



# Universal Tool

## MODEL: UT8922 1/4" Air-Hydraulic Riveter

### Operating Instructions, Parts List & Warranty

**IMPORTANT!** Read carefully before operating this tool.

Failure to operate any power tool properly can result in personal injury and/or property damage!



#### 7.2.2.3 GENERAL SAFETY RULES

- Multiple hazards. Read and understand the safety instructions before installing, operating, repairing, maintaining, changing accessories on, or working near the power tool. Failure to do so can result in serious bodily injury.
- Only qualified and trained operators should install, adjust or use the power tool.
- Do not modify this power tool. Modifications may reduce the effectiveness of safety measures and increase the risks to the operator.
- Do not discard the safety instructions – give them to the operator.
- Do not use a tool if the tool has been damaged.
- Warnings shall be given against the risk of explosion or fire due to the material being processed.
- Warnings shall be given against the risk of cutting.



#### 7.2.2.4 PROJECTILE HAZARDS

- Failure of the work piece, of accessories, or even of the tool itself may generate high velocity projectiles.
- Always wear impact-resistant eye protection during operation of the tool. The grade of protection required should be assessed for each use.



#### 7.2.2.5 ENTANGLEMENT HAZARDS

- Entanglement hazard – choking, scalping and/or lacerations can occur if neck ware, hair or gloves are not kept away from tool and accessories.

#### 7.2.2.6 OPERATING HAZARDS

- Use of the tool may expose the operator's hands to hazards including crushing, impacts, cuts and abrasions and heat. Wear suitable gloves to protect hands.
- Operators and maintenance personnel must be physically able to handle the bulk, weight and power of the tool.
- Hold the tool correctly: be ready to counteract normal or sudden movements – have both hands available.
- Maintain a balanced body position and secure footing.
- Keep hands away from rotating or reciprocation accessories, spindles or other moving parts.
- Release the start and stop device in the case of an interruption of the energy supply
- Use only lubricants recommended by the manufacturer.



#### 7.2.2.7 REPETITIVE MOTIONS HAZARDS

- When using a power tool, you may experience discomfort in your hands, arms, shoulders, neck, or other parts of your body.
- While using a power tool, position your body in a comfortable posture. Maintain secure footing and avoid awkward or off-balanced postures. Changing your posture during extended tasks may help avoid discomfort and fatigue.
- If you experience symptoms such as persistent or recurring discomfort, pain, throbbing, aching, tingling, numbness, burning sensation, or stiffness, do not ignore these warning signs. Promptly tell your employer and consult a qualified health professional.

#### 7.2.2.8 ACCESSORY HAZARDS

- Only use sizes and types of accessories and consumables that are recommended by the power tool manufacturer.



#### 7.2.2.9 WORKPLACE HAZARDS

- Slips, trips and falls are major causes of workplace injury. Be aware of slippery surfaces caused by use of the tool and also of trip hazards caused by the air line or hydraulic hose.
- Proceed with care in unfamiliar surroundings. Hidden hazards may exist, such as electricity or other utility lines.
- This power tool is not intended for use in potentially explosive atmospheres and is not insulated from coming into contact with electric power.
- Make sure there are no electrical cables, gas pipes etc. that could cause a hazard if damaged by use of the tool.



#### 7.2.2.10 DUST AND FUME HAZARDS

- Dust from some work processes can cause cancer, birth defects or other respiratory diseases. Risk assessment of these hazards and implementation of appropriate controls is essential.

- If the pneumatic tool is used in a dust filled environment exhaust air can cause a dust hazard.
- Dusts and fumes generated when using power tools can cause ill health (for example: cancer, birth defects, asthma and/or dermatitis); risk assessment of these hazards and implementation of appropriate controls of is essential.
- Risk assessment should include dust created by the use of the tool and the potential for disturbing existing dust.
- Operate and maintain the power tool as recommended in these instructions, to minimize dust or fume emissions
- Direct the exhaust so as to minimized disturbance of dust in a dust filled environment
- Where dusts or fumes are created, the priority shall be to control them at the point of emission.
- All integral features or accessories for the collection, extraction or suppression of airborne dust or fumes should be correctly used and maintained in accordance with the manufacturer's instructions.
- Select, maintain and replace the consumable/inserted tool as recommended in these instructions, to prevent an unnecessary increase in dust or fumes.
- Use respiratory protection as instructed by your employer or as required by occupational health and safety regulations;



#### 7.2.2.11 NOISE HAZARDS

- Unprotected exposure to high noise levels can cause permanent, disabling, hearing loss and other problems such as tinnitus (ringing, buzzing, whistling or humming in the ears).
- Risk assessment of these hazards and implementation of appropriate controls of is essential.
- Appropriate controls to reduce the risk may include actions such as damping materials to prevent work pieces from 'ringing'
- Use hearing protection as instructed by your employer or as required by occupational health and safety regulations;
- Operate and maintain the power tool as recommended in these instructions, to prevent an unnecessary increase in noise levels;
- Select, maintain and replace the consumable/inserted tool as recommended in these instructions, to prevent an unnecessary increase in noise.



#### 7.2.2.12 VIBRATION HAZARDS

- Exposure to vibration can cause disabling damage to the nerves and blood supply of the hands and arms;
- Wear warm clothing when working in cold conditions and keep your hands warm and dry.
- If you experience numbness, tingling, pain or whitening of the skin in your fingers or hands, stop using the power tool, and tell your employer. You should also seek medical advice from a qualified occupational health professional.
- Operate and maintain the power tool as recommended in these instructions, to prevent an unnecessary increase in vibration;
- Select, maintain and replace the consumable/inserted tool as recommended in these instructions, to prevent an unnecessary increase in vibration levels;
- Support the weight of the tool in a stand, tensioner or balancer, because the operator can then use a lighter grip to support the tool.
- Hold the tool with a light but safe grip taking account of the required hand reaction forces, because the risk from vibration is generally greater when the grip force is higher.

#### 7.2.3 ADDITIONAL SAFETY INSTRUCTIONS FOR PNEUMATIC POWER TOOLS - AIR SUPPLY & CONNECTION HAZARDS

- Air under pressure can cause severe injury.
- Never direct air at yourself or anyone else.
- Whipping hoses can cause severe injury. Always check for damaged or loose hoses and fittings.
- Whenever universal twist couplings (claw couplings) are used, lock pins must be installed.
- Do not exceed the maximum air pressure stated on the tool.
- Use whip check safety cables to safeguard against possible hose to tool and hose to hose connection failure.
- Never carry an air tool by the hose.

## MAINTENANCE

### CHANGING NOSEPIECES

1. Connect air tool to air line. Pull and hold trigger arm. Unscrew nosepiece and replace with new nosepiece.
2. Nosepiece can also be changed by disconnecting air supply and unscrewing the head first, then change nosepiece.
3. When new nosepiece is on and tool is at rest, there should be a circular opening visible in the nosepiece with jaws open.

### CLEANING AND CHANGING JAWS

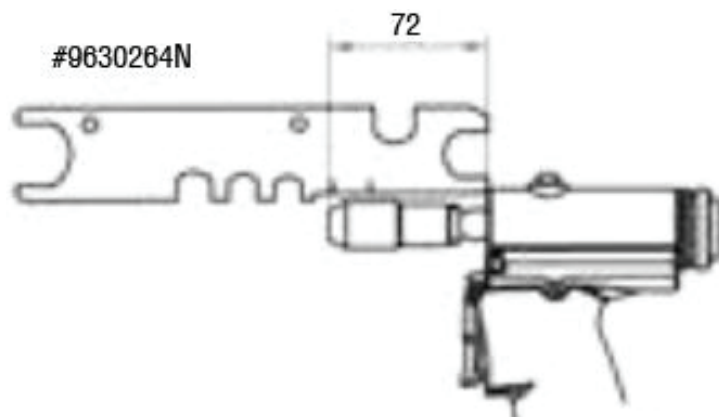
**⚠ CAUTION** *Disconnect tool from air supply before servicing.*

1. Use wrench (part #9630HW3) to remove head (ref. #3 / part #954009) and jaw housing coupler (ref. #7 / part #964006D) with an open-end wrench
2. Clean jaws with solvent or steel brush. Replace with new jaws if excess wear is apparent (a groove down middle of jaws). Always coat outer or smooth surface of jaws before assembling.
3. Reassemble by reversing above procedure. It is important that jaw pusher (ref. #5 / part #911507) engages the conical parts of the jaws. DO NOT change position of jaw housing coupler (ref. #7 / part #964006D) or locking nut (ref. #8 / part #963014).
4. The distance between the flat underside of jaw housing (ref. # 16 & 3 / part #964002V9 / #954009) should be measured against recess on wrench which is 72mm. Refer to Gapping the Jaw Assembly (see Figure 1).

### INSERT LINE DRAWING AND PHOTO

**Figure 1.**

#### ***Gapping the Jaw Assembly***



## MAINTENANCE (CONT.)

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### *Refilling the Hydraulic Section*

Using oil syringe (part #1179055), unscrew oil plug (ref. #17 / part #9630M5) to refill. Screw syringe into oil port. Begin filling.

Unscrew syringe nozzle from Riveter and insert OIL PLUG (#17) back into Riveter; tighten Oil Plug firmly. Reconnect Riveter to air supply and depress trigger 2-3 times. **Pour hydraulic oil (Texaco R&O-68) or any equivalent (36cSt-4.3e/50°C) into HYDRAULIC.**

### **GAPPING THE JAW ASSEMBLY (see Figure 1)**

1. With the head off, use the wrench (Ref. #963026N) provided with the tool
2. The spacing from the hydraulic section to the tip of the jaw housing should be 72mm.
3. Tighten the nut (Ref. # 8 on #7) against the jaw housing coupler to ensure the nut does not move.
4. Replace the head over the jaw section. Make sure you are using the proper nosepiece for the proper rivet size. This allows the jaws to open to the appropriate width of the mandrel on each rivet.

## AIR COMPRESSOR AND AIR TOOL SAFETY

1. Risk of Bursting. Do not adjust the regulator to result in output pressure greater than the marked maximum pressure of this air tool.
2. Ensure the hose is free of obstructions or snags. Entangled or snarled hoses can cause loss of balance or footing and may become damaged.
3. Never leave a tool unattended with the air hose attached.
4. Do not operate this tool if it does not contain a legible warning label.
5. Do not continue to use a tool or hose that leaks air or does not function properly.
6. Never direct a jet of compressed air toward people or animals.
7. Protect your lungs. Wear a face or dust mask if the operation is dusty.



**WARNING:** THIS PRODUCT CAN EXPOSE YOU TO CHEMICALS, INCLUDING LEAD, WHICH IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

**WARNING:** Some dust created by power sanding, sawing, 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 paint, crystalline silica from bricks and cement and other masonry products, arsenic and chromium from chemically-treated lumber.

Your risk from those 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 dust masks that are specifically designed to filter out microscopic particles.

**Obtain a copy of CAGI B186.1-2009 Safety Code for Portable Air tools from the following source:**

### COMPRESSED AIR AND GAS INSTITUTE

1300 SUMNER AVENUE  
CLEVELAND, OH 44115-2851  
PH: (216) 241 7333  
[www.cagi.org](http://www.cagi.org)

Or from **Florida Pneumatic MFG Corp**

851 Jupiter Park Lane  
Jupiter, FL 33458  
PH: (561) 744 9500

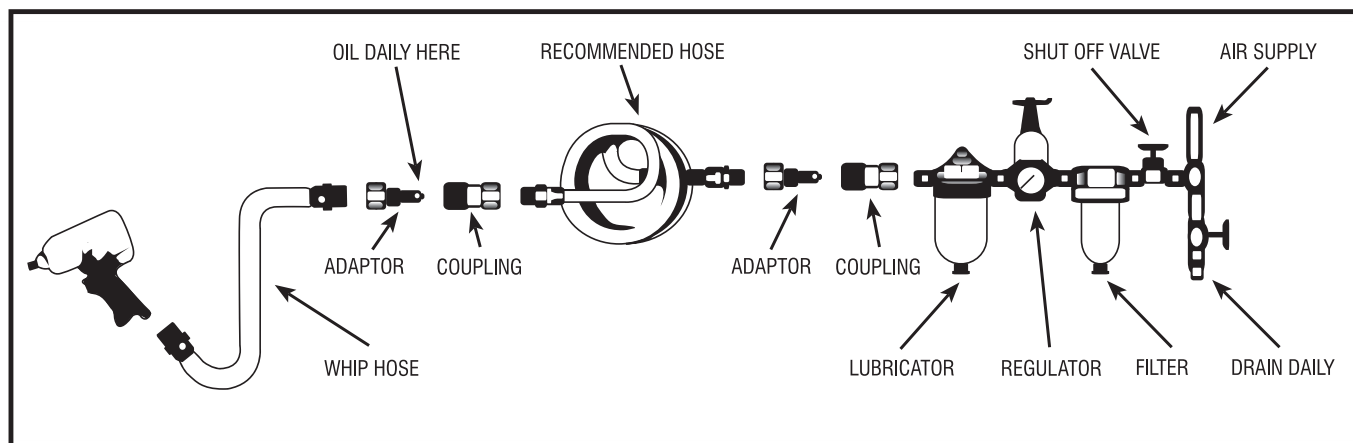
## Specifications

Model	Nose Piece	Traction Force (lb)	Rivet Capacity	Weight (lbs)	Weight (kg)	Length (in.)	Length (mm)	Air Inlet (NPT)	Rec. Hose (id.in.)	Air Cons (cfm)	Av. Air Cons (cfm)
UT8922	3/32", 1/8", 3/16", 1/4"	3500	Up to 1/4" Stainless	4	1.8	13.25	336	1/4"	3/8"	1.5	0.4

Recommended Air Pressure of 90 psi - 6.2 bar

## AIR TOOL SETUP

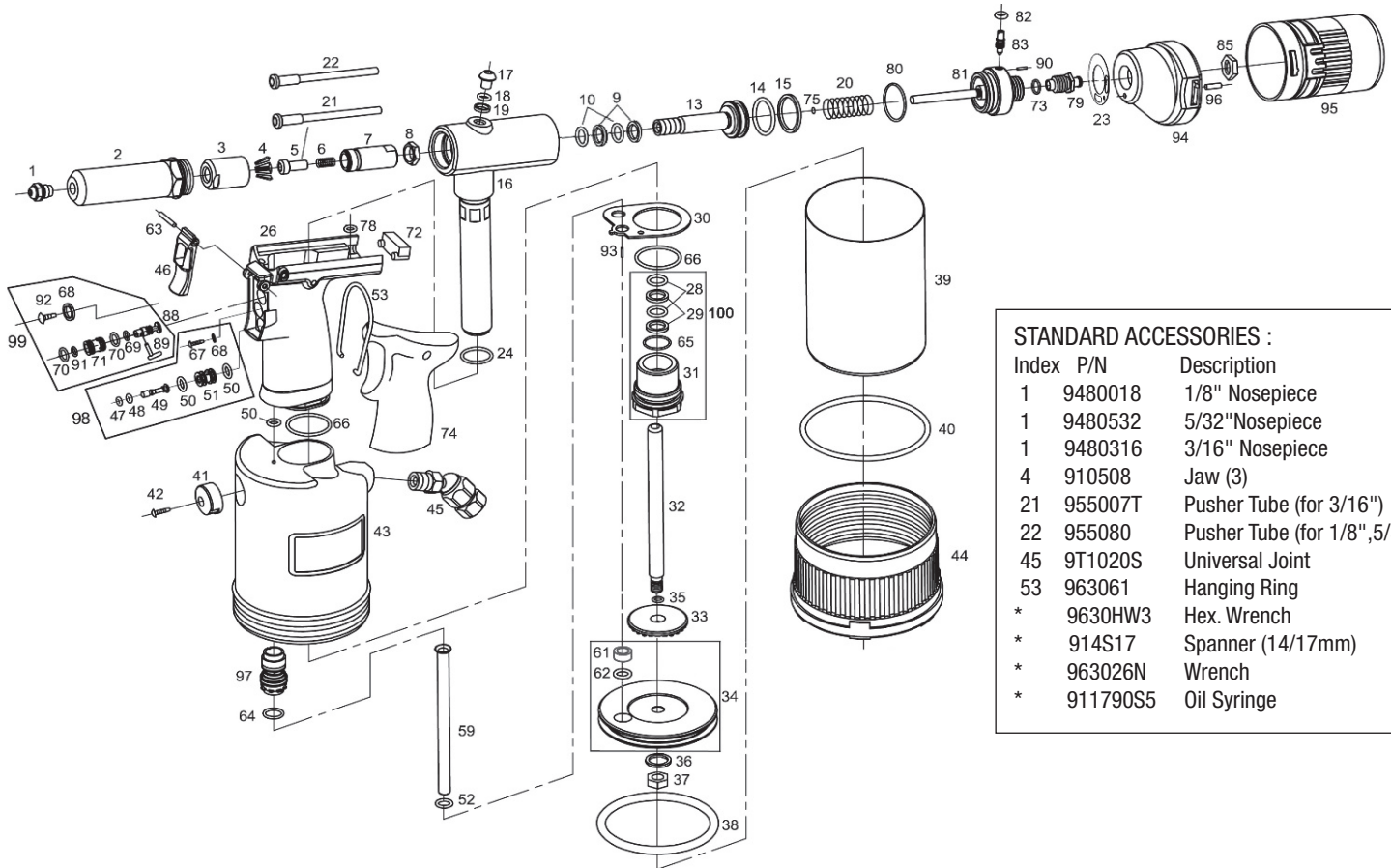
Tools of this class operate on a wide range of air pressure. It is recommended that air pressure of these tools measures 90 PSI at the tool while running free. Higher pressure and unclean air will shorten the tool's life because of faster wear and may create a hazardous condition and void the warranty. Water in the air line will cause damage to the tool. Drain the air tank daily. Clean the air inlet filter screen on at least a weekly schedule. The recommended hookup procedure can be viewed in the illustration below. The air inlet, used for connecting air supply, has standard 3/8" NPT American Thread. Line pressure should be increased to compensate for unusually long air hoses (over 25 feet). Minimum hose diameter should be 1/2" I.D. and fittings should have the same inside dimensions.





# Universal Tool

## MODEL: UT8922 1/4" Air-Hydraulic Riveter Exploded View & Parts List



### STANDARD ACCESSORIES :

Index	P/N	Description
1	9480018	1/8" Nosepiece
1	9480532	5/32" Nosepiece
1	9480316	3/16" Nosepiece
4	910508	Jaw (3)
21	955007T	Pusher Tube (for 3/16")
22	955080	Pusher Tube (for 1/8", 5/32")
45	9T1020S	Universal Joint
53	963061	Hanging Ring
*	9630HW3	Hex. Wrench
*	914S17	Spanner (14/17mm)
*	963026N	Wrench
*	911790S5	Oil Syringe

Index No.	Part No.	Description	Index No.	Part No.	Description	Index No.	Part No.	Description
1	9500064	1/4" Nosepiece	34	9630200	Piston Ass'y	69	910748	O-Ring
2	954015	Head	35	9R5X15	O-Ring Seal	70	9R6-4X15	O-Ring (2)
3	954009	Jaw Housing	36	948047	Washer	71	963052G	Valve Bush
4	910508	Jaws (3pcs/set)	37	948048	Nut	72	963060	Rubber Plug
5	911507	Jaw Pusher	38	9R70X57	O-Ring Seal	73	9R9X15	O-Ring
6	9540005	Spring	39	964008	Cylinder Cup	74	964086	Black Rubber Grip
7	964006D	Jaw Housing Coupler	40	9R78X2.8	O-Ring Seal	75	9R6X12	O-Ring
8	963014	Nut	41	963031	Exhaust Cap	78	964078	Rubber Washer
9	911520	X-Ring Seal (2)	42	9WS3X10	Screw	79	962081B	Nozzle
10	911558	O-Ring Washer (2)	43	963029	Cylinder Body	80	902116	O-Ring
13	964051VW	Hyd. Plunger w/Bush Screw	44	964035	Cylinder Cap	81	962010TVS	Screw Plug w/Tube
14	9P2224U	O-Ring Seal	46	963010V	Trigger	82	9R2X1	O-Ring
15	948022	O-Ring Washer	47	9R1-9X19	O-Ring Seal	83	962073	Regulator
16	964002V9	Hyd. Section Assy	48	9R2X15	O-Ring Seal	85	9620HN18	Nut
17	9630M5	Oil Plug	49	963016V	Trigger Stem	88	963053G	Valve Stem
18	920412	O-Ring Seal	50	902197	O-Ring Seal (3)	89	963089	Lever
19	9630W5	Fill Washer	51	963009	Trigger Bush	90	9PN1X8	Pin
20	9650C22	Hyd. Return Spring	52	9680RW13	O-Ring Seal	91	931451	O Ring
23	923211	Motor Gasket	59	964039	Valve Tube	92	9630BS3X6	Screw
24	902170	O-Ring	61	963079	Bushing	93	9400031	Pin
26	963003V	Hyd. Handle	62	910548	O-Ring	94	9620090	Cap
28	910454	X-Ring Seal (2)	63	925018B	Roll Pin	95	96200920	Mandre Bottle Ass'y
29	910558	O-Ring Washer (2)	64	925022	O-Ring Seal	96	9SP3X12	Pin
30	963032	Pipe Washer	65	9R18X2	O-Ring Seal	97	968036AK	Valve Kit
31	964057	Screw Plug	66	9R266X24	O-Ring Seal (2)	98	9630090V	Air Valve Bush Ass'y
32	964022	Plunger Rod	67	9630M3	Screw	99	963052G0	Air Suction Valve Bush Ass'y
33	963030	Cushion	68	9630W3	Washer (2)	100	9640570	Seal Screw Plug Ass'y

## Maintenance

Other factors outside the tool may cause loss of power or erratic action. Reduced compressor output, excessive drain on the air line, moisture or restriction in air pipes or the use of hose connections of improper size or poor condition may reduce air supply. Grit or gum deposits in the tool may cut power and may be corrected by cleaning the air strainer and flushing out the tool with gum solvent oil or an equal mixture of SAE#10 oil and kerosene. If outside conditions are in order and tool is out-of-warranty, disconnect tool from hose, disassemble tool, replace worn or damaged parts, clean, reassemble, and re-lubricate, or take tool to any air tool service center. For tools in warranty period, send tool direct to Warranty Center.

## Lubrication

Ensure the air line is shut-off and drained of air before removing this tool for service or changing sockets. This will prevent the tool from operating if the throttle is accidentally engaged.

An in-line filter-regulator-lubricator is recommended as it increases tool life and keeps the tool in sustained operation.

Regularly check and fill the in-line lubricator with air tool oil. Avoid using excessive amounts of oil.

Adjust the in-line lubricator by placing a sheet of paper next to the tool's 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.

If it is necessary to store the tool for an extended period of time (overnight, weekend, etc.), generously lubricate the tool through the air inlet. Run the tool for approximately 30 seconds to ensure the oil is evenly distributed throughout the tool. Store the tool in a clean and dry environment.

Recommended lubricants: Air tool oil or any other high grade turbine oil containing moisture absorbent, rust inhibitors, metal wetting agents, and an EP (extreme pressure) additive

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## Warranty

**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 UT tool proves defective in material or workmanship within one year after purchase, return it to any authorized service center or Universal Tool freight prepaid. Please enclose your name, address and adequate proof of date of purchase and a short 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 original 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 expenses excepting only the cost or expense of repair or replacement as described above.



# Universal Tool

Universal Tool a Division of  
Florida Pneumatic Manufacturing Corporation

851 Jupiter Park Lane  
Jupiter FL 33458  
USA

Tel: 800-356-3392  
sales@florida-pneumatic.com  
www.universaltoolusa.com