Wilhelmsen Ships Service

UNITOR by Wilhelmsen

Instruction manual

UPC-NEO NG
Air Plasma Cutter

Revision summary

Rev. No.	Version	Date issued
00	6945500000	July 05, 2021

CONTENTS

DELIVERY

UPC-NEO NG Air Plasma Cutter Product No. 404200 delivery consist of:

1	Machine supply complete with 4m primary cable 3+G x 2,5mm^2
2	Torch with 6m cable (connected directly to the machine)
3	Return clamp with 6m cable with Dix25
4	Initial supply consumables kit of 2 x Electrode, 2 x Tip Cutting, 1 x Cartridge, 1 x Shield Cup
5	Air regulator with filter and water separator mounted on the machine
6	User instruction manual

Remarks:
Air hose is not supplied.
Minimum diameter of the air hose should be 9mm – 3/8".
In case you use an extension cord, be sure that it is of an appropriate wire gauge for the cord length and system voltage.

Primary Voltage	Cord size	Length
380-440V 3P	2,5mm² (12 AWG)	Up to 50 m (164 feet)
380-440V 3P	4mm²/6mm² (10 AWG)	Up to 100 m (328 feet)
380-440V 3P	10mm² (8AWG)	Up to 150 m (492 feet)

Note : In addition to the section and length of the extensions, an adequate distribution line is also important.

1 SAFETY INSTRUCTIONS

ELECTRIC SHOCK CAN KILL
- Disconnect the power supply before working on the plasma machine.
- Do not work with deteriorated cable sheaths.
- Do not touch bare electrical parts.
- Ensure that all the panels covering the plasma machine are firmly secured in place when the machine is connected to the mains supply.
- Insulate yourself from the work bench and from the floor (ground): use insulating footwear and gloves.
- Keep gloves, footwear, clothes, the work area and this equipment clean and dry.

PRESSURISED CONTAINERS CAN EXPLODE IF WELDED.
When working with a plasma machine:
- do not cut pressurised container.
- do not cut in environments containing explosive powders or vapours.

THE RADIATIONS GENERATED BY THE WELDING ARC CAN DAMAGE THE EYES AND CAUSE BURNING OF THE SKIN.
- Provide suitable protection for the eyes and body.
- It is indispensable for contact lens wearers to protect themselves with suitable lenses and masks.

NOISE CAN DAMAGE YOUR HEARING.
- Protect yourself suitably to avoid hearing damage.

FUMES AND GASES CAN DAMAGE YOUR HEALTH.
- Keep your head out of the reach of fumes.
- Provide suitable ventilation of the work area.
- If the ventilation is not sufficient, use an exhaust system that sucks from the bottom.

HEAT, SPLASHES OF MOLTEN METAL AND SPARKS CAN CAUSE FIRES.
- Do not cut near inflammable materials.
- Avoid having any type of fuel with you such as cigarette lighters or matches.
- The cutting sparks can cause burns. Keep the tip of the electrode far from your body and from other persons.

PREVENTION OF ELECTRIC SHOCKS
Take the following precautions when working with a plasma machine:
- keep yourself and your clothes clean.
- do not be in contact with damp or wet parts when working with the plasma machine.
- maintain suitable insulation against electric shock. If the operator has to work in a damp environment, he must take extreme care and wear insulating footwear and gloves.
- check the machine power cable frequently: it must be free from damage to the insulation. BARE CABLES ARE DANGEROUS. Do not use the machine if the power cable is damaged; it must be replaced immediately.
- if it is necessary to open the machine, first disconnect the power supply. Wait 5 minutes to allow the capacitors to discharge. Failure to take this precaution may expose the operator to dangerous risks of electric shock.
- never work with the plasma machine if the protective cover is not in place.
- ensure that the earth connection of the power supply cable is perfectly efficient.
This machine has been designed for use in a professional and industrial environment. For other types of application contact the manufacturer. If **electromagnetic disturbances** are found it is the responsibility of the machine user to solve the problem with the technical assistance of the manufacturer.
It is forbidden for people with PACEMAKERS to use or come near the machine.

PREVENTION OF BURNS
To protect your eyes and skin from burns and ultraviolet rays:
- wear dark glasses. Wear suitable clothing, gloves and footwear.
- use masks with closed sides, having lenses and protective glass according to standards (degree of protection DIN 10).
- warn people in the vicinity not to look directly at the arc.

PREVENTION OF FIRE
Plasma cutting produces splashes of molten metal.
Take the following precautions to prevent fire:
- ensure that there is a fire extinguisher close to the working area.
- remove all inflammable material from the immediate vicinity of the working area.
- cool the cut material or let it cool before touching it or putting it in contact with combustible material
- never use the machine for cutting containers of potentially inflammable material. These containers must be completely cleaned before they are cut.
- ventilate the potentially inflammable area before using the machine.
- do not use the machine in atmospheres containing high concentrations of powders, inflammable gases or combustible vapours.

LIFTING
WARNING! The UPC-NEO NG weights 25kg / 56 lb.

Lifting by hand:
Lift the machine using the handle provided.

*Note: As safety requirements and regulations may vary from vessel to vessel depending on vessel's flag state for example, the vessel need to check the prevailing manual handling safety requirements or regulations that it is subjected to.

INSTRUCTION FOR INSECURE POSITIONING

Failure to properly secure the machine can cause personal injury. If machine is in an insecure position do not attempt to switch on. Do not put the machine on an unlevelled surface greater than 10°.

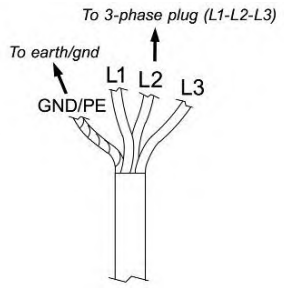
2 TECHNICAL DATA

Power supply	380-440V ±10% 3~50/60 Hz
Mains fuse minimum (Slow blow)	380-440V 3P: 16A
Maximum power	380-440V 3F: 11,80 KVA
Process power	88V – 20A 108V – 70A
Air supply NB! Dry and oil free	5-5,5 bar 150 l/min
Duty cycle @ 40°	35% @70A
	60% @ 55A
	100% @ 50A
Power factor	0,80
Efficiency	0,85
Idle state power consumption	21 W
Open circuit voltage	320V
Protection class	IP 23
Environmental conditions	Cutting: -10°C + 40°C
	Transport and storage: -20°C + 55°C
Cooling	Forced
Temperature class	H
Dimensions L x W x H	620x225x360 mm
Weight	25 kg
Severance cut	40 mm
Quality cut	25 mm @ 200mm/min
Recommended cut	20 mm @ 500mm/min

3 INSTALLATION

WARNING: This **Class A** equipment is not intended for use in residential locations where the electrical power is provided by the public low-voltage supply system. There may be potential difficulties in ensuring electromagnetic compatibility in those locations, due to conducted as well as radiated disturbances. This equipment does not comply with **IEC 61000-3-12**. If it is connected to a public low voltage system, it is the responsibility of the installer or user of the equipment to ensure, by consultation with the distribution network operator if necessary, that the equipment may be connected.
The good operation of the machine is ensured by correct installation; you must therefore proceed as follows:
- Position the machine in such a way that there is no obstacle to the air circulation ensured by the internal fan since the internal components require suitable cooling.
- Ensure that the fan does not send deposits or dust into the machine.
- Avoid impacts, rubbing, and – absolutely no exposure to dripping water, excessive heat sources, or any abnormal situations.

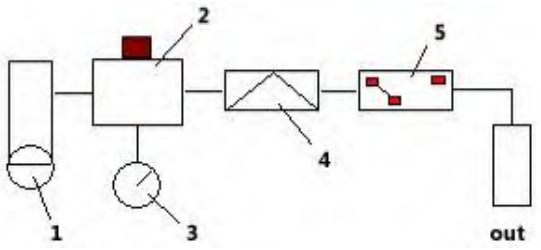
CONNECTION
- Before making the electrical connections between the Inverter and the line switch, ensure that the switch is turned off.
- The distribution panel must comply with the regulations in force in the country of use.
- The mains system must be of the industrial type.
- When using long extension cables, the core diameter section is increased as required for optimum performance.
- The power input supply socket must have a suitable switch provided with slow burning' type fuse(s).
- In the event of damage to the power cable, replacement or repair must be performed by a qualified person at an approved service centre.

3-PHASE CONNECTION
The Multi-link in this unit automatically adapts the power source to the primary voltage being applied. Check input voltage available at site. This machine can be connected to input power between 380 and 440 VAC 3-Phase.


EARTHING
- To ensure user protection the Inverter must by law be correctly connected to the earth system (INTERNATIONAL SAFETY REGULATIONS).
- It is necessary to provide good earthing by means of the yellow-green wire in the power cable, in order to avoid discharges due to accidental contacts with earthed objects.
- The chassis (which is conductive) is electrically connected with the earth wire; if the equipment is not suitably connected to earth it may cause electric shocks which are dangerous to the user and those nearby.

PNEUMATIC CIRCUIT CONNECTION:
The machine uses compressed air for plasma cutting. Any cylinder of compressed air may therefore be used, or air from a compressor. The air must be free from polluting particles, such as oil or other contaminating agents. A pressure regulator is provided to ensure the correct air flow rate on the torch.

KEY:
1– Air filter
2– Reducer (pressure regulator)
3– Pressure gauge
4– Pressure switch
5– Solenoid valves



A pressure between 5 bar and 5.5 bar must be applied to the air filter located on the rear panel of the machine (150l/min). The pressure must not exceed 6 bar. The pressure regulator 1 is set by the manufacturer at 4.8 bar. Check the pressure by pressing the Air Test button on the front panel and check that the pressure gauge gives a reading of 4.8 bar. If necessary to the correct pressure by turning the knob on the pressure regulator.

A pressure switch (4) in the machine will stop operation if the pressure at output of the reducer (2) is below 3 bar, which is minimum to guarantee operation.

4 OPERATING INSTRUCTIONS

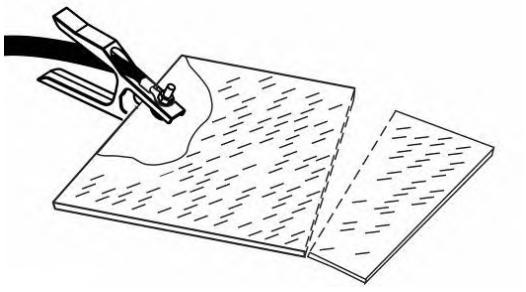
Place machine as far away from where cutting takes place as possible. Use all of the 6m torch length. This is to prevent the fumes produced by cutting from being sucked into machine by the cooling fans through the front and side ventilation openings.

BEFORE CUTTING
The operator may start up the machine only after having read and understood all parts of this manual. Depending on the type of cut to be performed he must follow the work phases described below.

WARNING! A preflow of 2 seconds after pressing the torch button to alert the operator of the imminent start of the pilot arc.

1. Ensure that the work environment and your clothing satisfy the safety requirements described.
2. Position the unit in a place where there is no obstruction to air circulation.
3. Connect the unit to a suitable power socket (an earthed socket is obligatory).
4. Connect the compressed air pipe to the air filter on the rear panel.
5. Ensure that there is no water in the air filter. If necessary, empty the filter.

NOTE! Air filter is a semi-automatic drain. Semi-automatic drain operates when the air line is depressurised. When the filter is pressurised, the drain can still operate manually by pushing the tube in the filter, which then protrudes outside the filter bowl.
6. Return clamp must be clamped into the work piece or cutting table. The area must be free from oil, paint and rust. Connect only to the main part of the work piece; do not connect to the part to be cut off.

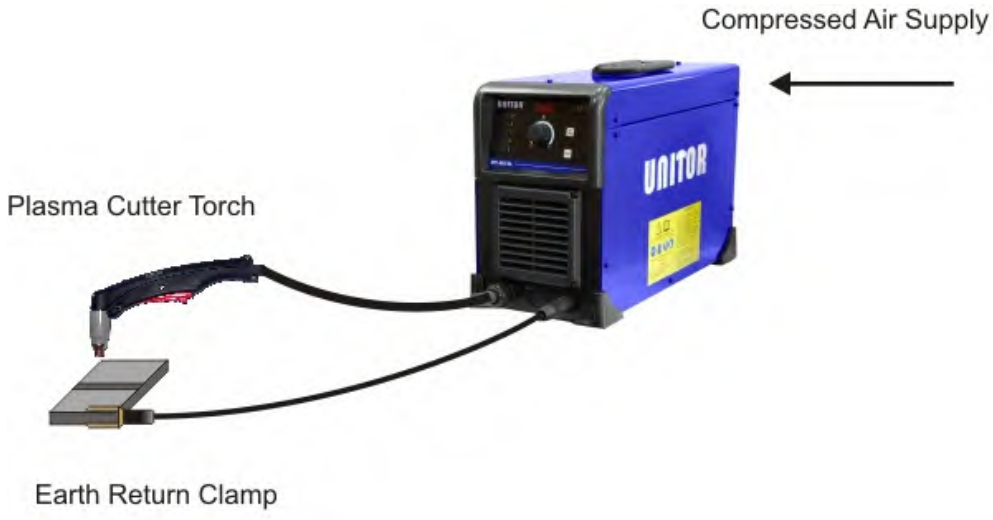


FRONT PANEL DESCRIPTION

1 Air presence LED
2 Consumables Warning LED
3 Reset Protection alarm LED
4 Excess temperature LED
5 Cutting enable LED
6 Cutting current regulation display
7 Air test button
8 RESET button

For the number reference below, refer to the Front Panel Description:
1.Turn the switch on the back panel to ON position.
2.The display **(6)** will light up (Unit live).
3.The green led **(1)** will light up to indicate the presence of compressed air in the air circuit.

Plasma Cutter Setup:



Return clamp must be clamped as close as possible to the work piece or cutting table.
If earth return clamp is not connected or having poor connection, upon torch trigger, the plasma pilot arc will go off and machine display showing 18 A. It is not possible to use the plasma cutter until the proper connection is setup up.

STEP NO. 3

1.The red led (3) is illuminated and the unit is now in STAND-BY.
2.Set the output current (6) to a suitable value for the thickness that is to be cut. for thin materials reduced output may be required to obtain a smooth and neat cut.
3.Before cutting, press the RESET button (8). The red led (3) is now off and you are ready to cut. If the RESET button is not pressed the unit will remain on STAND-BY mode.
THIS IS A SAFETY DEVICE!

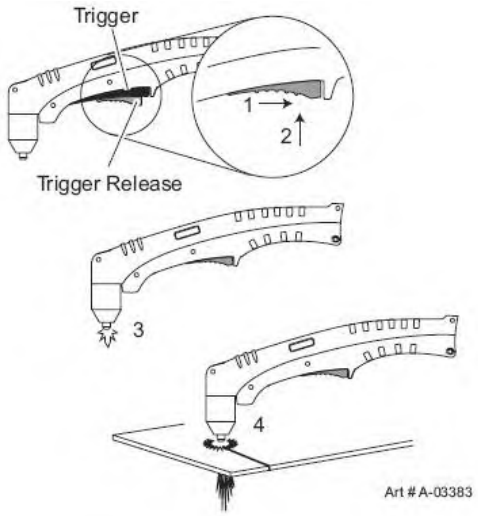
CAUTION: If AIR TEST button (7) is pressed before RESET button (8), you need to allow the air to flow out until it stopped completely (about 20 second), or pressing it again to stop it, before pressing the RESET button (8). If RESET button (8) is pressed during air flowing out, the machine will return error message "PIP" (For Safety Protection) and machine need to be re-started before use again.

1.The Inverter is now ready for work. When you want to start, position the torch on the work-piece to be cut and slide the trigger release toward the back of the torch and press the trigger. An air preflow of 2 seconds will come before the pilot arc starts.
2.The arc is transferred to the work-piece and cutting will start. Move the torch in the desired direction at a speed that ensures a good cutting quality.
3.When the cut is finished, release the torch trigger to stop the arc.
4.Air will continue to flow out for 15 seconds to cool the torch parts.

CUTTING TECHNIQUE

For best performance and life expectancy, always use the correct and original parts for cutting torch.

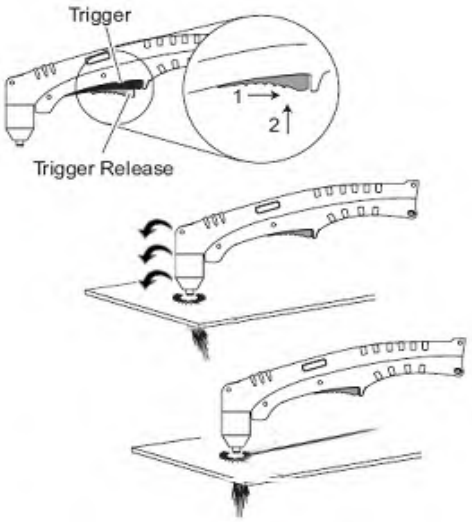
1.Install the cutting tip and set the output current.
2.Hold the torch away from your body.
3.Slede the trigger release toward the back of the torch handle while simultaneously squeezing the trigger. This will activate a pre-flow of air foe 2 seconds before the pilot arc is turned on followed by the plasma arc.
4.Start moving the torch across the work piece and observe that the arc penetrate the work piece.
5.when cutting is established pull the torch slowly across the surface of the work piece.
6.pause briefly at the and of the cut before releasing the trigger.
7.The plasma arc goes out immediately. Air continue to flow 15 seconds.



FOR PIERCING HOLES

With UPC-NEO NGyou can pierce metal with thickness up to 8mm.

1. Rest the torch tip lightly on the work piece at 45 deg. Angle.
2. Press trigger on the torch handle. Air will flow for 2 seconds before pilot arc strikes.
3. When the plasma arc is established, slowly and one smooth movement straighten the torch back to 90 deg. Angle ensuring the arc penetrate the work piece.
4. Start moving the torch across the work piece and observe that the arc continue to penetrate.



GOUGING

You can use this system with the gauging consumables for gouging applications. (Check torch parts. The torch parts must correspond with the type of operation. Refer to Section 5, Torch Parts Selection).
1. Hold the torch so that the torch tip is slightly above the workpiece before firing the torch.
2. Hold the torch at a 45° angle to the workpiece with a small gap between the torch tip and the workpiece. Press the trigger to obtain a pilot arc. Transfer the arc to the workpiece.
3. Maintain an approximate 45° angle to the workpiece as you feed into the gouge.
Push the plasma arc in the direction of the gouge you want to create. Keep a small distance between the torch tip and the molten metal to avoid reducing consumable life or damaging the torch.
You can vary the gouge profile by varying the:
-Speed of the torch over the workpiece.
-Torch-to-work standoff distance.
-Angle of the torch to the workpiece.

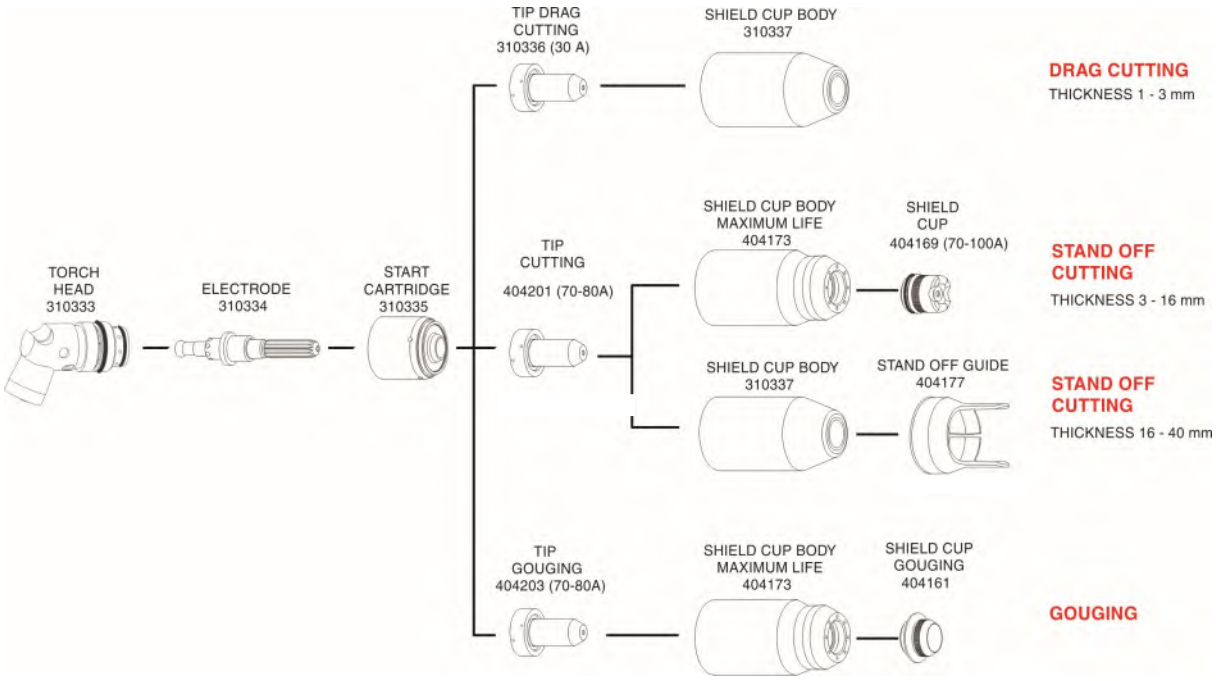
Varying the gouge profile

Follow these recommendations to change the gouge profile as needed:

- **Increasing the speed** of the torch will **decrease width** and **decrease depth**.
- **Decreasing the speed** of the torch will **increase width** and **increase depth**.
- **Increasing the standoff** of the torch will **increase width** and **decrease depth**.
- **Decreasing the standoff** of the torch will **decrease width** and **increase depth**.
- **Increasing the angle** of the torch (more vertical) will **decrease width** and **increase depth**.
- **Decreasing the angle** of the torch (less vertical) will **increase width** and **decrease depth**.

5 TORCH PARTS

FOR INPUT VOLTAGE 380-440V 3F.



DESCRIPTION	PRODUCT NUMBER	COMMENTS
Tip Drag Cutting 30A	310336	5 PCS
Tip Cutting 70-80A	404201	5 PCS
Tip Gouging 70-80A	404203	5 PCS
Electrode	310334	5 PCS
Shield Cup Body Maximum Life	404173	1 PCS
Shield Cup Body	310337	1 PCS
Shield Cup Cutting 70-85A	404169	1 PCS
Shield Cup Gouging	404161	1 PCS
Stand off Guide	404177	1 PCS
Start Cartridge	310335	1 PCS
Torch Head	310333	1 PCS
STARTER KIT FOR UPC NEO NG	404202	ELECTRODE 5 PCS TIP 70-80A CUTTING 5 PCS START CARTRIDGE 1 PCS SHIELD CUP BODY 1 PCS STAND OFF GUIDE 1 PCS SHIELD CUP BODY MAX LIFE 1 PCS SHIELD CUP 1 PCS O-RING BLACK Ø 21 1 PCS O-RING RED Ø 16 1 PCS

TORCH AND ACCESSORIES:

TORCH SL60 WITH 6M CABLE F/UPC-NEO NG	404204
TORCH SL60 WITH 15M CABLE FOR UPC-85ML	404158
CIRCLE CUTT. GUIDE F/UPC-310ML, 85ML & NEO-NG	310326

*TO CHANGE TIP CUTTING 70-80A

6 MAINTENANCE

This section describes basic maintenance procedures performable by operating personnel. No other adjustments or repairs are to be attempted by other than properly trained personnel.

WARNING

Disconnect primary power at the source before disassembling the power supply, torch, or torch leads. Frequently review the Important Safety Precautions at the front of this manual. Be sure the operator is equipped with proper gloves, clothing, eye and ear protection. Make sure no part of the operator's body comes into contact with the workpiece while the torch is activated.

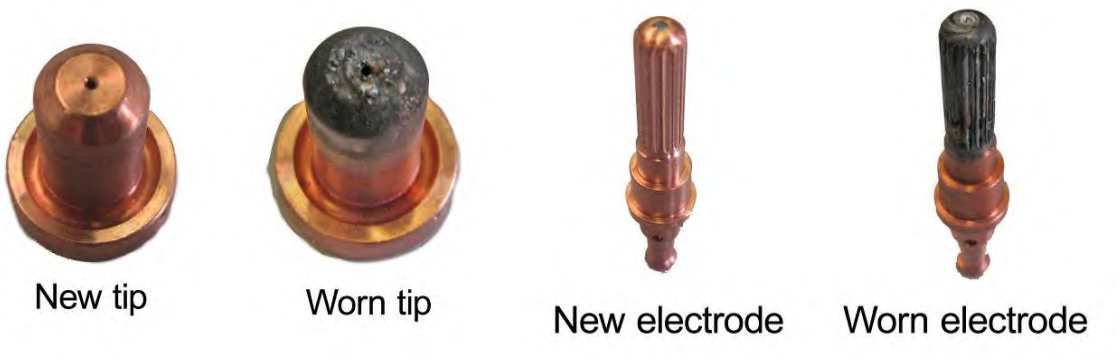
DAILY INSPECTION AND REPLACEMENT CONSUMABLE TORCH PARTS

Inspect and, if necessary, change the torch consumable parts. Electrode and nozzle must be changed at regular intervals, as a general guideline after 4 hours continues use, after 250 starts
or about 120m cut at 500mm/min 70A. Replace the nozzle if the opening is deformed or clearly oversized. Failure to replace worn nozzle or electrode in time will dramatically reduce the cutting capacity and eventually ruin the torch.
Carefully inspect the hose assembly and torch body with regard to any leak or damage.

NOTE
The shield cup holds the tip and the starter cartridge shield cup in place. Position the torch with the shield cup facing out when the cup is removed.

NOTE
Slag build-up on the shield cup that cannot be removed may affect the performance of the system.

1. Unscrew and remove the shield cup from the torch
2. Inspect the cup for damage. Wipe it clean or replace if damaged
3. Removed the tip. Check for excessive wear (indicated by an elongated or oversize orifice, see images). Clean or replace the tip if necessary.
4. Remove the starter cartridge. Check for excessive wear plugged gas holes, or discolouration. Check the lower end fittings for free motion. Replace if necessary.
5. Pull the electrode straight out of the torch head. Check the face of the electrode for excessive wear. Refer to the following figure.
6. Re-install the electrode by pushing it straight into the torch head until it clicks.
7. Re-install the desired starter cartridge and tip into the torch head
8. Hand tighten the shield cup until it is seated on the torch head. If resistance is felt when installing the cup, check the threads before proceeding.



EVERY 3 TO 6 MONTHS
AIR CLEAN (DRY AIR) THE INTERNAL PART OF THE PLASMA MACHINE

Before cleaning the inside of the machine, it is obligatory to **FIRST** follow the **WARNINGS** described previously and to proceed as follows:

1- Remove the casing, slackening the side screws;
2- Remove all traces of dust from the internal parts of the machine by means of a jet of dry compressed air at a pressure no higher than 3 bar;
3- Visually check all the electrical connections, ensuring that the screws and nuts are well secured;
4- Visually check the state of all the components: replace any deteriorated components;
5- Put back the casing, tightening the side screws.

7 TROUBLESHOOTING

The following lists the more common cutting faults and possible causes:

1. Insufficient penetration
a. Cutting speed too fast
b. Torch not at 90°
c. Metal too thick
d. Worn torch parts
e. Cutting current too low
f. NON-genuine manufacturer parts

2. Cutting Arc Extinguishes
a. Cutting speeds too slow
b. Torch stand-off too high from work piece
c. Cutting current too high
d. Work cable disconnected
e. Worn torch parts
f. NON-genuine manufacturer parts

3. Excessive dross Formation
a. Cutting speeds too slow
b. Torch stand-off too high from work piece
c. Worn torch parts
d. Improper cutting current
e. NON-genuine manufacturer parts

4. Short Life of Torch parts
a. Oil or moisture in air source
b. Exceeding system capability (material too thick)
c. Excessive pilot arc time
d. Air flow too low (incorrect air pressure)
e. Improperly assembled torch
f. NON-genuine manufacturer parts

NO AIR

The Led (1) will turn OFF.

1. No air into the system

2. Check air flow

Check the air pipe are correctly connected to the Gas regulator on the back of the unit and the pressure is correct. (see INSTALLATION - PNEUMATIC CIRCUIT)

RESET

The Led (3) is ON, fix and the display shows the Amperage

1. The unit is simply in STAND-BY
2. Press the button RESET (7).

See section STARTING UP

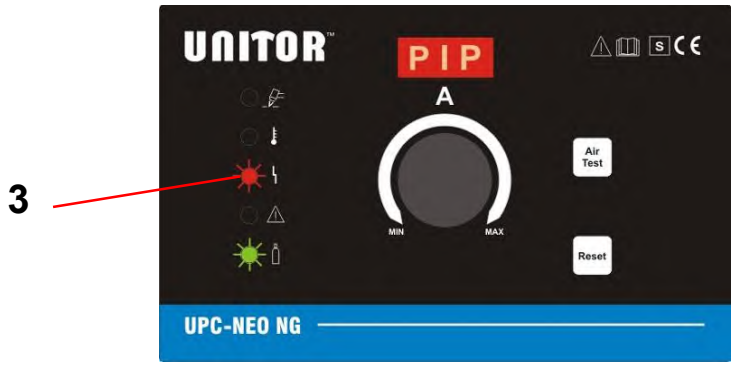
TRIGGER ALLARM

The Led (3) is ON fast blinking and display shows "TRI".

1. The operator Turn ON the unit with the torch trigger pressed or broken.
2. The unit is now blocked.
3. Turn Off the unit and check torch. See section SERVICE.

PIP (PART IN PLACE)

The Led (3) is ON , slow blinking and the display shows "PIP"

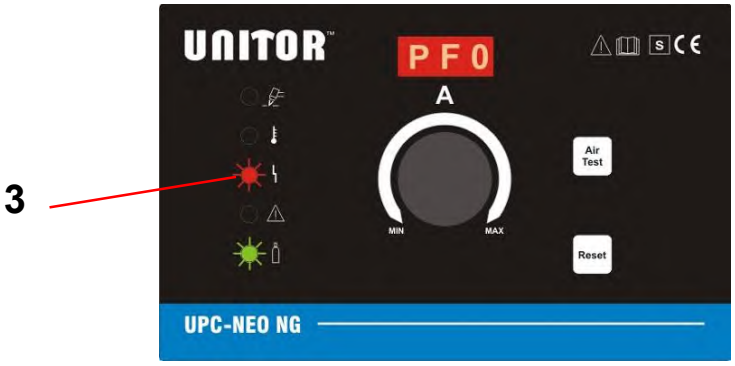


1. The consumables are not correctly mounted.
2. The unit is now blocked
3. Turn Off the unit and check consumables.

See section SERVICE.

PF0 (MISSING PHASE)

The Led (3) is ON , fix and the display shows "PF0"

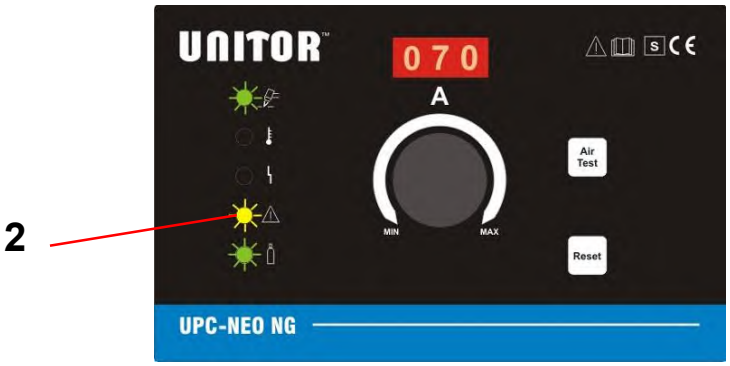


1. Missing phase of the supply voltage.
2. The unit is now blocked
3. Turn Off the unit and check the three. Restore the missing phase before using again the plasma cutter machine.

See section SERVICE.

CONSUMABLES WARNING

The Led (2) is ON , slow blinking during the pilot arc.

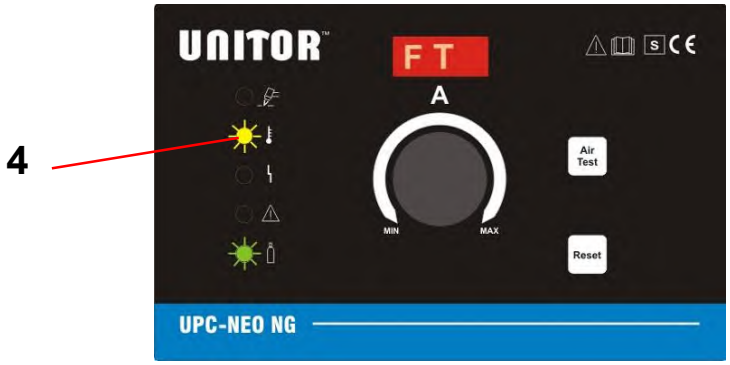


1. Warning! End of Life for plasma consumables.
2. The unit continues to work but the tip and electrode might reached its End of Life.
3. Turn Off the unit and check the consumables. In case the tip and electrode are worn, replace as required.
4. As consumables status reference check section 6. MAINTENANCE

Warning: Failure to change worn plasma consumables may cause poor cutting quality and might cause damage to plasma torch.

THERMAL PROTECTION PROBES FAILURE

The Led indicator light (4) is ON, and the display show FT(1,2,4,5,d)



1. This indicates a malfunction or failure in the thermal protection probes.

See section SERVICE.

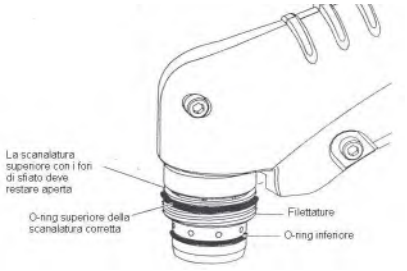
OVERHEATING OF THE TORCH:

After several minutes of cutting, the torch cap may become too hot to work.

1. To cool it, press the TEST GAS button
until the cap temperature falls to acceptable values.

If after this, torch will not pilot when switch is activated
1.Every thing on the panel looks normal. The green led and Air led are lit. The RESET button is pressed and red led is OFF.
a. Check that shield cup is properly installed.

2.Upper O-ring on torch head is in wrong position.
a. Remove shield cup from torch; check position of upper O-ring. Correct if necessary.

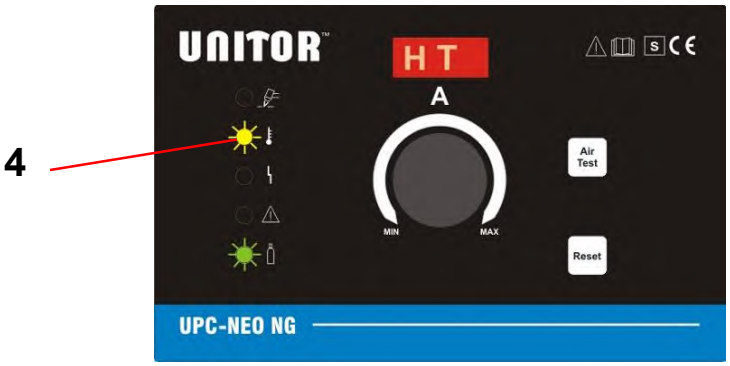


3. Faulty torch parts
a. inspect torch parts and replace if necessary. Refer to section SERVICE inspection and replacement consumable torch parts.

4. Faulty components in power supply
a. Return for repair or have qualified technician repair as per service manual.

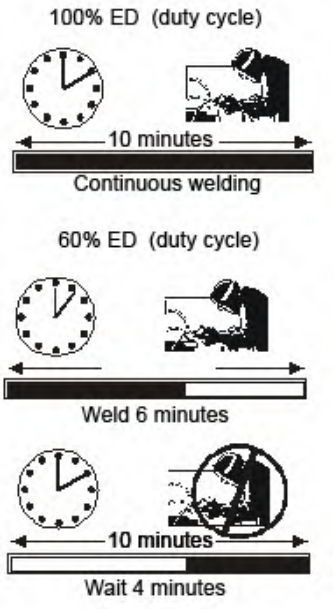
DUTY CYCLE AND EXCESSIVE TEMPERATURE

The Led indicator light (4) is ON, and the display show HT(1,2,4,5,d)



1. This is indicating the unit has exceeded the Duty Cycle.

The duty cycle is the percentage of use of the welding machine in 10 minutes which the operator must respect to avoid the power supply output blocking due to exceeding working temperature. If the machine goes into excessive temperature protection mode:



.

2. It is necessary to wait about 10 minutes before resuming welding.

3. Check the data plate on the unit or on see section TECHNICAL DATA in the Operating Manual..

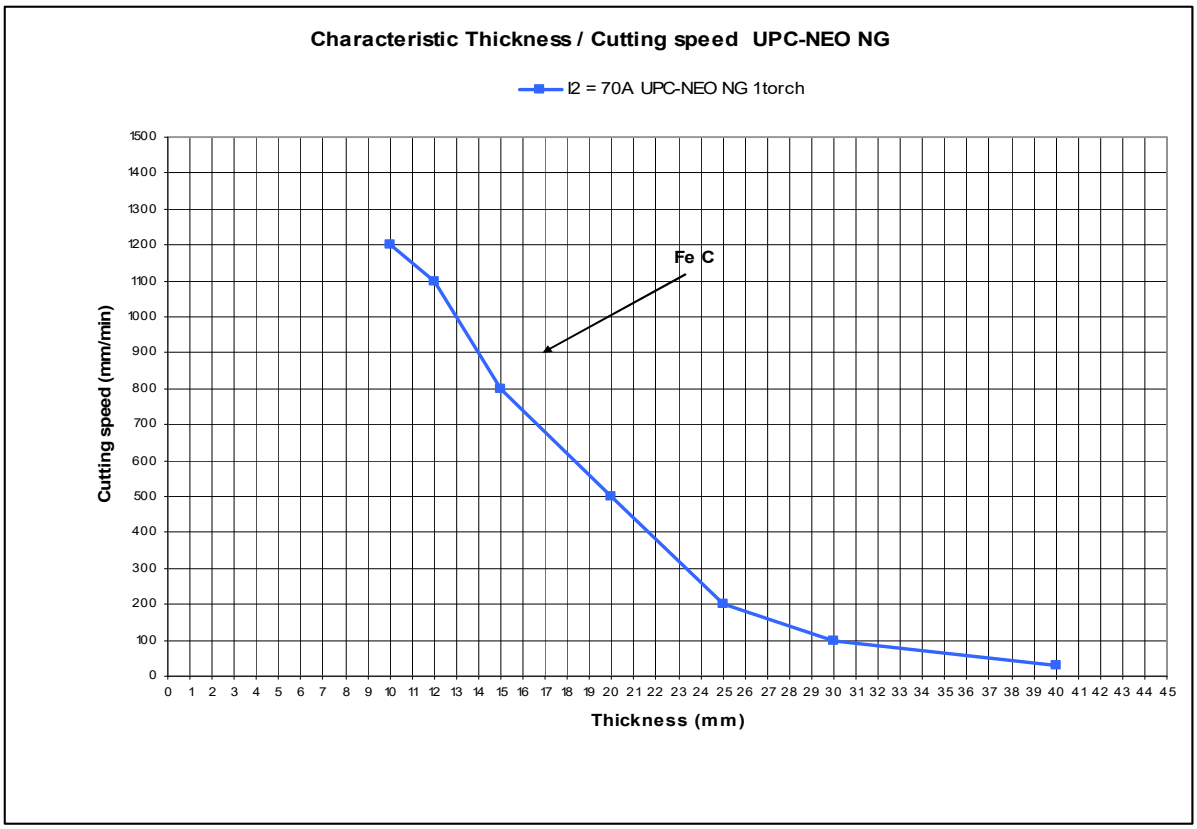
4. In the event the working condition are conforming to the specification on the Technical Data Plate, but still the display shows HT (1,2,4,5,d) this is an indication that one of the PC Boards is possibly faulty. Return for repair or have qualified service technician repair as per service manual.

DISPOSAL OF ELECTRICAL AND ELECTRONIC EQUIPMENT

Do not dispose of electrical equipment together with normal waste! In observance of European Directive 2012/19/EU on Waste Electrical and Electronic Equipment and its implementation in accordance with national law, electrical equipment that has reached the end of its life must be collected separately and returned to an environmentally compatible recycling facility. As the owner of the equipment, you should get information on approved collection systems from our local representative. By applying this European Directive, you will improve the environment and human health!

IN CASE OF MALFUNCTIONS, REQUEST ASSISTANCE FROM QUALIFIED PERSONNEL.

8. CUTTING / THICKNESS CHARACTERISTICS



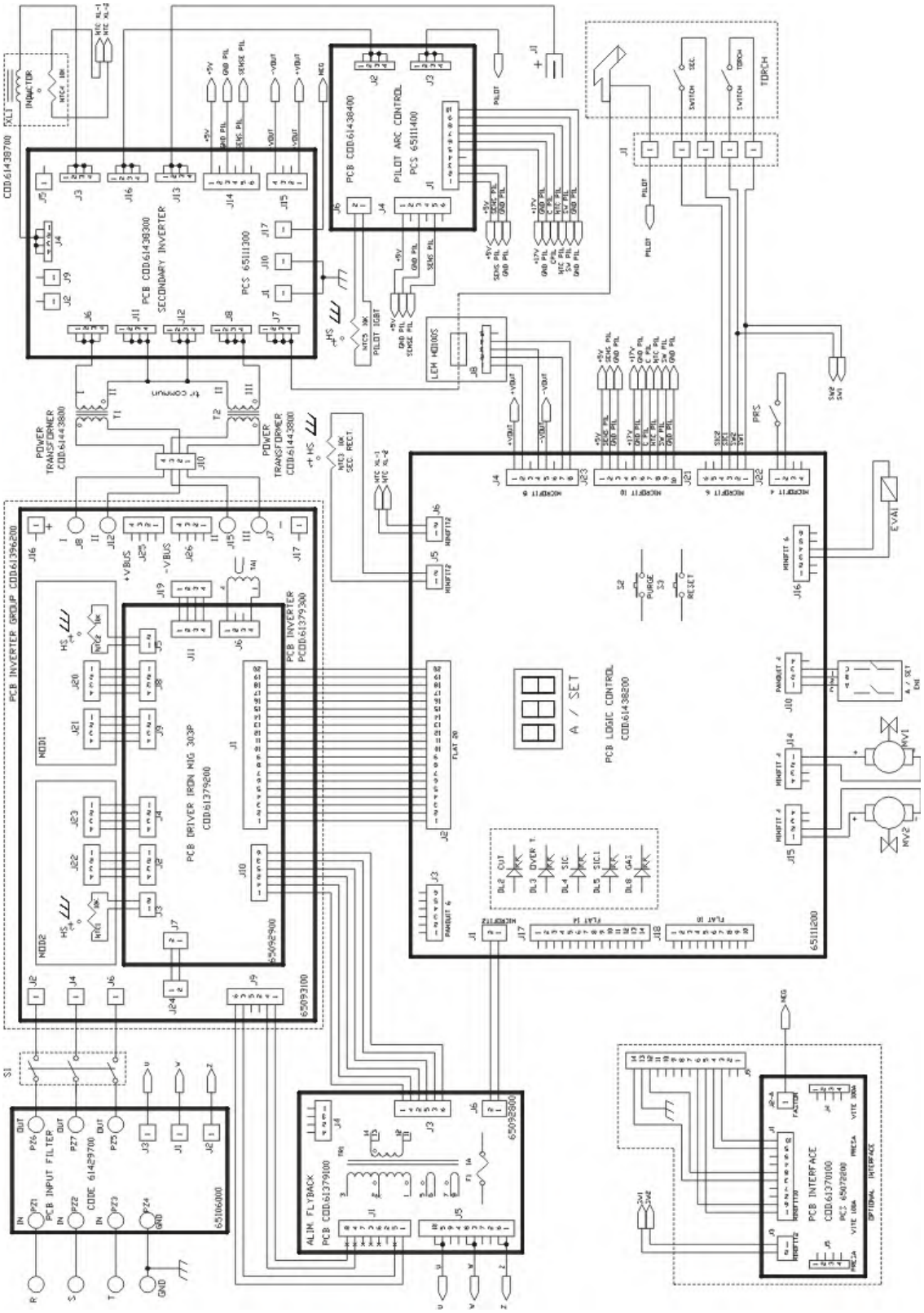
Pressure = 4,8 bar
Flow = 120 l/min

415V 3-Phase, 70A		
Thickness	**Cutting Speed**	**Note***
(mm)	**(mm/min)**	
40	30	Sever
30	100	
25	200	Quality
20	450	Recommended
15	800	
12	1100	
10	1200	

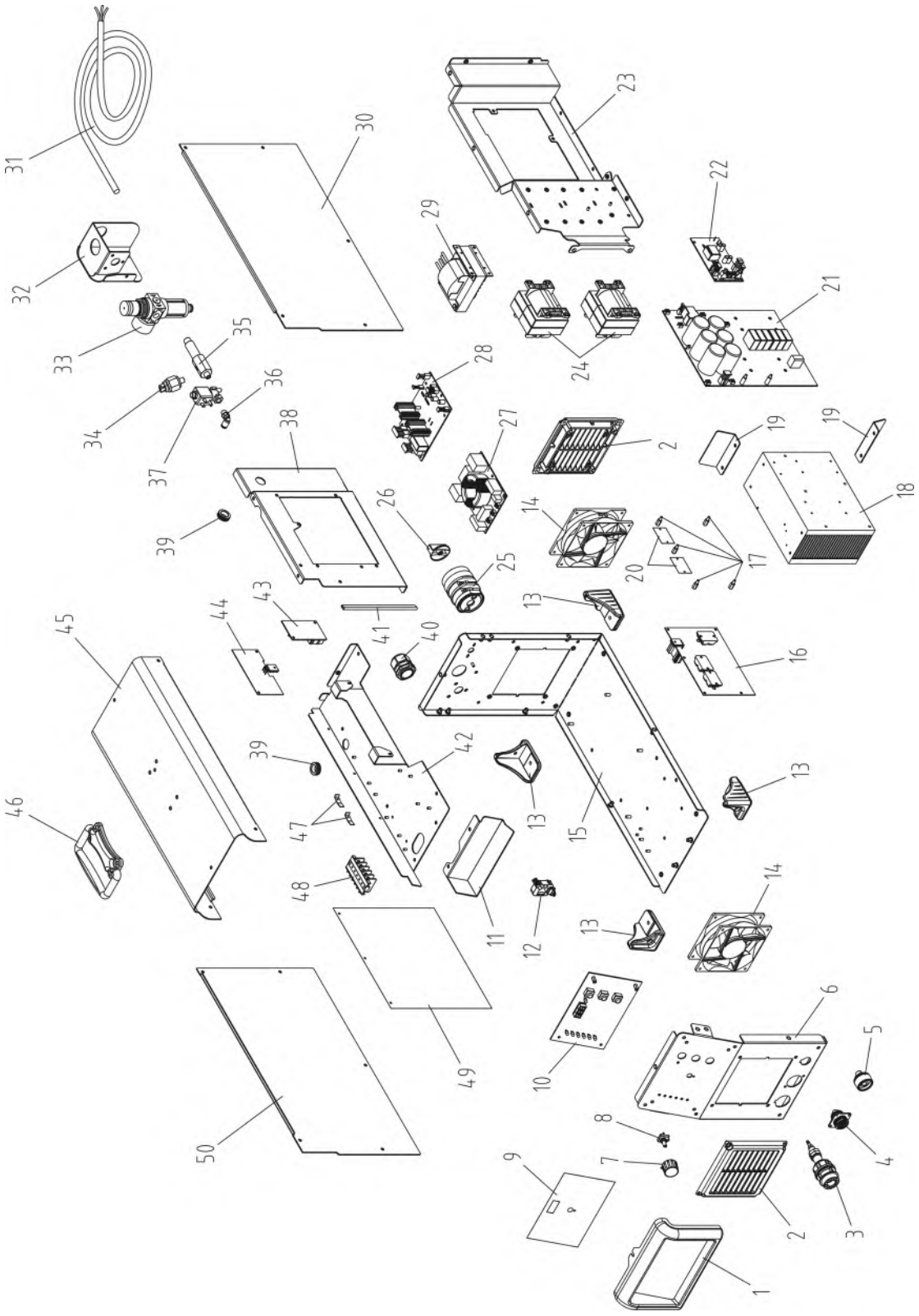
**Recommended = Quality cut manually handle (around 500 mm/min)*
Quality = Quality cut mechanized handle (less then 300mm/min)
Sever = Maximum achievable cut NOT quality

Piercing
(mm)
15

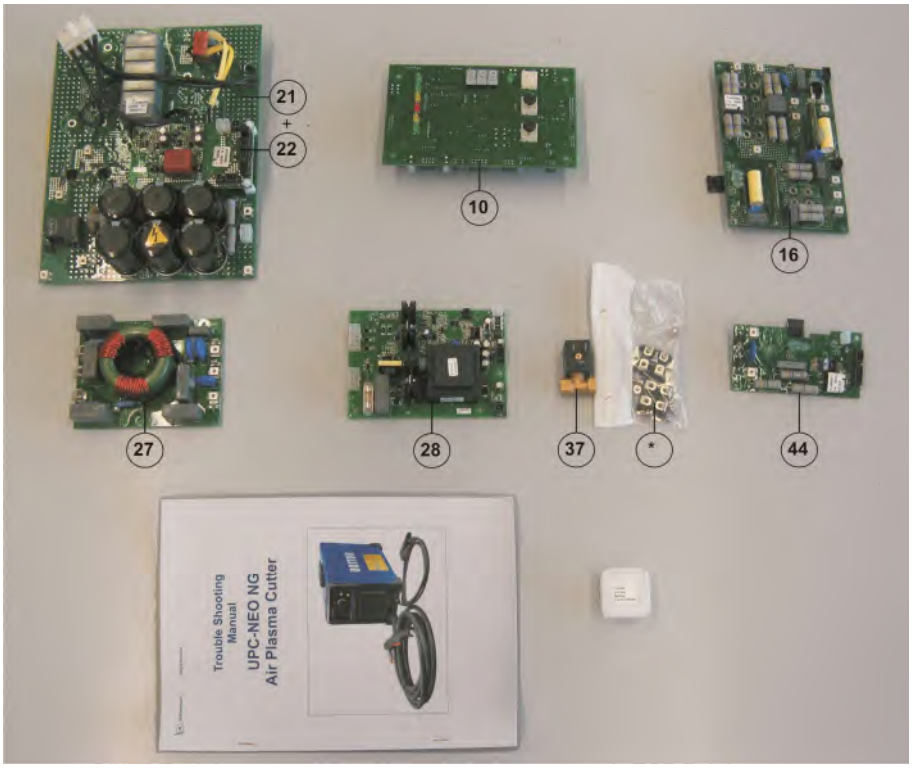
9. WIRING DIAGRAM



10. PARTS LIST



TOTAL REPAIR KIT FOR UPC-NEO NG [WSS Part No. 404208]



No.	Part Description
TOTAL REPAIR KIT FOR UPC-NEO NG consists of the following items	
10	UPC-NEO/ Front panel Logic PCB
21+22	UPC-NEO/ Primary power Inverter Group (Primary Power inverter PCB and Driver Inverter PCB)
27	UPC-NEO/ Line filter PCB
28	UPC-NEO/ Flyback PCB
37	UPC-NEO/ Solenoid valve
44	UPC-NEO/ Pilot arc PCB
16	UPC-NEO/ Secondary PCB
*	UPC-NEO/ Secondary Diodes
	UPC-NEO/ Thermal paste kit
	UPC-NEO/ Troubleshooting manual

SPARE PART LIST (ON-REQUEST BASIS)

No.	Part Description	WSS Part No.
1	UPC-NEO NG/ Plastic frame	1000001
2	UPC-NEO NG/ Grid	1000002
3	UPC-NEO NG/ Torch cable relief	1000003
5	UPC-NEO NG/ Positive socket (cut piece)	1000004
6	UPC-NEO NG/ Front panel	1000005
7	UPC-NEO NG/ Knob diameter 29	1000006
8	UPC-NEO NG/ Encoder	1000007
9	UPC-NEO NG/ Instrument plate	1000008
11	UPC-NEO NG/ Pcb protection	1000009
12	UPC-NEO NG/ Lem probe	1000010
13	UPC-NEO NG/ Feet	1000011
14	UPC-NEO NG/ Motor fan 120x120x38	1000012
15	UPC-NEO NG/ Base	1000013
17	UPC-NEO NG/ Pcb Support	1000014
18	UPC-NEO NG/ Heatsink	1000015
19	UPC-NEO NG/ Metal Deflector	1000016
20	UPC-NEO NG/ Isolator	1000017
23	UPC-NEO NG/ Support	1000018
24	UPC-NEO NG/ Power transformer	1000019
25	UPC-NEO NG/ ON/OFF Switch	1000020
26	UPC-NEO NG/ Knob	1000021
29	UPC-NEO NG/ Output inductance	1000022
30	UPC-NEO NG/ Left side panel	1000023
31	UPC-NEO NG/ Input power cable	1000024
32	UPC-NEO NG/ Air filter support	1000025
33A	UPC-NEO NG/ Air filter	1000026
33B	UPC-NEO NG/ Manometer	1000027
34	UPC-NEO NG/ Pressure switch	1000028
35	UPC-NEO NG/ Coupling	1000029
36	UPC-NEO NG/ Coupling	1000030
38	UPC-NEO NG/ Support	1000031
39	UPC-NEO NG/ Bushing	1000032
40	UPC-NEO NG/ Cable relief	1000033
41	UPC-NEO NG/ Isolator	1000034
42	UPC-NEO NG/ Support	1000035
45	UPC-NEO NG/ Cover	1000036
46	UPC-NEO NG/ Handle	1000037
47	UPC-NEO NG/ Spring	1000038
48	UPC-NEO NG/ Terminal block	1000039
49	UPC-NEO NG/ Insulating	1000040
50	UPC-NEO NG/ Rightside panel	1000041

DECLARATION OF CONFORMITY

According to
The Low Voltage Directive 2014/35/EU
The EMC Directive 2014/30/EU
The RoHS Directive 2011/65/EU
The Ecodesign Directive 2009/125/EC

Type of equipment
Plasma equipment

Type of designation
601734000L – UPC-NEO NG

Brand name or trade mark
UNITOR

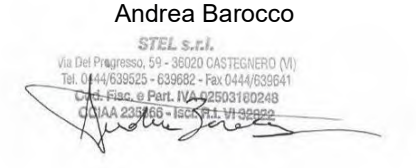
Manufacturer or his authorized representatives established within the EEA:
Name, address, phone, website:
STEL s.r.l
Via Del Progresso 59; 36020 Castegnero – Vicenza
Italy
Tel +39-0444-639525 Fax +39-0444-639682 www.stelgroup.it

The following harmonized standard in force within the EEA has been used in the design:
EN 60974-1:2018-09 Ed. 5, Arc welding equipment – Part 1: Welding power sources
EN 60974-10:2014 Ed.3, Arc welding equipment – Part 10: Electromagnetic compatibility (EMC)

Additional information: Restrictive use, Class A equipment, intended for use in locations other than residential.

By signing this document, the undersigned declares as manufacturer, or the manufacturer's authorized representative established within EEA, that the equipment in question complies with the safety requirements stated above.

Date	Signature	Position
02-02-2021	Andrea Barocco	General Manager

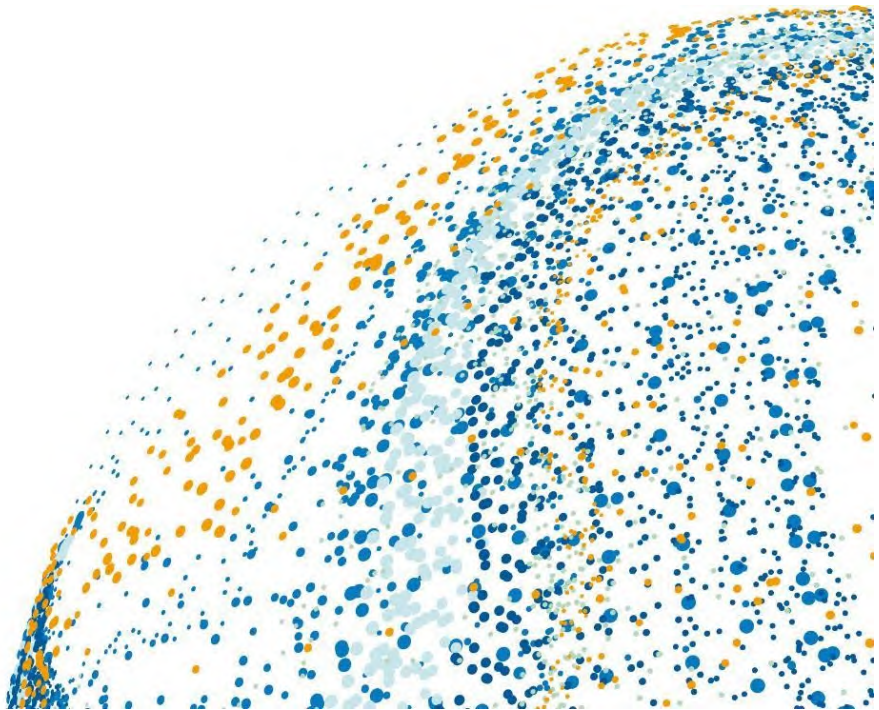


Wilhelmsen Ships Service

UNITOR by Wilhelmsen

Attention

Please use these Unitor products exclusively for the purpose indicated by WSS and only if the operator fully understands current practices and procedures. If any further information or assistance is required please contact your local WSS specialist.



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