

Operation and Service Instructions

**Gantry Crane FAG-3222-2M**



Description	Gantry Crane FAG-3222-2M
Article Number	8010197
Machine/Serial Number	
Manufacturing Year	
Carrying Capacity	500 kg
Length of the Running Rail	3.500 mm
Height Max.	3.000 mm
Clear height max..	2.800 mm
Clear width	1.600 mm
Total weight	80 kg
Adjustable leg with crank (optional)	

Picture 1 Overall View Gantry Crane FAG-3222-2M

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## 1 Contact

For any further questions and/or individual orders, please us directly:

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## 2 Conformity Declaration "CE"

Manufacturer:  
Signature:

## 3 Symbols and Warning Instructions

The following explanations of the symbols appearing on the machine or in the operating instructions should help you to understand them.

### 3.1 Warning Instructions on the Gantry Crane FAG-3222-2M

The following warning symbols can appear on the machine respectively unit:



This symbol points out the availability of the related operating instructions and warns the operator to read these instructions prior to the installation or the commissioning of the machine.



This warning symbol appearing on the machine points out to the operator the existence of electrical current, which is strong enough to cause an electric shock to the operator upon contact with the danger point. In such a location, health or loss of life are at risk.



This warning symbol denotes the need of the operator to wear ear-protection and eye goggles.



Warning as to suspended load! This warning symbol appearing on the machine warns the operator that he is forbidden to walk or stand under suspended loads.



Danger of bodily harm! This warning symbol appearing on the machine warns the operator that during use of the machine, utmost attention must be used otherwise negligence could cause an accident



This warning symbol located on the unit or machine instructs the operator that the suspended load must be equally distributed. Slanted and unevenly distributed loads may not be raised or transported!



Warning of contact with high tension lines. This warning symbol on the unit or machine warns the operator that danger may be caused by the operator in the event of negligent contact with high tension lines.



This mandatory sign obligates the operator of the machine to use and wear safety shoes, protective gloves and protection helmet.

## 3.2 Symbols in the Operation Instructions

The following symbols can appear in the operation instructions and are defined accordingly:



This exclamation mark, framed in an equilateral triangle, draws the operator's attention to the fact that very important directions are available and the operator should read and follow the information with particular interest.



Obligation to recycle waste materials into the production process and to safeguard the natural resources and protect the environment.

## 4 Regulations for the use of the Gantry Crane FAG-3222-2M

Please pay particular attention to the information concerning the use of the machine.



**Attention! Danger of Injury!!**  
**Inappropriate use leads to personal injuries and damage to materials!!**



This unit, respectively machine is especially conceived for one or several application fields. The following chapter explains the possible applications and the possible dangers during the operation.

### 4.1 Field of Application of the Gantry Crane FAG-3222-2M

You have purchased a quality product of Selby Engineering and Lifting Safety Ltd.

The Gantry Crane FAG-3222-2M is a helping device, to facilitate the easy transposing of objects, e.g. monument stones, and to assist you in your work.

Please note the following special characteristics:

- The Gantry Crane FAG-3222-2M is capable of being modified to become a transport vehicle.
- Total construction collapsible with a maximum length extension of 1.600 mm.
- Aluminum light-weight construction.
- Erection on uneven foundation by means of leveling adjustment.
- The Gantry Crane FAG-3222-2M can be varied in height and width.

### 4.2 Inappropriate Application

The Portal Crane FAG-3222-2M is to be exclusively for lifting and transporting of stone plates with a total maximum weight of 500 kg.! Utilize the Gantry Crane FAG-3222-2M exclusively for the intended purpose and avoid materials, which could damage the individual construction components or the metal!

- The Gantry Crane FAG-3222-2M is complete and specifically designed for the proposed application.
- The Gantry Crane FAG-3222-2M may not be erected in a slanted position.
- The permissible carrying capacity of 500 kg may not be exceeded.
- The Gantry Crane FAG-3222-2M may not be erected on a soft foundation.
- The Gantry Crane FAG-3222-2M may not be erected on an incline, slope..
- The Gantry Crane FAG-3222-2M may not be pulled on a slant.
- The Gantry Crane FAG-3222-2M may not be used with a prevailing wind speed of 10 m/s.
- **Never stand or walk under a suspended load!!**

### 4.3 Safety Regulations

- Please read completely these operating instructions before using the Gantry Crane FAG-3222-2M!
- Keep the operating instructions carefully in the proximity of the Gantry Crane FAG-3222-2M, for future reference or when in doubt!
- Unconventional changes or installing of additional devices will lead to the cancellation of any liability by the dealer or manufacturer!
- Remove all articles from the work area, which can be a possible source of danger!
- Only authorized persons may use the Gantry Crane FAG-3222-2M. Each user must have read and understood this documentation.
- Before each use, check the basic parts and welding seams for damages! In case of defects do not use the Crane. The use by an unauthorized third party must be prevented by suitable measures!
- Make certain that the location where the Crane is to be assembled offers suitable foundation carrying capacity!
- The supporting foundation must provide a carrying capacity of from 6.000 kg/m in the event no support plates are laid beneath the legs of the crane!!
- The maximum permissible carrying capacity 500 kg.
- Standing under a suspended load is absolutely forbidden!!
- Carrying capacities may not be pulled on a slant .
- The bolt for the height adjustment must be inserted at the peak of the side piece (A-Form)! It is FORBIDDEN to permit the bolt for the height adjustment on the cross bridge of the side piece (A-Form) to be used for supporting purposes!
- The Gantry Crane FAG-3222-2M may not be used with a prevailing wind speed of 10 m/s.
- All bolts must be safely secured to prevent unintentional loosening.
- Maintain a clean working area and provide for adequate lighting!
- Protective work clothing in accordance with prevailing instructions are to be used when operating the Crane!
- Among other items belong the following:
  - Protective Work Gloves in accordance with current safety measures to prevent accidents!
  - Protective Work Safety Shoes in accordance with the current safety measures to prevent accidents!
- Use only suitable work pieces exclusively suitable for this Crane. Do not lift slabs liable to crack or break during work! ("sound stone plates").
- Check to ensure during use that no one is in the proximity of the Crane, in order to avoid danger to a third party!!
- Check and make certain that all parts are correctly installed!
- In case damages or malfunctions of the machine arise, please contact the dealer or manufacturer immediately!
- Protect the machine against environmental factors, e.g. rain, sunrays, humidity, etc.!
- In case of irreparable damage or other reasons which prevent the further use of the Crane for a long term, Stop operation by making the machine unusable thus making certain there is no danger to other persons!
- If disposing of the machine or parts thereof; dismantle and separate the different materials which can then be disposed of in accordance with recycling regulations!



### 4.4 Machine Identification Plate

The identification plate indicates the origin, identity as well as year of manufacture and, if necessary the maximum carrying capacity

Upon receipt of the goods, please compare the identification plate with the data on the first page of the operation instructions. If the data differs from each other, please contact immediately the dealer or the manufacture

## 5 Assembly

Please read carefully the information in the chapter „Assembly“ and follow it precisely. The manufacturer or the Company SELS will not be held liable for any damage due to incorrect assembly.

On receipt of the goods, check the supplied commodity for any damages incurred during transportation and packing! Advise the Manufacturer/Agent respectively the Transport Company immediately of any damages!



**Any defects, caused by incorrect transport, incorrect assembly and operation are not covered under the Warranty by the dealer respectively the manufacturer!!**



Pay attention that the protective covering of the metal parts will not be damaged by sharp edge articles!

**Absolute attention must be devoted to the Safety Regulations in Chapter 3.3!**

### 5.1 Removing the transportation packaging

The Gantry Crane is usually delivered in cardboard packaging.

**Prior to unpacking, please compare the attached delivery note with the supplied articles!**

**Remove the transportation packing:**

- Release the adhesive strips and/or strapping bands and unpack the contents very carefully!
- Be careful when unpacking the Gantry Crane in order to prevent damages to the contents!
- Strong blows to the building parts of the Gantry Crane on sharp edges can damage the surface and other sections!
- Dispose of the packing waste for recycling in accordance with the local guidelines!

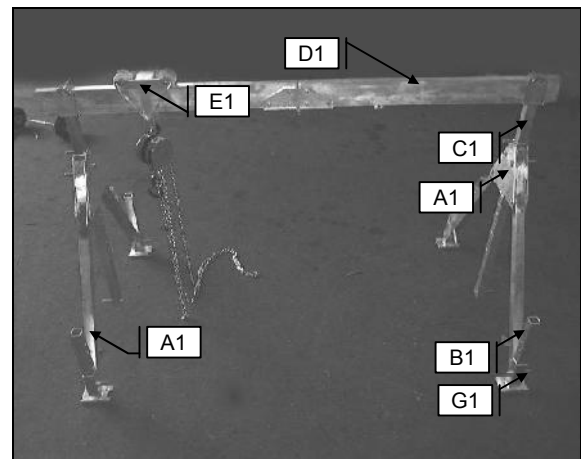
### 5.2 Scope of Supply

Prior to beginning the assembly, please check precisely to see whether all necessary parts are available. If the scope of supply is not complete, contact the dealer or the manufacturer immediately.

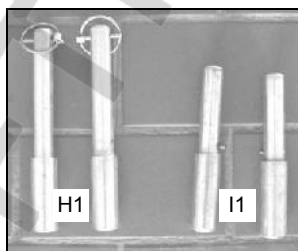
Scope of Supply consists of:

1 x Operation and Service Instructions  
1 x Gantry Crane FAG-3222-2M consisting of:

- 2 x Side pieces [A1]
- 4 x legs for the side pieces [B1]
- 2 x supports for the Alu-Rail [C1]
- 1 x collapsible Alu-track [D1]
- 1 beam trolley [E1]
- 4 bolts for the leg adjustment 160 mm long [G1]
- 2 x bolts for the height adjustment 170 mm long [H1]
- 4 x bolts for the support brace 170 mm long [H1]
- 2 x Grips for the height adjustment w/crosshead pin 155 mm long [I1]
- 1 x pulling carriage complete with steering rod
- 1 x chained geared pulley block (optional)



**Picture 4.1** – Overall view Gantry Crane FAG-3222-2M



**Picture 4.2** – overall view hardware



**Picture 4.1b** – adjustable leg with crank (optional)

### 5.3 Assembly and Mounting Instructions

The Gantry Crane FAG-3222-2M is delivered in an unassembled condition.

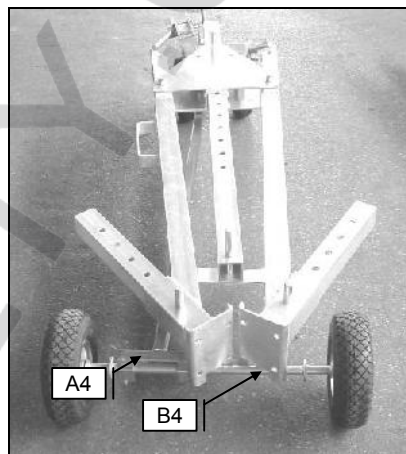
The assembly can be accomplished by one individual.

- The floor space need not be horizontal (on the level) and not flat.
- As a matter of principle, the Gantry Crane FAG-3222-2M is delivered as individual components.



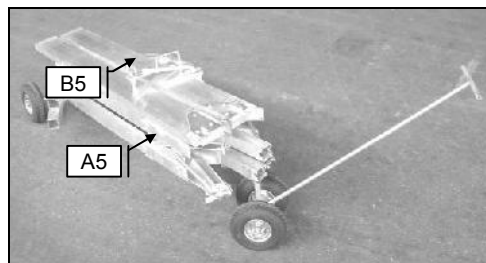
Picture 4.3 Pulling carriage for the components Gantry Crane FAG-3222-2M

- Shove the tracks (A4) of the transport vehicle axle to the left direction.
- Now lay the side pieces with the groove (B4) of the supporting legs on to the supporting surface of the transport vehicle in such a manner, that the axles can be laid down into the two grooves.



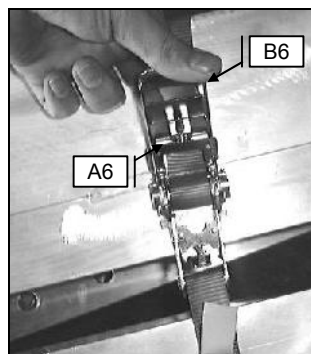
Picture 4.4 Gantry Crane FAG-3222-2M as transport vehicle

- Now lay the second side part (A5) on top of the first side part.
- Next Step is to lay the collapsed tracks (B5) on very top.
- Now wrap the entire building component with the lashing strap.
- Now the Gantry Crane FAG-3222-2M can be driven to the desired building site.



Picture 4.5 Gantry Crane FAG-3222-2M as transport vehicle

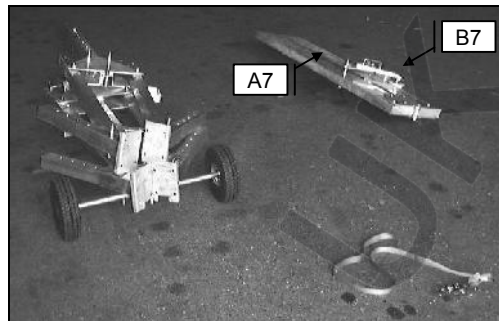
- Firstly open the lashing strap whereby the locking clamp (A6) is to be released .
- The tension lever (B6) is to be completely swung out so far as to permit the lashing strap to be pulled off.
- Lay the lashing strap to a secure location.



Picture 4.6 Release lashing strap

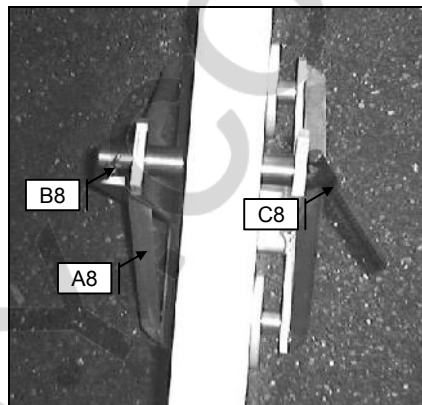
## Operation and Service Instructions

- The tracks (A7) can be lifted by the grip (B7) and placed to the side.



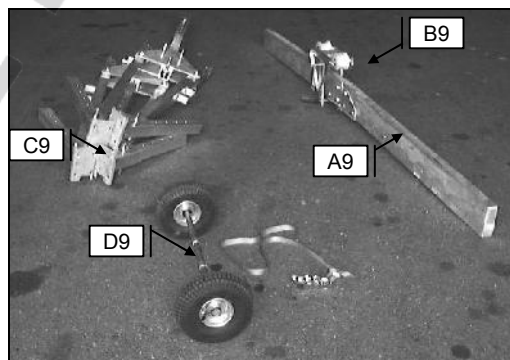
Picture 4.7 Place the tracks to the side

- The tracks with the beam trolley (A8) are now to be positioned, edgewise so that the rollers of the trolley are found on the under side.
- Now the safety bolt (B8) is to be removed and the bolt (C8) is to be pulled out.
- In the next Step, the upper track half is to be spread open.
- Then the bolt (C8) along with the safety bolt is to be inserted into the beam trolley.



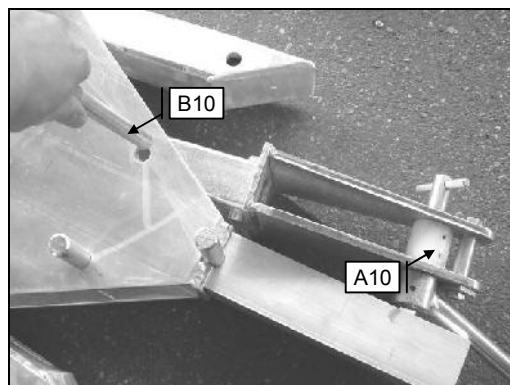
Picture 4.8 Tracks with the upper side in downwards

- Now the spreaded open tracks (A9) are to be turned 180°, so that the rollers (B9) of the trolley are now found on the upper side.
- By lifting of the lower side piece (C9) one can now remove the transport vehicle.



Picture 4.9 The tracks spread open and vehicle removed

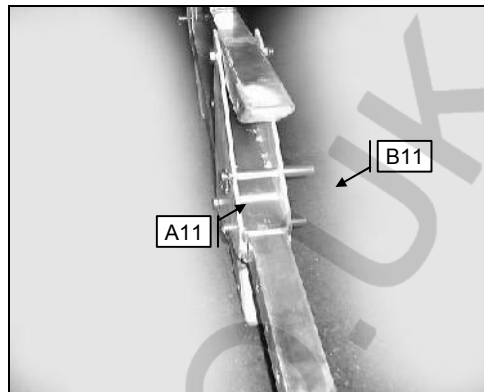
- Now the two clamping type sockets (A10) are to be removed from the side piece.
- Hereto the bolt (B10) is to be removed and the clamping type sockets extracted accordingly.



Picture 4.10 Set up the first side part and remove bolt

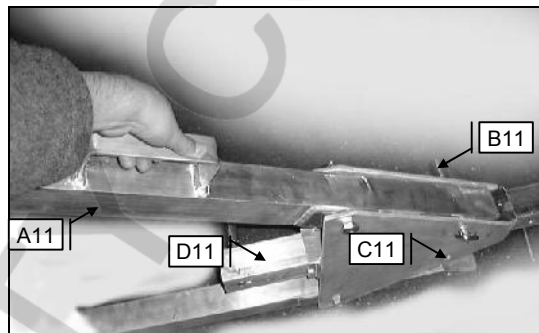
## Operation and Service Instructions

- Now take the grip on the upper side piece and lift up on the edge.
- Now remove the safety ring (A11) from the two socket pins and then the socket pins (B11) are to be extracted.



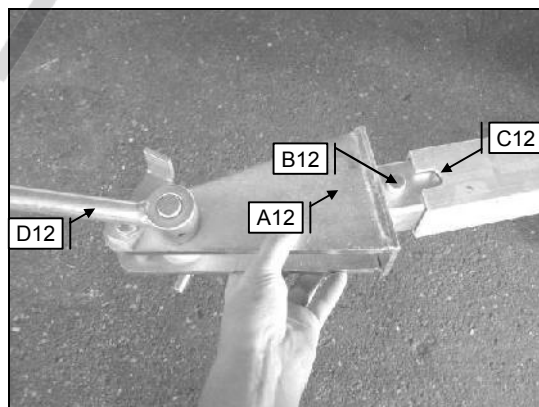
Picture 4.11 Set up first side part and remove bolt

- In the next step the upper face support is to be placed upwards and the socket pins are to be inserted into face support and secured with the safety clip.
- Now the side piece is to be raised as well as the lower face support.
- Then insert the socket pin (C11) through the lower face support and secure with the safety clip.
- Pull in completely once again the support (D11).



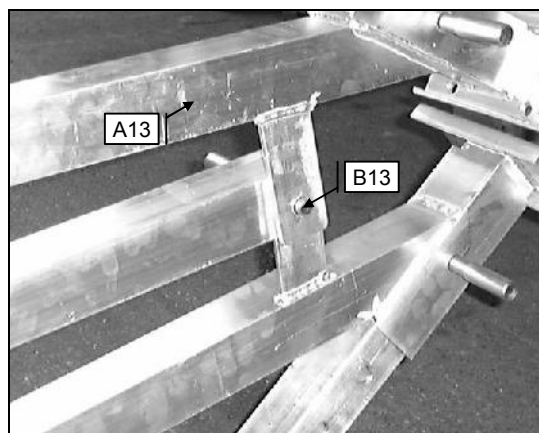
Picture 4.11 Spread open the face support and insert bolt

- The two clamping type sockets ((A12) are to be so assembled that the fitting nipple [B12] be inserted into the circular reception slot [C12] of the support.
- Hereby at the same time the clamping mechanism (D12) opens, in which the clamp lever points upwards as indicated in the picture.



Picture 4.12 Insert the clamp type socket

- In the next Step, the face supports (A13) are loosened, by means of removing the grips for the height adjustment (B13).
- Now lift up the second side piece, spread open and insert the socket pin in the same procedure as with the first side piece.



Picture 4.13 release the face supports



## Operation and Service Instructions

- Now the track is to be laid in and check in advance, if the clamping mechanism (C14) is in opened position.
- Now the clamping mechanism (C14) is to be folded back again and the somewhat extended track (as illustrated in picture D14) should then be clamped firmly.



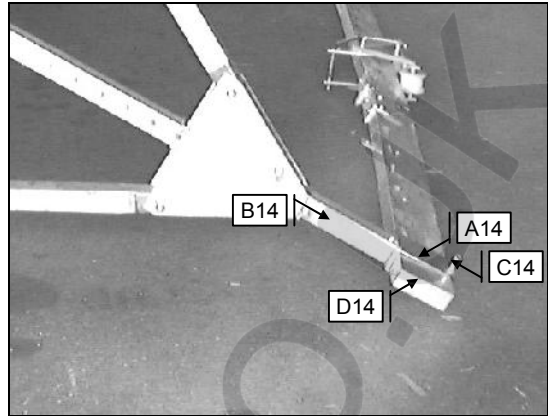
**Attention! The track must over extend the clamping mechanism! (D14).**

- Proceed exactly with the second side piece.

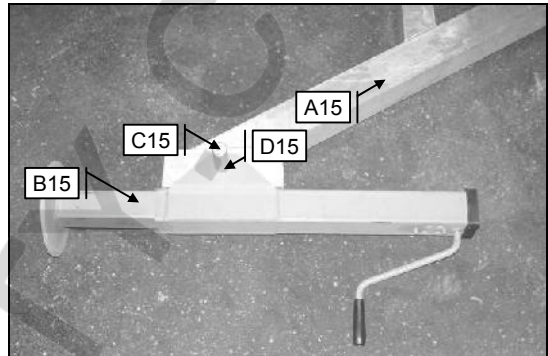


**Following description to this Picture 4.3b – leg with crank in the side piece is only required when the subject leg with crank (optional, see parts list) has also been purchased!**

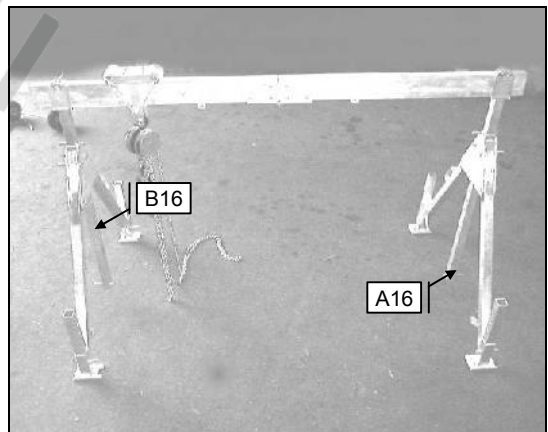
- The Gantry Crane must be aligned upon completion of the assembly. Hereto, the leg with the crank can be used also as an option. Which would be additional equipment you can buy for your Gantry Crane (See parts list).
- The leg with the crank for side piece (B15) would then as a substitute be inserted into the laying side piece (A15) until the bolt for the leg (C15, 160 mm long) can be placed into the Bore (D15). Thereto, the bolt for the leg adjustment (C15) should be completely inserted. With the safety clip the bolt (D15) will be prevented from slipping out unintentionally.
- According to the number of legs with cranks have been bought, one can replace the legs on the end points accordingly.
- The Gantry Crane FAG-3222-2M can now be placed in upright position and moved to the desired work area and the (optional) chained pulley block hung onto the trolley.
- The two grips for the height adjustment (A16, 155 mm long) are to be inserted completely into the two supports (B16). Attention must be made to the direction of the cross key bolt, thereby the same is completely inserted into the profile and the bolt is consequently completely inserted. Now the grips can be turned somewhat, thereby preventing an unintentional slipping out.
- The cross beam can now be changed in the height, which should be accomplished **WITHOUT** being under load.
- The identical height must be present on both pieces.
- Adjustment of the adjusting legs of the Gantry Crane FAG-3222-2M can be accomplished in the height, thereby the tracks of the Gantry Crane are laying level.



**Picture 4.14** Put on the clamping shoe and put in the rail



**Picture 4.15** Leg with crank in side piece



**Picture 4.16** Gantry Crane FAG-3222-2M in assembled condition



**Caution! Danger! Without use of supporting ground plates at the adjusting legs; the foundation must accommodate a carrying capacity of from 6.000 kg/m<sup>2</sup> with the 3 m Alu-rail design!**



- **WITHOUT** using supporting ground plates at the adjusting legs the foundation must accommodate a carrying capacity of from 6.000 kg/m<sup>2</sup> with the 4 m Alu-rail design, when the permissible carrying load is hung on the Gantry Crane.
- When the ground foundation does not accommodate the required carrying capacity, then 4 strong plates must be placed under the four supporting legs. The four plates must be adequately stable and large enough so that the plates under load do not become deformed.



**Caution! Danger!! The cross beam must be aligned horizontally, therefore „on the level“!**



- The cross beam of the Gantry Crane must be horizontally aligned, therefore „on the level“, not only in the cross direction as well as the length direction. The supporting legs are to be adjusted to the small differences in the floor surface. When greater differences in the floor surface are present, then the Gantry Crane may not be placed into use!
- In the event supporting legs with crank have been purchased, then the simple up and down cranking of the legs with crank will level off the Gantry Crane.
- The un-assembly of the Gantry Crane is accomplished in the reverse procedure.

## 6 Operation Instructions

This Chapter should provide you with information to better understand the Gantry Crane. Please read carefully the operating instructions to obtain optimal service!

Please pay attention that the protective cover of the metal parts will not be damaged by sharp edges!



Any defects, caused by incorrect assembly and operation are not covered under the Warranty by the dealer respectively the manufacturer!!



**Strict attention should be given to the safety regulations stipulated in Chapter 4.3!!**

### 6.1 Lifting of Monument Plates with the Gantry Crane FAG-3222-2M

- The beam trolley is to be moved above the centre of gravity of the stone plate.
- Now the load chain located on the left side (B1) is to be pulled down. The load hook is then lowered. This is to be repeated so long as the required lift is achieved.



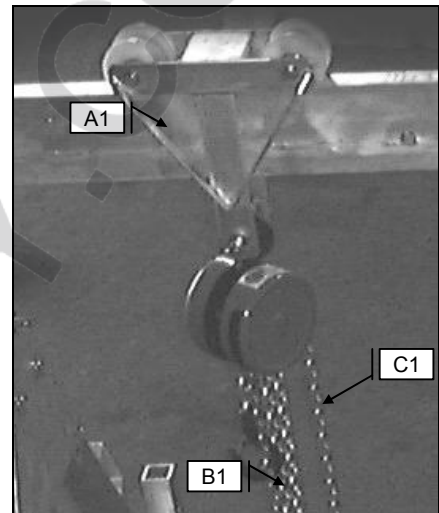
**Attention! Caution! Never exceed the capacity of 500 kgs for suspension and lifting!**



- Now the stone plate with the carrying lashing straps is to be hung on the load hook. The use of the lashing straps is in accordance with related operating instructions.
- Now the load chain located on the right side (C1) is to be pulled down. The stone plate is then raised. This is to be repeated so long as the required lift is achieved. If possible, the load should only be raised a short distance from the ground level.



**Attention! Caution! Never stand or walk under a suspended load!!**



Picture 5.1 – Hand chained pulley block with trolley

### 6.2 Transporting and Lowering of Monument Plates

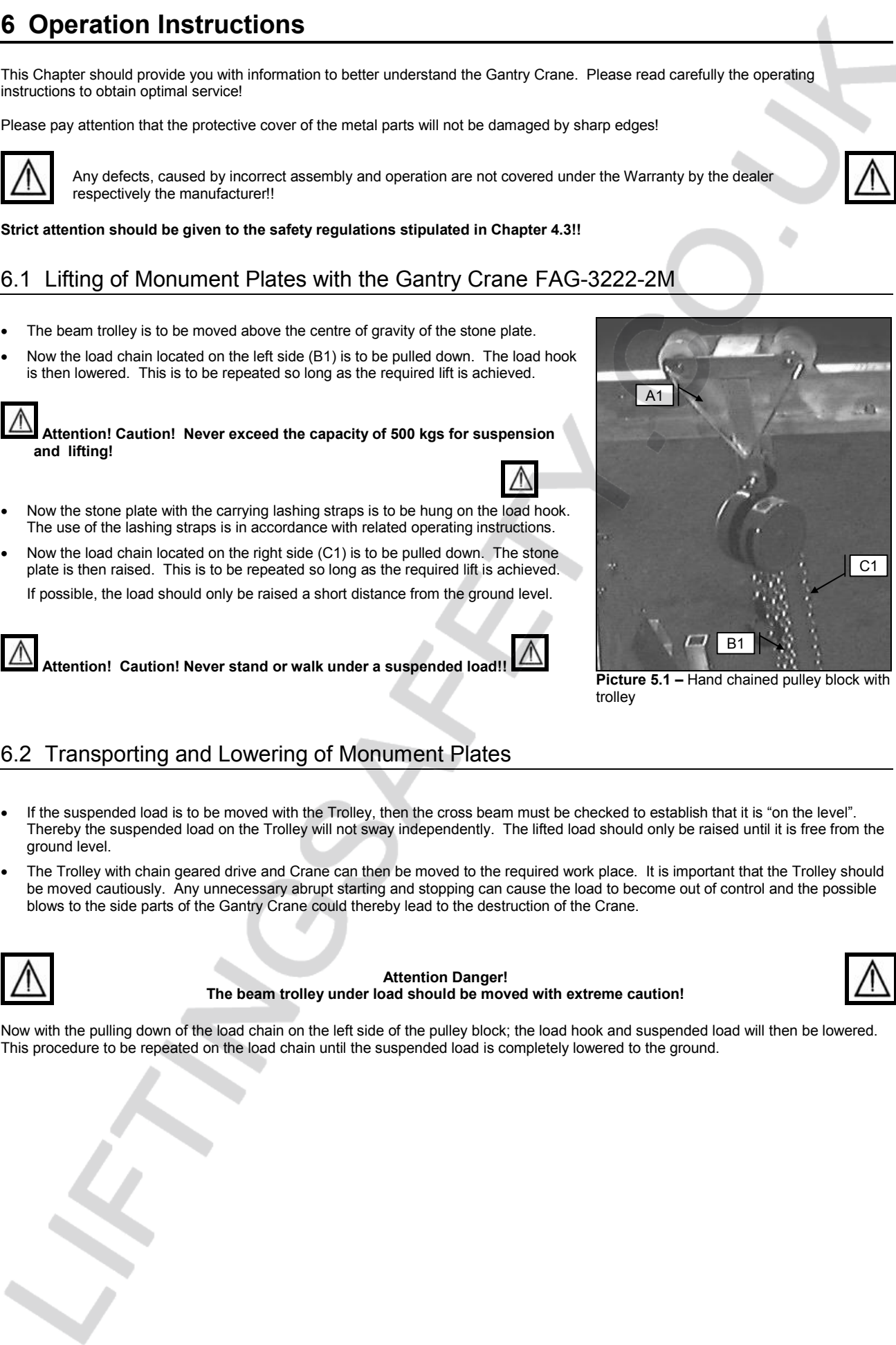
- If the suspended load is to be moved with the Trolley, then the cross beam must be checked to establish that it is “on the level”. Thereby the suspended load on the Trolley will not sway independently. The lifted load should only be raised until it is free from the ground level.
- The Trolley with chain geared drive and Crane can then be moved to the required work place. It is important that the Trolley should be moved cautiously. Any unnecessary abrupt starting and stopping can cause the load to become out of control and the possible blows to the side parts of the Gantry Crane could thereby lead to the destruction of the Crane.



**Attention Danger!**  
**The beam trolley under load should be moved with extreme caution!**



Now with the pulling down of the load chain on the left side of the pulley block; the load hook and suspended load will then be lowered. This procedure to be repeated on the load chain until the suspended load is completely lowered to the ground.



## 7 Maintenance and Inspection

### 7.1 Maintenance

The Gantry Crane needs no regular maintenance. Nonetheless the Crane must be inspected at least once yearly.

### 7.2 Inspection

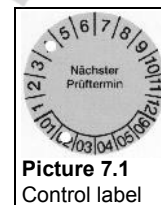
The Gantry Crane is a load suspension device. The Employer, who uses this device is obligated to arrange to have the Gantry Crane inspected within one years period by an authorized, competent person in accordance with § 40, section 1, VBG 9a prescriptions.

The next date for the inspection of the Gantry Crane is indicated in the Yellow Label „next inspection date“. For example April 2002.

Repairs and welding (poisoning danger) may only be carried out by authorized personnel who possess the knowledge and abilities to perform the same.

- You can have your Gantry Crane inspected by SELS. Please ask us!
- All nuts and bolts are to be checked for proper fitting and periodically tightened.
- All welding seams should be checked for corrosion and cracking.
- All profiles should be checked for deformation and or damages..

You should handle your Gantry Crane very carefully . Excessive demands on your Crane could lead to a shorter work life span.



**Picture 7.1**  
Control label

## 8 Technical Drawings and Parts Listing

In the following chapter the spare parts for the Gantry Crane are outlined. Please note when ordering your replacement parts. Only a complete indication of the required spare parts can guarantee a smooth processing of your spare parts order. Always indicate with your orders the required quantities, the description of the parts, article number and if available the standard indication.

### 8.1 Parts List Gantry Crane FAG-3222-2M

Pos.	Quant.	Description	Standard Indication	Material
1	2	Side pieces with folding beams		Alu
2	4	Legs for side pieces		Alu
3	1-4	Leg with crank for side piece (optional)	Art. Nr. VD080221	
4	2	Supports for Alu-track		Alu
5	1	Alu-track with 3 m length		Alu
6	1	Beam trolley		Alu
7	1	Hand chained pulley block (optional)		
8	4	Bolts with safety pin for horizontal swing of the side piece face supports		
9	4	Bolts with safety pin for leg adjustment		
10	2	Bolts with safety pin for height adjustment		
11	2	Grips for height adjustment		

#### Gantry Crane FAG-3222-2M

Art. Nr.: 8010197