EC Directive 93/42/EWG for medical products according MPG/MDD

Patent PCT/EP03/14387





Use, care and assembly instructions for the Multi-Person and Platform Swing

die-schaukel.de congratulates you on your purchase of the Multi-Person or Platform Swing which is designed to be used as a relaxation lounger as well as a piece of sports equipment. The swing has been tested under the EC Directive 93/42/EWG for medical products (MDD) and can carry a maximum load capacity of 150kg. This is a sturdy, lightweight apparatus. The lounger has a lounger webbing made from hard-wearing plastic fiber and an especially soft, plastic impact protector which meets all the requirements for medical/therapeutic equipment. For further technical information please refer to the appendix.

Before you start assembling your Swing please check your delivery to make sure that all the components are present. Please read the assembly instructions carefully to ensure that all the necessary assembly steps are followed accurately. In order to keep risks to a minimum when installing your swing we ask that you take note of your countries dynamic load restrictions regarding hanging apparatus, should you be unsure of the feasibility of hanging the swing we ask that you seek advice from a structural designer or architect. Please keep these instructions and any accompanying tools somewhere safe for future use. Please remember that taking all these precautions will enable you to enjoy your swing to the fullest.

Please take special note of the general safety instructions and how the apparatus should be used, exclusively in the realms of the specified normal use for hanging equipment. Keep the product away from open flames or fire. We can not beheld liable for accidents.

Choice of location:

Experience has shown us that the more central the mounting of the swing the more extensive the use, therefore choose your location for this product carefully, choose somewhere where neither people nor other equipment can be either hurt or damaged. Choose a place which is out of direct sun light in order to hinder any chance of sun damage, overheating, or burning of the upper surfaces. Protect your swing from corrosion and extreme moisture. We recommend you install your swing indoors or outside but under some form of roof. In order to avoid damage to the foam and plastic components of the swing the apparatus should not be used in temperatures below 5° Celsius.

<u>Mounting components for correct ceiling mounting</u>: The correct ceiling mounting will ensure the safe use of the product. Here please use only the highest quality, load-tested and safety-tested mounting components (hooks, screws, bolts, etc). These components must be capable of taking a load of at least 600kg. If you use top quality components for the mounting of your swing the service life of your swing will not be compromised, as it might be by the use of poor quality or insubstantial mounting components.

<u>Consideration of space needed</u>: Space is a further consideration which should be taken into account; there should be no obstacles especially either hard or sharp objects close by, nor should there be a sloping floor, a landing, any ledges, steps or stairs in the swing zone, this is to ensure that the person or people using the swing cannot injure themselves while swinging. Make sure an adequate safety space is kept clear at the front of and behind the swing, taking into account the full arc of the swinging motion. It is important, where applicable, to take the appropriate measures to provide a soft surface for under the swing, indoors via a carpet or sports mat, outdoors via sand or fall-protection tiles.

Mounting: The mounting of the swing may only be undertaken by specially trained and qualified personnel. The swing may only be mounted in a load bearing construction in accordance with the set minimum standards. For your own safety the necessary protective clothing should be worn, for example safety glasses, coveralls and gloves. As well as this, the use of insulated tools and appropriate aids and appliances is recommended, for example a well constructed stepladder of adequate height. We strongly suggest the use of appliances such as cable and pipe detectors, these will however not give information concerning the load capacity of the supporting medium. Whenever you are unsure seek the relative professional advice.

<u>Upkeep</u>: The swing and the hangings must be thoroughly checked after the initial installation and there after checked at regular intervals in order to detect any problems or find any defective components which must then be exchanged.

<u>Transport and storage</u>: In order to protect the impact protectors we recommend that the swing be transported and stored on its side.

Installation of the hanging apparatus:

Before starting the installation check that the structure is sturdy enough to carry the load of the apparatus. When completing this work please only use swing mountings and instillation material with the corresponding load carrying allowance and pay particular attention to the seal of approval, as shown here. **Tip**: Jointed swing mountings are best suited for this installation.



Irrespective of how the swing shall be hung, from one, two or four points, you must make sure you are installing on a uniform ceiling surface.

For the installation of your swing we have provided you with a mounting accessories set. At this point please read the enclosed assembly instructions carefully.

Tip: Ceiling hooks are designed to carry a static load. When deciding on hooks to carry a load in motion jointed swing mountings are definitely the better choice.

If the apparatus is being mounted from a concrete ceiling only heavy duty hooks capable of carrying the specified load should be used. When the swing is being secured via two or four points the mountings must have a minimum load carrying strength of at least 4 kN (~400kg) per drilled hole. When the swing is being secured to the ceiling by only one mounting the mounting must have a minimum load carrying strength of at least 8 kN (~800 kg).

If the apparatus is being mounted from a wooden beam in the ceiling it must be a beam which is horizontal, level and sufficiently stable (at least 120 x 140 mm) in order to carry the necessary load safely. The load carrying bolts must be at least M10 x 140 mm and must be screwed in up to the end of the thread but without sticking through the top of the beam.

<u>Spacing:</u> Care should be taken to ensure a free space of at least 2 meters more than the full arc of the swinging motion at the front of and behind the apparatus. A side space of at least 80cm must be allowed for, between the swing and its frame or the next piece of apparatus. A distance of at least 70cm must be left free between two pieces of swing apparatus. The swing surface may not be below 40cm off the floor.

<u>Mounting and adjusting</u>: The optimal distance from the mounting point = actual rope length / 10 + swing width. The space from the mounting point should not under cut the width of the swing.

Tip: When setting up the ropes make sure they are the same length. A swing swinging on ropes of varying length will swing skew or in circles not in clean straight arcs.

Care and Cleaning Instructions:

To clean the lounger webbing and/or impact protectors simply use a soft, wet cloth and soap and sponge off the dirty area. The apparatus may be cleaned using spay or wipe-down alcohol or mild disinfection solutions. Harsh cleaning products and steam cleaning machines are not to be used

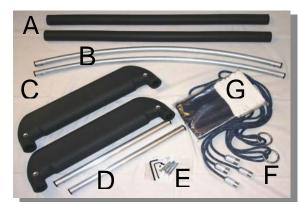


since they may bleach or damage the cleaned surfaces. Should the lounger webbing of the swing become extremely dirty it can be disassembled and machine washed at between 30° and 40° Celsius. To disassemble the lounger webbing simply reverse the assembly instructions.

Assembly instructions multi-person swings

Firstly, before starting assembly, check the contents of the package to make sure you have received all the necessary parts. You should have received the following parts:

- A. 2 x long impact protectors
- B. 2 x long aluminium pipes
- C. 2 x short impact protectors (head and foot pieces)
- D. 2 x short aluminium pipes
- E. 1 x plastic bag containing assembly material:
 - 4 x screws, 4 x screw caps and
 - 2 x Alan keys (large and small)
- F. 1 x rope set (consisting of 4 x height adjustable ropes, provided in pairs with swing rings)
- G. 1 x lounger webbing (a pack of long and short bands) in a plastic bag









For clinical use we strongly recommend the washing of the lounger bands prior to starting assembly. The bands can be machine washed at 40° Celsius.

Lay out the lounger parts in the following positions as shown in the diagram. Refer to the table to see how many bands you will need for your lounger webbing.

Swing size	М	L	XL
Number of long bands	6	8	10
Number of short bands	14	19	24

Do not use more bands than stated in the table, this may cause pinching!

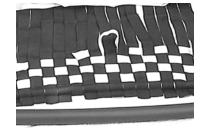


Firstly thread the long bands (Part G) on to one of the short pipes (Part D). Open the short impact protector (Part C) a little. Working carefully from one end mount the short pipe into the short impact protector. **Warning!**

Take care not to let the bands get trapped in between the pipe and impact protector!



Push the long pipes (Part B) into place in the short impact protector until the safety pins click into place. Using the large Alan key tighten the screws (~15 Nm) and screw caps into the holes on each side until the corners are closed. Now thread the short bands onto the long pipe (Part B).



Weave the bands together to create the lounger webbing. Weave the long bands through the short ones in the following way:

First row: up-down-up-down... etc Second row: down-up-down-up... etc

All odd numbered rows should be woven as in the first row while the even numbered rows should follow the same pattern as the second row. Use all the bands. Take care not to twist any bands while weaving. Make sure the webbing is evenly woven.



No bands should be left over. This must be an uniform webbing.



The long bands should now be threaded into the second short pipe (Part D). Open the second short impact protector (Part C) a little. Carefully mount the short pipe (Part D) into the short impact protector (Part C). At the same time carefully push the long pipes (Part B) into place in the short impact protector (Part C) until the safety pins click into place. Again tighten the screws and screw caps into the holes on each side by using the large Alan key (~15 Nm) until the corners are closed.

Warning: Take care not to trap the bands in the corners of the impact protector!! Finish by pushing the long impact protectors (Part A) over the long pipes (Part B).



Mounting of the Product:

Warning: To protect against injury from loose ends take care to adjust the lengths of the ropes according to the height of the ceiling.

Fasten one end of each rope pair (Part F) to the <u>long end</u> of the swing using the lock nuts attached to the ropes. Fasten the safety screws tightly (max. 5 Nm) using the small Alan key.



Assembly instructions platform swings

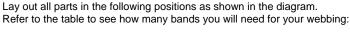
Firstly, before starting assembly, check the contents of the package to make sure you have received all the necessary parts. You should have received the following parts:

- A. 4 x long impact protectors
- B. 4 x corner impact protectors
- C. 4 x long aluminium pipes
- D. 1 x plastic bag containing assembly material:
 4 x screws, 4 x screw caps and 2 x Alan keys (large and small)
- E. 1 x rope set (consisting of 4 x height adjustable ropes, provided in pairs with swing rings)
- F. 1 x lounger webbing (a pack of long and short bands) in a plastic bag
- G. 1 x assembly instruction





Prior to starting assembly, we strongly recommend the washing of the lounger bands, only when this has been done should you move on to the next step. The bands can be machine washed at between 30° and 40° Celsius and well spun.



Swing Size	S	М	L	XL
Number of bands horizontal	7	10	14	19
Number of bands vertical	7	10	14	19

Thread the bands (F) on to the pipes (C) and screw them together at the corners with <u>two</u> corner impact protectors (B) (see arrow 1+2) (<u>firstly with screws only, no screw caps</u>).



Weave band 1, band 3, band 5 etc. in the following way:

First row: up-down-up-down... etc Second row: down-up-down-up... etc

All odd numbered rows should be woven as in the first row while the even numbered rows should follow the same pattern as the second row. Thread the bands on to the fourth pipe.

No bands should be left over. This must be an uniform webbing.

Fix corner (B) number 3 (see arrow).

To fix the last corner (B) go ahead as follows:

- Release all existing corner joints (3) the maximal way
- Raise clearly the corner marked with arrow 2
- Fix corner (B) number 4.

Straighten the surface. Add the 4 screw caps at all corners until the safety pins click into place. Tighten the screws and screw caps by using the large Alan key (~15 Nm) until the corners are closed



Warning: Take care not to trap the bands in the corners of the impact protector!!

Mount the pipes into the impact protectors (A).



Mounting of the Product:

Fasten the ends of each rope pair (Part E) at the edges of the swing using the lock nuts attached to the ropes. Fasten the safety screws tightly (max. 5 Nm) using the small Alan key with 2 fingers.



Initial use and maintenance:

Before the swing is initially used and once it is being used regularly it must be checked thoroughly. Any damaged or defective parts found anywhere on the apparatus must be exchanged immediately, in order to keep your swing in perfect working order and not cause more unnecessary damage.

Some parts of the swing are made from high quality, flammable plastic fiber; therefore take care to make sure that the swing is not exposed to excessive heat or an open flame; sharp objects or blades, such as scissors or knives should also be kept well away from the swing.

<u>Checking the mounting:</u> Check that the swing is mounted properly from the ceiling. Should there be any signs of cracks in the ceiling or evidence that the mounting itself is not as it should be the entire swing must be disassembled and the entire mounting repaired.

<u>Checking the ropes:</u> The swing's ropes must always be in top condition. All lock nuts must be tightly secured (max. 5 Nm). If damage has occurred (in any form) to a lock nut the swing must be disassembled and the complete rope set must be replaced. Damage to the rope casing itself (coloured fibers) will not compromise the safety of the apparatus.

<u>Check the impact protectors:</u> Check the functionality of the impact protectors, also check them for damage of any kind. If the impact protectors have defects or cracks of any kind they must be exchanged. If the swing is used outdoor there is an increased risk of moisture damage occurring to the impact protectors. Maximum safety is only achieved when using a product without defects.

<u>Check the frame components:</u> Check the corners of the metal frame of the lounger for a perfect fit, there should never be more than a distance of 2mm between the elements. Re-check the screws and bolts regularly, where necessary tightening them with the Alan key provided. Should one side of the metal frame appear to be worn or should the swing be over loaded the frame will suffer damage and become warped, if the frame is warped or bent it can become dangerous to use especially when the damaged part is visibly bent out of its original position, in such cases the two parallel components must be replace.

Check the lounger webbing:

Check that the webbing is evenly woven and that there are no tears or defects to the bands. If there is any evidence of damage or defects to the lounger webbing the swing must be dismantled and the damaged or defective parts replace before resuming use.

Instructions for use:

Adjusting the lounger:



The positioning and height of the lounger can be adjusted on each rope individually.

1. Load free lounger

The lounger must be empty; it must not be hindered by any excess weight in any form.



2. Adjust the settings

- adjustment upwards lengthens the rope.
- adjustment downwards shortens the rope.
- to adjust the overall height all ropes must be adjusted.
- each rope can be adjusted individually.

Using the lounger:

Warning: Never jump on the framework of the swing. Never overload the swing. Never load the swing on just one side. All of these can seriously damage the structure and material of the swing and therefore safety of use of the apparatus.

Using a safety belt system:

Children under 3 years of age must be secured in the swing via a safety belt system to protect them from falls. This rule also applies to people who suffer with problems with balance, dizziness, etc.



1. Attaching the safety belt system

Firstly fit the safety belt on the child or patient.



2. Attaching the safety belt to the swing

The safety straps are attached either to the lounger frame or the laying area. The safety straps should be well spaced with any metal pieces, for example the size adjustment hooks, being threaded to the rear of the lounger.



3. The closing and release of the safety belt system

The closing and release of the safety belt system is achieved via an easy to use central clasp. When using the safety belt system always check that it is properly adjusted to the body size of the child or person using it, it should fit snuggly.

General note about recycling:

Help the environment! All the parts used in this product can be recycled. The packaging that the product is delivered in is recyclable, the metal parts can be reused as can the plastic and foam parts. Please do your part and take the time, when you are finished having fun with your swing, to see that you dispose of it by the most environmentally friendly means possible. If you are unsure how to do this ask at your local town council office they will be more than happy to assist you.



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