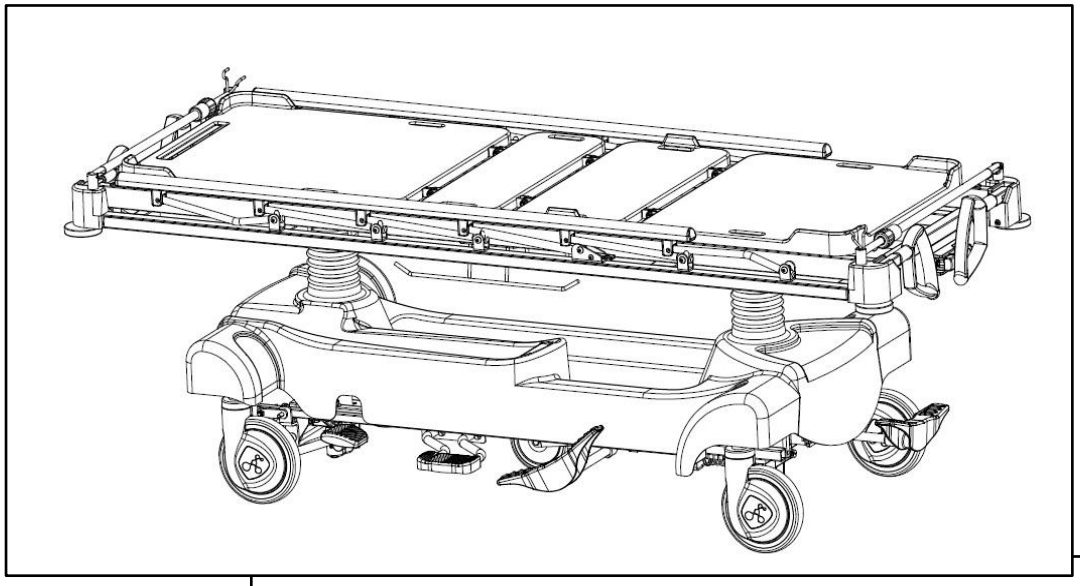
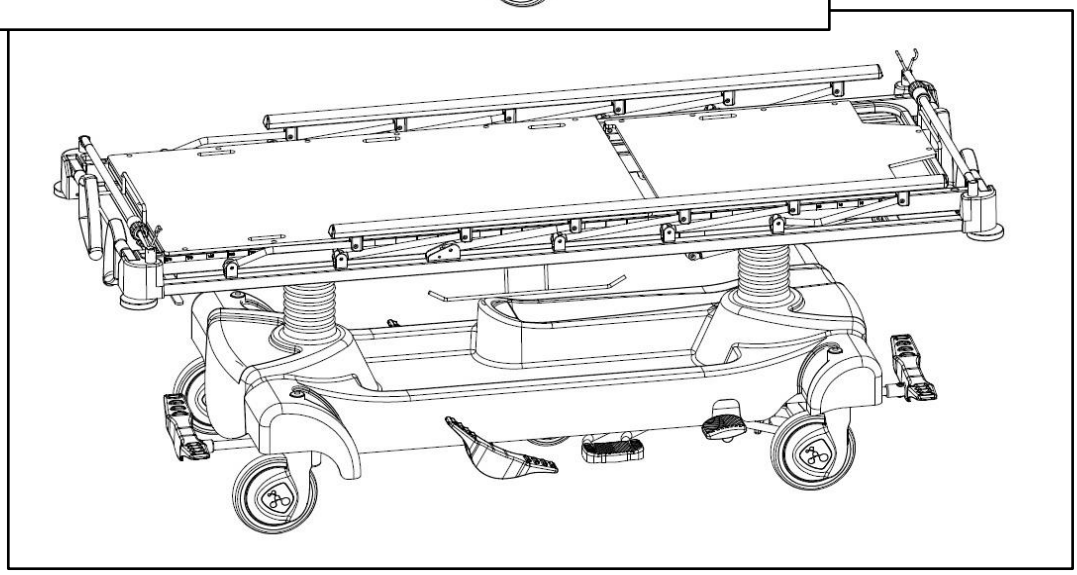
Medical Master

# User manual and technical description

**Model：MET-6600 Hydraulic Stretcher Series**
**Version：2019-A-1**





- Our company reserve rights to revise the technical parameters, appearance, structure, color…etc. of the products including in this user manual without previous notice.
- MET-6600 Recovery semi-electric stretcher will relaunch after 4th quarter of 2022.

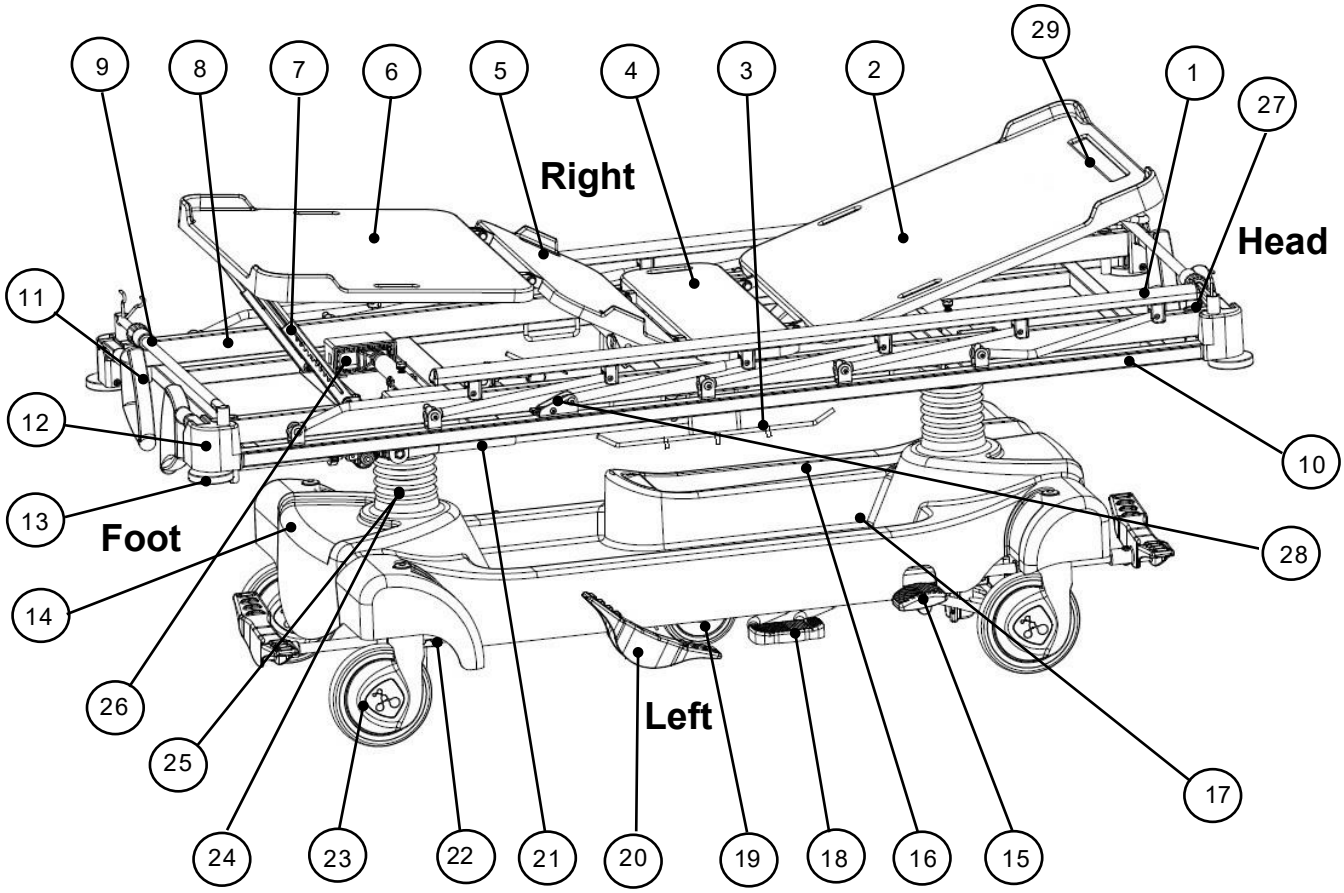
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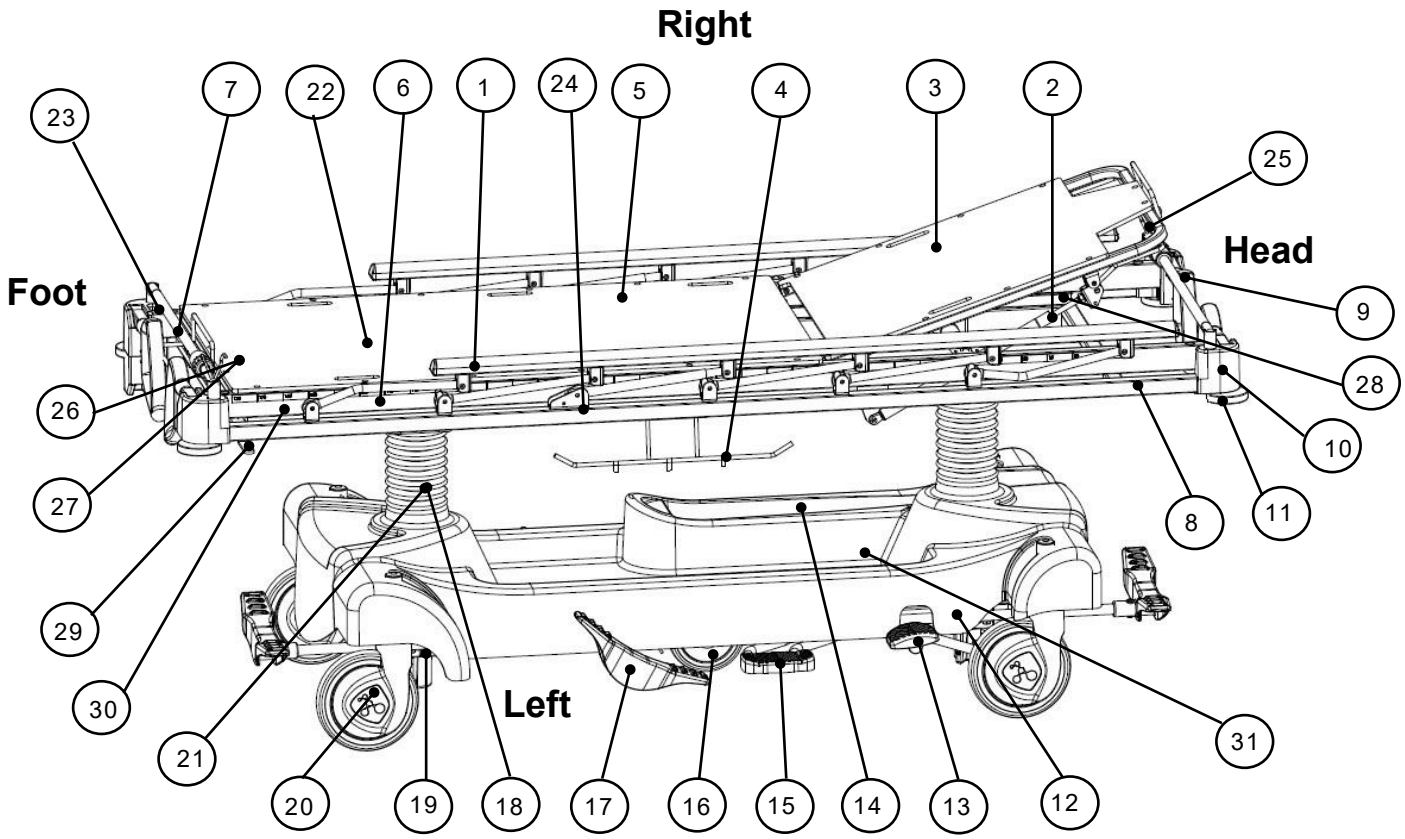
# 1 Component name and location

## 1.1 MET-6600 Transport



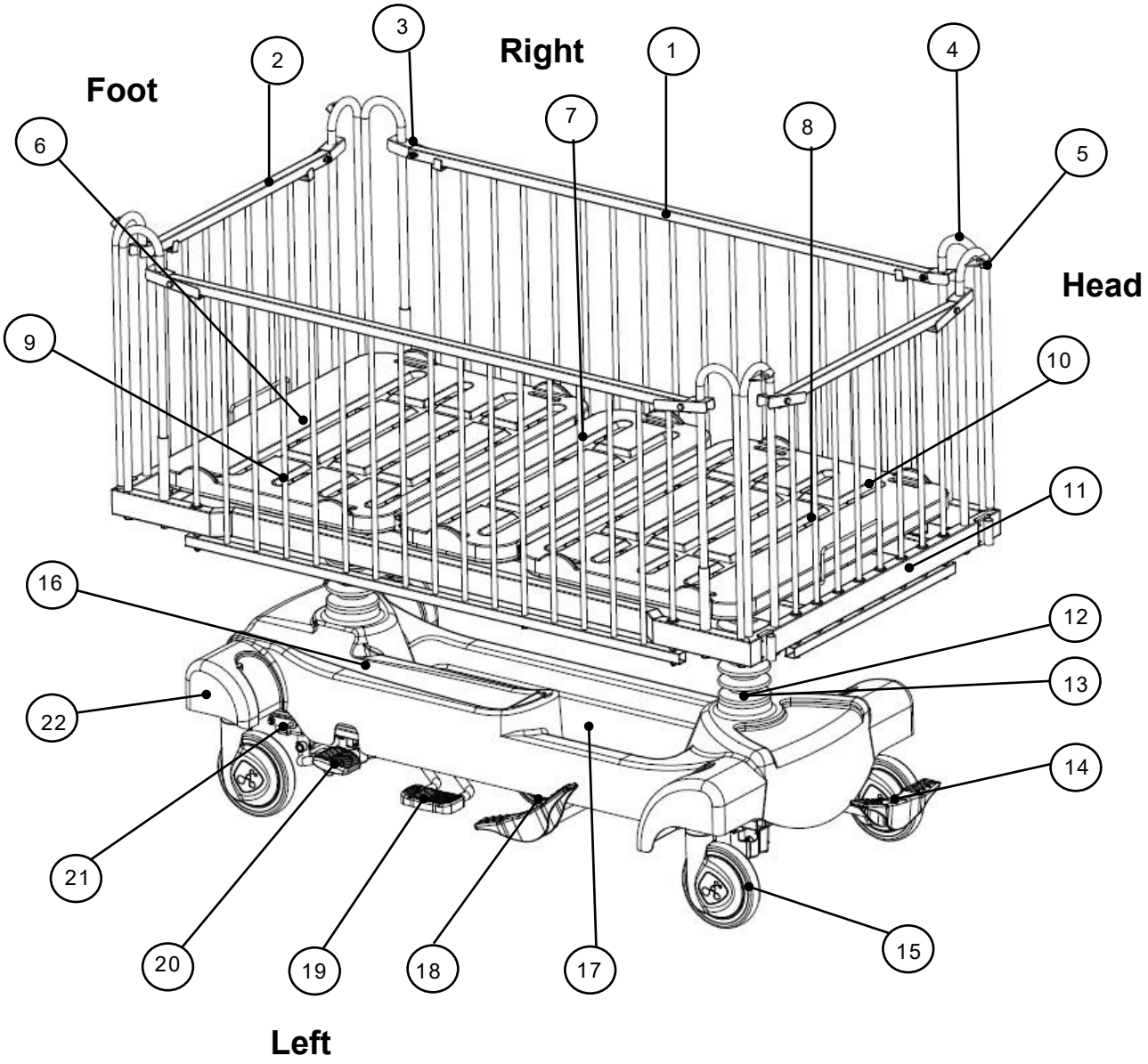

1 Side rail 2 pcs
2 Gas-spring for back section board 1 pcs
3 Drainage bag hook frame 2 sets
4 Buttock section board 1 pcs
5 Thigh section board 1 pcs
6 Leg section board 1 pcs
7 Leg lift lever 1 pair
8 Main frame 1 set
9 Telescopic IV pole 2 sets
10 Long side bumper 1 pair
11 Foldable P shape push bar 4 pcs
12 Corner protection 4 pcs
13 Wheel bumper 4 pcs
14 ABS base 1 pcs
15 High pedal 2 pcs
16 Oxygen tank store space 1 place
17 Store compartment 1 place
18 TR, RTR and lower pedal 2 pcs
19 5” steer caster 1 set
20 Central locking and steering system 4 sets
21 Knee movement crank 1 set
22 Bed chassis stand 1 set
23 8” brake caster 4 pcs
24 Hydraulic pump cover 2 pcs
25 Hydraulic pump 2 pcs
26 Sliding block 2 pcs
27 Socket 4 pcs
28 Side rail locking lever 2 pcs
29 Back section manual lever 1 pcs

## 1.2 MET-6600 Trauma/ Advance Trauma




1 Side rail 2 sets
2 Gas-spring stick 2 pcs
3 Bakelite back section board 1 pcs
4 Drainage bag hook frame 2 sets
5 X-ray body section board 1 pcs
6 Main frame 1 set
7 Telescopic IV poles 2 sets
8 Long side bumper 4 pcs
9 Foldable P shape push bar 4 pcs
10 Corner protection 4 pcs
11 Wheel bumper 4 pcs
12 ABS base 1 set
13 High pedal 2 pcs
14 Oxygen tank store space 1 place
15 TR, RTR and lower pedal 2 pcs
16 5” steer caster 1 set
17 Central locking and steering system 4 sets
18 Hydraulic pump cover 2 pcs
19 Bed chassis stand 1 set
20 8” brake caster 4 pcs
21 Hydraulic pump 2 pcs
22 Sliding block 2 pcs
23 Socket 4 pcs
24 Side rail locking lever 2 pcs
25 Back section manual lever 1 pcs
26 X-ray cassette holder with rollers 1 set
27 X-ray cassette holder extension track 2 sets
28 X-ray cassette track system 1 set
29 X-ray cassette handle with indicator 2 pcs
30 X-ray cassette location sticker 2 pcs
31 Store compartment 1 place
32 Knee adjustment 1 set (available for Adv Trauma)

### 1.3 MET-6600 Pediatric




1 Long side rail 2 sets
2 Short side rail 2 pcs
3 Operation switches 8 pcs
4 Vertical pole 4 sets
5 IV pole and oxygen tank socket 4 sets
6 Plastic feet section 1 pcs
7 Plastic buttock section 1 pcs
8 Plastic back section 1 pcs
9 Ratchet for foot adjustment 2 pcs
10 Ratchet for back adjustment 2 pcs
11 Main frame 1 set
12 Hydraulic pump 2 pcs
13 Hydraulic pump cover 2 pcs
14 Central locking and steering system 4 sets
15 8 inch brake caster 4 pcs
16 Oxygen tank store space 1 place
17 Store compartment 1 place
18 5th steer caster 1 set
19 TR, RTR and lower pedal 2 pcs
20 High pedal 2 pcs
21 Bed chassis stand 1 set
22 ABS base 1 pcs

# 2 Technical specifications

## 2.1 MET-6600 Transport:

| Specification | | |
|---|---|---|
| Overall dimension | 800 x 2100 mm | |
| Platform dimension | 622 x 1869 mm | |
| Adjustable height | 560~910 mm | |
| Back adjustment | 0~90˚ by single gas-spring | |
| Trendelenburg | 0~18˚ by foot switch | |
| Reverse Trendelenburg | 0~18˚ by foot switch | |
| Knee adjustment | 0~40˚ by manual crank | |
| Hydraulic column | Dual hydraulic pump system | |
| Sleeping surface | 4 section, detachable ABS material<br>With patient strap and mattress stopper | |
| Loading capacity | Max. patient weight: 300 kg<br>Safety working: 380 kg | |
| Tolerance | 5% | |
| **Functional equipment** | | |
| Side rail type | Standard 3/4 length；Aluminum shaft with 6 units SS tube<br>Side rail height: 350 mm/ 300 mm (from platform)<br>Side rail length: 1450 mm<br>Side rail gap: 260 mm | |
| Bed caster | 200 mm TPR caster x 4 | |
| 5th central wheel | 150 mm TPR caster x 1, retractable | |
| Central locking & steering pedal | 4 sides | |
| Foldable push bar | 4 units (front x 2, rear x 2); P shape with foam cover | |
| Urinal hook | Both sides | |
| Additional socket | 4 units (front x 2, rear x 2) | |
| IV pole and socket | 2 units IV pole attached on diagonal corner | |
| Side bumper | Surround with plastic bumper on long sides | |
| Corner bumper | ABS bumper with 3” wheel protection | |
| Mattress | 7 cm waterproof | |
| Chaise | ABS material; With oxygen holder and store compartment<br>Store compartment: 35 x 80 cm<br>Tank holder: Ø13 x 45 cm | |
| Min base clearance | Nominal | 15 cm +/- 5 mm |
| | Under hydraulic pump | 4 cm +/- 5 mm |

## 2.2 MET-6600 Trauma:

| Specification | | |
|---|---|---|
| Overall dimension | 800 x 2100 mm | |
| Platform dimension | 619 x 1885 mm | |
| Adjustable height | 590~940 mm | |
| Back adjustment | 0~90˚ by double gas-spring | |
| Knee adjustment | 0~35˚ by double gas-spring (Adv. Trauma) | |
| Low leg adjustment | 10 | |
| Trendelenburg | 0~18˚ by foot switch | |
| Reverse Trendelenburg | 0~18˚ by foot switch | |
| Hydraulic column | Dual hydraulic pump system | |
| Sleeping surface | 2 sections/ 4 section (Adv.), HPL material (X-ray translucent)<br>With patient strap and mattress stopper | |
| Loading capacity | Max. patient weight: 300 kg<br>Safety working: 380 kg | |
| Tolerance | 5% | |
| **Functional equipment** | | |
| Side rail type | Standard 3/4 length；Aluminum shaft with 6 units SS tube<br>Side rail height: 350 mm/ 300 mm (from platform)<br>Side rail length: 1450 mm<br>Side rail gap: 260 mm | |
| Bed caster | 200 mm TPR caster x 4 | |
| 5th central wheel | 150 mm TPR caster x 1, retractable | |
| Central locking & steering pedal | 4 sides | |
| Foldable push bar | 4 units (front x 2, rear x 2); P shape with foam cover | |
| Urinal hook | Both sides | |
| Additional socket | 4 units (front x 2, rear x 2) | |
| IV pole and socket | 2 units IV pole attached on diagonal corner | |
| Side bumper | Surround with plastic bumper on long sides | |
| Corner bumper | ABS bumper with 3” wheel protection | |
| Mattress | 7 cm waterproof | |
| Chaise | ABS material; With oxygen holder and store compartment<br>Store compartment: 35 x 80 cm<br>Tank holder: Ø13 x 45 cm | |
| X-ray cassette | Wheel operation, film cassette under platform | |
| Min base clearance | Nominal | 15 cm +/- 5 mm |
| | Under hydraulic pump | 4 cm +/- 5 mm |

## 2.3 MET-6600 Pediatric:

| Specification (manual/ semi-electric) | | |
|---|---|---|
| Overall dimension | 970 x 1760 mm | |
| Platform dimension | 860 x 1600 mm | |
| Adjustable height | 750~920 mm | |
| Back adjustment | 0~50˚ by manual ratchet | 0~50˚ by electric motor |
| Foot adjustment | 0~50˚ by manual ratchet | 0~50˚ by electric motor |
| Trendelenburg | 0~9˚ by foot switch | |
| Reverse Trendelenburg | 0~9˚ by foot switch | |
| Hydraulic column | Dual hydraulic pump system | |
| Sleeping surface | 3 sections, detachable PP material<br>With patient strap and mattress stopper | |
| Loading capacity | Max. patient weight: 200 kg<br>Safety working: 250 kg | |
| Tolerance | 5% | |
| **Functional equipment** | | |
| Side rail type | Stepless full length side rail (side rail can stop in any position during pathway)<br>Location on 4 sides for 360˚ care<br>Safety switch by 2 hand operation only for rail lower<br>Side rail gap ≤ 60 mm | |
| Bed caster | 200 mm TPR caster x 4 | |
| 5th central wheel | 150 mm TPR caster x 1, retractable | |
| Central locking & steering pedal | 4 sides | |
| Urinal hook | Both sides | |
| IV pole socket | 4 units IV pole socket on 4 coroners | |
| Corner bumper | 4 coroners | |
| Mattress | 10 cm waterproof | |
| Chaise | ABS material; With oxygen holder and store compartment<br>Store compartment: 35 x 80 cm<br>Tank holder: Ø13 x 45 cm | |
| Min base clearance | Nominal | 15 cm +/- 5 mm |
| | Under hydraulic pump | 4 cm +/- 5 mm |

**Environment condition:**

| Operation condition | |
|---|---|
| Temperature | 10°C to 40°C |
| Relative humidity | 30% to 75% at 30°C |
| Atmospheric pressure | 700hPa to 1060hPa |
| Storage and transport condition | |
| Temperature | -10°C to 50°C |
| Relative humidity | 20% to 90% at 30°C, non-condensing |
| Atmospheric pressure | 700hPa to 1060hPa |

**Clinical benefits**

Patient transport, facilitate treatment, and diagnostic

**Expected service life**

The MET-6600 Series stretcher has 10 years expected service life under normal use conditions, and with appropriate periodic maintenance.

The casters have a minimum expected service life of 5 years dependent on normal use, conditions, and with appropriate periodic maintenance.

**Expected life (mattress)**

The MET-6600 foam mattress has a 1 year expected life under normal use, conditions, and with appropriate periodic maintenance.

# 3 Symbolic and Safety prevention

Take precautions in advance to ensure proper use. Be sure to read these safety instructions.

Take precautions in advance to ensure proper use. The safety precautions described here are intended to ensure safe use of the product and prevent accident personal injury.

Precautions are classified as〝WARNING〞, 〝CAUTION〞, and 〝PROHIBITED〞to generally indicate the degree of hazard or injury that mat result for improper use.

## 3.1 Symbolic descriptions

**⚠WARNING** Indicates precautions on action that may result in fatal injury if ignored.

**⚠CAUTION** Indicates precautions on action that may result on personal injury or propertyd amage if ignored(described as “Usage Precautions” in the appendix.)

**⃠PROHIBITED** Indicates prohibited behavior (described as "prohibited" in the appendix).

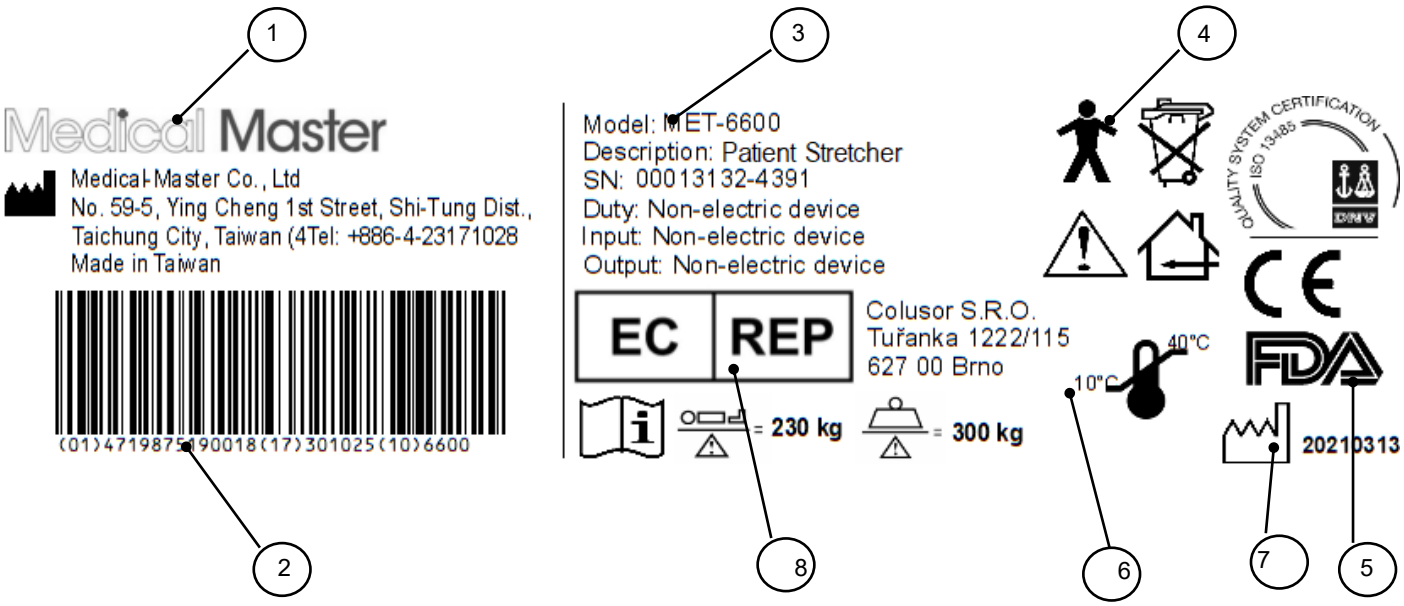
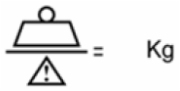
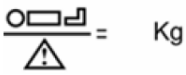



**Fig. Serial Label for MET-6600 series (reference only)**

| | |
|---|---|
| **1** | **Manufacturer Information (address, phone and origin)** |
| **2** | **GS1 Code** |
| **3** | **Model information (Model, item description, Serial number, electric standard)** |
| **4** | **Symbols** |
| **5** | **Safety standard & Certificate (ISO, CE, FDA)** |
| **6** | **Operation temperature** |
| **7** | **Production date (yy/mm/dd)** |
| **8** | **EC Rep information** |

| | |
|---|---|
|  | Do not repair or modify the bed yourself |
|  | Note! (If the safety label removed or defaced, replace with a new one obtained from your dealer.) |
|  | Read user manual |
|  | CE mark of conformity with EU regulation |
|   | Safe working load |
|   | Max weight of patient |
|   | Safety Mark |
|  | Production time |
|  | Do not put into household waste (follow manufacturer instruction) |
|  | Indoor using |
|  | Mattress feet parts |

### 3.2 Safety preventions

## ⚠WARNING

- Stretcher should be left in its lowest position when the patient is unattended in order to reduce risk of injury due to falls!
- Side rails of stretcher should be located in the “up“ position to reduce the risk of the patient accidentally slipping or rolling off the mattress!
- Incompatible side rails and mattresses can cause an entrapment hazard!
- Inappropriate handling of the power supply cord, e. g. by kinking, shearing or other mechanical damages is hazardous!
- When routing cables from other equipment in the stretcher avoid squeezing those between parts of the bed!
- Stretcher should not be used with bed hoists and bed lifts!
- During specific investigations or treatments, the significant risks of reciprocal interference posed by medical electrical equipment may occur.
- No modification of this equipment is allowed.
- Do not modify this equipment without authorization of the manufacturer.
- If this equipment is modified, appropriate inspection and testing must be conducted to ensure continued safe use of the equipment.
- Incompatible mattresses can create hazards.
- Ensure that the patient (health permitting) has been informed about the operation of the stretcher and all applicable safety instructions.
- Move the stretcher exclusively on even, hard-surfaced floors.
- Do not apply excess weight or loads to the bed according to SWL (Safe Working Load).
- During peak loads or unavoidable excess loads (CPR), place the mattress platform in the lowest position.
- Take care to avoid squeezing when operating moving parts.
- When using lifting poles or infusion stands, ensure that nothing will be damaged when you move or adjust the stretcher.
- Ensure that the castors are braked when the stretcher is not being moved, regardless of whether it is occupied or empty.
- Keep the mattress platform in the lowest position at any time when the healthcare personnel are not treating the patient in order to prevent the patient from falling or injuries.
- Ensure no injuries or damages will occur when folding the side rails
- If the patient's condition could lead to an entrapment, leave the mattress support platform in the flat position whilst unattended.
- Adjust stretcher height to approx. 20 cm below maximum height when transporting the stretcher in order to facilitate overcoming possible obstacles.
- Ensure there is no danger of crushing or otherwise injuring the patient’s limbs (e.g. between side rails and mattress platform, between movable parts etc.) before positioning the stretcher or collapsing the side rails.
- Do not put any objects (e.g. accessories, infusions, cables) between or on side rails and movable parts.
- Always set mattress platform to its lowest position and single parts of mattress platform to horizontal positioning case the patient is left on the bed without supervision of personnel and if his health and mental status may indicate increase risk of falling out of the bed or entrapment.

## ⚠ CAUTION

- Don’t climb on the stretcher in the raised position. Otherwise, the base supports are subjected to excessive weight, and may damage or deformed.
- Don’t put oversize items underneath the stretcher. It interferes the movement of hi-low. It can lead to a deformation and damage to related parts of the stretcher.
- Don’t use heaters near the stretcher. Otherwise, the bed may be damaged or deformed, or even catch fire.
- The stretcher needs extra space for taking the various bed positions. When placing the stretcher, keep at least 150 mm away from the head side wall or any object.
- Don’t move the stretcher over uneven surface. Otherwise, the stretcher may malfunction. If moving over uneven surfaces is unavailable, move the stretcher as slowly as possible
- Do not climb the casters or the base of the tripod. Otherwise, the pedal support or the stand base will be subjected to excessive weight and may be damaged or deformed. The climber may be injured.
- Don’t move the stretcher using the side rail or IV pole. Otherwise, the side rails / IV pole are subjected to excessive force and may be damaged or deformed.
- Don’t place the stretcher on slope. It may be cause of accidents.
- Ask the deal to check the bed carefully after accident such as earthquake, fire and flood. If they should happen. First and foremost, electronic components should be carefully checked. Failure to do so many leads to electric leakage, shock and accident
- In case of out of order, please stop use of the stretcher immediately and contact the dealer to request repairs.
- Don’t use volatile substances such as thinner, benzene or gasoline, as they may discolor or may affect the stretcher finish. Otherwise, this corrosion will cause damage on surface and finish, even corrode some plastic and rubber parts. It may result possible injury and accidents to patient and users.

## ⃠ PROHIBITED

- Don’t leave the child on the stretcher alone. Otherwise it may result possible injury or accidents.
- This stretcher is designed for use by one person. Using the stretcher for two or more people runs the risk of injury and man damage the stretcher.
- Don’t use the stretcher in conjunction with competitive product. All of our accessories are designed and manufactured to meet with the specification of Medical-Master’s item exclusive. Using accessories manufactured by other companies may not articulate or coincide with the bed. Disregard of this warning can cause damage to it. Such use may place excessive load on the bed, resulting in possible injury or malfunction.
- Don’t tie heavy objects on side rail or secure patient with side rail. Otherwise, the side rails pole is subjected to excessive force, and may be damaged or deformed. it may result possible injury or accidents to patient.
- Don’t repair or modify the bed yourself. Otherwise, you run the risk of injury due to malfunctioning.
- Don’t stand on the stretcher. Otherwise, you may fall off and injury yourself.
- Do not adjust the angle of the stretcher while a patient is lying face down. Otherwise, the bending joints of the patient maybe injured when the angle is adjusted in the wrong direction.

# 4 Clinic application

## 4.1 Suitable environments for use

- ❖ Prevent to solarize under the sun.
- ❖ Prevent to close heating area.
- ❖ Prevent wet environment.
- ❖ Prevent to stay with volatility oil/ liquid.
- ❖ Prevent high temperature, high humidity, low temperature and dry
- ❖ Prevent to close dust, smoke, salty, sulfide and corrosive environment.
- ❖ Prevent to store in bad ventilation.
- ❖ Prevent to store in jolt and sway location.
- ❖ Prevent to use on uneven ground
- ❖ To ensure the patient can use the bed safely, their age and condition should be assessed by a clinically qualified person
- ❖ The use of head down tilt (Trendelenburg) or foot down tilt (reverse Trendelenburg) may be contraindicated for certain medical conditions. The tilt facility should only be used under the guidance of a clinically qualified person after assessment of the patient's condition.

## 4.2 Correct for use

**Intendent use:** The stretcher is for use by patients in a hospital setting, including those mildly to critically one. The stretcher is for use in hospitals, institutions, and clinics as a short-term outpatient clinical evaluation, treatment, minor procedure, and short-term outpatient recovery platform. The stretcher may also be used to transport deceased patients within an enclosed healthcare facility. Operators for the stretcher include healthcare professionals (nurses, nurse aides, and medical doctors) and bystanders who can use bed motion functions (service or maintenance personnel).

The stretcher may include use in, but is not limited to:

- Emergency department (ED)
- Trauma area
- Post-anesthesia care unit (PACU)

The MET-6600 Series stretcher frame, litter mounted accessories, mattresses, and siderails can contact human skin.

The MET-6600 Series stretcher is not for use for long-term (more than 24 hours) inpatient treatment and recovery.

This product is not for use in a home healthcare environment, as a sterile product, in a home health setting, in the presence of flammable anesthetics, as a support for a patient in a prone position, with patients who have unstable spinal cord injuries, or with an oxygen tent.

The MET-6600 Trauma stretcher with X-ray deck option provides an articulating radiographic patient support surface and a platform below the patient support surface for X-ray cassette placement. The MET-6600 Trauma Series stretcher with X-ray deck option allows the capture of clinical X-rays when used with a medical X-ray system.

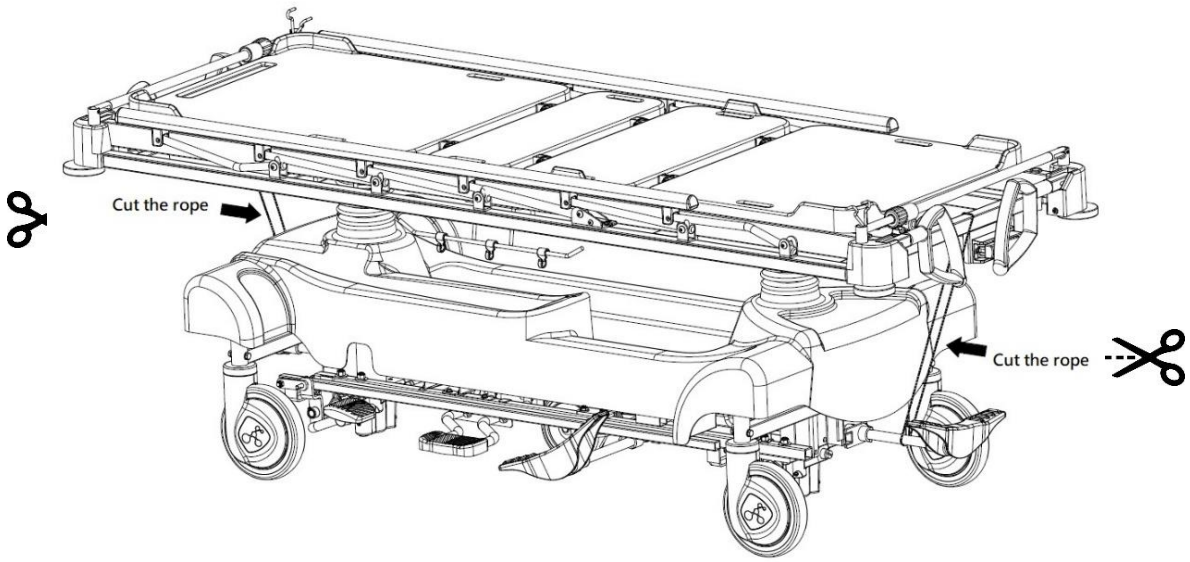
| | |
|---|---|
| **WARNING!** | ● To ensure the patient can use the bed safety, their age and condition should be assessed by a clinically qualified person |

## 5 Setup and use instructions

To unpack your product, please kindly follow manufacturer unpack instruction.

| | |
|---|---|
| **WARNING!** | ● Always allow the product to reach room temperature before you set up the product or test functional operations. Permanent product damage may occur.<br>● Always operate the product only when all operators are clear of the mechanisms.<br>● Always use mattress from Medical-Master approved type. Use of any other mattress may result in patient injury.<br>● Always use caution when you use a mattress thicker than 6.35 cm (2.5 inches). Operator supervision is recommended to reduce the risk of patient falls due to lesser siderail coverage. |

After you unpack the patient stretcher from wooden crate, please don't cut fasten strap on both sides. Until you move the patient stretcher to fixed location in ward/ room, please cut the strap before operation. Do not operate the bed while strap on it and cause unexpected damage.




**Suitable surface for stretcher operation:**

- Tilt
- Hard linoleum
- Poured flooring

**Unsuitable surface for stretcher operation:**

- Too soft, unsealed or defective flooring
- Soft wooden flooring
- Soft and porous stone floors
- Carpeted floors with underlay
- Soft linoleum

| | |
|---|---|
| **CAUTION!** | ● If floors are covered with synthetic material, the relative humidity should be at least 30% to avoid electrostatic discharge. |

## Before Use

**Prepare the bed for use as follows:**

- Perform bleeding procedure of hydraulic units in the highest bed position by pressing lifting pedal 10 times.
- Raise the Mattress Support Platform to the highest position.
- Lower the Mattress Support Platform to the lowest position.
- Tilt the Mattress Support Platform to Trendelenburg position.
- Position the Mattress Support Platform to Anti-Trendelenburg tilt.
- Check that the castors as well as main brake work correctly.
- Check that the Siderails function properly.
- Dispose of all packaging

## Transport

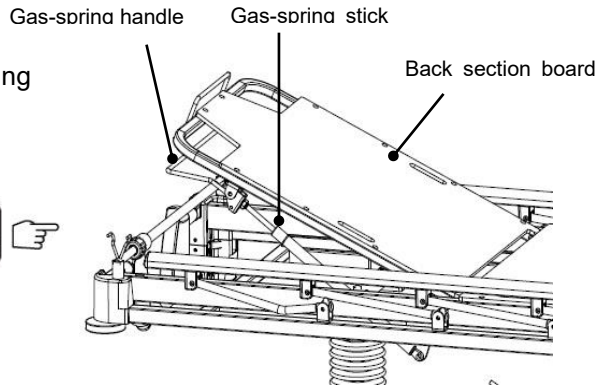
**For a safe transport, observe the following:**

- Ensure that no cables are run over when moving a bed.
- Ensure that the castors are not braked before moving the bed.
- Adjust bed height to at least 20 cm below maximum height.
- Push bed by handles on Head End or Foot End.
- Move the bed exclusively on suitable floor surfaces.
- Ensure the bed is braked when it should not move
- For longer distances, ensure that the castor steering function (main control) is activated.
- Ensure that the brakes are released before moving the bed.

## 5.1 Back section adjustment

### 5.1.1 Transport & Trauma

Press gas-spring handle to adjust the back-section angle. Back-raising from 0 to 90 degrees



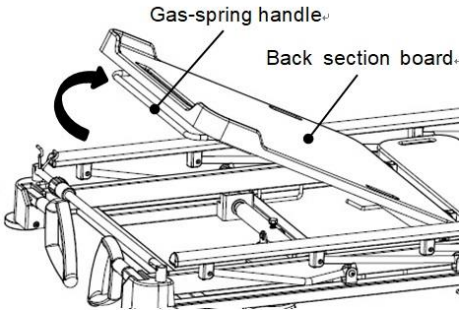

**a. Raise up**



Press the operation gas-spring handle by 2 hands and rise the back section. When it arrives suitable angle, please release the handle and it will lock at the position safety.

**b. Low down**

Press the operation gas-spring handle by 2 hands and lower down the back section. When it arrives suitable angle, please release the handle and it will lock at the position safety.




### 5.1.2 Pediatric

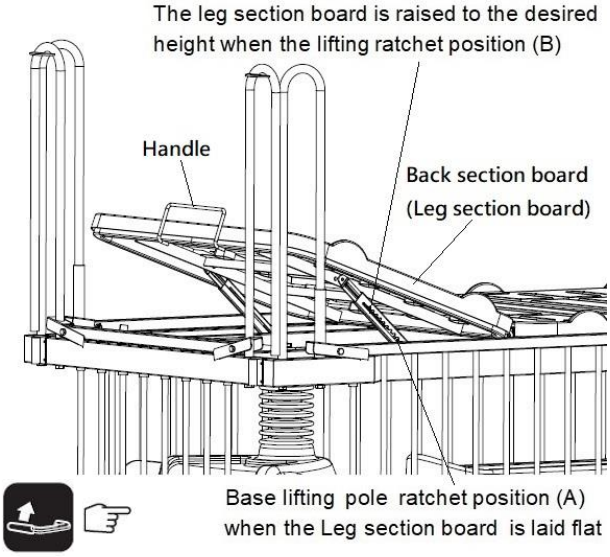
Hold back section board to adjust the back-section angle by ratchet. Back raising from 0 to 50 degrees.

**a. Raise up**

Hold back section coroner and raise the back section. Total has 10 different angles. When it arrives suitable angle, please release the back section and it will lock at closet stopper.

**b. Low down**

Hold back section coroner and raise the back section to max angle for release angle. When bed lower to min angle, please release the back section.

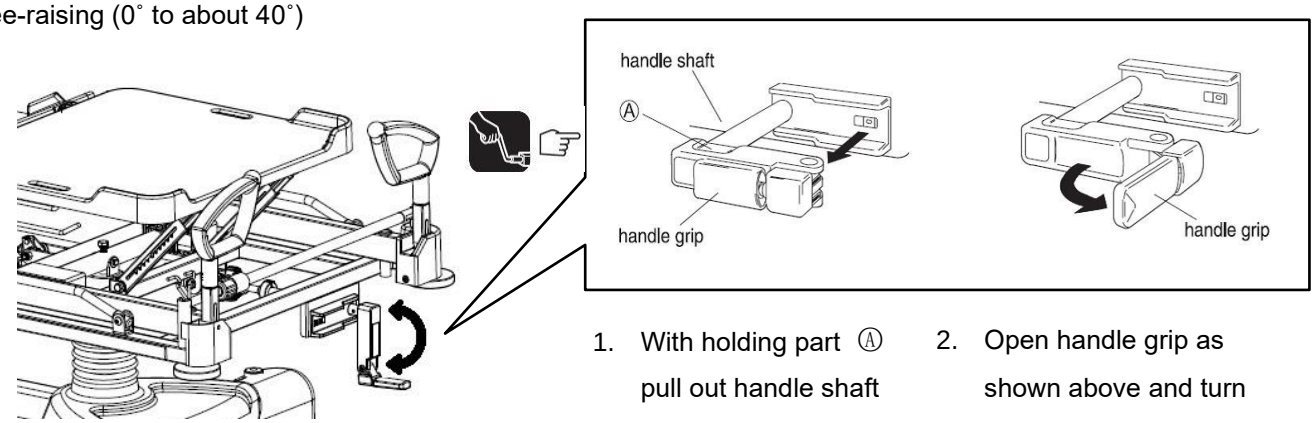



| | |
|---|---|
| **NOTE!** | ● Before you operate back section adjustment, please lock the caster in advance. Otherwise, the stretcher will move suddenly and result injury or accidents to patient.<br>● When you operate the operation handle, please prevent to operate by one hand or operate from side. The correct operation is 2 hands and stand on head section. |

## 5.2 Knee section adjustment

Operate the manual crank to adjust the knee section angle.

Knee-raising (0˚ to about 40˚)



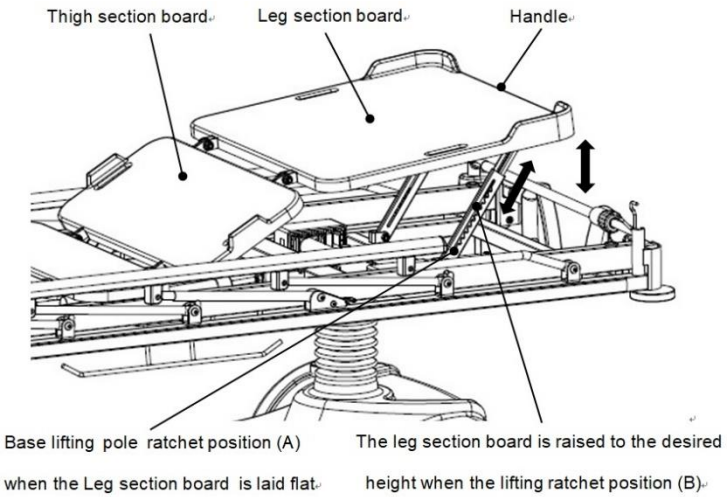

1. With holding part Ⓐ pull out handle shaft completely.
2. Open handle grip as shown above and turn it.

| | |
|---|---|
| **CAUTION!** | ● Don't overturn the handle beyond maximum point. As it reaches to a maximum point, there will be dullness in turning operation. It is the maximum point. Any overturn may cause equipment failure.<br>● When operating the crank, pull out the shaft completely. Failure to do so many leads to equipment damage.<br>● Expect when it is in use, always fold down the handle grip and store it to its original storage receptacle. Otherwise, you may trip on the handle and get injury.<br>● Don't touch or kick the handle by foot. It may be a cause of injury or equipment damage. |

## 5.3 Leg section adjustment

Operate the ratchet to adjust the leg section angle (6~10 steps).

This device is only suitable for MET-6600 Transport and MET-6600 Recovery patient stretcher. To raise the height, first raise the handle of the leg section board and the edge of the leg section board upwards. The lifting pole fixing shaft will be raised from the original ratchet position (A) to the desired height of the ratchet position (B). Conversely, when lowering, lifting the ratchet to max height and lower to desired height of the ratchet position.



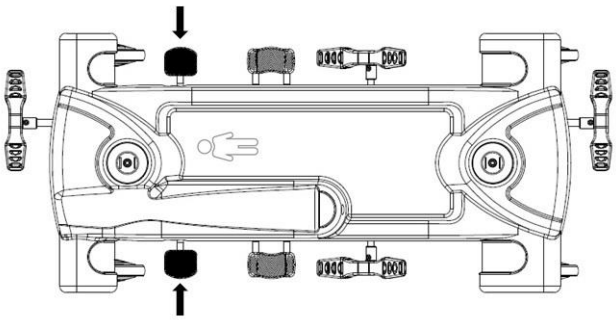

| | |
|---|---|
| **CAUTION!** | ● When raising the leg section while the patient is lying on the bed, make sure another person is standing on the other side of the bed. Otherwise, the patient's hands maybe trapped between the leg section bas e and bed frame<br>● When returning the knee section base to the horizontal position, first move the leg section base to top position and release. |

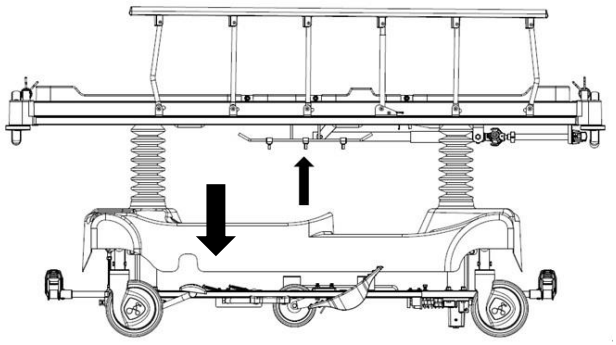
### 5.4 Height adjustment

The platform could adjust the height by operation Hi-Low pedal by feet.

**a. Height Up Pedal**

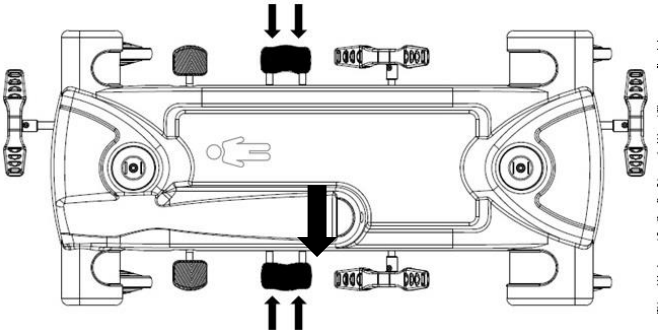
Step the operation pedal by feet and rise the platform. When it arrives suitable height, please stop step it and the stretcher will lock at the position safety.

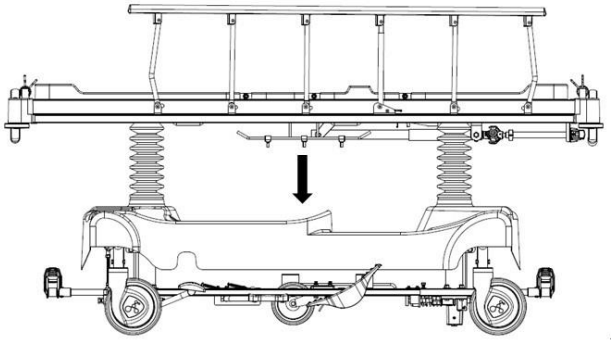




**b. Height Lower Pedal**

Please step on the pedal (middle side) by feet to lower down the platform. When it arrives suitable height, please stop press it and the stretcher will lock at the position safety.





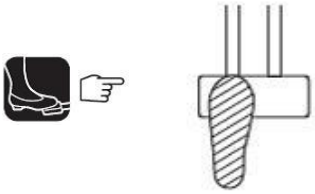
| | |
|---|---|
| **CAUTION!** | ● When you raise up / lower down the stretcher, please make sure the casters is on lock situation. Otherwise, the stretcher maybe moves suddenly and cause patient injured and accident.<br>● When operate height adjust, Trendelenburg and reverse Trendelenburg, please operate slowly and carefully acceding to patient's situation. |

### 5.5 Trendelenburg & reverse Trendelenburg

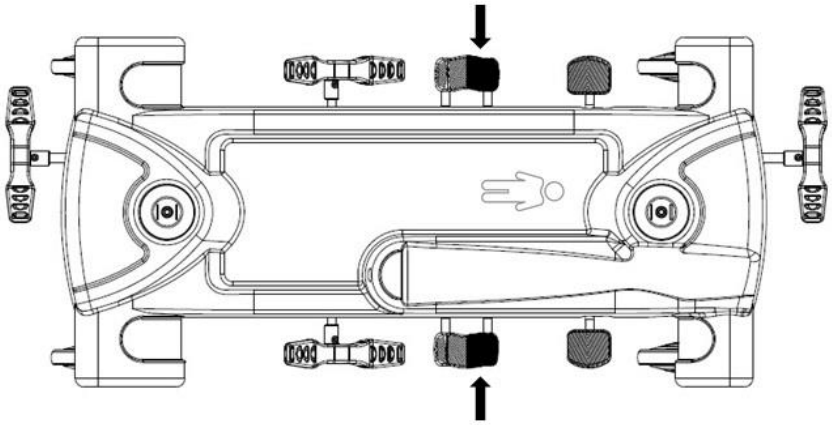
The platform could adjust tilt angle by TR & RTR pedal. When ER bed is in tilt position, the platform could return to flat position by press the pedal together. The tilt angle will influence by ER bed height.

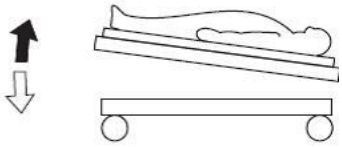
**TR and RTR Pedal Operation (-18˚ to about 18˚)**

a. Head down and Foot up position
   Press left side of pedal → The head side go down.

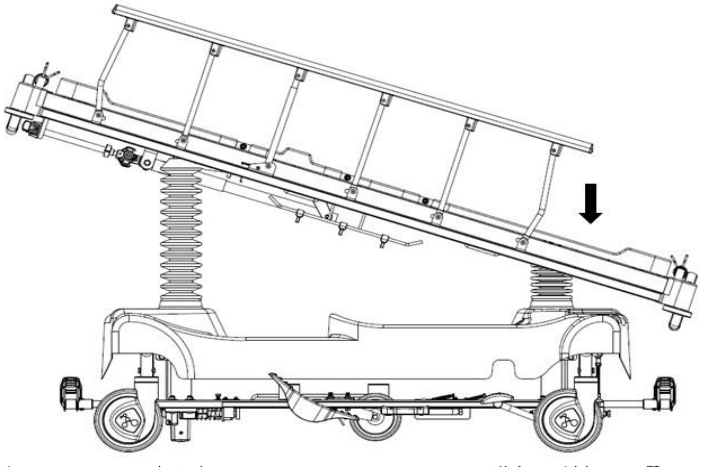


Please step on the left pedal.

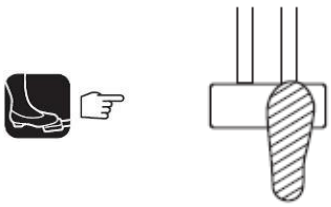


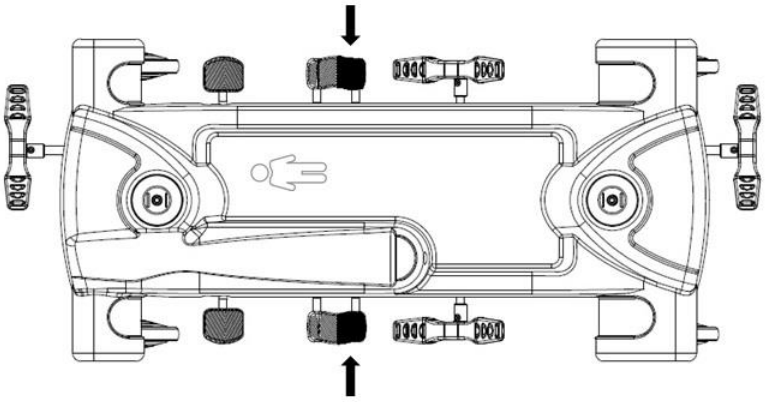


Operation symbol

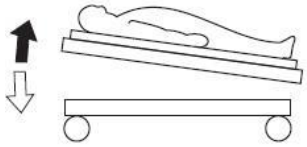


b. Head up and Foot down position
Press right side of pedal → The foot side go down.

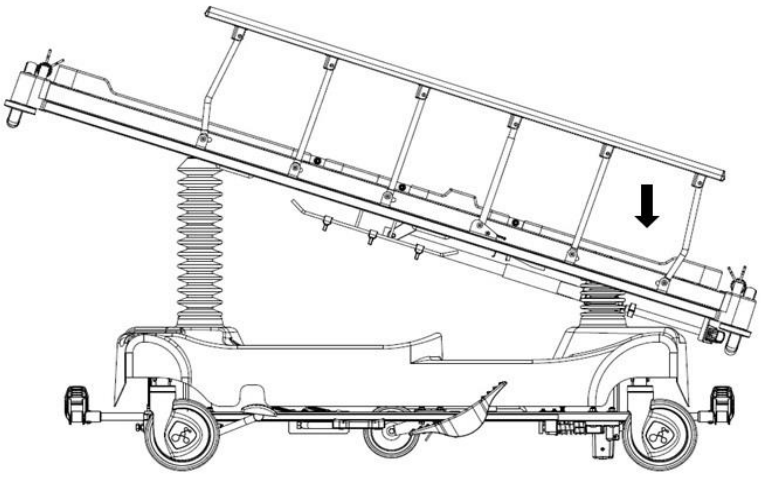




Please step on the right pedal.



Operation symbol



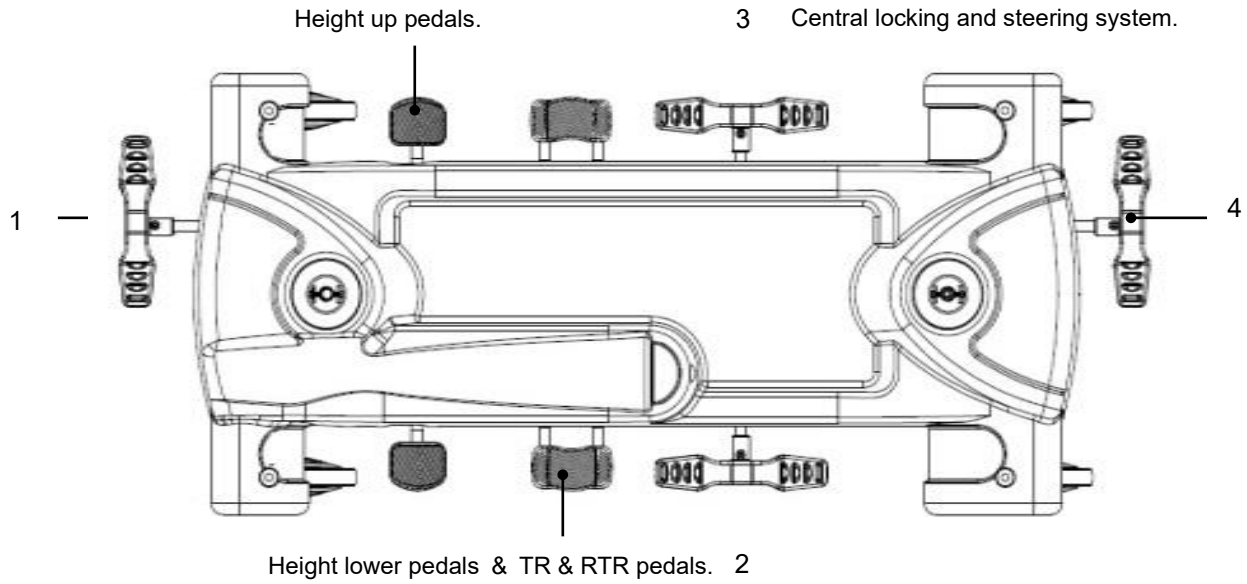
| | |
|---|---|
| **CAUTION!** | ● Please lock the casters except when moving the bed. Otherwise, the patient maybe injured when they get on or off the bed.<br>● When operate height adjust, Trendelenburg and reverse Trendelenburg, please operate slowly and carefully acceding to patient's situation. |

## 6 Castor control and bed transport

**a. Central locking and steering system**

Operate any pedal could lock or release 4 casters.

There are 4 pedals on head, foot, right and left side. The pedal install under the chaise.

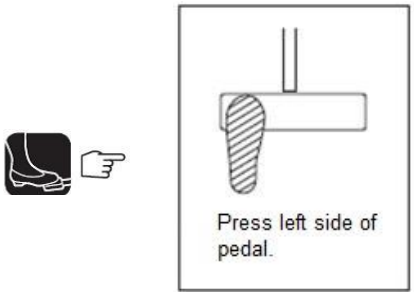


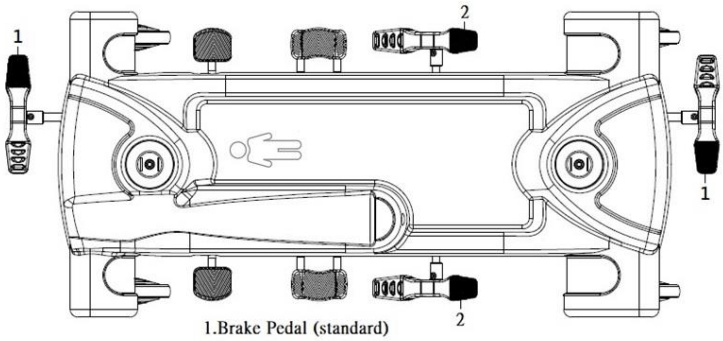

| | |
|---|---|
| **WARNING!** | **Please make sure the casters are on lock situation!**<br>● When you raise up / lower down the stretcher, please make sure the casters is on lock situation. Otherwise, the stretcher maybe moves suddenly and cause patient injured and accident.<br>● Ensure the castors are locked while the bed is occupied and / or not being transported. |

| | |
|---|---|
| **CAUTION!** | **Do not climb or gravity down the pedals of the casters, causing damage to the bed!**<br>● Do not place any objects on the undercarriage or in the space under the mattress platform.<br>● Don't climb the foot pedal of caster. Otherwise, the pedal supports are subjected to excessive weight, and may damage or deformed. The climber may run the risk of injury.<br>● Don't move the bed by force when the caster is lock. Otherwise, the base is subjected to excessive weight, and may damage or deformed. |

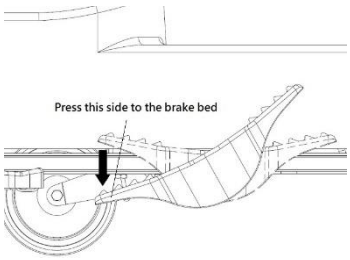
**b. Caster Pedal Operation**

1. Lock 4 caster
   Press left side of pedal. All casters will lock at the same time and the bed could not move.



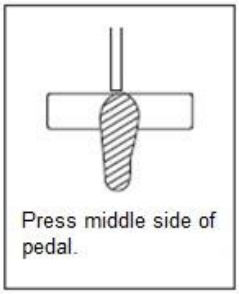



1.Brake Pedal (standard)
2.Brake Pedal (optional)



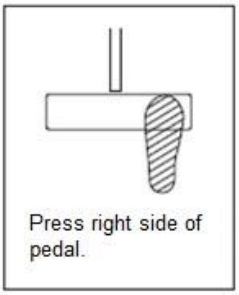

2. Release 4 caster
   Press middle side of pedal. All casters will release for lock/ steer situation at the same time and the bed could move to any direction.





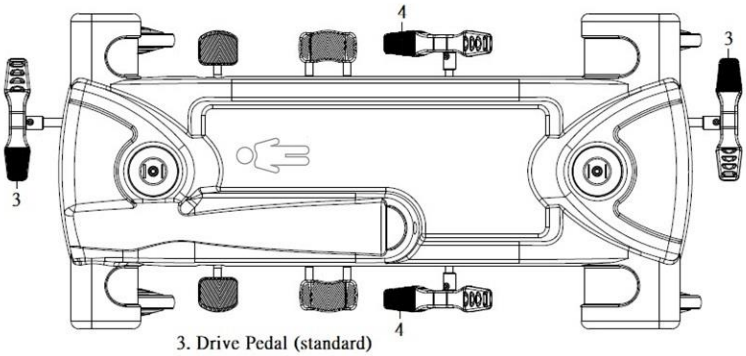

3. Steer caster Fix the 5th wheel to straight direction
   Press right side of pedal.



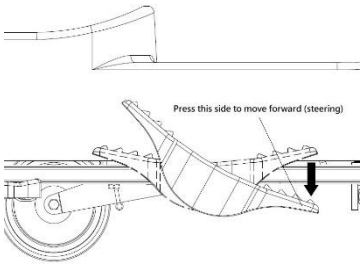


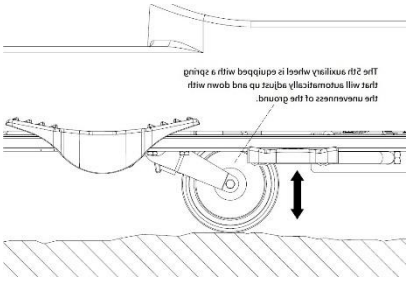

(1) With 5th wheel device: 5th wheel will be release and fix the bed to straight direction.

(2) Without 5th wheel device: Steer caster (1 of 4 caster) will fix to straight direction.



3. Drive Pedal (standard)
4. Drive Pedal (optional)



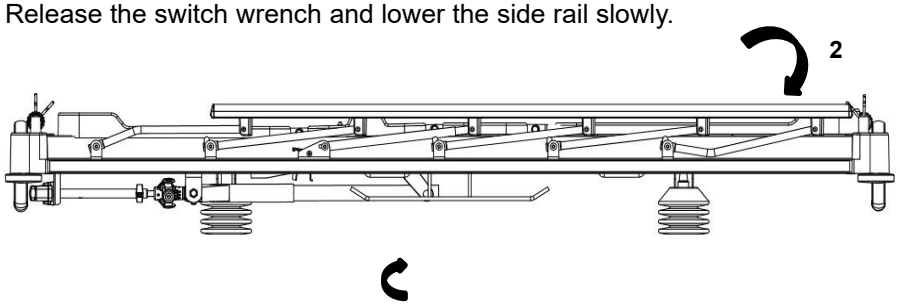



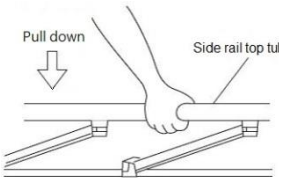
## 7 Side rails

**a. 3/4 length Collapsible side rail**

1. Lower side rail

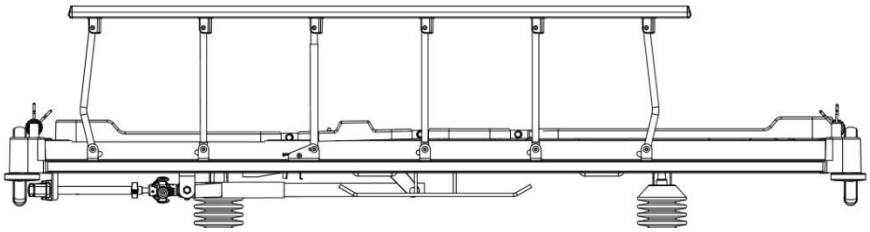
   Release the switch wrench and lower the side rail slowly.




2. Raise up side rail

   Rise up the side rail to top position and switch wrench will lock automatically. When it locks, you will hear “click” sound.



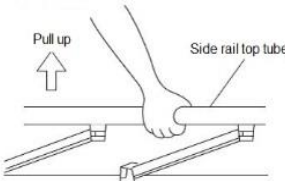



Fig. Collapsible bed side rail

| | |
|---|---|
| **WARNING!** | ● Please make sure that patient’s head, neck, arm, leg and body is in the safety area when you operate the side rail (up/ down). Otherwise, you run the risk of injury or accidents.<br>● Don’t move the bed by side rail or stay on side rail. Otherwise, the side rails are subjected to excessive force, and may be damaged or deformed.<br>● When patient stay on bed, please don’t move the bed without raise up the side rail. Otherwise, you run the risk of injury or accidents.<br>● When you rise up the side rail, please kindly make sure the side rail is completely locked. Otherwise, the patient maybe injured when the side rail falls down suddenly. |

**b. Full length stepless side rail (only available for MET-6600 Pediatric)**

1. Lower side rail

Release the switch on both sides and lower the side rail slowly. It can stop in any height during the pathway.

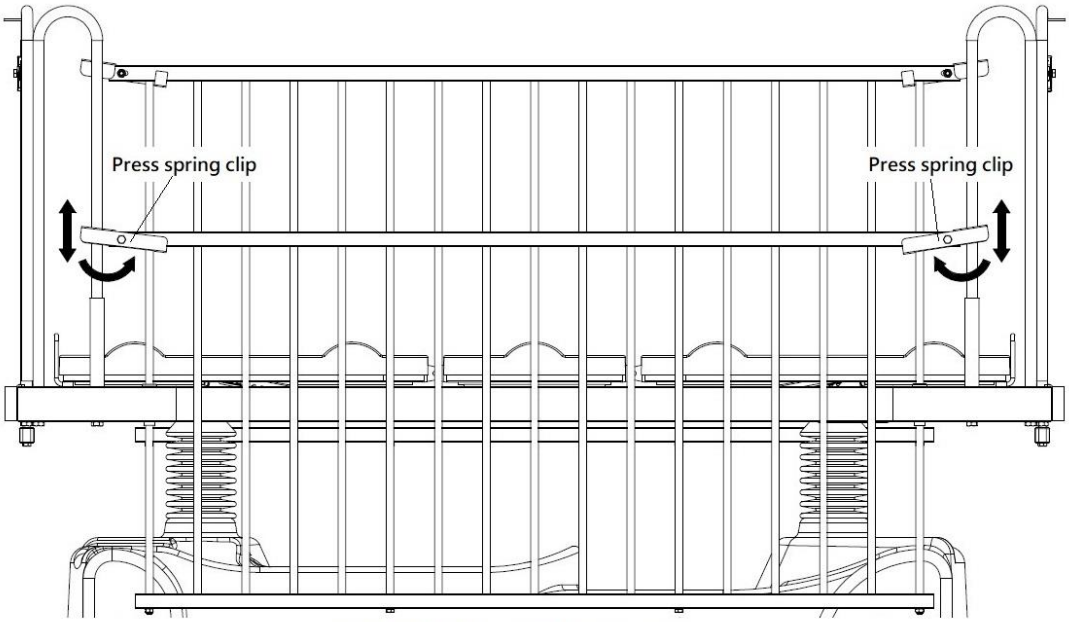


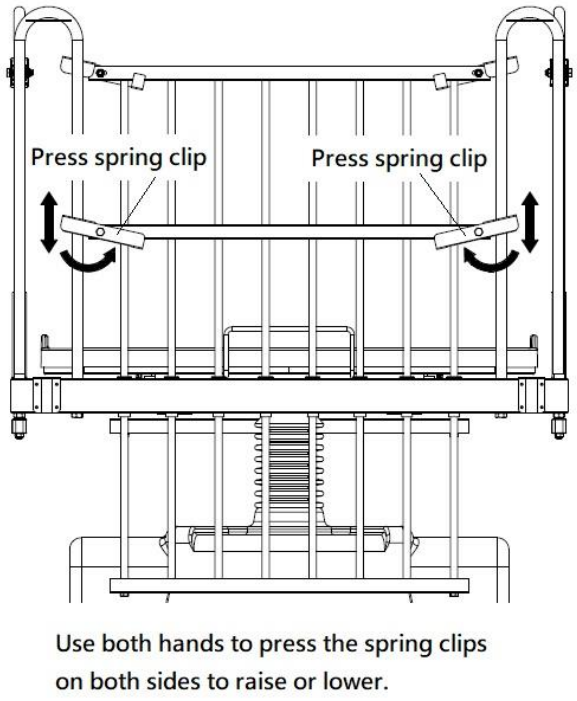

Fig. Stepless bed side rail

2. Raise up side rail

Rise up the side rail by press both side switch. Once you release switch, the side rail will lock automatically.

3. Head & foot board

Head & foot board has same device like side rail. Operation for hi-low is exact same.

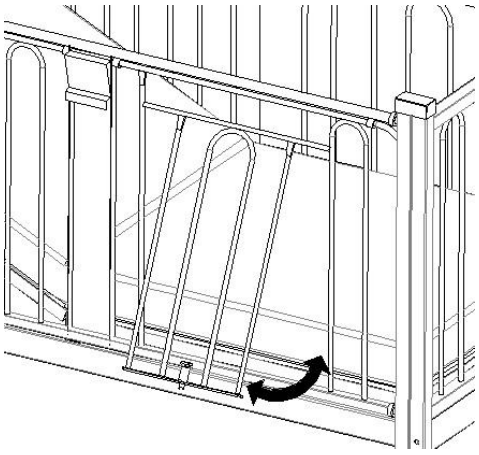


4. Openable siderail (option)

It is possible to equip the bed with openable siderail bars. This allows using e.g. redon bottles without having to fold whole siderail down. Openable siderail bars are equipped with safety brake.

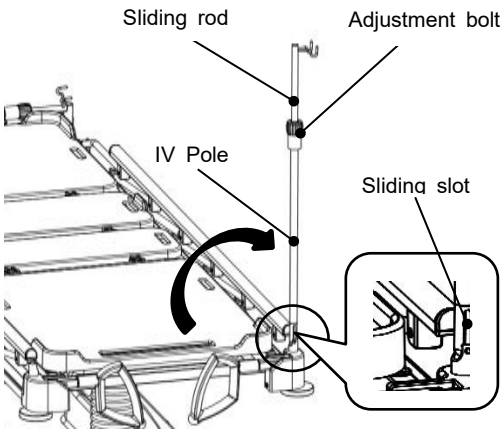
| | |
|---|---|
| **CAUTION!** | **Risk of damaging due to incorrect use!**<br>● Always ensure the openable bar is locked properly. Check the locking by pulling the bar up, down, towards and from you.<br>● Never leave the bed with opened bars without supervision of hospital personnel if the patient is on the bed.<br>● Ensure that no accessories is blocked in locking mechanism or is blocking the locking mechanism.<br>● Do not position siderail if openable siderail bar is not locked in the lowest position! |

| | |
|---|---|
| **WARNING!** | **Material damage due to incorrect using!**<br>● Avoid obstacles during closing siderail bars.<br>● Ensure siderail bars are carefully locked in lowest position. |



## 8 Permanent Infusion Stands (IV pole)

2 units IV pole attached on bed diagonal corner. IV pole could hang Intravenous injection items and other small instruments.




Using method

1. Rise up the pole and insert to the socket with sliding track. (as left photo)
2. Loosen the screw knob of IV pole and adjust to suitable height. After height adjust, please it by fasten the screw knob.

Storage method

1. Loosen the screw knob of IV pole and release it to lowest position and fasten by screw knob
2. Rise up the IV pole with sliding track slowly.
3. Fold the IV pole and store the IV pole on another socket.

| | |
|---|---|
| **WARNING!** | ● Do not use infusion stands (IV pole) for hanging infusion pumps, dosing devices etc. as this equipment might collide with movable parts of the bed.<br>● Make sure that arms, hand and legs do not stay in the gap of platform and IV pole. Otherwise, it may cause injury or accidents.<br>● Each hook has max loading capacity (1 kg). Overloading will cause deformed and injury to patient |

## 9 Urine bag holder

Urine bag holders are situated on both sides of buttock section of the mattress support platform.

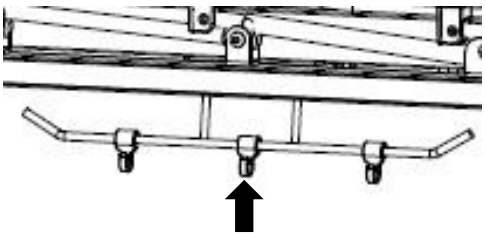
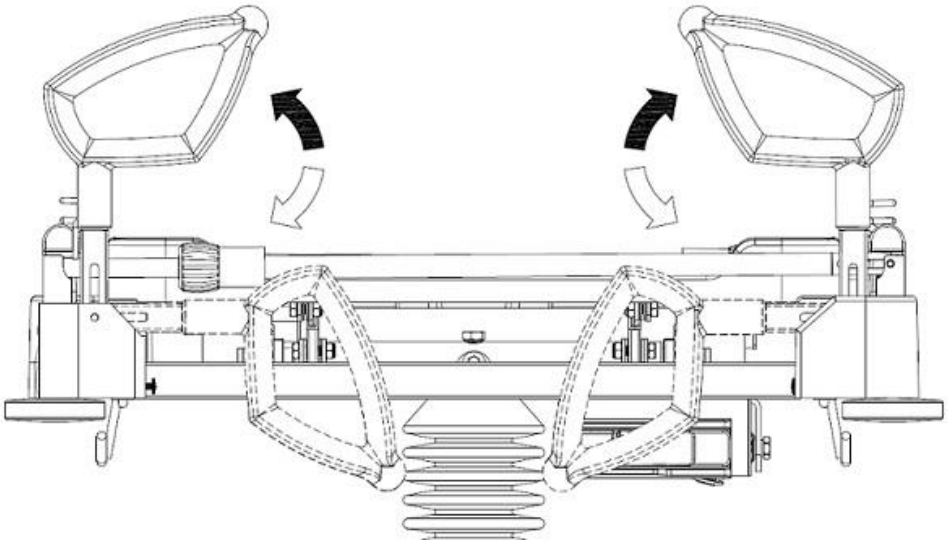


Fig. At the location MET-6600 Transport and Trauma.

| | |
|---|---|
| **CAUTION!** | **Risk of injury due to use of unsuitable accessories!**<br>● Use urine bag holders exclusively for accessories listed in the instructions for use.<br>● Do not use urine bag holders for hanging other devices etc. as this equipment might collide with movable parts of the bed. |

## 10 Transport handles

Foldable transport push bar equip on head and rear side.



Using method

1. Hold the push bar and rise up vertically.
2. Insert the push bar into the socket

Storage method

1. Rise up the push bar from the socket.
2. Release the push bar to original place.

| | |
|---|---|
| **WARNING!** | ● Please use push bar for bed transport. If you push other parts of bed, like side rail or IV pole, it may cause deformed or damages.<br>● Please make sure the push bar inserts to the socket before transport. Otherwise, it may cause accident or damage if the push bar is not completely lock.<br>● When push handle is not using, please fold down and store. Don't use it as stopper for mattress or patient.<br>● Before operate knee crank and X-ray cassette, please raise up push handle to prevent impact. |

## 11 Mattress

(1) Each type of stretcher is installed with mattress stopper (MET-6600 Transport/ Recovery/ Pediatric is plastic one on corner and side. MET-6600 Trauma is steel one in the head and rear.).

(2) Be sure to choose a correct size of mattress according to stretcher type.

(3) Be sure that the mattress is 100% fit with mattress stop before using.

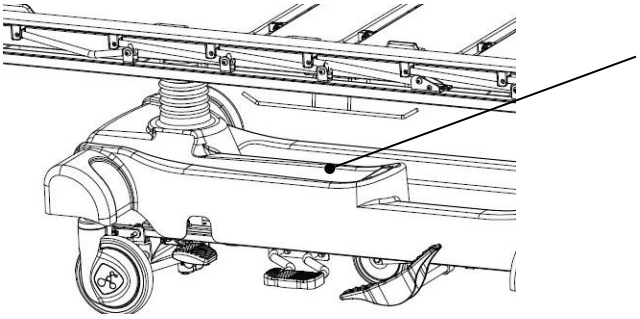
(4) Please make sure the mattress cover is good condition after unpacking. If you find any damage or dirty, please contact with local dealer.




| | |
|---|---|
| **CAUTION!** | **Select the correct size mattress according to the type of stretcher!**<br>● This mattress is designed and manufactured meet with the specification of Medical-Master's item exclusive.<br>● Using mattress manufactured by other companies may not articulate or coincide with the stretcher. Disregard of this warning can cause damage to it. Such use may place excessive load on the bed, resulting in possible injury or malfunction. |

## 12 Oxygen holder

The design of the use of oxygen cylinder. Please do not store other items.



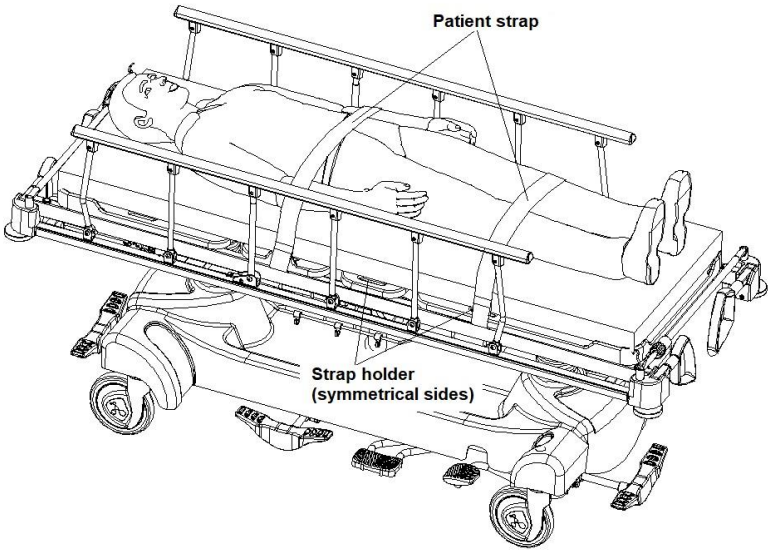
Oxygen holder

It could settle 100~400 mm diameter oxygen cylinder.

| | |
|---|---|
| **WARNING!** | ● When you use oxygen cylinder, please don't hit other items. Otherwise, it may cause damage or accidents.<br>● Please don't climb the oxygen holder. Otherwise, the supports are subjected to excessive weight, and may damage or deformed. The climber may run the risk of injury. |

## 13 Patient straps

Only for MET-6600 beds. Patient strap could fasten the patient on the bed (especially coma or stupor patient). There are several strap holders on platform (back, buttock, leg and knee).

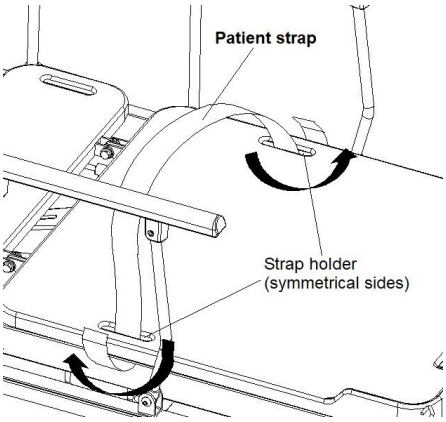



Installation method

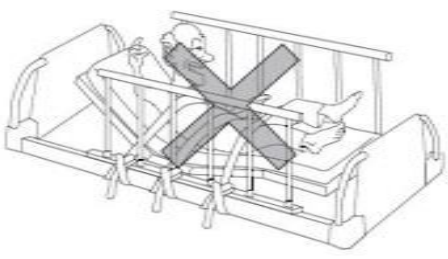
1. Pass through the strap from one side to another side (as below photo)
2. Push and test the strap before use.

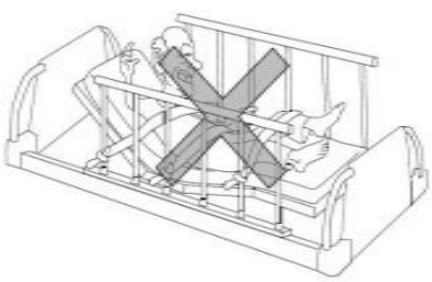
Using method

1. Lock the buckle after settle the patient on the bed.
2. Tighten the strap until suitable length and make sure the patient strapped on bed safely.



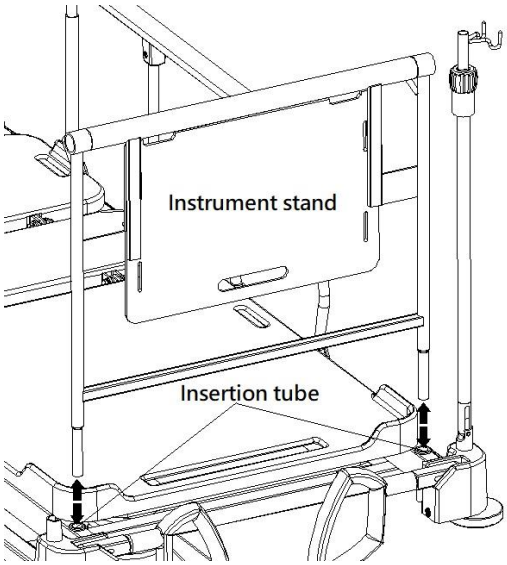

| | |
|---|---|
| **WARNING!** | ● Please don't operate back or knee adjustment when the patient strap on the bed. Otherwise, it may cause injury to patient.<br>● Please don't strap the patient with side rail. Otherwise, it may cause deformed of side rail or injury to patient by extra force.<br>● Incorrect using or unfix strap may cause accident or injury if the patient fall down from the platform. |

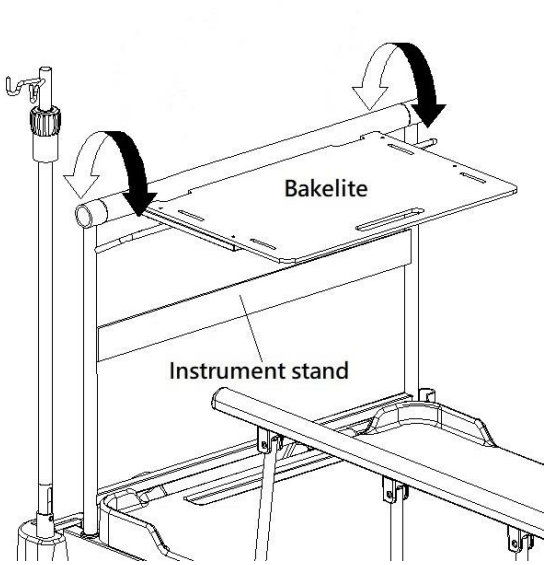




## 14 Instrument Tray/ Foot Board

Only for MET-6600 beds. The detachable instrument tray can install in the end of bed. By different purpose, it can use as instrument tray/ writing table. It can be foot board to prevent patient slip away during tilt position.



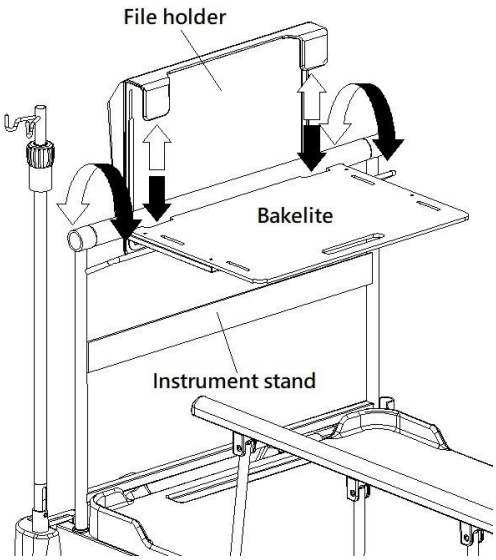




Installation method

1. Pass insert the tray to socket in the foot sides
2. Reversal the tray on stopper.
3. When you install instrument on top, please kindly use strap to secure the instrument on table top

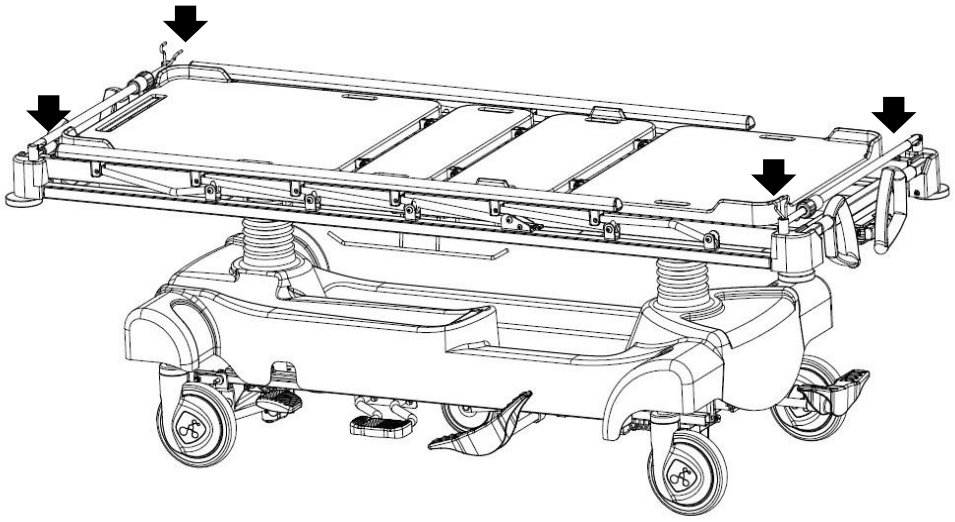
## 15 ABS File Keeper

Only for MET-6600 beds. The detachable ABS file keeper can install on instrument tray bar. Max loading capacity is 10 kg. Max size is 325 x 60 x 250 mm.



## 16 Vertical Oxygen Tank Holder/ Mobile Infusion Pole

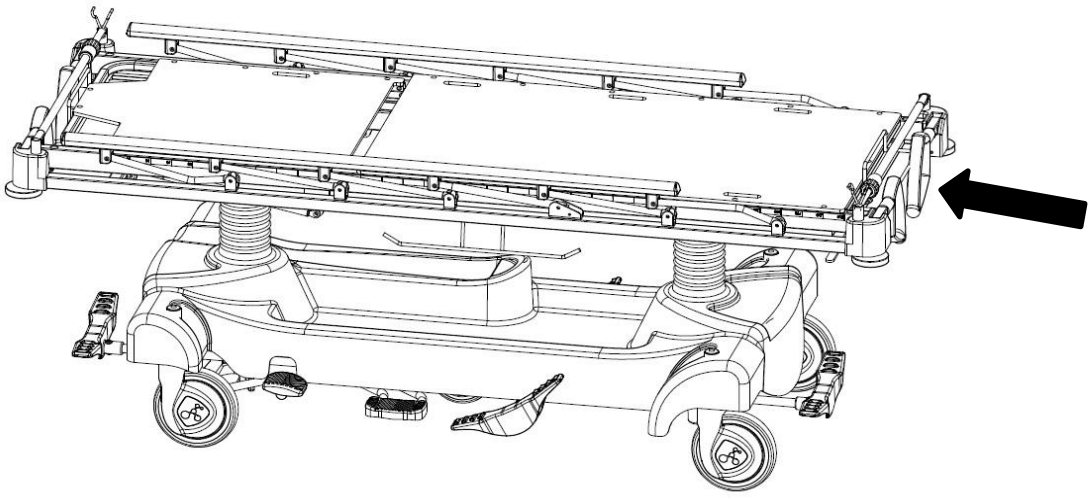
Only for MET-6600 beds. According to operation demand, the patient needs oxygen or injection offer during transport, there is additional device to offer this service. Please insert the parts into socket in any coroner (as arrow)



| | |
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| **WARNING!** | ● Do not use infusion stands (IV pole) for hanging infusion pumps, dosing devices etc. as this equipment might collide with movable parts of the bed.<br>● When the parts are not in duty. Please kindly store in safety position.<br>● When the parts install on the patient trolley, please make sure the space is enough for bed moving and operation. |

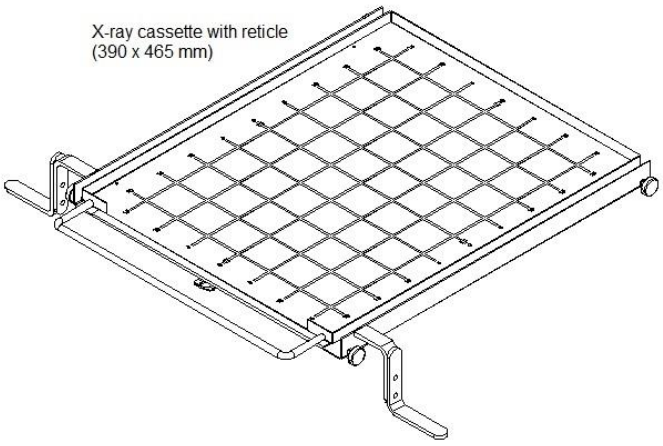
## 17 X-ray Cassette System

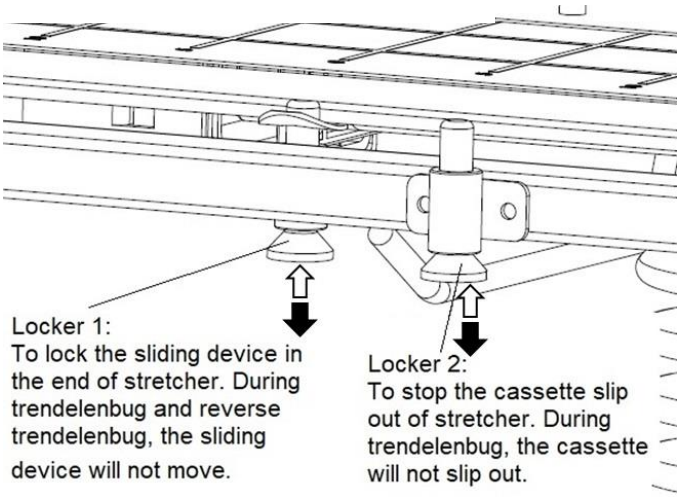
Only for MET-6600 Trauma and Adv, Trauma. According to patient condition, the patient is not suitable for moving or disable patient for moving. They should take X-ray on patient trolley.



Compartment details:

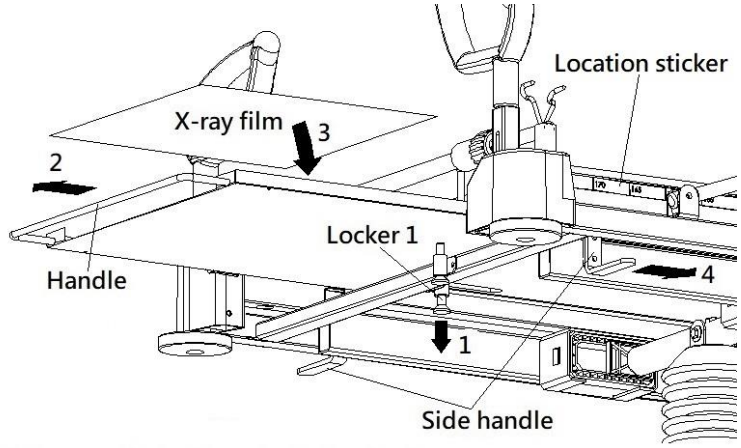
1. Telescopic X-ray film holder (390 x 465 mm size) with grid line and handle
2. Location sticker on both sides
3. Cassette and film stopper in the end of track



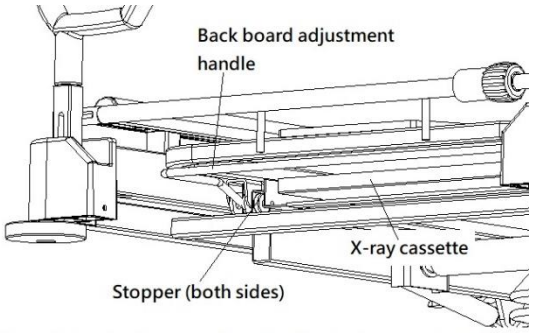




Operation method

1. Please unlock locker 2 and install film on telescopic tray.
2. Please unlock locker 1 to release track system. Please use the handle on both sides to move the tray.
3. According location sticker on both sides, please move the film to suitable location.




1. Loosen the locking device Locker 1.
2. Pull the X-ray cassette handle and pull the X-ray cassette out.
3. Put the X-ray film into the X-ray cassette.
4. Then pull the side handles to move the X-ray cassette to the appropriate location sticker position.




This is the back adjustment handle. That it is in same level with X-ray cassette. If you move out X-ray cassette by force, it will hit the handle.
Stopper (both sides) to prevent wrong operation to hit the back adjustment handle.

| | |
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| **WARNING!** | ● When the cassette is not using, please return it to end of bed and lock.<br>● During transport, please make sure telescopic cassette already store in.<br>● Please don't use telescopic cassette as store tray/ writing table/ chair. It might cause unexpected injury or damage/ |

# 18 Cleaning and disinfection

## 18.1 Safety Instructions for Cleaning and Disinfection of the Bed

**Preparation for cleaning:**

- ❖ Drive the bed on a place where the cleaning process will be performed and then brake the bed.
- ❖ Position the mattress platform to its highest positions and also position the back rest and thigh rest parts so the back side of those parts are accessible for cleaning.
- ❖ Lock all adjustment functions of the bed to prevent involuntary adjustment of the bed or injuries during cleaning.
- ❖ Disconnect the bed from the mains.
- ❖ Check if all connectors are properly fixed (controllers, actuators and control unit).

**Recommendations for cleaning:**

- ❖ Only use detergents designed for cleaning the medical technologies.
- ❖ Dilute the detergents in accordance with instructions from manufacturer of detergents.
- ❖ Never use any strong acids or bases. Optimal pH range is 6-8.
- ❖ Never use abrasive powders, steel wool or other materials and detergents that may damage the surface of the bed.
- ❖ Never use detergents with solvents that may affect the structure and consistency of the plastic parts (benzene, toluene, acetone etc.).

**Cleaning process:**

- ❖ Clean by wiping the bed with damp, well-wrung textile material.
- ❖ The detergent can be applied by spraying on bed or on the textile material.
- ❖ Perform cleaning and disinfection of the bed in the appropriate range. The range of cleaning and disinfection should be distinguished according to the degree of contamination of the bed and the cleaning mode (daily, before changing patient or complete).
- ❖ Electronic parts that may be contaminated clean carefully and only their outer side. Never open those connectors due to cleaning or disinfection. Those components should not be exposed to prolonged or continuous exposure to moisture.
- ❖ Let the bed dry completely after cleaning or disinfection process.
- ❖ After drying the bed place the mattress back on the mattress platform.
- ❖ After drying the bed check functions of the bed.

## 18.2 General Instructions for Cleaning and Disinfection

**First, the plastic material part:**

1. Wipe with a dry cloth or a cloth dampened with water.
2. Wipe with a neutral detergent (PH6-8).
3. Use 95% alcohol to wipe.
4. The bed board can be washed in water below 40 °C.
5. Disabling gasoline, organic solvents (pine perfume), chemical cleaning.
6. Do not bake and avoid sun exposure.

**Second, the steel paint part:**

1. Wipe with a dry cloth or a cloth dampened with water.
2. Wipe with a neutral detergent (PH6-8).
3. Use 95%↓ alcohol to wipe.
4. Disable bleach, organic solvents (pine perfume, toluene, acetone, etc.), chemical substances wipe.
5. Do not use a melon cloth or an abrasive cloth to scrub.

**Third, the screw and controller part**

1. Same as the plastic material part.
2. Do not spray with water other than the components of IP66.

**Fourth, Damaged Foam Mattress**

Mattress should be periodically checked for cracks, holes or cracks that may affect the integrity, water resistance or resistance to infections of the cover. Contact the service department of the manufacturer according to scope of damage to cover. Depend on the usage and how much the patient sweats, remove the mattress and place it in an outside area where is can be dried by the sun. The inside of mattress will dry. This should be done every 2 to 4 weeks.

| | |
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|  **WARNING!** | **Risk of injury when working on the bed!**<br>● Prior to assembly, disassembly, cleaning and maintenance, ensure that all adjustment functions are locked.<br>● Ensure the bed is disconnected from the mains during cleaning process.<br>● Pay extra attention when cleaning any movable or controlling mechanisms of the bed to prevent involuntary activation, entrapping or crushing.<br>● Cleaning should be entrusted to the person who has been trained to control the bed.<br>● Ensure nobody sits on the bed ends. |

| | |
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|  **WARNING!** | **Risk of damaging the bed due to use of incorrect cleaning detergents or cleaning processes!**<br>● The bed is not designed for machine washing.<br>● The bed is not designed for cleaning by spraying, showering nor for pressure or steam cleaners.<br>● The selection of cleaning detergents/disinfections and their correct concentration is responsibility of responsible person in charge of cleaning/disinfection in accordance with the informations provided in this manual.<br>● Never use germicidal or other radiants for disinfection of the bed, if those radiants act directly on the bed.<br>● Follow these instructions and follow the prescribed dosage by the manufacturer of cleaning detergents.<br>● Not following recommended processes may result in damaging or deterioration of the bed condition. |

## 19 Regular maintenance

**First, every three months should be implemented:**

1. Check the anchor rail group fixing bolts for looseness? Does it fall off?
2. Check the tamper brake latch for wear? Is there a crack?
3. Check if the anchor bolt of the rocker arm is loose or not.
4. There is an oil hole above the rocker arm. Please use No. 30 oil to lubricate.
5. Check if the nut of the bed lift pivot bolt is loose? Does it fall off?
6. Tilt the sliding seat and lubricate it with butter.
7. Check the ankle fixing bolts for looseness?
8. Battery charge and discharge test.

**Second, every six months should be implemented:**

1. Check the power cord for damage?
2. Check the electric screw housing and piston rod for deformation? Is there a crack? Is the function normal?

**Third, every 12 months should be implemented:**

1. Check the battery for leaks? Is there any deformation?
2. Weight scale correction if the bed has

| | |
|---|---|
|  **WARNING!** | **Risk of injury when working on the bed!**<br>● Ensure that the bed is disconnected from the mains connection prior to assembly, disassembly and maintenance.<br>● Ensure that the castors are locked prior to assembly, disassembly and maintenance.<br>● Ensure that the adjustment function on the handset is locked prior to assembly, disassembly, cleaning and<br>● Maintenance<br>● Please keep the power cord properly when moving or moving the bed to avoid collision, pressure and electric shock.<br>● Non-technical personnel are prohibited from dismantling the electric push rod controller, junction box and weight display to avoid electric shock. Removing the cover may expose you to electric shock.<br>● It is forbidden to disassemble the load-weight fixing bolts.<br>● Load weight sensor sensitivity do not hit.<br>● When the bed is not connected to the power supply, the weight display cannot be used. |

| | |
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|  **WARNING!** | **A defective bed can cause injuries and incorrect maintenance can damage the bed!**<br>● Have a defective bed repaired immediately.<br>● If the defect cannot be repaired, do not use the bed.<br>● Remove a defective bed from service and have the defective bed repaired. |

## 20 Storage and inspection

When the bed will not be used for long period of time, follow the instruction as below:

1 Lower the back and knee section base to the horizontal position.

2 Set the bed height to its lowest positions.

3 Don’t place anything on the bed other than mattress.

4 Don’t place anything on top of the mattress.

5 Don’t store the bed where hot, humid, or dirty. Store under a room temperature of 10˚C to 40˚C at humidity of 30% to 75%.

6 Always store the bed in its horizontal position. If you have to store vertically, please fasten all movable parts by strap and make a cover on the ground.

7 Be sure that the power has been disconnected and that the power cord is stored on the hook provided.

## 21 Waste treatment

For waste components that are regularly maintained or overhauled, please handle them as follows:

**First, the steel material:** recycling and reuse according to the waste metal processing methods.

**Second, the plastic material:** according to the Arabic word in the plastic material triangle recycling mark and the material description below, it can be recycled and reused.

**Third, the waste battery:** Dispose of the waste product and container and remove it by the recycling agency, and do not dispose of it at will. It should be properly stored before recycling to avoid pollution caused by waste liquid spillage.

**Fourth, other materials:** according to the transfer to the recycling agency.

## 22 Trouble shooting

1. Not all problems are mechanical defaults, so you should read through the following information before request repair service from local dealers. If your problem is not list or you are still unable to resolve the issue, stop to use stretcher and contact with us or local dealers.
2. If a natural disaster such as an earthquake, fire or flood, contact with us immediately to request maintenance / inspection / repair.

| Symptom | Inspection | Solution |
|---|---|---|
| When the knee section base is adjusted to the highest or lowest position, operation by rotating the manual crank cannot be carried out in reverse. | Did the operator exert excessive force at the highest or lowest position? | Rotate the manual crank in the opposite direction |
| When the knee section base is lowered to the level position, the leg section cannot return to the horizontal position | Was the ratchet of leg section in the normal position? | Life the leg section to highest position and put it back down. |
| Could not return all parts of stretcher | Are there any block or obstacles during their way? | Remove block or obstacles |
| Cannot move the stretcher | Are the caster locked? | Unlock the caster |
| When you raise up or lower the platform, you find the gap is big (>2cm) | Did you ever remove the platform by force? | Please make some weight on platform (over 30 kg) and make 10~20 times full hi & low action to release the air from pump |
| When you raise up or lower the IV pole, the inner tube could not lock | Did you ever remove the inner tube? | Please release lock device and make sure the inner tube insert to outer tube properly |
| The side rail could not fold down | Do you unlock the lever or any obstacles during rail gap? | Please release lever and remove obstacles |
| When you lower the platform, it could not arrive lowest position | Are there any block or obstacles during their way? | Remove block or obstacles |
| When you do Trendelenburg and reverse trend, it could not arrive max degrees | Are there any block or obstacles during their way? | Remove block or obstacles |

| | |
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| **DANGER!** | **Danger to life due to electric shock!**<br>● If a fault occurs ensure the electric motor, power box and other electrical parts checked by qualified personnel only.<br>● Do not open protective covers of the electric motor or power box. |

## 23 Preventative Maintenance

# Preventative Maintenance

### CHECKLIST

| All fasteners secure | Date | Date | Date | Date |
|---|---|---|---|---|
| Side rails move and latch properly | | | | |
| Engage brake pedal and push on the stretcher to ensure all casters lock securely | | | | |
| Steer function working properly | | | | |
| All casters secure and swivel properly | | | | |
| Body restraints working properly | | | | |
| I.V. pole intact and operating properly | | | | |
| Oxygen bottle holder intact and operating properly | | | | |
| Fowler operates and latches properly | | | | |
| Trendelenburg/Reverse Trendelenburg operating properly | | | | |
| No rips or cracks in mattress cover | | | | |
| Ground chain intact | | | | |
| No leaks at hydraulic connections | | | | |
| Hydraulic jacks holding properly | | | | |
| Hydraulic drop rate set properly | | | | |
| Hydraulic oil level sufficient | | | | |
| Lubricate where required | | | | |
| X−ray tray slide tracks cleaned of dust and debris | | | | |
| Accessories and mounting hardware in good condition and working properly | | | | |

Mode No. _____

Serial No. _____

**NOTE**

Preventative maintenance should be performed at a minimum of annually. A preventative maintenance program should be established for all Medical-Master equipment. Preventative maintenance may need to be performed more frequently based on the usage level of the product.

When you find something could not work properly, please kindly contact with Medical-Master local agent directly for immediate service.

## 24 Warranty and Service

Medical Master will only be held responsibility for the safety and reliability that are regularly serviced, maintained and used in accordance with the safety guidelines.

This product is covered by a 24-month warranty from the date of purchase (not including battery). The warranty covers all material and manufacturing related failure and errors. Failures and errors caused by incorrect use and external effects are not covered. Justified complaints will be fixed free of charge during warranty period. Proof of purchase, with the date of purchase, is required for all warranty services. Our standard terms and conditions apply.

For service, maintenance, and any questions regarding this product, please contact your local Medical-Master agency or distributor.

## 25 Consulting and service

If you have any problems during use, please contact the following departments:

**Manufacture：Medical-Master Co., Ltd**

**Office**

No.59-9, Ying Cheng 1st., Shi-Tung Dist, Taichung City, Taiwan (407)

**Factory**

No.158, Keliao Rd., Shengang Township, Changhua County, Taiwan (509)

**TEL：886-4-23171028**

**FAX：886-4-23171029**

**E-Mail：info@medical-master.com**

**www.medical-master.com**