

RehabAngel® Genie

A multi-purpose Lower Limb Rehabilitation and Circulation Physiotherapy and Sports Exerciser
 Product code : 40121



User Instructions

Distributed by:

Manufactured by:



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RehabAngel® Genie

Assembly Instructions



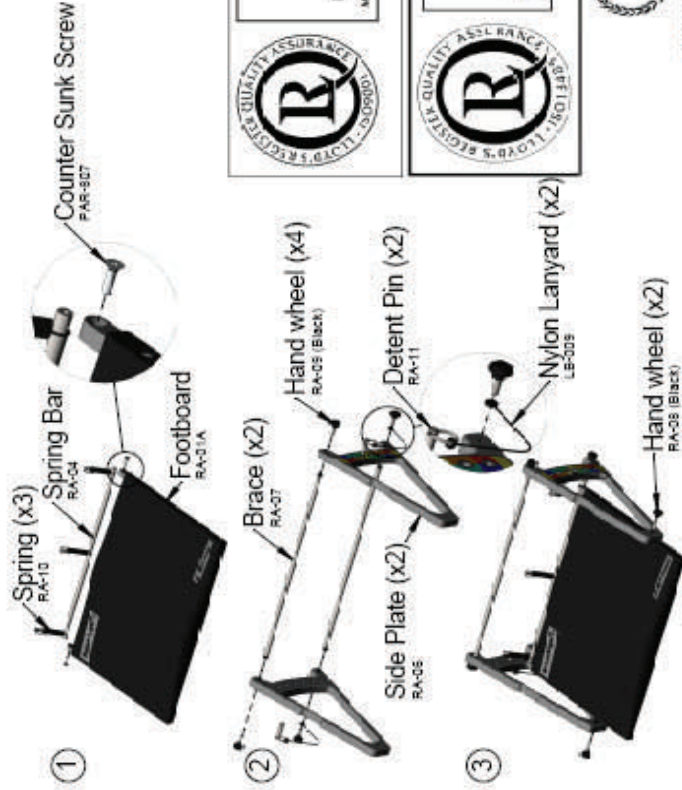
1. Push springs onto spring bar, ensuring one in the middle and two at each end. Position spring bar, complete with springs onto the footboard (as shown) and fasten tightly with counter sunk screws.

2. Fasten the side plates to both braces (as shown) using the four smaller threaded hand wheels. Ensure to pass one hand wheel through the nylon lanyard attached to the detent pin on each side. Tighten firmly.

3. Position the footboard completed in step one into the framework completed in step two (as shown). Fasten together using the two larger hand wheels.

Tip: Clip the springs onto the spring bar or position the detent pin through the side plates into the detent pin hole in the footboard for easier assembly.

4. Reverse procedure to disassemble.



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Bibliography

A Biomechanical Investigation of a Single-Limb Squat: Implications for Lower Extremity Rehabilitation Exercise by J Richards, D Thewlis, J Selfe, A Cunningham, C Hayes (2008; 43(5): 477-482) Journal of Athletic Training

Effectiveness of falls prevention and rehabilitation strategies in older people: implications for physiotherapy. Lamb, SE - Inter-disciplinary Research Centre in Health, Coventry University, Coventry, UK, Chartered Society of Physiotherapist November 2001

Heterotopic Ossification and Total Knee Replacement - Dushan Atkinson FRC Orthopaedic World Literature Society

Knee injury and Osteoarthritis Outcome Score (KOOS) – validation and comparison to the WOMAC in total knee replacement - Ewa M Roos and Sören Toksvig-Larsen¹ Department of Orthopedics, Lund University Hospital, Sweden, *Health and Quality of Life Outcomes* 2003, 1:17

Posterior limb muscle stretching with the RehabAngel® Genie

Stretching Exercises:

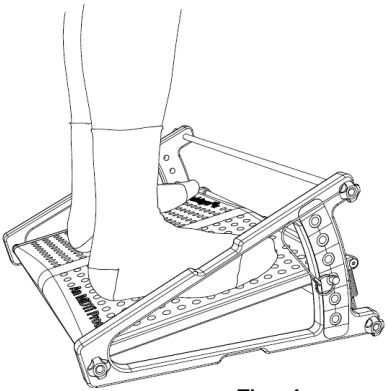


Fig. 4

Static stretching is slowly elongating the muscle through its full range of motion, then holding it at a position where it is at full extension (but without pain) as exemplified in Fig 4.

The stretch is held for 15 to 30 seconds.

Research has showed that daily stretching, once per muscle group for 30 seconds, can result in an increase in range of motion.

Soleus Stretch

This exercise stretches in particular the deeper parts of the calf muscle complex as well as gently improving knee strength Fig 5.

1. Set device to the appropriate angle (so that patient can stand upright feeling a gentle 'pull' in at least one calf muscle),
2. Ensure patient's feet are pointing as straight ahead as possible.
3. Get patient to bend the knees until the original 'pulling' sensation in the calf muscles firstly eases but then reappears in a deeper part of the calf muscle complex .
4. Patient to remain in this position for 30 seconds to 2 minutes.

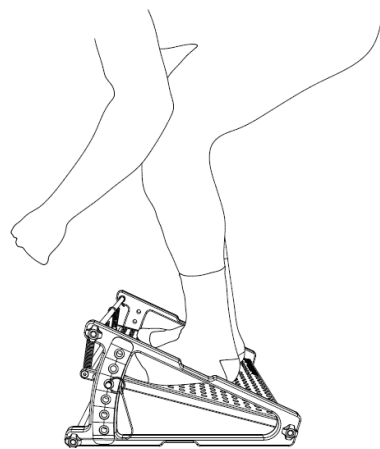


Fig. 5

Safety Information

When using the RehabAngel® Genie, basic safety precautions should always be observed, including the following:

1. Ensure the equipment is located on a flat, stable and non-slip area.
2. Ensure that the 'Foot Board' of the equipment is always dry and that there are no signs of residue of cleaning solution on its surface.
3. Whenever the equipment has been disassembled for a complete deep clean reassemble per the assembly instructions, **ensuring** all parts are correctly relocated back into place.
4. Always **be careful** not to trap your fingers between the 'Side Plate' when removing and placing 'Detent Pin' into the equipment.
5. Never use the equipment when it is acting as an incline or decline exerciser without first ensuring that the 'Detent' Pins are fully pushed through the 'Side Plates' and into the holes located at either side of the 'Foot Board'.
6. Avoid patients' using the equipment if they have any substances or material on their feet that will cause slippage.

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7. Be careful not to trip over the equipment when working around it.
 8. When using the 'Springs' on the equipment ensure that they are firmly attached to the 'Spring Bar'.

CAUTION: Maximum weight bearing 30 stones (190.51kgs).

CAUTION: Anhydrous (dry) skin types may cause foot slippage on the footboard when it is set to 20 degrees and over. This occurs because the coefficient of friction value may not be sufficient to hold the foot or feet in a static position when the RehabAngel® Genie is stood upon to avoid slippage it is highly recommended that at the above angles the device should be used with the patient/user wearing flat sole trainers or similar footwear .

PLEASE KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE AND USE.

Use and Function

IMPORTANT: The RehabAngel® Genie has been designed for Community, Acute Podiatry, Physiotherapy and Sports rehabilitation to the lower limbs. The Clinician should assess the patient treatment protocol prior to using the RehabAngel® Genie:

1. The RehabAngel® Genie can be used to perform exercises utilising either its wedged 5° (bungalow roof) 'Foot Board' or its reverse flat 'Foot Board' surface.
2. The RehabAngel® Genie can be used with any of its 'Footboard' surfaces as a static incline board or a static decline board. The incline or decline of the 'Foot Board' can be varied from an angle of 0° through to 25° this is achieved by simply removing the 'Detent Pin' that is located at either side of 'Side Plates'. Please see Assembly Instructions on page 2 for more details. The colour coding on each of the 'Side Plates' indicate the different Angles to which the 'Footboard' can be accommodated. It is important that at all times that the same colour code is selected on each 'Side Plate' to maintain the correct incline or decline position of the device.
3. The RehabAngel® Genie comes with three Resistance Springs these should be detached from the top 'Spring Bar' and pushed down and out of the way when the equipment is being used as a static exercise platform .
4. By removing the 'Detent Pins' and selecting the use of 'One', 'Two' or 'Three' 'Resistance Springs' the equipment can be made to produce a more challenging and unstable platform to which to undertake a variety of exercises.

Note: When using the equipment as described in point 4 so as to ensure 'Detent Pins' do not get damaged or broken, place pins into the 0° holes on the 'Side Members'.

5. The RehabAngel® Genie can be used with a variety of resistances tubes /bands (these are not included with the product) to aid with additional strengthening exercises. If wishing to use a resistance tube/ band then this should be first placed under the equipment and ensuring that the tubing/band rests between the cut away sections at the bottom of each 'Side Plate'.

Some possible exercises with the RehabAngel® Genie

Knee Exercises:

Double -Limb Squats with or without resistance springs in use.



Fig. 2

Choose the appropriate angle of decline that suits your patient or the rehabilitation requirement and get patient to place feet flat on the device as in Fig 2 .

Patient should flex or extend the hips for greater or lesser glutei contraction.

Patient should flex the knees to an angle and at a speed that suits the rehabilitation requirement being prescribed.

You can add increasing quadriceps load via increasing the decline angle or by holding weights or wearing a weighted rucksack. Patients should complete a number of repetitions and sets to suit the rehabilitation requirements.

Single -Limb Squats with or without resistance springs in use

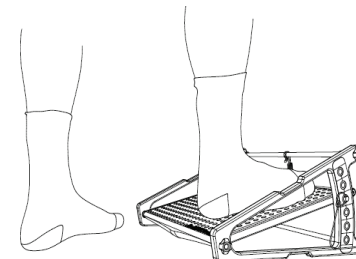


Fig. 3

Choose the appropriate angle of incline or decline that suits your patient or the rehabilitation requirement and get patient to place one foot flat on the device as example in Fig 3 .

Patient should follow the same instructions as in double-limb squats when using device in a decline. Whilst in an incline position the Clinician may decide upon various ways to alter the rehabilitation requirement with patients.

Note: It is important to consider risk of patient's losing balance, therefore have an upper limb support available especially with elderly patients.

Using the RehabAngel® Genie to aid assessments

Poor lower limb alignment is a common cause of MSK injuries. For example when a leg is loaded, the hip may internally rotate and adduct, and the lower leg may externally rotate and the foot pronate. Several 'links in the chain' in the lower limb could be causing the alignment problems. Identifying the potential cause of these problems can be achieved with RehabAngel® Genie in a decline position with the option of medial foot support.

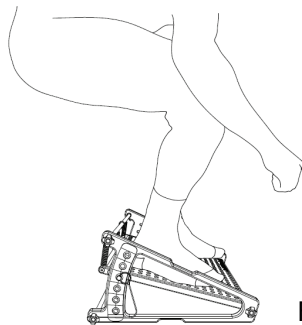


Fig. 1

1. Patient performs a squat or lunge on a flat surface initially without the device and alignment is observed
2. Then get patient to perform a squat or lunge on the 'flat' surface of the device when it is in a declined position and alignment is observed.
3. Patient then performs a squat or lunge on the 'Wedged' surface of the device when it is in a declined position and alignment is observed.

If alignment of the lower limb improves with the device in a decline position, then Triceps Surae limitation may need to be addressed. If alignment does not improve when using the 'flat' surface of device when in a decline position but does so when used with the 'Wedge' surface, then orthotics may need to be considered.

Note: If alignment does not improve with either surface of the device when in a decline position then hip abduction and external rotation power need to be considered. Further specific testing of the glutei power would then be desirable.

Cleaning and maintenance

Warning: These instructions should be used in-line with the guidance provided by your infection control policy and in-line with best practice guidelines.

1. **Decontamination Process** is a combination of processes (including cleaning, disinfection and sterilisation) used to make the RehabAngel® Genie safe for further use on patients and handling by staff by reducing the risk of transmission of infectious agents.
2. Ensure that hands are clean and dried prior to touching the equipment.
3. **Assessment of risk** the level of decontamination required is determined by the nature of the equipment and the risk it poses for transmission of infection. The classification of infection risk associated with decontamination of RehabAngel® Genie:

Risk	Application	Recommendation
Low	Item in contact with healthy skin	General purpose detergent wipe.
Medium	Item in contact with unhealthy or broken skin	General purpose detergent diluted with hot water or detergent wipe or as recommended by your local infection control policy

Note: Always follow the recommendations of your infection control policy

UK Help
MDTi care 01902 778380

Monday - Friday. 9.00am to 5.00pm. An answer phone will be available out of these hours. Any queries or concerns about using the RehabAngel® Genie call MDTi Care. Calls are charged at the UK normal rate. For all web enquires please visit: **www.mdti.co.uk**.

Compliance Specification

Conformity:	Medical Devices Directive 2007/47/EC Manual Handling Operations Regulations 1992 (as amended 2002)
Autoclave Cycles:	100
Product total weight	5kg
Product Shelf Life:	5 years
Manufacturer's Certificate Approvals:	ISO 9001:2008 ISO 13485:2003 ISO 14001:2004 LRQA 4003482/A