



QUICK START GUIDE – SUPPLEMENT

DX 9-HSN DX 9-ENP



2487268-2025.11.20

| | | |
|--|---|-------------------------|
| SAFETY FIRST | | 3 |
| TOOL ANATOMY | | 4–6 |
| SELECTING THE RIGHT NAIL, TOOL & CARTRIDGE | | 7 |
| FASTENING METAL DECK TO THE STEEL STRUCTURE | INSTALLING THE DECKING NAIL UNDERSTANDING THE SERVICE INDICATOR | 8 9 |
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Additional resources available are:

- Quick start guide
- Tool Operating Instructions
- How to video (use the resources in the Hilti Connect App, Hilti online or Hilti channel in YouTube)

**1****Requirements to be met by the user**

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.

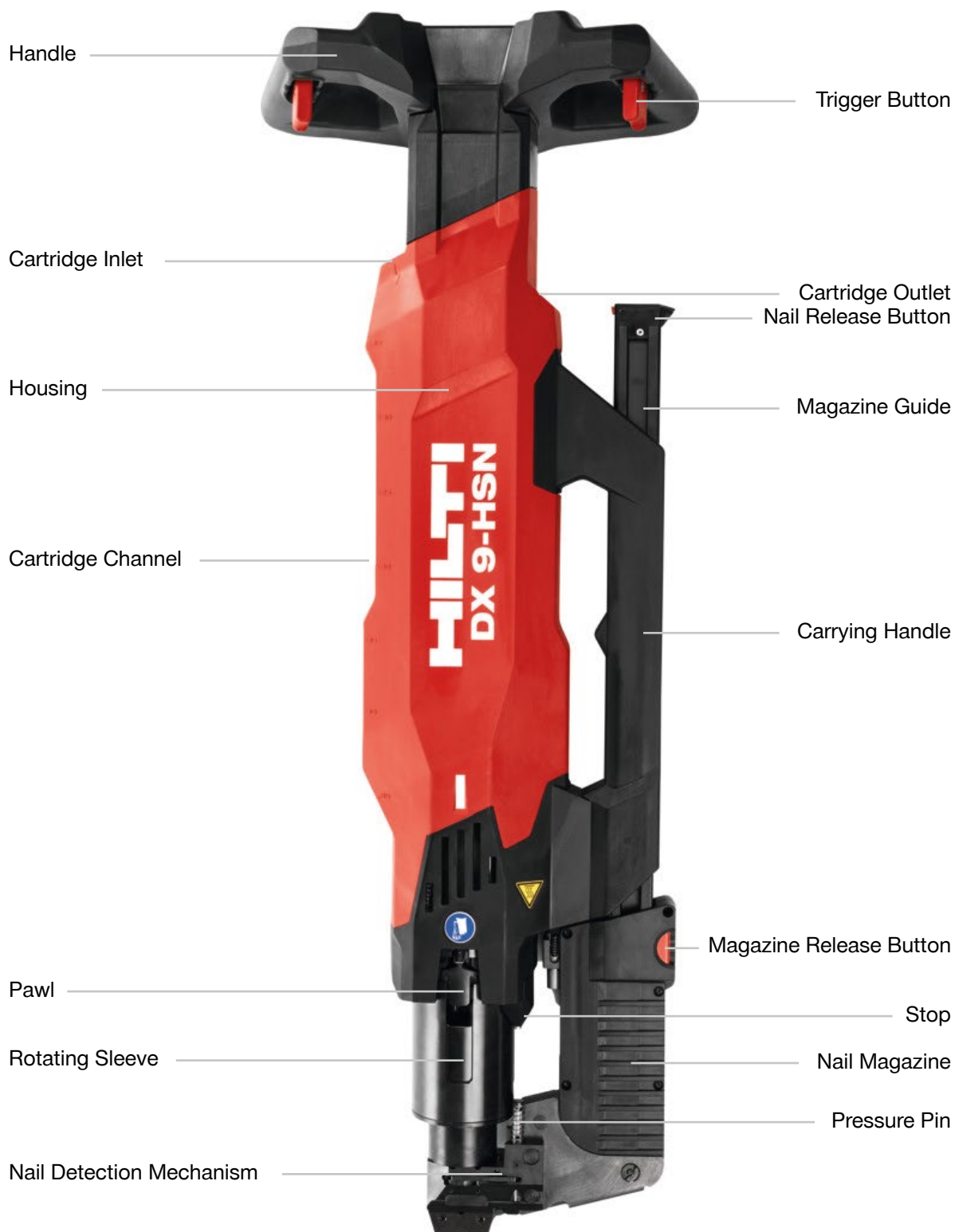
2**Personal Protective Equipment (PPE)**

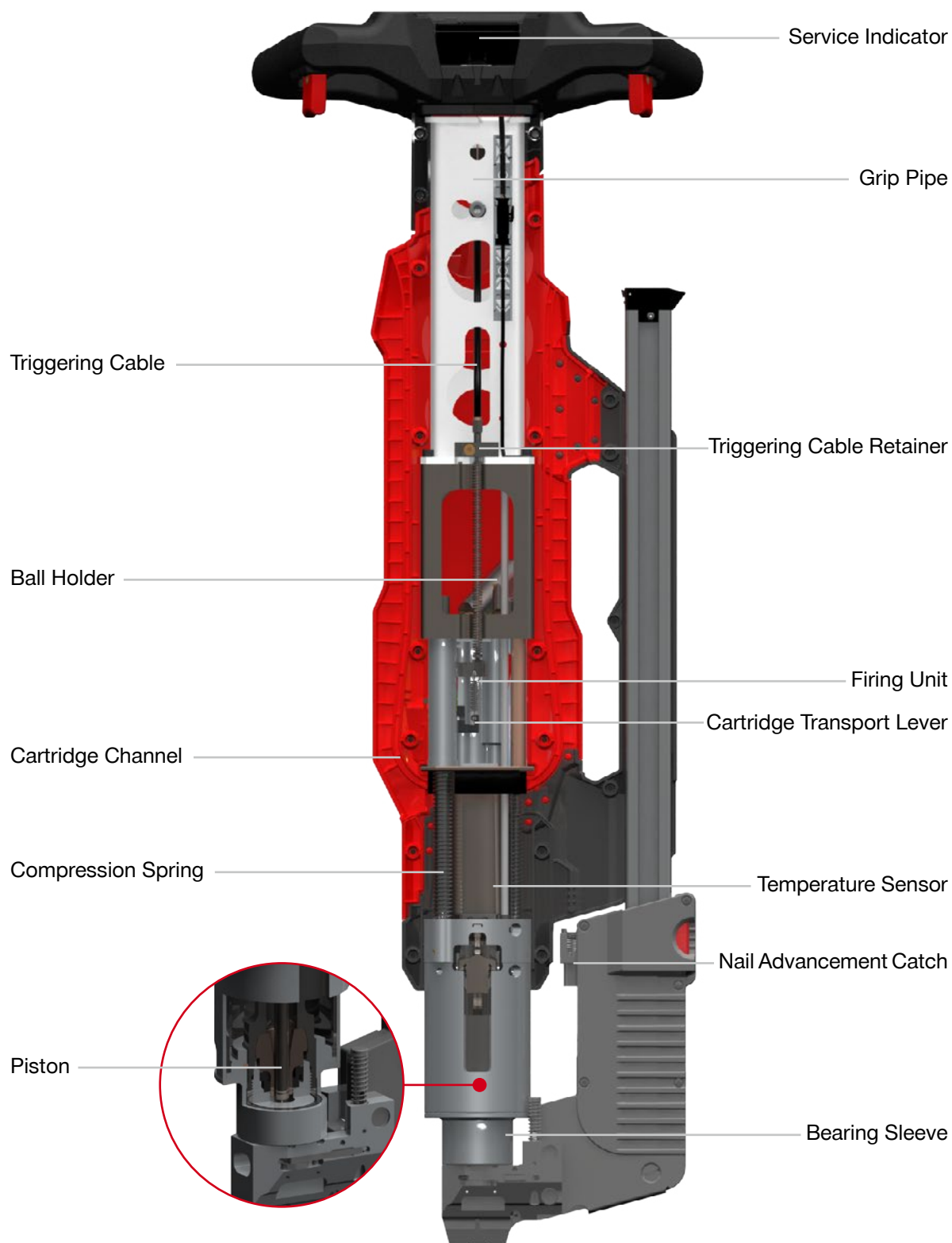
Operator and bystanders must wear helmet, eye and ear protection. Hilti recommends the operator wear hand gloves. In addition, all the jobsite safety requirements (steel toe safety shoes, safety harness, high visibility vest, etc.), deemed necessary by the local regulations and jobsite requirements must be adhered to.

**3****Personal safety**

- Never tamper with or modify the tool in any way.
- Do not use the tool for purposes for which it was not intended.
- 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 persons 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 help prevent the fastener being deflected by the surface.
- Never redrive a fastener, as this may cause the fastener to brake.
- 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 Pawl, as this presents a risk of injury to the operators 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 Tool Service.
- Always use the protective cap for tasks that can produce flying splinters.

Information here is general: read the operating instructions for complete details





Bearing Sleeve

Piston Guide Assembly

Slider



Piston

Piston Stop

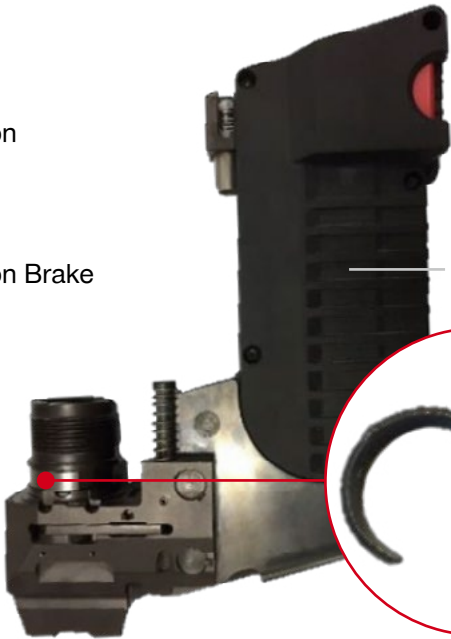
ENP



HSN

Piston

Piston Brake



Nail Magazine



Piston Retainer Kit

Selecting the right nail, tool and cartridge is a pre-requisite for good quality fastening.
In addition, improper selection can lead to excessive wear on the DX 9 deck fastening tool.

1 HSN

Select the right nail

X-HSN 24 fastener is used for fastening deck to bar joist and light gauge steel structure in the thickness range 1/8" (3.2 mm) to 3/8" (9.6 mm).



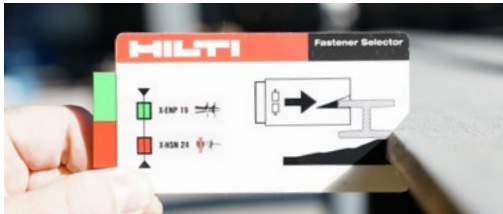
1 ENP

Select the right nail

X-ENP-19 L15MXR fastener is used for fastening deck to structural steel 1/4"(6.4 mm) to full steel.



A fastener selection guide is available to aid in selecting the right nail if doubtful. It is included in every DX 9 tool case and can also be ordered separately.



2 HSN

Select the right tool

For the X-HSN 24 nail you need to use the DX 9-HSN or the DX 860-HSN tool.



2 ENP

Select the right tool

For the X-ENP-19 L15MXR nail you need to use the DX 9-ENP or the DX 860-ENP tool.



See below reference chart to select the right color cartridge based on steel strength and steel thickness by nail type. The number within the box provides a quick reference for the tool power level. However, due to variability in base steel, check the nail stand-off by performing test fastenings and adjust the power level accordingly.

3 HSN

Select the right cartridge

For the X-HSN 24 nail and the DX 9-HSN or the DX 860-HSN tool you need to use the 6.8/11 M40 cartridge.



| Base material thickness (inch/mm) | Standard steel | High-strength steel |
|--------------------------------------|---|---|
| | Color | Color |
| 3/8" (9.6 mm) | 2 | 2 |
| 5/16" (8.0 mm) | | |
| 1/4" (6.4 mm) | | |
| 3/16" (4.8 mm) | | |
| 1/8" (3.2 mm) | S235, S275 E 36, ST 37, 340-470 N/mm ² | S355, S275 E 42, ST 52, 490-630 N/mm ² |

3 ENP

Select the right cartridge

For the X-ENP-19 L15MXR nail and DX 9-ENP or the DX 860-ENP tool you need to use the 6.8/18 M40 cartridge.



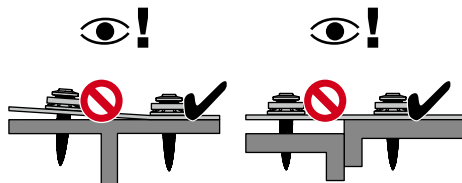
| Base material thickness (inch/mm) | Standard steel | High-strength steel |
|--------------------------------------|---|---|
| | Color | Color |
| >3/4" (19.0 mm) | 4 | 4 |
| 5/8" (16.0 mm) | | |
| 3/8" (9.6 mm) | 4 | 4 |
| 5/16" (8.0 mm) | | |
| 1/4" (6.4 mm) | 3 | 3 |
| | S235, S275 E 36, ST 37, 340-470 N/mm ² | S355, S275 E 42, ST 52, 490-630 N/mm ² |

7 HSN

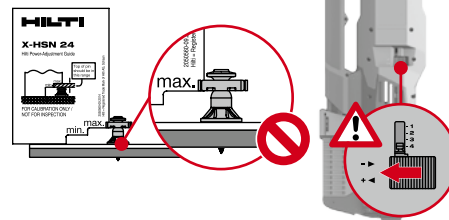
Check nail stand off and adjust power level if required

Initially, then periodically while fastening, and any time you change base material, use the Power Adjustment Gauge to check the nail stand-off and adjust the tool power level.

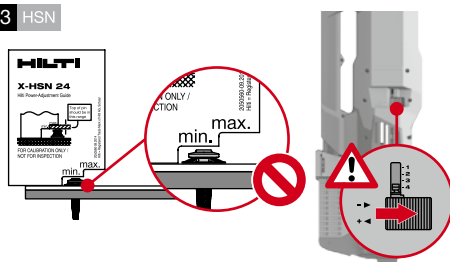
7.1 HSN



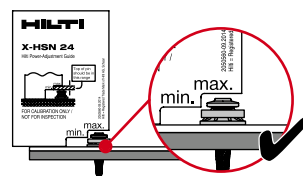
7.2 HSN



7.3 HSN



7.4 HSN

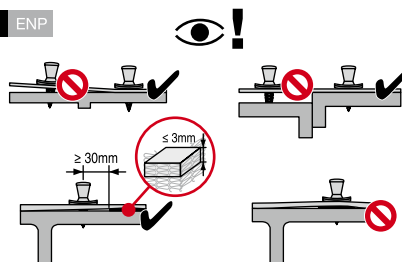


7 ENP

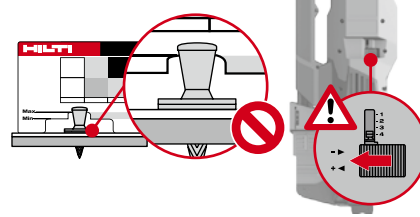
Check nail stand off and adjust power level if required

Initially, then periodically while fastening, and any time you change base material, use the Power Adjustment Gauge to check the nail stand-off and adjust the tool power level.

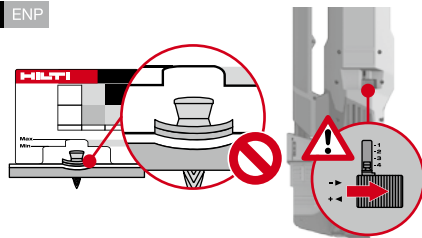
7.1 ENP



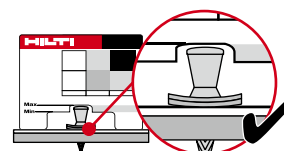
7.2 ENP



7.3 ENP



7.4 ENP



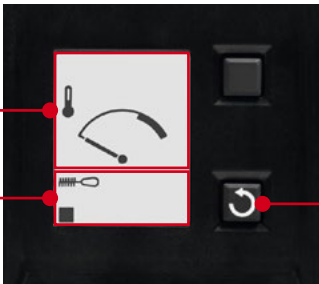
The Hilti DX 9-HSN / DX 9-ENP tool has an integrated digital Service Indicator. The digital Service Indicator on the DX 9 gives real-time feedback on when to clean and service the tool, maximizing productivity on the job. The tools operating temperature range is also displayed, helping you to work at the optimal pace.



The gauge shows the optimal operating temperature (i.e. working at optimal installation pace). A warning sign shows when the tool temperature is extremely high. A tool wrench is displayed when the tool needs to be sent to Hilti Tool Service Center for maintenance.

A large cleaning brush is displayed when the tool requires cleaning.

A progression bar with 7 segments indicates the number of settings since the last cleaning.



Counter reset button

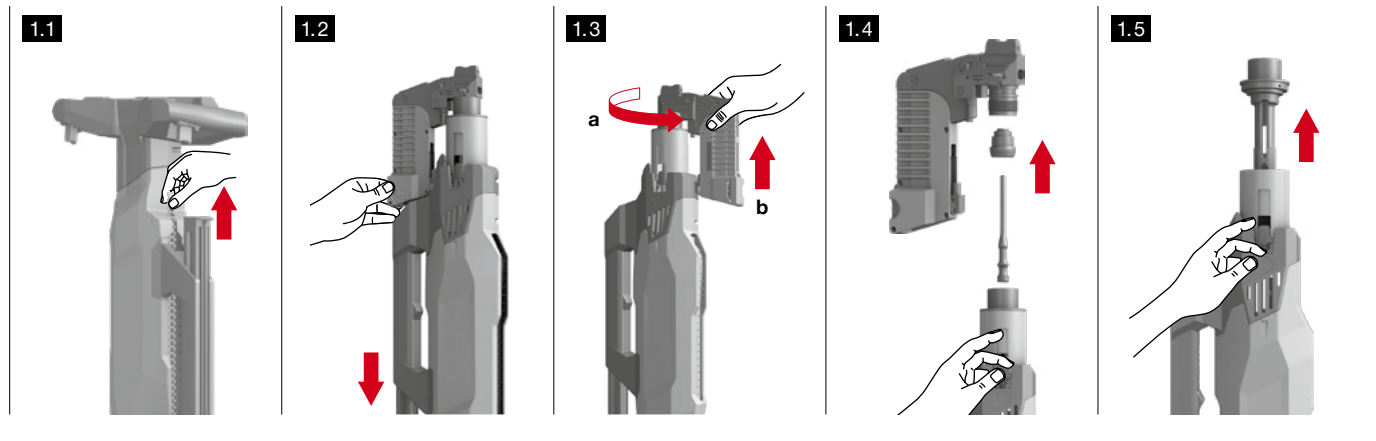
The SI displays prompts and field what it means and the action required is explained below.

| Display | What it means | Action required |
|---------|--|-----------------|
| | Normal operation, tool cold. Fastening count progressing. | - |
| | Clean the tool and reset the counter after cleaning. | |
| | WARNING: Tool is extremely hot – cartridges can fire prematurely and plastic nail strips can melt if they remain stagnant while inside the tool. Cartridge and nail strips must be removed from the tool, and use of the tool must be ceased immediately until tool temperature returns to normal. | |
| | Tool needs maintenance. Send the tool to Hilti Tool Service Center. | |
| | Temperature sensor dysfunctional – send the tool to Hilti Tool Service Center to get the temperature sensor replaced. | |

1

Disassemble the tool

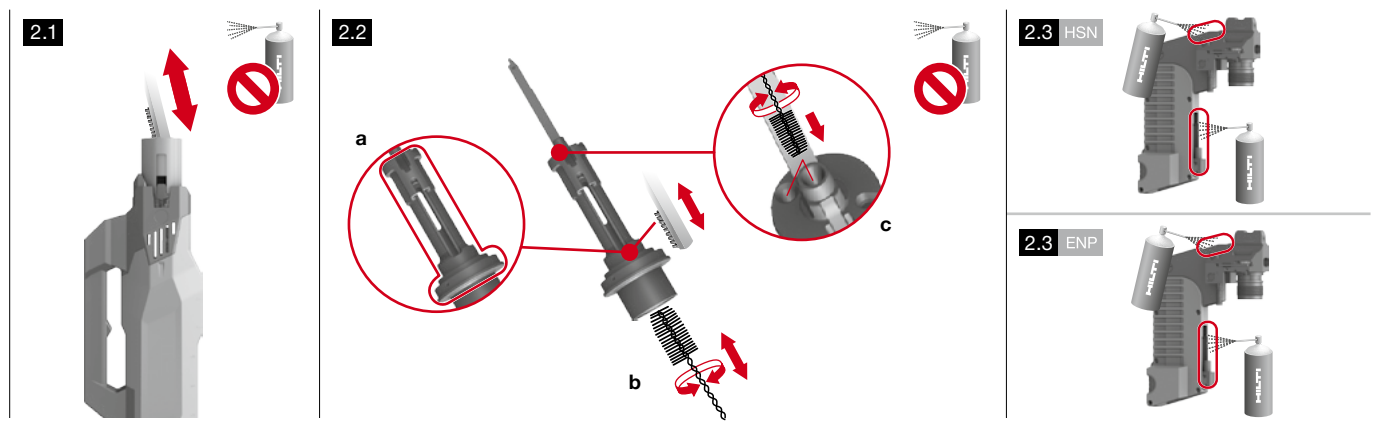
Remove the cartridge strip and nails before disassembling the tool.



2

Clean the tool

While cleaning the tool, the Hilti spray should be applied ONLY on the Nail Magazine and NOT inside the tool.



3 HSN

Check the Piston and Piston Brake

Change if either the Piston or Piston Brake is worn. Change only as a set both Piston and Piston Brake.



3 ENP

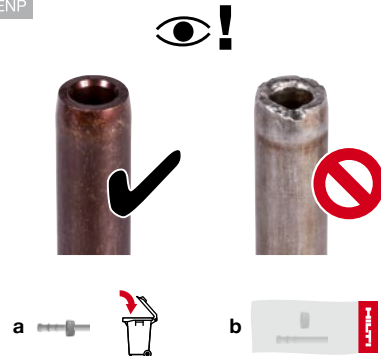
Check the Piston and Piston Stop

Change if either the Piston or Piston Stop is worn. Change only as a set both Piston and Piston Stop.

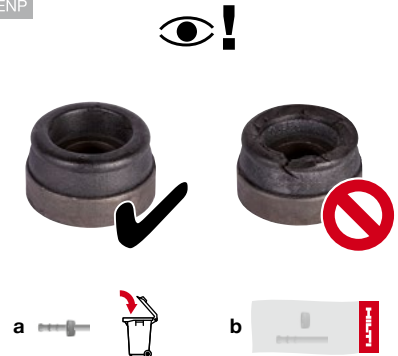
3.1 ENP



3.2 ENP



3.3 ENP

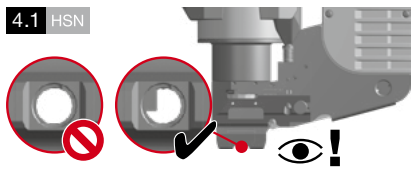


4

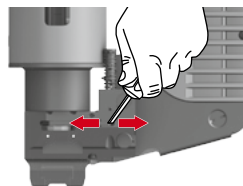
Check the Nail Detection Mechanism

Checking the Nail Detection Mechanism will help early diagnosis and limit the tool damage. If damaged send the Nail Magazine to Hilti Tool Service.

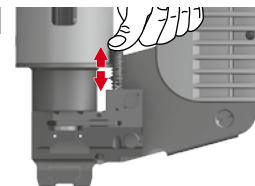
4.1 HSN



4.2 HSN

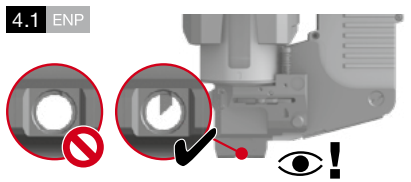


4.3 HSN

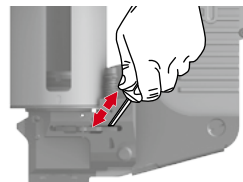


If not working
Hilti Tool Service

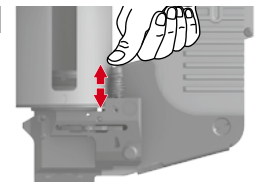
4.1 ENP



4.2 ENP



4.3 ENP



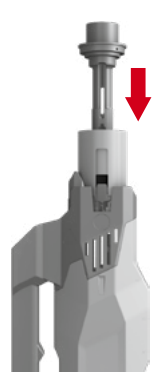
If not working
Hilti Tool Service

5

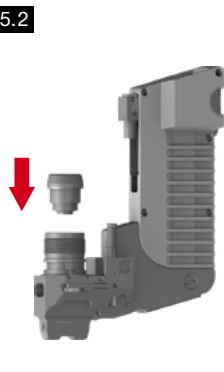
Assemble the tool

Check the Piston Brake/Stop and Piston is always assembled back in.

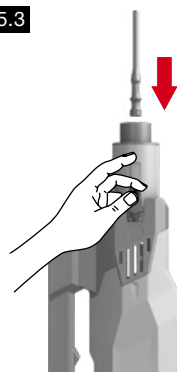
5.1



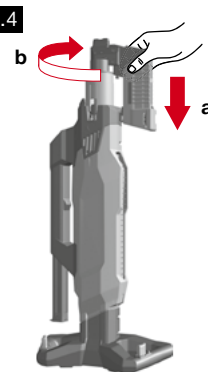
5.2



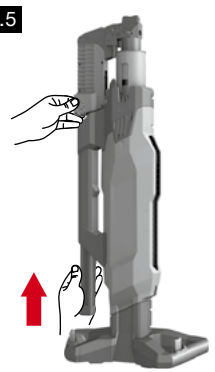
5.3



5.4



5.5



6






Reset counter

See page 9 where to reset the counter.






There are few instances the tool ceases to function on the jobsite. We identify below problems the customer may encounter, their possible causes and the recommended actions. Tool lifetime can be extended and higher tool performance can be achieved when the tool is cleaned and checked at regular intervals.

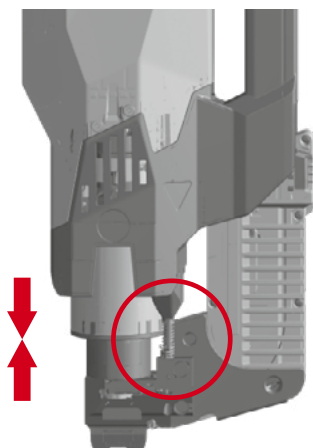
| Problem | Possible causes | Recommended action |
|---|--|--|
| Tool stays compressed | Piston stuck due to missing the joist/steel beam | see page 18 – 19 |
| | Piston Brake/Stop missing | Send Nail Magazine to Hilti Tool Service Center |
| | Inside of Rotating Sleeve not cleaned regularly | Send DX 9 Tool to Hilti Tool Service Center |
| Tool cannot be compressed | Ball stuck (Safety mechanism) | Send DX 9 Tool to Hilti Tool Service Center |
| | Nail Detection Mechanism damaged | Send Nail Magazine to Hilti Tool Service Center |
| | No nail or nail not positioned | see page 20 – 21 |
| | Debris in Nail Magazine | |
| Trigger failure | No cartridge | Load cartridge and try again |
| | Tool hot | Remove cartridges and wait for the tool to cool down |
| | Trigger mechanism failed | Send DX 9 Tool to Hilti Tool Service Center |
| Crushed cartridges | Cartridge feeding mechanism failed | Send DX 9 Tool to Hilti Tool Service Center |
| | Tool hot and cartridge was not removed immediately | Jobsite troubleshoot – Remove cartridge stuck in base of Piston Guide Assembly |
| Nail jams, Highly deformed nails, Nail failures | Stop on housing missing | Send DX 9 Tool to Hilti Tool Service Center |
| | Nail Magazine is damaged | Send Nail Magazine to Hilti Tool Service Center |
| Nail stand-off increasing need to increase power | Piston Retainer Kit damaged | Send Nail Magazine to Hilti Tool Service Center |

X-ENP-19

| Issue | Visual | Criteria | Trouble | Possible cause | Action |
|-----------------------------------|---|---|---|--|--|
| Nail stand-off too high |  | No piston mark visible, nail head stays off, stand-off too high | Deck is not fastened properly to the beam | Power setting too low or cartridge not strong enough | Dial up power setting or increase strength of cartridge |
| Nail stand-off is OK |  | Washer compressed, piston mark clearly visible, deck flat – no deformation | – | – | – |
| Nail stand-off is too low |  | Washer over compressed, deck deformed, stand-off too low | Deck is not fastened properly to the beam | Power setting too high or cartridge is too strong | Dial down power setting or decrease strength of cartridge |
| Gap between deck profile and beam |  | Nail stand off OK or too low without piston clear mark | Deck profile does not lay solid on the beam | Gap caused by slope of the deck or local effects | Avoid gap between sheet and beam or fasten at the right side of the beam |
| Beam miss |  | Nail stand off OK or too low, sheet metal one sided deformed (edge of the beam visible) | Beam miss | Deck not marked | Mark the deck |

X-HSN-24

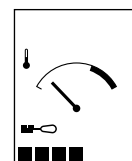
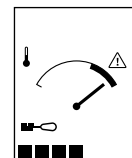
| Issue | Visual | Criteria | Trouble | Possible cause | Action |
|-----------------------------------|---|---|---|---|---|
| Nail stand-off too high |  | Top-hat not compressed, nail head stays off too high | Deck is not fastened properly to the beam | Power setting too low, or cartridge not strong enough | Dial up power setting, or increase strength of cartridge |
| Nail stand-off is too low |  | Top-hat compressed, plastic washer nearly in original shape | – | – | – |
| Nail stand-off is OK |  | Top-hat over compressed, red plastic strongly damaged | Deck is not fastened properly to the beam | Power setting too high, or cartridge is too strong | Dial down power setting, or decrease strength of cartridge |
| Gap between deck profile and beam |  | Nail stand off OK or too low, deck locally deformed | Deck profile does not lay solid on the beam | Gap caused by slope of the deck or local effects | Avoid gap between sheet and beam, or fasten at the right side of the beam |
| Beam miss |  | Nail stand off OK or too low, sheet metal deformed one sided (edge of the beam visible) | Beam miss | Deck not marked | Mark the deck |



1

Wait for the tool to cool down

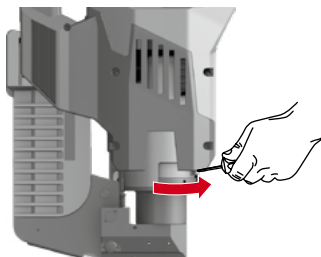
Wait for the tool to cool down before troubleshooting the tool. The temperature gauge on the tool can be used as a reference to check if the tool is still hot.



2

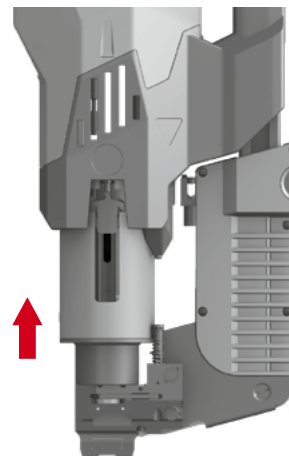
Use the scraper and open Rotating Sleeve

Tool should be pointing downwards while opening the Rotating Sleeve. Use only the scraper or a punch. Don't use hammer or stone as it will damage the Rotating Sleeve.



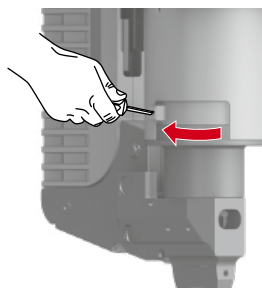
3

Tool decompresses



4

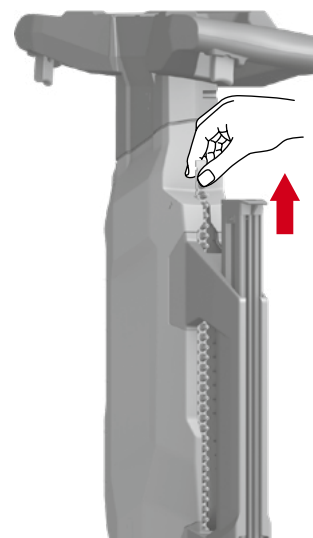
Close the Rotating Sleeve



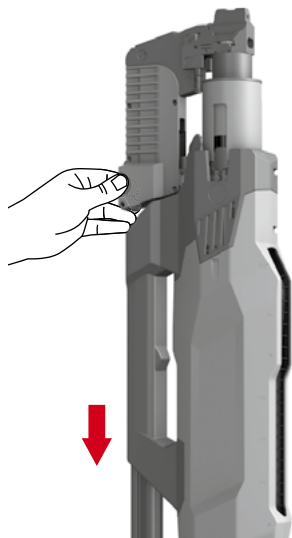
5

Remove the cartridge

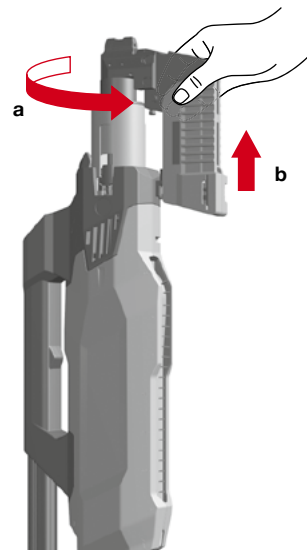
When the tool is compressed the cartridges cannot be removed. Hence decompress the tool first and then remove the cartridges



6
Release the Magazine Guide

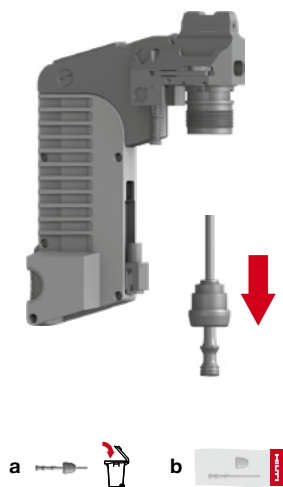


7
Disassemble the Nail Magazine

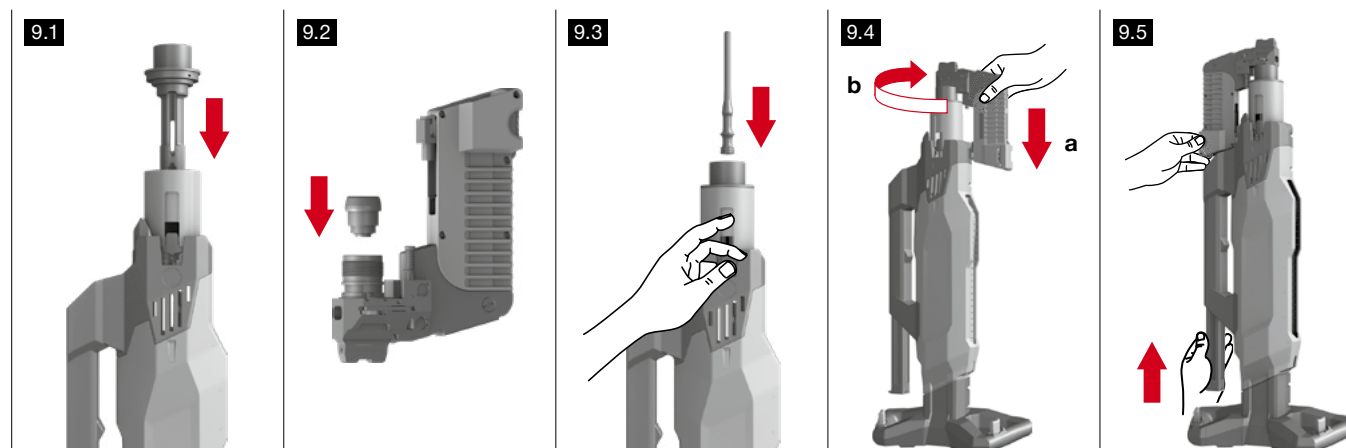


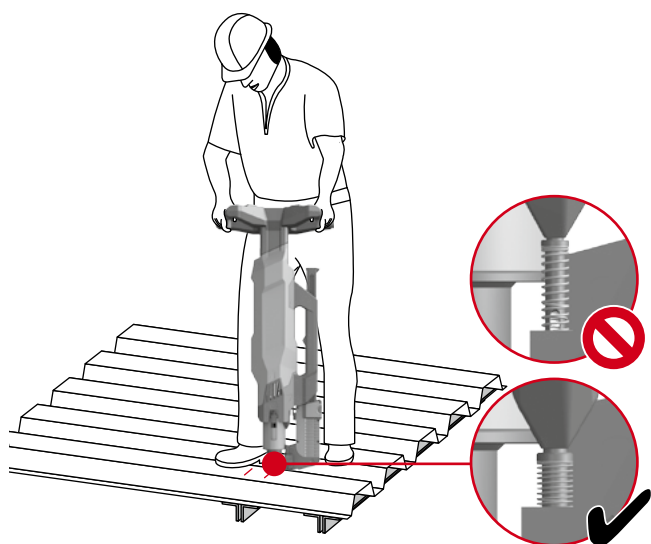
8
Replace Piston and Piston Brake/Stop

Replace the jammed Piston and Piston Brake/Stop with a new one.



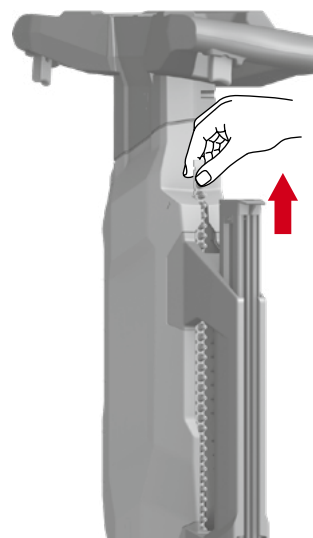
9
Assemble the tool





1

Remove the cartridge

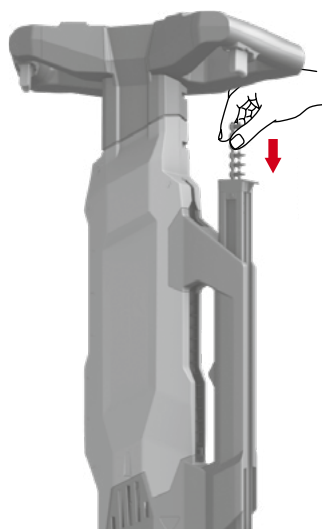


2

Insert the nails

One reason why the tool cannot be compressed is the nails are not loaded, or nails are not loaded into the right position.

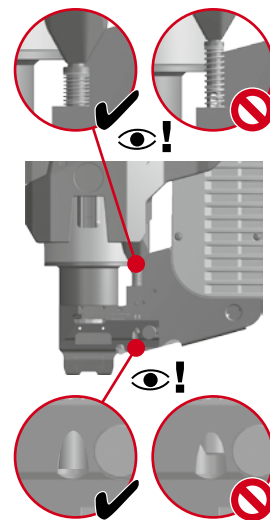
Tip: For DX 9-HSN load 6 nail strips and DX 9-ENP 4 nail strips first and then always load the nails when cartridge strip runs out.



3

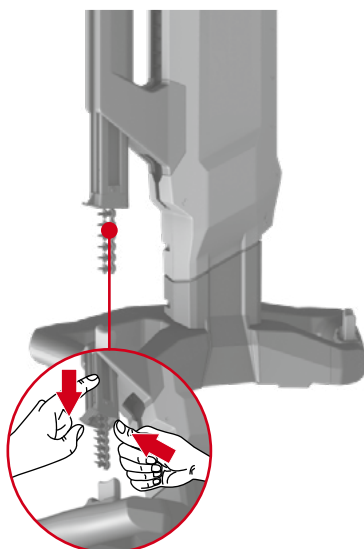
Visual check Pressure Pin

Try to compress the tool and visually check if the Pressure Pin is getting fully compressed.



4

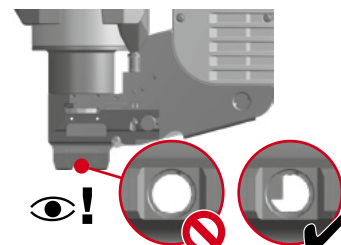
Remove the nails



5 HSN

Visually check Nail Magazine

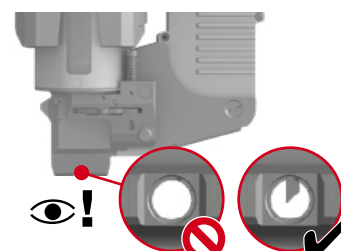
Visually check the Nail Magazine to see if the nail detection lever is intact and visible. If broken send the Nail Magazine to Hilti Tool Service to get it fixed.



5 ENP

Visually check Nail Magazine

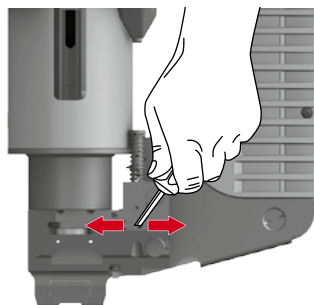
Visually check the Nail Magazine to see if the nail detection lever is intact and visible. If broken send the Nail Magazine to Hilti Tool Service to get it fixed.



6 HSN

Check movment of Nail Detection Mechanism

Use the scraper and check the movement of the Nail Detection Mechanism.



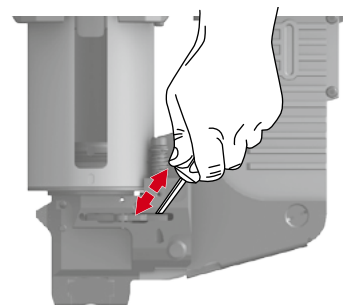
If Damaged, send the Nail Magazine to Hilti Tool Service Center.



6 ENP

Check movment of Nail Detection Mechanism

Use the scraper and check the movement of the Nail Detection Mechanism.

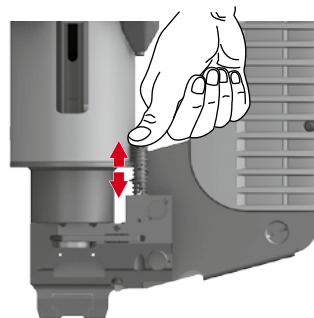


If Damaged, send the Nail Magazine to Hilti Tool Service Center.



7 HSN

Check movement of the Pressure Pin

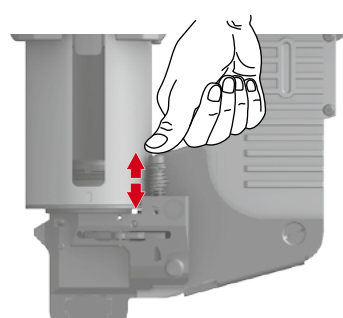


If Damaged, send the Nail Magazine to Hilti Tool Service Center.



7 ENP

Check movement of the Pressure Pin



If Damaged, send the Nail Magazine to Hilti Tool Service Center.

