



6084

# DX 600 N

## Operating instructions

2-10

## 취급설명서

11-19

# HILTI

	Page no.
Technical data	2
Technical description	3
Safety devices	3
Safety rules	4
Operation	5
Changing the piston and fastener guide	6
Changing the stop ring	7
Changing the protection shield (spall guard)	7
Replacing the piston ring	7
Cleaning and servicing	8
Fastening guidelines	9
Protection shields	9
Fastener and cartridge programme	9
Manufacturer's warranty – DX tools	10



Applications:	Medium and heavy-duty fastenings to concrete and structural steel
Weight:	4.96 kg (10.912 lbs)
Length:	360 mm (73.79")
Cartridges:	6.8/18 cartridges available in 3 power levels
Cartridge ejection:	automatic
Fasteners:	W10, EW10 threaded studs DS, EDS nails 72 mm (2 7/8") long

## Technical description

## Safety devices

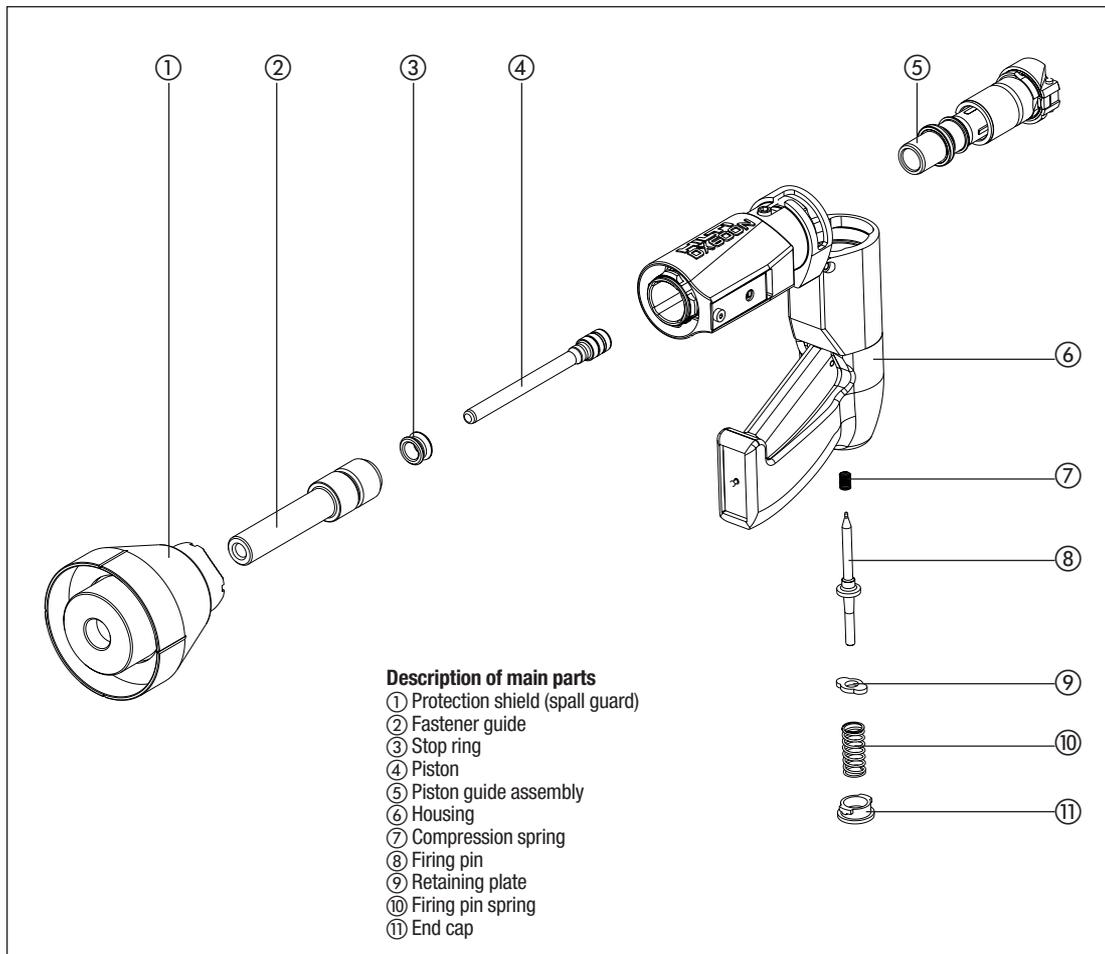
Your new Hilti DX 600 N tool is designed to make heavy-duty threaded stud fastenings to concrete and other base materials suitable for powder-actuated fastening (see Hilti Fastening Technology Manual). Using a tool with the proven safe, low-velocity, captive-piston principle, you can make fastenings formerly requiring high-velocity tools.

The tool has not been approved for use in an explosive atmosphere.

As with all powder-actuated tools, the DX 600 N, equipment, fastener programme and cartridge programme form a «technical system». This means that trouble-free fastening with this system can only be obtained if the fasteners and cartridges specially manufactured for the DX 600 N, or products of equivalent quality, are used. The fastening and application recommendations given by Hilti are only applicable if this condition is observed.

To ensure that the DX 600 N is always ready for use, please follow the operating, cleaning and servicing procedures.

If you have any questions which cannot be answered from the operating instructions, or if you have a special fastening problem, Hilti customer service, our your local Hilti representative is always available to help you.



# Safety rules

Failure to follow these rules may result in personal injury.

## Warnings

1. Never attempt to use the tool without first having received proper instruction on its use and associated safety precautions. Contact your local Hilti sales representative for assistance.
2. Always use the tool strictly in accordance with the operating instructions. The operating instructions should always be kept with the tool.
3. Never point the tool at yourself or any bystander.
4. Never press the muzzle of the tool against your hand or other part of your body.
5. The operator, and any other persons in the immediate vicinity, must wear suitable protective goggles and a hardhat while the tool is in use.

## Safety precautions

6. Never leave the loaded tool unattended. Always unload the tool before beginning cleaning and servicing, before putting the tool away at the end of the day, before work breaks, and before changing parts.
7. Wear ear protectors when using the tool in confined areas.
8. Always check that the tool is undamaged and fully functional before it is used. Never attempt to use an incomplete or malfunctioning tool.
9. Keep the arms flexed when the tool is fired (do not straighten the arms). Stop working with the tool if you feel pain or discomfort.
10. Avoid unfavorable body positions. Work from a secure stance and stay in balance at all times.
11. Always hold the tool perpendicular to the working surface.
12. To avoid the risk of injury, use only original Hilti fasteners, cartridges, accessories and spare parts or those of equivalent quality
13. If a cartridge misfires or fails to ignite, proceed as follows:
  - Keep the tool pressed against the working surface for 30 seconds.
  - If the cartridge still fails to fire, withdraw the tool from the working surface, taking care that it is not pointed towards your body or bystanders.
  - Unlock and open tool, cartridge will automatically be extracted.
  - Dispose of the cartridge in such a way that it can be neither reused nor misused.
  - If an unfired cartridge becomes stuck in your tool, contact Hilti. Never attempt to pry out an unfired cartridge.
14. Never attempt to drive a fastener in an existing hole, except where recommended by Hilti, e.g. when using the DX-Kwik system.
15. Always keep the tool and cartridges in a closed container in a safe place when not in use.
16. Do not operate the tool in an explosive or flammable atmosphere, unless the tool is approved for such use.
17. Application recommendations must always be observed.
18. Before using the tool, make sure that no one is standing behind or below the point where fasteners are to be driven.
19. Do not disassemble the tool while it is hot.

## General notes

20. Never attempt to redrive the same fastener.
21. The applicable national regulations must always be observed, particularly those relating to accident prevention.

# Operation



With the unloaded tool closed and locked, insert the stud or nail into the guide, head first.



Using the ramrod, push back the stud or nail until it stops.  
Remove the ramrod.  
Caution: Use only the ramrod end having the same diameter as the guide bore. If necessary, the grip may be fitted to the other end of the ramrod.



Rotate the front end of the tool to unlock it, pull it forward and lower to open the tool.



Place the cartridge into the chamber. Do not depress ejector lever.



Raise the grip end to align with the front of the tool, push it forward to mate the parts, and rotate to the locked position.  
**Caution: Always keep tool pointing down – and away from any person.**



Line up the scribe marks on the protection shield with the layout lines (when necessary). Press the tool firmly against the work surface and squeeze the trigger.  
Caution: The tool must be perpendicular to the work surface.  
**After each fastening: Do not unlock the tool.** First, insert the fastener as in illustrations 1 and 2.



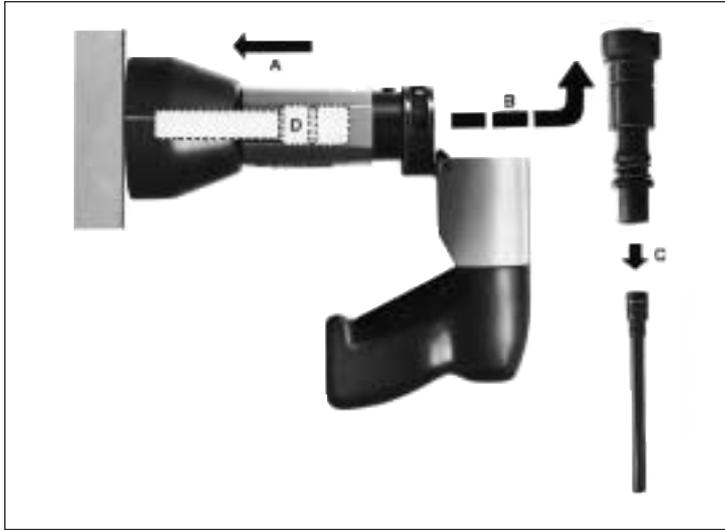
**Ejecting the cartridge case:**  
Unlock and open the tool.  
Swing down the front end and the used cartridge will be ejected automatically.

Caution: Should an occasional spent cartridge fail to eject automatically, it can easily be removed with the fingers. Take care that it has cooled enough for handling.  
Never attempt to pry out an unfired cartridge.  
Contact your Hilti representative.



**Caution: Never compress the tool with your hand or against any part of your body.**  
**Never attempt to insert a fastener with the ramrod when an unfired cartridge is in the tool.**

## Changing the piston and fastener guide



Open the tool by rotating the front end and pulling it forward. Make sure there is no cartridge in the tool.

Press the front of the opened tool against a hard surface (A).

Remove the piston guide assembly and piston (B).

Separate the piston and piston guide assembly (C).

Now point the front end of the tool upwards and the guide will slide out (D).

Note: the guide (D) will only slide out, if the protection shield is mounted.



### Assembly:

Put a stop ring onto the piston (E).

Put the proper piston into the guide (F).

**Warning:** Make sure the correct piston is used. It is marked 6N/DS. Insert the guide complete with piston into the front section (G).

Note: Insert the guide only when the protection shield is mounted. Now place the piston guide assembly in position (H).

Note: The groove in the piston guide assembly and end of the Allen guide screw must be aligned.

## Changing the stop ring

The stop ring is provided to absorb excess energy and help the piston from overdriving if the cartridge is too powerful or the base material too soft or irregular. It may be damaged and have to be replaced. If the piston is difficult to move with the ramrod, the stop ring should be replaced. To replace it, disassemble the tool and remove the piston.

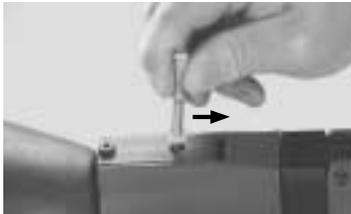


Place the extractor sleeve over the piston head, as shown, and strike the piston against a hard surface to remove the stop ring.



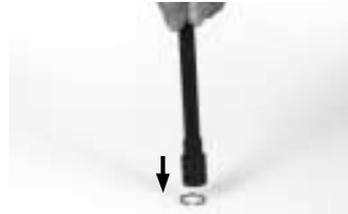
Insert the piston through the new stop ring and reassemble the tool as described.

## Changing the protection shield (spall guard)



Move back the retaining latch with the point of a fastener, rotate the protection shield 45° and remove it. Press in the new protection shield and rotate it until it locks.

## Replacing the piston ring



Place the piston ring on a hard surface. Press down the piston into the piston ring.



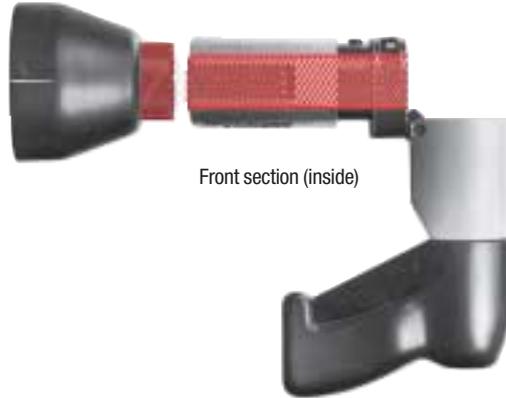
Move the piston ring by hand up to the first recessed part.

## Cleaning and servicing

To keep the tool ready for use, it should be cleaned at least once a week after normal use or immediately after every 1,000 fastenings.

For cleaning, the tool should be dismantled. The following surfaces must be cleaned.

Boss on protection shield (inside and outside)



Front section (inside)

Fastener guide (outside)



Piston (outside)



Piston guide (inside and outside)  
Chamber (inside)

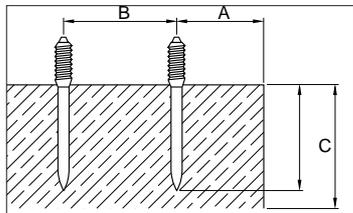


### CAUTION while cleaning the tool:

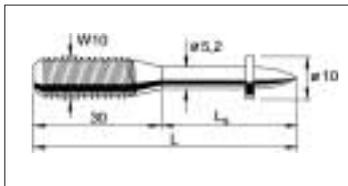
- Never use grease for maintenance/lubrication of tool parts. This may strongly affect the functionality of the tool. Use only Hilti spray or such of equivalent quality.
- Dirt from DX tool contains substances that could be endangering your health.
  - Do not breath in the dust from cleaning
  - Keep dust away from food
  - Wash your hands after cleaning the tool

## Fastening guidelines

For more specific information, refer to the Hilti Fastening Technology Manual, which is available from your local Hilti marketing organisation or, if necessary, refer to your national technical regulations.



**W10-30-yy P10 threaded stud (concrete)**



### Length of stud for concrete

Penetration depth ( $h_{nom}$ )  
27 mm minimum

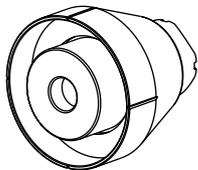
### Concrete:

A = min. edge distance = 70 mm (2<sup>3</sup>/<sub>4</sub>"

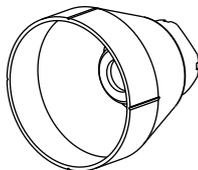
B = min. spacing = 80 mm (3<sup>1</sup>/<sub>8</sub>"

C = min. base material thickness =  
100 mm (4")

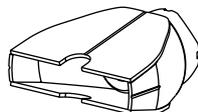
## Protection shields



6N/S4 standard



6N/S1



6N/S7

## Standard fastener programme

### W10/X-W10 studs for concrete



Thread length	Shank length		Shank diameter		Ordering designation	
	mm	inch	mm	inch		
30	1 <sup>1</sup> / <sub>4</sub> "	27	1"	5.2	0.205"	<b>W10-30-27 P10</b>
30	1 <sup>1</sup> / <sub>4</sub> "	32	1 <sup>1</sup> / <sub>4</sub> "	5.2	0.205"	<b>W10-30-32 P10</b>
30	1 <sup>1</sup> / <sub>4</sub> "	42	1 <sup>5</sup> / <sub>8</sub> "	5.2	0.205"	<b>W10-30-42 P10</b>



<b>27</b>	32	1 <sup>1</sup> / <sub>4</sub> "	4.5	0.177"	<b>X-W10-27-32 P10</b>
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### EW10 stud for steel



Thread length	Shank length		Shank diameter		Ordering designation	
	mm	inch	mm	inch		
30	1 <sup>1</sup> / <sub>4</sub> "	15	5 <sup>5</sup> / <sub>8</sub> "	5.2	0.205"	<b>EW10-30-15 P10</b>

### Standard Cartridge



Colour code	Power level	Ordering designation
<b>yellow</b>	light/medium	<b>6.8/18 yellow</b>
<b>red</b>	heavy	<b>6.8/18 red</b>
<b>black/purple</b>	magnum	<b>6.8/18 black/purple</b>

## Manufacturer's warranty – DX tools

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Hilti warrants that the tool supplied is free of defects in material and workmanship. This warranty is valid so long as the tool is operated and handled correctly, cleaned and serviced properly and in accordance with the Hilti Operating Instructions, and the technical system is maintained. This means that only original Hilti consumables, components and spare parts, or other products of equivalent quality, may be used in the tool.

This warranty provides the free-of-charge repair or replacement of defective parts only over the entire lifespan of the tool. Parts requiring repair or replacement as a result of normal wear and tear are not covered by this warranty.

**Additional claims are excluded, unless stringent national rules prohibit such exclusion. In particular, Hilti is not obligated for direct, indirect, incidental or consequential damages, losses or expenses in connection with, or by reason of, the use of, or inability to use the tool for any purpose. Implied warranties of merchantability or fitness for a particular purpose are specifically excluded.**

For repair or replacement, send tool or related parts immediately upon discovery of the defect to the address of the local Hilti marketing organization provided.

This constitutes Hilti's entire obligation with regard to warranty and supersedes all prior or contemporaneous comments and oral or written agreements concerning warranties.