

HILTI

DX 9-HSN

English



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1 Information about the documentation




1.1 About this documentation

- Read this documentation before initial operation or use. This is a prerequisite for safe, trouble-free handling and use of the product.
- Observe the safety instructions and warnings in this documentation and on the product.
- Always keep the operating instructions with the product and make sure that the operating instructions are with the product when it is given to other persons.

1.2 Explanation of symbols used



1.2.1 Warnings

Warnings alert persons to hazards that may occur when handling or using the product. The following signal words are used in combination with a symbol:

	DANGER! Draws attention to an imminent hazard that will lead to serious personal injury or fatality.
	WARNING! Draws attention to a potential hazard that could lead to serious personal injury or fatality.
	CAUTION! Draws attention to a potentially dangerous situation that could lead to minor personal injury or material damage.



1.2.2 Symbols in the documentation

The following symbols are used in this document:

	Read the operating instructions before use
	Instructions for use and other useful information

1.2.3 Symbols in the illustrations

The following symbols are used in illustrations:

2	These numbers refer to the corresponding illustrations found at the beginning of these operating instructions.
3	The numbering reflects the sequence of operations shown in the illustrations and may deviate from the steps described in the text.
	Item reference numbers are used in the overview illustration and refer to the numbers used in the key in the product overview section.
	This symbol is intended to draw special attention to certain points when handling the product.

1.3 Product-dependent symbols

1.3.1 Symbols on the product

The following symbols are used on the product:

	Warning: hot surface
	Wear protective gloves

1.4 Product information

Hilti products are designed for professional use and may be operated, serviced and maintained only by trained, authorized personnel. This personnel must be informed of any particular hazards that may be encountered. The product and its ancillary equipment can present hazards if used incorrectly by untrained personnel or if used not in accordance with the intended use.

The type designation and serial number are stated on the rating plate.

- ▶ Write down the serial number in the table below. You will be required to state the product details when contacting Hilti Service or your local Hilti organization to inquire about the product.

Product information

Direct fastening tool	DX 9-HSN
Generation	01
Serial no.	

2 Safety

2.1 Safety instructions

This documentation contains important instructions on how to use the fastening tool safely and correctly. You can avoid residual hazards through observance and practical implementation of the safety instructions found in this documentation and on the product.

2.1.1 Basic safety precautions

In addition to the safety instructions given in the various sections of these operating instructions, the following points must be strictly observed at all times.

Using cartridges

Use of cartridges of inferior quality in Hilti tools may lead to a build-up of unburned powder, which may suddenly explode and cause severe injuries to operators and bystanders. The cartridges must be either verifiably tested by the manufacturer in accordance with EU standard EN 16264 or they must bear the CE conformity marking.

- ▶ Use only Hilti cartridges or cartridges of equivalent quality of a type approved for use with this tool.

Requirements to be met by users

The tool is intended for professional use.

The tool may be operated, serviced and maintained only by trained, authorized personnel who have received special instruction regarding the hazards that may be encountered.

- ▶ Use the tool for the first time only after you have been trained by a Hilti specialist on how to use it safely.

Personal safety

- ▶ Never tamper with or modify the tool in any way.
- ▶ Use the right tool for the job. Do not use the tool for purposes for which it was not intended. Use it only as directed and when in technically faultless condition.
- ▶ Stay alert, watch what you are doing and use common sense when operating the tool. Do not use the tool if you are not concentrating.
- ▶ To reduce the risk of injury use only genuine Hilti accessories and spare parts or those of equivalent quality.
- ▶ Use only fasteners of a type approved for use with the tool.
- ▶ Observe the information printed in the operating instructions concerning operation, care and maintenance.
- ▶ Never point the tool toward yourself or other persons.
- ▶ Never press the nosepiece of the tool against your hand or against any other part of your body (or other person's hand or part of their body).
- ▶ Drive the fasteners only into structural steel members. Do not attempt to drive fasteners into other materials or into hardened or brittle steel, cast iron or spring steel.
- ▶ Pull the trigger only when the nosepiece of the tool is in contact with the working surface and the tool is fully compressed.
- ▶ When driving fasteners, always hold the fastening tool at right angles to the working surface in order to prevent the fastener being deflected by the surface.
- ▶ Never redrive a fastener, as this may cause the fastener to break.
- ▶ Keep the grips dry, clean and free from oil and grease.
- ▶ Never leave a loaded tool unattended.

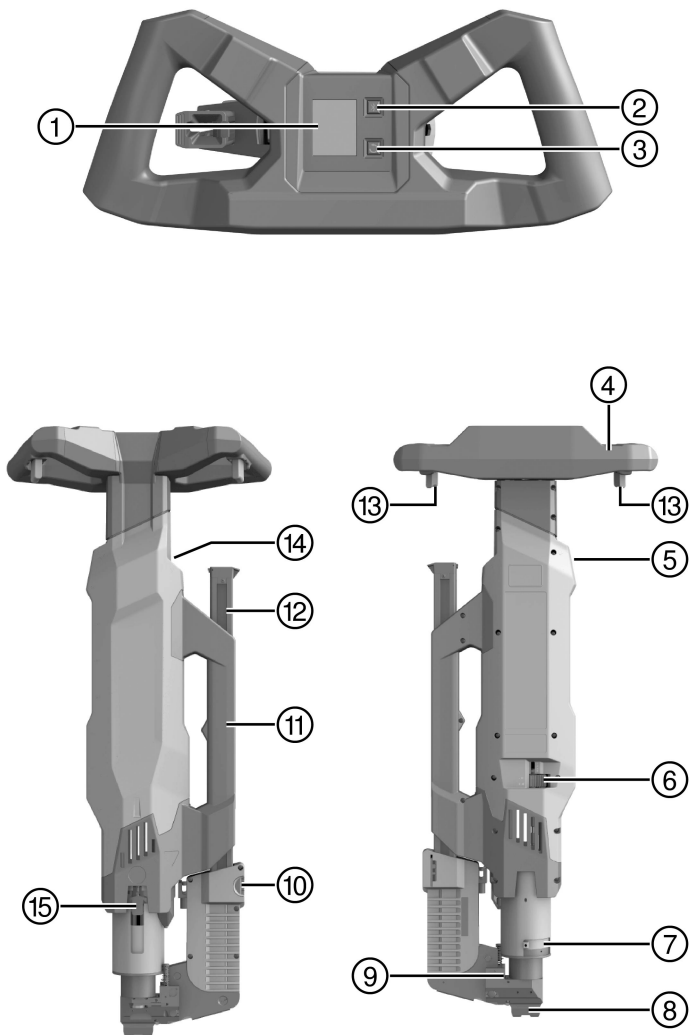
- ▶ Always remove the cartridges before cleaning, servicing or carrying out maintenance work on the tool.
- ▶ Never leave the tool unattended.
- ▶ When not in use, the tool should be unloaded (cartridge strips removed) and stored in a locked, dry place where it is inaccessible to children.
- ▶ Never compress the tool while operating the catch, as this presents a risk of injury to the operator's hand.
- ▶ Remove the cartridge strip from the tool carefully. Never attempt to pry a cartridge from the magazine strip or tool.
- ▶ Do not disassemble the tool while it is hot. If this is unavoidable, wear protective gloves.
- ▶ Store unused cartridges in a dry place, where they are locked away or high up and out of reach of children.
- ▶ Do not operate the tool when parts are damaged or when the controls do not function correctly. Have the tool repaired by **Hilti Service**.

Safety at the workplace

- ▶ Ensure that the working area is well lit.
- ▶ Keep the workplace tidy. Objects which could cause injury should be removed from the working area.
- ▶ Wear non-skid shoes.
- ▶ You and any other persons in the vicinity must wear suitable eye protection, a hard hat, ear protection and protective gloves while the tool is in use.
- ▶ When not in use, keep the tool and cartridges locked away and always out of reach of children.
- ▶ Keep children and other persons away from the working area.
- ▶ Avoid unusual body positions. Keep proper footing and balance at all times.
- ▶ Keep the arms slightly bent while operating the tool (do not straighten the arms). Stop using the tool if you experience pain or if you feel unwell.
- ▶ Before driving fasteners, check that no one is present on the other side of the sheet metal to be fastened.
- ▶ Take the influences of the surrounding area into account. Do not use the tool where there is a risk of fire or explosion.

3 Description

3.1 Overview of the product



- | | |
|-------------------------------|---------------------------|
| ① Display | ⑨ Base plate |
| ② Bluetooth button | ⑩ Magazine release button |
| ③ Reset button | ⑪ Carrying handle |
| ④ Grip | ⑫ Magazine |
| ⑤ Cartridge loading channel | ⑬ Trigger button |
| ⑥ Power regulation thumbwheel | ⑭ Cartridge exit opening |
| ⑦ Rotating sleeve | ⑮ Catch |
| ⑧ Nosepiece (interchangeable) | |

3.2 Intended use

The product described is a fastening tool designed to drive special fasteners for fastening trapezoidal profile metal sheets to steel beams.

3.3 Possible misuse

The fastening tool may not be operated in atmospheres or environments where there is a risk of fire or explosion.

The fastening tool may not be used with cartridges and fasteners other than those approved for use with this fastening tool.

The fasteners may not be driven into materials other than structural steel and, in particular, not into hardened steel, brittle steel, cast iron and spring steel.

3.4 Safety devices

The fastening tool features a 5-way safety system for the safety of the operator and any bystanders.

Piston principle

The energy from the propellant charge is transferred to a piston, the accelerated mass of which drives the nail into the base material.

Through use of the piston principle, the tool is classed as a "Low Velocity Tool". Approximately 95% of kinetic energy is taken up by the piston when the tool is fired. As the piston is always stopped by the tool as it reaches the end of its travel, excess energy is absorbed by the tool. Accordingly, when the tool is used correctly, dangerous through-shots (i.e. with a nail muzzle velocity of over 100 m/s) are virtually impossible.

Drop-firing safety device

The drop-firing safety device is the result of coupling the firing mechanism with the cocking movement. This prevents the tool from firing when dropped onto a hard surface, no matter at which angle the impact occurs.

Trigger safety device

The trigger safety device prevents the tool firing when only the trigger is pulled. The tool must be pressed against a firm surface before a fastener can be driven.

Contact pressure safety device

The contact pressure safety device requires a force of at least 50 N, so a fastener can be driven only when the tool is pressed fully against a firm surface with this force.

Unintentional firing safety device

The tool is equipped with an unintentional firing safety device. This prevents the tool from firing if the trigger is first pulled and the tool then pressed against the work surface. The tool can be fired only when it is first pressed correctly against the work surface and the trigger subsequently pulled.

3.5 Service indicator

The service indicator display incorporated in the grip consists of the display plus the Bluetooth and reset buttons.

The display indicates the temperature of the fastening tool with a view to allowing the operator to avoid overheating problems by adjusting the speed of use of the tool.

The service indicator display counts the number of fasteners driven and when the preconfigured limit is reached it indicates that cleaning or maintenance of the tool is due.

Using Bluetooth, the data shown in the service indicator display, including the number of fasteners driven and other information (e.g. the serial number of the tool, the number of fasteners driven since the last tool service, etc.), can be read by the **Hilti Connect** smartphone app.

After cleaning, the number of fasteners driven before cleaning is again due can be reset by pressing the reset button.

The service indicator and the built-in counter for the number of nails that can be driven before the next service is due are reset by **Hilti Service** when the tool is serviced.

The smartphone app can be used to activate demo mode in which the various messages indicated by the service interface over a period of 48 fasteners driven, up to and including the need for maintenance, are presented.

The smartphone app can also be used to deactivate demo mode. Demo mode is automatically deactivated after a period of 15 minutes.



Note

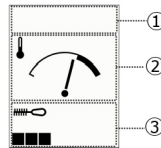
Demo mode does not indicate the actual status of the tool.

The number of fasteners driven is also recorded while in demo mode, so the total counted is always the actual value.

3.6 Information shown on the display

Service indicator display

- ① Upper area
- ② Middle area
- ③ Lower area



Information shown at the top of the display



Symbol	Explanation
	The Bluetooth symbol is shown when Bluetooth is active.
	The wrench symbol is shown when maintenance is due. The fastening tool should be serviced by Hilti Service .

Information shown in the middle of the display

Display	Explanation
	The tool temperature is shown in the middle of the display. In this case the tool temperature is within the normal range.
	The temperature of the tool is extremely high. A warning symbol indicates that use of the tool should not be interrupted when the tool reaches this temperature as cartridges may ignite prematurely and the plastic nail strip may melt. We therefore recommend that the tool continues to be used, but at a lower fastening rate, so that the temperature of the tool can return to normal. Important: The cartridge strip and the fastener strip must be removed from the tool immediately if use of the tool is interrupted while a warning symbol is displayed.

Information shown in the lower part of the display

Display	Explanation
	At the lower left edge, a bar showing 1 to 7 segments indicates the interval until the tool needs to be cleaned again. In this case, cleaning will not be necessary for some time.
	The 7 segments shown indicate that cleaning will be necessary shortly.

Display	Explanation
	The max. number of fasteners driven has been reached. The tool must be cleaned.
	The black square at the lower edge on the right indicates that demo mode is active. In this case, the information in the display does not reflect the actual status of the tool. The Hilti Connect smartphone app can be used to deactivate the demo mode. Demo mode is automatically deactivated after a period of 15 minutes.

3.7 Items supplied

Fastening tool, toolbox, cleaning set, scraper, ramrod, **Hilti** lubricant spray, operating instructions.



Note

You can find other system products approved for use with this product at your local **Hilti** Center or online at: www.hilti.com

4 Technical data

4.1 Technical data

	DX 9-HSN
Weight	30.0 lb (13.6 kg)
Dimensions (L × W × H)	39.3 in × 17.5 in × 7.4 in (999 mm × 445 mm × 188 mm)
Magazine capacity	60 nails / 40 cartridges
Suitable cartridges	6.8/11 M40 red or other cartridges of a type approved for use with the tool
Suitable fasteners	X-HSN 24
Thickness of the supporting steel	1/8 ... 3/8"
Compression stroke	3.5 in (89 mm)
Contact pressure	≥ 81 lb, (≥ 360 N)
Application temperature (ambient temperature)	5 °F ... 122 °F (-15 °C ... 50 °C)

4.2 Noise information

The noise values listed were determined under the following conditions:

General conditions for noise measurements

Direct fastening tool	DX 9-HSN
Model	Series
Caliber	6.8/11 red
Power setting	4
Application	Fastening to steel plate (Brinell hardness 358 N/mm ²) using the X-HSN 24

Noise information in accordance with EN 15895

Emission sound pressure level (L _{pa})	98 dB(A)
Uncertainty for the sound pressure level (K _{pa})	2 dB(A)
Sound (power) level (L _{WA})	106 dB(A)

Uncertainty for the sound power level (K_{WA})	2 dB(A)
Peak sound pressure emission level ($L_{pC, peak}$)	131 dB(C)
Uncertainty for the peak sound pressure level (K_{pCpeak})	2 dB(C)

4.3 Vibration

The vibration value that must be specified in accordance with 2006/42/EC does not exceed 2,5 m/s².

5 Operation

5.1 Preparations at the workplace

5.1.1 Establishing the position of the fasteners

To avoid incorrectly driven fasteners, proceed as follows:

- ▶ Each time you lay a metal sheet in position on the steel beams, use a water-resistant pen to mark the area in which fasteners can be driven.



Note

Do this each time, for each individual metal sheet. It is not sufficient to simply mark the ends of the beam and then draw a straight line between these points as the supporting beams may be distorted, i.e. curved.

5.1.2 Checking that the tool is ready for use



Note

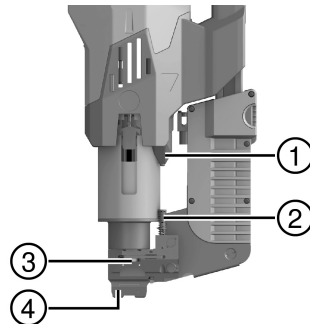
This check should always be carried out immediately before use of the fastening tool and after reassembling the tool after cleaning or after a routine check of the condition of the piston and piston brake.

1. Check the fastening tool for visible signs of damage, especially to the components shown in the illustration.

Result

Visible signs of damage are found.

- ▶ Have the tool repaired by **Hilti Service**.



- ① Catch
- ② Pressure pin
- ③ Slider and pivoting plate
- ④ Nosepiece

2. Make sure that there are **no cartridge strips and no nail strips** in the tool.

- Press the tool against the working surface until a definite resistance is felt and then check the position of the pressure pin.

Result 1 / 2

The pressure pin is not pressed down – the spring on the pressure pin is not compressed.

The tool has detected no nail and thus cannot be pressed against the working surface. The tool is working correctly.

Result 2 / 2

The pressure pin is pressed all the way down, the spring on the pressure pin is compressed and a click is heard when the trigger is pressed.

The slider and pivoting plate may be jammed. The tool should be cleaned again and the test repeated. If the problem persists, the tool must be repaired by **Hilti Service**.

- Release any pressure on the tool.

- Load the nail strips → page 10, but **do not load any cartridge strips**.

- Press the tool against the working surface again and check whether a click can be heard when the trigger is pulled.

Result 1 / 3

The tool cannot be pressed fully against the working surface – triggering is not possible.

- ▶ Check that the rotating sleeve is closed. If necessary, turn the rotating sleeve to the left as far as it will go.
- ▶ Check the position of the slider. If the slider has not clearly pivoted out so that it projects, have the tool repaired by **Hilti Service**.

Result 2 / 3

The tool can be pressed fully against the working surface (the spring on the pressure pin is fully compressed) and a click is heard when the trigger is pressed.

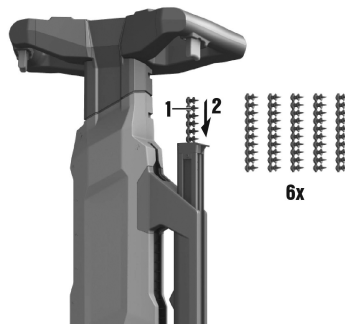
The nail detector in the tool is working correctly and the tool can be used.

Result 3 / 3

The tool can be pressed fully against the working surface (the spring on the pressure pin is fully compressed) but no click is heard when the trigger is pressed.

- ▶ Have the tool repaired by **Hilti Service**.

5.1.3 Loading fastener strips



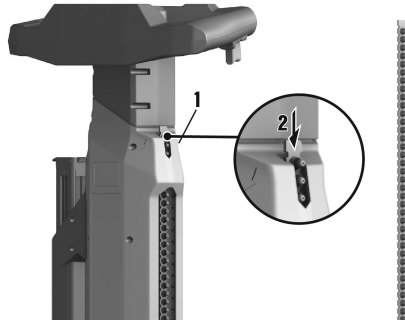
- Insert 6 fastener strips in the magazine from above.

Materials

Fasteners
X-HSN 24

- Press the last fastener strip in until it lies flush with the magazine.

5.1.4 Loading cartridge strips



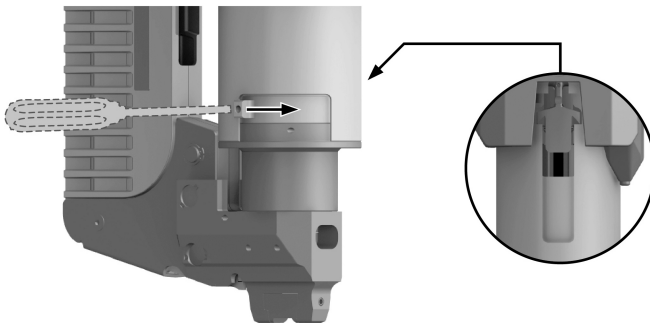
1. Insert the cartridge strips from above in the cartridge loading channel.

Materials

6.8/11 M40 red or other cartridges of a type approved for use with the tool (please refer to the cartridge recommendations printed in the instructions for use of the fasteners)
--

2. Press the cartridge strip into the cartridge loading channel until it lies flush with the top edge of the cartridge loading channel.

5.1.5 Opening the rotating sleeve

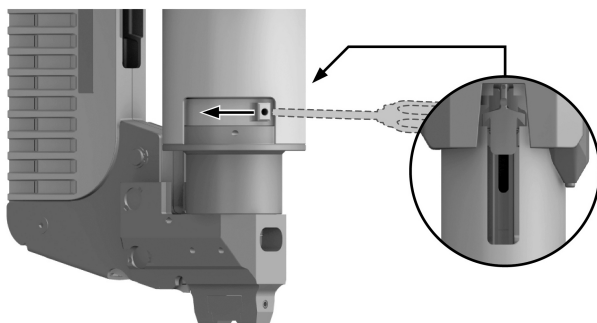


- ▶ Turn the rotating sleeve as far as it will go. Use the scraper or some other tool as an aid, if necessary.

**Note**

If the fastening tool is jammed, it will then be possible to access the catch.

5.1.6 Closing the rotating sleeve



- ▶ Turn the rotating sleeve as far as it will go. Use the scraper or some other tool as an aid, if necessary.



Note

If the rotating sleeve is not fully closed it will not be possible to press the fastening tool fully against the working surface and, accordingly, the tool cannot be operated.

5.2 Operation

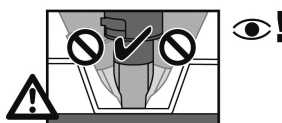
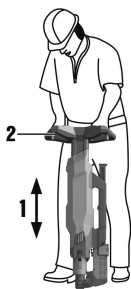
5.2.1 Driving fasteners



CAUTION

Risk of injury! If the tool is extremely hot (see service indicator display) cartridges may explode due to the effect of the heat, causing flying fragments.

- ▶ Remove the cartridges from the tool immediately before breaks between working.
- ▶ If the cartridges cannot be removed from the tool, lay the tool down and make sure that all persons keep a safe distance away from the tool (3 meters) until the pointer on the temperature indicator has moved all the way to the left.



1. Press the tool against the working surface at right angles.
2. Press the trigger buttons on the grip.
 - ◀ The fastener is driven.
 - ▼ The tool doesn't fire (no fastener is driven).
 - ▶ Check that there is a sufficient number of fasteners in the magazine.



Note

The fasteners are not transported when the magazine contains less than 15 fasteners. You must first insert additional fastener strips in the magazine.

- Position the tool at the point where the next fastener is to be driven and repeat the steps described. In doing so, observe the information shown in the display. → page 7



Note

Nail stand-off should be checked immediately after driving the first fasteners and subsequently at regular intervals so that the driving power of the tool can be set to the right value in order to ensure that fasteners are driven correctly.

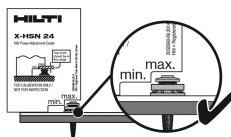
5.2.2 Checking the nail stand-off

- Use the test gauge to check the nail stand-off.

Result 1 / 3

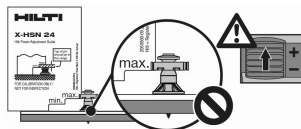
- Nail stand-off is within the required range.

The tool power setting is incorrect. The test is complete.



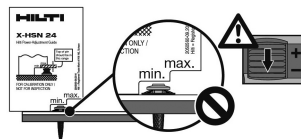
Result 2 / 3

- Nail stand-off is too high.
- ▶ Increase the power setting by turning the power regulation wheel to the next higher setting.



Result 3 / 3

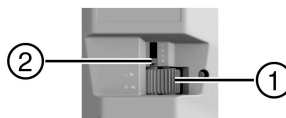
- Nail stand-off is too low.
- ▶ Reduce the power setting by turning the power regulation wheel to the next lower setting.



- Drive another fastener.
- Repeat the previously described steps until the correct nail stand-off is achieved.

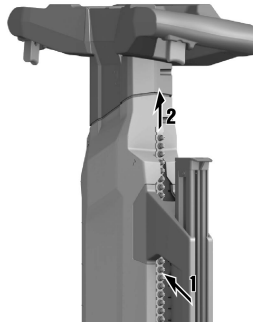
5.2.3 Adjusting the power setting

- ▶ Turn the power regulation wheel to set the desired nail driving power.
 - ◀ The current power setting is indicated.



- ① Power regulation wheel
- ② Power setting indicator

5.2.4 Removing cartridges from the tool



1. Press the cartridge strips forward, as far as possible, in the direction of advance.
2. Pull the cartridge strips out of the tool at the cartridge strip exit aperture.

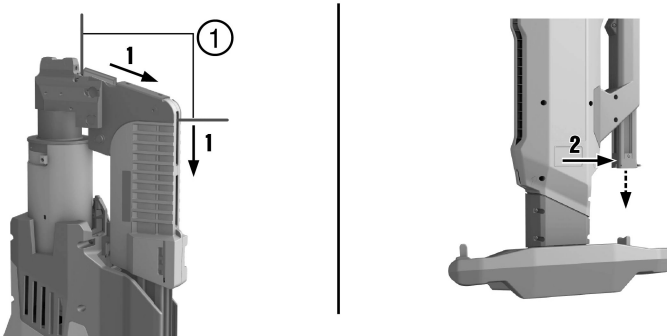
5.2.5 Removing fasteners from the tool



Note

The fasteners can normally remain in the tool. It is not necessary to remove them, for example, when you are finished working with the tool.

1. Check that the cartridges have already been removed from the tool. → page 14
2. Stand the tool on its grip.



3. Use the ramrod (1) supplied, or an equivalent tool, to push the fasteners back into the magazine.
4. Press the red latch at the mouth of the magazine and allow the fastener strips to slide back out of the magazine.

6 Care and maintenance

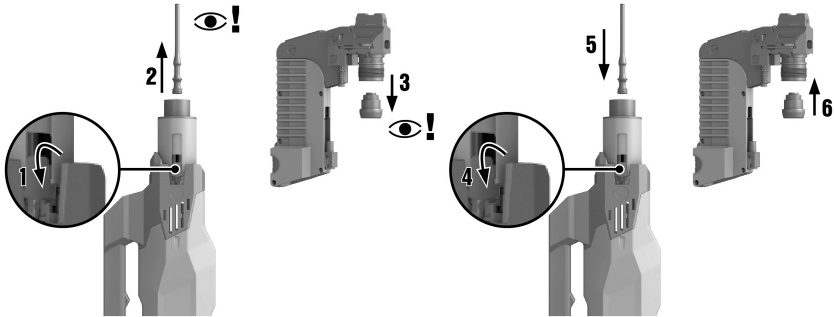
6.1 Check the piston and piston brake and replace the parts if necessary.



Note

The condition of the piston and piston brake must be checked at regular intervals and at least daily.

1. Disassemble the base plate. → page 15



2. Pull out the catch and hold it in this position. Pull the piston out of the piston guide and then release the catch.
3. Pull the piston brake out of the base plate.
4. Check the piston and piston brake for damage. Check the piston for straightness by rolling it on a smooth surface.



Note

Never use a worn or damaged piston and do not tamper with or modify the piston. Observe the wear criteria applicable to important tool components, as listed in the “Care and maintenance” section. → page 18

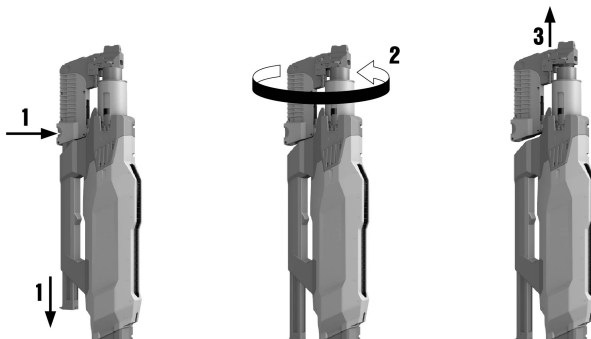
Result

If damage is found or if the piston is bent

- Replace the piston and piston brake as a set.

5. Pull out the catch and hold it in this position. Insert the piston, pushing it in until the tip of the piston no longer projects beyond the end of the tool, and then release the catch.
6. Fit the piston brake into the base plate.
7. Fit the base plate. → page 16

6.2 Disassembling the base plate



WARNING

Risk of injury! Cartridges in the tool could fire (explode).

- Check that all cartridges have been removed from the tool before carrying out the following tasks with the tool.



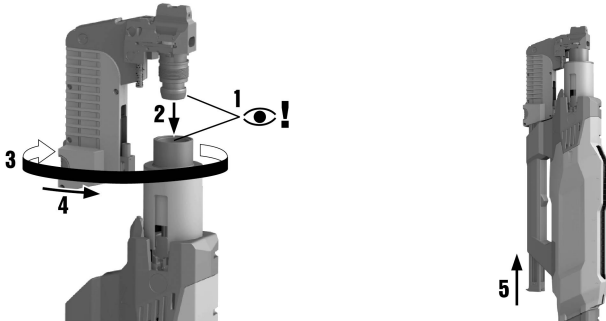
DANGER

Risk of burns! Parts of the tool may be very hot after the tool has been in use.

- ▶ If it is necessary to carry out maintenance without first allowing the tool to cool down, it is essential that protective gloves are worn.

1. Stand the tool on its grip.
2. Press the magazine release button (red button) on the magazine and allow the magazine to slide down.
3. Rotate the base plate in a counter clockwise direction, until the connection is released.
4. Lift off the base plate.

6.3 Fitting the base plate



1. Make sure that the piston brake is correctly fitted in the base plate and that the piston guide and the piston are correctly seated in the tool.
2. Press the base plate against the thread.
3. Rotate the base plate in a clockwise direction as far as it will go.
4. Rotate the base plate back slightly until it is in its starting position relative to the magazine.
5. Push the magazine back until it engages with the base plate.

6.4 Cleaning the fastening tool



WARNING

Risk of injury! Cartridges in the tool could fire (explode).

- ▶ Check that all cartridges have been removed from the tool before carrying out the following tasks with the tool.

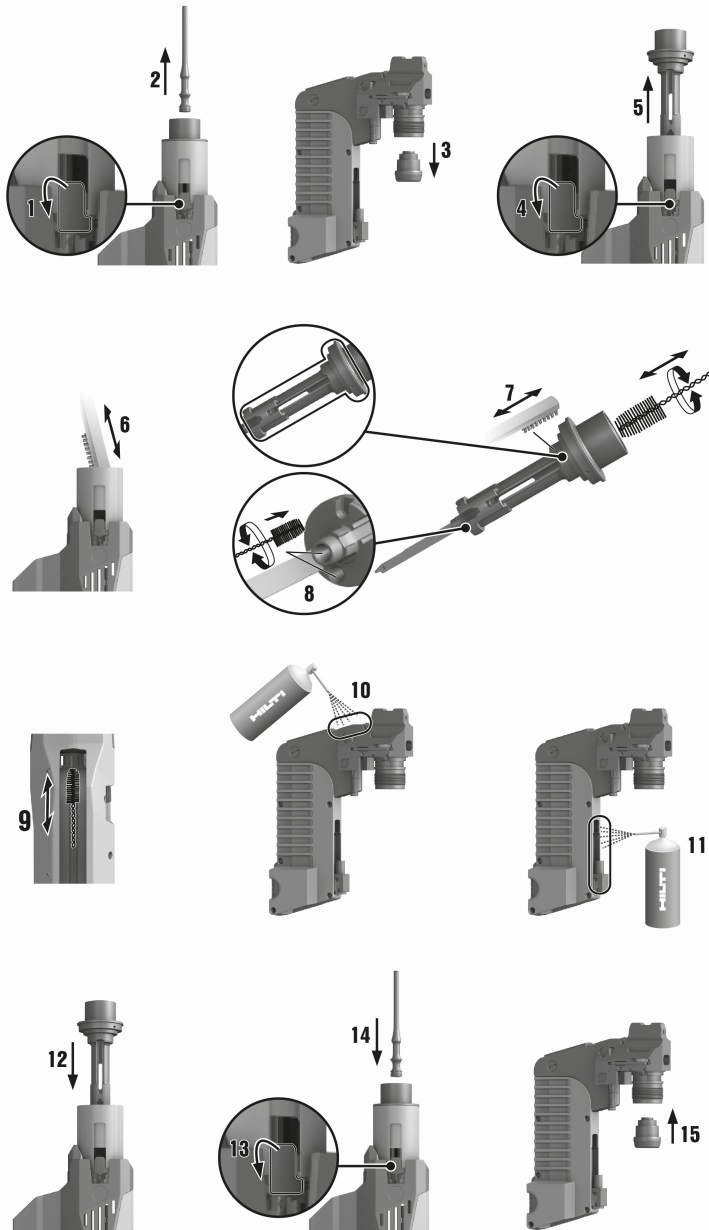


DANGER

Risk of burns! Parts of the tool may be very hot after the tool has been in use.

- ▶ If it is necessary to carry out maintenance without first allowing the tool to cool down, it is essential that protective gloves are worn.

1. Disassemble the base plate. → page 15



2. Pull out the catch and hold it in this position. Pull the piston out of the piston guide and then release the catch.
3. Pull the piston brake out of the base plate.

4. Pull out the catch and hold it in this position. Pull the piston guide upwards out of the tool and then release the catch.
5. Clean the inside of the tool. Then stand the tool upside down and tap it firmly with your hand so that the dirt falls out.
6. Use the large accessory wire brush to clean the surfaces of the piston guide (see marked area).
7. Use the small round brush to clean the cartridge chamber and the adjoining holes for the power regulation pin.
8. Use the narrow round brush to clean the cartridge guideway.
9. Use **Hilti** lubricant spray to lubricate the moving parts of the fastener strip guides and the fastener strip guides in the base plate.



Note

Use of other lubricants may damage the rubber parts, especially the piston brake. Moreover, other lubricants may cause dust to adhere to parts of the tool resulting in a build-up of deposits.

10. Slide the piston guide into the tool from above, until the catch engages.
11. Pull out the catch and hold it in this position. Insert the piston, pushing it in until the tip of the piston no longer projects beyond the end of the tool, and then release the catch.
12. Fit the piston brake into the base plate.
13. Fit the base plate. → page 16
14. Press the reset button for at least 1 second to reset the counter for the number of fasteners driven until the next scheduled cleaning operation is due.
15. Check that the tool is ready for use. → page 9



6.5 Wear criteria for important parts of the tool




Note

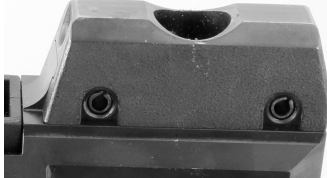

Damage to parts, in cases where replacement of the parts is obviously necessary, e.g. when parts are broken, is not listed in the following tables.

Piston and piston brake wear criteria

Status	Illustration showing example	Annotation
New condition		
Worn Note Always replace the piston and piston brake together.		Depressions (dents) in the piston are clearly visible.

Status	Illustration showing example	Annotation
Worn Note Always replace the piston and piston brake together.		The rubber part of the piston brake is cracked or torn. The rubber part has become detached from the metal part (no illustration).

Nosepiece wear criteria

Status	Illustration showing example	Annotation
New condition		
Worn Have it replaced by Hilti Service		Obvious signs of chipping.

7 Troubleshooting

7.1 Remediating malfunctions after misfiring

- ▶ Press the nose of the tool against the working surface and pull the trigger.
 - ▼ The cartridge doesn't fire.
 - ▶ Lift the tool away from the working surface. When doing so, never point the tool toward yourself or other persons.
 - ▶ Advance the cartridge strip manually to the next cartridge by pushing it by hand at the cartridge feed side or, alternatively, by pulling the cartridge strip through manually to the next cartridge at the cartridge strip exit side.
 - ▶ Use up the remaining cartridges on the strip. The partly-used cartridge strip must then be removed and disposed of appropriately to prevent further use or misuse of any unfired cartridges.

7.2 Remediating the malfunction if the tool jams



WARNING

Risk of explosion! Cartridges may fire (explode) if handled improperly.

- ▶ Do not attempt to forcibly remove cartridges from the magazine strip or tool.

1. Press the nose of the tool in a few millimeters and open the rotating sleeve → page 11.
 - ◀ The catch should then be accessible, making it possible to release the tool.
2. Remove the cartridges from the tool. → page 14
3. Check the piston and piston brake and replace these parts if necessary. → page 14
4. Clean the fastening tool. → page 16
5. Close the rotating sleeve. → page 12


7.3 Troubleshooting

If the trouble you are experiencing is not listed in this table or you are unable to remedy the problem by yourself, please contact **Hilti Service**.

Trouble or fault	Possible cause	Action to be taken
The cartridges are not transported.	The cartridge strip is damaged.	▶ Change the cartridge strip. Do not attempt to forcibly remove cartridges or the cartridge strip.
	The tool is damaged.	▶ Contact Hilti Service .
The cartridge strip cannot be removed.	The tool is damaged.	▶ Contact Hilti Service .
The tool doesn't fire.	Misfire	▶ Remedy the malfunction. → page 19
	The cartridge strip is used up.	▶ Remove the cartridge strip from the tool. ▶ Insert a new cartridge strip.
	There are less than 15 fasteners in the tool.	▶ Load new fastener strips.
	The tool is not adequately compressed.	▶ Press the nose of the tool against the working surface again and pull the trigger.
	Fastener transport malfunction.	▶ Check that the fastener strips are free to move. ▶ Remove any damaged or defective cartridge strips or strips containing damaged or defective fasteners.
	The tool is clogged with dirt.	▶ Clean the tool.
	The cartridges are unsuitable.	▶ Contact Hilti Service . ▶ Do not attempt to forcibly remove cartridges or the cartridge strip.
	The tool is damaged.	▶ Contact Hilti Service .
Nail stand-off is too low.	The fastener missed the beam.	▶ Mark the position of the beam and drive another fastener.
	Driving power is too high.	▶ Reduce the driving power (adjust the power regulation) or use less powerful cartridges – if available.
	The piston and piston brake are worn and/or damaged.	▶ Change the piston and piston brake together (as a set).
	The piston brake wasn't fitted.	▶ Fit the piston brake into the base plate.
Nail stand-off is too high.	The fastener is too close to the edge of the beam.	▶ Mark the position of the beam and drive another fastener.
	Driving power is too low.	▶ Increase the driving power (adjust the power regulation) or use more powerful cartridges – if available.
	The tool is clogged with dirt.	▶ Clean the tool.

Trouble or fault	Possible cause	Action to be taken
Nail stand-off is too high.	The piston is broken.	► Change the piston and piston brake together (as a set).
	The tool is damaged.	► Contact Hilti Service .
Shear breakage.	The fastener was driven into the rib of the beam.	► Mark the position of the rib of the beam and then drive another fastener alongside.
	The fasteners are not suitable for the supporting material.	► Use only the fasteners specified for the material for which they are intended, in accordance with the instructions.
	The supporting material is thicker and/or of higher strength.	► Increase the driving power (adjust the power regulation) or use more powerful cartridges – if available.
	The piston jams in the piston brake.	► Turn the rotating sleeve and change the piston and piston brake together (as a set). → page 14.
	The piston guide is clogged with dirt.	► If necessary, turn the rotating sleeve, disassemble the base plate → page 15 and clean the piston guide → page 16.
The tool remains compressed (does not extend when pressure is released).	The piston jams in the piston brake.	► Turn the rotating sleeve and change the piston and piston brake together (as a set). → page 14.
	The piston guide is clogged with dirt.	► If necessary, turn the rotating sleeve, disassemble the base plate → page 15 and clean the piston guide → page 16.
No fastener is driven.	The piston wasn't fitted.	► Fit the piston in the tool.
	The piston is broken.	► Change the piston and piston brake together (as a set).
	The fastener guide is clogged with dirt.	► Clean the base plate and the parts attached to it using the brushes intended for this purpose.
	A fastener is jammed in the fastener guide.	► Remove the jammed fastener. ► Avoid shear breakage. Avoid missing the beam. It may be necessary to mark the position of the beam better in future.
The tool cannot be pressed fully against the working surface.	The rotating sleeve is not fully closed.	► Close the rotating sleeve. → page 12
	The nail detector is jammed.	► Clean the base plate and remove all foreign objects. Take care to ensure adequate lubrication of the fastener strip guides with Hilti lubricant spray.
	Part of the nail detector is broken.	► Check for correct operation of the nail detector by checking that the tool is ready for use → page 9.

8 Disposal

 Most of the materials from which **Hilti** tools and appliances are manufactured can be recycled. The materials must be correctly separated before they can be recycled. In many countries, your old tools, machines or appliances can be returned to **Hilti** for recycling. Ask **Hilti** Service or your Hilti representative for further information.

9 Manufacturer's warranty

► Please contact your local **Hilti** representative if you have questions about the warranty conditions.



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