

Stealth

DIGI-MIG2000

INVERTER • MIG/MMA/TIG Semi-auto • ARC WELDING MACHINE

Part No. 9000



OPERATING INSTRUCTIONS

SWP 

SAFETY PRECAUTIONS

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

1. ONLY CONNECT MACHINE TO A POWER SOURCE FOR WHICH IT WAS DESIGNED. THE SPECIFICATION PLATE ON THE MACHINE LISTS THIS INFORMATION. WHEN WELDING OUTDOORS ONLY USE AN EXTENSION CORD INTENDED FOR SUCH USE.
2. ONLY OPERATE MACHINE IN DRY LOCATIONS AND ON CEMENT OR MASONRY FLOOR. KEEP AREA CLEAN AND UNCLUTTERED.
3. KEEP ALL COMBUSTIBLES AWAY FROM WORK SITE.
4. DO NOT WEAR CLOTHING THAT HAS BEEN CONTAMINATED WITH GREASE OR OIL.
5. KEEP CABLES DRY AND FREE FROM OIL AND GREASE AND NEVER COIL AROUND SHOULDERS.
6. SECURE WORK WITH CLAMPS OR OTHER MEANS – DON'T OVER-REACH WHEN WORKING.
7. NEVER STRIKE AN ARC OVER A COMPRESSED GAS CYLINDER.
8. DON'T ALLOW THE INSULATED PORTION OF THE ELECTRODE HOLDER TO TOUCH THE GROUND WHILE CURRENT IS FLOWING.
9. SHUT OFF POWER AND UNPLUG MACHINE WHEN REPAIRING OR ADJUSTING. INSPECT BEFORE EVERY USE. ONLY USE IDENTICAL REPLACEMENT PARTS.
10. FOLLOW ALL MANUFACTURER'S RULES ON OPERATING SWITCHES AND MAKING ADJUSTMENTS.
11. ALWAYS WEAR PROTECTIVE CLOTHING WHEN WELDING. THIS INCLUDES: LONG SLEEVED SHIRT (LEATHER SLEEVES), PROTECTIVE APRON WITHOUT POCKETS, LONG PROTECTIVE TROUSERS, BOOTS AND GLOVES WHEN HANDLING HOT MATERIALS.
12. ALWAYS WEAR A WELDER'S HELMET WITH PROTECTIVE EYE PIECE WHEN WELDING. WEAR A PROTECTIVE CAP UNDERNEATH THE HELMET.
13. WHEN WELDING OVERHEAD, BEWARE OF HOT METAL DROPPINGS. ALWAYS PROTECT THE HEAD, HAND, FEET AND BODY.
14. KEEP A FIRE EXTINGUISHER CLOSE BY AT ALL TIMES.
15. DO NOT EXCEED THE DUTY CYCLE OF THE MACHINE. THE RATED CYCLE OF A WELDING MACHINE IS THE PERCENTAGE OF A TEN MINUTE PERIOD THAT THE MACHINE CAN OPERATE SAFELY AT A GIVEN OUTPUT SETTING.
16. KEEP ALL CHILDREN AWAY FROM WORK AREA. WHEN STORING EQUIPMENT, MAKE SURE IT IS OUT OF REACH OF CHILDREN.
17. GUARD AGAINST ELECTRIC SHOCK. DO NOT WORK WHEN TIRED. DO NOT LET BODY COME IN CONTACT WITH GROUNDED SURFACES.

1 INTRODUCTION

STEALTH DIGI-MIG200D is a multi function inverter based Mig welder. It has the capability to weld in three functions Mig both gas and gasless, MMA and Lift Tig. It uses IGBT technology and is generator friendly. The STEALTH DIGI-MIG200D produces a high quality, efficient weld with low spatter using an easy to operate digital control panel.

2 TECHNICAL SPECIFICATIONS

MODEL: DIGI-MIG200D	
Input Voltage	1~220V/230V/240V ; 50/60Hz
Rated Input Current	36 A
Rated Input Power	7.8KVA
No-load Voltage	60~70V
Voltage Adjusting Range	14±3V~26±3V
Current Output Range	30~200A (MIG/MAG)
	10~175A (MMA)
	10~200A (TIG)
Suitable Wire	0.6, 0.8, 1.0
Duty Cycle	35% @ 200A/24V
	60% @ 160A/22V
	100% @ 130A/20.5V
Efficiency	≥0.85
Power Factor	=0.83
Insulation	Class F
Protection Class of Shell	Fan Cooling

3 FUNCTIONS AND WORK SURROUNDINGS

3.1 Functions

- 3.1.1 Adjust the range of the MIG output as follows:
 - Welding voltage : $14V \pm 3V \sim 26V \pm 3V$ use the voltage adjusting knob.
 - Welding current : 30A~200A use the current adjusting knob.
- 3.1.2 Adjust the range of the MMA output as follows:
 - Welding current : 10A~175A use the welding current knob on the panel.
- 3.1.3 Adjust the range of the Lift Tig output as follows:
 - Welding current : 10A~200A use the welding current knob on the panel.
- 3.1.4 Adjusting function of the Arc Force:
 - Allows the arc bead to be controlled minimizing spatter.
 - If the Arc Force is low, the arc is soft and creates a high amount of spatter.
 - If the Arc Force is high the arc will be too strong and a high amount of spatter will be created.

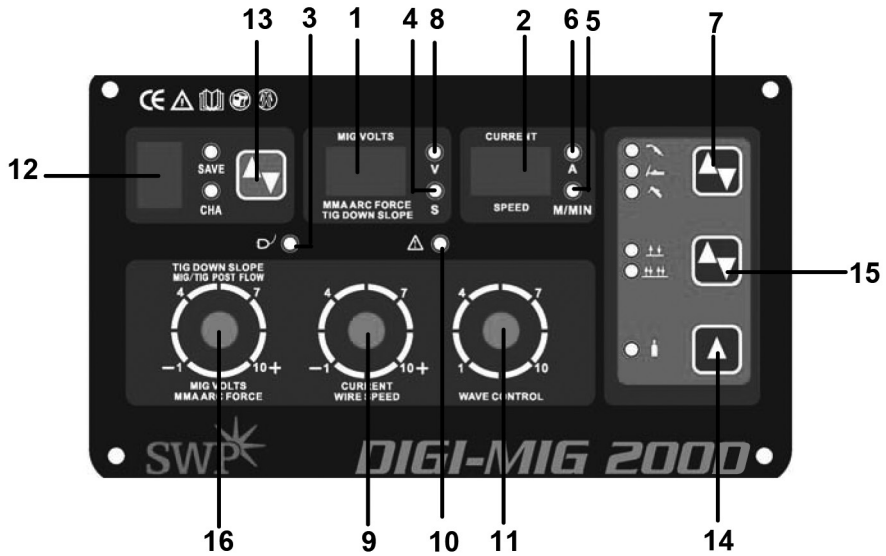
3.2 Work Surroundings

- 3.2.1 Relative humidity: not more than 90% (average monthly temperature not more than 20°C).
- 3.2.2 Ambient temperature: $-10^{\circ}\text{C} \sim 40^{\circ}\text{C}$.
- 3.2.3 The welding site should have no harmful gas, chemicals, moulds and inflammable matter, explosive and corrosive medium.
- 3.2.4 Operating in rain is not permitted.

4 SAFETY

1. **Before welding, the operator should read the operating instructions.**
2. Check the machine appearance for deformation and damage.
3. For the safety of the equipment the operator must make an appropriate earth according to the power supply system.
4. The welding operation should be carried out in a dry and well ventilated area.
5. Check the machine output connection.
6. The machine should not be moved or the cover opened when the power is on and during the welding operation.
7. The machine should be maintained, operated and managed by a qualified person.
8. The current of the distribution board should be no less than 36A.

5 PANEL CONTROL FUNCTIONS EXPLAINED



- 1 **Voltage/MMA/Arcforce/TIG Downslope Display Meter**
 - The meter on the front panel can indicate the actual welding voltage or preset MIG voltage.
 - The indicating number has the precision of 0.1V .The meter indicates the preset voltage during no welding.
- 2 **Current/Wire Speed Indicator**
 - The current indicating meter on the front panel indicates the actual welding current during the welding process and indicates the wire speed during no welding.
- 3 **Power Indication Light**
 - If the indicating light is on the control circuit connects the power already.
- 4 **Unit of TIG Downslope Time or Post Flow Time**
- 5 **Unit Wire Speed**
- 6 **Unit of Current**
- 7 **MIG/TIG/STICK Process Selector**
 - Each icon graphically represents each process for rapid eye acquisition when changing processes.
 - The top function represents MIG. The middle function represents TIG. The bottom function represents MMA.
- 8 **Unit of Voltage**

9 Amp/Wire Speed Adjustment Knob

- For MMA and TIG function, this adjusts the amps. For MIG operation, the amps are directly tied to the wire speed feed. Increasing the speed increases the amps and vice versa. While the unit displays in m/min for MIG operation, a change in this control also results in a change of amps.

10 Duty Cycle/Over Current Warning

- When the duty cycle has been exceeded or an over current condition has occurred the LED will light. Allow the unit to cool while running until the light goes off or for 10 minutes before resetting the machine. If condition persists check for loose wires or voltage supply problems.

11 MIG Wave Form Control

- Varies the slope of the current rise time between MIG operation. This affects the actual point where the current has risen sufficiently to burn back the wire.

12 Memory LED indicator**13 CH(channel)/SAVE Process Selector**

- Hold the CH(channel) button down for 3 seconds until the SAVE LED lights and you will have stored the welding process you have used.

14 MIG/TIG Post Flow Process Selector**15 2T/4T Torch Switch Selector**

- The torch trigger function is designed to operate for both MIG and TIG functions. To operate in 2T mode, the trigger on either the MIG or TIG torch should be simply held down. The 4T function operates as “latch” in MIG mode that locks the MIG torch on without needing to hold the trigger. To operate 4T in the MIG mode simply press the torch trigger and hold it down until the arc starts. To lock it on, release the trigger and weld without holding the trigger down. To stop, the trigger must be pressed again and then released after 1-2 seconds. The 4T function in TIG mode acts similarly but in conjunction with the down slope timer. As the torch trigger is pressed for the second time the trigger should be held in until the downslope timer completes its cycle. The trigger may then be released to end the arc. Releasing before the down slope is finished will terminate the arc immediately.

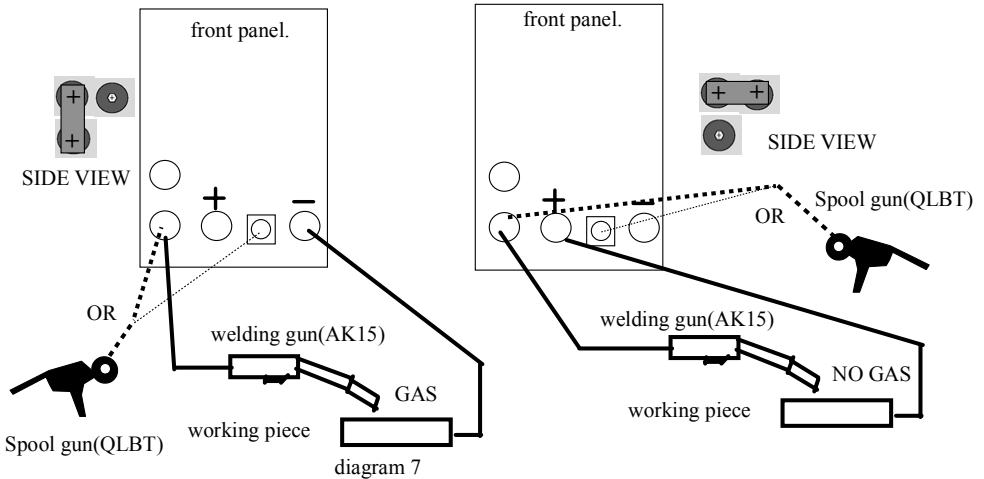
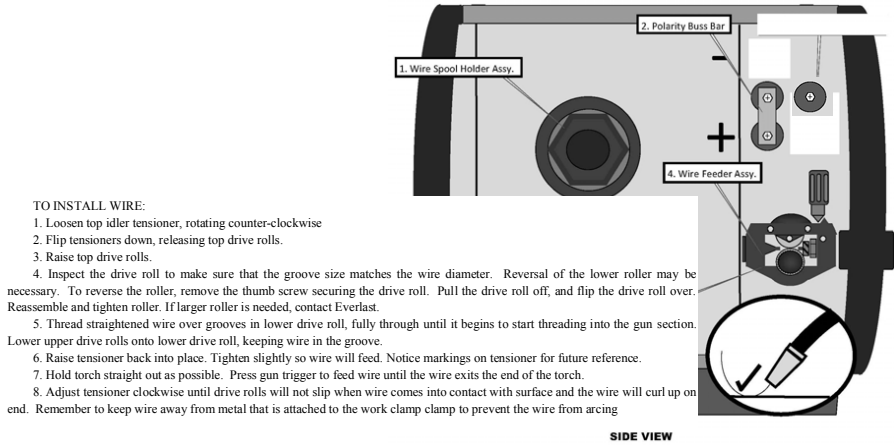
16 MIG Volt/TIG Down Slope/MMA Arc Force Control/MIG TIG Post Flow

- In each mode, the function of the control changes. In the MIG mode the control is used to adjust the arc voltage. While in TIG mode it functions to adjust the down slope of the arc current. In MMA mode, the control is used to vary the automatic arc force current response. When used for stick welding the arc force is also known as “dig”. When welding in stick mode, the current is increased as the volts fall off due to a short arc length. This helps maintain the arc by providing more wattage.

6 CLEANING BEFORE WELDING

Tungsten argon welding is very sensitive to surface contamination. Therefore, before welding is carried out remove grease, paint, surface coatings, lubricants and oxidized film.

7 MACHINE OPERATION



TROUBLESHOOTING

Problems	Causes	Solutions
Power lamp not lit	<ol style="list-style-type: none"> 1. No electricity input 2. Switch fails 	<ol style="list-style-type: none"> 1. Check incoming line 2. Replace the switch
Fan not rotating	<ol style="list-style-type: none"> 1. Fan power line is off 2. Enclosure blocks the fan due to deformation 3. The fan fails 	<ol style="list-style-type: none"> 1. Reconnect the line 2. Reform the enclosure 3. Replace the fan
Warning lamp lights	<ol style="list-style-type: none"> 1. Over heat (yellow lamp lights) 2. Over current (Green lamp lights) 	<ol style="list-style-type: none"> 1. Welding after cooling 2. Input voltage too low or the machine fails
No output of welder	<ol style="list-style-type: none"> 1. Over current protection 2. Welder fails 	<ol style="list-style-type: none"> 1. Over load using 2. Maintenance in manufacturer or service centre
Output current decreased	<ol style="list-style-type: none"> 1. Input Voltage is low 2. Input line is too thin 	<ol style="list-style-type: none"> 2. Power line is thickened
Current cannot be regulated	<ol style="list-style-type: none"> 1. Connecting line of the potentiometer is off 2. Potentiometer for current regulation fails 	<ol style="list-style-type: none"> 1. Reconnect the line 2. Replace potentiometer
High frequency cannot be generated	<ol style="list-style-type: none"> 1. The switch fails 2. Interval of high frequency discharging is too big 3. Distance of the torch and workpiece is too far high frequency arc generator fails 	<ol style="list-style-type: none"> 1. Replace torch switch 2. Regulating discharging interval to 0.8-1.0mm 3. Put torch tungsten electrode close to workpiece 4. Replace high frequency arc generator
Arc of argon welding is broken or tungsten electrode is burnt	<ol style="list-style-type: none"> 1. Argon gas flow not well regulated 2. Tungsten electrode fails 3. Value of current does not match with tungsten electrode diagram 4. After flow time too short 	<ol style="list-style-type: none"> 1. Regulate well 2. Replace or sharpen 3. Select the electrode diagram and current correctly 4. Enlarge the time
Welding torch overheats	<ol style="list-style-type: none"> 1. Not use the water cooling when current is more than 160A 2. The argon flow is the low current 	<ol style="list-style-type: none"> 1. Use water cooling 2. Enlarge the argon flow
Welding stops, and warning light is on	<p>Self-protection has engaged</p> <ol style="list-style-type: none"> 1. Display 801 2. Display 802 3. Display 804 4. Display 805 	<ol style="list-style-type: none"> 1. Over-voltage, lower-voltage 2. Over-current 3. Over-temperature 4. Torch switch always close

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

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

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

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

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

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

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

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

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

이 제품에 동봉된 작업지침서를 숙지하시고 귀사의 작업자 안전수칙을 준수하시기 바랍니다.

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



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