



NIRA 67 Playground pump

Operating and maintenance manual

28.04.2014

CE



Contents

1 NIRA 67 Playground pump	3
1.1 Description of parts	3
2 Introduction	4
2.1 Inspection upon delivery.....	4
2.2 Before use	4
3 Using the pump.....	5
3.1 Installation	5
3.2 Taking the pump out of use.....	6
4 Maintenance and repair	7
4.1 Regular inspection.....	7
4.2 Maintenance	7
4.3 Detaching the cover	7
4.4 Changing the rocker shaft bushes and seals	8
4.5 Cleaning and changing the O-rings and the spring.....	8
5 Technical information.....	9
6 Warranty	10
7 Recycling	10
8 Contact information.....	11



Read these instructions carefully. Follow all warnings and instructions marked on the product

1 NIRA 67 Playground pump

Nira 67 Playground pump is intended for children's playgrounds. The pump is designed to be connected to a pipeline and therefore cannot be used for pumping water from ordinary water wells. This document gives instructions for operating and maintaining the device. Please familiarize yourself with these instructions before using the device. Use the device only as described and for the specified applications. Store these instructions in an appropriate way, making sure that the instructions are available to all possible users throughout the life of the device.



To avoid injury, follow the instructions given in this document.

1.1 Description of parts

The parts of NIRA 67 Playground pump are shown below (Figure 1, Figure 2).

1	Handle	P18485
2	Main pipe	SD302
3	Rocker arm	P18466
4	Side disk	P15749
5	Piston rod	P18886
6	Pellet	P16967
7	Base plate	SD1804
8	Piston	P15671
9	Cylinder	P15673
10	Cylinder bottom	P15675
11	Bobbing	P18550
12	Pump head	P14749
13	Shaft seal	RSL05
14	Grip handle	R282GRIP82L
15	Reducing socket	R1570713
16	Plastic cover (blue (S)/red(P)/grey(H))	R14766S/P/H
17	Bearing	P14750
18	Cover screw	R206820
19	Spring	H50296
20	O-ring	R2781425
21	Plug	R2030630
22	Locking washer	R23010N
23	Hex. Screw M10x30	R2061030
24	Sand blocking	P18840
25	O-ring	R278104
26	Pin	R242430
27	Hex. screw M6x35	R206635
28	Locking nut M6	R2276RST
29	Cover screw seal	R16787
30	Washer M8	R2308A
31	Cover seal	R14832
32	Washer M10	SD404
33	Hex. screw M8x40	R202840
34	Hex. Nut M8	R2288
35	Locking screw M5x6	R21456
36	Screw (M10x10)	R2141010
37	Hex. screw M8x25	R206825
38	Hex. screw M8x40	R206840
39	Valve	P15447

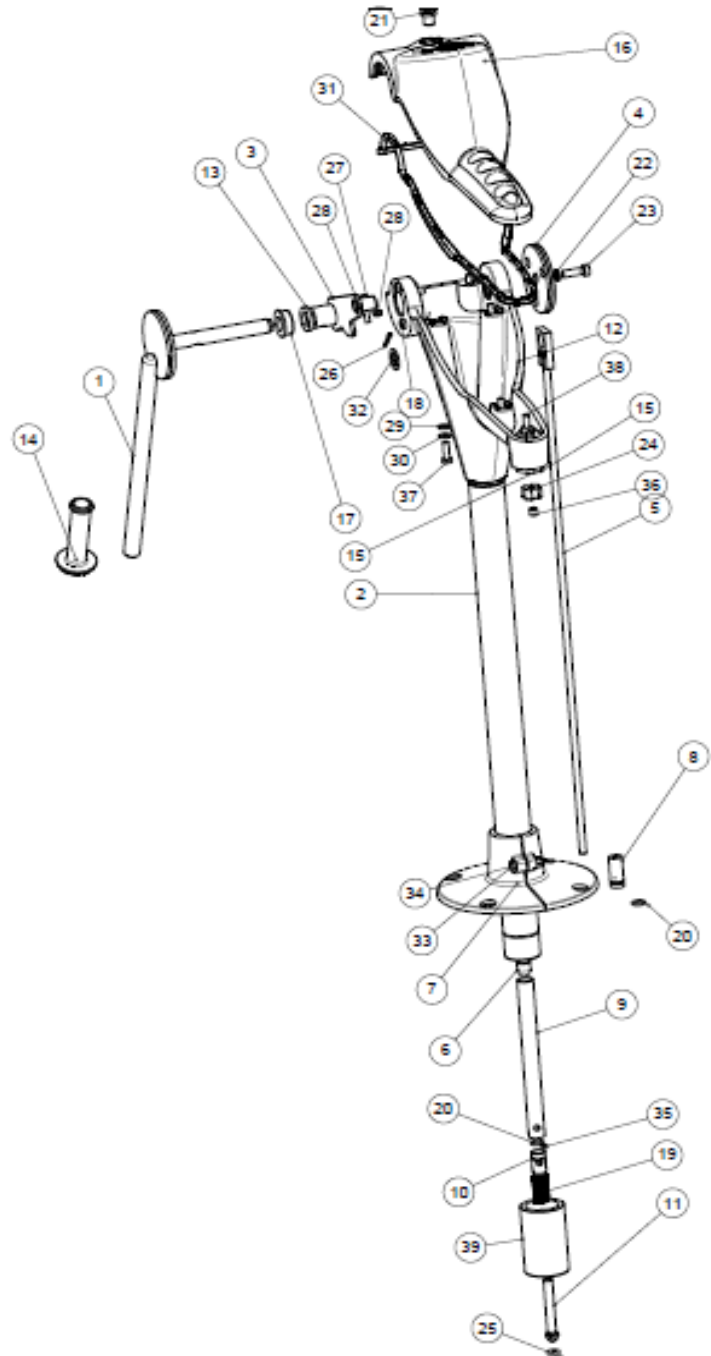


Figure 1: NIRA Playground Pump

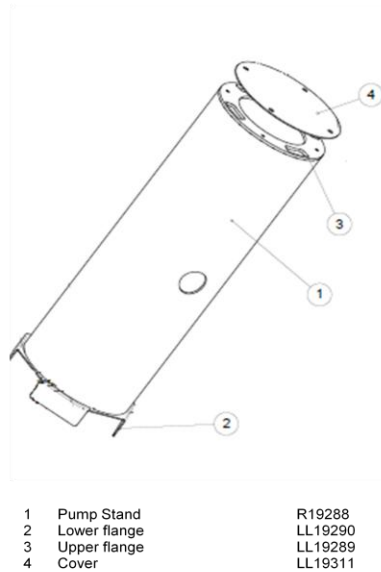
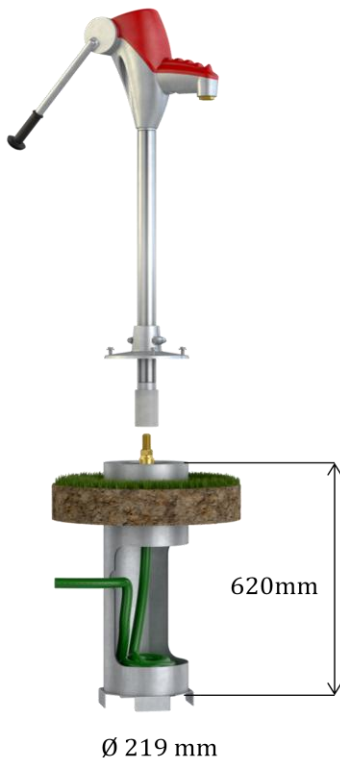


Figure 2: NIRA Playground pump stand (accessory)

2 Introduction

2.1 Inspection upon delivery

Before the device is taken into use, check that the packaging is intact and that it has not been damaged during transportation. Please notify the transport company and the supplier of any transit damage within two (2) days of receiving the delivery.

Ensure that the delivery contains all the parts detailed in the delivery note. If there is anything missing from the delivery consignment, please contact the supplier immediately.

2.2 Before use

NIRA 67 Playground pump is intended to be used in children's playgrounds and other places where the pump can be connected to a water pipe line instead of water wells. NIRA 67 Playground pump cannot be used for pumping water from water wells since it has no pumping mechanism.

If the pump head is too high, it can be adjusted by sliding the pump body through the base plate approx. 50 cm. Height adjustment inquires requires enough free space under the base plate.

A steady slab is needed for installation. The base plate must be mounted on the slab. Under the slab there must be enough free space for adjusting the pump head and for installing the valve to the pipeline. Use rubber hose and make sure that there is few meters of hose rolled in the stand (Figure 3). This way the possible pressure changes won't affect the operation of the pump.



Figure 3: Extra hose in the stand

Also a hosepipe with a hose clamp and a hose pipe coupling with 3/4" thread is needed (Figure 4).

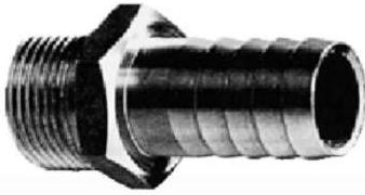


Figure 4: Hose pipe coupling with 3/4" thread

Note following important issues:

- Pressure 4-6 bars; the higher the pressure, the higher the water consumption. Pressure has an impact on the closing of the valve. Pressure shock absorber is available as an accessory. The use of the absorber is recommended since it reduces hydraulic impacts on the pipe line.
- For the connection to the water mains, contact your plumber and adhere to EN1717- Protection against pollution in water installations and general requirements of the devices to prevent pollution by backflow.
- Priming water must be added before use. Remove the plug (Figure (21)) and fill in approx. 1 liter of water.



While pump is in use there must be water in it to lubricate the mechanism. The pipe water must be clean.



The pump may exert the pipeline and its joints. Use the pressure shock absorber (optional).



Do not use the pump without priming water as the mechanism can get damaged if dry pump is used.



The pump should not get frozen, while priming water is in the pump. The operating temperature is between +2°...+50° C.



Shut off the closing valve of the pipeline when the pump is not in use.



A small amount of water remains in the pump. The pump should be flushed daily before use.



Use the pump according to its intended use.

3 Using the pump

3.1 Installation

As a standard the package contains following items:

- Base plate (1 pc)
- Pump body (1pc) with installed handle and valve

The stand is available as an accessory.

Tools needed for the installation:

- 13 mm spanner or adjustable spanner (1 pc)
- 10 mm hex key (Allen key)

1. Install the base plate on the desired height on the pump body (Figure 5)

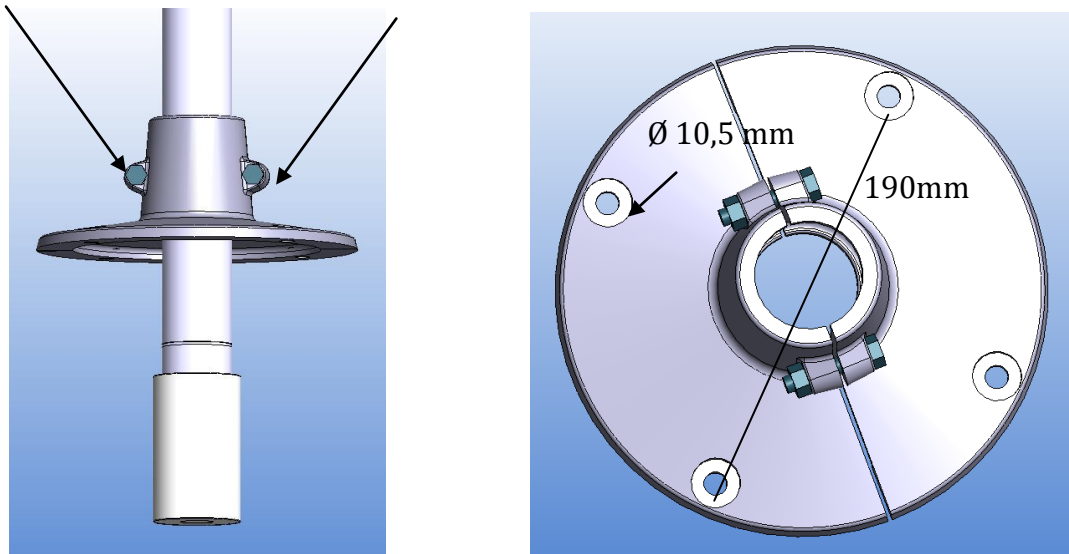


Figure 5: Base plate

2. Attach the hose coupling to the valve and install the hose pipe on the hose coupling with a hose clamp (Figure 6).

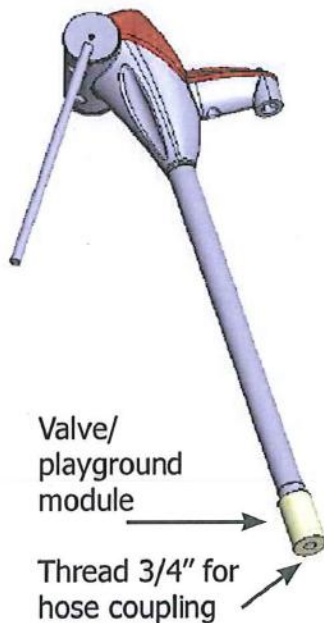


Figure 6: Installing the hose coupling

3. Install the base plate on the slab. Hole pattern is 4x190 mm and diameter 10,5 mm (Figure 5).

4. Add priming water (1 liter) before use. Remove plug (Figure 1 (21)) on top of the pump. Fasten the plug.

5. Water has to be added if the water inside the pump has drained. Usually no water has to be added as long as the hose is filled with water and is connected to the pump.

3.2 Taking the pump out of use

If the temperature goes below the operating temperature (+2 °...+50°C) any time of the day, the pump must be disconnected and dumped.

1. Close the water tab and remove the hose
2. Remove the plug on top of the cover (Figure 1(21)).
3. Move the handle on the uppermost position.
4. Turn the pump upside down so that the water can drain from the pump through the opening.
5. If the stand is used, place the cover in place (Figure 2 (4))
6. Store the pump in warm and dry place.

4 Maintenance and repair

4.1 Regular inspection

NIRA Playground pump is a playground equipment. According to the EN 1176 regular inspections have to be made to ensure safe operation. Weekly inspections are recommended.



If the screw (Figure 1(23)) comes loose do not try to tighten it. The screw must be removed and thread locker (e.g. Loctite-Threadlocker) must be added to the thread.

Use only new locking washers (Figure 1 (22)). Install the handle again with the washers and tighten the screw with approx. 40Nm torque.

4.2 Maintenance

NIRA playground pumps do not need periodical service. Water impurities are the most common reason for malfunction in the valve system. In this case the valve needs to be cleaned. When the pump opened and cleaned, change the O-rings in valve at the same time. Intensive use may cause the spring (Figure 1 (19)) to wear out and break.

4.3 Detaching the cover

The cover is fastened to the pump with hexagonal screws (6 short and 1 long).

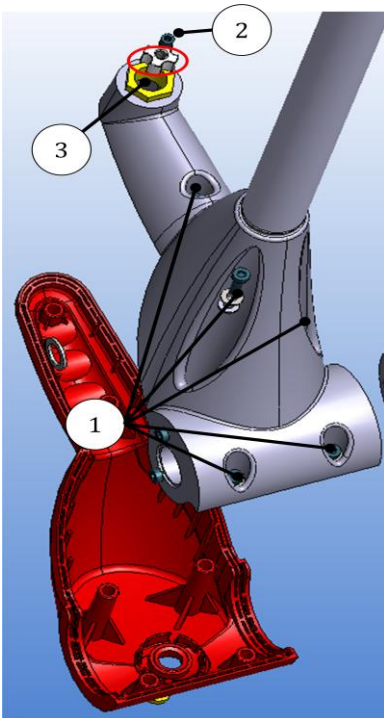


Figure 7: Detaching the cover

1. Unscrew the screws (5 pc.)(Figure 7(1)) and remove the cover.
2. Remove the screw (2)(Figure 7). Notice that the sand blockage (marked with red circle) won't come out but you are now able to unscrew the screw (3).
3. Assemble the pump in reverse order. Make sure that the seal is properly in place.

4.4 Changing the rocker shaft bushes and seals

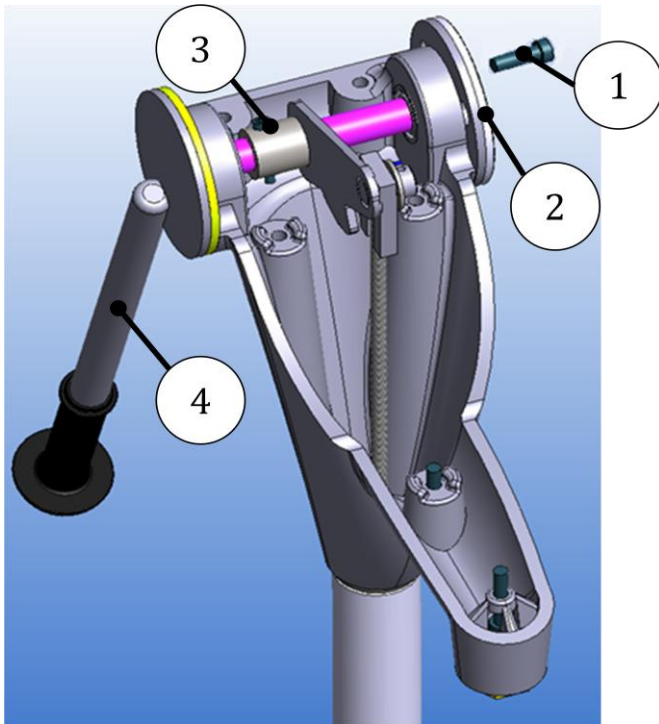


Figure 8: Changing the rocker shaft bushes and seals

1. Remove the cover as described in Chapter 4.3.
2. Loosen the screw (1) (Figure 8) with the locking washer.
3. Remove the side plate (2) (Figure 8).
4. Remove the screw (3) (Figure 8).
5. Now the handle (4) (Figure 8) can be removed in order to change bushes and seals (see Figure 1)
6. Assemble the parts in reverse order.

4.5 Cleaning and changing the O-rings and the spring

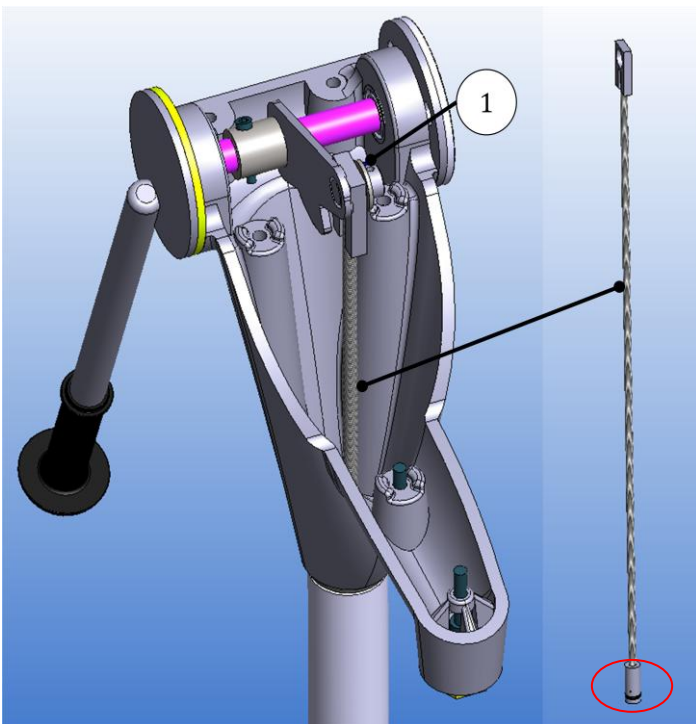
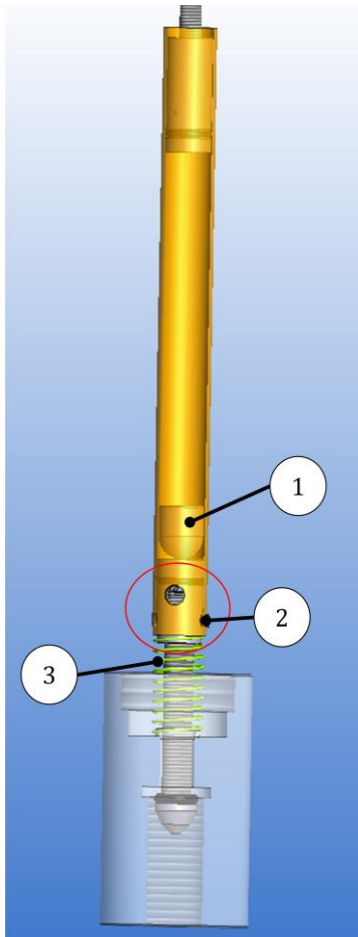


Figure 9: Changing the O-ring

1. Remove the cover as described in Chapter 4.3.
2. Remove the pin (1) (Figure 9).
3. The piston rod can now be removed. Notice the pellet (6) (Figure 1).
4. Change the O-ring of the piston (marked with red).



1. Open the screw (2) (Figure 10). Make sure that the cylinder bottom (10) (Figure 1) at the lowest position (marked with red).
2. Notice the pellet (1) (Figure 10).
3. Change the spring and O-ring.
4. Reassemble the parts.

Figure 10: Changing the spring

5 Technical information

Weight	10 kg
Pumping capacity	10-20l/min.
Operating pressure	4-6 bar
Diameter of the mounting holes	10,5 mm
Operating temperature	+2...50 ° C
Material:	
Exterior	Stainless steel, plastic, aluminum
Seals	Nitrile rubber, EPDM
Valve/Piston	POM-plastic
Cylinder	Brass, stainless steel

Check the information also in the type plate (Figure 9).

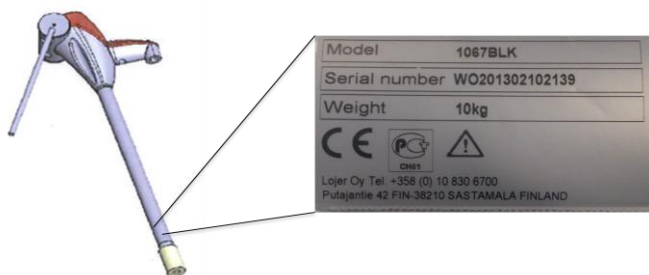


Figure 11: Type plate and its location (NOTE! The picture is suggestive)

The designing of the pump is based on the standard EN 1176-1. NIRA Playground pumps are CE-marked.

6 Warranty

The general guarantee is one (1) year from the delivery date.

The terms of guarantee are appropriate use of the product and compliance with operating instructions. The guarantee does not apply to damage caused by misuse or failure to comply with the terms of guarantee.

Manufacturer's obligations are limited to the repair or, at its discretion, replacement of the product or the defective part. For this, the customer is responsible for the despatch and insurance of the product. The transport and insurance costs shall be borne by the customer. Manufacturer shall assume the costs for the materials / spare parts and the labour costs as required, as well as the return postage to the sender.

The guarantee does not apply to maintenance and cleaning, foreign objects installed to the product, construction changes, natural wear or paint damage.

7 Recycling

Most of the materials used in the pump are recyclable. When the device is removed from usage, it should be disassembled and recycled appropriately. Recycling should be done by specialized company. Do not dispose the device in the household waste.

Following materials should be separated before recycling:

- METALS: frame, screws, nails, springs etc.
- ENERGY WASTE (combustible waste): wood and wood-based materials.
- HOUSE HOLD WASTE: plastic, and other materials which cannot be separated further.

Contact your local disposal authority for more details of how to recycle. Follow the instructions given in local collection points

8 Contact information

Manufacturer

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FI-38201 Sastamala
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Fax. +35810 830 6702
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nira.info@nira.fi
www.lojer.com

Service

Tel. +35810 830 6750
Email: service@lojer.com

Model: _____

Serial number: _____

Date of purchase: _____

Your local dealer: _____