

# Installation Instructions Mini Rope-End Swinger Art No. 4585-45



Operator: \_\_\_\_\_

Location: \_\_\_\_\_



#### **Revision history** Revision 1 – 2005- 08-01

First released version

Assembly instructions

Revision 6 – 2011-08-09 B25 in C25/30

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# 1 Introduction Assembling

#### 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.

Please do not hesitate to call your supplier 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 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 or another similar lubricant.

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



# 2 Data sheet Mini – Rope End Swinger 4585-45

- 1. Space required: 3,10 x 1,10 m resp. 6,10 x 4,10 m including safety distance, Height of fall max. 0,80 m.
- 2. Required safety 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 surface materials	Like tested according to HIC		

\*In Germany, lawn is a sufficient ground surface in the safety zone for heights of up to 1,50 m.

- Name and total dimension of the largest part of the equipment:
   4 steel posts Ø 102 mm, 2,00 m long
- 4. Name and weight of the heaviest part of the equipment:1 freight pallets with 4 steel posts 83 kg
- 5. Intended age group: 2 years and up

Attention! Equipment to be embedded in concrete Concrete: C25/30 Concrete requirement: ~ 1,5 m<sup>3</sup> Size of excavation and foundation: 2 x 1,80 m long x 0,80 m wide, total depth 0,90 m incl. 10 cm percolation layer.2 x 1,80 m long x 0,80 m wide x 0,50 m high, rounded concrete edges.



Round off foundation edges (min.R = 100 mm)! Sizes of fundations are "4-5" (natural ground).

Soil class 4: soft to medium plasticity, interleave bound, with minor portion of stone (portion < 30% with bigger diameter of 63 mm grain size).



Soil class 5 : ground with soil class 3 and 4 with big portion of stones (portion > 30% with bigger diameter of 63 mm grain size).

In case of sandy and soft soils, the surface measure of foundations have to be enlarged for about 50%!

- 6. Assembly time once steel masts are embedded in concrete: Approx. 1 hour. Number of persons required: 2
- 7. Any spare parts that may be required can be directly obtained by your supplier
- 8. We hereby confirm that this play equipment is tested and certified according to the new playing equipment norm EN 1176.-1:1008.



Drawings / Views:

All optical drawings are showing only the measurements/dimensions and are no mandatory technical views of the complete item.

We reserve the right to change technical details of our articles which are serving for the further development of our articles and are reasonable for the customer.

Measurement tolerances:

Because of the properties and characteristics of the components, minor measurement tolerances compared to the indication on the sketches are possible.

This concerns all shown measurements except the foundation measurements resp. measurements below upper edge ground level/play area.



# 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	0.K.	Missing
1	4	Steel posts	Ø 102 mm, 2,00 m long		
2	4	Red plastic caps	for Ø 102		
3	4	Tube clamps with coach bolts and stop screw nuts			
4	12	Self-cutting screws			
5	4	Tube clamps with bolts M10 x 150 mm + 2 nuts			
6	1	Red paint (1 can) + paint brush			
7	1	Mini-Easy Swing			
	4	Sidewalk stones			



## 3.2 in symbols

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





# Securing bolts and nuts !



Secure all screws, nuts and sleeves with loctite. (not less than 5 drops !) (except for Nyloc nuts)



# Assembly instruction















# Abreviations for drawings

AB	Setting time for concrete at least 7-8 days
AM	Axial dimensions
D	Concrete C25/30 ( for foundation )
F	Fall protection
FR	Radius of foundation at least 10 cm
G	Percolation layer 10 cm
Gehw.Pl.	Sidewalk stone ca. 40 x 40 cm
O.K	Upper edge play level
Р	Post
PS	Space required including safety area
	Round off foundation edges (min.R = 100 mm)! Sizes of fundations are designed for soils class "4-5" (natural ground). Soil class 4: soft to medium plasticity, interleave bound, with minor portion of stone (portion < 30% with bigger diameter of 63 mm grain size). Soil class 5 : ground with soil class 3 and 4 with big portion of stones (portion > 30% with bigger diameter of 63 mm grain size). In case of sandy and soft soils, the surface measure of foundations have to be enlarged for about 50%!



# 4 Examionation after installation



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

#### 4.1 Marking the filling level

• Markings on the equipment to indicate filling levels of fall protection material (for example of loose filling material).

#### 4.2 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

#### 4.3 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.

#### 4.4 Details concerning inspection of the equipment prior to the first use

• No acceptance test specifications apply prior to first use.

#### 4.5 Retighten bolts

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



# A Assemnly instructions Mini- Rope End Swinger 4585-45





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First released version

Maintenance instructions

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# 5 Introduction maintenance

#### 5.1 General informations

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

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 (please refer to the next to the last page) is to be handed over to the operator, who must confirm receipt.

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



# 6 General maintenance information

#### 6.1 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!

#### 6.2 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!

#### 6.3 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.

#### 6.4 Spare parts

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

#### 6.5 Identifying spare parts

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

# 6.6 Special instructions for the disposal of individual equipment components

No special instructions are necessary.

#### 6.7 Special measures in the starting time

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

#### 6.8 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.



#### 6.9 Faults



Faults 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.

#### 6.10 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 seethrough holes, for example).

#### 6.11 Preventing equipment use

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

#### 6.12 Guarantee resp. 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.



# 7 Regular maintenance

7.1 (image)



......



## 7.2 Regular maintenance (text)

m = monthly

1/4 j = quarterly

 $\frac{1}{2}$  j = half-yearly

#### m ¼j ½j

Check the ground surface of fall protection for hard objects and loose foundations.	х	
Check stability (posts, springs, braces, foundations, etc.).		Х
Ceck all connecting elements and fittings for wear and tear and tighten if necessary. Replace damaged parts.	х	
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 roller bearings.	x	
Check all attachments such as chains, ropes, nets, etc. for damage and replace if necessary.	х	
Check rubber parts, sleeves, bearing ring, etc. for wear and tear or dam- age and replace if necessary.	х	
Check the surface of wooden parts for damage caused by the weather or external influences. Repair (apply varnish) or replace if necessary.	х	
Check the surface of plastic and metal parts, e.g. slides, for damages and replace if necessary.	х	
	<ul> <li>foundations.</li> <li>Check stability (posts, springs, braces, foundations, etc.).</li> <li>Ceck all connecting elements and fittings for wear and tear and tighten if necessary. Replace damaged parts.</li> <li>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 roller bearings.</li> <li>Check all attachments such as chains, ropes, nets, etc. for damage and replace if necessary.</li> <li>Check rubber parts, sleeves, bearing ring, etc. for wear and tear or damage and replace if necessary.</li> <li>Check the surface of wooden parts for damage caused by the weather or external influences. Repair (apply varnish) or replace if necessary.</li> <li>Check the surface of plastic and metal parts, e.g. slides, for damages</li> </ul>	foundations.XCheck stability (posts, springs, braces, foundations, etc.).XCeck all connecting elements and fittings for wear and tear and tighten if necessary. Replace damaged parts.XCheck 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 roller bearings.XCheck all attachments such as chains, ropes, nets, etc. for damage and 

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.



# 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 dismantled.

#### 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 Monthly maintenance

- Check the spaces between the equipment and the ground (clearance and height of fall).
- Check the ground surface of 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. It is not necessary to lubricate joints as we only use maintenance-free metal roller bearings.
- 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.
- 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.

### **10** Quarterly maintenance

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

### 11 Half-yearly maintenance

 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.



# 12 Annual main inspection

- The complete equipment as well as the foundations and the surfaces are to be checked if they are generally safe.
- The equipment is to be verified according to rotting and corrosion. For that some parts might have to be excavated. Zinc paint should be applied to any corroded areas and scratches.



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!



#### **13** Maintenance printout

Name of equipment: Mini-Easy Swing\_\_\_\_\_\_ / Part no. 4585 -45 \_\_\_\_\_

Location: \_\_\_\_\_

Customer or operator: \_\_\_\_\_

(Town, municipal, kindergarden)

Date of inspection	Inspector	ОК	Accessible	Closed	Defects	Repaired by	Date

Please copy and return to the manufacturer by fax +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.



#### 14 Hand-over document



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!

Part no.: 4585 -45

Type of equipment:	 _ Mini – Easy Swing
Serial number:	

Customer or operator (town, municipal, kindergarden, etc.):

Person in charge:

Installation company (address):

Assistant in charge (assembler):

Complete assembly instruction, maintenance instruction and maintenance printout received,

(Signature operator) (Stamp) (Signature installation company)

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