

Contact

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ISO	ISO 9001: 2015 / JIS Q 9001: 2015

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Warning!

Read the manual and safety instructions before operating the device

- Check all parts for possible damage during transportation. In case of damage, please contact the forwarder immediately.
- Because our products are continuously subject to improvements, we reserve the right to make changes.

Vor Inbetriebnahme die Betriebsanleitung und die Sicherheitsvorschriften aufmerksam lesen

- Alle Teile auf möglichen Transportschaden kontrollieren. Eventuelle Schäden umgehend der Spedition melden.
- Da unsere Produkte ständig verbessert werden, behalten wir uns Änderungen vor.

Antes de la primera puesta en marcha, lea atentamente el manual de uso y las instrucciones de seguridad

- Revise todos los elementos para detectar posibles daños sufridos durante el transporte. En caso de observar algún daño, avise inmediatamente a la empresa de transporte.
- Debido a que nuestros productos están continuamente sujetos a mejoras, nos reservamos el derecho de realizar cambios.

Lisez le mode d'emploi et les consignes de sécurité avant la mise en service

- Vérifiez pour l'ensemble des pièces que celles-ci n'ont pas été endommagées pendant le transport. En cas de dommages, avertissez immédiatement le transporteur.
- Nos produits étant constamment améliorés, nous nous réservons le droit d'apporter des modifications.

Lees voor ingebruikname eerst de gebruiksaanwijzing en de veiligheidsvoorschriften

- Controleer alle onderdelen op mogelijke transportschade. Waarschuw bij schade onmiddellijk het transportbedrijf.
- Omdat onze producten voortdurend worden verbeterd, behouden wij ons het recht voor om wijzigingen aan te brengen.

ENGLISH

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1. Introduction

1.1 Application

- The NACHI Hydraulic Puller is designed exclusively for mounting and dismantling pulleys, bearings, couplings and other symmetric rotation objects mounted on a shaft.
- The NACHI Hydraulic Pullers must only be used up to a maximum pulling force according to specifications in section 8.1.

1.2 Warnings

- Do not use if the NACHI Hydraulic Puller cannot be positioned in line with the shaft and the job to be dismantled. See chapter 4 Operation.
- Do not use if the pressure surface of the shaft is not positioned at a right angle to the pressure surface.
- Never exceed the maximum pressure.
- Do not use if a working pressure is required which exceeds the absorption capacity of the shaft or the job to be dismantled.
- Use with original accessories supplied by the manufacturer.

1.3 Application areas

- Industrial environments.
- Do not expose to rain or moisture (humidity < 80%).

1.4 Operation

- The operation of the NACHI Hydraulic Puller is based on a hydraulic cylinder which reacts against the end of the shaft with the workpiece to be removed. The workpiece is shifted axially by placing the puller jaws of the NACHI Hydraulic Puller behind the workpiece to be removed and positioning the cylinder against the end of the shaft.

1.5 Requirements for user/maintenance personnel

- The user must have sufficient command of the language in which the manual is written to enable him to fully understand the contents of this manual.
- The user must possess the relevant technical expertise. Furthermore, the user must be conversant with how the NACHI Hydraulic Puller works, and be able to accurately assess the potential dangers of using the NACHI Hydraulic Puller.

1.6 Personal protective equipment

- Always use personal protective equipment during operation or maintenance. Required PPEs include safety shoes for fall hazards, safety glasses for splashes and/or projectiles. These PPEs are not supplied with the product.
- Always use the safety blanket supplied when working with the NP pullers.

1.7 User workplace

- The workplace must always be clean, tidy and free of obstacles.

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2. Safety

WARNING!



- Read these instructions thoroughly before operating the NACHI Hydraulic Puller. Failure to follow these instructions can lead to personal injury or damage to the pump. The safety instructions and operating manual for this device can be found on the following pages.
- Inspect the pump and all accessories carefully upon delivery. The carrier (not the supplier) is responsible for any damage originating from shipment of the product.

2.1 Safety risks

- Airborne projectiles if the part to be dismantled is suddenly released or damaged.
- High hydraulic pressure.
- A press cylinder that is not properly aligned with the shaft holding the part to be dismantled, risks damage to the shaft, the jaws and/or the press cylinder and adapters.

2.2 Safety aids

- Use a safety blanket to reduce the risk of injury from airborne objects.

2.3 Safety measures

- Use the NACHI Hydraulic Puller only for dismantling and never for supporting, holding and/or transporting the part.
- Align the NACHI Hydraulic Puller exactly to the centerline of the part.
- Use personal protective equipment. See paragraph 1.6.
- Never adjust the settings of the internal high-pressure relief valve. Creating hydraulic pressure beyond rated capacities can result in personal injury and damage to the machine.

2.4 Explanation of machine symbols

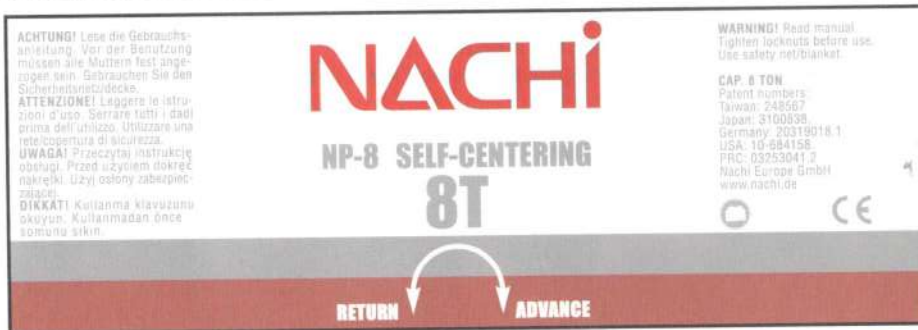


Consult manual



Conform CE

2.5 Location of symbols on the machine



3. Assembly, installation and commissioning

3.1 Unpacking and fitting

- Remove packaging materials. Check all parts for transport damage. If any damage is apparent, inform carrier immediately.

3.2 Trial run

- We recommend pumping the cylinder a number of times through a complete stroke before use (also after extended periods without use). See chapter 4.

3.3 Aids to be supplied by the user

- Personal protective equipment. See paragraph 1.6.
- Safety blankets if not included.

4. Operation

4.1 General operation

WARNING!



- Never heat a part that is connected to the NACHI Hydraulic Puller as the heat can damage parts of the NACHI Hydraulic Puller.

The NP pullers can be used with 2 or 3 puller arms. It is recommended that the 3-arm configuration is used whenever possible, as this distributes the puller force better. The puller must be inspected for damage before every use. Any loose bolts must also be retightened!

4.2 Removal of workpieces using an NP puller

1. Select the right puller for the removal. See the figure in section 8.1.
2. Place the lever into the holder. Set the valve to "ADVANCE".
3. Loosen the ring of the cylinder to open the arms. Place the puller and the arms around the workpiece to be removed. Tighten the ring so that the arms grip firmly around the workpiece. Back off the press cylinder further so that the arms grip firmly behind the workpiece. If necessary, adapters can be placed between the plunger and the shaft. Move the handle up and down to move the plunger forwards. Stop when the plunger contacts the shaft and check whether the puller is clamped correctly at all 2 or 3 points. The puller must be in line with the workpiece to be removed.
4. Place the safety blanket around the puller and the workpiece to be removed.
5. Hold the puller tight with 1 hand and pump with the other hand. The plunger presses against the shaft and the workpiece comes loose.
6. Set the valve to "RETURN". The plunger should move back.
7. Clean the puller and store it after use in the carrying case supplied.



5. Cleaning and maintenance

5.1 Nature and frequency

We recommend that the puller is cleaned using a cloth and a mild degreasing agent after every use.

- Only for competent users (as described in Section 1).
- Release the pressure from the entire system.
- Retract the cylinders fully before refreshing the oil. This prevents overfilling. An overfill can cause personal injury due to excess reservoir pressure created when cylinder is retracted.

6. Disposal

6.1 In accordance with statutory regulations

All materials must be disposed of in accordance with statutory requirements.

- Check that the press cylinder is retracted.
- Release the pressure from the system.
- Remove the oil.
- Or return the materials to the supplier.

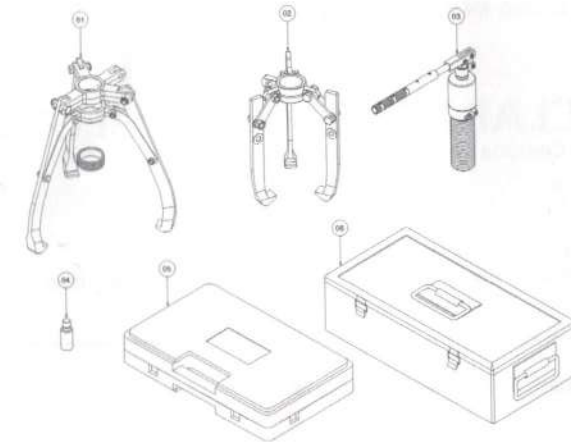
7. Disclaimer

The manufacturer and/or supplier cannot be held liable for any damage or consequential damage resulting from incorrect use of the device or damage to workpieces and any consequential damage resulting from a defect in the device.

8. Technical specifications

8.1 Technical specifications

Type	Art. no.	Cap. ton	Max. Shaft length mm	Spread mm	Stroke mm	Weight kg
NP-4	791500	4	190	315	60	8
NP-6	792500	6	230	390	70	10
NP-8	793500	8	280	460	85	12
NP-12	794500	12	300	515	85	15
NP-20	796500	20	325	520	111	26
NP-30	797500	30	415	620	111	36



8.5 Explanation parts NP Puller

Type	Pos. 1	Pos. 2	Pos. 3	Pos. 4	Pos. 5	Pos. 6
NP-4	JAE04T	-	PM04R	B1128	G0443	-
NP-6	JAE06T	-	PM06R	B1128	G0443	-
NP-8	JAE08T	-	PM08R	B1128	G0442	-
NP-12	JAE12T	-	PM12R	B1128	G0442	-
NP-20	JAE20T	-	PM20R	B1129	-	G0744
NP-30	JAE30T	-	PM30R	B1129	-	B0895

9. Troubleshooting

The machine should only be checked or repaired by qualified engineers.

Problem	Cause	Solution
Press cylinder does not pressurize	Too little oil	Top up the oil. Clamp the puller horizontally in the vice with the filler cap facing upwards. Loosen the cap using an Allen key. Ensure that the press cylinder is completely retracted. Fill the reservoir with hydraulic oil ISO 46 up to the max.
	Valve or pump worn	Send the puller to your supplier for overhaul.
	Seals worn	Send the puller to your supplier for overhaul.
Press cylinder does not retract	Plunger crooked	If the plunger is crooked, the puller can no longer be repaired. Dispose of the puller in accordance with the local disposal regulations.
Oil comes out at the front of the press cylinder.	Seals worn	Send the puller to your supplier for overhaul.

10. EC Declaration of conformity

EC DECLARATION OF CONFORMITY

Complies with Appendix II of Machinery Directive

Manufacturer's name: NACHI EUROPE GmbH
Manufacturer's address: Bischofstrasse 99, D-47809 Krefeld, Germany
www.nachi.de

Hereby declares that the following products:

- NACHI NP-4
- NACHI NP-6
- NACHI NP-8
- NACHI NP-12
- NACHI NP-20
- NACHI NP-30

to which this declaration refers complies with the provisions of the following directives:

Machinery Directive
• 2006 / 42 / EC

In which (parts of) the following standards are applied:

- NEN-EN-ISO 12100:2010
- NEN-EN-ISO 4413:2010

Krefeld, 01-02-2022



R. Motysia
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Nachi Europe GmbH

