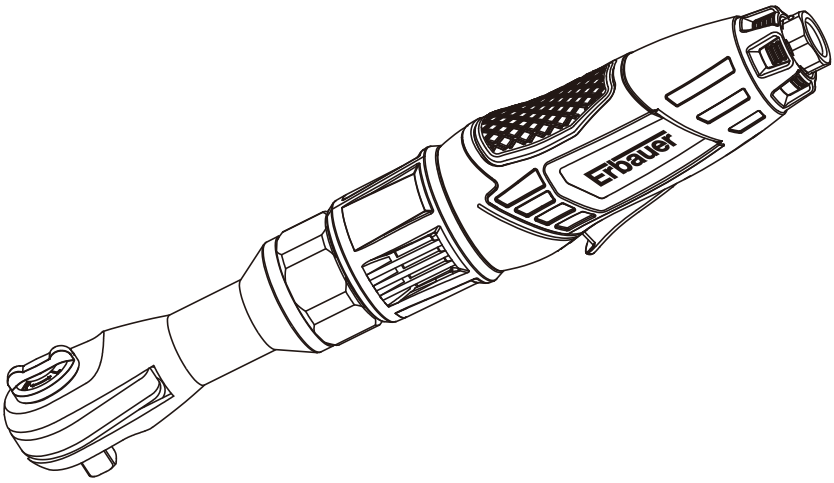
Erbauer



ERN634ATL

2 Year Guarantee

1/2" AIR RATCHET WRENCH

Erbauer

Congratulations on your purchase of a quality power tool from Erbauer (UK) Ltd. This product should give you reliable service but for your peace of mind this Erbauer power tool does carry a 2 year guarantee, the terms of which are detailed below.

If this product develops a fault within the guarantee period contact your retailer.

Please retain this handbook in case you need to refer to safety, care or guarantee information in the future.

GUARANTEE

This Erbauer product carries a 2 year guarantee. If your product develops a fault within this period, you should in the first instance contact the retailer where the item was purchased.

This guarantee specifically excludes losses caused due to:

- Fair wear and tear
- Misuse or abuse
- Lack of routine maintenance
- Failure of consumable items (such as batteries)
- Accidental damage
- Cosmetic damage
- Failure to follow manufacturer's guidelines
- Loss of use of the goods

Consumables supplied with this product are excluded from any guarantee offered.

This guarantee does not affect your statutory rights. This guarantee is only valid in the UK.

1/2" AIR RATCHET WRENCH

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 ratchet wrench safety instructions

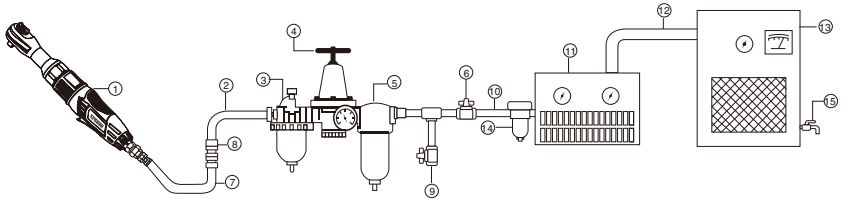
1. Always use the ratchet wrench in the manner and for the functions described in this manual.
2. Always ensure the wrench is not moving and disconnected from the air supply when changing sockets etc. Only use impact sockets. Do not use standard sockets.
3. Always finish tightening threaded fasteners, bolts or nuts, or engine parts with a calibrated torque wrench by hand to the correct torque as recommended by the manufacturer where critical torque values are required.
4. Where critical torque values are not required, the final tightening of threaded fasteners, bolts or nuts can be slightly tighter if gaskets are used between surfaces.
5. Use penetrating oil to assist in freeing off rusted fasteners, bolts and nuts if necessary.
6. When assembling, first turn fasteners, bolts or nuts by hand onto workpiece. Then start the tool for tightening.
7. Always ensure that the socket is correctly installed onto the tool anvil before starting the tool.
8. Never carry the ratchet wrench by the air supply hose.
9. Always disconnect the tool from the air supply when changing sockets or when the wrench is not required for immediate use in order to avoid accidental start.
10. Always ensure that the wrench has come to a complete stop before putting it down after use.
11. If necessary, use clamps or proper devices to securely fix the workpiece when installing/tightening or removing/loosening threaded fasteners on the workpiece.
12. For overhead work, wear a safety helmet.
13. Do not discard the safety instructions, give them to the operator.
14. 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:

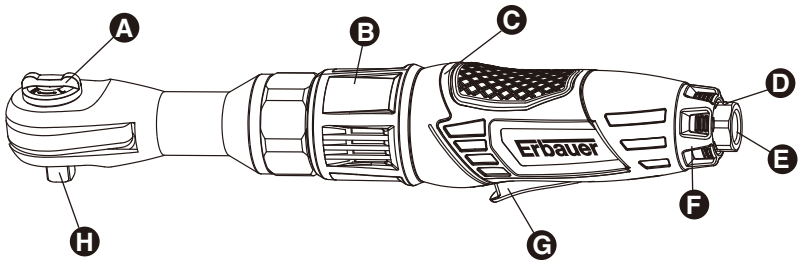
1. Air Tool
2. Air Hose 3/8" (I.D.)
3. Oiler
4. Pressure Regulator
5. Filter
6. Shut Off Valve
7. Whip Hose
8. Coupler Body And Connector
9. Drain Daily
10. 1/2" Or Larger Pipe And Fitting
11. Air Dryer
12. 1" Or Larger Pipe And Fitting
13. Air Compressor
14. Auto Drain
15. Drain Daily

SYMBOLS

On the product, the rating label and within these instructions you will find among others the following symbols and abbreviations. Familiarise yourself with them to reduce hazards like personal injuries and damage to property.

RPM	Revolution per minute	CFM	Cubic feet per minute
PSI	Pound per square inch		
xxWxx	Manufacturing date code; year of manufacturing (20xx) and week of manufacturing (Wxx)		
SN	Serial number		
	Caution / Warning.		Read the instruction manual.
	Wear hearing protection.		Wear eye protection.
	Wear protective gloves.	CE	The product complies with the applicable European directives and an evaluation method of conformity for these directives was done.

PRODUCT DESCRIPTION



PART	DESCRIPTION	QUANTITY
A	F/R Knob	1
B	Exhaust Deflector	1
C	1/2" Air Ratchet Wrench	1
D	Steel Ball	1
E	Air Inlet	1
F	Air Regulator	1
G	Trigger	1
H	Anvil	1

1/2" AIR RATCHET WRENCH

TECHNICAL SPECIFICATIONS

COMPONENT	SPECIFICATIONS
Square drive	**1/2"**
Maximum no load speed	**160rpm**
Maximum torque	**60Ft-Lb (85Nm)**
Air inlet	**1/4" BSP**
Air hose (inner diameter)	**3/8"**
Average air consumption	**4cfm**
Working pressure	**90psi (6.3bar)**

NOISE AND VIBRATION DATA

Sound pressure level LPA: 87 dB (A) (K=3dB(A))

Sound power level LWA: 98 dB (A) (K=3dB(A))

Vibration level: 4.35m/s² (K = 1.5m/s²)

- The declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another.
- The declared vibration total value may also be used in a preliminary assessment of exposure.

WARNING! The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used; and of the need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

VIBRATION

The European Physical Agents (Vibration) Directive has been brought in to help reducehand arm vibration syndrome injuries to power tool users. The directive requires power tool manufacturers and suppliers to provide indicative vibration test results to enable users to make informed decisions as to the period of time a power tool can be used safely on a daily basis and the choice of tool.Further Advice can be found at **www.hse.gov.uk**

The declared vibration emission value should be used as a minimum level should be used with the current guidance on vibration.
Calculating the actual period of the actual period off use can be difficult and the HSE website has further information.
The declared vibration emission been measured in accordance with a standardised test stated above and may be used to compare one tool with another.
The declared vibration emission value may also be used in a preliminary assessment of exposure.

WARNING! The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is used dependant on the following examples and other variations on how the tool is used:-
How the tool is used and the materials being worked with.
The tool being in good condition and well maintained.
The use of the correct accessory for the tool and ensuring it is in good condition.
And the tool is being used as intended by its design and these instructions.

This tool may cause hand-arm vibration syndrome if its use is not adequately managed

WARNING! identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time). Note The use of other tools will reduce the users' total working period on this tool. Helping to minimise your vibration exposure risk.

ALWAYS use impact sockets. Maintain this tool in accordance with these instructions and keep well lubricated (where appropriate).
Plan your work schedule to spread any high vibration tool use across a number of days.

Health Surveillance
All employees should be part of an employer's health surveillance scheme to help identity any vibration related diseases at an early stage, prevent disease progression and help employees stay in work.

INTENDED USE

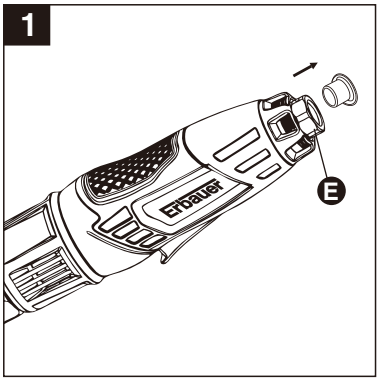
This 1/2" air ratchet wrench ERN634ATL is compact and ergonomic for working in confined spaces. It features 4-speed air regulator and rotatable exhaust deflector. The intended use includes installing/tightening or removing/loosening threaded fasteners and/or small bolts in automotive and garage, and in other workshop applications as well.
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 domestic use only, not for any commercial trade use. It must not be used for any purposes other than those described.

UNPACK

1. Unpack all parts 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.

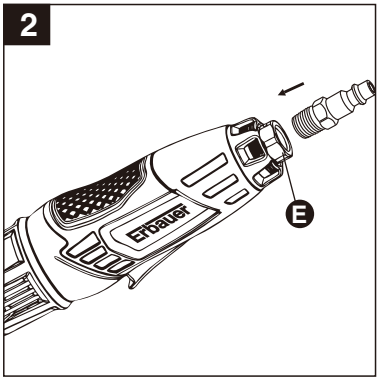
ASSEMBLY

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

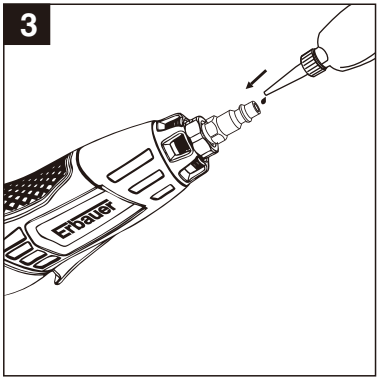


2. Mount the male plug by hand into the air inlet (E). (See Figure 2)

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



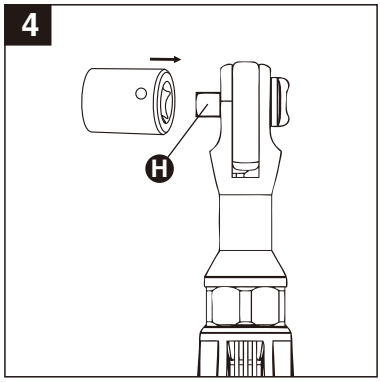
3. Place 2 - 3 drops of air tool oil (not included) into the male plug before each use. (See Figure 3)



1/2" AIR RATCHET WRENCH

4. Choose the correct impact socket (not provided) as needed and mount it onto the anvil (H). (See Figure 4)

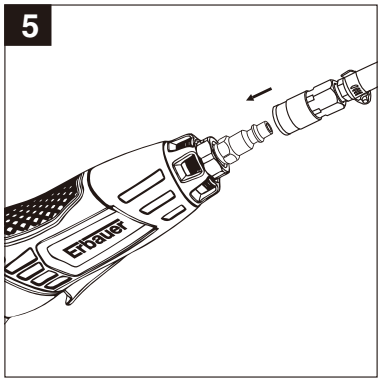
WARNING! Only use impact sockets that have a RPM and Torque rating equal to or greater than the tool itself.



5. Connect air supply hose to the male plug. (See Figure 5)

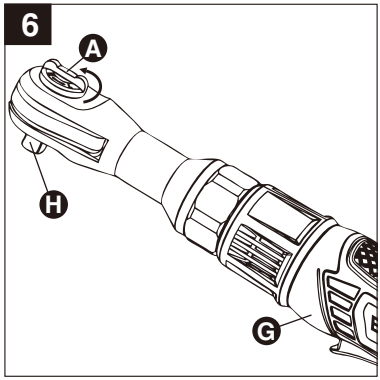
6. Set the working pressure at 90psi/6.3bar for best tool performance.

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

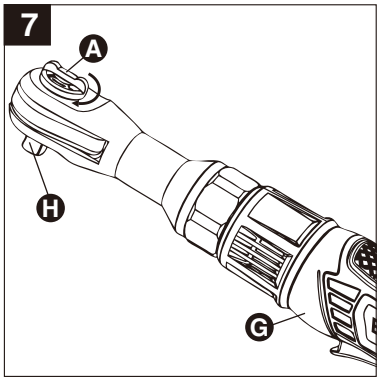


OPERATION

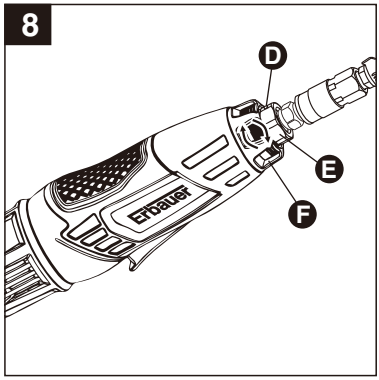
1. How to install/tighten threaded fasteners. Turn the F/R knob (A) counterclockwise to “F” position (F=Forward or Tighten). Press the trigger (G). The tool anvil (H) runs clockwise. (See Figure 6)



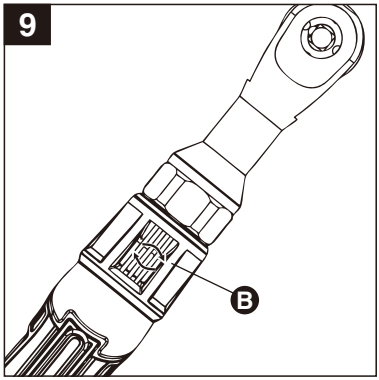
2. How to remove/loosen threaded fasteners. Turn the F/R knob (A) clockwise to “R” position (R=Reverse or Loosen). Press the trigger (G). The tool anvil (H) runs counterclockwise. (See Figure 7)



NOTE: This tool features a power regulator valve. Rotate the air regulator (F) 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” (one-line symbol) is the least amount of power while “Setting 4” (four-line symbol) is the most amount of power. Rotate the air regulator (F) until the desired setting is lined up with the small steel ball (D) on air inlet (E). (See Figure 8)



NOTE: This tool features an exhaust deflector (B) 9 which can be rotated to any position to direct air away from workpiece or operator. (See Figure 9)



TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Tool runs slowly or will not operate	1. Grit or gum in tool.	1. Flush the tool with air-tool oil or gum solvent.
	2. No oil in tool.	2. Lubricate the tool.
	3. Low air pressure.	3. a. Adjust the regulator on the tool to maximum setting. b. Adjust the compressor regulator to tool maximum of 90 PSI/6.3 BAR.
	4. Air hose leaks.	4. Tighten and seal hose fittings if leaks are found. Use sealing tape.
	5. Pressure drops.	5. a. Be sure the hose is the proper size. Long hose or tools using large volumes of air may require a hose with an I.D. of 1/2 in. or larger depending on the total length of the hoses. b. Do not use a multiple number of hoses connected together with quick-connect fittings. This causes additional pressure drops and reduces the tool power. Directly connect the hoses together.
	6. Worn rotor blade.	6. Replace rotor blade.
	7. Moisture blowing out of tool exhaust.	7. Water in tank; drain tank. (See air compressor manual). Oil tool and run until no water is evident. Oil tool again and run 1-2 seconds.

CARE AND MAINTENANCE

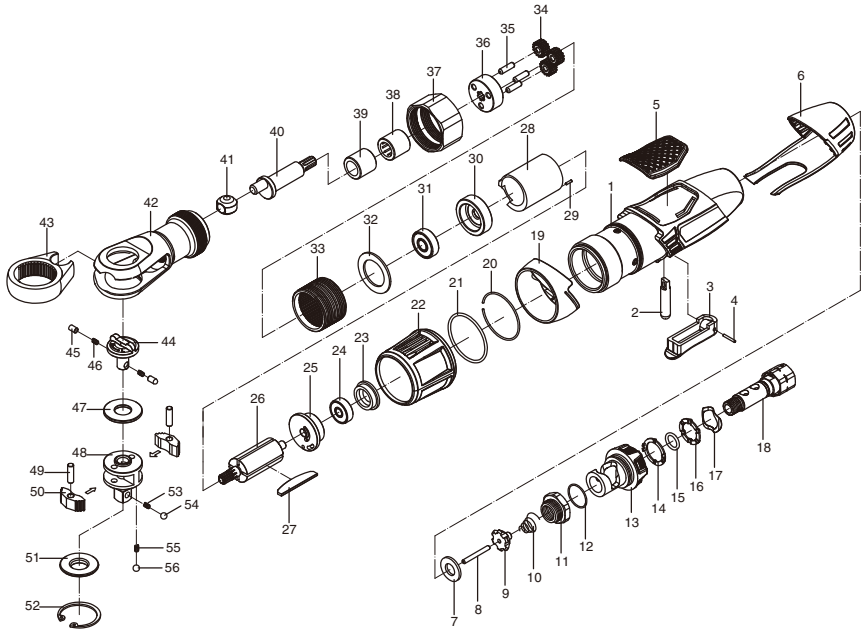
An in-line oiler is recommended to be installed on air supply line as it increases tool life and keeps the tool in sustained operation. The in-line oiler should be regularly checked and filled with air-tool oil. Proper adjustment of the in-line oiler is performed by placing a sheet of paper next to the tool's exhaust ports and holding the throttle open approximately 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 AND PARTS LIST



Part No.	Description	Qty.
1	Main housing	1
2	Bolt	1
3	Trigger	1
4	Bolt	1
5	Soft grip	1
6	Rear cover	1
7	Valve seat	1
8	Bolt	1
9	Throttle valve	1
10	Spring	1
11	Screw cap	1
12	O-ring	1
13	Air regulator	1
14	Set plate	1
15	O-ring	1
16	Set plate	1
17	Gasket	1
18	Air inlet	1
19	Front cover	1
20	Clip	1
21	O-ring	1
22	Exhaust deflector	1
23	Bearing cap	1
24	Bearing	1
25	Rear plate	1
26	Rotor	1
27	Rotor blade	4
28	Cylinder	1

Part No.	Description	Qty.
29	Pin	1
30	Front plate	1
31	Bearing	1
32	Washer	1
33	Thread ring gear	1
34	Idle gear	3
35	Gear pin	3
36	Gear plate	1
37	Clamp nut	1
38	Ring gear	1
39	Bushing	1
40	Crankshaft	1
41	Drive bushing	1
42	Ratchet housing	1
43	Ratchet yoke	1
44	F/R knob	1
45	Sleeve	2
46	Spring	2
47	Washer	1
48	Ratchet head	1
49	Pin	2
50	Ratchet pawl	2
51	Thrust washer	1
52	Retainer spring	1
53	Spring	1
54	Steel ball	1
55	Spring	2
56	Steel ball	2

1/2" AIR RATCHET WRENCH

Erbauer

DECLARATION OF CONFORMITY

We, Importer
Erbauer (UK) Ltd BA22 8RT

Declare that the product
Description: **1/2" Air Ratchet Wrench**
Model: **ERN634ATL**

Complies with the following Directive(s),
EC Machinery Directive **2006/42/EC**

Standard and technical specifications referred to:
EN ISO 11148-6: 2012

Authorised Signatory and technical file holder

Date: 05/05/2015

Signature: P.C Harries

Name / title: Peter Harries / Quality Manager
Erbauer (UK) Ltd. Trade House, Mead Avenue, BA22 8RT

CE

1/2" AIR RATCHET WRENCH

Erbauer

1/2" AIR RATCHET WRENCH