



# Nira 6B Hand Pump

*Instruction and Maintenance Manual*





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*Always read instructions carefully before use.*

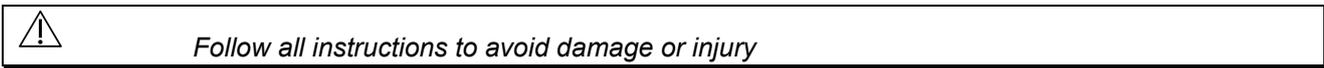


*Familiarise yourself with the parts of the product and any markings before use.*

# 1 Nira 6B

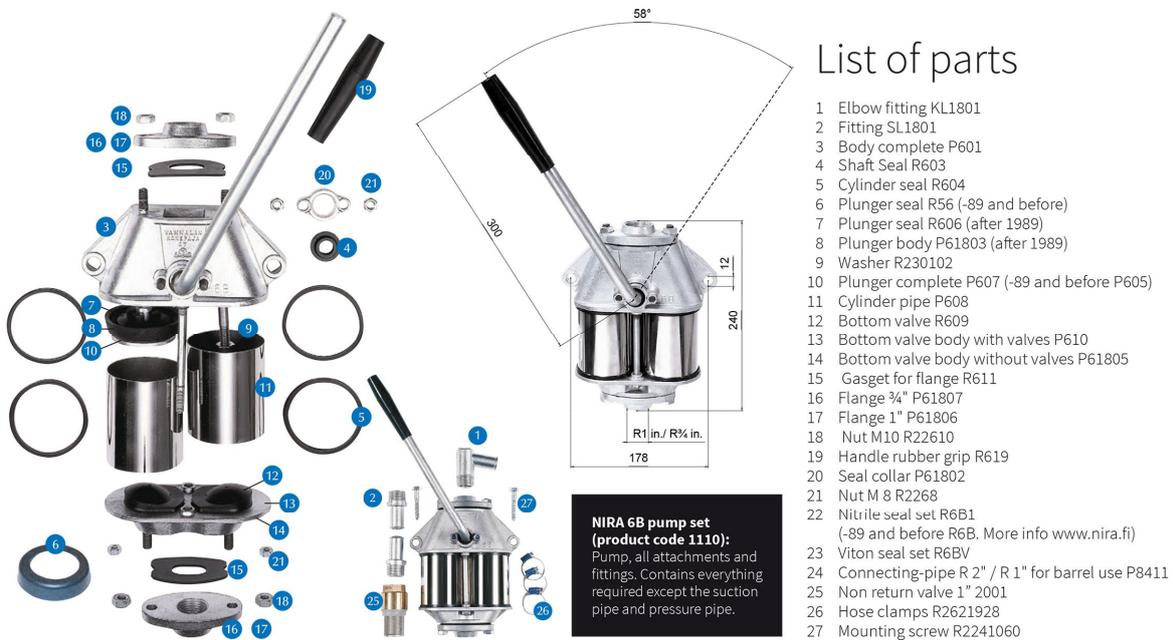
The Nira 6B is a high-quality hand pump with primarily rust-proof construction. The 6B is suitable for pumping liquids such as water\*, oil and glycol. Easy to maintain and offering a long service life, the 6B is ideal for applications such as pumping water for sauna use and pumping oil from tanks. The Nira 6B is available also with VITON seals for pumping liquids such as petroleum, and EPDM seals for pumping glycol. The Nira 6B Arctic features ECO seals and is ideal for applications such as pumping fuels in sub-zero conditions.

\*not suitable for drinking water



Follow all instructions to avoid damage or injury

The parts of the Nira 6B pump are shown below (Figure 1).



## List of parts

- 1 Elbow fitting KL1801
- 2 Fitting SL1801
- 3 Body complete P601
- 4 Shaft Seal R603
- 5 Cylinder seal R604
- 6 Plunger seal R56 (-89 and before)
- 7 Plunger seal R606 (after 1989)
- 8 Plunger body P61803 (after 1989)
- 9 Washer R230102
- 10 Plunger complete P607 (-89 and before P605)
- 11 Cylinder pipe P608
- 12 Bottom valve R609
- 13 Bottom valve body with valves P610
- 14 Bottom valve body without valves P61805
- 15 Gasget for flange R611
- 16 Flange 3/4" P61807
- 17 Flange 1" P61806
- 18 Nut M10 R22610
- 19 Handle rubber grip R619
- 20 Seal collar P61802
- 21 Nut M 8 R2268
- 22 Nitrile seal set R6B1 (-89 and before R6B. More info [www.nira.fi](http://www.nira.fi))
- 23 Viton seal set R6BV
- 24 Connecting-pipe R 2" / R 1" for barrel use P8411
- 25 Non return valve 1" 2001
- 26 Hose clamps R2621928
- 27 Mounting screw R2241060

**NIRA 6B pump set (product code 1110):**  
 Pump, all attachments and fittings. Contains everything required except the suction pipe and pressure pipe.

### Other product versions

	Nira 6B VITON	Nira 6B EPDM	Nira 6B Arctic ECO
Flange gasket	R611V	R611E	R611
Shaft seal	R603V	R603E	R603ECO
Plunger seal (1989 and earlier)	R56V	R56E	R56ECO
Plunger seal	R606V	R606E	-
Cylinder seal	R604V	R604E	R604ECO
Bottom valve	R609V	R609E	R609ECO

## 2 Use

### 2.1 Before using

Before first using the pump please ensure that the packaging is intact and that there are no signs of damage during transit. Any signs of damage should be reported to the delivery company and to the supplier within two (2) days of receiving the goods. Ensure that all parts on the packing list are included in the delivery. Contact the seller immediately if there are any problems with the delivery.

### 2.2 Installation

The pump is mounted to a vertical surface through the two holes in the pump body. The pump flanges have either ¾" or 1" threads to which various kinds of suitable pipes or connectors can be fitted. Be sure to check that all connections are tight.

### 2.3 Using the pump

The pump is ready for use as soon as it is installed. The pump can lift up to 4 metres without a bottom valve fitted to the suction line, and up to 8 metres with a bottom valve. Without height differences the length of the suction pipe can be tens of metres. Please note that the length of the suction pipe and the height difference between the pump and the water source affect the pumping capacity.

If the pump is used for pumping water and there is a risk of freezing, make sure that the pump is emptied of water thoroughly after use. If the pump is permanently attached to an oil container make sure that the container cannot be unintentionally drained through the siphon effect. An accessory designed to prevent draining due to the siphon effect is available for containers with a 2" internal thread from Nira's online store (article P61808).



*The same pump must not be used for pumping both water and oil*



*This product is not suitable for pumping drinking water or foodstuffs*



*Ensure that there is sufficient space around the pump for safe operation*



*Before using the pump make sure that nothing is in the way of the handle*



*Ensure that all the parts of the product are firmly fixed in place before use*



*Check the condition and operation of the pump regularly (at least once a year)*



*Do not use a defective or leaking pump*

### 3 Maintenance

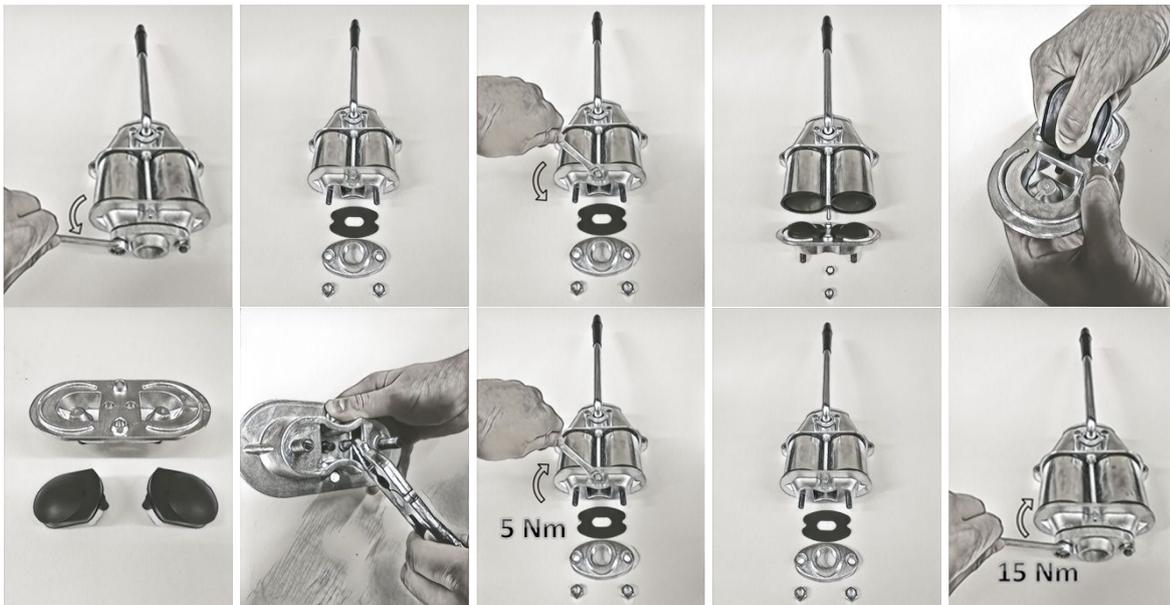
The Nira 6B pump does not require any regular maintenance. This chapter describes the process of changing the seals in the pump.

-  *The pump should only be serviced or repaired by a capable person*
-  *Only use original parts*
-  *Before commencing work ensure that the pump is empty of liquid and that the system is not pressurised*
-  *Ensure that all parts are properly tightened after maintenance*
-  *Ensure that the pump works as it should after maintenance work*

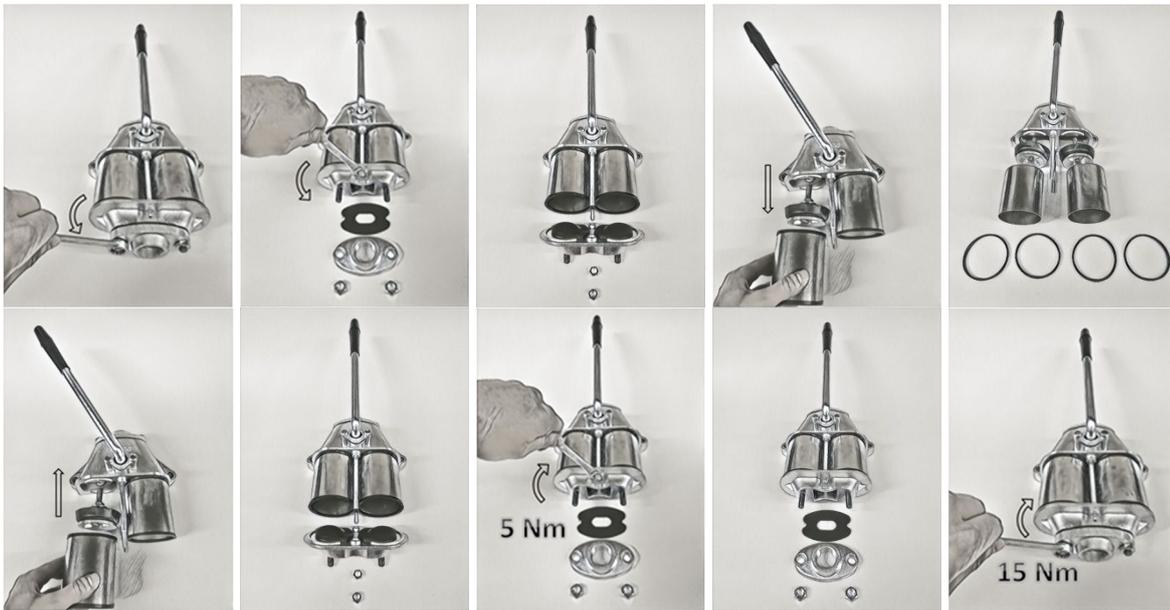
#### Changing the flange gasket



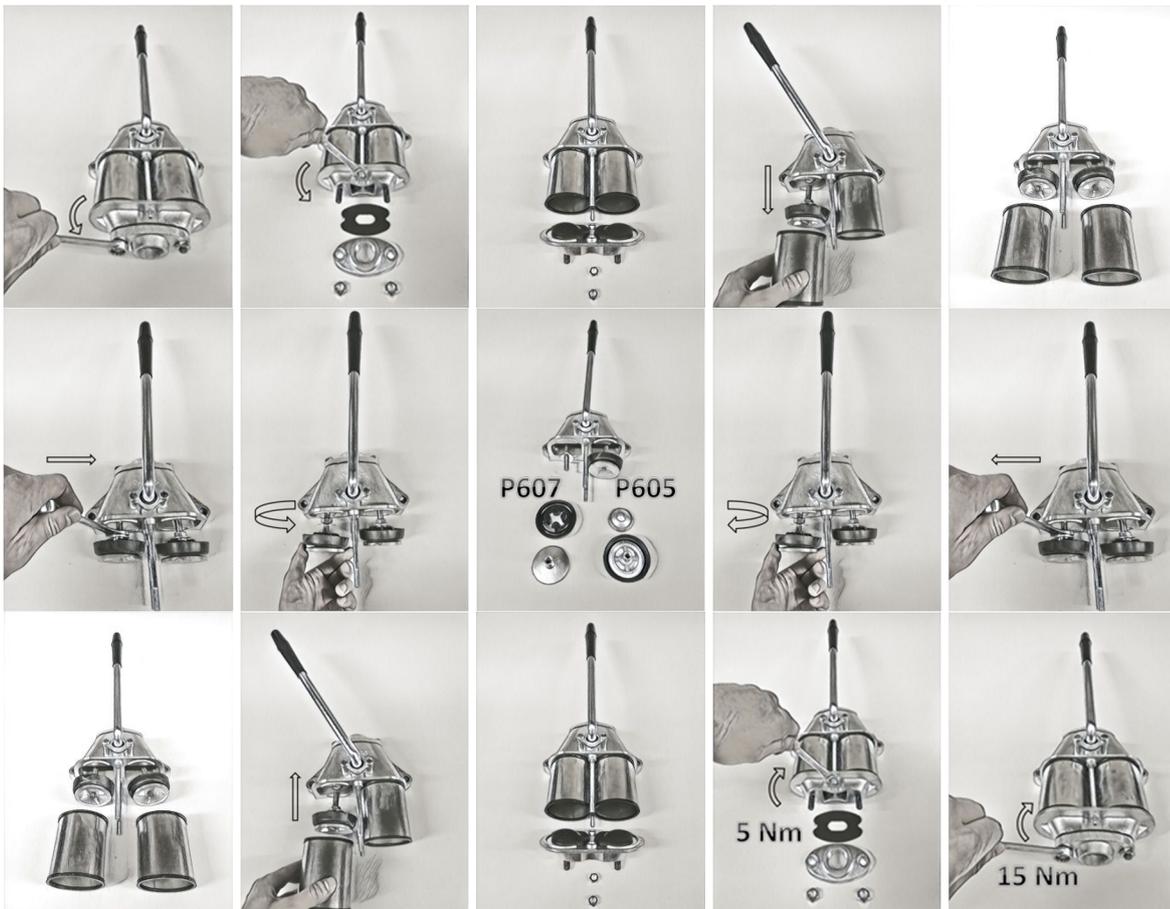
#### Changing the bottom valve



Changing the cylinder seals



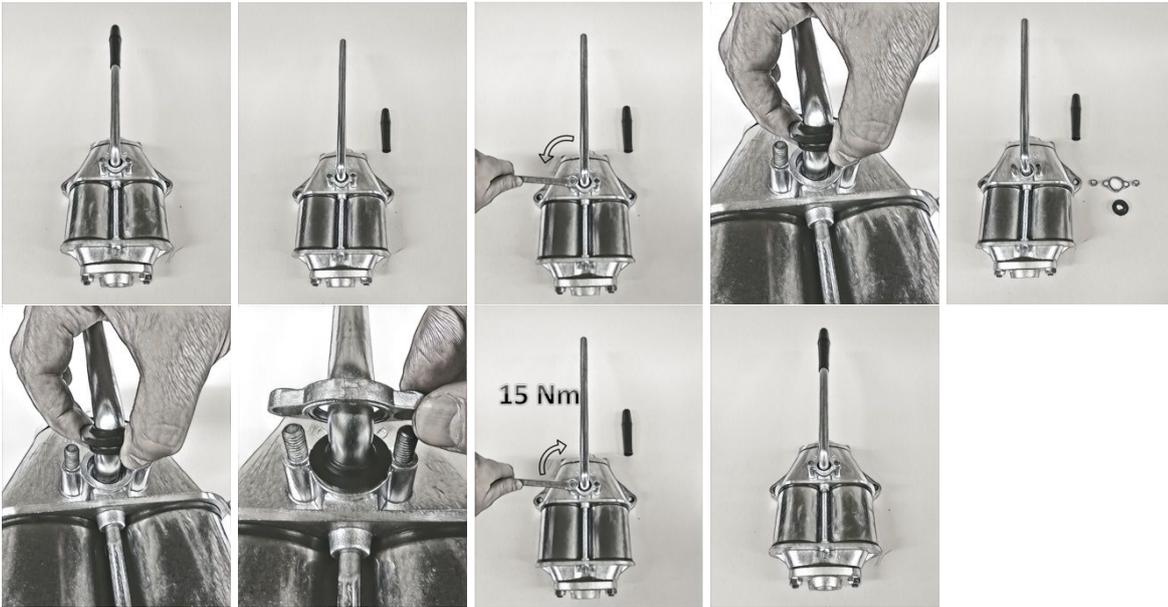
Changing the plunger body and seal (R606)



*Changing the plunger seal (R56)*



*Changing the shaft seal*



## 4 Technical details

### Nira 6B

- **Material:** Cast silumin, steel, stainless steel
- **Seal material:** Nitrile / VITON / EPDM / ECO
- **Max. Capacity:** c. 40l/min
- **Weight:** 3.3kg
- **Flange threads:** ¾" or 1"
- **Max. pressure:** continuous 1 Bar, peak 3 Bar
- **Packaging dimensions:** 500 x 245 x 140mm



### Nira applicability chart for most common liquid

	Nira 9 Nira 6B Nira 2	Nira 9 Nira 6B Nira 2	Nira 6B Arctic	Nira 9 Nira 6B Nira 2
Seal/gasket material	Nitrile	Viton	ECO	EPDM
LIQUID TO BE TRANSFERRED				
Water	1	1	3*	1
Diesel	1	1	1	3
BioDiesel ( e.g. NExBTL) (Methyl esters max 7 vol-%)	1	1	1	3
Lubricating oil	1	1	1	3
Hydraulic oil	1	1	1	3
Petrol, also E10 ( etanol 10 %)	3	1	3	3
Ethanol**	2	2	2	2
Ethylene**	2	2	3	3
Acetone**	3	3	3	2
Heat-exchange liquid (Glycol)	1	1	1	1
Thinner and xylene**	3	2	3	3
Turpentine**	2	2	2	3
Engine cleaner**	3	2	3	3

Seal/gasket material	Temperature	Applications
NITRILE	max -15 ° C	Water, Diesel oil, lubricating and hydraulic oil, glycol
VITON	max -5 ° C	Petrol 95E ja 98E (vehicles, small engine; e.g. lawn mowers, snowblowers, chain saws etc.), turpentine, thinner and engine cleaner)
ECO, only Nira 6B Arctic	max -45 ° C	Diesel oil, lubricating and hydraulic oil, glycol
EPDM	max -30 ° C	Heat transfer fluid (glycol), suitable for geothermal applications. Acetone. Not applicable with any type of oil.

1 = Good

2 = Tolerable

3 = not to be used

\* ECO seal/gasket material contains toxic substance, therefore ECO NOT to be used for any potable liquid.

\*\* Corrosive substances; steel, stainless steel and siluminum in a structure of the pump might get corroded.

Extensive recommendation of material applicability can not be disclosed, it can be defined through testing only.

## 5 Limited international warranty

*The warranty period is determined in the agreement documents. Unless otherwise agreed, the warranty period for manufacturing and material defects is **2 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 is always limited to the value of the defective product. Nira shall not in any event be liable for any direct or indirect consequential loss. 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 authorised Nira dealers. No reimbursement 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](http://www.nira.fi). You may also contact the service centre in Finland (e-mail: [nira.info@nira.fi](mailto: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 authorised by Nira has serviced/repaired or otherwise modified the device and these measures have caused a fault in the product.

Warranty terms in Finnish language are available at [www.nira.fi](http://www.nira.fi).

## 6 Frequently asked questions

*Q: Do Nira pumps freeze?*

*A: The Nira 6B must be completely emptied of water (or other liquids prone to freezing) before the temperature descends below 0°C. To empty the pump, remove the suction pipe and operate the pump until it is completely empty. Remember to also empty the suction pipe before winter. The durability of seals in the winter depends on the seal material and the liquid being pumped.*

*Q: Do Nira pumps rust?*

*A: Hand pumps feature a steel mechanism which may rust over time. The Nira 6B is also available with all parts in stainless steel.*

*Q: What liquids can be pumped with the Nira 6B hand pump?*

*A: Check the implementation chart. The aluminium-bodied Nira 6B is not suitable for pumping Ad Blue fuel additive.*

*Q: From what depth can the 6B hand pump lift?*

*A: 4 metres without a bottom valve and 8 metres with a bottom valve fitted. 1 metre of lift corresponds to around 10 metres of horizontal pumping (suction or pressure).*

*Q: Can the handle of the 6B pump be turned downwards?*

*A: This is not possible after purchase; a pump can, however, be ordered from the factory with the handle downwards.*

*Q: Does the hand pump stop the siphon effect?*

*A: No. After pumping stops, if the end of the discharge pipe is lower than the level of liquid being pumped, the liquid will continue to flow until the end of the suction line is no longer in the liquid (the siphon effect). An optional accessory designed for containers with a 2" internal thread is available to stop the siphon effect.*

## 7 Contact information

*Manufacturer*  
*Nira Pumps Oy*  
*PL54*  
*38210 Sastamala*  
*FINLAND*  
*Tel. +358 10 830 6770*  
*E-mail: [nira.info@nira.fi](mailto:nira.info@nira.fi)*  
*[www.nira.fi](http://www.nira.fi)*

*Spare Parts:*  
*Authorised dealers or*  
*the Nira online store*

*Model:* \_\_\_\_\_

*Purchase date:* \_\_\_\_\_