



Nira 67

Operating and maintenance manual

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CE



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 Read these instructions carefully.

1 Nira 67

Device is meant to be used for hand pumping of the water from wells and drilled wells. Height of the pump in standard package is about 2,5 meters from the well cover to the bottom of the cylinder.

It is possible to lower the cylinder using the 0,5 m, 1 m or 3 m pipe modules, max. 21 m. At the lower end of the cylinder there is an inside thread of 1 1/4", where you can install a pipe connector for 40 mm polythene suction pipe. You can install suction pipe max. 6 m. If you install suction pipe more than 1,5 m, you will also need a pipe connector and bottom valve to the lower end of the pipe. The maximum installation depth of the pump is 27,5 m from the base plate. It is not allowed to install the pumps deeper than that. Plastic intake pipe HDPE 40, bottom valve 1 1/4" and connectors are sold as accessories.

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 sections of Nira 67 are shown below (Figure 1).

| | | |
|----|---------------------------|-----------|
| 1 | Cover grey | R14766H |
| | Cover red | R14766P |
| | Cover blue | R14766S |
| 2 | Rubber plug | R406 |
| 3 | Gasket | R14832 |
| 4 | Screw stainless | R206820 |
| 5 | O-ring | R2788324 |
| 6 | Screw stainless | R20610201 |
| 7 | Mounting fork flange | P14705 |
| 8 | Bearing | P14750 |
| 9 | Shaft seal | RSL05 |
| 10 | Rocker arm | P14742 |
| 11 | Cotter pin | R242430 |
| 12 | Washer | SD404 |
| 13 | Handle fork mounting | P14744 |
| 14 | Clamping screw | R21256 |
| 15 | Handle | P14747 |
| 16 | Handle grip | R93B |
| 17 | Pump head top | P14749 |
| 18 | Hosepipe adapter 3/4" | R1570713 |
| 19 | Pump head pipe | SD302 |
| 20 | Base plate | SD1804 |
| 21 | Screw | R2288 |
| 22 | Nut | R202840 |
| 23 | Cylindertop coupling | P27 |
| 24 | Cylinder piston driver | P35 |
| 25 | Plunger complete | P606 |
| 26 | Plunger seal | R56 |
| 27 | Cylinder pipe | P28 |
| 28 | Cylindervale | R30 |
| 29 | Cylindervale body | R29 |
| 30 | Cylinder complete | P31 |
| 31 | Pump head rod | SD14373 |
| 32 | Riser pipe 1 m | M2100K |
| 33 | Plunger rod 1 m | L2102 |
| 34 | Coupling | SD106 |
| 35 | Coupling for suction pipe | R26211440 |
| 36 | Suction pipe | R1964058 |
| 37 | Bottom valve 1 1/4" | 2002 |



Figure 1: Nira 67

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.

3 Using the device

3.1 Content of the package

Nira 67 pump set includes

- Cylinder, 1 pc.
- Plastic pipe 1 m, 2 pc.
- Plunger rod 1 m, 2 pc.
- Base plate, 1 pc.
- Pump frame, 1 pc.
- Handle, 1 pc.
- Plunger rod holder, 1 pc.

Tools needed for installation

- 17 mm spanner or adjustable spanner, 2 pc.
- 13 mm spanner or adjustable spanner, 1 pc.
- 2 mm Allen key
- Plunger rod holder (included in package)

3.2 Installation

ASSEMBLE STEPS 1-4 WHEN THE PUMP IS IN HORIZONTAL POSITION. YOU CAN ALSO ASSEMBLE THE PUMP FULLY READY IN HORIZONTAL POSITION AND LIFT IT AFTERWARDS IN THE WELL.

1. Attach the 1-meter plunger rod to the extension piece of the plunger rod and tighten (Figure 2).



Figure 2: Fastening of the extension part

2. Fasten the 1-meter pipe to the top thread of the cylinder.

NOTE! Check that the pipe has 3,5 mm drainage hole above the cylinder (Figure 4).



Figure 3: Fastening of the pipe

3. Attach the next plunger rod and pipe to continuation of the previous ones (Figure 5).

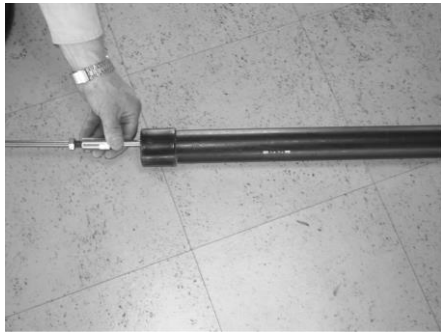


Figure 4: Fastening of the extension part

4. Put the plunger rod holder (Figure 6) to the plunger rod, so that the rod doesn't fall lower than the pipe head. **NOTE!** Be careful not to drop the holder in to the well.



Figure 5: Piston driver holder

5. Lift the cylinder with the pipes in to the well. Make sure not to drop the plunger rod holder in to the well. Carry the pipes for example with pipe tongs

6. Install the base plate to the tube at the body.



Figure 6: Base flange

7. Attach the pump head rod to the plunger rod of the riser pipe



Figure 7: Pipe

8. Fasten the pump head pipe to the coupling of the riser pipe (Figure 9).



Figure 8: Fastening of the main pipe

9. Fasten the pump from its plate tightly to the well cover.
NOTE! Fasten the extensions of the plunger rods tightly.

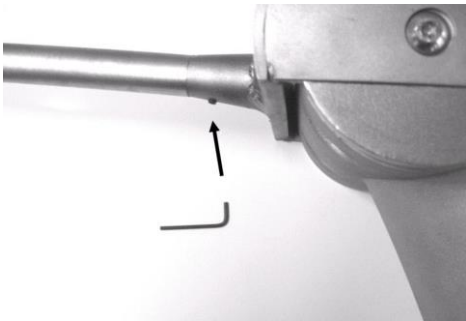


Figure 10: Fastening of the clamping screw

10. Turn the handle to the handle fork thread and secure with the locking screw (2 mm Allen key)
11. Pump is ready for use.

5 Maintenance

The pump doesn't require any regular maintenance. Plunger rod of the pump is made of stainless material and the cylinder of plastic.

Pump is also non-freezing, so it can be left on its place through the winter without any specific care. Non-freezing feature is guaranteed with the drainage hole (diameter 3,5 mm) located at the ascension pipe in two meters deep. This hole enables the water inside the pump to run off itself. Only if the water level in the well is higher that 1 ½ m below the ground level, the pump should be drained for winter. Otherwise the pump may freeze.

6 Repair procedures

6.1 Removing the cover and changing the gasket

The replaceable coloured plastic cover is mounted to the upper body with six 6 mm Allen screws. The screws on both sides of the body and the draw-off pipe opening require a key longer than conventional.

- Open the handle fork mounting screws with a 6 mm Allen key and remove them. Pull the handle and fork out from the spacer slots. The cover can be removed also with the handle in place, if handle is held in horizontal position during the removal of the two screws
- Open the mounting screws of the corner and remove the cover with gasket from the pump head top. Remove the gasket. Reassemble the parts in reverse order. Make sure that the gasket fits properly in its groove

6.2 Changing the rocker arm bushes and seals

- Remove handle and the cover with its gasket from the pump head top as described in chapter 6.1
- Remove the fork spacers from the shaft ends.
- Remove the other pin, the washers and the plunger rod from the rocker arm



Make sure that the plunger rod does not drop down the pump head pipe (e.g. by tying it up or by pushing long rod or similar through the plunger rod eye



- Lift the rocker arm to vertical position and push the arm towards the longer end side
- Remove the seal and bush from the shorter end housing
- Pull the arm out and remove the seal and bush from the longer end housing
- Reassemble in reverse order. Make sure that the cover gasket fits properly in its groove

7 Technical information

7.1 Characteristics

| | |
|----------------------------|-----------------|
| Weight | 14 kg (approx.) |
| Maximum delivery | 40 l/min |
| Hole pattern in base plate | 4 x 190 mm |
| Fixing hole diameter | 10,5 mm |
| Size of the package | 109x42x16 cm |

7.2 Recycling

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

8 Limited International Warranty

The warranty period is determined in the agreement documents. Unless otherwise agreed, the warranty period for manufacturing and material defects is **1 year**, hand pump models NIRA 1, NIRA 67 and NIRA 3B which carry a warranty of **3 years**.

Warranty Conditions

The warranty is only valid if the warranty demand is presented together with the original invoice or sales slip or (order) confirmation.

NIRA's obligations are limited to the repair or, at its discretion, replacement of the product or the defective part. Defective parts shall be replaced with new or equivalent "as new" parts. If necessary, the entire product shall be exchanged with an identical or functionally identical product. The value of the warranty service is always limited to the value of the defective product. The defective parts removed from a product as part of a warranty case shall become the property of NIRA and shall be retained for by the End Customer for NIRA, if necessary. If these parts cannot be returned to NIRA upon request, NIRA is entitled to charge for a corresponding amount. When genuine NIRA parts are installed in a NIRA product under warranty, only the remaining warranty period of the repaired device applies.

Warranty repairs must be carried out by NIRA or authorized NIRA Dealers. No re-imbusement will be made for repairs carried out by a non-NIRA representative, and any such repair work or damage to the products caused by such repair work will not be covered by this warranty.

This product is not considered to be defective in materials nor workmanship if it requires adaptation in order to conform to other local or national technical or safety standards.

This warranty covers none of the following:

- a) Periodic checks, maintenance and repair or replacement of parts due to normal wear and tear
- b) Costs relating to transport, removal or installation of the product;
- c) Misuse, including the failure to use this product for its normal purposes or incorrect installation;
- d) Damage caused by lightning, water, fire, acts of God, natural catastrophes, war, public disturbances or any other cause beyond the control of NIRA;
- e) Spillage of chemicals or liquids, or use of any other hazardous or non-instructed substances, which may affect the product;
- f) Minor defects or deviations from the product specifications which are immaterial, negligible or trivial as regards to the value or the functioning of the product

Proceeding in a Warranty Case

The following information is an explanation of what you must do in the case of a warranty claim. First, please contact your NIRA dealer and describe the problem (possibly with photographs or videos) and inform NIRA of the product type and date of purchase. NIRA's technicians will help to diagnose defects and malfunctions, and are often capable of eliminating the malfunction over the phone.

In the event that warranty service is required, you should return the product to the dealer from whom it was purchased, or directly to NIRA's factory in Finland. In this case, the customer is responsible for the dispatch and insurance of the product, and the transport and insurance costs shall be borne by the customer. NIRA shall assume the costs for the materials / spare parts and the labour costs as required, as well as the standard return transportation to the sender. In case of difficulty, details of local dealers are available online at www.nira.fi. You may also contact the service centre in Finland (e-mail: nira.info@nira.fi).

The guarantee will become void if:

- A NIRA product has been used in unspecified conditions or if the product is allowed to come into direct contact with chemicals or agents other than those specified in the manual;
- A NIRA product is equipped or used with parts that have not been approved by NIRA for the product in question;
- Someone other than a person authorized by NIRA has serviced/repaired or otherwise modified the device and these measures have caused a fault in the product;
- Regular maintenance has not been performed.

9 Contact information

Manufacturer

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