

Operator's manual

Rebar tier

DF 16



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Errors excepted.

The machine on the cover may have special equipment (options).



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Original operator's manual



CALIFORNIA Proposition 65 Warning



WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.



WARNING

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.



WARNING

Cancer and Reproductive Harm -
www.P65Warnings.ca.gov.



WARNING

Batteries, battery posts, terminals and related accessories contain lead and lead compounds, and other chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. WASH HANDS AFTER HANDLING.



1	Foreword	5
2	Introduction	6
2.1	Means of representation for this operator's manual	6
2.2	Wacker Neuson representative	7
2.3	Described machine types	7
2.4	Identification of the machine	8
3	Safety	9
3.1	Principle	9
3.2	Qualification of the operating personnel	12
3.3	Transport	12
3.4	Operating safety	13
3.5	Safety during the operation of hand machines	14
3.6	Maintenance	14
4	Scope of delivery	15
5	Structure and function	16
5.1	Application	16
5.2	Field of application	16
5.3	Functionality	16
6	Components and operator's controls	17
7	Transport	18
8	Use and operation	19
8.1	Prior to starting the machine	20
8.2	Starting up	23
8.3	Operating the machine	26
8.4	Avoiding faulty ties	27
8.5	Removing jammed ties	31
9	Troubleshooting	34
10	Maintenance	35
10.1	Maintenance schedule	35
10.2	Maintenance work	36
10.2.1	Cleaning machine	36
10.2.2	Oiling the spindle	37
10.2.3	Greasing the folding mechanism of the twisting hook	38
10.2.4	Greasing the fixing spring	40



10.2.5	Thorough cleaning of the machine	41
11	Accessories	42
11.1	Tie strip.....	42
11.2	Copper grease.....	42
11.3	Belt pouch	42
12	Technical data	43
12.1	DF 16.....	43

1 Preface

This operator's manual contains important information and procedures for the safe, proper and economic operation of this Wacker Neuson machine. Carefully reading, understanding and observing is an aid to avoiding hazards, repair costs and downtime, and therefore to increasing the availability and service life of the machine.

This operator's manual is not a manual for extensive maintenance or repair work. Such work should be carried out by Wacker Neuson service or by technically trained personnel. The Wacker Neuson machine should be operated and maintained in accordance with this operator's manual. An improper operation or improper maintenance can pose dangers. Therefore, the operator's manual should be constantly available at the location of the machine.

Defective machine parts must be exchanged immediately!

If you have any questions concerning the operation or maintenance, a Wacker Neuson contact person is always available.

2 Introduction

2.1 Means of representation for this operator's manual

Warning symbols

This operator's manual contains safety information of the categories: DANGER, WARNING, CAUTION, NOTICE.

They should be followed to prevent danger to life and limb of the operator or damage to equipment and exclude improper service.



DANGER

This warning notice indicates immediate hazards that result in serious injury or even death.

- Danger can be avoided by the following the actions mentioned.
-



WARNING

This warning notice indicates possible hazards that can result in serious injury or even death.

- Danger can be avoided by the following the actions mentioned.
-



CAUTION

This warning notice indicates possible hazards that can result in minor injury.

- Danger can be avoided by the following the actions mentioned.
-

NOTICE

This warning notice indicates possible hazards that can result in material damage.

- Danger can be avoided by the following the actions mentioned.
-

Notes

Note: Complementary information will be displayed here.

Instructions

- ▶ This symbol indicates there is something for you to do.
- 1. Numbered instructions indicate that you have to carry out something in a defined sequence.
- This symbol is used for lists.

2.2 Wacker Neuson representative

Depending on your country, your Wacker Neuson representative is your Wacker Neuson service, your Wacker Neuson affiliate or your Wacker Neuson dealer.

You can find the addresses in the Internet at www.wackerneuson.com.

The address of the manufacturer is located at the beginning of this operator's manual.

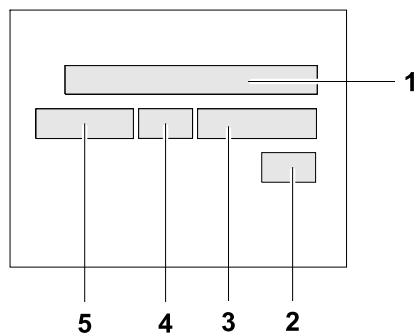
2.3 Described machine types

This operator's manual is valid for different machine types from a product range. Therefore some figures can differ from the actual appearance of your machine. It is also possible that the descriptions include components which are not a part of your machine.

Details for the described machine types can be found in the chapter *Technical data*.

2.4 Identification of the machine

Nameplate data



The nameplate lists information that uniquely identifies your machine. This information is needed to order spare parts and when requesting additional technical information.

► Enter the information of your machine into the following table:

Item	Designation	Your information
1	Group and type	
2	Construction year	
3	Machine no.	
4	Version no.	
5	Item no.	

3 Safety

3.1 Principle

State of the art

This machine has been constructed with state-of-the-art technology according to the recognized rules of safety. Nevertheless, when used improperly, dangers to the life and limb of the operator or to third persons or damage to the machine or other materials cannot be excluded.

Proper use

The machine was designed to tie together reinforced steel rods prior to their use in concrete.

The machine must only be used for tying together the following materials:

- Reinforcing steel rods.
- Water hoses which are suitable for and have been approved for concrete core activation.
- Conduits for electrical installations which are suitable and approved for attachment to reinforcements.

The sum of the diameters of the materials which are to be connected to each other must not exceed a maximum value, see chapter *Technical data*.

The machine may only be operated using ties made by Wacker Neuson.

In particular, the machine must not be used for tying the following materials:

- Electrical cables.
- Gas lines.

Its proper use also includes the observance of all instructions contained in this operator's manual as well as complying with the required service and maintenance instructions.

Any other use is regarded as improper. Any damage resulting from improper use will void the warranty and the liability on behalf of the manufacturer. The operator assumes full responsibility.

Structural modifications

Never attempt to modify the machine without the written permission of the manufacturer. To do so will endanger your safety and the safety of other people! In addition, this will void the warranty and the liability on behalf of the manufacturer.

Especially the following are cases of structural modifications:

- Opening the machine and the permanent removal of components from Wacker Neuson.
- Installing new components which are not from Wacker Neuson and not equivalent to the original parts in design and quality.
- Installation of accessories which are not from Wacker Neuson.

It is no problem to install spare parts from Wacker Neuson.

It is no problem to install accessories that are available in the Wacker Neuson product range of your machine. Please refer to the installation regulations in this operator's manual.

Requirements for operation

The ability to operate the machine safely requires:

- Proper transport, storage and setup.
- Careful operation.
- Careful service and maintenance.

Operation

Operate the machine only as intended and only when in proper working condition.

Maintenance

Regular maintenance is required in order for the machine to operate properly and reliably over time. Failure to perform adequate maintenance reduces the safety of the machine.

- Strictly observe the prescribed maintenance intervals.
- Do not use the machine if it requires maintenance or repairs.

Malfunctions

If a malfunction occurs, the machine must be secured immediately.

Eliminate the malfunctions that impair safety immediately!

Have damaged or defective components replaced immediately!

For further information, refer to chapter *Troubleshooting*.



Spare parts, accessories

Use only spare parts from Wacker Neuson or such that are equivalent to the original parts in design and quality.

Only use accessories from Wacker Neuson.

Non-compliance will exempt the manufacturer from all liability.

Exclusion of liability

Wacker Neuson will refuse to accept liability for injuries to persons or for damage to materials in the following cases:

- Structural modifications.
- Improper use.
- Failure to comply with this operator's manual.
- Improper handling.
- Using of spare parts which are not from Wacker Neuson and not equivalent to the original parts in design and quality.
- Using of accessories which are not from Wacker Neuson.
- Using ties which are not from Wacker Neuson.

Operator's manual

Always keep the operator's manual near the machine or near the worksite for quick reference.

If you have misplaced the operator's manual or require an additional copy, contact your Wacker Neuson representative or download the operator's manual from the Internet (www.wackerneuson.com).

Always hand over this operator's manual to other operators or to the future owner of the machine.

Country-specific regulations

Observe the country-specific regulations, standards and guidelines in reference to accident prevention and environmental safety, for example those pertaining to hazardous materials and wearing protective gear.

Complement the operator's manual with additional instructions taking into account the operational, regulatory, national or generally applicable safety guidelines.

Operator's controls

Always keep the operator's controls of the machine dry, clean and free of oil or grease.

The function of the operator's controls must not be manipulated or rendered ineffective.

Checking for signs of damage

Inspect the machine when it is switched off for any signs of damage at least once per work shift.

Do not operate the machine if there is visible damage or defects.

Have any damage or defects eliminated immediately.

3.2 Qualification of the operating personnel**Operator qualifications**

Only trained personnel must operate the machine.

Incorrect operation

Incorrect operation or misuse by untrained personnel can endanger the health and safety of the operator or third persons and also cause machine and material damage.

Operating company responsibilities

The operating company must make the operator's manual available to the operator and ensure that the operator has read and understood it.

Work recommendations

Please observe the recommendations below:

- Work only if you are in a good physical condition.
- Work attentively, particularly as you finish.
- Do not operate the machine when you are tired.
- Carry out all work calmly, circumspectly and carefully.
- Never operate the machine under the influence of alcohol, drugs or medication. This can impair your vision, reactions and your judgment.
- Work in a manner that does not endanger others.

3.3 Transport**Transporting the machine**

Secure the carrying case on the transport device against tilting, falling and slipping.

3.4 Operating safety

Work environment

Familiarize yourself with your work environment before you start work. This includes e.g. the following items:

- Obstacles in the work and traffic area.
- Load-carrying capacity of the ground.
- The measures needed to cordon off the construction site from public traffic.
- The measures needed to secure walls and ceilings.
- Options available in the event of an accident.

Vertical stability

Always make sure that you stand firmly when working with the machine. This applies particularly when working on scaffoldings, ladders, etc.



Operating the machine

Always place the machine onto the reinforced steel rods at an exact right angle.
Work using even push and pull movements (do not push or pull abruptly).
Always continue the push and pull movements up to the stop.

Do not direct towards people

Do not direct the machine towards people in the vicinity during operation. Inserted components might be flung out and cause serious injuries.

Storage

Set the machine down or store it securely so that it cannot tilt, fall down or slip.

Storage location

Store the machine after operation at a sealed off, clean and dry location inaccessible to children.

3.5 Safety during the operation of hand machines**Setting the hand machine down properly**

Set the machine down carefully. Do not drop the machine to the floor or from greater heights. Dropping the machine can cause injuries to other persons or the machine itself can be damaged.

3.6 Maintenance**Maintenance work**

Service and maintenance work must only be carried out to the extent described in these operating instructions. All other procedures must be performed by your Wacker Neuson representative.

For further information, refer to chapter *Maintenance*.

Cleaning

Always keep the machine clean and be sure to clean it each time you have finished using it.

Do not use gasoline or solvents. Danger of explosion!

Do not use high pressure washers. Permeating water can damage the machine. When electrical equipment is present, this can pose a serious injury risk from electric shocks.

4 Scope of delivery



Item	Designation
1	Rebar tier
2	Tube of copper grease (without illustration)
3	Operator's Manual (without illustration)
4	Spare parts catalog (without illustration)

5 Structure and function

5.1 Application

Use the machine only as intended, see chapter *Safety, Proper use*.

5.2 Field of application

You can work with the machine in a horizontal or in a vertical direction, on ceilings and on walls.

The machine can be used in all weather conditions.

5.3 Functionality

Principle

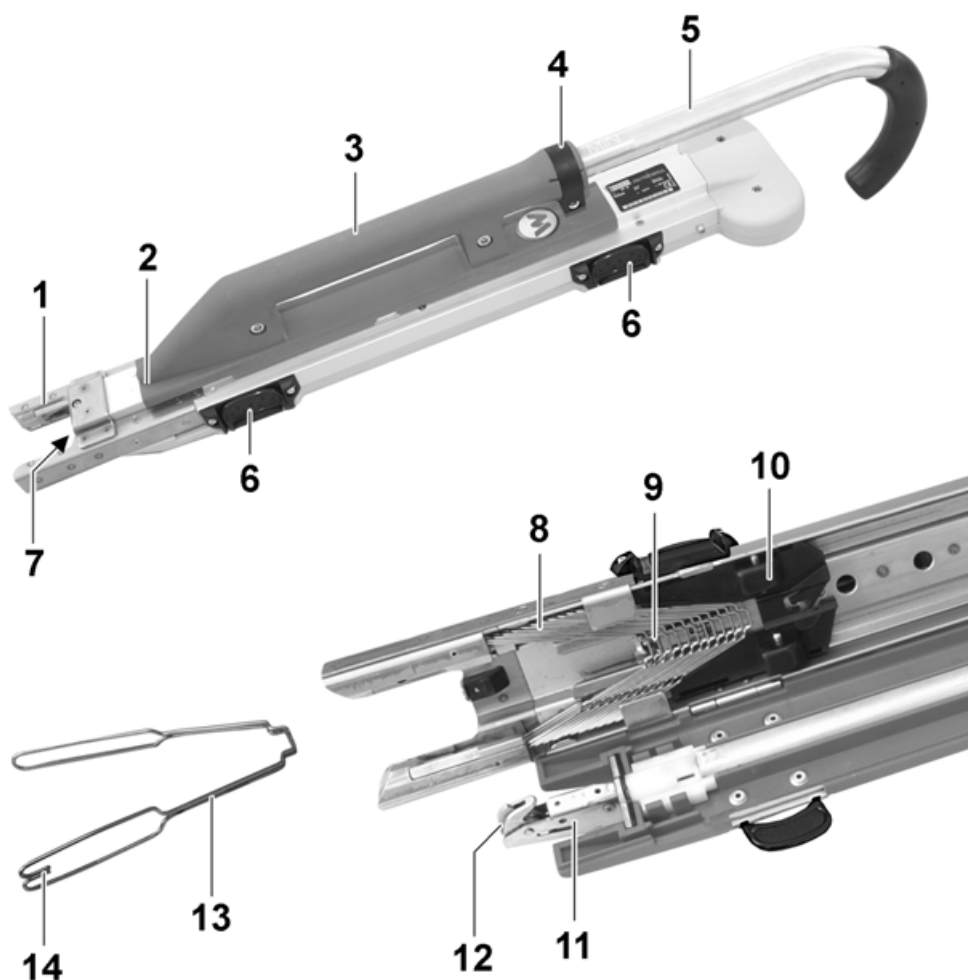
The tool is a manually operated rebar tier. The machine can be operated single-handed.

After placement onto the reinforced steel rods the handle is moved forward up to the stop. This causes a feed device to transport a tie in an arc shape around the reinforced steel rods. At the end point of the forward movement the tie tabs interlock automatically.

When the handle is pulled back the arc shaped tie is twisted. The fully twisted tie automatically triggers the unlocking of the twisting hook.

After the twisting spindle is moved back the machine is ready for the next tying operation.

6 Components and operator's controls



Item	Designation	Item	Designation	Item	Designation
1	Tie outlet	6	Lock	11	Twisting hook
2	Cover	7	Housing floor	12	Unlock mechanism at the twisting hook
3	Handle	8	Tie strip	13	Tie
4	Gripper clamp	9	Feed finger	14	Tie tab with guide pin
5	Umbrella handle	10	Magazine tensioner		

7 Transport

Transporting the machine

1. Push umbrella handle in completely, see [Adjusting the length of the umbrella handle](#) (page 21).
2. Push the handle completely forwards.
3. If necessary, remove tie, see [Removing jammed ties from the outside](#) (page 31).
4. Place the machine on or into a suitable means of transport.
5. Secure the machine against falling or sliding.

8 Use and operation



WARNING

Spring-loaded moving components.

Serious injuries or property damage from improper handling.

- ▶ When the machine is open, secure the magazine tensioner in the park or stop position.

NOTICE

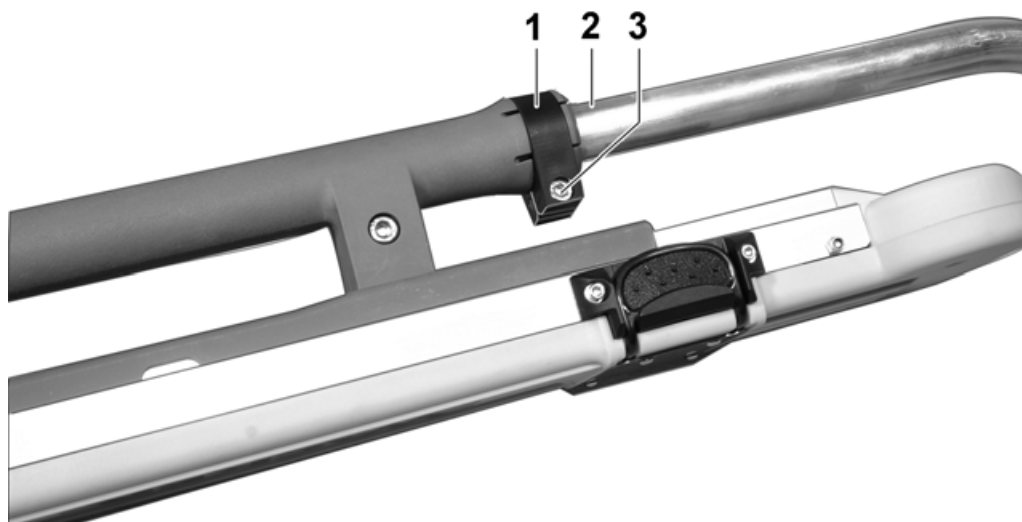
Machine malfunction due to damaged components within the machine.

- ▶ Always store the machine and tie strip under dry conditions.
 - ▶ Protect the tie strip against excessive heat and cold.
 - ▶ Do not use corroded ties.
 - ▶ Dry machines which have become wet.
-

8.1 Prior to starting the machine

Turning the umbrella handle

For ties which are rotated by 45° from the direction of movement of the operator, you can turn the umbrella handle for easier handling.

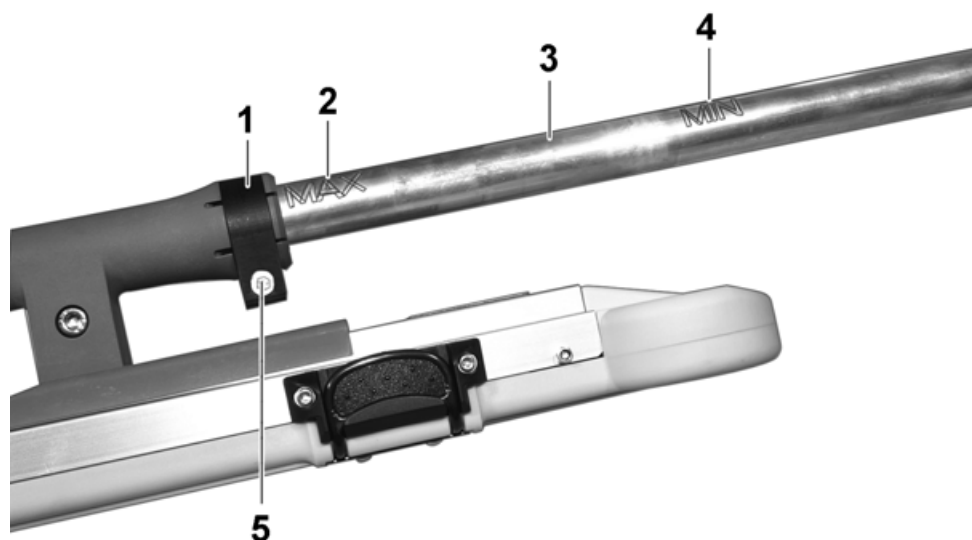


Item	Designation
1	Gripper clamp
2	Umbrella handle
3	Allen screw

1. Release the Allen screw on the gripper clamp.
2. Turn the umbrella handle into the position required.
3. Retighten the Allen screw manually.

Adjusting the length of the umbrella handle

You can adjust the umbrella handle to suit your body height or the working conditions (large distance).



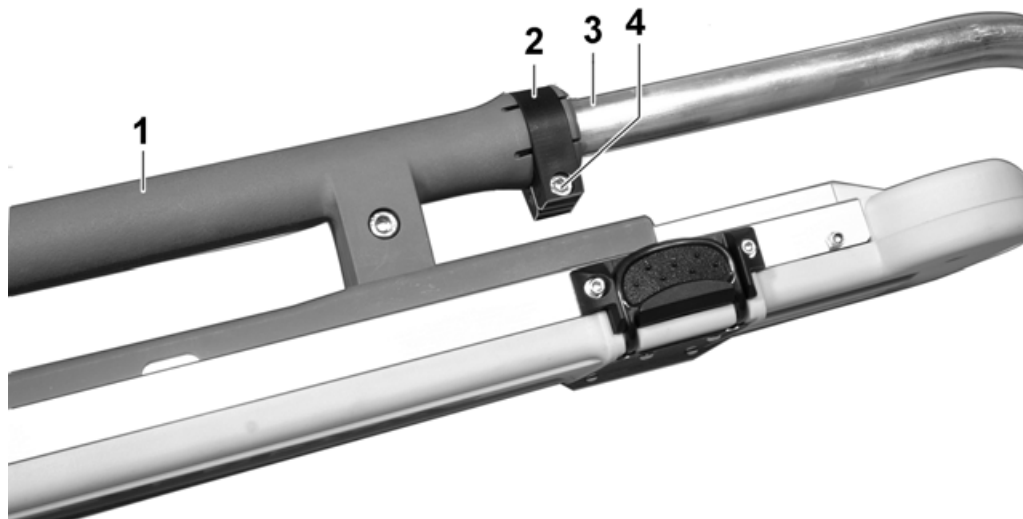
Item	Designation
1	Gripper clamp
2	Marking "MAX"
3	Umbrella handle
4	Marking "MIN"
5	Allen screw

1. Release the Allen screw on the gripper clamp.
2. Pull out the umbrella handle or push it in (not exceeding the marking "MAX" or the marking "MIN").
3. Retighten the Allen screw manually.

Removing the umbrella handle

For easier handling, you can remove the umbrella handle:

- For horizontal use of the rebar tier, e.g. on walls. This results in a more favorable center of gravity for the machine.
- For cramped space conditions.



Item	Designation
1	Handle
2	Gripper clamp
3	Umbrella handle
4	Allen screw

1. Release the Allen screw on the gripper clamp.
2. Pull the umbrella handle out of the handle.
3. Retighten the Allen screw manually.

Fastening the umbrella handle

1. Release the Allen screw on the gripper clamp.
2. Put the umbrella handle into the handle, adjust to the required length and turn into the required position.
3. Retighten the Allen screw manually.

8.2 Starting up

Loading the machine

NOTICE

Malfunctions during operation due to damaged components within the machine.

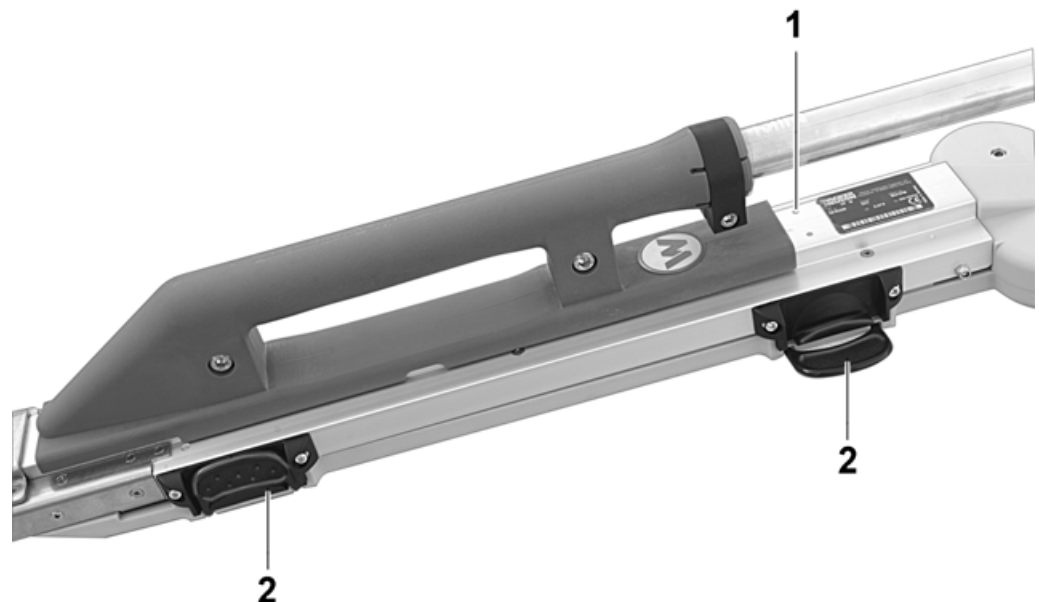
- When the machine is open, secure the magazine tensioner in the park or stop position.
-

NOTICE

Malfunctions during operation due to incorrect position of the tie strip.

- Ensure the correct position of the tie strip.
-

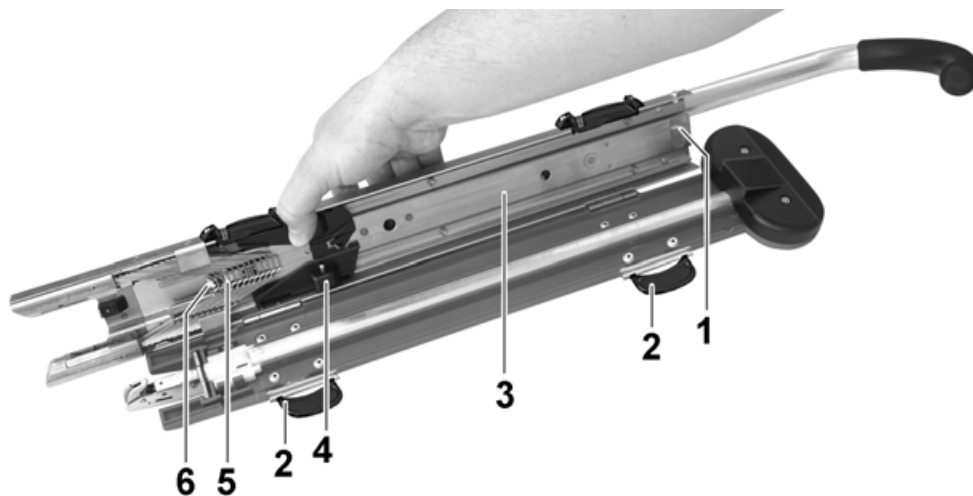
Performing preparations



Item	Designation
1	Cover
2	Lock

1. Pull the handle right back to the stop.
2. Open both locks. Do this by pulling the locks upwards and folding them outwards.
3. Unfold lid.

Inserting tie strips



Item	Designation
1	Park position of the magazine tensioner
2	Lock
3	Cover
4	Magazine tensioner
5	Tie strip
6	Feed finger

1. Pull the magazine tensioner back against the spring resistance until it engages in the park position.
2. Insert a new tie strip or several shorter tie strips into the machine. Ensure the correct position of the tie strip:
 - Adhesive side (colored) facing downwards.
 - Outlet of the ties forward.
 - Lettering Wacker Neuson facing upwards.
3. Pull the magazine tensioner back until the lock releases and slowly guide it forwards to the tie strip. Do not let the magazine tensioner "jump".
4. Checking the position of the tie strip: The ties must lie flat. Ties must not protrude.

Closing and loading the machine

1. Close the lid.
2. Close both locks. Do this by pulling the tabs over the holders.
3. Load the machine. Move the handle once forward and back up to the stops. This allows the feed finger to engage in the tie strips.

Note: When the stop is reached a distinct clicking sound is heard.

Checks before starting work

Check the following points before beginning any work:

- ▶ Damage to the machine and to all components.
If the machine is damaged, do not start the machine. Have any damage or defects eliminated immediately.
- ▶ Tie inserted properly into the machine.
- ▶ The sum of the diameters of the reinforcing steel rods which are to be tied together is adhered to, see chapter *Technical data*.
- ▶ No tie in the tie outlet.



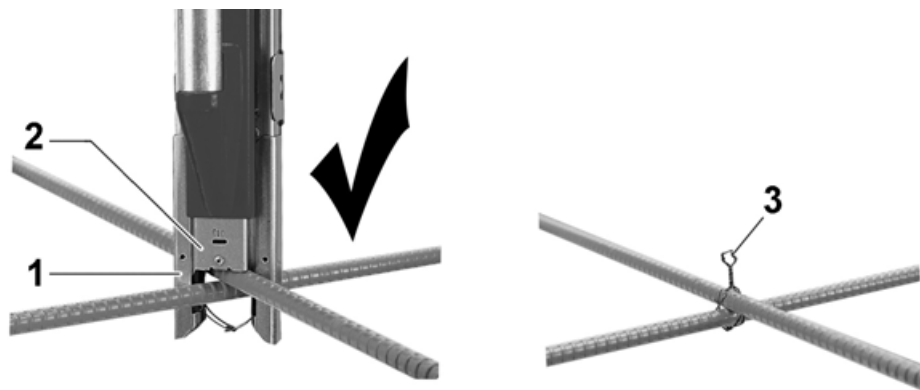
8.3 Operating the machine

Tying

NOTICE

Damage to the machine due to improper handling.

- ▶ Always place tie outlet at right angles to the reinforcing steel rods.
- ▶ Carry out push and pull movements evenly. Avoid jerky movements.
- ▶ Always carry out push and pull movements up to the stop.



Item	Designation
1	Tie outlet
2	Housing floor
3	Tie ends

1. Place the machine with the tie outlet to the housing floor onto the crossover point of the reinforcing steel rods at an exact right angle.
2. Press the reinforcing steel rods against each other:
 - When working in a vertical direction, step lightly onto the upper reinforcing steel rod until both reinforcing steel rods are lying firmly together.
 - When working in horizontal direction press the two reinforcing steel rods outside the tying area together with the empty hand.
3. Push the handle forwards slowly and evenly up to the stop, do **not** shove.

Note: When the stop is reached a distinct clicking sound is heard.
4. Pull the handle back slowly and evenly to the stop.
5. If necessary, bend any protruding tie ends.

In case of a malfunction or suspected loading problem stop the operation immediately and carry out a visual inspection. Remove jammed tie immediately. Do not carry out any further tying operations! The machine can otherwise be seriously damaged.

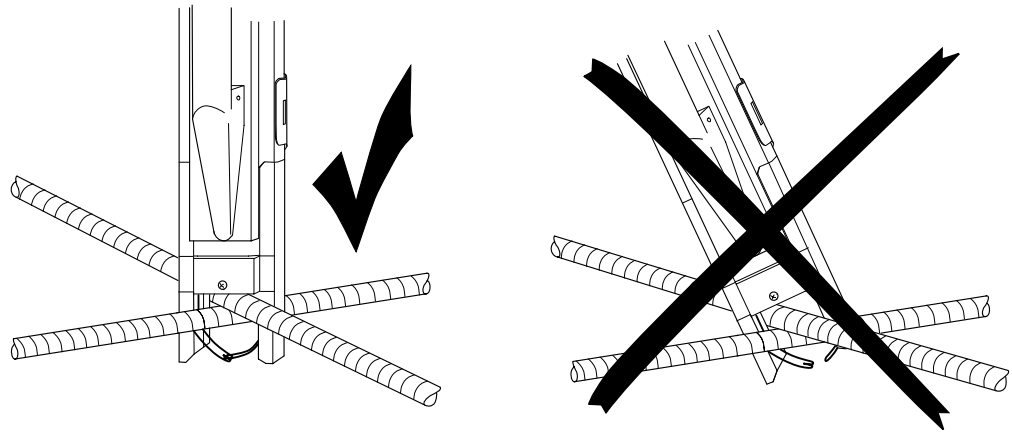
8.4 Avoiding faulty ties

To avoid faulty ties, observe the following tips:

Operating the machine slowly and evenly

Always carry out push and pull movements slowly, evenly and up to the stop. The machine will thank you for it!

Placing the machine at a right angle



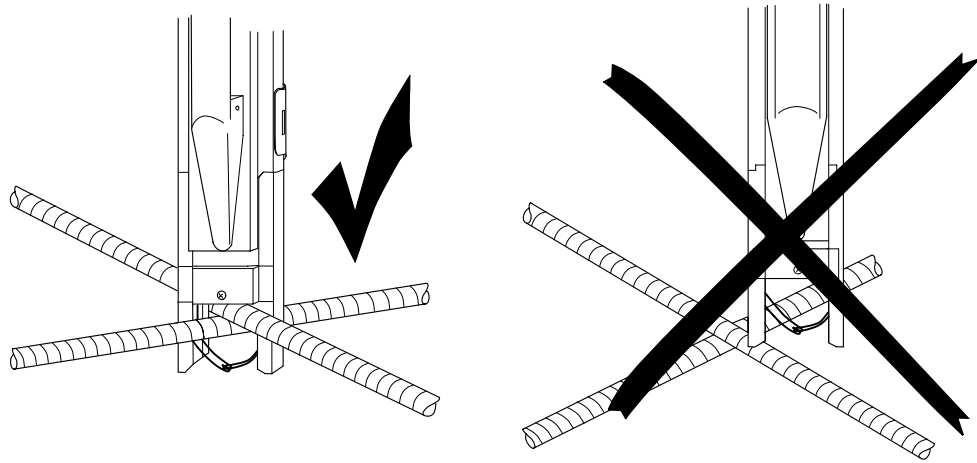
Place the machine with the tie outlet to the housing floor onto the reinforcing rods at an exact right angle, so that the tie tabs can hook up.

If you place the machine at an angle, the tie tabs may not be able to hook up. The tie will remain stuck in the machine and become jammed.

NOTICE

Damage to the machine due to jammed ties.

- Remove jammed ties before continuing work.
-

Positioning the tie outlet exactly over the reinforcing steel rods

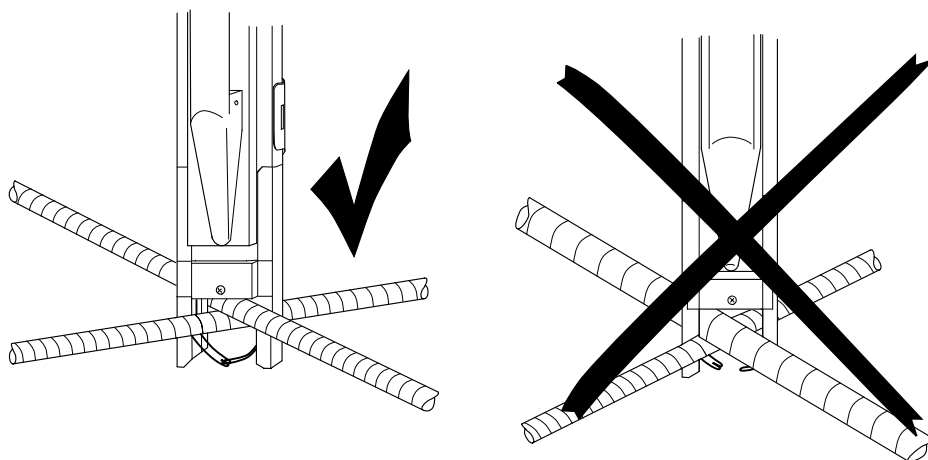
Ensure that the tie outlet always surrounds the reinforcing rods correctly.

If the machine is accidentally placed on the edge, an "empty" tie is produced. The tie will remain stuck in the machine and become jammed.

NOTICE

Damage to the machine due to jammed ties.

- Remove jammed ties before continuing work.
-

Observing the correct combination of the reinforcing steel rods

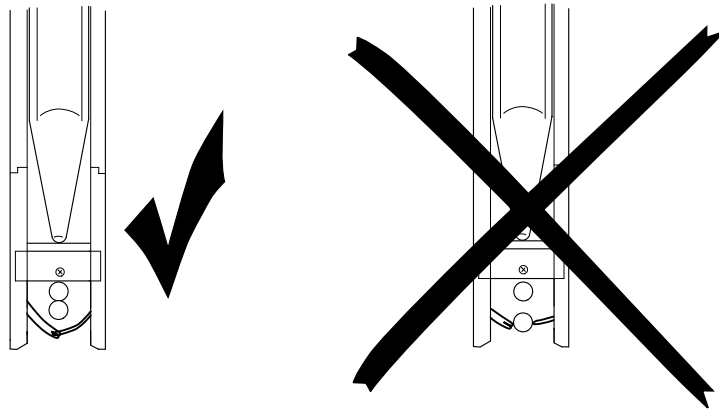
Observe the permissible diameter of the reinforcing rods, see chapter *Technical data*.

If e. g. one of the reinforcing steel rods is too thick, the tie tabs may not be able to hook up. The tie will remain stuck in the machine and become jammed.

NOTICE

Damage to the machine due to jammed ties.

- Remove jammed ties before continuing work.
-

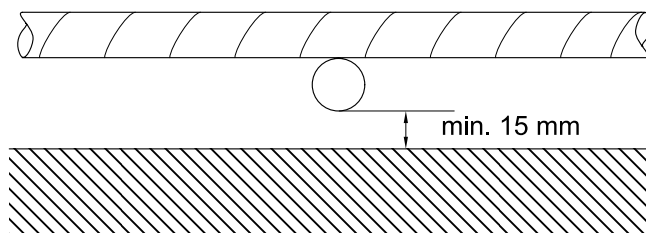
Placing the reinforcing steel rods directly adjacent to each other

Always press the reinforcing rods together, so that the tie can clasp around them. If the reinforcing steel rods are not adjacent to each other, the tie tabs may not be able to hook up. The tie will remain stuck in the machine and become jammed.

NOTICE

Damage to the machine due to jammed ties.

- Remove jammed ties before continuing work.

Maintaining the minimum distance to the formwork

Maintain the minimum distance to the formwork, so that the tie can always hook up.

If you do not observe the minimum distance, the tie tabs may not be able to hook up. The tie will remain stuck in the machine and become jammed.

NOTICE

Damage to the machine due to jammed ties.

- Remove jammed ties before continuing work.

8.5 Removing jammed ties

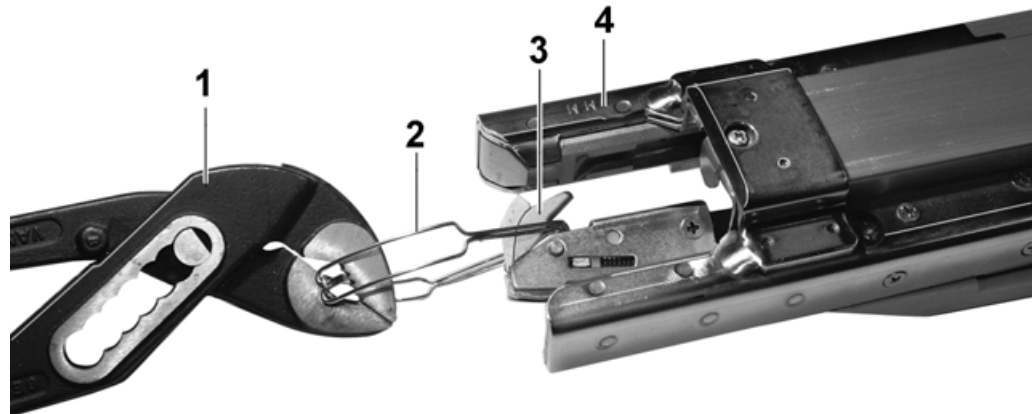


CAUTION

Injury due to protruding metal ends on a bent tie.

- Remove jammed tie using pliers.

Removing jammed ties from the outside



Item	Designation
1	Pliers
2	Tie
3	Twisting hook
4	Tie outlet

1. Pull the handle right back to the stop.
2. Hook the tie tabs of the jammed tie into each other.
3. Grip the tie tabs using pliers and carefully pull forwards out of the tie outlet guides. The tie will turn in a spiral manner.
4. Detach the tie from the twisting hook and remove.

Removing jammed ties when the machine is open

If the tie is jammed in such a way that it cannot be removed from the outside, proceed as follows:

NOTICE

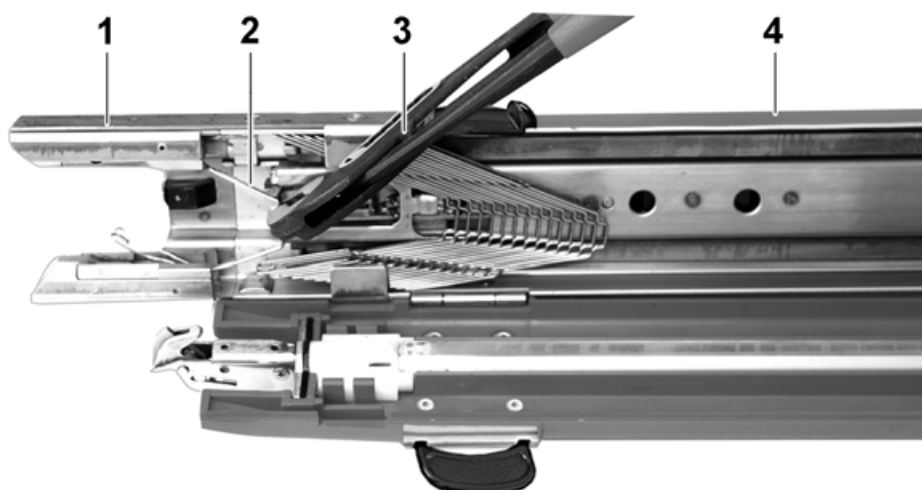
Malfunctions during operation due to damaged components within the machine.

- When the machine is open, secure the magazine tensioner in the park or stop position.

NOTICE

Malfunctions during operation due to incorrect position of the tie strip.

- Ensure the correct position of the tie strip.



Item	Designation
1	Tie outlet
2	Tie
3	Pliers
4	Cover

Opening the machine

1. Pull the handle right back to the stop.
2. Open both locks. Do this by pulling the locks upwards and folding them outwards.
3. Unfold lid.

Removing the tie

1. If necessary, pull the magazine tensioner backwards until it engages in the park position.
2. Carefully pull the tie back out of the tie outlet using a pair of pliers.
3. When the magazine tensioner has engaged in the park position, pull the magazine tensioner backwards until the lock releases and slowly guide it forwards to the tie strip. Do not let the magazine tensioner "jump".
4. Checking the position of the tie strips: The ties must lie flat.

Closing and loading the machine

1. Close the lid.
2. Close both locks. Do this by pulling the tabs over the holders.
3. Load the machine. Do this by moving the handle forwards and back once, slowly and evenly and right to the stops.

Note: When the stop is reached a distinct clicking sound is heard.



9 Troubleshooting

Potential faults, their causes and the respective remedies are listed in the following table.

Malfunction	Cause	Remedy
No tying.	Tie ends are not connected	Remove tie. Place the machine at a right angle.
	Tie is stuck in the tie outlet.	Remove tie.
	No tie is loaded.	Move handle forward up to the stop and back.
Loose tying.	Handle pulled back too fast or too abruptly.	Pull handle back slower or more evenly.

For malfunctions which you cannot remedy yourself, please contact your Wacker Neuson dealer.



10 Maintenance



WARNING

Spring-loaded moving components.

Serious injuries or property damage from improper handling.

- ▶ When the machine is open, secure the magazine tensioner in the park or stop position.

NOTICE

Machine malfunction due to damaged components within the machine.

- ▶ Only oil and grease the machine as described in these operating instructions.

The machine is lubricated for life. If the machine is lubricated in excess of the measures described in the maintenance tasks or with a non-approved lubricant this can impede movements and cause the machine to malfunction (Lubricants see chapter *Technical data*).

10.1 Maintenance schedule

Task	Daily before operation	As required	Annually
Clean the machine.	■		
Oil the spindle.		■	
Grease the folding mechanism of the twisting hook.		■	
Grease the fixing spring.		■	
Replace the fixing spring. *			■ **
Thorough cleaning of the machine. *			■ **

* Have these tasks carried out by the service department of your Wacker Neuson contact person.

** Or after 150,000 ties.



**WACKER
NEUSON**

10.2 Maintenance work

10.2.1 Cleaning machine

Performing preparations

1. Pull the handle right back to the stop.
2. Open both locks. Do this by pulling the locks upwards and folding them outwards.
3. Unfold lid.

Cleaning machine

- Remove dirt or tie adhesive residue using a brush or by wiping with a clean and soft cloth to the front through the tie outlet.

Closing the machine

1. Close the lid.
2. Close both locks. Do this by pulling the tabs over the holders.

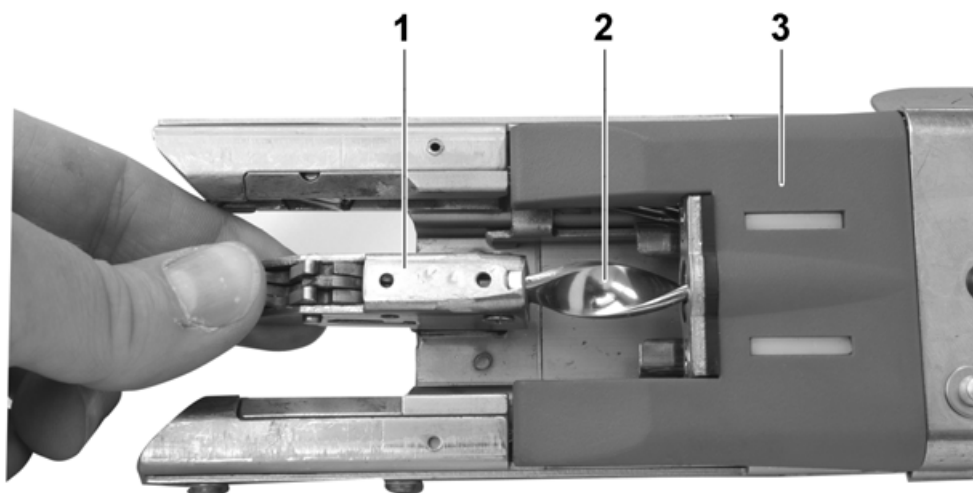
Cleaning the spindle

1. Pull the twisting hook out of the housing up to the stop. The twisting hook will turn in a spiral manner. The spindle is pulled out.
2. Hold the twisting hook against the spring resistance.
3. Wipe off the spindle with a clean cloth. Remove any tie adhesive residue.
4. Allow the twisting hook to slide slowly back into the housing, do not "let it jump".

10.2.2 Oiling the spindle

If the spindle is no longer shiny it must be relubricated.

Only use acid- and resin-free oil for lubricating, see chapter *Technical data*.



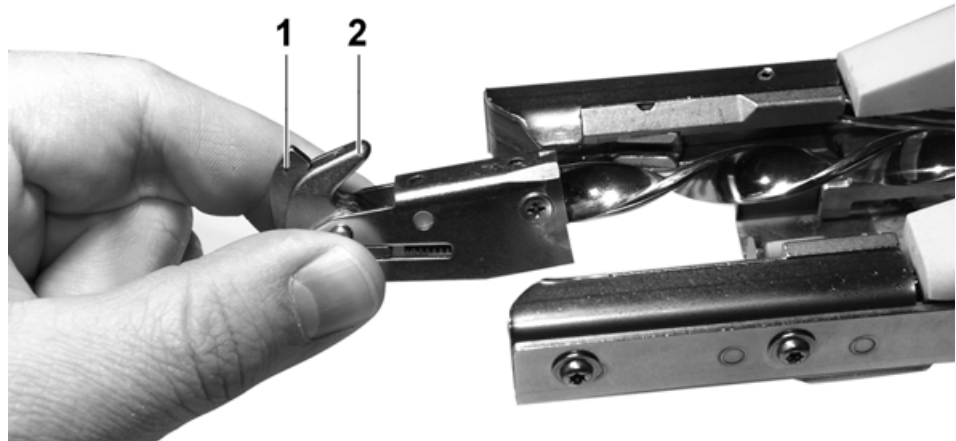
Item	Designation
1	Twisting hook
2	Spindle
3	Housing

1. Pull the twisting hook out of the housing up to the stop. The twisting hook will turn in a spiral manner. The spindle is pulled out.
2. Hold the twisting hook against the spring resistance.
3. Wipe off the spindle with a clean cloth. Remove any tie adhesive residue.
4. Apply a few drops of oil to the spindle and spread evenly with a cloth.
5. Allow the twisting hook to slide slowly back into the housing, do not "let it jump".

10.2.3 Greasing the folding mechanism of the twisting hook

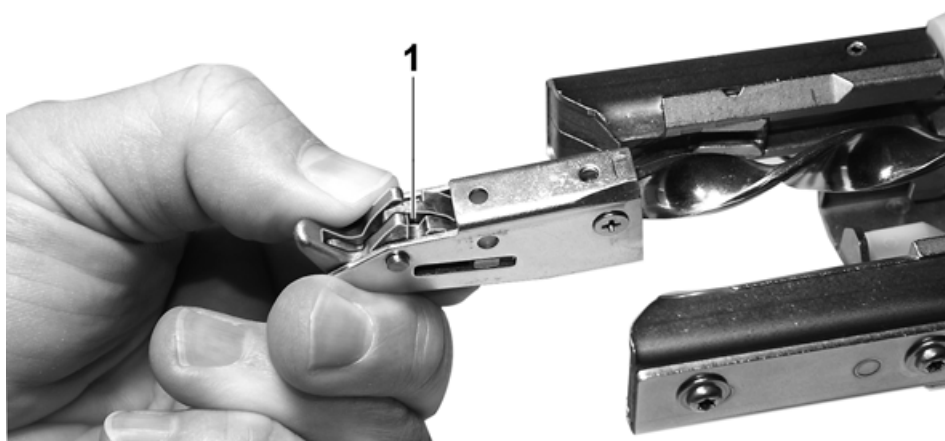
If no more grease is visible between the moving components of the twisting hook, the folding mechanism must be relubricated on both sides.

Only use special copper grease for lubricating, see chapter *Technical data*.



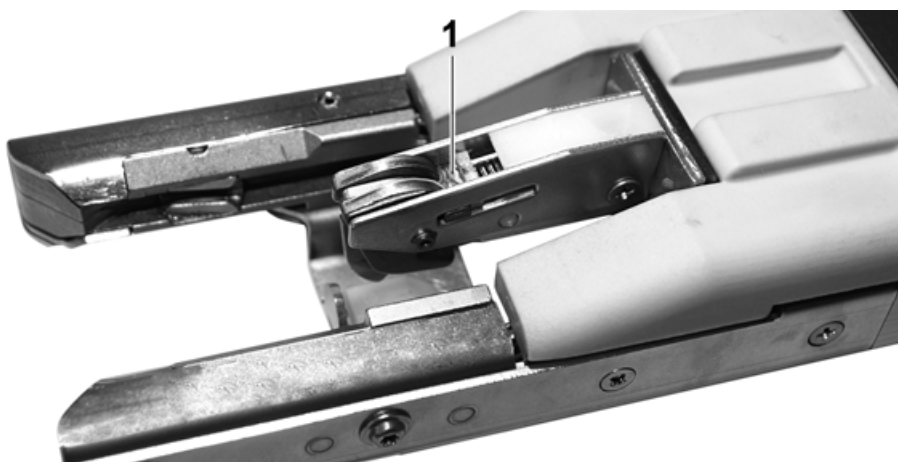
Item	Designation
1	Unlocking handle
2	Twisting hook

1. Pull the twisting hook partly out of the housing. The twisting hook will turn in a spiral manner.
2. Hold the twisting hook against the spring resistance.
3. Press the unlocking handle in and fold down the twisting hook.



Item	Designation
1	Twisting hook folding mechanism (view from above)

4. Apply some copper grease into the groove on the twisting hook folding mechanism from above.
5. Allow the twisting hook to slide slowly back into the housing, do not "let it jump".



Item	Designation
1	Twisting hook folding mechanism (view from above)

6. Apply some copper grease onto the twisting hook folding mechanism from below.

10.2.4 Greasing the fixing spring

**WARNING**

Spring-loaded moving components.

Serious injuries or property damage from improper handling.

- When the machine is open, secure the magazine tensioner in the park or stop position.

NOTICE

Malfunctions during operation due to incorrect position of the tie strip.

- Ensure the correct position of the tie strip.

If no more grease is visible on the fixing spring, it must be relubricated.

Only use special copper grease for lubricating, see chapter *Technical data*.



Item	Designation
1	Fixing spring

Performing preparations

1. Pull the handle right back to the stop.
2. Open both locks. Do this by pulling the locks upwards and folding them outwards.
3. Unfold lid.

Greasing the fixing spring

1. Pull the magazine tensioner back against the spring resistance until it engages in park position.
2. Remove tie strip if applicable.
3. Apply some copper grease to the fixing spring.

Inserting tie strips

1. Insert tie strips. Ensure the correct position of the tie strip:
 - Adhesive side (green) downwards.
 - Outlet of the ties forward.
 - Lettering Wacker Neuson facing upwards.
2. Pull the magazine tensioner back until the lock releases and slowly guide it forwards to the tie strip. Do not let the magazine tensioner "jump".
3. Checking the position of the tie strip: The ties must lie flat. Ties must not protrude.

Closing and loading the machine

1. Close the lid.
2. Close both locks. Do this by pulling the tabs over the holders.
3. Load the machine. Do this by moving the handle forwards and back once, slowly and evenly and right to the stops.

Note: When the stop is reached a distinct clicking sound is heard.

10.2.5 Thorough cleaning of the machine

NOTICE

Damage to the sensitive mechanics due to improper maintenance.

- Only have thorough cleaning performed by the service department of your Wacker Neuson representative.
-

Tie adhesive residue could enter the interior of the machine due to the extending and retracting of the spindle. This residue must be removed from time to time to prevent damage to the sensitive mechanics.

The machine must be disassembled for thorough cleaning. You must only have thorough cleaning performed by the service department of your Wacker Neuson representative.

11 Accessories

The following accessories are offered for the machine.

For more information on the individual accessories, visit the following website:
www.wackerneuson.com.

11.1 Tie strip

You can order expendables for tying in different sized trading units.

11.2 Copper grease

You require copper grease for lubricating the sensitive components in the machine interior.

11.3 Belt pouch

You can carry a packet of tie strips (10 pieces) in the belt pouch.

12 Technical data

12.1 DF 16

Designation	Unit	DF 16
Item no.		0610299
Dimensions	mm (in)	656 x 118 x 164 (25.82 x 4.64 x 6.45)
Weight	kg (lb)	2.2 (4.85)
Number of ties per tie strip	Number	77
Tie diameter	mm (in)	Ø 1.1 (0.04)
Field of application: * ■ Sum of all Ø. ■ Ø of the materials to be tied for a cross tie. ■ Ø of the materials to be tied for a longitudinal tie.	mm (in) mm (in) mm (in)	Min. 10 (0.39) Max. 32 (1.26) Min. 2 x Ø 6 (0.08 x Ø 0.24) Max. 2 x Ø 16 (0.08 x Ø 0.63) Min. 2 x Ø 6 (0.08 x Ø 0.24) Max. Ø 22 + Ø 10 (Ø 0.87 x Ø 0.39)
Field of application using accessory <i>objective</i> (see chapter <i>Accessories</i>): * ■ Sum of all Ø. ■ Ø of the materials to be tied for a cross tie. ■ Ø of the materials to be tied for a longitudinal tie.	mm (in) mm (in) mm (in)	Min. 10 (0.39) Max. 32 (1.26) Min. 2 x Ø 6 (0.08 x Ø 0.24) Max. 2 x Ø 16 (0.08 x Ø 0.63) Min. 2 x Ø 6 (0.08 x Ø 0.24) Max. Ø 26 + Ø 6 (Ø 1.02 x Ø 0.24)
Copper grease	–	Molykote [®] CU-7439 plus
Oil specification (acid- and resin-free)	–	Low viscosity, e.g. WD 40

* The materials to be tied must be directly adjacent to each other.



