EZITIG200ACDCI

TIG/ARC INVERTER WELDER

OPERATING INSTRUCTIONS

48 MONTH WARRANTY

☞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.

www.strata.co.nz

Contents

48 MONTH WARRANTY

200A
Max Ouput (TIG/ARC)

Professional TIG Welding of;
Aluminium, Mild Steel, Stainless & More

4.0mm
Max Electrode Size

15A
230V

200A AC/DC Pulse TIG/ARC Inverter Welder

- **AC Sine & Square Wave options with adjustable frequency up to 250hz** - Versatility for excellent welding performance in any aluminium welding application
- **Electronic HF Tig Arc Ignition System** - Contamination free and easy arc starting with low EMF interference
- **Lightweight & Compact Design** - Ideal for portable site work applications
- **Production tested with 440V** - Extreme stress testing in production for rugged reliability.
- **Spot Welding Mode** - Special feature for welding very thin material without heat distortion
- **Smart cooling fan system** - Reduces noise and intake of environmental contaminants into machine
- **IGBT Inverter Technology** - Smooth & stable welding welding output, increased reliability
- **Digital Microprocessor Control System** - Accurate and reliable setting of control parameters
- **Dual Lift TIG and HF Start Modes** - Versatility for welding around sensitive electronic equipment
- **2T, 4T & Bi-Level Trigger Control Modes** - Ease of operator use for all job applications
- **Dual Mode Remote Control Option** - Digital up/ down button or potentiometer thumb wheel torch remote control options through a single connection plug (optional add on)
- **Industrial casing with front panel protection** - Resistant to damage, moisture and corrosion
- **Adjustable Arc Force, Hot Start & Automatic Anti Stick Control** - Greater control and ease of use for ARC welding.
- **Generator Friendly** - Designed to work with generator power supply and protect from power surges.
- **Intelligent Machine Protection System** - Temperature, voltage and current sensors for increased reliability & safety
- **Quick connect inlet gas fitting** - Tool-less easy connection of gas supply to machine

Description	Details
DIMENSIONS (LxWxH)	480 x 146 x 278mm
WEIGHT	10kg
INPUT POWER SUPPLY	230V AC 15A 50/60Hz
INPUT POWER SUPPLY TOLERANCE	+/-10%
MAXIMUM INPUT CURRENT	44A
GENERATOR CAPACITY	10kVA
MMA CURRENT OUTPUT	10-200A
MMA O/C VOLTAGE	67V
MMA DUTY CYCLE	200A@20% 163A@60% 100A@100%
TIG CURRENT OUTPUT	10-200A
DC TIG DUTY CYCLE	200A@25% 163A@60% 100A@100%
AC TIG DUTY CYCLE	200A@20% 163A@60% 100A@100%
TIG UP/DOWN SLOPE ADJUSTMENT	0-10S

Description	Details
TIG GAS POST/PRE FLOW ADJUSTMENT	0-2/0-10S
TIG PULSE FREQUENCY	0.5-100Hz
TIG PULSE WIDTH RANGE	5-95%
AC TIG WAVEFORM	Square, Sine Wave
INSULATION CLASS	IP21S
AC FREQUENCY ADJUSTMENT	50-250Hz
POWER EFFICIENCY	85%
POWER FACTOR	0.7
STANDARDS	AS/ IEC60974-1:2012
WARRANTY	48 Months

Includes:


4m Arc Lead


4m Earth Lead


Strata Professional PRO26 4m TIG Torch


2-Stage Flowmeter Argon Gas Regulator


2m QC Gas Hose Kit

Optional:


Tig Torch Consumables Kit


TIG Torch WP26 8m w/ Remote Control


Tig Foot Control

EZITIG200ACDCi
User guide, specs, videos

LEARN MORE

TIG WELDING ACCESSORIES & CONSUMABLES

○ Standard ● Optional

ACCESSORY:	EZITIG200DCi	EZITIG200ACDCi	ADVANCETIG250ACDC	ADVANCETIG400ACDC
Arc Leads	○ AAL3550	○ AAL3550	○ AAL3550	○ 17479
Earth Leads	○ AEL3550	○ AEL3550	○ AEL3550	○ 17478
Regulator	○ GR102ARFL	○ GR102ARFL	○ GR102ARFL	○ GR102ARFL
TIG Torch	○ 32235 ● 17371	○ 24219 ● 17371	○ 17371 ● 17372/33921	○ 17372
TIG Consumables Kit	● DCKIT	● ACDCKIT	● ACDCKIT	● ACDCKIT
Foot Pedal (Electric)	● 31088	● 31088	● 31088/33728	● 31088/33728
Water Cooler	-	-	● 39554	● 22109

Standard Collets

TC10N23	1.6mm Standard Collet
WT-TC10N24	2.4mm Standard Collet
TC10N25	3.2mm Standard Collet

Standard Collet Bodies

TCB10N31	1.6mm Standard Collet Body
WT-TCB10N32	2.4mm Standard Collet Body
TCB10N28	3.2mm Standard Collet Body

Standard Ceramic Cups

TCC10N46	1/2” Standard Ceramic Cup
TCC10N47	7/16” Standard Ceramic Cup
TCC10N48	3/8” Standard Ceramic Cup

Mild Steel TIG Rods

✓ ER70S-6 Grade.

WT-TR16MS-70S-6	1.6mm x 1m Mild Steel TIG Rods
TR24MS-70S-6	2.4mm x 1m Mild Steel TIG Rods
TR32MS-70S-6	3.2mm x 1m Mild Steel TIG Rods

Aluminium TIG Rods

✓ 5356 Grade

TR16AL-5356	1.6mm x 1m Aluminium TIG Rods
WT-TR24AL-5356	2.4mm x 1m Aluminium TIG Rods
TR32AL-5356	3.2mm x 1m Aluminium TIG Rods

Stainless Steel TIG Rods

✓ 316 Grade.

WT-TR16SS-316	1.6mm x 1m Stainless Steel TIG Rods
TR24SS-316	2.4mm x 1m Stainless Steel TIG Rods
TR32SS-316	3.2mm x 1m Stainless Steel TIG Rods

Tungsten Electrodes

✓ Zirconiated for use on aluminium
✓ Thoriated for use on stainless and mild steel

TT16-150	1.6mm x 150mm Thoriated Tungsten Electrodes
WT-TT24-150	2.4mm x 150mm Thoriated Tungsten Electrodes
TT32-150	3.2mm x 150mm Thoriated Tungsten Electrodes
TZ16-150	1.6mm x 150mm Zirconiated Tungsten Electrodes
WT-TZ24-150	2.4mm x 150mm Zirconiated Tungsten Electrodes
TZ32-150	3.2mm x 150mm Zirconiated Tungsten Electrodes

ARC Welding Electrodes - 1KG

WEL1KG-16	1.6mm E6013 GP Electrodes
WEL1KG-20	2.0mm E6013 GP Electrodes
WEL1KG-25	2.5mm E6013 GP Electrodes
WEL1KG-32	3.2mm E6013 GP Electrodes
WEL316-25	2.5mm 316L S/S Electrodes
WEL316-32	3.2mm 316L S/S Electrodes
WEL312-25	2.5mm 312 Weld-All Electrodes
WEL312-32	3.2mm 312 Weld-All Electrodes
WELCi-25	2.5mm Cast Iron NiFe Electrodes
WELCi-32	3.2mm Cast Iron NiFe Electrodes
WEL7018-32	3.2mm 7018 Low Hydrogen Electrodes
WELHF-32	3.2mm HF600 Hard Facing Electrodes

Weld Torch Coolant

✓ for Tig, Mig, Laser & Spot Welder torches and water coolers

WTC5	5L Weld Torch Coolant

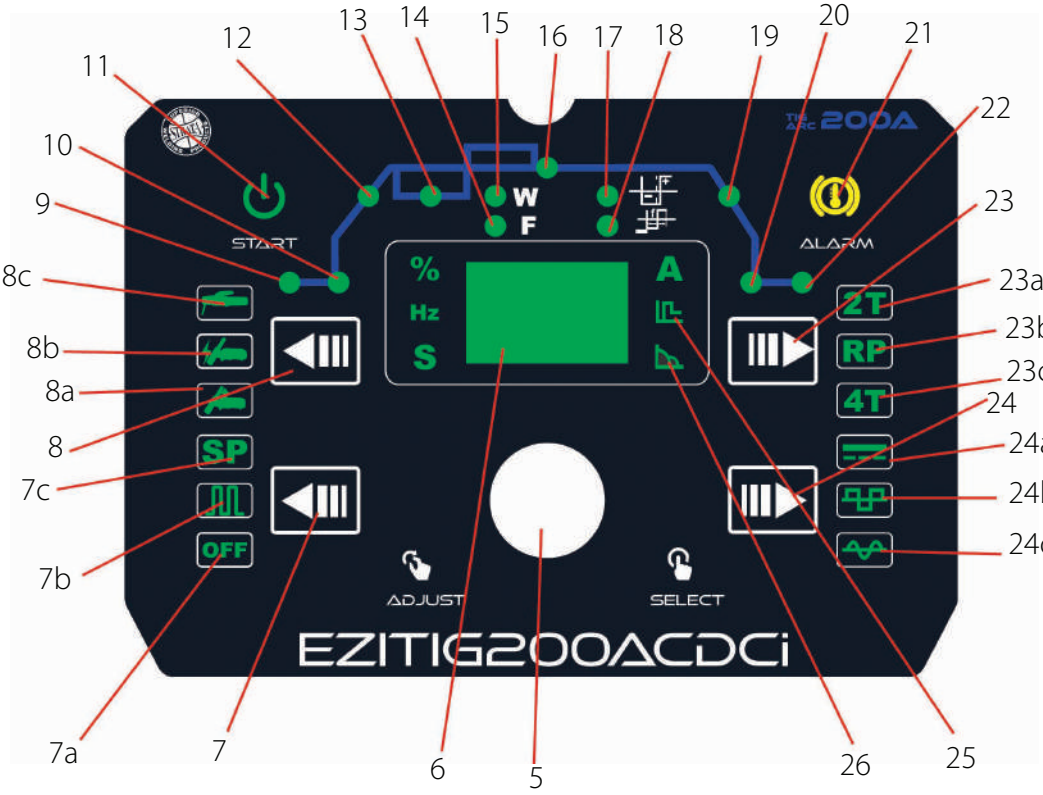
Leads & Plugs

CP3550	Welding Lead Cable Plug
17847	17847 - 12 Pin Strata TIG Remote Connection Plug

Know Your Machine

1. Positive (+) welding power output connection socket
2. 12 Pin Torch/ Foot Pedal Remote Control Connection*
3. Negative (-) welding power output connection socket
4. TIG torch gas outlet connector

EZITIG200ACDCI



5. Adjustment/ Selector Knob – Turn to adjust value, depress to confirm setting and move to next setting
6. Digital Display
    a. 'S' = Seconds. Lights when parameter being adjusted is set by time. E.G '1.5' displayed means 1.5 seconds.
    b. 'Hz' = Hertz. Lights when parameter being adjusted is set by cycles per second. E.G. '10' displayed means parameter is set to 10 cycles per second
    c. '%' = Percentage. Lights when parameter being adjusted is set by proportion. E.G '40' displayed means parameter is set to 40%
    d. 'A' = Welding Current. Lights when parameter being adjusted is set by amperage. E.G '150' means 150A.
7. TIG Welding Mode Selector Button
    a. Spot Welding Mode*
    b. Pulse Mode On*
    c. Pulse Mode Off
8. Welding Mode Control Selector Button
    a. TIG Mode – Lift Ignition*
    b. TIG mode – HF Ignition *
    c. MMA (Stick) Mode
9. Pre Flow Gas Time*
10. Start Current*
11. Start/ Power Indicator Light – Lights when mains power is connected and machine is switched on
12. Up Slope Time*
13. Base Current*
14. Pulse Frequency*
15. Pulse Duty*
16. Peak/ Main Welding Current
17. AC Wave Balance*
18. AC Frequency*
19. Down Slope*
20. End Current*
21. Post Flow Gas Time*
22. Alarm/Over Temp Indicator Indicator*
23. TIG Trigger Mode Selector Button
    a. 2T Trigger Mode*
    b. Repeat Trigger Mode*
    c. 4T Trigger Mode*
24. Waveform Mode Control Button
    a. DC Waveform Mode*
    b. AC Square Waveform Mode*
    c. AC Sine Waveform Mode*
25. MMA Mode Hot Start Adjustment
26. MMA Mode Arc Force Adjustment

* Denotes more detailed function control explanation below

Note- Only some settings will be available, dependent on the welding mode (8), TIG mode (7), waveform (24) and trigger mode (23) selected.

In Depth Controls Explanation

2. Remote Current Control Connection -
The EziTig200ACDCi can accept remote current control from a potentiometer 'thumbwheel' analogue input, or a digital up/down button input, fitted to the torch. The EziTig200ACDCi can also be used with the Strata wired or wireless foot pedal remote control system. Refer to the Strata website www.strata.co.nz for more details regarding accessory options.

7a- Spot welding mode - a useful setting for consecutive and evenly timed arcs that work well if you want perfectly even tacks and small welds.

7b. Pulse welding mode switches the welding output between a high and low current output in a cyclical manner. When used correctly this function has substantial benefits in the TIG welding process including greater weld penetration for less work heat input and greater control of the weld pool. The basic theory for setting the base current using pulse mode is that the base current should be sufficient to maintain the existing molten weld pool, while the peak current is sufficient to melt new metal in order to move/ expand the molten weld pool. Increased pulse frequency will have the effect of making the arc more tightly focused which is useful for fine stainless work and similar. Pulsing can also be used to help move the weld pool, this technique is useful for welding out of position or with materials that have higher viscosity weld pool. Higher pulse duty setting will give greater heat input, while lower pulse duty will have the opposite effect.

8b/c - Lift/ HF TIG Arc Starting Modes - HF (high frequency) ignition sends a pulse of high energy electricity through the torch system that is capable of 'jumping' the gap between the tungsten and the workpiece, ensuring arc starting without any contact between the tungsten and workpiece. The advantage of HF start is that it is easy to use and eliminates contamination between the torch tungsten and workpiece. The disadvantage of HF ignition is that the high energy electrical pulse may cause electrical and radio signal interference, which limits its use around sensitive electronic equipment such as computers. Lift TIG ignition is a compromise that minimises tungsten contamination while eliminating the electrical interference issue of HF start. Lift tig starting works by lightly resting the tungsten on the work piece, activating the torch trigger signal and then lifting the tungsten off. The control circuit will sense when the tungsten is removed from the work piece and send a low powered pulse of electricity through the tungsten that will cause the TIG arc to initiate.

9 Pre Flow- Controls the period shielding gas will flow for when the torch is triggered before the arc starts. This purges the work area of atmospheric gas which could otherwise contaminate the weld area when the weld is first started, and also makes starting the arc easier.

10 Start Current Setting - Sets a welding current activated when the trigger is held on to 'latch' the trigger before the main weld current is started. Once the trigger is released, the current will go through the upslope (12) period if it is set, to the main welding current (16).

12 Up Slope - When the trigger is activated, the welding current will increase gradually over the time selected up to the set main welding current (16).

13 Base Current - Sets the current of the low/ base pulse. Only available when pulse mode (7b) is selected.

14 Pulse Frequency - Sets the rate that the welding output alternates between the peak and base current settings. Only available when pulse mode (7b) is selected.

15 Pulse Duty/ Width - Sets the time proportion as a percentage between the peak current and base current when using pulse mode. Neutral setting is 50%, the time period of the peak current and base current pulse is equal. Higher pulse duty setting will give greater heat input, while lower pulse duty will have the opposite effect. Only available when pulse mode (7b) is selected.

17- AC Wave Balance Adjustment/Cleaning Cycle Adjustment - Adjusts the balance as a percentage between the forward and reverse current cycles when welding in AC output mode. The reverse part of the AC cycle gives the 'cleaning' effect on the weld material, while the forward cycle melts the weld material. Neutral setting is 0. Increased reverse cycle bias will give greater cleaning effect, less weld penetration and more heat in the torch tungsten,

which gives the disadvantage of reducing the output current that can be used for a given tungsten size, to prevent the tungsten overheating. Increased forward cycle bias will give the opposite effect, less cleaning effect, greater weld penetration and less heat in the tungsten. Ideally for maximum effectiveness, the clean width/ AC balance should be set with as much forward cycle bias as possible, while still maintaining a sufficient level of oxidisation removal for a contamination free weld pool. The cleaner non-ferrous metal is before welding, the more effective it is to weld. This effect can also be used to reduce heat in the tungsten, allowing use of a smaller tungsten tip shape for a more focussed arc.

18 AC Wave Frequency Adjustment - Increasing AC frequency will focus the shape of the arc, resulting in a tighter, more controlled arc causing increased penetration and less heated affected area for the same current setting. Slower frequency will result in a wider, ofter arc shape.

19 Down Slope - When the trigger is released, the welding current will reduce gradually over the time elected down to 0. This allows the operator to complete the weld without leaving a 'crater' at the end of the weld pool.

20 End Current Setting - Available in 4T trigger mode only, sets a welding current activated when the trigger is held on to 'unlatch' the trigger before the weld is finished. If downslope (16) is set, the current will go through the downslope period before going to the end current set. When the trigger is released, the arc will stop.

21 Alarm/Over Temp Indicator Lamp - Lights when over voltage, current or temperature is detected and protection is activated. When activated, welding output will be disabled until the overload condition has reduced sufficiently and indicator lamp goes out. – Refer duty cycle rating. If this indicator light stays illuminated permanently, this may indicate internal machine damage, in which case please contact Strata customer service.

Duty Cycle Rating - Welding duty cycle is the percentage of actual welding time that can occur in a ten minute cycle. E.g. 20% at 160 amps - this means the welder can weld at 160 amps for 2 minutes and then the unit will need to be rested for 8 minutes.

All duty cycle ratings are based on an ambient air temperature of 40°C with 50% humidity, which is the international standard for such a rating. In an environment with temperatures exceeding 40°C, the duty cycle will be less than stated. In ambient temperature less than 40°C, duty cycle performance will be higher.

22 Post Flow Gas - Controls the period of time the shielding gas continues to flow for after the arc is stopped. This protects the weld area and torch tungsten from contamination while it is still hot enough to react with atmospheric gases, after the weld is finished.

23a. 2T Trigger mode - the trigger is pulled and held on to activate the welding cycle, when the trigger is released, the welding cycle finishes.

23c. 4T is known as 'latching' mode. The trigger is pulled once and released to activate the welding circuit, pulled and released again to stops the welding circuit. This function is useful to longer welds as the trigger is not required to be held on continuously, r educing operator fatigue. Start current (9) and end current (17) can be independently controlled with 4T mode.

23b Repeat Trigger Mode - Functions similar to 4T 'latching' mode, except momentarily activating the trigger will cause the welding current to cycle between peak (16) and base (13) welding current set, rather than finish the welding cycle. To finish the welding cycle, depress and hold the trigger, which will activate the downslope and end current part of the cycle.

24a DC (Direct Current) Welding Output - suitable for TIG welding ferrous (iron based) metals such as mild steel and stainless steel, copper and titanium.

TIG welding reactive metals such as Aluminium, Magnesium and Zinc requires AC (alternating current) output. When reactive metals are exposed to air they form an oxide layer that insulates the base metal and prevents welding current flowing, it also contaminates the weld pool. Reverse current flow is required to break through/ clean off this oxide layer so that welding can take place, while the current flow during the positive cycle does the majority of the heating of the weld pool area.

24b AC Square Wave - Focused arc for maximum penetration, fast travel speed with best directional control.

24c AC Sine Wave - Traditional AC TIG welding wave form. Quieter, 'soft' arc characteristic

25 Hot Start Control - In MMA welding mode, provides extra power when the weld is first started. This overcomes the problem of needing to set higher welding current than would otherwise be required due to the workpiece and welding rod being cooler for the start of the first weld, or using a rod type that is more difficult to start.

26 Arc Force Control - An MMA welding power source is designed to produce constant output current (CC). This means with different types of electrode and arc length; the welding voltage varies to keep the current constant. This can cause instability in some welding conditions as MMA welding electrodes will have a minimum voltage they can operate with and still have a stable arc. Arc Force control boosts the welding power if its senses the welding voltage is getting too low. The higher the arc force adjustment, the higher the minimum voltage that the power source will allow. This effect will also cause the welding current to increase. 0 is Arc Force off, 10 is maximum Arc Force. This is practically useful for electrode types that have a higher operating voltage requirement or joint types that require a short arc length such as out of position welds.

Quick Start Guide

Welder Installation

Electrical Power Supply

The EziTIG200ACDCi is designed to operate on a 15A 230V AC power supply

If using an extension cord, it should be a heavy duty version with a minimum cable core size of 2.5mm2. It is recommended to use the Strata industrial duty 15A extension lead, part number; 16895.

If powering from a generator, refer to specification table at the start of this manual for required generator capacity.

Operating Environment

Adequate ventilation is required to provide proper cooling for the EziTig200ACDCi. Ensure that the machine is placed on a stable level surface where clean cool air can easily flow through the unit.
The EziTig200ACDCi has electrical components and control circuit boards which may be damaged by excessive dust and dirt, so a clean operating environment is important for long term reliability.

Basic Operation

1.MMA/ Stick Welding Operation

1.1 Connect the earth cable quick connector to the negative welding power output socket (3) Connect the earth clamp to the work piece. Contact with the work piece must be firm contact with clean, bare metal, with no corrosion, paint or scale at the contact point.

1.2 Insert an electrode into the electrode holder and connect the electrode holder and work lead to the positive welding power output socket (1). Note: This polarity connection configuration is valid for most GP (General Purpose) MMA electrodes. There are variances to this. If in doubt, check the electrode specifications or consult the electrode manufacturer.

1.3 Connect the machine to suitable mains power using the mains input power lead. Switch the mains power switch to 'on' to power up the machine. Select MMA welding mode by pushing on the mode selector button (8) to select MMA mode (8c)

1.4 Select the desired hot start (25), welding current (16) and arc force (26) settings by pressing in the selector knob (5) to switch between the settings, turning the knob to adjust the settings, the selected setting will be displayed on the LCD screen (6).

You are now ready to weld!

2. TIG Operation

2.1 Connect the earth cable quick connector to the positive welding power output socket (1). Connect the earth clamp to the work piece. Contact with the work piece must be firm contact with clean, bare metal, with no corrosion, paint or scale at the contact point.

2.2 Insert TIG torch power connection into the negative welding power output socket (3). Connect TIG torch gas line to machine gas connector (4), tighten nut firmly with a spanner to ensure a positive seal. Connect TIG torch 12 pin remote control pin to machine remote socket (2)

2.3 Connect the machine to suitable mains power using the mains input power lead. Switch the mains power switch on the rear of the machine to 'on' to power up the machine.

2.4 Select HF TIG (8b) or Lift TIG (8a) welding mode by pressing the mode control button (8)

2.5 Connect the argon gas regulator to the argon gas cylinder and tighten firmly with a spanner. Connect the flexible gas line to the hose tail outlet on the regulator and secure using the hose clamp. Connect the female quick connector on the other end of the gas line to the male gas inlet quick connector on the rear of the machine. Ensure all connections are tight, then open gas cylinder valve. Adjust regulator flow setting to between 5-10l/min as required. Re-check regulator flow pressure pr using gas flow test function or torch switch prior to welding as static gas flow setting may drop once gas is flowing.

2.6 Select the desired TIG waveform using button 24, TIG mode option using button 7 and trigger control mode using button 23.

2.7 Adjust the various parameter settings as required by turning the control knob (5) and then depressing the control knob to move to the next setting. The selected setting being adjusted will be illuminated on the control panel and the setting value displayed on the LCD screen (6)

You are now ready to weld!

Safety

Store and Retain this Manual

Retain this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number into the NOTES section at the rear, and keep this manual and the receipt in a safe and dry place for future reference.

Important Safety Information

Failure to follow the warnings and instructions may result in electric shock, fire, serious injury and/or death. Save all warnings and instructions for future reference.

This is the safety alert symbol to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER! indicates a hazardous situation which, if not avoided, will result in death or se - rious injury.

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

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate in- jury.

NOTE, used to address practices not related to per sonal injury.

General Safety Warnings

1. Maintain labels and nameplates on the welder. These carry important information. If unreadable or missing, contact Euroquip for a replacement.

2. Avoid unintentional starting. Make sure the welder is setup correctly and you are prepared to begin work before turning on the welder.

3. Unplug before performing maintenance. Always unplug the welder from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

4. Never leave the welder unattended while ener gised. Turn power off before leaving the welder unattended.

5. Do not touch live electrical parts. Wear dry, insulating gloves. Do not touch the electrode or the conductor tong with bare hands. Do not wear wet or damaged gloves.

6. Protect yourself from electric shock. Do not use the welder outdoors. Insulate yourself from the work piece and the ground. Use non-flammable, dry insulating material if possible, or use dry rubber mats, dry wood or plywood, or other dry insulating mate rial large enough to cover the area of contact with the work or the ground.

7. Avoid inhaling dust. Some dust created by power sanding, sawing, grinding, drilling, cutting, welding and other construction activities, contain chemicals known to cause cancer, birth defects or other harm. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

8. People with pacemakers should consult their physician(s) before using this machine.

WARNING!
Electromagnetic fields in close proximity to a heart pacemaker could cause interference, or failure of the pacemaker. The use of a Welder is NOT RECOMMENDED for pacemaker wearers. Consult your doctor.

9. Ensure that the unit is placed on a stable location before use.

WARNING!
If this unit falls while pluggedin, severe injury, electric shock, or fire may result.

10. Transportation Methods Lift unit with the handles provided, or use a handcart or similar device of adequate capacity. If using a fork lift vehicle, secure the unit to a skid before transporting.

CAUTION!
Disconnect input power conductors from de-energized supply line before moving the welding power source.

11. Exercise good work practices. The warnings, precautions, 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 considered by the operator.

Welding Safety Instructions & Warnings

WARNING!
Protect yourself and others from possible serious injury or death. Keep children away. Read the operating/Instruction manual before installing, operating or servicing this equipment. Have all installation, operation, maintenance, and repair work performed by qualified people.

If an operator does not strictly observe all safety rules and take precautionary actions, welding products and welding processes can cause serious injury or death, or damage to other equipment or property.
Safe practices have developed from past experience in the use of welding and cutting.

These practices must be learned through study and training before using this equipment. Some of these practices apply to equipment connected to power lines; other practices apply to engine driven equipment. Anyone not having extensive training in welding and cutting practices should not attempt to weld.

Safe practices are outlined in the European Standard EN60974-1 entitled: Safety in welding and allied processes.

WARNING!
Only use safety equipment that has been approved by an appropriate standards agency. Unapproved safety equipment may not provide adequate protection. Eye and breathing protection must be AS/NZS compliant for the specific hazards in the work area.

DANGER!
Always wear AS/NZS compliant safety glasses and full face shield fitted with appropriate filter shade number (Refer Filter Table in this safety section)

CAUTION!
Heavy-duty work gloves, non-skid safety shoes and hearing protection used for appropriate conditions will reduce personal injuries.

CAUTION!
Have the equipment serviced by a qualified repair person using identical replacement parts. This will ensure that the safety of the power tool is maintained.

Personal Safety

CAUTION!
Keep the work area well lit. Make sure there is adequate space surrounding the work area. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use equipment in areas near flammable chemicals, dust, and vapours. Do not use this product in a damp or wet location.

1. Stay alert, watch what you are doing and use common sense when operating equipment. Do not use a tool while you are tired or under the influence of drugs, alcohol or medication. A moment of distraction when operating equipment may result in serious personal injury.
2. Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

Arc Rays can Burn Eyes and Skin

DANGER!
Arc rays from the welding process produce intense heat and strong ultraviolet rays that can burn eyes and skin.

1. Use a Welding Helmet or Welding Face Shield fitted with a proper shade filter (refer AS 60974-1, AS/NZS 1337.1 and AS/NZS 1338.1 Safety Standards) to protect your face and eyes when welding or watching. (See Filter Table later in this section)
2. Wear approved safety glasses. Side shields are recommended.
3. Use protective screens or barriers to protect others from flash and glare; warn others not to watch the arc.
4. Wear protective clothing made from durable, flame-resistant material (wool and leather) and foot safety protection.
5. Never wear contact lenses while welding.

Noise Can Damage Hearing

CAUTION!
Noise from some processes can damage hearing. Use AS/NZS compliant ear plugs or ear muffs if the noise level is high.

Work Environment Safety

DANGER!
Remove any combustible material from the work area.

1. When possible, move the work to a location well away from combustible materials. If relocation is not possible, protect the combustibles with a cover made of fire resistant material.
2. Remove or make safe all combustible materials for a radius of 10 metres around the work area. Use a fire resistant material to cover or block all doorways, windows, cracks, and other openings.
3. Enclose the work area with portable fire resistant screens. Protect combustible walls, ceilings, floors, etc., from sparks and heat with fire resistant covers.
4. If working on a metal wall, ceiling, etc., prevent ignition of combustibles on the other side by moving the combustibles to a safe location. If relocation of combustibles is not possible, designate someone to serve as a fire watch, equipped with a fire extinguisher, during the welding process and well after the welding is completed.
5. Do not weld or cut on materials having a combustible coating or combustible internal structure, as in walls or ceilings, without an approved method for eliminating the hazard.
6. After welding, make a thorough examination for evidence of fire. Be aware that visible smoke or flame may not be present for some time after the fire has started. Do not weld or cut in atmospheres containing dangerously reactive or flammable gases, vapours, liquids, and dust. Provide adequate ventilation in work areas to prevent accumulation of flammable gases, vapours, and dust.
7. Do not apply heat to a container that has held an unknown substance or a combustible material whose contents, when heated, can produce flammable or explosive vapours. Clean and purge containers before applying heat. Vent closed containers, including castings, before preheating, welding, or cutting.

Electricity Can Kill

DANGER!
Touching live electrical parts can cause fatal shocks or severe burns. The electrode and work circuit is electrically live whenever the output is on.

The input power circuit and machine internal circuits are also live when power is on. In semi-automatic or automatic wire welding, the wire, wire reel, drive roll housing, and all metal parts touching the welding wire are electrically live. Incorrectly installed or improperly grounded equipment is a hazard.

1. Do not touch live electrical parts.
2. Wear dry, hole-free insulating gloves and body protection.
3. Insulate yourself from the work and the ground using dry insulating mats or covers.

4. Disconnect input power before installing or servicing this equipment.Lock input power, disconnect switch open, or remove line fuses so power cannot be turned on accidentally.
5. Properly install and ground this equipment according to national, state, and local codes.
6. Turn off all equipmentwhen not in use. Disconnect power to equipment if it will be left unattended or out of service.
7. Use fully insulated electrode holders. Never dip the holder in water to cool it or lay it down on the ground or the work surface. Do not touch holders connected to two welding machines at the same time or touch other people with the holder or electrode.
8. Do not use worn, damaged, undersized, or poorly spliced cables.
9. Do not wrap cables around your body.
10. Connect work piece to a good electrical ground.
11. Do not touch the electrode while in contact with the work (ground) circuit.

Recommended Protective Filters for Electric Welding		
Description of Process	**Approximate Range of Welding Current in Amps**	**Minimum Shade Number of Filter(s)**
Manual Metal Arc Welding - Covered Electrodes (MMA)	Less than or equal to 100	8
	100 to 200	10
	200 to 300	11
	300 to 400	12
	Greater than 400	13
Gas Metal Arc Welding (GWAW) (MIG) other than Aluminium And Stainless Steel	Less than or equal to 150	10
	150 to 250	11
	250 to 300	12
	300 to 400	13
	Greater than 400	14
Gas Metal Arc Welding(GWAW) (MIG) Aluminium and Stainless Steel	Less than or equal to 250	12
	250 to 350	13
Gas Tungsten Arc Welding (GTAW) (TIG)	Less than or equal to 100	10
	100 to 200	11
	200 to 250	12
	250 to 350	13
	Greater than 350	14
Flux-Cored Arc Welding (FCAW) - with or without Shielding Gas	Less than or equal to 300	11
	300 to 400	12
	400 to 500	13
	Greater than 500	14
Air - Arc Gouging	Less than or equal to 400	12
Plasma - Arc Cutting	50 to 100	10
	100 to 400	12
	400 to 800	14
Plasma - Arc Spraying	—	15
Plasma - Arc Welding	Less than or equal to 20	8
	20 to 100	10
	100 to 400	12
	400 to 800	14
Submerged - Arc Welding	—	2 (5)
Resistance Welding	—	Safety Spectacles or Eye Shield

Refer to standard AS/NZS 1338.1 for comprehensive information regarding the above table.

12. Use only well-maintained equipment. Repair or replace damaged parts as soon as practical.
13. In confined spaces or damp locations, do not use a welder with AC output unless equipped with a voltage reducer.

Arc rays from the welding process produce intense heat and strong ultraviolet rays that can burn eyes and skin. Use the following table to select the appropriate shade number for a Welding Helmet or Welding Face Shield.

Fumes And Gases

WARNING!
Welding produces fumes and gases. Breathing these fumes and gases can be hazardous to your health.

1. Keep your head out of the fumes. Do not breathe the fumes.
2. If inside, ventilate the area and/or use an exhaust at the arc to remove welding fumes and gases.
3. If ventilation is poor, use an approved air-supplied respirator.
4. Read the Safety Data Sheets (SDS) and the manufacturer's instruction for the metals, consumables, coatings, and cleaners.
5. Work in a confined space only if it is well ventilated, or while wearing an air-supplied respirator. Shielding ga es used for welding can displace air causing injury or death. Be sure the breathing air is safe.
6. Do not weld in locations near degreasing, cleaning, or spraying operations. The heat and rays of the arc can react with vapours to form highly toxic and irritating gases.
7. Do not weld on coated metals, such as galvanized, lead, or cadmium plated steel, unless the coating is removed from the weld area, the area is well ventilated, and if necessary, while wearing an air- supplied respirator. The coatings and any metals containing these elements can give off toxic fumes if welded.

Fire & Explosive Risks

WARNING!
Sparks and spatter fly off from the welding arc. The flying sparks and hot metal, weld spatter, work piece, and hot equipment can cause fires and burns.

Accidental contact of electrode or welding wire to metal objects can cause sparks, overheating, or fire.

1. Protect yourself and others from flying sparks and hot metal.
2. Do not weld where flying sparks can strike flammable material.
3. Remove all flammables within 10m of the welding site.
4. Be alert that welding sparks and hot materials from welding can easily go through small cracks and openings to adjacent areas.
5. Watch for fire, and keep a fire extinguisher nearby.
6. Be aware that welding on a ceiling, floor, bulkhead, or partition can cause fire on the hidden side.
7. Do not weld on closed containers such as tanks or drums.
8. Connect the work lead/clamp to the job as close to the welding area as practical to prevent welding current from travelling long, possibly unknown paths and causing electric shock and fire hazards.
9. Do not use a welder to thaw frozen pipes.
10. Remove the stick electrode from the holder or cut off the welding wire at the contact tip when not in use.

Sparks & Hot Metal

WARNING!
Chipping and grinding causes flying metal, and as welds cool they can throw off slag.

1. Wear an AS/NZS approved face shield or safety goggles. Side shields are recommended.
2. Wear appropriate safety equipment to protect the skin and body.

Cylinders

WARNING!
Gas cylinders contain gas under high pressure. If damaged, a cylinder can explode. Since gas cylinders are normally part of the welding process, be sure to treat them carefully.

1. Protect compressed gas cylinders from excessive heat, mechanical shocks, and arcs.
2. Install and secure cylinders in an upright position by chaining them to a stationary support or equipment cylinder rack to prevent falling or tipping.
3. Keep cylinders away from any welding or other electrical circuits.
4. Never allow a welding electrode to touch any cylinder.
5. Use appropriate shielding gas, regulators, hoses, and fittings designed for the specific application; maintain them and their associated parts in good condition.
6. Turn your face away from the valve outlet when opening the cylinder valve.

Warranty

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

Warranty period for the EZITIG200ACDCi:

Commercial Use: 48 Months

Domestic Use: 48 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.

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 untime ly 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 contaminated fuel or poor water supply, modifications to the product, attemptedrepair/ 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 productis 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 and world-wide service network. To locate your nearest distributor or service agency visit www.strata.co.nz, or email us at customerservice@euroquip.co.nz

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