

Welding Industries (Malaysia) Sdn. Bhd.16, Jalan Johan 1/2, Kawasan Perindustrian Pengkalan II,31550 Pusing. Perak Darul Ridzuan. MalaysiaTel: + (605) 366-8828Fax: + (605) 366-8328URL: www.wim.com.myE-mail: wim@wim.com.my

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MIG210S (IMW-MIGS)



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1. INTRODUCTION

A few minutes spent reading about your new MIG S Series welding machine will enable you to operate your machine efficiently and benefit from its many features.

2. SETTING UP OPERATION

2.1 Fit Torch to Machine

Carefully align gas connection tube and trigger connection pins with central adaptor. Push in and tighten the lock nut. Open the wire feed pressure arm above the feed roll. Fit the feed roll to suit the diameter of wire to be used.

2.2 Feed Roll Changing (if required)

Remove the feed roll-retaining knob. Pull off feed roll. When replacing the feed roll, note the wire size which is stamped on the side face of the roll. The required size must face inwards when the roll is refitted. Ensure that the Woodruff Key is not lost. Fit the feed roll and refit the retaining knob using thumb and forefinger. Do not over tighten.

2.3 Fit the Reel of Welding Wire

Turn the red plastic knob of the hub until the concave is aligned with the black tip. Place the reel of wire on hub so that the wire will be drawn off from the bottom. Ensure that the pin on the hub locates in the hole in the side of the wire reel spool reel. Turn the red plastic knob and make sure the concave is not aligned with the black tip. Use 300mm diameter 15kg spools only.

WIRE	WIRE GUIDE
DIAMETER FE.	LINER INT.
WIRE MM	DIAMETER MM
Dia. 0.8 - 1.2	Dia. 1.0-1.5
Dia. 1.6	Dia. 2.0
WIRE	WIRE GUIDE
DIAMETER AL.	LINER INT.
WIRE MM	DIAMETER MM
Dia. 0.8	
Dia. 1.0	Dia. 1.5
Dia. 1.2	Dia. 1.5

2.4 Overrun Adjustment

Remove the red plastic knob. Tighten or unscrew the hub tension hand nut in the centre of the hub reel assembly until sufficient hub friction is achieved to prevent overrun. This adjustment should be done with full spool of wire at maximum wire feed speed. Do not over tighten.

2.4 Wire Feeding

Release the wire end from reel and cut off the bent wire end, taking care that the wire does not unwind. Remove the nozzle and contact tip from the welding gun. Straighten about 10cm of the wire and make sure that the end is as blunt as possible (file off if necessary). A sharp end could damage the cable liner and the contact tip of the welding torch. Ensure the wire is placed correctly on to the feed rolls. Thread some wire through the feed rolls into the guide tube and liner of the welding cable. Close the wire feed pressure arm. The pressure adjustment of the feed rolls must be set so that the wire is fed evenly into the liner and light restriction of the wire can be made without feed rolls slipping. Note: Excessive pressure will cause flattening of the wire, loosening of the wire coating and undue wear of the rolls.

2.6 Earth Connection

The earth connection from the welder should at all times be made directly on to the piece to be welded. The contact between the earth and the job should be as large and flat as possible. All rust and paint on the work piece should be removed

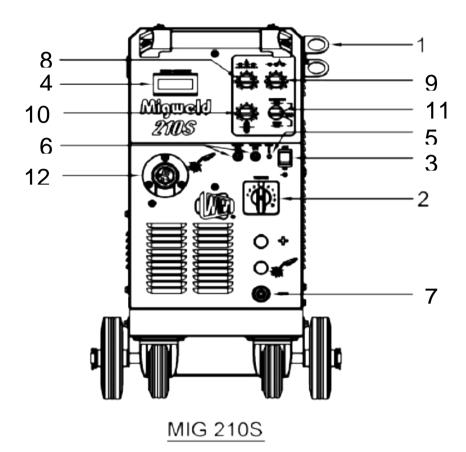
2.7 Gas Connection

Fit hose tail and nut to the gas hose and hold captive with the hose clamp. Connect the gas hose to the regulator, open the cylinder valve and the gas flow rate is automatically set to 15 liters per minute.

NOTE: PLUG TOP MUST BE FITTED BY A QUALIFIED ELECTRICIAN



3-0 MACHINE CONTROLS/CONNECTIONS



1. TORCH HOLDER FIT ON THE SIDE COVER RIGHT AS POINT AT THE DRAWING

2. VOLTAGE SELECTOR SWITCH

- Coarse control 10 steps

3. ON/OFF SWITCH

- With this switch is in the ON position, power is applied to the fan and control circuits.

WARNING: This switch does not isolate the unit from the mains electrical supply.

4. DC AMMETER

- Show the welding current.

5. OVERHEAT INDICATOR (LED)

- 6. FUSES
- 7. NEGATIVE TERMINAL (CO²)
- 8. SPOT TIME ADJUSTOR

9. STITICH TIME ADJUSTOR

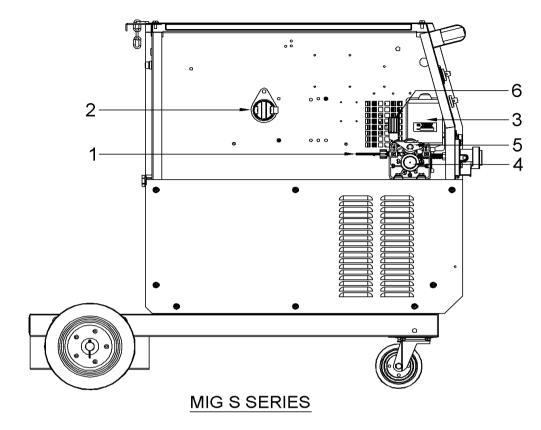
10. WIRE FEED SPEED ADJUSTOR

11. FUNCTION SELECTOR SWITCH To select the modes of the machine i.e. continuous, spot or stitich.

12. CENTRAL ADAPTOR



3-1 INTERNAL VIEW/PART DESCRIPTION

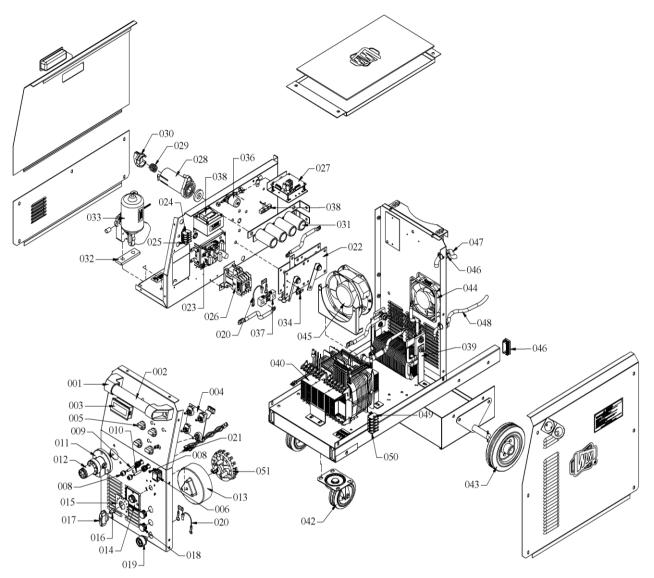


- 1 INLET GUIDE TUBE
- 2 WIRE SPOOL
- 3 DC MOTOR
- 4 FEED ROLL SECURE KNOB
- 5 PRESSURE WHEEL AND ARM
- 6 TENSIONING KNOB



4-0 PARTS LIST

4-1 General View of MIG 210S



MIG 210S FINAL ASSEMBLY



4-2 MIG210S SPARE PARTS LIST

DWG	PART CODE	DESCRIPTION	QUANTITY
NO.			
001	BKT-2520	NYLON SIDE HOLDER / BRACKET	2
002	STBH-SD32-218	TUBE: HADLE 1¼" (OD) X 1.2MM (T) X 218MM (L)	1
003	MTA-R075HB	DIGITAL DISPLAY METER HB5135BW DA400 75MV (HBKJ)	
004	SCBA-MGV1-1	MIGWELD-VR P.C ASSEMBLY BOARD	1
005	EVAO-KN00	VOLUME KNOB (MO-895/T)	4
006	ESWO-1550	ON/OFF SWITCH C1550VQ (ROCKET SWITCHES)	1
007	ELED-001H	LED HOLDER	1
008	EFUH-B001	FUSE HOLDER (BIG)	2
009	EFUS-0030-CE	GLASS FUSE 3A 250V MGC 6.35X31.75MM (F) WALTER	1
010	EFUS-0050	GLASS FUSE MRS 5A 250V (UL/CSA)	1
011	THA-I001	MIG TORCH ADAPTOR INSULATOR	1
012	THA-U001	(501.2364) CENTRAL ADAPTOR 3E+UNIVERSAL	1
013	CVT-3923	PLASTIC COVER: (LL9X0.40) STEP SWITCH	1
014	SWS-NPH-M135	STEP SWITCH NO PLATE HANDLE	1
015	SSWS-PNP-M210	10 STEPS SWITCH P.C NO PLATE WITH VOLUME	1
016	SSWS-SWK-M135	STEP SWITCH KNOB WITH HEXAGON BRASS	1
017	SWS-SNH-M135	STEP SWITCH HANDLE	1
018	RBS-0002	PLASTIC STOPPER (OD 20.5MM)	2
019	SPS-CX30	PANEL SOCKET TEBM25 (10-25MM ²)	1
020	SBKF-R100-1	FILTER TERMINAL SET MIGWELD SERIES	2
021	ELED-001R	L.E.D (RED)	1
022	REF-2500	RECTIFIER RADD PTS 290	1
023	SCBA-MGD2-1	MIGWELD-D2 P.C ASSEMBLY BOARD	1
024	CNB-0600	CONNECTOR: TERMINAL TEND (BLOCK) 10A	4
025	CNE-0600	CONNECTOR: TERMINAL TEND (BLOCK) 10A END PLATE 1	
026	CCA-0240-12T	CONTACTOR: AC24V TMC-12 (3-1) 1	
027	SCBA-MIGD-AV2	DIGITAL DISPLAY (V2) (MIGWELD) 1	
028	WIS-1200-1	WIRE SPOOL 120MM (PLASTIC)	1
029	SRW-02R5-1450	SPRING; G12 (2.5MM) x 14MM x 5P x 25MM BL (SPOOL)	1
030	KNW-S001	KNOB: WIRE SPOOL (PLASTIC RED)	1
031	CPT-1802-500A	CAPACITOR ALU 18000UF 50V ALU-E/CAP	4

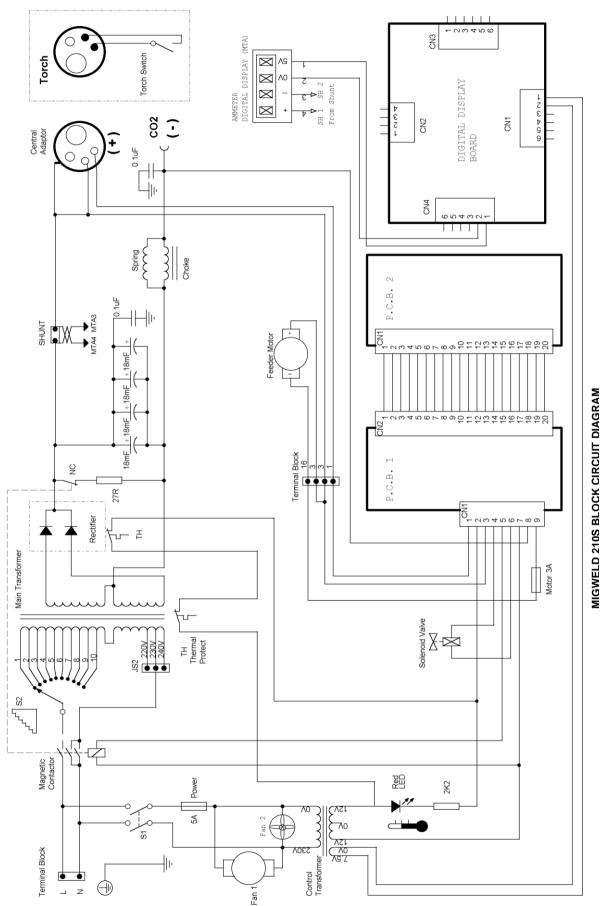


4-2 MIG210S SPARE PARTS LIST (Cont...)

DWG	PART CODE	DESCRIPTION	QUANTITY
NO.			
032	NLP-8828-08R0	NYLON PLATE: 88 x 28 x 8MM	1
033	FDW-3110-4	WIRE FEED MECH CWF-3110-4 C/W MOTOR	1
034	ETMS-1010	THERMOTSTAT INTOIL C1010 0248AB	1
035	TRC-2303-012N	TRANS: IP(0-180-200-230) OP(0-7.5-12-0-12)	1
036	VVG-24AC-ZK	VALVE: GAS 24VAC	1
037	SHT-4000-75	SHUNT 400A 75MV	1
038	ERST-0270-100	RESISTOR 270HM 10W (CR TYPE – H)	1
039	STRM-M21C-1	WELDING TRANSFORMER (C)	1
040	STRM-M210-2	MAIN WELDING TRANSFORMER	1
041	TBS-B228	RUBBER STOPPER B228	2
042	WLR-1020	4" SWIVEL CASTOR C/W BLACK RUBBER WHEEL	2
043	WLR-1600	6" BLACK RUBBER WHEEL (160MM x 21MM)	2
044	BWC-RAH-1238	BLOWER COOLING FAN RAH 1238B1 220-240VAC 1	
		50/60HZ	
045	BWC-RAH-1751	BLOWER COOLING FAN (172 x 150 x 51MM)	1
046	HOB-P150	HOSE BINDER (PLASTIC) (AC200/500)	2
047	HOG-0060	RUBBER GAS HOSE 5MM	1
048	SWRH-KFA0-345	CABLE: FLEXIBLE 3C/110-0.193MM+13A PIN PLUG (345)	1
049	CNB-020A	CONNECTOR: TERMINAL BLOCK 20A (TBC-20-14)	5
050	CNE-0800	CONNECTOR: TERMINAL TEND (BLOCK) 20A END PLATE	1
051	ASSW-M210-2	10 POLES STEP SWITCH ASSEMBLY SET	1



5-0 CIRCUIT DIAGRAM



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6-0 WELDING TECHNIQUES

6-1 Setting of the Machine

The setting of a MIG S Series welding machine demands some practice from the welder, the machine having two control points that have to conform. These two are the wire feed speed and the welding voltage. The welding current is determined by the wire feed speed, and it should correspond to the work piece. The current will increase wire speed, resulting in a shorter arc. Less wire speed will reduce the current and lengthen the arc. Increasing the welding voltage hardly alters the current intensity, but lengthens the arc. By decreasing the voltage a shorter arc is obtained with little change in current intensity.

When using CO2 as shielding gas, increase the voltage by about 5 volts per 100 Amp.

When changing the wire diameters, different control settings are required. A thinner wire needs more speed to acquire the same current strength. A satisfactory weld cannot be obtained if extreme values are exceeded.

If the feed speed is too high for the welding voltage, blockage will occur in the torch as the wire dips into the molten pool and does not melt. Welding in these conditions normally gives faults due to lack of fusion. If, however, the welding voltage is too high, large drops will form on the end of the wire, causing spatter. The correct setting of voltage and speed can be seen in an even and calm arc.

6-2 Influence of the Welding Position

The position of the torch and the work piece is important for quality and appearance of the seam.

The diagrams on the next page show some of the many possibilities and indicate schematically the importance of these positions. In practice one of course uses all combinations of welding positions, torch directions and positions of the work piece.

Together with the figures, the diagram may help when an estimation of the importance of separate factors for welding quality is needed.

The terms drawing weld and thrusting weld mean:

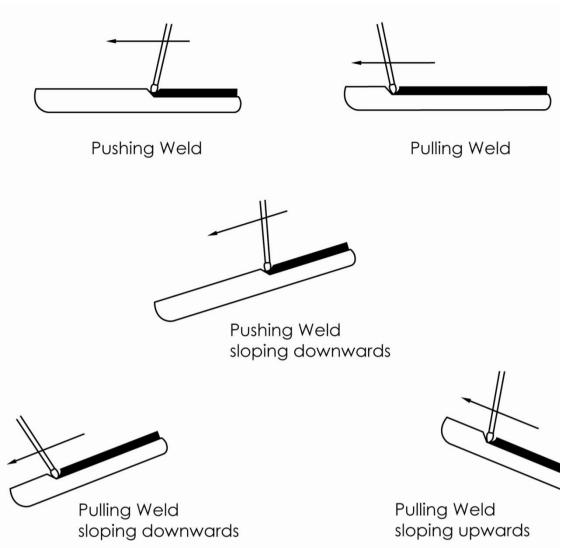
Drawing weld: torch sloped in direction of weld. Thrusting weld: torch sloped away from direction of weld.

Drawing weld is sometimes designated "dragging welding" and thrusting weld "stabbing welding".

	Thrusting weld	Drawing weld
Width of seam	Wider	Narrower
Upper bead	Smaller	Larger
Penetration	Decrease	Increase
Tendency to lack of fusion	Greater	Lesser

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7-0 MAINTENANCE



7-1 Checking Items

The following items demand special attention:

(A) Wire feed unit.

This unit is to be checked regularly at the wire feed roller and the wire nozzles, as it is of great importance for a satisfactory welding result and a minimum of wear and tear that the wire passes through the mechanism without any deformations of the wire or the wire feed roller.

The wire nozzle should often be checked and changed if the copper coating of the wire is damaged on its way through the nozzles. Copper dust may totally hinder free passage through the wire liner.

A weekly check and cleaning of the nozzles as well as the wire feed roller is recommended.

(B) Welding hose.

Great care should be taken that the welding hose is not overloaded. It should not be pulled over sharp edges, and other heavy machines should not run over it as it may damage the wire lines. The hose should be dismantled every week and cleaned with dry air.

(C) Welding torch.

There are many parts in the welding torch that have to be cleaned regularly. The main ones are the contact tip and the gas nozzle. During the welding process, these parts are bombarded with spatter that sticks in the nozzles. This may disturb the shielding gas flowing from the gas nozzle down to the molten pool. Otherwise, if the gas nozzle is blocked up with spatter, there is a danger that short-circuits will occur between the contact tip and the gas nozzle. The spatter should therefore be removed regularly and spatter remover applied in order to prevent spatter from burning into the nozzles. During the cleaning process, the gas nozzle is removed.

REMEMBER: DO NOT CLEAN BY BEATING THE TORCH.

(D) Power source.

The rectifier and transformer should be blown out with dry air occasionally; otherwise the air circulation will be affected by the dust.



8-0 TROUBLESHOOTING

Table 1: Common Faults

No.	FAULT	PROBABLE CAUSE AND REMEDY
1	Too little welding effect. The welding seam forms a bead.	 One of the three fuses in the main switch is not working (one phase is missing). The welding voltage is too low. Switch one setting higher.
2	The wire feed is blocking.	 The inlet nozzle and the wire are not in alignment with each other. The reel of wire is too taut; the wire must come off the reel evenly. The inlet or contact tip is worn out or is blocked up. The welding wire is not clean or it is rusty. It could also be of an inferior quality. The pressure roller has to be tightened.
3	Spatter	 The wire feed is too fast for the voltage setting. Worn out contact tip.
4	Porous weld. A cone is formed when spot welding	 Insufficient gas-not enough pressure or the cylinder is empty. Contact tip is blocked up. Leakage-air is pumped in and dilutes the shielding gas.
5	The arc does not look normal, and there is a lot of spatter.	1) The material is dirty, under sealed or paint.
6	The wire keeps sticking in the contact tip and is very slow.	 The wire can be malformed. The damage wire should be cut off, pulled out and replaced. The pressure on the wire feed roller should be checked. Worn out contact tip.
7	No welding voltage	1)Working voltage interrupted due to overloading of the transformer. Automatic switch on after cooling (15-30 min.)

Table 2: Troubleshooting for MIG S SERIES P.C. Assembly Board

No.	Trouble	PROBABLE CAUSE
1	Motor automatic work	a) Transistor 2SA1215 (MOSFETS)
2	Motor does not work	 a) VR2 (B10K) Damage (Open circuit, short circuit or broken pin). b) Transistor BC557 (Q5) open circuit. c) Transistor 2SA1215(MOSFETS) d) Selector switch damage. e) Resistor 10W 0.68 Ohm open circuit.
3	Spot & stitch time is short	 a) VR1 (B250K) damage (Open circuit, short circuit or broken pin).
4	Motor can not stop	a) Resistor 5W 0.68-Ohm (R3) open circuit.
5	Motor speed is slow	a) Transistor 2SA1215(MOSFETS) b) VR2 (B10K) leaking.
6	Contactor's malfunction	a) Zener diode 24V 1/2W (ZD4) open circuit. b) Transistor BC547 (Q11) short circuit.
7	Contactor does not work	a) TRIACS BTA10 600C (T1) open circuit.

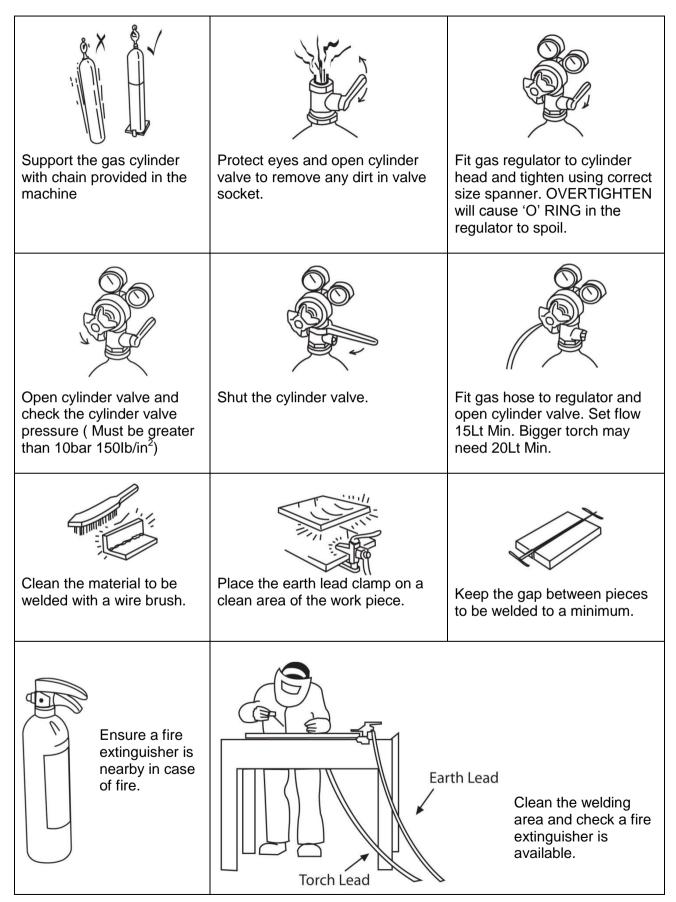


9-0 TECHNICAL DATA

MODEL	MIG210S
Main Supply	1 - PHASE 50/60HZ
Voltage	220V ~ 240V
Max Input Current	33A
Fuse (slow)	35A
Cable Cross – Section Area	4 ~ 10mm ²
Output Rating	210A / 24V
Duty Cycle %	30%
Rating 60%	145A / 21V
Rating 100%	110A / 20V
Voltage Adjustment	10 steps
Open Circuit Voltage	18V~45V
Max Welding Output	210A / 24.5V
Min Welding Output	30A / 15.5V
Filler Wire Dimensions	0.6 ~ 1.0 Ømm
Wire Feeding Speed	1 ~ 17m/min
Timer (Spot or Stitch Welding)	0 ~ 5 sec
Static Characteristic	Flat (CV)
Dimension (L x W x H)mm	820 x 450 x 720
Weight	72kg
Insulation Class	H180°C
Degree of Protection	IPS21

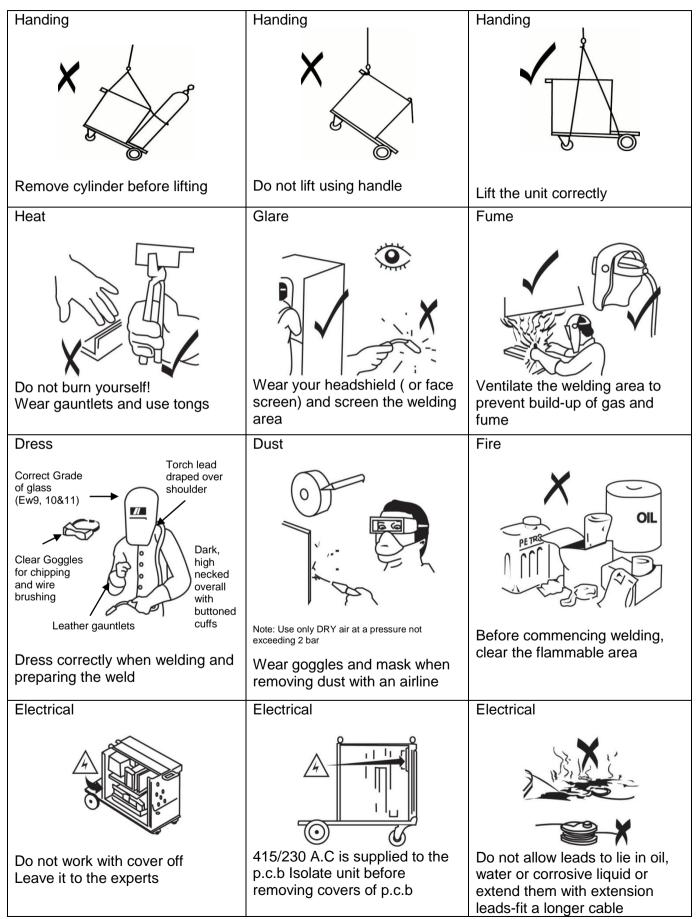


10-0 SAFETY OBSERVATION





10-0 SAFETY OBSERVATION (Cont'd)





THE WIM GENERAL WARRANTY

Your welding machine is warranted by WIM to be of satisfactory quality, fit for its purpose and to comply with applicable WIM specification for a period of twelve (12) months from the date of purchase (verified by reference to your proof of purchase). Not applicable for consumable parts and accessories.

This warranty does not apply if the welding machine has:

- a) Been mishandled, misused, willfully damaged, neglected, improperly tested, repaired by unauthorized person, altered or defaced in any way.
- b) A defect arising as a result of any failure to follow instructions either on the manual or product specification.
- c) A defect which has arisen from the use of non-WIM approved accessories or ancillary items attached to or in connection with the welding machine.
- d) The warranty sticker removed or tempered with.

The manufacturer reserves the right to:

- a) Make changes in technical and product specification without prior notice.
- b) Waive the warranty on visual defect not reported within seven (7) working days.

JAMINAN AM WIM

Mesin kimpalan anda dijamin oleh WIM untuk kualiti yang memuaskan, sesuai digunakan untuk tujuan dan mengikut spesifikasi WIM untuk tempoh dua belas (12) bulan dari tarikh pembelian (disahkan melalui bukti resit pembelian anda.) Syarat ini tidak termasuk pada barangan guna habis dan aksesori.

Jaminan ini tidak boleh dituntut jika didapati mesin kimpalan anda telah:

- a) Salah penyelengaraan, disalahgunakan, kerosakan yang disengajakan, kecuaian, ujian yang tidak dilakukan dengan betul, dibaiki oleh orang yang tidak berkelayakan, diubahsuai atau dirosakan dengan apa cara sekalipun.
- b) Kerosakan berlaku akibat dari kegagalan mematuhi arahan samaada dari manual atau spesifikasi produk.
- c) Kerosakan berpunca dari penggunaan aksesori yang tidak mendapat pengesahan WIM atau barang sampingan yang dipasang atau disambung pada mesin kimpalan anda.
- d) Label jaminan telah ditanggalkan atau kotor.

Pihak pengilang berhak untuk:

- a) Membuat sebarang pindaan teknikal dan spesifikasi produk tanpa sebarang notis.
- b) Jaminan tidak boleh dituntut jika berlaku kerosakkan visual yang tidak dilaporkan dalam tempoh tujuh (7) hari bekerja.

WIM一般的保证书

由购买日期算起的十二个月内,(由购买证据所鉴定)WIM保证您的焊机品质令人满意,功能良好及附合WIM的相关规格。这保证不包含消耗物品和配件。

这保证不包含以下情况之产品:

- a) 焊机经过不适当的处理、误用、 蓄意毁坏、 疏忽、 不正确地做试验、没有经过WIM批准人员修理 、改造或磨灭。
- b) 没有跟从手册或在产品规格里的指示所引起的缺点。
- c) 使用没有得到WIM所批准的配件或跟焊机附著或连接的物品。
- d) 保证贴纸已被移位或破坏。

厂商保留以下权力:

- a) 在没有优先的通知下更改技术规格。
- b) 在七个工作天内,外观不良必须提出,否则作废。



WIM MIG 01 WARRANTY

- 1) General: WIM products are warranted against manufacturing defects for one (1) year following date of shipment to the original user. With exception of item listed in paragraphs 2 through 7 below.
- 2) Major Power Components: Main power transformers are warranted for two (2) years following date of shipment to the original user. WIM will cover parts and labor in year one and replacement only in year two,
- 3) Major Power Rectifiers: Silicon diodes and power SCRs used in the welding output circuit of equipment are warranted for one year following date of shipment to the original user.
- 4) Major PCB Component: Main control board will be warranted for a period of one year from the date of purchase (verified by reference to proof of purchase).
- 5) Expendable Items: Primary and secondary switch contacts, cable connectors, fuses, bulbs, filter, ceramic nozzles, collets body, handle, leads connector and trigger switch are worn or consumed in the normal process of welding or cutting and are therefore warranted only if found to be defective prior to use.
- 6) Semiautomatic Item: Torch body and cable are warranted for fourteen (14) days from the date of purchase (verified by reference to your proof of purchase).
- 7) Modification and Misuse: This warranty does not apply to products which have been modified in any way by any party other than WIM: nor to products which have not been installed and operated in accordance with applicable industry standards: nor to products which have been used other than under the usual conditions for which designed: nor to products that have not received proper care, lubrication, protection and maintenance under supervision of competent personnel. Use of a product after discovery of a defect voids all warranties.

DISCLAIMER OF WARRANTIES

There are no warranties, which extend beyond the description on the face hereof, except as specifically provided in the expressed warranties set forth above. All products are sold "as is". WIM makes no warranties, expressed or implied, of merchantability or fitness for a particular purpose.

WARNING

At all times, safety is an important consideration in the installation, servicing, and operation of the product, and skilled, qualified technical assistance should be utilized at all times. Specific recommendations are included in instruction manual. The users are reminded to read carefully the steps before carrying out welding jobs.



JAMINAN SIRI MIG WIM

- 1) Secara am: Produk WIM diberi jaminan selama satu (1) tahun dari tarikh pembelian oleh pengguna. Pengecualian pada barangan yang terdapat pada perenggan 2 hingga 7 dibawah.
- 2) Komponen Kuasa Utama: Transformer kuasa utama diberi jaminan selama dua (2) tahun dari tarikh pembelian oleh pengguna. WIM akan membiayai kedua-dua kos komponen gantian dan penyelenggaran perkhidmatan pada tahun pertama dan hanya membiayai kos komponen gantian pada tahun kedua.
- 3) Komponen Kuasa Rectifiers: Silicon diodes dan kuasa SCRs digunakan dalam peralatan litar ouput kimpalan diberi jaminan selama satu (1) tahun dari tarikh pembelian pengguna.
- 4) Komponen Utama PCB: Main control board diberi jaminan satu (1) tahun dari tarikh pembelian (disahkan melalui resit pembelian).
- 5) Komponen Guna Habis: Suis konteks primer dan sekunder, kabel penyambung, fius, mentol, filter, ceramic nozzle, collects body, gas nozzle, contact tip, gas diffuser, handle, lead connector dan trigger switch yang rosak atau habis guna dalam proses normal kimpalan atau pemotongan hanya diberi jaminan jika didapati kerosakan berlaku sebelum digunakan.
- 6) Barangan separa automatic; Torch Body dan kabel diberi jaminan selama empat belas (14) hari dari tarikh pembelian(disahkan melalui resit pembelian).
- 7) Pengubahsuaian dan penyalahgunaan: Jaminan tidak diberikan pada produk yang telah diubahsuai dengan apa cara sekalipun oleh mana-mana pihak selain dari pihak WIM; atau produk yang tidak dipasang dan beroperasi seperti mana bersesuaian dengan piawaian industri; atau produk telah digunakan luar dari kebiasaan ia direkabentuk, atau produk tersebut tidak diberi penjagaan dengan betul, minyak pelinciran, kawalan dan penyelenggaraan serta penyeliaan yang cekap oleh orang yang berkelayakan. **Penggunaan produk yang telah didapati rosak akan membatalkan semua jaminan yang diberikan**

JAMINAN YANG TIDAK BOLEH DITUNTUT

Tidak ada jaminan melebihi dari apa yang dinyatakan kecuali tertera secara spesifik di atas. Semua produk dijual " dengan apa yang ada". WIM tidak memberi jaminan, menyatakan dengan jelas atau tidak langsung tentang jualan atau kesesuaian untuk tujuan tertentu.

AMARAN

Setiap masa keselamatan merupakan faktor utama semasa pemasangan, servis dan pengoperasian produk, kemahiran dan pembantu teknikal yang berkelayakan perlu diberi keutamaan sepanjang masa. Cadangan khusus yang terdapat dalam "Manual Keselamatan". Semua penguna diingatkan supaya membaca dengan teliti semua langkah-langkah yang dinyatakan sebelum memulakan kerja-kerja kimpalan.



(保证书)

- 1) 一般:除了以下第二至第七段所注明之项目,所有WIM之产品对制造上之不良享有一年之使用保证,保用期限由交货至原有使用者之日期算起。
- 2) 主要的确电力元件:主变压器有二年的保证,由交货至原有使用者之日算起。在第一年,WIM所保证的包括零件更 换和工钱,在第二年只保证零件更换。
- 3) 主要的电力整流器:在焊接输出的线路之硅二极体及SCR有一年的保证,由交货至原有使用者之日 算起.
- 4) 主要的电路板元件:主控制板从购买日期算起有一年保证.(由购买证据所鉴定)
- 5) 消耗品:开关接触器、电缆连接器、保险丝、灯泡、过滤器、陶瓷喷咀、筒夹、把手、插座和 触发开关在正常焊接或切割中会磨损或消耗,因此只有用前的不良可享有保证.
- 6) 半自动项目: 焊枪体和电缆从购买日期算起有十四天保证. (由购买证据所鉴定)
- 7) 修改和误用:这保证不含包以下情况之产品: (a)经过WIM以外的团体或个人之修改, (b)没有按照通用的工业标准来安装和操作, (c)没有在原有设计的寻常情况下使用, (d)没有在可胜任的人监督下给予适当照顾、润滑、保护和保养。

保证之声明

除了特别提供更新的明确说明保证,任何超出於此说明范围之情况皆不获保证.全部产品照原样出售.对於其他特殊用途 WIM一概不作保证.

注 意

无时无刻,在安装、维修和操作本产品时.安全是一项很重要的考虑因素.应该时常利用合格的技术 援助.明确的建议已包含在附上的使用自手册里.在还没进行焊接工作之前使用者要记得仔细读预防 步骤.