

GAS SAVER



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${\rm I\hspace{-1.5mm}I}$. Components catalog

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I. About Electronic Gas Saver

1. Summary

The Auto Gas Saver incorporates electronically operated valves for the On/Off switching of Gas/Oxgen or Air etc, also for the supply of gas to the Pilot Flame. And also, it is included in torch hanger unit and electronic PC Boaed etc.

2. Specification & Model

Mains voltage	220V 50/60Hz
Power consumption	20W
Control voltage	DC24V and 220V
Pressure range	1.0 Kgf/cm3 (fuel gas), 7.0 Kgf/cm3 (Oxygen gas)
Temperature range	0 ~ + 50°C
Size	120W X 120D X 230H(mm)
Weigh	3.8 KG

Models	Areas of use	
JH-1	LPG & LNG, Oxygen	
JH-1A	Acetylene, Oxygen	
JH-2	N2 / flame force adjustable	
JH-3	Cutting and Heating (higher capacity)	

3. Principle of Function

During brazing or soldering, it switches ON the internal micro switch by lifting up the torch from the torch holder. This leads to the high frequency transformer and ignition solenoid valve open. At the same time, the arc ignites at the pilot nozzle. It continued to spark for 2 - 3 seconds by the pilot flame and high pressure transformer for ignition. Then it cuts out after ignition. If putting again the torch on the torch holder after working, the torch and pilot flame are put out automatically.



4. Installation Instruction

- > Fix the saver on the stand (post) with the screws.
- > Assemble the torch hanger on the torch holder.
- Connect the torch hose into the outlet for gas/oxygen of the saver.
 (It's not allowed to use the Teflon materials)
- > Connect the saver into the inlet for gas/oxygen.
- > Check if the gas/oxygen is leaked on each connection part using the soapy water.
- > Check the gas supply pressure. (LPG 0.5kg/cm², O2 5kg/cm²)
- > Connect the main plug in 220V.
- > Turn the main switch on and check the main voltage lamp lit up on the front of saver.
- > Fasten the needle valve of torch and adjust the pilot flame lifting up the torch.
- > Ignite on the torch and adjust the torch flame.
- > If putting the torch on the torch holder again after working, gas/oxygen supply will be cut out.
- > Turn the main switch off and check the main voltage lamp out on the front of saver.
- Fasten the gas main valve.
- > In case of using vapor flux, fasten also the valves in the inlet and outlet of vapor tank.

5. General Remarks for Installation and Operation

- > It must be mounted the flashback protection in the gas inlet/outlet.
- > The gas saver must be installed at the place being well ventilated.
- Handle the gas saver with care because of using electronic circuit.
 (Any shock can damage the built-in pc-boards)
- Do not change at discretion on the circuit of gas saver without agreement with manufacturer. (Otherwise it results in faults in function or flashback)
- > Make sure that the gas cuts out after working by fastening the main valve.
- Perform the regular check for the leakage on the connection parts.
 (Give a person in charge of duty and let him check once a week)
- > Clean the pilot nozzle and torch regularly.
- Do not use at the place of high temperature and humidity. (Otherwise the circuit can be broken as well as lifetime can be reduced)



6. Trouble shooting

- > Check the main voltage lamp lit up on the front of gas saver.
- > Check the main plug is in.
- > Check the main fuse and change the fuse if necessary.
- > Check pilot flame is ignited.
- > If it does not spark, adjust the distance of igniter.
- > If it's not improved still despite of adjusting igniter distance, check the power supply of ignition transfor
- > Check it functions in normal the solenoid valves for LPG/Oxygen by turning it by hand.
- > If necessary, change the valves.
- > Check it functions in normal the solenoid valve for ignition.
- > If the gas saver does not work by falling down or shaking seriously, turn the main switch off and on ag
- > Contac After-Sales Service and ask the remedies.

7. Warranty

Fill up the purchase date and sales agency on the warranty card provided from sales agency. The product will be under warranty for 1 year since the purchase date.

Please inform the following details when asking After-Sales Service for warranty;

- Model
- Purchase date(warranty card attached)
- Customer address, contact point(Tel. No., e-mail address and Name)
- Descriptions for damage/faults/defection

Though the product is under warranty period, but the following reasons are the warranty exception;

- Damages resulted that the user does not keep operating instruction properly.
- Damages in installation
- Damages from natural calamity



8. Advantages

1) Safety

- If it's not ignired on the torch within defined time, gas feeding stops automatically by the solenoid valve.
- Gas feeding also stops automatically when the saver fall down due by carelessness or it mechanically impacted.
- There is no backfire/backward due to serial processing by means micro process control

2) Workability

- The way that special line is connected in the gas inflow is improved to flow-in at the 2 points(when using flux)
- Some inconvenient functions are not necessary anymore; for example, to put example, to put out by hanging the torch after torch ignition or end of work in case of brazing repeatedly. To adjust the flame.

3) Economy

 This Pilot Flame will be Extinguished automatically in a few seconds just after the ignition is made successfully Pilot Flame Consumes very little gas.

4) Endurance

- It's considerably increased the endurance by using PCB micro process controller. (Endurance test over 1,000,000times)
- Pilot nozzle is designed so optimized that the nozzle is not blocked by gas flux



9. Single line torch

1) Features of Single line torch

• Lightweight torch

- Less fatigue for worker
- More convenient
- Increased efficiency and productivity



Safety

- Free of backfire due to protection inside torch and check valve
- Small quantity of gas remained in the torch leads to more safety

2. Instructions of Single line torch

• Single line torch must be used with the electronic gas saver

(Lower compatible when using with other facility

- Use only LPG or LNG fuel gas
- (Please ask our technician in advance to use other kinds of gas)
- The max, length of hose is 2M
- Both of power and gas must be OFF to connect the single line torch to the saver



${\rm I\hspace{-1.5mm}I}$. Components catalog

1. Components info.







1) GAS SAVER SET



• The front



• The side











2 GAS SAVER HEAD

• The front



• The side











(4) Back flow breaker







2. SINGLE TORCH SET



6 SINGLE TORCH SET





* Option N₂ regulator The Prevention device of Oxidation







2. Type of TIP body







JHT-4	
-	
Size	M8xP1.5x90°
Length	250mm

JHT-5	
₽—	
Size	M6xP1.5x90°
Length	200mm

	JHT-6
Size	M6
Length	230mm





























3. Type of TIP







JLP-4	
type	
Size	M6x6division
Length	21mm















JLP-11





JLP-13	
6	
type	—
Size	M8x12division
Length	45m















