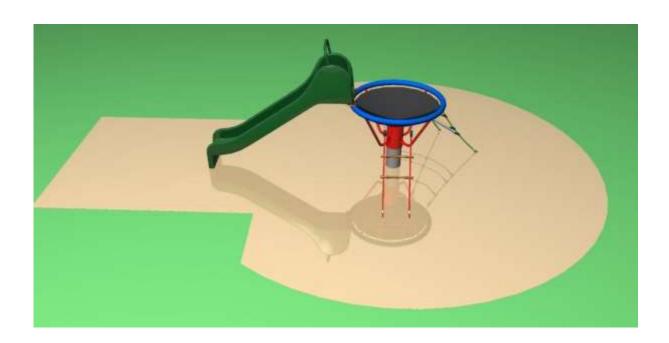


# A Assembly instruction Adlerhorst "Asslar" with slide Art.# 4634S

**Version: Steel post** 



Operator: _	 	 	
Location:			



Revision history Revision 0 – 2005-07-22 First released version

Assembly instruction SP

Revision 5 – 2008-11-19 (new information)

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# **Table of content**

A	Assembly instruction Adjernorst "Assiar" with slide Art.# 46345 Version: Steel post1
1	Introduction installation4
2	Data sheet Adlerhorst "Asslar Art.# 4634S5
3	Scope of supply, parts list with part numbers8
4	Assembly instruction11
5	Examination after installation20
В	Maintenance instruction Adlerhorst "Asslar" with slide Art.# 4634S Version: Steel post19
6	Introduction maintenance21
7	General maintenance information22
8	Maintenance timetable24
9	Regular maintenance25
10	Monthly maintenance26
11	Quarterly maintenance26
12	Half-yearly maintenance26
13	Annual main inspection27
14	Maintenance printout29
15	Hand-over document31
Tal	bles' legends
Tab	ole 3-1: Scopr of supply, parts list with part numbers8
Tab	ole 3-2: Scope of supply, parts list with part numbers9



#### 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 3-1 and 3-2)!

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 / 8311-0

Fax +49 (0)6443 / 8311-79

Please do not hesitate to call your supplier +49 (0)6443/8311-99 if you have any problems during installation or in case of any other questions.



Following installation, complete assembly instructions, maintenance instructions and a maintenance record must be sent to the operator!! See 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 (for example HTS plus Teflon no. 893128, can be purchased from the company Würth) or another similar lubricant.



# 2 Data sheet Adlerhorst "Asslar Art.# 4634S

1. Space required without safety area:

2,55 m x 3,70 m

Space required with safety area:

4,85 m x 6,95 m

Height of fall is 1,00 m

Images (individual drawings) are not true to scale!!

## 2. Specified ground surface:

Surface material	Description mm	Minimum thick- ness of layer in mm	Maximum height of fall mm
Lawn/top soil			<= 1000*
Chipped bark	Grain size 20 – 80	300/400	<= 2000/3000
Wood chippings	Grain size 5 – 30	300/400	<= 2000/3000
Sand	Grain size 0,2 – 2	300/400	<= 2000/3000
Gravel	Grain size 2 – 8	300/400	<= 2000/3000
Other ground surface materials	Like tested according to HIC		

<sup>\*</sup>In Germany, lawn is a sufficient ground surface for heights of up to 1,50 m.

- 3. Name and complete dimension of the largest part of the equipment: Green GRP slide (1 piece) length approximately 0,50 m
- 4. Name and weight of the heaviest part of the equipment: 1 freight pallet with play equipment approximately 90 kg
- 5. Allowed age group: 3 years and up

### 6. Attention! Equipment to be embedded in concrete

Concrete: C25/30

Concrete requirement: ~ 0,50 m<sup>3</sup> Size of excavation and foundation :

- **1 x** 0,80 m long x 0,80 m wide, total depth 0,90 m including 10 cm percolation layer.
- **1 x** 0,40 m long x 0,70 m wide, total depth 0,75 m including 10 cm percolation layer. (Upper edges of concrete are rounded, upper edge of concrete = 20 cm below upper edge play level)



<u>Upper edges of concrete are rounded! Foundation sizes apply for regular soil classification 4-5 (grown surface).</u>

Soil classification 4: Light up to medium plasticity, interlaced, with little sediment (proportion < 30 % larger than 63 mm grain size in diameter)

Soil classification 5: Grounds of soil classification 3 and 4 with more sediment (proportion > 30 % larger than 63 mm grain size in diameter)

For safety reasons, foundations of sandy, soft grounds should be layered with a larger surface of at least 50



Assembly time once steel posts are set in concrete: Approximately 2 hours. 2 persons.

7. Any spare parts that may be required can be directly obtained from your supplier or Huck Seiltechnik

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We herewith confirm that this play equipment is tested and certified according to the new play equipment norm EN 1176-1.



# **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.

# **Tolerances / proportions**

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 (Attention – number of items refer to 1 unit!!)

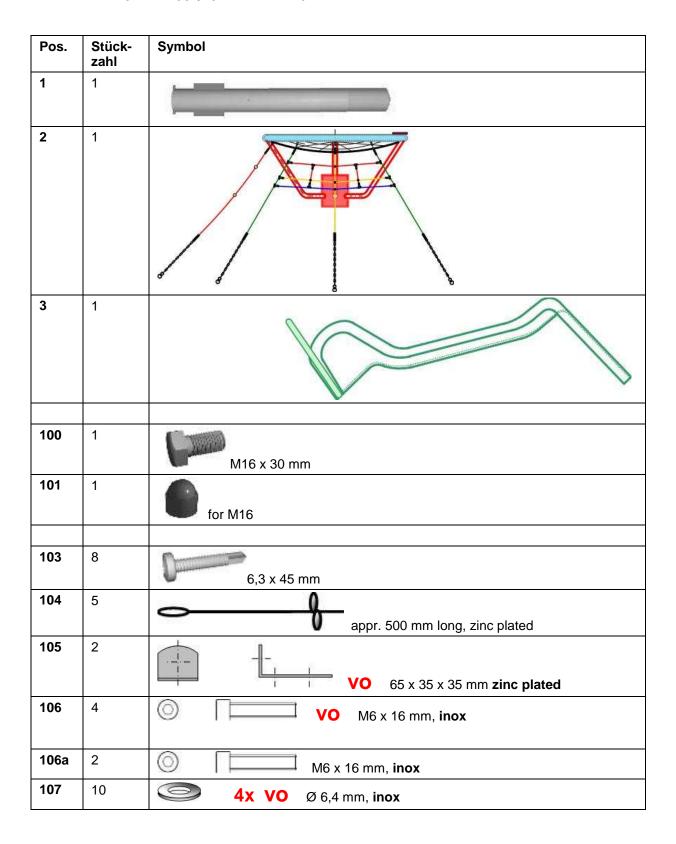
Tabelle 3-1: Lieferumfang, Stückliste mit Teilenummern

Pos.	Number of items	Element / Description	Size	O.K.	Mis- sing
1	1	Steel post	Ø 193 mm - 1,40 m long		
2	1	Play equipment (pre-assembled)			
3	1	Slide with safety frame			
100	1	Hexagon head screw	M16 x 30 mm long		
101	1	Black cap	for M16		
103	8	Self-cutting screws	6,3 x 45 mm		
104	5	Screw-in anchor	ca. 500 mm lg., zinc plated		
105	2	Angle 65 x 35 x 35	65 x 35 x 35 mm zinc plated		
			pre-assembled on slide		
106	4	Cylinder head screws with internal	M6 x 16 mm, <b>inox</b>		
		hexagon DIN 912	Pre-assembled on slide		
106a	2	Cylinder head screws with internal hexagon DIN 912	M6 x 16 mm, <b>inox</b>		
107	10	Washers DIN 125	Ø 6,4 mm <b>inox</b>		
			4 pieces		
			Pre-assembled on slide		
108	6	Stop screw nuts DIN 985	M6 inox		
			4 pieces		
			Pre-assembled on slide		
109	2	Brazen nut	M6		
110	2	Washers DIN 9021	<u>Ø 8,4 mm</u> inox		
111	1	Loctite	3 ml		



# 3.2 in symbols

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



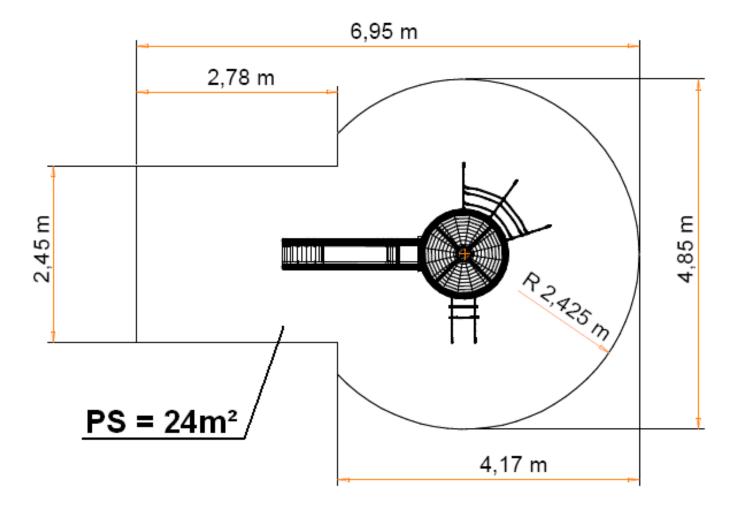


108	6	4x VO M6 inox
109	2	● M6
110	2	Ø 8,4 mm inox
111	2	



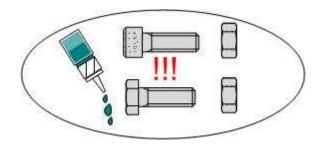
# 4 Assembly instruction

Images (individual drawings) are not true to scale!!



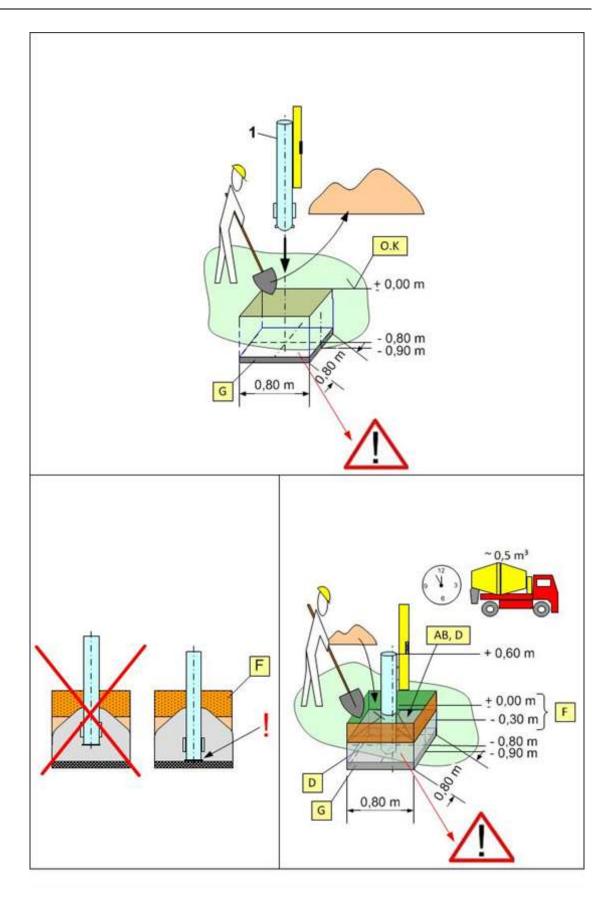


# Securing bolts and nuts!

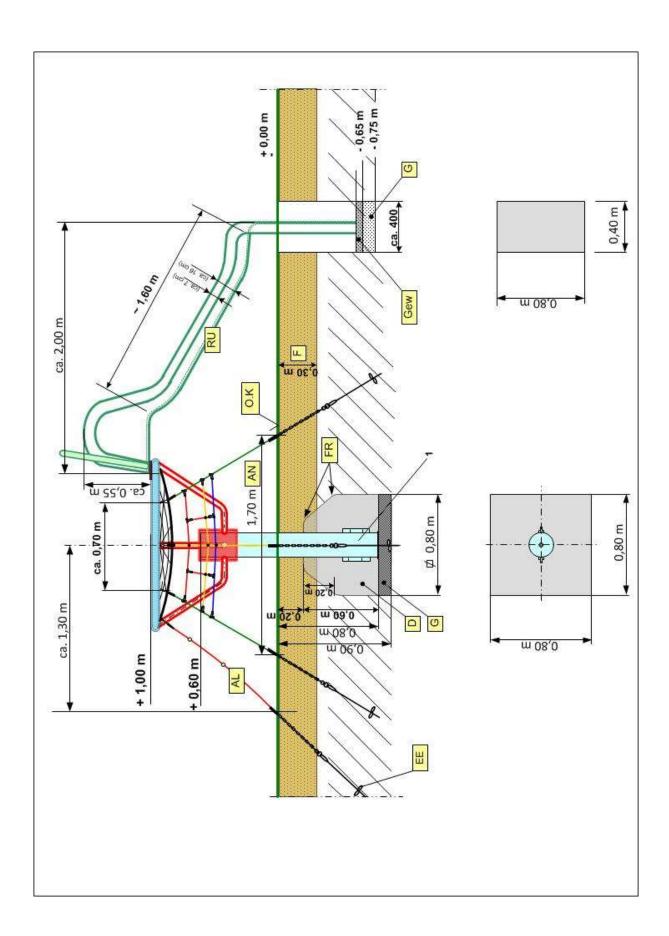


All bolts, nuts, cylinder nuts, etc.
(except for Nyloc nuts)
must be secured with at least 5 drops of Loctite!

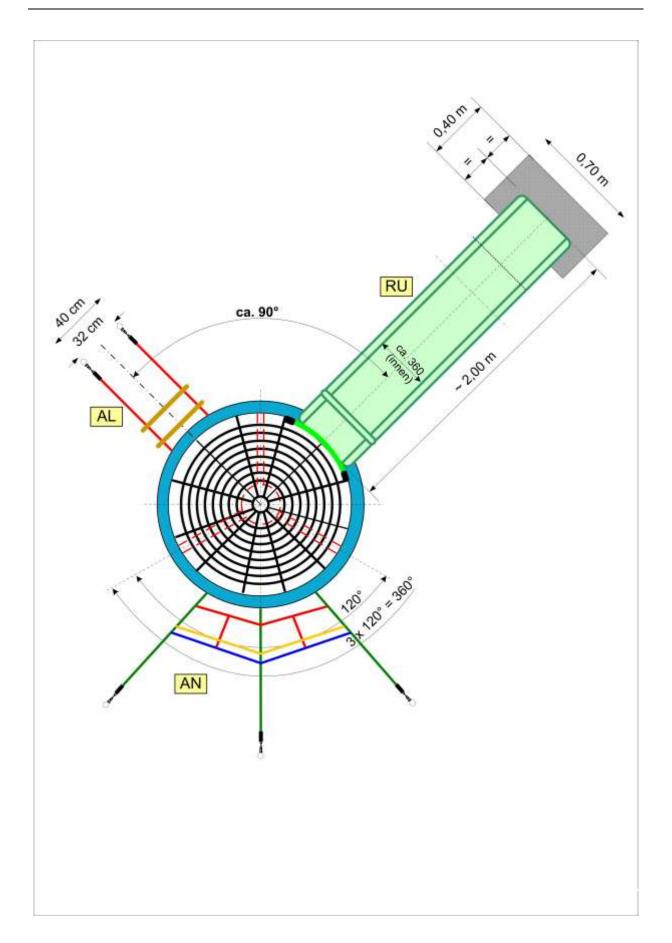




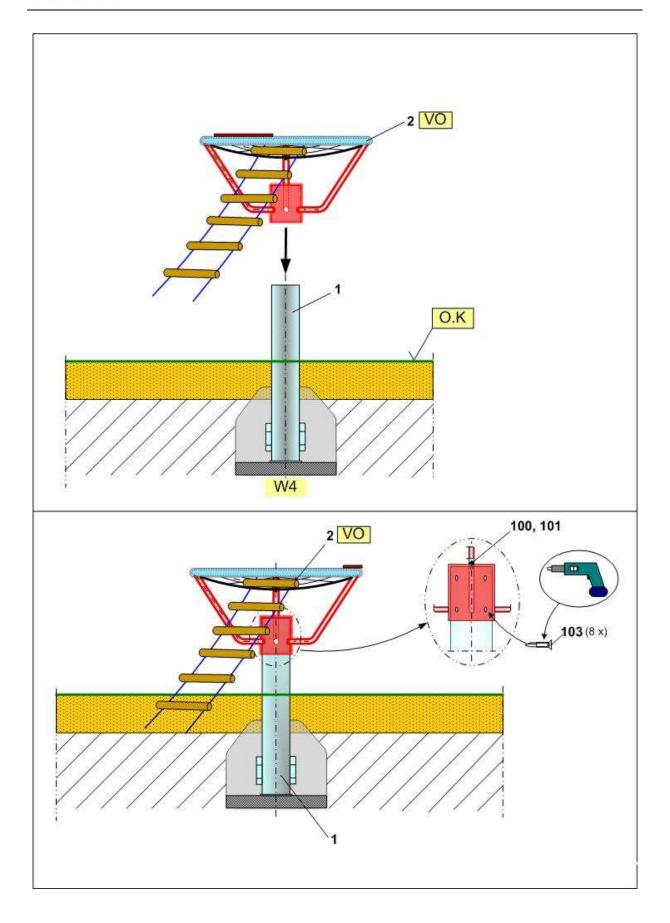




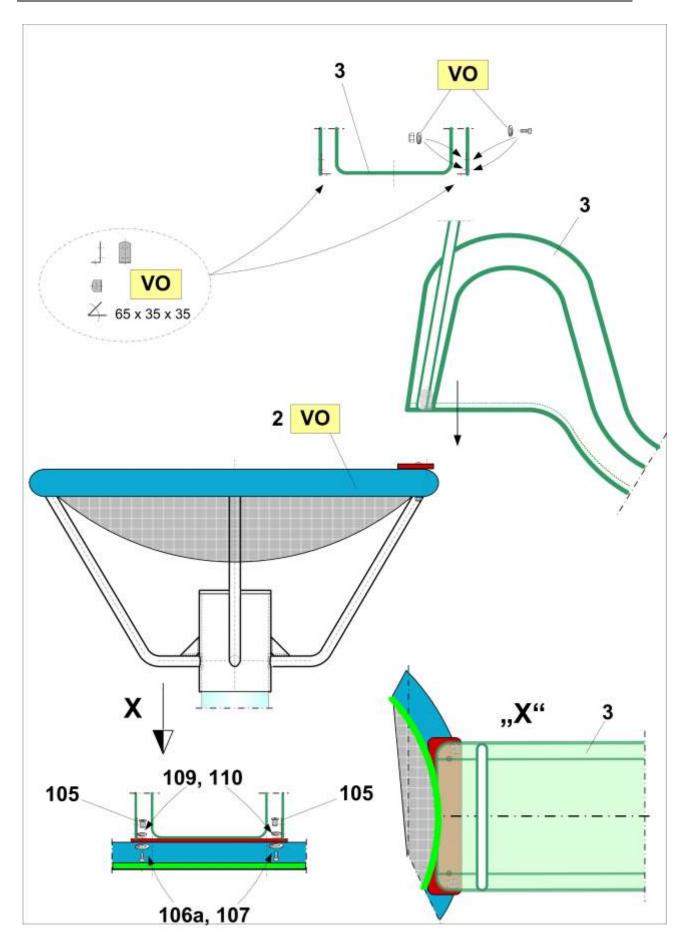




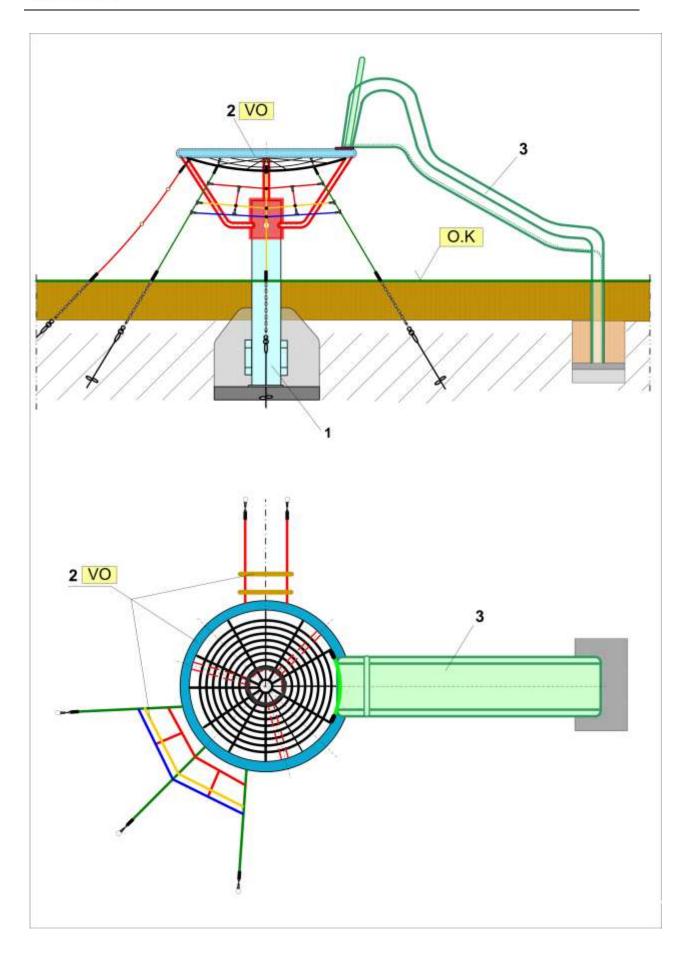














	Abbreviations:
AB	Setting time for concrete C25/30 minimum 7 – 8 days
AL	Climb-up ladder
AN	Climb-up net
D	Concrete C25/30 for foundation
bMa	Adjust when assembling
EE	Screw-in anchor
F	Fall protection
FR	Foundation radius at least 10 cm
G	Percolation layer 10 cm
Н	Ø (diameter of tap)
vb	predrill
VO	Pre-assembled
O.K	O.K. play level
If	Lubricate slightly
m	At least
PS	Space required including safety area
Ru	Slide
$\triangle$	Upper edges of concrete are rounded! Foundation sizes apply for regular soil classification 4-5 (grown surface).  Soil classification 4: Light up to medium plasticity, interlaced, with little sediment (proportion < 30 % larger than 63 mm grain size in diameter).  Soil classification 5: Grounds of soil classification 3 and 4 with more sediment (proportion > 30 % larger than 63 mm grain size in diameter)  For safety reasons, foundations of sandy, soft grounds should be layered with a larger surface of at least 50%.

# 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 the filling level

Markings on the equipment to indicate filling levels of fall protection material (for example of loose filling 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 assembly 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 the first use

No acceptance test specifications apply prior to first use.

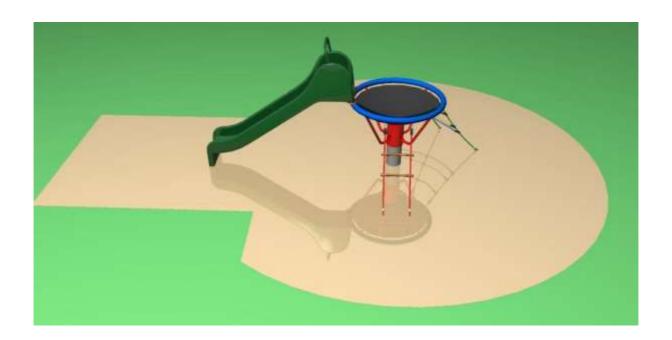
## 5.5 Retighten bolts

 Please retighten all bots after one week of initial use. Later, it is sufficient to retighten the bolts with every maintenance.



# **B** Maintenance instruction Adlerhorst "Asslar" with slide Art.# 4634S

**Version: Steel post** 





Revision history Revision 0 – 2005-07-22 First released version

Maintenance instruction SP

Revision 5 – 2008-11-19 (new information)

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### 6 Introduction maintenance

#### 6.1 General information

This equipment should be installed, inspected, maintained and operated in accordance with EN1176-7 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 that may be required can be obtained directly from your supplier or HUCK Seiltechnik GmbH

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

A copy of the inspection record is to be handed over to the operator, who must confirm receipt.

This maintenance instruction is based on the standard "EN 1176-1".



#### 7 General maintenance information

## 7.1 Mintenance 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 (for example HTS plus Teflon no. 893128, can be purchased from the company Würth) or another similar lubricant.

### 7.4 Spare parts

All spare parts must comply with the manufacturer's specifications!

### 7.5 Identifying spre parts

All spare parts are listed in the parts list. You find the parts list in chapter 3.

# 7.6 Special instructions for the disposal of individual equipment components

No special instructions are necessary.

### 7.7 Special measures in the starting time

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

#### 7.8 Maintenance of fall 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.



#### 7.9 Faults



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

#### 7.10 Loose screws



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

# 7.11 Preventing equipment use

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

### 7.12 Guarantee respectively warranty

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 the concrete foundations and checked **for corrosion**.

Zinc paint should be applied to any corroded areas and scratches. Check ropes for abrasion. Ropes are to be re-impregnated once intensive abrasion occurs.



#### 8 Maintenance timetable

## 8.1 Special advices

#### 8.1.1 Maintenance interval

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

#### 8.1.2 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!!!

### 8.1.3 Faults that compromise safety



In the event of a fault that compromises safety, quick action must be taken: The equipment has to be closed immediately and repaired or dismanteled.

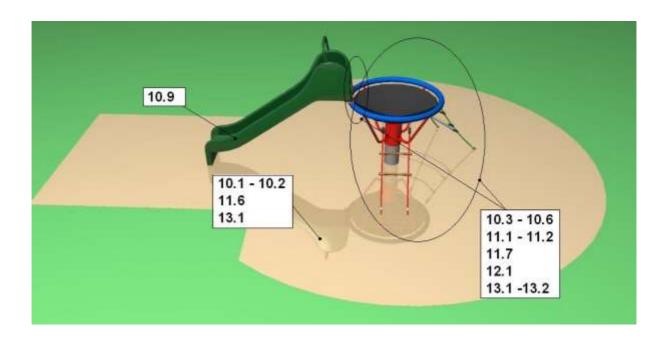
# 8.1.4 Faults that compromise function



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 damages should be repaired immediately.



# 9 Regular maintenance





## 10 Monthly maintenance

- (10.1) Check the spaces between the equipment and the ground (clearance and height of fall).
- (10.2) Check the ground surface of fall protection for hard objects and loose foundations.
- (10.3) Check all connecting elements and fittings for wear and tear and tighten if necessary. Replace damaged or missing parts.
- (10.4) 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.
- (10.5) Check all attachments such as chains, ropes, nets, etc. for damage and replace if necessary.
- (10.6) Check rubber parts, sleeves, etc. for wear and tear or damage and replace if necessary.
- (10.7) Check the surface of wooden parts for damage caused by the weather or external influences and mould. Repair or replace if necessary.
- (10.8) Check the surface of plastic and metal parts, e.g. slides, for damage and replace if necessary.

## 11 Quarterly maintenance

- (11.1) Detailed inspection of the operation and stability of the equipment paying particular attention to any wear and tear.
- (11.2) Tighten all types of fastenings.
- (11.3) Repaint and retreat surfaces.
- (11.4) Maintenance of fall protection surfaces.
- (11.5) Check height of fall protection material and fill up with loose filling material if necessary! If the posts are marked, fill up correspondingly.
- (11.6) Retighten all bolts.

### 12 Half-yearly maintenance

• (12.1) The stability of supporting posts, braces, foundations etc. has to be checked. Once repair respectively replacement is completed, the entire equipment has to be verified.





# **Annual main inspection**

## 13 Annual main inspection

- 13.1 The complete equipment as well as the foundations and the surfaces are to be checked if they are generally safe.
- 13.2 The equipment is to be verified according to rotting and corrosion. For that some parts have to be excavated. All woods respectively post are to be treated additionally with the supplied varnish. Here it is important to also brush against the wood grain direction, in order to also saturate natural cracks, which naturally appear after factory-primed, to prevent ingress of water. All wooden posts must be excavated and completely varnished. Crossbeams of swing frames must be varnished thoroughly. Until the paint has dried up, depending on the weather conditions this might take one day or longer, the equipment should be closed to the public. Corroded areas of steel posts and also scratches have to be treated with zinc paint!
- 13.3 Any changes to the equipment which are caused by repairs or added or replaced parts to provide safety, are to be determined.



The equipment must be inspected by someone with the necessary expertise in strict compliance with the instructions issued by Huck Seiltechnik GmbH.

A copy of the inspection record is to be given to the operator, who must confirm receipt!



14	Maintenance printout	
Name	of the equipment: Adlerhorst "Asslar"	/ Art.# 4634S
Location	on:	
	ner or operator: municipal, kindergarden)	

Date of inspection	Inspector	ок	Accessible	Closed	Defects	Repaired by	Date

Please copy and return to the manufacturer by Telefax +49 (0)6443 / 83 11 79 once a year after main inspection has been carried out. Place the confirmation form in your existing play equipment files.





Date: \_\_\_\_\_

After the installation of the equipment the installation and maintenance documents are to be handed over to the operator. The operator has to have the documents signed. The complete filled and signed hand over documents are to be sent back to the supplier Huck Seiltechnik GmbH via fax +49 (0)6443 / 83 11 79!

15	Hand-over document	
Art.#	# 4634S	
	be of equipment: Adlerhorst "Asslar" rial number:	
Cust	stomer or operator (town, municipal, kindergarden, etc.):	
Perso	son in charge:	
Insta	tallation company (address):	
Assis	sistant in charge (assembler):	
Comp	mplete assembly instruction, maintenance instruction and maintenance p	rintout received,
(Sign (Stam		allation company)