

MAINTENANCE

After use, allow for the unit to cool then remove the nozzle cap, nozzle and electrode. Switch the unit on and press the torch switch for approximately 15 seconds to eliminate blockages in the gas nozzle.

Dust with a dry air compressor (low pressure) after use to remove any dust.

Do not fold or bend the torch cable. Keep as straight as possible at all times.

Store in a dry, cool place. Avoid water.

TROUBLESHOOTING

The power light is on but the fan does not activate and torch operating button does not work.

- The overvoltage protection is in operation. Switch off and leave for 5 minutes. Try again.

Power light is on, fan runs, solenoid valve in the machine runs but it is not cutting.

- The distance to the electric discharge nozzle is too far away or the edge is sticking.
- Input voltage is too low.
- Pressure from the air compressor is too large or too small.
- Check connections.
- Relay damaged.
- Possible damage to K1170 driver module, motherboard or control module.

SPECIFICATIONS

Input Power Voltage	AC220V	No-Load Loss	40W
Rated Input Power Cap.	4.8KVA	Efficiency	85%
Input Voltage Frequency	50/60Hz	Power Factor COS	0.93
No-Load Voltage	230V	Insulation Class	B
Output Current Range	10-40A	Weight	10KG
Rate Output Voltage	96V	Casing Protection	IP21S
Duty Cycle	60%		

Monster Mechanics

Unit 26A/B, The Bull Commercial Centre, Stockton Lane,
Stockton-On-Forest, York, YO32 9LE.



MONSTER MECHANICS

AIR PLASMA CUTTER

OWNER'S MANUAL
MODEL: CUT40

CONTENTS

T-Mech CUT-40
Cutting Torch & Bag
Spare Torch Nozzle
Earthing Clamp
Protective Welding Mask
Metal Brush
Plastic Tube

NOT INCLUDED BUT REQUIRED

Air Compressor (Minimum 24ltr, 0.2-0.4MPa)

INTRODUCTION

Congratulations and thank you for your purchase.

The CUT40 air plasma cutter 50Hz/60Hz line frequency is inverted into a high frequency (over 100KHz) by using a high power V-MOSFET field effect tube. The de-compression produces a high power DC output ideal with the Pulse Width Modulation (PWM) technique. Developments in the advanced technology used have allowed the CUT40 to have substantially reduced dimensions and weight as well as increased efficiency by up to 30% on previous models.

The CUT40 features include:

- High speed cutting.
- Suitable to cut stainless steel, alloy steel, mild steel, copper, and other non-ferrous metal materials up to a thickness of 0.5cm.
- Low noise levels.
- Energy efficient.
- Light & portable.

OPERATING ENVIRONMENT

- The cutting machine performs in environments where conditions are particularly harsh. Operating temperatures are between -10 and +40 degrees centigrade with a dampness level of max 80%.
- Avoid using in direct sunlight.
- Keep machine dry and avoid water.
- Do not use the cutting machine in environments where the environment is polluted with high concentrations of dust or corrosive gas.

SAFETY

- Make sure the working area is adequately ventilated.
- Ensure the working area is clean and free from obstructions or rust.
- The CUT40 should only be used on the recommended materials.
- The exhaust shutter must not be covered or blocked at any point. The machine should have a minimum of a 30cm gap from any other objects whilst in operation.
- DO NOT change the function (2S/5S) switch whilst in operation.
- The power voltage on the CUT40 should not exceed 220v.
- An earthing device should be used to prevent serious injury.

- DO NOT touch any live parts of the welding rod with any body parts, gloves or clothes.
- DO NOT touch the output terminal when in use.
- DO NOT allow water to come in contact with the appliance.
- A suitable face guard must be used to avoid damage to the face/eyes.
- Protective glasses and Personal Protective Equipment (PPE) should be used.
- Whilst every effort has been made to reduce noise levels, ear plugs are recommended to avoid hearing damage.
- Avoid inhalation of smoke/gasses produced whilst in use.
- Weld sparks can cause fire therefore the area should be free of flammable objects and fire extinguishers should be on hand.
- Do not use continuously for periods longer than 10 minutes. Overheating can occur when used continuously and the cutter will need to cool prior to continuing work.

INSTALLATION & USE

- (1) Connect the CUT40 to a suitable power supply. The maximum voltage for this machine is 220v. Use on supplies exceeding this limit can cause substantial damage. Do not switch on the unit yet.
- (2) Connect a suitable air compressor (not supplied) to the rear of the unit in the valve labelled 'GAS'. A suitable compressor should have a minimum capacity of 24 litres.
- (3) Earth the appliance by attaching the earth cable (with clamp grip) to the CUT40 - bottom left port at the front of the machine. Earth the machine to a suitable object.
- (4) Attach the cutting torch by inserting the two plugs to the front of the machine - bottom middle and bottom right ports.
- (5) Switch on the CUT40 at the mains socket.
- (6) Turn on the machine on the unit.
- (7) Switch on the compressor.
- (8) Adjust the strength of the air compressor.
- (9) Adjust the current strength knob (labelled 'A') at the front of the unit. Ensure the torch switch is not on prior to adjusting power levels.
- (10) Ensure adequate Personal Protective Equipment (PPE) is in place prior to operating the machine.
- (11) Place the torch on the working surface and press the button on the torch. The solenoid valve operates and you should hear electric discharge from the front of the torch. The torch needs to be within 2mm of the surface to operate.
- (12) Move the torch steadily across the working surface. If sparks are sent upwards, slow down speed to ensure the cut is made all the way through the material. If sparks are sent vertically towards the floor, increase speed slightly.