PNEUMATIC PLANISHING HAMMER 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.

Thank you very much for choosing a	
For future reference, please complete	e 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 b	pefore you begin using it.

This machine is designed for certain applications only. Northern Tool + Equipment cannot be responsible for issues arising from modification. We strongly recommend 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 please call 1-800-222-5381.

INTENDED USE

A Planishing Hammer is used in metal fabrication and restoration to smooth large areas of metal, welds and gentle panel crowning.

TECHNICAL SPECIFICATIONS & PACKING LIST

Item	Description				
Speed	875 - 1350 BPM				
Operating Air Pressure	50 to 100 (maximum) PSI; 4 SCFM				
Air Inlet	1/4", 18 NPT, female				
Overall Dimensions	23"(L) x 5-1/2"(W) x 24"(H) (C-frame and Hammer)				
Anvil-to-Hammer	4 inches (maximum)				
Opening					
Anvil Height	2-position anvil shaft mount with lock pin				
Adjustment	3/8" to 1-1/4" opening (between head and anvil);				
	4-position, stepped anvil micro-adjustment block 1/16"				
	height difference between each level				
Anvil Sizes	1" Radius, 2" Radius and 3" Radius				
Throat Depth	19-5/8"				
Foot Pedal	7-1/4"(L) x 4"(W) x 3-1/2"(H) inches. Built-in air filter				

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.

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

SAFETY WARNINGS AND PRECAUTIONS

WARNING: When using this tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to the equipment.

Read all instructions before using this tool!

- Keep the work area clean. Cluttered areas invite injuries.
- Observe work area conditions. Do not use machines or power tools in damp or wet locations.
 Do not expose this tool to the rain. Keep the work area well lit. Do not use electrically powered tools in the presence of flammable gases or liquids.
- Keep children away. Children must never be allowed in the work area. Do not let them handle machines, tools or extension cords.
- Store idle equipment. When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
- Use the right tool for the job. Do not attempt to force a small tool or attachment to do the
 work of a larger industrial tool. There are certain applications for which this tool was designed.
 Do not modify this tool. Do not use this tool for purposes it was not intended for.
- Use eye and ear protection. Always wear ANSI-approved impact safety goggles.
- Dress properly. Do not wear loose clothing or jewelry as they can be caught in moving parts.
 Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear a restrictive hair covering to contain long hair.
- **Do not overreach**. Keep proper footing and balance at all times. Do not reach over or across running machines.
- Maintain tools with care. Keep tools sharp and clean for better and safer performance. Follow
 instructions for lubricating and changing accessories. Inspect tool cords periodically. If
 damaged, have the cord repaired by an authorized service provider. The handles must be kept
 clean, dry and free from oil and grease at all times.
- Disconnect the air supply. Unplug the tool from the air supply when not in use.
- Remove adjusting keys and wrenches. Check that keys and adjusting wrenches are removed from the tool and machine work surface before operation.
- Stay alert. Watch what you are doing and use common sense. Do not operate a tool when you
 are tired.
- Check for damaged parts. Before using a tool, carefully check parts for damage to determine that the tool will operate properly and perform its intended function. Check for alignment; binding of moving parts; any broken parts or mounting fixtures; or any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.
- Replacement parts and accessories. When servicing, use only identical replacement parts.

Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Northern Tool + Equipment.

- Do not operate the tool if under the influence of alcohol or drugs. If taking prescription
 medicine, read the warning label to determine if your judgment or reflexes are impaired while
 on the drug. If there is any doubt, do not operate the tool.
- Maintenance. For your safety, service and maintenance should be performed regularly by a authorized service provider.
- Use compressed air only. Never use combustible gas as a power source.
- Protect your hands and body from injury. Always wear leather gloves and body protection
 when handling metal for use on the Planishing Hammer. Keep hands, fingers, and arms away
 from the hammer head and anvil during operation.

Unpacking

When unpacking, make sure that all the parts are included. Refer to the Parts List and Assembly Drawing located in the back of this manual. If any parts are missing or broken, please call Northern Tool + Equipment Customer Service Dept. at 1-800-222-5381.



ASSEMBLY

Mounting "C" Frame

- 1. Select a workbench in the shop area able to support the weight of the Planishing Hammer, the metal being worked on, and the vibration of the planishing process.
- 2. Mount the "C" Frame (1) to the workbench using mounting hardware (not supplied).

The "C" Frame should be positioned so that the mounted Air Hammer (10) is extended slightly over the edge of the workbench. This will accommodate various shapes of metals being planished. The mounting hardware should consist of nuts, bolts, flat washers and lock washers.

Note: There is an entry hole on the side of the "C" Frame (1) where sand can be inserted to reduce noise and vibration.

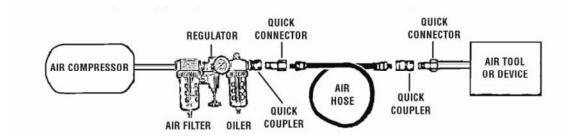
Air Connection

- 1. Attach a Union fitting (not supplied) into the Foot Switch Assembly Inlet (13) fitting.
- A Union fitting is necessary before a connection can be made to an Air Compressor.
- 2. For easy connection or removal, attach an Air Coupler (not supplied) to the Union fitting.
- 3. Tighten all couplings and fittings.
- 4. Attach the Air Hose (not supplied) from the Air Compressor (not supplied) to the Foot Switch Assembly (13). Place the Foot Switch Assembly on the floor next to the Planishing Hammer.

Caution: Do not turn the Air Compressor on at this time.

Oiler and Filter Connection

Dirt, water and the lack of pneumatic tool oil are major causes for tool wear. Install an optional oiler-filter (not supplied), as illustrated below for better performance.



Connect the air tool, air hoses, filter and oiler to the Compressor Air Outlet as illustrated below. Use pipe thread seal or Teflon tape on all threaded connections. The filter and oiler (not supplied) are recommended, but not mandatory for operation.

If the filter and oiler are not used, connect the air hose directly to the 1/4" 18 NPT connector located at the Air Switch Assembly Inlet (13) fitting. Also, a few drops of pneumatic tool oil must be added through the air line before each use.

Mounting The Air Hammer to The "C" Frame

1 .Loosen the Screw (2) so that it is out of the way of the Air Hammer (10) when inserting it into the "C" Frame. Do not completely remove the Screw (2). See the photo on the right, below.



- 2. Unscrew the Coil Spring from the Air Hammer (10) and slip it off, along with the Hammer Head (3) and the Hammer Sleeve (4). See the photo on the left, below.
- 3. Slide the Air Hammer body into the "C" Frame mounting hole as shown on the right, below.
- 4. Insert the desired size Anvil (5) onto the Adjustable Pole (7).
- 5. Place the Hammer Head (3) through the Coil Spring, then into the Air Hammer. Screw the Coil

6. Tighten the Screw (2) completely.

OPERATION

- To change the height of the Anvil (5) to within 1-1/2" of the desired height, pull out the Stopper Pin (9) and move the Adjustable Pole (7) up or down to the Stopper Pin hole. Replace the Stopper Pin.
- To adjust it closer to the desired height, move the Range Adjust Block (6) to the right or to the left.
- Turn on the Air Compressor and set its regulator to 90 PSI.
- Before planishing, test the tool by pressing down on the Foot Switch Assembly (13).
- Adjust the cycle speed of the Air Hammer by turning the Regulator valve (11) clockwise or counterclockwise.
- Use both hands to hold the material to be planished and place it between the Anvil (5) and the Hammer Head (3). Make sure you wear gloves.
- Press down on the Foot Switch Assembly (13) to operate.
- When finished planishing, remove your foot from the Foot Switch Assembly and wait for the Air Hammer to stop completely.
- Turn the Air Compressor off.
- Press down on the Foot Switch Assembly (13) to release any remaining air pressure in the Air Hammer.

Changing Anvils

- Loosen the Screw (2) so that it is out of the way of the Air Hammer (10) when removing it from the "C" Frame. Do not completely remove the Screw (2). See the photo on page 5, bottom-right.
- Unscrew the Coil Spring from the Air Hammer (10) and slip it off, along with the Hammer Head (3) and the Hammer Sleeve (4). See photo on page 5, bottom-left.
- Slide the Air Hammer body out of the "C" Frame mounting hole.
- Replace the Anvil (5) with the desired size onto the Adjustable Pole (7).
- Place the Air Hammer back into the "C" Frame. Attach the Hammer Head (3) through the Coil Spring, then into the Air Hammer. Screw on the Coil Spring until it stops.
- Tighten the Screw (2) completely.

MAINTENANCE

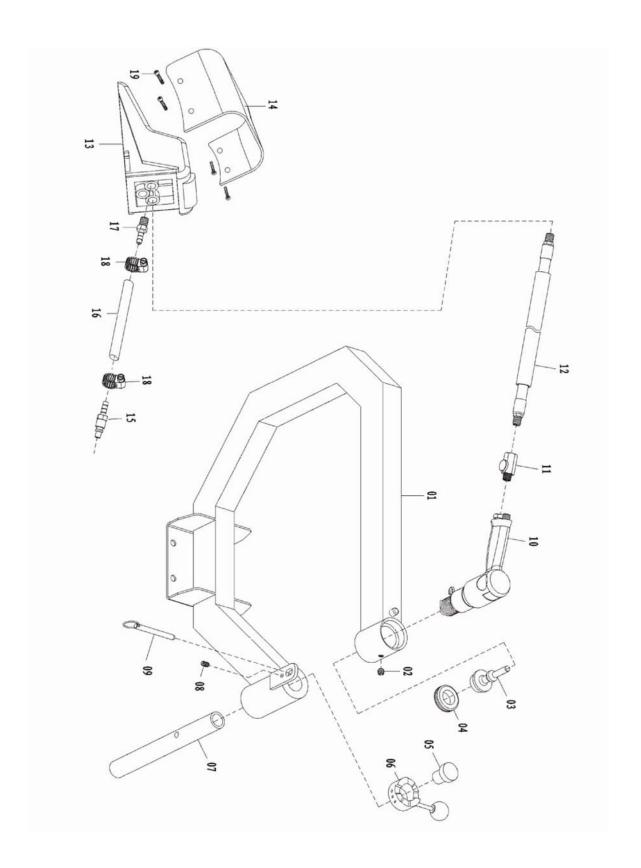
WARNING: Make sure this tool is disconnected from the air compressor before attempting any maintenance, cleaning, or inspection.

- 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 a qualified service provider.
- After each use, wipe all components of the Planishing Hammer with a clean cloth to remove any excess dirt and grease.
- To maintain tool life, always lubricate the air-line by adding a few drops of pneumatic tool oil before each use. Or, install the automatic oiler-filter system as illustrated on page 5.
- Before each use, drain the water out of the air compressor tank and the condensation from the air-lines. Refer to the Air Compressor Operation Manual.
- Cover the Planishing Hammer and keep it in a clean and dry location.

TROUBLESHOOTING

Problem	Probable Cause	Solution	
Planishing Hammer does not operate when Switch pressed	No air pressure in air line	Check air line and compressor	
Planishing Hammer operates	Air pressure below normal	Check regulator on	
at diminished pressure	operating pressure	compressor and Air Hammer	

DIAGRAM & PARTS LIST



Part #	Description	Qty.	Part #	Description	Qty.
1	"C" Frame	1	11	Regulator	1
2	Screw	1	12	Air Hose	1
3	Hammer Head	1	13	Switch Assembly	1
4	Hammer Head	1	14	Cover	1
5	Anvil (small, medium, large)	3	15	Quick Connector	1
6	Range Adjust Block	1	16	PU Air Hose	1
7	Adjustable Pole	1	17	Male Thread Fitting	1
8	Screw	1	18	Hose Clamp	2
9	Stopper Pin	1	19	Screw	4
10	Air Hammer	1			

Note: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

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

WARRANTY

One-Year Limited Warranty