



PWTG01-110

PWTG01-230

OPERATOR MANUAL

ISSUE 2

Welcome

Thank you for choosing Parweld. This Owner's Manual is designed to help you get the most out of your Parweld products. Please take time to read the Safety precautions. They will help you protect yourself against potential hazards in the workplace. With proper maintenance this equipment should provide years of reliable service. All our systems conform to ISO9001: 2015 and are independently audited by NQA.

The product range is constructed in accordance with European and UK directives and the product specific standards where they apply.

Further Information

Parweld is the UK's leading manufacturer of MIG, TIG and Plasma torches and consumables.

For more information about Parweld's complete range visit: www.parweld.com



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1.0 Safety Precautions

ELECTRIC SHOCK can kill.

Touching live electrical parts can cause fatal shocks or severe burns. Do not touch live electrical parts.

Do Not operate any equipment where the power cord or the equipment covers are missing or damaged.

Additional safety precautions are required when any of the following electrically hazardous conditions are present:

In damp locations or while wearing wet clothing;

Disconnect input power before installing or servicing this equipment.

Properly install and this equipment according to national and local standards.

Frequently inspect input power cable for damage or bare wiring - replace cable immediately if damaged - bare wiring can kill.

Turn off all equipment when not in use.

Do not use worn, damaged, under sized, or spliced cables.

Do not drape cables over your body.

Use only well-maintained equipment. Repair or replace damaged parts at once. Maintain unit according to manual.

Wear a safety harness if working above floor level.

Keep all covers securely in place.

GRINDING DUST can be hazardous.

Do not breathe the dust.

Use local exhaust (forced ventilation) to remove dust or wear an approved respirator.

Grinding dust from thoriated electrodes contains low-level radioactive material. Consider using tungsten containing ceria, lanthana, or yttria instead of thoria.

Properly dispose of grinder dust in an environmentally safe way.

Read and understand the Material Safety Data Sheets (MSDSs) and the manufacturer's instructions for Tungsten electrodes.

GRINDING can cause FIRE OR EXPLOSION.

Do not grind where flying sparks can strike flammable material.

Protect yourself and others from flying sparks and hot metal.

Be alert that sparks and hot materials from grinding can easily go through small cracks and openings to adjacent areas.

Watch for fire, and keep a fire extinguisher nearby.

FLYING METAL can injure eyes.

Grinding causes sparks and flying metal. Wear approved safety glasses with side shields.

HOT PARTS can cause severe burns.

Do not touch hot parts with bare hands.

Allow cooling period before working on electrodes

To handle hot parts, use proper tools and/or wear heavy, insulated welding gloves and clothing to prevent burns.

NOISE can damage hearing.

Noise from some processes or equipment can damage hearing.

Wear approved ear protection if noise level is high.

MOVING PARTS can injure.

Keep away from moving parts. Do not operate without dust cover fitted.

2.0 Product Description

You have purchased a portable handle held tungsten grinding machine, which has been engineered to give precise and contamination free cutting and sharpening of tungsten welding electrodes from 1.0 to 4.0mm in diameter. It can be used to cut, sharpen and flatten the ends of tungsten electrodes used for welding applications. The use of a dedicated grinding machine will improve the quality of the point and ensure no arc contamination that is normally picked up from an off hand grinder used with other materials, so providing superior arc stability.

3.0 Technical Specifications

This appliance is double insulated and does not require an earth connection.

Model	PWTG01-110	PWTG01-230
Input Voltage (V)	110V 1P	230V 1P
Frequency	50/60Hz	50/60Hz
Input Current A (MAX)	7.0	3.5
Fuse rating	16A	5A
Rated Power (W)	750	750

4.0 Grinder Overview



1. Grinder Motor Body
2. Power Cord
3. On/Off Switch
4. Speed Control

4.1 Grinding Head Detail



- 5. Depth Gauge for Length Cutting
- 6. Insertion Points for Angle Grinding
- 7. Insertion Point for End Dressing
- 8. Clear Dust Cover
- 9. Grub Screw Driver

5.0 Preparing for Use

5.1 Unpacking the grinder

Carefully remove the grinder and identify all the parts we recommend you retain the packaging until the machine has been installed and tested in case it has been damaged in transit and has to be returned to the re-seller.

5.2 Location

Ensure good ventilation and wear the required PPE to protect yourself from grinding dust.

5.3 Input

WARNING

Before starting the installation, check that your power supply is adequate for the voltage, and frequency specified on the Machine nameplate.

Only operate from an AC power supply, the input voltage must match that on the grinder rating plate.

Do not exert pressure on the grinding wheel or the life of the wheel will be shortened and you will produce flat spots on the tungsten.

Determine diameter of electrode and desired sharpening angle.

Turn on grinder. Insert electrode in corresponding hole in grinder.

Slowly turn the electrode until tip is sharpened evenly. If the electrode is not turned the tip will be flat ground on one side.



6.0 Operation

Note:- We recommend, the unit is operated with the dust cover fitted, this reduces the spread of tungsten dust and makes the disposal of grinding dust easier. We show the unit without the dust cover fitted for clarity in the user manual.

6.1 Switch the unit on/off



Slide the power switch forward and down to latch the power on.

Press down on the back of the switch to switch off.

6.2 Sharpen the tungsten electrode

Grinding produces dust and flying sparks which can cause injury and start fires.

6.3 To Grind the end face of the Electrode:

Determine diameter of electrode.

Turn on grinder. Insert electrode in corresponding hole on the top of the grinder head. Grind the electrode tip until square.



6.4 Cut Electrode to Length

Turn on grinder. Insert electrode in cutting slot and turn electrode slowly until cut.

Turn grinder off.



7.0 Maintenance

7.1 Replacing Grinding Wheel

Turn off grinder and disconnect power cord.

Use supplied driver to remove the dust cover securing screw and slide off the dust cover



Remove remove head nut and head to reveal the disc



Remove the Locking bar hole grub screw



Slide a rod through cross hole and motor shaft to prevent rotation of the grinding wheel. You can use a tungsten 2.4 or 3.2mm for this. Remove grinding wheel screw. Remove grinding wheel.

The grinding wheel is double sided so it can be reversed and reinstalled to increase its life, we recommend marking the worn side with a marker pen for future reference.

To ensure correct installation, align the grinding wheel pilot hole with locator pin on shaft. Reinstall grinding wheel screw and washer, tightening with the locking bar in place to prevent rotation. Remove the locking bar and refit the grinding head cap and the locking bar cover screw.



7.2 Routine Maintenance

Remove Dust Cover Dispose of Grinding Dust .

Check Grinder Head is Secure.

Check Power Cord for Damage.

Vacuum Out Grinder Head Holes and Inside of Housing.

7.3 Troubleshooting

Fault	Action
Unit does not switch on.	Have Factory Authorized Service Agent the unit.
Unit vibrates.	Tighten head screws. Tighten grinding wheel screw. Have Factory Authorized Service Agent check the unit.
Grinder is slow to sharpen the tungsten.	Tighten grinding wheel screw. Replace grinding wheel.

8.0 Spare Parts

Part No.	Description
DGD01	Diamond Grinding Disc



Part No.	Description
CDC01	Clear Dust Cover



9.0 EC Declaration of Conformity

Hereby we declare that the machines as stated below

Type: **PWTG01-110, PWTG01-230**

Conform to the Low Voltage Directive: 2014/35/EEC

EMC Directive 2014/30/EEC

Machinery directive 2023/1230/EEC

European standard: BS EN 60745

This is to certify that the tested sample is in conformity with all provisions of the above detailed EU directives and product standards.

9.1 RoHS Compliance Declaration

Directive 2011/65/EU of the European Parliament

Amended 2015/863 and 2017/2102

Restriction of use of certain hazardous substances in electrical and electronic equipment

Type: **PWTG01-110, PWTG01-230**

The above listed products are certified to be compliant with the RoHS directive with all homogeneous component parts being controlled to ensure material contents as per the list below.

Cadmium 0.01% by weight

Lead 0.1% by weight

Mercury 0.1% by weight

Hexavalent chromium 0.1% by weight

Polybrominated biphenyl's (pbbs) 0.1% by weight

Polybrominated diphenyl ethers (pbdes) 0.1% by weight

It should be noted that under specific exempted applications, where lead is used as an alloying element the following limits are applied in accordance with the regulations.

Copper and copper alloy parts use less than 4% by weight of each homogeneous component.

Steel and steel alloy parts use less than 4% by weight of each homogeneous component.

Aluminium and aluminium alloy parts use less than 4% by weight of each homogeneous component.

Only dispose off in authorised sites for electrical and electronic waste do not dispose of with general refuse or landfill waste.

9.2 WEEE Statement



WEEE (Waste Electrical & Electronic Equipment) 2012/19/EU

In relation to implementing the legislation, Parweld has established relevant recycling and recovery methods. We have been fully compliant against the marking requirements since August 2005. Parweld is registered in the UK with the Environment agency as detailed below. For WEEE compliance outside the UK please contact your supplier/Importer

Parweld is registered with a compliance scheme Official registration number is WEE/FD0255QV

When your equipment reaches the end of its service life you should return it to Parweld where it will be reconditioned or processed for recycling.

9.3 Statement of Warranty

Limited Warranty:

Parweld Ltd, hereafter, "Parweld" warrants its customers 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 Parweld products as stated below, Parweld shall, upon notification thereof and substantiation that the product has been stored, installed, operated, and maintained in accordance with Parweld'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 Parweld's sole option, of any components or parts of the product determined by Parweld to be defective.

Parweld 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:

Parweld 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 Parweld 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 Parweld 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 Parweld is authorized 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 Parweld's sole judgement may impair the safety or performance of any Parweld product.

Purchaser's rights under this warranty are void if the product is sold to purchaser by non-authorized persons.

The warranty is effective for the time stated below beginning on the date that the authorized Distributor delivers the products to the purchaser. Notwithstanding the foregoing, in no event shall the warranty period extend more than the time stated plus one year from the date Parweld delivered the product to the authorized distributor.



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