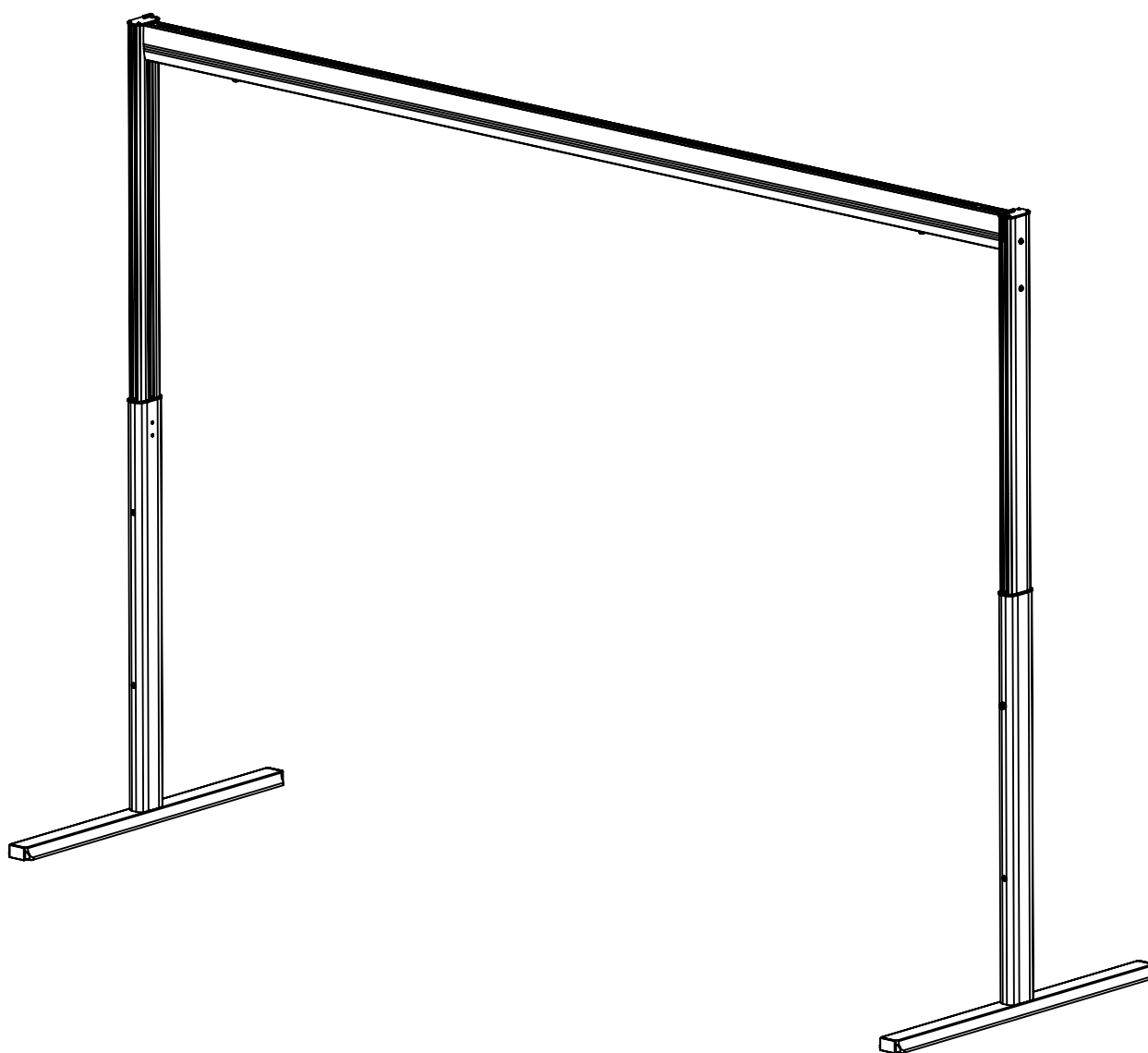


# MRS Duo

EN - User manual

**molift**<sup>®</sup>  
a part of Etac

BM20001 Rev. B 2014-11-13



CE

# English Manual


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## Important

This User Manual contains important safety instructions and information regarding the use of the MRS Duo and accessories.

In this manual the user is the person being lifted. The assistant is the person operating the lifter.



**Warning!**  
This symbol indicates important information related to safety. Follow these instructions carefully.

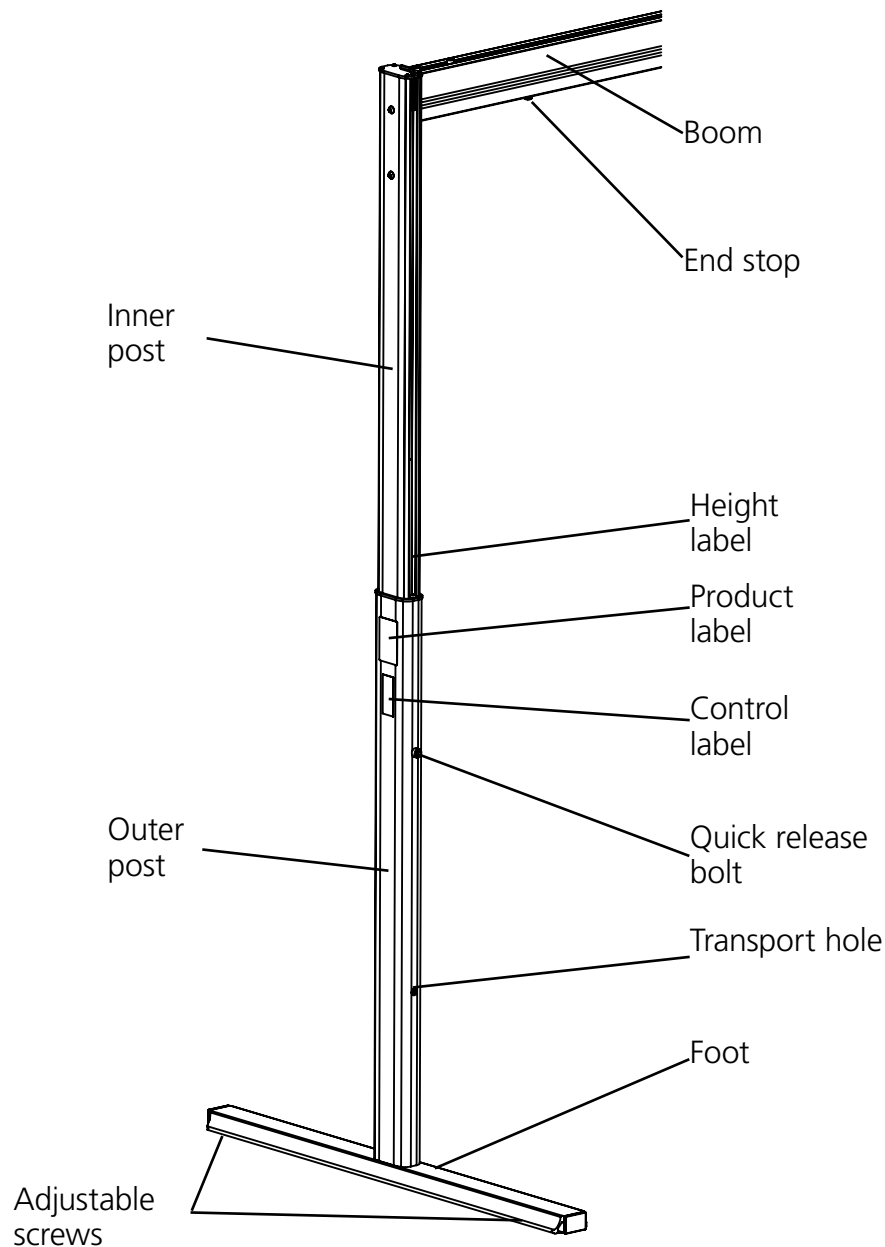


**Read User Manual before use!**  
It is important to fully understand the content of the user manual before attempting to use the equipment.

Visit [www.etac.com](http://www.etac.com) for download of documentation to ensure you have the latest version.

## MRS Duo

MRS Duo components:



### About MRS Duo

MRS Duo is a mobile 2 post gantry intended for Molift Air and Molift Nomad lifters. The purpose is for lifting and transferring a person from/to bed, floor, chair, wheelchair or toilet with a sling. The MRS Duo is made of light-weight materials, can easily be disassembled and mounted for new locations, and has four step adjustable posts from 2,25 to 2,55 meters. Boom ranges from 2 to 3,5

meters and the lifting capacity is 300 kg (661 lbs). It is ideal for hospitals and institutional, in environments where permanent installations are not possible or desirable, but can also be used in private homes. The MRS Duo should only be used indoor on flat surfaces. Such as Bedroom, bathroom, living room etc.

## General

### Declaration of conformity



The MRS Duo and related accessories described in this user manual are CE marked in accordance with EU Council Directive 93/42/EEC concerning medical devices, class 1, and has been tested and approved by a third party according to standard NS-EN ISO 10535:2006.

### Conditions for Use

Lift and transfer of a person will always pose a certain risk and only trained personnel are allowed to use the equipment and accessories covered by this user manual.

### Modifications and use of components made by other manufacturers.

We recommend only using Molift components and spare parts. Declaration of conformity is not valid and Etac is not responsible for warranty if any modifications are made to the product. Etac shall not be liable for faults or accidents that can occur when using components made by other manufacturers.



Only certified personnel are allowed to perform repairs.

### Warranty

2-year warranty against defects in workmanship and materials of our products.  
For Terms and conditions, see [www.etac.com](http://www.etac.com)

## Product identification

### Product label

The Product label contain article number and production date.



detail:



CE marked



Refer to user manual



Indoor Use only

### Warning labels and Symbols

Symbols used on the product, explained in more

## Technical Data

### Safe Working Load (SWL)

300 kg (661 lbs)

### Weight of unit

Post (complete): 14,8 kg/30,9 lbs  
 Boom Kg/m: 4,2 kg/m/8,8 lbs/m  
 Foot: 3,8 kg/6,6 lbs  
 Post (without foot): 11 kg/24,3 lbs  
 Total weight (2 posts and boom):  
 38-44,3 kg/83,8-97 lbs

### Available boom lengths (A):

2m - 2,5m - 3m - 3,5 m

### Dimensions:

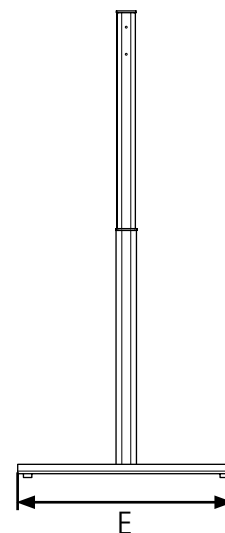
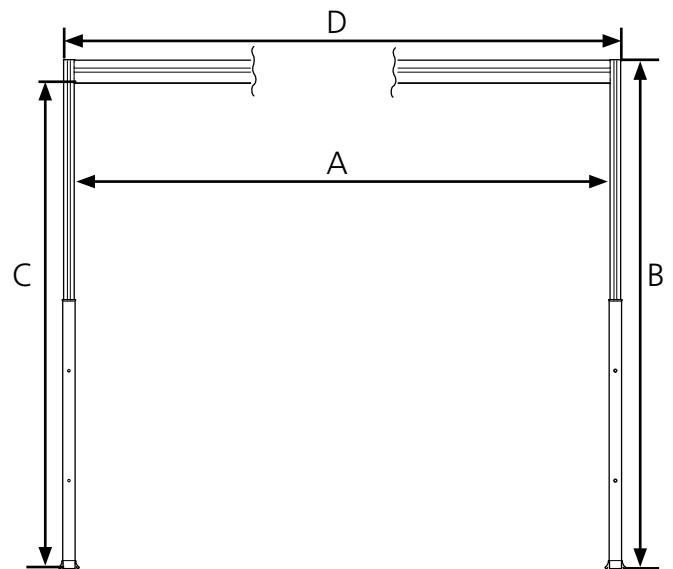
Width (D): 2,15 - 3,65 m  
 Height (B): (4 steps x 100mm) 2,25-2,55 m  
 Depth (E): 1,2m  
 Max internal space (AxC): 3,5x2,4m  
 Transport height: 1,7 m

### Material:

Anodized aluminum, Plastic

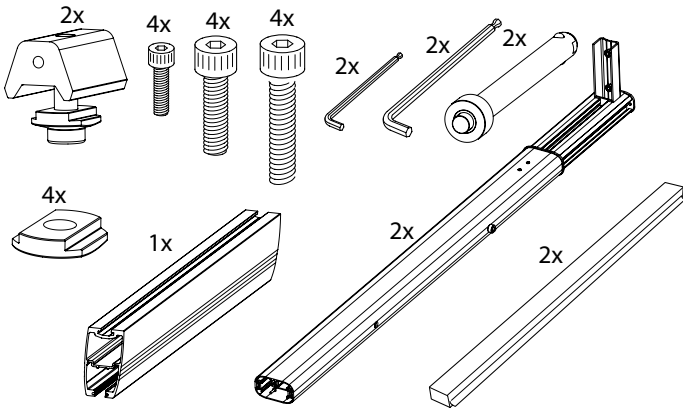
### Expected Lifetime:

The MRS Duo has an expected lifetime of 10 years



# Assembly

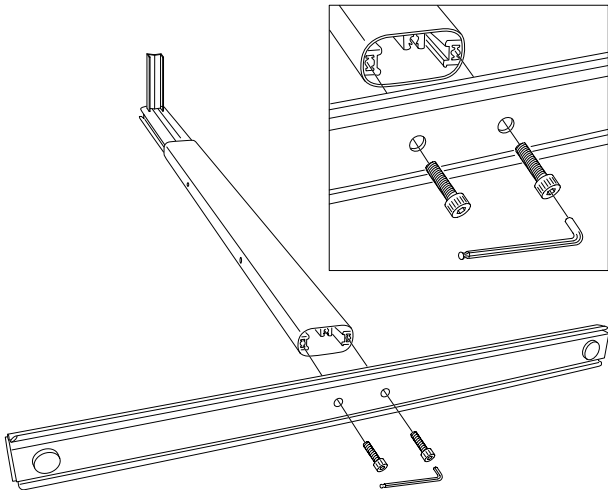
## Supplied parts



Make sure the following parts are included in the package.

Beware of sharp edges at the ends of the boom.

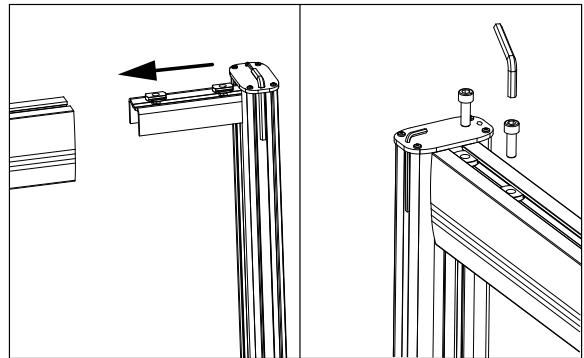
## Mounting Foot



1. Lay post on the floor.
2. Use the longest M10x50 bolts.
3. Use allen key, located in top of post) to screw in bolts.
4. Align the foot, and screw in both bolts.
5. Make sure both bolts are properly fastened.

**Important!** Use the longest bolts (M10x50) when installing foot, shorter bolts may cause collapse.

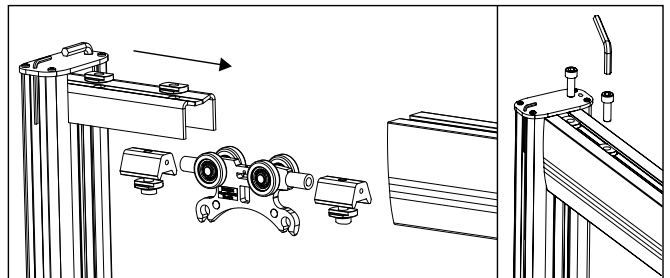
## Mounting boom to post



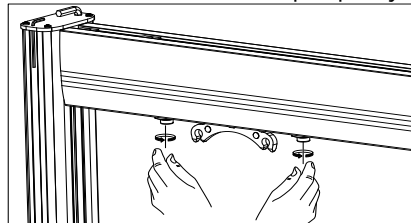
1. Slide washer and post in to boom.
2. Insert bolts trough holes and washer in boom.
3. Use allen key, (located in top of post) to screw in bolts.
4. Make sure both bolts are properly fastened

**Do not stand under the boom when mounting, use a stand or similar to support the boom.**

## Mounting second post, trolley and end stop



1. Slide end stop, trolley and end stop into boom in described order.
2. Slide washer and post in to boom.
3. Insert bolts trough holes and washer in boom.
4. Use allen key (located in top of post) to screw in bolts .
5. Make sure both bolts are properly fastened.

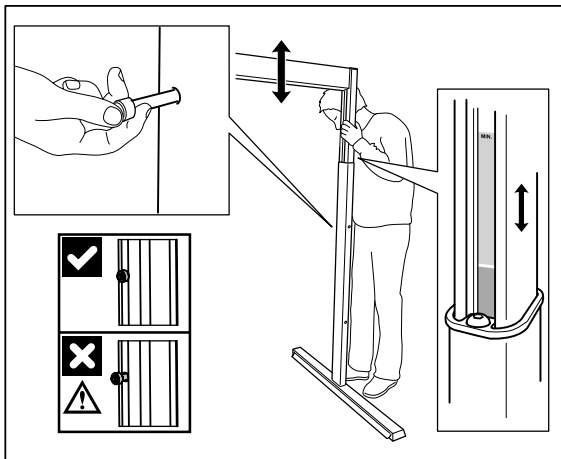


Fasten end stops temporary during assembly. Must be fastened properly with tools after adjustment of height.

**Important!** Fasten end stops to prevent trolley from moving when adjusting post heights. Moving trolley can unintendedly hit the operator.

# Assembly

## Adjusting post heights



1. Lift the inner post and pull out quick release bolt.
2. Lift post to desired height and insert quick release bolt trough outer post.
3. Look at height labels and ensure that both post are adjusted at the same height.



**Don't stand under boom when adjusting post height**

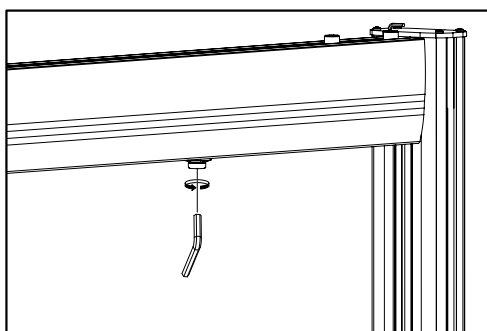


**Make sure quick release bolt is properly installed**



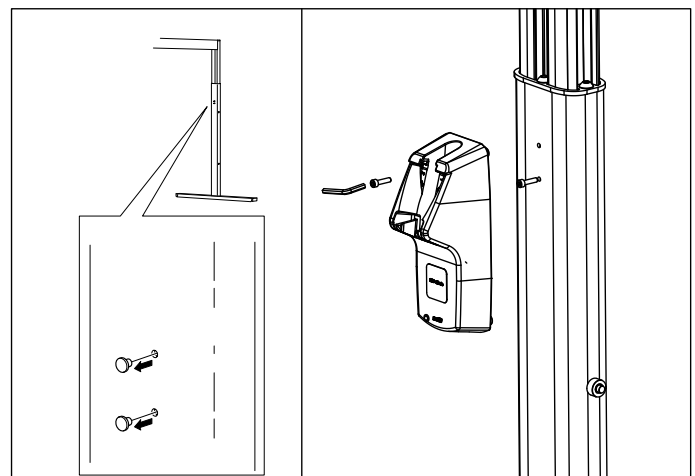
**Don't lift boom any higher when stop sign appears on height label**

## End stops



1. Lead the end stops to the desired position and tighten them.
2. Make sure the liftmotor does not hit the post.
3. Use allen key (located in top of post) to screw in bolts.

## Mounting charger to post



1. Remove plugs from holes on the post.
2. Use the small allen key (located in top of post) to fasten screws.
3. Fasten the lower screw first.
4. Place charger on screw and insert second bolt.

## Check list before use



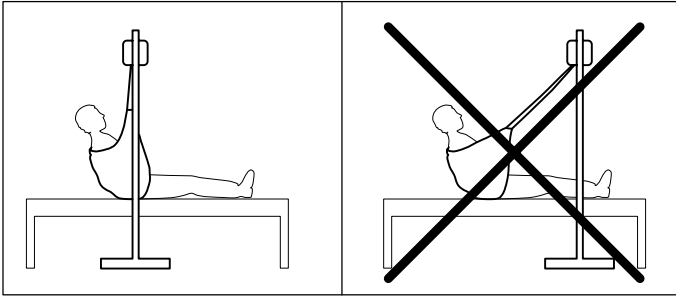
**Don't start using MRS Duo before completing control according to checklist after assembly.**

Use this checklist to verify that the MRS Duo is properly installed and can operate correctly and safely before use.

- Make sure both bolts in foot are properly fastened.
- Make sure all four bolts on boom are properly fastened.
- Make sure quick release bolts are correctly installed
- Make sure end stops are properly fastened

## How to use MRS Duo

### Lifting user



1. Make sure the floor is level.
2. Make sure the MRS Duo are stable, screw the adjustable screws in foot to correct position
3. Place the MRS Duo straight above the user.
4. Read the user manual for Molift Air or Nomad before lifting patient.



Never transport MRS Duo without quick release bolt inserted. Post may fall apart.

### Transport and storage

MRS Duo can be stored and transported under temperatures between -25 - 70 °C and Relative Humidity between 15 - 93 %.

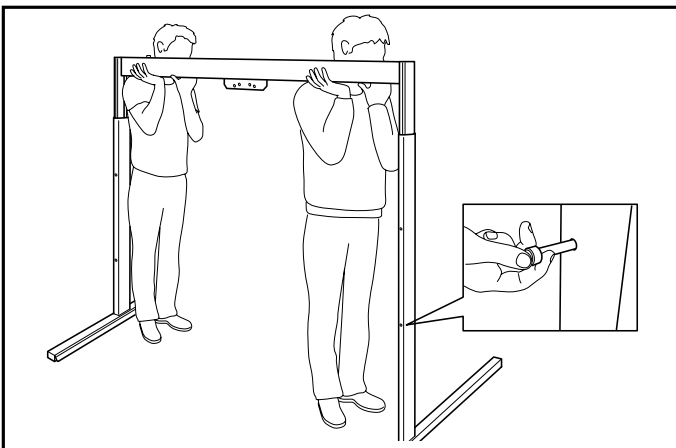


Never lift the user higher than necessary to carry out a lift.



Never leave a user unattended in a lifting situation.

### Transport



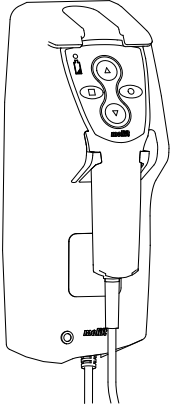
1. Secure trolley (se page 6, fastening end stop temporarily)
2. Remove quick release bolt and lower MRS Duo.
3. Place the quick release bolt in the transport hole (lowest hole)
4. Transportation height is now 1,7 m.
5. Move the MRS Duo as shown in illustration



## Accessories

### Battery charger

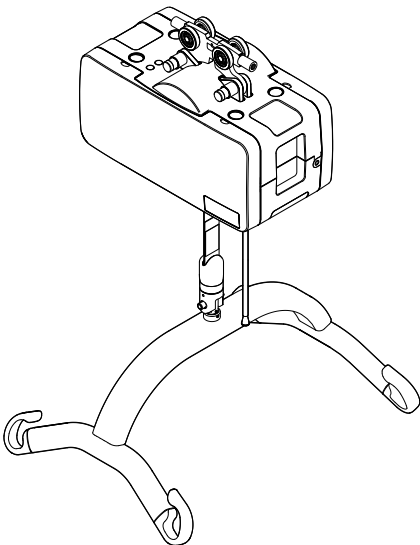
Molift Air or Molift Nomad ceiling hoist is charged through the hand control. The hand control charger can be mounted on the MRS Duo.



Charger for hand control Molift Nomad/AIR.  
Art. no.: 1240100

### Molift Air

Molift Air 205 and Molift Air 300 is suitable for use with MRS Duo.



Molift Air is available with or without propulsion, with 205 or 300 kg SWL.

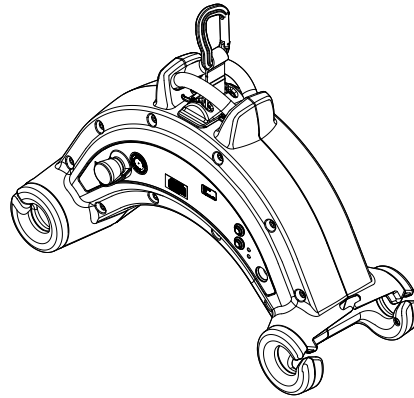
- Molift Air 205
- Molift Air 300
- Molift Air 205 Propulsion
- Molift Air 300 Propulsion

### Trolley for Molift Air

MRS Trolley Basic  
Art. no.: 2520000  
MRS Trolley Propulsion  
Art. no.: 2500103

### Molift Nomad

Molift Nomad portable hoist is suitable for use with MRS Duo.



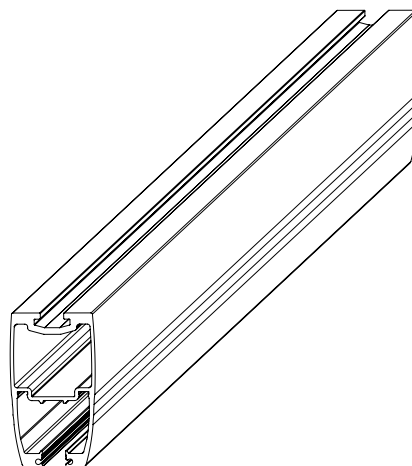
Molift Nomad is available with 160, 205, 230 or 255 kg SWL.

- Molift Nomad 160 kg SWL
- Molift Nomad 205 kg SWL
- Molift Nomad 230 kg SWL
- Molift Nomad 255 kg SWL

### Trolley for Molift Nomad

Trolley with brake  
Art. no.: 1109109

### Boom



MRS Duo can be delivered with 4 different boom lengths from 2 - 3,5 meters.

Boom for MRS Duo:

Art. no.: 1600012-20 - 2 m  
Art. no.: 1600012-25 - 2,5 m  
Art. no.: 1600012-30 - 3 m  
Art. no.: 1600012-35 - 3,5 m

## Maintenance

### Cleaning and disinfection

Clean on a regular basis. Clean surfaces with a damp cloth using an appropriate pH-neutral detergent. Do not use solvents or strong liquids, this may damage surfaces on the lifter. For disinfection when needed; use isopropyl alcohol. Avoid abrasive cleaning products. Remove hair and pile from the castors and verify that the castors rotates freely.



**Make sure not to damage or remove labels when cleaning.**

### Reconditioning

Follow cleaning and assembly procedure, complete periodic inspection and use checklist after assembly to recondition the lifter.

### Recycling

MRS Duo can be disposed of as metal waste without battery charger. Battery charger must be removed and disposed of as Electrical equipment.

### Spare Parts

A list of spare parts is available on request.

## Periodic Inspection

### Periodic Inspection Scope

Periodic inspection is a visual examination (particularly of the MRS Duos structure, bolts and lifters with attachments, safety devices and person-support devices) according to Periodic Inspection Report for MRS Duo. This can be found on [www.etac.com](http://www.etac.com).



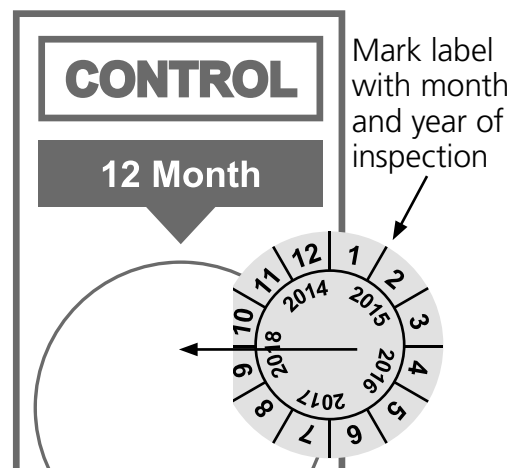
**In the event of danger to safety, the MRS Duo shall immediately be taken out of service and marked clearly with "out of order" and shall not be used until the MRS Duo is repaired**

Periodic Inspection shall be performed at least once a year or more frequently if required by local requirements. The inspection should be performed by service personnel authorized by Etac. Contact Etac for training and authorization or recommendation of an approved service partner.

When performing a periodic inspection, the inspector shall fill out the inspection report for MRS Duo. The reports should be retained by the person(s) responsible for servicing the lifter. If the inspection reveals defects and damages, the

owner shall be notified and a copy of the report should be sent to Etac, [molift@etac.com](mailto:molift@etac.com).

When periodic inspection is completed the inspector shall mark the MRS Duo with a sticker on the control label showing the date when periodic inspection is performed and a label (with 6-digit ID from Etac or distributor) showing who has performed the periodic control. The control label can be found on the post, and this will then indicate when next service should be performed.



## Troubleshooting

Symptom	Possible Cause/Action
Wobbly between foot and post.	Check bolts in foot. Make sure bolts is properly fastened.
Wobbly between inner and outer post.	Check slider in outer post for wear. Change sliders.
Wobbly between boom and post.	Check bolts between bracket and boom. Make sure bolts are properly fastened.
	Controll bolts between bracket and post. Make sure bolts is properly fastened.
MRS Duo jams when lowering boom to transport position.	Quick release bolt is already inserted in bottom hole, inner post jams against bolt. Remove bolt.
	Lowering one post only, try to lover both post at the same time, or put quick release bolt in lowest user position, then start to lower the other side.
	Check slider in outer post for wear. Change sliders.
Molift Air or Molift Nomad hits post during use.	Adjust end stopper to correct position.

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