

AIR-HYDRAULIC BLIND RIVETER



JEFARIVTO2H

User Manual

v.1.1





CONTENTS

Contents	3
About This Document	3
Introduction	4
Specifications	4
Equipment Identification	4
Safety Guidelines	5
Connecting to The Air Supply	6
Operation	6
Maintenance	7
Troubleshooting	8
Hand Arm Vibration	9
Environmental Protection	9
Parts List	10
Parts Diagram	11
Limited Warranty Statement	12
EU Declaration Of Conformity	14

ABOUT THIS DOCUMENT

This manual has been compiled by Jefferson Tools and is an integrated part of the product with which it's enclosed and should be kept with it for future reference. Please read all of the information supplied in this User Manual before operating this product.

This manual describes the purpose for which the product has been designed and contains all the necessary information to ensure its correct and safe use. We recommend that you read the information supplied before carrying out any maintenance or repair. By following all the general safety instructions contained in this manual you will help to ensure operator safety and extend the potential life span of the equipment.

All photographs and drawings in this manual are supplied by Jefferson Tools to help illustrate the operation of the product. Whilst every effort has been made to ensure accuracy of information contained in this manual our policy of continuous improvement determines the right to make modifications without prior warning.

The information contained in this Instruction Manual is designed to assist you in the safe operation and maintenance of the equipment Some illustrations in this Instruction Manual may show details or attachments that differ from those on your own model. Contact your nearest Jefferson Dealer if you are unsure about any information included in this manual or require any additional information about the safe use, operation maintenance, or repair of this equipment.



INTRODUCTION

A powerful, heavy duty trigger-operated Air Hydraulic Riveter for aluminium, steel, stainless steel and structural blind rivets from 3/16" to 1/4". With hardened steel jaw assembly and air-actuated vacuum rivet shaft collector. Durable grip for added comfort and hanging loop for use with balancer.

Supplied with three riveting nozzles: 4.8mm(3/16") • 5.6mm(7/32") • 6.4mm(1/4"); two spanners and oil can in a durable carry case.

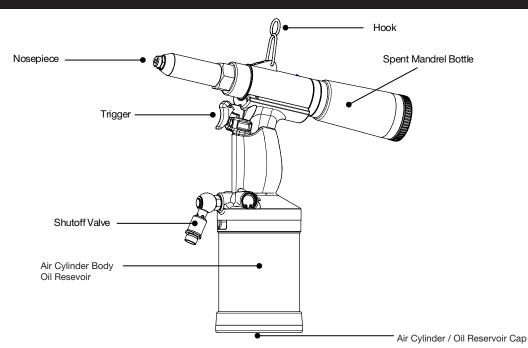
SPECIFICATIONS

Model Number:	JEFARIVT02H	
Air Consumption:	4cfm	
Maximum Operating Pressure:	90psi	
Air Inlet Size:	1/4" BSP	
Sound Power:	82 dB(A)	
Measured vibration emission value (a):	0.4 m/s ²	
Uncertainty value (k)	0.54 m/s²	
Nozzles:	4.8mm(3/16") • 5.6mm(7/32") • 6.4mm(1/4")	
Weight:	1.9kg	

* Sound Power Level:

The figures quoted in this table are emission (sound power) levels and are not necessarily safe working levels. Whilst there is a correlation between the emission and exposure levels, this can not be used reliably to determine whether or not further precautions are required. Factors that influence the actual level of exposure to the work-force include the characteristics of the work room, the other sources of noise, the number of machines and other adjacent processes, and the length of time for which an operator is exposed to the noise. Also the permissible exposure level can vary between regions. This information, however, will allow the user of the machine to make a better evaluation of the hazard and risk.

EQUIPMENT IDENTIFICATION





SAFETY GUIDELINES





Please read and ensure that you understand all of the operating instructions, safety precautions and warnings in this Instruction Manual before operating or maintaining this equipment. An accident can often be avoided by recognizing a potentially hazardous situation before it occurs, and by observing the appropriate safety procedures. Never use this equipment or modify it in any way that has not been specifically recommended by the manufacturer.

GENERAL EQUIPMENT SAFETY

- Familiarise yourself with the use, application and potential hazards associated with this equipment before use .
- Ensure all Health & Safety regulations are adhered to when using this equipment.
- Ensure that the riveter is operated by a capable and responsible person who is familiar with the user guidelines.
- Never operate the riveter when you are tired or under the influence of alcohol, drugs or intoxicating medication.
- Disconnect the riveter from the air supply before changing accessories, servicing or performing any maintenance.
- Ensure that the equipment is well-maintained and kept clean condition.
- Check equipment condition prior to use. Replace or repair damaged parts before use. Use Jefferson approved genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- Only use in a suitable working environment. Keep the area free from unrelated materials and ensure that there is adequate lighting. Do not operate near children or animals.
- Always wear approved eye (or face) and hand protection when operating the riveter.
- Maintain correct balance and footing at all times. Do not over reach, ensure the floor is not slippery, wear nonslip shoes.
- Keep the air hose away from heat, oil and sharp edges. Check air hose for wear before each use and ensure that all connections are secure before use.
- Remove ill fitting clothing, ties, watches, rings, loose jewellery before use. Contain or tie back long hair.
- Wear appropriate protective clothing and keep hands and body clear of working parts.
- Keep the riveter away from your body and at a safe distance from others.
- Secure any non-stable workpieces with a clamp, vice or other adequate holding device.
- Ensure that spent rivet stems are disposed of correctly and do not cause a hazard.
- Ensure correct air pressure is maintained and not exceeded (check specifications).
- The recommended working pressure for the riveter is 85-90psi.
- Avoid unintentional starting.
- Never use the riveter for a task it is not designed to perform.
- This tool is designed for riveting metal, primarily in workshops and garages. We do not recommend any other use. Do not modify the equipment for other uses or try to enhance beyond its capacity.
- Do not operate the riveter if any parts are damaged or missing as this may cause failure and/or personal injury.
- Never carry the riveter by the hose, or pull the hose from the air supply.
- Do not use the riveter in wet or damp environments or areas where there is heavy condensation.
- Never direct air from the air hose at yourself or others.
- When not in use, disconnect from the air supply and store in a safe, dry, childproof location.









WARNING:

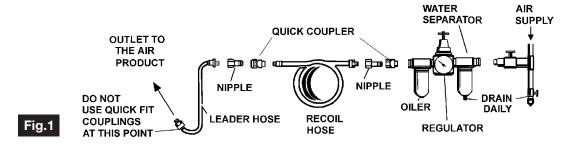
No responsibility is accepted for incorrect use of this equipment. Incorrect use can result in damage to the equipment and danger to the user. Warranty will be void in the event of incorrect use. The warnings, cautions and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.



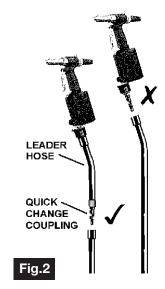
CONNECTING TO THE AIR SUPPLY

IMPORTANT: Ensure the air supply is clean and does not exceed the maximum operating pressure for this equipment (90psi). Unclean air supply and high pressure can cause excessive wear, and may be dangerous, causing damage and/or personal injury.

Please refer to the diagram shown in **Fig.1** below for an example of a recommended connection set-up for this equipment:



- Ensure the riveter air valve (or trigger) is not depressed before connecting to the air supply.
- To operate safely and efficiently the riveter requires a suitable air pressure between 85-90psi, and an air flow according to the specification above.
- For optimal performance ensure that the air tank is drained daily. Water in the air line will damage the riveter and invalidate your warranty.
- Clean air inlet filter weekly to ensure a constantly clean air supply.
- Line pressure should be increased to compensate for unusually long air hoses (over 8 metres). The minimum hose diameter should be 1/4" I.D. and fittings must have the same inside dimensions.
- Ensure that the hose is kept away from heat, oil and sharp edges at all times. Check hoses for wear, and make certain that all connections are secure before use.
- To avoid excessive vibration during use, ensure that quick couplings are not connected directly to the riveter Vibration may cause failure if a quick change coupling is connected directly to the riveter. Use a leader hose to connect the riveter to the air line as shown in **Fig.2**. Contact your nearest Jefferson Dealer for advice on the equipment and airline setup and suitable components.

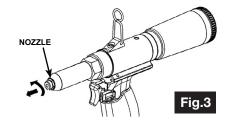


OPERATION

IMPORTANT: Ensure that you have read, understood and apply the safety instructions prior to using this equipment.

Fitting the required nozzle:

- Fit the supplied spanner over the nozzle and turn it anti-clockwise to remove it as shown in **Fig.3**.
- •Fit the correct size nozzle for the rivet to be used and screw back into the frame head and tighten with the spanner.

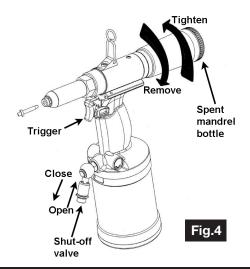




Operation

Ensure the air valve is in the closed position before connecting the air supply:

- Open the shut-off valve by sliding the knurled ring upwards as shown in the diagram to the right.
- Insert the desired size rivet into the nozzle, ensuring the appropriate nozzle is fitted first.
- Insert the rivet into the workpiece as far as it will go and squeeze the
- The rivet will be compressed and the spent mandrel will be sucked into the spent mandrel bottle.
- When the spent mandrel bottle is full, close the shut-off valve, unscrew, empty and replace as shown in Fig.4.



MAINTENANCE

IMPORTANT: Ensure you disconnect the tool from the air supply system before attempting any maintenance.

General Maintenance

- Ensure that the riveter is kept in good clean condition. Check condition prior to use. Do not use the equipment if damage is detected. Contact Jefferson tools for advice on repair and replacement parts.
- Maintain the tool with care. Keep the equipment well oiled for optimum performance.

Lubrication

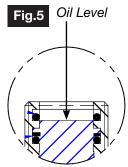
- Lubricate the air tool daily with a suitable high quality air tool oil (for example SAE 10). Please refer to the parts diagram shown on pg.10 for reference.
- Unscrew and remove the frame head (Part #38) and cylinder cap (Part #1A) using 2x Ø5.1mm rods as shown in Fig.5. Remove the air piston (Part #7A). Using the oil can supplied, fill the reservoir with oil until the oil level reaches the o-ring (Part #18). Inspect, clean or replace the oil seal as required during this procedure.
- Re-fit the cylinder cap and reassemble the jaw housing and adjust the length to match the spanner gauge (Part #63) and fix the frame head as shown in Fig.9.

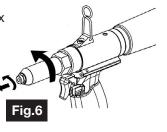
Jaw Replacement

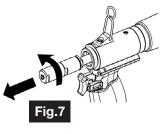
- After a period of use the jaws on the riveter will wear and require replacement.
- To replace, first remove the nozzle and frame head using the spanners supplied as shown in Fig.6.
- Undo and remove the jaw housing from the jaw housing (Fig.7 Fig.8)
- Remove the worn jaws and replace with a new set. If the jaw pusher and spring fall out, put the spring back first and then the jaw pusher followed by the jaws.
- Fit the frame head and tighten.
- When the jaws are replaced check that the jaw distance from the main body is 84mm using the guide on the spanner as shown in Fig.9.

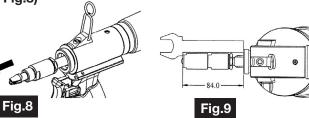














TROUBLESHOOTING

Factors That May Inhibit Performance:

- Loss of power or erratic action may be caused by reduced compressor output, an excessive drain on the air line, moisture or restrictions in air pipes or the use of hose connections of improper size.
- Grit or gum deposits in the tool may cut power and can be corrected by cleaning the air strainer and flushing out the tool with gum solvent oil or an equivalent de-greaser.
- If all outside conditions are in order, disconnect the tool from the air supply, disassemble and replace any worn or damaged parts with Jefferson approved parts.
- Clean all parts, reassemble the tool and lubricate.
- Store the tool in a safe, dry, secure environment.

Symptom	Possible Causes	Solution		
1. Wrong size for rivet/nozzle. 2. Filings jammed in jaw housing. 3. Filings jammed in nozzle.		 Use correct size nozzle for the rivet. Snap off rivet head, dismantle jaw housing and pull out the rivet mandrel. Use an airline to blow out the filings, oil and reassemble the jaw housing. Clean out the nozzle. 		
No suction.	The shut-off valve has not been opened.	1. Open shut-off valve.		
Air leaking.	Loose screws. Damaged O-rings.	Tighten screws. O-rings must be replaced.		
Tool runs slow or suffers a loss of power.	 Air line is loose. Exhaust port is blocked. Operating pressure is too low. 	 Re-install and tighten air line. Clean out exhaust port. Increase the operating pressure to 85- 95psi. If the pressure exceeds 105-110psi, the safety valve will be activated. 		



HAND ARM VIBRATION



Risk of Hand Arm Vibration Injury.

This tool may cause Hand Arm Vibration Syndrome if its use is not managed adequately. This tool is subject to the vibration testing section of the Machinery Directive 2006/42/EC. This tool is to be operated in accordance with these instructions.

Measured vibration emission value (a): **0.4 m/s²**Uncertainty value (k): **0.54 m/s²**

Please note that the application of the tool to a sole specialist task may produce a different average vibration emission. We recommend that a specific evaluation of the vibration emission is conducted prior to commencing with a specialist task.

A health and safety assessment by the user (or employer) will need to be carried out to determine the suitable duration of use for each tool.

NB: Stated Vibration Emission values are type-test values and are intended to be typical. Whilst in use, the actual value will vary considerably from and depend on many factors. Such factors include; the operator, the task and the inserted tool or consumable.

NB: ensure that the length of leader hoses is sufficient to allow unrestricted use, as this also helps to reduce vibration. The state of maintenance of the tool itself is also an important factor, a poorly maintained tool will also increase the risk of Hand Arm Vibration Syndrome.

Health surveillance

We recommend a programme of health surveillance to detect early symptoms of vibration injury so that management procedures can be modified accordingly.

Personal protective equipment

We are not aware of any personal protective equipment (PPE) that provides protection against vibration injury that may result from the uncontrolled use of this tool. We recommend a sufficient supply of clothing (including gloves) to enable the operator to remain warm and dry and maintain good blood circulation in fingers etc.

Please note that the most effective protection is prevention, please refer to the Correct Use and Maintenance section in these instructions. Guidance relating to the management of hand arm vibration can be found on the HSC website www.hse.gov.uk - Hand-Arm Vibration at Work.

ENVIRONMENTAL PROTECTION

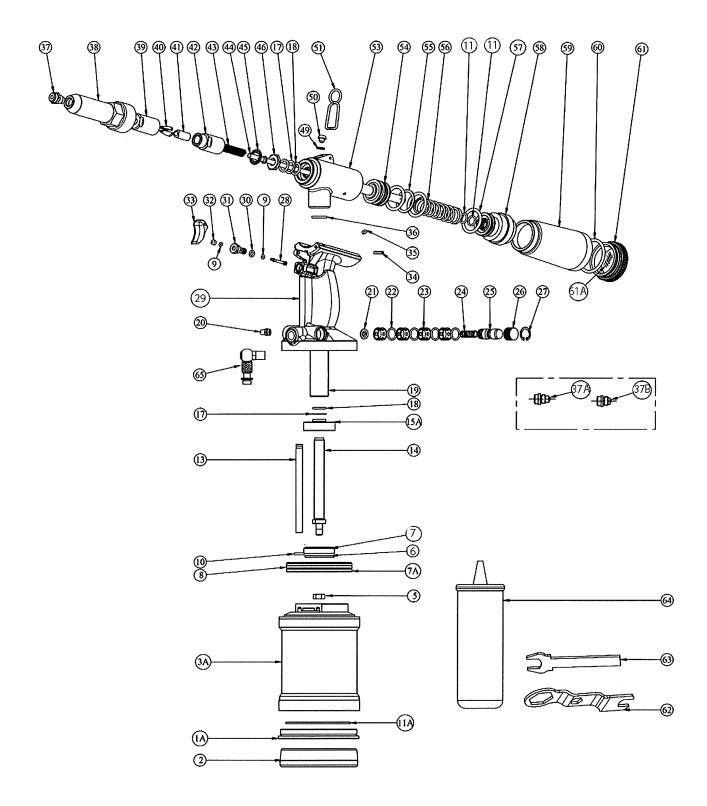


Recycle any packaging and unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment.

When the product becomes completely unserviceable, reaches the end of its working life and requires disposal, drain off any fluids (if applicable) into approved containers and dispose of the product and the fluids according to local regulations.



PARTS DIAGRAM





PARTS LIST

#	Description	#	Description
1A	CYLINDER CAP	34	SPRING PIN
2	RUBBER BASE	35	O-RING (2.57-6.13-1.78)
3A	AIR CYLINDER BODY	36	O-RING (13.8-18.6-2.4)
5	NUT	37	NOZZLE 1/4"
6	WASHER	37A	NOZZLE 7/32"
7A	AIR PISTON	37B	NOZZLE 3/16"
7	WASHER	38	FRAME HEAD
8	O-RING (72.62-79.68-3.53)	39	JAW HOUSING
9	O-RING (1.78-5.34-1.78)	40	JAW FOR NOZZLES
10	O-RING (7.6-12.84-2.62)	41	JAW PUSHER FOR NOZZLES
11	O-RING (9.8-13.6-1.9)	42	JAW HOUSING COUPLER
11A	O-RING	43	SPRING
13	TUBE	44	PISTON SHAFT
14	ROD	45	INT TOOTH WASHER
15A	STEM NUT	46	CASE LOCK NUT M10
17	BACK-UP RING	49	OIL SEAL WASHER
18	O-RING (11.8-16.6-2.4)	50	HEXAGON SOCKET SCREW
19	STEM	51	ноок
20	MUFFLER	53	OIL CYLINDER BODY
21	PAD	54	PISTON ROD
22	O-RING 12.74x1.78	55	O-RING
23	CAGE	56	SPRING
24	SPRING	57	O-RING (24.7-31.7-3.5)
25	VALVE	58	FRAME CAP NUT
26	VALVE CAP	59	BOTTLE
27	RETAINING RING	60	O-RING (37.7-44.7-3.5)
28	VALVE PISTON	61	BOTTLE ADAPTOR
29	HANDLE BODY ASS'Y	61A	SILENCER
30	O-RING (4.47-8.03-1.78)	62	SPANNER
31	TRIGGER INSERT	63	SPANNER GAUGE
32	TRIGGER HEAD	64	OIL CAN
33	TRIGGER (SO)	65	VALVE



LIMITED WARRANTY STATEMENT

Jefferson Professional Tools & Equipment, or hereafter "Jefferson" warrants its customers that its products will be free of defects in workmanship or material. Jefferson shall, upon suitable notification, correct any defects, by repair or replacement, of any parts or components of this product that are determined by Jefferson to be faulty or defective.

This warranty is void if the equipment has been subjected to improper installation, storage, alteration, abnormal operations, improper care, service or repair.

Warranty Period

Jefferson will assume both the parts and labour expense of correcting defects during the stated warranty periods below.

All warranty periods start from the date of purchase from an authorised Jefferson dealer. If proof of purchase is unavailable from the end user, then the date of purchase will be deemed to be 3 months after the initial sale to the distributor.

1 Year

JEFARIVT02H AIR-HYDRAULIC BLIND RIVETER

90 Davs

• All replacement parts purchased outside of the warranty period

Important: All parts used in the repair or replacement of warranty covered equipment will be subject to a minimum of 90 days cover or the remaining duration of the warranty period from the original date of purchase.

Warranty Registration / Activation

You can register and activate your warranty by visiting the Jefferson Tools website using the following address: **www.jeffersontools.com/warranty** and completing the online form. Online warranty registration is recommended as it eliminates the need to provide proof of purchase should a warranty claim be necessary.

Warranty Repair

Should Jefferson confirm the existence of any defect covered by this warranty the defect will be corrected by repair or replacement at an authorized Jefferson dealer or repair centre.

Packaging & Freight Costs

The customer is responsible for the packaging of the equipment and making it ready for collection. Jefferson will arrange collection and transportation of any equipment returned under warranty. Upon inspection of the equipment, if no defect can be found or the equipment is not covered under the terms of the Jefferson warranty, the customer will be liable for any labour and return transportation costs incurred. These costs will be agreed with the customer before the machine is returned.

* Jefferson reserve the right to void any warranty for damages identified as being caused through misuse

Warranty Limitations

Jefferson will not accept responsibility or liability for repairs made by unauthorised technicians or engineers. Jefferson's liability under this warranty will not exceed the cost of correcting the defect of the Jefferson products.

Jefferson will not be liable for incidental or consequential damages (such as loss of business or hire of substitute equipment etc.) caused by the defect or the time involved to correct the defect. This written warranty is the only express warranty provided by Jefferson with respect to its products

Any warranties of merchantability are limited to the duration of this limited warranty for the equipment involved.

Jefferson is not responsible for cable wear due to flexing and abrasion. The end user is responsible for routine inspection of cables for possible wear and to correct any issues prior to cable failure.



Claiming Warranty Coverage

The end user must contact Jefferson Professional Tools & Equipment (Tel: +44 (0) 1244 646 048) or their nearest authorised Jefferson dealer where final determination of the warranty coverage can be ascertained.

Step 1 - Reporting the Defect

Online Method:

Visit our website www.jeffersontools.com/warranty and complete the Warranty Returns form. You can complete the form online and submit it
to us directly or download the form to print out and return by post.

Telephone Method:

Contact your Jefferson dealer or sales representative with the following information:

- Model number
- Serial number (usually located on the specification plate)
- Date of purchase

A Warranty Returns form will be sent to you for completion and return by post or fax, together with details of your nearest authorised Jefferson repair centre. On receipt of this form Jefferson will arrange to collect the equipment from you at the earliest convenience.

Step 2 - Returning the Equipment

It is the customer's responsibility to ensure that the equipment is appropriately and securely packaged for collection, **together with a copy of the original proof of purchase**. Please note that Jefferson cannot assume any responsibility for any damage incurred to equipment during transit. Any claims against a third party courier will be dealt with under the terms & conditions of their road haulage association directives.

NOTE: Jefferson will be unable to collect or process any warranty requests without a copy of the original proof of purchase.

Step 3 - Assessment and Repair

On receipt, the equipment will be assessed by an authorised Jefferson engineer and it will be determined if the equipment is defective and in need of repair and any repairs needed are covered by the warranty policy. In order to qualify for warranty cover all equipment presented must have been used, serviced and maintained as instructed in the user manual.

Where repair is not covered by the warranty a quotation for repair, labour costs and return delivery will be sent to the customer (normally within 7 working days).

NOTE: If the repair quotation is not accepted Jefferson Professional Tools & Equipment will invoice 1 hour labour time at £30 per hour plus return carriage costs (plus VAT).

In cases where no fault can be found with the equipment, or, if incorrect operation of the equipment is identified as the cause of the problem, a minimum of 1 hour labour at £30 per hour plus carriage costs will be required before the equipment will be despatched back to the customer.

Any equipment repaired or replaced under warranty will normally be ready for shipment back to the customer within 7 working days upon receipt of the equipment at an authorised Jefferson Repair centre (subject to part availability). Where parts are not immediately available Jefferson will contact you with a revised date for completion of the repair.

General Warranty Enquiries

For any further information relating to Jefferson warranty cover please call +44 (0) 1244 646 048 or send your enquiry via email to warranty@jeffersontools.com

Disclaimer:

The information in this document is to the best of our knowledge true and accurate, but all recommendations or suggestions are made without guarantee. Since the conditions of use are beyond their control, Jefferson Tools® disclaim any liability for loss or damage suffered from the use of this data or suggestions. Furthermore, no liability is accepted if use of any product in accordance with this data or suggestions infringes any patent. Jefferson Tools® reserve the right to change product specifications and warranty statements without further notification. All images are for illustration purposes only.



EU DECLARATION OF CONORMITY

We, Jefferson Professional Tools & Equipment, as the authorised European Community representative of the manufacturer, declare that the following equipment conforms to the requirements of the following:

Directive / Standard / Regulation	Description:
2006/42/EC (as amended)	Machinery Directive
EN ISO 11148-1	Hand-held non-electric power tools - Safety Requirement Part 1: Assembly Power Tools for Non-Threaded Mechanical Fasteners (ISO 11178-1:2011)
EN ISO 20643:2008+A1:2012	Principles for evaluation of vibration emission
EN ISO 15744: 2008	Hand-held non-electric power tools. Noise measurement code. Engineering method (grade 2)

Equipment Category: Riveter

Model Number(s): JEFARIVT02H - Air-Hydraulic Blind Riveter

Sound Power: 82 dB(A)

Measured vibration emission value (a) 0.4 m/s² Uncertainty value (k) 0.54 m/s²

Signed by: Stephen McIntyre

Smelte

Position in the company: Operations Director

Date: 23 October 2020

Technical file holder's address as shown below

Name and address of manufacturer or authorised representative:

Jefferson Tools, Herons Way, Chester Business Park,

Chester, United Kingdom, CH4 9QR

Telephone: +44 (0)1244 646 048 **Fax:** +44 (0)1244 241 191

Email: enquiries@jeffersontools.com

IMPORTANT! SAFETY FIRST!

Before attempting to use this product please read all the safety precautions and operating instructions outlined in this manual to reduce the risk of fire, electric shock or personal injury.

Jefferson Tools, Herons Way, Chester Business Park, Chester, United Kingdom, CH4 9QR

Tel. +44 (0)1244 646 048 **Email:** sales@jeffersontools.com