PULSEMIG500D

Inverter MIG/MMA Semi-auto ARC Welding Machine

Advanced Product

Operation Manual

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

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 DESIGEND. 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 parl.
- 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 handing 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 PULSEMIG500D 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 PULSEMIG500D 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 PULSEMIG500D 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.

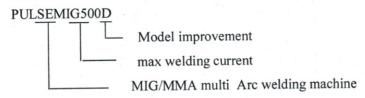
- . Installation of the power cord. Be grounded correctly.
- . Don't put sundries under the welder.Otherwise it will affect the heat released.
- . Installation for the positive and negative cable of the power output.
- . Welding voltage selection
- . Welding current selection (speed of wire feeder)
- . 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 PULSEMIG500D 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 PULSEMIG500D 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(PULSEMIG500D)
- * welding gun
- 1.2 Suitable range of the PULSEMIG500D
 - ★ 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 0.8,1.0,1.2,1.6solid wire/flux cord wire.
- 1.3 Characteristic of PULSEMIG500D
 - ★ Wide output current 10-500A: 0.8------40-150A 1.0-----40-250A 1.2-----80-350A 1.6-----100-500A
 - ★Steady welding process,low splash,easy control,good welding form.
 - ★High efficiency: 500A/39V the duty cycle is 60% 388A/33.4V 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	PULSEMIG500D	
	Voltage	3xAC380~415V 50Hz/60Hz	
INPUT	Rated Input current	38A	
	Rated Input power	27KVA	
	No-load Voltage	79V	
	current Adjusting Range	10~500A	
DC	Rated Output Current	500A	
MMA	Start Current	0-200A	
	Arcforce Current	0-200A	
	Rated Duty Cycle	60%	
	No-load Voltage	79V	
	Rated Duty Cycle	60%	
	Current Adjusting Range	20~500A	
	Rated Output Current	500A	
	crater-fill voltage	14-40V	
	crater-fill current	10-500A	
CO ₂	burnback time	0.01-0.5S	
	burnback voltage	10.0-25.0V	
	Wire Alloy Material		
	Synergic MIG or BASIC MIG	all	
	crater mode	2T(no Start Current & no crater current)	
		or 4T(no Start Current) ,no S4 (special 4 step)	
	gas type	CO ₂ or Ar	
	Welding Current	20~500A	
	Welding Voltage	-5.0 ~ +5.0	
	Rated Output Current	500A	
	Rated Duty Cycle	60%	
	Start(Initial) Current	10~500A	
	Start(Initial) Voltage	-5.0 ~ +5.0	
	crater-fill voltage	-5.0 ~ +5.0	
PULSE	crater-fill current	10-500A	
MIG	burnback time	0.01-0.5\$	
	burnback voltage	-5.0 ~ +5.0	
	Wire Alloy Material	Fe,AlSi,AlMg,CrNi,Cu	
Ì	Synergic MIG or BASIC MIG		
}	-7.15-9.5 III OI DAOIO WIIG	only Synergic MIG	
	crater mode	2T(no Start Current & no crater current)	
	good	or 4T(no Start Current) or S4 (special 4 step)	
	gas type	80%Ar+20%CO ₂ (Fe,Cu);100%Ar(AlSi,AlMg); 98%Ar+2%CO ₂ or O ₂ (CrNi)	

	MODEL	PULSEMIG500D	
INPUT	Voltage	3xAC380~415V 50Hz/60Hz	
DOUBLE PULSE MIG	PULSE peak Current	10~500A	
	PULSE peak Voltage	-5.0 ~ +5.0	
	Welding(base) Current	10~500A	
	Welding(base) Voltage	-5.0 ~ +5.0	
	mixed frequency	0.1-9.9Hz	
	mixed ratio	10-90%	
	Start(Initial) Current	10~500A	
	Start(Initial) Voltage	-5.0 ~ +5.0	
	crater-fill voltage	-5.0 ~ +5.0	
	crater-fill current	10-500A	
	Rated Duty Cycle	60%	
	Rated Output Current	500A	
	Wire Alloy Material	Fe,AlSi,AlMg,CrNi,Cu	
	Synergic MIG or BASIC MIG	only Synergic MIG	
	crater mode	2T(no Start Current & no crater current) or 4T(no Start Current) or S4 (special 4 step)	
	gas type	80%Ar+20%CO ₂ (Fe,Cu); 100%Ar(AlSi,AlMg);98%Ar+2%CO ₂ or O ₂ (CrNi)	
CO ₂	inductance	1~10	
or	Pre gas Flow Time	0~3s	
MIG	Post gas Flow Time	0~20s	
IVIIG	Wire Diameter	0.8,1.0,1.2,1.6(solid/flux)	
	Efficiency	≥80%	
Protection Class of enclosure		IP21S	
	lation class	and the property of the proper	
Protect	ion class of shell	fan cooling	

3. Function

- 3.1 Adjusting function for the welding voltage and welding current
- 3.1.1 PULSEMIG500D supply the adjusting range at MIG/MAG as following,

Welding voltage : $14V \pm 3V \sim 50V \pm 3V$ use the voltage adjusting knob

Welding current: 20A~500A use the current adjusting knob

3.1.2 PULSEMIG500Dsupply the adjusting range at MMA as following,

Welding current: 10A~500A 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,.

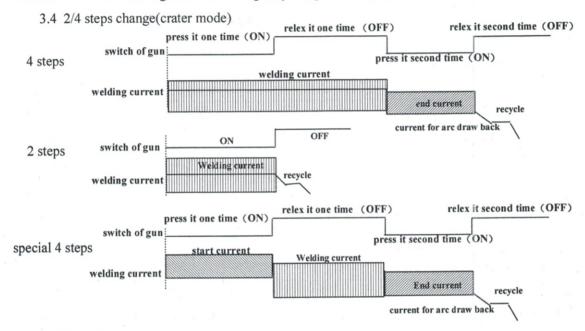
If the thrusting is low, the arc is soft and splash.

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 PULSEMIG500D.

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.



3.5 Function for low Arc starting

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

3.6 36V-3A/110W power function

When you use the CO_2 MIG/MAG welding machine, you may generally equip with gas heating source. So we design the power function to meet the heating for 36V-3A /110W heater .The out connection is down of the front panel of PULSEMIG500D.

3.7 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.

3.8 Over current function of the wire feed motor

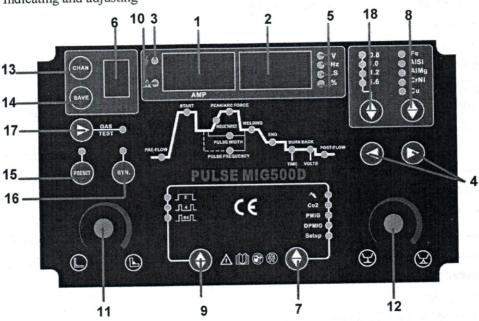
In order to protect the motor, the wire feed motor may stop rolling automatically if the current reaches 10A .When it is lower than 10A ,the motor begins rolling automatically.

3.9 Quick wire feed function

The spot wire feed speed can be adjusted by the welding current knob on the wire feed panel, so that it is convenient for the customers to get the quick wire feed speed.

4. Indicating and warning on the PULSEMIG500D control panel

4.1 Indicating and adjusting



4.1.1 Start current / Welding current/Peak(arc force)/End current Display meter

The current indicating meter on the front panel indicates the actual welding current during the welding, indicates the preset current during no welding.

- 4.1.2 welding Voltage /Pre-flow time/inductance/pulse width/pulse frequency/Burnback time& voltage/post-flow time Display meter
- a. The meter on the front panel can indicate the actual welding voltage or preset MIG voltage. The indicating number has the precision of 0.1V. The meter indicates the preset during no welding.
 - b display time(S)
 - c. display width(%)
 - d.display frequency(Hz)
 - 4.1.3 Power indicating

If the indicating light is on the control circuit connects the power already.

- 4.1.4 pre-flow/Start current /inductance/Peak(arc force)/pulse width/pulse frequency/welding current/End current/Burnback time &voltage/post-flow time Process Selector
 - a.MMA: Start current /arcforce/Welding current
- b. CO2:pre-flow/Start current&voltage /inductance/welding current&voltage/End current&voltage/Burnback time &voltage/post-flow time
- c. PMIG:pre-flow/Start current&voltage /inductance/welding current/End current/Burnback time&voltage/post-flow time
- d. DPMIG:pre-flow/Start current&voltage /inductance/Peak current&voltage /pulse width/pulse frequency/welding current&voltage/End current&voltage/Burnback time &voltage/post-flow time

4.1.5 unit

V-- unit of voltage

S -- unit of burnbacktime, pre& post flow time

% -- unit of pulse width

Hz-- unit of pulse freq.

4.1.6 Memory chanel LED

Display 0 to 9 @MMA or CO2 or PMIG or DPMIG

All 10* 4=40, 40 different sets of user data can be stored for the user to choose then use.

4.1.7 MMA/CO₂/PMIG/DPMIG/SETUP Process Selector

*setup--Restore default values: led of the "DPMIG" lighting when you press "3 s" until the led of "SETUP" ,press "4"Selector until "1"&"2"display "Lod dEF",Rotating "12"knob,"1"&"2"display meter flashing 2 seconds, the parameters of the user settings are all restored as the default parameters.

4.1.8 Wire Alloy Selector.

Select your wire type according to the basic categories of Fe (Steel), AlSi (4043Aluminum). AlMg (5356 Aluminum), CrNi(Stainless Steel), Cu. This input must be made to properly use the Synergic function to automatically adjust the Volts needed to weld at the selected wire speed.

4.1.9 crater mode

2T or 4T or S4 (special 4 step)

4.1.10 Duty Cycle/Overcurrent Warning.

When the duty cycle has been exceeded or an overcurrent, condition has occurred, the L.E.D. will light. Allow the unit to cool while running until the light goes off or for 10 minutes before resetting the welder. If condition persists check for loose wires or voltage supply problems.

- 4.1.11 Start current / Welding current/Peak(arc force)/End current Adjustment Knob
- 4.1.12 volts/frequency/Time /width Adjustment Knob
- 4.1.13 CH(chanel) Process Selector

select 0-9, see item 4.1.6

4.1.14 SAVE Process Selector

select CH(chanel) "0-9" then you press or press "3 s" the "SAVE" you have saved the data.

4.1.15 preset Process Selector

Select the default parameters for the user to use ,may change and save.

4.1.16 syn. Process Selector

select syn. MIG or basic MIG @CO₂ only syn. MIG @PMIG or @DPMIG

4.1.17 GAS flow Process Selector

test gas, Gas through when you press, no gas when you release.

4.1.18 Wire Diameter selector:

Select your wire diameter according of the type wire you are using. Selecting the correct wire diameter is critical to optimum Synergic function of the welder, automatically compensating the voltage while the wire speed is adjusted.

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.

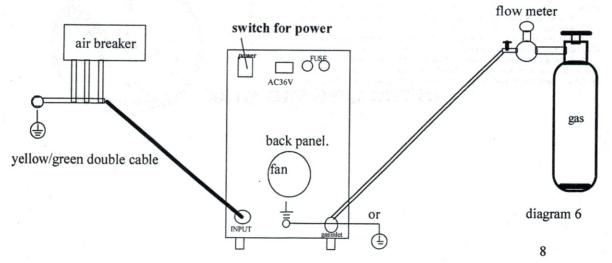
- ★ Check if any damage ot out looking of the welder.
- ★ Confirm the capacity:more than 30A.
- ★ Power source is grounded, diagram 6
- ★ Prohibit the combustible goods in the welding locale.
- ★ There is fire proof measure in the welding locale with favorable ventilated condition.
- ★ There is smoke 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 "7" MMA/CO₂/PMIG/DPMIG SWITCH into "PMIG" or "CO₂"
- ★ Check the products according to the packing list when open the package.
- ★Grounded protection. Attached the diagram 6

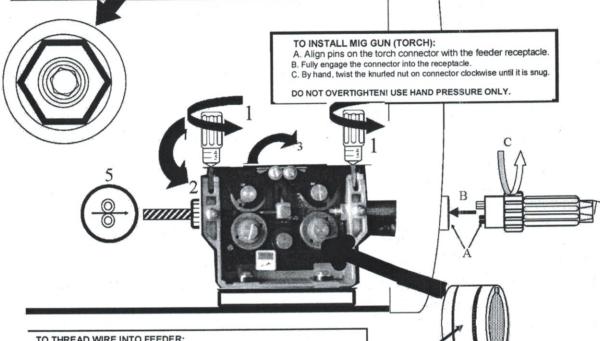
The power source is $380\sim415 \text{Vac}/(50\sim60 \text{Hz})$. The yellow/green double cable is grounding cable. Be sure to connect the yellow/green double cable into the grounding connection in the welding locale. Another way is selecting the M8 bolt on the back on the machine and connect the grounding 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 conditions to ensure the good airproof.





- 1. Loosen and remove the hand nut by turning it counter-clockwise.
- 2. Align the locating pin with the hole on the wire spool (if present).
- 3. Slide spool onto the shaft. Make sure wire is unwinding from the bottom of the spool.
- 4. Use a 8mm hex wrench to adjust tension (Hex screw located under hand nut)
- 5. Lightly spin the spool. If it free-wheels more than 1/4 turn, tighten hex screw. If it does not free-wheel at all, loosen hex screw until it free wheels 1/4 turn.
- 6. Reinstall Hand nut so the spool is retained securely.
- 7. Locate end of wire and clip the bent end of the wire so that it will feed through the wire feed mechanism smoothly. Carefully hold the spool of wire with one hand so the wire will not despool. Proceed to instructions listed below: "To thread wire into feeder"



TO THREAD WIRE INTO FEEDER:

- 1. Loosen top idler tensioner, rotating counter-clockwise
- 2. Flip tensioner down, releasing top drive roll.
- 3. Raise top drive idler roller.
- 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 a flux core roller is needed
- 5. Thread straightened wire into coiled sheath and over grooves in lower drive roll. Thread through until it threads into the gun section 3"-4". Lower the upper drive roll onto lower drive roll, keeping the wire securely fixed in the groove of the feed roller. Make sure the wire has been engaged in the correct 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 the gun trigger to feed wire until the wire exits the end of the torch. Remove contact tip if necessary to feed out wire
- 8. Adjust tensioner clockwise until drive rolls will not slip when the wire comes into contact with a hard surface (a block of wood) and the wire will curl up on end. Re-member to keep wire away from metal that is attached to the work clamp to pre-vent the wire from accidentally arcing.

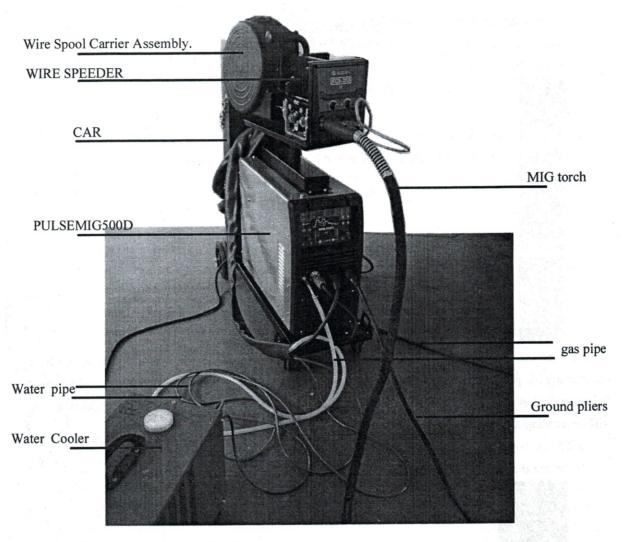
Bottom Drive Roll (See side for stamped size)

.8mm=.030" -.035" 1.0mm=.040" -.045" OR .6mm=.023" -.025" .8mm=.030" -.035" OR

.9mm-.035" 1.2mm=.045" OR 1.2mm=.045" 1.6mm=.06"



INSTALLING MIG WIRE



SYNERGIC AND BASIC MIG OPERATION

Synergic vs. Manual Setup and Operation

How Synergic MIG operates:

The Synergic function of the SYN. MIG component allows the user to only need to use the wire feed speed control to make the unit operate. The welder is programmed to automatically adjust the voltage based off the users input of wire diameter, and filler metal type when the wire speed is increased or decreased by turning the wire speed adjustment knob. While in the Synergic mode, the user can make manual adjustment to "fine tune" the voltage if he chooses by turning the voltage up or down after adjusting the wire feed speed. If the wire speed is readjusted after manual adjustment to voltage is made, the unit defaults to the synergic mode again, and voltage is once again adjusted automatically. The welder may be used in full Manual mode, with independent control of the wire feed speed by simply selecting MIG on the wire diameter selector. Settings will not be saved when the unit cycles off and back on and will default to factory settings. If stepping away briefly it is best to keep the unit on, or the settings will not remember the last settings if it is turned off.

How to setup the Synergic and Manual functions:

- 1. Turn unit on. Wait for it to go through the power up cycle.
- 2. Select the SYN MIG icon with the Process Selector button.



the syn. LED is lighting.

3. Select the wire diameter of the wire being used.



so that the wire will not jam or birds nest while feeding.

4. Select the filler wire type. Steel=Fe, AlSi,AlMg = Aluminum, CrNi = Stainless Steel.



Cu=Copper

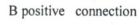
- 5. Use the "inductance" control to select the desired arc qualities, and adjust the arc qualities, whether a stiff, pen-etrating arc with a narrow bead profile and slightly more spatter, or a wider, more fluid puddle that easily wets in with low amounts of spatter. Overhead welding usually requires a more stiff penetrating arc. Flat welding will accept a wider, more fluid puddle.
 - 6.2 Stick welding
 - ★ put the switch "7" MMA/CO₂/PMIG/DPMIG SWITCH into "Stick"

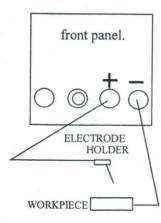


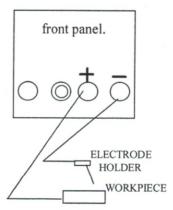
★ Selecting empiric formula: I=40*d,d is dia. of the electrode.

Notice positive and negative connection during welding.

A negative connection







7. Operatings

- ★"ON" and "OFF" indicating switch on the real panel.
- ★Preset the welding voltage ,welding current(wire speed).and Arc force.Diagram 4
- ★ 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 160mm.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

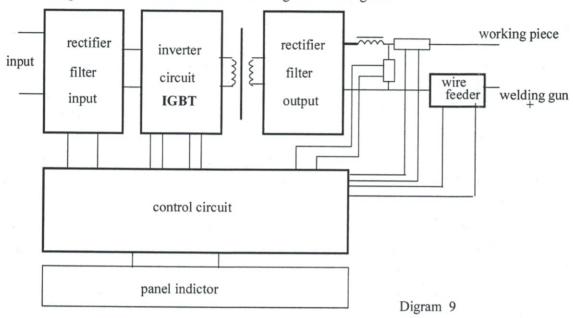
Press the switch of the gun before the wire roller is firmed, preset the gas flow through the meter to check if it is gas proof. Otherwise, it affects the welding result.

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 PULSEMIG500D working elements. Digram9



Input AC380~415V, rectifier and filter it into 580VDC.

Control the IGBT by PWM+PFM, inverter the 580VDC 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 5~10 pieces nibs/40 kg 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(φ 8) 3.Contact with the namufacturer .
3.Over heating light on(warning led lights r ed or yellow color)	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 fuse broken 2.Potentiometer line fall down or Potentiometer broken 3.the wire blocked 4.the drive circuit broken 5.other reasons	1.Change the fuse 5A/250V (on left panel, open wire feeder case) 2.Connect the lines or Change it 3.Check the gun 4.Change the control panel 5.Contact with the namufacturer
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.over-temperature,

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°C ~ 40°C

transportation -25°C ~+55°C

B The air humidity

40°C

50%RH

20°C

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.

	*	W.E.	- 1 P
WARNING	Do not touch electrically live parts or electrode with skin or wet clothing. Insulate yourself from work and ground.	Keep flammable materials away.	Wear eye, ear and body protection.
AVISO DE PRECAUCION	No toque las partes o los electrodos bajo carga con la piel o ropa mojada. Alstese del trabajo y de la tierra.	 Mantenga el material combustible fuera del área de trabajo. 	Protéjase los ojos, los oídos y el cuerpo.
ATTENTION	Ne laissez ni la peau ni des vête- ments mouillés entrer en contact avec des pièces sous tension. Isolez-vous du travail et de la terre.	 Gardez à l'écart de tout matériel inflammable. 	Protégez vos yeux, vos oreilles et votre corps.
WARNUNG	Berühren Sie keine stromführenden Teile oder Elektroden mit Ihrem Körper oder leuchter Kleidung! Isolieren Sie sich von den Elektroden und dem Erdboden!	Entlernen Sie brennbarres Material!	Tragen Sie Augen-, Ohren- und Kör- perschutz!
ATENÇÃO	Não toque partes elétricas e electrodos com a pele ou roupa molhada. Isole-se da peça e terra.	Mantenha inflamáveis bem guardados.	 Use proteção para a vista, ouvido e corpo.
注意事項	● 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。	●燃えやすいものの側での溶接作業は絶対にしてはなりません。	● 目、耳及び身体に保護具をして下 さい。
Chinese 警告	皮肤或濕衣物切勿接觸帶電部件及 轉條。使你自己與地面和工件絶緣。	● 把一切易燃物品移離工作場所。	●係敷眼、耳及身體勞動保護用具。
Rorean 위 험	● 전도체나 용접봉을 젖은 형겁 또는 피부로 절대 접촉치 마심시요. ● 모재와 접지를 접촉치 마심시요.	●인화성 물질을 접근 시키지 마시요.	●눈, 귀와 몸에 보호장구를 착용하십시요.
تحذير	 ♦ لا تلمس الإجزاء التي يسري فيها التيار الكهريائي أو الاكترود بجلد الجسم أو بالملابس المبللة بالماء. ♦ ضع عاز لا على جسمك خلال المعل. 	 ضع المواد القابلة للاشتعال في مكان يعيد. 	 ضع أدوات وملايس 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.

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Keep your head out of fumes. Use ventilation or exhaust to remove fumes from breathing zone.	Turn power off before servicing.	Do not operate with panel open or guards off.	WARNING
Los humos fuera de la zona de res- piración. Mantenga la cabeza fuera de los humos. Utilice ventilación o aspiración para gases.	Desconectar el cable de ali- mentación de poder de la máquina antes de iniciar cualquier servicio.	No operar con panel abierto o guardas quitadas.	AVISO DE PRECAUCION
Gardez la tête à l'écart des fumées. Utilisez un ventilateur ou un aspirateur pour ôter les fumées des zones de travail.	Débranchez le courant avant l'entre- tien.	 N'opérez pas avec les panneaux ouverts ou avec les dispositifs de protection enlevés. 	ATTENTION
Vermeiden Sie das Einatmen von Schweibrauch! Sorgen Sie für gute Be- und Entlüftung des Arbeitsplatzes!	Strom vor Wartungsarbeiten abschalten! (Netzstrom völlig öff- nen; Maschine anhalten!)	 Anlage nie ohne Schutzgehäuse oder Innenschutzverkleidung in Betrieb setzen! 	WARNUNG
Mantenha seu rosto da fumaça. Use ventilação e exhaustão para remover fumo da zona respiratória.	Não opere com as tampas removidas. Desligue a corrente antes de fazer serviço. Não toque as partes elétricas nuas.	Mantenha-se afastado das partes moventes. Não opere com os paineis abertos ou guardas removidas.	ATENÇÃO
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念して下さい。	 ◆ 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 必ず切って下さい。 	● パネルやカバーを取り外したままで機械操作をしないで下さい。	注意事項
● 頭部遠離煙霧。 ●在呼吸區使用通風或排風器除煙。	●維修前切斷電源。	●儀表板打開或沒有安全罩時不準作 業。	管 告
● 얼굴로부터 용접가스를 멀리하십시요. ● 호흡지역으로부터 용접가스를 제거하기 위해 가스제거기나 통풍기를 사용하십시요.	● 보수전에 전원을 차단하십시요.	● 판넬이 열린 상태로 작동치 마십시요.	Rorean 위 험
 ♦ ابعد رأسك بعيداً عن الدخان. ♦ استمعل التهوية أو جهاز ضغط الدخان للخارج لكي تبعد الدخان عن المنطقة التي تتنفس فيها. 	 اقطع التيار الكهرياني قبل القيام بأية صياتة. 	 ♦ لا تشغل هذا الجهاز اذا كانت الاغطية الحديدية الواقية ليست عليه. 	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捍材料,並請遵守貴方的有関勞動保護規定。

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

No.

PACKING LIST



PULSEMIG500D Welding machine	. 1		PACKING 1
adapter connector+cable+Ground pliers	1		PACKING 1
adapter connector+cable+holder	1		PACKING 1
welding torch	1		PACKING 1
			The second secon
flow meter	1	optional accessory	PACKING 1
Operation instructions	1		PACKING 1
Certificate of quality	1		PACKING 1

Certificate of quality	
Name of product:MIG/MAG / MMA Semi-auto ARC Welding Machine	
Type of product: PULSEMIG500D Packing No: 461912934	
0.101	
technical requirements and its release TESTIAL	1
technical requirements and its release from the works is granted. Inspector N.S.D. Date 12 03 2019 PASS	")
Inspector NSP Pate 12 09 2019 PASS	