GAP-O AUTONOMOUS GROUP

EN	**TECHNICAL INSTRUCTION MANUAL.** **PORTABLE STAND-ALONE UNIT FOR OXYGEN CUTTING**

GAP-O	Thermal lance cutting.	Ref. 78000038

⚠	BEFORE STARTING TO WORK, READ CAREFULLY THE CONTENTS OF THIS INSTRUCTION MANUAL
⚠	RESPECT SAFETY AND SELF-PROTECTION REGULATIONS AGAINST FIRE AND GAS LEAKS. USE PROTECTIVE CLOTHING AND EQUIPMENT APPROPRIATE TO THE EXISTING RISKS.
⚠	*NEVER USE* OILS OR GREASES TO GREASE OR CLEAN EQUIPMENT. SOME GASES PRODUCE EXPLOSIONS WHEN THEY COME INTO CONTACT WITH THESE SUBSTANCES.
⚠	CONSULT THE ATTACHED TORCH MANUAL ACCORDING TO THE TYPE OF AUTONOMOUS GROUP YOU HAVE PURCHASED.

EN INDEX OF TOPICS.

1. GENERAL DESCRIPTION. TECHNICAL CHARACTERISTICS.

Portable self-contained equipment for autogenous cutting with oxygen. They incorporate a trolley that enables easy and safe transport.

Equipment Overview:

GAP-O. Oxygen cutting equipment for medium performance with medium autonomy. General use in professional scrapping, demolition and heavy-gauge drilling.

TECHNICAL CHARACTERISTICS	GAP-OA Ref.78000038
Autonomy (*)	1 ÷ 8 hours
Flame temperature	4100ºC
Equipment Weight	24 Kg.
Thermal cutting lance holder	OXYGEN Ref 13000050
Pressure reducer	EN-2000 Ref 3700000 (O_2)
Safety valve (For insertion in portal)	OXYGEN Ref 76000000
Oxygen Bottle (Volume-Weight)	5 LITERS-8,5KG.
Working Pressure (Inlet)	200 bar
Maximum regulated pressure	10 bar
Type of bottles	GALA GAR
Ø Bottle	140 mm.
Bottle Height	535 mm.

Ref.780.00.038 GAP-O

HEIGHT: 835 mm.

WIDTH: 355 mm.

DEPTH: 360 mm

1.1. ACCESSORY ELEMENTS.

Ultrathermal steel electrodes Ø10x1000mm., ref. **130.10.100**

Ø	Length	Duration	m3 O2/Rod	Pressure of O2
10mm.	1000mm.	95 sg.	0,28	4,5-5 bar
10mm.	1500mm.	150 sg.	0,55	5,5-6 bar

2. TRANSPORT AND INSTALLATION.

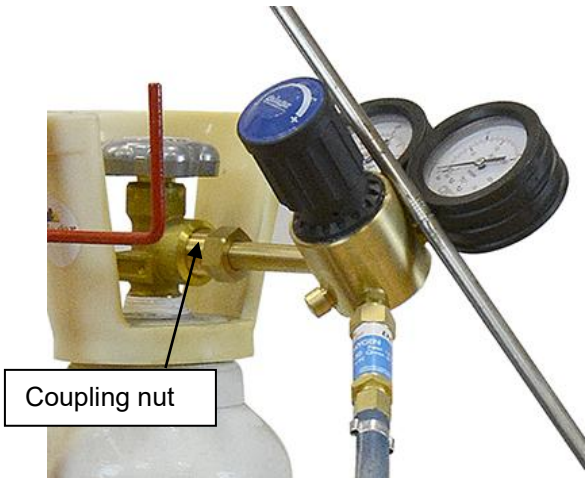
When transporting the equipment, shocks and sudden movements must be avoided, it must be done in an upright position.

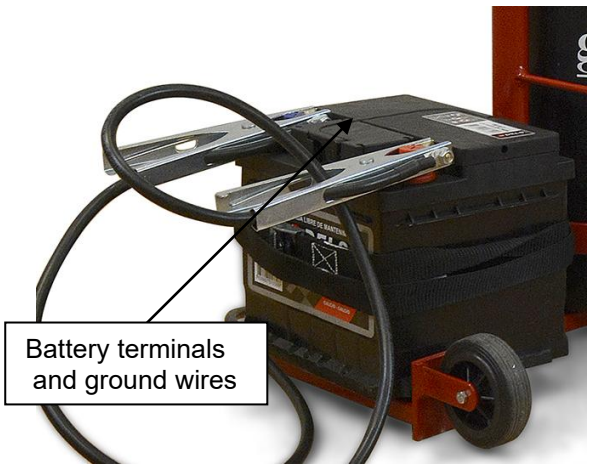
Once the equipment has been unpacked, the pressure reducer and safety valve must be assembled; and of the gas hose over the outlet of the gas. At the other end of the hose, screw the holder.

GAP-O. The oxygen pressure reducer shall be coupled to the oxygen cylinder by means of the coupling nut of the pressure reducer. The safety valve must be mounted on the regulator outlet. The blue hose will be attached to the safety valve of the pressure reducer on one side and to the carrier on the other.

The ground wires must be coupled to the two terminals of the battery so that the short circuit that ignites the gas occurs.

ASSEMBLY GAP-OA





3. COMMISSIONING.

3.1 OPERATIONAL. PREVIOUS OPERATIONS.

Before you get to work, do the following:

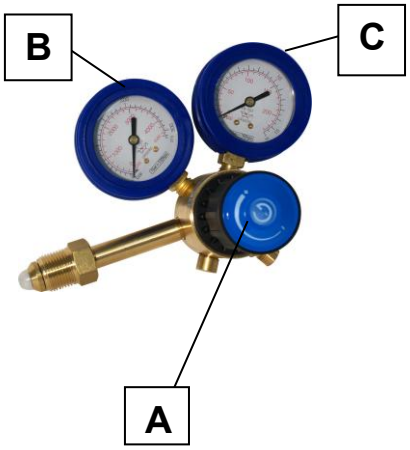
1º)- Before opening the bottle, make sure that the balance wheel (A) of the pressure reducer is loose.

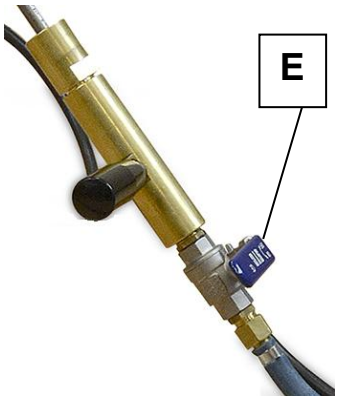
2º)- Slowly open the tap (D) of the bottle.

3ª)- The high pressure gauge (B) indicates the pressure in the cylinder. The low pressure gauge needle (C) should not oscillate and will remain at zero.

4º)- Operate the adjustment handwheel (A) of the pressure reducer to regulate the operating pressure, this pressure will be indicated on the low pressure gauge (C). It should always be borne in mind that pressure reducers supply pressure if the handwheel (A) is operated clockwise.

3.2 MANDOS DE OPERACION.





A – Pressure reducer adjustment handwheel.
B – High pressure gauge.
C – Low pressure gauge.
D – Bottle tap.
E – Oxygen Stopcock.

3.3 OPERATIONAL. IGNITION AND CUTTING PROCESS

To operate the cutting lance, perform the following operations:

1º)- Regulate the oxygen pressure between 3 and 4 bar. Open the oxygen stopcock at the same time as you bring the end of the lance closer to the copper mass on the ground.

2º)- Place a spear over the holder by tightening it with the nut. Make sure the lance is held by the clamp on the collet.

3º)- Once the lance is lit and it is flamed, increase the pressure of the oxygen to a pressure between 8 and 10 bar to make cuts.

4º)- Press the lance against the material to be cut using slight circular movements until the material is pierced.

5º)- The steel lance is pulverized by the action of oxygen and its combustion and is consumed until it is exhausted.

6º)- When the lance is about to run out, close the oxygen stopcock and replace it with a new one using the tightening nut.

7º)- Once the lance is replaced, repeat the same process sequence to cut.

4. MAINTENANCE OPERATIONS. RECOMMENDATIONS.

Before carrying out any work process, the reviews indicated in section 3.1 must be verified. of the instruction manual. The intervention on the equipment to carry out maintenance and repair operations must be carried out by specialised personnel. In all repairs, require original parts with the original GALA GAR warranty. Check out our S.A.T.

- ☞ PERIODICALLY CHECK THAT THE GROUP IS NOT LEAKING.
- ☞ CHANGE THE CONDUCTIVE TIRES PERIODICALLY EVERY 3 YEARS, STARTING WITH THE PURCHASE OF THE GROUP.
- ☞ REPLACE THE OXYGEN SAFETY VALVE EVERY 3 YEARS OF USE.

5. ANOMALIES. PROBABLE CAUSES. POSSIBLE SOLUTIONS.

SYMPTOM. ANOMALY	PROBABLE CAUSE.	POSSIBLE SOLUTION.
PRESSURE GAUGES DO NOT MARK PRESSURE	The bottle is empty.	Refill the bottle.
THE BOTTLE HAS GAS AND NO OXYGEN COMES OUT OF THE LANCE	Clogged safety valve or gate filter.	Replace safety valve and filter of the gate.
GAS SMELL	Gas leak in some element of the group.	Take the equipment out to a well-ventilated place away from ignition sources. Notify your S.A.T.

THE INTERVENTION ON THE EQUIPMENT MUST BE CARRIED OUT BY SPECIALIZED STAFF.

6. SECURITY MEASURES.

The use of this equipment requires a maximum degree of responsibility in its use and maintenance. Read chapter 4 carefully, as well as the rest of the instruction manual, it will depend on whether you use the equipment correctly.

When work stops, close the valve of the cylinder and loosen the pressure reducer adjustment handwheel.

For the benefit of your safety and that of others, remember that:
ANY PRECAUTION MAY BE INSUFFICIENT!

	The view must be protected with an approved protection system. Never wear contact lenses, they can get stuck to the cornea because of the heat emitted in the process.

		During the welding process, projections of molten material are triggered, due precautions must be taken. A fire

	extinguisher must be located in the vicinity of the workstation. Avoid the existence of flammable or explosive materials in the vicinity of the workplace. Prevent fire from sparks or slag. Use approved footwear for this type of operation.

NOTES:

FABRICACIÓN Y VENTA DE APARATOS DE SOLDADURA AUTÓGENA, ELÉCTRICA Y CONSTRUCCIONES ELECTROMECÁNICAS
MANUFACTURE AND SALE OF AUTOGENOUS, AND ELECTRIC WELDING APPLIANCES, AND ELECTROMECHANICAL CONSTRUCTIONS.
FABRICATION ET VENTE D'APPAREILS DE SOUDAGE AUTOGÈNE, ÉLECTRIQUE ET CONSTRUCTIONS ÉLECTROMÉCANIQUES

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