

CIGWELD

AN ESAB BRAND



100+
YEARS OF
WELDING
INNOVATION

TIG TUNGSTEN GRINDER KIT



OPERATING MANUAL

CIGWELD

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WE APPRECIATE YOUR BUSINESS!

Congratulations on your new CIGWELD product. We are proud to have you as our customer and will strive to provide you with the best service and reliability in the industry. This product is backed by our extensive warranty and world-wide service network.

This Operating Manual has been designed to instruct you on the correct use and operation of your CIGWELD product. Your satisfaction with this product and its safe operation is our ultimate concern. Therefore please take the time to read the entire manual, especially the Safety Precautions. They will help you to avoid potential hazards that may exist when working with this product.

We have made every effort to provide you with accurate instructions, drawings, and photographs of the product(s) while writing this manual. However errors do occur and we apologise if there are any contained in this manual.

Due to our constant effort to bring you the best products, we may make an improvement that does not get reflected in the manual. If you are ever in doubt about what you see or read in this manual with the product you received, then check for a newer version of the manual on our website or contact our customer support for assistance.

YOU ARE IN GOOD COMPANY!

The Brand of Choice for Contractors and Fabricators Worldwide.

CIGWELD is a Market Leading Brand of Arc Welding Products for ESAB. We are a mainline supplier to major welding industry sectors in the Asia Pacific and emerging global markets including; Manufacturing, Construction, Mining, Automotive, Engineering, Rural and DIY.

We distinguish ourselves from our competition through market-leading, dependable products that have stood the test of time. We pride ourselves on technical innovation, competitive prices, excellent delivery, superior customer service and technical support, together with excellence in sales and marketing expertise.

Above all, we are committed to develop technologically advanced products to achieve a safer working environment for industry operators.



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**WARNING**

Read and understand this entire Manual and your employer's safety practices before installing, operating, or servicing the equipment. While the information contained in this Manual represents the Manufacturer's best judgement, the Manufacturer assumes no liability for its use. Disclaimer: The images and values depicted in this manual are for illustration purposes only and may vary to actual values.

**CIGWELD TUNGSTEN GRINDER
OPERATING MANUAL NUMBER
212506
FOR: PART NUMBER 208572**

**RECORD THE FOLLOWING
INFORMATION
FOR WARRANTY PURPOSES:**

Published by:



**CIGWELD Pty Ltd
CIGWELD An ESAB Brand
71 Gower Street, Preston VIC 3072 Australia**

CUSTOMER CARE:

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The publisher does not assume and hereby disclaims any liability to any party for any loss or damage caused by any error or omission in this Manual, whether such error results from negligence, accident, or any other cause.

For Printing Material Specification refer to document 47x1915.

Publication Date: 20-05-2026

Where Purchased:

Purchase Date:

Equipment Serial #:

BE SURE THIS INFORMATION REACHES THE OPERATOR. YOU CAN GET EXTRA COPIES FOR FREE BY DOWNLOADING FROM THE CIGWELD WEBSITE.

**CAUTION**

These INSTRUCTIONS are for experienced operators. If you are not fully familiar with the principles of operation and safe practices for arc welding and cutting equipment, we urge you to read our booklet, "Precautions and Safe Practices for Arc Welding, Cutting, and Gouging," Booklet 0-5407. Do NOT permit untrained persons to install, operate, or maintain this equipment. Do NOT attempt to install or operate this equipment until you have read and fully understand these instructions. If you do not fully understand these instructions, contact your supplier for further information. Be sure to read the Safety Precautions before installing or operating this equipment.



READ AND UNDERSTAND THE OPERATING MANUAL BEFORE INSTALLING OR OPERATING. PROTECT YOURSELF AND OTHERS!

AN **ESAB** BRAND**DECLARATION OF CONFORMITY**

According to AS/NZS 3820:2020, Essential Safety Requirements for Electrical Equipment Radiocommunications Labelling (Electromagnetic Compatibility) Notice 2017

TYPE OF EQUIPMENT

Tungsten Electrodes Grinder

BRAND NAME OR TRADEMARK

CIGWELD

MANUFACTURER OR HIS AUTHORISED REPRESENTATIVE ESTABLISHED WITHIN THE EEA NAME, ADDRESS, AND TELEPHONE NO:

CIGWELD Pty Ltd 71 Gower Street
Preston, Victoria, Australia, 3072
Phone: +61 3 9474 7400;
www.cigweld.com.au

THE FOLLOWING HAS BEEN USED IN THE DESIGN:**EN 60745-1**

Safety standard for hand-held motor-operated or magnetically driven electric tools.

EN 60745-2-23

Safety standard for handheld, motor-operated die grinders and small rotary tools.

BY SIGNING THIS DOCUMENT, THE UNDERSIGNED DECLARES AS MANUFACTURER, OR THE MANUFACTURER'S AUTHORISED REPRESENTATIVE, THAT THE EQUIPMENT IN QUESTION COMPLIES WITH THE SAFETY REQUIREMENTS STATED ABOVE.

PLACE/DATE**SIGNATURE**

Preston
20-05-2026

Jarrod Brennan
General Manager

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SECTION 1: INTRODUCTION

1.01 HOW TO USE THIS MANUAL

This Owner's Manual only applies to the Part Numbers listed on page 3.

To ensure safe operation, read the entire manual, including the chapter on safety instructions and warnings.

Throughout this manual, the words WARNING, CAUTION, and NOTE may appear. Pay particular attention to the information provided under these headings. These special annotations are easily recognized as follows:



NOTE

An operation, procedure, or background information which requires additional emphasis or is helpful in efficient operation of the system.



WARNING

A procedure which, if not properly followed, may cause damage to the equipment.



CAUTION

A procedure which, if not properly followed, may cause damage to the equipment.



ELECTRICAL WARNING

Gives information regarding possible electrical shock injury. Warnings will be enclosed in a box such as this.



DANGER

Means immediate hazards which, if not avoided, will result in immediate, serious personal injury or loss of life.

Additional copies of this manual may be purchased by contacting CIGWELD at the address and phone number for your location listed in the inside back cover of this manual. Include the Operating Manual number and equipment identification numbers.

Electronic copies of this manual can also be downloaded at no charge in Acrobat PDF format by going to the CIGWELD web site listed below and clicking on the Literature Library link: cigweld.com.au

1.02 RECEIPT OF EQUIPMENT

When you receive the equipment, check it against the invoice to confirm it is complete and inspect the equipment for possible damage due to shipping. If there is any damage, notify the carrier immediately to file a claim. Furnish complete information concerning damage claims or shipping errors to the location listed on back cover of this manual. Include all equipment identification numbers as described above, along with a full description of the parts in error.

Move the equipment to the installation site before unboxing the unit. Use care to avoid damaging the equipment when using knives, breaker bars, hammers, etc, to unbox the machine and its accessories.

1.03 DESCRIPTION

The CIGWELD TIG Tungsten Grinder is a portable rotary tool engineered for precise and consistent grinding of TIG tungsten electrodes. By delivering accurate grind angles, it enhances weld quality and improves electrode performance compared to manual grinding methods.

Featuring preset angles of 15°, 22.5°, and 32°, the grinder allows for quick selection, minimizing setup time while ensuring repeatable, high-quality results. It accommodates a wide range of electrode diameters, including 1.0 mm, 1.6 mm, 2.0 mm, 2.4 mm, 3.2 mm, and 4.0 mm.

Built tough for both workshop and on-site use, the CIGWELD TIG Tungsten Grinder is designed to perform in demanding environments. Its integrated protective cover helps contain debris, keeping your workspace cleaner while enhancing operator safety.

1.04 USER RESPONSIBILITY

This equipment will perform safely and reliably when installed, operated and maintained in accordance with the instructions herewith. Periodic checks are recommended as defective or poorly maintained equipment should not be used. Broken, missing, severely worn, distorted or contaminated parts should be replaced immediately.

Should a repair or replacement become necessary, it is recommended that the Authorised Distributor from whom the equipment was purchased, be contacted for service advice. The owner or user of this equipment shall have the responsibility for any malfunction which results from improper use, damage, faulty maintenance or repair/alteration by other than CIGWELD or an accredited service provider.



NOTE

Refer to the complete Warranty Schedule at the back of the manual.

1.05 SPECIFICATIONS

Speed Levels	1 -5 (6,000 - 30,000 rpm)
Operation Time	30 Minutes
Battery Capacity	Lithium – Ion 5VDC 2000mAH
Charging Compatibly	USB – C
Display	Digital
Standards	EN 60745-1 EN 60745-2-23

1.06 ORDERING INFORMATION

208572	CIGWELD TIG Tungsten Grinder kit
208573	CIGWELD TIG Tungsten Grinder Attachment
208574	CIGWELD TIG Tungsten Grinder Diamond Wheel Set

SECTION 2: INSTALLATION

2.01 COMPONENTS

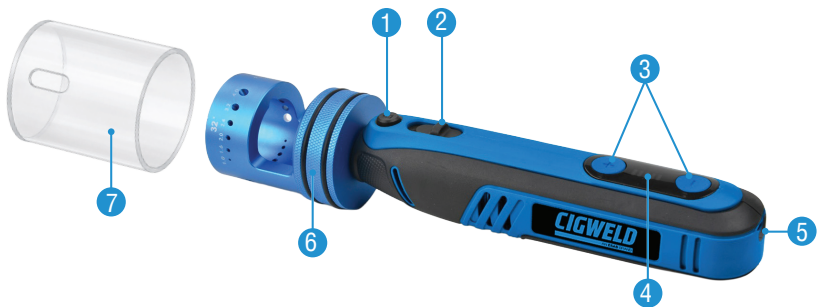


Figure 1: Tungsten Grinder

- 1 Spindle Lock
- 2 Power Switch (ON/OFF)
- 3 Speed Adjustment
- 4 Battery Level
- 5 USB - C Charging Port
- 6 Tungsten Grinder Attachment
- 7 Transparent Protective Cover

2.02 HOW TO USE

Step 1 : Install the two O-rings on the tungsten grinder attachment (see Figure 2). Ensure that each O-ring is fully seated in the grooves on the bottom section of the attachment. Ensure a tight fit.



Figure 2

Step 2: Remove the thread cover cap from the top of the grinder (see Figures 3 and 4).



Figure 3



Figure 4

Step 3: Install the grinder attachment on the rotary tool (see Figures 5 and 6). Tighten the attachment by hand only. Do not use tools.



Figure 5



Figure 6

Step 4: Collect the components for the diamond wheel and spindle assembly (see Figure 7). Mount the diamond wheel on the spindle (see Figure 8). Install the washer on the top side of the diamond wheel. Tighten the nut with a screwdriver. Tighten securely. Do not tighten too much.



Figure 7



Figure 8

Step 5: Press and hold the spindle lock button to lock the spindle. Loosen the spindle locking nut with a spanner (see Figure 9).



Figure 9

Step 6: Insert the diamond wheel and spindle assembly into the grinder attachment (see Figure 10). Ensure correct alignment and a secure fit. Press and hold the spindle lock button. Tighten the spindle locking nut with a spanner (see Figure 11). Tighten securely.



Figure 10



Figure 11

Step 7: Install the transparent protective cover on the grinder attachment (see Figure 12). Rotate the cover until the cutout aligns with the required grinding angle and the tungsten electrode size.



Figure 12

Step 8: Before you start the electrode grinding process, switch on the rotary tool. Set the speed with the speed control knob (see Figure 13). Set the speed to level 4 (25,000 rpm).



Figure 13

Step 9: Insert the tungsten electrode through the cut-out in the transparent protective cover (see Figure 14). Ensure alignment with the required grinding angle and the electrode size specified in Step 7. Rotate the tungsten electrode gently in an anticlockwise direction to start the grinding process. Do not apply excessive pressure to the rotating diamond wheel. This can reduce the wheel life and cause poor grinding quality.



Figure 14

SECTION 3: OPERATION

3.01 CHARGING AND BATTERY LEVELS

The CIGWELD Tungsten Grinder uses a built-in, non-removable Lithium-Ion battery rated at 5V DC, 2000 mAh. It can only be charged using a USB-C cable (see Figure 15).



Figure 15

While charging, the digital display shows a sweeping animation to indicate charging is in progress. The speed-level bars also act as a battery charge indicator: (see Figure 16).



Figure 16

The charged levels of the device will indicate as follows;

- 5 bars illuminated: 100% charged
- 3 bars illuminated: 60% charged
- 1 bar illuminated: 10% charged

If the battery indicator flashes, the battery charge is low, and the device should be recharged.



NOTE

Disconnect the USB – C cable from the device once fully charged.

3.02 GENERAL OPERATION AND SAFETY

SAFE WORK AREA

Operate the grinder in a clean, dry, well-ventilated, and well-lit area, ideally with dust extraction. Keep it away from flammable liquids, gases, dust, and materials that could ignite from sparks. Regularly clean up grinding dust.

ELECTRICAL AND BUILT-IN BATTERY SAFETY

Moisture, dust, and dirt can damage the grinder's electrical components, so use it only in a clean, dry environment to ensure safe operation and long service life. For safety, do not disassemble or puncture the battery, keep it away from heat, water, and fire, avoid short circuits, use only approved chargers, avoid unnecessary charging longer than necessary, and store and operate the device at moderate temperatures.

PERSONAL SAFETY

Stay alert and never use the device when tired or under the influence. Always wear appropriate PPE and always keep transparent protective cover on the grinder attachment during operation. Ensure equipment is switched off before charging and remove any spanner from the spindle locking nut before starting. Avoid loose clothing, jewellery, and unsecured hair, and maintain stable footing while working. Use dust extraction systems where available.

GENERAL TOOL USE & MAINTENANCE

Regular maintenance and safe operation of the grinder are essential to ensure performance and user safety. The retaining components, including the grinding wheel retaining screw and spindle lock nut, should be checked regularly to ensure they are properly tightened. Ventilation slots of the rotary tool must be cleaned regularly to remove dust and debris and maintain proper airflow, while the outer casing should be cleaned as required to keep the housing free from dirt. The diamond wheel should be maintained by replacing it when worn or rotating (flipping) it if applicable. Before use, discs and attachments should always be inspected for cracks, wear, or other damage. The supplied spanner must be used to tighten and loosen the spindle locking nut correctly. When changing diamond wheels or storing the grinder, the device must be unplugged from the charger. During operation, excessive force should never be applied when grinding tungsten electrodes.

For safety, compressed air should never be used on electrical components, as it may force dust inside and cause short circuits. The grinder should also be regularly inspected for any visible damage or worn parts. Finally, the device must be stored safely out of reach of untrained users, and all operations should always follow the manufacturer's instructions in the manual.

3.03 TROUBLESHOOTING

FAULT	CAUSE	REMEDY
1 Poor arc stability	Tungsten electrodes not grinded properly	• Rotate the tungsten anticlockwise while grinding. • Test different speeds to optimize the required finish. • Check if the diamond wheels are worn out, if so flip them over or change.
2 Diamond wheel and spindle not spinning	Stuck Spindle	• Release the Spindle lock button • Check if the spindle attachment is properly attached to the spindle of the rotary tool and tighten. (refer to the installation step 5). • Check if the Diamond wheel retaining nut and is properly tightened with the washer.
3 Device not charging	• Charging connection is not properly done • Dust/ debris have got stuck in the charging port	• Check the connection and whether the correct apparatus charging cable and power supply is used. • Gently blow into the charging port to blow away the dust or debris. Do not use compressed air/ other inserts to clean as it may damage the charging port.

SECTION 4: WARRANTY

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LIMITED WARRANTY TERMS

LIMITED WARRANTY: CIGWELD Pty Ltd, An ESAB Brand, hereafter, "CIGWELD" warrants to customers of its Authorised distributors hereafter "Purchaser" that its products will be free of defects in workmanship or material. Should any failure to conform to this warranty appear within the time period applicable to the CIGWELD products as stated below, CIGWELD shall, upon notification thereof and substantiation that the product has been stored, installed, operated, and maintained in accordance with CIGWELD's specifications, instructions, recommendations and recognized standard industry practice, and not subject to misuse, repair, neglect, alteration, or accident, correct such defects by suitable repair or replacement, at CIGWELD's sole option, of any components or parts of the product determined by CIGWELD to be defective.

CIGWELD MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED. THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHERS, INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

LIMITATION OF LIABILITY: CIGWELD SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, SUCH AS, BUT NOT LIMITED TO, LOST PROFITS AND BUSINESS INTERRUPTION.

The remedies of the Purchaser set forth herein are exclusive and the liability of CIGWELD with respect to any contract, or anything done in connection therewith such as the performance or breach thereof, or from the manufacture, sale, delivery, resale, or use of any goods covered by or furnished by CIGWELD whether arising out of contract, negligence, strict tort, or under any warranty, or otherwise, shall not, except as expressly provided herein, exceed the price of the goods upon which such liability is based. No employee, agent, or representative of CIGWELD is Authorised to change this warranty in any way or grant any other warranty.

PURCHASER'S RIGHTS UNDER THIS WARRANTY ARE VOID IF REPLACEMENT PARTS OR ACCESSORIES ARE USED WHICH IN CIGWELD'S SOLE JUDGEMENT MAY IMPAIR THE SAFETY OR PERFORMANCE OF ANY CIGWELD PRODUCT. PURCHASER'S RIGHTS UNDER THIS WARRANTY ARE VOID IF THE PRODUCT IS SOLD TO PURCHASER BY NON-Authorised PERSONS.

The warranty is effective for the time stated below beginning on the date that the Authorised distributor delivers the products to the Purchaser. Not with standing the foregoing, in no event shall the warranty period extend more than the time stated plus one year from the date CIGWELD delivered the product to the Authorised distributor.

Any claim under this warranty must be made within the warranty period which commences on the date of purchase of the product. To make a claim under the warranty, take the product (with proof of purchase from a CIGWELD Accredited Seller) to the store where you purchased the product or contact CIGWELD Customer Care 1300 654 674 for advice on your nearest Service Provider. CIGWELD reserves the right to request documented evidence of date of purchase. CIGWELD or our Accredited Distributor must be notified in writing of its claim within seven (7) days of becoming aware of the basis thereof, and at its own expense returning the goods which are the subject of the claim to CIGWELD or nominated Accredited Distributor/Accredited Service Provider

This warranty is given.

CIGWELD Pty Ltd A.B.N. 56007226815

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Email: support@cigweld.com

Website: cigweld.com.au

This warranty is provided in addition to other rights and remedies you have under law: Our goods come with guarantees which cannot be excluded under the Australian Consumer Law. You are entitled to replacement or refund for a major failure and to compensation for other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Please note that the information detailed in this statement supersedes any prior published data produced by CIGWELD.

WARRANTY SCHEDULE - TUNGSTEN GRINDER

WARRANTY	WARRANTY PERIOD (PARTS AND LABOUR)
TIG Tungsten Grinder Rotary Tool	3 Years
TIG Tungsten Grinder Attachment	3 Years
TIG Tungsten Grinder Diamond Wheels Set and Spindles	N/A

CIGWELD LIMITED WARRANTY DOES NOT APPLY TO;

- Obsolete goods sold at auction, second-hand goods and prototype goods.
- Consumable Parts includes the diamond wheels and spindles.

Notes:

- * No employee, agent, or representative of CIGWELD is Authorised to change this warranty in any way or grant any other warranty, and CIGWELD shall not be bound by any such attempt. Correction of non-conformities, in the manner and time provided herein, constitutes fulfilment of CIGWELD's obligations to purchaser with respect to the product.
- * This warranty is void, and seller bears no liability hereunder, if purchaser used replacement parts or accessories which, in CIGWELD's sole judgment, impaired the safety or performance of any CIGWELD product and if the unit is altered or serviced by an unauthorised CIGWELD Service Provider. Purchaser's rights under this warranty are void if the product is sold to purchaser by unAuthorised persons.

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