



Operator Manual AP-140 & AP-150



# Your new product



# Thank you for selecting this Jasic EVO 20 product.

This product manual has been designed to ensure that you get the most from your new product. Please ensure that you are fully conversant with the information provided paying particular attention to the safety precautions. The information will help protect yourself and others against the potential hazards that you may come across.

Please ensure that you carry out daily and periodic maintenance checks to ensure years of reliable and trouble free operation.

Please call your Jasic distributor in the unlikely event of a problem occurring.

Please record below the details from your product as these will be required for warranty purposes and to ensure you get the correct information should you require assistance or spare parts.

Date purchased	<del></del>
From where	
Serial number	
(The serial number is no	ormally located on the top or underside of the machine and will begin with AA)
For further information	on your Jasic product warranty registration please visit:

# **Disclaimer**

www.jasic-warranty.co.uk

Whilst every effort has been made to ensure that the information contained within this manual is complete and accurate, no liability can be accepted for any errors or omissions.

### **Please Note:**

- Products are subject to continual development and may be subject to change without notice.
- Regularly check our product pages at www.jasic.co.uk for revision updated operating manuals.
- No part of this manual may be copied or reproduced by any means without the written permission of Wilkinson Star Limited.
- Use this accessory manual in conjunction with the EP-80 & EP-100 operating manuals.

# **CONTENTS**

Index	Page
Your New Product	2
Index	3
Safety Instruction	4
Waste disposal	5
RoHS Compliance Declaration	5
Package and Contents	5
General Information	6
Description of Symbols	6
Technical Specifications	6
Description	8
Maintenance	9
Troubleshooting	10
Schematic	10
Statement of Warranty	11
Jasic Contact Details	12

# SAFETY INSTRUCTIONS





These general safety norms cover both arc welding machines and plasma cutting machines unless otherwise noted. The user is responsible for installing and operating the equipment in accordance with the enclosed instructions.

It is important that users of this equipment protect themselves 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 operate the equipment.

Pacemaker wearers should consult their doctor prior to using this equipment.

PPE and workplace safety equipment must be compatible for the application of the work involved.

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

# **General electrical safety**



The equipment should be installed by a qualified person and in accordance with current standards in operation.

Danger Electric shock risk It is the users responsibility to ensure that the equipment is connected to a suitable power supply. Consult your utility supplier if required.

which are electrically charged. Turn off all equipment when not in use.

In the case of abnormal behaviour of the equipment, the equipment should be checked by a suitably qualified service engineer.

If earth bonding of the work piece is required, bond it directly with a separate cable with a current carrying capacity capable of carrying the maximum capacity of the machine current.

Cables (both primary supply and welding) should be regularly checked for damage and overheating. Never use worn, damaged, under sized or poorly jointed cables.

Insulate yourself from work and earth using dry insulating mats or covers big enough to prevent any physical contact.

Never touch the electrode if you are in contact with the work piece return.

Do not wrap cables over your body.

Ensure that you take additional safety precautions when you are welding in electrically hazardous conditions such as damp environments, wearing wet clothing and metal structures.

Try to avoid welding in cramped or restricted positions.

Ensure that the equipment is well maintained. Repair or replace damaged or defective parts immediately. Carry out any regular maintenance in accordance with the manufacturers instructions.

The EMC classification of this product is class A in accordance with electromagnetic compatibility standards CISPR 11 and IEC 60974-10 and therefore the product is designed to be used in industrial environments only.

**WARNING:** This class A equipment is not intended for use in residential locations where the electrical power is provided by a public low-voltage supply system. In those locations it may be difficult to ensure the electromagnetic compatibility due to conducted and radiated disturbances.

# **General operating safety**



Never carry the equipment or suspend it by the carrying strap or handles during welding. Never pull or lift the machine by the welding torch or other cables.

Always use the correct lift points or handles. Always use the transport under gear as recommended by the manufacturer.

Never lift a machine with the gas cylinder mounted on it.

If the operating environment is classified as dangerous, only use S-marked welding equipment with a safe idle voltage level. Such environments may be for example: humid, hot or restricted accessibility spaces.

# SAFETY INSTRUCTION

# Materials and their disposal



Welding equipment is manufactured with BSI published standards meeting CE requirements for materials which do not contain any toxic or poisonous materials dangerous to the operator. Do not dispose of the equipment with normal waste.



The European Directive 2012/19/EU on Waste Electrical and Electronic Equipment states that electrical equipment that has reached its end of life must be collected separately and returned to an environmentally compatible recycling facility for disposal.

For more detailed information please refer to the HSE website www.hse.gov.uk

# PACKAGE CONTENTS AND UNPACKING

Supplied within your new Jasic EVO product package will be the following items with each model. Use care when unpacking the contents and ensure all items are present and not damaged. If damage is noted or items are missing, please contact the supplier in the first instance and before installing or using the product.

Record the product model, serial numbers (if applicable) and purchase date in the information section found on the inside front page of this operating manual.

Jasic EVO AP-140 Compressor (use with the Jasic EVO EP-80 Plasma Cutting machine). Securing screws

Jasic EVO AP-150 Compressor (use with the Jasic EVO EP-100 Plasma Cutting machine). Securing screws



### **Please Note:**

Only to be used with the Jasic EVO EP-80 and EP-100 Plasma Cutting machine. Package contents may very depending on country location and package part number purchased.

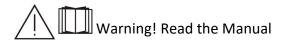
# **GENERAL INFORMATION**

# **General safety**

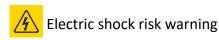


The following operations require sufficient professional knowledge on electrical aspects and comprehensive safety knowledge. Make sure the input cable of the machine is disconnected from the electricity supply and wait for 5 minutes before removing the machine covers.

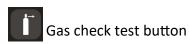
# **Description of symbols**

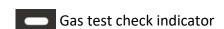












# **Product Overview**

The AP-140 AND AP-150 compressors has been designed to integrate with the EVO EP-80SC & EP-100SC plasma machine that then offers the operator the ultimate in portable plasma cutting whether within the factory or onsite.

The AP-140 AND AP-150 installs very easily, securing to the underneath the either the EP-80/EP-100 plasma power source units and then offers the ability to use its own generated compressed air or factory supplied compressed air as and when required.

# **Technical parameters**

Parameter	Unit	AP-140 Jasic Air Compressor (Jasic No A0S2)	AP-150 Jasic Air Compressor (Jasic No A0S1)
Rated input (U1)	V/Hz	AC 400V 50/60Hz	AC 400V 50/60Hz
Rated input current	А	2.7	3
Power Capacity	kVA	1.5	1.5
Rated input power	W	780 +/-5%	780 +/-5%
Max pressure	MPa	0.4	0.4
Air Flow	lpm	145	150
Rotation Speed	rpm	2800	2800
Protection class	IP	IP23S	IP23S
Insulation class	-	Н	Н
Compressor Size	mm	547 x 230 x 318	547 x 230 x 318
Size (with Compressor)	mm	626 x 230 x 734	626 x 230 x 734
Compressor Weight	Kg	20	23
Weight with power source	Kg	42	44
Jasic Model used with	-	SC-80	SC-100

# **GENERAL INFORMATION**



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 any machine covers.

# Packaging, transportation, storage and waste disposal

Transportation requirements

When handling the water cooler, the item should always be handled with care, and should not be dropped or severely impacted. Avoid moisture and rain during transportation.

# **Storage**

Storage temperature:-20°C ~ +60°C

Storage humidity: Relative humidity ≤ 90%

Storage period: 12 months

Storage site: Indoors with no corrosive gas and air circulation

# **WEEE disposal**

# Waste 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 and United Kingdom's Directive The Waste Electrical and Electronic Equipment (WEEE) regulations 2013 states that electrical equipment that has reached its end of life must be collected separately and returned to an environmentally compatible recycling facility.

Jasic has a relevant recycling system which is compliant and registered in the UK with the environment agency. Our UK registration reference is WEEMM3813AA.

In order to comply with WEEE regulations outside the UK you should contact your local registered WEEE organisation.

# **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.

# **DESCRIPTION OF AIR COMPRESSOR AP-140 AND AP-150**

# Overall view and technical details

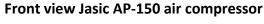




# 2 1 2 3 4 5 5

# Rear view Jasic AP-150 air compressor

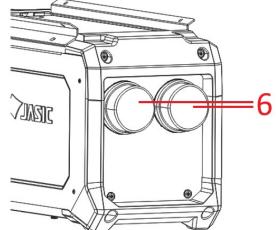
- 1. Mounting brackets.
- 2. Front panel with integrated cooling vents.
- 3. Input power indicator light.
- 4. Compressed air outlet connection which connects the air hose to the power source regulator inlet.
- 5. Input power cable and 4 pin control plug which connects to the power source front panel matching 4 pin socket.



6. Intake air filter caps which lock in place the air filter elements.



For further information for the AP-140 AND AP-150 compressor, please consult the EP-80 and EP-100 operating manuals.



# **MAINTENANCE**



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.

In order to guarantee that the arc welding machine works efficiently and in safety, it must be maintained regularly.

Operators should understand the maintenance methods and means of arc welding 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 arc welding machine, so as to lengthen service life of arc welding machines.

<u>Period</u>	Maintenance item	
Daily examination	Check the condition of the machine, mains cables, welding 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.	

### Maintenance

Filter element replacement

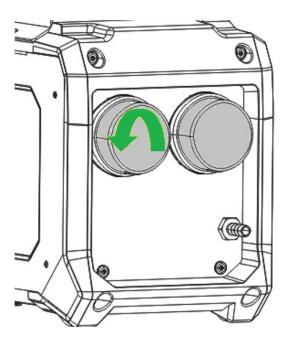
Regular replacement of the air filter is beneficial to increase the service life of the air compressor unit.

In normal working conditions, it is recommended to replace the filter element as per the following steps every 1000 hours or 12 months of the air compressor running.

- 1. Turn the rear panel air filter anticlockwise to open the outer cover.
- 2. Replace the internal filter element Pt No 10097311.
- 3. Install and restore the outer cover.

### **Please Note:**

Disconnect from the mains supply and wait for at least 2 minutes before removing the air filter covers as to avoid injury to maintenance personnel or damage to the machine.



# **TROUBLESHOOTING**

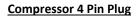


The following operation requires sufficient professional knowledge on electric aspects and comprehensive safety knowledge. Make sure the input cable of the machine is disconnected from the electricity supply and wait for 5 minutes before removing any machine covers.

The below chart lists general problems that maybe experienced with the AP-140 AND AP-150 compressor

Symptoms	Reason	Troubleshooting
Compressor is not running	The compressor is only activated by the plasma unit if the start signal is activated	Check settings on the plasma power source control panel
	Control cable defective or not plugged in	Check the compressor control cable
	Defective fuse	Check compressor supply
	Air filter is clogged	Check filters of compressor
Torch is getting too hot	The air regulator is not set correctly	Check air regulator settings and adjust accordingly
	Compressor not delivering enough compressed air	Check compressor output
Compressor hose burst or motor/ pump failure.  Check for air leaks and motor operation		Have an accredited distributors technical engineer check your product

# **SCHEMATIC**

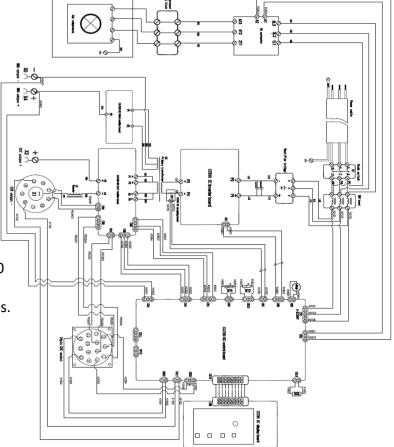




Pins	function
1 - 2	400v AC
3	Return Error signal
4	Ground

# **Please Note:**

For further information regarding the AP-140 And the AP-150 compressor, please see the EP-80SC and the EP-100SC operating manuals.



# STATEMENT OF WARRANTY

All new JASIC EVO20 welding, plasma cutters and multi-process machines are sold through our partner Wilkinson Star Limited within the United Kingdom and Ireland shall be warrantied to the original owner, non transferable, against failure due to defective materials or production.

The warranty period is 1 years following the date of purchase and we recommend you register your product online within 28 days of purchase.

The original invoice is documentation for the standard warranty period. The warranty period is based on a single shift pattern.

Defective units shall be repaired or replaced by the company at our workshop. The company may opt to refund the purchase price (less any costs and depreciation due to use and wear).

The company reserves the right to alter the warranty conditions at any time with effect for the future.

A prerequisite for the full warranty is that products are operated in accordance with the operating instructions supplied, observing the relevant installation and any legal requirements recommendations and guidelines and carrying out the maintenance instructions shown in the operator manual. This should be carried out by a suitably qualified competent person.

Warranty claims will only be accepted from authorised Jasic distributors and in the unlikely event of a problem this should be reported to the technical support team to review the claim.

The customer has no claim to loan or replacement products whilst repairs are being performed.

The following falls outside the scope of the warranty:

- Defects due to natural wear and tear
- Failure to observe the operating and maintenance instructions
- Connection to an incorrect or faulty mains supply
- Overloading during use
- Any modifications that are made to the product without the prior written consent
- Software errors due incorrect operation
- Any repairs that are carried out using non-approved spare parts
- Any transport or storage damage
- Direct or indirect damage as well as any loss of earnings are not covered under the warranty
- External damage such as fire or damage due to natural causes e.g. flooding
- Warranty repairs carried out by non-authorised Jasic distributors.

# NOTE:

Under the terms of the warranty, welding torches, their consumable parts, wire feed unit drive rolls and guide tubes, work return cables and clamps, electrode holders, connection and extension cables, mains and control leads, plugs, wheels, coolant and accessories are covered with a 3 month warranty.

Jasic shall in no event be responsible for any third party expenses or expenses/costs or any indirect or consequential expenses/costs.

Jasic will submit an invoice for any repair work performed outside the scope of the warranty. A quotation for any non warranty will be raised prior to any repairs being carried out.

The decision about repair or replacement of the defective part(s) is made by Jasic. The replaced part(s) remain(s) Jasic property.

Warranty extends only to the machine, its accessories and parts contained inside. No other warranty is expressed or implied. No warranty is expressed or implied in regards to the fitness of the product for any particular application or use.

If in our judgment you fail, or we suspect that you have failed, to comply with any term or provision of the product warranty terms, we reserve the right to deny you access to our services (or any part thereof).

For further information on Jasic product warranty terms and product warranty registration please visit:

www.jasic.co.uk/warranty-information www.jasic.co.uk/warranty-registration



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