

RAZORCUT USdi



INSTRUCTION MANUAL -JRWCUT45di

Congratulations on choosing our equipment!

This operating manual contains important information on the use and maintenance of this product, as well as safe handling of the product. Please refer to the technical parameters of the equipment in the Technical section located in this manual, and read the manual carefully before using the equipment for the first time. For your own safety and that of your working environment, please pay particular attention to the safety instructions in the manual and operate the equipment according to the instructions.

Disclaimer

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- 1. While every effort has been made to ensure that the information contained in this manual is accurate and complete, no liability will be accepted for any errors or omissions due to the operation not according to this manual.
- 2. JASIC reserves the right to change the manual at any time without prior notice.
- 3. Though contents in this manual have been carefully checked, there might be inaccuracies. Please contact us in case of inaccuracy.
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For your safety, please read this manual carefully before installing and operating this JASIC equipment.

Pay extra attention to all content marked with " ... "...



All operations must be carried out by professional, suitably qualified persons!

1. Safety precautions

1.1. General safety

SAFETY INSTRUCTION

These general safety norms cover both arc welding machines and plasma cutting machines unless otherwise noted.

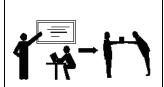
It is important that users of this equipment protect yourselves and others from harm or even death.

The equipment must only be used for the purpose it was designed for. Using it in any other way could result in damage or injury and in breach of the safety rules.

Only suitably trained and competent persons should use the equipment.

Pacemaker wearers should consult your doctor prior to using this equipment PPE and workplace safety equipment must be compatible for the application of work involved.

Always carry out a risk assessment before carrying out any welding or cutting activity



Only qualified personnel should operate this machine!

- ·Always use the appropriate personal protective equipment.
- ·Always pay attention to the safety of other persons around the working zone
- ·Do not carry out any maintenance with the power on the machine



Electric shock—May cause serious injury or even death!

- ·The equipment should be installed by a qualified person and in accordance with current standards in operation. It is the user's responsibility to ensure that the equipment is connected to a suitable power supply. Consult with your utility supplier if required. Do not use the equipment with the covers removed.
- ·Do not touch live electrical parts or parts, which are electrically charged.
- ·Turn off all equipment when not in use.



Fumes and gases—May be hazardous to your health.

Locate the equipment in a well-ventilated position and keep your head out of the fume.

Do not breathe the fume.

Ensure the working zone is well ventilated and provision should be made for suitable local fume extraction system to be in place.

If ventilation is poor, wear an approved air fed welding helmet or respirator. Read and understand the Material Safety Data Sheets (MSDS's) and the manufacturer's instructions for metals, consumable, coatings, cleaners and de-greasers.

Do not work in locations near any de-greasing, cleaning or spraying operations. Be aware that heat and rays of the arc can react with vapours to form highly toxic and irritating gases.



Arc rays——May injure the eyes and burn the skin.

The arc rays from all processes produce intense, visible and invisible (ultraviolet and infrared) rays that can burn eyes and skin.

- ·Wear an approved welding helmet fitted with an appropriate shade of filter lens to protect your face and eyes when working or watching.
- ·Wear approved safety glasses with side shields under your helmet.
- ·Never use broken or faulty welding helmets.
- ·Always ensure there are adequate protective screens or barriers to protect others from flash, glare and sparks from the working area.
- ·Ensure that there are adequate warnings that welding or cutting is taking place.
- ·Wear suitable protective flame resistant clothing, gloves and footwear.



Precautions against fire and explosion

Avoid causing fires due to sparks and hot waste or molten metal.

Ensure that appropriate fire safety devices are available near the welding and cutting area.

Remove all flammable and combustible materials from the welding, cutting and surrounding areas.

Do not weld or cut fuel and lubricant containers, even if empty. These must be carefully cleaned before they can be welded or cut.

Always allow the welded or cut material to cool before touching it or placing it in contact with combustible or flammable material.

Do not work in atmospheres with high concentrations of combustible fumes, flammable gases and dust.

Always check the work area half an hour after cutting to make sure that no fires have begun.

Take care to avoid accidental contact of electrode to metal objects. This could cause arcs, explosion, overheating or fire.



Risks due to hot material ·

The process will create hot metal, sparks and drips of molten metal, so it's very important to ensure the operator is equipped with full PPE and to always ensure there are adequate protective screens or barriers to protect others from flash, glare and sparks from the working area. Hot surfaces will create fires and will burn any exposed skin.

Always protect your eyes and body. Use the correct welding screen and filter lens and wear full PPE protective clothing.

Do not touch any hot surfaces or parts bare handed.

Always allow hot surfaces and parts to cool down first before touching or moving. If you are required to move hot parts, ensure you use proper tools and insulated welding gloves (PPE) to prevent burns to your hands and arms.



Noise——Excessive noise may be harmful to hearing

- ·Protect your ears by ear shields or other hearing protectors.
- ·Give warning to nearby personnel that noise may be potentially hazardous to hearing.



Risks due to magnetic fields

The magnetic fields created by high currents may affect the operation of pacemakers or electronically controlled medical equipment.

Wearers of vital electronic equipment should consult their physician before beginning any arc welding, cutting, gouging or spot welding operations.

Do not go near welding equipment with any sensitive electronic equipment as the magnetic fields may cause damage.

Keep the torch cable and work return cable as close to each other as possible throughout their length, this can help minimize your exposure to harmful magnetic fields.

Do not wrap the cables around the body.



Protection from moving parts

When the machine is in operation keep away from moving parts such as motors and fans.

Moving parts, such as the fan, may cut fingers and hands and snag garments. Protections and coverings may be removed for maintenance and controls only by qualified personnel after first disconnecting the power supply cable.

Replace the coverings and protections and close all doors when the intervention is finished and before starting the equipment.

Take care to avoid getting fingers trapped when loading and feeding wire during set up and operation.

When feeding wire be careful to avoid pointing it at other people or towards your body.

Always ensure machine covers and protective devices are in operation.

❤JASIC • I Passionate About Your Welding



Troubleshooting

Before the machines are dispatched from the factory, they have already been checked thoroughly. The machine should not be tampered with or altered. Maintenance must be carried out carefully. If any wire becomes loose or is misplaced, it maybe potentially dangerous to user!

Only professional maintenance personnel should repair the machine! Ensure the power is disconnected before working on the machine. Always wait 5 minutes after power switch off before removing the panels.

If you still do not fully understand or cannot solve the problem after reading the instructions in this manual, you should contact the supplier or JASIC's service center immediately for professional help.

1.2. Other precautions



Warning! Location

The machine should be located in a suitable position and environment. Care should be taken to avoid moisture, dust, steam, oil or corrosive gases. Place on a secure level surface and ensure that there is adequate clearance around the machine to ensure natural airflow.



Warning! The handle or strap on the machine is only suitable for manual lifting of the machine. If mechanical equipment such as crane is used to lift the machine, please ensure the machine is secured with suitable lifting equipment.



Warning!

Input connection

Before connecting the machine, you should ensure that the correct supply is available. Details of the machine requirements can be found on the data plate of the machine or in the technical parameters shown in the manual. The equipment should be connected by a suitably qualified competent person. Always ensure the equipment has a proper grounding.

Never connect the machine to the mains supply with the panels removed.

- 1) When the operator's movement is limited by the surroundings (for example, the operator can only bend his knees, barefoot, or lie down during operation), the operator shall practice proper insulation and avoid direct contact with conductive parts on the equipment.
- 2) Do not use the machine in closed containers in narrow spaces where conductive components cannot be removed.
- 3) Do not use the machine in humid environments where the operator is prone to the risk of electric shock.
- 4) Do not use the machine in sunlight or rain, and no water or rainwater shall seep into the machine.
- 5) Do not perform gas shielded welding in an environment with strong air flow.
- 6) Avoid welding or cutting in dusty area or environment with corrosive chemical gas.
- 7) The ambient temperature must be between-10°C and 40°C (14F 104F) during operation and between-25°C and 50°C during storage.(-13 122F)
- 8) Welding or cutting shall be carried out in a relatively dry environment, and the air humidity shall not exceed 90%.
- 9) The inclination of the machine shall not exceed 10°.
- 10) Ensure that the input power supply voltage does not exceed 15% of the rated voltage of the machine.
- 11) Beware of falling when welding or cutting at heights.

2. Description of symbols



Electric shock risk warning

WEEE tag

A Current unit "A"

Overheat protection indication

Overcurrent protection indication

2T continuous cutting

4T continuous cutting

Mesh cutting

Cutting mode switching

Gas detection indicator

Gas check button

3. Product overview



This is a digital inverter plasma cutter with excellent performance and advanced technology. It can generate a stable DC arc used to cut carbon steel, low alloy steel, stainless steel and other materials. The length of the cutting torch and post-flow time can be adjusted separately. It is durable and has a wide range of applications.

The unique electrical structure and air duct design accelerate the dissipation of heat generated by the power component, thereby improving the duty cycle. Due to its unique air duct heat dissipation efficiency, it can prevent dust sucked in by the fan from damaging the power component and control circuit, thereby greatly improving the reliability of the machine. Its main functions are as follows:

- ◆ Three cutting modes: 2T continuous cutting, 4T continuous cutting, and mesh cutting.
- Stepless adjustment of cutting current for more precise adjustment.
- ◆ Intelligent fan temperature control: improves the service life of the fan and reduces accumulation of dust inside the machine.
- ◆ Parameters are automatically saved before shutdown, and the settings are restored after starting again.
- Reset to factory parameter settings function.
- Optional CNC interface, convenient for use with CNC machine tools.

4. Technical parameters

Item	Unit	US MODEL	Parameters		
Model	/	CUT45PFC	CUT45PFC SC	CUT40HF	CUT40NHF
Input voltage	VAC	AC95~265V	AC115/230V±15%	AC230V±15%	AC230V±15%
Input frequency	Hz	50/60	50/60	50/60	50/60
Rated input current	А	AC115V: 31 AC230V: 23	AC115V: 37 AC230V: 27	26	26
Rated input power	kVA	AC115V: 3.6 AC230V: 5.3	AC115V: 4.3 AC230V: 6.2	6	6
Output current range	Α	AC115V: 20-30 AC230V: 20-45	AC115V: 20-30 AC230V: 20-45	20-40	20-40
No-load voltage	V	300	300	280	280
Rated operating voltage	V	AC115V: 92 AC230V: 98	AC115V: 92 AC230V: 98	96	96
Arc start mode		NHF	NHF	HF	NHF
Duty cycle	%	25	25	25	25
Power factor		0.99	0.99	0.6	0.6
Insulation class		Н	Н	Н	Н
Protection class		IP23S	IP23S	IP23S	IP23S
Dimensions L*W*H	Inch	21.5"×6.55"×13.5"	547.5×187×558	546×165.8×341.1	546×165.8×341.1
Net weight	lbs	22	26.5	9.6	9.2
Overall total weight	lbs	32	33.6	14.1	13.7
Good cutting (Carbon Steel)	Inch	AC115V: 1/4" AC230V: 1/2"	AC115V: 5 AC230V: 14	10	10
Severance (Carbon Steel)	Inch	AC115V: 3/8" AC230V: 1"	AC115V: 12 AC230V: 25	20	20
Power supply efficiency (at maximum input current)	%	86	86	88	88
Idle state power	W	11.7	11.7	10.8	10.8
Characteristics		CC	CC	CC	CC
Pollution level		Grade 3	Grade 3	Grade 3	Grade 3

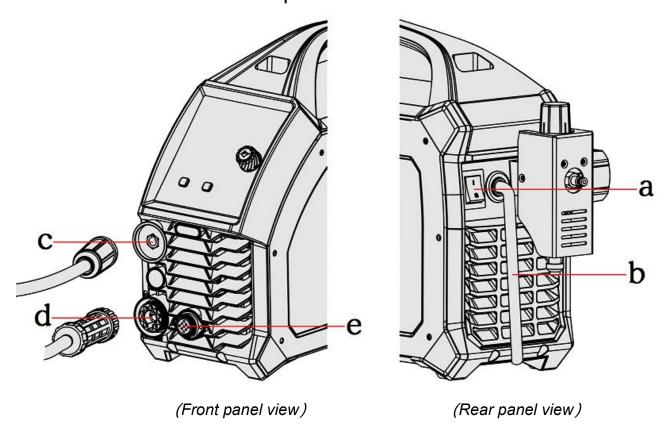
5. Installation



Warning! All connections shall be made with the power supply is turned off. Warning! Electric shock may cause death; after power failure, there is still a high voltage on the equipment, do not touch the live parts on the equipment. Warning! Incorrect input voltage may damage the equipment.

Warning! This product meets the requirements of Class A equipment in EMC requirements and is not to be connected to a residential low-voltage power supply grid.

5.1. External interface description



- a. Power switch
- b. Input power line
- c. Quick socket (positive output)
- d. Central plasma socket
- e. CNC aviation socket (optional) (applicable for CUT45PFC/CUT40HF/CUT40NHF) Power supply aviation socket for external air compressor (standard) (applicable for CUT45PFC SC)

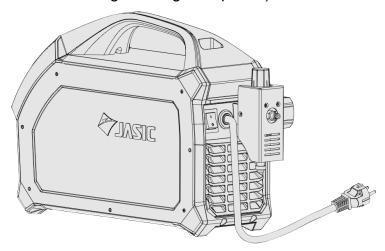
5.2. Power installation



Warning! The electrical connection of equipment shall be carried out by suitably qualified personnel.

Warning! All connections shall be made after the power supply is off. Warning! Incorrect voltage may damage the equipment.

- 1) Ensure the input voltage value is within the specified input voltage range.
- 2) Ensure that the power switch of the welder is turned off.
- 3) Connect the input power cord to the input terminal or plug the power cord into the corresponding socket (if any) and ensure a good contact.
- 4) Ground the power supply well. (As shown in the diagram, the European plug has a grounding terminal, so no additional grounding is required.)



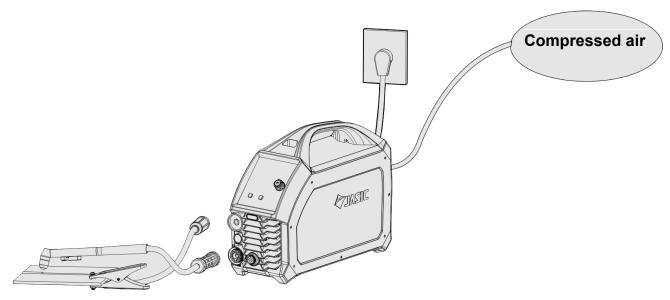
(Wiring diagram)

NOTE!

If the input cable needs to be extended, please use a cable with larger cross-sectional area to reduce the voltage drop, 3x1"² (3 X 1" square) or more is recommended.

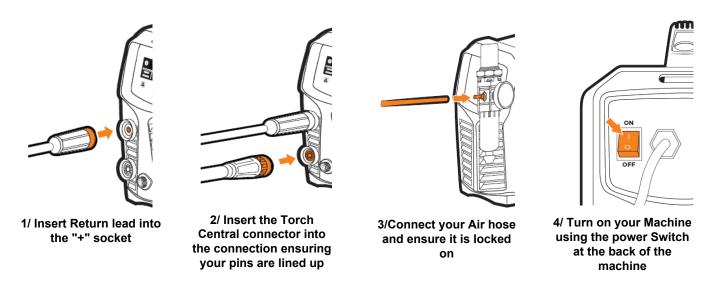
5.3. Connection of cutting torch, earth cable and air line

- 1) Ensure that the power switch of the cutting machine is turned off.
- 2) Insert the cable plug with earth clamp into the corresponding positive quick socket on the front panel of the machine and tighten it clockwise.
- 3) Insert the central plasma plug of the cutting torch into the negative central plasma socket on the front panel, and tighten it clockwise.
- 4) Connect the input end of the air regulator on the rear panel to the output port of the compressed air source, and fix it firmly with the clamp. (See diagrams below)



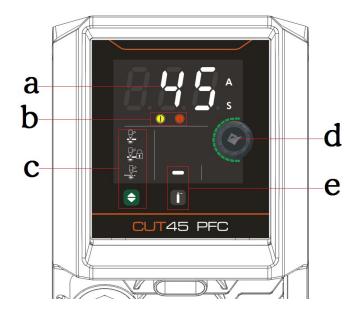
(Wiring diagram)

NOTE! If you want to use long secondary cables (Plasma torch cable and earth cable), you must ensure that the cross-sectional area of the cable is increased appropriately in order to reduce the voltage drop due to the cable length.



6. Control panel

6.1. Overview



- a. Parameter and error code display
- b. Protection indicator
- c. Cutting mode selector
- d. Parameter adjustment knob
- e. Gas check buttons and indicators

6.2. Display of parameters and error codes



- 1) Electric current configuration
- 2) When the factory settings are restored the countdown is displayed.
- 3) In user mode, the parameter settings are displayed during back-end adjustment.
- 4) In abnormal state, an error code will be displayed.

6.3. Parameter adjustment knob

- 1) Rotate the adjusting knob to adjust the parameters.
- 2) Rotating the adjusting knob clockwise increases the parameter value, and rotating the adjusting knob counterclockwise decreases the parameter value.
- 3) When the adjusting knob is rotated the adjusted parameters are displayed in the parameter display area.

6.4. Selection of working mode





- 1) Press the cutting mode selection button while not cutting to switch between the three cutting modes as needed: 2T, 4T and mesh cutting.
- 2) If the indicator is on, it indicates that the machine is currently in 2T cutting mode.
- 3) If the indicator is on, it indicates that the machine is currently in 4T cutting mode.
- 4) If the indicator is on, it indicates that the machine is currently in mesh cutting mode.

6.5. Gas check function



- 1) Press the gas check button while not in cutting state.
- 2) When the indicator is lit, the machine is in gas check mode.
- 3) Press the gas check button again or wait 20s. After the indicator light goes out, the machine has exited gas check mode.

6.6. Electrical current settings for cutting

In cutting mode, the display window displays the current cutting current, which can be set by turning the adjustment knob.

6.7. Protective indicators

The overheat indicator light indicates that the machine has entered overheat protection and has stopped output.

The over-current indicator light indicates that the machine has entered over-current protection and has stopped output.

6.8. Engineer mode

- 1) Press and hold the parameter adjustment knob for 5s while not in cutting mode to enter engineer mode.
- 2) After pressing for 1 second, the display window will count down from 3, then the machine will enter engineer mode. Release the button during that time to exit the countdown without entering engineer mode.
- 3) Engineer mode: F01: Standby time selection; 0, 5, 10, or 15, unit is min, 0 means that the standby function is not enabled.

F02: Input over-voltage protection enabled; 0 means the function is off, 1 means the function is on.

F03: Post-flow time adjustment; 0-60s, precision is 1s.

F04: Torch length selection; 0, 5, 10, 15, or 20, unit is m, 0 means self-adjusted.

4) After adjusting the parameters, press the cutting mode selection button to save and exit.

6.9. Restoring factory settings

- 1) Press and hold the cutting mode selection button for 5s while not cutting to restore factory mode.
- 2) After 1s, the display window will count down from 3. After completion, factory settings are restored. Release the button halfway to exit the countdown without restoring factory settings.
- 3) Factory settings: Cutting mode: 2T continuous cutting; cutting current: rated maximum; post-flow time: 15s.

6.10. Serial Number display

1) Press and hold the cutting mode selection button and parameter adjustment knob



for 5s at the same time while not cutting to enter display mode.

2) The serial Number of the machine is displayed in the display window. Press any key to exit.

7. Cutting function operation



Warning! Before turning on the power supply make sure that the equipment is disconnected to the output. Otherwise, an unexpected arc may be started when the power is turned on. This can cause damage to the work piece and to



personnel.

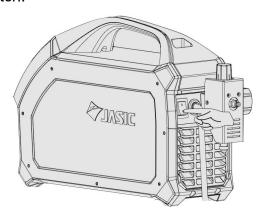
Warning! Be sure to wear appropriate protective equipment during welding or cutting operation. Arcs, spatter, smoke, and high temperatures produced in the process may cause injury to personnel.



Warning! After the power supply is turned off, the output voltage of the machine may continue for a period and then drop slowly. Please do not touch the conductive part of the output before the panel is extinguished.

7.1. Cutting operation

7.1.1 Turn on the power switch.



The power switch is located at the rear panel of the machine; set it in the "ON" position; then the panel indicator will light up, the fan will start to rotate, and the machine will start to work normally.

NOTE! Some models are equipped with the smart fan function. When the power supply is turned on for a period before welding or cutting, the fan will automatically stop running. It will run automatically when welding or cutting begins.

- 7.1.2 Select the most appropriate cutting mode as needed: 2T or 4T continuous cutting, or mesh cutting.
- 7.1.3 Select the appropriate cutting current level according to the thickness of the sheet. The rotary encoder will adjust the electric current parameters.

Quick reference table for CUT45PFC cutting process (Ft/min) approximate only!

CUTTING CAPACITY FEET/MINUTE

CUTTING THICKNESS (Inch)	3/64	13/64	25/64	19/32	25/32	1"
	(1.0MM}	(5.0MM)	(10MM)	(15MM)	(20MM)	(25MM)
MILD STEEL	26	4	2.3	1.3	0.65	0.33
STAINLESS STEEL	19	3.2	1.65	.65	0.33	
ALUMINUM	19	3.2	1.65	.65	0.33	

NOTE! The operator should set the functions that meet the cutting requirements. If the selections are incorrect, this may lead to problems such as an unstable arc, incomplete cutting, more dross, rough cutting surface and heavy consumables consumption and etc.

7.1.4 Start Cutting

2T continuous cutting: When the main arc is extinguished due to lack of base material, the cutting machine automatically cuts off the output. You must release the torch trigger and press it again to re-establish the pilot arc and keep cutting.

4T continuous cutting: When the main arc is extinguished due to lack of base material, the cutting machine automatically transfers to pilot arc output, and the pilot arc can be re-established and cutting continued without releasing the torch trigger.

Mesh cutting: When the main arc is extinguished due to missing workpieces, the cutting machine automatically establishes a pilot arc and maintains it for a certain period of time. When the pilot arc contacts the workpiece and ignites the main arc, cutting can continue. In mesh cutting mode, the machine automatically locks 2T/4T mode to 2T mode.

7.1.5 Turn off the power supply after cutting

The power switch is located on the rear panel of the machine and set it to the "off" position. After a time delay, the panel indicator is off and the machine stops working.

Maintenance



Warning!

The following operation requires sufficient professional knowledge on electric aspects and comprehensive safety knowledge. Make sure the input cable of the machine is disconnected from the electricity supply and wait for 5 minutes before removing the machine covers.

Please note: The following should only be carried out by an authorised electrical technician.

8.1. Power supply maintenance

In order to guarantee that the machine works efficiently and in safety, it must be maintained regularly. Operators should understand the maintenance methods and means of the machine operation. This guide should enable customers to carry out simple examination and safeguarding by oneself, try to reduce the fault rate and repair times of the machine, so as to lengthen service life of the machines.

Period	Maintenance item
Daily examination	Check the condition of the machine, mains cables, welding or cutting cables and connections. Check for any warnings LEDs and machine operation.
Monthly examination	Disconnect from the mains supply and wait for at least 5 minutes before removing the cover. Check internal connections and tighten if required. Clean the inside of the machine with a soft brush and vacuum cleaner. Take care not to remove any cables or cause damage to components. Ensure that ventilation grills are clear. Carefully replace the covers and test the unit. This work should be carried out by a suitably qualified competent person.
Yearly examination	Carry out an annual service to include a safety check in accordance with the manufacturers standard (EN 60974-1). This work should be carried out by a suitably qualified competent person.

8. Troubleshooting



Warning! Before machines are dispatched from the factory, they have already been checked thoroughly. The machine should not be tampered with or altered. Maintenance must be carried out carefully. If any wire becomes loose or is misplaced, it maybe potentially dangerous to user! Only professional maintenance personnel should repair the machine!

Ensure the power is disconnected before working on the machine. Always wait 5 minutes after power switch off before removing the panels.

9.1. Common malfunction analysis and solution



The symptoms listed here may be related to the accessories, gas, environmental factors, and power supply you use. Please try to improve the environment and avoid such situations.

Symptom	Reasons	Troubleshooting
	·The machine is in gas check	·Turn off the gas check function or
	mode	wait 20s to exit automatically
No pilot arc after	·The torch trigger circuit is	·Check the torch trigger circuit
pressing the torch	blocked	·Reconnect the compressed air
trigger	·Compressed air is not	·Replace or repair the mainboard
	connected	
	·The pilot arc circuit is damaged	
	·Serious wear and tear on parts	·Replace with new consumables
	Input compressed air pressure	·Adjust the pressure of compressed
	too high	air to 0.35-0.55MPa through the gas
Intermittent or	·Too much moisture or	regulator on the rear panel
extinguished pilot	impurities in the compressed air	·Manually drain the water in the filter
arc	·Pilot arc time exceeds 2s	cup of the gas regulator on the rear
		panel or replace the regulator
		·Don't press the torch to keep pilot
		arc for a long time without cutting.
	·The cutting circuit is blocked	·Check whether the earth clamp is
	·The distance between the	damaged and clean the contact part
The pilot arc cannot	nozzle of the cutting torch and	of the clamp and the workpiece to
be transferred to the	the workpiece is too large	ensure good metal to metal contact
workpiece		·Ensure that the distance between
		the tip of the cutting torch and the
		workpiece remains within 3-5mm
	·The cutting current and speed	·Select the standard cutting
Poor cutting quality	do not match the thickness of	operation; refer to Table 7.1.3
	the workpiece	Cutting Process Quick Reference

·Incorrect cutting air pressure	·Ensure that the working air
·Serious wear and tear on parts	pressure range is 0.35-0.55MPa
	·Replace with new consumables

9.2. Alarm and solutions

Error code	Category	Possible cause	Countermeasure
E10	Overcurrent protection	Continuously output the maximum capacity current of machine	Restart the machine. If it is still in overcurrent protection, contact after-sales service.
E32	Overvoltage protection	Input grid voltage is too high	Turn it off and on again. If the alarm cannot be eliminated and the grid voltage remains too high, check the power grid voltage and wait for the grid to be normal before welding. If the grid voltage is normal and the alarm persists, contact professional maintenance personnel.
E60	Overheating	Inverter IGBT temperature is too high	Do not turn off the machine. Wait for a while, and then continue welding after the indicator goes out.
E61	Overheating	Output rectifier diode temperature is too high	Do not turn off the machine. Wait for a while, and then continue welding after the indicator goes out.

NOTE! After applying the above countermeasures, the alarm still persists or reappears. Please contact professional maintenance personnel.

9. Packaging, transportation, storage and waste disposal

10.1. Transportation requirements

In the process of handling the equipment, it should be handled with care, and should not be dropped or severely impacted. Avoid moisture and rain during transportation.

10.2. Storage conditions

Storage temperature:-25 $^{\circ}$ C ~ + 50 $^{\circ}$ C (-13 - 122F)

Storage humidity: relative humidity ≤ 90%

Storage period: 12 months

Storage site: indoors with no corrosive gas and air circulation

10.3. Waste disposal

Disposal

The equipment is manufactured with materials, which do not contain any toxic or poisonous materials dangerous to the operator.

When the equipment is scrapped, it should be dismantled separating components according to the type of materials.

Do not dispose of the equipment with normal waste. The European Directive 2002/96/EC on Waste Electrical and Electronic Equipment states the electrical equipment that has reached its end of life must be collected separately and returned to an environmentally compatible recycling facility.

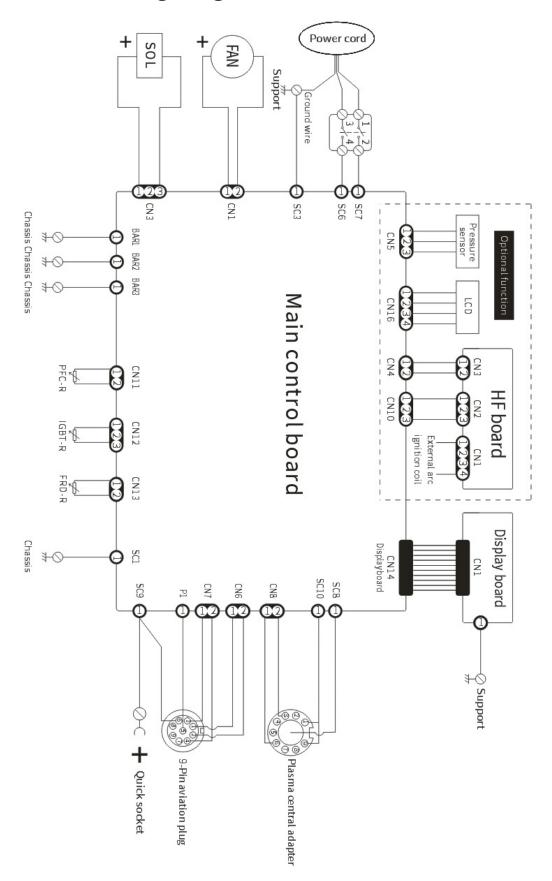
In order to comply with WEEE regulations in your country you should contact your supplier.

RoHS Compliance Declaration

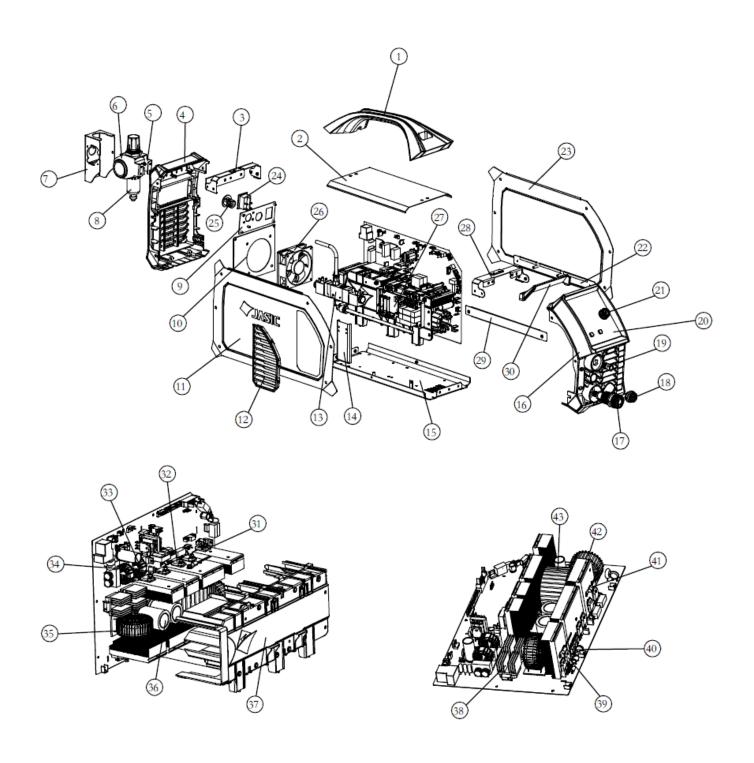
We herewith confirm, that the above-mentioned product does not contain any of the restricted substances as listed in EU Directive 2011/65/EC in concentrations above the limits as specified therein.

Disclaimer: Please note that this confirmation is given to the best of our present knowledge and belief. Nothing herein represents and/or may be interpreted as warranty within the meaning of the applicable warranty law.

Appendix 1: Wiring diagram of CUT45PFC



Appendix 2: Exploded-view drawing of CUT45PFC



Appendix 3: List of common spare parts - CUT45PFC

SN	Material code	Name	Quan tity	SN	Material code	Name	Quantit y
1	10084166	Handle	1	23	10084070	Right side cover	1
2	10084064	Top cover	1	24	51000471	Rocker switch	1
3	10084057	Rear bracket	1	25	10083802	Ring	1
4	10084109	Rear panel	1	26	51000336	Fan	1
5	10084071	Air regulator bracket	1	27	51000501	HF board	1
6	10084110	Gas meter protection cover	1	28	10084066	Front bracket	1
7	10084069	Air regulator protection cover	1	29	10084062	Left bracket	1
8	10080422	Air regulator	1	30	-	Front panel cover	1
9	10084052	Rear fixed plate	1	31	51000601	Pilot arc IGBT	1
10	10084055	Fan bracket	1	32	51000072	FRD	4
11	10084068	Left side cover	1	33	10006545	EMC inductor	1
12	10084105	Louver	1	34	51000602	Inverter IGBT	4
13	51000510	Air valve	1	35	51000455	PFC inductor	1
14	10084063	Air valve support	1	36	10078333	Electrolytic capacitor	2
15	10084056	Chassis	1	37	10084111	Wind shield	1
16	10084103	Front panel	1	38	10037345+51 000332	Bridge rectifier + heat sink	2
17	51000513	Plasma central adapter	1	39	51000601	PFC IGBT	2
18	10041400	9-Pin aviation plug	1	40	10064645	PFC diode	3
19	10004635	Quick socket	1	41	51000705	Thermistor	2
20	51000779	Display board iron plate	1	42	10077123	Arc ignition coil	1
21	10083484	Encoder knob	1	43	10084177	Main transformer	1
22	10084067	Right bracket	1				

PLASMA CUTTING TECHNOLOGY

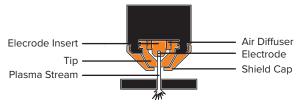
Plasma cutters work by passing an electric arc through a gas that is passing through a constricted opening. The electric arc elevates the temperature of the gas to the point that it enters a 4th state of matter. We all are familiar with the first three: i.e., Solid, liquid, and gas. Scientists call this additional state plasma. As the metal being cut is part of the circuit, the electrical conductivity of the plasma causes the arc to transfer to the work. The restricted opening (Tip) the gas passes through causes it to squeeze by at high speed, like air passing through a venturi in a carburettor. This high-speed gas cuts through the molten metal. Plasma cutting was invented as a result of trying to develop a better welding process. Many improvements then led to making this technology what it is today. Plasma cutters provide the best combination of accuracy, speed, and affordability for producing a variety of flat metal shapes. They can cut much finer and faster than oxy-acetylene torches.

How a plasma cutter works:

Basic plasma cutters use electricity to superheat air into plasma (the 4th state of matter), which is then blown through the metal to be cut. Plasma cutters require a compressed air supply and AC power to operate.

Operation:

- 1. When the trigger is squeezed, DC current flows through the torch lead into the tip.
- **2.** Next, compressed air flows through the torch head, through the air diffuser that spirals the airflow around the electrode and through the hole of the cutting tip.
- **3.** A fixed gap is established between the electrode and the tip. (The power supply increases voltage in order to maintain a constant current through the joint.) Electrons arc across the gap, ionizing and superheating the air creating a plasma stream.
- **4.** Finally, the regulated DC current is switched so that it no longer flows to the tip but instead flows from the electrode to the workpiece. Current and airflow continue until cutting is stopped.



The nozzle and electrode require periodic replacement. The electrode has an insert of a tough high conductive material such as hafnium and cerium. This insert erodes with use; also, the tip orifice will erode with use. Quality of the air used is paramount to longer life of electrodes and tips, in short, clean dry air gives more extended parts life, the cleaner and dryer the better. We recommend the use of a Plasma Air Filter.

What kinds of materials can the plasma cut?

Virtually any metal can be plasma cut including steel, stainless steel, aluminum, brass, copper, etc. Any thickness from 30 gauge through 30mm/13/16"can be cut, depending on the power of the plasma cutter used

How Does Plasma Cutting Compare to Oxy-fuel (gas) cutting?

Plasma cutting can be performed on any conductive metal - mild steel, aluminum and stainless are some examples. With mild steel, operators will experience faster, thicker cuts than with alloys.

Oxy-fuel cuts by burning, or oxidizing the metal it is severancing. It is therefore limited to steel and other ferrous metals which support the oxidizing process. Metals like aluminum and stainless steel form an oxide that inhibits further oxidization, making conventional oxy-fuel cutting impossible. Plasma cutting, however, does not rely on oxidation to work and thus it can cut aluminum, stainless and any other conductive material. While different gasses can be used for plasma cutting, most people today use compressed air for the plasma gas. In most shops, compressed air is readily available, and thus plasma does not require fuel gas and compressed oxygen for operation.

Plasma cutting is typically more accessible for the novice to master, and on thinner materials, plasma cutting is much faster than oxy-fuel cutting. However, for heavy sections of steel (25mm/1" and greater), oxy-fuel is still preferred since oxy-fuel is typically faster and, for heavier plate applications, high powered plasma machines are required for plasma cutting applications.

What are the limitations to Plasma Cutting? Where is Oxy-fuel preferred?

The plasma cutting machines are typically more expensive than oxy/acetylene. Also, oxy/acetylene does not require access to electrical power or compressed air which may make it a more convenient method for some users. Oxy-fuel can generally cut thicker sections (>1 ") of steel more quickly than plasma.

Amperage

The standard rule of thumb is the thicker the material, the more amperage required. On thick material, set the machine to full output and vary your travel speed. On thinner material, you need to turn down the amperage and change to a lower-amperage tip to maintain a narrow kerf. The kerf is the width of the cut material that is removed during cutting.

Speed

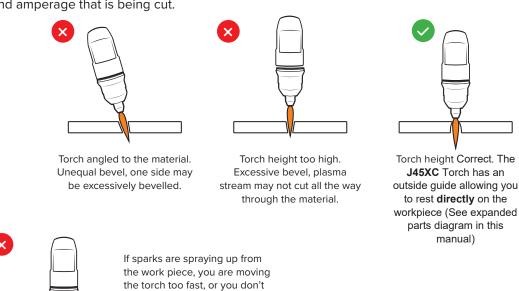
Amperage and speed are critical to producing a good quality cut. The faster you move (especially on aluminium), the cleaner your cut will be. To determine if you're going too fast or too slow, visually follow the arc that is coming from the bottom of the cut. The arc should exit the material at a slight angle away from the direction of travel. If it's going straight down, that means you're going too slow, and you'll have an unnecessary build-up of dross or slag. If you go too fast, it will start spraying back onto the surface of the material without cutting all the way through. Because the arc trails at an angle, at the end of a cut, slow your cutting speed and angle the torch in to cut through the last bit of metal.

Direction

It is easier to pull the torch towards you than push it. The plasma stream swirls as it exits the tip, biting one side and finishing off on the other, leaving a bevelled edge and a straight edge. The bevel cut effect is more noticeable on thicker material and needs to be taken into consideration before starting your cut as you want the straight side of the cut to be on the finished piece you keep.

Torch tip height & position

The distance and position of the plasma torch cutting tip affect the quality of the cut and the extent of the bevel of the cut. The easiest way to reduce bevel is by cutting at the proper speed and height for the material and amperage that is being cut.





have enough amps set.

The tip orifices focus the plasma stream to the workpiece. It is essential to use the correct size tip for the amperage being used, for example, a tip with a 1.0mm orifice is suitable for 0-40 amps whereas a 1.3mm orifice is better for 40-80 amps. The low-amp tip has a smaller orifice which maintains a narrow plasma stream at lower settings for use on thin-gauge material. Using a 25 amp tip at a 60 amp setting will blow out and distort the tip orifice and require replacement. Conversely, using an 80-amp tip on the lower settings will not allow you to focus the plasma stream as well and creates a wide kerf. The condition of the tip orifice is critical to the quality of the cut result, a worn or damaged tip orifice will produce a distorted plasma stream resulting in poor cut quality.

PLASMA CUTTING TIPS & TECHNIQUES

Electrode condition

A fixed gap is established between the electrode and the inside of the cutting tip — electrons arc across the gap, ionizing and superheating the air creating the plasma stream. The electrode contains an insert at the end made of a highly conductive material called hafnium. This insert erodes with use and develops a pit at the end of the electrode when the pit becomes too much poor-quality cuts will result and necessitate replacement of the electrode.

Air pressure and volume

Air pressure, flow rate and air quality are critical to quality plasma cutting and consumable life span. The required air pressure and volume can vary from model to model, and the manufacturer will provide the specs.

The air pressure must be adjusted and set to 0.5MPA (75psi) and requires a flow rate of 190 L/min. The volume capacity of your compressor is important. If you have a small compressor with precisely the same L/min rating as the plasma, then the compressor will run continuously when you are plasma cutting. A compressor with a L/min rating slightly higher than the plasma would be more than adequate.

If you are doing a lot of cutting, cutting thick plate (same air consumption but slower cut speeds = longer cut time), then choose a compressor at 1.5 to 2 times the plasma system requirement.

Air quality

Good air quality is essential to quality plasma cutting and consumable life span.

Compressors take in air at atmospheric pressure and increase the pressure and store it in a tank. Humidity in the air is condensed in the tank and the airlines producing water, more so in humid environments. Moisture that forms in airlines tends to condense into larger drops when the air pressure decreases as it is entering the plasma torch. When these droplets enter into the high temperatures (as much as 11,000°C) in the plenum of the torch, they immediately break down into oxygen and hydrogen, which alters the regular chemical content of the air in the torch. These elements will then dramatically change the plasma arc which causes the torch consumable parts to wear very quickly, alters the shape of the nozzle orifice, dramatically affecting cut quality in terms of edge squareness, dross formation, and edge smoothness.

Minimizing the moisture in the air supply is absolutely critical to quality plasma cuts and longevity of consumable parts. As a minimum be sure to drain the receiver (tank) on the air compressor at least daily.

Most air plasma systems from reputable manufacturers have an onboard particulate filter and or a coalescing filter with an auto drain that will remove some moisture from the air supply. For home workshop and light industrial users, the onboard air filter is adequate. Most situations, however, will require additional filtration to prevent moisture from affecting the quality of the plasma cutter and in most cases, it is recommended to install a submicronic particulate filter that is designed to trap water through absorption. This style of filter has a replaceable filter cartridge that absorbs water and must be changed after it is near saturation; it should be installed close as possible to the air intake of the plasma cutter.

Technique Tips

- It is easier to pull the torch through the cut than to push it.
- To cut thin material, reduce the amperage until you get the best quality cut.
- Use the correct size tip orifice for the amperage being used.
- For straight cuts use a straight edge or cutting buggy as a guide. For circles, use a template or circle cutting attachment.
- · Check that the front end consumable parts of the plasma cutting torch are in good condition.



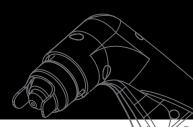
Plasma Cutter Air Filter

SKU: RF50500F

Most situations, however, will require additional filtration to prevent moisture from affecting the quality of the plasma cutter and in most cases, it is recommended to install a submicronic particulate filter that is designed to trap water through absorption.







JASIC TECHNOLOGIES AMERICA INC 25503 74th Ave S, Kent, WA 98032 Ph: 253-859-6277 , Fax: 253-859-6286 sales@razorweld.com

Technical Data

Current: 45 Amps

Duty Cycle: 60%@40 Amps

Air pressure: 65-75 psi (4.5 -5.0bar)

Flow:

3.55cfm (100l/m)

Ignition:

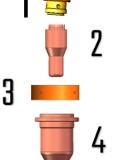
Non H/F

TORCH SUITABLE FOR RAZORCUT 40di. 45. 45di. 30. 30di















8



PART	CODE	DESCRIPTION	PACK QTY
1	RW001	J45XC TORCH HEAD	1
2	RWPR1048-03	ELECTRODE	5
3	RW1601	SWIRLRING	1
4	RWPN792-08	CUTTING NOZZLE	5
5	RW0632-05	OUTSIDE NOZZLE	1
6	RW0658	SHIELD CAP	1
7	RW0678	DOUBLE POINTED SPACER	1
8	PLAK06	PLASMA CUTTING KIT	1
9	PLAK07	PLASMA CUTING KIT (ELECTRODES+ NOZZLES)	1
10	RW	HANDLE KIT	1
11	RW0085*	TWIN PRONG STAND OFF GUIDE *FOR USE WITH 78.8 ONLY	1
	J100XC6	PLASMA TORCH 19.5FT CENTRAL Adaptor	
	J100XC6M	AUTO PLASMA TORCH 19.5FT CENTRAL Adaptor	

QUALITY ORIGINAL PARTS

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+1 253-859-6278
FAX: +1 253-859-6286
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WARRANTY

JASIC Technologies America Inc ('Us', 'We') warrants that the following products under Brands supplied by Us and purchased by you from an Authorized RAZORWELD Dealer throughout the U.S.A & Canada are free of Material and Faulty Work-manship defects except for those products listed under 'Warranty Exclusions'.

These terms and conditions supersede and exclude all former and other representations and arrangements relating to any warranties on these products.

WARRANTY PERIOD

We offer the following 'Warranty Periods' from 'date of purchase':

An Extended Warranty Period of 6 months total shall apply only to Machinery where offered and warranty is registered online.

RAZORWELD WELDING MACHINES

RAZORWELD Series (Power Source Only)	3 Years	(Clause 1)
RAZORWELD JASIC Inverter MIG (Power Source Only)	3 Years	(Clause 1)
RAZORWELD JASIC Inverter MIG SWF (Power Source / Separate Wire Feeder Only)	3 Years	(Clause 1)
RAZORWELD JASIC Inverter TIG (Power Source Only)	3 Years	(Clause 1)
RAZORWELD Water Cooler	1 Year	
RAZORWELD JASIC Series (Power Source Only)	3 Years	(Clause 1)
Regulators Argon/ Acetylene / Oxygen / LPG / Bobbin Flowmeter	1 Year	
VIPER WELDING AND CUTTING MACHINES	1 Year	
RAZORWELD Automatic Welding Helmets	2 Years	
TORCHES -GMAW, GTAW, MMAW, PLASMA, EARTH LEADS,	3 Months	(Clause 3)
INTERCONNECTING CABLES, GAS HOSE	5 10111113	(Clause 3)

(Clause 1) 3 year warranty on transformers, inductor and rectifier. 1 year warranty on PCB, and all other components.

(Clause 2) Gas Hose, Flashbacks are subject to and covered by the Manufacturer's Individual Warranty, Contact the manufacturer for details

(Clause 3) This only Covers Manufactures defaults on all accessories for the first three months after date of purchase.

• SELLER MAKES NO WARRANTIES EXPRESSED OR IMPLIED, INCLUDING BUT NOT BY WAY OF LIMITATION, ANY IMPLIED WARRANTY

OF MERCHANTABILITY AND ANY IMPLIED WARRANTY OF FITNESS FOR A

PARTICULAR PURPOSE, ON ANY ORDER EXCEPT THAT SELLER WARRANTS TITLE TO ALL GOODS FURNISHED BY SELLER AND EXCEPT
THAT SELLER WARRANTS FOR A PERIOD OF ONE YEAR FROM THE DATE MARK

LOCATED ON THE SELLER'S IDENTIFICATION TAG THAT ALL GOODS DESCRIBED ON SELLER'S

ACKNOWLEDGMENT OF PURCHASER'S PURCHASE ORDER WILL BE MANUFACTURED IN ACCORDANCE WITH THE SPECIFICATIONS, IF ANY, SET FORTH IN SAID PURCHASE ORDER AND EXPRESSLY ACCEPTED IN

SELLER'S ACKNOWLEDGMENT SUBJECT TO SELLER'S STANDARD MANUFACTURING VARIATIONS AND PRACTICES. IN THE CASE OF COMPONENTS OR ACCESSORIES FURNISHED BY SUPPLIERS TO SELLER, PURCHASER'S WARRANTY FROM SELLER SHALL BE LIMITED TO THE WARRANTY OF THE COMPONENT OR ACCESSORY SUPPLIER. THE FOREGOING WARRANTIES ARE THE SOLE AND EXCLUSIVE WARRANTIES

APPLICABLE TO THE GOODS DELIVERED, AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ARE HEREBY EXPRESSLY DISCLAIMED AND NEGATED. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, PURCHASER ACKNOWLEDGES THAT SELLER'S PRODUCTS ARE NOT PACKAGED OR PROTECT-ED FOR LONG PERIODS OF STORAGE AND THUS MAY CORRODE OR RUST OVER TIME...



WARRANTY / RETURNS / EXCHANGES

We understand that sometimes a product may need to be returned. If you have purchased from the RAZORWELD Authorised Dealer Network, to assist you in following the correct procedure enclosed is the returns policy.

Our Returns Policy includes the rights you have under the American consumer Law and other relevant laws.

- . You are entitled to a replacement or refund for a major failure within the warranty period and for compensation for any 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 with approval and submission of the appropriate Company RGA form.
- You shall inspect the Goods on delivery and shall within seven (7) days of delivery (time being of the essence) notify JASIC Technologies America Inc of any alleged defect, shortage in quantity, damage or failure to comply with the description or quote.
- You shall also afford JASIC Technologies America Inc the opportunity to inspect the Goods within a reasonable time following delivery if you believe the Goods are defective in any way.
- If you shall fail to comply with these provisions the Goods shall be presumed to be free from any defect or damage. For defective Goods, Which JASIC Technologies America Inc has agreed in writing that you are entitled to reject, JASIC Technologies America Inc 's liability is limited to, at the discretion of JASIC Technologies America Inc either replacing the Goods or repairing the Goods except where you have acquired Goods as a consumer within the meaning of the relevant State legislation and trade act policies and is therefore also entitled to, at the consumer's discretion either a refund of the purchase price of the Goods, or repair of the Goods, or replacement of the Goods.

Returns will only be accepted provided that:

- (a) You have complied with the provisions outlined above, and
- (b) where the Goods are unable to be repaired, the Goods are returned at your cost within thirty (30) days of the delivery date, and
- (c) JASIC Technologies America inc will not be liable for Goods which have not been stored or used in a proper manner, and
- (d) the Goods are returned in the condition in which they were delivered and with all packaging material, brochures and instruction material in as new condition as is reasonably possible in the circumstances.
- JASIC Technologies America Inc Accepts no responsibility for products lost, damaged or mislaid whilst in transit
- JASIC Technologies America Inc may (at their sole discretion) accept the return of Goods for credit but this may incur a handling fee of up to fifteen percent (15%) of the value of the returned Goods plus any freight costs.
- Where a failure does not amount to a major failure, JASIC Technologies America Inc is entitled to choose between providing you with a repair, replacement or other suitable remedy.

PURCHASER'S REMEDIES:

WITH RESPECT TO ANY CLAIM ARISING OUT OF ANY ORDER, ANY GOODS DELIVERED PURSUANT TO ANY ORDER AND EX-PRESSLY ACCEPTED IN SELLER'S ACKNOWLEDGMENT, OR SELLER'S PERFORMANCE IN CONNECTION WITH ANY ORDER, INCLUDING, WITHOUT LIMITATION, ANY CLAIM ARISING OUT OF ANY RECALL, DEFECT OR ALLEGED DEFECT IN ANY GOODS OR SERVICES FURNISHED BY SELLER, SHALL BE LIMITED EXCLUSIVELY TO THE RIGHT OF REPAIR OR REPLACEMENT OF SUCH GOODS OR SERVICES, AT SELLER'S OPTION. WITHOUT IN ANY WAY LIMITING THE GENERALITY OF THE FOREGOING, IN NO EVENT SHALL SELLER BE LI-ABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT

LIMITATION, ANY LOSS OF ANTICIPATED PROFITS INCURRED BY PURCHASER WITH RESPECT TO ANY GOODS OR SERVICES FURNISHED BY SELLER, OR ANY DAMAGES ARISING FROM INJURIES TO PERSONS AS A

RESULT OF PURCHASER'S OR A THIRD PARTY'S NEGLIGENCE. SELLER'S WARRANTY DOES NOT COVER FAILURES RESULTING FROM THE IMPROPER INSTALLATION, MOUNTING DESIGN OR APPLICATION OR FROM CORROSION. THE PROVISIONS OF THIS PARAGRAPH ARE A MATERIAL TERM OF THIS TRANSACTION.

MAKING A CLAIM

If you wish to make a claim under this Warranty, you should:

- Return the product to the point of purchase either in person or on a prepaid courier; or
- Contact Us by Telephone on (+1) 253-859-6277, 253-859-6278 or e-mail sales@razorweld.com
- When returned, the product must be accompanied with the original invoice including the purchase price and disclosing the purchase date
- All costs of installation, cartage, freight, traveling expenses, hiring tools and insurance are paid by the Customer.
- To the extent permitted by law, our total liability for loss or damage of every kind related to the product in any way whatsoever is limited to the purchase amount of said equipment by the said party involved in the original transaction from JASIC Technologies America Inc

No responsibility will be taken for products lost, damaged or mislaid whilst in transit.



WARRANTY EXCLUSIONS

This Warranty covers Material and Faulty Workmanship defects only. This Warranty does not cover damage caused by:

- Normal wear and tear due to usage
- Misuse or abusive use of the RAZORWELD/Other instructions supplied with the product.
- Failure to clean or improper cleaning of the product
- Failure to maintain the equipment such as regular services etc
- Incorrect voltage or non-authorised electrical connections
- Improper installation
- Use of non-authorised/non-standard parts
- Abnormal product performance caused by any ancillary equipment interference or other external factors
- Failure or any breakage caused by overload, dropping or abusive treatment or use by the customer
- Repair, modifications or other work carried out on the product other than by an Authorised RAZORWELD
 Dealers

Unless it is a manufacturing fault, this Warranty does not cover the following parts:

MIG Welding Torches and Consumables to suit, such as:

Gas Nozzles, Gas Diffusers, Contact Tip holder, Contact tip, Swan Necks, Trigger, Handle, Liners, Wire Guide, Drive Roller, Gas Nozzle Spring. Neck Spring, Connector Block, Insulator, Gas Nipple, Cap, Euro Block, Head Assembly, Gas Block, Trigger Spring, Spring Cable Support, Neck Insulator, Shroud Spring, Gun Plug Cover, Lock Nut, Snap On Head, Spring Cap, Ball, Motor 42 Volt, Pot 10K standard, Knob, Drive Roll Seat, Washer, Bow, Ball Bearing, Wire Conduit Nipple, Central Plug, Printed Circuit Board, Gun Plug House, Cable Support, Gas Connector, Handle To Suit PP36 with Knobs, & Electrodes, Arc Leads, Welding Cable, Electrode Holder, Earth Clamps

TIG Welding Torches and Consumables to suit, such as:

Tungsten Electrodes, Collet, Collet Body, Alumina Nozzle, Torch Head, Torch Head water Cooled, Torch Head Flexible, Back Caps, Gas Lens, Torch Handle, Cup Gasket, Torch Body Gas Valve, O-ring, Arc Leads, Welding Cable, Electrode Holder, Earth Clamps.

PLASMA Cutting Torches and Consumables to suit, such as:

All Cutting Tips, All Diffuser/Swirl Ring, All Electrode, Retaining Caps, Nozzle Springs, All Spacers, All Shield Caps, All Air and Power Cables, All Switches, All O-rings, All Springs, All Circle Guides and Cutting Kits, Torch Bodies, Air Filter Regulator, Arc Leads, Welding Cable, Electrode Holder, Eatch Clamps

STRAIGHT LINE CUTTING MACHINES and Consumables to suit, such as:

Hoses, Fittings, Track, Cutting Nozzles.

HIT-8SS Welding Carriage Consumables to suit, such as: Input Cord, Inter-connecting Cord, Triggering Cable.

This Warranty does not cover products purchased:

- From a non-authorized Dealer (such as purchases from unauthorized retailers and purchases over the Internet from unauthorized local/international sellers or sites such as EBay)
- At an auction:
- From a private seller Unless it is a manufacturing fault, this Warranty does not apply to any products sold to Hire Companies.

These conditions may only be varied with the written approval of the Directors of JASIC Technologies America Inc

REMEMBER TO RETAIN YOUR ORIGINAL INVOICE FOR PROOF OF PURCHASE.

Thank you for your purchase of your RAZORWELD Welding Machine.

We are proud of our range of welding equipment that has a proven track record of innovation, performance and reliability. Our product range represents the latest developments in Inverter technology put together by our professional team of highly skilled engineers. The expertise gained from our long involvement with inverter technology has proven to be invaluable towards the evolution and future development of our equipment range. This experience gives us the inside knowledge on what the arc characteristics, performance and interface between man and machine should be. Within our team are specialist welders that have a proven history of welding knowledge and expertise, giving vital input towards ensuring that our machines deliver control and performance to the utmost professional level. We employ an expert team of professional sales, marketing and technical personnel that provide us with market trends, market feedback and customer comments and requirements. Secondly they provide a customer support service that is second to none, thus ensuring our customers have confidence that they will be well satisfied both now and in the future.

RAZORWELD welders are manufactured and compliant with - CAN/CSA E60974-1 & ANSI/IEC 60974-1, guaranteeing you electrical safety and performance.



California Proposition 65

WARNING: This product contains or produces a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm) (California Health and Safety Code Section 25249.5 et seq.)

WARNING: This product, when used for welding or cutting, produces fumes or gases which contain chemicals known to the State of California to cause birth defects and, in some cases, cancer (California Health and Safety Code Section 25249.5 et seq.).

INFORMATION SOURCES

- California Health and Safety Code, Section 25249.4 through 25249.13.
- The California Office of Environmental Health Hazard Assessment, 301 Capitol Mall, Sacramento, CA 95814; telephone 916-445-6900.
- California Proposition 65 website: www.oehha.ca.gov/prop65.html.
- American National Standards Institute (ANSI). Product Safety Signs And Labels (ANSI Z535.4), available from ANSI, 25 West 43rd Street, New York, NY 10036; telephone: 212-642-4900; web site: www.ansi.org.

WARRANTY

- 3 Years from date of purchase.
- JASIC Technologies America Inc Ltd warranties all goods as specified by the manufacturer of those goods.
- This Warranty does not cover freight or goods that have been interfered with.
- All goods in question must be repaired by an authorised repair agent as appointed by this company.
- Warranty does not cover abuse, mis-use, accident, theft, general wear and tear.
- New product will not be supplied unless JASIC Technologies America Inc has inspected product returned for warranty and agree to replace product.
- Product will only be replaced if repair is not possible
- Please view full Warranty term and conditions supplied with machine or at www.razorweld.com or at the back of this manual.

NOTES:	

