

THANKS FOR PURCHASING OUR PRODUCT

PULSEMIG200P

Inverter MIG/MMA Semi-auto ARC Welding Machine

Advanced Product

Operation Manual

(Read the manual carefully before installation ,operation and maintenance)

(BE SUITABLE FOR 1~ 230V)

SAFETY PRECAUTIONS

Follow these precautions carefully. Improper use of any welder can result in injury or death.

1. ONLY CONNECT WELDER TO A POWER SOURCE FOR WHICH IT WAS DESIGNED. The specification plate on the welder lists this information. When welding outdoors only use an extension cord intended for such use.
2. ONLY OPERATE WELDER IN DRY LOCATIONS and on cement or masonry floor. Keep area clean and uncluttered.
3. KEEP ALL COMBUSTIBLES AWAY FROM WORK SITE.
4. DO NOT WEAR CLOTHING THAT HAS BEEN CONTAMINATED with grease or oil.
5. KEEP CABLES DRY AND FREE FROM OIL AND GREASE and never coil around shoulders.
6. SECURE WORK WITH CLAMPS or other means; don't over reach when working.
7. NEVER STRIKE AN ARC ON A COMPRESSED GAS CYLINDER
8. DON'T ALLOW THE INSULATED PORTION OF THE ELECTRODE HOLDER TO TOUCH THE WELDING GROUND WHILE CURRENT IS FLOWING.
9. SHUT OFF POWER AND UNPLUG MACHINE WHEN REPAIRING OR ADJUSTING. Inspect before every use. Only use identical replacement part.
10. FOLLOW ALL MANUFACTURER'S RULES on operating switches and making adjustments.
11. ALWAYS WEAR PROTECTIVE CLOTHING when welding . This includes: long sleeved shirt(leather sleeves), protective apron without pockets, long protective pants and boots. When handling hot materials, wear asbestos gloves.
12. ALWAYS WEAR A WELDER'S HELMET WITH PROTECTIVE EYE PIECE when welding. Arcs may cause blindness. Wear a protective cap underneath the helmet.
13. WHEN WELDING OVERHEAD, BEWARE OF HOT METAL DROPPINGS. Always protect the head, hand, feet and body.
14. KEEP A FIRE EXTINGUISHER CLOSE BY AT ALL TIMES.
15. DO NOT EXCEED THE DUTY CYCLE OF THE MACHINE. The rated cycle of a welding machine is the percentage of a ten minute period that the machine can operate safely at a given output setting.
16. KEEP ALL CHILDREN AWAY FROM WORK AREA. When storing equipment, make sure it is out of reach of children.
17. GUARD AGAINST ELECTRIC SHOCK. DO not work when tired. Do not let body come in contact with grounded surfaces.

Prolegomenon

We do very appreciated for your selecting our products.

This kind of welding power Model PULSEMIG200P is taken foreign advanced technology to develop and manufacture the new generation inverter integrated controlling Semi-auto MIG/MAG ARC and MMA Welding machine.

It can be composed the PULSEMIG200P MIG/MMA multi function Welding system equipped with wire feeder and welding gun .It has many characteristic such as easy Arc starting ,good Arc springiness ,adjustable arc thrusting ,low splash,good welding form ,easy welding operation,wide range and electricity save.

The MIG/MMA multi function welding machine model PULSEMIG200P is advanced welding machine and it can be compared with foreign products.

This operation manual can help you for the machine installation, operation and maintenance correctly and safely.Pay attention to the points as following.

- . Installation of the power cord. Be grounded correctly.
- . Don't put sundries under the welder.Otherwise it will affect the heat released.
- . Installation for the positive and negative cable of the power output.
- . Welding voltage selection
- . Welding current selection (speed of wire feeder)
- . Selection of Arc thrusting(arc force)

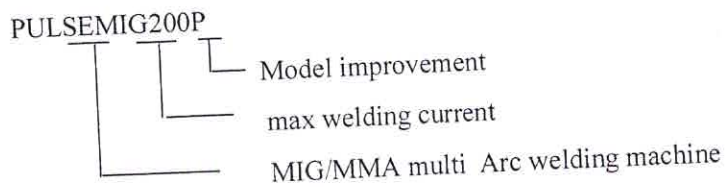
The amendment right and the explanation right of the manual belonging to my company.We have no special notice if the manual is amended.

1. Main characteristic and suitable range

This kind of welding power Model PULSEMIG200P is taken foreign advanced technology to develop and manufacture the new generation inverter integrated controlling Semi-auto MIG/MAG Arc welding machine. It makes use of the import key parts such as Siemens IGBT module of Germany, alloy magnetic core and the resume diode module of America. It has the perfect performance of high quality , good reliability, quick speed of welding current, steady welding process, low splash and good welding form . Anyway, It becomes the welding very easy.

1.1 Structure of the PULSEMIG200P multi function welding machine

a. The name of the model



b. Composing of the product

This product is composed by three parts as following

★ Power source(PULSEMIG200P)

★ welding gun

1.2 Suitable range of the PULSEMIG200P

★ Suitable material: low-carbon steel, stainless steel

★ Thickness of the material: low-carbon steel and stainless: more than 0.5mm

★ Suitable position: all positions

★ Suitable wire : ϕ 0.8, 1.0, 1.2, solid wire/flux cord wire.

1.3 Characteristic of PULSEMIG200P

★ Wide output current 20-200A: 0.8----- 40-150A

1.0-----40-200A

1.2-----80-200A

★ Steady welding process, low splash, easy control, good welding form.

★ High efficiency: 200A/24V the duty cycle is 35%

130A/20.5V the duty cycle is 100%

continuous wire feed, the max speed of wire feed is 15m/min

★ Low starting of wire feed

★ Preset the welding voltage : Preset the welding current to read the welding criterion easy.

★Adjusting the arc thrusting: Control the splash and steady arc.

★Strong resistance for the fluctuate of the electricity

2.Main technical Data :

MODEL		PULSEMIG200P	
INPUT	Voltage	1~AC230V 50Hz/60Hz	
	Rated Input current	33A	
	Rated Input power	7.6KVA	
DC MMA	No-load Voltage	70V	
	current Adjusting Range	20~175A	
	VRD	ON/OFF	
	Arcforce	0~100%	
	Arc-initiating current (HOTI)	20-175A	
	Arc-initiating time (HOTT)	0~99ms	
	Arc characteristics (SLOP)	Cc constant current mode	
		Cp constant power mode	
		1~20A slow-decrease characteristic	
	Rated Duty Cycle	35%	
MIG	No-load Voltage	70V	
	Rated input current (A)	60~200A	
	Material selection(GAS)	Fe(Co2),Fe(AR82%+Co218%), AlMg5(Ar),AlSi5 (Ar), E308(Ar98)	Fe(Co2),Fe(AR82%+Co218%), AlMg5(Ar),AlSi5 (Ar)
	Welding wire diameter (DIAM)	0.8, 1.0, 1.2	
	Operation mode (TRIG)	2T, 4T, S2T, S4T, Spot, Cpot	
	Inductance (Forc)	-99%~50%	
	Burn-back time (Burn)	-50%~50%	
	Time for spot welding (Sptt)	0.1~9.9s	
	Soft Starting Speed (StFd)	1~13m	
	Spot welding stop time (Stop)	0.1~25.5s	
	Preflow time of gas (Freg)	0~10s	
	Postflow time of gas (Post)	0.1~50s	
PULSE MIG	Rated current (A)	20~200A	
	Material selection(GAS)	AlSi5(Ar) AlMg5 (Ar)	Fe(CO2),Fe(AR82%),E308 (Ar98)
	Welding wire diameter(DIAM)	1.0, 1.2	0.8,1.0
	Operation mode (TRIG)	2T, 4T, S2T, S4T, Spot, Cpot	
	Peak current amplitude (Forc)	-99%~50%	
	Burn-back time (Burn)	-50%~50%	
	Time for spot welding (Sptt)	0.1~9.9s	
	Soft starting speed (StFd)	1~15m	
	Spot welding stop time (Stop)	0.1~25.5s	
	Preflow time of gas (Freg)	0~10s	
	Postflow time of gas (Post)	0.1~50s	

MODEL		PULSEMIG200P	
INPUT	Voltage	1xAC230V 50Hz/60Hz	
DOUBLE PULSE MIG	Rated current (A)	20~200A	
	Material selection(GAS)	AlSi5 (Ar), AlMg5 (Ar)	Fe (Co2),Fe(Ar82),E308 (Ar98)
	Welding wire diameter (DIAM)	1.0, 1.2	0.8, 1.0
	Operation mode (TRIG)	2T, 4T, S2T, S4T, Spot, Cpot	
	Inductance (Forc)	-99%~50%	
	Burn-back time (Burn)	-50%~50%	
	Time for spot welding (Sptt)	0.1~9.9s	
	Pulse frequency (Freq)	0.5~5.0H	
	Duty ratio (Duty)	20%~80%	
	Pulse amplitude (Ip-p)	5%~50%	
	Basic arc length (BU)	-50%~50%	
	Peak arc length (PU)	-50%~50%	
	Soft starting speed (StFd)	1~13m	
	Spot welding stop time (Stop)	0.1~25.5s	
	Preflow time of gas (Freg)	0~10s	
	Postflow time of gas (Post)	0.1~50s	
Power factor COS ϕ		0.73	
Efficiency		$\geq 80\%$	
Protection Class of enclosure		IP21S	
Insulation class		F	
Protection class of shell		fan cooling	

3.Function

3.1 Adjusting function for the welding voltage and welding current

3.1.1 PULSEMIG200P supply the adjusting range at MIG/MAG as following,

Welding voltage : $14V \pm 3V \sim 24V \pm 3V$ use the voltage adjusting knob

Welding current : 60A~200A use the current adjusting knob

3.1.2 PULSEMIG200P supply the adjusting range at MMA as following,

Welding current : 20A~175A use the welding current knob on the panel.

3.2 Adjusting function of the Arc thrusting

It has the important function to select the proper Arc thrusting for improvement of the welding line ,control the welding splash and the steady Arc. Normally,.

If the thrusting is low ,the arc is soft and splash .

If the thrusting is high,the arc is strong and high splash.

Use the arc thrusting continuously by the control knob on the front panel of PULSEMIG200P.

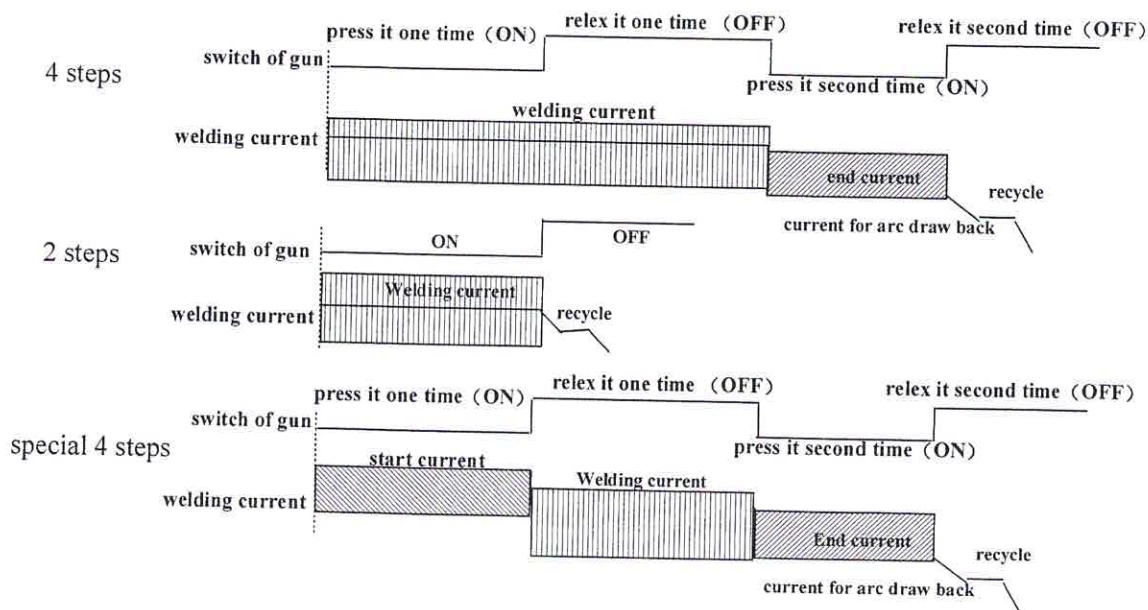
3.3 Function of arc drawing back

★ Reduce the welding criterion at the end of welding line in order to fill the short coming of

welding end.

★ Change the knob on the welding gun ,you may get two kinds of welding criterions to fit for different position and different thickness.Turn on the switch of : "Arc drawing back".the power now has the function of Arc drawing back.The voltage adjusting is used by the current knob on the front panel.

3.4 2/4 steps change(crater mode)



3.5 Function for low Arc starting

We design the function for low arc starting in order to improve the efficiency of arc starting.

3.6 Recycle function

We design the function to settle two problems.

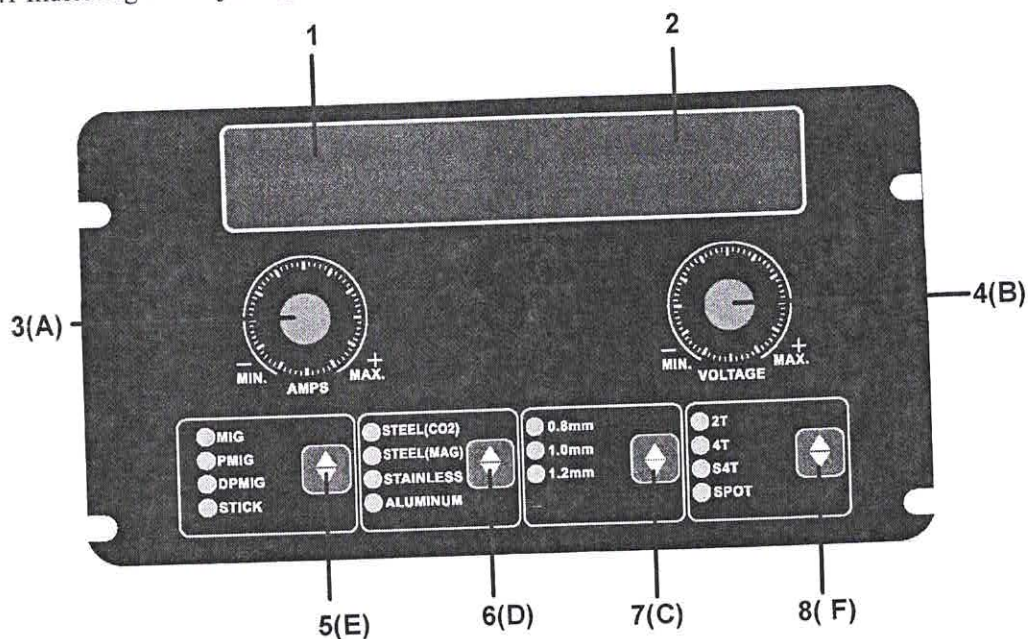
- 1) Control the diameter of the wire ball at the end of wire .
- 2) Prevent the wire into the pool after the Arc stop.

3.7 Over current function of the wire feed motor

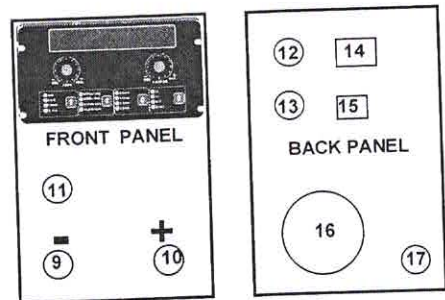
In order to protect the motor, the wire feed motor may stop rolling automatically if the current reaches 10A .When it is lower than 10A ,the motor begins rolling automatically.

4. Indicating and warning on the PULSEMIG200P control panel

4.1 Indicating and adjusting



- 1. display meter 1
- 2. display meter 2
- 3(A). AMPS Adjustment Knob
- 4(B). Voltage Adjustment Knob
- 5(E). MIG/PMIG/DPMIG/STICK switch
- 6(D). Material selector
- 7(C). wire diameter selector
- 8(F). 2T/4T/S4T/SPOT switch



- 9.output "-" 10.output "+" 11.Welding torch 12.power supply 13.argon inlet
- 14.power switch 15.No use 12.fan 13.safety earthing column

note :3(A)= Knob A,4(B)=Knob B

Description of Operation Panel Functions

This welding machine has two kinds of operation interfaces: current setting and parameter setting.
Current setting interface

The welding machine will automatically enter the current setting interface after starting up, and will also automatically enter the current setting interface during welding.

(1) Current and voltage adjustment

Knob 3(A) is used to adjust current, and Knob 4(B) is used to adjust voltage. There are two modes to display the set voltage: percentage and voltage value. Press Knob B to switch the two display modes. 100% represents the difference from the standard voltage; 0% represents the standard voltage; 10 % means that the voltage is 10 % higher than the standard voltage, and so on.

(2) Wire inspection

Press Knob 3(A) to start wire inspection, and gradually increase the speed to the set value.

(3) Gas detection

Press the Knob B to start gas detection, and loose to stop.

Parameter setting interface

Press and hold Knob A and Knob B simultaneously in the current setting interface to enter the parameter setting interface. Press any button in this interface to return to the current setting interface. Other parameters can also be adjusted in this interface: press Knob A to select parameters, and Knob B to adjust parameter values.

(4) Select welding mode :5(E)

As soon as you enter the parameter setting interface, the current welding mode will be displayed. Use Key E to adjust the welding mode. See Table-1 for various welding modes. This welding machine may supports up to 14 welding modes, depending on the specifications of the product ordered by the user. Users can also purchase passwords later to add welding modes.

Table-1

note: The funtion may be different depending on the machine.

No	Code	Abbreviation	Name of welding mode
1	FastPulse	FMIG	High-speed pulse gas shielded arc welding
2	PulseMIG	PMIG	Pulse gas shielded arc welding
3	FastTwin	Ftwi	High-speed dual-pulse gas shielded arc welding
4	TwinPulse	Twin	Dual-pulse gas shielded arc welding
5	FastArc	Farc	High-speed gas shielded arc welding
6	MIG/MAG	YMIG	Gas shielded arc welding
7	FastUp	F-UP	High-speed internal welding
8	MMA Mode	MMA	Coating manual welding
9	FastRoot	Root	High-speed root welding
10	TIG Mode	TIG	DC argon arc welding (pulling and striking arc)
11	FastCold	Cold	High-speed cold welding
12	PulseTIG	PTIG	Pulsed argon arc welding
13	SYNC MIG	MIG	Unitary gas shielded arc welding
14	CarbonArc	Carc	Carbon arc air gouging

(5) Select welding materials: 6(D)

When the welding mode is displayed, adjust the left knob clockwise to display the current welding material, and press Key D to adjust the welding material. See Table-2 for various welding materials. This welding machine supports up to 19 welding modes, depending on the specifications of the product ordered by the user. Users can purchase passwords to add welding materials.

(6) Select wire diameter: 7(C)

When the welding material is displayed, adjust Knob A clockwise to display the current wire diameter, e.g. "SIZE 1.0"; press Key C to adjust the wire diameter.

note: The function may be different depending on the machine.

Table-2

Code	Abbreviation	Name of welding mode
Fe CO2	FeCO	Carbon steel Co2
Fe Ar82	FeA8	Carbon steel Ar 82%+CO2 18%
Fe Ar92	FeA9	Carbon steel Ar 92%+CO2 8%
Al Ar	Al	Pure aluminium Ar
AlMg4.5Ar	AlM4	Aluminum-magnesium welding wire (ER 5183) Ar
AlMg5 Ar	AlMg	Aluminum-magnesium welding wire (ER 5356) Ar
AlSi5 Ar	AlSi	Aluminium-silicon welding wire (ER 4043) Ar
CuSi3 Ar	CuSi	Silicon-bronze welding wire Ar
CuAl8 Ar	CuAl	Aluminum-bronze welding wire Ar
CuSiAr98	CuS9	Silicon-bronze welding wire Ar 98%+CO2 2%
CuAlAr98	CuA9	Aluminum-bronze welding wire Ar 98%+CO2 2%
E308Ar98	E308	Stainless steel welding wire (ER 308) Ar 98%+CO2 2%
E316Ar98	E316	Stainless steel welding wire (ER 316) Ar 98%+CO2 2%
RutilFlux	Ruti	Acid flux-cored wire Ar 82%+CO2 18%
BasicFlux	Basi	Basic flux-cored wire Ar 82%+CO2 18%
MetalFlux	Meta	Iron dust flux-cored wire Ar 82%+CO2 18%
CrNiFlux	CrNi	Stainless steel welding wire Ar 82%+CO2 18%
ER2319Ar	2319	Aluminum-copper welding wire Ar
FeCO2 09	Fe09	Carbon steel 0.9mm CO2

(7) Adjust other parameters

Other parameters can also be adjusted in this way: press Knob A to select parameters, and Knob B to adjust parameter values. See parameter codes in Table 3.

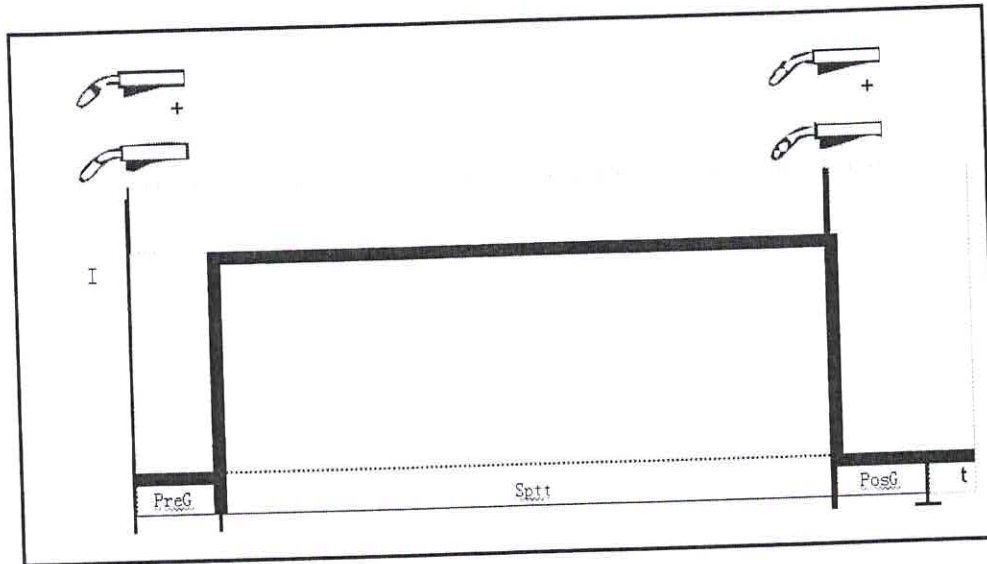
note: The function may be different depending on the machine.

Table-3

Abbreviation	Code	Name of welding mode
Size	Welding wire diameter	Support 3 wire diameters: 0.8, 1.0, and 1.2
Mode	Operation Mode	Support 6 gun switch modes: 2T, 4T, S4T, S2T, spot welding and continuous spot welding
EndI	Extinguishing arc current	The function is to fill the arc crater, for S4T and S2T
HotI	Initial current	The function is to increase the heat input at the beginning of welding, for S4T and S2T
Burn	Burn-back time	It is used to adjust the effect of small ball cutting at the end of welding.
Hott	Initial time	The initial current duration is only for S2T.
Endt	Extinguishing time	Extinguishing arc current duration is only for S2T.
Slop	Transition time	The time for switching of the two currents (e.g. the initial current and the welding current); characteristic selection for manual welding: CC constant current, CP constant power (for cellulose), 1 - 20 slow descent
Sptt	Time for spot welding	Duration of spot welding
Freq	Pulse frequency	Frequency of dual-pulse gas shielded, high-speed dual-pulse gas shielded and high-speed vertical position welding
Duty	Duty ratio	Duty ratio of dual-pulse gas shielded, high-speed dual-pulse gas shielded and high-speed vertical position welding
Ip-p	Pulse amplitude	Peak current amplitude of dual-pulse gas shielded and high-speed dual-pulse gas shielded welding
HotU	Initial arc length	Initial current length
PU	Peak arc length	Peak current arc length
BU	Basic arc length	Background current arc length
StFd	soft starting	Soft start feeding rate
VRD	Low/no-load	Manual welding VRD switch
Stop	Stop time	Time interval to stop welding during continuous spot welding
Preg	Preflow of gas	Gas Preflow Time
Post	Postflow of gas	Gas Postflow Time
EndU	Extinguishing arc length	Extinguishing arc length
FORC	Arc force	Gas shielded welding refers to inductance; pulse gas shielded arc welding refers to the peak current amplitude; manual welding refers to arc force

Operation Mode :8(F)

SPOT (spot welding) operating instructions: Press the gun switch to start gas preflow to arc striking to the set current, wait for the spot welding time for arc extinguishing and gas postflow. If you release the gun switch before the spot welding time, the arc will be extinguished immediately and gas will post flow.



Spot Welding Operation Mode

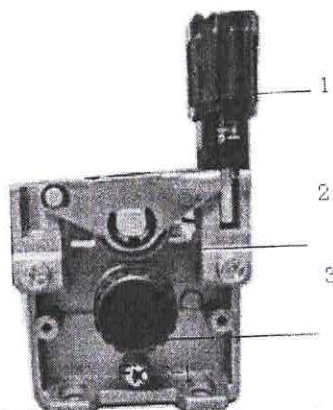
Preg in the figure is the gas preflow time, Posg is the gas postflow time, HotI is the initial current, EndI is the extinguishing current, WeldI is the setting current, Hott is the initial time, Endt is the extinguishing time, SLOP is the gradual change time, and Sptt is the spot welding time.

CPOT (continuous spot welding) operating instructions: press the gun switch and the welding machine will start intermittent spot welding. The spot welding time is Sptt and the intermediate stop time is STOP. Release the gun switch to stop welding.

Error display

Characters will be displayed directly in case of errors. There are only two kinds of displays: 1 overheating: Over Temp; and 2 over time: Over Time

Wire feeder mechanism



- (1) Pressure handle
- (2) Wire pressing wheel
- (3) Wire feeding wheel

Specification and installation of wire feeding wheel

The wire feeding pressure scale is located on the pressure handle, and the pressure relations are different for welding wires made of different materials and with different diameters, as shown in the Table 6-2 and Figure 6-2. The values in the table are for reference only, and the actual pressure adjustment specifications must be adjusted according to the welding torch cable length, welding torch type, wire feeding condition and welding wire type.

Type 1 is suitable for the hard welding wire, such as those made of solid cored carbon steel and stainless steel.

Type 2 is suitable for the hard welding wire, such as those made of solid cored carbon steel and stainless steel.

Type 3 is suitable for the flux cored welding wire.

Use the pressure handle to adjust the wire feeding wheel pressure, so as to feed the welding wire into the conduit and to allow the welding wire with a little braking force while coming out of the contact tube, which will avoid slipping on the wire feeding wheel.

Note: The excessive pressure will make the welding wire flattened and the coating damaged, and will result in the rapid wear of wire feeding wheel and the increased resistance of wire feeding.

Table 6-2

Welding wire diameter Wire feeding wheel type Pressure scale	ϕ 0.8	ϕ 1.0	ϕ 1.2
1	3	3	2.5
2	1.5	1.5	1.5
3	—	—	2

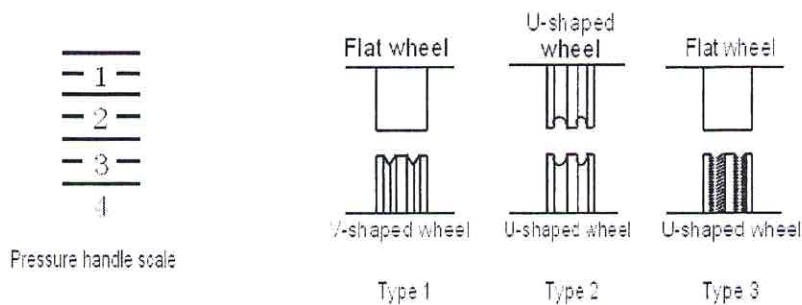


Fig6-2

Braking and Adjustment of Wire Reel

Use the screw wrench to turn the braking force control screw (1) to adjust the braking force (as shown in Fig. 6-3); the braking force should be moderate. Adjust the braking force to an appropriate level so that the welding wire on the wire reel is not too loose, thus preventing the welding wire from scattering when the wire reel stops; the braking force cannot be too large, otherwise the motor load will be increased.

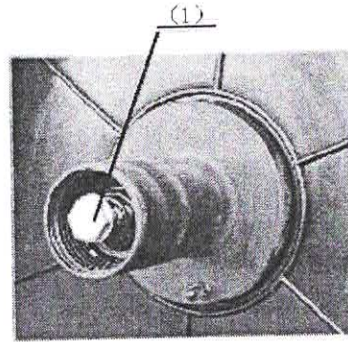
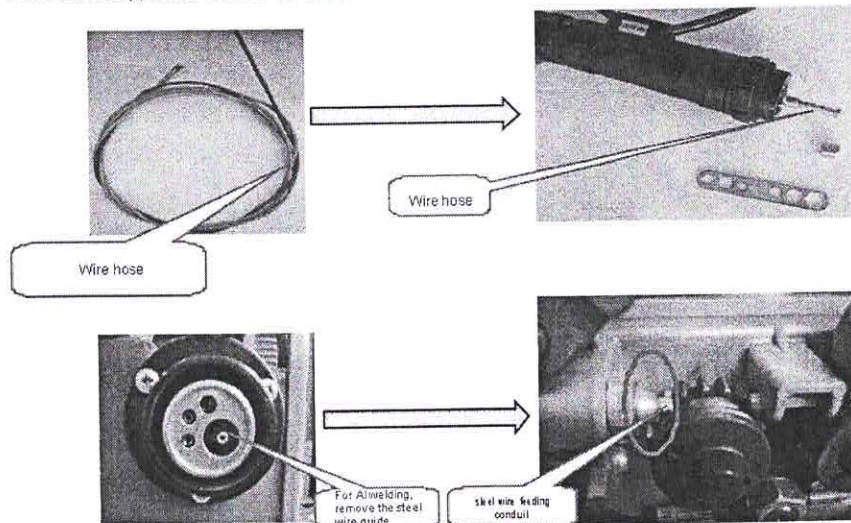


Fig6-3

Installation of Gas Shielded Arc Welding Torch

In order to ensure the smooth welding progress, please make sure that the wire feeding conduit and contact tube agree with the model of the welding torch. The wire feeding conduit is compatible with the diameter of all welding wires used and the type of welding wire. The wired hose is suitable for the hard welding wire, such as those made of solid cored carbon steel and stainless steel. The Teflon hose is suitable for the soft wire, such as those made of aluminum and its alloys and those made of copper and its alloys. When the wire feeding conduit is too tight or too loose, the resistance of wire feeding will be increased and thus the wire feeding will be unstable. Tighten the torch's quick connector to ensure there is no voltage drop on the contact surface. The pressure drop caused by loose contact will make the torch and the wire feeder heated.

The wire feeding hose made of steel wire and its installation are shown in the figure below:



5.Safe and installation caution

Read the safe caution before installation and operation .It come down to the high voltage electricity,electric Arc and high temperature splash.So keep the safe regulation ,operate the machine properly,avoid the danger of electricity and high temperature arc.

- ★ Check if any damage ot out looking ot the welder.
- ★ Confirm the capacity:more than 50A.
- ★ Power source is grounded,diagram 6
- ★ Prohibit the combustible goods in the welding locale.
- ★ There is fire proof measure in the welding locale with favorable ventilated condition.
- ★ There is smoke discharge system if the welding is operated inside the house in order to keep the safety of workers.
- ★The welding operator must be professional workers.
- ★ The operator must be fitted with safe accessories .Such as safe shoes,gloves,cover,welding make and welding dress etc.

6. Explanation of installation

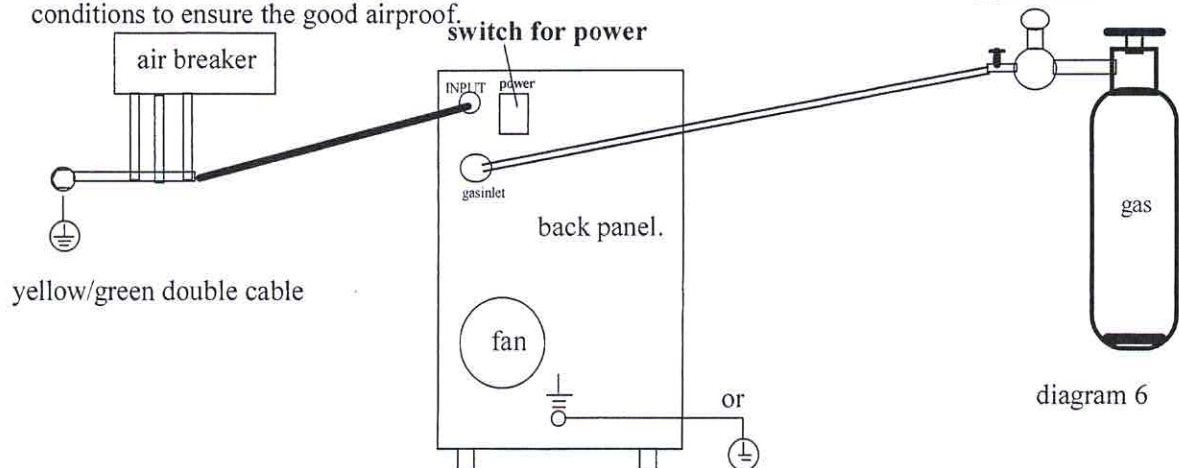
6.1 MIG/MAG welding

put the switch "5(E)" into "PMIG" or "DPMIG" or "MIG"

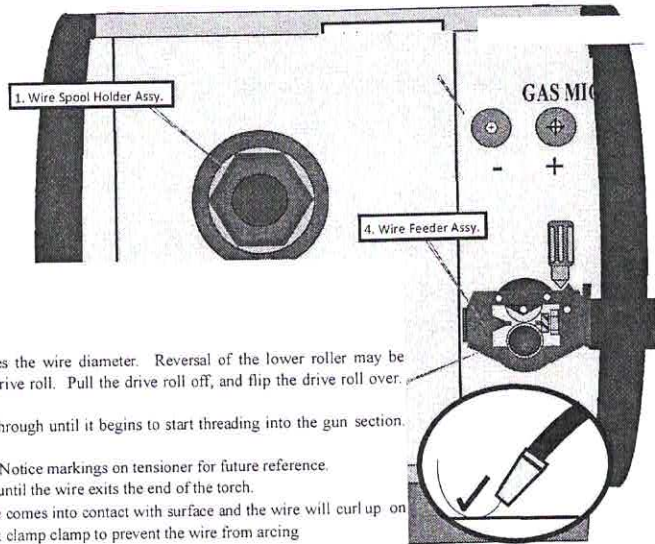
- ★ Check the products according to the packing list when open the package.
- ★Grounded protection.Attached the diagram 6

The power source is 230Vac/(50~60Hz) .The yellow/green double cable is grounding cable.Be sure to connect the yellow/green double cable into the grounding connection in the welding locale . Another way is selecting the M8 bolt on the back on the machine and connect the grounding as the diagram as following.

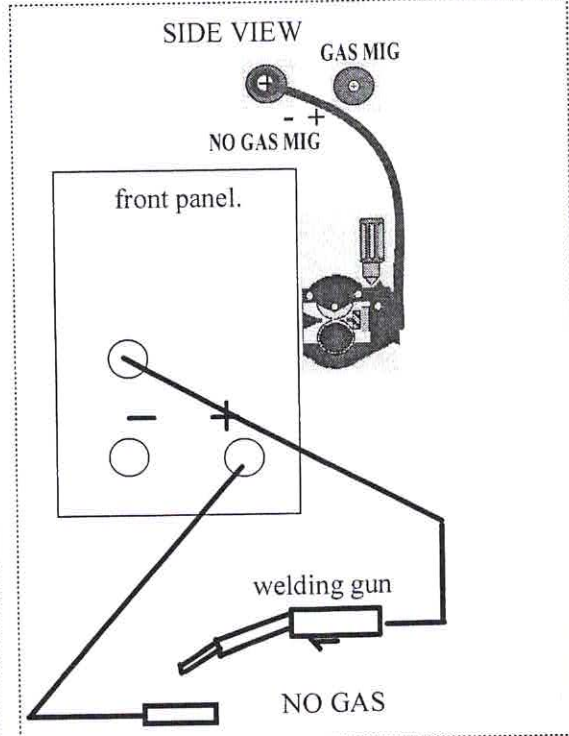
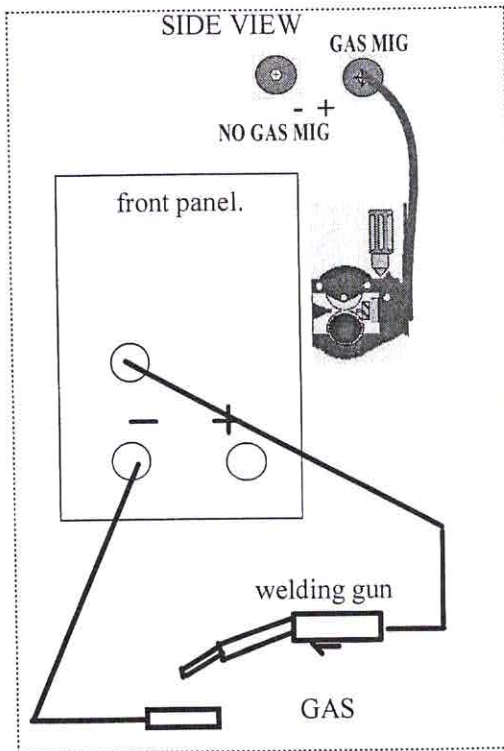
- ★Install the welding gun on the front panel and screw the welding gun ,then lock the bolt.
- ★ Connect the gas pipe with the gas bottle according to the locale conditions. Check the air proof flow meter conditions to ensure the good airproof.



- TO INSTALL WIRE:
1. Loosen top idler tensioner, rotating counter-clockwise
 2. Flip tensioners down, releasing top drive rolls.
 3. Raise top drive rolls.
 4. Inspect the drive roll to make sure that the groove size matches the wire diameter. Reversal of the lower roller may be necessary. To reverse the roller, remove the thumb screw securing the drive roll. Pull the drive roll off, and flip the drive roll over. Reassemble and tighten roller. If larger roller is needed, contact Everlast.
 5. Thread straightened wire over grooves in lower drive roll, fully through until it begins to start threading into the gun section. Lower upper drive rolls onto lower drive roll, keeping wire in the groove.
 6. Raise tensioner back into place. Tighten slightly so wire will feed. Notice markings on tensioner for future reference.
 7. Hold torch straight out as possible. Press gun trigger to feed wire until the wire exits the end of the torch.
 8. Adjust tensioner clockwise until drive rolls will not slip when wire comes into contact with surface and the wire will curl up on end. Remember to keep wire away from metal that is attached to the work clamp clamp to prevent the wire from arcing



SIDE VIEW



6.2 Stick welding

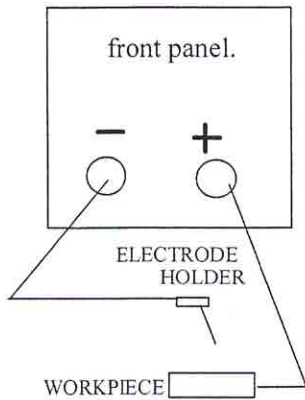
★ put the switch "5(E)" STICK/MIG/PMIG/DPMIG SWITCH into "STICK"



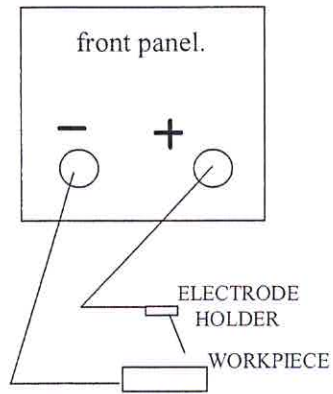
★ Selecting empiric formula: $I=40*d$, d is dia. of the electrode.

Notice positive and negative connection during welding.

A positive connection



B negative connection



7. Operatings

- ★ "ON" and "OFF" indicating switch on the real panel.
- ★ Preset the welding voltage ,welding current(wire speed).
- ★ Confirm the specification of the wire feed hose

- ★ Confirm the specification of nib base .It affects the extended length of the wire .
- ★ Confirm the specification of nib. It affects the electric resistance.
- ★ Confirm the wire slot of the roller is suitable for the diameter of the wire. Different diameter of wire select different wire slot. Otherwise it affects the wire feed result.

- ★ Confirm the pressure of the roller to avoid slipping.

If the pressure is not enough ,the wire feed is slow speed.

If the pressure is too much ,the wire will be anamorphic.

The wire feeder can not work properly.

- ★ Confirm the flow of the gas and air proof.

We suggest the gas flow to be "L" more than $10D$ (D -diameter of wire).If the selection is not proper,it also affects the welding quality.When using the CO_2 gas,please confirm if the heating power works properly or not .

- ★ Straight the hose of welding gun as much as possible .The bending radius can not be less than 200mm.Otherwise it affects the wire feeder.

7.1 working process

press the switch of the gun ,the normal welding begins.Relax the switch,the arc stops.

7.2 Gas inspection

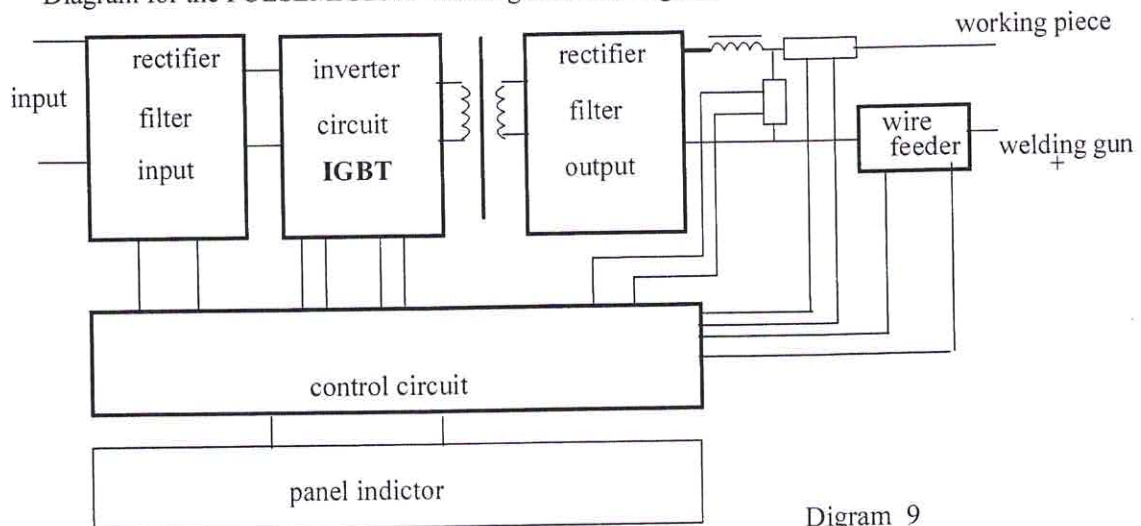
Press the switch of the gun before the wire roller is firmed,preset the gas flow through the meter to check if it is gas proof.Otherwise ,it affects the welding result.

7.3Rip into the wire

Select the specification of the wire ,materials according to the craft requirements.Firm the bolt and press the button on the front panel.The speed of ripping wire can be controlled by the welding current knob.Unload the nib if necessary and load it again after the wire is out.

8. working elements

Diagram for the PULSEMIG200P working elements.Digram9



Digram 9

Input AC230V,rectifier and filter it into 310VDC.

Control the IGBT by PWM+PFM,inverter the 310VDC to 20KHZ AC.

High frequency transformer pass the power by insulation and voltage reducing with high efficiency.

Output the second rectifier and the second filter.Output the required welding current and voltage.

9.Maintenance

Check the safety measure be efficiency.

Get rid of the dust for the power source (For example,dry compressed air)

Before operating,,Check the "workpiece" "torch"connectors of the power panel if they are relaxed

.Check the connection between the grounding cable and plug if they are relaxed,(If relaxed,the serious heating will damage the quick connectors)

.Check the fan if it works regularly.charge it if it is trouble.

Check the insulation and breakage of the input power cord

.Change it in time to ensure the safety.

check if there is any noisy for the wire feed motor.

Check the abrasion of the wire feed hose.Get rid of the dust inside of the hose.(1~2times /40kg wire)

.Get rid of the splash inside the nib regularly to ensure the guaranteed result by the gas blow.

Check the abrasion of the nib.Change it in time.(suggest 5~10pieces nibs/40kg wire).

10.Troubles and Remedy

Troubles and remedy and remedy are as the form 10 as following

Troubles	Cause	Remedy
1.Fan not works properly	1.the fan line lose 2.Fan breakage	1.Connect the line 2.Change the fan
2.No indicating on the front panel	1.the power line lose 2.Indicating light broken 3.IGBT broken	1.Check the power,Connect the line 2.Change it 3.Contact with the namufacturer .
3.Over heating light on	1.aeration is not good 2.The temperature is too high 3.over-load use 4.Thermostat broken 5.Control plate broken	1.get rid of the bar 0.5m around 2.Reduce the temperature 3.Reduce the use loading 4.Change the thermostat(JUC-OF) 5.Check and change the control plate

4.Wire feeder not work (welding current not adjustable)	1.the wire blocked 2.the drive circuit broken 3.other reasons	1.Check the gun 2.Change the control panel 3.Contact with the manufacturer
5.Welding Voltage not adjustable	1.Potentiometer line fall down 2.Potentiometer broken 3.The circuit broken	1.Connect the lines 2.Change it 3.Change the control pcb
6.Welding stops, and warning light is on	Self-protection has engaged 1 overheating: Over Temp; 2 over time: Over Time	1.over-temperature, 2.rest

11.Transportation,storage and environment conditions

★The package (Wooden cases or cartons)of the manufacturer is suitable for air ,sea ,railway and highway (three class more) transportation..

★Pay attention to the indication on the package during the transportation.

★ the environment conditions

A Temperature range operating 0℃ ~ 40℃
 transportation -25℃ ~+55℃

B The air humidity 40℃ 50%RH
 20℃ 90%RH

C The dust ,acid and causticity gas in the environment must be lower than the normal level (The welding process produced not included)

D Rain proof when it is used outside.

12.Quality Guaranteed

If you have any problem of the quality ,please contact us in time .We generally have one year quality guarantee on condition that you operate or transport the machine properly according to the operation manual.

WARNING	<ul style="list-style-type: none"> Do not touch electrically live parts or electrode with skin or wet clothing. Insulate yourself from work and ground. 	<ul style="list-style-type: none"> Keep flammable materials away. 	<ul style="list-style-type: none"> Wear eye, ear and body protection.
Spanish AVISO DE PRECAUCION	<ul style="list-style-type: none"> No toque las partes o los electrodos bajo carga con la piel o ropa mojada. Aíselese del trabajo y de la tierra. 	<ul style="list-style-type: none"> Mantenga el material combustible fuera del área de trabajo. 	<ul style="list-style-type: none"> Protéjase los ojos, los oídos y el cuerpo.
French ATTENTION	<ul style="list-style-type: none"> Ne laissez ni la peau ni des vêtements mouillés entrer en contact avec des pièces sous tension. Isolez-vous du travail et de la terre. 	<ul style="list-style-type: none"> Gardez à l'écart de tout matériel inflammable. 	<ul style="list-style-type: none"> Protégez vos yeux, vos oreilles et votre corps.
German WARNUNG	<ul style="list-style-type: none"> Berühren Sie keine stromführenden Teile oder Elektroden mit Ihrem Körper oder leichter Kleidung! Isolieren Sie sich von den Elektroden und dem Erdboden! 	<ul style="list-style-type: none"> Entfernen Sie brennbares Material! 	<ul style="list-style-type: none"> Tragen Sie Augen-, Ohren- und Körperschutz!
Portuguese ATENÇÃO	<ul style="list-style-type: none"> Não toque partes elétricas e electrodos com a pele ou roupa molhada. Isole-se da peça e terra. 	<ul style="list-style-type: none"> Mantenha inflamáveis bem guardados. 	<ul style="list-style-type: none"> Use proteção para a vista, ouvido e corpo.
Japanese 注意事項	<ul style="list-style-type: none"> 通電中の電気部品、又は溶材にヒフやぬれた布で触れないこと。 施工物やアースから身体が絶縁されている様にして下さい。 	<ul style="list-style-type: none"> 燃えやすいものの側での溶接作業は絶対にはなりません。 	<ul style="list-style-type: none"> 目、耳及び身体に保護具をして下さい。
Chinese 警告	<ul style="list-style-type: none"> 皮肤或湿衣物切勿接触带电部件及焊缝。 使你自已与地面和工件绝缘。 	<ul style="list-style-type: none"> 把一切易燃物品移离工作场所。 	<ul style="list-style-type: none"> 佩戴眼、耳及身体劳动保护用具。
Korean 위험	<ul style="list-style-type: none"> 전도체나 용접봉을 젖은 헝겊 또는 피부로 절대 접촉하지 마십시오. 모재와 접지를 접촉하지 마십시오. 	<ul style="list-style-type: none"> 인화성 물질을 접근시키지 마십시오. 	<ul style="list-style-type: none"> 눈, 귀와 몸에 보호장구를 착용하십시오.
Arabic تحذير	<ul style="list-style-type: none"> لا تلمس الأجزاء التي يسري فيها التيار الكهربائي أو الأقطاب بجهد الجسم أو بالمعازل المبللة بالماء. ضع عازلاً على جسمك خلال العمل. 	<ul style="list-style-type: none"> ضع المواد القابلة للاشتعال في مكان بعيد. 	<ul style="list-style-type: none"> ضع أدوات وملابس واقية على عينيك وأذنيك وجسمك.

READ AND UNDERSTAND THE MANUFACTURER'S INSTRUCTION FOR THIS EQUIPMENT AND THE CONSUMABLES TO BE USED AND FOLLOW YOUR EMPLOYER'S SAFETY PRACTICES.

SE RECOMIENDA LEER Y ENTENDER LAS INSTRUCCIONES DEL FABRICANTE PARA EL USO DE ESTE EQUIPO Y LOS CONSUMIBLES QUE VA A UTILIZAR, SIGA LAS MEDIDAS DE SEGURIDAD DE SU SUPERVISOR.

LISEZ ET COMPRENEZ LES INSTRUCTIONS DU FABRICANT EN CE QUI REGARDE CET EQUIPMENT ET LES PRODUITS A ETRE EMPLOYES ET SUIVEZ LES PROCEDURES DE SECURITE DE VOTRE EMPLOYEUR.

LESEN SIE UND BEFOLGEN SIE DIE BETRIEBSANLEITUNG DER ANLAGE UND DEN ELEKTRODENEINSATZ DES HERSTELLERS. DIE UNFALLVERHÜTUNGSVORSCHRIFTEN DES ARBEITGEBERS SIND EBENFALLS ZU BEACHTEN.

			
<ul style="list-style-type: none"> ● Keep your head out of fumes. ● Use ventilation or exhaust to remove fumes from breathing zone. 	<ul style="list-style-type: none"> ● Turn power off before servicing. 	<ul style="list-style-type: none"> ● Do not operate with panel open or guards off. 	WARNING
<ul style="list-style-type: none"> ● Los humos fuera de la zona de respiración. ● Mantenga la cabeza fuera de los humos. Utilice ventilación o aspiración para gases. 	<ul style="list-style-type: none"> ● Desconectar el cable de alimentación de poder de la máquina antes de iniciar cualquier servicio. 	<ul style="list-style-type: none"> ● No operar con panel abierto o guardas quitadas. 	Spanish AVISO DE PRECAUCION
<ul style="list-style-type: none"> ● Gardez la tête à l'écart des fumées. ● Utilisez un ventilateur ou un aspirateur pour ôter les fumées des zones de travail. 	<ul style="list-style-type: none"> ● Débranchez le courant avant l'entretien. 	<ul style="list-style-type: none"> ● N'opérez pas avec les panneaux ouverts ou avec les dispositifs de protection enlevés. 	French ATTENTION
<ul style="list-style-type: none"> ● Vermeiden Sie das Einatmen von Schweißrauch! ● Sorgen Sie für gute Be- und Entlüftung des Arbeitsplatzes! 	<ul style="list-style-type: none"> ● Strom vor Wartungsarbeiten abschalten! (Netzstrom völlig öffnen; Maschine anhalten!) 	<ul style="list-style-type: none"> ● Anlage nie ohne Schutzgehäuse oder Innenschutzverkleidung in Betrieb setzen! 	German WARNUNG
<ul style="list-style-type: none"> ● Mantenha seu rosto da fumaça. ● Use ventilação e exaustão para remover fumo da zona respiratória. 	<ul style="list-style-type: none"> ● Não opere com as tampas removidas. ● Desligue a corrente antes de fazer serviço. ● Não toque as partes elétricas nuas. 	<ul style="list-style-type: none"> ● Mantenha-se afastado das partes moventes. ● Não opere com os painéis abertos ou guardas removidas. 	Portuguese ATENÇÃO
<ul style="list-style-type: none"> ● ヒュームから頭を離すようにして下さい。 ● 換気や排煙に十分留意して下さい。 	<ul style="list-style-type: none"> ● メンテナンス・サービスに取りかかる際には、まず電源スイッチを必ず切して下さい。 	<ul style="list-style-type: none"> ● パネルやカバーを取り外したまま機械操作をしないで下さい。 	Japanese 注意事項
<ul style="list-style-type: none"> ● 頭部遠離煙霧。 ● 在呼吸區使用通風或排風器除煙。 	<ul style="list-style-type: none"> ● 維修前切斷電源。 	<ul style="list-style-type: none"> ● 儀表板打開或沒有安全罩時不準作業。 	Chinese 警告
<ul style="list-style-type: none"> ● 얼굴로부터 용접가스를 멀리하십시오. ● 호흡지역으로부터 용접가스를 제거하기 위해 가스제거기나 통풍기를 사용하십시오. 	<ul style="list-style-type: none"> ● 보수전에 전원을 차단하십시오. 	<ul style="list-style-type: none"> ● 판넬이 열린 상태로 작동치 마십시오. 	Korean 위험
<ul style="list-style-type: none"> ● أبعد رأسك بعيداً عن الدخان. ● استعمل التهوية أو جهاز ضغط الدخان للخارج لكي تبعد الدخان عن المنطقة التي تتنفس فيها. 	<ul style="list-style-type: none"> ● اقطع التيار الكهربائي قبل القيام بأية صيانة. 	<ul style="list-style-type: none"> ● لا تشغيل هذا الجهاز إذا كانت الاغطية الحديدية الواقية ليست عليه. 	Arabic تحذير

LEIA E COMPREENDA AS INSTRUÇÕES DO FABRICANTE PARA ESTE EQUIPAMENTO E AS PARTES DE USO, E SIGA AS PRÁTICAS DE SEGURANÇA DO EMPREGADOR.

使う機械や溶材のメーカーの指示書をよく読み、まず理解して下さい。そして貴社の安全規定に従って下さい。

請詳細閱讀並理解製造廠提供的說明以及應該使用的銀焊材料，並請遵守貴方的有關勞動保護規定。









이 제품에 동봉된 작업지침서를 숙지하시고 귀사의 작업자 안전수칙을 준수하시기 바랍니다.

اقرأ بتمعن وافهم تعليمات المصنع المنتج لهذه المعدات والمواد قبل استعمالها واتبع تعليمات الوقاية لصاحب العمل.

13.ACCESSORIES:SEE PACKING LIST,PLEASE

PACKING LIST



PULSEMIG200P Welding machine	1		
connector+cable+Ground pliers	1		
connector+cable+holder	1		
Gas hose	1		
MIG welding torch	1		
flow meter	1	optional accessory	
Operation instructions	1		
Certificate of quality	1		

No.

Certificate of quality

Name of product:MIG/MAG / MMA Semi-auto ARC Welding Machine

Type of product: PULSEMIG200P

Packing No: 462404001

Test results of this welder fulfils _____

technical requirements and its release

from the works is granted.

Inspector NSP Date 06 08 2024

Date 06 08 2024



