INSTALLATION INSTRUCTIONS

5970-EL Bano height adjustable toilet, electrical
5970-MA Bano height adjustable toilet, manual

BANO HEIGHT ADJUSTABLE TOILET

This product is suited to plumbing industry safety regulations. BANO guarantees the functioning when the relevant regulations and installation instructions are followed.

Bano provides a 3-year warranty against manufacturing defects: i.e., if such defects appear within 3 years of installation, customers can replace the defective item with a corresponding property.

Bano’s products meet the provisions in the EU safety requirements.

This product is suitable for the provisions in the EU safety requirements.

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<thead>
<tr>
<th>BANO AS</th>
<th>BANO AB</th>
<th>BANO A/S</th>
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<tbody>
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<td><a href="http://www.bano.no">www.bano.no</a></td>
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Introduction

Bano’s height-adjustable cisterns can be adjusted either manually with a crank or electrically. This lightens the carer’s work load because one person can quickly and easily adjust the height of the toilet to fit the users needs. The height of the toilet can be adjusted from 41 to 61 cm.

The cistern is supplied either with a manual hand crank or with electrical height adjusters. With simple steps the height of the toilet and the WC grab bars can be adjusted. For bathrooms with external pipes an extension for the cistern must be used. For more information see Bano interface on www.bano.no

Electrical adjustment is operated by a button on the top of the cistern. For manual adjustment, use the accompanying crank.

Compliance with EU directive:

This product is CE branded and meet the provisions in the EU safety requirements laid down in the Medical Devices Directive 93/42/EEC, class 1.

See also:
EN 12182: 2012: Assistive products for persons with disability
EN 14055: 2011: WC and urinal flushing cisterns
EN 997: 2013: Sanitary appliances, washbasins

Accessories:

Installed with a Bano WC 55 or a Bano WC 70 (5960/5970), and grab bars for WC/cistern (5603/5604). With external pipes, please use an extension (5970-22/5970-23), either 50 mm or 100 mm.

Article numbers:
5960 WC 55
5970 WC 70
5603 Grab bars WC 90 cm (35 in.)
5604 Grab bars WC 70 cm (28 in.)
5970-22 Extension 50 mm
5970-23 Extension 100 mm
5970-03 Toilet seat, white
5970-06 Toilet seat, grey
Product name: Height adjustable toilet (cistern) with manual height-adjustment
Product number: 5970-MA
Height-adjustment: 20 cm (from 41 cm to 61 cm)
Materials: Main frame: Corrosion treated steel, E1 galvanized
Cover: ABS/ PMMA plastic, colour code RAL 9016.
Max weight load: Static load, toilet: 500 kg
Static load, grab bars: 250 kg
Max weight load, height-adjustment: 200 kg

Producer: BANO AS
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Phone: +47 57 86 98 00
Web site: www.bano.no

Product name: Cistern with electrical height-adjustment
Product number: 5970-EL
Height-adjustment: 20 cm (from 41 cm to 61 cm)
Materials: Main frame: Corrosion treated steel, E1 galvanized
Cover: ABS/ PMMA plastic, colour code RAL 9016.
Max weight load: Static load, toilet: 500 kg
Static load, grab bars: 250 kg
Max weight load, height-adjustment: 200 kg (Reduced speed must be expected)
U In: 230V ~ /50 Hz
I In: Max 0.63A
U Out: 24V~, max. 100VA IPX5
Int.: 5%, max. 1 min./19 min.

Producer: BANO AS
Email: post@bano.no
Phone: +47 57 86 98 00
Web site: www.bano.no
NOTE! PLUMBING:
Water outlet on left side as shown in illustration.

Placement of stopvalve: because of moving parts when adjusting the cistern’s height the stop valve must be placed exactly as is shown on the illustration.

Stopvalves are turned as shown on drawing.

Concerning water; finish with stop valve with 1/2” external threads (G15). (Threads pointing up)

Drainpipe in floor: Ø110 drainpipe without cuff is finished 40 mm above floor.

NOTE! ELECTRICAL:
Electrical installation only for products with electrical height adjustment.

Electrical outlet on right side as shown in illustration.

Electrical cable/ pipe is pulled 500 mm from wall and placed 200 mm above finished floor and 100 mm from the center of the cistern’s drain.

Electrician connects IP44-box after the cistern is installed. (IP44-box not included).

NOTE! ELECTRICAL:
This ONLY applies to 5970-EL with electrical height-adjustment.

NOTE! CONSTRUCTION:
Loadtested until 500 kg.
Min.: 48x198 board
Nailingstrips must be placed flush against wall material.
Nailing strips are indicated with shaded area.

For more information: www.bano.no
Contents (loose parts):

- **9750** White caps for installing, toilet
- **9716** Installation bolts, toilet
- **9712** Water pipe, cistern
- **9753** Double jetcoupling
- **9747** Flexible drain pipe 600 mm DN 90-110
- **9747-01** Holder
- **9700** Flush button, cistern
- **9754** Hex7 bit to drill (only for 5970-EL)
- **ISO 7380 M4x12**
- **9755** Krank (ONLY for 5970-MA)
- **9751** Nut (ONLY for 5970-MA)
- **Control for height adjustment (ONLY for 5970-EL)**
Installing the cistern:

Install the drain pipe in the floor drain by using the provided double jetcoupling. Check that the holder 9749 is mounted on the flexible drain pipe before proceeding.

Place cistern frame against the wall and ensure that it is level. Mark all the screw holes. (8 pieces).

The cistern must be raised up or down using the crank to get to the fixing holes during installation. **For the electric model we recommend accompanying Hex7 bits in a powerful drill to adjust the height during installation.**

Remove the frame and follow the procedure below.
Adjustment in case of uneven floor:

If uneven floors (e.g., slope towards the drain) cistern can be adjusted using the adjustment screws found on the bottom of each side. Adjust from above with hex key, M5.
Fixing to wall:

Make sure never to perforate wet walls completely. Clean the holes after drilling. Make sure to use sealant approved for application on wet walls. See illustration.

Please note that the product guarantee only applies when the wall and screws are dimensioned according to «Byggebransjens Våtromsnorm» and Bano interface for products mounted in Norway. For products mounted in other countries, please note that the product guarantee only applies when wall and screws are dimensioned according to national guidelines/regulations and Bano interface.

**Tiled wooden wall:**
Make sure never to perforate wet walls completely. Drill holes with a 10 mm drill bit through the tiles only. Clean and fill the hole with sealant approved for application on wet walls. See illustration.

**Tiled concrete wall:**
Drill holes using a 12 mm drill bit through the tiles only. Switch to a 10 mm drill bit for further drilling through the concrete. Fill the hole with sealant, place a nylon plug in the hole and fill the plug with sealant. See illustration.

**Other wall materials (bathroom boards, vinyl):**
Make sure never to perforate wet walls completely. Drill holes which are dimensioned for said type of wall. Fill the hole with sealant, place a nylon plug in the hole and fill the plug with sealant. See illustration.

[FIXING WOODEN WALL]

[FIXING CONCRETE WALL]

Drill holes and fix the frame to the wall. Make sure the screws are fastened within the nailing strips, see Bano interface page 5.
Step 1:
Lower the cistern to the bottom position and secure to the wall with appropriate screws for the wall. Bano recommends M8 French wood stainless steel screws. For concrete Bano recommends French wood screws DIN571 in combination with a nylon plug.

Step 2:
Raise the cistern to the top position and secure to the wall with appropriate screws for the wall. Bano recommends M8 French wood DIN571 stainless steel screws. For concrete Bano recommends French wood screws DIN571 M8 in combination with a nylon plug.

After the cistern is mounted, seal with silicone along steel bracket and wall.

Silicone must be on before mounting main cover and toilet.
Adjusting installation bolts:

Adjust the length of the installation bolt. Each bolt is screwed into the frame and secured with a M12 nut in the back. Make sure the shaft runs freely without coming into contact with nut or threaded rod.
Installing flush pipe and drain pipe:

Adjust the length of the flushpipe according to the type of toilet.

Install drain pipe and holder before installing the toilet. We recommend raising the cistern to the highest position when installing the toilet.

Please check that the water supply pipe is installed, and the valve open, before mounting the cover.

**Flush pipe length:**
5960 WC 55: 19 cm
5970 WC 70: 33 cm

ISO 7380 M4x12
Cover and crank:

Mount the main cover and remove the protection film from all plastic parts.

Mount the crank on one side, and the nut on the other.
Installing the flush button:

1. 

2. 

3. 

4. 

5. 

6. 

7. 

8.
Installing the grab bar:

Toilet grab bar (5603/5604) on each side of the cistern.
Wiring diagram (ONLY 5970-EL):

1. Kontrolboks, CB8
2. Motor for LA28, IP66
3. Håndbetjeningskabel
4. 2

Parts List

<table>
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<tr>
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<td>T60-001011</td>
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<td></td>
<td>Motor for LA28, IP66</td>
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<td>Håndbetjeningskabel</td>
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Subject: Product:
No:
Date: change no:
Matr: LINAK no:
General tolerance:
Geometrical tolerance:
Surface character:

Indgår i tegnings N
Rev. From. Date
A
B
C
D
E
F
G
H

Papirformat:
DKJC11-09-2013
Operating the height-adjustment:

**5970-EL:** The height on the WC is adjusted by using the button on the top of the cistern. The cistern is raised by pushing the "up"-button and lowered by using the "down"-button. The cistern stops as soon as the button is released.

**5970-MA:** When using the manual height-adjustment the crank installed on the side of the cistern is used. This crank can be mounted on both sides of the cistern. The crank must be pushed in before it can be used and is therefore safe to use with dementia patients. The crank can easily be removed and replaced with a nut.

(Contact Bano for more information)