

A Assembly instruction Cheops-Pyramid **Midi**

Art. 4643-2B
to be dug in



Operator: _____

Location: _____

Revision 0 – 2010-03-12
First released version

Assembly instruction SP

Revision 7 -- 2012-04-17
R 4000 FH

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1 Introduction installation

1.1 General information

This equipment should be installed, inspected, maintained and operated in accordance with EN1176-7 guidelines.

Before installation work commences, please check that you have all of the equipment and fixation components in the parts list provided (see tables 2-1 and 2-2).

Please consider that the installation has to be carried out only on even terrain (max. slope up to 3%).

Any spare parts that may be required can be obtained directly from your supplier or HUCK Seiltechnik GmbH

Address: Huck Seiltechnik GmbH
Dillerberg 3
35614 Asslar/Berghausen
Phone +49 (0)6443 / 83 11-0
Fax +49 (0)6443 / 83 11-79

Please do not hesitate to contact us **+49 (0)6443 / 83 11-70, 81** or **51** if you have any problems during installation or in case of any other questions.



Following installation, complete assembly instructions, maintenance instructions and maintenance record must be sent to the operator who must confirm receipt in writing. See the last page of this document!!!



All nuts and bolts are hot-dip galvanised or stainless steel. One of the characteristics of stainless steel is that uncontrolled cold welding may occur when the nuts are tightened. To prevent this, it is necessary to spray the nuts and bolts with Teflon spray (like for example HTS plus Teflon no. 893128 from Würth) or another similar lubricant.

2 Data sheet: Midi Cheops Pyramid, Art. 4643-2B

- Space required Ø 8,00 m resp. Ø 9,60 m incl. safety area
 Height of fall: 1,50 m
Attention! For the dig-in version the size of the required foundation for installing the play equipment is Ø 11,80 m.

- Ground surface

Ground surface material	Description mm	Minimum thickness of layer mm	Maximum height of fall mm
Lawn top soil			≤ 1000*
Chipped bark	Grain size 20 – 80	300	≤ 2000
		400	≤ 3000
Wood chippings	Grain size 5 – 30	300	≤ 2000
		400	≤ 3000
Sand	Grain size 0,2 – 2	300	≤ 2000
		400	≤ 3000
Gravel	Grain size 2 – 8	300	≤ 2000
		400	≤ 3000
Other ground surface material	Tested like according to HIC		

*in Germany, lawn is a sufficient fall protection for heights of up to 1,50 m.

- Name and size of the largest part of the equipment:
 Steel post, Ø 159 mm, 5,00 m long
- Name and weight of the heaviest part of the equipment:
 1 freight pallet steel post (1 piece) ~ 106 kg
- Intended age group: 6 years and up
- Attention! Equipment to be dug in**
 Size of excavation:

**1 x excavation 1,80 m x 1,80 m x 1,00 m high,
 Total depth: 1,10 m incl. 10 cm percolation layer
 16 x excavations: 0,80 m x 0,80 m x 1,00 m high,
 Total depth: 1,10 m including 10 cm drainage layer**
- Assembly time once excavations are completed:
 Approx. 3 hours, number of persons required: 3
- Spare parts that may be required can be directly obtained from your supplier of from Huck Seiltechnik GmbH
 Address: Huck Seiltechnik GmbH
 Dillerberg 3
 D-35614 Asslar/Berghausen

Phone +49 (0)6443 / 83 11-0
Fax +49 (0)6443 / 83 11-79

- 9. We hereby confirm that this item of play equipment has been tested and certified in accordance with the play equipment standard EN 1176.**

Drawings / views

All optical illustrations simply demonstrate the proportions/dimensions to be followed, but are not binding, technical equipment images.

Technical modifications supporting the advancement of our articles are subject to change.

Measurement tolerances / dimensions

Due to the quality and characteristics of equipment parts, minor dimensional tolerances over drawings data are possible.

This regards all visible dimensions, except for foundation dimensions respectively dimensions below OK ground surface/play surface.

3 Scope of supply, parts list with part numbers

3.1 in letters


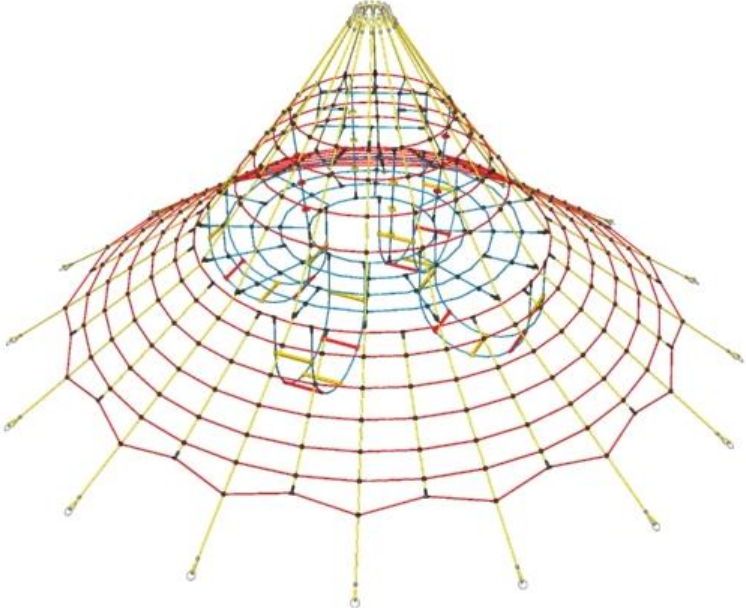
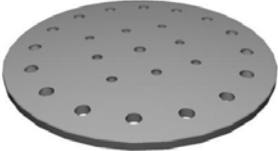
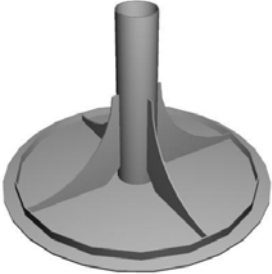
Table 3-1: Scope of supply, parts list with part numbers



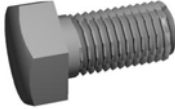





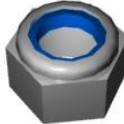
Pos.	Quantity	Element / description	Size	O.K.	Missing
1	1	Steel mast galvanized	Ø 159 mm; 5,00 m lg.		
2	1	Play equipment part (netting completely pre-assembled)			
3	1	Head plate galvanized	Ø 360 mm x 12 mm		
4	1	Dig-in ground anchor (centre mast anchor)	Ø 1,25 m		
100	4	Hexagon head screws	M12 x 30 galvanized		
101	4	Toothed washers	M12 galvanized		
102	16	Hexagon head screws	M16 x 30 galvanized		
103	16	Toothed washers	M16 verzinkt		
104	1	Threaded rod	M16 x 165 mm galv.		
105	1	Hexagon nut	M16 Inox		
106	1	Red cap cover	Ø 375 mm, 140 mm h.		
107	1	Washer	17 DIN 9021 Inox		
108	1	Stop screw nut	M16 Inox		
109	1	Black cap cover	for M16		
110	16	Turnbuckle	M16 hot dip galvanized		
111	16	10-chain	Approx. 1,80 m long		
112	16	Curved shackle	10er galvanized		
113	(6)	Self-cutting Zebra Pias-screws (vo)	6 x 45, galvanized		
113a	(1)	Pinch protection ring (vo)	for mast-Ø 160 mm		
114	2	Loctite (thread locking)	3 ml each		
115	1	Ring screw (for erecting the mast)	M16 galvanized		
116	16	Anchor plates	500 x 500 mm		










Pos.	Quantity	Element / description	Size	O.K.	Missing
117	16	Ring nut for anchor plates	M16, galvanized		
117a	16	Hexagon head screws with washer for anchor plates	M16		
118	32	Pegs (T-iron)			
10	1	Paint brush	Customer request		
11	1	Can of paint	Customer request		




3.2 in symbols

Table 3-2: Scope of supply, parts list with part numbers

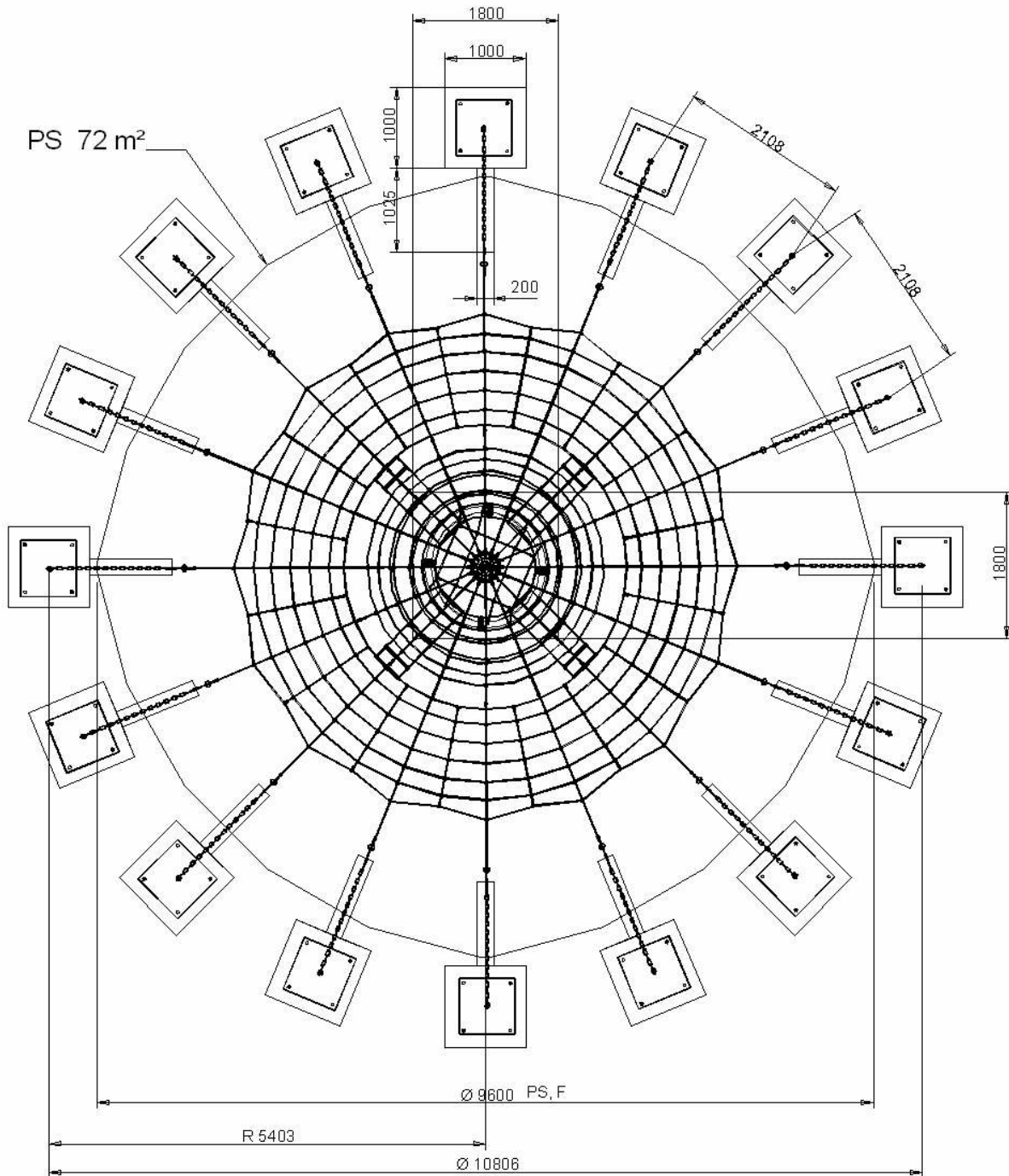
Pos.	Quantity	Symbol
1	1	 <p>Ø 159 mm; 5,00 m lg.</p>
2	1	
3	1	 <p>Ø 360 mm x 12 mm</p>
4	1	 <p>Ø 1,25 m</p>

Pos.	Quantity	Symbol
100	4	 <p>M12 x 30 galvanized</p>
101	4	 <p>M12 galvanized</p>
102	16	 <p>M16 galvanized</p>
103	16	 <p>f. M16 galvanized</p>
104	1	 <p>M16 x 165 mm galv.</p>
105	1	 <p>M16 Inox</p>
106	1	 <p>Ø 375 mm, 140 mm h.</p>
107	1	 <p>17 DIN 9021 Inox</p>
108	1	 <p>M16 Inox</p>

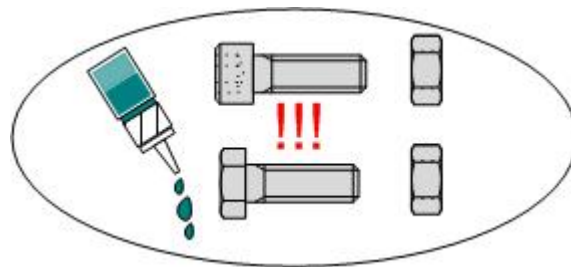
Pos.	Quantity	Symbol
109	1	 for M16
110	16	 M16 hot dip galvanized
111	16	 1,80 m long
112	16	 10er galvanized
113	(6)	 (vo)
113a	(1)	 (vo)
114	2	 Loctite (thread locking) 3 ml each
115	1	 M16 galvanized
116	16	 500 x 500 mm

Pos.	Quantity	Symbol
117	16	 <p>M16, galvanized</p>
117a	16	 <p>M16</p>
118	32	 <p>(T-iron)</p>

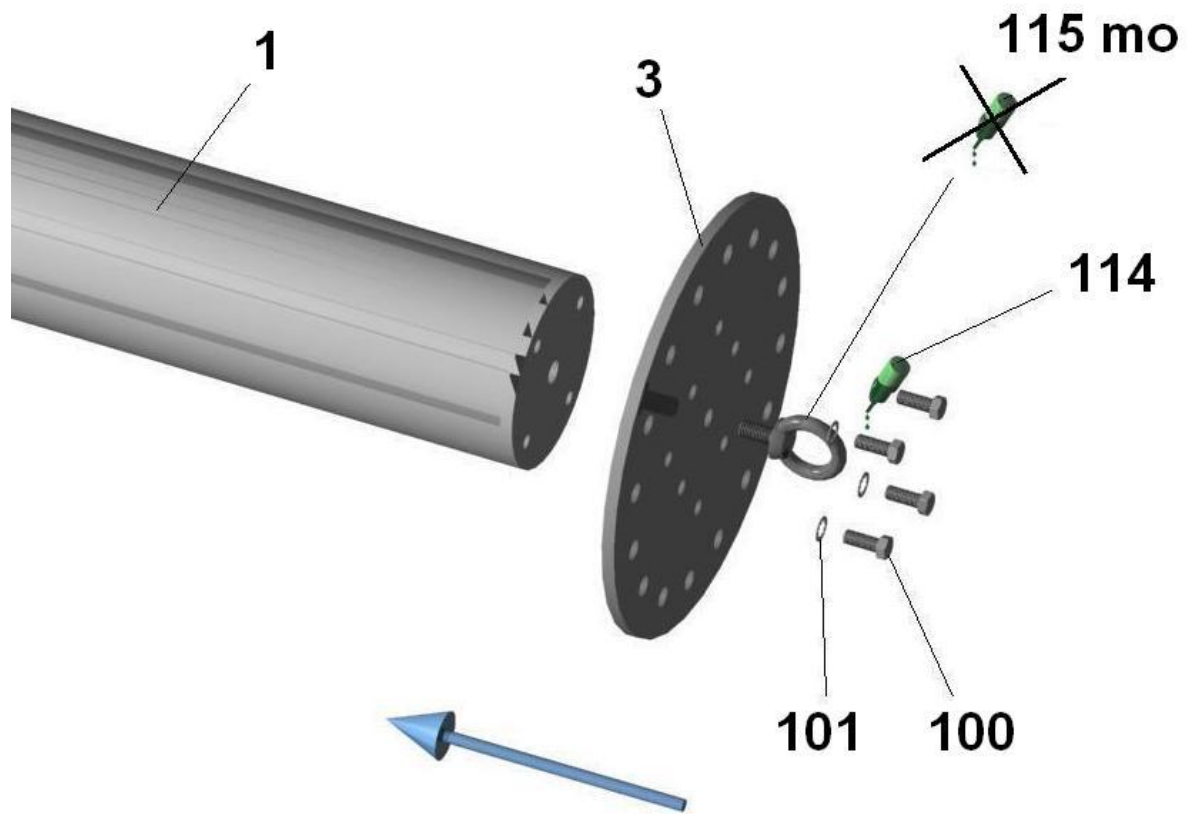
4 Assembly Instruction

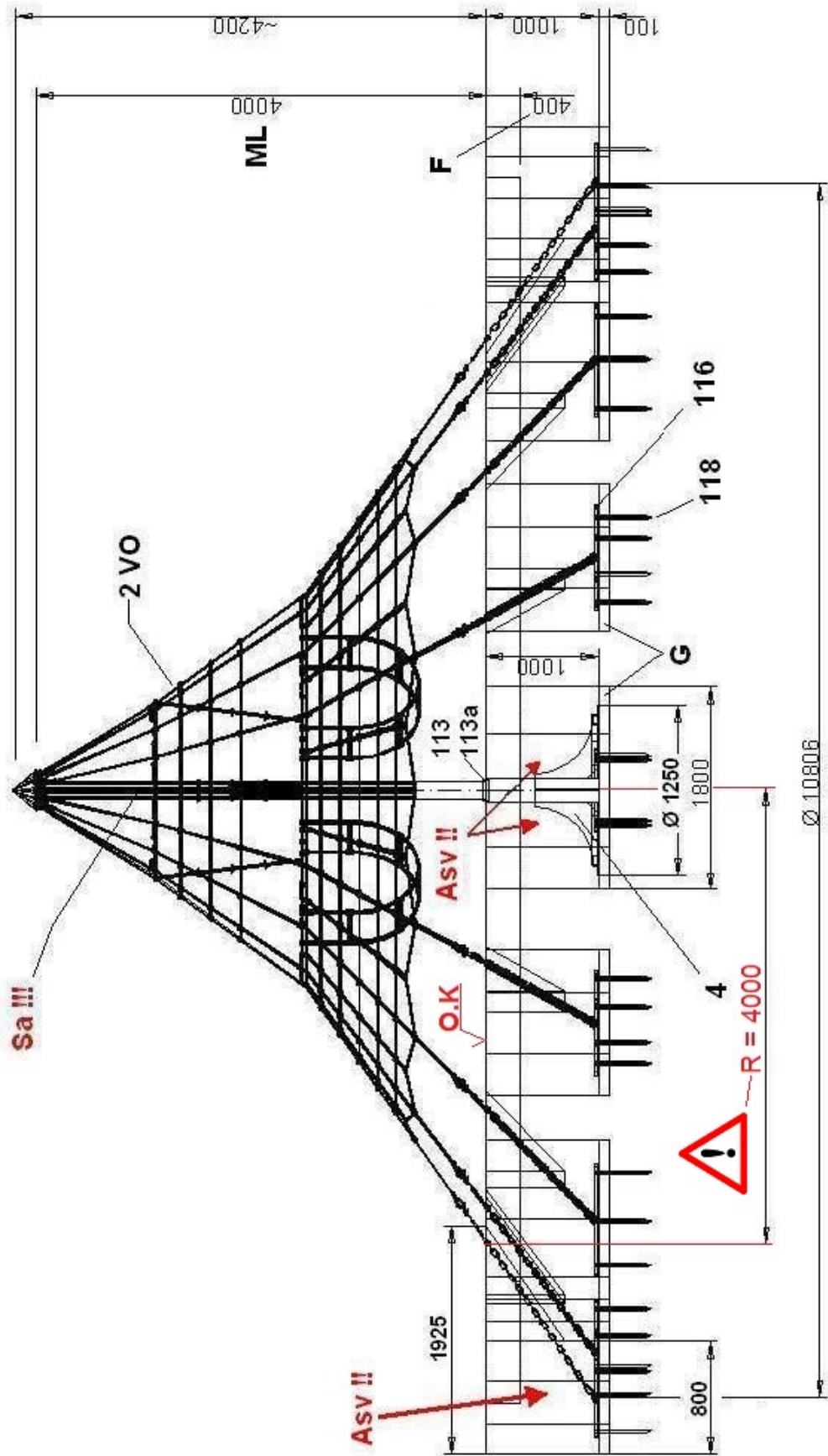


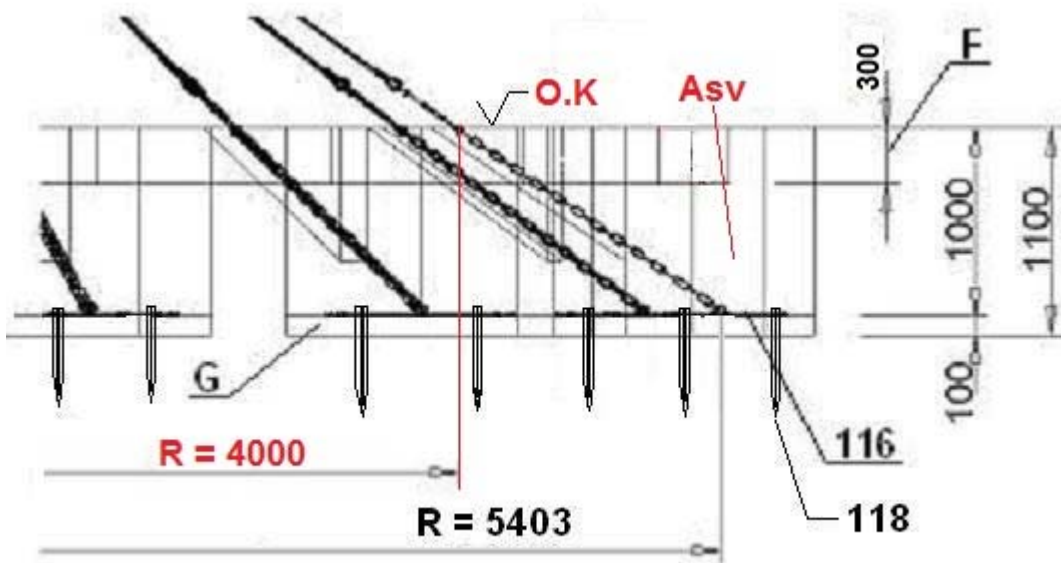
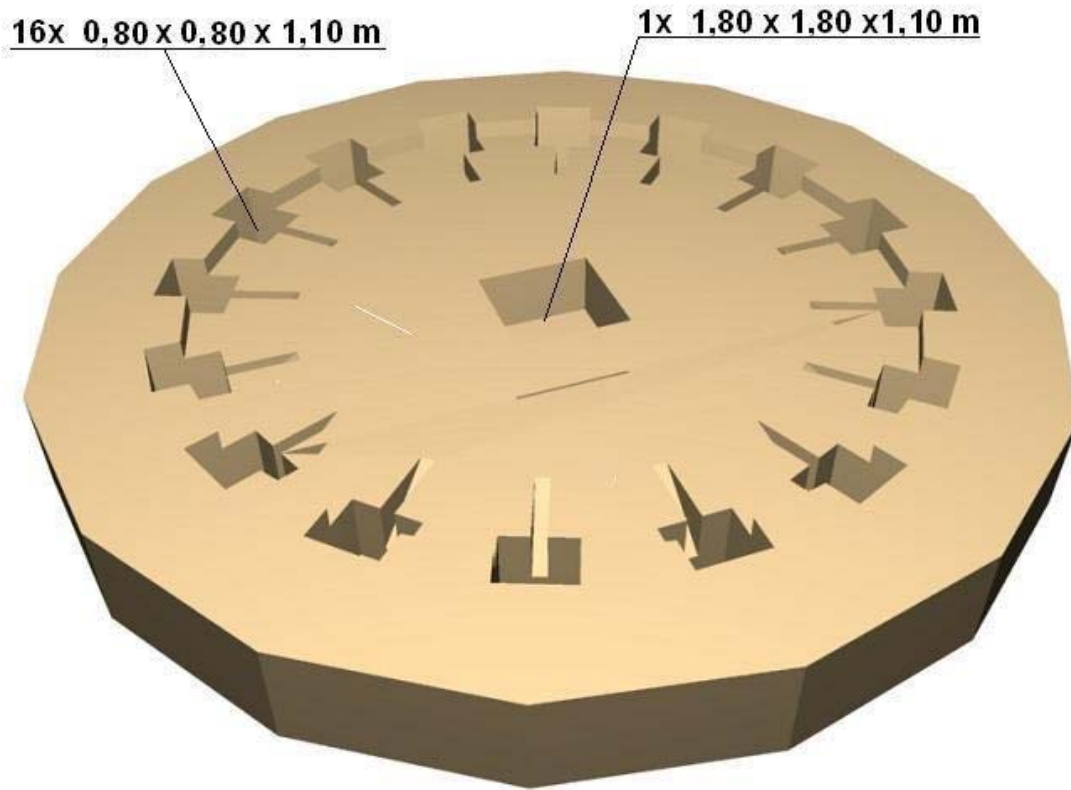
Thread locking!

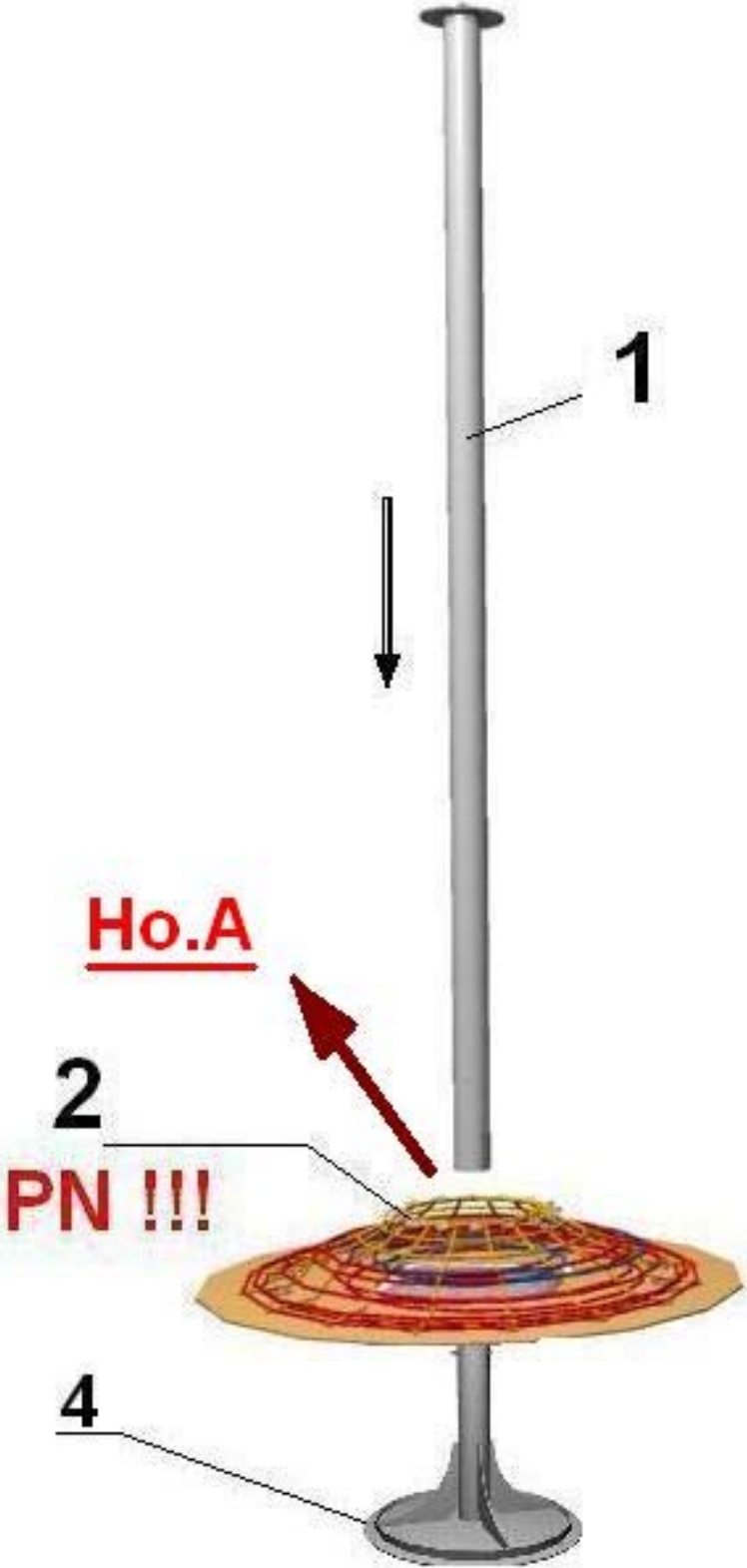


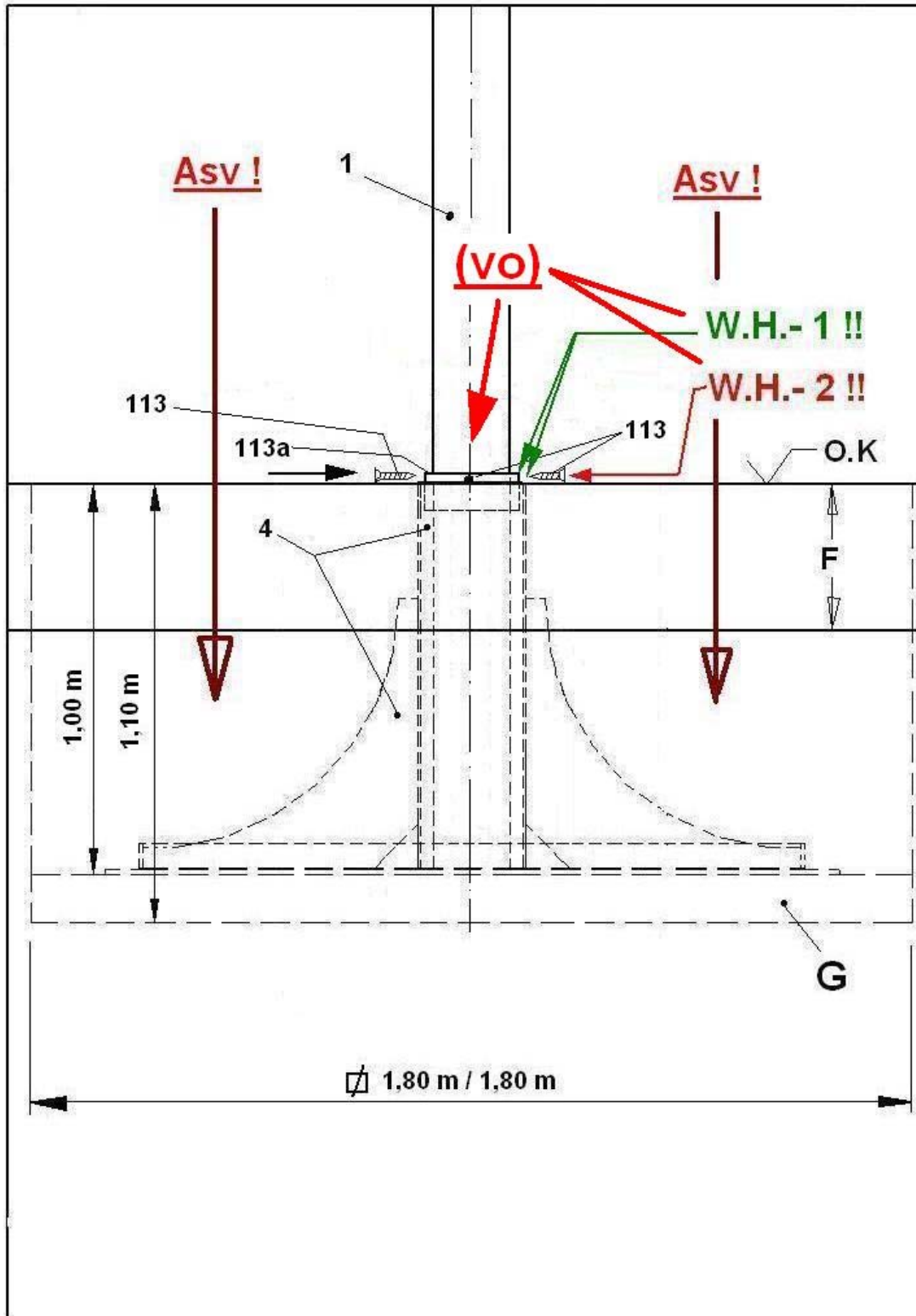
**All screws, nuts and bushes have to be secured
with Loctite
(stop screw nuts excepted)
(e.g. for Torx-bushes M12 x 40 at least 5 drops
are required)**

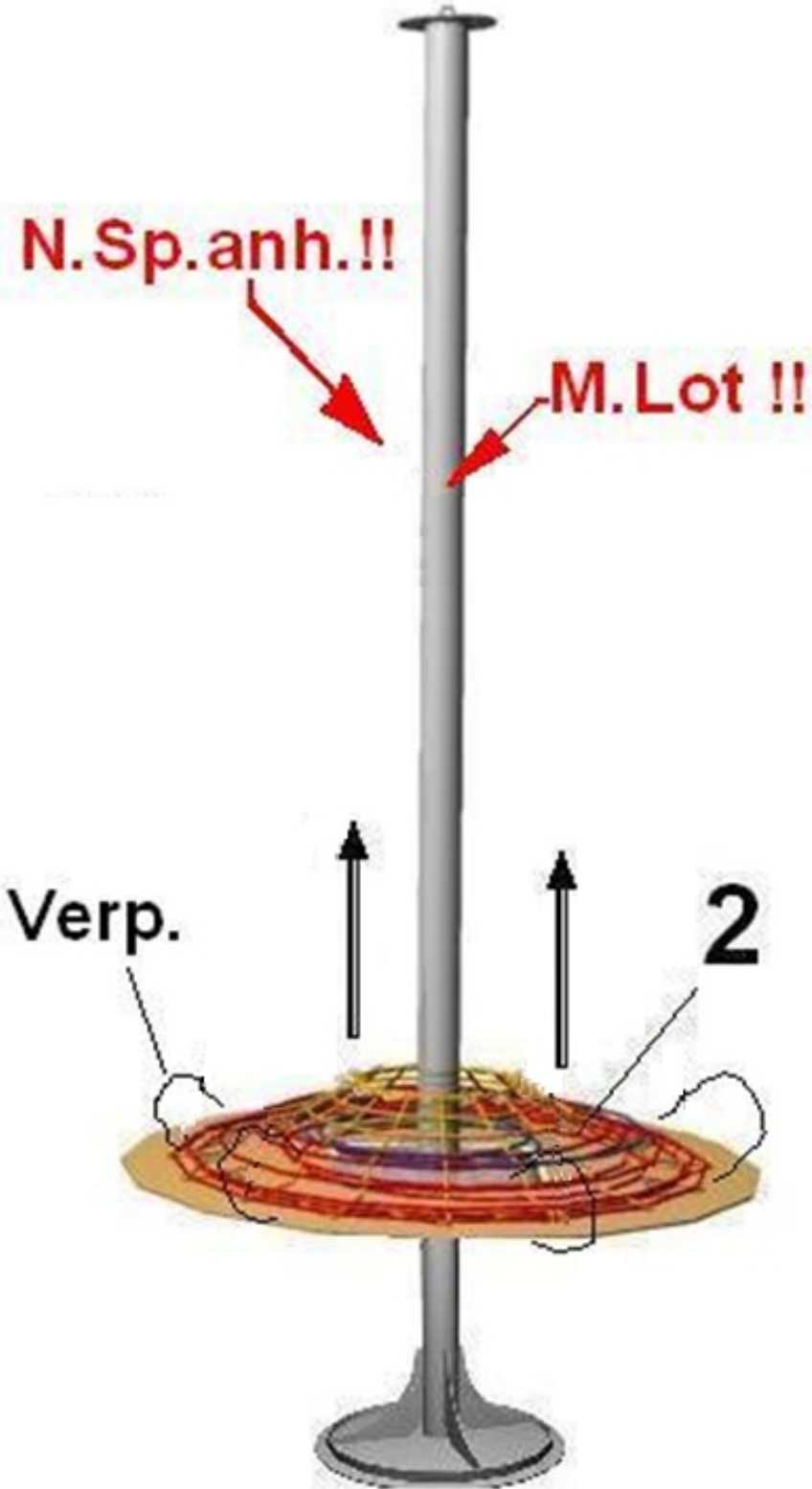


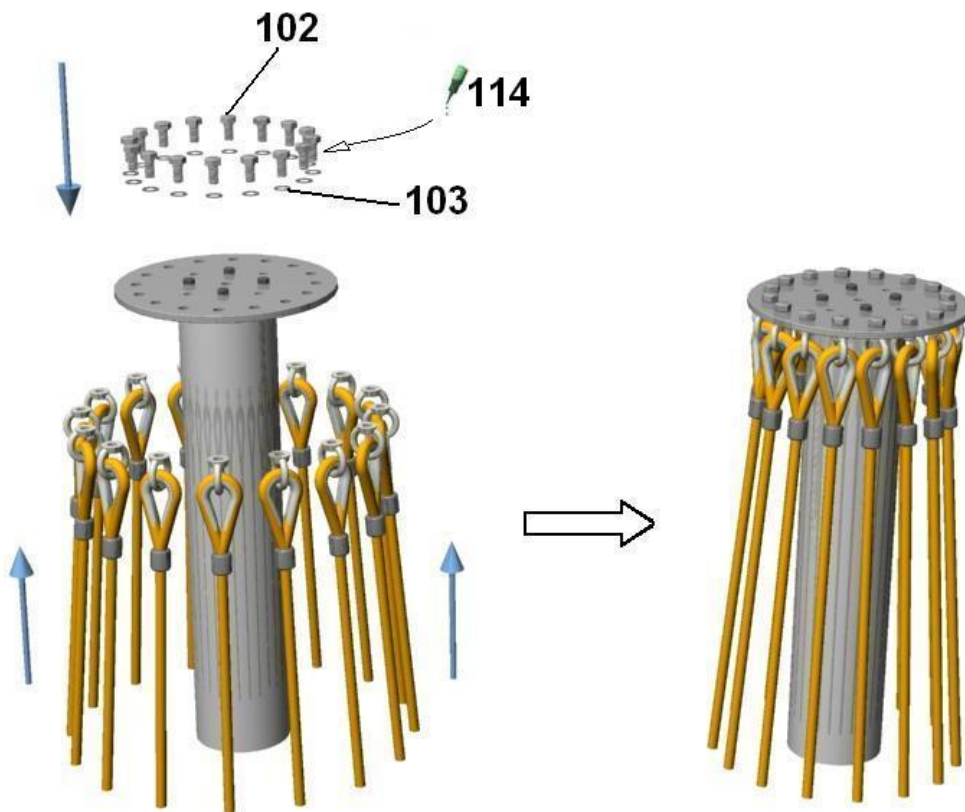
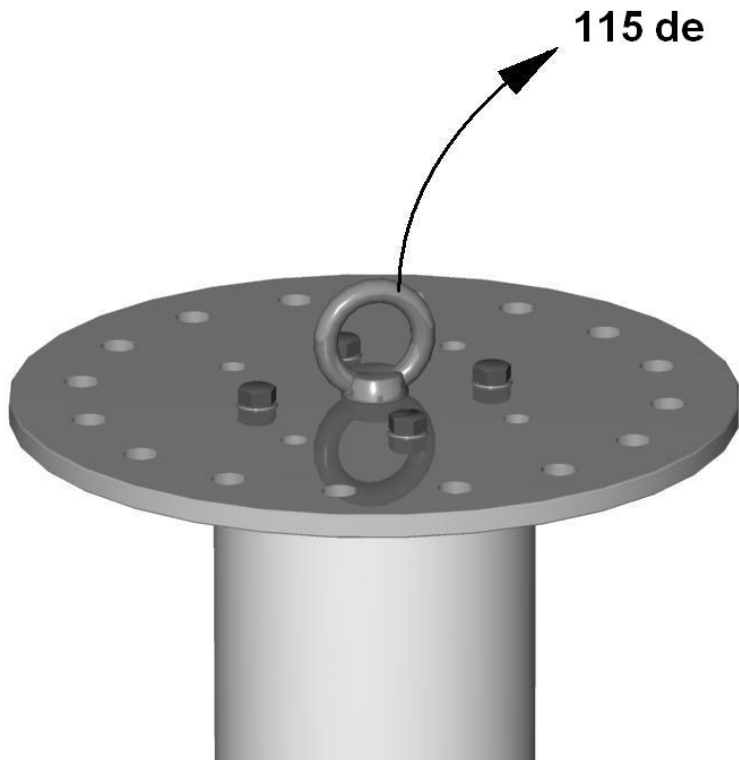


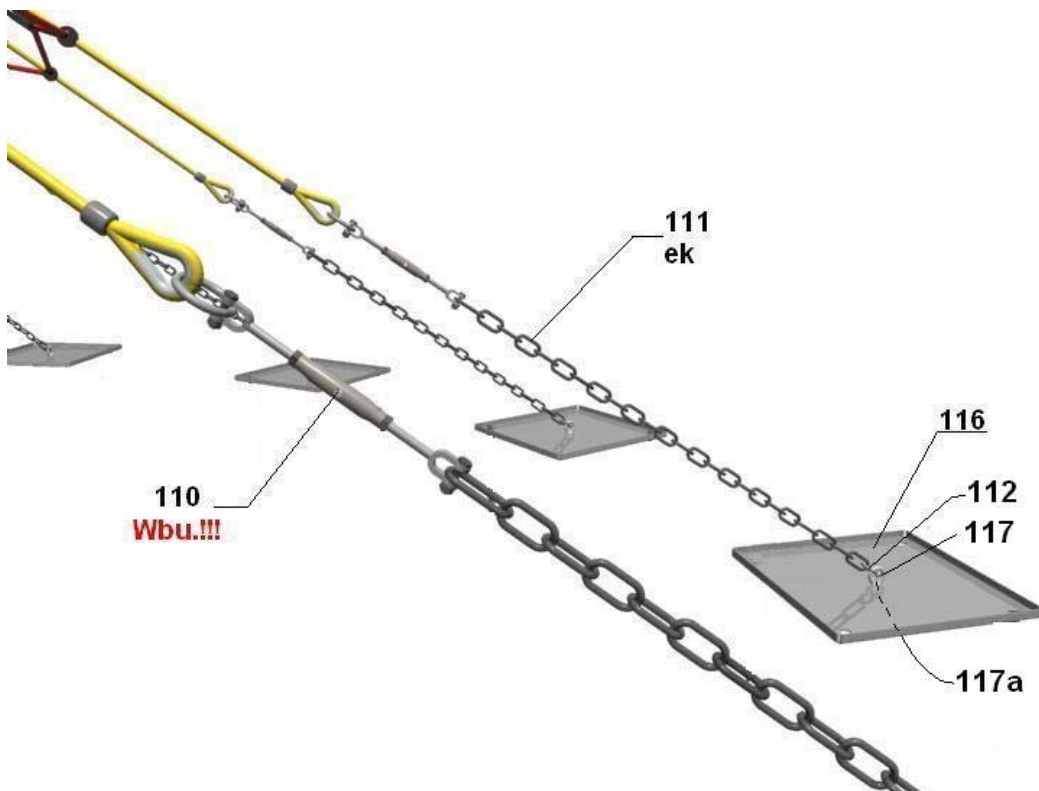
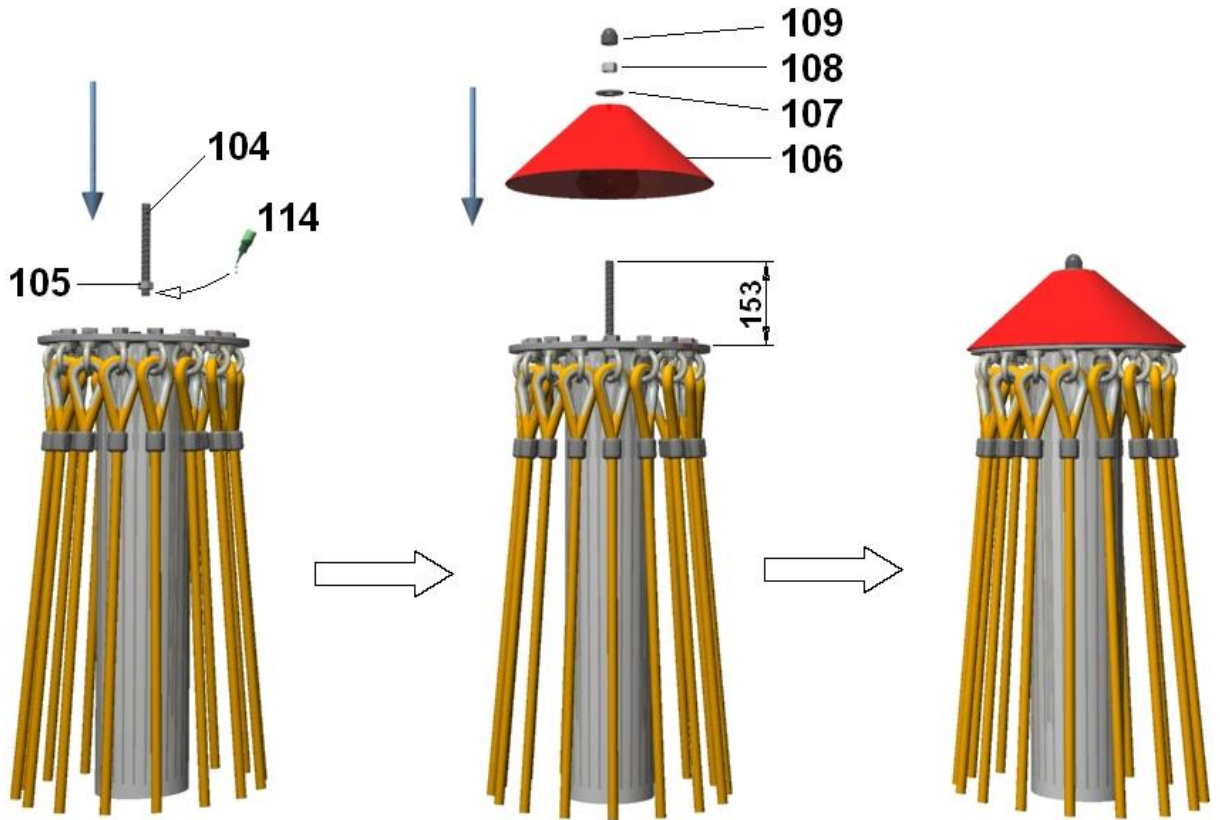


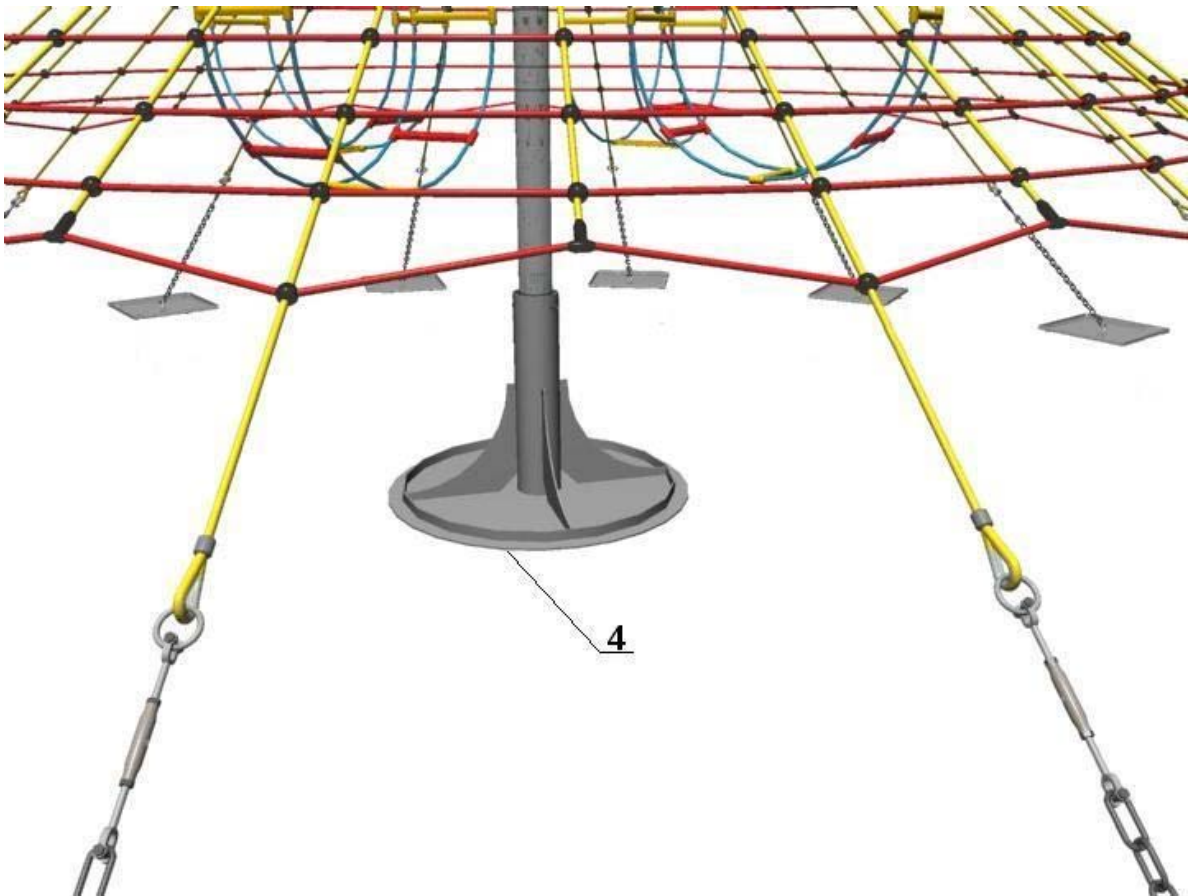
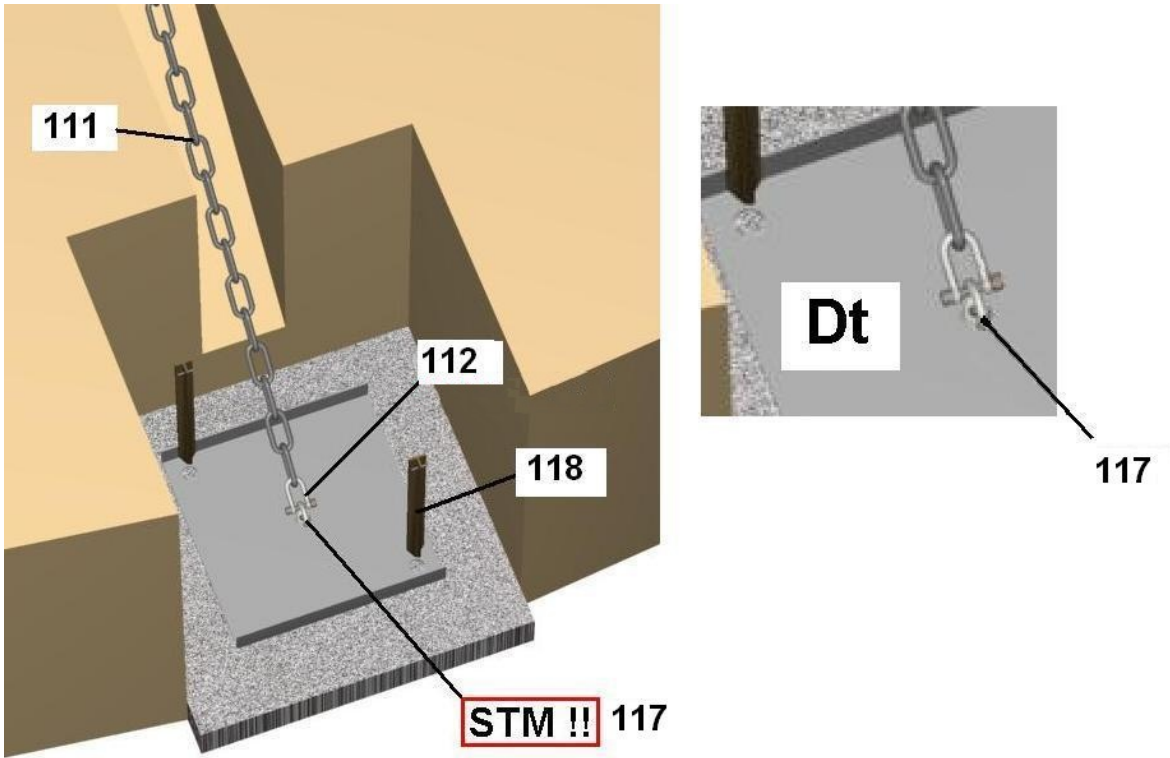


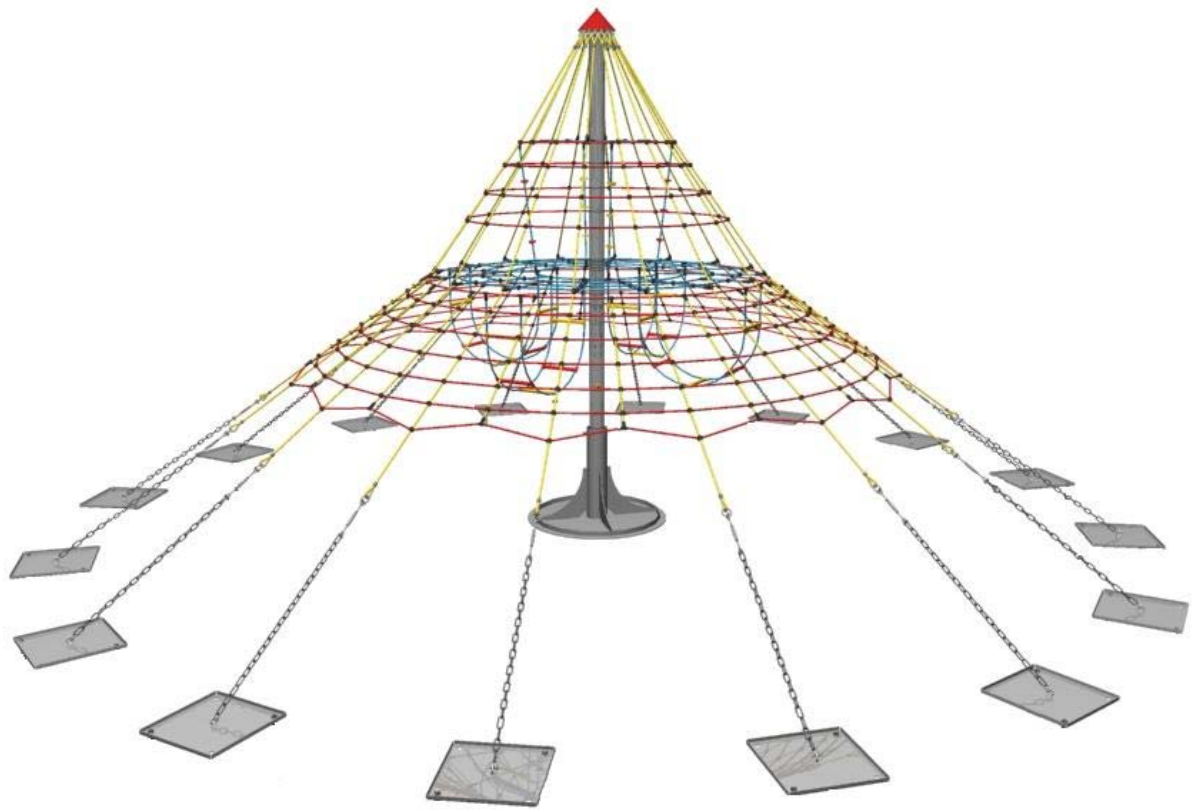


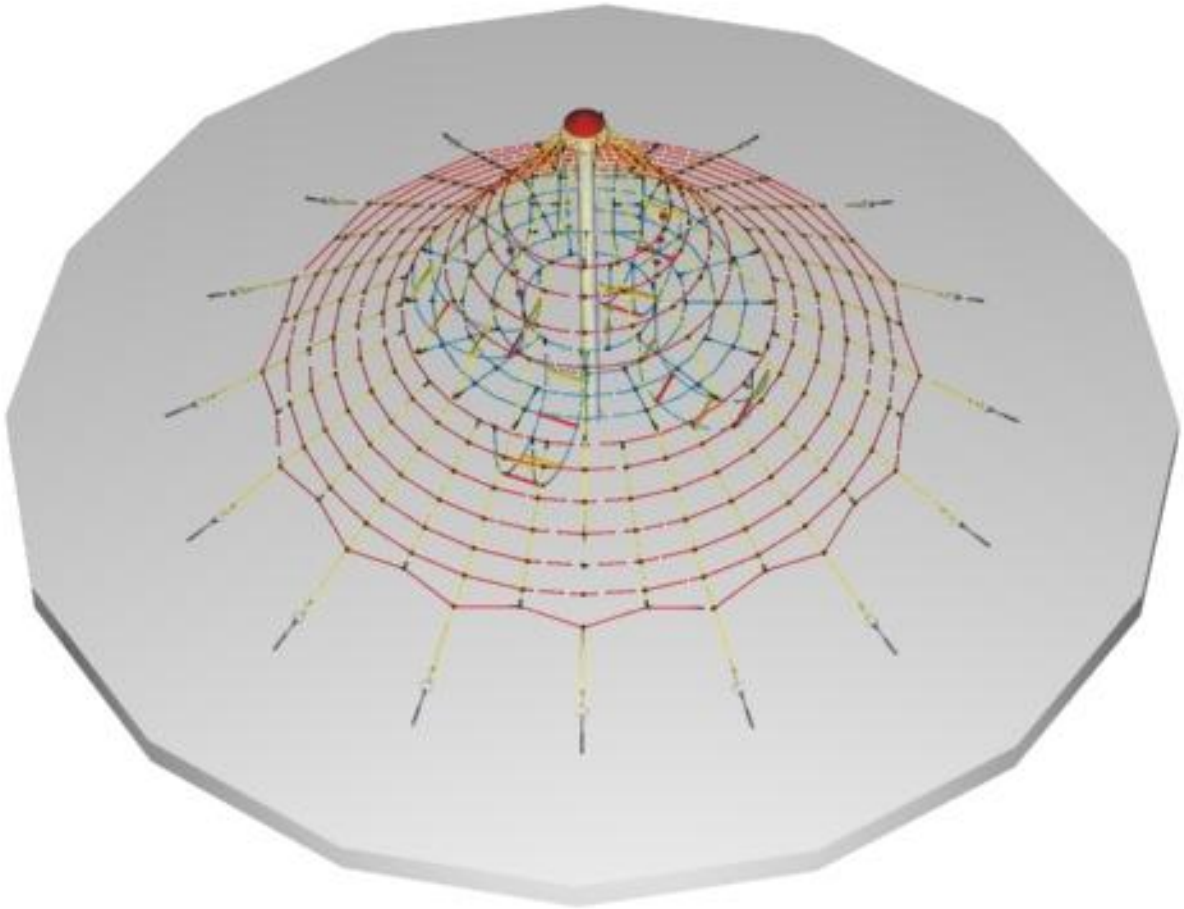













	<u>Abbreviations and signs:</u> <u>Version: Cheops-Pyramid MIDI (to be dug in)</u>
Asv	Fill up excavation by layers and compact.
ASK	Anchor chains (have to be adjusted during assembly, i.e. after all of the 16 chains have been tensioned, the remaining chain links have to be removed by bolt cutter or angle grinder!)
Dt	Detail view
de	Dismount
ek	Chains might have to be shortened during assembly.
F	Fall protection of 300 mm thickness
G	Percolation layer
HIS	Support ropes / lifting ropes
LRSA	Fill up space (between empty pipe and steel mast) with sand!
M.Lot !!	It is mandatory to position mast/post perpendicular!
ML	Length of mast above play level
mo	Mount
N.Sp.anh. !!	Lift pre-assembled net part resp. play equipment part with lifting aid (e.g. excavator) which is big enough.
O.K.	Upper edge play level
PN	Place „package“ of net (tied up with wooden adaptor Ho.A) over the center-pole anchor in a centred position, carefully remove wooden adaptor and put center-pole (pos. 1) into the center-pole anchor. Now mount the steel mast, according to page 15, with the squeeze protection ring (pos. 113a) and the appropriate self-cutting PIAS-screws (pos.113), position perpendicular and seal indicated openings with silicone!!! Then, fasten netting with pressed-in ring nut on the top of the center-pole plate (pos.3), like displayed (pages 17 + 18).
PS	Space required including safety area ~98 m ²
R	Radius
Verp.	Open packaging strings
VO	Pre-assembled
Sa !!!	Erect post (when erecting the post it is mandatory to orientate its position according to the desired direction of the net, prior to its filling with soil. Turning it afterwards is not possible any more).
STM !!	Watch position of ring nut!
W.H. 2 !!	(vo!)

	Fasten squeeze protection ring in two parts pos. 113a to position its upper edge with the marking!!
W.H. 1 !!	<u>On-site (e.g. by customer)</u> The area at the marking on top as well as the area between squeeze protection ring and centre-mast anchor (see arrow) are to be carefully sealed with silicone!
Wbu.	After tensioning and before filling fall protection, plug the bores of the threaded sleeve of the turnbuckles on-site!!!
	The radius R = 4000 mm (edge of groundlevel to ± 0) must be strictly adhered to the instruction. The raps have to be tensioned.

see drawings

5 Examination after installation



If the equipment is not installed in a secure manner you must ensure that access is closed to the public!

5.1 Marking filling level

Markings on the equipment to indicate height of fall protection material (resp. loose fill material).

5.2 In the following cases the equipment is not yet safely installed:

- Safe installation of the equipment is not fully completed
- Impact absorbing surface is not installed yet
- The upkeep of occupational safety through appropriate maintenance can not be guaranteed.

5.3 Removing assembling accessories

- Please make sure that all accessories, which were used for the installation of the equipment, are removed from the play area! Only then the equipment can be declared open.

5.4 Details concerning inspection of the equipment prior to first use

- No acceptance test specifications apply prior to first use.

5.5 Retighten bolts

- Please retighten all bolts after one week of initial use. Later, it is sufficient to retighten the bolts upon maintenance.

B Maintenance instruction Cheops-Pyramid **Midi**

Art. 4643-2B
(to be dug in)



Revision history
Revision 0 – 2010-03-12

First released version

Maintenance instruction
Revision 7 – 2012-04-17
R 4000 FH

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6 Introduction maintenance

6.1 General information

This equipment should be installed, inspected, maintained and operated in accordance with EN 1176-7 guidelines.



Please note: Providing any necessary repairs are carried out, a piece of play equipment that is inspected regularly cannot become so damaged that it is dangerous.

Any spare parts which may be required can be obtained directly from your supplier or from Huck Seiltechnik GmbH

Address: Huck Seiltechnik GmbH
Dillerberg 3
35614 Asslar/Berghausen
Phone +49 (0)6443 / 83 11-0
Fax +49 (0)6443 / 83 11-79



This equipment should only be assembled, maintained and repaired by **persons with the necessary expertise.**

A copy of the inspection record should be given to the operator, who must confirm receipt.

This maintenance instruction is based on the standard “EN 1176-1:1998”.

7 General maintenance information

7.1 Maintenance intervals

Maintenance intervals are based on average use. Please note that more frequent inspections and/or maintenance are required if the play equipment is subject to intensive use.

7.2 Inspection frequency

The frequency of inspections must be based on actual use. Factors that affect frequency include vandalism, location (e.g. coastal proximity), air pollution and the age of the equipment!

7.3 Maintenance products and procedures

All nuts and bolts are hot-dip galvanised or stainless steel. One of the characteristics of stainless steel is that uncontrolled cold welding may occur when the nuts are tightened. To prevent this, it is necessary to spray the nuts and bolts with Teflon spray (e.g. HTS plus Teflon no. 893128 by Würth) or another similar lubricant.

7.4 Spare parts

All spare parts must conform to the manufacturer's specifications!

7.5 Identifying spare parts

All spare parts are listed in the parts list. The parts list follows the installation requirements.

7.6 Special instructions for the disposal of individual equipment components

No special instructions are necessary.

7.7 Special measures in the break-in period

No later than 2 weeks after assembly, all screwed connections should be checked and tightened if necessary.

7.8 Drainage

All drainage openings are to be kept free.

7.9 Maintenance of protection surfaces

Surfaces providing fall protection must also be maintained regularly. It is particularly important to maintain the correct level of loose surface material and add more if necessary.

7.10 Faults



Damages must be repaired as soon as they are detected. If serious defects that affect safety cannot be repaired straight away, the playground equipment must be closed to the public with immediate effect.

7.11 Loose screws



Loose screws always cause quality problems and put safety at risk. Therefore, loose screws should always be tightened and checked to ensure that there are no missing screws (watch for see-through holes, for example).

7.12 Preventing equipment use

The use of the equipment should be prevented in case of incomplete installation, disassembly, maintenance, repairs and faults.

7.13 Claims / liability for faults

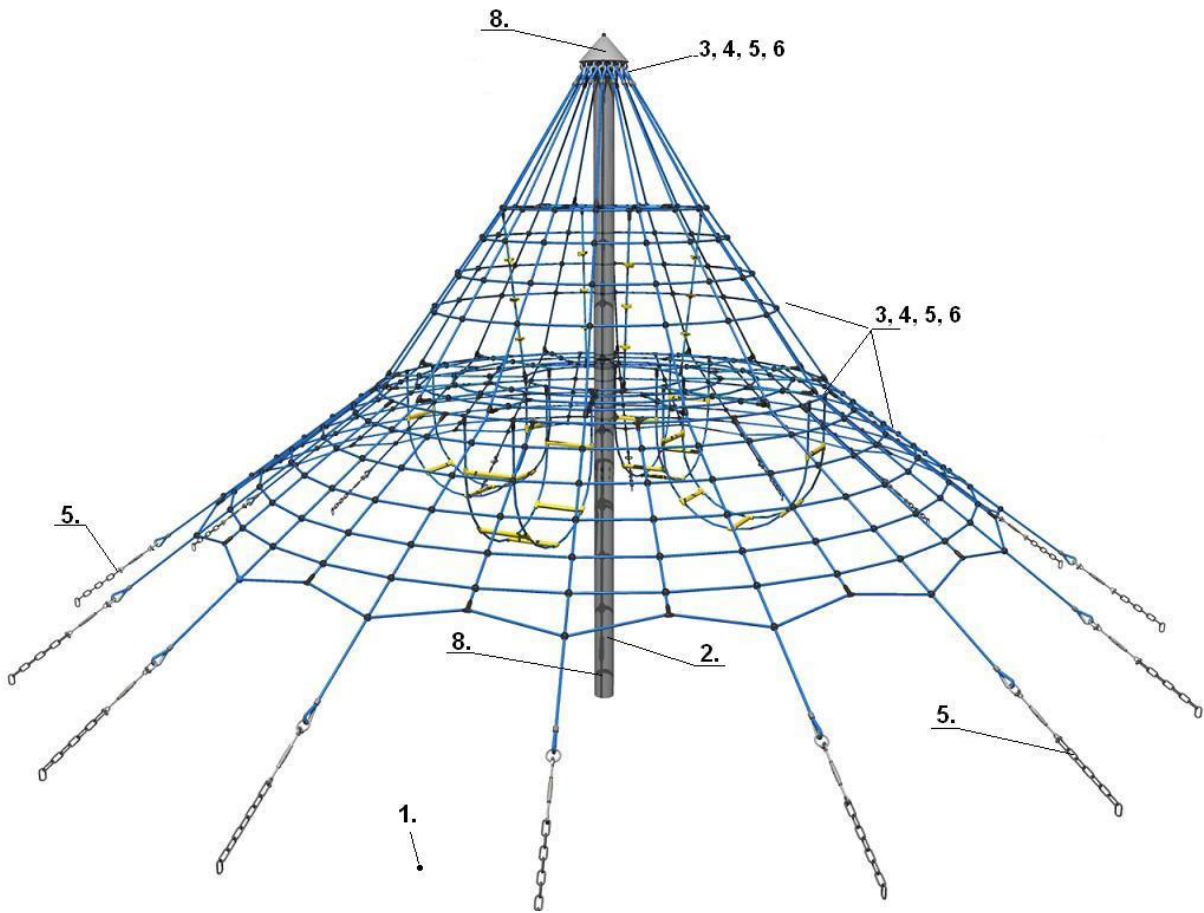
Steel posts and post shoes are covered by our guarantee if regular maintenance is carried out and recorded in writing.

Our general terms and conditions apply. Maintenance of steel poles first takes place after 3 years. The steel posts must be excavated down to their dug-in parts and checked for corrosion.

Zinc paint should be applied to any corroded areas and scratches. Re-impregnate ropes if they are extremely worn.

8 Regular Maintenance

8.1 (image)



8.2 Regular maintenance (text)

	M	$\frac{1}{4}$ y	$\frac{1}{2}$ y
1. Check the ground surface of fall protection for hard objects and loose foundations.	X		
2. Check stability (posts, springs, braces, foundations etc).			X
3. Check all connecting elements and fittings for wear and tear and tighten if necessary. Replace damaged or missing parts.	X		
4. Check that moving metal parts (joints, springs, etc.) move smoothly and are not worn. Replace if necessary. It is not necessary to lubricate joints as we only use maintenance-free metal roller bearings.	X		
5. Check all attachments such as chains, ropes, nets, etc. for damage and replace if necessary.	X		
6. Check rubber parts, sleeves, bearing ring etc. for wear and tear or damage and replace if necessary.	X		
7. Check the surface of wooden parts for damage caused by the weather or external influences and mould. Repair or replace if necessary (varnish).	X		
8. Check the surface of plastic and metal parts, e.g. slides, for damage and replace if necessary.	X		

We strongly advise to carry out **inspection and maintenance work** within the specified periods as use of the equipment, the weather and malicious vandalism cause wear and tear that compromise safety and function of the equipment.

In the event of fault that compromises safety, quick action must be taken: Either the equipment must be repaired immediately, or it has to be dismantled or closed to the public!

Faults that compromise function should also be repaired immediately. Such faults lower the value of the equipment to the user and encourage malicious vandalism, which may render the equipment less safe. Any damages should be repaired immediately.

Maintenance and repair must be made by someone with the necessary expertise.

General information: Providing any necessary inspections and repairs are carried out, a piece of play equipment that is inspected regularly cannot become so damaged that it is dangerous.

9 Maintenance Timetable

9.1 Special advices

9.1.1 Maintenance interval

We strongly advise you to carry out inspections and maintenance work within the specified periods as use of the equipment, the weather and malicious vandalism cause wear and tear that compromises the safety and function of the equipment.

9.1.2 Maintenance intervals in the event of intensive use

Please note that more frequent inspections and/or maintenance are required if the play equipment is subject to intensive use!!!

9.1.3 Faults that compromise safety



In the event of a fault that compromises safety, quick action must be taken. This may involve repairing it immediately or shutting down and dismantling the equipment.

9.1.4 Faults that compromise function



Faults that compromise function should also be repaired immediately. Such faults lower the value of the equipment to the user and encourage malicious vandalism, which may render the equipment less safe. Any damage should also be repaired immediately.

10 Monthly maintenance

- Check the spaces between the equipment and the ground (clearance and height of fall).
- Check the ground surface in the area with fall protection for hard objects and loose foundations.
- Check all connecting elements and fittings for wear and tear and tighten if necessary. Replace damaged or missing parts.
- Check that moving metal parts (joints, springs, etc.) move smoothly and are not worn. Replace if necessary.
- Check all attachments such as chains, ropes, nets, etc. for damage and replace if necessary.
- Check rubber parts, sleeves, etc. for wear and tear or damage and replace if necessary.
- If necessary, remove excess filling material from the post footings due to danger of rotting.
- Check the surface of wooden parts for damage caused by the weather or external influences and mould. Repair or replace if necessary.
- Check the surface of plastic and metal parts, e.g. slides, for damage and replace if necessary.

11 Quarterly maintenance

- Detailed inspection of the operation and stability of the equipment paying particular attention to any wear and tear.
- Tighten all forms of attachment.
- Repaint and retreat surfaces.
- Maintenance of fall protection surfaces.
- Lubricate joints.
- Check the height of the fall and fill up with loose filling material, if necessary. If the posts are marked, fill up correspondingly.
- Retighten bolts.


12 Half-yearly maintenance

- Check stability of posts, braces, foundations etc. Check the complete play equipment after repairs or when equipment parts have been added or replaced.

	<h2>Annual main inspection</h2>
---	---------------------------------

13 Annual maintenance

- Ascertaining that the equipment, foundations and surfaces are safe for operation.
- In particular, the equipment should be checked for decay and corrosion. It may be necessary to dig out or excavate certain components in order to do so. Zinc paint should be applied to corroded areas and scratches.

 <p>Attention</p>	<p>The equipment must be inspected by someone with the necessary expertise in strict compliance with the instructions issued by Huck Seiltechnik GmbH.</p> <p>A copy of the inspection record should be given to the operator, who must confirm receipt!</p>
---	--

14 Maintenance printout

Name of equipment: Cheops-Pyramid Midi _____ / Part no. 4643-2B _____

Location: _____

Customer or operator: _____
(Town, Council, School)

Date of inspection	Inspector	OK	Accessible	Closed	Defects	Repaired by	Date

**Please copy and return once a year after main inspection has been carried out to the manufacturer by Telefax
+49(0)6443/ 83 11 79!**

Place the confirmation form in the play equipment files.

15 Hand-over document



After the installation of the equipment pass the installation and maintenance documents to the operator. The operator has to receive the hand over documents. The complete filled and signed hand over document should be sent to Huck Seiltechnik GmbH via fax +49 (0)6443 / 8311-79!

Part no.: 4643-2B

Type of equipment: Cheops-Pyramide Midi

Serial number: _____

Customer or operator (Town, Council, School, etc.):

Person in charge:

Installation Company (address):

Responsible assistant (assembler):

Complete assembly instructions, maintenance instructions and maintenance printout received,

(Signature operator)
(Stamp)

(Signature Installation Company)

Date: _____