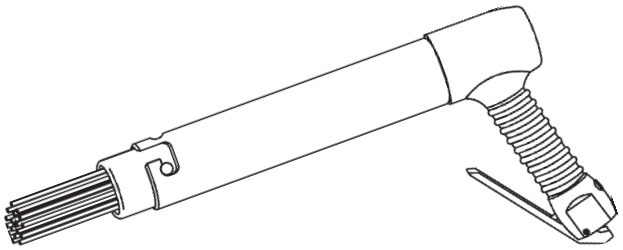
Universal Tool

UT9914 & UT9914-2
Pistol Grip Recoilless Needle Scalers

Description

The Universal Tool model UT9914 & UT9914-2 Pistol Grip Recoilless Needle Scalers feature a patented vibration dampening system. The low vibration and high blow frequency results in less operator fatigue and increased production. These versatile tools are used on flat and irregular surfaces for removing weld flux, paint, rust, scale and to resurface concrete.



Specifications

Number of needles (UT9914)	19
Number of needles (UT9914-2)	38
Needle size (UT9914)	1/8" X 7"
Needle size (UT9914-2)	2mm X 7"
Blows per minute	3,400
Stroke length	7/8"
Vibration level	3.5 m/s^2
Overall length	11 7/8"
Weight	6 1/8 lbs.
Air inlet	¼" NPT
Hose size	3/8" I.D.
Average air consumption	3 CFM
Maximum operating pressure	90 PSI

PLEASE READ AND FOLLOW ALL WARNINGS

Read Operating Instructions
Always become familiar with all the instructions and warnings before operating any pneumatic tool.

Always Wear Approved Eye Protection
Impact resistant eye protection should meet or exceed the standards as set forth in the United States ANSI Z87.1, Occupational and Educational Eye and Face Protection. Look for the marking Z87.1 on your eye protection to insure that it is an approved style. For further information, ANSI Z87.1, Occupational and Educational Eye and Face Protection, is available from the American National Standards Institute, Inc., 11 West 42nd Street, New York, NY 10036.

Hearing Protection is Recommended
Hearing protection should be used when the noise level exposure equals or exceeds an 8 hour time-weighted average sound level of 85dBA. Process noise, reflective surfaces, other tools being operated nearby, all add to the noise level present in your work area. If you are unable to determine your noise level exposure, we recommend the use of hearing protection.

Avoid Prolonged Exposure to Vibration
Pneumatic tools can vibrate during use. Prolonged exposure to vibration or very repetitive hand and arm movements, can cause injury. Stop using any tool if discomfort, tingling feeling or pain occurs. You should consult your physician before resuming use of the tool.

90 PSIG Maximum
This tool is designed to operate at an air pressure of 90 pounds per square inch gauge pressure (90 PSIG) maximum, at the tool. Use of higher air pressure can, and may cause injury. Also, the use of higher air pressure places the internal components under loads and stresses they were not designed for, causing premature tool failure. The air supply should be clean and dry, preferably lubricated. For best results, drain the moisture from your compressor daily.

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Installation

The UT9914 & UT9914-2 Pistol Grip Recoilless Needle Scalers are designed to operate with 90 PSIG. Lower pressure (below 90 PSIG) will reduce performance of the tool while higher air pressure (over 90 PSIG) raises the performance of the tool beyond its rated capacity and could cause serious damage to tool and operator.

Always use clean dry air. Excessive moisture and dirt will greatly reduce the life of any air tool. We recommend the installation of an in-line filter-regulator-lubricator as close to the tool as possible.

A 3/8" air hose is required up to a length of 8 ft. If more length is required, a 1/2" air hose should be connected to the 3/8" hose to ensure the tool has the necessary air supply. Be sure all hoses and fitting are the correct size and tightly secured.

Installing Replacement Needles

Before the tool is connected to the air supply, clear the air hose of accumulated dust and moisture. Before removing a tool for service or changing accessories, make sure the air line is shut-off and drained of air. This will prevent the tool from operating if the throttle is accidently engaged.

1. Push in the front assembly (Ref. No. 1) and twist to the open slot, then pull needle assembly (Ref. Nos. 1-4) out of housing (Ref. No. 8).

2. Remove old needles (Ref. No. 4) from holder (Ref. No. 3) and replace with new needles, making sure the needle heads fit into the countersunk holes in needle holder.

3. Slide needles through spring (Ref. No. 2) and front assembly (Ref. No. 1). Check that driver (Ref. No. 5), pusher (Ref. No. 6) and piston ring (Ref. No. 7) are placed inside housing correctly.

4. Lubricate entire needle assembly with a light coating of air tool oil. Reassemble by sliding assembly into the housing, line up slot, then depress and twist to lock in place.

5. Lubricate tool through inlet with air tool oil and run in a protected area to check operation.

⚠ Caution ⚠ - Never operate scaler without the needles installed and pressed against the work surface. Doing so may result in personal injury or damage to the tool.

⚠ Warning ⚠ - This tool may produce flying objects. Always wear eye protection during operation.

Operation

After properly setting up the tool, air lines, air supply and work area, the scaler is ready to use. The UT9914 & UT9914-2 do not operate like conventional needle scalers, tool operators should take time to familiarize themselves with the feel and operation of this design for better results.

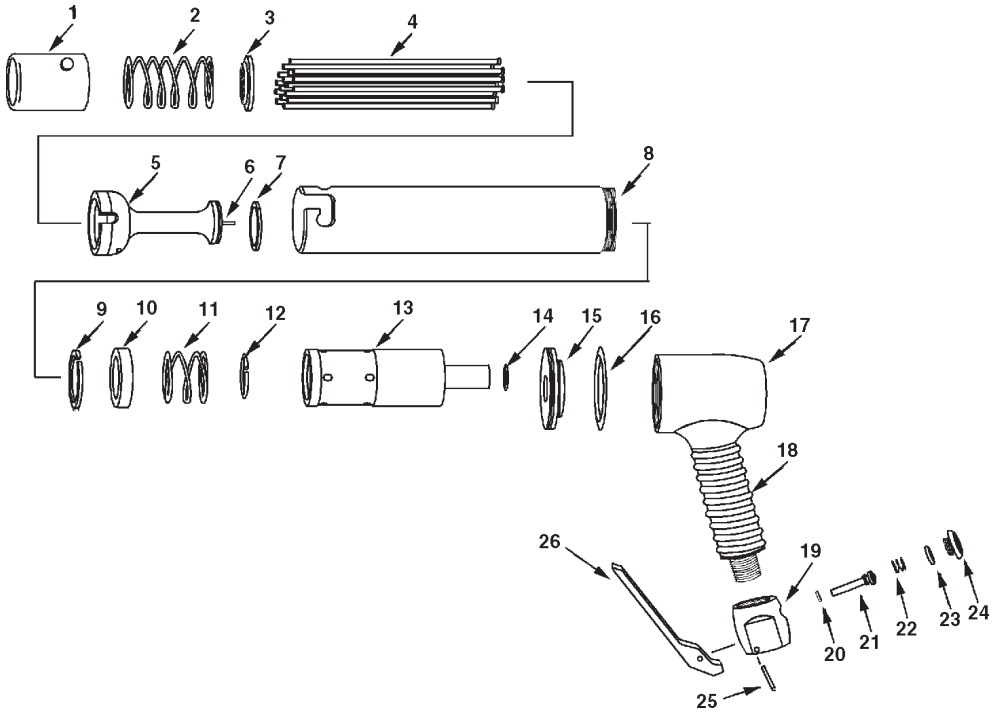
This model operates two to three times higher than the frequency of conventional scalers. The higher frequency results in smoother operation and a smoother finished surface than with conventional scalers.

Scaling efficiency depends on the force applied to the scaler. For efficient material removal on most applications, applying an intermediate force will give the best results.

Lubricate tool regularly and properly. Always wear safety equipment during operation. Check condition of tool and needles before each use. Avoid free air operation of this tool, always apply tool to work before pressing throttle. This tool is designed to use (19) 1/8" (3mm) X 7" needles, or (38) 2mm X 7" needles. Needles must have correct needle holder for each configuration. Please refer to parts list for part numbers.

Lubrication

1. An automatic in-line filter-regulator-lubricator is recommended to increase tool life and keeps the tool operating properly. The in-line lubricator should be regularly checked and filled with Marvel air tool oil or equivalent. Proper adjustment of the in-line lubricator is performed by placing a sheet of paper next to the tool exhaust ports and holding the throttle open approximately 30 seconds. (The lubricator is properly set when a light stain of oil collects on the paper). Excessive amounts of oil should be avoided as it will decrease tool performance.
2. In the event that it becomes necessary to store the tool for an extended period of time (overnight, weekend, etc.), it should receive a generous amount of lubrication at that time. The tool should be run for approximately 30 seconds to ensure oil has been evenly distributed throughout the tool. The tool should be stored in a clean and dry environment.
3. Recommended lubricants:
   Use Marvel Air Tool Oil or any other high grade turbine oil containing moisture absorbents, rust inhibitors, metal wetting agents and an EP (extreme pressure) additive.



Replacement Parts List for UT9914 & UT9914-2 Pistol Grip Recoilless Needle Scalers

Ref.	Description	Part #	Qty	Ref.	Description	Part #	Qty
1	Front assembly	6NRV19-1	1	13	Cylinder assembly	6NRV19A-2	1
2	Spring	6NRV19-2	1	14	O-Ring	6NRV19-15	1
3	3mm Needle holder	6NRV19-3	1	15	Divider assembly	6NRV19A-3	1
3	2mm Needle holder	109160	1	16	O-Ring	6NRV19-20	1
4	3mm Needles (Set of 19)	109020	1	17	Handle assembly	260320	1
4	2mm Needles (Set of 38)	109170	1	18	Grip	995120B-15	1
5	Driver assembly	6NRV19A-1	1	19	Valve body	995120B-6	1
6	Pusher	6NRV19-10	1	20	O-Ring valve seat	995120B-5	1
7	Piston Ring	6NRV19-13	1	21	Valve stem	995120B-4	1
8	Housing	6NRV19-5	1	22	Valve spring	995120B-3	1
9	Snap ring	6NRV19-7	1	23	O-Ring valve cap	995120B-2	1
10	Support ring	6NRV19-6	1	24	Valve cap	995120B-1	1
11	Spring	6NRV19-9	1	25	Roll pin	995120B-8	1
12	Limit ring	6NRV19-14	1	26	Valve lever	995120B-7	1

Limited Warranty

Universal Tool warrants its tools to be free from defects in material and workmanship for one year from the date of purchase. This warranty does not apply to tools which have been abused, misused, modified or repaired by someone other than Universal Tool or its authorized service centers. If a Universal Tool proves defective in material of workmanship within one year after purchase, return it to any authorized service center or to Universal Tool, freight prepaid. Please enclose your name, address and adequate proof of purchase date with a brief description of the defect. Universal Tool will, at its option, repair or replace defective tools, free of charge. Repairs or replacements are warranted as described above for the remainder of the warranty period. Universal Tool's sole liability and your exclusive remedy under this warranty is limited to repair or replacement of the defective tool. There are no other warranties expressed or implied and Universal Tool shall not be liable for incidental, consequential or special damages, or any other damages, costs or expense of repair or replacement as described above.

Trouble Shooting

Tool failure, loss of power or erratic action may be caused by factors outside the tool. Make the following checks:

1. Check air pressure. For rated performance, 90 PSIG air pressure is required AT THE TOOL with tool operating. A drop in air pressure may be caused by lowered compressor output, excessive drain on the air line or use of hose or connections of improper size (or in poor condition).
2. Check for wet or dirty air in system. Wet air tends to wash lubricant away from tool and may rust and corrode the components. Dirt and foreign matter in the air supply will impede action of the tool and cause damage to the internal mechanisms. If dirt or water has entered the tool, flush with Marvel air tool oil or equivalent.

Recommended Air Line Set-Up