

## Installation/Training Checklist for ELA Upgrades on Pro Spot i5 and i5s - **General Training Guidelines**

### **Ergo Lift Assist (ELA):**

- Go over personal protective equipment, i.e., safety glasses, gloves, etc.
- Ensure the Ergo Lift Assist is properly assembled and secured.
- Demonstrate the proper operation of the ELA, including adjusting the height and position for ergonomic handling.
- Show how to attach and secure the welder or other tools to the ELA.
- Explain the weight limits and safe handling procedures to avoid overloading the ELA.
- Demonstrate how to maneuver and operate the ELA in confined spaces and around obstacles.
- Go over maintenance checks, including inspecting the ELA's mechanical components.
- Explain how the ELA can reduce strain and fatigue, improving technician safety and productivity.
- Show proper storage and handling procedures when the ELA assist is not in use.

### **Detailed Training Guidelines**

Go over the following safety and informational items with the appropriate technicians and management.

- General Spot Welder Safety:**
- How to change arms including C arms, wheelhouse arm and C2X arm.
- How to safely position the gun safely for use, provide the limitations of the gun rotation in the gun holder, how to connect and disconnect the tool balancer safely.
- Tool balancing system only designed to support the weight of the Pro Spot welding gun (60 lbs /27 kg MAX).
- The tool balancer should be set to balance the Pro Spot Welding Gun with the 80mm Arm.
- To set up the ELA for operation, adjust the ELA to a height of approximately 7'. Balance the gun to a comfortable working height at approximately waist level.
- To increase the tension on the tool balancer and raise the level of the welding gun, use the manufacturer supplied wrench and turn the mechanism towards the (+) sign.
- To reduce tension on the tool balancer and lower the height of the welding gun, use the handle on the tool balancer mechanism and turn towards the (-) sign.

- CAUTION: IT IS NOT RECOMMEND TO USE ANY OTHER WRENCH ON THE TOOL BALANCER THAN THE MANUFACTURER SUPPLIED WRENCH. TAKE CARE TO KEEP IT WITH THE WELDER FOR USE WHEN NEEDED.**
- The ELA MUST be connected to the Auto Gun Hanger Kit (Part No. SA0454) on i5 Welders. If the Hanger Kit is not available, DO Not connect the ELA and contact Pro Spot to order a replacement part.
- 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 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.

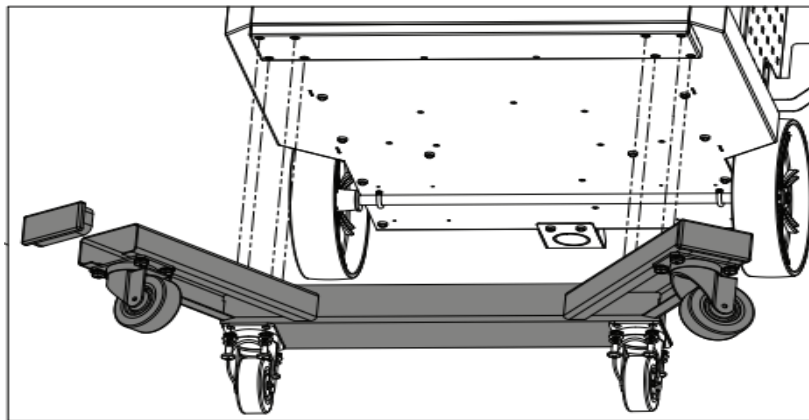
### **Operating the Ergo Lift Assist/ELA**

- 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.

- Show the technicians how to raise and lower the ELA to access different height vehicles and specific welding applications on the interior of the vehicle without having to remove the gun from the cable support on the ELA.
- Show the technicians how to connect the support cable to the hanger hoop over the top of the gun and the rear hook located at the back of the gun if welding in a vertical position.
- Explain that the technician should visually watch the ELA as it is going up and down to make sure it does not come in contact with anything during the movement up or down.
- Explain how to adjust tension on the tool balancer.
- Show using the supplied tool to increase the balancer tension to carry more weight in the direction shown on the tool balancer decals. Note: When the ELA is installed onto an i5, the tool balancer tension is maxed out when the gun has the standard arm installed on the gun. No further adjustment of the ELA is possible to assist in carrying the weight of a larger arm if installed onto the gun. The initial tension of the ELA might need to be increased from the factory as the ELA is used on multiple welders that require different tensioning for different weight tools.
- Show decreasing the tension with the lever attached to the tool balancer in the correct direction if needed.

**DO NOT INSTALL THE ELA UNDER THE FOLLOWING CONDITIONS**

- Do not install** just the top part of the boom without the rear leg widening brackets. Not even if you are coming back in the morning to "wrap it up". **Just don't do it. It is not safe.**
- Do not install** the ELA onto an i5 that does not have the leg extenders on the front of the welder. The below picture shows the front legs. **Under no circumstances should you do anything before installing that extender to the front of the welder. If those legs are not mounted on the welder when you get to the location, do not install the ELA.** These are the parts that are needed for the front legs. 1 - 90-0640, 2 - P10-05, 8 - S-170, 8 - W-16 and 8 - W-19



- Do not install** the ELA if the bolt holding the upper boom to the lower boom is not in place, preventing it from turning. Upper and lower sections must be bolted together to prevent the

ELA from turning to the side at that connection point. We use an 11mm (0.433") drill bit in production to drill out that hole. The bolt size is 3/8"/0.375". Anything in between 0.375" and 0.433" would work.

For more information and training, scan:



[ELA SAFETY Information](#)



[ELA: How it Works Video](#)



[Assembly Instructions for Ergo Lift Assist](#)

Technicians:

\_\_\_\_\_  
Installation Technician (Pro Spot)

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Center Number

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

I certify that Pro Spot delivered and Installed the ELA Equipment and training per this document.

\_\_\_\_\_  
Body Shop Manager