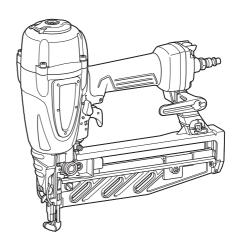
# INSTRUCTION MANUAL MANUEL D'INSTRUCTION MANUAL DE INSTRUCCIONES



# Pneumatic Finish Nailer Cloueuse pneumatique de finition Clavadora Neumática de Acabado AF601



IMPORTANT: Read Before Using.
IMPORTANT: Lire avant usage.
IMPORTANTE: Lea antes de usar.

# **SPECIFICATIONS**

| Model:                 | AF601   |
|------------------------|---|
| Air pressure           | 0.49 - 0.83 MPa (70 - 120 PSIG)                     |
| Nail length            | 25 mm (1") - 64 mm (2-1/2")                         |
| Nail capacity          | 100 pcs.  |
| Minimum hose diameter  | 6.5 mm (1/4")                                       |
| Dimensions (L x W x H) | 304 mm x 95 mm x 297 mm<br>(12" x 3-3/4" x 11-3/4") |
| Net weight             | 1.7 kg (3.8 lbs)                                    |

- 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

# **SAFETY WARNINGS**

#### Important safety instructions

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

WARNING: WHEN USING THIS TOOL, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED TO REDUCE THE RISK OF PERSONAL INJURY. INCLUDING THE FOLLOWING:

#### READ ALL INSTRUCTIONS.

#### **Personal Protective Equipment**

- Always wear safety glasses to avoid eye injury from dust or fasteners. The safety glasses should conform with the requirements of ANSI 787 1
  - WARNING: 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.
- 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.

#### Flammable Atmospheres

 Do not operate tool in explosive atmospheres, such as in the presence of flammable liquids, gases or combustible dust.

#### Tool modification

 The tool should not be modified unless authorized in the tool manual or approved in writing by the tool manufacturer.

#### Tool maintenance

 Refer to the tool maintenance instructions for detailed information on the proper maintenance of a tool.

#### Recommended fasteners and accessories

- Use only fasteners made or recommended by the tool manufacturer, or fasteners that perform equivalently to those recommended by the manufacturer.
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#### Inspect tool before operating to:

- Use only power source specified in the instruction manual.
  - Operate the tool within the specified air pressure on the tool label for safety and longer tool life. Do not exceed the recommended max. operating pressure. The tool should not be connected to a source whose pressure potentially exceeds 1.38 MPa (200 PSIG).
- 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 check the tool for its overall condition and loose screws before operation. Tighten as required.
- 4. 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 element is pressed against the wood. It must work only when both actions are performed. Test for possible faulty operation with fasteners unloaded and the contact element in fully pulled position.
- Always check contact element as instructed in this manual. Fasteners may be driven accidentally if the safety mechanism is not working correctly.

#### Operating controls

 Do not use a tool with missing or damaged safety warning label(s.)

- 2. A tool that is not in proper working order must not be used. Tags and physical segregation shall be used for control.
- 3. Do not remove, tamper with, or otherwise cause tool operating controls to become inoperable.
- Do not operate tool if any portion of the tool 4 operating controls is inoperable, disconnected, altered, or not working properly.

#### Tool handling

- Only persons who have read and understand the tool operating/safety instructions should operate the tool.
- 2. Always assume that tool contains fasteners.
- 3. Do not point tool toward yourself or anyone whether it contains fasteners or not.
- Keep bystanders and children away while 4. operating tool.
- 5. Do not actuate tool unless tool is placed firmly against the workpiece.
- Respect tool as a working implement. 6.
- 7. Do not engage in horseplay.
- 8 Stay alert, focus on your work and use common sense when working with tools.
- 9. Do not use tool while tired, after having consumed drugs or alcohol, or while under the influence of medication.
- Do not overreach. Keep proper footing and balance at all times.
- Do not hold or carry tool with a finger on the 11 trigger.
- 12 Drive fasteners into proper work surface only.
- Do not drive fasteners into other fasteners.
- After driving a fastener, tool may spring back ("recoil") causing it to move away from the work surface. To reduce risk of injury always manage recoil by:
  - always maintaining control of tool. a)
  - allowing recoil to move tool away from b) work surface.
  - c) not resisting recoil such that tool will be forced back into the work surface. In "Contact Actuation Mode," if workpiece contact is allowed to re-contact work surface before the trigger is released, an unintended discharge of a fastener will
  - keeping face and body parts away from d)
- When working close to an edge of a workpiece or at steep angles use care to minimize chipping, splitting or splintering, or free flight or ricochet of fasteners, which may cause injury.
- Keep hands and body away from fastener discharge area of tool.
- Do not load tool with fasteners when any one of the operating controls is activated.
- Do not operate tool with any power source 18. other than that specified in tool operating/ safety instructions.
- Do not operate tool with any operating pressure other than that specified in tool operating/ safety instructions.

- 20. Always select an actuation system that is appropriate to the fastener application and the training of the operator.
- Use extra caution when driving fasteners into existing walls or other blind areas to prevent contact with hidden objects or persons on other side (e.g., wires, pipes.)
- 22. Do not lift, pull or lower tool by the hose. Disconnecting tool

Disconnect tool from the power source when:

- 1. Not in use:
- 2. Performing any maintenance or repairs;
- 3 Clearing a jam;
- Elevating, lowering or otherwise moving the tool to a new location:
- 5. Tool is outside of the operator's supervision or control; or
- 6 Removing fasteners from the magazine. Additional safety instructions
- The area should be sufficiently illuminated to assure safe operations. The area should be clear and litter-free.
- 2 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
- Check walls, ceilings, floors, roofing and 3. the like carefully to avoid possible electrical shock, gas leakage, explosions, etc. caused by striking live wires, conduits or gas pipes.
- 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 against perpendicular surface, drive fasteners from the top to the bottom. You can perform the operations with less fatigue by doing so.
- 5 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.
- 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.
- Do not disconnect the air hose with a finger on the trigger. An unexpected driving will cause serious injury when the air hose is connected.
- 8 When you drop or strike the tool, check the tool damage or crack and make sure that safety systems are in working order before **operation.** As there is high pressure inside the tool, failure to do so will cause serious injury.
- Ask Makita's Authorized service centers for periodical inspection of the tool.
- To maintain product SAFETY and RELIABILITY, maintenance and repairs should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement

## SAVE THESE INSTRUCTIONS.

AWARNING: MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

#### **Symbols**

The followings show the symbols used for tool.



Read and understand tool labels and manual. Failure to follow warnings could result in death or serious injury.

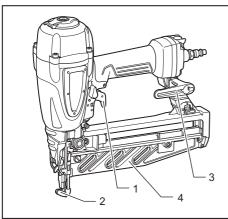


Operators and others in work area must wear safety glasses with side shields.



Keep fingers away from trigger when not driving fasteners to avoid accidental discharge.

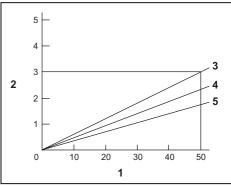
# PARTS DESCRIPTION



1. Trigger 2. Nose adapter (contact element)
 3. Hook 4. Magazine

# **INSTALLATION**

#### Selecting compressor



1. Nailing frequency (times/min) 2. Compressor air output per minute (CFM (ft³ /min.)) 3. 0.83 MPa (120 PSIG) 4. 0.66 MPa (95 PSIG) 5. 0.49 MPa (70 PSIG)

The air compressor must comply with the requirements of ANSI B19.3.

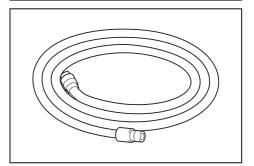
Select a compressor that has ample pressure and air output to assure cost-efficient operation. The graph shows the relation between nailing frequency, applicable pressure and compressor air output.

Thus, for example, if nailing takes place at a rate of approximately 50 times per minute at a compression of 0.83 MPa (120 PSIG), a compressor with an air output over 3.0 CFM ( ft³/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

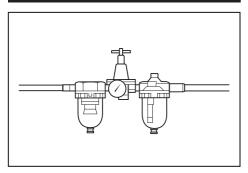
**ACAUTION:** Low air output of the compressor, or a long or smaller diameter air hose in relation to the nailing frequency may cause a decrease in the driving capability of the tool.



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

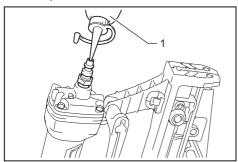
With an air pressure of 0.49 MPa (70 PSIG), an air hose with an internal diameter of over 6.5 mm (1/4") and a length of less than 20 m (6.6 ft.) is recommended when the interval between each nailing is 0.5 seconds. Air supply hoses shall have a minimum working pressure rating of 1.03 MPa (150 PSIG) or 150 percent of the maximum pressure produced in the system whichever is higher.

#### Lubrication



To insure maximum performance, install an air set (oiler, regulator, air filter) as close as possible to the tool. Adjust the oiler so that one drop of oil will be provided for every 50 nails.

When an air set is not used, oil the tool with pneumatic tool oil by placing 2 (two) or 3 (three) drops into the air fitting. This should be done before and after use. For proper lubrication, the tool must be fired a couple of times after pneumatic tool oil is introduced.

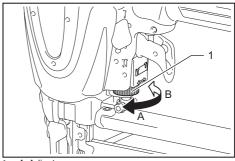


1. Pneumatic tool oil

# FUNCTIONAL DESCRIPTION

**ACAUTION:** Before adjusting or checking function on the tool, always return the trigger and disconnect the air hose from the tool.

## Adjusting depth of nailing



▶ 1. Adjuster

To adjust the depth of nailing, turn the adjuster. The depth of nailing is the deepest when the adjuster is turned fully in the A direction shown in the figure. It will become shallower as the adjuster is turned in the B direction. If nails cannot be driven deep enough even when the adjuster is turned fully in the A direction, increase the air pressure.

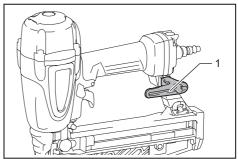
If nails are driven too deep even when the adjuster is turned fully in the B direction, decrease the air pressure.

Generally speaking, the tool service life will be longer when the tool is used with lower air pressure and the adjuster set to deeper depth of nail driving.

#### 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.



▶ 1. Hook

The hook is convenient for hanging the tool temporarily.

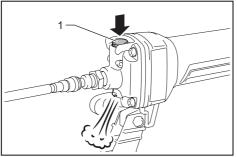
#### Air duster

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.

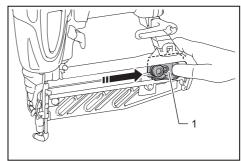
# **ASSEMBLY**

**ACAUTION:** Before carrying out any work on the tool, always return the trigger and disconnect the air hose from the tool.

**ACAUTION:** Load the same type, size and uniform length of nails when loading nails in the magazine.

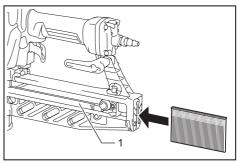
# Loading nailer

1. Pull the pusher lever until it is locked at the magazine end.



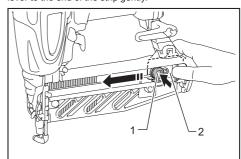
1. Pusher lever

2. Insert a strip of nails into the slit in the rear of the magazine and push the strip toward the firing opening.



1. Magazine

**3.** With pushing the pusher button, return the pusher lever to the end of the strip gently.



1. Pusher button 2. Pusher lever

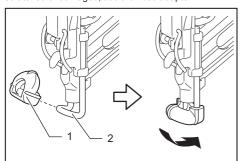
**ACAUTION:** Always hold the pusher lever when you press the pusher button to return the pusher lever, otherwise the pusher lever suddenly returns, it may cause personal injury.

# Removing nails

- 1. Pull the pusher lever until it is locked at the magazine end.
- 2. Slide the nails toward the rear of the magazine and remove them out.

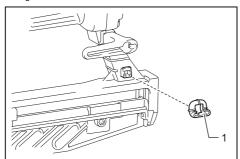
#### Nose adapter

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



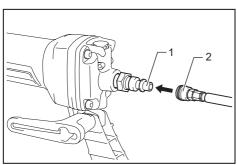
▶ 1. Nose adapter 2. Contact element

A spare nose adapter is stored in the place shown in the figure.



1. Spare nose adapter

# Connecting air hose



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.

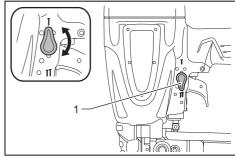
A hose coupling must be installed on or near the tool in such a way that the pressure reservoir will discharge at the time the air supply coupling is disconnected.

# **OPERATION**

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

#### Selecting the operation mode

**ACAUTION:** Always make sure that the actuation mode selector is properly set to the position for the desired nailing mode before nailing.



▶ 1. Actuation mode selector

#### Single sequential actuation mode:

You can drive one nail by one sequential operation. Select this mode when driving a nail carefully and accurately.

To choose this mode, set the actuation mode selector to the position.

#### Contact actuation mode:

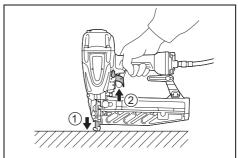
You can drive nails repetitively by placing the contact element with the trigger held.

To choose this mode, set the actuation mode selector to the  $\rightarrow$  position.

# 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.

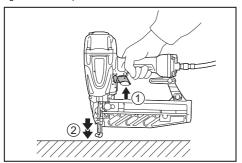


**ACAUTION:** Do not place the contact element against the workpiece with excessive force. Also, pull the trigger fully and hold it on for 1-2 seconds after nailing.

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.



## Anti dry fire mechanism

This tool is equipped with an anti dry fire mechanism. When there are a few nails remaining in the magazine, the contact arm will be locked in the undepressed position to prevent the tool from being activated. When it is activated, load more nails to resume operation.

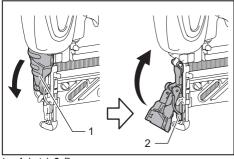
## Removing jammed nails

**ACAUTION:** Always return the trigger and disconnect the hose before removing jammed nails.

ACAUTION: Do not use deformed nails or nail strip. Failure to do so causes poor nail feeding.

Follow the procedures in "Removing nails" to remove the nails in the magazine.

Open the latch and release the door, then remove the jammed nail.



1. Latch 2. Door

# **MAINTENANCE**

**ACAUTION:** Before attempting to perform inspection or maintenance, always return the trigger and disconnect the air hose from the tool.

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

#### **Nails**

Handle nail strips and their box carefully. If the nail strips have been handled roughly, they may be out of shape, causing poor nail feed.

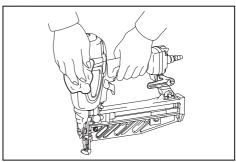
Avoid storing nails in a very humid or hot place or place exposed to direct sunlight.

#### Maintenance of nailer

Always check the tool for its overall condition and loose screws before operation. Tighten as required.

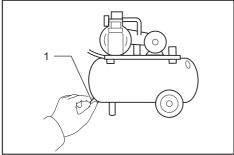
With tool disconnected, make daily inspection to assure free movement of the contact element and trigger. Do not use tool if the contact element or trigger sticks or binds.

When the tool is not to be used for an extended period of time, lubricate the tool using pneumatic tool oil and store the tool in a safe place. Avoid exposure to direct sunlight and/or humid or hot environment.

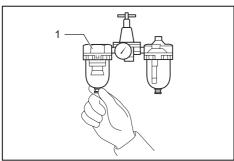


# Maintenance of compressor, air set and air hose

After operation, always drain the compressor tank and the air filter. If moisture is allowed to enter the tool, it may result in poor performance and possible tool failure

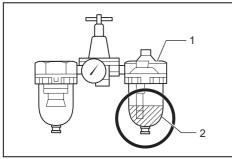


1. Drain cock



1. Air filter

Check regularly to see if there is sufficient pneumatic oil in the oiler of the air set. Failure to maintain sufficient lubrication will cause O-rings to wear quickly.



■ 1. Oiler 2. Pneumatic oil

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.

## MAKITA LIMITED ONE YEAR WARRANTY

#### **Warranty Policy**

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centers. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply where:

- repairs have been made or attempted by others:
- repairs are required because of normal wear and tear:
- the tool has been abused, misused or improperly maintained:
- alterations have been made to the tool.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.