Operators Manual

Wienold Mini Rotating Crane

MRC 751

Wienold-LIFTE.de

Rev.2.1
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Contents

Basic procedures

Please read an adhere to :

1. The manufacturer's instructions and safety regulations.
2. The operating instructions and safety regulations for the crane.
3. The labels, stickers and hazard warnings on the crane.
4. The safety regulations and work instructions at the place of use.
5. The applicable legal and local safety regulations.

This appliance complies with the applicable CE regulations and standards, EN ISO 12100 and the Machinery Directive 2006/42/EC when operated and used in accordance with the manufacturer's instructions.

It is the responsibility of each user to follow all regional guidelines and regulations regarding the safe operation of the appliance.

Read and follow all safety instructions carefully before operating, maintaining or repairing the unit.

This also includes all manufacturer recommendations and all guidelines issued by government and local authorities.

To ensure safe and appropriate use of the appliance, it must only be operated by persons who have been instructed in its use by authorised specialist personnel and who are authorised to use it.

Repairs, maintenance and repair work must be carried out without exception by qualified personnel specially trained for the unit.

The applicable safety regulations and standards of the respective county in which the MRC is used must be complied with.

Owners and landlords/landladies should carry out a full inspection of all components and check all functions before selling or handing over. Damaged and/or defective parts must be repaired or replaced.

These operating instructions are a necessary and safety-relevant part of the unit. It must therefore remain on the unit and be available at all times.

Norbert Wienold GmbH works consistently on the improvement of this and all other Wienold products. For this reason, we reserve the right to make changes.

If you have any questions about these operating instructions, please do not hesitate to contact us.

Contact:

Norbert Wienold GmbH

Waldstr. 35a
D-48488 Emsbüren
Germany
HRB100272 Commercial Register Osnabrück

Represented by: Norbert Wienold - Christian Wienold

Tel.: +49 (0) 5903 - 9394-0
Fax: +49 (0) 5903 - 9394-50
info@wienold-lifte.de

Wienold-LIFTE.de

General description

MRC Wienold Mini Rotating Crane

The **Mini Rotating Crane** is a mini crane and consists of a chassis with a manual crane construction and extendable crane arm. The height of the crane arm is determined by pumping the hydraulic cylinder: The more pumping movements, the more height the crane arm reaches.

Opening the valve on the hydraulic cylinder the lowering speed of the crane arm controlled. The further the valve is opened, the faster the crane arm lowers.

The **crane arm is** extended manually and in stages.

The **payload** depends on:

a) Variant (1 or 2 weight boxes)
b) Telescopic extensions
c) Distance of the load centre to the front edge of the support (load centre)
d) Own weight of attachment.

The MRC can be set up in two **variants:**

a) Short legs aligned to the front with 2 weight boxes with 14 weights each
b) Short legs aligned to the front with 1 weight box with 14 weights

The Mini Rotating Crane is equipped with a crane hook as standard for lifting loads.

Changing the position of the Mini Crane must **always** be done **manually.**

The Mini Crane is **not** designed **for continuous operation.**
Do not leave the Mini Crane **unattended** with the crane arm raised, especially with the load lifted.
In the event of a loss of pressure, stop work immediately. Do **not** use the crane **to transport people.**

The crane is not suitable for use in rooms with an explosion hazard.

ALWAYS read and understand BEFORE OPERATING:
All components must be checked for the specified payloads before commissioning! The payload of the crane is generally dependent on the telescopic extension.
Always take into account the relationship between the lifting capacity and the headroom of the crane, bearing in mind the OWN WEIGHT of the attachment.

Always observe for safe operation:

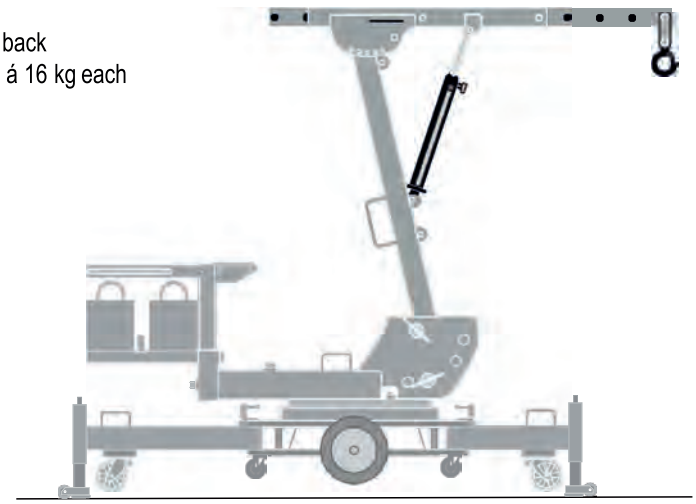
1. Load capacity of the crane taking into account the telescopic extension
2. Payload of the attachment
3. Own weight of the attachment

MRC 751 Working/transport position

MRC 751 (with two weight boxes)

Short version Working position

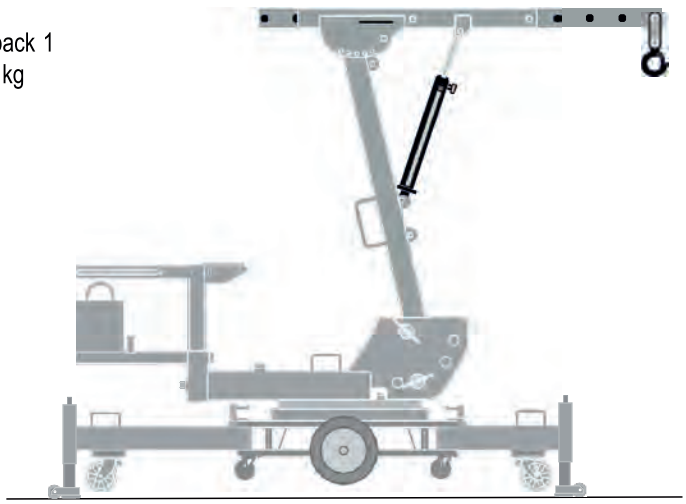
- 2 short legs in front / 2 long legs in the back
- 2 weight boxes with 14 counterweights á 16 kg each



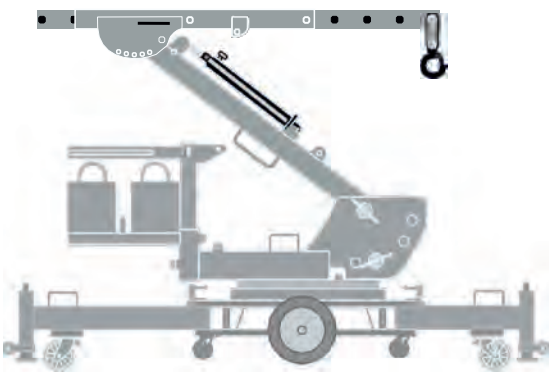
MRC 751 (with one weight box)

Short version Working position

- 2 short legs in front / 2 long legs in the back 1
- weight box with 14 counterweights á 16 kg

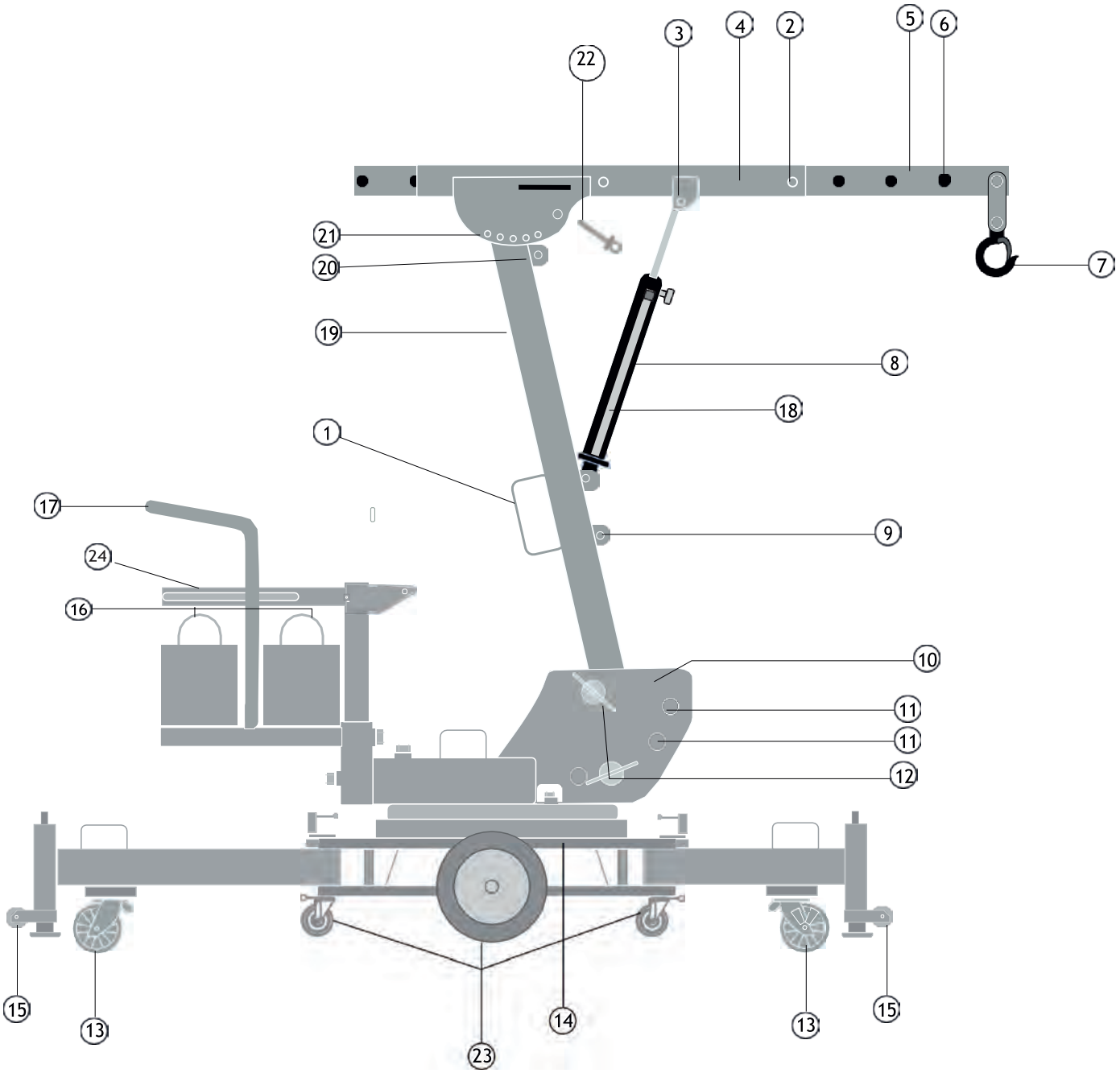


Transport position



Attention! Loading only allowed with empty weight boxes!

Components MRC 751



1) Carry handle
2) Pin with linch pin
3) Adapter hydraulic cylinder
4) Telescopic arm
5) Telescopic
6) Telescopic adjustment
7) Load hook
8) Hydraulic cylinder
9) Auxiliary hydraulic cylinder mount
10) Adapter main arm
11) Transport drillings
12) Mounting bolts
13) Swivel caster
14) Chassis
15) Support caster
16) Counterweights and boxes
17) Stearing bracket
18) Pump lever for hydraulic cylinder
19) Main arm
20) Fixing hole for transport position
21) Locking holes
22) Bolt for lock
23) Transport wheels
24) Dead man's lever

Safety instructions

Failure to follow the instructions and safety regulations in this operating manual may result in serious injuries or fatal accidents!

Only operate the crane when the following conditions are met:

☑ Know and follow the principles of safe operation of the crane from this Operating instructions.

1. **Avoid dangerous situations. Familiarise yourself with the safety instructions before proceeding to the next section.**
2. Always perform a pre-operation inspection on the crane.
3. Always check the working area before using the crane.
4. Always perform the function test according to the operating manual prior to use.
5. Only use the crane in accordance with the operating instructions. Any deviations are not permitted.

Read and follow:
a) the manufacturer's instructions and safety instructions,
b) the operating instructions and safety instructions for the MRC,
c) the labels, stickers and hazard warnings on the MRC,
d) the safety instructions and work procedures on the jobsite.
e) the applicable legal and local regulations.

Safety instructions

Wear Appropriate Personal Protective Equipment (PPE)

Always wear personal protective equipment before starting to work with the crane. Only operate the crane with adequate personal protective equipment, such as:

1. **Safety helmet**
2. **Safety googles**
3. **Safety shoes**

Check which personal protective equipment is prescribed in the area of use of the crane. Do not operate the crane without PPE and do not carry out any functional tests without personal protectiv equipment.

Keep loose clothing, parts of clothing, jewellery, hair, etc. away from the moving parts.

Fall Hazards

Do not use the lift to carry people or to climb on.
Do not climb on the outriggers, weight boxes, chassis or other components.

Tip-over hazards

Lift the load only when all the jacks are fully lowered, aligned using the spirit level, locked in place and securely fixed. Make sure that the jacks have firm contact with the ground.

Only operate the crane when the weight boxes are completely filled and correctly positioned. Make sure that the wheels are **not** in contact with the ground.

Do not adjust or remove the telescopic and boom fixing or securing pins while the machine is loaded or lifted with load.

When lifting the load, always ensure that the machine is on firm, load-bearing, level and horizontal ground.

Before using the crane, check the working area for slopes, holes, debris, unstable, slippery or icy ground or other conditions that may be hazardous. Do not operate the crane in any of the above conditions.

Lift the load only if the parts intended for this purpose, such as e.g. the telescope, the crane hook, etc. are properly fastened.

Do not use blocks, stones or other things to level the crane.

Do not operate the crane when it is iced up. Do not operate the crane when it is windy.
A larger surface area of the load reduces the stability of the crane in windy conditions.

If the wind speed exceeds 34 km/h (5 Beaufort), the boom operation must be stopped immediately!

Do not leave the load lifted when wind is expected.

Do not exert horizontal or lateral pressure on the machine by lifting or lowering fixed or overhanging loads.

Safety instructions

Electrocution Hazards - Danger to Life

The MRC is not electrically insulated and does not provide protection in case of contact with electricity or in the vicinity of electricity.

Keep away from the crane when it touches live wires. The crane must not be touched by persons or put into operation before the electrical lines have been switched off.
Always keep a safe distance from electrical lines and devices. In doing so, comply with the respective legal regulations and the following table:

VOLTAGE	MINIMUM SAFETY DISTANCE
Phase-to-phase	Metre
0 to 300 V	Avoid contact
300 V - 50 kV	3,1 m
50 kV - 200 kV	4,6 m
200 kV - 350 kV	6,1 m
350 kV - 500 kV	7,6 m
500 kV - 7550 kV	10,7 m
750 kV - 1000 kV	13,7 m

Take into account movements of the telescope as well as swaying or sagging of electric cables.
Do not use the crane as a mass during welding work.

Injury Hazard

Do not hold onto the locking arch, the swivel arm, the telescope or the cylinder and do not reach into moving parts.

Do not lean ladders or scaffolding against the crane or telescope.

The crane must not be operated on a moving surface or on a vehicle.

The permissible load capacity must not be exceeded. For exact details, please refer to the section Load Capacity Table.

Do not push the crane past debris or uneven terrain.

Never replace parts of the crane with parts of different weight or other specifications. Use only original spare parts.
Only use the load attachment specially approved for the crane (original part).

Operation of the crane

Before operating the MRC, secure it against rolling away with the safety brakes.

Never stand under the load support. Do not stand on the chassis, outriggers or other components. Do not allow other persons to do so either.

Safety instructions

Crushing Hazards

Do not raise if the load is not

1.fixed
2.centred
3.secured.

Never stand under the crane or load and make sure that no one is under the crane or load.

It is not permitted to stay under the load.

Before lowering the load, make sure that there are no persons or obstacles underneath.

Keep hands and fingers away from the cylinder, telescopic arm, outriggers and other crane parts where there is a risk of crushing.

Load hook

Lift loads only with the original load hook. Before loading, make sure that the load hook is suitable for the load and properly attached.
Only lift the load when the load hook is properly mounted and the load is sufficiently secured.

Before lifting, observe the information in the load table.

Collision Hazards

Check the working area for obstacles and sources of danger, in particular if you are working overhead.

Proceed sensibly and according to plan when moving the crane over a sloping surface, inclined plane or similar. Move the MRC only in transport position.

Loading

When loading, make sure that the MRC and the transport vehicle are on level ground.

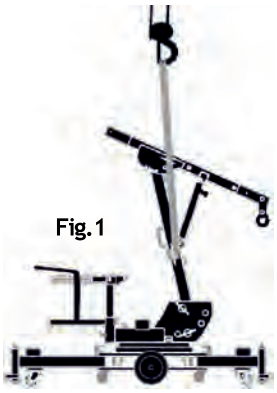


Fig.1

When loading with a crane or forklift/telescopic handler, use a suitable sling and pull it through the handles on the main arm and telescopic arm Fig.1. Lift the crane only in transport position (p. 9) - and never with a load attached!
Always remove before loading:

- load,
- weight boxes,
- counterweights,
- steering bracket,
- loading accessories (if used).

Safety instructions

Damaged Crane Hazards

Never use a damaged MRC that does not function properly.
Do not use the crane with a worn, leaking, oil-smeared or bent cylinder. Make sure that the components of the MRC 751 are in good working order.

Always carry out a thorough inspection of the crane before putting it into operation.

Damage, malfunctions and other safety-relevant impairments may only be removed by personnel who have been specially instructed and trained for the crane! Otherwise there is a risk of accidents or danger to life.
Make sure that all safety stickers are attached and clearly visible (according to appendix).

Make sure that the operating instructions in the crane's storage compartment, is complete and clearly legible.
For lubrication of the crane components, use the grease nipple attached to the crane, see maintenance instructions.

Hazard due to improper use

Never leave the loaded MRC unattended.

Unauthorised persons could attempt to operate the crane without proper instruction and cause dangerous situations.

The MRC is not designed for continious operation. The load could be sinking unintentionally and there for create dangerous situations.

Pre-operation Inspection

Failure to follow the instructions and safety regulations in this operating manual may result in serious injury or fatal accidents!

Only operate the MRC when the following conditions are met:

☑ You know and follow the principles of safe operation of the crane from these operating instructions.

1) Avoid dangerous situations. Familiarise yourself with the safety instructions before proceeding to the next section.

2) **Always carry out an inspection of the crane before commissioning.**

3) Inspect the work area thoroughly before using the MRC.

4) Before using the MRC, you must always carry out a functional test in accordance with these operating instructions.

5) In general, use the crane only for the intended purpose according to the operating instructions. Deviations are not permitted.

Fundamentals:

The pre-operation inspection is a visual and functional check that must be carried out by the operator before each use of the crane.

This inspection is to determine if the crane has any obvious faults before the operator uses it.

Check the crane for modifications, damages, loosened, brittle, loose or missing parts.

A damaged or modified crane must not be put into operation. If damage or deviation from factory condition is detected, the crane must be taken out of service immediately and marked accordingly.

Repair work may only be carried out by qualified service technicians in accordance with the manufacturer's specification.

Once the repair work has been completed, the user must carry out a new inspection before commissioning and then carry out the functional tests.

Read, understand and adhered to:

a) the manufacturer's instructions and safety instructions,
b) the operating instructions and safety instructions for the MRC,
c) the labels, stickers and hazard warnings on the MRC,
d) the safety instructions and work procedures on the job site,
e) the applicable legal and local regulations.

Pre-operation Inspection

Make sure,

that the operating instructions are complete and legible and is located in the crane's storage compartment.

Make sure,

that all warning labels and inscriptions are present and clearly legible. For more information see the section on safety stickers.

Check

following components and areas for safety-relevant damages, modifications and incorrectly installed or missing parts:

Basic components and chassis

- Legs, support legs, stabilisers
- Wheels/tires/brakes
- Cylinder
- Main arm, telescopic arm and load hook
- Bolts, pins, screws, nuts
- Other fastening and protective devices

Check the entire crane, including the telescope and the load suspension:

- Dents, dings, damage Corrosion or oxidation
- Cracks in weld
- Weld seams/components Defects on the cylinder; oil leaks

Make sure,

that all attachments are present and that

1. all associated fasteners, plugs, bolts and locks are in place.
2. have been properly installed
3. are complete and undamaged see and the crane is in a safe working position.

Working Area Inspection

Failure to follow the instructions and safety regulations in this operating manual may result in serious injury or fatal accidents!

Only operate the crane when the following conditions are met:

☑ Know and follow the principles of safe operation of the crane from this operating instructions.

1. Avoid dangerous situations. Familiarise yourself with the safety regulations before proceeding to the next section.
2. Always perform a pre-operation inspection on the MRC.
3. **Always check the working area before using the MRC.**
4. Before using the crane, always carry out a functional test in accordance with these operating instructions.
5. In general, use the crane only for its intended purpose according to the operating instructions. Deviations are not permitted.

Fundamentals

Inspection of the work area helps the operator determine if the work area is suitable for safe operation of the crane. The inspection must be carried out by the operator before the crane is brought into the work area.

It is the operator's responsibility to read and know the instructions for working hazards. These working area hazards must be avoided when moving, setting up and operating the crane.

Only work with the crane on firm, load-bearing ground. Observe the wheel loads specified in the technical data and adhere to the locally permissible ground loads.

Avoid sources of danger!

Do not operate the crane if the following sources of danger do not permit safe use:

- Inclines, holes, thresholds, rubble
- Subfloors with insufficient bearing capacity
- Subfloors with holes, obstacles, etc.
- Obstacles above head height such as:
  Beams, wires and cables
  High-voltage lines
- Wind force 5
- Other unsafe areas and conditions

Read, understand and adhere to:

a) the manufacturer's instructions and safety instructions,
b) the operating instructions and safety regulations for the unit,
c) the labels, stickers and hazard warnings on the unit,
d) the safety regulations and work instructions at the place of work,
e) the applicable legal and local regulations.

Function tests

Failure to follow the instructions and safety regulations in this operating manual may result in serious injury or fatal accidents!

Only operate the crane when the following conditions are met:

☑ Know and follow the principles of safe operation of the crane from this operating instructions.

1. Avoid hazardous situations. Familiarise yourself with the safety regulations before proceeding to the next section.

2. Always carry out an inspection of the crane before commissioning.

3. Always check the workplace before using the crane.

4. **Before using the crane, always carry out the functional tests according to these operating instructions.**

5. In general, use the crane only for its intended purpose according to the operating instructions. Deviations are not permitted.

Fundamentals

The function tests are desgned to identific malfunctions before the crane is put into service.

The operator must follow the instructions step by step and check all crane functions.

A crane with malfunctions must never be put into service or used.

Example:

- Cylinder lowers by itself
- Components are damaged
- Supports cannot be locked in place
- Rotation function of the turntable is limited
- Counterweights are not complete

If any malfunctions are detected, the crane must be taken out of service immediately and marked accordingly. Further use of the of the crane is to be excluded.

Repair work may only be carried out by qualified service technicians in accordance with the manufacturer's specifications.

After completion of the repair work, the service technician must carry out a pre-commissioning inspection and repeat the functional tests before the crane is released for its intended use.

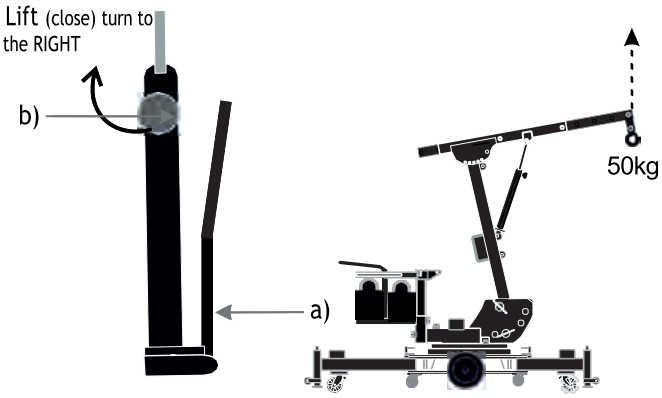
Read and follow:

a) the manufacturer's instructions and safety instructions,
b) the operating instructions and safety regulations for the unit,
c) the labels, stickers and hazard warnings on the unit,
d) the safety regulations and work instructions at the place of work,
e) the applicable legal and local regulations.

Function tests

Hydraulic Cylinder

1. Close the valve on the lifting cylinder by turning the hand wheel b) to the right until the valve closes.

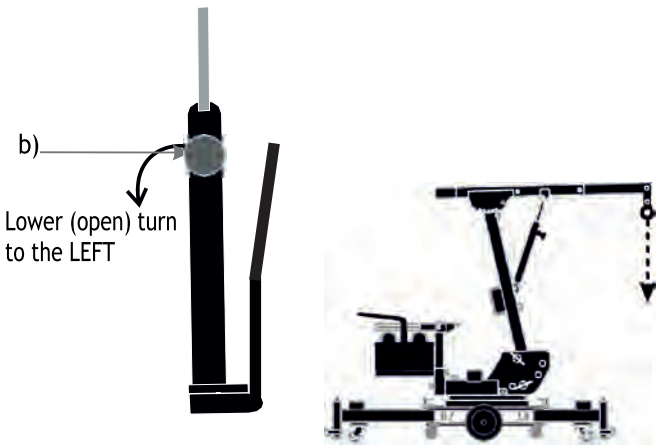


2. Pump with the help of of the pump rod a) the telescope **with min. 50 kg load a** few centimetres upwards. Then wait for 10-20 minutes.

>The piston of the cylinder (= the telescope arm) must not lower automatically when the valve is closed.

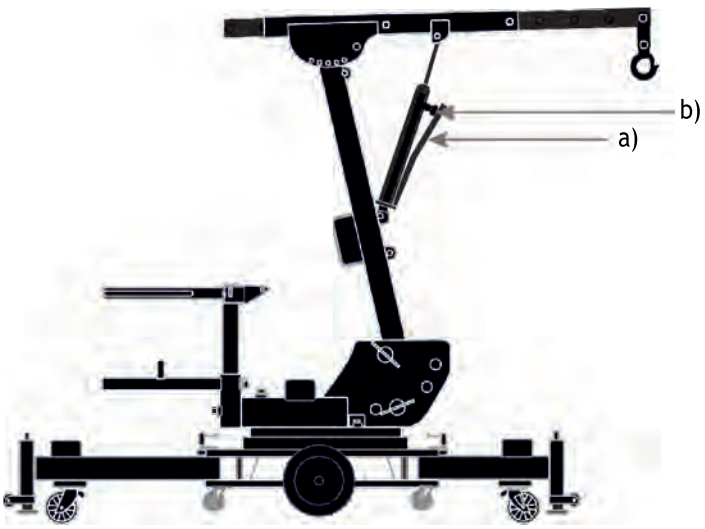
3. After the waiting time, make sure that the lifting cylinder (telescope) does not lower itself, check the lowering function.

4. Open the valve of the lifting cylinder by turning the hand wheel b) to the left (anticlockwise).



5. Please grease the bolt of the hand pump weekly.

> The piston of the cylinder (= the telescope arm) must lower easily, evenly and without jerking when the valve is open.



Operating instructions

Only operate the crane when the following conditions are met:

☑ Know and follow the principles of safe operation of the crane from this operating instructions.

1. Avoid dangerous situations. Familiarise yourself with the safety regulations before proceeding to the next section.
2. Always carry out an inspection of the crane before commissioning.
3. Always check the working area before using the crane.
4. Before using the crane, always carry out the function tests in accordance with these operating instructions.
5. **In general, only use the crane for the purpose foreseen in the operating instructions. Deviations are not permitted.**

Fundamentals

Using the MRC for purposes other than lifting material is dangerous.

Every operator must be instructed in the machine and it is assumed that he/she knows and follows the safety regulations and instructions in the operating manual.

This means that every new operator must know and comply with the safety regulations described here in the previous chapters before using the crane.

For this purpose, the following tasks must always be carried out by each operator before the machine is put into operation:

Read and understand these operating instructions:

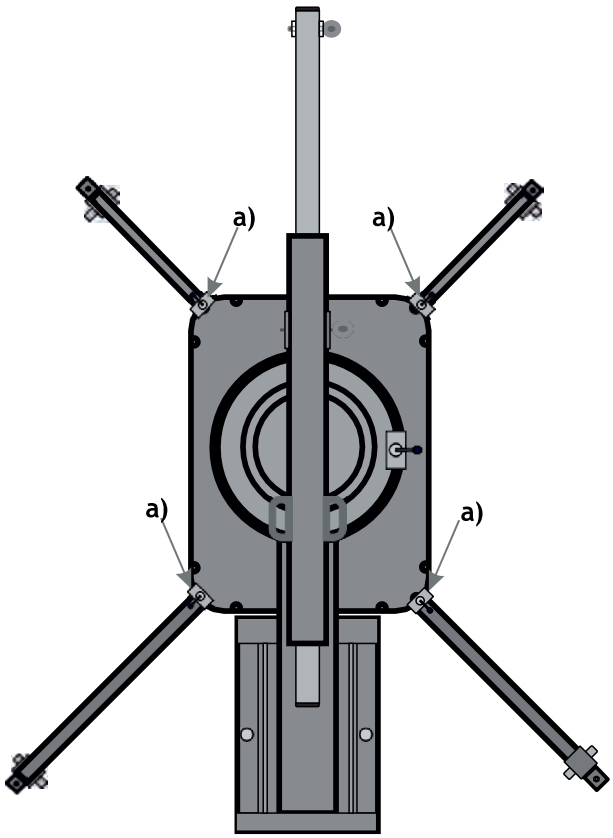
- Pre-operation inspection
- Function tests
- Checking the working area
- Operating instructions
- Observation and application of the data from the load centre table

Installation MRC 751

Working position - alignment of the legs and the jacks

Set up the MRC on firm and level ground.
When setting up, make sure that all parking brakes on the castors are locked on the chassis.

Working position

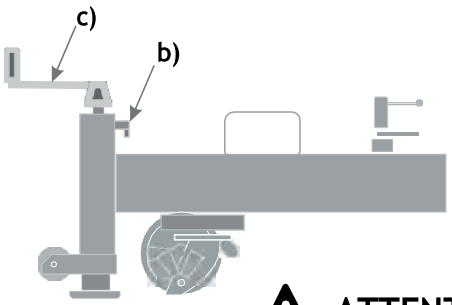


1. Make sure that the legs are always arranged at a 45°angle to the chassis, see illustration above.

2. The legs must always be locked with the locks a) provided for this purpose.

3. The MRC 751 is now ready for alignment. Turn the spindle lock b) upwards. Now the jacks can be turned downwards with the hand crank c) or a cordless screwdriver. Do not use, hammer drill.

4. Align the MRC using the spirit level so that it is leveled. A firm ground pressure of all four jacks must be ensured at all times.



ATTENTION:

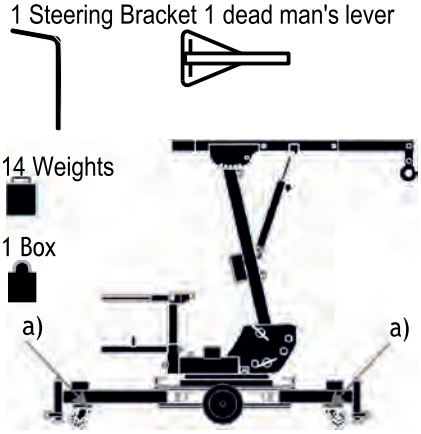
1. Never operate the crane without completely filled weight boxes!
2. <u>Always operate the crane with all four legs!</u>
3. Do not move the crane with the load raised or leave it unattended.

Installation MRC 751

Installation short legs forward with a weight box
Set up the MRC on firm and level ground.
When setting up, make sure that all parking brakes of the castors on the chassis are locked.

1. Locking the brakes:

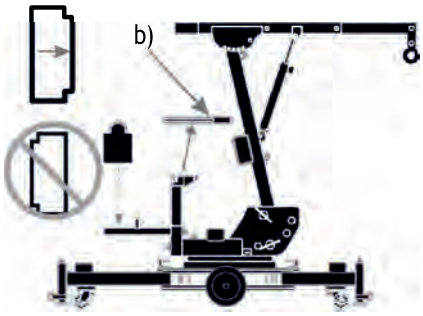
1 Steering Bracket 1 dead man's lever



1. Apply the parking brakes a) on each individual castor of the chassis before starting the installation.
2. Press the brake lever down with your foot until it is engaged and holds its position automatically.
3. Repeat the procedure until all brakes are locked and then check the braking effect!

2. Installation of the first weight box:

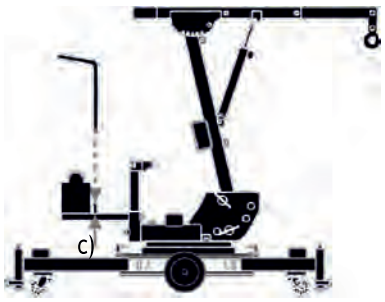
Fig.1



4. First remove the dead man's lever b) which is mounted above the weight boxes. Make sure that the recessed corners of the weight box are pointed to the main arm (Fig.1)!

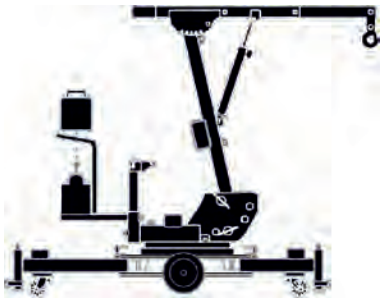
Notice:
If you are using only one weight box, arrange it as shown in the illustration above.

3. Mounting the steering bracket:



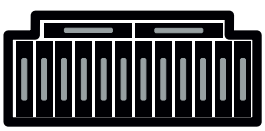
5. Put the steering bracket onto the holders on the right and left of the chassis c).
6. Secure the traversing bar on both sides with a linch pin.

4.Fill weight box:

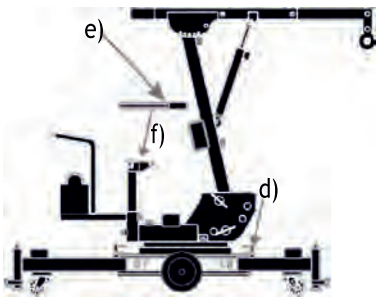


7. Fill the box with 14 weights in the correct alignment:
   12 Weights along
   2 weights crosswise (in bulge)

Filling pattern:



5. Fit the dead man's lever:



8. Reconnect the dead man's lever e) to the holder f) provided for it on the chassis. and lock it again with the pins provided for this purpose. Always make sure that the locking bolts d) of the legs are engaged in the holes provided for this purpose on the chassis.

Attention: The MRC 751 may only be used with the dead man's lever fitted.

ATTENTION:

Never operate the crane without completely filled weight boxes!

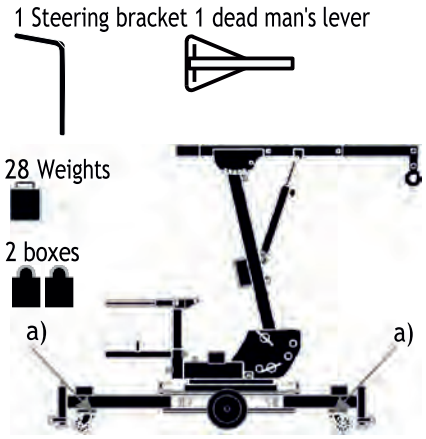
Installation MRC 751

Installation short legs to the front with two weight boxes

Set up the MRC on firm and level ground.

When setting up, make sure that all parking brakes of the castors on the chassis are locked.

1. Apply the parking brakes:

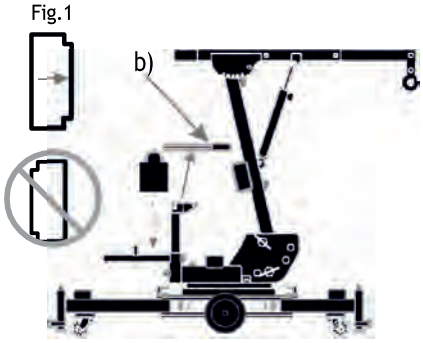


1. Apply the parking brakes a) on each individual castor of the chassis before starting the istallation.

2. Press the brake lever down with your foot until it is engaged and holds its position automatically.

3. Repeat the procedure until all brakes are locked and then check the braking effect!

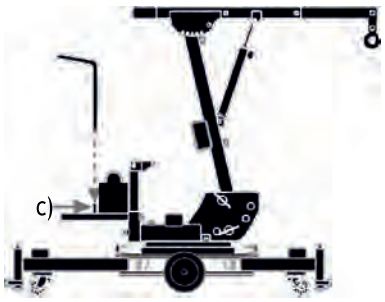
2. Insert the first weight box:



4. First remove the dead man's lever b) which is mounted above the weight boxes. Make sure that the recessed corners of the weight box are points to the main arm (Fig.1)!

Notice:
Insert the second box later, otherwise the traversing bracket cannot be mounted!

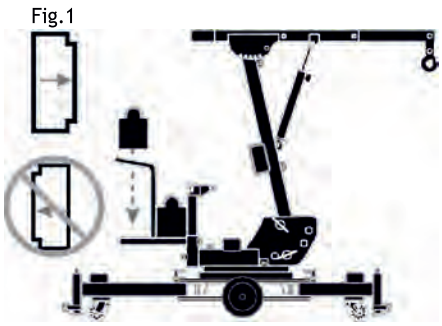
3. Mounting the steering bracket:



5. Put the steering bracket onto the holders on the right and left of the chassis c).

6. Secure the steering bracket on both sides with a linch pin.

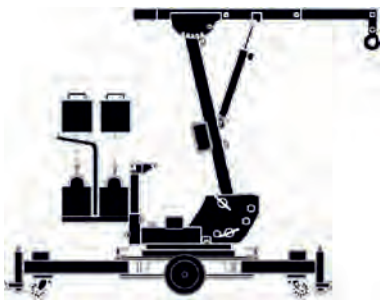
4. Insert the second weight box:



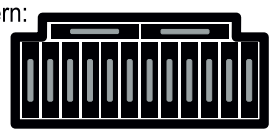
7. Place the second weight box in the <u>rear</u> bracket of the chassis. Make sure that the bulge of the box points to the main arm (Fig.1)!

8. Make sure that both boxes are firmly anchored in the brackets before filling them with the weights.

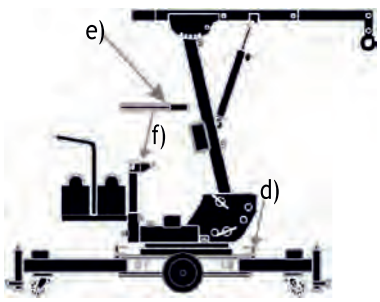
5. Fill weight boxes:



9. Fill each box with 14 weights in the correct orientation:
12 Weights along
2 weights crosswise (in bulge) Filling pattern:



6. Fit the dead man's lever:



10.Insert the dead man's lever e) into the holder f) provided for it on the chassis and lock it again with the locking bolts provided for this purpose. Always make sure that the locking pins d) of the legs engage in the holes provided for this purpose on the chassis.

Attention: The MRC 751 may only be used with the dead man's lever fitted.

ATTENTION:

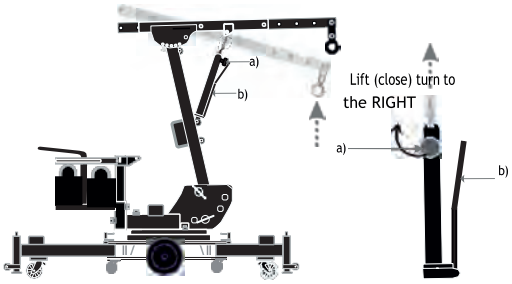
Never operate the crane without completely filled weight boxes!

Installation MRC 751

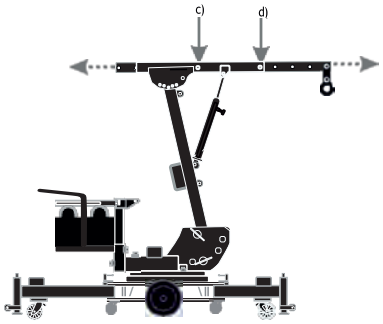
Set up cylinder, telescope.

Set up the MRC on firm and level ground.
When setting up, make sure that all parking brakes on the castors are locked on the chassis.

Pump up 1.telescope:



1. Turn the hand wheel of the hydraulic cylinder a) to the right, to close the drain valve (Fig. 1).
2. Pull the pump rod b) for the hydraulic cylinder towards you to lift the telescopic arm with the aid of the cylinder.



3. Loosen the two plug-in bolts c) and d) on the telescopic arm and pull them out.
4. Carefully push the telescope into the desired position until the pins can be inserted again.
5. Then secure the telescope by securing the two pins with the folding pins.

ATTENTION:

Always pull the telescope out only so far that it can be secured with two bolts!
Notice:
The further the telescope is pulled out, the more the load capacity of the MRC is reduced. For exact figures, please refer to the load table in the back section of these operators manual.

ATTENTION:

Never operate the crane without completely filled weight boxes!
Never operate the crane with only one jack!
Do not move the crane with the load raised or leave it unattended.

Installation MRC 751

Pick up load, lift, lower.

Set up the MRC on firm and level ground.
When setting up, make sure that all parking brakes of the castors on the chassis are locked.

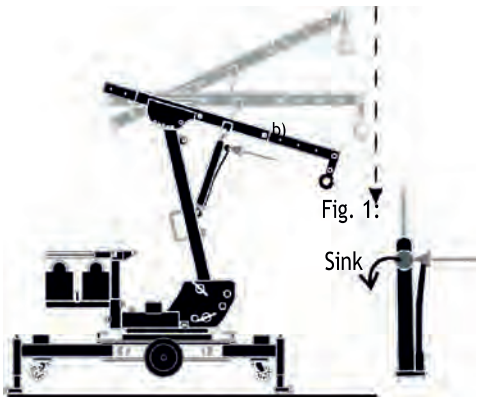
1. Loading:

1. To pick up the load on the crane hook a), bring the load and the crane as close as possible to the place of use.

2. Then attach a shackle to the load. Make sure that the shackle has sufficient load capacity and is attached to the centre of the load.

3. Align the MRC and the telescope so that the crane hook is above the load's centre of gravity.

2. Lowering Telescope:



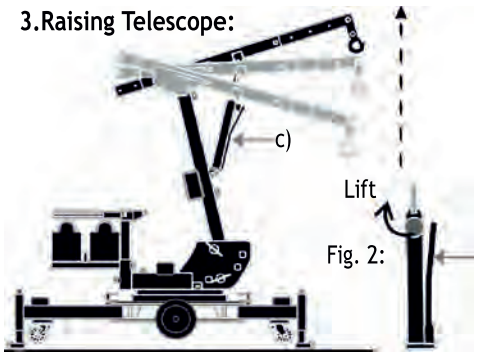
1. To lower the telescope, turn the hand wheel of the hydraulic cylinder b) to the left to open the drain valve (Fig. 1).

2. When the telescope has reached the desired position, close the valve by turning the hand wheel to the right (see 2. Raising the telescope Fig. 2).

Notice:

The more you turn the hand wheel of the cylinder to the left, the faster the telescope lowers. The less you turn it to the left, the a) slower the telescope lowers.

3. Raising Telescope:

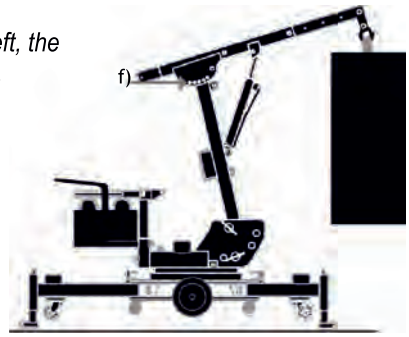


Pump up and down using the pump rod c) in the hydraulic cylinder to move the telescope upwards.

Notice:
If the telescope lowers itself under load the valve is
1.) not closed properly, or
2.) the hydraulic cylinder is defective.

b)

4. Secure telescope:

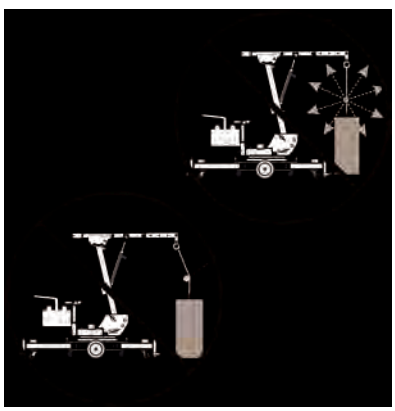


Secure the telescope when the load is brought to working height. Insert the locking bolt through the locking hole f) closest to the main arm.

ATTENTION:
The locking device is not designed for, hold the load and telescope permanently!

ATTENTION:
Make sure that the spring hook of the crane hook closes completely after the shackle has been picked up. Otherwise the load could fall down (risk of accident).

ATTENTION:
Lift and lower the load only vertically, up and down. Do not pull the load sideways, forwards or backwards. Do not use deflectors or similar tools.



ATTENTION:
Never operate the crane withuot completely filled weight boxes!
Never operate the crane with only one jack!
Do not move the crane with the load raised or leave it unattendet.

Load Positioning

Position the load and align the castors.

Note that the load capacity reduces as the telescope is extended.
Only load the crane when it is standing on the supports and the chassis is horizontally levelled.

Position the load correctly at the load handling attachment used. Make sure that the load is adequately secured and that the MRC has sufficient load-bearing capacity!Incorrectly positioned and unsecured loads can cause serious injuries or lead to fatal accidents!

Position cargo

1. Determine the weight and centre of gravity of the load.
2. Measure the distance from the shackle to the outer edge of the load (longest distance). Adjust the telescope's outreach so that the suspended load cannot hit the main arm.
3. Use the load table to ensure that there is sufficient load capacity for the set telescopic extension to lift the load safely.
4. Ensure that the load is adequately secured.

ATTENTION:

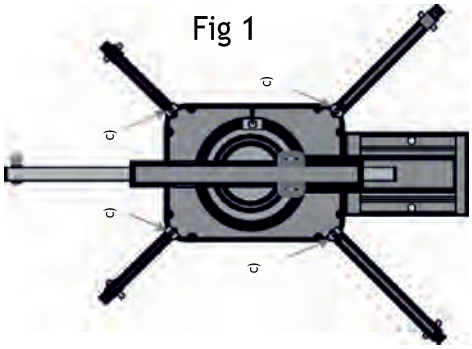
Always adhere to the specifications in the load table. Do not exceed the given loading specifications under any circumstances. Only use the crane on level ground.
and load-bearing surfaces!

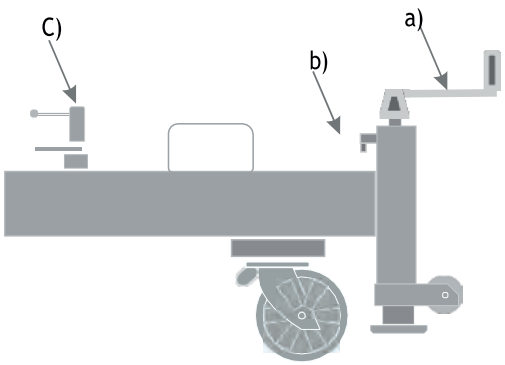
Alignment of the legs

To use the MRC 751, adjust the legs on the chassis so that they are at a 45° angle to the chassis.
Fig. 1.
Lock the outriggers with the catches provided on the chassis c). To align the crane, first loosen the prop lock b) by turning it upwards. Now you can crank the support downwards with the aid of the crank handle a) until the wheel lifts off the ground.

Do this for all four supports until the MRC is aligned.

Fig 1





Loading and Transportation

Basic principles.

Before you start loading, familiarise yourself with the prerequisites of the loading methods and over the vehicles/trailers to be used for transporting the crane. Observe and follow the respective requierments.

Transport vehicle/trailer:

1. The transport vehicle/trailer must be positioned on a firm and level surface.

2. The transport vehicle/trailer must be appropriately secured to prevent it from rolling away while the MRC is being unloaded (chocks, parking brake, etc.).

3. Make sure that the transport vehicle/ trailer:

- is big enough,
- has sufficient payload/trailing load,
- has a safe, flat ramp,
- provides sufficient securing points.

Trailer with ramp:

1. Observe the points mentioned under "Transport vehicle/ trailer".

2. When using a ramp, make sure that the ramp:

- is sufficiently load-bearing,
- is stable enough,
- cannot bend/break through,
- is secured against slipping away,
- has been positioned flat to the ground.

Lifting equipment:

1. When loading with a **crane, make** sure that the lifting capacity of the crane is sufficient to load the MRC safely.

2. Make sure that the **straps** used for lifting are undamaged.

3. Make sure that the straps are sufficiently dimensioned for the weight of the MRC.

4. Observe the weight specifications for the MRC on the type plate on the chassis, or in the technical data of these operating instructions.

Load securing:

1. Apply the parking brakes on all castors that are in contact with the ground.

2. Lower the jacks so that they are in contact with the ground.

3. Make sure that the straps used to secure the load are free of damage and of sufficient dimensions.

4. Secure the MRC for transport with approved straps.
The unit is attached diagonally to the lashing points provided for this purpose.

ATTENTION:

Do not load the MRC in working position and never with counterweights. The MRC 751 is to be loaded in transport position only.

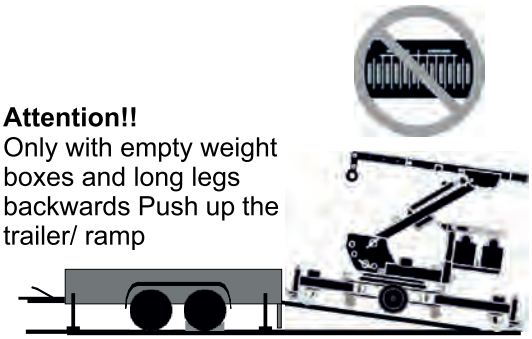
- **An unsecured MRC could roll down a ramp unintentionally (risk of injury!)**
- **Be careful when loading: The MRC could swing when raised as soon as the castors are no longer in contact with the ground.**
- **When loading, always ensure that people who are not involved in the loading process keep a safe distance.**

Loading methods

Trailer and crane.

Before you start loading, familiarise yourself with the prerequisites of the loading methods. and of the vehicles/trailers to be used for transporting the MRC. Observe and follow the respective requierments.

1. Transport vehicle/trailer:



Attention!!
Only with empty weight boxes and long legs backwards Push up the trailer/ ramp

1. Place the MRC in transport position in front of the trailer. The trailer brake must be applied and the trailer must be adequately supported and secured with wedges to prevent it from rolling away.

2. Only push the MRC onto the trailer/transporter when it has been ensured that the ramp has sufficient load-bearing capacity, is flat enough and is sufficiently secured against slipping away.

3. Make sure that:
   a) there is no load on the MRC
   b) the telescope is retracted and lowered
   c) Weights and boxes have been removed
   d) all legs straight to the chassis
   e) are locked and secured.

4. Push the MRC over the ramp with 2 people and momentum. Use the winch if available.

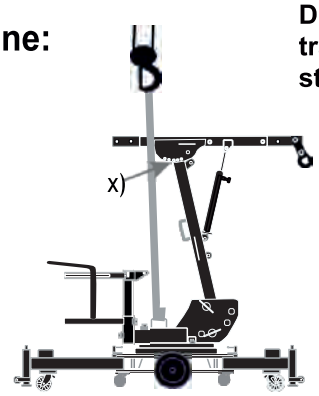
5. Position the MRC at the desired location on the loading area.

6. Lock the parking brakes of all wheels that are in contact with the ground.

7. Secure the MRC with suitable straps and secure it sufficiently against rolling away, moving, tipping, falling over or similar.

8. Pay attention when loading and fixing. Make sure that no components are damaged.

2. Crane:



1. Place the MRC under the crane as shown above.

2. Make sure that:
   a) there is no load on the MRC,
   b) the telescopic arm is fully lowered, retracted and secured,
   c) Weights and boxes have been removed
   d) the legs are in the middle position and secured,
   e) the crane has sufficient lifting capacity.

3. Secure the telescopic arm by inserting the locking bolt into the first hole in the head part of the main arm x).

4. Pass sufficiently strong straps, with an eyelet at each end, through the handles on the main and telescopic arms on the MRC. Start from the top down
   1. through the handle on the telescopic arm,
   2. through the handle on the main arm,
   3. along in front of the main arm,
   4. to the opposite side,
   5. through the handle on the main arm,
   6. through the handle on the telescopic arm.

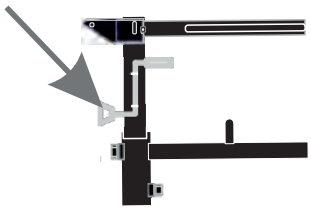
5. Bring both strap ends together over the telescopic boom and hook them into the crane hook. Make sure that the hook safety device is correctly closed.

6. Carefully lift the MRC and slowly set it down on the desired position on the loading area.

7. Lock the parking brakes of the MRC and secure it sufficiently against rolling away, falling over, etc.

8. Detach the lifting straps from the crane hook.

Attention:
Dismantle the crank handle for road transport, on water or in the air and stow it in your vehicle.



Unloading:

1. To unload the MRC, release the straps and unlock the parking brakes on the wheels.

2. Push the MRC carefully and slowly to a position where unhindered and safe access possible.

3. Connect the lifting hook of the crane and the handles of the MRC on the main and swivel arm with a suitable belt. Make sure that the clamp of the crane hook is back in place before lifting the MRC.

4. Carefully lift the MRC from the loading place with the crane and then set it down slowly next to the transport vehicle.

5. Disconnect the MRC from the crane.

ATTENTION:

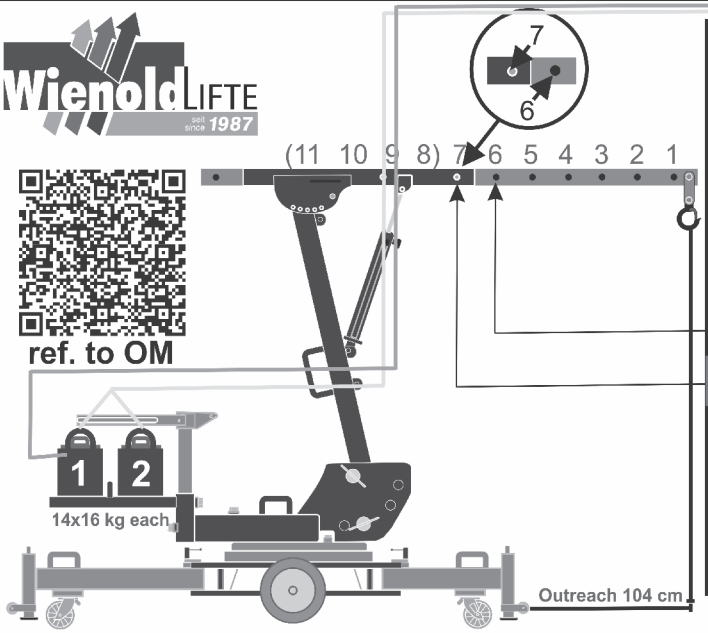
- **Never load the MRC in working position, with counterweights and boxes, or loose parts. They could fall down (risk of injury!).**
- **The MRC could roll back unintentionally on a ramp if it is not secured (risk of injury!).**
- **Be cautious when loading the MRC with a crane: The MRC could swing as soon as the rollers no longer have contact with the ground (risk of injury!).**
- **When loading, always ensure that persons who are not involved in the loading process keep a safe distance.**

Technical data

Technical data	MRC 751
Lifting heights:	2,91 m
Transport position -height:	1,93 m
-length with legs/without legs:	2,24 m/ 75 cm
-Width with large/without large wheels:	80 cm/59 cm
Working position -height:	2,11 m
-Length:	1,58 m
-Width: **Short/Long**	1,38 m/1,84 m
Telescopic extension each:	14 cm
Max. range: **Short/Long**	1,34 m/1,05 m
Chassis without legs:	241 kg
Mast complete:	85 kg
Short legs (1 piece) :	23 kg
Long legs (1 piece):	27 kg
2 weight boxes with 28x16kg:	480 kg
MRC with all attachments	928 kg

Specifications are subject to change without notice.

Payload MRC 751 Dynamic Load - (360° Rotating)



Position	Outreach	Payload 2 Boxes	Payload 1 Box
1	20 cm	720 kg	720 kg
2	34 cm	720 kg	720 kg
3	48 cm	720 kg	650 kg
4	62 cm	720 kg	550 kg
5	76 cm	678 kg	450 kg
6	90 cm	582 kg	380 kg
7	104 cm	510 kg	340 kg
8	118 cm	454 kg	300 kg
9	132 cm	408 kg	270 kg
10	146 cm	371 kg	240 kg
11	160 cm	341 kg	215 kg

Own weight:
Chassiss with all attachments
480 kg
Total weight with all attachments
928 kg

908-408

Telescope + Plugin Extension(PIE) (with 2 Boxes ONLY)

Position	6+PIE	7+PIE	8+PIE	9+PIE	10+PIE	11+PIE
Outreach	182 cm	196 cm	210 cm	224 cm	238 cm	252 cm
Payload	247 kg	229 kg	217 kg	205 kg	193 kg	177 kg

Declaration of conformity

EC-Declaration of Conformity in accordance with Directive 2006/42/EG, appendix II 1.A

- Original EC-Declaration of Conformity -

CE

Norbert Wienold GmbH

Industriegebiet Waldstr. 35a | 48488 Emsbüren | Germany

Wienold LIFTE

We herby declare that the design, construction and execution of the below listed Glass and Material Lift comply with applicable health and safety requirements here the EC Directive

OELGEMÖLLER Planning+Engeneering
Hessbergstraße 12
48488 Emsbüren, Germany

1. EC Directive
   Machinery Directive 2006/42/EG

2. Applied harmonizing EN standards
   Cranes –General design –Part 1: General principles and requirements, DIN EN 13001-1
   Crane safety – General design – Part 2: Load actions DIN EN 13001-2
   CE regulations DIN EN 12100 Safety of Machinery General design sets

3. The special technical documents, state September 2016 according to Annex VII · Part B and the assembly instructions in accordance with Annex VI to Directive 2006/42 / EC have been created

Lifting, lowering, holding and mounting loads.

Product description: **Wienold Mini Rotating Crane**

Model: **MRC 751**

Serial No.:

Year:

Manufacturer:

Norbert Wienold GmbH
Industriegebiet Waldstr. 35a
D-48488 Emsbüren, Germany

Representative of Norbert Wienold GmbH
Venue: Emsbüren
Function of the signatory within the company: Managing Director
Date:

This declaration certifies the conformity to the specified directives but does not imply any warranty for properties. The safety documentation accompanying the product shall be considered in detail.

Norbert Wienold
Managing Director

Notes

Notes

Notes

Notes

Norbert Wienold GmbH
Industrial area Waldstr. 35a
48488 Emsbüren
Germany

Tel. +49 59 03 - 93 94 0
Fax +49 59 03 - 93 94 50

www.wienold-lifte.de
e-mail: info@wienold-lifte.de

Service Stations: Munich, Frankfurt, Leverkusen, Walsrode, Brandenburg, Emsbüren