Jefferson®
PROFESSIONAL TOOLS & EQUIPMENT

AUTOMATIC MAGNETIC CORE DRILL

JEFMAGDAUT35-230
JEFMAGDAUT35-110

User Manual
v.1.1

CONTENTS

Important: *Please read all these instructions before operating this product and save these instructions. 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 the future reference.*

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 this manual is read before any operation or, before performing any kind of adjustment to the product and prior to any maintenance tasks. By following all the general safety instructions contained in this manual you will help to ensure operator safety and extend the potential lifespan 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.

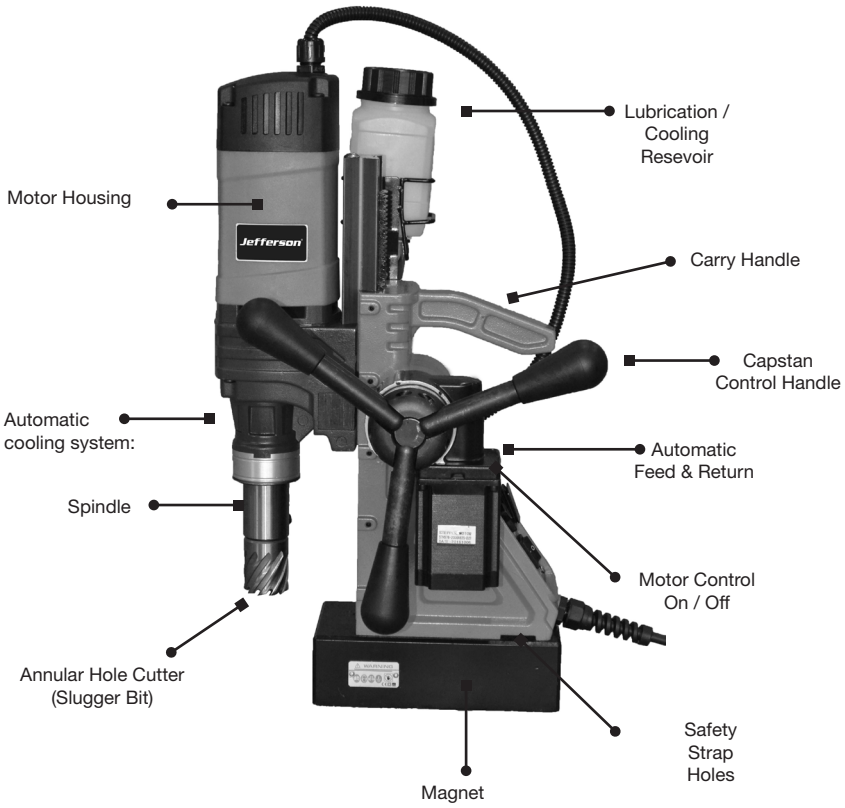
Note: *The information contained in this Instruction Manual is designed to assist you in the safe operation and maintenance of the equipment. Some illustrations in this Instruction Manual may show details or attachments that differ from those on your own model. Contact your nearest Jefferson Dealer if 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.*

1. Introduction

This magnetic drill is designed for drilling holes in steel fabrication work. It is an ideal portable drilling solution equally suited for use in building sites or the workshop environment and can be used to cut in horizontal, vertical and overhead positions.

This model features an Automatic Feed and Return system (automatic cutting and and return after cutting) for fast, efficient, accurate and safe core drilling.

The magnetic drill uses an annular hole cutter (sometimes called a slugger bit) to cut clean and accurate holes without pre-drilling or step drilling. After cutting through the steel the cutter produces a "slug" (a cylindrical lump of steel) that falls from the centre of the cut.



2. Safety Guidelines

Important: Ensure that you have read and understand the information contained in this manual before operating this equipment.

This appliance is not intended for use by persons with reduced physical, sensory or mental capabilities. The appliance must not be operated by children or by any persons who have not been instructed in the correct operation.

Children and pets should be kept away from the working environment at all times during operation.

Please read these instructions carefully and keep in a safe location for future reference. Ensure that the manual is passed on should ownership of the equipment change at any time.

Contact your nearest Jefferson Dealer for advice on correct usage, accessories (including compatible detergents), servicing and replacement parts.

Do not modify this equipment for any other purpose than those originally intended buy the manufacturer.

Ensure that the product is used in accordance with the guidelines described in this manual. Failure to do so can result in personal injury and may void the warranty.

Ensure that you disconnect from the power supply before carrying out any adjustments maintenance or servicing on this equipment.

Working Environment

Ensure that the working environment is kept clear and uncluttered. There should be plenty of light available for safe operation.

Do not use this equipment in wet or windy conditions or damp or wet conditions.

Do not use this equipment in the presence of flammable liquid or gases.

Protect against electric shock by preventing contact with earthed or ground surfaces (e.g. pipes, radiators, cookers and refrigerators).

Jefferson recommend using a suitable residual current device (RCD) for electrical safety when using this equipment.

Store idle tools when not in use in a dry and secure location, out of reach of children.

Do not force the tool during operation or use the equipment for a larger job than which it was designed.

Personal Protection Equipment (PPE)

Do not wear loose clothing or jewellery during operation incase they get caught in moving parts.

Wear protective hair covering to prevent long hair getting caught up in the tool.

Ensure that suitable safety equipment is worn during use these include:

- Safety glasses
- Ear defenders
- Protective gloves

Wear a hard hat (if working with magnetic drill above head height to prevent injury from ejected slugs after cutting). Use a face or dust mask if cutting operations create dust. Non-slip, steel toecap footwear is recommended.

Cutters are sharp. Wear gloves when installing or removing cutter from the arbor. Do not grab a rotating cutter.

Keep tools sharp and clean for better and safer performance. Do not use dull or broken cutters.

Follow safety instructions for lubricating and changing accessories (always check compatibility of annular cutters before use). Inspect tool cords periodically and, if damaged, have them repaired by a qualified electrician or an authorised Jefferson Repair Centre.

3. Specifications

Model Number:	**JEFMAGDAUT35-110**	**JEFMAGAUT35-230**
Maximum Core Drill Diameter:	35mm	
Maximum Cutting Depth:	35mm	
Input Voltage / Frequency:	110V	230V
Magnetic Adhesion:	16000N	
Motor Power / Speed:	1600W	
No Load Speed:	760rpm	
Dimensions:	42 x 18 x 35cm	
Weight:	20.5kg	

4. Operation Guide

1. Make sure the workpiece is suitable for magnetic adhesion and that both the surface of the workpiece and the magnetic base of the drill are clean and free of dirt, grease and debris.
2. Secure the magnetic drill to the unit to workpiece with safety chain provided.
3. Position the drill by sliding it and gently feeding the arbor so that pilot pin is in contact with the centre of the hole you need to cut.
4. Activate the magnet by moving the Magnet Switch to the **ON** position.
5. Turn the Feed Handle, raising the annular cutter until the pilot pin is above the work surface.
6. Open the cutting fluid valve.
8. Make certain that the annular cutter is clear of the workpiece and turn the motor on by pressing the motor button to the **ON** position.
9. Feed the cutter slowly onto the workpiece. Carefully establish a cutting
depth of about 1/16" before using the full force of the drill on the cut by turning the feed handle to lower the arbor as required.
10. Ease up on feed pressure as the cutter starts to break through the workpiece.
11. When you have completed the cut, turn off the motor by pushing the motor button into the **STOP** position.
12. Turn feed handles to raise the arbor away from the hole. This will cause the slug to fall free (if it hasn't already) so take care to ensure it does not fall in a way that can cause bodily harm to the operator or any other persons in the vicinity.
13. Turn the magnet **OFF** by moving the Magnet switch to the **OFF** position. As the magnet de-activates the base should lift up from the work surface.
14. Disconnect the equipment from the power source.
15. Remove any chips or debris from the cutter and the magnet wearing a pair of protective working gloves and a set of pliers to protect your hands from sharp materials.
16. Disconnect the safety chain and carefully remove the drill to complete the procedure.

Important: *The magnetic strength of the drill base is related to the thickness of the steel ,or other ferrous metal, in the workpiece. Magnetic adhesion can also be affected by the cleanliness of the metallic surface you are fixing to. Material that is clean and free from coatings will offer the best surface for the magnet.*

Factors that can reduce the effectiveness of the magnet and safe operation of the equipment include:
• Coatings or paint layers on material
• Material less than 3/8" thick
• Workpieces with dirt, grease or debris between the magnet and the metallic surface
• Curved or uneven work surfaces (The surface of the workpiece should be flat. For pipe applications, a pipe adapter should be used.)
• Workpieces that are smaller than the dimensions of the metallic base.

5. Cleaning & Maintenance

• Keep the machine, the cutter and electric cables clean from drilling debris.

• Always turn off the machine and unplug from the mains before carrying out any cleaning.

• Clean the motor by means of dry compressed air.

• Clean and grease any sliding surfaces regularly.

• Carbon brushes should be replaced after approximately 250 hours running time.

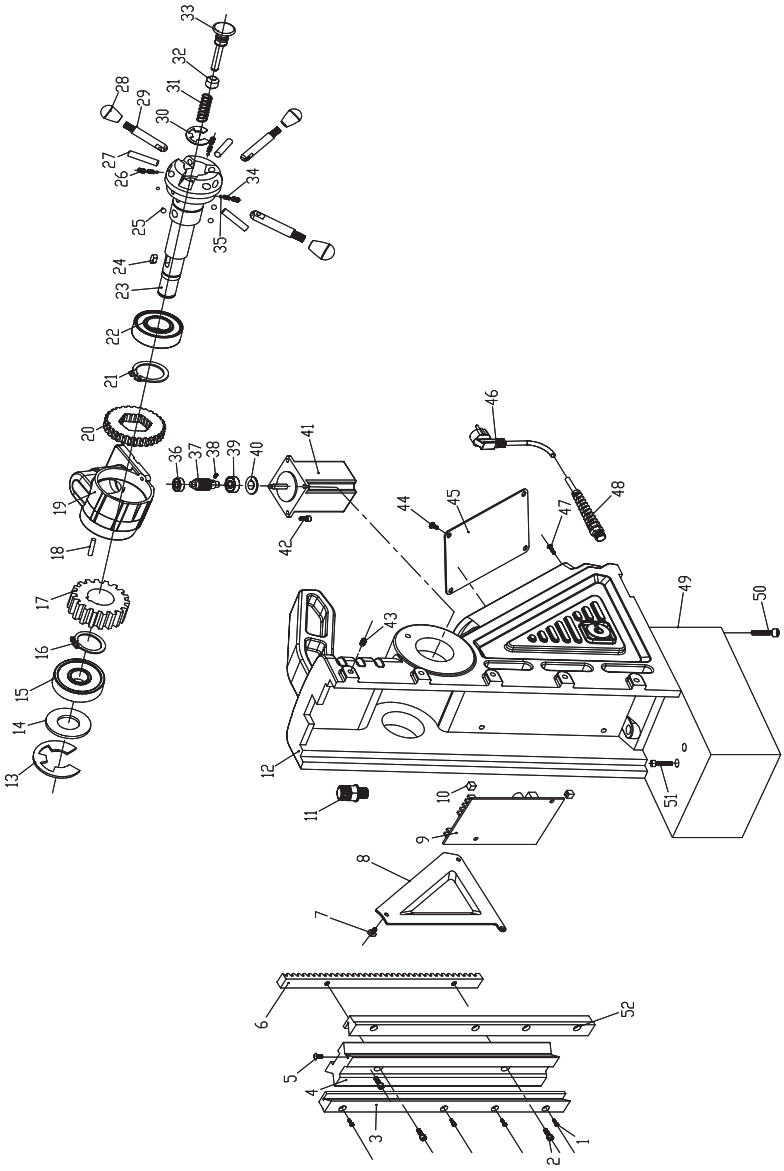
• When not in use the magnetic drilling machine should be stored securely in the transport case lying flat in a dry storage space.

Note: Excessive sparking may indicate the presence of dirt in the motor or worn out carbon brushes.

We recommend that you periodically check the brushes for wear and tear and replace them when they reach 6mm. Keep moving parts lubricated.

Maintenance, checks and repairs should only be made by qualified electricians or a Jefferson approved technician. We recommend that the machine should be serviced after approximately 250 hours running time. **Only use genuine spare parts. A full list is available at the end of this manual. Contact your nearest Jefferson dealer for further information.**

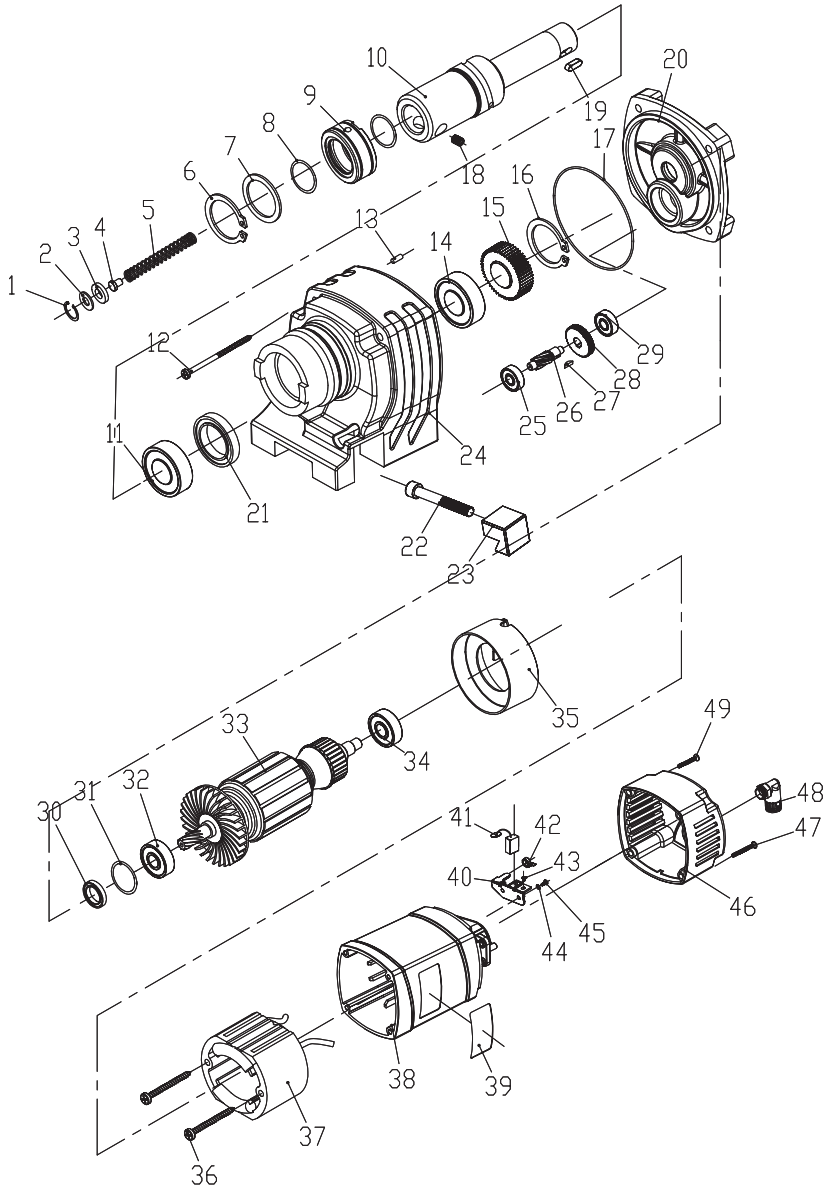
PARTS DIAGRAM - Frame & Magnet Components



PARTS LIST - Frame & Magnet Components

#	Qty	Description	#	Qty	Description
1	6	Inner Hexagon Screw M4*20	**27**	3	Cylindrical Pin 6*26
2	2	Inner Hexagon Screw M6*16	**28**	3	Handle M12 (No.3)
3	1	Strake 17*230	**29**	3	Rocker M12
4	1	40 Dual Dovetail Guides 230 (Brown)	**30**	1	Spring 9*26
5	2	M5*8 Stainless Steel Screw	**31**	1	Spring 9*26
6	1	Rack 32Hd 10*16*180 (M1) Black	**32**	1	Pinhead
7	4	Round Head Screw M4*6	**33**	1	Top Mandril 55
8	1	Triangular Panel	**34**	3	Spring4*10
9	1	Circular Board	**35**	3	Steel Ball5
10	2	Clamp Ring	**36**	1	Bering
11	1	Hose Coupler	**37**	1	Gear
12	1	Frame	**38**	1	Hexagon Socke Jackscrew M4*4
13	1	E Cleam Spring	**39**	1	Bering6001
14	1	Flat Gasket	**40**	1	Flat Gasket
15	1	Bearing	**41**	1	Motor
16	1	Clamp Ring	**42**	4	Screw M4*8
17	1	Lifting Shaft	**43**	1	Jackscrew M5*12
18	1	Pin	**44**	4	Stainless Steel Screwm3*6
19	1	Cover	**45**	1	Nameplate
20	1	Plate	**46**	1	Power Line
21	1	Clamp Ring	**47**	1	Round Head Screw M4*6
22	1	Bearing	**48**	1	Anti-Bending Joints M12*1.5
23	1	Lift Shaft	**49**	1	Magnetic Disk Cx-172.5*90*50.5
24	1	Square Pin	**50**	2	Inner Hexagon Screw M5*55
25	3	Ball	**51**	2	Inner Hexagon Screw M5*20
26	3	Hexagon Socke Jackscrew M5*5	**52**	1	Strake 17*230

PARTS DIAGRAM - Motor Components



PARTS LIST - Motor Components

#	Qty	Description	#	Qty	Description
1	1	Clamp Ring 19	**26**	1	Armature Gear Shift
2	1	Gasket 9*19*2	**27**	1	Pin 9*3
3	1	Plastic Ring	**28**	1	Armature Gear Plate
4	1	Key10.3*12	**29**	1	Bearing 608
5	1	Spring120	**30**	1	Oil Seal 10*16*4
6	2	Clamp Ring 33	**31**	1	O-Ring 29*1.8
7	1	Flat Gasket 34*40	**32**	1	Bearing LFB6000
8	1	O-Ring 40*2	**33**	1	Rotor (8)
9	1	Water Ring	**34**	1	Bearing 608
10	2	Spindle	**35**	1	Fan Shroud
11	4	Bearing JVB69004	**36**	2	Screw M4*60
12	1	Screw M4*12	**37**	1	Stator
13	1	Cylindrical pin 4*12	**38**	1	Coil Shell
14	1	Bearing 69041	**39**	1	Nameplate
15	1	Flat Board	**40**	1	Carbon Brush holder
16	1	Clamp ring 20	**41**	2	Carbon Brush
17	3	O-ring 73*2	**42**	2	Carbon Spring
18	3	Inner Hexagon Screw M10*15	**43**	2	ScrewM4*8
19	5	Square Pin 6*10	**44**	4	Flat Gasket 4
20	1	Middle Board	**45**	4	Screw M4*8
21	1	Oil Seal	**46**	1	Cover
22	1	Stainless Steel Screw M8*45	**47**	2	Screw M5*10
23	1	Briquette	**48**	1	Hose Coupler
24	1	Gear Box	**49**	2	M5*35 Screw
25	1	Bearing 608			

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
JEFMAGDAUT35-230 • JEFMAGDAUT35-110 • AUTOMATIC MAGNETIC CORE DRILL

90 Days
- 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.

Please 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.

EC DECLARATION OF CONFORMITY

We, Tundra Industrial, as the authorised European Community representative of the manufacturer, declare that the following equipment conforms to the requirements of the following Directives:

Directive:	Description:
2014/30/EU (as amended)	Electromagnetic Compatibility
2006/42/EC (as amended)	Machinery Directive
2014/35/EU (as amended) 2011/65/EU (as amended)	Low Voltage Directive RoHS Directive

Equipment Category: Magnetic Drill

Model Number: JEFMAGDAUT35-230 • JEFMAGDAUT35-110
AUTOMATIC MAGNETIC CORE DRILL

Signed by: Stephen McIntyre

Position in the company: Operations Director

Date: 14 August 2018

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

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.

WEEE Waste Electrical and Electronic Equipment Statement

Information on Disposal for Users of Waste Electrical & Electronic Equipment

This symbol on the product(s) and / or accompanying documents means that used electrical and electronic products should not be mixed with general household waste. For proper treatment, recovery and recycling, please take this product(s) to designated collection points where it will be accepted free of charge.

For private households:

Dispose of this product at the end of its working life and in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). Contact your local solid waste authority for recycling information for this equipment.

Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment, which could otherwise arise from inappropriate waste handling.

Please contact your local authority for further details of your nearest designated collection point.

Penalties may be applicable for incorrect disposal of this waste, in accordance with you national legislation.

For business users in the European Union:

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union:

This symbol is only valid in the European Union. If you wish to discard this product please contact your local authorities or dealer and ask for the correct method of disposal.

RoHS Directive 2011/65/EU - COMPLIANCY

We hereby declare that this equipment has been tested and found to be compliant to RoHS Directive 2011/65/EU of the European Parliament and the Council from 08/06/2011 on restriction of the use of certain hazardous substances in electrical and electronic appliances.

Determination of levels of regulated substances in electrotechnical products, elements of Cadmium (Cd), Lead (Pb), Mercury (Hg), Chromium (Cr) and Bromine (Br) contents were measured by XRF Spectroscopy and chemical confirmation test for RoHS restricted substances.

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.

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