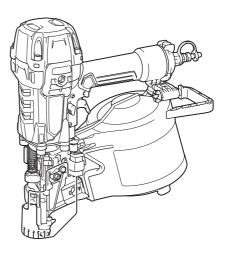
# **INSTRUCTION MANUAL**



# **Construction Coil Nailer AN935H**



Read before use.

Created with



# **SPECIFICATIONS**

Model:		AN935H	
Air pressure		1.28 - 2.26 MPa (12.8 - 22.6 bar)	
Nail length	Wire-collated coil nail	45 mm - 90 mm	
	Sheet-collated coil nail	45 mm - 75 mm	
Nail capacity	Wire-collated coil nail	120 pcs - 300 pcs	
	Sheet-collated coil nail	200 pcs	
Minimum hose diameter		4.0 mm	
Pneumatic tool oil		ISO VG32 or equivalent	
Dimensions (L x W x H)		299 mm x 125 mm x 330 mm	
Net weight		2.7 kg	

- Due to our continuing program of research and development, the specifications herein are subject to change without notice.
- Specifications may differ from country to country.
- Weight according to EPTA-Procedure 01/2003

#### **Symbols**

The following show the symbols used for the equipment. Be sure that you understand their meaning before use



Read instruction manual



Wear safety glasses.



Do not use on scaffoldings, ladders.

#### Intended use

The tool is intended for the preliminary interior work such as fixing floor joists or common rafters and framing work in 2" x 4" housing.

#### Noise

The typical A-weighted noise level determined according to EN792:

Sound pressure level ( $L_{pA}$ ): 84 dB(A) Sound power level ( $L_{WA}$ ): 97 dB (A) Uncertainty (K): 3 dB(A)

**AWARNING:** Wear ear protection.

#### **Vibration**

The vibration total value determined according to EN792:

Vibration emission (a<sub>h</sub>): 4.5 m/s<sup>2</sup> Uncertainty (K): 1.5 m/s<sup>2</sup>

**NOTE:** The declared vibration emission value has been measured in accordance with the standard test method and may be used for comparing one tool with another.

**NOTE:** The declared vibration emission values also be used in a preliminary assessment exposure.

**AWARNING:** The vibration emission during actual use of the power tool can differ from the declared emission value depending on the ways in which the tool is used.

**AWARNING:** Be sure to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

#### **EC Declaration of Conformity**

#### For European countries only

The EC declaration of conformity is included as Annex A to this instruction manual.

# **SAFETY WARNINGS**

# Pneumatic nailer/stapler safety warnings

**AWARNING:** WARNING Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in serious injury, electric shock and/or fire.

# Save all warnings and instructions for future reference.

For personal safety and proper operation and maintenance of the tool, read this instruction manual before using the tool.

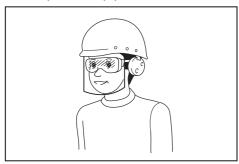
#### General safety

1. Do not permit those uninstructed to use the tool. With 2. No horseplay. Respect the tool as a working



 Never alter the tool. download the free trial online at nitropdf.com/professional

#### Personal protective equipments



- Always wear safety glasses to protect your eyes from dust or fastener injury.
   AWARNING: It is an employer's responsibility to enforce the use of safety eye protection equipment by the tool operators and by other persons in the immediate working area.
   For Australia and New Zealand only Always wear safety glasses and face shield to protect your eyes from dust or fastener injury. The safety glasses and the face shield should conform with the requirements of AS/NZS 1336.
- Wear hearing protection to protect your ears against exhaust noise and head protection. Also wear light but not loose clothing. Sleeves should be buttoned or rolled up. No necktie should be worn.

#### Work area safety

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate the tool in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Operating the tool can create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating the tool. Distractions can cause you to lose control.
- 4. Illuminate the work area sufficiently.
- There may be local regulations concerning noise which must be complied with by keeping noise levels within prescribed limits. In certain cases, shutters should be used to contain noise.

#### Safety devices

- Make sure all safety systems are in working order before operation. The tool must not operate if only the trigger is pulled or if only the contact arm is pressed against the wood. It must work only when both actions are performed. Test for possible faulty operation with fasteners unloaded and the pusher in fully pulled position.
- 2. Do not play with the contact element: it prevents accidental discharge, so it must be kept on and not removed. Securing the trigger in the ON position is also very dangerous. Never attempt to fasten the trigger. Do not operate a tool if any with 5 portion of the tool operating controls is inoperable, disconnected, altered, or not working pr
- Do not attempt to keep the contact e depressed with tape or wire. Death or injury may occur.

 Always check contact element as instructed in this manual. Fasteners may be driven accidentally if the safety mechanism is not working correctly.

#### Loading fasteners

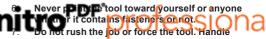
- Do not load the tool with fasteners when any one of the operating controls is activated.
- Use only fasteners specified in this manual.
   The use of any other fasteners may cause malfunction of the tool.

#### Power source

- Never connect the tool to compressed air line where the air pressure can exceed the suitable air pressure range of the tool, specified in the "SPECIFICATIONS" table, by 10%. Make sure that the pressure supplied by the compressed air system does not exceed the suitable air pressure range of the tool. Set the air pressure initially to the lower value of the suitable air pressure range.
- When using the tool operated by compressed air, particular attention must be paid to avoid exceeding the maximum allowable pressure.
- Operate the tool at the lowest pressure required for the application, in order to prevent unnecessarily high noise levels, increased wear and resulting failures.
- 4. Never use the tool with other than compressed air. If bottled gas (carbon dioxide, oxygen, nitrogen, hydrogen, air, etc.) or combustible gas (hydrogen, propane, acetylene, etc.) is used as a power source for this tool, the tool will explode and cause serious injury.
- Always disconnect the air hose and remove all of the fasteners:
  - when unattended;
  - before performing any maintenance or repair;
  - before cleaning a jam;
  - before moving the tool to a new location.
- 6. Use only pneumatic tool oil specified in this manual.

#### Operational safety

- Always check the tool for its overall condition and loose screws before operation. Tighten as required.
- Handle the tool carefully, as there is high pressure inside the tool that can be dangerous if a crack is caused by rough handling (dropping or striking). Do not attempt to carve or engrave on the tool.
- Stop the operation immediately if you notice something wrong or out of the ordinary with the tool. An improperly functioning tool must not be used.
- Do not point the ejection port at anyone in the vicinity. Keep hands and feet away from the ejection port area.
- 5. Always assume that the tool contains fasteners.



the tool carefully punicad the free trial online at nitropdf.com/professional

- Do not activate the tool unless the tool is placed firmly against the workpiece.
- Never hold or carry the tool with a finger on the trigger or hand it to someone in this condition. Accidental firing can cause serious injury.
- 10. Never use fastener driving tools marked with the symbol "Do not use on scaffoldings, ladders" for specific application for example:
  - when changing one driving location to another involves the use of scaffoldings, stairs, ladders, or ladder alike constructions, e.g. roof laths;
  - closing boxes or crates;
  - fitting transportation safety systems e.g. on vehicles and wagons.
- Check walls, ceilings, floors, roofing and the like carefully to avoid possible electrical shock, gas leakage, explosions, etc. caused by striking live wires, conduits or gas pipes.
- 12. Do not use the tool for fastening electrical cables. It is not designed for electric cable installation and may damage the insulation of electric cables thereby causing electric shock or fire hazards.
- 13. Watch your footing and maintain your balance with the tool. Make sure there is no one below when working in high locations, and secure the air hose to prevent danger if there is sudden jerking or catching.
- 14. On rooftops and other high locations, drive fasteners as you move forward. It is easy to lose your footing if you drive fasteners while inching backward. When driving fasteners against perpendicular surface, work from the top to the bottom. You can perform driving operations with less fatigue by doing so.
- 15. A fastener will be bent or the tool can become jammed if you mistakenly drive fastener on top of another fastener or strike a knot in the wood. The fastener may be thrown and hit someone, or the tool itself can react dangerously. Place the fasteners with care.
- 16. Do not leave the loaded tool or the air compressor under pressure for a long time out in the sun. Be sure that dust, sand, chips and foreign matter will not enter the tool in the place where you leave it setting.
- Never attempt to drive fasteners from both the inside and outside at the same time. Fasteners may rip through and/or fly off, presenting a grave danger.

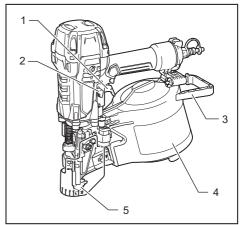
#### Service

- Perform cleaning and maintenance right after finishing the job. Keep the tool in tip-top condition. Lubricate moving parts to prevent rusting and minimize friction-related wear. Wipe off all dust from the parts.
- Ask Makita authorized service center for periodical inspection of the tool.
- 3. To maintain product SAFETY and RELIABILITY, maintenance and repairs should be permed by Makita Authorized Service Center using Makita replacement parts.

SAVE THESE INSTRUCTIONS.

AWARNING: DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to safety rules for the subject product. MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

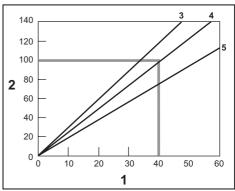
# PARTS DESCRIPTION



 Trigger 2. Trigger lock lever 3. Hook 4. Magazine cap 5. Nose adapter (contact element)

# **INSTALLATION**

## **Selecting compressor**



1. Nailing frequency (times/min) 2. Compressor air output per minute (L/min) 3. 2.26 MPa (22.6 bar) 4. 1.77

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The air compressor must comply with the requirements of EN60335-2-34.

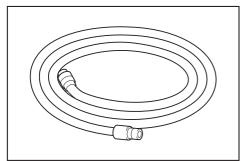
Select a compressor that has ample pressure and air output to assure cost-efficient operation. The graph shows the relation between nailing frequency, applicable pressure and compressor air output.

Thus, for example, if nailing takes place at a rate of approximately 40 times per minute at a compression of 1.77 MPa (17.7 bar), a compressor with an air output over 100 liters/minute is required.

Pressure regulators must be used to limit air pressure to the rated pressure of the tool where air supply pressure exceeds the tool's rated pressure. Failure to do so may result in serious injury to tool operator or persons in the vicinity.

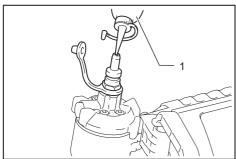
#### Selecting air hose

**ACAUTION:** Low air output of the compressor, or a long or smaller diameter air hose in relation to the nailing frequency may cause a decrease in the driving capability of the tool.



Use a high pressure resistant air hose.
Use an air hose as large and as short as possible to assure continuous, efficient nailing operation.

#### Lubrication



▶ 1. Pneumatic tool oil

Oil the tool with pneumatic tool oil by placing two or three drops into the air fitting. This should be doneted with before and after use.

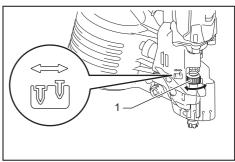
For proper lubrication, the tool must be fired times after pneumatic tool oil is introduced.

# FUNCTIONAL DESCRIPTION

▲ CAUTION: Before adjusting or checking function on the tool, always lock the trigger by turning the trigger lock lever to the lock position ⊕, and disconnect the air hose from the tool.

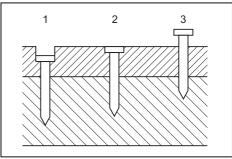
## Adjusting depth of nailing

This toll has the adjuster of the nailing depth. To modulate the nailing depth, turn the adjuster to the proper depth.



▶ 1. Adjuster

The adjustable range is 8.5 mm (11/32"). (One full turn allows 1.25 mm (1/16") adjustment.)



1. Too deep 2. Flush 3. Too shallow

#### Hook

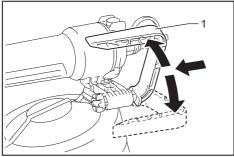
**ACAUTION:** Always disconnect the hose when hanging the tool using the hook.

**ACAUTION:** Never hook the tool at high location or on potentially unstable surface.

**ACAUTION:** Do not hang the hook from the waist belt. If the nailer accidentally drops, it may result in misfiring and personal injuries.

The book is used into hanging up the tool temporarily.

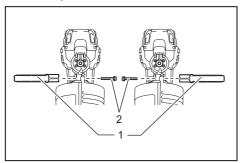
The book can be turned while pushing the bottom to the desired angle.



▶ 1. Hook

Furthermore, this hook can be installed on either side of the tool.

To change the installation position, remove the bolt with a hex wrench. Install the hook on another side and then secure it firmly with the bolt.

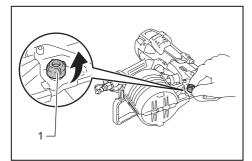


1. Hook 2. Bolt

#### Nose adapter

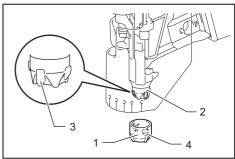
To prevent the surface of workpiece from being scratched or damaged, use the nose adapter.

To detach the nose adapter from its housing base, pull the nose adapter in the direction of the arrow.



1. Nose adapter

To attach the nose adapter to the contact element, press it onto the contact element until the receparts in four places inside the nose adapter for protrusions of the contact element.



Nose adapter 2. Contact element 3. Protrusion
 Recessed part

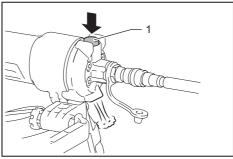
#### Air duster

**ACAUTION:** Do not aim the ejection port of the air duster to someone. Also, keep your hands and foot away from the ejection port. If the air duster button is accidentally pushed, it may cause a personal injury.

**ACAUTION:** Always check your surroundings before using the air duster. Blown dust or objects may hit someone.

ACAUTION: Do not connect or disconnect the air hose while pushing the air duster button.

The air supplied to the tool can also be used as an air duster. You can clean the work area by pressing the button on the grip end.



1. Button

**NOTICE:** After using the air duster, the driving force of the tool will temporarily decline. Wait until the air pressure recovers in this case.

**NOTICE:** Perform a test blow if you use the air duster immediately after the oil was applied. The oil may be sprayed with the air.

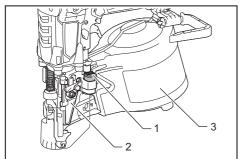
# **ASSEMBLY**

ACAUTION Store carrying out any work on in the ways lock the frigger by turning the rigger beck lever to the lock position , and disconnect the air hose from the tool.

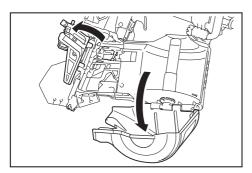
#### Loading nailer

# ACAUTION: Do not use deformed nails or linked sheet.

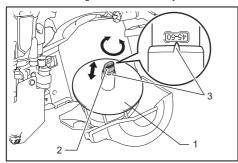
- Disconnect the air hose
- **2.** Depress the latch lever and open the door and magazine cap.



▶ 1. Latch lever 2. Door 3. Magazine cap



3. Turn the adjust shaft and set the step of the change plate suitable for the nail length. Make sure that the arrow points to the corresponding graduation increment of the nail length marked on the adjust shaft.

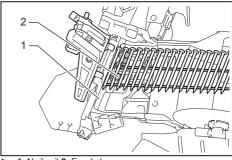


▶ 1. Change plate 2. Adjust shaft 3. Arrow

NOTICE: If the tool is operated with the change plate set to the wrong step, it may result in possible feeding or tool malfunction.

**4.** Place the nail coil over the change plate uncoil enough nails to reach the nail rail.

Then place the first nail in the nail rail and the second nail in the feed claw. Also, place other uncoiled nails on feeder body.

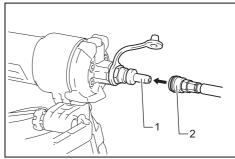


1. Nail rail 2. Feed claw

- Check that the nail coil is set properly in the magazine.
- **6.** Close the magazine cap carefully. Then with depressing the latch lever, close the door until the latch lever locks.

## Connecting air hose

**ACAUTION:** Do not connect the air hose with a finger on the trigger. An unexpected driving will cause serious injury.



▶ 1. Air fitting 2. Air socket

Slip the air socket of the air hose onto the air fitting on the nailer. Be sure that the air socket locks firmly into position when installed onto the air fitting.

A hose coupling must be installed on or near the tool in such a way that the pressure reservoir will discharge at the time the air supply coupling is disconnected.

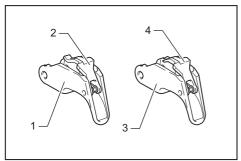
# Changing the trigger for contact actuation mode

**ACAUTION:** Always disconnect the air hose and unload the tool with nails before replacing the trigger.

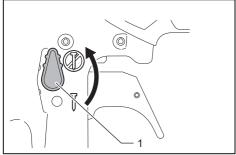
ACAUTION: After the trigger replacement, always chert that the tool operates properly be a real work. Do not load the tool with any as be see checking the function to avoid unex-

pected nailing.
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The trigger for single sequential actuation mode is factory-installed. To change the nailing mode to contact actuation, replace the trigger part with the one for contact actuation.

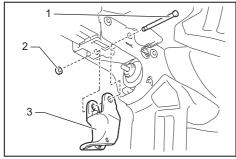


- 1. Trigger for contact actuation 2. Silver part
   3. Trigger for single sequential actuation 4. Black part
- 1. Turn the trigger lock lever to the lock position .



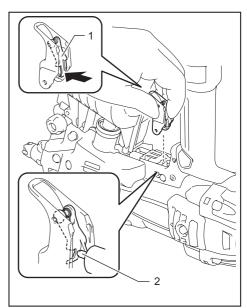
▶ 1. Trigger lock lever

Push the pin securing the trigger from the urethane washer side, and then remove the urethane washer. Then pull out the pin and remove the trigger.



1. Pin 2. Urethane washer 3. Trigger

3. Set the trigger assembly for contact actuation. With pushing in the hinged part inward, set the trigger with so that the hinged part is under the rod of the valve in the housing.



▶ 1. Hinged part 2. Rod of the valve

- **4.** Insert the pin to the hole and secure it by urethane washer.
- **5.** Connect the air hose, and make sure that the tool operates properly. Refer to the section "Checking proper action before operation".

**NOTE:** To set back to single sequential actuation, follow the procedures for changing the trigger above.

# **OPERATION**

**ACAUTION:** Make sure all safety systems are in working order before operation.

**ACAUTION:** When operating the tool, do not close the face to the tool. Also keep hands and feet away from the ejection port area.

**ACAUTION:** When not operating the tool, always lock the trigger by turning the trigger lock lever to the lock position ⊜.

**ACAUTION:** Make sure that the trigger is locked when the trigger lock lever is set to the lock position ⊕.

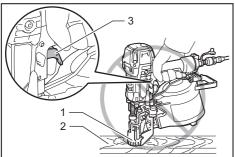
# Checking proper action before operation

Before operation, always check following points.

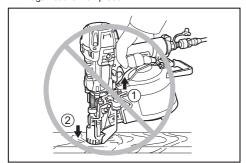
Make sure that the tool does not operate only by
 connecting the sur hose



 Make sure that the tool does not operate only by placing the contact element against the workpiece without pulling the trigger.



- 1. Contact element 2. Workpiece 3. Trigger (not pulled)
- In single sequential actuation mode, make sure that the tool does not operate when pulling the trigger first and then placing the contact element against the workpiece.

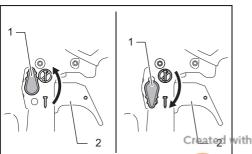


## **Nailing method**

To prevent the trigger from being accidentally pulled, the trigger lock lever is provided.

To lock the trigger, turn the trigger lock lever to the lock position .

To use the tool, turn the trigger lock lever to the unlock position = .

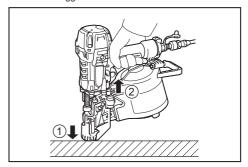


1. Trigger lock lever 2. Trigger

## Single sequential actuation

Place the contact element against the workpiece and pull the trigger fully.

After nailing, release the contact element, and then release the trigger.

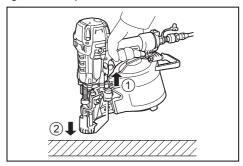


▲ CAUTION: Do not place the contact element against the workpiece with excessive force. Also, pull the trigger fully and hold it on for 1-2 seconds after nailing.

Even in the "Single sequential actuation" mode, halfpulled trigger causes an unexpected nailing, when the contact element re-contacts the workpiece.

#### **Contact actuation**

Pull the trigger first and then place the contact element against the workpiece.





#### Nailing on steel plate

**AWARNING:** When nailing on the C-shaped steel, limit the thickness to 3.2 mm (1/8") or thinner. Otherwise the tool will bounce severely and a nail struck back, causing serious injuries.

**AWARNING:** Use hardened nails only for steel plate. Using other purposed nails may cause serious injuries.

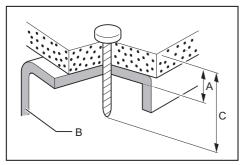
**AWARNING:** When nailing, hold the tool so that it stands upright to the driving surface. Slanted nailing may cause nails to strike back, causing serious injuries.

AWARNING: Do not use the tool for fastening a corrugated plate or the C-shaped steel directly. It may cause nails to strike back, causing serious injuries.

**AWARNING:** Do not use the tool for nailing on ceiling or roof.

Choose and use nails 10 mm (3/8") or much longer than total thickness of all workpiece to be fastened. Refer to the table below.

Material thick- ness including C-shaped steel (A)	C-shaped steel (B) thickness	Nail length (C)
30 mm - 35 mm (1-3/16" - 1-3/8")	1.6 mm - 3.2 mm (1/16" - 1/8")	45 mm (1-3/4")
35 mm - 40 mm (1-3/8" - 1-5/8")		50 mm (2")



NOTICE: Depending on the hardness and total thickness of all workpiece in combination, enough fastening may not be obtained. Nailing on steel plate with excessive depth may extremely reduce the fastening force. Before nailing, adjust the nailing depth properly.

**NOTICE:** Nailing on the steel plate makes the driver prematurely worn out and it may cause nail jamming. When the driver is worn, replace it with a new one.

#### Nailing on concrete

**AWARNING:** Use hardened nails only for concrete. Using other purposed nails may cause serious injuries.

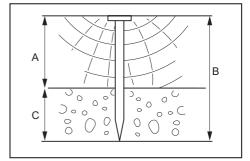
AWARNING: Do not nail directly on the concrete or do not fasten directly the steel plate to the concrete. It may cause concrete fragments to fly off or nails to strike back, causing serious injuries.

AWARNING: When nailing, hold the tool so that it stands upright to the driving surface. Slanted nailing may cause concrete fragments to fly off or nails to strike back, causing serious injuries.

AWARNING: Do not use the tool for fastening an object to hang something such as sewer pipe.

Choose and use nails so that the penetration depth into concrete ranges 10 mm (3/8") - 15 mm (5/8"). Refer to the table below.

Wood thick- ness (A)	Nail length (B)	Penetration depth into concrete (C)
30 mm - 35 mm (1-3/16" - 1-3/8")	45 mm (1-3/4")	10 mm - 15 mm (3/8" - 5/8")
35 mm - 40 mm (1-3/8" - 1-5/8")	50 mm (2")	
50 mm - 55 mm (2" - 2-3/16")	65 mm (2-1/2")	



**NOTICE:** Use the tool only for soft concrete built up not so long before. Driving nails into hard concrete may cause nail bending or nailing into insufficient depth.

**NOTICE:** When penetrating into concrete deeper than 15 mm (5/8"), nails may not be driven sufficiently.

## **Cutting linked sheet**

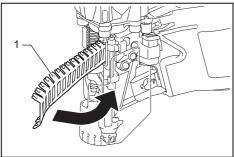
ACAUTION: Always disconnect the air hose from the tool before removing the linked sheet.

When using linked sheet nails, the linked sheet will be Created with ejected from the driver guide as you drive the nails. Tear away the ejected sheet by twisting as shown in the



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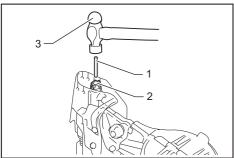


1. Ejected linked sheet

## Removing jammed nails

★CAUTION: Always lock the trigger by turning the trigger lock lever to the lock position ⊕, and disconnect the hose before removing jammed nails. Also remove the nails from the magazine before cleaning a jam.

- **1.** Depress the latch lever and open the door. Open the magazine cap and remove the nail coil.
- 2. Insert a small metal rod into the nail ejection port and hit it with a hammer lightly.



■ 1. Metal rod 2. Nail ejection port 3. Hammer

3. Remove the jammed nail with a flat-blade screw-driver or other similar tool.



**4.** Reset the nail coil and close the magaz and the door.

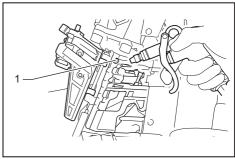
# **MAINTENANCE**

**ACAUTION:** Before attempting to perform inspection or maintenance, always lock the trigger by turning the trigger lock lever to the lock position , and disconnect the air hose from the tool.

**NOTICE:** Never use gasoline, benzine, thinner, alcohol or the like. Discoloration, deformation or cracks may result.

## Cleaning of tool

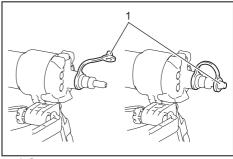
Iron dust that adhere to the magnet can be blown off by using an air duster.



▶ 1. Magnet

## Storage

When not in use, disconnect the hose. Then cap the air fitting with the cap. Store the nailer in a warm and dry place.

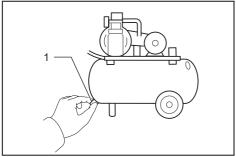


▶ 1. Cap

# Maintenance of compressor, air set and air hose

After operation, always drain the compressor tank and the air filter. If moisture is allowed to enter the tool,

in by result in the performance and possible tool professiona



1. Drain cock

Keep the air hose away from heat (over 60°C, over 140°F), away from chemicals (thinner, strong acids or alkalis). Also, route the hose away from obstacles which it may become dangerously caught on during operation. Hoses must also be directed away from sharp edges and areas which may lead to damage or abrasion to the hose.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

# OPTIONAL ACCESSORIES

**ACAUTION:** These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita Service Center.

- Nails
- Air hose
- · Safety goggles

**NOTE:** Some items in the list may be included in the tool package as standard accessories. They may differ from country to country.

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