


Fig. 11

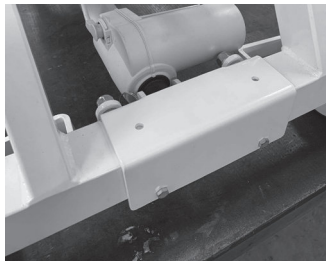


Fig. 12

2. Install the assembly ref.b to the crossbar in correspondence with the electric actuator and connect the supplied screws (ref.g). Pay attention to the positioning of the bracket: it must be centered respect to the available space.

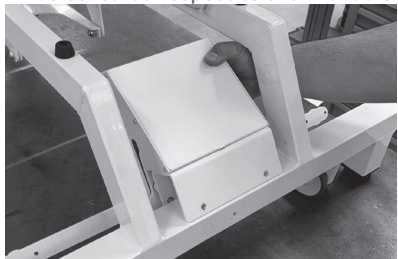


Fig. 13



Fig. 14



Fig. 15

3. Install the two perimeter bars (ref.c) fixing their ends to the levers using the supplied screws, both on the right and on the left side, as in the photo

4. Arrange the connection cable to the hub along the base using the supplied cable clamp (ref.f).



Fig. 16

Remove any remote control cable already connected from the control unit and install the hub connection cable (ref.d) as in the photo (Fig. 17)

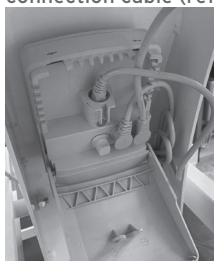


Fig. 17



Fig. 18

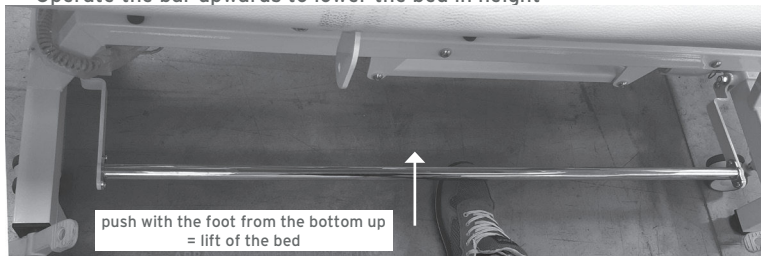


Fig. 19

5. Connect the 5-plugs HUB to ref.b, in particular insert the connectors of the remote control and the cable coming from the control unit into the free places of the hub as follows (2 outputs will not be used and will be equipped with closing caps):(Fig. 18). Close the hub by installing the special comb cover. (Fig. 19).

Connect the control box to the electric socket; the accessory is ready and functioning.  
To use the Perimeter Bar:

- Operate the bar upwards to lower the bed in height



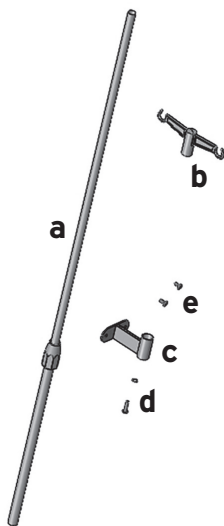
- Operate the bar downwards to raise the table in height

**WARNING!**

Do not press excessively on the bars (to operate it is sufficient to move the bar up or down by a few millimeters); do not let your weight rest on the bars, so as not to trigger a phenomenon of permanent deformation of the material!

**8.8 Accessory (optional): MIA305 IV pole in aluminium**

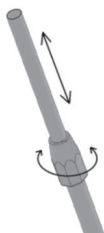
Accessory compatible with all Lytus MI37X, MI38X, MI39X models

**Components included:**

- a) n.1 IV pole in aluminium
- b) n.1 Support of 2 plastic IV hooks
- c) n.1 Painted IV pole holder
- d) n.1 M8 screw with washer for rod
- e) n.2 M6 screws with washers for fixing to the holder

**Assembly operations:**

1. Screw the rod support plate (c) to the appropriate threaded holes on the longitudinal side of the bed frame, in the head end area, choosing the desired installation side (right or left) by M8 screws (e).
2. Insert the IV pole inside the already mounted IV pole holder, and fix the pole by the M8 screw with washer under the IV pole holder (d).
3. Insert the support hooks into the end of the pole (b).

**Using the IV pole:**

To adjust the IV pole in height, loosen the sleeve by turning it counterclockwise, then position the tube to the desired height, then tighten the sleeve again.

**ATTENTION!**

Never exceed the maximum load per hook indicated in the technical characteristics

**8.9 Accessory (optional): MIA310 folding side rails**

Accessory compatible with Lytus MI37X MI38X, MI39X models

- n.1 right side rail
- n.1 left side rail

The accessory is already installed on the bed without the customer having to do further installation operations (it is ready for use).

To use the side rails, proceed as follows:

- to raise the side panel, pull the knob on the right side and simultaneously rotate the side rail upwards, releasing the knob; once the side rail has the high vertical position, the knob will lock in a locking seat: the side rail is locked in the raised position.



Fig. 20



Fig. 21

- to lower the side panel, pull the knob on the right side and simultaneously rotate the side rail downwards, releasing the knob; once the side rail has the low vertical position, the knob will lock in a locking seat: the side rail is locked in the lowered position.



Fig. 22

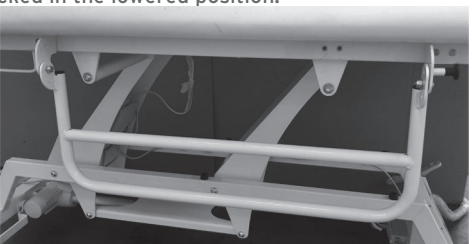


Fig. 23

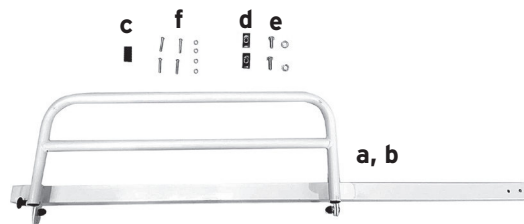


**ATTENTION!**

When raising the side panels, always make sure that the locking device has correctly engaged in the special locking seat in order to ensure that the side rails are securely fixed.

**8.10 Accessory (optional): MIA311 folding side rails**

Accessory compatible with Lytus, MI38X, MI39X models



- a) n.1 right side with longitudinal support
- b) n.1 left side with longitudinal support
- c) n.2 black plastic head covers 40x20 (they can already be installed on the tubular)
- d) n.2 black M10 threaded head covers in plastic 40x20
- e) n.2 M10 screws with washer
- f) n.4 M6 screws with washer

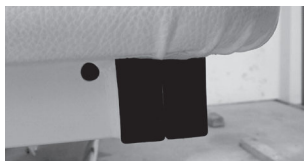
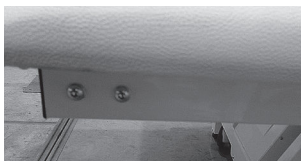


**Assembly operations:**

1. Remove the plastic head cover from the side longitudinal tube of the frame on the head side (one for each side) and replace it with the new threaded head cover supplied (one for each side) (d).

2. Insert the plastic head cover (if not already installed in the factory) on the foot end of the additional longitudinal tube with sides (one per side) (c) and install the longitudinal with sides alongside the longitudinal of the frame as follows:

- I. Screw the supplied M10 screw on the threaded head cover inserted in the previous step (e)
- II. Screw the 2 M6 screws into the two threaded holes in the end part of the longitudinal foot side (f)



The accessory is ready to be used.

Note: in the presence of the foot-side roll holder, during the assembly of the side rails, in step 2.II, insert the roll holder bracket between the bed frame and the additional longitudinal element, tightening everything together using the M6 screws described above.



#### WARNING!

When raising the side rails, always make sure that the locking device has correctly engaged in the appropriate locking seat in order to guarantee that the side rails are in safety.

## 9. BEFORE USE

- Always check the state of wear of the mechanical parts in order to ensure a use of the device in total safety for people and things
- Check for proper assembly of the device with particular attention to the pins and locking clips of the headboard, actuators and mechanical joints in general

## 10. WARNINGS FOR A CORRECT USE

- Before making any adjustment on the bed make sure that this is in a stable position on the legs;
- Before cleaning or maintaining operations or simply move the bed disconnect the plug of the mains voltage;
- Do not use power strips or extension cords
- Do not connect to the device any electrical device not covered by the normal operation



#### WARNING!

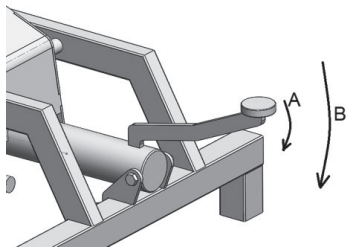
Do not sit with the weight weighing all on the head, since the maximum declared load for the bed is to be understood "evenly distributed on its surface"; otherwise the frame could be seriously and irreparably damaged. Moretti Spa declines any liability for damages arising from improper use and/or other than that reported in this user manual.

## 11. HOW TO USE

### 11.1 Electric models (MI37X-MI380X-MI381X-MI390X-MI391X)

Before each use connect the charger/adaptor cord to the electric socket 220VAC. Use the remote control to set the bed height and the headrest position.

## 11.2 Hydraulic/gas spring models (MI385-MI386-MI395-MI396)



Push the pedal several times to increase the height of the bed as shown in Fig.9 (ref.A), keep pushing deep the pedal to decrease the height of the bed (ref. B). To set the headrest position, push the release lever located under the headrest.

## 11.3 Electric lift models with backrest section moved by gas spring (MI382X-MI383X-MI392X-MI393X)

Before each use connect the charger/adaptor cord to the electric socket 220VAC.

Use the remote control to set the bed height.

To set the headrest position, adjust it manually, push the release lever located under the headrest.

## 12. USE THE REMOTE CONTROL

### 12.2 Use the remote control (only for MI37XX-MI382X-MI383X-MI392X-MI393X)

Rif.6 Bed lift button "UP"

Rif.7 Bed lift button "DOWN"



### 12.2 Remote control (only MI380X-MI381X-MI390X-MI391X)

Rif.8 Backrest button "UP"

Rif.9 Backrest button "DOWN"

Rif.10 Bed lift button "UP"

Rif.11 Bed lift button "DOWN"



### 13. CASTORS USE (ONLY FOR MI371X-MI381X-MI383X-MI386X-MI391X-MI393X-MI396X)



#### WARNING!

- Before moving the bed, always unplug the supply cable
- Do not move the bed with patients on board

These models of beds have 4 swivel wheels to facilitate movement.

The system of wheels has been studied to ensure a fast and easy intervention through a pedal control. When it is desired to move the bed is sufficient to press with a foot the two pedals on the same side of the bed (right or left) in such a way that the bed is lifted by the supporting feet. Move the bed to the desired location, then press the footrests to lower the wheels and replace the bed on its feet so that it is stable.

### 14. MAINTENANCE

The SKEMA devices by MORETTI are checked carefully and supplied with EC mark, once launched on the market. For the safety of the patient and the doctor we recommend to check the suitability of your product at least once a year.

For periodic inspection we refer to the check of the following parts:

- The supporting frame of the bed and the lifting mechanism with their fittings, safety devices
- Check installation and operation of the control mechanism wheels
- Check the integrity of cables and plugs
- Check all welding points

If a repair is needed, please use only approved parts and accessories

### 15. CLEANING AND DISINFECTION

#### 15.1 Cleaning

Use a damp cloth and mild soap. Then dry thoroughly before use

Use water at a temperature not exceeding 30° C

Do not to use washing machines jet of water and steam

#### 15.2 Disinfection

If you need to disinfect the device use a common disinfectant cleaner

**NOTE** Never use acids, alkalis or solvents such as acetone

### 16. CONDITIONS OF DISPOSAL

#### 16.1 General conditions of disposal

In case of disposal don't use the inserting container for municipal waste. We recommend to dispose the beds in the appropriate disposal areas for recycling

#### 16.2 Correct treatment of electrical parts (Directive 2012/19/UE)

At the end of its life, the product must not be disposed of along with other domestic waste. The users must dispose of this equipment by bringing it to a specific recycling point for electric and electronic equipment or at retailers that provide this service. By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. To remark the need to dispose of electrical equipment separately, the products is marked with crossed mobile waste bin

## 17. DECLARATION OF ELECTROMAGNETIC COMPATIBILITY

### 17.1 Guidance and Manufacturer's Declaration - Electromagnetic Emissions

This device is intended for use in the electromagnetic environment specified below. The user of this device should make sure it is used in such an environment.


EMISSIONS TEST	COMPLIANCE	ELECTROMAGNETIC ENVIRONMENT - GUIDANCE
RF emissions CISPR 11	Group 1	The device uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment
RF emissions CISPR 11	Class B	The device is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network
Harmonic emissions IEC61000-3-2	Class A	
Voltage fluctuations / Flicker emissions IEC61000-3-3	Compliant	
<div>⚠ Warning:</div> <div>1. The device should not be used adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, the device should be observed to verify normal operation in the configuration in which it will be used.</div> <div>2. Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.</div> <div>3. Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the pump, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.</div>		

### 17.2 Guidance and Manufacturer's Declaration - Electromagnetic Immunity

This device is intended for use in the electromagnetic environment specified below. The user of this device should make sure it is used in such an environment.

Basic EMC standard	Immunity Test Levels		Compliance Levels	Electromagnetic Environment-Guidance
	Professional healthcare facility environment	HOME HEALTHCARE ENVIRONMENT		
Electrostatic Discharge (ESD) IEC61000-4-2	±8kV contact ±15kV air		±8kV contact ±15kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrical fast transient/ burst IEC61000-4-4	±2kV for power supply line ±1kV for input/output line		±2kV for power supply line ±1kV for input/output line	Mains power quality should be that of a typical commercial or hospital environment
Surge IEC61000-4-5	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	± 1 kV line(s) to line(s)	± 1 kV line(s) to line(s)	Mains power quality should be that of atypical commercial or hospital environment.



Basic EMC standard	Immunity Test Levels		Compliance Levels	Electromagnetic Environment-Guidance
	Professional healthcare facility environment	HOME HEALTHCARE ENVIRONMENT		
Voltage dips, short interruptions and voltage variations on power supply input lines IEC61000-4-11	Voltage Dips: i) 100% reduction for 0.5 period, ii) 100% reduction for 1 period, iii) 30% reduction for 25/30 period, Voltage Interruptions: 100% reduction for 250/300 period		230V	Mains power quality should be that of a typical commercial or hospital environment. If the user of this device requires continued operation during power mains interruptions, it is recommended that the device be powered from an uninterruptible power supply or a battery.
Power frequency (50/60Hz) magnetic field IEC61000-4-8	30 A/m	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Conducted RF IEC 61000-4-6	3 Vrms 0,15 MHz - 80 MHz 6 Vrms in ISM bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz	3 Vrms 0,15 MHz - 80 MHz 6 Vrms in ISM and amateur radio bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz	6Vrms	Portable and mobile RF communications equipment should be used no closer to any part of this device, including cables, than there commended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $=\sqrt{P} 150\text{kHz to } 80\text{MHz}$ $=0.6\sqrt{P} 80\text{MHz to } 800\text{MHz}$ $=1.2\sqrt{P} 800\text{ MHz to } 2.7\text{ GHz}$ Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m).b Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,a should be less than the compliance level in each frequency ranged. Interference may occur in the vicinity of equipment marked with the following symbol: 
Radiated RF EM Fields IEC61000-4-3	3 V/m 80 MHz to 2.7 GHz 80 % AM at 1 kHz  385-6000 MHz, 9-28V/m, 80% AM(1kHz) pulse mode and other modulation	10 V/m 80 MHz to 2,7 GHz 80 % AM at 1 kHz  385-6000 MHz, 9-28V/m, 80% AM(1kHz) pulse mode and other modulation	10V/m	

NOTE 1: UT is the a.c. mains voltage prior to the application of the test level

NOTE2: At 80 MHz and 800 MHz, the higher frequency range applies.

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

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

b) Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 10 V/m.

### 17.3 Recommended separation distances between portable and mobile RF communications equipment and this device

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

Rated maximum output power of transmitter W	Separation distance according to frequency of transmitter m		
	150 kHz to 80 MHz $\approx \sqrt{P}$	80 MHz to 800 MHz $\approx 0.6\sqrt{P}$	800 MHz to 2,7 GHz $d = 1.2\sqrt{P}$
0.01	0.1	0.06	0.12
0.1	0.31	0.19	0.38
1	1	0.6	1.2
10	3.1	1.9	3.8
100	10	6	12

For transmitters specified for a maximum output not listed above, the recommended separation distance "d" in meters (m) can be calculated using the equation applicable to the frequency of the transmitter, where "P" is the maximum rated power d ' transmitter output in Watts (W) according to the transmitter manufacturer.

NOTE 1 At 80MHz and 800MHz if the high frequency range is applied

NOTE 2: Guideline question for not applying in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people

## 18. SPARE PARTS AND ACCESSORIES

For spare parts and accessories refer to Moretti main catalogue

MR332 Kit footswitch 1 channel for MI37XX-MI382X-MI383X-MI392X-MI393X

MR333 Kit footswitch 2 channels for MI380X-MI381X-MI390X-MI391X

MIA391 Paper roll holder (foot side) 60cm wide for MI37X

MIA392 Paper roll holder (foot side) 60cm wide for MI38X

MIA393 Paper roll holder (foot side) 60cm wide for MI39X

MIA394 Paper roll holder (foot side) 80cm wide for MI39X

MIA395 Paper roll holder (head side) 60cm wide for MI39X

MIA396 Paper roll holder (head side) 60cm wide for MI38X

MIA397 Paper roll holder (head side) 80cm wide for MI39X

MIA300 Perimeter Bars set for electrical bed height adjustment (for all electric models)

MIA305 IV pole in aluminium (for all models)

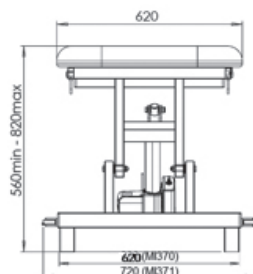
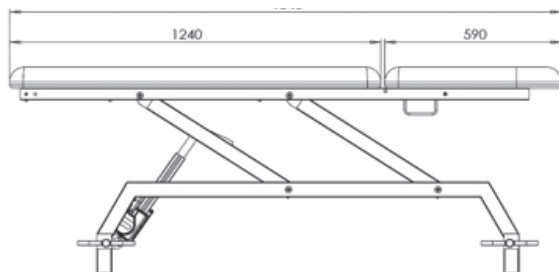
MIA310 Folding side rails (for all models)

MIA311 Foldable side panels that can be installed "after-market" for models MI38x-MI39x



## 19. TECHNICAL FEATURES

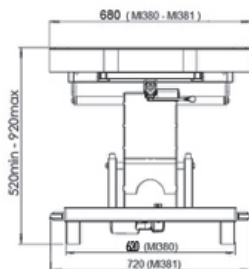
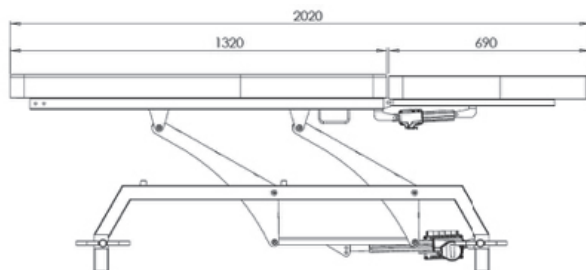
### 19.1 Dimension and weight MI370X - MI371X














Dimension (MI370):	mm 1840x620
Dimension (MI371):	mm 1840x720
Min height:	mm 560
Max height:	mm 820
Head section max angle:	60°

Pack size MI370-MI371	L: 1850 mm	P: 730 mm	H: 570 mm
Pack weight MI372-MI371	MI370: 51 Kg		MI371: 54 Kg
Bed weight MI370-MI371	MI370: 45 Kg		MI371: 48 Kg
Max weight	150 kg		

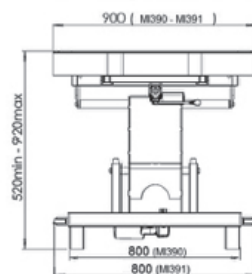
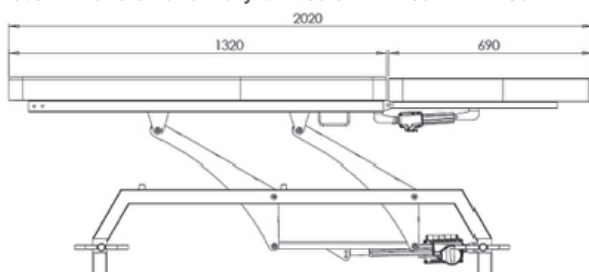
### 19.2 Dimension and weight MI380X - MI381X - MI382X - MI383X










Dimension (MI380X-MI382X):	mm 2020x680
Dimension (MI381X-MI383X):	mm 2020x720
Min height:	mm 520
Max height:	mm 920
Head section max angle:	60°

 Pack size MI380-MI381	 L: 1785 mm	 P: 730 mm	 H: 535 mm
 Pack size MI382-MI383	 L: 2040 mm	 P: 730 mm	 H: 535 mm
 Pack weight MI38X	MI380-MI382: 65 Kg		MI381-MI383: 68 Kg
 Bed weight MI38X	MI380-MI382: 57 Kg		MI381-MI383: 60 Kg
 Max weight	200 kg		

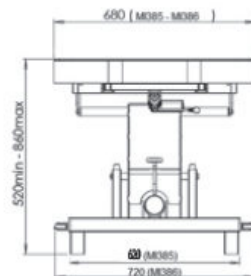
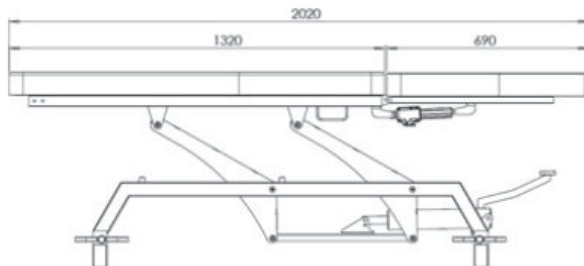
### 19.3 Dimension and weight MI390X - MI391X - MI392X - MI393X










Dimension (MI390X-MI392X): mm 2020x900  
 Dimension (MI391X-MI393X): mm 2020x900  
 Min height: mm 520  
 Max height: mm 920  
 Head section max angle: 60°

 Pack size MI39X	 L: 2040 mm	 P: 940 mm	 H: 535 mm
 Pack weight MI39X	MI390-MI392: 83 Kg		MI391-MI393: 86 Kg
 Bed weight MI39X	MI390-MI392: 74 Kg		MI391-MI393: 77 Kg
 Max weight	200 kg		

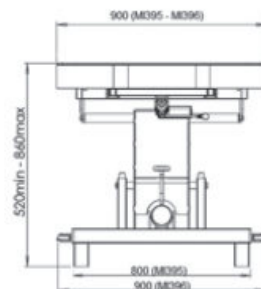
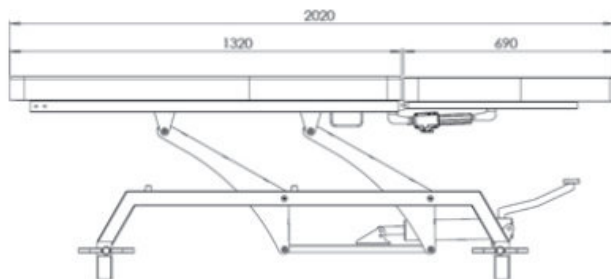
#### 19.4 Dimension and weight MI385X - MI386X










Dimension (MI385X): mm 2020x620  
 Dimension (MI386X): mm 2020x720  
 Min height: mm 520  
 Max height: mm 860  
 Head section max angle: 60°

 Pack size MI385-MI386	 L: 2040 mm	 P: 730 mm	 H: 535 mm
 Pack weight MI385-MI386	MI385: 66 Kg		MI386: 69 Kg
 Bed weight MI385-MI386	MI385: 58 Kg		MI386: 61 Kg
 Max weight	180 kg		

#### 19.5 Dimension and weight MI395X - MI396X



Dimension (MI395X): mm 2020x900  
 Dimension (MI396X): mm 2020x900  
 Min height: mm 520  
 Max height: mm 860  
 Head section max angle: 60°

 Pack size MI395-MI396	 L: 2040 mm	 P: 940 mm	 H: 535 mm
 Pack weight MI395-MI396	MI395: 86 Kg		MI396: 89 Kg
 Bed weight MI395-MI396	MI395: 75Kg		MI396: 78 Kg
 Max weight	180 kg		

## 19.6 Technical specifications

Required force to operate the controls on the remote control	5 N
Required force to push the elevation pedal (MI39X)	30N
Input	220-240V AC 50Hz, 2.5A
Output	24 VDC
Protection Class	IPX 6
Noise level	< 45 dB
Insulation Class	Class 2
Used materials for bed mainframe	Varnished steel frame, foam bed cover in PVC

## 20. TROUBLE SHOOTING

SYMPTOM	CAUSES	SOLUTION
No control running	<ol style="list-style-type: none"> <li>1. The plug is not connected</li> <li>2. The remote control is not connected to the control unit</li> <li>3. The remote control or the control unit are defective</li> </ol>	<ol style="list-style-type: none"> <li>1. Connect the plug</li> <li>2. Check and connect the remote control</li> <li>3. Contact the service center for a more precise diagnosis</li> </ol>
The head-section elevation doesn't work	<ol style="list-style-type: none"> <li>1. The head-section actuator is not connected to the control unit</li> <li>2. The actuator or the remote control are defective</li> </ol>	<ol style="list-style-type: none"> <li>1. Check and connect the elevator to the control unit</li> <li>2. Contact the service center for a more precise diagnosis</li> </ol>
The bed elevation doesn't work	<ol style="list-style-type: none"> <li>1. The bed actuator is not connected to the control unit</li> <li>2. The actuator or the remote control are defective</li> </ol>	<ol style="list-style-type: none"> <li>1. Check and connect the actuator to the control unit</li> <li>2. Contact the service center for a more precise diagnosis</li> </ol>
The footswitch doesn't work	<ol style="list-style-type: none"> <li>1. The footswitch is not connected to the Y cable</li> <li>2. The Y cable is not connected to the control unit</li> <li>3. The control unit or the actuator are defective</li> </ol>	<ol style="list-style-type: none"> <li>1. Check and connect the footswitch to the Y cable</li> <li>2. Connect the Y cable to the control unit</li> <li>3. Contact the service center for a more precise diagnosis</li> </ol>

## 21. WARRANTY

Moretti products are guaranteed from material or manufacturing faults for 2 years from the purchasing date, except possible exclusion or restriction as follows. The warranty shall not be applied in the possible damages caused by improper use, abuse or alteration, and the warranty will not be valid if the instructions for use are not strictly adhered to. The correct intended use is specified in this manual.

Moretti is not responsible for consequent damages, personal injuries or whatever caused by or in relation to wrong installation or improper use.

Moretti warranty does not cover damages resulting from: natural disaster, not authorized maintenance or repairs, faults caused by problems on electricity supply (when necessary), use of spare parts not covered by Moretti, improper use, not authorized alteration, shipment damages (different from original Moretti shipment), or in case of insufficient maintenance as indicated in the manual.

The warranty doesn't cover components subject to wear and tear during the correct use of the device.

## 22. REPAIRING

### 22.1 Warranty repair

If a Moretti item presents material or manufacturing faults during the warranty period, Moretti will confirm with customer if the fault can be covered from warranty. Moretti, at its unquestionable discretion, can repair or replace the item, by a Moretti dealer or to Moretti headquarters. Labor cost can be charged to Moretti if the repair is covered by warranty. A repair or a replacement doesn't extend the warranty.

### 22.2 Repair not covered by warranty

A product out of warranty can be sent after Moretti authorization. The labor and shipping costs for good out of warranty are to be paid by the customer or by the dealer. The repairs are guaranteed for 6 months from the good received

### 22.3 Non-defective devices

The customer will be informed if, after the device return and examination, Moretti declares that the device is not faulty. In this case the good will be sent back to customer, the shipping charge will be paid by the customer

## 23. SPARE PARTS

The original Moretti spare parts are guaranteed for 6 months from the receiving date

## 24. EXEMPT CLAUSES

Moretti does not offer any other declarations, explicit or implicit warranty or conditions, including possible declarations, warranties or conditions of merchantability, fitness for a specific purpose, non infringement and non interference, all but what expressly specified in this warranty. Moretti does not guarantee the nonstop and faultless usage.

The duration of possible implicit warranties which can be imposed by the law is limited by the warranty period, in the limits of law. Some states or countries don't allow limiting the implicit warranty or the exclusion or the limitation for accidental damages. In such countries, some of those exclusions or limitation may not be applied to the user. The present warranty may be modified without prior notification.



**SKEMA®FORM**

**WARRANTY CERTIFICATE**

ENGLISH

**Product** \_\_\_\_\_

**Purchased on (date)** \_\_\_\_\_

**Retailer** \_\_\_\_\_

**Address** \_\_\_\_\_ **Town/city** \_\_\_\_\_

**Sold to** \_\_\_\_\_

**Address** \_\_\_\_\_ **Town/city** \_\_\_\_\_



**MORETTI S.P.A.**

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**www.morettispa.com email: info@morettispa.com**

**MADE IN ITALY**

*\* Please consult our website for the latest available version of the user manual*



## NOTE



### NOTE

**MORETTI S.P.A.**

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