KinisiForo
SYSTEM OF ELLIPTICAL TRAINING

KINISIFORO® HOSPITAL UNIT

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1. Introduction

Congratulation for the Purchase of KINISIFORO® HOSPITAL UNIT!

It has been successfully used for rehabilitation of patients with stroke, cerebral palsy and brain/spinal injuries. It helps in reducing neurological deficit and movement disorders and ultimately can improve the quality of life of even severely disabled patients. The theoretical ground for such an effect is based on neuroplasticity, a phenomenon of stimulation of innate brain capacity to change and adapt in response to environmental influences.

KINISIFORO® Hospital Unit allows for simultaneous exercise of :

- *lower extremities*,
- *upper extremities,* and
- *torso*

i n simultaneously active/passive mode in standing or sitting position.

How does KINISIFORO® Hospital Unit work?

Using a special harness, the patient can be lifted up onto KINISIFORO® Hospital Unit by means of the hydraulic power installed. The upper and lower extremities are placed at specific receptors, which can be adjusted according to the physical characteristics of each patient. The KINISIFORO® Hospital Unit operates through symmetrical elliptical motion whilst simultaneously exercise the upper and lower limbs as well as the trunk muscles. Exercise can be executed as active or/and passive, a counterweight mechanism controls accurately the intensity of the exercise at each drive cycle. Using an HMI(Human Unit Interface), a tough screen, virtual video and sound are available that

helps the automation learning of motion. The HMI is also used to adjust stroke of movements, both for upper and lower extremities.

2. Delivery of the KINISIFORO® Hospital Unit

2.1 Uploading of the KINISIFORO® Hospital Unit

The Unit is delivered into a wooden box. Upload the wooden box from the delivery truck, using a lifting device with capacity more than 800 Kg. This can be done preferably using a forklift or Hand lift having the above named capacity.

Upload of the wooden box should take place as closed as possible to the permanent place of installation of the unit. The unit has its own rolls, so that it can be moved manually to the final permanent installation place.

Make sure that the path on which moving the unit manually to reach the permanent position, can hold the weight of the Unit. Avoid moving the Unit onto sensible soft surfaces to avoid damages or permanent signs.

2.2 Unpacking/Installing the KINISIFORO® Hospital Unit at place of operation

Before moving the Unit, remove the outside wooden carton. Make sure the path leading to the final position of the Unit is free of any obstacles.

All packing material must be disposed/recycled according to the country laws and regulations.

Move the Unit to its final position and place it on a firm even ground. Make sure a power supply plug exist closed to this position, so that the Unit can be plugged in without using any additional power supply extensions. It is delivered with a 5m free cable.

2.3 SETUP Procedure / Calibration

This procedure is normally carried out by the makers personal, which is providing the princible training prior first operation, in case this is not possible please setup according to following procedure:

2.3.1 Remove both Front and rear cover of the Unit

2.3.2 Make sure the Unit is sitting firm on the ground Install the delivered M16 Unit feet (4X) one at each corner of the Unit frame, by lifting the Unit on each side individually. After installation lift and level the Unit by approx. 3 cm, using the nut on the Unit feet. Turning the nut anti clock wise will rise the Unit, turning it clock wise it will lower the Unit. Make sure the Unit is leveled in both directions within 1 mm.

2.3.3 Adjust clutch to provide the adequate safety.

2.3.4 Setup Antroid

2.3.5 Setup Balance board

2.4 Electrical connection of the unit

Make sure the Unit will be connected to a 230V-1PH-50 Hz power supply grit. The Unit is delivered having a power supply G-TYPE – 3 PIN plug according to the British standard BS1363. If needed replace the plug according to the local needs. The temporary use of an adapter is permitted but the change to a local plug is highly recommended.

! ONLY A TRAINED ELECTRICIAN CAN CARRY OUT ANY ELECTRICAL WORK.

2.5 Initial Training by the manufacturer

During Setup of the Unit for the first time, a 3-day training is provided by the manufacturer(or his legal representative) to ensure the safe and correct operation of the Unit.

KinisiForo
SYSTEM OF ELLIPTICAL TRAINING

Certificate of Attendance

Presented by KINISIFORO LTD & NICOMED REHABILITATION CENTER
Department of Research and Development

To certify that

SAMPLE

Has attended the program entitled

K – SET METHOD

Using the medical Device

KINISIFORO

RATIONALE, PROTOCOLS & CLINICAL TECHNIQUES

Conducted in REEM HOSPITAL, ABU DHABI

Date: From 6/4/2021 to 8/4/2021 (15 Hours)

Certified by

Hadjionisiforou Onisiforos

Managing Director

Signature

KINISIFORO LTD NicoMed REHABILITATION CENTER

Issued on: 8/4/2021

NICOMED REHABILITATION CENTER

ISO

WIPO WORLD INTELLECTUAL PROPERTY ORGANIZATION

! The usage of the Unit, before participating at the initial training by the manufacturer(or his legal representative) is strictly forbidden, and can lead to personal injuries or damages.

! Only persons, certified by the manufacturer after a 3 Day training are allowed to operate the Unit.

! This instruction manual does not replace at any time the obligatory principle training by the manufacturer*(or his legal representative)*

! Please read this instruction manual carefully. Follow all instructions in this manual and take notice of the warning signs and pictograms on the unit. Gait exercising presents a risk in itself and not complying with these instructions could cause accidents.

! The KINISIFORO® Hospital Unit may only be used for the purpose for which it has been designed – the rehabilitation of patients in need of gait training.

3. Safety Instructions

3.1 Who is allowed to operate the KINISIFORO® Hospital Unit

- ! Only operators attended the initial training by the manufacturer
- ! Only operators who are both physically and mentally sound
- ! Only operators who are not under the influence of alcohol, drugs or heavy medication
- ! Only operators who are able to maintain their balance without great effort
- ! Only operators who are suitable dressed, wearing closed non slip shoes

3.2 Who is allowed to train with the KINISIFORO® Hospital Unit

- ! Patients with stroke, cerebral palsy and brain/spinal injuries
- ! Patients with moving disorders
- ! Children are only allowed to use it when supervised by a trained adult individual
- ! By any doubt who can use it, please contact the manufacturer or legal representative for clarification
- ! Never overload the device. The maximum load capacity is 150kg.
- ! It can be used by individuals of minimum 90 cm up to 200 cm Height
- ! Patients who are not able to hold bars will need to wear the special glove supplied with the unit.

3.3 Where can I use the KINISIFORO® Hospital Unit

- ! Never operate the KINISIFORO® Hospital Unit in rooms with no ventilation, in high room temperatures, insufficient space, or in rooms with uneven surfaces. Rugs and carpets can also present a risk.
- ! It is not possible for the KINISIFORO® Hospital Unit to be used in rooms with space less than 2m (W) x 4 (L) x 3 (H)
- ! Make sure that the room the KINISIFORO® Hospital Unit is kept is designed to bear the combined load of device + weight of persons.
- ! When transporting people from wheelchairs, should be done by the method demonstrated and executed by trained personnel. Always ask from a second person to assist you when you cannot manage the patient's weight.
- ! For Lifting people from the wheelchairs use only the supplied safety harness (belt) or other personnel retention system supplied only by the authorized dealer.
- ! The following rules apply regarding ambient conditions for storing and operating the KINISIFORO® Hospital Unit: avoid exposing the unit to high temperatures such as direct sunlight or high air humidity as a consequence of using in a sauna area or in the rain, or

similar, due to the risk of damaging the unit as a result of overheating. Likewise, avoid exposing the unit to very low temperatures below 5°C.

3.4 When can I use the KINISIFORO® Hospital Unit

- ! Do not use the KINISIFORO® Hospital Unit with a patient until you have practiced operating it perfectly without a payload. Next, try operating it again with somebody as lightweight as possible who is not disabled. The test passenger should hold onto a handrail or a second person during the climb.
- ! Do not use the KINISIFORO® Hospital Unit if unusual noises and/or vibrations occur while the KINISIFORO® Hospital Unit is in operation. Withdraw the unit from use and have it inspected by an authorized specialist.
- ! Do not use in the vicinity of sensitive medical equipment
- ! The KINISIFORO® Hospital Unit is operated by electricity. The power supply cable should be connected to a well maintained wall plague preferably directly without the use of any cable extensions, placed away from busy corridors or pathways.
- ! Keep always the area around the Unit clean and tidy. No one except the operator and the patient should be closed to the Unit when in operation.
- ! Be always aware of the Unit moving parts, especially at the front of the machine. Never reach into the KINISIFORO® Hospital Unit Moving parts (risk of trapping/squashing)!
- ! Never wear loose cloths or hanging chains, this are potential means to engage with the moving parts of the machine.
- ! Never remove the plastic covers of the Unit. If in any case it is necessary to do so, then always disconnect the Unit from the power supply and make sure it is not possible to connect it again accidentally.
- ! When covers are removed from the unit, and it is necessary to put the machine in operation, make sure the space around the machine is inaccessible to anyone except of the maintenance personal. Be always aware that there are a lot of moving parts in the Unit, keep your hands and feet away in a safe distance.
- ! Always check the Lifting Harness condition before using it. Make sure it's buckles are in perfect working condition.
- ! Never leave a patient on the unit unattended, weather the unit is IN or NOT in operation.
- ! Always make sure the patient feels comfortable training in the unit. Read well and understand the way of adjusting the upper and lower extremities receptors on the unit and adjust them individually to every patient's physical characteristics. When needed re-adjust.
- ! Always clean and disinfect the extremities receptors, especially the upper ones after every session.

3.5 Relocation of the machine

- ! To remove the unit from one room to another use the already installed wheels, by lowering the machine down to the floor at the machine feet, till the wheels touch the ground. Relocate the machine and lift it back and level it.

! To transport the device itself, we recommend to remove the rear cover of the KINISIFORO® Hospital Unit and lift using lifting belts from the frame.

4. Start up

4.1 Technical Specifications

The unit consist of a mechanical chain drive system using a 3-phase Gear motor, controlled by an inverter to adjust speed. Strokes for upper and lower extremities moving system are adjusted using a hydraulic pump and various hydraulic cylinders. The pump serves also the lifting and moving cylinders for the patient. Following drives are installed:

Qty	Description	Notes
1	Gearmotor 3PH 230/400V-50Hz-0.75KW-3.2/1.8 A-1420 RPM	Gear box Ratio 1:25
1	Pressure Pump with 1PH 240V-50Hz-0,5KW-4.0A-1400 RPM	Pressure 50 bar

The footprint needed for the machine is 2x4 m(WxL), the needed Height must not be less than 3m

The KINISIFORO® Hospital Unit is able to train patients with a maximum weight of 150 Kg and a height between 0.9-2,0 m.

The KINISIFORO® Hospital Unit has an own weight of 700 Kg.

4.2 Explanation of Operation and main components

The KINISIFORO® Hospital Unit consist of 3 main subassemblies, and producing a **stable and symmetrical elliptical motion without any acceleration as follows:**

4.2.1 Main Drive Subassembly

The main drive Subassembly consist of a Gear motor and a drive chain which which produces a rotational motion to drive the elliptical motion subassembly. In addition, the main drive controls over a mechanical clutch the resistance level, this means the effort needed from patient. Patients can use the unit either in an active or in a passive modus by changing /adjusting the resistance level. The adjustment of the clutch is described under 2.3.3.

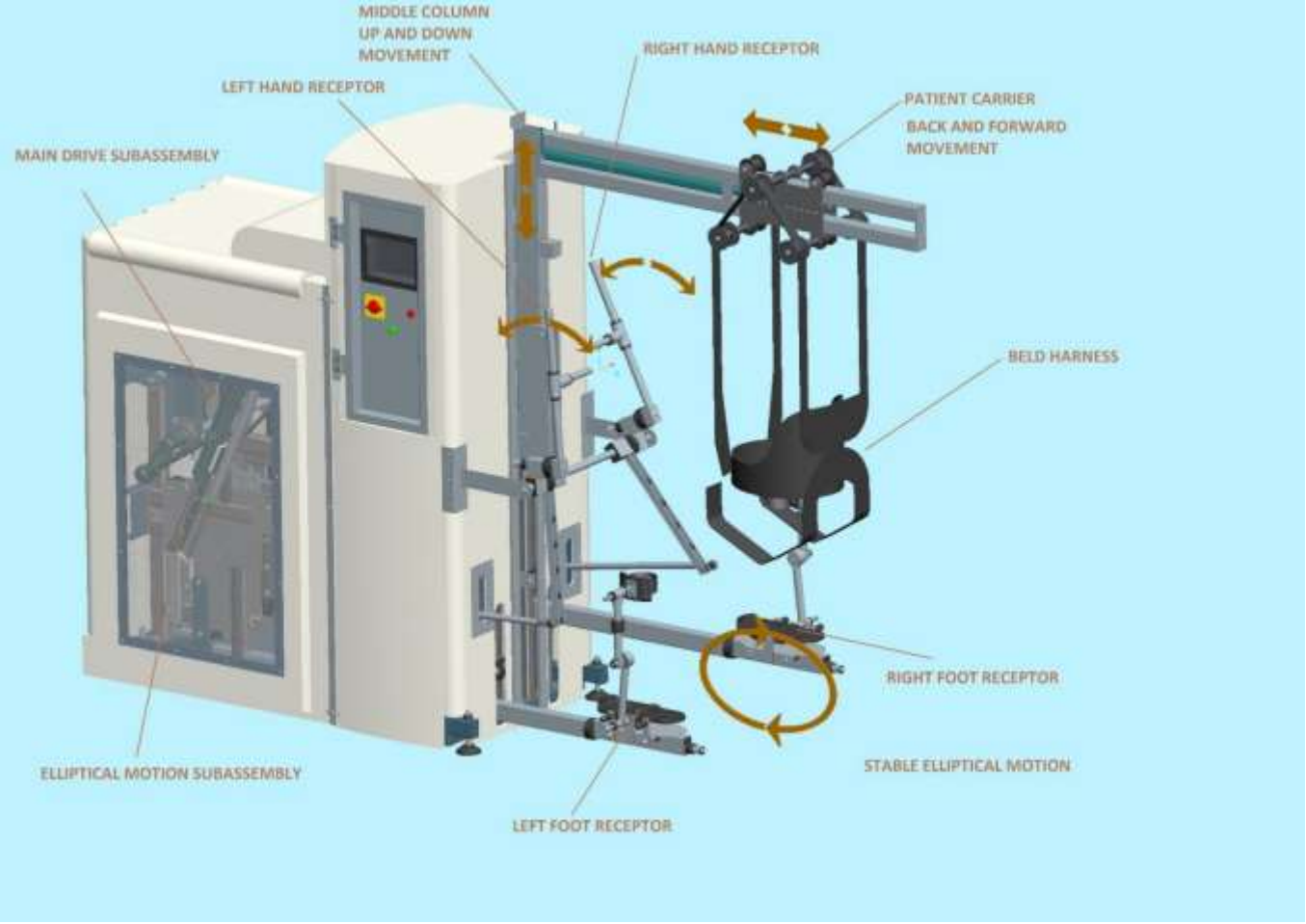
4.2.2 Elliptical Motion Subassembly

The elliptical motion subassembly translates the rotational motion produced be the main drive into an elliptical one. Hereby, it is possible to modify the length of the ellipse axis, both short and long, to produce different stroke lengths for the patient. Hydraulic cylinders, which are controlled from the control panel of the unit, modify their length to produce the different stroke lengths. This feature is extremely important because the unit is adjustable individually for each patient, taking into account his abilities and disabilities.

The elliptical motion produced, drives the lower and upper extremities receptors, on which the patient is allocated (in addition to the lifting subassembly)

4.2.3 Lifting and moving Subassembly

The Lift and Support subassembly consist of a wagon and a lifting arm, running in a column up and down to lift the patient from his wheel chair(if any) on to the lower and upper extremities (feet & Hands) receptors, and support him during training. To do this patient must carry the specific Beld harness. The system is hydraulically driven, and it is controlled from the control panel of the unit. Another hydraulic cylinder drives the patient carrier back and forward to reach the receptors, also controllable form the control panel of the unit.



For safety reasons(a lot of moving parts), both main drive subassembly and Elliptical Motion assembly are covered with composite panels, and under normal operation circumstances have to remain covered. Only trained personal or after specific instruction from the manufacturer is allowed to remove these covers. All settings of the unit can be adjusted from the control panel.

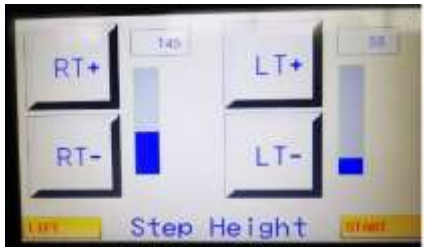
4.3 Operating the KINISIFORO® Hospital Unit

It is advisable for every operator, even after the training from the manufacturer, to run the machine without a patient several times, make all kind of adjustments and watch the changes made in:

- speed,
- Stroke length and height,
- operation time,
- lifting and moving the patient carrier,
- adjusting the belt harness
- adjusting the feet and hand receptors
- placing a patient onto the unit(using first a healthy person)

4.3.1 HMI (Human Machine Intreface)

To be able to operate the unit, you need first to learn the usage of the HMI, and be able to make adjustments and change settings.

	When Unit is set to ON, first page opens, and lets to Set up the Lift position up and down or run the patient carrier on the arm forward or backwards.
	Then go to the second page and set up step length (stroke length) for right and left lower extremity separately
	Then go to the third page and set up step height separately for right and left lower extremity

	On forth page You can set up the speed and duration and start exercise. Here you can also select to exercise forward or reverse move.

4.3.2 Placing a patient on to the unit.

As previously mentioned, it is advisable to simulate the procedure firstly with a healthy person.

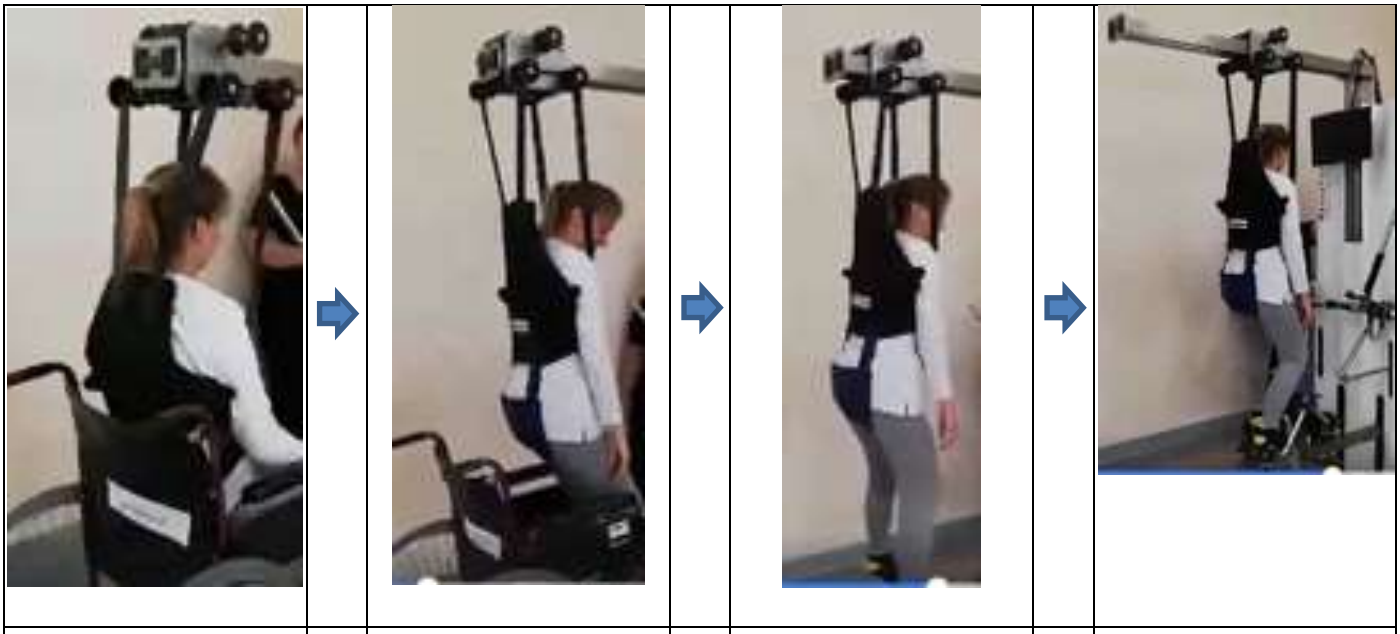
a) In case the patient is able to walk and support himself, then attach the belt harness to the patient and drive the patient carrier to the end of the arm. Lower the arm down and hook the belt harness on to the carrier. On the picture you can see the harness hanging on all 3 rollers on each side. It is possible to hook the harness also using only the 2 lower rollers on each side. This is normally done when higher patients are using the unit. After hooking the patient, lift the arm up and drive it back towards the extremities receptors. Place the patient on to the lower left and right feet receptors. Follow up instructions further down to adjust both lower and upper receptors taking into consideration the individual size, physical characteristics or abnormality of the limbs.

In case needed patients can be attacthed to the unit without using the receptors, facing away from the unit, doing other type of excersice. The Lift arm will help supporting them selves.

It is also possible to use the unit in different ways, sitting on a wheel chair, two patients at once, using the special glove (for person with disability to catch).

b) When the patient is seating on a wheel chair do as follows:

- ! Drive the patient carrier to the end of the supporting arm and put the wheel chair under this position. Drive the patient carrier with harness over the patient. Attach the harness to the patient. The correct way of attaching the harness will is demonstrated und exercised during the initial training.
- ! Lift the patient up and remove the wheel chair.
- ! When patient is free hanging on the support arm move the carrier towards the extremities receptors, to the exercise position.
- ! Place the patient on to the feet receptors and proceed as described next to adjust receptors taking into consideration the individual size, physical characteristics or abnormality of the limbs.



1		2		3		4

With KINISIFORO® Hospital Unit comes a set of harness (size No. 1 for patients with weight up to 50 kg, size No.2 for patients with weight from 50 kg up to 75 kg, size No. 3 for patients with weight from 75 kg up to 150 kg).

Always make sure patient feels comfortable when placed on the receptors. Make sure there are no loose cloths or personal belongings of the patient, which could interfere with the moving extremities receptors of the unit.

4.3.3 Adjusting the extremities receptors

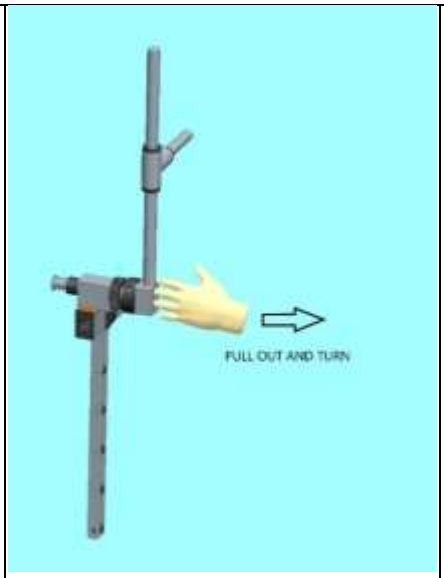
The KINISIFORO® Hospital Unit has 4 specific receptors, to receive the patient extremities, 2 for the feet and 2 for the hand (always LEFT and RIGHT). These can be adjusted in various positions taking into consideration the individual size or abnormality of the limbs (such as for example legs with spasticity, varum or valgum knees, vara or valca hips, drop foot, legs of uneven length, arms with spasticity or rigidity of the fingers, wrist, elbow, shoulder, as well as arms with ataxia, etc.,)

Adjusting the upper extremities receptors

The system of interfacing upper extremities consists of two identical receptors, one for each limb, left and right. The distance between them is adjustable over some cm. These receptors are pivoted on axis and linked through a retractable link to the carrier respectively thus performing a forward reverse movement about pivot during operation of the unit. Depending on the body shape and possible special disorders of each individual, the following settings can be obtained in order to have the correct joint of upper extremities to the unit.

Adjust Arm/Handle angle and Position

1 → 2



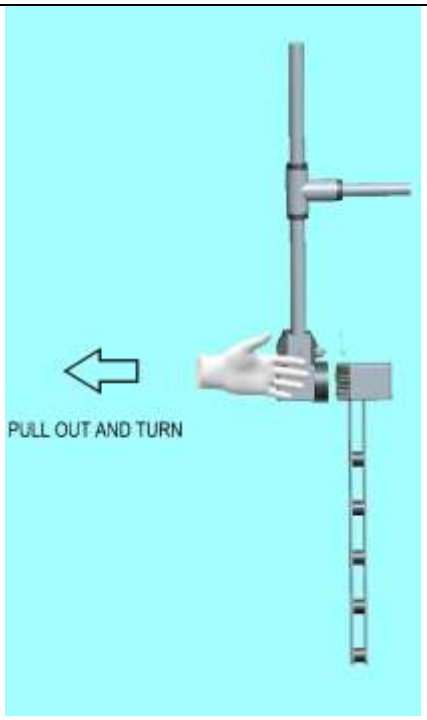
2 → 3

Adjust angle a: Pull out the arm and turn left or right to change angle of the arm. The arm is spring loaded, when you find the required position release the arm back to rest in a different position. Like this, you can change the arm angle according to the patient's requirement.

Adjust height and angle of handle: After resting the arm, unscrew the handle bar and pull up or down the handle-tee to the desired position. Screw tight again the handle bar. Like this, you can adjust the handle bar height according to the patient's height if necessary.

Adjust arm inclination

1



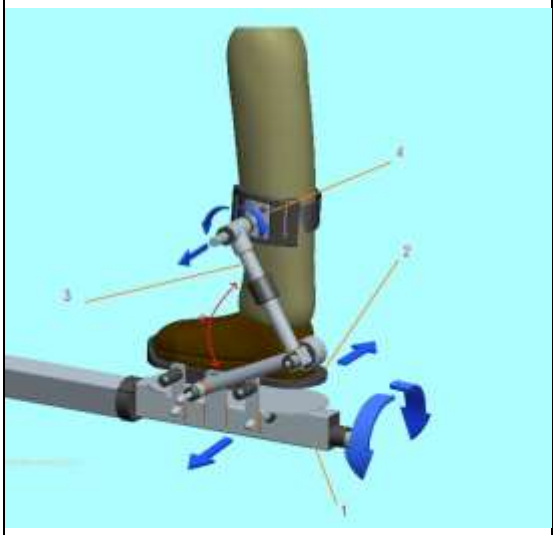
2

3

Adjust angle b: Pull out the arm and turn left or right to change inclination of the arm. The arm is spring loaded, when you find the required position release the arm back to rest in a different position. Like this, you can change the arm inclination according to the patient's requirement.

Special case:
Patients having difficulties to catch/hold the handle can use the special glove delivered with the KINISIFORO® Hospital Unit. The way of using the glove is demonstrated during the initial training from the manufacturer.

Adjusting the lower extremities receptors

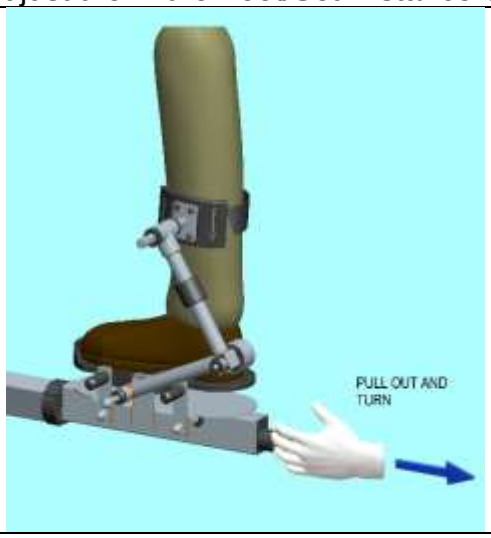


The system of interfacing lower extremities consists of two identical receptors one for each lower limb, left and right. These receptors are joint with two long bars to the elliptical motion creating assembly, thus performing stable and symmetrical elliptical motion.

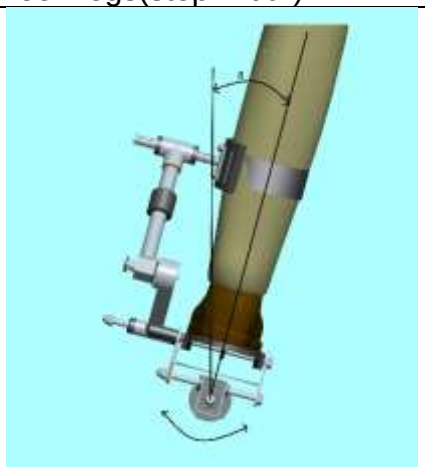
Depending on the body shape and possible special disorders of the individual the following settings can be obtained in order to have the correct interfacing of the lower extremities to the receptor:

1. Adjust if tilt for foot (inversion or eversion)
2. Set distance between legs (step width)
3. Set pivot point for the tibia support receptor
4. Set distance between pads
5. Adjust the point where tibia support receptor is applied
6. Set the host of the tread
7. Set position of the heel

Adjust the Tilt for foot/Set Distance between legs(step width)



1



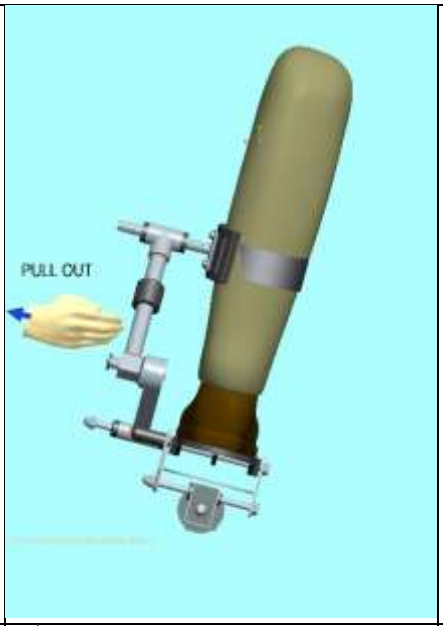
2

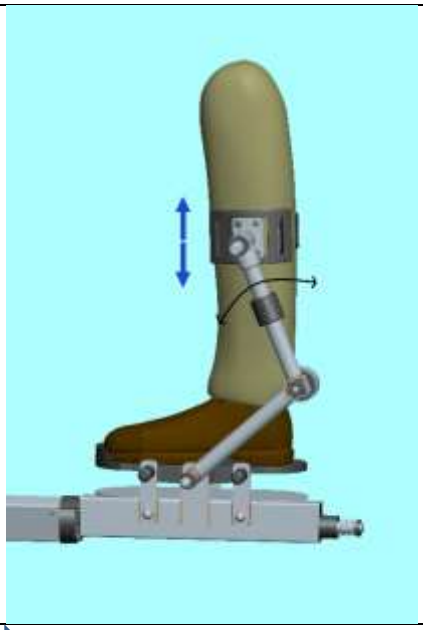
3

Adjust angle a: Pull out the foot carrier and turn left or right to change angle of the carrier in respect to the horizontal. The carrier is spring loaded, when you find the required position release the arm back to rest in a different position. Like this, you can change the arm angle according to the patient's requirement. (inversion or eversion)

Adjust step width: Push the complete carrier towards inside to reduce step width, push carrier towards outside to increase step width.

Adjust angle for Tibia receptor

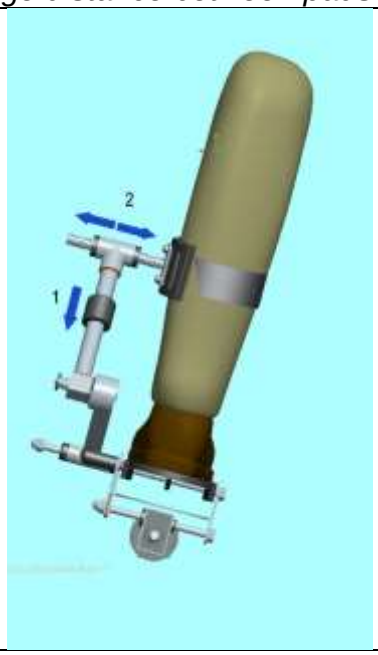




1 → 2 → 3

Adjust angle a: To adjust angle a and change the position of tibia receptor in respect to the leg of the patient, pull out the receptor arm and turn left to lower or right to rise the tibia receptor. The tibia receptor arm is spring loaded, when you find the required position release the arm back to rest in a different position. Like this, you can change the arm angle according to the patient's requirement.

Change distance between pads



To adjust the distance between the pads, pull down the black knob on the tibia receptor arm and push towards inside to decrease distance or pull outside to increase distance between pads. The knob is spring loaded when you find the desired position then release knob to snap in again.

Pubber straps and securing feet on carrier

4.4 Active – Passive System

- Frame;
- Active – passive drive system;
- Mechanism producing elliptical motion.

Technical description for active – passive drive system:

The electric motor drives the flywheel which is supported by a system of bearings through the belt. The mating plate and sprocket are pressed on the flywheel by the compressed spring. The magnitude of this pressing force is proportional to the position of the nut which defines the extent to which the spring is compressed.

Thus the power that can be transferred from motor to the sprocket is controlled by the position of the nut. *This arrangement permits the power transfer from motor to sprocket acting as one passive system or from sprocket to motor acting as an active drive*

4.5 Production of elliptical motion

Technical description for mechanism producing elliptical motion consists of:

- Carrier traveling in Y direction;
- Carrier traveling in X direction;
- Adjustable axis driving carrier in Y direction;
- Adjustable axis driving carrier in X direction;
- Referring to the adjustable axis they are synchronized through a system of sprockets and chains to the driving system by driving carrier through the axis in Y direction at the same time as the axis drives the carrier in X direction.

Carrier (X direction) is sliding on the carrier thus experiences the effect of both displacements in X and Y direction simultaneously. This combined effect that carrier experiences is an elliptical motion. The displacement in X or Y direction can be adjusted through the adjustable axes and without affecting one another assuring stable and symmetric elliptical cycle.

This subsystem consists of two identical mechanisms producing an elliptical motion to the same driving system.

This system produces a **stable and symmetrical motion without any acceleration** and vibration during all the stages of the elliptical cycle. In addition, this system is fully adjustable to

adapt to the user's characteristics. The speed of motion and resistance can be controlled by patient while exercising.

5.0 KINISIFORO® HOSPITAL UNIT Android Pad

- Beside the integrated computer, KINISIFORO® Hospital Unit is also equipped with a standart laptop with installed Windows software.
- Laptop can be easily integrated by IT specialists to Your local network, thus You can open patient folder and complete client data to the form is usually used in Your center/department, or use a patients' progress tracking form, advised by KINISIFORO® Hospital Unit producers.
- KINISIFORO® Hospital Unit is equipped with an additional screen, located in front of the exercising person and connected to the laptop. The front screen can be used as activated stopwatch, for viewing 3D virtual reality movies or any other video, audio or other materials, preferable to patient for motivation.

6.0 Monitoring of heart rate and Spirometry

For monitoring of heart rate and spirometry is used a CMS50EW Pulse Oximeter.

The CMS50EW Pulse Oximeter adopts Photoelectric Oxyhemoglobin Inspection Technology in accordance with Capacity Pulse Scanning & Recording Technology, which can be used to measure human oxygen saturation and pulse rate through finger. The device is suitable for being used in family, hospital, oxygen bar, community healthcare and physical care in sports, etc. (It can be used before or after exercise, *but not recommended to use during exercising!)*

View of the front panel

Measurement

- Activate the pulse oximeter on the desktop of the laptop
- Squeeze the clamp, put a finger into the rubber hole, then release it (secure that finger is not sweat or could).
- Do not shake the finger and keep the patient in a stable state during the process
- The data can be read directly from the screen in the measuring interface.

❗ Fingernails and the luminescent tube should be in the same side

❗ If the alarm function is on, the device will provide medium-priority alarm signal when probe or

finger is out. Intermittent alarm will occur and the user interface presents “FINGER OUT”. Medium priority indicating that prompt operator response is required.

6.1 PC software operation

By PC software, the user could upload Real-time measure data and storage data. Here the user should connect the device to the computer by the USB data line or bluetooth adapter. It is recommended to use the ORICO 4.0 bluetooth adapter.

6.2 Attention for operation

- Please check the device before using and confirm that it can work normally.
- The ray between luminescent tube and photoelectric receiving tube must get across subject’s arteriole
- The oximeter should not be used at a location or limb tied with arterial canal or blood pressure cuff or receiving intravenous injection.
- Ensure nothing, such as plaster, can impede the light passage, or else it may result in inaccurate measure of SpO2 and pulse rate.
- Intense activity of a subject or extreme electrosurgical interference may also affect the accuracy.
- Testee can not use enamel or other makeup

6.3 Cleaning and disinfecting

Using medical alcohol to wipe the device for disinfecting, nature dry or clean it with clean soft cloth.

6.4 Replacement of pulse oximeter's battery

1. Remove the battery cover on the back of the oximeter.
2. Replace two 1.5V (AA) batteries.
3. Make sure the batteries are installed correctly and the polarities are correct.
4. If the display is not clear or only partial segments appeared, remove the batteries and wait for 15 seconds before re-install them.
5. The battery life is approx. 6 months under normal usage.
6. When the batteries are removed, all functional values will reset to zero

6.5 Troubleshooting

Trouble	Possible Reason	Solution
The SpO_2 and Pulse Rate can not be displayed normally	1. The finger is not properly positioned. 2. The patient's SpO_2 is too low to be detected.	1. Lay the finger properly and try again. 2. Try again; Go to a hospital for a diagnosis if you are sure the device works all right.
The SpO_2 and Pulse Rate are not displayed stably	1. The finger is not laid inside deep enough. 2. The finger is shaking or the patient is moving.	1. Lay the finger properly and try again. 2. Let the patient keep calm
The device can not be turned on	1. The batteries are drained or almost drained. 2. The device's malfunction	1.Please recharge the battery 2. Please contact the local service center.
The display is off suddenly	1. This device is set to be automatically power off within 5 seconds when it cannot detect any signal (without external probe) 2. The battery is drained away or almost drained away .	1.Normal 2.Please recharge the battery
The battery can not be full charged even after 10 hours charging time.	The battery is broken	Please contact the local service center.

7.0 Operating the balance board

The Balance training application is installed on KINISIFORO® Android pad and comes with MFT Challenge Disc – for Windows, Mac, Android and Ios.

Following the instructions, appearing on the screen, you can either proceed to test, training or exercising through playing different games.

(all pictures not readable, need new ones)

7.1 Coordination test

A coordination test shows personal performance level, allowing to discover how to optimise balance requirements. During a single-leg coordination test, the laterality determines one leg's capacity and compares it to the other leg's capacity. A laterality of less than 10% is the basis for a healthy load on the spine and joints.

7.2 Training programs

Five training and therapy programmes for dual-leg and single-leg training provide motivation for high- quality, effective training.The digital coach helps monitor training progress and optimise training quality. The result is increased performance, healthy joints and a healthy back.

7.3 Games

There are 6 training games which are also divided into dual-leg and single-leg exercises and provide fun training for young and old alike.

Depending on the game, the axes of rotation front-back, left-right or combined are trained in a targeted manner. The following games are available: Ping-Pong, Cross, Butterfly, Ski Racing, Football, Auto Racing

7.4 Test evaluations

MFT CHALLENGE DISC
BODYTEAMWORK

Einbeiniger Test: Rechtes und linkes Bein abwechselnd

Testperson

Name : Ewald
Geburtsjahr : 1962
Geschlecht : männlich

Datum und Zeit

04.05.2017 11:05

Auswertung	Ergebnis	Normbereich	Grafik
Koordination/Balance *			
Balance Linkes Bein	2.75	2.50 - 3.00	[*]
Balance Rechtes Bein	2.63	2.50 - 3.00	[*]
Seitigkeit **			
Seitigkeit links/rechts	24%	5% - 20%	[ ]*

* Der Messwert zeigt, wie das rechte und das linke Bein jeweils die Gleichgewichtsanforderungen durch das Zusammenspiel der Muskulatur koordinieren und ausgleichen kann. Eine ausgezeichnete bis gute Koordination/Balance gibt Dir im Alltag beim Meistern unvorhergesehener Situationen Sicherheit und stellt eine wertvolle Unfallprophylaxe dar. Da Du weniger Energie für Deine Bewegungen benötigst, wird Deine körperliche Leistungsfähigkeit im Sport und Alltag positiv beeinflusst.

** Der Messwert vergleicht die Leistungsfähigkeit des linken mit jenen des rechten Beins. Eine Seitigkeit unter 10% gilt als Voraussetzung und Basis für eine gesunde Beanspruchung der Wirbelsäule und aller Gelenke und verhindert so Überbelastungen und einseitige Abnützungen des passiven Bewegungsapparates.

The app's test results and standard values evaluate patients coordination/balance and laterality,pointing out deficits in the same.

The results and values can be saved in a score list, emailed as a PDF file and/or printed.

8. Maintenance and storage of KINISIFORO® HOSPITAL UNIT

- The maintenance/repair of all parts, which are replaceable without removing the plastic covers of the unit, are carried out by the customer. Please refer to the spare parts list at the ANNEX A of the Manual.
- Store/Place the Unit IN-DOOR. Excess moisture and water would cause rust on the frame.
- The Unit shall be placed at least 24 inches away from a wall or/and any other object such as furniture to provide safe access to and passage around the Unit.
- Inspect and tighten periodically if needed any parts. Replace any worn parts immediately.
- Clean the KINISIFORO® Hospital Unit using a damp cloth and mild non-abrasive detergent. Do not use solvents.
- Lubricate the chain every six months with Chain Grease
- To avoid possible injury, the help of two or more people is needed when moving the Unit around.9.0
- KINISIFORO® Hospital Unit is a durable product. At the end of it’s useful life, the device’s components should be disposed properly. The unit does not contain any hazardous materials and is fully recycling- compatible.

9.0 Certification

KINISIFORO® is a medical device type class 1 specifically designed for physical rehabilitation for patients with wide range of motor impairments for both children and adults.

This is a proven and fully worldwide patented with a publication number wo/2012/137038 from world intellectual property office (WIPO). And it is register as a medical device class 1 with the file number 5.23.005.01.1.3/CY/M/016 for use in movement therapy and rehabilitation of a wide variety of neurological and musculoskeletal conditions.

KINISIFORO® Hospital Unit is manufactured by KINISIFORO® LTD in Limassol Cyprus under EU regulations and it is CE certified.

KinisiForo CE
SYSTEM OF ELLIPTICAL TRAINING

EC Declaration of Conformity

Manufacturer: KINISIFORO Ltd.
Lamprou Charalampous 8, Akrounta
Limassol 4552 - CYPRUS
Tel: +357 99 353 959
Web: www.kinisiforo.com
Email: onisiforos@kinisiforoltd.com

Product: Kinisiforo Hospital Unit

Classification: CLASS I. (Active Medical Device as per Annex IX, section III, Classification Rule 12.)

Self Declaration: We hereby declare that the above mentioned product comply with the provisions of council directive 93/42/EEC for Medical Devices. All relevant documentation is kept and maintained by the manufacturer.

Standards Applied: All applicable Harmonized Standards.

Place of issue: Limassol - CYPRUS

Date of Issue: 20th December 2017

Signature

KINISIFORO LTD NicoMed REHABILITATION CENTER

Onisiforos Hadjionisiforou C.E.O.

10. Warranty and Liability

Warranty

As KINISIFORO® LTD, we stand behind our product 100%. Everything we sell is packed by a warranty and after sale service, and we put that in writing!

Modification of any kind are not permitted and make void all liability and warranty claims to the manufacturer. Modifications to the KINISIFORO® Hospital Unit may only be made by the manufacturer.

KINISIFORO® Hospital Unit is under 3-year warranty on the frame, moving parts, electronics and motor. Warranty period starts on the day the product is handed over to the consumer.

The following are excluded from a warranty:

- parts subject to natural wear and tear
- damage that occurs from using the device for a purpose it was not intended
- unauthorized modifications to the device or accessories
- faults, occuring due to incorrect operation and/or failure to comply with the instruction manual, accidents, negligent or violent damage, damage due to fire and water, force majeure and other causes outside our control.

Liability

KINISIFORO® Ltd. is not liable as manufacturer for any damage if:

- KINISIFORO® Hospital Unit is used for a purpose for which it is not intended
- KINISIFORO® Hospital Unit is not serviced regularly (at least once in 6 months) by KINISIFORO® Ltd. or one of our authorized specialists.
- the instructions in this manual are not complied with
- non KINISIFORO® Ltd. components are fitted or linked to KINISIFORO® Hospital Unit
- original components are removed

11. KINISIFORO® LTD Conduct Details

Quality of Life
is everyone's right

Address: Limassol: 25 – 27 , Koronis Street, 3081, Cyprus

Phone Number: +357 25954510

Mobile Number: +357 99 353 959

Fax: +357 25735 789

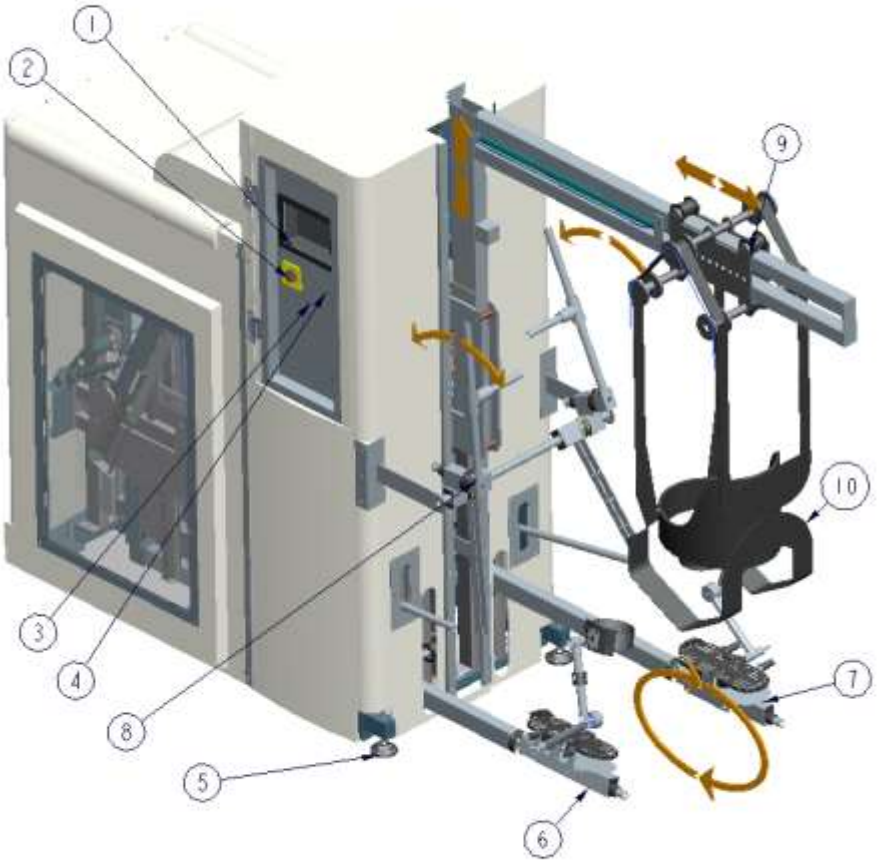
Email: info@KINISIFORO®ltd.com / Onisiforos@KINISIFORO®ltd.com

Website: www.KINISIFORO®.com

12. NOTES

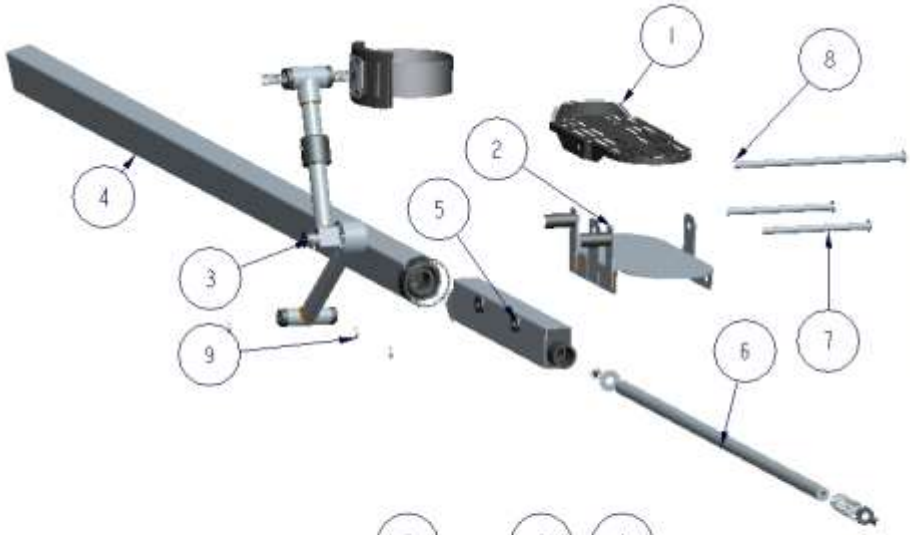
ANNEX

A1. Spare Parts lists-General Layout



1	HMI
2	ON/OFF SWITCH
3	LED RUN
4	LED TRIP
5	FEET M16X110
6	LEFT LOWER RECEPTOR
7	RIGHT LOWER RECEPTOR
8	UPPER RECEPTORS L/R
9	PARIENT CARRIER
10	HARNESS

A2. Spare parts List – Left Lower Receptor



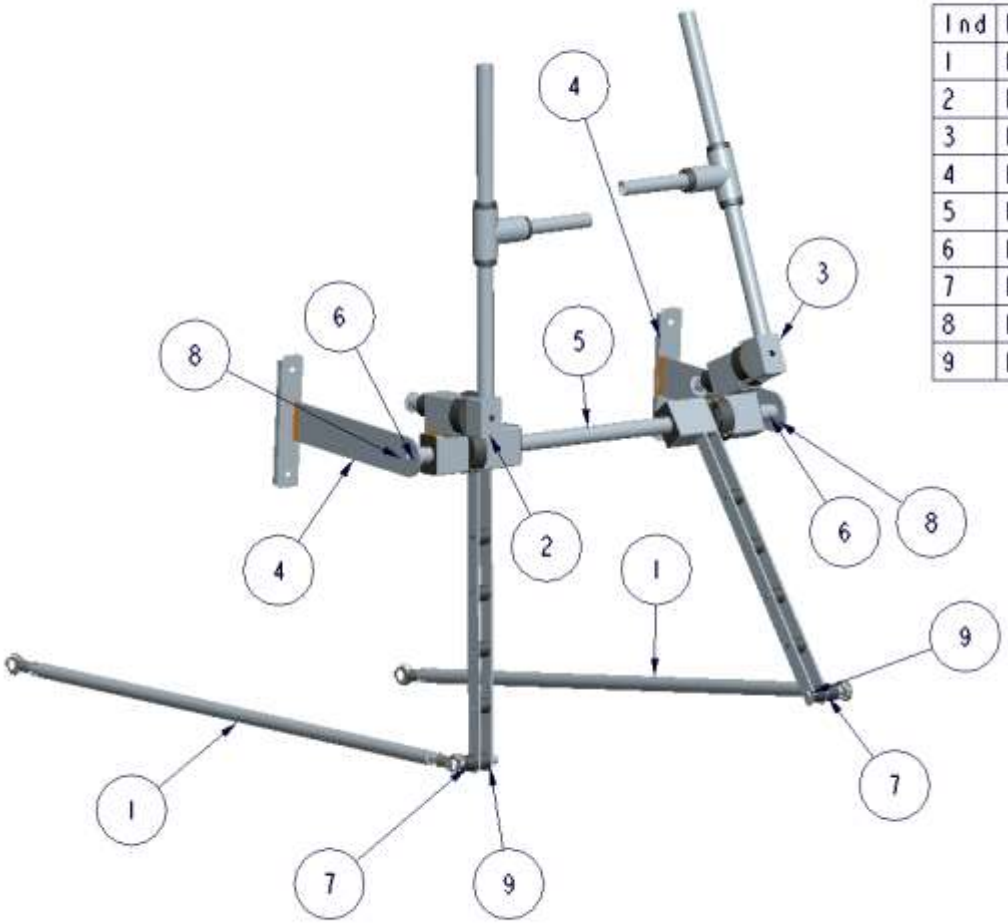
Ind	Name	Qty
1	F-STAB_FUSS_AUFNAHME	1
2	F-STAB_FUSSCARRIER	1
3	F-STAB_LEGAR_ASS_COMPL	1
4	F-STAB_PROFILE1550	1
5	F-STAB_PROFILE360	1
6	F-STAB_SHAFTD20	1
7	HEX_BOLT_M10X160	2
8	HEX_BOLT_M10X255	1
9	HUTNUTM10	3

Ind	Name	Qty
1	F-STAB_HOLDER	1
2	F-STAB_LEGAR_BOT_PIPE_F_R1	1
3	F-STAB_LEGAR_BOT_PIPE_M_R1	1
4	F-STAB_LEGAR_SPRING_STOPER	1
5	F-STAB_SPRINGD18_5XD15_5	1
6	INBUSSM6X20	2
7	RIVET3MM	1

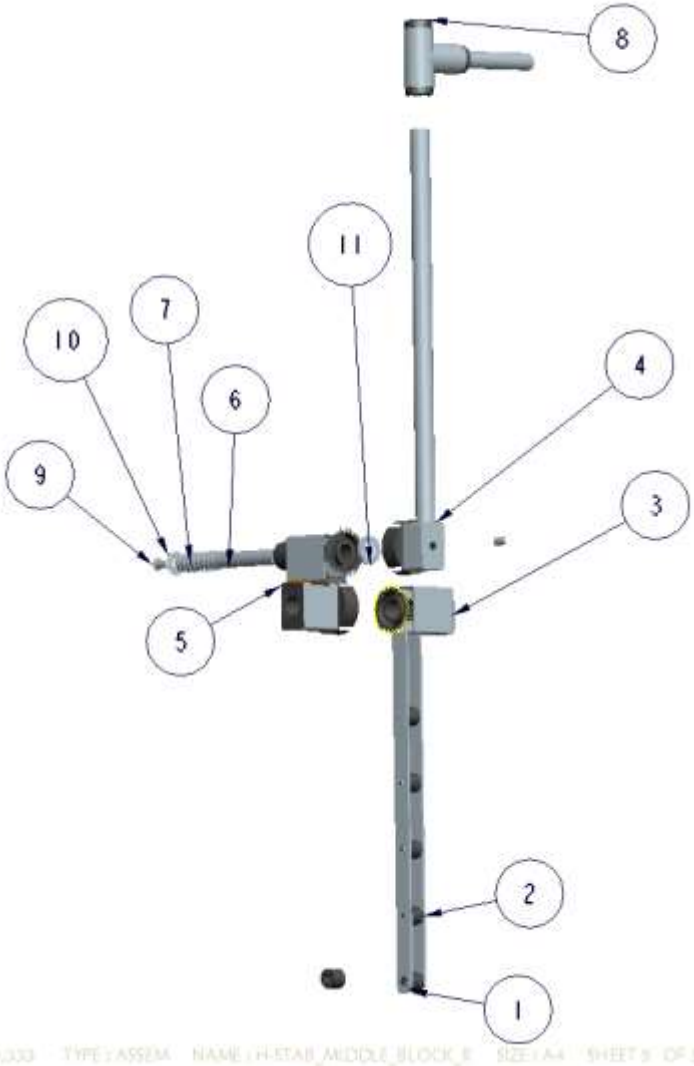
A3. Spare parts List – Right Lower Receptor

The spare parts for the right lower receptor are the same like the left lower receptor, only mirrored assembled.

A4. Spare parts List – Upper Receptors L/R



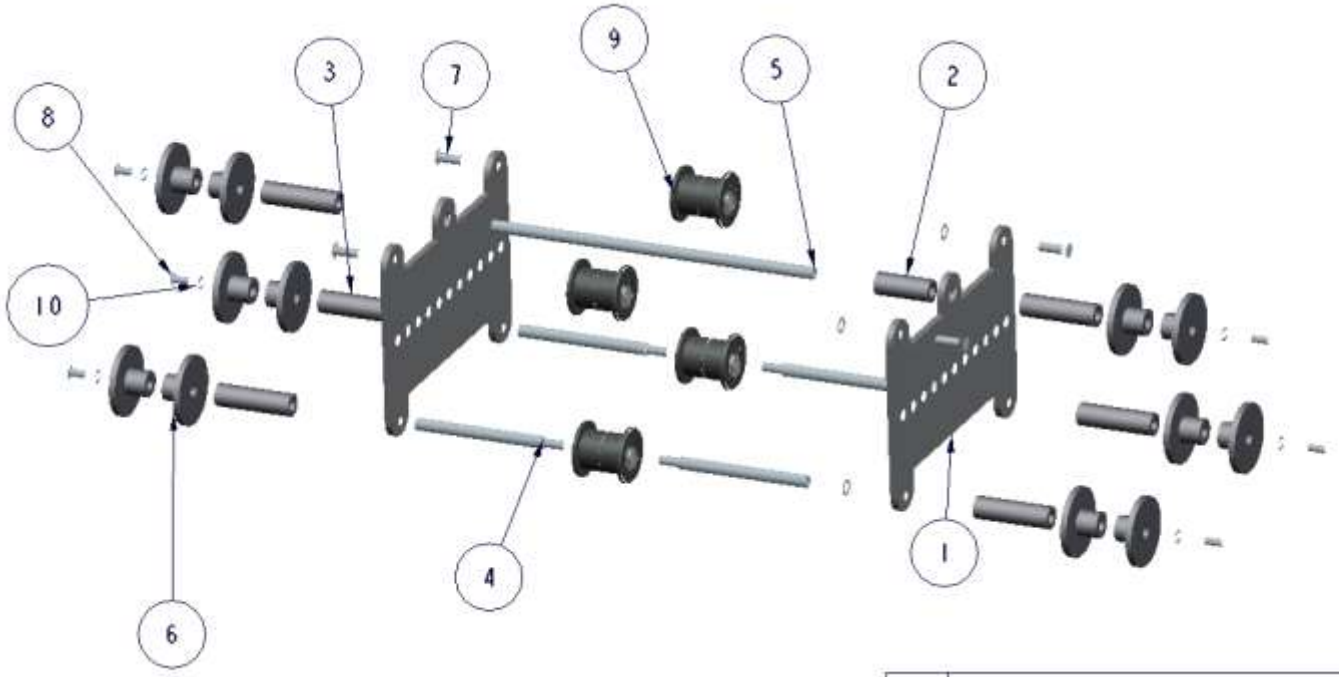
Ind	Name	Qty
1	H-STAB_CONNECTOR_PIPE	2
2	H-STAB_PROFILE_BLOCK_LEFT	1
3	H-STAB_PROFILE_BLOCK_RIGHT	1
4	H-STAB_SUPPORT_LASH	2
5	H-STAB_SUPPORTPIPE_D25X2	1
6	HEX_BOLT_M12X30	2
7	HEX_BOLT_M12X80	2
8	LIFT_RITSEL_WASHER_D30XD12X2	2
9	LOCKNUTM12	2



Ind	Name	Qty
1	H-STAB_CON_BUSHD25XD12X20	2
2	H-STAB_CON_BUSHD25XD6X20	4
3	H-STAB_CONNECTOR	1
4	H-STAB_HANDLEPIPE_L	1
5	H-STAB_MIDDLE_BLOCK	1
6	H-STAB_SHAFTD20X177_L	1
7	H-STAB_SPRING_D26XD21_L	1
8	H-STAB_TEE_L	1
9	INBUSSM10X20_L	2
10	REPAIRWASHERM10_L	1
11	REPAIRWASHERM20_L	2

* The only difference between Left anf Right receptor is the middle block, which is mirrored. Please indicate when ordering
Part 5 - H-STAB-MIDDLE BLOCK
if L or R

A5. Spare parts List – Patient Carrier



Ind	Name	Qty
1	HAENGE_WAGON_PLATE	2
2	HAENGEWAGON_BUSHD26X66	1
3	HAENGEWAGON_BUSHD26X90	6
4	HAENGEWAGON_SHAFTD14X164	4
5	HAENGEWAGON_SHAFTD14X390	1
6	HAENGEWAGON_STRAPWHEELD30XD80	12
7	HEX_BOLT_M10X25	4
8	INBUSSM8X20	6
9	SINGLE_WHEEL_ASSEMBLY_50COMPL	4
10	WASHERM8	6