

# AEROPRO

## INSTRUCTION MANUAL



### 1/2" AIR-POWERED IMPACT WRENCH

A301



#### IMPORTANT:

Upon receipt of the product, read and follow all safety rules, operating instructions before first use it. And retain this manual for future reference.



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## ➤ TECHNICAL SPECIFICATIONS:

Square drive head:	1/2"(13mm)	Air hose required:	3/8"ID
Capacity Bolt size:	5/8"(16mm)	Air inlet:	1/4" ID(6.35mm)
SPEED (NO LOAD):	7000RPM±10%	A weighted sound pressure level:	106.6dB (A)
Working torque:	1000ft-lb(1350N.m)	Sound power level:	94.6dB (A)
SCFM Requirement:	7cfm(198 l/min)	Vibration in handle:	5.99m/s <sup>2</sup> , K=1.1 m/s <sup>2</sup>
Working pressure:	90PSI(6.3Bar)	Weight:	2.0kgs(4.4Lbs)

SCFM: Standard Cubic Feet per Minute (the volumetric flow rate of a gas corrected to standardized conditions of temperature and pressure).

NPT: National Pipe Thread

### Environmental Responsibilities

Please recycle unwanted materials instead of disposing of them as waste. All tools, hoses and packaging should be sorted, taken to the local recycling centre and disposed of in an environmentally safe way.

## ➤ SAFETY GUIDELINES:



### **DANGER!**

Potential hazard that will result in serious injury or loss of life.



### **WARNING!**

Potential hazard that could result in serious injury or loss of life.



### **CAUTION!**

Potential hazard that may result in moderate injury or damage to equipment.

**NOTE:** The word "Note" is used to inform the reader of something he/she needs to know about the tool.

### **PERSONAL SAFETY**

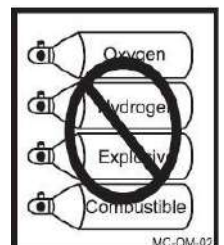
These precautions are intended for the personal safety of the user and others working with the user. Please take time to read and understand them.



### **DANGER!**

Potential hazard that will result in serious injury or loss of life.

- **Keep children away** from the work area. Do not allow children to handle power tools.
- **Do not use a tool that is leaking air**, that has missing or damaged parts, or that requires repairs. Verify that all screws are securely tightened.
- **Never attempt to override tool safety features.**
- **Do not allow unskilled or untrained individuals to operate** Air-powered impact wrench or any other air-powered tools.
- **Do not use oxygen or any other combustible or bottled gas** to power air powered tools. Failure to observe this warning can cause explosion and serious personal injury or death. Use only the compressed air to power air-powered tools, Use a minimum of 25' (7.6m) of hose to



MC-OM-02

connect the tool to the compressor. Failure to comply will result in serious injury or loss of life.

- **Risk of electric shock:** Do not expose a compressor to rain. Store it indoors. Compressor must be grounded. Do not use grounding adaptors.



- **Risk of personal injury:** Do not direct compressed air from the air hose toward the user or other personnel.



- **Risk of inhalation:** Never directly inhale the air produced by the compressor.
- **Risk of bursting:** Do not adjust the pressure switch or safety valve for any reason. They have been preset at the factory for this compressor's maximum pressure. Tampering with the pressure switch or the safety valve may cause personal injury or property damage.



- **Risk of burns:** The pump and the manifold generate high temperatures. In order to avoid burns or other injuries, do not touch the pump, the manifold, or the transfer tube while the compressor is running. Allow the parts to cool down before handling or servicing. Keep children away from the compressor at all times.



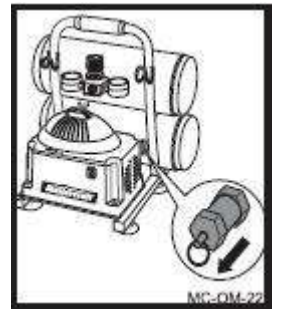
- **Risk of bursting:** Make sure the regulator is adjusted so that the compressor outlet pressure is set lower than the maximum operating pressure of the tool. Before starting the compressor, pull the ring on the safety valve to make sure the valve moves freely. Drain water from tank after each use. Do not weld or repair tank. Relieve all pressure in the hose before removing or attaching accessories.



#### **WARNING!**

Potential hazard that will result in serious injury or loss of life.

- **Always ensure that the work piece is firmly secured** leaving both hands free to control the tool.
- **Always keep your air tool clean and lubricated.** Daily lubrication is essential to avoid internal corrosion and possible failure.
- **Do not overload the tool.** Allow the tool to operate at its optimum speed for maximum efficiency. Excessive overload can cause the tool casing to split, and may also lead to excessive wear on moving parts and possible failure.
- **Use only the light weight coil hoses.** For connecting the tool to the compressor coupling. Do not fit quick change couplings onto the tool, as the vibration can lead to damage or failure of the coupling.
- **Always ensure that the tool has stopped before connecting it to the air supply.**
- **Verify that grinding accessories that are used with this tools are rated at or above the tool's speed rating (7000RPM).** Failure to properly match the accessory to the tool could result in serious personal injury.
- **Always ensure that the accessories are rated/ designed for use with the tool.**
- **Ensure that the accessories are correctly and securely fastened** before connecting the tool to the air supply.
- **Locate the compressor in a well-ventilated area.** For cooling, at a minimum of 12"(31cm) away from the nearest wall.
- **Protect the air hose and the power cord from damage and puncture.** Inspect them for weak or worn spots every week, and replace them if necessary.
- **Always wear hearing protection** when using the air compressor. Failure to do so may result in hearing loss.
- **Do not carry the compressor while it is running.**
- **Do not operate the compressor if it is not in a stable position.**
- **Do not operate the compressor on a rooftop or in an elevated position** that could allow the unit to fall or be tipped over.
- **Always replace a damaged gauge** before operating the unit again.



#### **CAUTION!**

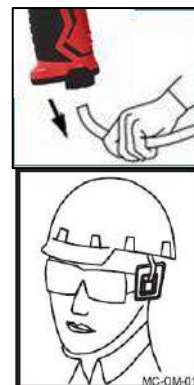
Potential hazard that may result in moderate injury or damage to equipment.

- **Keep proper footing at all times in order to ensure correct balance.**
- **Do not wear watches, rings, bracelets, or loose clothing** when using any air tool.
- **For optimal safety and tool performance, inspect the tool daily** in order to ensure free movement of the trigger, safety mechanisms, and springs.

- **Keep the work area clean.** A cluttered or dirty workbench may lead to an accident. Floors should be kept clear.
- **This tool is not a toy. Use it with caution.**
- **Use the tool in a well-ventilated area.**
- **Verify that the tool has stopped before putting it down after use.**
- **Handling and storage of oil:** Use with adequate ventilation. Avoid contact of oil with eyes, skin and clothing. Avoid breathing spray or mist. Store in a tightly closed container in a cool, dry, well-ventilated area free from incompatible substances.
- **Do not use the tool near or below freezing temperatures,** as doing so may cause tool failure.
- **Do not store the tool in a freezing environment** to prevent ice formation on the operating valves of the tool, as doing may cause tool failure.
- **Disconnect the tool from the air supply and turn off the compressor** before changing any accessories, performing any maintenance, servicing, when the tool is not in use, when it is being handed to another person, and when it is left unattended. Failure to comply may result in moderate injury or damage to equipment.



**Use safety goggles and ear protection:** Wear safety glasses with side shields when operating the tool/compressor and verify that others in the work area are also wearing safety glass. requirements and must provide protection from flying particles from the front and the sides.



Air-powered tools are loud and the sound can cause hearing damage. Always wear ear protection to help prevent hearing damage and loss. Failure to comply may result in moderate injury.

**Note:** Recycle unwanted materials rather than disposing of it as waste. Sort the tools, hoses, and package in specific categories and take them to the local recycling center or dispose of them in an environmentally safe way.

## ➤ KEY PARTS DIAGRAM



## ➤ IMPORTANT INFORMATION

### General usage description

The AEROPRO air-powered impact wrench features Impact of job security, free from vibration, heat, electromagnetic, etc, segmented in take structure design, handing more accurate. tool has the appearance of new, large torque, low noise characteristics. knob to change the structure, the pros and cons easily manipulated, high alloy steel, ensuring a more durable wear, greatly extend the service life. Best used for tire rotation, brake repairs, exhaust repairs, mechanical equipment bolt etc.

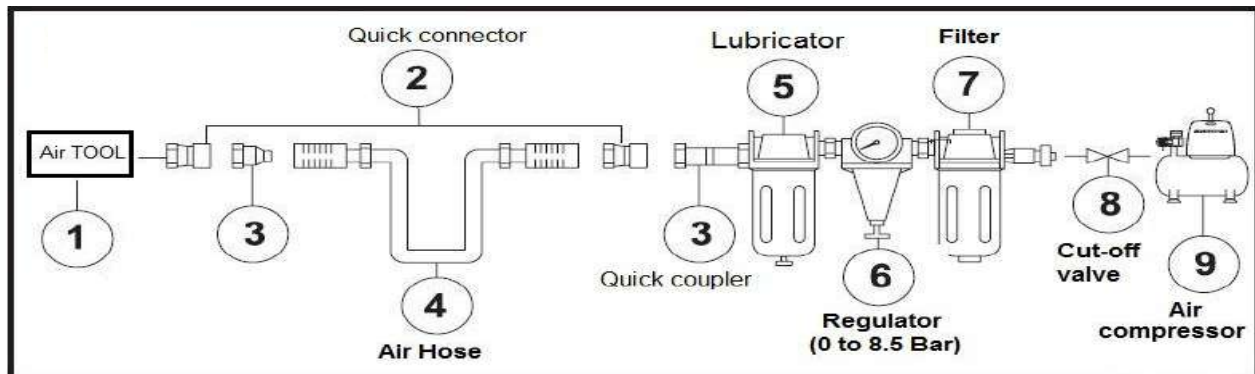
### Compatible compressor and air tool: GUIDELINES FOR PROPER USAGE AND POERATION

Always ensure the use of appropriately matched air tools and compressors. The compressor should be able to supply a minimal air delivery of 5 SCFM@90PSI to ensure the compressor can run continuously with the AEROPRO Air-Powered Impact wrench. Using tools or a combination of tools that together or separately require air pressure more than that of which the air compressor can deliver will reduce performance and could void the compressor or tool guarantee/warranty.

Air compressor size & power	2HP	2-1/2 HP	3+ HP
5-6 Gallons	Light duty and intermittent use	Light duty and intermittent use	Medium duty and intermittent use
8-11 Gallons	Light duty and intermittent use	Medium duty and intermittent use	Heavy duty and continuous use
15+ Gallons	Medium duty and intermittent use	Heavy duty and continuous use	Heavy duty and continuous use

## AIR SYSTEM

- Always use clean, dry, regulated, compressed air at 4 to 7bar (60 to 100PSI).
- Do not exceed the maximum and minimum pressure. Operating the tool at the wrong pressure (too low or too high) will cause excessive noise or rapid wear.
- It is recommended that a filter-regulator-lubricator be used and be located as close to the tool as possible.
- If a filter-regulator-lubricator is not installed, place up to 6 drops of pneumatic tool oil into the air inlet plug before each use.
- If a filter-regulator-lubricator is installed, keep the air filter clean. A dirty filter will reduce the air pressure to the tool, which will cause a reduction in power, efficiency, and general performance.



### CAUTION!

Potential hazard that may result in moderate injury or damage to equipment.

- Verify that all connections in the air supply system are sealed in order to prevent air from leaking. Failure to comply will result in moderate injury or damage to equipment.

Read this instruction manual thoroughly or have tool operators read thoroughly before using the tool.

- Read all safety guidelines (see section "Safety guidelines") at the beginning of this manual.
- Always inspect the air tool prior to each use to
  - Ensure proper use of power source.
  - Determine whether the tool is in proper working order.
- Only use accessories which are specifically designed for use with this tool (see section "technical specifications").
- Drain the compressor tank daily. Water in the air supply line will damage the tool.
- Clean the air inlet and the filter weekly.
- Line pressure should be increased to compensate for unusually long air hoses. The hose diameter should be 3/8"ID.



### WARNING!

Potential hazard that will result in serious injury or loss of life.

- Do not use the tool if it is not in proper working order.
- Do not use oxygen or any other combustible or bottled gas to power this tool.
- Do not use this tool in the presence of any flammable liquids or gases.
- Keep hose away from heat, oil, and sharp edges. Check hose for wear and tear, and ensure that all connections are secure. Failure to comply could lead to serious injury or loss of life.
- Keep hands and other parts of the body away from the work areas when connecting the air supply. Failure to comply could lead to serious injury or loss of life.

## ➤ OPERATING INSTRUCTIONS

### Loading and operation



### DANGER!

Potential hazard that will result in serious injury or loss of life.

- Carefully read all instructions provided in this manual and understand them thoroughly before using the tool.
- Do not use Impact wrench accessories other than those that are specifically designed for use with the Air-powered

impact wrench. Failure to comply will result in serious injury or loss of life.

- Verify that the air supply is clean before operating the Air powered impact wrench.
1. Plug in compressor, turn it on set the pressure regulator to 90psi, attach one end of the air hose to the compressor and the other end of the air hose to the tool. Use plumber's tape to avoid air leak ( see section" Technical specifications").
  2. Place and lock the socket over the square drive of the Air-powered impact wrench.
  3. Place the socket over a nut to be removed or installed and press the trigger at the top of the handle to operate the tool.
  4. For reverse ( R ) rotation, press the speed control knob on the left side of the tool; For forward (F) rotation, press the speed control knob on the right side of the tool; Rotate the speed control knob on the left side of the tool during reverse rotation to control the speed of the air flow as required. Rotate the speed control knob on the right side of the tool during forward rotation to control the speed of the air flow as required.
  5. After using the tool, disconnect the air hose from the tool.



### **WARNING!**

Potential hazard that will result in serious injury or loss of life.

- Hold the tool firmly with hands.
- Do not apply additional or excessive force to the tool when working.
- Do not allow the tool to run free for an extended period of time. Doing so will shorten the life of the tool.
- Verify that the air supply is clean and air pressure does not exceed 90psi (6.3bar) while operating the tool. If the air pressure is too high or unclean, it will shorten the life of the tool. Failure to comply could result in serious injury or loss of life.

## ➤ **MAINTENANCE**

### **WARNING!**

Potential hazard that will result in serious injury or loss of life.

- Disconnect the tool from the air supply before changing accessories, servicing, or performing maintenance.
- Only use the tool after replacing or repairing the damaged parts or accessories.
- Use only recommended and properly rated replacement parts and accessories. Failure to comply will lead to serious injury or loss of life.
- Repairs must be performed by a qualified service technician.

Maintenance required	Description	Tools or materials required	Maximum service interval		
			Each use or every 2 hrs	Monthly	As needed
General inspection-free movement	Trigger, spring, safety mechanism	None	✓		
In-depth inspection	Worn or broken parts			✓	✓
Replace worn or broken parts					✓
Lubrication	See below	Pneumatic tool oil	✓		

- Lubrication: If the Air-powered impact wrench and the compressor are not equipped with an in –line lubrication system, place up to 6 drops of pneumatic tool oil into the air inlet before each work day or after every 2 hours of continuous use, depending on the characteristics of work piece.
- Air-operated tools must be inspected periodically, and worn or broken parts must be replaced in order to keep tools operating safety and efficiently.
- Inspect and replace worn or damaged O-rings, seals, etc. Tighten all screws and caps frequently in order to help prevent personal injury.
- Loss of power or erratic action may be due to the following
  - Excessive drain in the air line.





- Moisture or restriction in the air pipe.
- Incorrect size or type of hose connector. Check the air supply and follow instructions.
- Grit or gum deposits in the tool may also reduce performance.
- Inspect the trigger, the spring, and the safety mechanism for free movement on a regular basis in order to ensure that the safety system is fully functional.
- Verify that no part is loose or missing and that no part is stuck or jammed.
- Disconnect the tool from the air supply, clean, and store it in a safe, dry, and childproof location, when tool is not in use.
- When temperatures are below freezing, keep tools as warm as possible using any safe, convenient method.
- Check the air supply for correct size and type of hose connectors. To avoid loss of power or erratic action, ensure that there is no additional drain on the air line and no moisture or restriction in the air pipe.

## Storage:

- Apply an ample amount of lubrication before storing the tool.
- Run the tool for approximately 30 seconds after lubricating, in order to ensure that the lubrication is uniformly distributed throughout the tool.
- Store the tool in a clean and dry environment.

## ➤ TROUBLESHOOTING

The following chart lists common issues and solutions. Please read it carefully and follow all instructions closely.



### **WARNING!**

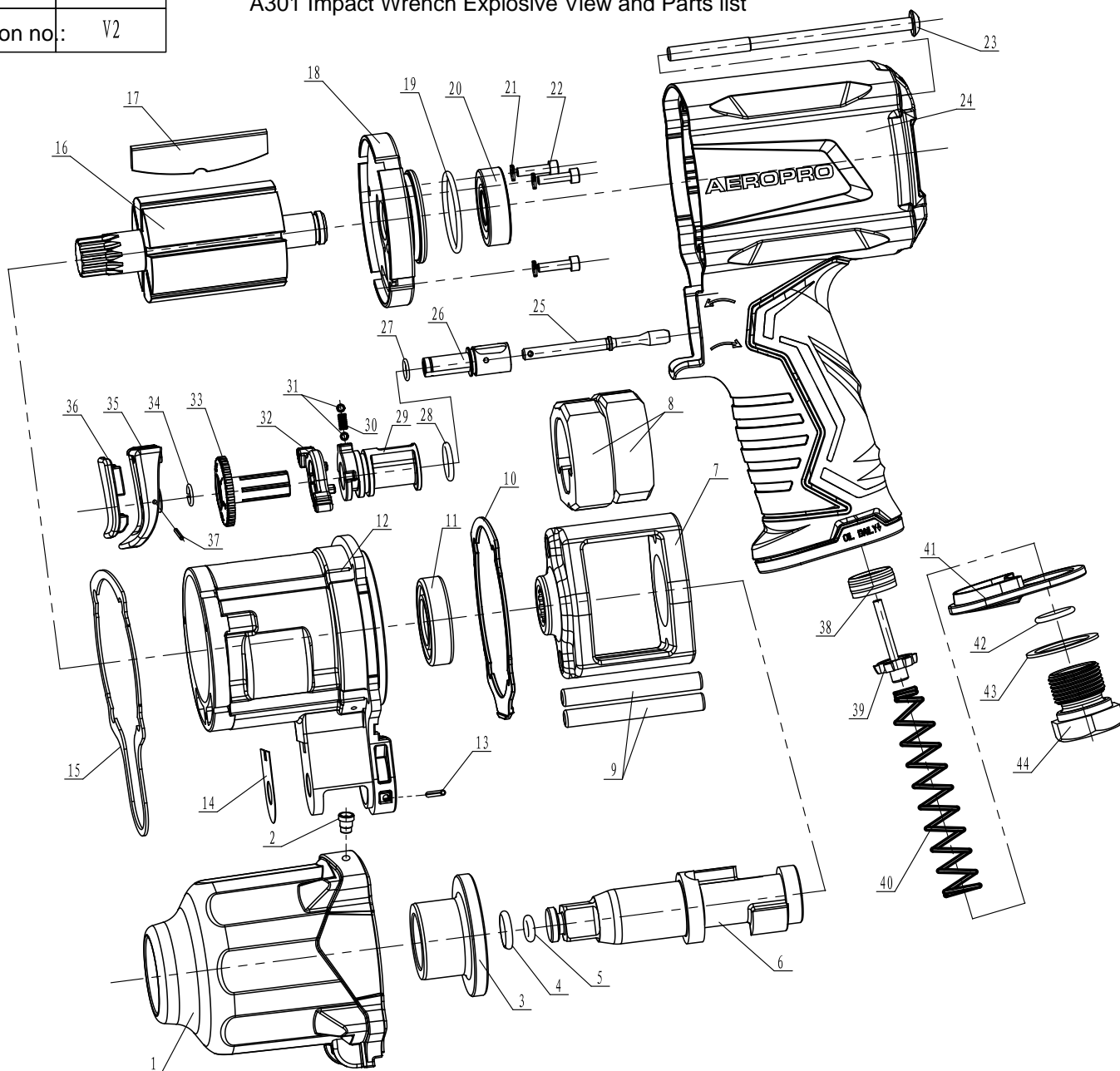
Potential hazard that will result in serious injury or loss of life.

- If any of the following symptoms appear while the tool is in use, turn it off and disconnect it from the air supply immediately. Failure to heed this warning will result in serious personal injury.
- Disconnect the tool from the air supply before making any adjustments.
- Repairs must be performed by a qualified service technician only.

PROBLEMS	POSSIBLE CAUSES	REMEDIES
Tool runs at normal speed but loses under load	<ul style="list-style-type: none"> <li>■ Motor parts worn.</li> <li>■ Cam clutch worn or sticking due to lack of lubricant.</li> </ul>	<ul style="list-style-type: none"> <li>■ Lubricating clutch housing.</li> <li>■ Check for excess clutch oil. Clutch cases need only be half full. Overfilling can cause drag on high speed clutch parts, ie. a typical oiled/lubricated wrench requires 1/2 ounce of oil.</li> </ul> <p><b>GREASE LUBRICATED:NOTE:</b> Heat usually indicates insufficient grease in chamber. Severe operating conditions may require more frequent lubrication.</p>
Tool runs slowly. Air flows slightly from exhaust	<ul style="list-style-type: none"> <li>■ Motor parts jammed with dirt particles</li> <li>■ Power regulator in closed position</li> <li>■ Air flow blocked by dirt.</li> </ul>	<ul style="list-style-type: none"> <li>■ Check air inlet filter for blockage.</li> <li>■ Pour air tool lubricating oil into air inlet as per instructions.</li> <li>■ Operate tool in short bursts quickly reversing rotation back and forth where applicable.</li> <li>■ Repeat above as needed.</li> </ul>
Tools will not run. Air flows freely from exhaust	<ul style="list-style-type: none"> <li>■ One or more motor vanes stuck due to material build up.</li> </ul>	<ul style="list-style-type: none"> <li>■ Pour air tool lubricating tool into air inlet.</li> <li>■ Operate tool in short bursts of forward and/or reverse rotation where applicable.</li> <li>■ Tap motor housing gently with plastic mallet.</li> <li>■ Disconnect supply. Free motor by rotating drive shank manually where applicable</li> </ul>
Tool will not shut off	<ul style="list-style-type: none"> <li>■ 'O' rings throttle valve dislodged from seat inlet valve.</li> </ul>	<ul style="list-style-type: none"> <li>■ Replace O-rings or return to service center.</li> </ul>
Note: Repairs should be carried out by a qualified person.		

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# A301 Impact Wrench Explosive View and Parts list



No.	Description	Qty.	No.	Description	Qty.	No.	Description	Qty.	No.	Description	Qty.
1	Gun body cover	1	13	Pin 2.5×20	1	25	Switch Lever	1	37	Pin 1.5×15	1
2	Press-oiling cup	1	14	Air Inlet Washer	1	26	Regulating Valve	1	38	Air Inlet Plug	1
3	Oilite bushing	1	15	Cylinder Gasket	1	27	O-ring 8×1	1	39	Switch Pin	1
4	Anvil collar	1	16	Rotor	1	28	O-ring 11.8×1.5	1	40	Switch Pin Spring	1
5	Oring 7.5×1.8	1	17	Blade	6	29	Directional valve	1	41	Exhaust Cover	1
6	Anvil	1	18	Back Cover	1	30	Gear Spring	1	42	O-ring 15×1.8	1
7	Hammer Cage	1	19	O-ring 30×1.8	1	31	Ball Dw=2.5	2	43	Coupler Washer	1
8	Hammer Pin	2	20	Deep Groove Ball Bearing P6-C0	1	32	Direction Button	1	44	Air Inlet Coupler	1
9	Hammer Dog	2	21	Spring Washer	3	33	Gear Spring	1			
10	Gasket	1	22	Screw M3×12	3	34	Gear Adjustment Knob	1			
11	"Deep Groove Ball Bearing P6-C3y"	1	23	Screw M5×90	4	35	Trigger	1			
12	Cylinder	1	24	Gun Body Assembly	1	36	Trigger Washer	1			

Note: If you need spare parts of this model, pls feel free to contact us or the distributor where you bought this tool. Tks!