KROFtools®
PROFESSIONAL TOOLS

Language
EN

CE

90 DEGREE ANGLE DIE GRINDER 20.000 RPM
REF.: 9377

Operating manual and instructions
General information

Name:	
Address:	

Model:	

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DECLARATION OF CONFORMITY

CE

We:

KROFTOOLS
Parque Industrial da Pousa
Rua da Devesa, n.º 8
4755-307 Martim,
Barcelos

Declare under our sole responsibility that the product:

Part Number: 9377
Description: 90 DEGREE ANGLE DIE GRINDER 20.000 RPM
Serial No:-

To which this declaration relates is in conformity with the following directive (s):

Directive 2006/42/EC

EN ISO 11148-9: 2011

IssueDate: 13/11/2024

José Bárbara
CEO

Thanks for your purchasing our air tools and please read this Instruction Manual carefully and thoroughly before operating the tool to do your best jobs.

GENERAL SAFETY RULES

WARNING!

● Improper operation or maintenance of this tool could result in personal injury and/or property damage. Read and understand all warnings and operation instructions before using this tool.

● When using this tool, these basic safety precautions should always be followed to reduce the risk of personal injury and/or property damage.

Workplace conditons

1. Always work in a clean, dry, well-ventilated area free of combustible materials. Never operate the tool near flammable substances such as gasoline, naphtha, cleaning solvent, etc.
2. Dress properly. Do not wear loose clothing. Tie up or cover long hair, remove any jewelry, necklaces, etc., which might become caught by the tool.
3. Keep the work area well lit and free of clutter. Slips, trips and falls are major causes of workplace injury. Be aware of excess air hose left on your walking way or on the working surface.
4. Ensure that there are no electrical cables, gas pipes, etc., which can cause a hazard if damaged by use of the tool.
5. Keep visitors a safe distance from the work area. Keep children away.

Use of air tools

1. Stay alert and use common sense. Watch what you are doing. Do not operate the tool when you are tired or under the influence of alcohol, drugs or medication.
2. Do not overreach. Keep proper footing and balance at all times.
3. Always wear eye protectors which provides protection from flying particles from the front and side when using the tool. Ear protectors should also be worn.
4. Never use oxygen, carbon dioxide, combustible gases or any other type of bottled gases as a power source for this tool.
5. Always verify prior to using this tool that the air source has been adjusted to the rated air pressure range. Never connect to an air source that is capable of exceeding 200psi.
6. Do not connect the air supply hose to the tool with your finger on the trigger.
7. Do not exceed the maximum working pressure 90psi/6.3bar for the tool. Excessive pressure will reduce the tool life and/or might cause a hazardous situation.
8. Never leave the operating tool unattended. Disconnect the air hose when the tool is not in use.
9. Keep the air supply hose away from heat, oil and sharp edges.
10. Check the air supply hose for wear and/or leaks before each use. Make sure that all connections are tight and secure.
11. Do not use the tool for any other than its intended use.
12. Do not carry out any alternations and/or modifications to the tool.
13. Always disconnect the tool from air supply before replacing any accessories, performing any repair and maintenance, moving to another work area, or passing the tool to another person.
14. Never use the tool if it is defective, damaged, or operating abnormally.
15. Check for misalignment or binding of moving parts, breakage of parts and any other condition that affects the tool operation. If damaged, have the tool serviced before using.
16. Keep working parts of the tool away from hands and body.
17. Do not carry the tool by the air hose.
18. Do not apply excessive force of any kind to the tool. Let the tool perform the work at the rate as it was designed.
19. Do not remove any labels on the tool. Replace if they become obscured or damaged.

20. Always maintain the tool with care. Keep it clean for the best and safest performance.
21. It is not recommended that quick change couplings should be located directly at the air inlet, as they add weight and could fail due to vibration.
22. This tool vibrates with use. Continuous operation of this tool might be harmful to your hands or arms. Stop using the tool if discomfort, a tingling feeling or pain occurs.
Resume work after recovery. Seek medical advice if a serious symptom occurs.

Air die grinder safety instructions

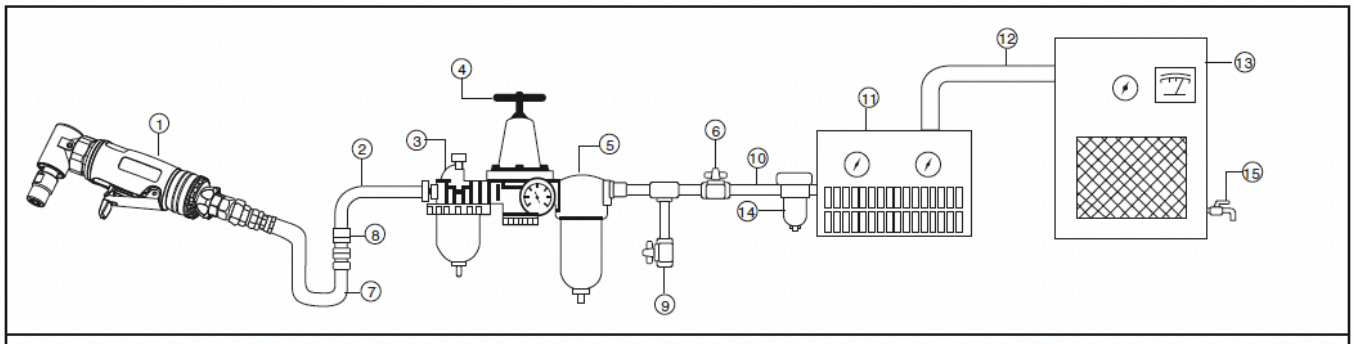
1. Always use the die grinder in the manner and for the functions described in this manual.
2. Always ensure the grinder is not moving and disconnected from the air supply when changing grinding stones etc.
3. Only use qualified grinding stones. Never use chipped or cracked grinding stones.
4. Always ensure that the grinding stone is correctly installed onto the tool before starting the tool.
5. Avoid direct contact with the grinding stone during and after use as it can be hot and sharp. Wear suitable gloves to protect hands.
6. Use respiratory protection when working in certain materials which creates emission of dust and fumes.
7. If necessary, use clamps or proper devices to securely fix the workpiece.
8. Never carry the grinder by the air supply hose.
9. Always disconnect the tool from the air supply when the grinder is not required for immediate use in order to avoid accidental start.
10. Always ensure that the grinder has come to a complete stop before putting it down after use.
11. Do not discard the safety instructions. Give them to the operator.
12. Always store this product in a dry and safe place out of reach of children or untrained operators.

AIR SUPPLY

Please refer to the typical air system layout recommended below.

WARNING! Compressed air can be dangerous. Ensure that you are familiar with all precautions relating to the use of compressors and compressed air supply.

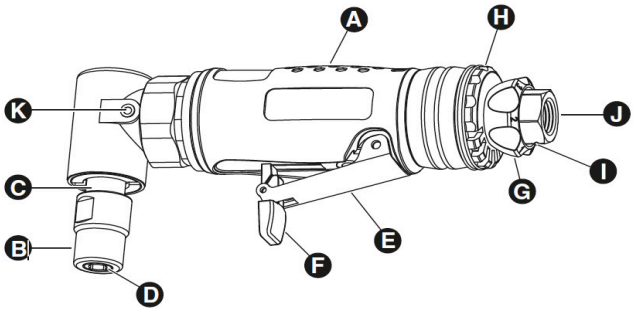
1. Use only clean, dry, regulated compressed air as the power source.
2. Air compressors used with the tool must comply with the appropriate European Community Safety Directives.
3. Make sure that the air compressor being used for the tool operation supplies the correct output (CFM).
4. Have the tool in “off” position when connecting the tool to the air supply.
5. Use normal 90psi working pressure for the tool. High pressure and unclean air will shorten the tool life due to the faster wear and also may create a safety hazard.
6. Drain water from the air compressor tank daily, as well as any condensation in the air lines. Water in the air line may enter the tool and cause damage to the tool mechanisms at operation.
7. Clean the tool air inlet screen filter for blockage weekly. Clean if necessary.
8. Usually a 3/8” (inner diameter) air hose is recommended for air supply and airflow to get the optimum performance of tool.
9. A long air hose (usually over 8 meters) may cause up to 15psi drop in pressure, so you need to set the output pressure of the air compressor higher to maintain the required working pressure at the tool.
10. Use proper hoses and fittings. We do not suggest connecting quick change couplings directly to the tool since they may cause failure due to tool vibration at operation.
Instead, add a lead hose and connect coupling between air supply and hose whip.
11. Check hoses for wear before each use. Make certain that all connections are in security.



AIR SYSTEM LAYOUT:

1. Air Tool
2. Air Hose 3/8" (I.D.)
3. Oiler
4. Pressure Regulator
5. Filter
6. Shut Off Valve
7. Whip Hose
8. Coupler Body And Connector
9. Drain Daily
10. 1/2" Or Larger Pipe And Fitting
11. Air Dryer
12. 1" Or Larger Pipe And Fitting
13. Air Compressor
14. Auto Drain
15. Drain Daily

PRODUCT DESCRIPTION



Accessories:

Part	Description	Qty	Part	Description	Qty
A	1/4" Air Angle Die Grinder	1	H	Exhaust Deflector	1
B	Collet Jacket	1	I	Steel Ball Indicator	1
C	Collet Holder	1	J	Air Inlet	1
D	Collet	1	K	Grease Cap	1
E	Trigger	1	L	Large Wrench	1
F	Lever	1	M	Small Wrench	1
G	Air Regulator	1			

TECHNICAL SPECIFICATIONS

Speed: 20000rpm
Tweezers: 1/4”
Air Inlet: 1/4”
Hose Diameter: 3/8”
Ratchet head head height: 77.4mm
Air pressure: 90 PSI
Average Air Consumption: 4 CFM
Length: 175mm
Sound Pressure: 88,6 dB(A) KpA: 3 dB(A)
Sound Power: 99,6 dB(A) KwA: 3 dB(A)

INTENDED USE

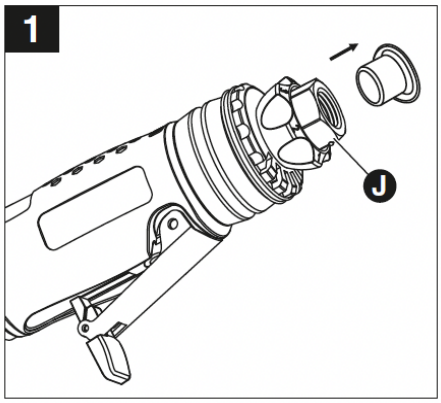
This 1/4” Air Die Grinder, with compact and ergonomic design, allows accessibility in confined spaces. The safety trigger prevents accidental starts. It features 4-speed air regulator and rotatable exhaust deflector. The intended use is for light weld grinding, polishing, de-burring and smoothing sharp edges in automotive, garage, and workshops.
For safety reasons it is essential to read the entire instruction manual before first operation and to observe all the instructions therein.
This product is intended for private use only, not for any commercial trade use. It must not be used for any purpose other than described.

UNPACK

1. Unpack the unit and lay them on a flat, stable surface.
2. Remove all packing materials and shipping devices if applicable.
3. Make sure the delivery contents are complete and free of any damage. If you find that parts are missing or show damage do not use the product but contact your dealer.
4. Using an incomplete or damaged product represents a hazard to people and property.
5. Ensure that you have all the accessories and tools needed for assembly and operation. This also includes suitable personal protective equipment.

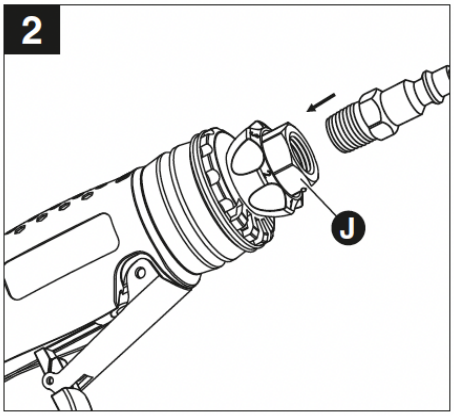
ASSEMBLY

1. Remove the air inlet protective cap from the air inlet (J). (See Figure 1)



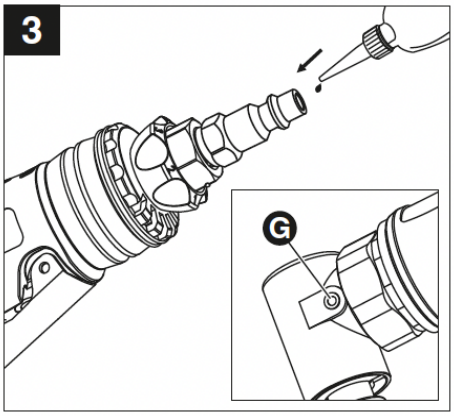
2. Mount a male plug by hand into the air inlet (J). (See Figure 2)

NOTE: Use thread sealant tape on the male plug and tighten it with a wrench for airtight connection.
Do not overtighten.

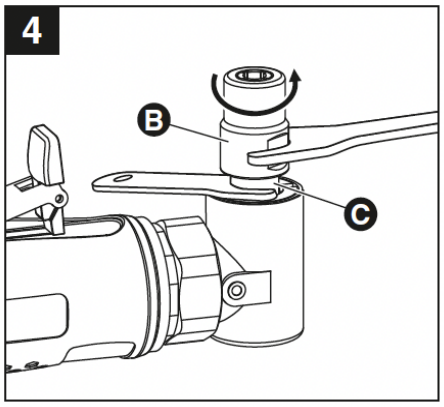


3. Place 2 - 3 drops of air tool oil into the male 3 plug before each use. (See Figure 3)

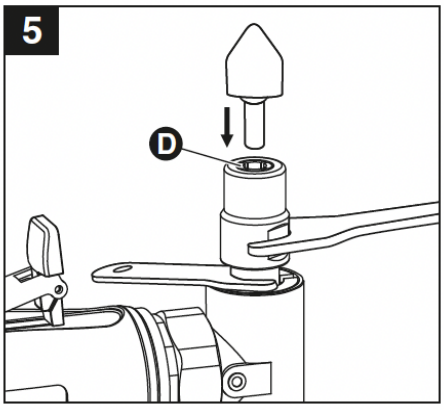
NOTE: The machine gears should be lubricated once every working day.
Lubricate the gears by using a grease gun (not provided). Insert the gun nozzle into the grease cap (G). Several drops of grease are recommended as this will keep the gears in good rotating condition and extend the tool life.



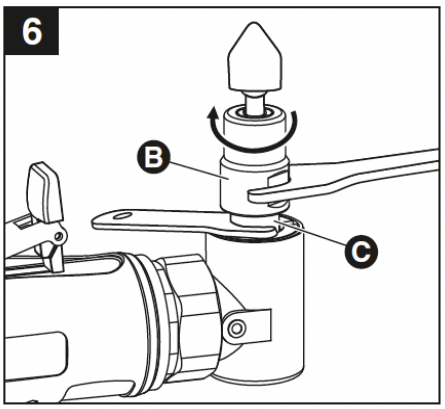
4. Loosen the collet jacket (B) counterclockwise by hand or with the large wrench while holding the small wrench on the flats of the collet holder (C). (See Figure 4)



5. Insert a grinding stone into the collet (D).
(See Figure 5)

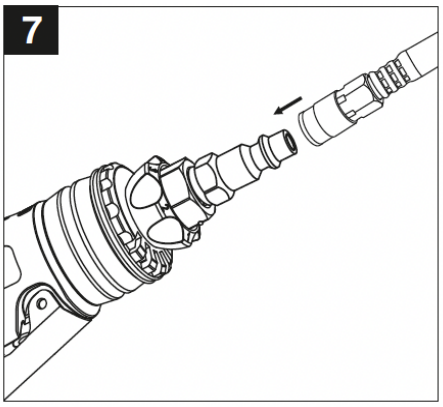


6. Tighten the collet jacket (B) clockwise with large wrench while holding the small wrench on the flats of the collet holder (C). Make sure that the grinding stone is installed securely and tightly. (See Figure 6)



WARNING! Only use grinding accessories that have an RPM rating equal to or greater than the tool itself.

7. Connect air supply hose to the male plug. (See Figure 7)

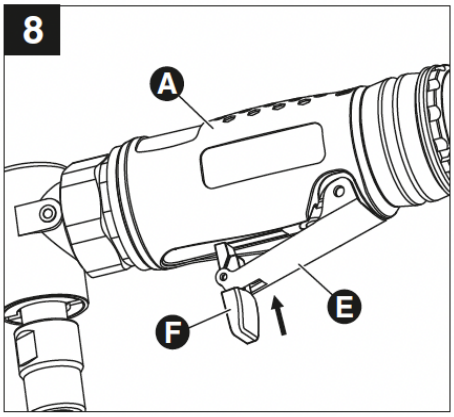


8. Set the working pressure at 90psi/6.3bar for best tool performance.

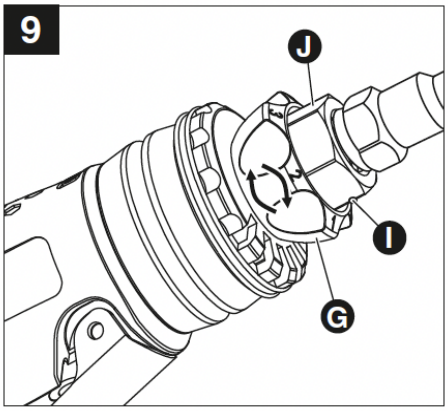
NOTE: Working pressure refers to the air line pressure set to tool when tool is under working conditions.

OPERATION

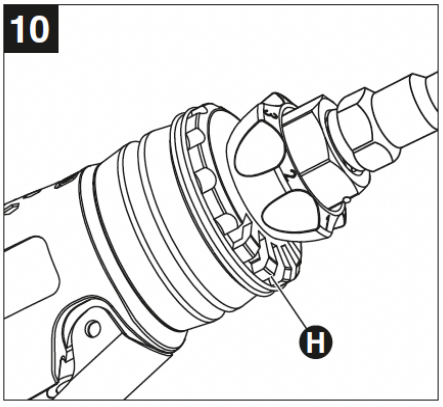
Push lever (F) forward and press down on the trigger (E) to start the tool (A). (See Figure 8)



NOTE: This tool features a power regulator valve. Rotate the air regulator (G) until desired output is achieved. The settings 1, 2, 3, 4 are only for reference and do not denote a specific power output. “Setting 1” is the lowest speed while “Setting 4” is the highest speed.
Rotate the air regulator (G) until the desired setting is lined up with the small steel ball (I) on air inlet (J).
(See Figure 9)



NOTE: This tool also features an exhaust deflector (H) which is rotatable to direct air away in any direction.
(See Figure 10)



TROUBLESHOOTING

Problem(s)	Possible Cause(s)	Suggested Solution(s)
Tool runs at normal speed, but loses power under load.	Motor parts worn.	1. Have a qualified technician service the tool. 2. Replace tool or parts.
Tool runs slowly. Air flows slightly from exhaust.	Motor parts jammed with dirt particles. OR Airflow blocked by dirt.	1. Check air inlet filter for blockage. 2. Pour air tool lubricating oil into air inlet as per lubrication instructions for clearing shipping grease. 3. Operate tool in short bursts to clear debris. 4. If tool still jammed, clean tool and lubricate per lubrication instructions.
Tool runs slowly. Air flows slightly from exhaust.	1. Air regulator in closed position. 2. Damage or excessive wearing of internal parts.	1. Open the air regulator to desired airflow. 2a. Have a qualified technician service the tool. 2b. Replace tool or parts.
Tool will not shut off.	1. Throttle valve o-ring dislodged from inlet valve seat. 2. Trigger mechanism jammed or dirty.	1. Replace throttle valve o-rings. 2. Clean trigger mechanism and lubricate.
Loss of power or erratic performance.	1. Excessive drain on the air hose. Incorrect size or type of hose connectors. 2. Moisture or restriction in the air hose/tank 3. Air compressor has insufficient flow.	Check the air hose and confirm the hose fitting is correct for the inlet bushing. 2. Depressurize system and drain tank and air hose of water. 3. Ensure tool is connected to a compressor with a rate flow hat matches the tool.

CARE AND MAINTENANCE

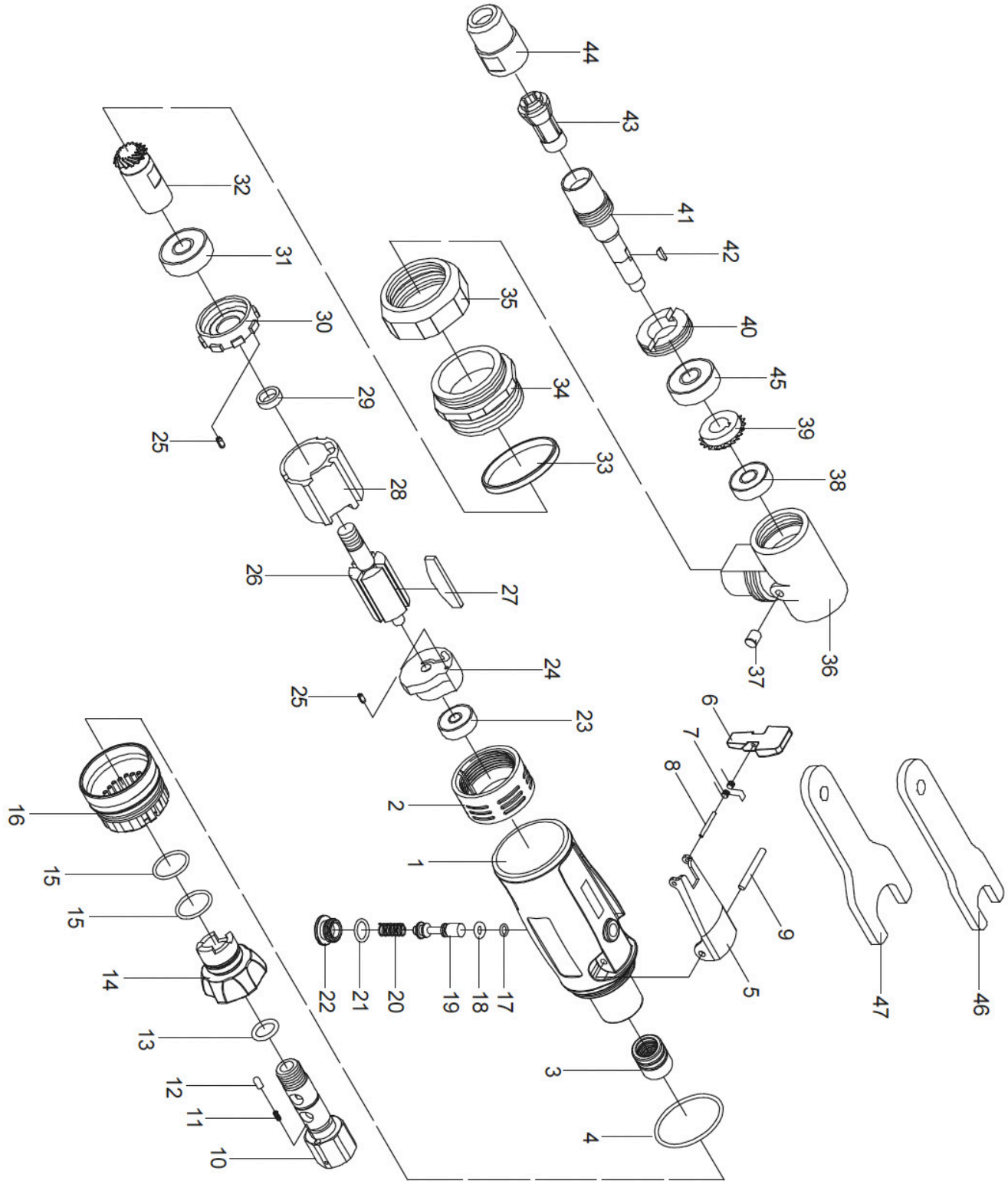
An in-line oiler is recommended to be installed on air supply line as it increases tool life and keeps the tool in sustained operation. The in-line oiler should be regularly checked and filled with air-tool oil. Proper adjustment of the in-line oiler is performed by placing a sheet of paper next to the tool's exhaust ports and holding the throttle open approxmately 30 seconds. The in-line oiler is properly set when a light stain of oil collects on the paper. Excessive amounts of oil should be avoided.

In the event that it becomes necessary to store the tool for an extended period of time, 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.

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

Clean the tool all over with a cotton rag after each use. Keep the tool in a dry and safe place out of reach of children.

EXPLODED DIAGRAM



PARTS LIST

Part No.	Description	Qty	Part No.	Description	Qty
1	Main Housing	1	25	Set Pin	2
2	Housing Liner	1	26	Rotor	1
3	Bushing	1	27	Rotor Blade	4
4	O-ring	1	28	Cylinder	1
5	Trigger	1	29	Bushing	1
6	Lever	1	30	Front Plate	1
7	Spring	1	31	Bearing	1
8	Pin	1	32	Gear	1
9	Trigger Pin	1	33	Seal Ring	1
10	Air Inlet	1	34	Lock Ring	1
11	Spring	1	35	Hex Nut	1
12	Pin	1	36	L-Head	1
13	O-ring	1	37	Grease Cap	1
14	Air Regulator	1	38	Bearing	1
15	O-ring	2	39	Gear	1
16	Exhaust Deflector	1	40	Bushing	1
17	O-ring	1	41	Work Spindle	1
18	O-ring	1	42	Semi-round Key	1
19	Valve Stem	1	43	Collet	1
20	Spring	1	44	Collet Jacket	1
21	O-ring	1	45	Bearing	1
22	Screw	1	46	Small Wrench	1
23	Bearing	1	47	Large Wrench	1
24	Rear Plate	1			