PRO SPOT

QUALITY WELDING SYSTEMS

Resistance Spot Welder

Instruction Manual

MNL-i5-1.6

About Pro Spot

Pro Spot International specializes in quality welding and repair products for the collision repair industry. Pro Spot owns three patents for special welding equipment and applications, and works with the largest auto manufacturers in the world. Pro Spot is a proud 'MADE IN THE USA' manufacturer in Carlsbad, CA. The turnkey facility includes Design, Engineering, Machine and Sheet Metal Shops, Powder Coating, Assembly, Training and Customer Support. The Pro Spot equipment line includes resistance spot welders, aluminum & steel dent repair systems, pulse MIG welders, rivet guns and tools, dust-free sanding systems, fume extraction and more.

Pro Spot Training and Services

Pro Spot provides on-going training to all of our distributors and their technicians, therefore, all owners of Pro Spot products receive complete training first hand. Pro Spot has two ASE certified training programs that are I-CAR alliance approved. Pro Spot has a fully equipped training facility at their Headquarters in Carlsbad, CA for groups to come in and train on all products. To stay up-to-date, Pro Spot offers their unique My.prospot.com which includes interactive training courses for shops and technicians to access online.

Pro Spot is constantly striving to improve. Whether that means designing innovative equipment, implementing cutting edge technical support or further improving their already extensive training programs, Pro Spot is always looking for ways to better our customer's experiences.

ASE Continuing Automotive Service Education
CERTIFIED TRAINING PROVIDER

I-CAR INDUSTRY TRAINING ALLIANCE

PRO SPOT
QUALITY WELDING SYSTEMS

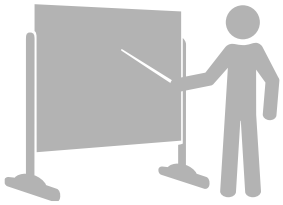
Pro Spot International, Inc.
5932 Sea Otter Place
Carlsbad, CA 92010

Toll Free: (877) PRO SPOT
Phone: +1 (760) 407-1414
Fax: (760) 407-1421

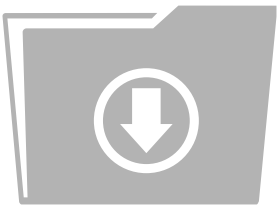
E-mail: info@prospot.com
Web: www.prospot.com

http://my.prospot.com

Technical Support



Training

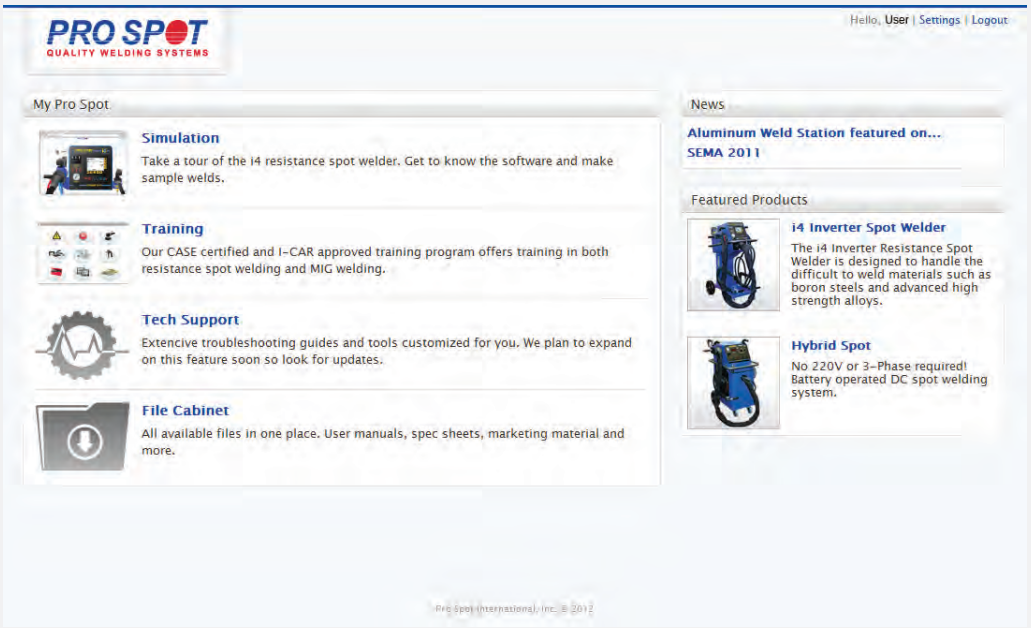


Documents

Pro Spot wants to personalize your experience.

Come to my.prospot.com and register today! Gain access to exclusive product demonstration videos, training, important product documents, and more. My Pro Spot is a site just for you with an easy to use interface that is custom tailored based on the products you own. This means quicker troubleshooting solutions, with less hassle. My Pro Spot is constantly evolving, and we have more exciting features to come.

http://my.prospot.com is where you'll find updates on new i5 related products and features so be sure to check it out.



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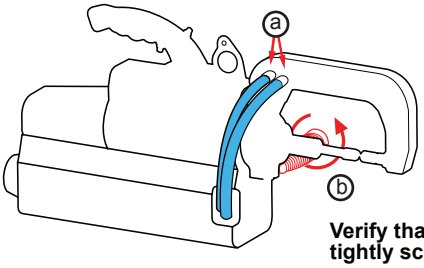
i5 Quick start instructions

WARNING! Read this manual in it's entirety before attempting to weld with the i5 for the first time. Before turning the welder on, make sure it is connected to the proper electricity by certified professionals. The water tank should be filled with a 50/50 water & antifreeze solution, and make sure to properly secure all water hoses.

1 Weld Gun Check

Verify that hoses are secured in place.



Verify that the weld-arm handle is tightly screwed on.

2 System Checks and Power On

ⓑ Verify all 3-Phase lights are illuminated.

ⓐ Verify the presence of air pressure.

ⓒ Turn on the i5's power.

3 Login

Select a user to login.

Enter the password and select the ✓ button

NOTE: The default user password is - **1234**

4 Navigation

Select the double sided gun.

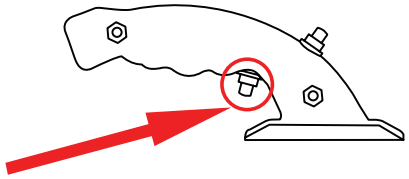
5 Calibrate

*** CAUTION!** **No material between electrodes during calibration.**

Press the CALIBRATE button to calibrate the weld gun.

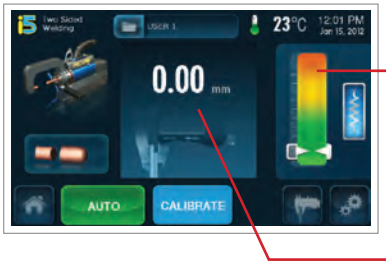
Calibrate:
- Every 100 welds
- Every arm exchange
- Every time auto mode is entered

6 Weld



Press the trigger button on the trans. gun to weld.

THE DISPLAY SHOWS:



RESISTANCE INDICATOR

MEASURED THICKNESS

1) Introduction

Congratulations on acquiring your new PRO SPOT i5 welder!

Team Pro Spot looks forward to supporting you.

You have a welder and support group that will increase your productivity. The integrated features, ease of use, speed and quality welds that your i5 offers will become an important part of your business.

The following information will be needed when you call Pro Spot:
* MODEL TYPE: i5
* SERIAL NO:_____
The serial number is located on the back of the unit.

For parts or service contact your local distributor,

Local number: _____
or in the U.S. call: Toll free:1-877 PRO SPOT or 1-760-407-1414
for a customer service representative.
Visit Pro Spot On-Line: www.prospot.com E-mail: info@prospot.com

NOTE: You can now order parts online at: prospot.com/store/

The i5 Spot welder is used by body shops to duplicate the welding procedure used by the car manufacturers. Use of the equipment that is contrary to the instructions in this manual can cause personal injury and/or machine damage.

Pro Spot International, Inc. can in no way be held responsible for intentional or unintentional damage, and consequent unlimited loss of profit, loss of income, loss of business opportunity, loss of use, etc. that originates from incorrect use of this equipment or its use in a manner not intended.

Warranty
Pro Spot International, Inc. offers a limited two-year guarantee from the date of delivery of the new welder. This guarantee covers material defects and assumes normal care and maintenance.

The guarantee assumes that:

• the equipment is correctly installed and inspected
• the equipment has not been altered or rebuilt without approval from Pro Spot International, Inc.
• genuine Pro Spot International, Inc. spare parts are used to make repairs.
• operation and maintenance has been carried out according to the instructions in this manual.

All claims on warranty must verify that the fault has occurred within the guarantee period, and that the unit has been used within its operating range as stated in the specifications. All claims must include the product type and serial number. This data is stamped on the name plate.

Note: This instruction manual provides advice as well as instructions for installation, operation, maintenance and troubleshooting.

IMPORTANT! Read this manual carefully to become familiar with the proper operation of the welder. Do not neglect to do this as improper handling may result in personal injury and damage to the equipment.

IMPORTANT! Lisez ce Mode d'Emploi attentivement afin de vous familiariser avec le bon fonctionnement du soudeur. Ne négligez pas de le faire puisque une mauvaise manipulation peut conduire aux blessures et dommages à l'équipement.

The drawings in this manual are presented for illustrative purposes only and do not necessarily show the design of the equipment available on the market at any given time. The equipment is intended for use in accordance with current trade practice and appropriate safety regulations. The equipment illustrated in the manual may be changed without prior notice.

The contents in this publication can be changed without prior notice.

Conformity with directives and standards:
i5 complies with CE standards.

2) Safety

2.0 Safety & Environmental Specifications

The i5 Spot welder is designed for indoor use - Protection Degree IP21S.
The i5 Spot welder is designed to operate from -10º C to 40º C.
The unit may be stored and transported in an ambient temperature from -20º C to +55º C. The unit can be operated at 95% Relative Humidity (RH). For operation above 1000m consult the manufacturer. Do not operate the unit on a slope of more than 10º. The unit meets the requirements of IEC|EN60974-1 2005 third edition and UL60974-1 2nd edition. E.M.C. classification is C1SPR11.

Always follow requirements and recommendations provided by CAN/C-SA-W117.2 “Safety in welding, cutting, and allied processes” regarding protection against personal hazards for operators and persons in the work area. In some countries, Uo is also known as OCV (see CAN/CSA-W117.2).

NOTE: Heating tests were performed at room ambient temperature and the duty cycle at 40º C has been determined by simulation.

2.1 General

The i5 Spot welder has been designed and is tested to meet strict safety requirements. Please read the following instructions carefully before operating the i5 and refer to them as needed to ensure the continued safe operation of the welder.

Information provided in this manual describes the suggested best working practices and should in no way take precedence over individual responsibilities or local regulations.

The i5 Spot Welder is designed to comply with all applicable safety regulations for this type of equipment. During operation, it is always each individual’s responsibility to consider:
- Their own and other’s personal safety.
- The safety of the welder through correct use of the equipment in accordance with the descriptions and instructions provided in this manual.

By observing and following the safety precautions, users of the i5 Spot welder will ensure safer working conditions for themselves and their fellow workers.

2.2 Warnings and important notices

The following types of safety signs are used on the equipment and in Pro Spot’s instruction manuals:

Caution.
Read instruction manual.

Prohibited.
Prohibits behaviour that can cause injury.

Command.
Calls for a specific action.

Warning.
Notice of personal injury risk and or damage to equipment.

Warning.
Some parts of the welder may become hot after prolonged use.

Attention!
Lire Mode d’Emploi.

Interdit.
Interdit aux comportements qui peuvent provoquer des blessures.

Commande.
Appelle à une action spécifique.

Avertissement.
Avis de risque de blessure personnelle et / ou d’endommager l'équipement.

Avertissement.
Certaines parties du soudeur peuvent devenir chaudes après une utilisation prolongée.

The following warnings and important notices are used in the instruction manual:

WARNING! Do not operate or place the welder near water, in wet locations or outdoors. Risk for injuries or damage to the welder.	**ATTENTION!** Ne pas faire fonctionner le soudeur près de l'eau, en voie humide , ou à l'éxterieur . Risque de blessures ou de dommages au soudeur.
WARNING! Do not place the welder on unstable or uneven ground. The welder might tip causing personal injuries or serious damage to the welder.	**ATTENTION!** Ne placez pas le soudeur sur un sol instable ou irrégulière. Le soudeur peut basculer causant des lésions corporelles ou des dommages graves au soudeur.
WARNING! All electrical connections must be made by a qualified electrician. Risk for electrical shock.	**ATTENTION!** Toutes les connexions électriques doivent être faites par un électricien qualifié. Risque de choc électrique.
WARNING! Loose cables and hoses present tripping risks. Risk for injuries.	**ATTENTION!** Câbles et tuyaux lâches présentent des risques de déclenchement. Risque de blessures
WARNING! Make sure to use welding goggles when spot welding. The sparks might otherwise injure the eyes.	**ATTENTION!** Veuillez utiliser des lunettes de soudeur sur place. Les étincelles pourraient autrement blesser les yeux.
WARNING! Sparks from welding could start a fire. Risk for injuries.	**ATTENTION!** Étincelles de soudure pourrait provoquer une incendie. Risque de blessures.
WARNING! Risk for damage to materials close to the weld, e.g to glass or textiles.	**ATTENTION!** Risque de dommages aux matériaux à proximité de la soudure, par exemple verre ou textiles.
WARNING! For proper cooling efficiency, never operate the welder without connecting it to the compressed air source.	**ATTENTION!** Pour refroidissement efficace, ne jamais soudeur sans attacher à la source d'air comprimé.
WARNING! All service and maintenance must be carried out by Pro Spot service personnel and service support. Risk for electrical shock.	**ATTENTION!** Tout le service et l'entretien doivent être effectués par personnel et soutien de service Pro Spot. Risque de choc électrique.
WARNING! Unplug the welder from the wall outlet before servicing, cleaning or maintenance. Risk for electrical shock.	**ATTENTION!** Débranchez le soudeur de la prise murale avant l'entretien, ou nettoyage. Risque de choc électrique.
IMPORTANT! The i4 welder may only be used by qualified personnel. The user of the welder must have knowledge of spot welding and of alignment of collision-damaged vehicles.	**IMPORTANT!** Le soudeur i4 peut seulement être utilisé par personnel qualifié. L'utilisateur du soudeur doit avoir une connaissance de soudage par points et l'alignement des véhicules endommagés par collisions.
IMPORTANT! Do not turn off the welder while cooling is activated!	**IMPORTANT!** N'éteignez pas le soudeur pendant que le refroidissement est activé!
IMPORTANT! The air must be clean and free from oil and moisture. Use filter.	**IMPORTANT!** L'air doit être propre et sans huile et humidité. Utilisez un filtre

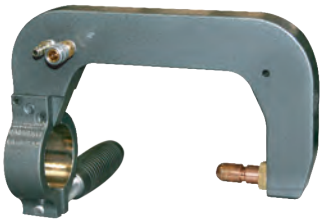
2.3 Safety devices

2.3.1 Cooling

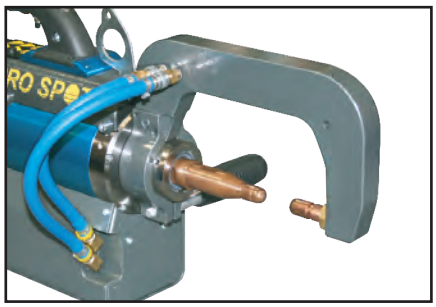
BEFORE WELDING

COOLING SYSTEM

IMPORTANT! The i5 welder **COMES WITHOUT COOLANT** to ease transportation. Be sure to fill coolant tank before turning on the welder! The cooling system turns on and off automatically. It starts at the first weld and shuts off 3 minutes (or longer if needed) after last weld was completed. Make sure water the lines are connected properly.



The i5 is equipped with a closed loop cooling system, 5 gallon (20L) tank, radiator with high powered fan cooling all the way to the tip of electrodes.



Make sure the water cooling hoses are securely clipped into place before welding. Water will leak if water feed and return hoses are not properly connected. (See cooling hoses connections)

Always make sure the welding arm is installed correctly and the tightening handle is firmly secured.

Coolant Refill Cap
Located in the upper right hand side on the back of the i5. Make sure that the cap is securely tightened before welding after filling the tank. It is recommended that a funnel be used when filling to prevent spillage.

Coolant Level Indicator
Located in the lower right hand side on the back of the i5. Be sure to check the coolant levels regularly to maintain an optimum of 11L minimum in the tank.

The coolant tank is located in the rear of the unit, inside the center column. It should be filled with a 50/50 water & antifreeze solution. Be sure to turn off the i5's power before filling the coolant tank or changing weld arms to prevent spillage. Maintain a level of at least 11L of 50/50 solution at all times and do not over fill. When filling coolant it is recommended that a funnel be used to prevent unnecessary spills. Avoid contact of skin, eyes, or mouth with the antifreeze or 50/50 solution. See antifreeze directions for proper handling instructions.

IMPORTANT! Turn the power off before disconnecting water hoses from the weld gun.

IMPORTANT! Make sure the water cooling hoses are securely clipped into place before welding.

IMPORTANT! The i5 welder comes without coolant to ease transportation, be sure to fill coolant tank before turning on the welder!

IMPORTANT! If the thermal breaker has switched off the welder, please contact Pro Spot's authorized service personnel

IMPORTANT! N'éteignez pas le soudeur pendant que le système de refroidissement est activé!

IMPORTANT! Si le disjoncteur thermique a éteint le soudeur, s'il vousplaît contactez personnel de service autorisé Pro Spot.

3) Installation

3.1 General

The i5 Spot welder is inspected and tested prior to leaving the factory to guarantee consistent quality and the highest possible reliability. Follow the installation tips and operating instructions below to ensure user safety and proper welder performance.

WARNING! Do not operate or place the welder near water, in wet locations or outdoors. Risk for injuries or damage to the welder.

WARNING! Do not place the welder on unstable or uneven ground. The welder might fall causing personal injuries and damage to the welder. Do not operate on a slope of more than 10º.

IMPORTANT! It is the responsibility of the owner to ensure that the equipment has been installed as specified in the instructions provided. It is also the owner's responsibility to ensure that the welder is inspected in accordance with applicable regulations before it is put into service. Do not use for thawing out frozen water pipes (17.1)

ATTENTION! Ne pas faire fonctionner le soudeur près de l'eau, en voie humide ou à l'extérieur. Risque de blessures ou de dommages au soudeur.

ATTENTION! Ne placez pas le soudeur sur un sol instable ou irrégulière. Le soudeur peut tomber causant des dommages graves au soudeur. Ne pas utiliser sur une pente de plus de 10º

IMPORTANT! C'est la responsabilité du propriétaire de s'assurer que l'équipement a été installé comme spécifié dans les instructions fournies. C'est aussi la responsabilité du propriétaire de s'assurer que le soudeur est inspecté conforment à la réglementation applicable avant qu'il ne soit mise en service. Ne pas utiliser pour dégeler les conduites d'eau congelées (17.1)

A grounded electrical plug must be installed (*refer to section 3.4 "Connection of electrical supply"*).

3.2 Packaging and delivery inspection

Check the contents of the shipping container against the packing list, consignment note, or other delivery documentation to verify that everything is included and in the correct quantity. Check the i5 Spot Welder carefully to make sure that no damage has occurred during transport. If anything is damaged or missing, the welder may be unsafe to use until the part is repaired or replaced. If anything is missing, please contact your supplier. Remove all packaging material from the welder.

3.3 Ergo Lift Assist ™

ABOUT ERGO LIFT ASSIST

The revolutionary Pro Spot Ergo Lift Assist™ System (ELA) is the tallest and most versatile motorized boom mechanism for spot welding applications. Designed to reach higher (9.25' / 2.82 m) and lower (60" / 1.5 m) than most conventional booms, the ELA makes spot welding any area on today's high reach / wide footprint vehicles accessible and ergonomically friendly.

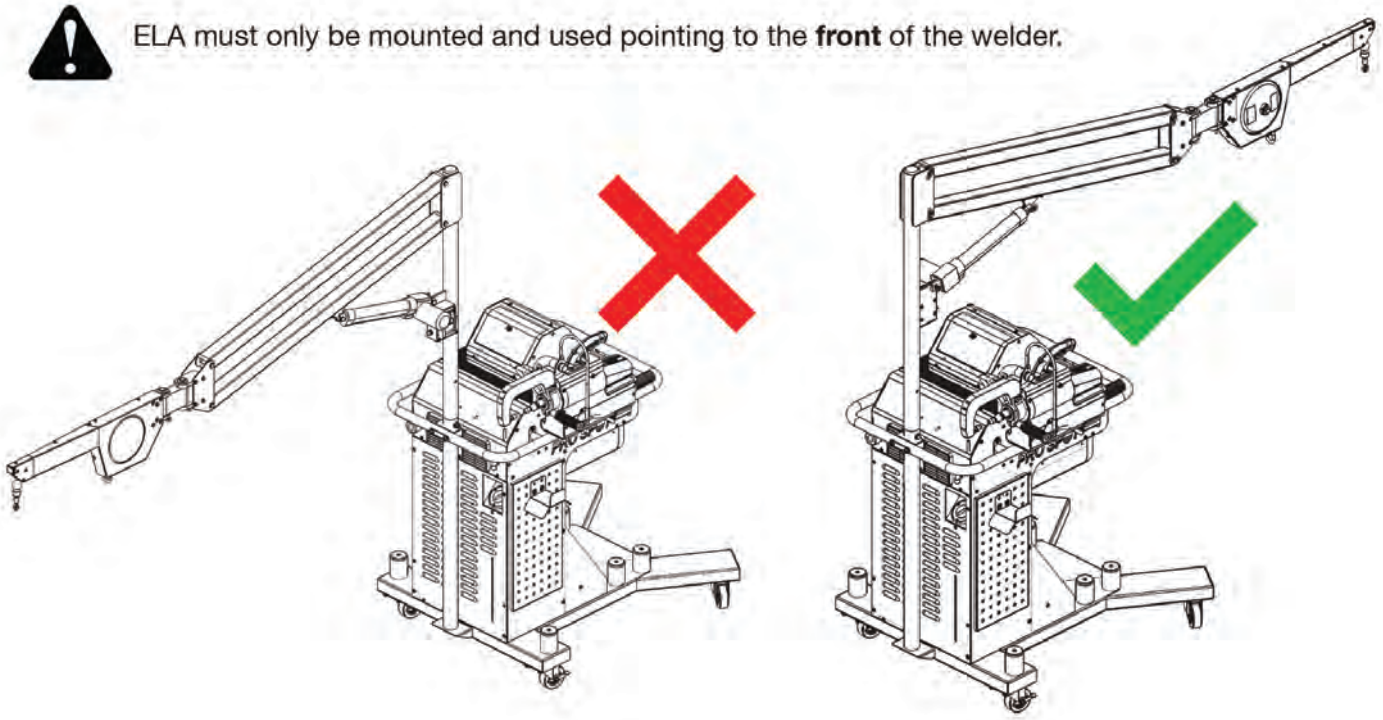
- The tool balancer and pivot arm are uniquely designed to make lifting and holding the weld gun light and easy, no matter the location on the vehicle.
- Muscle strain is reduced and injuries are prevented due to the ergonomic design and functionality of the ELA. As a result, job performance and satisfaction are significantly improved.

- The ELA is powered by either wall outlet or battery power, allowing mobility and boom control anywhere and anytime around the shop without being tethered to an inconvenient electrical outlet.
- The extended reach arms allow work to be done far away from the welder, keeping the area around the vehicle clear and accessible.
- The ELA engineering solution provides a low center of gravity weight distribution to keep the welder balanced, stable and safe at all limits of the ELA's reach.
- There are retrofit kits available to add the ELA to the Pro Spot i5 and i5s spot welders.
- Pro Spot's Ergo Lift Assist™ is designed, engineered and manufactured in the USA.

WARNINGS

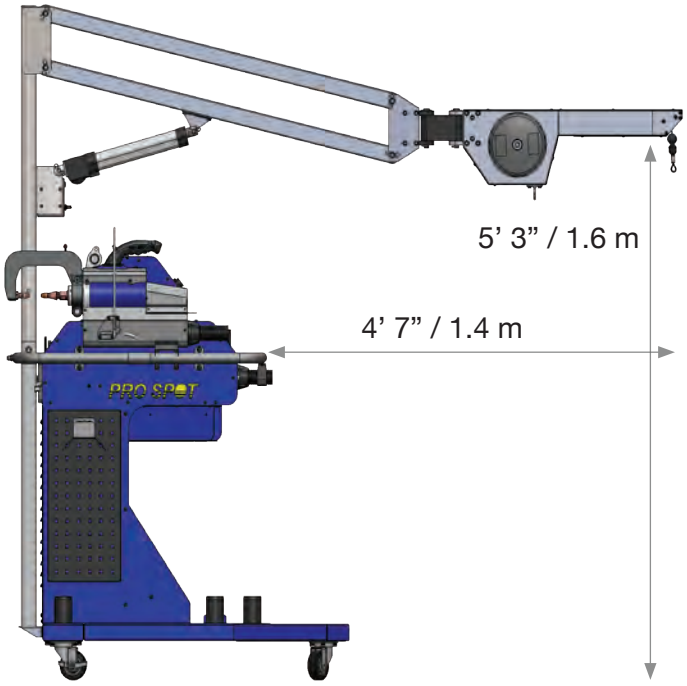
- Tool balancing system only designed to support the weight of the Pro Spot welding gun (60 lbs / 27 kg MAX).
- Do not hang from or pull down on any part of the tool balancing system.
- Make sure you are aware of any pinching points on the boom.
- Return tool balancing system above 7 feet / 2.1 m prior to storing the machine.
- Always holster the spot welding gun when not in use. Raise the tool balancing system to secure the spot welding gun in the holster.
- Do not disconnect the tool balancer cable from the spot welding gun without keeping tension on the cable and slowly retracting the cable up the the boom.
- Make sure that the boom is not going to come in contact with anything when raising or lowering the boom.
- Make sure that the boom is not going to come in contact with anything while moving the welder to a different location.
- Make sure that the spot welding gun is not going to come in contact with anything while it is hanging from the balancer cable. Make sure to holster the spot welding gun prior to moving the welder.
- When locking the casters of the welder, be sure that there is enough range of motion to operate the boom without having to pull the tool balancer cable to the side.
- The tool balancer cable should always remain vertical and not pulled to the side.
- Do not use a defective battery on the boom.
- Properly dispose of defective batteries.
- Strictly adhere to the designated functions outlined in our manual and website; avoid using the stand for any other purposes.
- Avoid utilizing substitute parts; in case of replacement requirements, reach out to the manufacturer for authentic replacement parts.

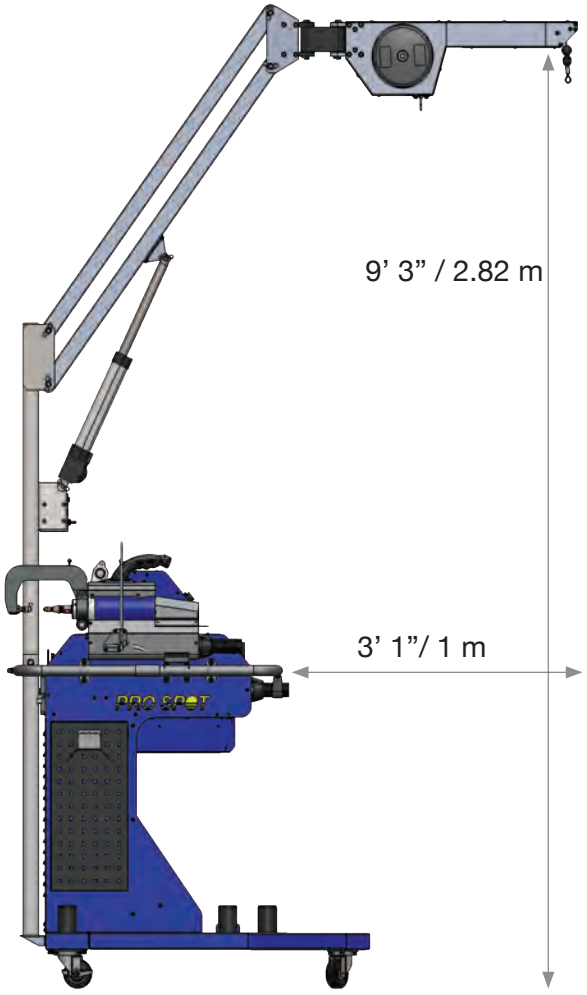
ELA must only be mounted and used pointing to the **front** of the welder.



ELA DIMENSIONS

- Weight: 52 lbs / 23.5 kg
- Height fully extended: 9’ 3” / 2.82 m
- Height in the lowest position: 5’ 3” / 1.6 m
- Reach fully extended (from the handle): 3’ 1”/ 1 m
- Reach in the lowest position: 4’ 7” / 1.4 m





ERGO LIFT ASSIST™ COMPONENTS

A. SA-0823 - Elbow Boom/Tool Balancer Kit
B. 90-2672 - Upper Arm
C. 90-2673 - Lower Arm
D. SA-0828 - Actuator/Battery Box Assembly
E. PRR-22 - Battery Charger & PRR-21 - 18v Battery w/ charge indicator
F. 77-0024 - Power supply adapter, 24v 5A 120W output, 85-264 VAC Input, 69-0002 - Power Cord, 90-2690 - Bracket, Power Supply Mount
G. PS-005 - Weld Cable Saddle with (x2) C-09 Carabiner
H. 51-0185 - Clevis Pin ½”x2-½”
I. 51-0179 - Clevis Pin 10 mm x 40 mm
J. W-141 Washer
K. 51-0188 - Bow Tie Cotter Pin
L. 52-3211 - License Plate Nuts and S-12 Screws
M. S-282 Hex Bolt, W-05 Washers, W-14 Lock Washer, N-08 Hex Nut.
N. 52-0620 Bushings
O. 90-2676 - Vertical Boom Support
P. 51-0191 - Hook and Loop Cable Tie

TOOLS FOR ASSEMBLY (NOT INCLUDED)

1. #2 Phillips Screwdriver
2. 9/16” Ratchet/Wrench

ELA ASSEMBLY INSTRUCTIONS

I. Installing the Bushings

Place the bushings (N) in the holes at each end of the Upper Arm and Lower Arm.

II. Securing the Actuator to the Vertical Boom Support.

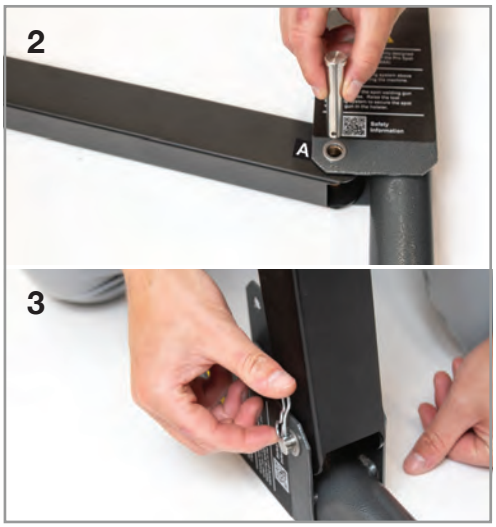
1. Line up the lower portion of the Actuator to the mounting holes on the Vertical Boom Support.
2. Place the 10mm x 40mm Clevis pin (I) through the hole.
3. Secure with the Bow Tie Cotter Pin (K).

IMPORTANT: Be sure to attach the SHORTER side (labeled A) of the Lower Arm with the Vertical Boom Support (labeled A). Failure to do so will result in severely shortened range of motion and product damage.

III. Installing the Lower Arm

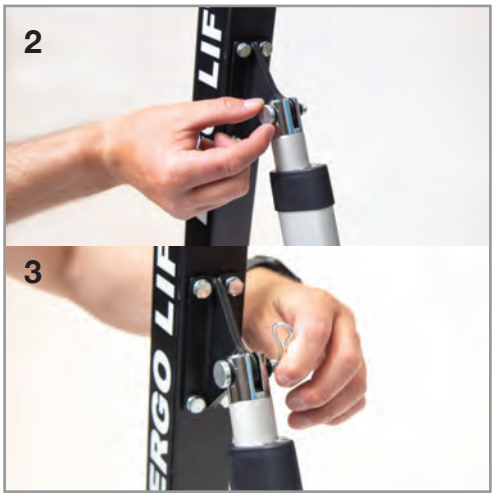
1. Line up the Lower Arm with the bottom set of holes of the Vertical Boom Support.

   Be sure the Bushings (N) on the lower arm are in place before installing Clevis pins.
2. Place a ½" x 2 ½" Clevis pin with a washer through the holes (H, J).
3. Secure the Clevis pin with a washer and a Bow Tie Cotter Pin (J, K).



IV. Attaching the Actuator to the Lower Arm

1. Align the upper portion of the Actuator (D) to the triangular Actuator Mount on the bottom side of the Lower Arm (C).
2. Place the 10mm x 40mm Clevis pin through the holes (I).
3. Secure the Clevis pin with the Bow Tie Cotter Pin (K).



V. Installing the Upper Arm

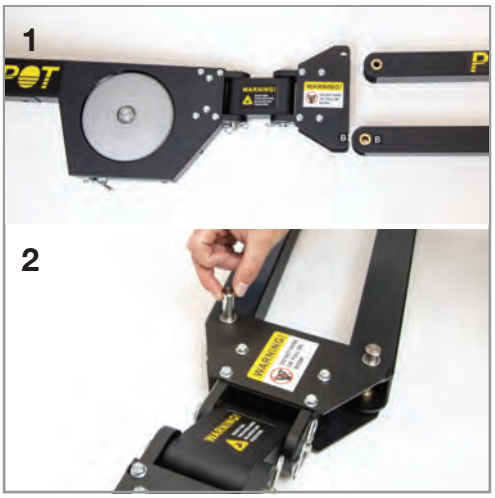
1. Align the Upper Arm (B) to the top holes on the Vertical Boom Support.

   Be sure the Bushings are in place on the upper arm before installing Clevis pins (N).
2. Place a ½" x 2 ½" Clevis pin with a washer through the holes (H, J).
3. Secure the Clevis pin with a washer and a Bow Tie Cotter Pin (J, K).

VI. Attaching the Boom Elbow/Tool Balancer

1. Align the Upper and Lower arms to the Elbow Boom/Tool Balancer Kit.

   Be sure the Bushings are in place before installing Clevis pins (N).
2. Place the Clevis pins with washers through the holes (H, J).
3. Secure the Clevis pins with washers and Bow Tie Cotter Pins (J, K).



VII. Installing the Boom on the Welder

1. Install the fully assembled ELA into the lower tube facing the front of the welder.
   Two people recommended for this step.

IMPORTANT! ELA must only be mounted and used pointing to the front of the welder (See p. 4).

2. Rotate the boom so it faces forward and the hole in the boom aligns with the hole in the post. Install the Hex Bolt (M) with a washer through the holes.

   Place a washer and the lock washer on the end of the Hex Bolt (M). Then place the Hex Nut on the end (M).
3. Use the 9/16” ratchet and 9/16” open-end wrench to tighten the bolts.

WARNING: Operating ELA without securing Hex bolt can lead to tipping and SERIOUS INJURY.

VIII. Installing the Power Supply

1. Pull the Power Supply Cable through the inside of the handle bar and plug it into the power inlet on the backside of the Battery Box.

Tip: You may use zip ties to secure the power cable to the Vertical Boom Support.

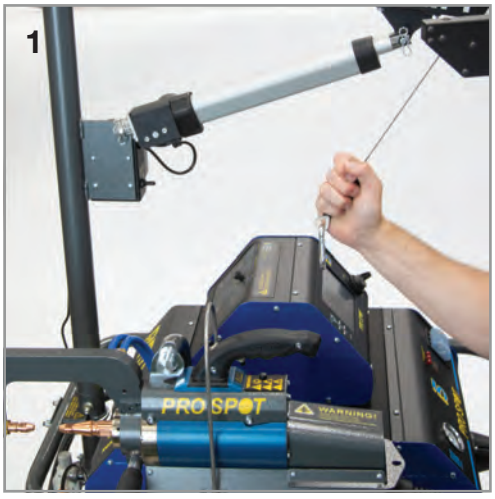
2. Charge the battery with supplied battery charger prior to use and place it in the battery holder.

IX. Installing the Weld Cable Saddle

1. Attach the Weld Cable Saddle to the hook underneath the Tool Balancer.
2. Loop the Weld Cable Saddle around the weld cable.
3. Attach the second carabiner to secure it.

X. Attaching the Weld Gun to the Tool Balancer Cable

1. Attach the Tool Balancer Cable to the Weld Gun using the carabiner.



WARNING: Tool balancing system is only designed to support the weight of the Pro Spot welding gun. (60 LBS / 27 KG MAX).

Do not hang from or pull down on any part of the tool balancing system.

Make sure you are aware of any pinching points on the boom.

OPERATING ERGO LIFT ASSIST

All the following operations must only be carried out by trained and qualified personnel.

Failure to comply with the instructions below or tampering with the pneumatic connections, exempts the manufacturer from any liability for non-compliance or damage caused by malfunctioning of the equipment.

The Ergo Lift Assist™ is designed to ergonomically and safely hold the weight of the spot welding gun at various heights and positions.

The Ergo Lift Assist™ can be operated using the 18 volt battery or the supplied 110-240 volt power adapter. The battery and the power adapter can be plugged in at the same time. To charge the battery (Makita Style 18V - PRR-21), it must be removed from the battery holder and charged with the supplied battery charger.

Use the Up/Down switch to get the boom into a comfortable position to be able to pull the balancer cable and attach it to the spot welding gun.

The Tool Balancer tension is set to 11-13 kg for shipping. It may be adjusted as needed (+/- 1 kg).

To move the Ergo Lift Assist up and down, use the up / down switch located on the vertical boom support assembly.

All maintenance and repair work must be carried out by authorized Pro Spot personnel who have read this manual and the operating instructions.

3.4 Connection of electrical supply

The i5 Spot Welder requires one of the following voltage / frequency combinations:

✓ 208-240V 50/60 Hz U.S.A., Canada, Japan *OR*
✓ 400-420V 50/60 Hz Europe, Australia

Note: Make sure that the facility supply voltage and frequency are the same as shown on the welder name plate (*see section 4.2 "About your welder"*).

The power supply must have a ground connection. The supply must also be protected as follows:
✓ The 208-240V 3-Phase require 60A breaker.
✓ The 400-420V 3-Phase supply require a 32A slow blow fuse (Circuit breaker 32D).

WARNING! All electrical connections must be made by a qualified electrician. Risk for electrical shock.

ATTENTION! Toutes les connexions électriques doivent être faites par un électricien qualifié . Risque de choc électrique.

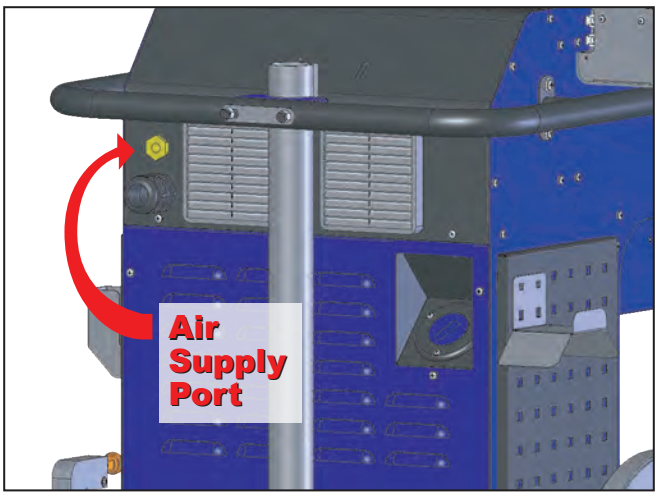
1. Connect the green wire to ground.
Note: Make sure that the supply cable is at least 6 AWG at 208V and 400 V.
The i5 is rated for over voltage category III and pollution degree 3.

3.4.1 Electrical Plug / Extension cords

2. If an extension cord is used with the welder, ensure that the length of the extension cord does not exceed 10 m (30 ft) and it meets the specifications of Item 1 above. The cord must also be grounded. Consult an electrician for safe and proper installation of the electrical plug.

NOTE: When connecting the welder to Single-Phase input power, install Red and White wires. Connect Green to earth ground! **Leave out the black wire.** Insulate and store the black wire properly.

3.5 Connection of pneumatic air supply



The i5 Spot welder must be connected to a pneumatic air network. (100 PSI to 130 PSI)
1. Connect the i5 to the air supply via the threaded input port at the rear of the welder using a standard connector.

IMPORTANT! The air must be clean and free from oil and moisture. Use a filter.

IMPORTANT! L'air doit être propre sans huile et humidité. Utilisez un filtre.

4) Operation

4.1 Before you begin welding

Before you begin welding, be sure to read and understand the following instructions.

The Pro Spot i5 is a state-of-the-art Inverter Resistance Spot Welder that was designed for the collision repair industry. It duplicates the welding procedure used by the car manufacturers. It is important to understand the design and function of this welder before operating it.

ELECTRICITY ONLY: The i5 uses only electricity to create the welds unlike the MIG welder which uses an arc from a feeding wire to build a weld nugget using inert gas and the feeding wire material.

PRESSURE: The i5 has a built in air cylinder that compresses the Double-Sided Gun's welding tips together automatically when triggered. The compression is an important part of a good resistance weld. **The i5 adjusts pressure automatically to an appropriate level for every metal type.**

CURRENT: Another important aspect of a weld is the current applied through the work piece. A weld is created when a large current is transferred through the layers of sheet metal. The resistance in the metal causes the area to heat up and fuse the sheets together in a nugget.

WELD PROGRAM: Maintaining the air pressure after the current shuts off makes the weld cool down under pressure resulting in a harder, stronger weld. This feature is built in to the i5's weld control program and is engaged automatically during a weld cycle.

TIME: The Timer controls the duration of the current applied during the weld cycle. An ideal program uses higher current and shorter time to control heat buildup.

4.2 About your welder

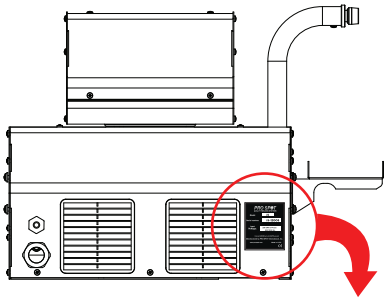
4.2.1 Welder Overview & Technical Specifications

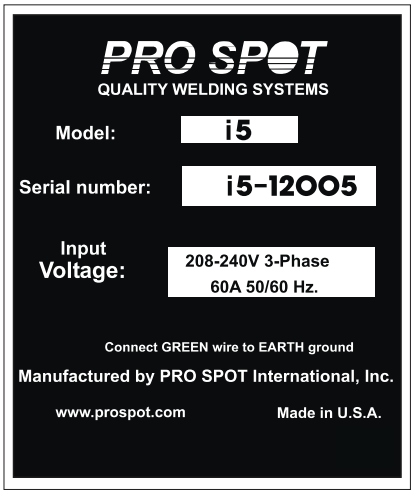
The welder is supplied with one of the following voltage and frequency combinations:

Input voltage: *3 phase*
208-240V 50/60 Hz.
400-420V 50/60 Hz.
480V 50/60 Hz.

The actual voltage and frequency is stated on the rear panel name plate. Open circuit output voltage 20v max. E.M.C. classification is C1SPR 11.

Welding amperage:	*14,500Amp max (3-phase)*
Cable length:	*Input 30' (10m) weld cable 16' (5m)*
Electrode Force:	*1,240 lb (565 daN)*
Cooling system:	*Radiator / pump active loop cooled to the weld caps.*
Micro processor:	*i5 Upgradeable Software Platform*
Shipping Weight (standard):	*314 lb (142 kg)*
Weld Head Weight:	*26 lb (12 kg)*





The name plate is at the rear of the welder unit. The required voltage is indicated on the label. Welding output is rated at 15V.

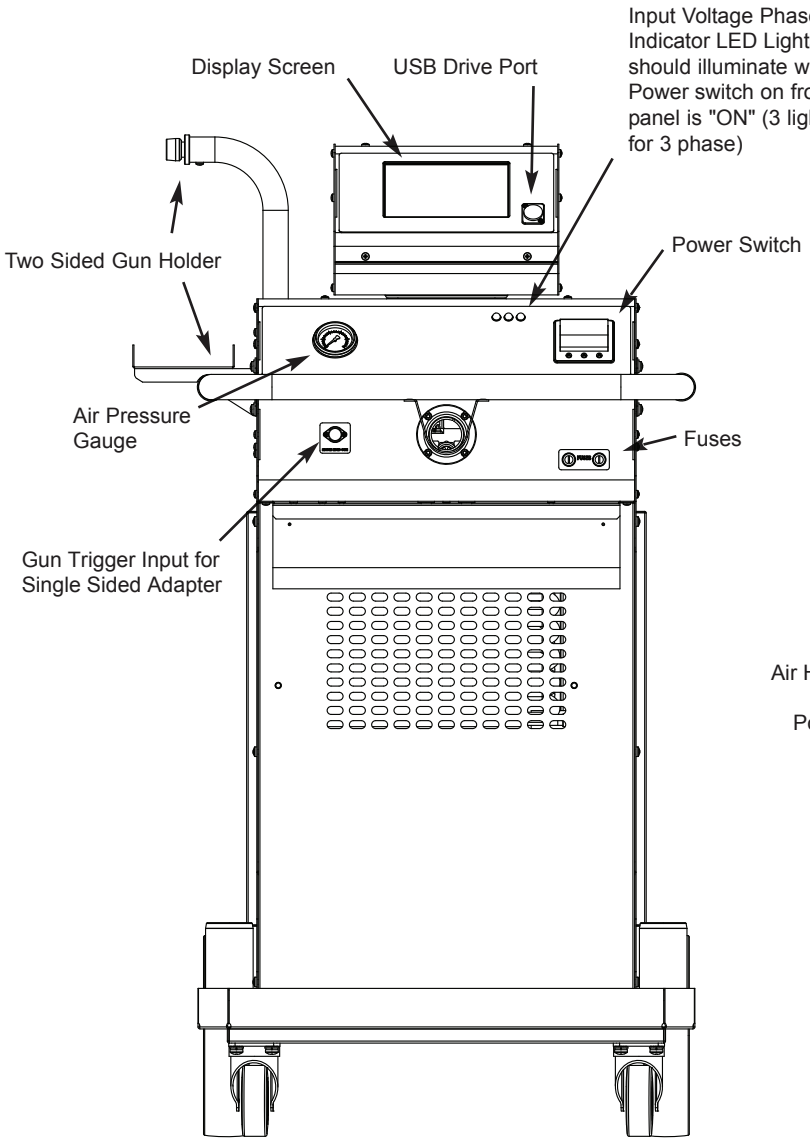


Figure 4.1 i5-Front View

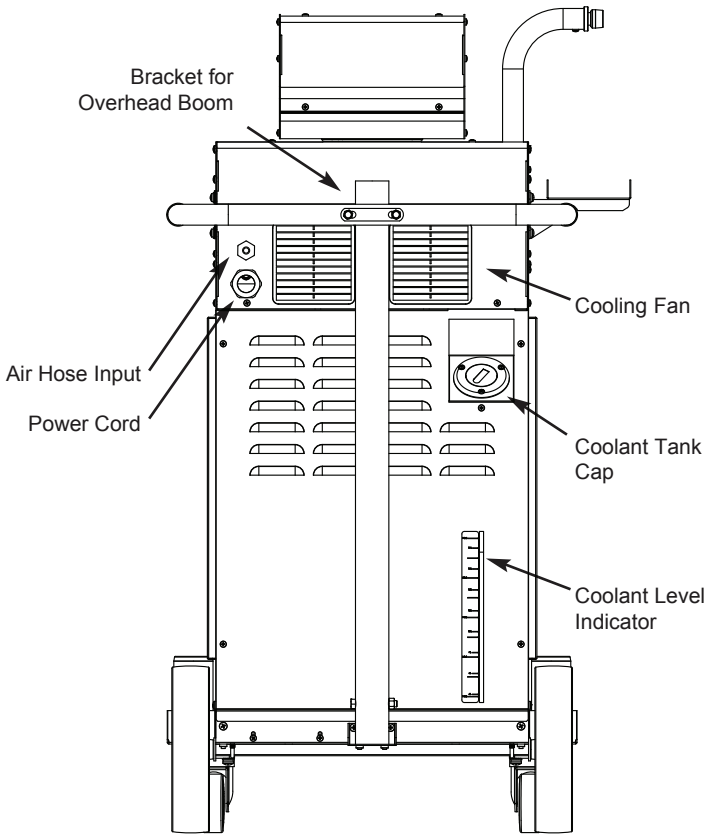
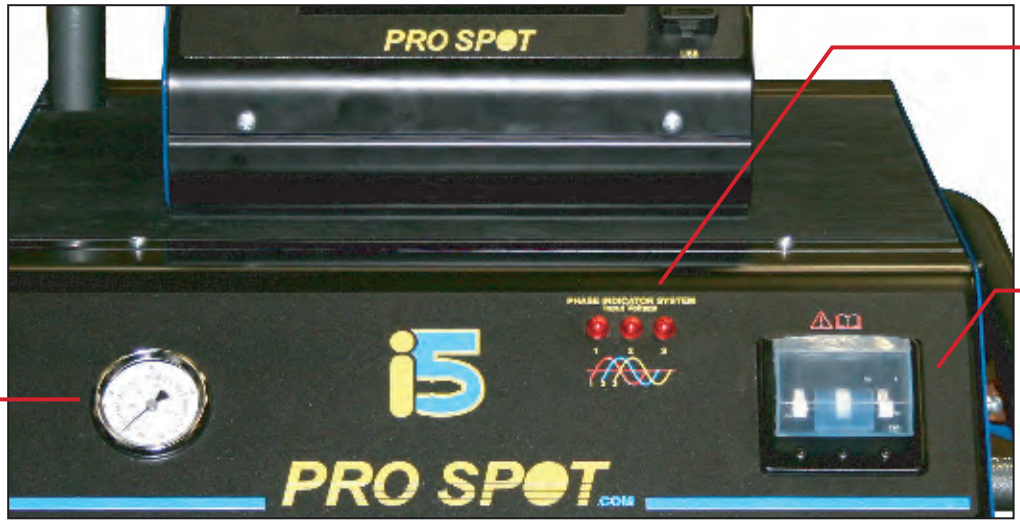


Figure 4.2 i5-Back View

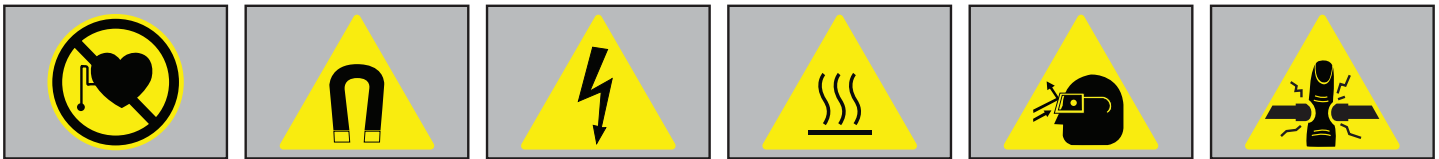
4.2.2 Turning On the Welder



1. The 3-phase indicator (3 LEDs on the front panel) should always be illuminated while the welder is plugged in. Verify this before turning on the power. Switch the circuit breaker on the front panel to “ON”.
2. The display will go through the start-up procedure.
3. The i5 is now ready to use.

IMPORTANT! Make sure to read the instruction manual before operating the welder. Only trained personnel should use this welder.

IMPORTANT! Assurez-vous de lire le Mode d’Emploi avant d'opérer le soudeur. Seul le personnel qualifié devrait utiliser ce soudeur.



CAUTION:
The i5 discharges a large magnetic field when in use which can negatively effect medical implant devices such as pace-makers.

CAUTION:
The i5 discharges a large magnetic field when in use which can negatively effect electronics and attract metal to the gun.

CAUTION:
Unplug the welder from the wall outlet before servicing, cleaning, or maintenance. Risk for electrical shock

CAUTION:
Some parts of the welder may become hot after prolonged use.

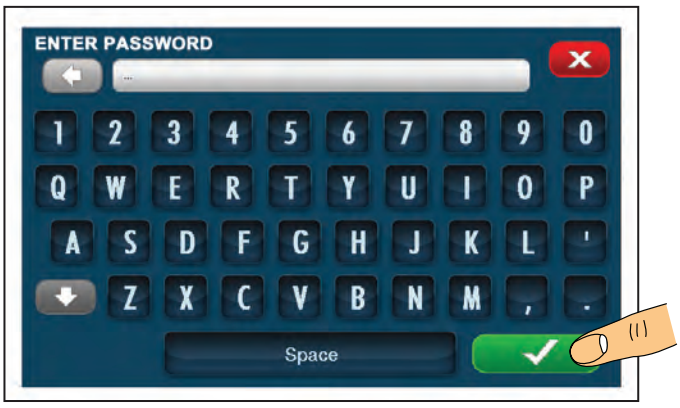
CAUTION:
Always wear eye protection when welding. Periodically showers of sparks will fly up from the material being welded.

CAUTION:
Be wary of pinch points on the i5 such as the electrodes / weld caps on the trans gun.

4.2.3 i5 Login and User Log

Starting Up

When the i5 is turned on the user is presented with a login screen. Select the desired user name or space where a new user is to be added.



Enter the user password to begin welding with that user or the administrator password to modify, add, or delete a user. Then press the green check mark to continue to the i5's home screen.

NOTE: Default user password is - 1234

User Administration

Once the administrator's password has been entered, user profile information can be altered by pressing on the user's but-

Select the blue key button next to the user profile to be edited. Profiles can only be removed from the global settings accessible from the home screen.

From the user profile page user profile information and permissions can be set. These settings can only be done by an administrator.

In basic mode the user can weld but may not make any adjustments to weld settings. This is the mode the user enters with the default password.

Advanced mode allows for the changing of basic settings such as time and current.

Expert mode gives access to time and current settings as well as rise and fall times and some system settings.

4.2.3 i5 Touch Screen Control

i5 Status Screen

Login Status

Time / Date

Trans-Gun Temp. Indicator

3-Phase Power Indicator

Air Pressure Indicator

Help

Two Sided welding
Brings the user to Auto Mode by default. Use the Carousel to navigate to Semi-Auto and Manual modes.

Single Sided welding

Global Settings

- Temperature Control
- Welder Calibration
- Brightness Control
- Factory Default

Global Settings Screen

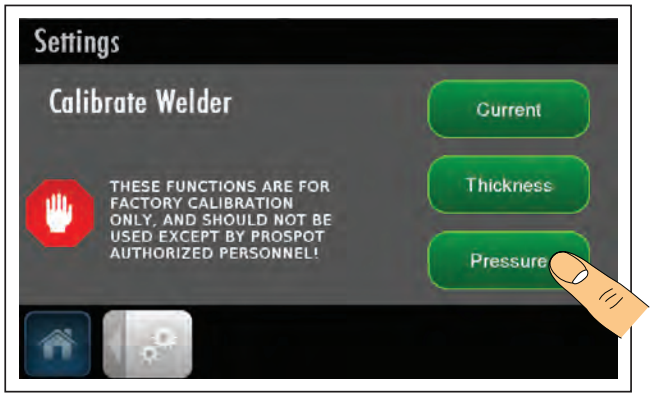
Accessed from the Status Screen (as pictured above).

4.2.3 i5 Touch Screen Control

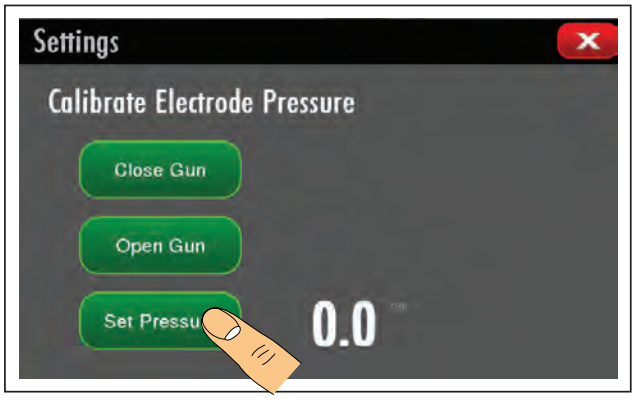
Global Settings

Pressure Calibration

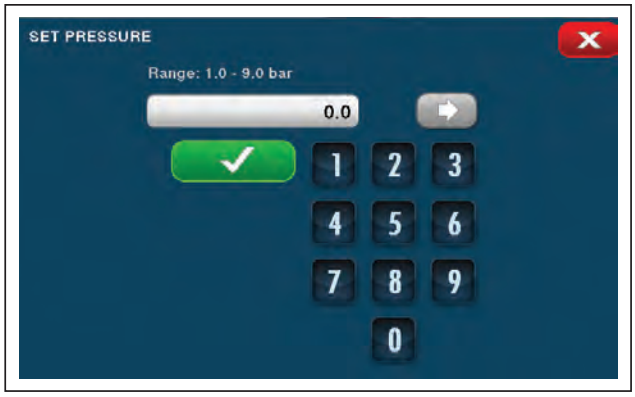
The electrode pressure calibration setting is to verify that there is sufficient air pressure going to the welder.



To navigate to the pressure calibration screen, press the “calibrate” button in global settings.



Press the “set pressure” button to set a pressure to test.



A numerical key pad screen will open. Enter the desired test pressure in bars and then press the green check button to accept.

Insert a pressure gauge in between the electrodes of the Trans. Gun.

Press the “close gun” button and the electrodes will close. Then take a reading from the pressure gauge and verify that it matches the set pressure.

Press the “open gun” button to release the pressure gauge.

Continued on next page >

4.2.3 i5 Touch Screen Control

Global Settings

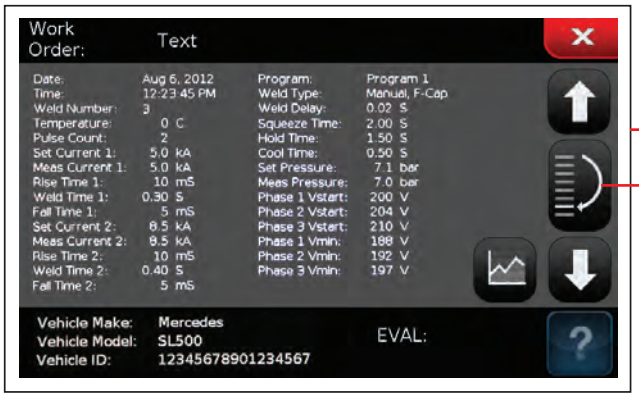
Weld Log Setup

The Weld Log Setup screen allows you create work orders which are jobs specific to a single car that is being worked on.

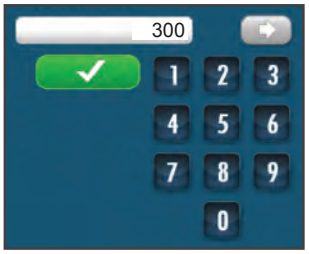
Select the green check mark that is next to the work order that is currently being worked on. Press the work order button in order to change it's specifics.

When a work order button is pressed you are presented with several fields to fill with information regarding the car being worked on. This will show up in the header of the job print out.

Press the disc icon to save your changes.



Pressing the eyeglass icon will bring up the weld log screen. This will show the last weld made by default. All of the welds can be viewed by navigating with the up and down arrows.

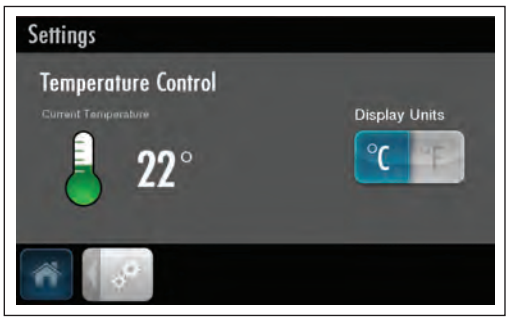


Use the log navigation button to enter a specific weld number.

4.2.3 i5 Touch Screen Control

Global Settings

Use the slide bar to change the brightness of the display.



View Trans. Gun Temperature and change temperature formatting.

Select parameters to reset to manufacture settings, then hit the reset button.

Set the date and time, and change time formatting.

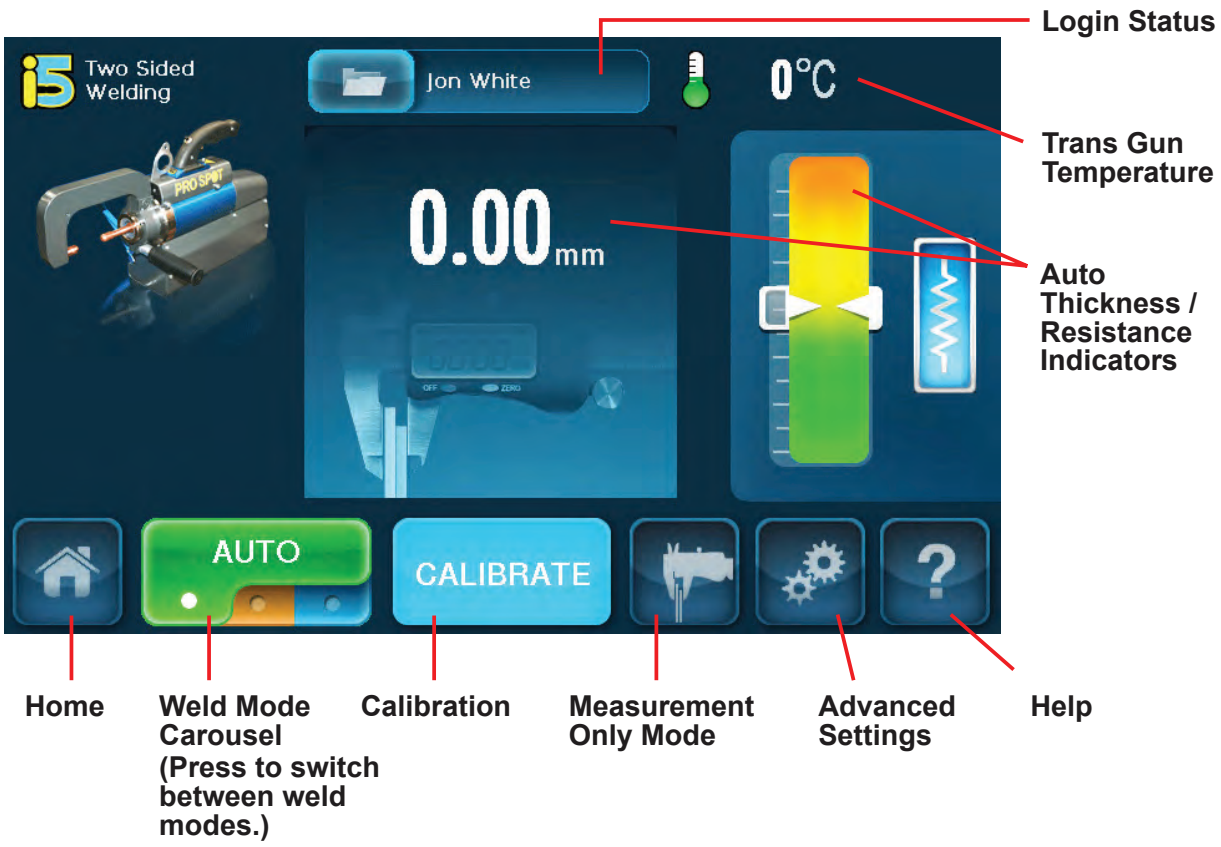
View software version details.

4.2.3 i5 Touch Screen Control

Two-Sided Auto Welding

Auto Mode on the i5 is able to automatically detect the thickness and resistance of most metals and coatings / adhesives. Once properly calibrated the user only needs to press the weld trigger and allow the i5 to determine the correct power levels and duration.

The user can also use Measurment Only Mode within the Auto Mode screen which measures the steel thickness and resistance without welding.



IMPORTANT! Turn the power off before disconnecting water hoses from the weld gun.

IMPORTANT! Make sure the water cooling hoses are securely clipped into place before welding.

IMPORTANT! The i5 welder comes without coolant to ease transportation, be sure to fill coolant tank before turning on the welder!

IMPORTANT! If the thermal breaker has switched off the welder, please contact Pro Spot's authorized service personnel

IMPORTANT! N'éteignez pas le soudeur pendant que le système de refroidissement est activé!

IMPORTANT! Si le disjoncteur thermique a éteint le soudeur, s'il vousplaît contactez personnel de service autorisé Pro Spot.

4.2.3 i5 Touch Screen Control

Calibration:

Be sure to calibrate in Auto Mode:

- Every 100 welds
- Every arm exchange
- Every time auto mode is entered
- You can NEVER calibrate too often!

CAUTION: During calibration test cycle, the electrodes will close, creating a pinch point.

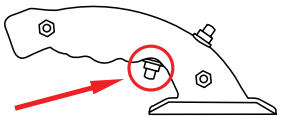
Do not calibrate with metal between the electrodes!

To calibrate the i5 for auto detect simply press the calibrate button. The system will then go through a mock weld cycle.

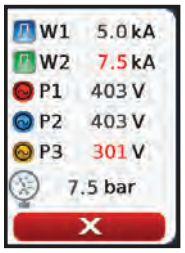
Welding / On-Screen Feedback:

CAUTION: Only "OEM" and "Radius Nose" caps should be used in auto mode.

Place the weld gun in the desired position and press the trigger.



After each weld the measured thickness and resistance feedback will be displayed on screen. Thickness is displayed in millimeters, and resistance feedback is given through the resistance bar on the right hand of the display.



After a weld is made the weld status screen will show. If the weld was performed correctly then you will be returned to the Auto Weld screen automatically. If there was a problem with the weld, the status screen will display what went wrong. Hold the weld trigger for 1sec. or press the red X button to continue.

X button to continue

Settings:

The settings button can be used to modify weld settings. Only users at the advanced and expert levels are able to access weld mode settings.

WARNING: It is NOT recommended that the factory settings be modified.

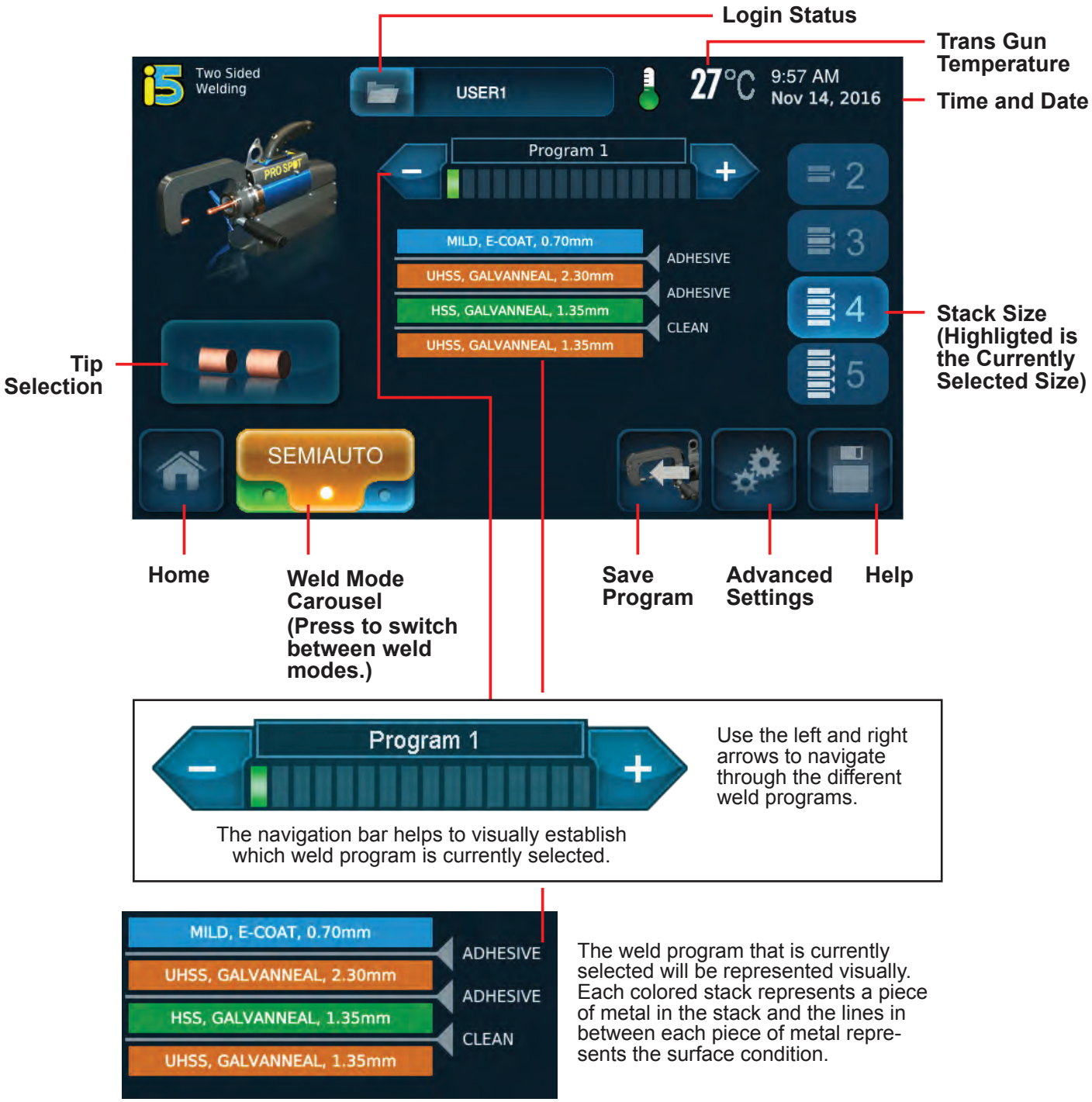
Measurement Only Mode:

The caliper icon sets the i5 to measurement only mode. While in measurement only mode the caliper icon will be highlighted green. Measurement only mode allows you to measure the thickness and resistance of steel without welding it.

4.2.3 i5 Touch Screen Control

2-Sided Welding (Semi-Auto Mode)

Semi-Auto Mode gives the user a high level of customizability that is based on the materials being welded rather than specific time and current settings. The user can select either a predetermined weld setting (out of 16 common metal/coating/surface condition combinations) or create a custom stack between 2-5 pieces of metal with industry standard coatings, surface conditions and material thicknesses.



4.2.3 i5 Touch Screen Control

2-Sided Welding (Semi-Auto mode)

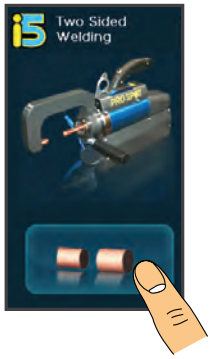
Custom Weld Programs:

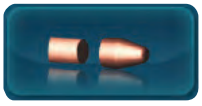
The edit stack screen (which is accessed with the settings button from the Semi-Auto Mode screen) allows the user to make custom weld stacks.

Creating a Custom Weld

1. <u>Select a Weld Cap, Stack Size, and Program</u>

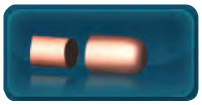
Press the weld cap selection button on the main Manual Mode screen, then select the appropriate weld cap.





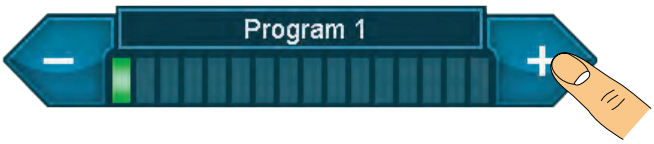
PS-025
Weld Cap

PS-026
Flat 1/2” Cap



PS-027
OEM Cap

To create a custom weld program in Semi-Auto Mode, first select the size of stack you’re working with.



Then select a weld program to over-write.

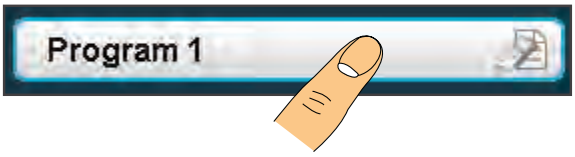
Go to settings to edit the stack composition and surface conditions.

Continued on next page >

4.2.3 i5 Touch Screen Control

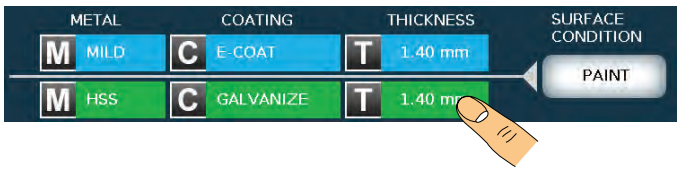
2. Edit Mode

You can name the stack you are customizing by pressing the title button to open the alpha-numeric keypad. Enter the new title and press the green check mark to save.



Select a metal and coating for each layer.

Press the thickness field on the edit screen, this will bring up a key pad. Enter the thickness of the material and press the green check mark.



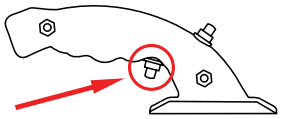
Press the surface condition button to cycle through several different surface scenarios.

4.2.3 i5 Touch Screen Control

3. Save New Weld Program

Press the green check mark soft key to accept the changes and return to the Main Semi-Auto Screen. Finally press the disk icon to save the newly created stack. An overwrite message will appear, prompting you to select “yes” to continue saving or “no” to cancel.

Welding / On-Screen Feedback:



Place the weld gun in the desired position and press the trigger to weld.

After a weld is made the weld status screen will show. If the weld was performed correctly then you will be returned to the Auto Weld screen automatically. If there was a problem with the weld, the status screen will display what went wrong. Hold the weld trigger for 1sec. or press the red X button to continue.

IMPORTANT! Turn the power off before disconnecting water hoses from the weld gun.

IMPORTANT! Make sure the water cooling hoses are securely clipped into place before welding.

IMPORTANT! The i5 welder comes without coolant to ease transportation, be sure to fill coolant tank before turning on the welder!

IMPORTANT! If the thermal breaker has switched off the welder, please contact Pro Spot’s authorized service personnel

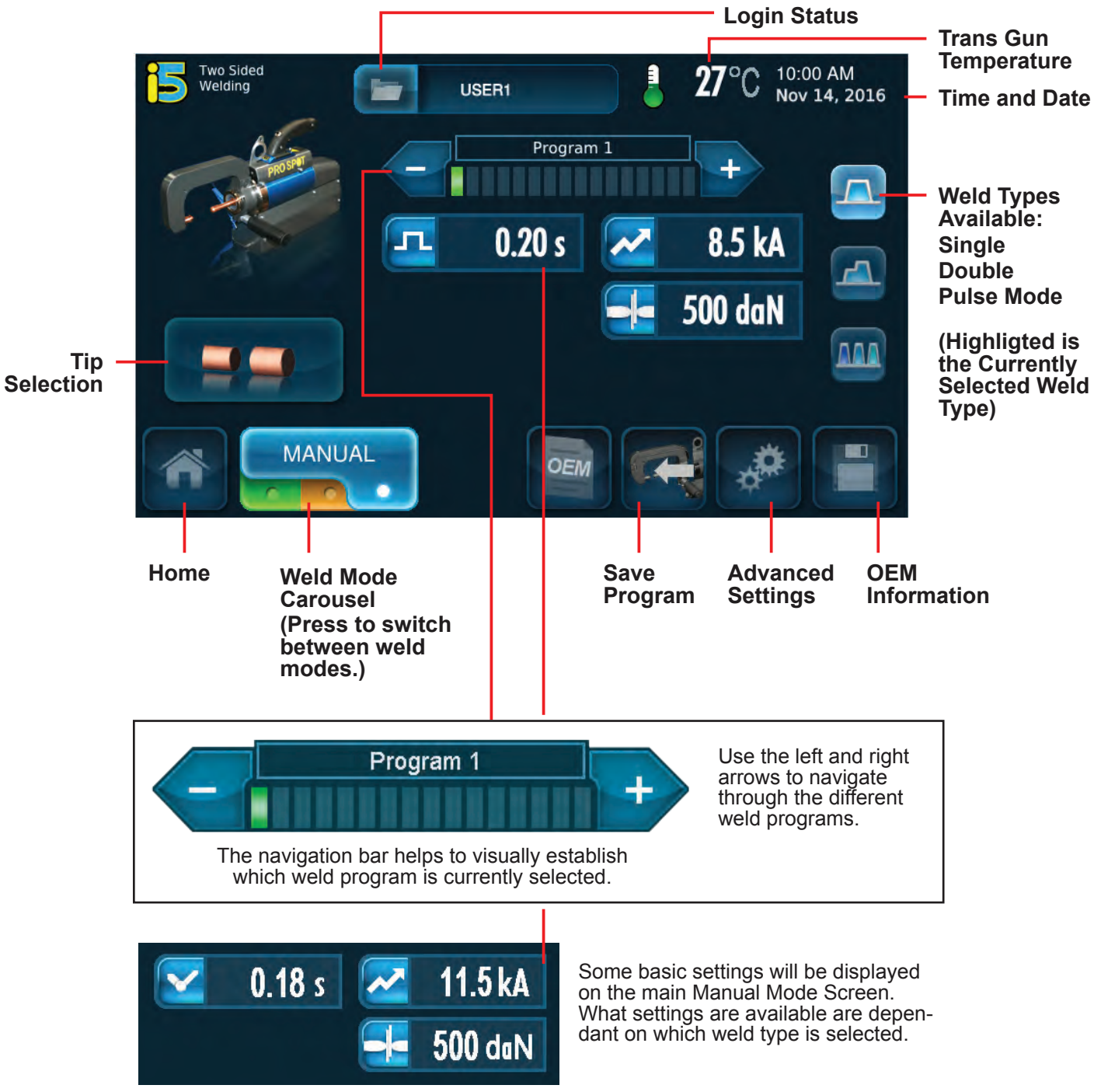
IMPORTANT! N’éteignez pas le soudeur pendant que le système de refroidissement est activé!

IMPORTANT! Si le disjoncteur thermique a éteint le soudeur, s’il vousplaît contactez personnel de service autorisé Pro Spot.

4.2.3 i5 Touch Screen Control

2-Sided Welding (Manual Mode)

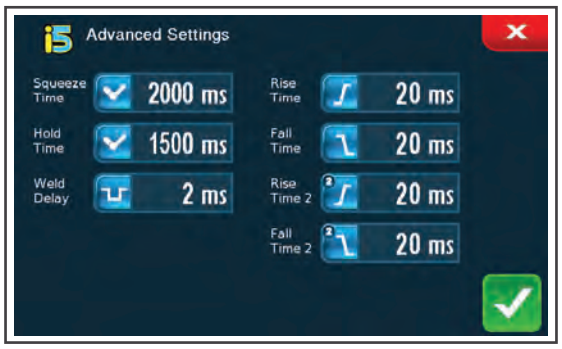
Manual Mode is for users that want complete control over their weld settings. Every aspect of a weld scenario can be established in Manual Mode. As with Semi-Auto Mode Manual Mode comes with 16 pre-loaded common weld programs that can be over written by the user and can be reset in the global settings if necessary.



4.2.3 i5 Touch Screen Control

2-Sided Welding (Manual Mode)

Custom Weld Programs:

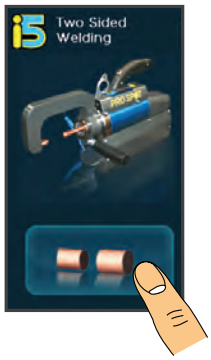


The advanced settings screen (which is accessed with the settings button from the Main Manual Mode screen) allows the user to make a custom weld program. Once the changes are accepted they will be reflected by the weld settings display on the main Manual Mode screen.

Creating a Custom Weld

1. <u>Select the Weld Type and Cap</u>

Press the weld cap selection button on the main Manual Mode screen, then select the apropriate weld cap.



PS-025
Weld Cap

PS-026
Flat 1/2” Cap

PS-027
OEM Cap

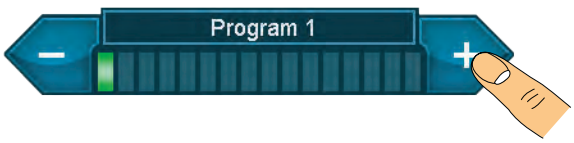
Select one of the 3 weld types in the Main Manual Mode Screen.

Single Weld
A single weld.

Double Weld
Two consecutive current pulses.

Pulse Weld
3-9 consecutive current pulses.

Then select a weld program to over-write.



Continued on next page >

4.2.3 i5 Touch Screen Control

2. Choose Your Settings

Set the desired parameters by selecting each one to be edited and modify using the keypad that opens.

If you selected “Single Weld” you are presented with these options.

Weld Time 

Amount of time current is applied during the weld.

Weld Current 

How much current is applied during the weld.

Weld Force 

How much pressure is applied during the weld.

If you selected “Double Weld” you are presented with these options.

Weld Time (1) 

Amount of time applied to the first pulse.

Weld Current (1) 

How much current is applied to the first pulse.

Weld Force 

How much pressure is applied to the weld.

Weld Time (2) 

Amount of time applied to the second pulse.

Weld Current (2) 

How much current is applied to the second pulse.

If you selected “Pulse Weld” you are presented with these options.

Pulse On Time 

Amount of time each pulse is applied.

Weld Current 

How much current is applied during each pulse.

Weld Force 

How much pressure is applied during the weld.

Pulse Off Delay 

Amount of time between each pulse.

Pulse Count 

Number of pulses that are applied (between 3 and 9)

4.2.3 i5 Touch Screen Control

3. Choose Your Advanced Settings

Press the settings button to go to advanced settings.

Set the desired parameters by selecting each one to be edited and modify using the keypad that opens.

If you selected “Single Weld” on the main screen you are presented with these options.

Squeeze Time 

Amount of time between pressure and current being applied.

Rise Time 

Amount of time it takes for the current to reach its peak.

Hold Time 

Amount of time pressure is applied after the weld is complete.

Fall Time 

Amount of time it takes for the current to go from its peak to 0.

If you selected “Double Weld” on the main screen you are presented with these options.

Squeeze Time 

Amount of time between pressure and the initial pulse being applied.

Rise Time 

Amount of time it takes for the current to reach its peak during the first pulse.

Rise Time (2) 

Amount of time current is applied during the weld during the second pulse.

Hold Time 

Amount of time pressure is applied after the weld is complete.

Fall Time 

Amount of time it takes for the current to go from its peak to 0 during the first pulse.

Fall Time (2) 

Amount of time current is applied during the weld during the second pulse.

Weld Delay 

Amount of time between pulses.

Continued on next page >

4.2.3 i5 Touch Screen Control

3. Choose Your Advanced Settings (continued)

If you selected “Pulse Weld” on the main screen you are presented with these options.

Squeeze Time

Amount of time between pressure and the initial pulse being applied.

Rise Time

Amount of time it takes for the current to reach its peak during each pulse.

Hold Time

Amount of time pressure is applied after the weld is complete.

Fall Time

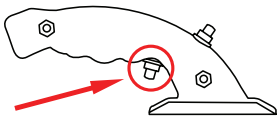
Amount of time it takes for the current to go from its peak to 0 during each pulse.

4. Save New Weld Program

Press the green check mark soft key to accept the changes and return to the Main Manual Screen. Finally press the disk icon to save the newly created weld program. An overwrite message will appear, prompting you to select “yes” to continue saving or “no” to cancel.

Welding / On-Screen Feedback:

Place the weld gun in the desired position and press the trigger to weld.

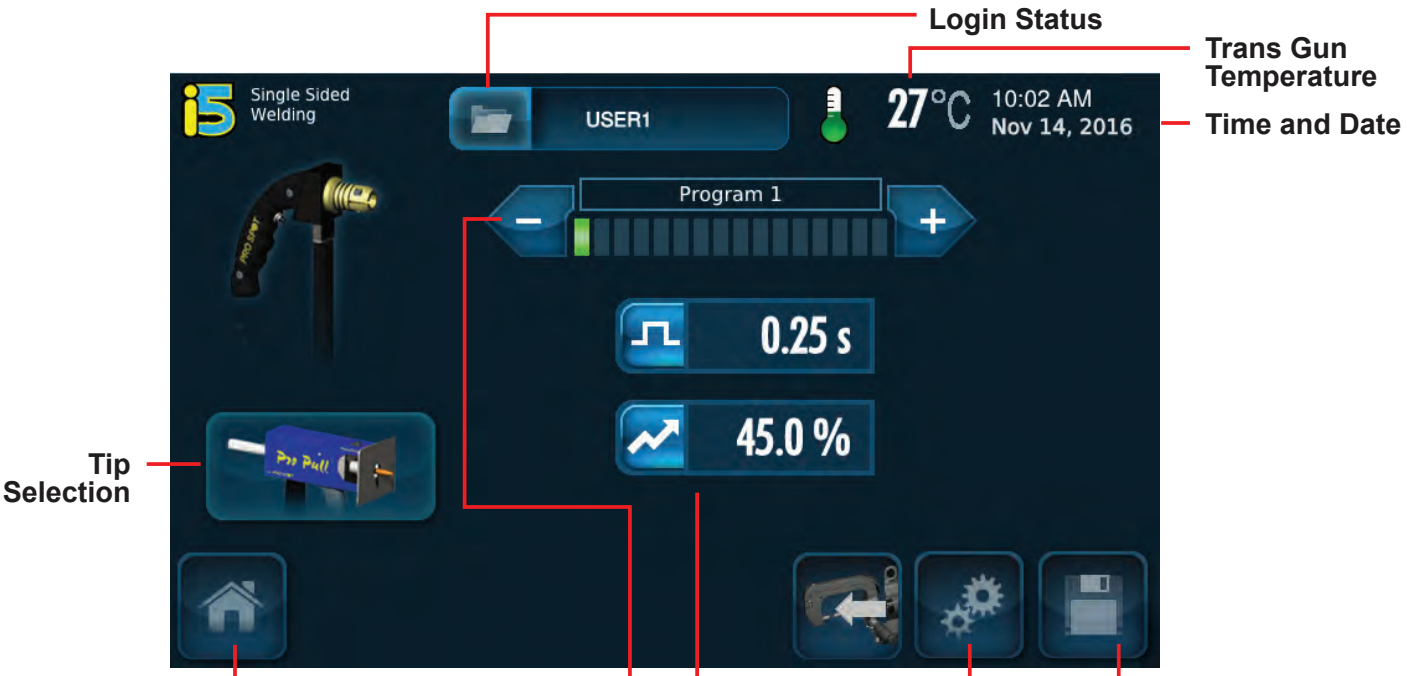


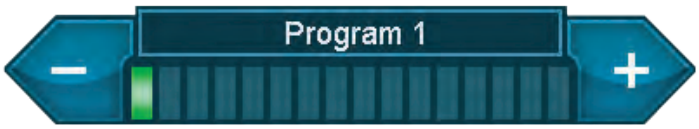
After a weld is made the weld status screen will show. If the weld was performed correctly then you will be returned to the Auto Weld screen automatically. If there was a problem with the weld, the status screen will display what went wrong. Press the red X button to continue.

4.2.3 i5 Touch Screen Control

Single Sided Welding

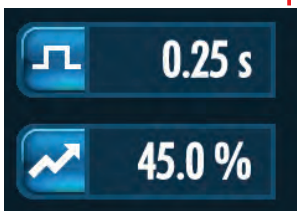
Single Sided Mode has many different applications in auto repair, such as rust and dent repair. There are 16 programs associated with each selectable SS weld tip.





Use the left and right arrows to navigate through the different weld programs.

The navigation bar helps to visually establish which weld program is currently selected.



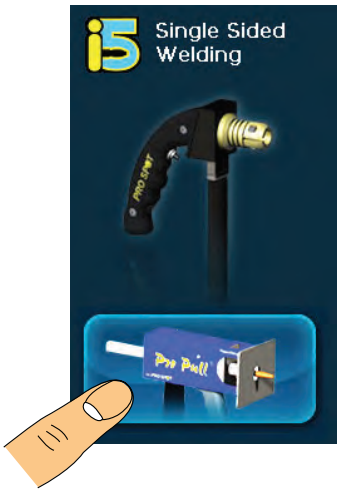
Weld duration and current can be modified from the main screen.

4.2.3 i5 Touch Screen Control

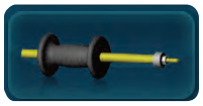
Welding in Single Sided Mode

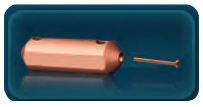
1. <u>Select the Weld Tip and Program</u>

Press the weld Tip selection button on the main Manual Mode screen, then select the tip you are using.




PRO-66
Pro Pull


CLP-70
Spot Hammer


PS-210
Nail Dent Pulling


PS-870
Contact
Shrinking


PS-870
Rivet Welding

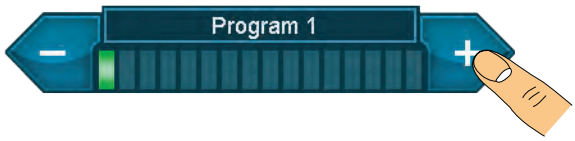

PS-830
Bolt Welding


PS-870
Nut Welding


PS-840
Washer Dent
Pulling


CLT-29
Carbon Shrinking

Then select a weld program, each tip has 16 different pre-set weld programs.



4.2.5 Service Panel Window – Control System Status Lamps

Location: Underneath the i5's swivel head that houses the display screen.

Purpose: To quickly determine the status of many internal systems. The welder needs to be powered up. There are several lights to watch for. The Voltage Indicator windows have three LED lights in each window, while the IGBT and Bus Bar windows have only one light per window.

NOTE: D means diode while the number determines the device's board location.

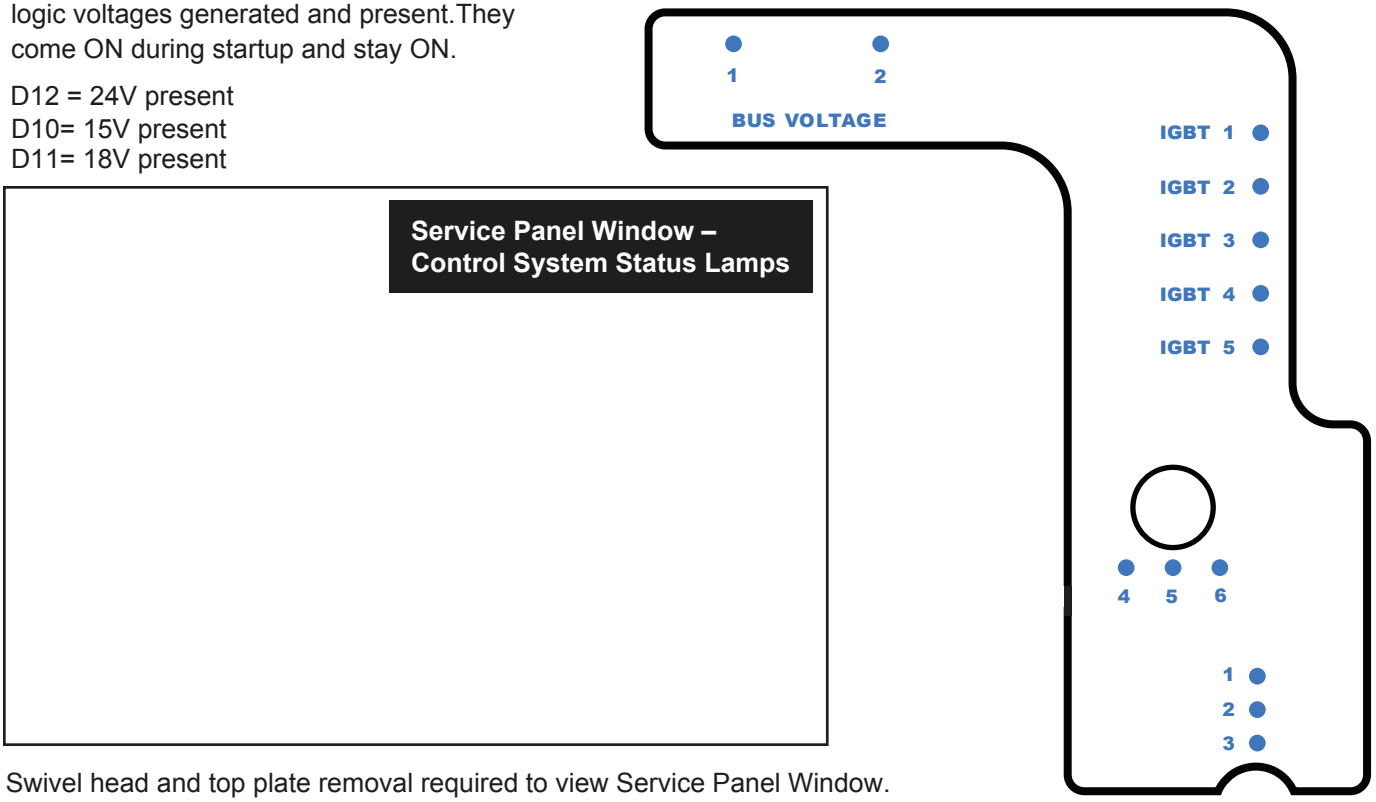
1) Bus High Voltage OK: LED1 & 2 indicate 300 volts DC present. Both stay ON (but often only one of them is seen unless top cover is removed).
D26= present.
D06= present

2) IGBT Control System OK: LEDs 1, 2, 3, 4 indicate voltage present across each IGBT gate. Each LED should stay ON. LED 5 (yellow) indicates 15VDC control voltage and should stay ON. These diodes are on a separate, vertically-mounted mini-board.
D107 = present
D108 = present
D109 = present
D110 = present
D101= 15V present

3) AC Input - Voltage Drop Condition: LEDs 4, 5, 6 indicate a problem if any of them comes ON during welding. They all come on briefly during startup then stay OFF.
D23= Primary voltage drop 10%,
D22= Primary voltage drop 15%
D21= Primary voltage drop 20%

4) DC Voltage Indicators, LED 1, 2, 3 indicate logic voltages generated and present. They come ON during startup and stay ON.

D12 = 24V present
D10= 15V present
D11= 18V present



Service Panel Window – Control System Status Lamps

Swivel head and top plate removal required to view Service Panel Window.

5) Double-Sided Welding

5.1 SA-0053 Double-Acting Spot Gun

The spot gun is used for the following weld programs:
• Two-Sided spot welding - HSS Galvanized steel, Mild steel, Weld Bonding, Boron Steel, Pulse welding and OEM, Custom Modes

(see section 4.8 "Setting the default welding programs")

5.1.1 SA-0053 Component Diagram

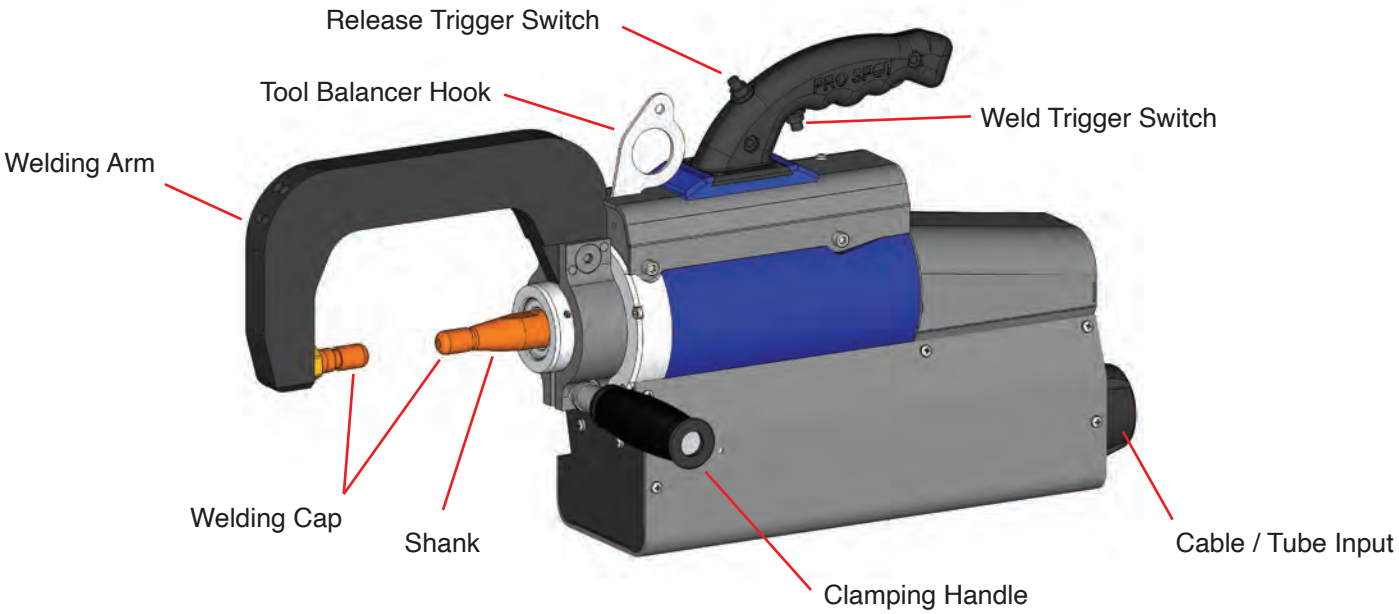
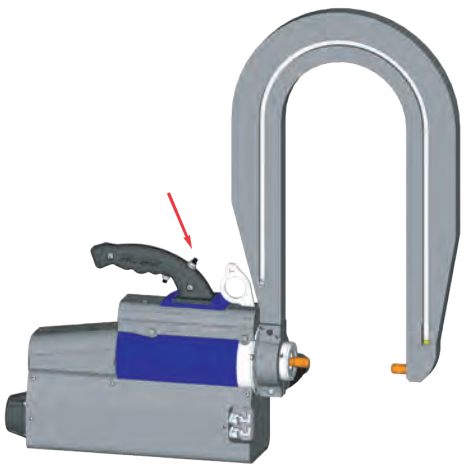
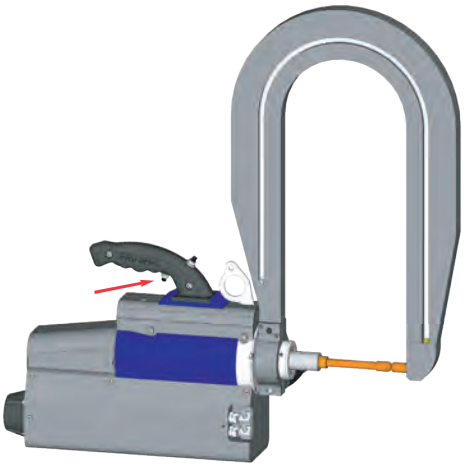


Figure 5.1 SA-0053 Spot Gun - Component Diagram

5.1.2 Using the Double-Acting Gun



Push this button to open electrodes wide.



Push this button to close electrodes and weld.

5.2 Extension Arms

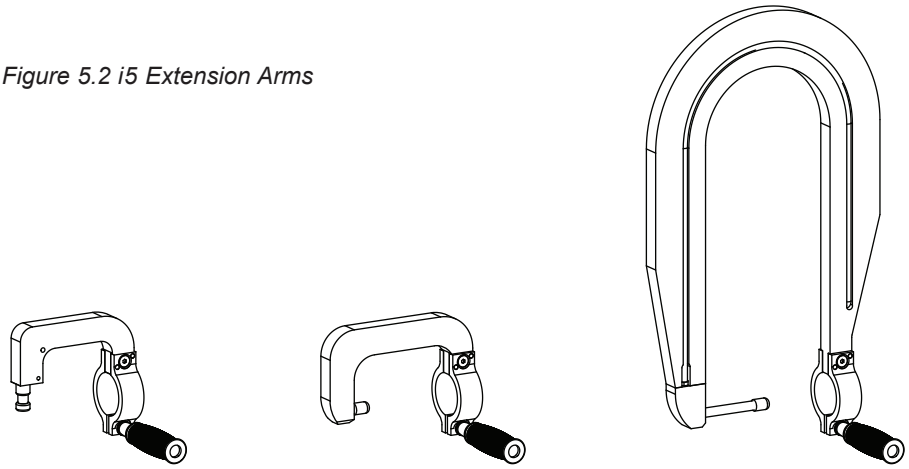
The Pro Spot i5 comes with a variety of extension arms to accomodate most welding job situations.

Please refer to *fig. 5.3* for details on what welding electrodes to use with each extension arm.

NOTE: Extension arms marked "*optional*" are available from your local distributor or online at www.prospot.com

REMARQUE: bras d'extension portant la mention «facultatif» sont disponibles à partir de votre Distributeur régional ou en ligne à www.prospot.com

Figure 5.2 i5 Extension Arms

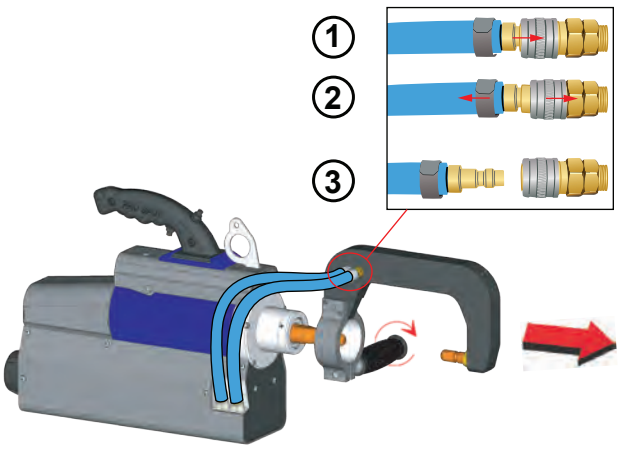


PSW-52
Wheelhouse Arm

PSW-302 C-Arm

PSW-305
508mm Extension Arm

5.2.1 Switching to extension arms



Turn off the welder's power,Loosen the handle, and unclip water hoses and pull off the C-arm...

Now, insert the extension arm, insert water hoses and tighten the handle.

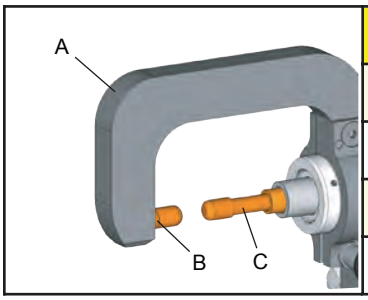
Make sure to properly secure all water hoses before welding.
Turn off the welder before disconnecting water lines.

5.2.2 Extension Arms and Welding Electrodes

Different extension arms require the use of different welding electrodes.
Use charts in *fig. 5.3 and 5.4 to determine the correct combination of extension arms and welding electrodes.*

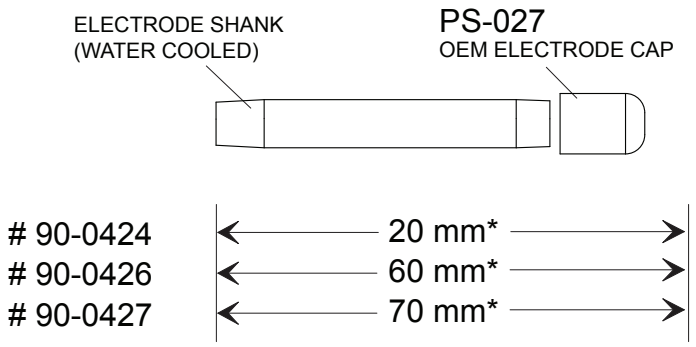
IMPORTANT! Using incorrect welding electrodes with extension arms may result in weak welds and/or damage to your welder.

IMPORTANT! En utilisant des électrodes de soudage inexactes au bras d'extension peut donner des soudures faibles et / ou endommager votre soudeur.



A	B	C
PSW-302	90-0424	90-0426
PSW-52-5/8	90-0416	90-0426
PSW-305	90-0427	90-0426

Figure 5.3 Extension arm - Welding electrode configuration chart



* length with Welding Cap attached. -20mm w/o cap

Figure 5.4 Welding electrode selection chart

NOTE: PS-027 Welding Caps can be purchased in packages of 15 from your local distributor or online at www.prospot.com

REMARQUE: PS-027 caps de soudure peuvent être achetés en paquets de 15 à partir de votre distributeur local ou en ligne à www.prospot.com

5.3 PS-500 Electrode Alignment

Use the set screws (A, B, C) to align the electrodes. Ex: to move electrode down, loosen screw (C) and tighten screws (A and B).

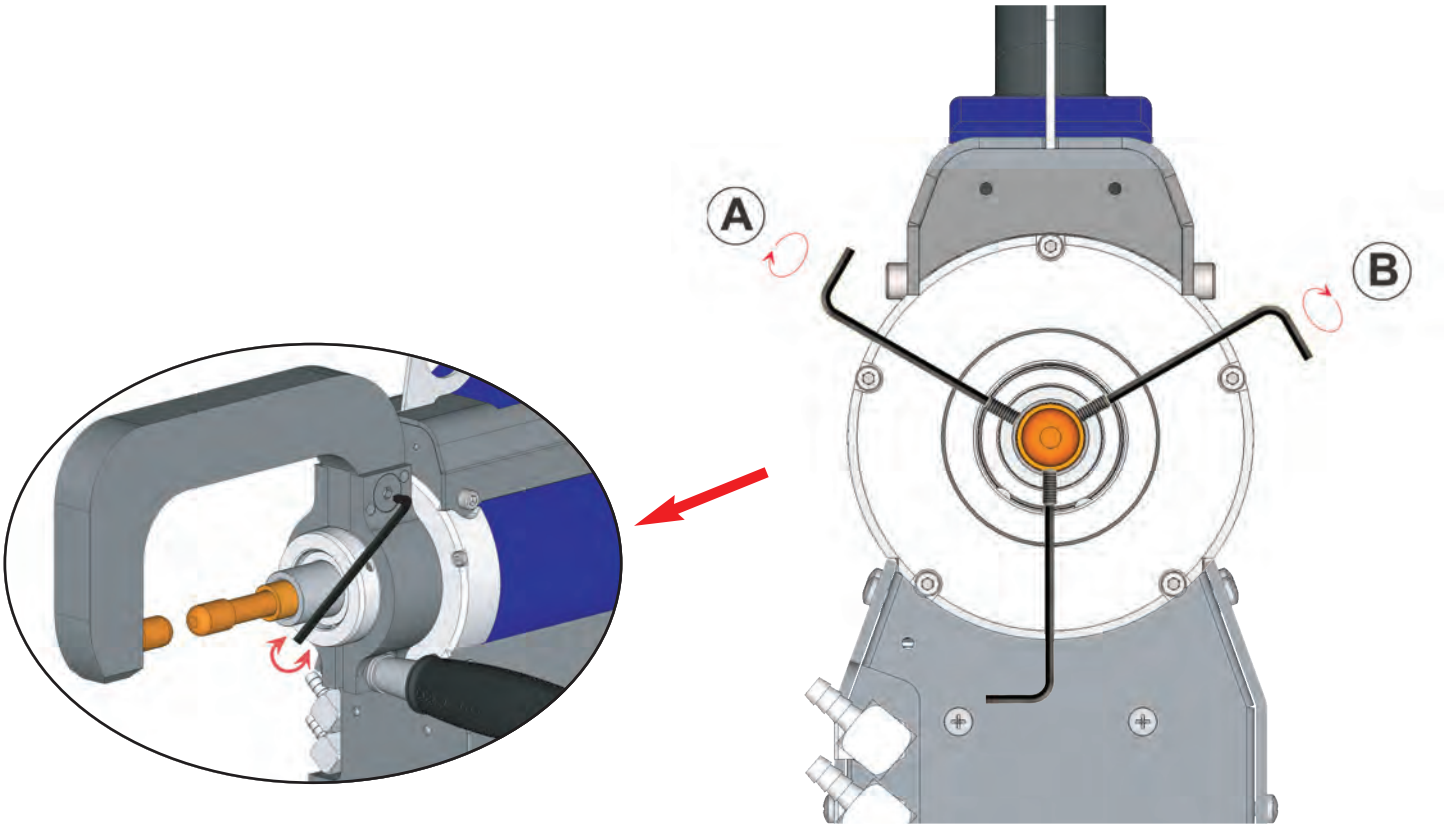
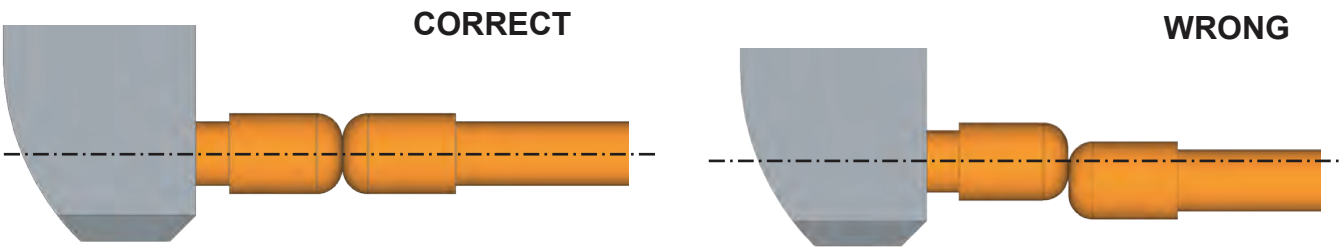


Figure 5.5 Electrode Alignment

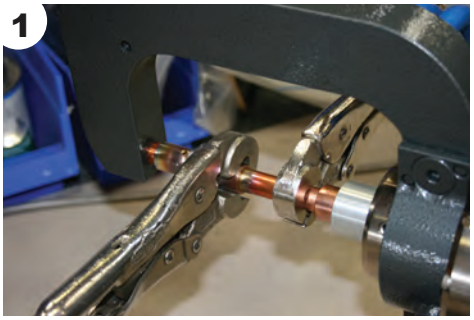


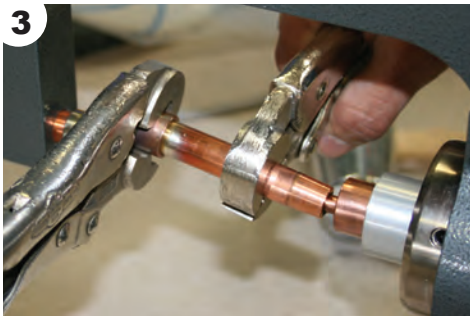
IMPORTANT! Always maintain proper electrode alignment. Not doing so may result in weak, substandard welds!

IMPORTANT! Toujours maintenir l'alignement des électrodes appropriées. Ne pas le faire peut conduire aux soudures faibles de qualité inférieure!

5.4 Removing Welding Electrodes

Removing Extension Arm Electrode and Weld Cap





1. Attach vice grips to the weld cap and electrode that is being removed. Grip the handles and twist them in opposite directions.

2. If twisting the cap and electrode doesn't work you can gently tap them with a hammer (Pro Spot ALU-9 Aluminum Hammer shown) while maintaining control of the electrode by holding one of the vice grips firmly with one hand.

3. Carefully remove the electrode and allow the excess water to drain from it. You can now release the vice grips from the electrode and weld cap if you choose or you can continue on to the following step with a vice grip still attached to the electrode shaft for a better grip.

4. Finally if the weld cap has not loosened hold on to the electrode, gently tap the weld cap off with a hammer and rotate the electrode with your other hand. Make sure that when you are tapping at the weld cap to aim your hammer outward (not just down) away from the electrode.

IMPORTANT! Do not attempt to remove the electrode by hitting it. This could damage the electrode and/or the spot gun.

IMPORTANT! N'essayez pas de retirer l'électrode en la frappant. Cela pourrait endommager l'électrode et le "pistolet".

5.5 Welding Electrode Maintenance

CLEAN TIPS DIRTY TIPS

WARNING! The electrodes may be hot. Use caution when handling them.

ATTENTION! Les électrodes peuvent être chauds. Soyez prudent lors de leur manipulation.

To maintain structurally-sound welds it is important to keep your welding electrodes and weld caps from build-up. It is also important to maintain a 6mm weld nugget diameter. Clean electrodes with a file and periodically replace weld caps.

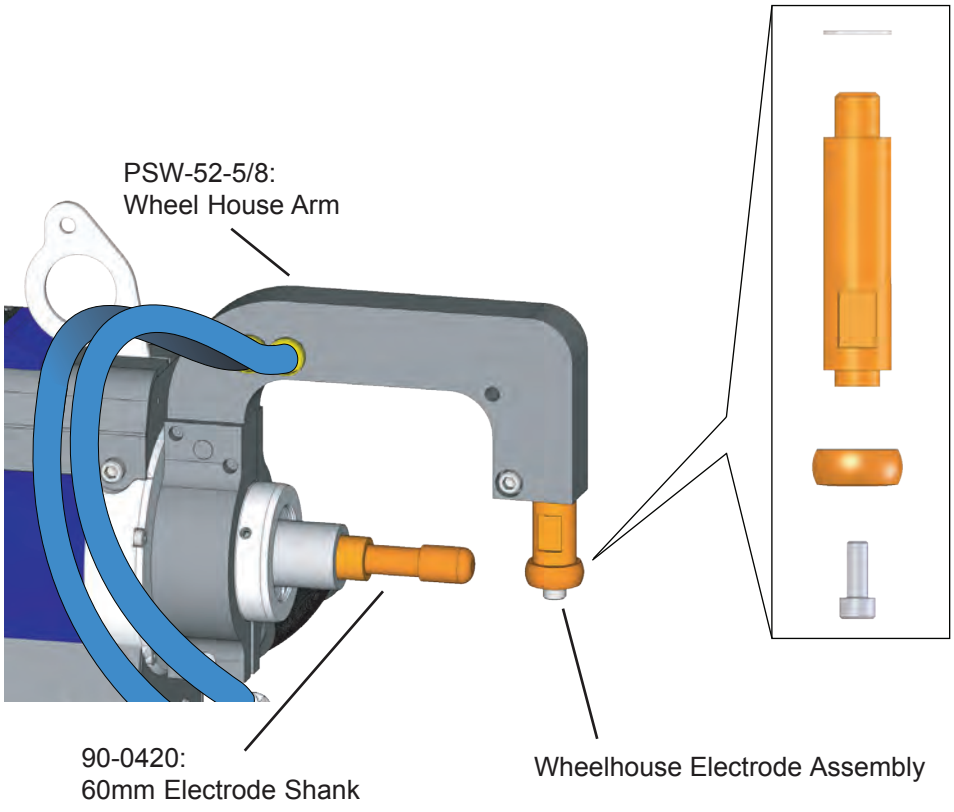
PLT-51 Tip Sharpener

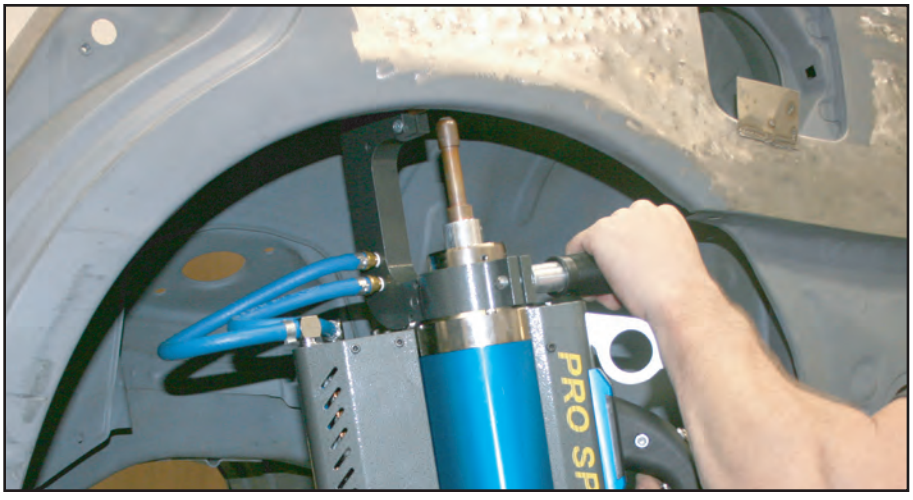
Note:
The PLT-51 (meant for the OEM weld caps) is distinguishable from the PLT-50 by the green mark on the neck of the grinding head.

Cap cleaning:
After the i5 has been turned off, connect the PLT-51 tip sharpener to a compressed air hose and set the sharpening blade on the weld cap to be cleaned. Hold down the paddle switch while applying a slight pressure against the weld cap for about 10-15 seconds. Repeat these steps until all debris is cleared from the weld cap and there is a clear connection path between both tips.

A video demo of the PLT-51 in action can be found on our Youtube page at: http://youtu.be/yx0efiLb8lE

5.6 Wheel House Arm



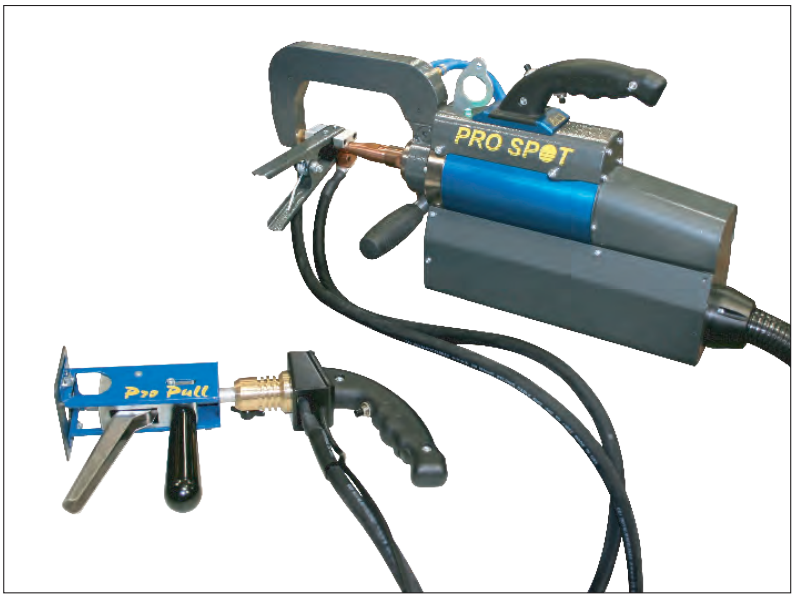


The Wheel House Adapter allows access to hard to reach areas such as the wheel house.

6.1 Single-Sided Welding Adapter

A Single Sided welding adapter is available for the i5 Smart Resistance Spot Welder.

Quickly and easily attach a single-sided dent puller to the i5's electrodes and plug into the control panel. The i5's built in software will help with the rest of the process with pre-loaded weld settings, or set and save your own.



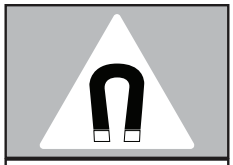
PRO SPOT
QUALITY WELDING SYSTEMS

Pro Spot International, Inc.
5932 Sea Otter Place
Carlsbad, CA 92010

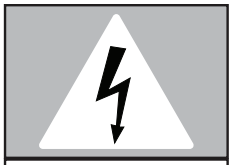
Toll Free (US Only): (877) PRO SPOT
Phone: (760) 407-1414
Fax: (760) 407-1421

E-mail: info@prospot.com
Web: www.prospot.com

CAUTION:
The i5 discharges a large magnetic field when in use which can negatively effect medical implant devices such as pace-makers.



CAUTION:
The i5 discharges a large magnetic field when in use which can negatively effect electronics and attract metal to the gun.



CAUTION:
Unplug the welder from the wall outlet before servicing, cleaning, or maintenance. Risk for electrical shock

CAUTION:
Some parts of the welder may become hot after prolonged use.

CAUTION:
Always wear eye protection when welding. Periodically showers of sparks will fly up from the material being welded.

CAUTION:
Be wary of pinch points on the i5 such as the electrodes / weld caps on the trans gun.

NOTES

NOTES