



Long Reach Scalers Needle and Chisel Scalers Operations & Maintenance

28XC2ST/28XN2ST
28XC5ST/28XN5ST
28XC4AL/28XN4AL
28XC5AL/28XN5AL
40LRE600



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Specifications subject to changes without notice!

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OPERATION AND MAINTENANCE MANUAL FOR LONG REACH NEEDLE AND CHISEL SCALERS

NOTICE

FOR PROFESSIONAL USE ONLY



WARNING



**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.)
- 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

- 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,
 - 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 Long Reach Needle/Chisel Scalers.

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

PRIOR TO USE

1. Place three drops of oil into the air inlet using light machine oil. (See recommended lubrications.)
2. The compressed air should be free from moisture and contamination. The installation of a filter/regulator/lubricator air preparation set (with moisture trap) is strongly recommended.
3. Ensure that only 3/8" (10mm) bore airline is used and that all Couplings are tight and in good condition.
4. 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).
5. Check that the tool is mechanically sound and all airlines are leak free and in good condition.

SECTION III

IN USE

1. Maintain contact with the work surface with sufficient pressure only to keep the tool stable. Excessive operator pressure will not improve tool efficiency. Handled in this way, the tool will cover a greater area more effectively leaving a more regular finish on the surface.
2. In particularly cold temperatures it is recommended that propriety anti-freeze lubricating oil is to be used.
3. Avoid letting the operating pressure fall below 80psi (5.5bar) or rise about 100psi (6.9bar).

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

4. DO NOT use the scaler as a lever – if the chisel or scraper becomes embedded in the material being removed, withdraw the scaler and try again.
5. Never allow the tool to run continuously while it is not in use by taping up the throttle lever. Always use the right type of needle or chisel.

SECTION IV

FITTING THE CHISEL / SCRAPER HOLDERS

1. Before fitting the chisel / scraper holder, disconnect the air supply to the tool.
2. To fit the holder, make sure that the cap head screw is free and screw the holder onto the cylinder and tighten cap head screw.
3. To secure the chisel / scraper, insert hexagon shank into holder and turn the knurled collar until the retaining ball is visible.
4. Locate the indentation of the chisel / scraper on the ball and give the collar half a turn to lock the chisel/ scraper into the holder.
5. Reverse the procedure for removal.

FITTING THE NEEDLE SCALING ATTACHMENT

1. Before fitting the needle scaling attachment, disconnect the air supply to the tool.
2. Assemble the parts: anvil, needle holder, needles, spring as show on the service layout and place inside the intermediate tube.
3. Thread this tube assembly onto the cylinder and tighten cap head screw.
4. Fit front tube onto the intermediate tube until 1" (25mm) of needle length protrudes from the front tube. Tighten the cap head screw.
5. When changing or replacing needles, take care to note how all parts fit together within the intermediate tube as incorrect assembly of these parts will result in damage to the tube.
6. As needles wear, adjust front tube so that 1" (25mm) of needle is always protruding.

SECTION V

LUBRICATION

Oil the tool daily during use through the air inlet using an industry approved lubricant such as one of those listed below. Always use clean oil from a sealed container whenever possible. All of the following lubricants are ISO.VE22 grade.

SHELL
CASTROL

Naturelle HF
Carelube HTG 22

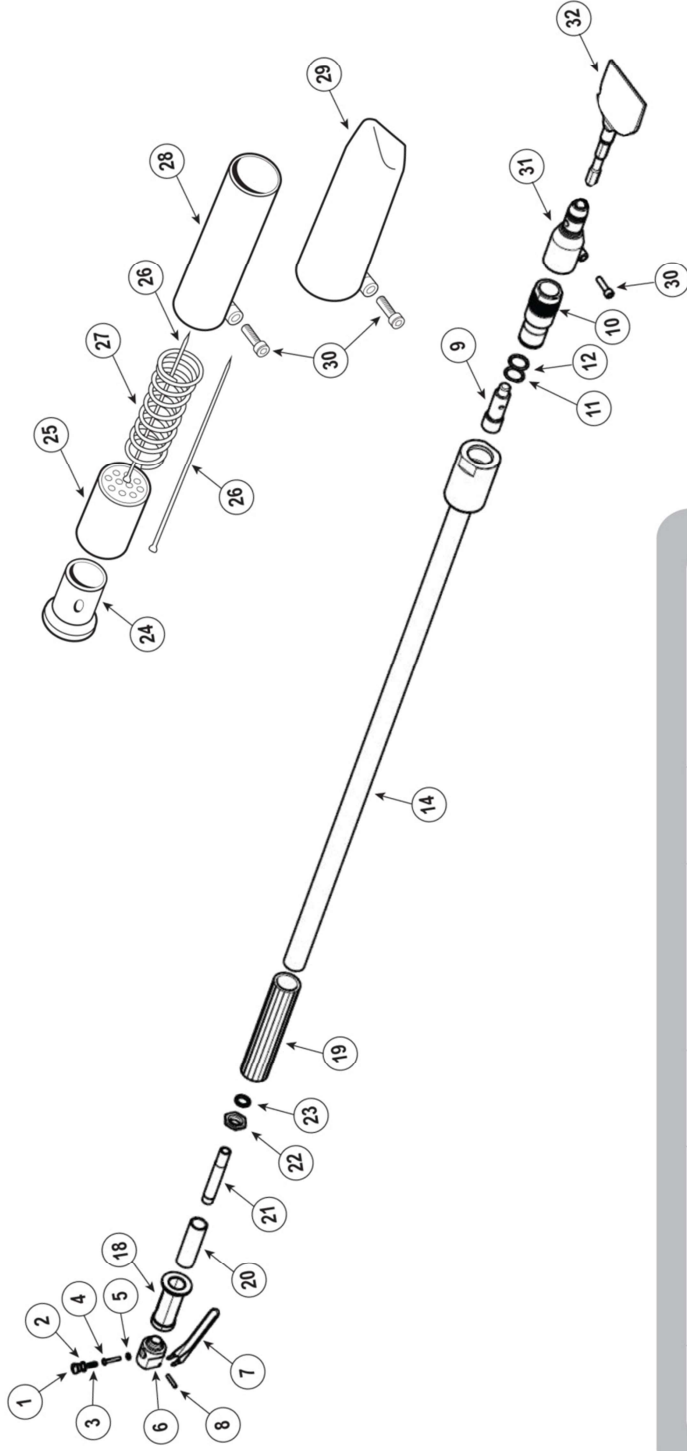
The use of a filter lubricator in the airline of the tool is strongly recommended. This will ensure trouble free running and prolong the life of the tool.

SECTION VI

Long Reach Spares

Item No.	Description	2ft Steel	4ft LITE	5ft Steel	5ft LITE	6ft Steel ERGO
		Part No.	Part No.	Part No.	Part No.	Part No.
1	Valve Cap	28NS501	28NS501	28NS501	28NS501	28NS501
2	Valve Cap 'O' Ring (Pack of 10)	28NS502	28NS502	28NS502	28NS502	28NS502
3	Valve Spring	28NS503	28NS503	28NS503	28NS503	28NS503
4	Valve Stem	28NS504	28NS504	28NS504	28NS504	28NS504
5	Valve Seat 'O' Ring (Pack of 10)	28NS505	28NS505	28NS505	28NS505	28NS505
6	Valve Body Assembly (comprises items 1-8)	28NS506	28NS506	28NS506	28NS506	28NS506
7	Throttle Lever	28NS507	28NS507	28NS507	28NS507	28NS507
8	Roll Pin (Pack of 10)	28NS508	28NS508	28NS508	28NS508	28NS508
9	Piston	28NS509	28NS509	28NS509	28NS509	28NS509
10	Cylinder	28NS510	28NS510	28NS510	28NS510	28NS510
11	'O' Ring (Pack of 10)	28NS511	28NS511	28NS511	28NS511	28NS511
12	'O' Ring (Pack of 10)	28NS512	28NS512	28NS512	28NS512	28NS512
14	Cover Assembly	28XP414	28XP415	28XP417	28XP416	40LRE600
18	Rubber Handle Grip	28XP418	28XP418	28XP418	28XP418	28XP418
19	Cover Assembly Grip			28XP519		28XP519
20	Handle Tube	28XP420		28XP420		28XP420
21	Centre Tube or Threaded Adaptor	28XP421	28XP521	28XP421	28XP521	28XP421
22	Locknut	28XP422		28XP422		28XP422
23	Sealing Washer (Pack of 10)	28NS523		28NS523		28NS523
24	Anvil	28NS524	28NS524	28NS524	28NS524	28NS524
25	Needle Holder 3mm	28NS526	28NS526	28NS526	28NS526	28NS526
25a	Needle Holder 2mm	28NS525	28NS525	28NS525	28NS525	28NS525
25b	Needle Holder 4mm	28NS526C	28NS526C	28NS526C	28NS526C	28NS526C
27	Compression Spring	28NS527	28NS527	28NS527	28NS527	28NS527
28	Intermediate Tube	28NS528	28NS528	28NS528	28NS528	28NS528
29	Front Tube - Straight	28NS529	28NS529	28NS529	28NS529	28NS529
29a	Needle Attachment Kit (Items 24-29)	ACCLRNA1	ACCLRNA1	ACCLRNA1	ACCLRNA1	ACCLRNA1
30	Cap Head Screw (Pack of 10)	28NS530	28NS530	28NS530	28NS530	28NS530
31	Chisel Holder Assembly 5/8" Hexagon	28NS531H	28NS531H	28NS531H	28NS531H	28NS531H
32	Scraper Yoke with Beveled 4" Replaceable Blade	ACCHX34	ACCHX34	ACCHX34	ACCHX34	ACCHX34
32a	Scraper Yoke with Beveled 8" Replaceable Blade	ACCHX38	ACCHX38	ACCHX38	ACCHX38	ACCHX38
32b	Scraper Yoke with Beveled 12" Replaceable Blade	ACCHX32	ACCHX32	ACCHX32	ACCHX32	ACCHX32
32c	Chisel 1" Blade	ACCHX01	ACCHX01	ACCHX01	ACCHX01	ACCHX01
32d	Chisel 2" Blade	ACCHX02	ACCHX02	ACCHX02	ACCHX02	ACCHX02
32e	Chisel 4" Blade	ACCHX04	ACCHX04	ACCHX04	ACCHX04	ACCHX04
32f	Chisel 2" Blade Spark Resistant	ACCHX12	ACCHX12	ACCHX12	ACCHX12	ACCHX12
32g	Chisel 4" Blade Spark Resistant	ACCHX14	ACCHX14	ACCHX14	ACCHX14	ACCHX14
32h	Scraper Yoke w/ Hardware	ACCHX20	ACCHX20	ACCHX20	ACCHX20	ACCHX20
	Pack of 5 Beveled Scraper Blades 4"	ACCHX24	ACCHX24	ACCHX24	ACCHX24	ACCHX24
	Pack of 4 Beveled Scraper Blades 12"	ACCHX22	ACCHX22	ACCHX22	ACCHX22	ACCHX22
	Pack of 5 Beveled Scraper Blades 8"	ACCHX28	ACCHX28	ACCHX28	ACCHX28	ACCHX28
33	Center Handle Assembly for Ergo model					40LRE700

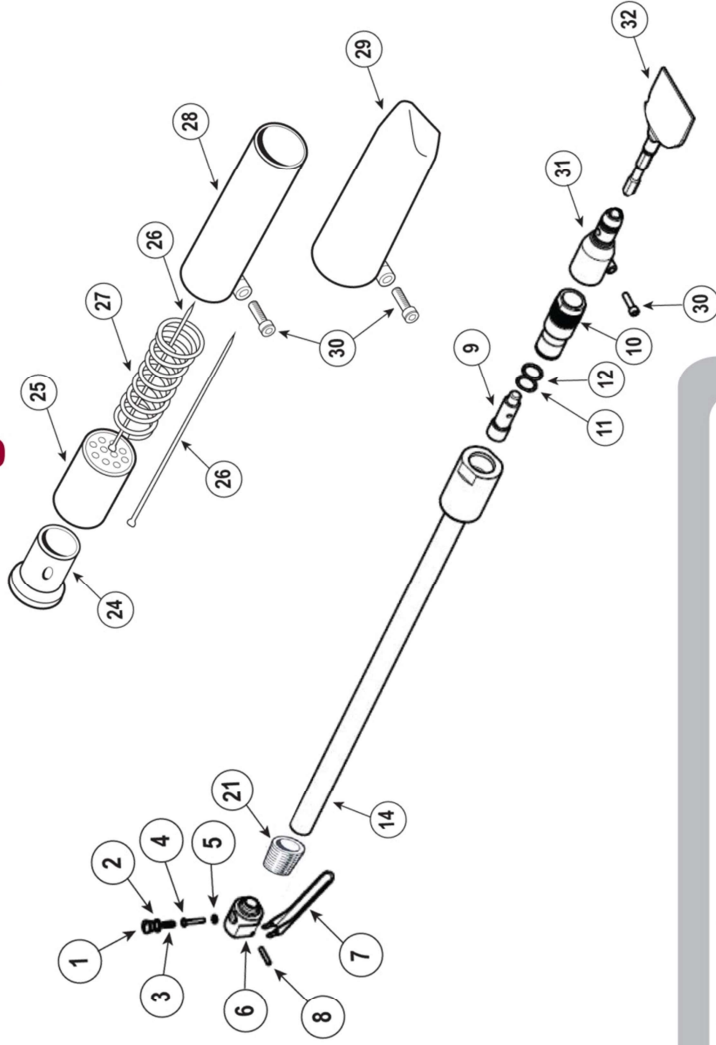
2 & 5 ft. Steel Long Chisel Scaler



Item No.	Description	Item No.	Description	Item No.	Description
1	Valve Cap	10	Cylinder	24	Anvil
2	Valve Cap 'O' Ring	11	'O' Ring	25	Needle Holder
3	Valve Spring	12	'O' Ring	26	Needle
4	Valve Stem	13	-	27	Compression Spring
5	Valve Stem 'O' Ring	14	Cover Assembly	28	Intermediate Tube
6	Valve Body Assembly (Includes items: 1-8)	15	-	29	Front Tube
7	Throttle Lever	16	-	30	Cap Head Screw
8	Roll Pin	17	-	31	Chisel Holder Assembly
9	Piston	18	Rubber Handle Grip	32	Chisel
		19-23	-		



4 & 5 ft. Aluminum Long Reach Scaler

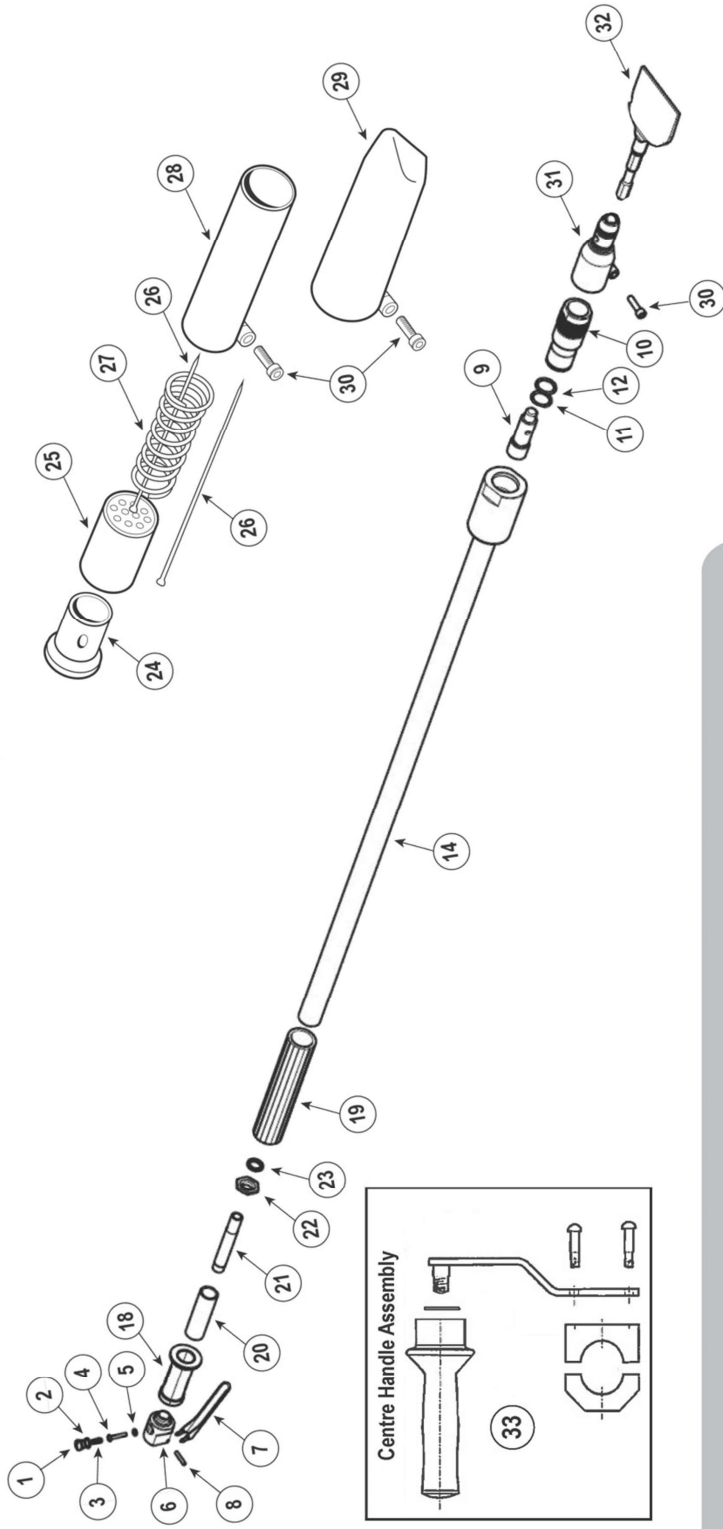


Item No.	Description	Item No.	Description	Item No.	Description
1	Valve Cap	11	'O' Ring	22	-
2	Valve Cap 'O' Ring	12	'O' Ring	23	-
3	Valve Spring	13	-	24	-
4	Valve Stem	14	Cover Assembly	25	Needle Holder
5	Valve Stem 'O' Ring	15	-	26	Needle
6	Valve Body Assembly (Includes items: 1-8)	16	-	27	Compression Spring
7	Throttle Lever	17	-	28	Intermediate Tube
8	Roll Pin	18	-	29	Front Tube
9	Piston	19	-	30	Cap Head Screw
10	Cylinder	20	-	31	Chisel Holder Assembly
		21	Threaded Adaptor	32	Chisel



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6 ft. Steel Long Reach Ergo



Item No.	Description	Item No.	Description	Item No.	Description
1	Valve Cap	10	Cylinder	24	Anvil
2	Valve Cap 'O' Ring	11	'O' Ring	25	Needle Holder
3	Valve Spring	12	'O' Ring	26	Needle
4	Valve Stem	13	-	27	Compression Spring
5	Valve Stem 'O' Ring	14	Cover Assembly	28	Intermediate Tube
6	Valve Body Assembly (Includes items: 1-8)	15	-	29	Front Tube
7	Throttle Lever	16	-	30	Cap Head Screw
8	Roll Pin	17	-	31	Chisel Holder Assembly
9	Piston	18	Rubber Handle Grip	32	Chisel
		19-23	-	33	Centre Handle Assembly (Ergo Model Only)



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. 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** or one of its authorized distributors. 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
254 Welsh Pool Rd
Exton, PA 19341

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.