

Model no. 058-1927-4

Mastercraft

MIG 180I Welder



IMPORTANT:

Please read this manual carefully before using this welder and save it for reference.

**INSTRUCTION
MANUAL**

Model no. 058-1927-4

Mastercraft



**CONSULT OWNER'S MANUAL BEFORE
OPERATING**



WARNING



ELECTRIC SHOCK CAN KILL



FUMES AND GASES



FIRE HAZARDS



ARC RAYS



HOT MATERIALS



MAGNETIC FIELDS

TABLE OF CONTENTS

SPECIFICATIONS	4
SAFETY GUIDELINES	5
PACKAGE CONTENTS	6
ASSEMBLY PREPARATIONS	7
ASSEMBLY INSTRUCTIONS	9
QUICK START GUIDE	13
KEY PARTS INSTRUCTIONS	14
OPERATING INSTRUCTIONS	15
MAINTENANCE	22
TROUBLESHOOTING	23
PARTS LIST	24
WARRANTY	26

NOTE:

If any parts are missing or damaged, or if you have any questions, please call our toll-free helpline at 1-800-689-9928.

**SAVE THESE INSTRUCTIONS**

This manual contains important safety and operating instructions. Read all instructions and follow them when using this product.

Conforms to the standard of CAN ICES-1/NMB-1.

SPECIFICATIONS

Model number	058-1927-4	
Power	120 V, 60 Hz, 1 Phase	230 V, 60 Hz, 1 Phase
Voltage	54 V (no load)	54 V (no load)
Output current	30–140 A	30–180 A
Duty cycle	40% at 90 A	25% at 160 A
Suggested wire	MIG and flux-cored wire	
Wire diameter	0.023, 0.030 and 0.035" (0.6, 0.8 and 0.9 mm)	
Dimensions (L x W x H)	19 5/32 x 8 3/8 x 13 9/16" (48.7 x 21.3 x 34.4 cm)	
Weight	30 lb (12.7 kg)	

Welding mode	Materials	For metal thickness	Use wire size
Flux core	Steel	18-gauge–1/4"	0.03" (1/32") 0.8 mm 0.035" (5/128") 0.9 mm
		31/64–1/4"	
		1.2–6.0 mm	
MIG	Steel, stainless steel	24-gauge–1/4"	0.03" (1/32") 0.8 mm 0.023" (3/128") 0.6 mm 0.035" (5/128") 0.9 mm
		15/64–1/4"	
		0.6–6.0 mm	

SAFETY GUIDELINES

Please read and save these instructions. Read through this owner’s manual carefully before using the product. Protect yourself and others by observing all safety information, warnings, and cautions.

- 1 Keep the environment you will be welding in free from flammable materials.
- 2 Always keep a fire extinguisher accessible from your welding environment.
- 3 Always have a qualified person install and operate this equipment.
- 4 Make sure the area is clean, dry and ventilated. Do not operate the welder in humid, wet or poorly ventilated areas.
- 5 Always have your welder maintained by a qualified technician in accordance with local, provincial and national codes.
- 6 Always be aware of your work environment. Be sure to keep other people, especially children, away from you while you are welding.
- 7 Check all components to ensure they are clean and in good operating condition before use.
- 8 Do not operate the welder if the output cable, wire, or any part of the system is wet.
- 9 Do not immerse these parts in water.
- 10 Do not allow any body part to come in contact with the wire if you are in contact with the material being welded, the ground or wire from another welder.
- 11 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.
- 12 Do not drape cables over or around your body.
- 13 Wear a full-coverage helmet with shade (see ANSI Z87.1 safety standard) and safety glasses while welding.
- 14 Wear proper gloves and protective clothing to prevent your skin from being exposed to hot metals, UV and IR rays.
- 15 Do not overuse or overheat your welder. Allow proper cooling time between duty cycles.
- 16 Always use this welder in the rated duty cycle to prevent excessive heat and failure.
- 17 Do not attempt to repair or maintain the welder while the power is on.
- 18 Do not touch the electrode and the ground or grounded workpiece at the same time.
- 19 Do not use a welder to thaw frozen pipes.



WARNING!

In order to avoid mistakes that could cause serious injury, read the following steps carefully and understand them thoroughly before using this welder.

PACKAGING CONTENTS

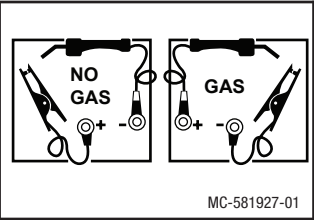
- 1. Remove cartons, bags, or foam containing the welder and accessories.
 - 2. Check the contents with the packaging list below.
- After unpacking the welder unit, inspect for any damage that may have occurred during transit. Check for loose, missing, or damaged parts. A shipping damage claim must be filed with the carrier.

ITEM	QTY.
Portable MIG Inverter Welder	1 unit
Welding torch	1 pc
Contact tips: 0.030" (0.8 mm)	2 pcs
Grounding clamp with 6' (1.8 m) cable	1 pc
Gas hose (5/8"-18UNF)	1 pc
Drive roller	1 pc
Regulator (Inlet CGA 580 male; Outlet 5/8"-18UNF female)	1 pc
Plug adaptor	1 pc
Instruction manual	1 manual

ASSEMBLY PREPARATIONS

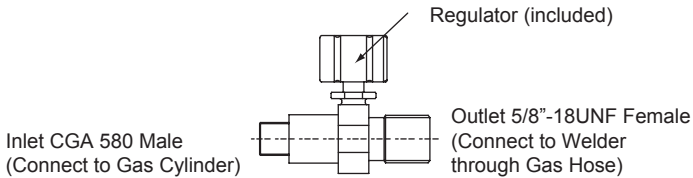
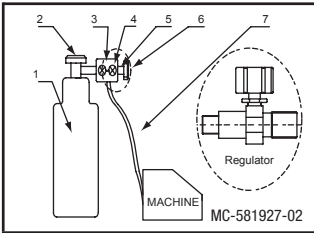
Factory polarity setting is for MIG welding (solid wire) using shielding gas. In this process the RED gun lead is connected to positive ("+") terminal and the ground cable is connected to the negative ("-") polarity terminal.

For flux-core welding (no shielding gas is required), the RED gun lead is connected to the negative ("-") and the ground cable is connected to positive ("+").



Gas hoses, regulator and gas cylinder connections

- Connect a CGA 580 adapter (not included) to the inlet connection of the Regulator and wrench tighten.
- Connect one end of Gas Hose (included) to the outlet connection of the Regulator and wrench tighten.
- Connect the other end of Gas Hose (included) to the gas input on the back panel of the welder.



NO.	Description	NO.	Description
1	Gas cylinder	5	Regulator (Inlet CGA 580 male; Outlet 5/8"-18UNF female)
2	Cylinder valve	6	Adjustment knob
3	Cylinder pressure gauge	7	Gas hose (5/8"-18UNF)
4	Gas flow gauge		

- Slowly open the cylinder valve by turning it counter-clockwise until the cylinder pressure gauge fixes the cylinder pressure.
- Slowly turn the adjustment knob clockwise to increase gas flow to 0.2-0.4 CFM. Turn it counter-clockwise to reduce the gas flow.
- Gas flow can be heard at the end of the gun when the trigger is activated.



WARNING!

If there is no gas flow, this will result in a harsh arc with excessive spatter, and a smooth weld bead will not be obtained.

GAS SELECTION

Different materials require different shielding gas when MIG welding. Refer to the set-up chart inside the wire drive compartment.

Mild steel: Use 75% argon and 25% CO₂ for reduced spatter and reduced penetration for thinner materials. Use CO₂ for deeper penetration and increased spatter.

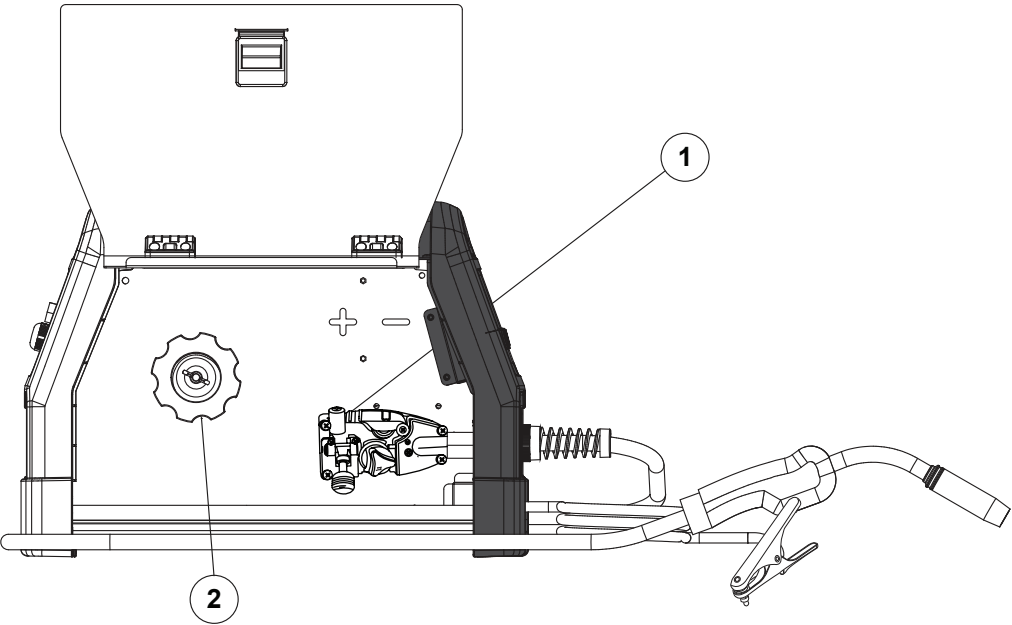
Note: Do not use argon gas concentrations higher than 75% on steel. The result will be extremely poor penetration, porosity, and brittleness of weld.

Stainless steel: Use a mixed gas consisting of helium, argon, and CO₂.

Aluminum or bronze: Use 100% argon.

WIRE DRIVE COMPARTMENT

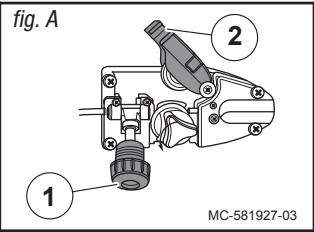
The wire drive compartment houses wire feed components such as wire feeder (1), and spool hub (2).



ASSEMBLY INSTRUCTIONS

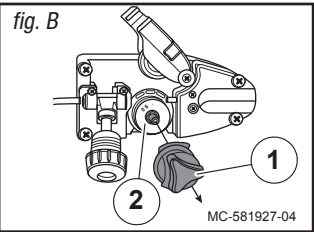
Installing the wire roller:

1. Open the wire drive compartment.
2. Relieve the drive tension by loosening the drive tension adjustment knob (1) and lifting the drive tension adjustor and drive tension arm (2) away from the drive roller (fig. A).



3. Put an end of the wire into the hole on the outside edges of the wire spool and bend the wire over to hold it in place. Remove the wire spool from the wire drive compartment.

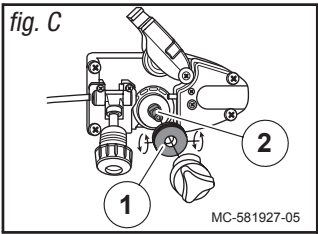
4. Rotate the drive roller cap (1) counter-clockwise and remove it from the drive roller (2) (fig. B).



WARNING!

Note: If the wire is already installed in the welder, roll the wire back onto the wire spool by manually rotating the wire spool clockwise. Do not allow the wire to come out of the rear end of the inlet guide tube.

5. Pull the drive roller (1) from the drive roller shaft (2) (fig. C).



Based on the wire diameter, select the correct groove using the following table:

Wire diameter	Roller groove
0.023" (0.6 mm)	0.023" (0.6 mm)
0.030" (0.8 mm)	0.030" (0.8 mm)
0.035" (0.9 mm)	0.035" (0.9 mm)

Note: When installing the drive roller, the number stamped on the drive roller should face the user. Push the drive roller onto the drive roller shaft.

6. Reinstall the drive roller cap and lock in place by turning it clockwise. Close the wire drive compartment.

Select the type of wire using the following table:

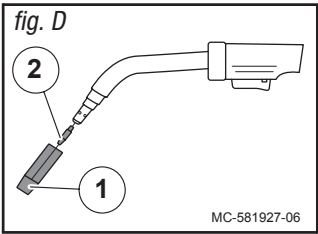
Wire type	Availability
0.023" (0.6 mm) MIG wire	Yes
0.030" (0.8 mm) MIG wire	Yes
0.035" (0.9 mm) MIG wire	Yes
Flux-cored wire 0.030" (0.8 mm)	Yes
Flux-cored wire 0.035" (0.9 mm)	Yes



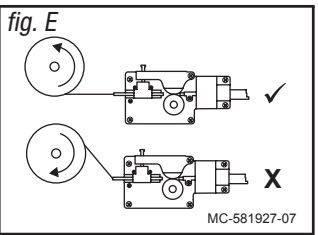
WARNING!

- Always switch off the power and unplug the power cord from the AC power source before installing the wire.
- Remove any wire or wire spool that is rusty.
- Do not weld metal thinner than 24 gauge, as doing so may burn the metal.
- Before installing, remove any old wire from the MIG gun assembly to prevent the wire from being jammed inside the gun liner.
- Use extreme caution when removing the welding nozzle, as the contact tip on the welder is live whenever the torch trigger is pulled.

1. Remove the nozzle (1) and contact tip (2) from the end of the torch assembly (fig. D).
2. Ensure the proper groove on the drive roller is in place for the wire to be installed.
3. Remove the packaging from the wire spool and identify the leading end of the wire secured on the edge of the spool. Do not unhook it at this time.



4. Place the spool on the hub with the wire passing from the bottom of the spool into the drive mechanism (fig. E).
Note: The welder can use either 4 or 8" (10 or 20 cm) spool. The 8" (20-cm) spool requires an adaptor. The wing nut controls the tension on the spool.



5. Setting the wire spool tension:
 - a. Turn the wire spool with one hand.
 - b. Increase the spool tension by tightening the wing nut while turning the spool. Turn the spool until it slows down.
 - c. Stop tightening the wing nut. Repeat these steps until proper spool tension is achieved.Note: If high tension is applied to the wire spool, the wire slips on the drive roller or will not be able to feed. If less tension is applied, the wire spool unspools itself when the trigger is released. If the tension is too high or too low, readjust using the wing nut.
6. Disconnect the welder from the power source, and remove the leading end of the wire from the spool.
7. Cut off any bent portion of the wire using a wire cutter.
8. Loosen the drive tension adjustment knob holding the drive tension arm in place and lift the tension arm up off the drive roller.
9. Insert the wire into the inlet guide tube, and feed about 6" (15 cm) of it across the drive roller and into the torch assembly.



WARNING!

When installing the drive roller, the number stamped on the drive roller should face the user. Push the drive roller onto the drive roller shaft.

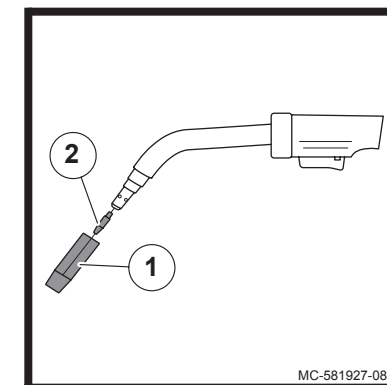
10. Line up the wire with the correct groove in the drive roller.
 11. Place the drive tension arm back above the drive roller.
 12. Tighten the drive tension adjustment knob until the tension roller is applying enough force on the wire to prevent it from slipping in the drive roller.
 13. Plug in the welder and turn it ON. Set the voltage switch to the voltage setting recommended for the gauge of metal that is to be welded. Refer to the set-up chart on the back side of the wire drive compartment.
 14. Set the wire speed control. Straighten the MIG gun cable and pull the trigger in the gun handle to feed the wire through the torch assembly.
 15. Turn the power switch to the OFF position. Select a contact tip with the same diameter as the wire being used.
- Note: Due to inherent variances in flux-cored welding wire, it is necessary to use a contact tip that is larger than the wire.
16. Slide the contact tip over the wire, thread the contact tip into the end of the gun and tighten securely.
 17. Install the nozzle on the gun assembly, and cut off any excess wire that extends past the end of the nozzle.

STEP 1

Installing the wire

Remove the nozzle (1) and contact tip (2) from the end of the torch assembly. Identify the leading end of the wire secured on the edge of the wire spool. Place the spool on the hub with the wire passing from the bottom of spool into the drive mechanism.

➔ Page 11, steps 1-4

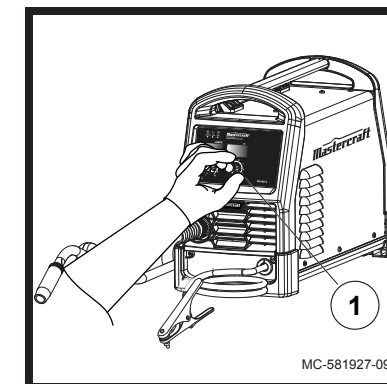


STEP 2

Setting the wire tension

Press the trigger on the gun. Turn the drive tension adjustment knob (1) clockwise, and increase the drive tension until the wire seems to feed smoothly without slipping.

➔ Page 11, step 5

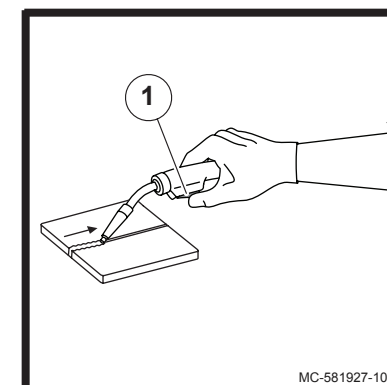


STEP 3

Operation

Hold the torch in one hand and turn the wire speed dial with the other hand to its maximum position. Pull the trigger (1) on the torch to start an arc. Drag the torch toward the user while simultaneously turning the wire speed dial counter-clockwise.

➔ Page 16, steps 4-5



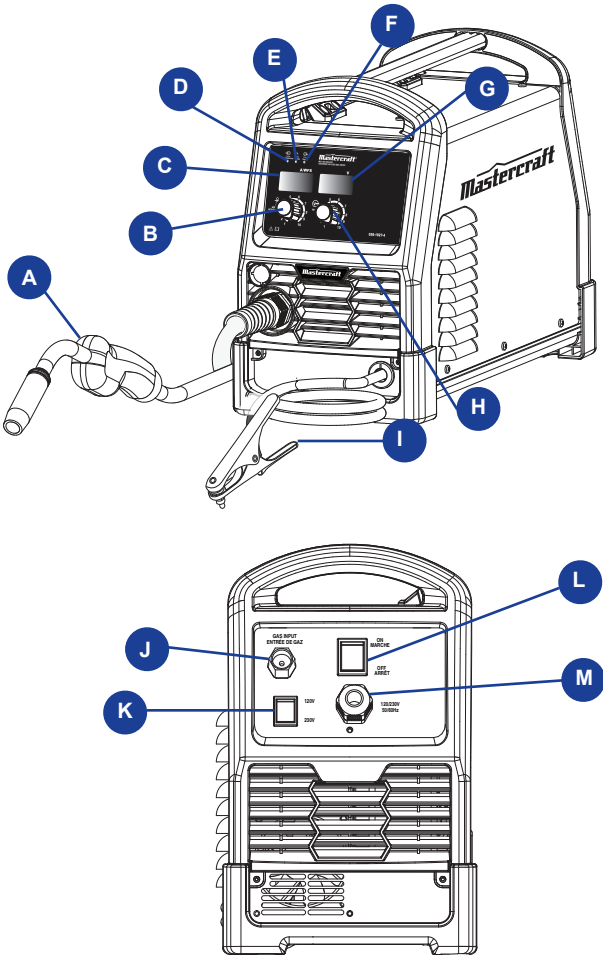
WARNING!

Potential hazard that could result in serious injury or loss of life.

- Ensure that wire protruding from the end of the torch does not come in contact with the workpiece, ground clamp or any grounded material during the drive tension setting process to reduce the risk of arc flash.

KEY PARTS DIAGRAM

NO.	Description	NO.	Description
A	MIG Torch	H	Voltage setting
B	Wire feed setting	I	Ground cable and clamp
C	Current display	J	GAS Input(5/8"-18UNF Female)
D	Power indicator	K	Dual voltage exchange
E	Thermal overload indicator	L	ON/OFF switch
F	Work indicator	M	Power cord connector
G	Voltage display		



OPERATING INSTRUCTIONS

Holding the torch (MIG gun):

- When using the welder, experiment holding the torch in different positions while finding a suitable position.

Distance from the workpiece:

- If the nozzle is held off the workpiece, the distance between the nozzle and the workpiece should be kept constant and should not exceed 1/4" (6 mm).

Tuning in the wire speed:

This is one of the most important parts of the MIG welder operation and must be done before starting each welding job or whenever any of the following variables are changed: heat setting, wire diameter, or wire type.

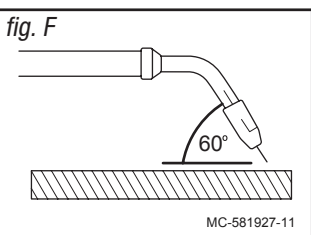
1. Connect the ground clamp to a scrap piece of the same type of material as the material to be welded. Note: The thickness of the scrap piece should be equal to or greater than the thickness of the actual workpiece, and free of oil, paint, and rust.
2. Select the heat setting.
3. Hold the torch in one hand, and allow the nozzle to rest on the edge of the workpiece farther from the user and at an angle similar to that which will be used when welding. There are two angles of the torch nozzle in relation to the workpiece that must be considered when welding.



WARNING!
Potential hazard that could result in serious injury or loss of life.

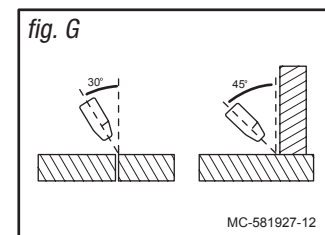
- Prolonged exposure to the welding arc can cause blindness and burns.
- Never strike the arc or start welding until the user is adequately protected.
- Wear flameproof welding gloves, heavy long-sleeved shirt, trousers without cuffs, high-topped shoes, and welding helmet.

Angle A



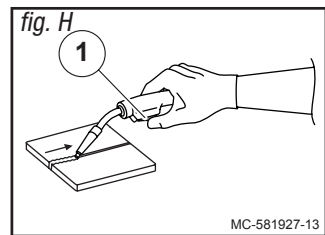
• Angle A can be varied, but in most cases the optimum angle will be 60 degrees (the point at which the torch handle is parallel to the workpiece). If angle A is increased, penetration will increase; if it is decreased, penetration will decrease (fig. F).

Angle B



• Angle B can be varied to improve the visibility of the arc in relation to the weld puddle and to direct the force of the arc (fig. G).

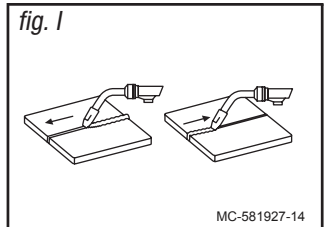
- 4. Turn the wire speed dial with the other hand to its maximum position and continue to hold onto the knob.
- 5. Pull the trigger (1) on the torch to start an arc. Drag the torch toward the user while simultaneously turning the wire speed dial counter-clockwise (fig. H).



6. When the wire speed decreases, the sound that the arc makes will change from a sputtering sound to a high-pitched buzzing sound. The correct setting is the point where the high-pitched buzzing sound is achieved. Use the wire feed control to slightly increase or decrease the heat and penetration by selecting higher or lower wire feed settings. Repeat this tune-in procedure if a new heat setting, a different diameter wire, or a different type of welding wire is selected.

Welding techniques:

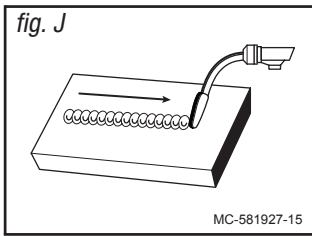
- Torch travel: The movement of the torch along the weld joint. For a solid weld bead, the welding torch should be moved steadily and at the right speed along the weld joint. Moving the torch too fast, too slow, or erratically prevents proper fusion or creates a lumpy, uneven bead.
- Travel direction: The direction of the torch moving along the weld joint in relation to the weld puddle. The torch is either pushed into the weld puddle or pulled away from the weld puddle. For most welding jobs, pull the torch along the weld joint for greater weld puddle visibility (fig. I).



- Travel speed: The rate at which the torch is being pushed or pulled along the weld joint. For a fixed heat setting, if the travel speed is faster, the penetration will be low and the finished weld bead will be low and narrow. Likewise, if the travel speed is slow, the penetration will be deep and the finished weld bead will be high and wide.

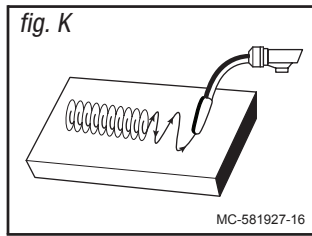
Types of welding beads:

Stringer bead



- The stringer bead is formed by moving the torch in a straight line while keeping the wire and nozzle centred over the weld joint (fig. J).

Weave bead



- The weave bead is made by weaving the wire from side to side while moving with the torch (fig. K).



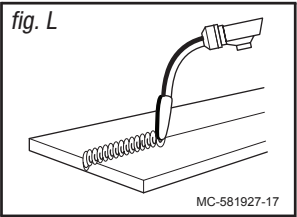
WARNING!

Potential hazard that could result in serious injury or loss of life.

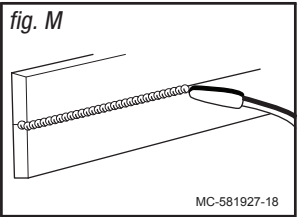
- Prolonged exposure to the welding arc can cause blindness and burns.
- Do not perform any welding while standing, kneeling, or lying on the grounded area. Failure to comply could result in serious injury or loss of life.

Welding position:

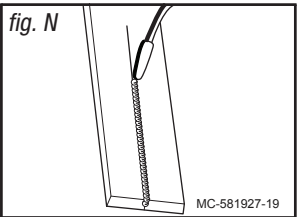
1. Flat position: This position is easiest and most commonly used. It is best to weld in the flat position to achieve good results (fig. L).



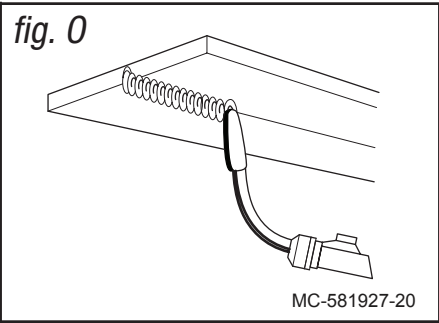
2. Horizontal position: This position prevents the weld puddle from running downward while allowing a slow but sufficient travel speed. For this position, angle B should be about 30 degrees downward from being perpendicular to the workpiece (fig. M).



3. Vertical position: The torch can be easily pulled from top to bottom in this position, though it is difficult to prevent the puddle from running downward. Pushing the torch from bottom to top provides better puddle control and allows slower rates of travel speed to achieve deeper penetration. For this position, angle B should be zero and angle A will vary from 45 to 60 degrees to provide better puddle control (fig. N).

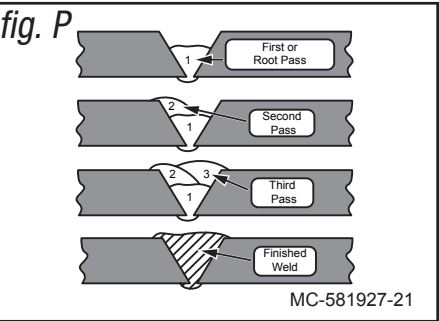


4. Overhead position: This is the most difficult welding position. For this position, angle A should be maintained at 60 degrees. Maintaining this angle will reduce the amount of molten metal falling into the nozzle (fig. O). Angle B should be zero degrees so that the wire is aiming directly into the weld joint. If excessive dripping of the weld puddle occurs, select a lower heat setting.



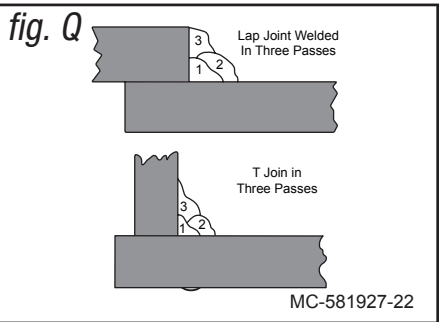
Multiple pass welding:

- Butt weld joint: When butt welding thicker materials, prepare the edges of the material to be joined by grinding a bevel on the edges of the metal pieces being joined. When it is done, a "V" is created between the two metal pieces. In most cases, more than one pass or bead will need to be laid into the joint to close the "V" (fig. P).



Note: When using self-shielding flux-core wire, it is necessary to thoroughly chip and brush the slag off each completed weld bead before making another pass.

- Fillet weld joint: Most fillet weld joints on metals of moderate to heavy thickness will require multiple passes to produce a strong joint. The sequence of laying multiple pass beads into a T-joint and a lap fillet joint is shown (fig. Q).



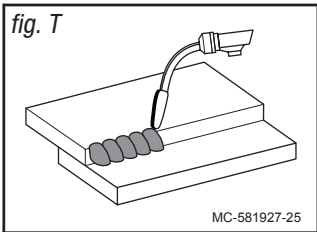
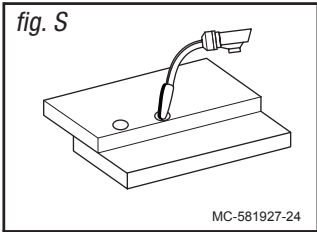
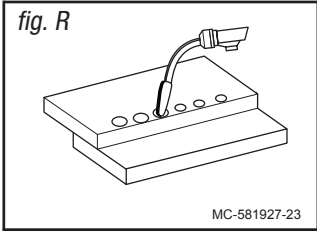
Spot welding:

There are three methods of spot welding:

1. Burn-through method: In this method, two overlapped metal pieces are welded together by burning through the top piece and into the bottom piece. The wire suitable for this method is 0.035" (0.9 mm) self-shielding, flux-cored wire. Always select the high heat setting for this method and tune in the wire speed prior to making a spot weld (fig. R).

2. Punch and fill method: This method produces a weld with the most finished appearance. In this method, a hole is punched or drilled into the top piece of metal and the arc is directed through the hole to penetrate into the bottom piece. The puddle is allowed to fill up the hole leaving a spot weld that is smooth and flush with the surface of the top piece (fig. S).

3. Lap spot method: The welding arc is directed to penetrate the bottom and top pieces at the same time, and along each side of the lap joint seam. Select the wire diameter and, heat setting, and tune in the wire speed in a way suitable for welding the material with a continuous bead (fig. T).



Instructions to be followed for the spot welding methods:

1. Select the wire diameter and heat setting recommended above for the intended method of spot welding.
2. Tune in the wire speed as if a continuous weld is to be performed.
3. Hold the nozzle piece completely perpendicular to and about 1/4" (6 mm) from the workpiece.
4. Pull the trigger on the torch and release it when the desired penetration is achieved.
5. Make practice spot welds on scrap metal and vary the duration of time of holding the trigger until a desired spot weld is made.
6. Make spot welds on the actual workpiece at desired locations.



WARNING!

Note: Do not use 0.030" (0.8 mm) self-shielding flux-core wire when using this method unless the metal is very thin or excessive filler metal.

MAINTENANCE

- The welder needs regular maintenance.
- Periodically clean dust, dirt, grease etc. from your welder . Every six months, or as necessary, remove the cover panel from the welder and air-blow any dust and dirt that may have accumulated inside the welder.
 - Replace power cord, ground cable , ground clamp, or electrode assembly when damaged or worn.
 - Store in a clean dry facility, free from corrosive gas, excess dust and high humidity. Store in a temperature range from -12 to 49°C (10 to 120°F) and relative humidity no higher than 90%.
 - When transporting or storing the welder after use, it is recommended to repack the product as it was received for protection. Cleaning is required before storage and you must seal the plastic bag in the box for storage.



WARNING!

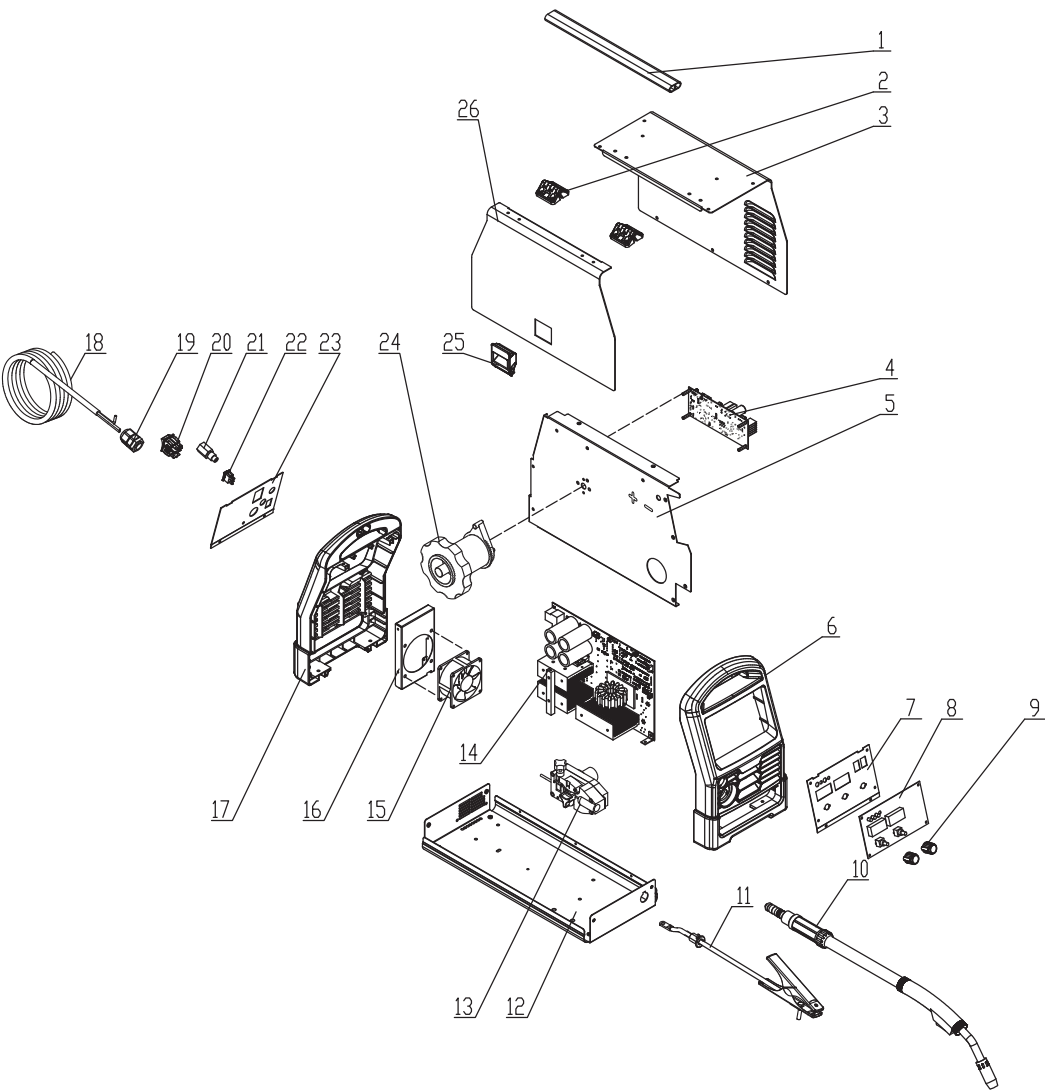
Potential hazard that could result in serious injury or loss of life.

- Unplug the welder before performing any maintenance or service.
- Only use the welder after replacing or repairing any damaged parts or accessories.
- Use only recommended and properly rated replacement parts. Failure to comply could lead to serious injury or loss of life.

TROUBLESHOOTING

NO.	PROBLEM	POSSIBLE CAUSES	SOLUTIONS
1	Yellow thermal overload light	Voltage is too high (≥15%)	Switch off power source; check the main supply; restart welder when power returns to normal state.
		Voltage is too low (≤15%)	
		Bad power ventilation leads to over-heat protection	Improve the ventilation condition.
		Circumstance temperature is too high.	It will automatically recover when the welder's temperature cools down.
		Using over the rated duty-cycle.	It will automatically recover when the welder's temperature cools down.
2	Wire feed motor does not work	Potentiometer not in the proper stathus	Change potentiometer
		Nozzle is blocked up	Change nozzle
		Feed roller is loose	Tighten the bolts
3	Cooling fan not working or turning very slowly	Switch broken	Replace the switch
		Fan broken	Replace or repair the fan
		Wire broken or falling off	Check the connection
4	Arc is not stable and splash is large	Too large contact tip makes the current unsteady	Change the proper contact tip or roller
		Too thin power cable makes the power ast aticism	Change the power cable
		Too low input voltage	Enhance the input voltage
		Wire feeding resistance is too large	Clean or replace the liner and the torch cable in the line direction.
5	arc cannot be pilot	Earth cable break	Connect earth cable
		Workpiece is greasy, dirty, stained, or rusty	Clean workpiece.
6	No shielded gas	Torch is not connected well	Connect the torch again
		Gas pipe is pressed or blocked up	Check gas system
		Gas system rubber pipe break	Connect gas system and bind firmly
7	Others		Please contact our company

EXPLODED VIEW



PARTS LIST

NO.	Description	Qty.	NO.	Description	Qty.
1	Handle	1	15	Fan	1
2	Hinge	2	16	Fan bracket	1
3	Right panel	1	17	Back plastic panel	1
4	Control board	1	18	Power cord	1
5	Middle board	1	19	Cable holder	1
6	Front plastic panel	1	20	Switch	1
7	Front panel fixed	1	21	Gas holder	1
8	Front panel PC board	1	22	Power transfer switch	1
9	Potentiometer knob	2	23	Back panel fixed	1
10	MIG torch	1	24	Spool holder	1
11	Ground cable and clamp	1	25	Latch	1
12	Base plate	1	26	Left panel	1
13	Wire feeder	1			
14	Main PC board	1			



WARNING!

If any part is missing or damaged, do not use the product until the missing or damaged part has been replaced.

NOTE:

The manufacturer and/or distributor has provided the parts list and assembly diagram in this manual as a reference tool only. Neither the manufacturer nor distributor makes any representation or warranty of any kind to the buyer that he or she is qualified to make any repairs to the product, or that he or she is qualified to replace any parts of the product. In fact, the manufacturer and/or distributor expressly states that all repairs and parts replacements should be undertaken by certified and licensed technicians, and not by the buyer. The buyer assumes all risk and liability arising out of his or her repairs to the original product or replacement parts thereto, or arising out of his or her installation of replacement parts thereto.

Three-year limited warranty

This Mastercraft product is guaranteed for a period of three (3) years from the date of original retail purchase, against defects in materials and workmanship.

Subject to the conditions and limitations described below, this product, if returned to us with proof of purchase within the stated warranty period and if covered under this warranty, will be repaired or replaced (with the same model, or one of equal value or specification), at our discretion. We will bear the cost of any repair or replacement and any costs of labour relating thereto.

These warranties are subject to the following conditions and limitations

- a) a bill of sale verifying the purchase and purchase date must be provided;
- b) this warranty will not apply to any product or part thereof which is worn or broken or which has become inoperative due to abuse, misuse, accidental damage, neglect or lack of proper installation, operation or maintenance (as outlined in the applicable owner's manual or operating instructions) or which is being used for industrial, professional, commercial or rental purposes;
- c) this warranty will not apply to normal wear and tear or to expendable parts or accessories that may be supplied with the product which are expected to become inoperative or unusable after a reasonable period of use;
- d) this warranty will not apply to routine maintenance and consumable items such as, but not limited to, fuel, lubricants, vacuum bags, blades, belts, sandpaper, bits, fluids, tune-ups or adjustment;
- e) this warranty will not apply where damage is caused by repairs made or attempted by others (i.e. persons not authorized by the manufacturer);
- f) this warranty will not apply to any product that was sold to the original purchaser as a reconditioned or refurbished product (unless otherwise specified in writing);
- g) this warranty will not apply to any product or part thereof if any part from another manufacturer is installed therein or any repairs or alterations have been made or attempted by unauthorized persons;
- h) this warranty will not apply to normal deterioration of the exterior finish, such as, but not limited to, scratches, dents, paint chips, or to any corrosion or discolouring by heat, abrasive and chemical cleaners;
- i) this warranty will not apply to component parts sold by and identified as the product of another company, which shall be covered under the product manufacturer's warranty, if any.

Additional limitations

This warranty applies only to the original purchaser and may not be transferred. Neither the retailer nor the manufacturer shall be liable for any other expense, loss or damage, including, without limitation, any indirect, incidental, consequential or exemplary damages arising in connection with the sale, use or inability to use this product.

Notice to consumer

This warranty gives you specific legal rights, and you may have other rights, which may vary from province to province. The provisions contained in this warranty are not intended to limit, modify, take away from, disclaim or exclude any statutory warranties set forth in any applicable provincial or federal legislation.

Made in China
Imported by
Mastercraft Canada Toronto, Canada M4S 2B8

