



## **Air Needle Scaler**

### **OWNER'S MANUAL**



#### **WARNING:**

Read carefully and understand all INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

**Item# 15763**

Thank you very much for choosing a NORTHERN TOOL & EQUIPMENT CO., INC. Product! For future reference, please complete the owner's record below:

Model: \_\_\_\_\_ Purchase Date: \_\_\_\_\_

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This machine is designed for certain applications only. Northern Tool + Equipment strongly recommends that this machine is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted Northern Tool + Equipment to determine if it can or should be performed on the product.

For technical questions and replacement parts, please call **1-800-222-5381**.

## Technical Specifications

Specifications	
Blows per minute	4500
Max air pressure	90 PSI
Air Consumption	5 CFM
Air Inlet Diameter	1/4"
Accessories	19 needle attachments
Needles	7"L x 1/8"Thick

## GENERAL SAFETY RULES



**WARNING: Read and understand all instructions.** Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your pneumatic tool.



**WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur.** It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

## SAVE THESE INSTRUCTIONS

### WORK AREA

- **Keep work area clean**, free of clutter and well lit. Cluttered and dark work areas can cause accidents.
- **Do not use your tool where there is a risk of causing a fire or an explosion;** e.g. in the presence of flammable liquids, gasses, or dust. Power tools create sparks, which may ignite the dust or fumes.

- **Keep children, bystanders and pets** away while operating a power tool. Distractions can cause you to lose control, so visitors should remain at a safe distance from the work area.
- **Be aware of all power lines, electrical circuits**, water pipes and other mechanical hazards in your work area, particularly those hazards below the work surface hidden from the operator's view that may be unintentionally contacted and may cause personal harm or property damage.
- **Be alert of your surroundings.** Using power tools in confined work areas may put you dangerously close to cutting tools and rotating parts.

## PERSONAL SAFETY

- **Stay alert**, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- **Dress properly.** Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts. Air vents often cover moving parts and should be avoided.
- **Use safety apparel and equipment.** Use safety goggles or safety glasses with side shields which comply with current national standards, or when needed, a face shield. Use as dust mask in dusty work conditions. This applies to all persons in the work area. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate.
- **Avoid accidental starting.** Do not carry the power tool with your finger on the switch. Ensure the switch is in the off position before plugging tool into power outlet. In the event of a power failure, while a tool is being used, turn the switch off to prevent surprise starting when power is restored.
- **Do not overreach.** Keep proper footing and balance at all times.
- **Remove adjusting keys or wrenches** before connecting to the power supply or turning on the tool. A wrench or key that is left attached to a rotating part of the tool may result in personal injury.

## PNEUMATIC TOOL USE AND CARE

- **Do not force the tool.** Tools do a better and safer job when used in the manner for which they are designed. Plan your work, and use the correct tool for the job.
- **Never use a tool** with a malfunctioning switch. Any power tool that cannot be controlled with the switch is dangerous and must be repaired by an authorized service representative before using.
- **Disconnect air supply** from tool and place the switch in the locked or off position before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **Secure work** with clamps or a vise instead of your hand to hold work when practical. This safety precaution allows for proper tool operation using both hands.
- **Store idle tools.** When tools are not in use, store them in a dry, secure place out of the reach of children. Inspect tools for good working condition prior to storage and before re-use.
- **Use only accessories that are recommended** by the manufacturer for your model. Accessories that may be suitable for one tool may create a risk of injury when used on another tool.
- **Use proper size and type extension cord.** If an extension cord is required for the air compressor, it must be of the proper size and type to supply the correct current to the tool without heating up. Otherwise, the extension cord could melt and catch fire, or cause electrical damage to the tool. Check your compressor's manual for the appropriate size cord.

- **Keep guards in place** and in working order.
  - **Never leave tool** running unattended.
  - **Compressed air only.** Only use clean, dry and regulated compressed air at no more than 90 PSI to power this tool. Never use oxygen, carbon dioxide or any other bottled gas as a power source for this tool.
  - **Use proper size and type** air pressure line and fittings.
  - **Use air hoses rated** for safe operation of the tool.
  - **Make sure the hose** is free of obstructions or snags. Entangled hoses can cause loss of balance or footing.
  - **For your safety, maintenance should be performed regularly by a qualified technician.**
- Note: Performance of the compressor (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.**

### Additional Safety Warnings

- Repetitive motions or exposure to vibration may be harmful to your hands and arms.
- When wearing gloves to operate the Air Needle Scaler, make sure that the gloves do not interfere with operating the trigger. Test your gloves with the trigger before attaching the unit to an air source.
- Never start the tool unless you have a firm grip with both hands and you are positioned at your workpiece or area.
- Before using the Air Needle Scaler, know what is directly underneath the work area or workpiece.
- The Air Needle Scaler can quickly penetrate material. If working directly on the ground, make sure you are not directly above shallow cables, lines, or pipes.
- Never point the tool or the air hose (not included) at anyone.
- Keep your finger away from the trigger until you are ready to work.

### Operation

#### Set Up

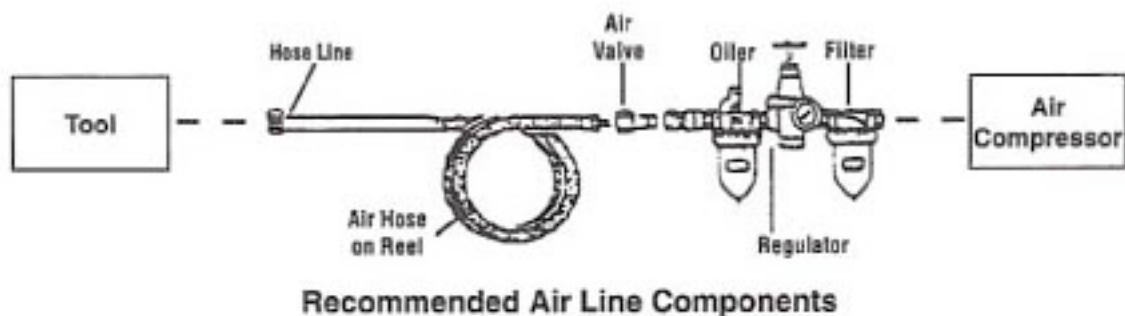


Fig. 1

- You will need to prepare a 1/4" air connector (sold separately) to connect to the Air Inlet. First, wrap the 1/4" air connector (not included) with pipe thread seal tape before connecting to a Air Source Hose (not included).
- Attach air hose to the Air Inlet on the Air Needle Scaler. Note: If you are not using an automatic oiler system, before operation, add a few drops of Pneumatic Tool Oil to the airline connection. Add a few drops more after each hour of continual use.

- Set the air pressure on your compressor to 90 PSI. Do not exceed the recommended air pressure of 90 PSI.
- Check the air connection for leaks.
- Turn off the compressor and disconnect the air source hose in preparation to load bits into the Air Needle Scaler.
- Take out the needle scaler from the box (See Fig. 2), screw it into the cylinder (See Fig. 3), tighten it (See Fig. 4) and start the trigger.



Fig. 2



Fig. 3



Fig. 4

- Gently squeeze the trigger and move slowly along the workpiece. Do not push down on the scaler; let it do the work. If it does not do the intended job to satisfaction, examine your scaler to see if it is worn or dull.
- When you are finished, turn off the air supply and then hold the Air Needle Scaler a safe distance away from yourself and others and squeeze the trigger to bleed off the remaining air. Then, disconnect the air hose.

## MAINTENANCE



**WARNING:** Make sure this tool is disconnected from its power source before attempting any maintenance, cleaning, or inspection.

- **Maintain your tools.** It is recommended that the general condition of any tool be examined before it is used. Keep your tools in good repair by adopting a program of conscientious repair and maintenance in accordance with the recommended procedures found in this manual. If any abnormal vibrations or noise occurs, turn the tool off immediately and have the problem corrected before further use. Have necessary repairs made by qualified service personnel.
- **Cleaning.** Use only soap and a damp cloth to clean your tools. Many household cleaners are harmful to plastics and other insulation. Never let liquid get inside a tool.

## Diagram for the Air Needle Scaler

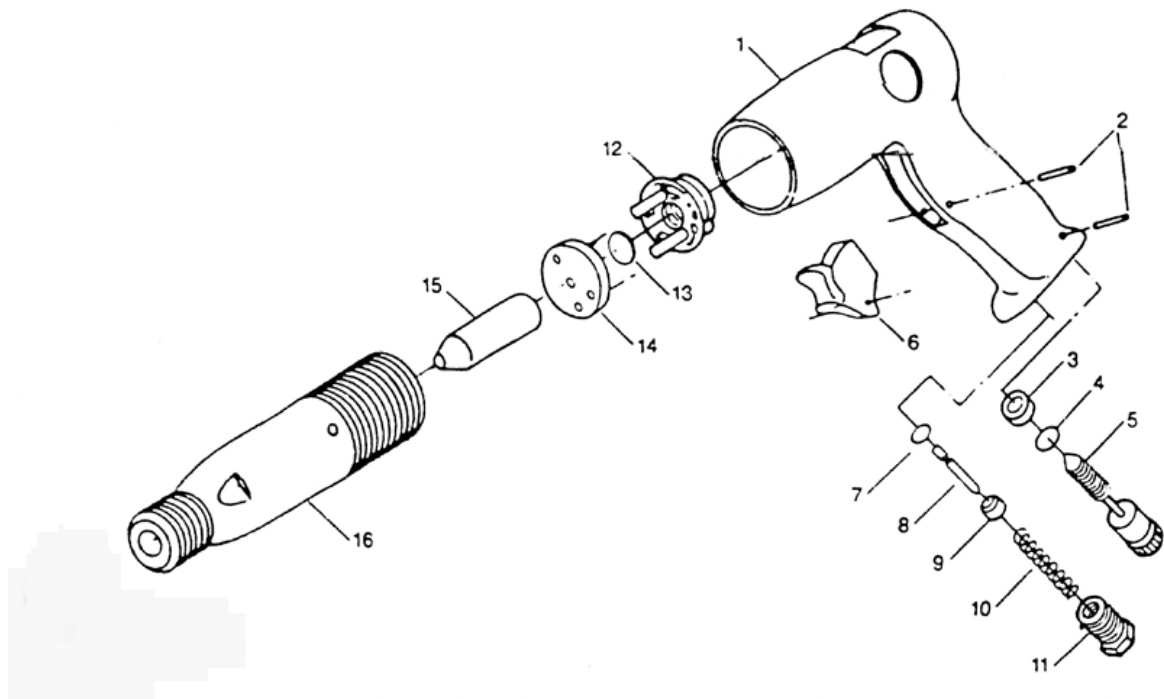


Fig. 5

## Parts List for the Air Needle Scaler

Part#	Item#	Description	Qty.	Part#	Item#	Description	Qty.
1	H-1	Handle	1	10	H-10	Throttle Spring	1
2	H-2	Pin	2	11	H-11	Hose Adapter	1
3	H-3	Ball Seat	1	12	H-12	Upper Valve Case	1
4	H-4	O-ring	1	13	H-13	Valve Disc	1
5	H-5	Regulator	1	14	H-14	Lower Valve Case	1
6	H-6	Trigger	1	15	H-15	Piston	1
7	H-7	O-ring	1	16	H-16	Cylinder	1
8	H-8	Pin	1				
9	H-9	Pin Seat	1				

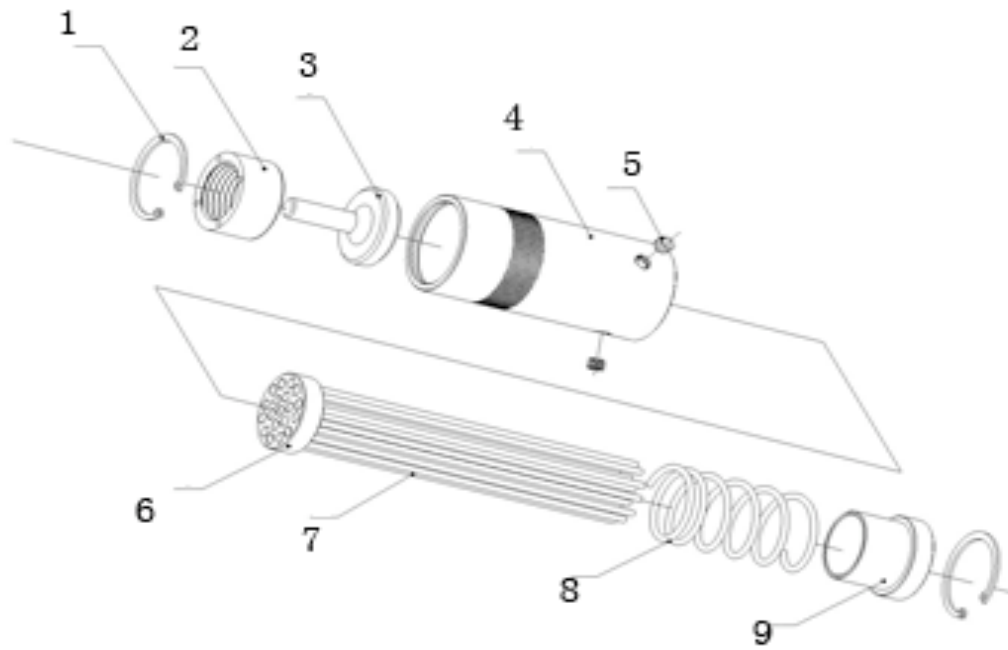


Fig. 6

#### Parts List for the Needle Scaler

Part#	Item#	Description	Qty.
1	N-1	O-ring	2
2	N-2	Fix Nut	1
3	N-3	Drive	1
4	N-4	Body	1
5	N-5	Screw	3
6	N-6	Needle fixer	1
7	N-7	Needle	19
8	N-8	Spring	1
9	N-9	Bearing Cover	1



## **WARNING**

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.



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