OWNER'S MANUAL

MIG/STICK 201₁₁₁ / 251₁₁₁





WARNING:

Read carefully and understand all **ASSEMBLY AND OPERATION INSTRUCTIONS** before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

CATALOGUE

GENERAL SAFETY RULES

Product Description

Safety Operation

Technical Specifications

Installation

Operation

Trouble Shooting

List of Spare Parts

Schematic Circuit Diagram

Complete Set Specifications

Transport & Storage

GENERAL SAFETY RULES

WARNING: Read and understand all instructions. Failure to follow all instructions listed below may result in serious injury.

CAUTION: Do not allow persons to operate or assemble this MIG/STICK 201 III/251 III until they have read this manual and have developed a thorough understanding of how the 201 III works.

WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY CONSIDERATIONS

1.1 Your Welding Environment

- -Keep the environment you will be welding in free from flammable materials.
- -Always keep a fire extinguisher accessible to your welding environment.
- -Always have a qualified person install and operate this equipment.
- -Make sure the area is clean, dry and ventilated. Do not operate the welder in humid, wet or poorly ventilated areas.
- -Always have your welder maintained by a qualified technician in accordance with local, state and national codes.
- -Always be aware of your work environment. Be sure to keep other people, especially children, away from you while welding.
- -Keep harmful arc rays shielded from the view of others.
- -Mount the welder on a secure bench
- or cart that will keep the welder secure and prevent it from tipping over or falling.

1.2 Your Welder's Condition

- -Check ground cable, power cord and welding cable to be sure the insulation is not damaged. Always replace or repair damaged components before using the welder.
- -Check all components to ensure they are clean and in good operating condition before use.

1.3 Use of Your Welder

A CAUTION

Do not operate the welder if the output cable, electrode, torch, wire or wire feed system is wet. Do not immerse them in water. These components and the welder must be completely dry before attempting to use them.

- -Follow the instructions in this manual.
- -Keep welder in the off position when not in use.
- -Connect ground lead as close to the area being welded as possible to ensure a good ground.
- -Do not allow any body part to come in contact with the welding wire if you are in contact with the material being welded, ground or electrode from another welder.
- -Do not weld if you are in an awkward position. Always have a secure stance while welding to prevent accidents. Wear a safety harness if working above ground.
- -Do not drape cables over or around your body.
- -Wear a full coverage helmet with appropriate shade (see ANSI Z87.1 safety standard) and safety glasses while welding.
- -Wear proper gloves and protective clothing to prevent your skin from being exposed to hot metals, UV and IR rays.
- -Do not overuse or overheat your welder. Allow proper cooling time between duty cycles.
- -Keep hands and fingers away from moving parts and stay away from the drive rolls.
- -Do not point torch at any body part of yourself or anyone else.
- -Always use this welder in the rated duty cycle to prevent excessive heat and failure.

1.4 Specific Areas of Danger, Caution or Warning



Electrical Shock

AWARNING

Electric arc welders can produce a shock that can cause injury or death. Touching electrically live parts can cause fatal shocks and severe burns. While welding, all metal

components connected to the wire are electrically hot. Poor ground connections are a hazard, so secure the ground lead before welding.

- -Wear dry protective apparel: coat, shirt, gloves and insulated footwear.
- -Insulate yourself from the work piece. Avoid contacting the work piece or ground.
- Do not attempt to repair or maintain the welder while the power is on.
- -Inspect all cables and cords for any exposed wire and replace immediately if found.
- -Use only recommended replacement cables and cords.
- -Always attach ground clamp to the work piece or work table as close to the weld area as possible.
- -Do not touch the welding wire and the ground or grounded work piece at the same time.
- -Do not use a welder to thaw frozen pipes.

Fumes and Gases

AWARNING

- -Fumes emitted from the welding process displace clean air and can result in injury or death.
- -Do not breathe in fumes emitted by the welding process. Make sure your breathing air is clean and safe.
- -Work only in a well-ventilated area or use a ventilation device to remove welding fumes from the environment where you will be working.
- -Do not weld on coated materials (galvanized, cadmium plated or containing zinc, mercury or barium). They will emit harmful fumes that are dangerous to breathe. If necessary use a ventilator, respirator with air supply or remove the coating from the material in the weld area.

- -The fumes emitted from some metals when heated are extremely toxic. Refer to the material safety data sheet for the manufacturer's instructions.
- -Do not weld near materials that will emit toxic fumes when heated. Vapors from cleaners, sprays and degreasers can be highly toxic when heated.



UV and IR Arc Rays

A DANGER

The welding arc produces ultraviolet (UV) and infrared (IR) rays that can cause injury to your eyes and skin. Do not look at the welding arc without proper eye protection.

- -Always use a helmet that covers your full face from the neck to top of head and to the back of each ear.
- -Use a lens that meets ANSI standards and safety glasses. For welders under 160 Amps output, use a shade 10 lens; for above 160 Amps, use a shade 12. Refer to the ANSI standard Z87.1 for more information.
- -Cover all bare skin areas exposed to the arc with protective clothing and shoes. Flame-retardant cloth or leather shirts, coats, pants or coveralls are available for protection.
- -Use screens or other barriers to protect other people from the arc rays emitted from your welding.
- -Warn people in your welding area when you are going to strike an arc so they can protect themselves.



Fire Hazards AWARNING

Do not weld on containers or pipes that contain or have had flammable, gaseous or liquid combustibles in them. Welding creates sparks and heat that can ignite flammable and explosive materials.

- -Do not operate any electric arc welder in areas where flammable or explosive materials are present.
- -Remove all flammable materials within 35 feet of the welding arc. If removal is not possible, tightly cover them with fireproof covers.
- -Take precautions to ensure that flying sparks do not cause fires or explosions in hidden areas, cracks or areas you cannot see.
- -Keep a fire extinguisher close in the case of fire.
- -Wear garments that are oil-free with no pockets or cuffs that will collect sparks.
- -Do not have on your person any items that are combustible, such as lighters or matches.
- -Keep work lead connected as close to the weld area as possible to prevent any unknown, unintended paths of electrical current from causing electrical shock and fire hazards.
- -To prevent any unintended arcs, cut wire back to 1/4" stick out after welding.



Hot Materials

A CAUTION

Welded materials are hot and can cause severe burns if handled improperly.

- -Do not touch welded materials with bare hands.
- -Do not touch MIG gun nozzle after welding until it has had time to cool down.



Sparks/Flying Debris

A CAUTION

Welding creates hot sparks that can cause injury. Chipping slag off welds creates flying debris.

-Wear protective apparel at all times: ANSI-approved safety glasses or shield, welder's hat and ear plugs to keep sparks out of ears and hair.



Electromagnetic Field

A CAUTION

- -Electromagnetic fields can interfere with various electrical and electronic devices such as pacemakers.
- -Consult your doctor before using any electric arc welder or cutting device
- -Keep people with pacemakers away from your welding area when welding.
- -Do not wrap cable around your body while welding.
- -Wrap MIG gun and ground cable together whenever possible.
- -Keep MIG gun and ground cables on the same side of your body.



Shielding Gas Cylinders Can Explode AWARNING

High pressure cylinders can explode if damaged, so treat them carefully.

- -Never expose cylinders to high heat, sparks, open flames, mechanical shocks or arcs.
- -Do not touch cylinder with MIG gun.
- -Do not weld on the cylinder
- -Always secure cylinder upright to a cart or stationary object.
- -Keep cylinders away from welding or electrical circuits.
- -Use the proper regulators, gas hose and fittings for the specific application.
- -Do not look into the valve when opening it.
- -Use protective cylinder cap whenever possible

1.5 Proper Care, Maintenance and Repair

A DANGER

- -Always have power disconnected when working on internal components.
- Do not touch or handle PC board without being properly grounded with a wrist strap. Put PC board in static proof bag to move or ship.
- -Do not put hands or fingers near moving parts such as drive rolls of fan

MIG/STICK 201 251 SERIES USE AND CARE

- Do not modify the MIG/STICK 201 m/251 m in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment. There are specific applications for which the MIG/STICK 201 m/251 m was designed.
- Always check of damaged or worn out parts before using the MIG/STICK 201 Ⅲ/251 Ⅲ. Broken parts will affect the MIG/STICK 201 Ⅲ/251 Ⅲ operation. Replace or repair damaged or worn parts immediately.
- Store idle MIG/STICK 201Ⅲ/251Ⅲ. When MIG/STICK 201Ⅲ/251Ⅲ is not in use, store it in a secure place out of the reach of children. Inspect it for good working condition prior to storage and before re-use.

Product Description

MIG/STICK 201 III / 251 III series Gas Shielded Inverter arc Welder used the Electric arc to fusion the welding wire and the base metal and input the gas to protect the welding area to make sure the welding quality. Due to melting gas shielded arc welding of the welding area protection is simple, convenient, easy for observation, the torch is easy to operate, high production efficiency, easy for all position welding, easy to realize mechanization and automation, thus increasingly widely used in practical production.

- MIG/STICK 201 III /251 III Machine used CO2 gas as the Shielding gas. With the welding wire as pole, semi-automatic gas shielded arc welding It is quite popular in welding the materials like low-carbon steel, alloy steel and stainless steel. Compared with normal hand welding the Gas Shielded Welder has the advantage of energy saving, material saving, high efficiency, low cost and so on.
- Using single tube IGBT inverter control technology, frequency more than 20 KHZ, save electricity, response quickly

A closed-loop feedback control, stable output voltage, strong ability to resist power grid voltage fluctuation (15%)

Can continuous adjustable welding voltage, and the welding current to achieve precise matching, good welding characteristics;

- Dynamic characteristic of welding control circuit, stable welding arc, less spatter and weld moulding beauty, weld efficiency is high; Suitable for different welding requirements
- Have 2T/4T function, Suitable for different welding requirements;
- With welding droplet clearing function
- Can use Co2 and Mixed gas for welding.
- Apply to ϕ 0.8 ϕ 1.2 wire welding;
- With MMA function
- Under the CO2 with Voltage preset function, under the MMA with current preset function
- With overheating, overcurrnet and short circuit function.

Safety Operation

- Operator's Self Protection
- * Please always follow the rules that conform to safety and hygiene. Wear protective garments to a void injuries to eyes and skins.
- * Use the welding helmet to cover your head while working with the welding machine. Only by viewing through the filter lens on the welding helmet can you watch your operation.
- * Under no circumstance can you allow any part of your body to touch the welder's output bipolarity (the handle of electrode holder and work piece.).
- Attention
- * MIG/STICK 201 III / 251 III Gas Shielded Inverter Arc Welder is electronic products whose spare parts are very tender, do not change or adjust with a rush otherwise the switch will be damaged.
- * Check the connection to see if it is well connected, whether the earth (ground) connection is reliable, etc.

- * Fumes and gases produced when welding are hazardous to health. Make sure to work in places where there are exhaust or ventilation facilities to keep fumes or emissions away from the breathing zone.
- * Please remember to keep arc rays away from the other nearby people when welding. This is only due
 to the interference from arc rays.
- * Never allow anybody else other than the operator himself to dislocate or modulate the welding machine.
- Never allow the people with the cardiac pacemaker or any other things which are susceptible to the electromagnetism to get close to the welding machine, which has interference with the pacemaker's normal function.
- * The welder can not be used for pipeline ice-out.
- * Over-load is forbidden. Please noted the rated continuous loading factor
- Safety Measures to Be Taken to Assure the Correct Installation and Position
- * Careful precaution must be taken to keep the operator and the machine from the foreign materials falling from up above.
- * The dust, acid and erosible dirt in the air at the job site can not exceed the amount required by the norm (excluding the emission from the welder).
- * The welder must be installed in the place where it can not be exposed to sun and rain. Also it must be stored in less humid place with the temperature range at $-10\sim40^{\circ}$ C.
- * There should be 50 cm space about for the welding machine to have good ventilation.
- * Make sure that there is no metal-like foreign body to enter the welding machine.
- * No violent vibration in the welder's surrounding area.
- * Make sure that there is no interference with the surrounding area at the installation site.
- * Make sure whether there is enough power supply to make the welding machine work properly. Any power source required to access the welder must be installed with some protective equipments.
- * The welder should be installed on the horizontal surface and if it over 15°, there should be added some anti-dump set.
- Safety Check
- Each item listed below must be carefully checked before operation:
- * Make sure that the welding machine has reliable earth wire connection;
- * Make sure that there is no short circuit connection with welder's both outputs;
- * Make sure that there is always sound output and input wire connection instead of exposing it outside.
- Regular check needs to be conducted by the qualified personnel after the welder has been installed over a period of six months, which involves as follows:
- * Routine cleaning needs to be done to make sure that there is no such abnormal condition as loose connection happening in the welding machine.
- * The external parts installed with the welder must guarantee that the welder works properly.
- * Check the welding cable to see if it can continue to be used before it is worn out.
- * Replace the welder's input cable as soon as it is found to be broken or damaged.
- Please do not hesitate to contact us for technical assistance whenever you come across the problems you can not work out or you may deem difficult to fix.

Technical Specification

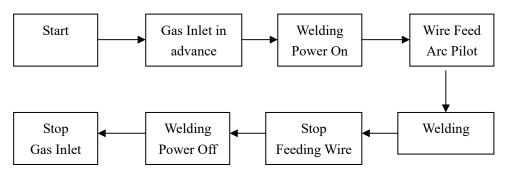
Environment to which the product is subject

- * The surrounding temperature range:
- * When welding: $-10 \sim +40$ °C
- * During transport or in storage: -20~+55 ℃
- * Relative humidity: when at 40° C: $\leq 50^{\circ}$, when at 20° C: $\leq 90^{\circ}$.
- * The dust, acid and erosible materials in the air can not exceed the amount required by the norm (apart from the emissions from the welder). No violent vibration at the job site.
- * Altitude no more than 1,000m.
- * Keep from raining when it is used outdoors.

The Requirement for Main Supply

- * The voltage oscillogram should display actual sine wave, the oscillation of the frequency should not exceed \pm 1% of the rated value.
- * The oscillation of the supplied voltage should not exceed $\pm 10\%$ of the rated value.

The Welder's Principle



The MIG Gun Specification

The MIG Gun is composed of the handle, the connecting cable and the gun. One end of the gooseneck in the handle is connected with the cable and the other end is connected with the diffuser. The protective gas will be lead through the nozzle and by regulating the switch on the handle the user can control the welding current.



Notice: * Turn off the power before assembling or replacing parts of the MIG Gun.

* The parts like nozzle, diffuser, cable etc. should be replaced when it is damaged and the welding quality is influenced.

Only the green light is on, so the machine with the power can staring welding.

When the yellow light is on, internal temperature is too high, need to wait until the machine automatically into the normal working condition.

Slow wire feeding

Set a slow wire feeding before the welding wire touch the work-piece for get good welding quality. When staring arc it is will change to normal condition.

Burn back time

When finished the welding, because of the inertia the wire feeder did not immediately stop, so still have wil to out from the gun, Cause the wire will stick on the work-piece and also not easy to staring arc and next time. To eliminate the adverse factors, inside the machine Settings: at the end of the welding welding machine still keep the output voltage, within a certain amount of time to make wire can continue to burn, this paragraph of time is to burn back time.

Arc characteristic

When under the short circuiting transfer, it is can change the current rate of change, to change the wire breaking energy, so as to reduce the splash.

Welding droplet clearing

In general, when end of the welding, the wire end often have a droplet and under the surface with welding slag, cause not easy to starting arc again, so this machine set this function to solve this problem.

Gas post-flow

In order to protect the welding area, when end of the welding still have gas for protect (last 3S)

MMA function

Η

When put the switch under the MMA, can do MMA

Sign & Pictures Illustration

Ground Single phase stillness transducer---transformer---rectifier MIG/MAG welder DC current Single phases AC power source X Duty Cycle $I_{1\,max}$ Max Input Current I_{1eff} Effective Input Current I2: Rated Welding Current U_0 Rated Open Circuit Voltage U_1 Rated Input Voltage U_2 Rated Load V V Voltage Α Amperage % Duty Cycle A/ V~ A/ V: Output Range, Rated Minimum, Rated Maximum Welding Current and Related Load Voltage EN60974-1 International Standard, Welding Equipments – Part 1: Welding Power Sources IP21S Case protection class. IP is the code of International Protection. 2 mean preventing user's finger from the dangerous parts; preventing the solid material with the diameter no less than 12.5 mm into the box. 1 means preventing water dropping vertically which is harmless. S means water proof test is conducting while the

movable parts are standstill.

Insulation Grade H

Main Technical Data

ITEM	UNIT	MIG/STIC	MIG/STICK 251 _{III}		CK 201 _{III}	
Input Voltage	V	1 ~220	1 ~230	1 ~220	1 ~230	
Frequency	Hz		50/60			
Max Input Current	А	45	45 39.5			
Rated Input Capacity	kVA	9.9	10.4	9.9	10.4	
Open circuit Voltage	V		55			
Rated Working Voltage	V	16.5~	26.5	16.5	~24	
Duty Cycle	%	60				
wire diameter	mm		Ф0.8~Ф1.0			
Wire Feeding Speed	m/min		2.5~13			
CO2 Rated welding current	А	250	250 200			
CO2 welding current range	А	50~	250	30~	-200	
MMA Rated welding current	А		;	200		
MMA welding current range	А		3	0~200		
Insulation Grade		Н				
Case Protection Grade		IP21S				
Cooling Type		Air				
Weight	kg	50				
Case Size L*W*H	mm	990*495*720				

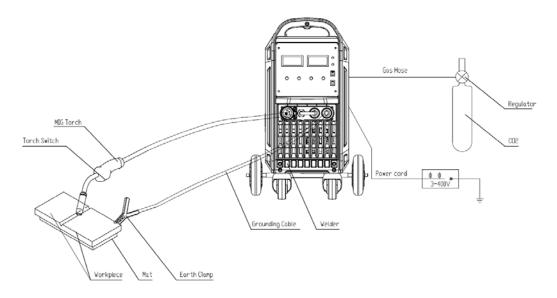
Mark, the duty cycle is under the 40 degree

Installation



Welder's Placement

- * The dust, acid and erosible dirt in the air at the job site can not exceed the amount required by the norm.
- * The welder must be installed in the place where it can not be exposed to sun and rain. Also it must be stored in less humid place with the temperature range at $-10\sim40^{\circ}$ C.
- * There should be 50 cm space about for the welding machine to have good ventilation.
- * Apparatus to exclude wind and smoke should be equipped if the inside aeration is not sound.



Connection chart

Connection between Welder and Power Source (See the Input Connection Sketch)

Connect the power source cable at the back board of the welder into the single phase 220~240 voltage power network with breaker; 380 voltage power sources is strictly prohibited to the welder which will severely damage the welder, otherwise the user should take the consequences for it.

Notice: Power network earth connection is not power network connection zero.

Item	MIG/STICK 201 _{III} /251 _{III}
Air Switch A	≥60
Fuse (Rated Current) A	55
Cable Line mm2	≥4.0

Notice: The melting current of the fuse is two times of its rated current.

Connection between Welder and Gas Cylinder

- * Install the pressure regulator on the gas cylinder, tighten it and make sure there is no gas leak.
- * Put the plug of the pressure regulator into the socket of heater.
- * Connect the one end of the gas hose with the pressure regulator and tighten with the clip and connect the other

end with the gas valve connector on the back panel of the welder.

Connection between Welder and Wire Feeder

- * Choose the right wire according to the diameter and make sure it matches the drive roller, liner and contact tips.
- * Fix the wire spool with the spool axel and make sure the direction is right.
- * Adjust the damp bolt to have a right resistance and lead the wire into the drive roller.

Connection between Welder and MIG Gun

* Connect the MIG Gun with the interface on the front panel and fix it.

Connection between Welder and Work Piece

Insert the quick connector of earth cable with earth clamp into current output '-' electrode adaptor on the second half of the front panel and then screw down clockwise. The earth clamp is connected with work piece.

Operation



ATTENTION: The protection class of MIG/STICK 201 [[] / 251 [[] Gas Shielded Inverter Arc Welder

is IP21S. It is forbidden to put in a finger or insert a round bar less than 12.5 mm (metal bar in particular) into the welder. No heavy force can be employed on the welder.

- * The 'protection indicator light' will be on after a long time operation, it shows that the inner temperature is over the permitted data, then the machine should be stopped using for some time to let it cool down. It can continue using after the 'protection indicator light' is off.
- * The power source should be switched off after the operation or while temporarily leaving job site.
- * Welders should dress canvas work cloth and wear welding mask to prevent the hurt from arc and thermal radiation.
- * Light separating screen should be put in the job site to prevent the arc will hurt other people.
- * Inflammable or explosive materials are prohibited to access the job site.
- * Each connection of the welder should be connected correctly and creditably.

Basic Welding Procedure

- a) Connecting all kind of cable, Mig torch, Gas hose, welding wire and Connecting the power source switch [Power Indicator Light] bright; fan is working now
- b) Unscrew the gas flowmeter, the barometer will indicate the pressure.
- c) Press the switch of the torch, the wire come out form the torch.



REMARKS: * Only until the slag cools off and becomes hardened can the removal work starts.

• To avoid the slag injuring people, never point at the nearby people when you remove slag.

Material Thickness mm	Wire Diameter mm	Liner Inside Diameter mm	Wire feeding tube Spec mm	Amperage A	Voltage V	Gas Flow L/min
0.8~1.5	Ф0.8	Ф1.4	1.2×1.6 (Blue)	50~90	17~18	6
·1.0~2.5	Ф0.8	Ф1.4	1.2×1.6 (Blue)	60~100	18~19	7
2.5~4.0	Ф0.8	Ф1.4	1.2×1.6 (Blue)	100~140	21~24	8
·2.0~5.0	Ф1.0	Ф1.6	1.2×1.6 (Black)	70~120	19~21	9
5.0~10	Ф1.0	Ф1.6	1.2×1.8 (Black)	120~170	23~26	10
∙5.0∼8.0	Ф1.2	Ф1.6	1.2×1.8 (Black)	110~180	22~24	10
8.0~12	Ф1.2	Ф1.6	1.2×1.8 (Black)	160~300	25~38	12

Maintenance and Service

Unlike the traditional welder, the reversible welder belongs to the scientifically sophisticated product which uses the modern electronic component parts combined with state-of-the art technology. Therefore the trained personnel are required for its maintenance. However, due to the fact that there are very few components to be easily worn out, it doesn't need regular service apart from usual cleaning work. Only the qualified people are allowed to be in charge of the repair job. It is strongly recommended that customers contact our company for the technical back-up or service when they feel unable to work out the technical hitch or problems.

The Maintenance includes:

* Dust Removal

The professional service man must regularly clean up the dust from the welder by the dry compressed air (air compressor or the similar device). Meanwhile examination can also be performed to make sure there are no loose parts and components inside the machine. Immediate cleaning is needed if there is an accumulation of dust. Under normal circumstance cleaning is only required once a year unless there is too much dust inside the welder. If so, cleaning needs to be done every quarter of the year.

* Keep the Welder Cable Plug in good condition

The Welder Cable Plug needs to be checked from time to time. In its regular usage, at least it has to be inspected each month. However, it is necessary to check it every time when it is in the mobile circumstance.



WARNING: * If the main loop voltage happens to be a bit higher, safety precaution should be taken before repair to avoid accidental shock. The untrained people are forbidden to open the case!

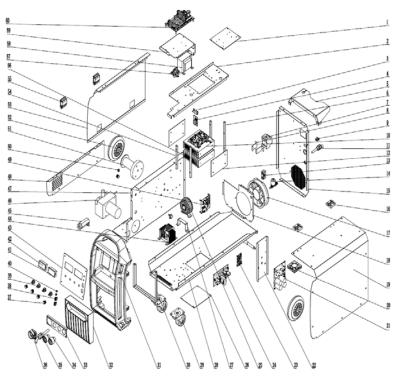
- * Power source needs to be cut off before dust removal;
- * Never tamper with wire or damage the component parts when cleaning.

Trouble shooting

No.	Breakdown	Analysis	Solution	
	No Wire Feeding when	Power is off.	Turn on the power.	
1	turning on the switch of the MIG Gun	The switch of the MIG Gun is damaged.	Replace the switch.	
	No Wire Feeding with	No Wine Feeding with The potentiometer of the wire feed		
2	normal OCV and Gas	system is damaged.	potentionmeter.	
	Inlet	The cable of the wire feeder is broken.	Recover the connection.	
	IIIICt	PCB is defected.	Replace the PCB.	
	No OCV with normal	The main PCB is defected.	Replace the main PCB.	
3	Wire Feeding and Gas Inlet	Bad contact of the parts inside.	Replace the parts.	
4	Maladjustment of	The potentiometer is damaged.	Replace the	
4	Welding Current		potentiometer.	
	I OCII	The control PCB is defected.	Replace the control PCB.	
5	Low OCV	The input power is too low.	Increase the power.	
		The current does not match the voltage.	Adjust.	
	Arc is unstable and with	The size of the wire does not match the	Replace the contact tip or	
6		contact tip or the drive roller.	drive roller.	
	splash.	The resistance of the wire feeding it too	Clean or replace the liner	
		high.	and do not bend the	
	NI A D'1 4 '41 1	gt · · ·	welding cable	
7	No Arc Pilot with normal	Short circuit	Recover the connection.	
	OCV and Wire Feeding	To much dirt or rust on the work piece.	Clean the dirt or rust.	
		The gas hose is broken.	Replace the gas hose. Check the air flow.	
8	No Gas Protection	No Gas Protection The gas hose is pressed and jammed.		
		The valve is broken.	Repair or replace the valve.	
		Contact tip is stuck with the wire.	Replace the contact tip.	
		The inside diameter of the contact tip is	Replace with a right	
		too small.	contact tip.	
	Wire is bended, even	The end of the liner is too far away from	Reduce the distance	
9	broken at the entrance of	the drive roller.	between liner and drive	
	drive roller and liner.		roller. Adjust until aligned.	
	directioner and inici.	The groove and the liner are not aligned.		
		The inside diameter of the liner is too	Replace with a right liner	
		small or to big.	with right diameter.	
		The liner is jammed.	Clean the liner.	

Power Protection: Continually turn on/off in short time is forbidden. It will lock the power source automatic if the forbidden operation has been

List of Spare Parts



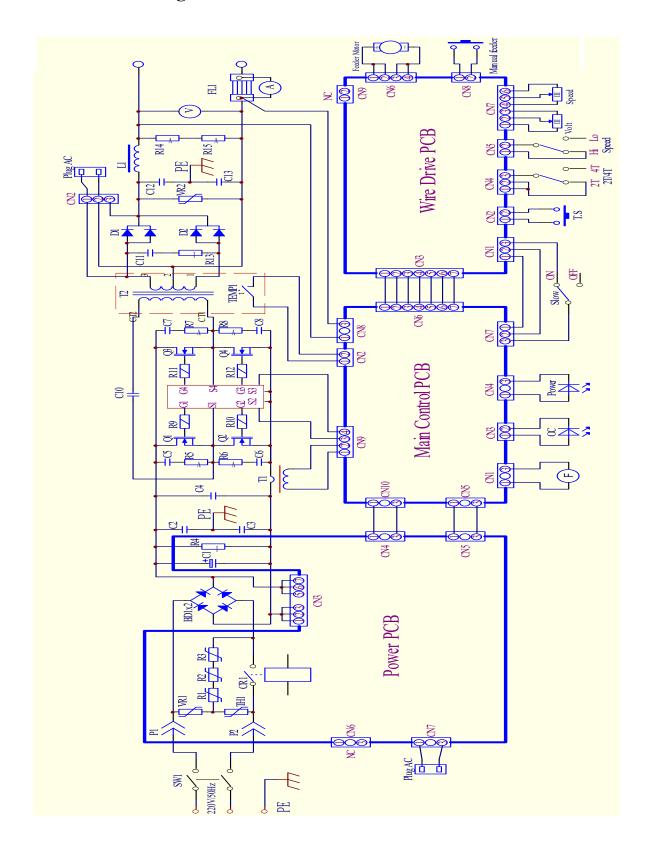
No.	Code	English name	Specification	Unit	QTY	quick-wear part
1	11020015857	The wind deflector	TekMaster MIG 250	pcs	1	
2	11020015854	up shield plate	TekMaster MIG 250	pcs	1	
3	11020015133	current transformer holder	NB500. 3-2	pcs	1	
4	11050010012	current sampling plate	MIG/STICK 251111	pcs	1	
5	11020015851	cylinder support	TekMaster MIG 250	pcs	1	
6	20050050696	heat sink suppoprt	TekMaster MIG 250	pcs	2	
7	20070800125	breaker	DZ47-60A-D 63A/415V/2P	pcs	1	
8	11020011828	power switch	8HG. 125. 044	pcs	2	
9	20070570126	2pins plug	DCZ-02 10A/250V	pcs	1	
10	11050050023	IGBT heat sink assembly	MIG/STICK 251III	pcs	1	
11	12070020997	power input cable	INVERMATRIX 251K pulse	pcs	1	

12	11020015858	heat sink side wind shield	TekMaster MIG 250	pcs	2	
13	20050170019	cable press plate	NB500. 5-2	pcs	2	
14	12070024608	gas valve	TekMaster MIG 250	pcs	1	
15	11010032565	back panel	MIG/STICK 251KD ii	pcs	1	
16	20050170009	hingle	30*28. 4	pcs	2	
17	12070020919	fan II	ALPHAMAC 285	pcs	1	
18	11020015892	fan fixed plate	MIG/STICK 251KD ii	pcs	1	
19	11010011793	cover	TekMaster MIG 250	pcs	1	
20	11110200151	Fan II	ALPHAMAC 285	pcs	1	
21	11050110308	Rectifier filter board	MIG/STICK 251K	pcs	1	*
22	11020015875	wire spool reinforcing plate	TekMaster MIG 250	pcs	1	
23	11050110015	Hot plate	MIG/STICK 250Ш	pcs	1	*
24	11050010101	power board	MIG/STICK 250HI	pcs	1	*
25	20070250112	mid frequency transformer	POWERMIG 251K	pcs	1	
26	11020015856	down wind shield	TekMaster MIG 250	pcs	1	
27	11020015861	mid frequency transformer fixed plate	TekMaster MIG 250	pcs	1	
28	11010041336	bottom plate	TekMaster MIG 250	pcs	1	
29	20050070036	universal wheel	WP12B-75×30	pcs	2	
30	11020015864	front panel support	TekMaster MIG 250	pcs	1	
31	20050050654	plastic panel	INVERMIG-500E	pcs	1	
32	20050050651	front panel fan window	INVERMIG 500E	pcs	1	
33	11020015853	output fixed plate	TekMaster MIG 250	pcs	1	
34	20070570197	Euro quick connector	DKJ35-70	pcs	2	

35	12070031371	Polar conversion cable	TekMaster MIG 250	pcs	1	
36	20050050695	Euro insulating flange	TekMaster MIG 250	pcs	1	
37	20070110068	potentiometer knob	KN-21B-6	pcs	5	
38	20070800129	rocker switch	MR2-120-C2-BB-5NN	pcs	2	
39	20030304453	potentiometer harness	TekMaster MIG 250	pcs	1	
40	20070490004	light holder	¢ 5	pcs	2	
41	20070460069	digital meter	LXD5135V-2/1999	pcs	1	
42	20070460079	digital meter	LX5135V-3±20V	pcs	1	
43	11020015852	printing support plate	TekMaster MIG 250	pcs	1	
44	11040030174	output reactor	HG2NB250F. 6. 1	pcs	1	
45	12070024607	torch switch	TekMaster MIG 250	pcs	1	
46	12070024606	wire feeder motor	TekMaster MIG 250	pcs	1	
47	11020015859	middle panel	TekMaster MIG 250	pcs	1	
48	11010021204	left down panel	TekMaster MIG 250	pcs	1	
49	11050030043	wire feeder drive board	HG2NB250F. 17. 5	pcs	1	*
50	20030302204	spot switch	POWERMIG 251K	pcs	1	
51	20050050516	wire spool	5#	pcs	1	
52	20050070073	rubber wheel	13B-200×50	pcs	2	
53	11020015855	side panel	TekMaster MIG 250	pcs	1	
54	20050050697	heat sink support	TekMaster MIG 250	pcs	2	
55	20080070229	lock	MS733-2	pcs	2	
56	11050050448	fast recovery diode heat sink	TekMaster MIG 250	pcs	1	

57	11050110206	small load plate	NB250F. 5. 8	pcs	1	*
58	20070250660	contorl transformer	MIG/STICK 251KIII 230V	pcs	1	
59	11020010552	fixed plate	TekMaster MIG 250	pcs	1	
60	11050060084	time sequence board	MIG/STICK 251K	pcs	1	*

Schematic Circuit Diagram



Complete Set Specification

*	MIG/STICK 201 III / 251 III Gas Shielded Inverter Arc Welder	1
*	Product Certificate	1
*	Operator's Manual	1

Remarks: a) No guarantee has been made yet to get the welding accessories repaired at any time because of its breakable attribute.

b) If there is any stipulation in the contract, then base on the contract.

Transport & Storage

The welder comes under the category of indoor equipment. The tolerable temperature for both transport and storage ranges from -25 to +55°C, and the storage environment should be dry. To keep the machine from the humidity, it is recommended to free it from moisture and dust before it is kept in the plastic bag.

Users are suggested to keep carton and shock-proof stuff for the future possible transport. In line-haul, please prepare another wood carton which is labeled "Keep it from rain", "Handle with care", and "Precision Instrument etc."

