



STG12

CORDLESS TUNGSTEN GRINDER

OPERATING INSTRUCTIONS



👉 IMPORTANT!

Read these Operating Instructions Completely before attempting to use this machine. Save this manual and keep it handy for quick reference. Pay particular attention to the safety instructions we have provided for your protection. Contact your distributor if you do not fully understand anything in this manual.



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INSTRUCTIONS

NOTE: PLEASE READ THE INSTRUCTIONS CAREFULLY BEFORE USING THE DEVICE. PLEASE KEEP THIS OPERATION MANUAL FOR ANY USE.

The CORDLESS TUNGSTEN GRINDER was specifically designed for the Professional welder. It includes a rechargeable, long-life, Lithium-Ion battery that provides ample power and USB Type C charging cable for jobs away from the welding bench, or in the field, with cordless convenience. Features a long-lasting, double-sided, Diamond Grinding Disc capable of providing over 200 tungsten sharpening's before requiring replacement.

Included with your machine

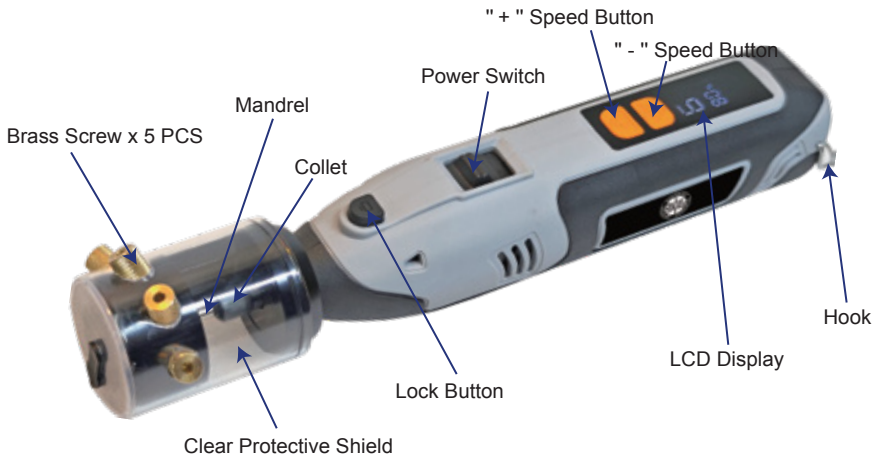


1. Strata 12V Cordless Tungsten Grinder / Cutter Kit (STG12)
2. 5pcs Diamond Grinding Disc (#42596)
3. 3pcs Mandrel (#42597)
4. Tungsten Grinder Head Assembly (#42595)
5. Collet Wrench (#42598)
6. USB Type-C Cable (#43251)
7. Storage bag

Specification	Details
Model	STG12
Voltage	12V
Tungsten Dia.	1.0mm (0.04"), 1.6mm (1/16"), 2.0mm (5/64"), 2.4mm (3/32"), 3.2mm (1/8")
Angle	10°, 15°, 20°, 22.5°, 25°
Grinding DISC Dia.	φ150 Grit
Battery Size	Li-ion 18650, 2000mAh
Mandrel	3.2mm
Charging Time	5V 1A: ~7 hours, 9V 2A: ~1.5 hours
Charging Type	USB Type-C Cable
No-Load Speed	Position 1: 5000 RPM; Position 2: 10000 RPM; Position 3: 15000 RPM; Position 4: 20000 RPM; Position 5: 25000 RPM; Position 6: 30000 RPM



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OPERATION

- Power switch (OFF), shutdown status. Power switch (On), switch on status.



Adjust the speed using the “+”/“-” buttons, with the display showing settings from 1 to 6. The LCD display shows the current battery level and speed setting. If a fault occurs during operation, the LCD will show the corresponding error code.



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CHARGING THE TOOL

- Connect the power (DC 5V or 9V) and plug the Type-C connector into the product.



Insert the plug into the tool's TYPE-C socket, then connect the other end of the Type-C cable to a USB charger or a mobile USB power adapter. During charging, the light indicator will flash; once fully charged, the display will show 100%. When the power drops below 10%, the tool requires recharging.

ATTENTION! If the tool are not used for an extended period, please recharge it every 3 months to keep the lithium battery active.

CAUTION! Use only standard accessories or those recommended and approved. Other accessories may cause personal injury.

HOW TO QUICK REPLACING DIAMOND GRINDING DISC

The tungsten grinder is supplied with the tungsten grinder head with Clear Protective Shield and diamond grinding disc pre-assembled.

Below are the steps to change the grinding disc.

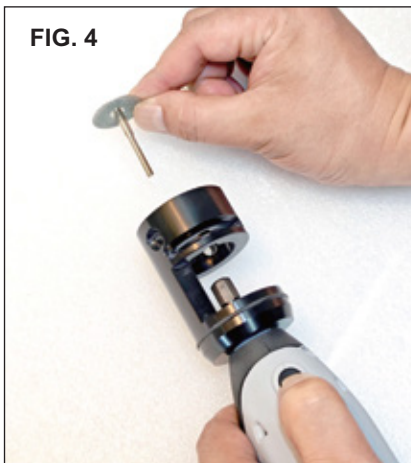
- Unscrew the Brass Screw (FIG 1).
- Remove the Clear Protective Shield (FIG 2).



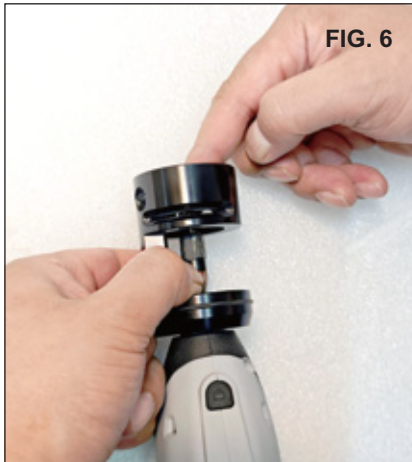
- Press the Lock button and use the included wrench to unscrew the collet (FIG 3)



- Remove the diamond grinding disc and Mandrel (FIG 4).
- Use the included wrench to replace diamond grinding disc, assemble it onto the Mandrel, and then insert it into the collet (FIG 5).



- Assemble the collet onto the Mandrel (FIG 6).
- Use your finger to adjust the height of the assembled diamond grinding disc (FIG 7).



- Ensure the diamond grinding disc aligns with the height reference line (FIG 8) .
(LOWER LINE OF THE SMALL SLOT).



- Tighten the collet to complete the diamond grinding disc assembly (FIG 9+10).



FIG. 9



FIG. 10

- Fit the Clear Protective Shield over the head. Ensuring the rubber sleeve and holes are properly aligned. (FIG 11+12)
- Tighten the Brass Screw to complete the assembly. (FIG 13)



FIG. 11



FIG. 12



FIG. 13

- This tool features a convenient hook for hanging when not in use, helping to keep your workspace tidy and free from clutter on the table. (FIG 14)



FIG. 14

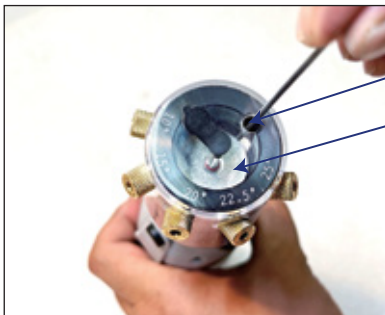
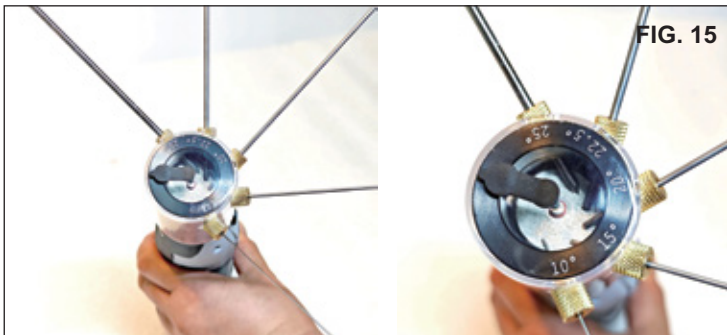


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START GRINDING

Begin by turning on the Tungsten Grinder to ensure it operates smoothly; allow a few seconds for the motor to reach full speed, then gently insert the tungsten (not included) into the appropriate screw. The high-speed motor enables users to create a finely sharpened point. Under ideal conditions, it supports 5 different tungsten wire sizes and 5 different angles, offering 25 possible combinations. Refer to the table below as needed (FIG 15).

Metric Size (mm)	Inch Size	Angle				
		10°	15°	20°	22.5°	25°
1.0	0.04"	√	√	√	√	√
1.6	1/16"	√	√	√	√	√
2.0	5/64"	√	√	√	√	√
2.4	3/32"	√	√	√	√	√
3.2	1/8"	√	√	√	√	√



Tungsten Cutter
Diamond Grinding Disc
Built-in tungsten cutter
(As shown in the PICTURE)
for removing a balled or contaminated end.

NOTICE: ONE TUNGSTEN AT A TIME

- Gently and steadily bring the tungsten into contact with the Diamond Grinding Disc surface while rolling it to shape a sharpened tip.
- **DO NOT** apply force; let the abrasive action of the Diamond Grinding Disc Wheel do the work.
- Once grinding is complete, withdraw the tungsten and toggle the power switch to the (OFF) position to enter shutdown mode.

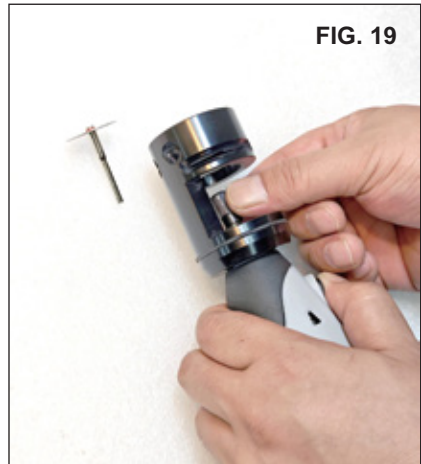
HOW TO QUICKLY SWITCH TO ROTARY TOOL MODE

Ensure the tool is powered off and unplugged before proceeding for safety.

- Unscrew the Brass Screw (FIG 16).
- Remove the Clear Protective Shield (FIG 17).

**FIG. 16****FIG. 17**

- Press the Lock button and use the included wrench to unscrew the collet (FIG 18)
- Remove the Mandrel and collet (FIG 19).

**FIG. 18****FIG. 19**

- Unscrew and remove the tungsten grinder head (FIG 20).
- Insert the components in the following order (FIG 21)



FIG. 20



FIG. 21

- Tighten the collet (FIG 22).
- Secure the Cap for Grinder to complete the setup and begin your grinding work (FIG 23).



FIG. 22



FIG. 23

WARNING: Always wear protective goggles and gloves when operating in rotary tool mode. Ensure the accessory is securely fastened to prevent injury. Keep hands clear of the rotating parts and avoid using damaged or incompatible accessories. This mode transforms your tungsten grinder into a versatile rotary tool for precision tasks like engraving or polishing. Always refer to the accessory guidelines for compatibility.



ERROR CODES AND SOLUTIONS

Code	Code description	Countermeasures
E1	Overload protection	Turn off and restart the machine
E2	Machine locks after 3 consecutive E1 overload protections within 30 seconds	Connect the charger to activate immediately or wait 1 minute for automatic activation
E3	Battery high/low temperature protection	During charging, continue charging once the battery returns to normal temperature. During use, turn off and restart the machine once the battery reaches normal temperature
E5	Voltage difference between any two batteries exceeds 0.3V	Replace the battery
Lo	Battery level below 10%, displayed as "Lo" with a flashing empty battery icon.	Charge promptly



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SAFETY INFORMATION



READ ALL SAFETY WARNINGS AND INSTRUCTIONS!

The following explanations are displayed in this manual, on the labeling, and on all other information provided with this product:

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

⚠ NOTICE

NOTICE is used to address practices not related to personal injury.

SAFETY INFORMATION WARNING! Lithium batteries store a large amount of energy and will erupt in flames or violently explode if not properly handled.



⚠ WARNING

READ ALL SAFETY WARNINGS AND ALL INSTRUCTIONS!

Failure to follow the warnings and instructions may result in electric shock, fire, and/or serious injury.

Save all warnings and instructions for future reference.



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⚠ WARNING EYE INJURY HAZARD!

Rapidly moving abrasive surfaces can eject metal particles, dirt, and debris at high velocity. Always wear AS/NZS 1337-approved eye protection when operating this tool.



⚠ WARNING INJURY HAZARD!

The rotating Wheel of this Grinder can quickly catch loose clothing, long hair, or jewelry, causing serious personal injury. Keep all loose clothing, long hair, and jewelry away from the operating Grinder. Always turn the Grinder switch to the "OFF" position before changing Wheels or performing maintenance. Shortened tungsten points can wound. Always wear AS/NZS 2161-approved protective work gloves when handling sharpened tungsten.



⚠ CAUTION FIRE INJURY HAZARD!



This Grinder can eject sparks during use, which may ignite flammable materials or injure others nearby. Do not operate near flammable materials and keep all persons and pets away from the work area.



⚠ CAUTION HEARING DAMAGE HAZARD!

This tool may emit high sound levels while operating. Use AS/NZS 1270-approved ear protection when operating. (Designed for New Zealand's auditory safety and crafted with precision.)



⚠ CAUTION VIBRATION INJURY HAZARD!

Prolonged use or repeated exposure to vibration may cause physical injury. Take regular breaks during use to minimize vibration-related injury, in compliance with AS/NZS 2760 guidelines. (Tailored for New Zealand's user well-being and crafted with care.)



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CLEANING AND MAINTENANCE

- Check the tightness of the diamond grinding disc and Brass Screw.
- Inspect the diamond grinding disc for cracks, damage, or excessive wear.
- Clear any dirt and debris from the motor's air cooling slots.
- Before starting any cleaning work, always unplug the power cord.
- Keep all safety devices, vents, and the motor housing as dust-free as possible.
- Wipe the equipment with a clean cloth or dry it with low-pressure compressed air.
- Periodically clean the device with a damp cloth and a small amount of non-abrasive mild soap.
- Avoid using cleaners or solvents, as they may damage the plastic components.
- Ensure no water seeps into the interior of the device.
- This power tool requires no lubricating oil or other maintenance.
- The tool contains no replaceable parts.
- Do not clean with water or chemical agents—use only a dry cloth.
- Store the tool in a dry environment to maintain optimal performance.



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Warranty

As part of an on-going commitment to excellence in product support, Euroquip offers a comprehensive product warranty program.

Warranty period for the Strata STG12:

Commercial Use: 12 Months

Domestic Use: 12 Months

Warranty covers failure caused by manufacturing and material defects in the product, during the warranty period specified. The warranty period begins when the product is purchased by the end user. Warranty is not transferrable and is only claimable by the original purchaser.

Warranty does not cover parts that are subject to wear and tear from usage, such as hoses, filters etc.

Warranty covers failure of a product caused by defective materials and/or manufacturing for the period given and the usage specified by Euroquip. The warranty period begins when the product is purchased by the end user. Warranty is not transferrable and is only claimable by the original purchaser.

Warranty also does not cover failure caused by the untimely replacement or service of the above wearing parts. Evidence must be provided that the product has been maintained and serviced suitably for a claim to be considered under warranty.

Failure caused by incorrect operation of the product, lack of proper care and maintenance of the product, external damage, external circumstances such as poor power, non standard filter usage, modifications to the product, attempted repair/ service by a party other than an Approved Service Agent, is not covered under warranty.

Warranty does not cover pre delivery service and adjustment, or failure that may occur as a result of lack of/ incorrect pre delivery service and adjustment.

Warranty does not cover any incidental, indirect or consequential loss, damage or expense that may result from any defect, failure or malfunction of a product.

Should any issue be found to be a combination of a warranty failure and a non-warranty issue, the repair cost component to rectify and repair the non-warranty failure is the customers' full responsibility.

The decision that an issue with a product qualifies as a warranty claim is made at the sole jurisdiction of Euroquip.

No costs incurred will be considered under warranty if repairs are carried out by a party other than a Euroquip Approved Service Agent, unless with prior consent in writing from Euroquip.

It is the responsibility of the purchaser to deliver a product under warranty to the nearest relevant service agent or product reseller. Warranty does not cover call outs, mileage and freight costs.

If a product is repaired under warranty, parts and labour required for the repair will be supplied at no charge. Warranty assessment and repair will be scheduled and executed according to the normal work flow at the service location and depending on the availability of suitable replacement parts.

This warranty policy is an additional benefit and does not affect the legal rights of any end user, reseller or service agent.



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Congratulations on your new STRATA 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. To locate your nearest distributor or service agency visit www.strata.co.nz, or email us at customerservice@euroquip.co.nz

www.strata.co.nz