

Scaling Hammer Single and Triple Pistons Operations & Maintenance

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Specifications subject to changes without notice!

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OPERATION AND MAINTENANCE MANUAL FOR Single and Triple Scaling Hammers

NOTICE

FOR PROFESSIONAL USE ONLY



IMPORTANT SAFETY INFORMATION ENCLOSED. READ AND UNDERSTAND THIS MANUAL BEFORE OPERATING THIS PRODUCT.

IT IS YOUR RESPONSIBILITY TO MAKE THIS SAFETY INFORMATION AVAILABLE TO OTHERS THAT WILL OPERATE THIS PRODUCT.

FAILURE TO OBSERVE THE FOLLOWING WARNING COULD RESULT IN INJURY.

PLACING TOOL IN SERVICE

- Always install, operate, inspect and maintain this product in accordance with all applicable standards and regulations (local, state, country, federal, etc.).
- Compressed air models always use clean, dry air at 90 psi (6.2bar/620kPa) maximum air pressure at the inlet. Higher pressure may result in hazardous situations including excessive speed, rupture, or incorrect output torque or force.
- Electric models must always utilize proper gauge, and rated electrical cords with correct connections.
- Be sure all hoses and fittings are the correctly sized and secured.
- Ensure an accessible emergency shut off has been installed in the air or electrical supply line. Make others aware of its location.
- Do not use damaged, frayed, or deteriorated air hoses and fittings.
- Always use proper gauge electrical cords with correct connections. (When applicable.)
- Always wear protection when operating or performing maintenance on this tool.
- Always wear hearing protection when operating this tool.
- Always use Personal Protective Equipment appropriate to the tool used and material worked. This may include dust mask or other breathing apparatus, safety glasses, ear plugs, gloves, apron, safety shoes, hard hat and other equipment,
- Prevent exposure and breathing of harmful dust and particles created by power tool use:
- Some dust created by power sanding, sawing, and grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
- Lead from lead based paints,

- Electric models must not use damaged, frayed, or deteriorated electrical cords and connections.
- Keep clear of whipping air hoses. Shut off the compressed air before approaching a whipping hose.
- Always turn off and disconnect the tool from its power supply before installing, removing or adjusting any accessory, or before performing any maintenance on the tool.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel. Use only recommended lubricants.
- Keep work area clean, uncluttered, ventilated and illuminated.
- Keep all electrical connections clear of water or other liquids. (When applicable.)
- Do not operate the machine while flammable or volatile liquids such as gasoline, diesel or jet fuel are present. Failure to do so can result in explosion. (When applicable.)
- Do not remove any labels. Replace any damaged label.

USING THE TOOL

- 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.

- Keep others a safe distance from your work area, or ensure they use appropriate Personal Protective Equipment.
- This tool is not designed for working in explosive environments, including those caused by fumes and dust, or near flammable materials.
- Electrically powered tools are not insulated against electric shock.



- Be aware of buried, hidden or other hazards in your work environment. Do not contact or damage cords, conduits, pipes, or hoses that may contain electrical wires, explosive gases or harmful liquids.
- Keep hands, loose clothing, long hair and jewelry away from working end of tool.
- Power tools can vibrate in use. Vibration, repetitive motions or uncomfortable positions may be harmful to your hands and arms. Stop using any tool if discomfort, tingling feeling or pain occurs. Seek medical advices before resuming use.
- Keep body stance balanced and firm. Do not overreach when operating this tool. Anticipate and be alert for sudden changes in motion, reaction torques, or forces during startup and operation.
- Tool and/or accessories may briefly continue their motion after throttle is released,
- To avoid accidental starting ensure tool in "off" position before applying air pressure or connecting to electricity. Avoid throttle when carrying, and release throttle with loss of air or electricity.
- Ensure work pieces are secure. Use clamps or vises to hold work piece whenever possible.
- Do not carry or drag the tool by the hose or power cord.
- Do not use power tools when tired, or under the influence of medication, drugs, or alcohol.
- Never us a damaged or malfunctioning tool or accessory,
- Do not modify the tool, safety devices, or accessories.
- Do not use this tool for purposed other than those recommended.
- Use accessories recommended by Novatek Corp.
- Never operate a tool with an accessory unless it is properly installed and the tool is held firmly against the work,
- Always use a retainer, when furnished, in addition to proper barriers to protect persons in surrounding or lower areas from possible ejected accessories.
- When wearing gloves and operating models with inside trigger, always be sure that the

gloves will not prevent the trigger from being released.

- Wear safety shoes, hard hat, safety goggles, gloves, dust mask and any other appropriate protective clothing while operating the tool.
- Do no indulge in horseplay. Distraction can cause accidents.
- Keep hands and fingers away from the throttle lever until it is time to operate the tool.
- Never rest the tool on your foot.
- Never point the tool at anyone.
- Compressed air is dangerous. Never point an air hose at yourself or others.
- Never blow clothes free of dust with compressed air.
- Be sure all hose connections are tight. A loose hose not only leaks but can come completely off the tool and while whipping under pressure, can injure the operator and other in the area. Attach safety cables to all hosed to prevent injury in case a hose is accidentally broken.
- Never disconnect a pressurized air hose. Always turn off the air supply and bleed the tool before disconnecting a hose.
- When applicable, the operator must keep limbs and body clear of the chisel. If a chisel breaks, the tool with the broken chisel projecting from the tool will suddenly surge forward.
- Do not ride the tool with one leg over the handle. Injury can result if the chisel breaks while riding the tool.
- Know what is underneath the material being worked. Be alert for hidden water, gas, sewer, telephone or electric lines.
- Use only proper cleaning solvents to clean parts. Use only cleaning solvents which meet current safety and health standards. Use cleaning solvents in a well ventilated area.
- Do not flush the tool or clean any parts with diesel fuel. Diesel fuel residue will ignite in the tool when the tool is operated, causing damage to internal parts. When using models with outside triggers or throttle levers, take care when setting the tool down to prevent accidental operation.
- Do not operate the tool with broken or damaged parts.
- Never start the tool when it is lying on the ground.
- This tool is not designed for working in explosive atmospheres.



SECTION I

GENERAL

This operation and maintenance manual is for the Single and Triple Head Scaling Hammers.

READ ALL INSTRUCTIONS AND DATA IN THIS OPERATION AND MAINTENANCE MANUAL PRIOR TO OPERATION OF THIS EQUIPMENT.

These instructions are for your protection and convenience. Please read them carefully since failure to follow the precautions could result in injury. Whenever using electric powered equipment, basic safety precautions should be followed.

If after reading this manual anything seems unclear, contact a **NOVATEK** authorized distributor or **NOVATEK** directly by dialing 1-866-563-7800.

SECTION II

BEFORE USE

- Place three drops of oil into the air inlet using light machine oil. (See recommended lubrications.)
- The compressed air should be free from moisture and contamination. The installation of a filter/regulator/lubricant air preparation set with a moisture trap is strongly recommended
- Ensure that only 3/8" (10mm) bore airline is used and that all couplings are tight and in good condition.
- Limit the length of airline to 50ft. Where extra length is necessary, for each additional 50ft of airline, the pressure drop is approximately 4psi at 100 psi (0.2bar at 6.9bar).

NOTE: The correct operating pressure is 6.2bar (90psi). CLEANING

At intervals of no more than 50 hours of operation, operating becomes sluggish or if the tool begins to show signs of sticking, flush through with a paraffin/high flash solvent. Immediately after flushing, thoroughly oil the tool with one of the recommended lubricants.

NOTE: If the tool is used on concrete scabbling applications where highly abrasive airborne particles are present, we strongly recommend that this practice is carried out at least on a daily basis.

Changing Pistons

After ensuring that the air supply is completely turned off, remove the tool from the airline. Clean all deposits from the outside of the tool.

Single Piece Piston and Head System

- Open Screwed caps
- Remove Spring and Spring Cap
- Pull out piston.

ASSEMBLY

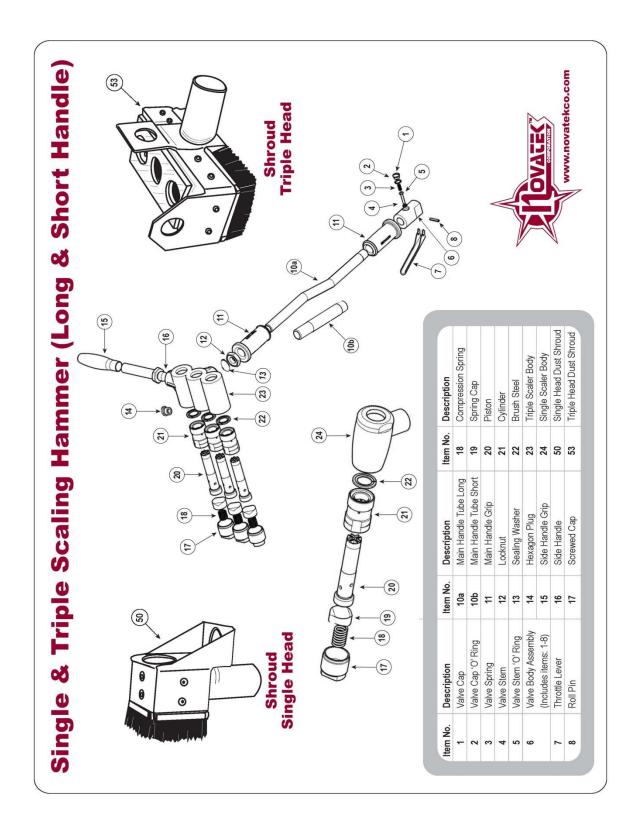
Ensure all parts are clean and have a film of air tool oil on them. Change out all O-rings and any parts that show signs of wear.

Handle For In-Line Use

- Remove the hex plug or side handle and sealing washer from the live side inlet port.
- Loosen locknut and then unscrew the handle.
- Unscrew the handle from the normal inlet port.
- Locknut and washer will come away with the handle.
- Remove soiled Teflon tape from handle thread and hex plug thread. (Apply 3 turns of new Teflon tape to both.)
- Hold body in vice with side inlet port uppermost.
- Screw locknut and washer up to the lip of the handle grip.
- Screw in handle to inlet port until hand tight.
- Align trigger with screwed caps on top of the body and fasten with locknut another half turn.
- Remove from vice and screw hex plug and sealing washer into exposed port.

SECTION IV

| Single and Triple Head Scalers | | | Heavy Duty | Heavy Duty |
|--|--|----------------------|----------------------|---------------|
| Scaling Hammer Including Tungsten Carbide Tipped Single Piece Cruciform Piston-Long Handle | | | PHS1HDL | PHS3HDL |
| Scaling Hammer Including Tungsten Carbide Tipped Single Piece Cruciform Piston- Short Handle | | | PHS1HDS | PHS3HDS |
| Scaling Hammer Spares | | | | |
| Item No. | Description | Single Scaler H/D | Triple Scaler H/D | |
| 1 | Valve Cap | 28NS501 | 28NS501 | |
| 2 | O' Ring - Valve Cap (Pack of 10) | 28NS502 | 28NS502 | |
| 3 | Valve Spring | 28NS503 | 28NS503 | |
| 4 | Valve Stem | 28NS504 | 28NS504 | |
| 5 | 'O' Ring - Valve Seat (Pack of 10) | 28NS505 | 28NS505 | |
| 6 | Valve Body Assembly (Comprises items 1-8) | PHS406 | PHS406 | |
| 7 | Throttle Lever | 28NS507 | 28NS507 | |
| 8 | Throttle Lever Pin (Pack of 10) | 28NS508 | 28NS508 | |
| 10a | Main Handle Tube Standard | PHS410LG | PHS410LG | |
| 10b | Main Handle Tube Short | PHS410SH | PHS410SH | |
| 11 | Main Handle Grip | PHS411 | PHS411 | |
| 12 | Locknut | PHS412 | PHS412 | |
| 13 | Sealing Washer (Pack of 10) | PHS413 | PHS413 | |
| 14 | Hexagon Plug | | PDS425 | |
| 15 | Side Handle Grip | | PHS415 | |
| 16 | Side Handle | | PHS416 | |
| 17 | Screwed Cap | PHS417 | PHS417 | |
| 18 | Compression Spring | PHS418 | PHS418 | |
| 19 | Spring Cap | PHS419 | PHS419 | |
| 20 | Piston Cruciform | PHS433C | PHS433C | |
| 20 | Piston Bush Hammer | PHS433B | PHS433B | |
| 21 | Cylinder | PDS428 | PDS428 | |
| 22 | Brush Seal (Pack of 10) | PHS422 | PHS422 | |
| 23 | Body Triple Scaler | | PHS423 | |
| 24 | Body Single Scaler | PHS424 | | |
| 33 | Single Head Scaling Hammer Heavy Duty Vacuum Shroud | PHS451 | | |
| 33a | Triple Head Scaling Hammer Heavy Duty Vacuum Shroud | | PHS453 | |



NOVATEK CORPORATION LIMITED WARRANTY

The **TOOLS** manufactured by **NOVATEK CORPORATION** are warranted to be free from defects in material and workmanship for a period of **180 DAYS** from the date of purchase from **NOVATEK CORPORATION**. This warranty does not apply to accessories. All electrical components of the tool are also warranted to be free from defects in material and workmanship for a period of **180 DAYS**.

This warranty applies only to **TOOLS** purchased new from **NOVATEK CORPORATION**. This warranty does not apply to any **TOOL** which has been abused, misused, modified or repaired by someone other than **NOVATEK CORPORATION** or its authorized repair center.

If a **TOOL** proves defective in material or workmanship within one year of purchase from **NOVATEK CORPORATION**, it should be returned to **NOVATEK CORPORATION**, transportation pre-paid. The return must be authorized by a **RETURN MERCHANDISE AUTHORIZATION NUMBER (R.M.A. #)** obtained from **NOVATEK CORPORATION** prior to returning the **UNIT**. All packages must show clearly on the outside the return merchandise authorization number. All packages received without any R.M.A. # on the outside will be refused by **NOVATEK CORPORATION** receiving department.

Warranty claims will only be considered upon adequate proof of date of purchase. **NOVATEK CORPORATION** will, at its option, **REPAIR or REPLACE DEFECTIVE PARTS**. Repairs or replacements are warranted as above for the remainder of the original warranty period. The sole liability of **NOVATEK CORPORATION** and the user's exclusive remedy under this warranty is limited to the repair or replacement of the defective product.

THERE ARE NO OTHER WARRANTIES EXPRESSED OR IMPLIED AND **NOVATEK CORPORATION** SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OR ANY OTHER EXPENSES OR REPAIR OR REPLACEMENT AS DESCRIBED ABOVE.

All warranty claims should be forwarded to:

NOVATEK CORPORATION 700 Schell Lane Phoenixville, PA 19460

ATTENTION: CLAIM AND SERVICE DEPARTMENT R.M.A. # _____

CALL Toll Free at 1-866-563-7800 for your RMA number prior to shipping.

Also include a brief description of the problem as well as a phone number, contact name and return address in case **NOVATEK CORPORATION** service personnel has to get in contact with you.