



**375A**

# PowerCool 375

*Safety, Setup and General Use Guide*



FUNCTION: Water Cooler

PURCHASE DATE:

SERIAL NUMBER:

**240V**

## Operator's Manual

[www.everlastwelders.com](http://www.everlastwelders.com)

**Need Parts? Need Technical Help? Call: 1-877-755-9353**

380 Swift Ave. Unit 12 South San Francisco, CA 94080, USA



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## NOTICE:

Product Specifications and features are subject to change without notice. While every attempt has been made to provide the most accurate and current information possible at the time of publication, this manual is intended to be a general guide and not intended to be exhaustive in its content regarding safety, welding, or the operation/maintenance of this unit. Due to multiple variables that exist in the welding field and the changing nature of it and of the Everlast product line, Everlast Power Equipment INC. does not guarantee the accuracy, completeness, authority or authenticity of the information contained within this manual or of any information offered during the course of conversation or business by any Everlast employee or subsidiary. The owner of this product assumes all liability for its use and maintenance. Everlast Power Equipment INC. does not warrant this product or this document for fitness for any particular purpose, for performance/accuracy or for suitability of application. Furthermore, Everlast Power Equipment INC. does not accept liability for injury or damages, consequential or incidental, resulting from the use of this product or resulting from the content found in this document or accept claims by a third party of such liability.

## WARNING!

### **California Proposition 65 Warning:**

**This product, when used for welding or cutting, produces fumes or gases which contain chemicals known to the State of California to cause birth defects and, in some cases, cancer. (California Health & Safety Code § 25249.5 et seq.)**

** Warning: Cancer and/or Reproductive Harm**

**[www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)**

**THANK YOU!** We appreciate you as a valued customer and hope that you will enjoy years of use from your plasma cutter. We work to please the customer by providing a well supported, quality product. *To make sure that you receive the best quality ownership experience, please see below for important information and time sensitive details.*

#### **What to do right now:**

1. Print your receipt from your confirmation email that should have been sent to you after your purchase and put it up for safe keeping. If you do not have one, contact us at 1-877-755-9353 (US customers) or 1-905-570-1818 (Canadian Customers). You will need this if anything should ever happen for original owner verification (if bought as a gift, original receipt will still be needed, or explanation sent to Everlast).
2. Read this manual! A large number of tech and service calls are a result of not reading the manual from start to finish. Do not just scan or casually peruse this manual. There are different features and functions that you may not be familiar with, or that may operate differently than you expect. Even if you have expertise in the field of welding, you should not assume this unit operates like other brands or models you have used.
3. Carefully unpack and inspect all items immediately. Look for missing or damaged items. Please report any issues within 48 hours (72 hours on weekend or holidays) of receiving your product. Take pictures if you are able and contact us at 1-877-755-9353, ext. 207 if any issue is discovered between 9 am and 5 pm Eastern Time M-F (US customers) or at 1-905-570-1818 (Canadian Customers) between 9am and 4 pm weekdays except on Fridays when hours are from 9 am to 12pm Eastern. If outside of the US or Canada, contact your in-country/or regional distributor direct at their service number.

#### **What to do within the next 2-3 days:**

1. Make sure your electrical system is up to date and capable of handling the combined inrush and rated current of the unit and the welder. (Add the Inrush and rated currents together to get the total breaker and wiring requirements.) Consult and use a licensed and knowledgeable electrician. If you have downloaded this manual in expectation of delivery, get started now.
2. Make sure this machine is plugged in, turned on, and tested with every process and major feature, checking for proper function. You have a 30 day period to test and thoroughly check out the operation of this unit under our 30 day satisfaction period. If something is wrong, this policy covers shipping on the unit (30 day satisfaction policy applies to the USA only for the 48 lower states and D.C., territories and provinces are excluded) or any incidental parts that may be needed to resolve any issue. After this 30 day period, if you find something wrong with the unit, you will not receive the benefit of free shipping back and forth to resolve this issue. Your unit is still covered under the 5 year parts/labor warranty, but shipping is covered by the customer after the 30 day period is over. The first 30 days of operation with any electronic item is the most critical and if any issue will happen, it will often happen during this time. This is why it is very important that you put this unit to work as soon as possible. Any issue should be reported within 48 hours (72 if on the weekend or holiday). Everlast will not be liable for any shipping after that time.

#### **What to do within the next 30 days:**

Visit our website (US customers). Go to [www.everlastwelders.com](http://www.everlastwelders.com). Navigate to the resources tab and to the "product registration" page to register your product. While keeping your receipt/proof of purchase is still required for verification of ownership, registering will help us keep your details straight and establish a chain of ownership. Don't worry, though, your warranty is still valid if you can't do this. Remember: Always keep your receipt even if you register. You may want to staple a copy to your manual.

#### **What to do if you have a warranty issue or problem with the unit:**

1. Unplug the unit. (Also do this before any maintenance or cleaning is done.)
2. Do not attempt a self-repair until authorized by an Everlast representative. This does not include performing routine maintenance such as point gap adjustments or regular internal cleaning. Any third party repairs are not covered under warranty, and can further damage your unit.
3. Within 24-48hours, (or by the next working business day) you must contact U.S. tech support at 1-877-755-9353 ext 207 (U.S. hours are 9 am to 5pm Eastern for tech support and 9 am to 5 pm Pacific for the business/sales office). If you are in Canada contact 1-905-570-1818 (Canada hours are 9am to 4pm M-Th, 9am to 12pm Fri). Although phone contact is preferred to establish a warranty claim, you may send an email to [tech@everlastwelders.com](mailto:tech@everlastwelders.com) (US) or [mike@everlastwelders.ca](mailto:mike@everlastwelders.ca) (Canada) along with your contact information and brief explanation of the issue and ask for a follow up call. If you contact us via phone, and you do not reach a live person, please leave a brief message with the nature of your problem and your contact information. You should expect a call back within 24 hours. It is also a good idea to follow up the message with an email.
4. Be prepared with as much information as possible when you talk with a tech advisor, including a details of the failure, settings, and application of the unit. **NOTE: A Proof-Of-Purchase (receipt) is required before returning the unit for warranty or before warranty parts can be sent to you.**
5. Keep in mind that, you may be asked to check a few basic things. Before you call, having a screwdriver and volt/ohm meter at hand is a good idea and will save time. Many issues can be resolved over the phone. If the issue cannot be resolved over the phone/email, you may be given an option to return the unit, or have a part shipped to you, at Everlast's discretion. Keep in mind, you may be asked questions that seem basic, or elementary to your knowledge base. These are not meant to question your knowledge, but rather to make sure nothing is overlooked. However the tech chooses to proceed, please cooperate with the process, even if you think you know what the cause or issue is. You may be asked to check something or open the unit during the diagnosis. This does not void the warranty! Opening the unit is a part of routine maintenance and cleaning.

This is an important step. The willingness of the customer to work with tech support can save lots of time and accelerate the warranty process. For warranty to be honored, you will need to make sure that you follow these guidelines. ***Units that are returned without an RMA (issued by the tech support department) may not be repaired under the warranty agreement and you may be charged for the repair and can result in a delayed repair as well.***

**What to do if you need setup help, guidance, weld issue diagnosis or have general product compatibility questions.**

Call us at 877-755-9353 ext. 204 for welding guidance and general welding issue diagnosis. Or email [performance@everlastwelders.com](mailto:performance@everlastwelders.com) with the basic issue you are having, along with your specific settings, and welding application.

## **Hey...wait, what is my warranty?**

**Warranties and service policies and procedures vary from country to country and are maintained and supported by the regional or in country distributor of Everlast welding equipment.**

**USA Customers Only:** For full details on the 5 year parts and labor warranty, 30 day satisfaction policy, terms of sale, and how to proceed with a warranty claim, please visit: <https://www.everlastgenerators.com/standard-warranty>. Accessories are covered by a separate warranty and detailed information can also be found at the link above.

**Canada Customers Only:** For full details on the 3 year parts and labor warranty, terms of sale, and related policies and procedures, please visit: <https://www.everlastwelders.ca/terms.php>.

## **Who do I contact?**

### **USA Technical Support:**

Email: [tech@everlastwelders.com](mailto:tech@everlastwelders.com)  
1-877-755-9353 ext. 207  
9am-5pm Eastern (Closed holidays)  
Monday-Friday

### **USA Welding Support and General Product Information:**

Email: [performance@everlastwelders.com](mailto:performance@everlastwelders.com)  
1-877-755-9353 ext 204  
9am-6:30 pm Eastern (Closed holidays)  
Monday-Friday

### **USA Sales and Main Office:**

Email: [sales@everlastwelders.com](mailto:sales@everlastwelders.com)  
1-877-755-9353 ext 201  
9am-5pm Pacific (Closed holidays)  
Monday-Friday

### **Canada Technical Support:**

Email: [mike@everlastwelders.ca](mailto:mike@everlastwelders.ca)  
905-570-1818  
9am-4pm Eastern Monday-Thursday  
9am-12pm Eastern Friday

### **Canada Sales and Main Office:**

Email: [sales@everlastwelders.ca](mailto:sales@everlastwelders.ca)  
905-570-1818  
9am-4pm Eastern Monday-Thursday  
9am-12pm Eastern Friday

### **Other Countries and Regions:**

Visit the U.S. Website @ [www.everlastwelders.com](http://www.everlastwelders.com) and click on the flag of the country or region represented that is closest to you. If your country or



## Safe operation and proper maintenance is your responsibility.

Everlast is dedicated to keeping safety a top priority. While we have compiled this operator's manual to instruct you in basic safe operation and maintenance of your Everlast product, it is no substitute for observing safe welding practices and behavior. Safe welding and related cutting operations require basic knowledge, experience and ultimately the exercise of common sense. **Welding does significant hazards to your health and life! Exercise extreme caution and care in all activities related to welding or cutting. Your safety, health and even life depends upon it.**

**WARNING!** If you do not have proper knowledge or capability to safely operate this machine, do not use this machine until proper training has been received!

*While accidents are never planned, preventing an accident requires careful planning. Stay alert!*

**Please carefully read this manual before you operate your Everlast unit.**

The warranty does not cover damage or harm created by improper use, neglect of the machine or failure to follow safe operating practices.

### NOTICE:



Welding and cutting operations may generate undesirable High Frequency (HF) and EMF energy. This can interfere with surrounding electronic equipment such as computers, routers, CNC equipment, televisions, radios, fluorescent lighting etc. If disturbance in surrounding electrical and electronic equipment is noted, consult a licensed electrician to help properly ground surrounding equipment to limit the interference. This machine may cause GCFI and ground fault outlets to malfunction. This unit is designed to be operated on a dedicated, properly grounded circuit.

# Safety Warnings, Dangers, Cautions and Instructions



**NOTICE.** This unit manual is intended for users with basic knowledge and skillset in welding. It is your responsibility to make certain that the use of this plasma cutter is restricted to persons who have read, understand and follow the warnings and instructions in this manual. If you or the operator needs further instruction, contact Everlast welding support at 1-877 755-9353 ext. 204 or seek qualified professional advice and training.



**WARNING!** High Frequency (HF) energy can interfere with the operation of pacemakers and can damage pacemakers. Consult with your physician and pacemaker manufacturer *before* entering an area where welding and cutting equipment is in operation and *before* using this plasma cutter. Some pacemakers have limited shielding. Alert any users or customers of



**WARNING!** Use approved safety glasses with wrap around shields and sides while welding and working in the weld area or serious eye damage or loss of vision may result. Use a grinding shield in addition to the safety glasses during chipping and grinding operations.



**WARNING!** When welding always use an approved welding helmet or shielding device equipped with at least an equivalent of a shade 9 or greater. Increase the shade number rating as amperage increase over 100 amps. Inspect helmet for cracks in lenses and in the helmet. Keep lens covers in good condition and replace as necessary.



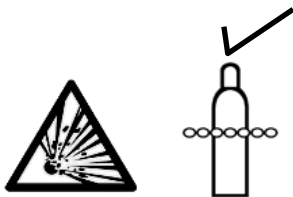
**WARNING!** Welding/cutting operations carry inherent risks which include but not limited to possible cuts burns, electrical shocks, lung damage, eye damage and even death. Take all appropriate measures to use proper Personal Protective Equipment (PPE). Always use leather welding gloves, closed toe (preferably reinforced or steel toe leather shoes, and long-sleeved flame resistant clothing (i.e. denim). Do not wear Poly/Nylon blend materials.



**DANGER!** Welding/cutting poses shock and electrocution risks. Keep this welding equipment dry. **Do not weld in the rain or where moisture accumulates.** Use dry, rubber soled shoes, gloves and clothing when welding. Do not rest or contact work clamp (ground) when welding. Keep all parts of the body insulated from the part being welded when possible. Do not touch terminals or connections while the unit is on. Consider all parts to be “live” at all times even if no live work is being performed. Do not use frayed welding cables.



**CAUTION!** Fires are possible but also preventable while welding. Always remove flammable rags, papers, and other materials from the weld area. Keep rags stored in an approved flame proof canister. Keep a fully charged fire extinguisher at hand. Remove any fuels, oils, paint, pressurized spray cans, and chemicals from the weld area. Make sure any smoke/fire detectors are function properly. Do not weld on tanks, drums or barrels, especially if pressurized or sealed. Do not weld on any container that previously held fuel or chemicals. Make sure the weld area is clear of flammable materials such as grass or wood shavings solvents and fuels. Do not wear frayed or loose clothing. Visually inspect and recheck the work area after welding looking for smoldering debris or flames.



**WARNING!** Welding gas cylinders are under high pressure. Keep all gas cylinders upright and chained to a cart or held safely in a safety holding pen. Never transport gas cylinders in an enclosed car van or other vehicle. Transport gas cylinders securely. Keep all cylinders capped while not in use or during transport. Replace the cap on the cylinder when it is going to be more than 24 hours before use. Do not use or attempt to repair faulty regulators. Never weld on gas cylinders. Keep gas cylinders away from direct sparks.

# Safety Warnings, Dangers, Cautions and Instructions



**DANGER!** Welding and cutting operations pose serious inhalation hazards. Some of these hazards are immediate while others are cumulative in their effect. **Do not weld in enclosed spaces or in areas without adequate ventilation.** Fumes and gases released in the welding and cutting operations can be toxic. Use fans or respiration equipment to insure adequate ventilation if you are welding in a shop or garage area. **Do not weld on galvanized metal under any circumstance. You may develop metal fume fever. Symptoms are similar to lu-like symptoms. Seek medical advice and treatment if you are exposed to galvanized welding fumes.**

If you experience any eye burning, nose or throat irritation while welding, these are signs that you need more ventilation.

If you feel these symptoms:

- Stop work immediately and relocate work area with better ventilation.
- Wash and clean your face and hands.
- Stop work completely and seek medical help if irritation persists



**DANGER!** Never use brake cleaner or any chlorinated solvent to clean or degrease metal scheduled to be welded or other related equipment in the area being welded. The heating of this cleaner and its residue will create highly toxic phosgene gas. Small amounts of this vapor are harmful and can lead to organ failure and death. If degreasing of a part is necessary, use Acetone or an approved pre-weld cleaner. Use the proper personal protective equipment (PPE) when handling any cleaners/solvents.



**DANGER!** People with pacemakers should consult a physician and pacemaker manufacturer before welding. There is a potential for damage or serious malfunction resulting in death. High Frequency energy (HF)/Electromagnetic Fields generated during welding can interfere with pacemaker signals, even permanently damaging it. Some pacemakers offer some shielding, but restrictions regarding amperage and HF starting of TIG arcs may be placed upon the individual. Warn all potential bystanders that they should exit the work area if they have a pacemaker or similar medical equipment before welding. Severe electrical shock leading to injury or death may occur while using the plasma cutter if the user becomes part of the circuit path. While the Amp output of the plasma cutter is limited, the unit may produce an OCV of 300V or greater. Consult with a Physician if a pacemaker is



**DANGER!** Never defeat or modify any safety guards or shields. Keep all safety covers and shields in place.









Never place your fingers in or near a fan shroud or insert any object into the fan(s).



**DANGER!** Do not supply more than 100 PSI to the air-pressure regulator supplied with this machine. If you do, the regulator may leak or explode, causing severe injury or death. Use a separate regulator mounted at the air-compressor to control supply air pressure. **Never use an air compressor without a separate compressor mounted air regulator!**



## Safety Warnings, Dangers, Cautions and Instructions

	<p><b>CAUTION!</b> Trip Hazards exist around plasma cutters. Cords, cables, welding leads and hoses pose a trip hazard. Be aware of their location and inform others of their location. Tape and secure them so they will stay out of high traffic areas.</p>
	<p><b>CAUTION!</b> Welded metal can stay hot long after welding is completed. Burns may occur. Always wear gloves or use tongs/pliers when handling welded or cut metal. Remember the heat from the metal may catch other material on fire. Always have a fire-proof area ready to place welded components until they fully cool. Use soap stone or a metal marking marker to label the metal as "HOT" to serve as a reminder to all present in the area.</p>
	<p><b>CAUTION!</b> Welding and cutting operations generate high levels of ultraviolet (UV) radiation which can burn and damage skin and eyes. The intensity is so high that exposed skin and eyes can burn in a few minutes of exposure. Minimize direct skin and eye exposure to this intense form of radiation by using proper PPE and sun screen where appropriate.</p>
	<p><b>CAUTION!</b> Do not allow bystanders. Do not allow others without proper Personal Protection Equipment (PPE) suitable for welding to stand in the welding area or to observe welding and welding related activities. If protection is not readily available, use a welding screen to separate the welding area from the rest of the area. If no protection or screen is available, physically exclude them from the welding area by a wall or other solid divider. Keep all pets and young children away from the welding area.</p>
	<p><b>CAUTION!</b> Electromagnetic Fields can be generated by this plasma cutter and radiate into the work place. The effect of EMF is not fully known. Exercise caution when welding by: NOT draping welding leads (guns/cables) over your shoulders or arms, NOT coiling them around your body, NOT inserting yourself directly between the cables, and by NOT contacting the unit while welding. DO keep the work clamp connected as close as possible to the area of the weld and directly to the object being welded whenever possible.</p>
 	<p><b>DANGER!</b> Never touch connectors or fittings while this machine is turned on. Keep all safety covers in place when not in use. <b>Never remove or replace the plasma consumables while the machine is turned On.</b> Make sure the brass switch safety pins on the torch head remain in good repair and that the spring loaded function remains operational and keeps them fully extended when the torch cap is removed. The Open Circuit Voltage (OCV) while in plasma mode may exceed 400V. This is enough to cause burns, injury severe electrical shock, injury and instant death.</p>
	<p><b>DANGER!</b> Use of this product may result in a hazardous fluid waste. Drinking or ingesting the coolant may cause serious injury or death. Keep children and animals away from any overflow, leak or empty containers. Recycle coolant in appropriate areas that accept recycled fluids. Do not pour coolant down drains, or dispose of in streams, lakes or water shed areas. If storage of spent product is necessary, use an appropriate container, and mark the label clearly as to contents. When possible use environmentally safe products, or products that include safe recycle or disposal instructions.</p>

## Using This Unit with Everlast Welding Products.

**This water cooling unit is designed for 240V use only.** It's unique stackable (and nearly seamless) design means that it can be used in conjunction all new generation PowerTIG and PowerPro units. (Except PowerTIG 185DV). All PowerTIG and PowerPro models, except the PowerTIG 185DV are equipped with a special water-cooler power plug located on the rear of the unit. Even though the PowerPro 164, PowerTIG 200DV, PowerTIG 210EXT, and PowerTIG 255EXT offer dual voltage(120/240V) operation, the PowerCool 350 should not be used with the these welders while they are operating on 120V input. The Power Plug on the rear of these units is connected directly to the switch and does not run through a step-up transformers to alter the power. This means that the plug supplies 120V while operating on 120V, and 240V while operating on 240V input power.

### **Why isn't this water-cooler dual voltage for dual voltage welders, so I can operate the cooler on 120V?**

The 120V input power operating capability of the Everlast PowerTIG and PowerPro welding products is primarily intended for portable welding applications where 240V is not available at all. This means that the unit is usually being transported and used without the water cooler, especially since 120V output of the welders is limited to either, depending upon the model, 125A or 150A. Additionally, the weight, space limitations and added inconveniences in general, most people find that carrying a cooler in portable applications is prohibitive. In any case, the Amp range provided, while operating on 120V input power, is the Amp range that can be easily covered by the use of most air-cooled (gas-cooled) torches. All dual voltage units include at least one gas-cooled torch that should be sufficient for use with either all or most of the range of the welder while operating on 120V.

**WARNING!** Never use a water-cooled torch without a water-cooler or with the water-cooler turned off or disconnected (even for a few seconds) or damage may result to the torch, including melting of the torch cables internally, fire due to burn through, or other damage. Damage will occur to the torch even while welding at low Amperages.

## WARNING!

Never use the electrical power outlet on the back of your Everlast welding machine for anything other than powering an Everlast brand water cooler. Do not attempt to modify, or otherwise change this outlet for use with anything else other than an Everlast brand water cooler designed for 240V operation. Severe damage, fire or injury may occur if other devices or other brand equipment is connected.

## NOTICE!

This unit is designed to cool water via conventional heat-air exchange. This is not a water chiller. The water may be warm or even slightly hot in the coolant tank, torch and water lines during circulation. Do not expect this unit to drop the water temperature to a cooler temperature than ambient air temperature. In most cases, during heavy use, the water temperature will be well above ambient air temperature. This should not be a concern as long as the cooling capacity is observed and the unit is maintained with proper coolants at proper levels. Should the Alarm sound however, stop immediately and check for coolant flow to prevent overheating.

# Specifications and Components

Specifications	PowerCool 375
Item Description	Stackable-Design TIG/MIG Torch Water-Cooler
Heat Exchanger (Radiator) Construction type	Copper Core type
Cooling System Design	Direct drive sealed industrial motor connected to fan and pump on a single shaft
Amp Rating	1.1A
Voltage	240V (±10%) 50/60Hz
Operating Pressure	45 to 57 psi
System Fluid Capacity	Approximately 2 gallons/ 7.5 Liters
Flow Rate (at connector)/Cooling Capacity	.26 GPM (1 qt/minute)/ 1LPM (16.6kW)
Pump	Stainless with Bronze Impellor
Rated Cooling Amperage	375A @ 100% Duty Cycle
Minumum-Maximum Operation Temperature	14-104°F/-10-40°C
Dimensions	27.5" L X 10" W x12" H
Bare Unit Weight	25 Lbs.
Water Connection	9mm quick connect
Ingress Protection	IP21
Coolant Type	Use only name-brand commercially produced TIG coolant rated for low conductivity or for HF TIG use. Do not use or substitute any other type. Distilled water may be used temporarily for no more than 3 months.
Minimum Storage/ Minimum Operating Temperature	0°F/14°F

# Specifications and Components

## What Coolant Fluid Should I Use?

Quality TIG water cooler coolants are available from most any welding supplier. Everlast recommends only a quality, name-brand, commercially-manufactured TIG water cooler coolant for your PowerCool product from major manufacturers. Coolant selection is important to both the life span of the cooler and the torch itself. Furthermore, it is necessary to keep your warranty on your cooler and torches valid. Most coolants are pre-mixed. Be sure to consult the coolant manufacturer's recommendation. If dilution is required, dilute with distilled or deionized water, or per the coolant manufacturer's instructions.

Look for the following when selecting your TIG water cooler coolant:

- Make sure the coolant is rated for TIG High Frequency (HF) use. Some coolants are for MIG, Plasma Cutting and DC scratch start/lift TIG. These coolants are considered "conductive" and can drain HF energy from the torch, making arc starting difficult or erratic. A coolant rated for HF use is considered to have "low conductivity".
- Quality TIG water cooler coolants include line conditioners and lubricants. These help extend the pump life and helps to prevent degradation of the TIG torch and cooler components.
- Quality TIG water water cooler coolants have anti-algae additives included to prevent clogging of tiny torch orifices and lines.
- Quality TIG water Ethylene Glycol based cooler coolants have anti-freeze properties which protect from freezing down to at least  $-32^{\circ}$  F.

Distilled water may be used, for not more than 3 month period, until the proper coolant is purchased. However, this is considered to be a temporary concession until the proper coolant is located and purchased. Under no circumstances should distilled water only be used.

Use of non standard, non name-brand coolants will jeopardize warranty status on both torches and the cooler itself.

Please do not use "home brew" or low quality (cheap) TIG coolants. Even if they are commercially sold, or recommended are often repackaged coolants or antifreezes that are crossed over from other industries as a "will work" coolant.

**NOTICE:** *Water cooler coolant recommendations have varied by the manufacturer and model of cooler over the years as materials have changed and a wider variety of coolants have become available. However, as more specialized coolants, and new materials have become available, these older types of coolants once used have fallen out of favor as they may now can cause damage to the cooler or torch components. The types of damage seen by the use of such coolants is often associated with rapid aging of torch cables and components (dry rotting), torch head plugging, bearing seizure in the pump, leaks, and other similar issues. **The use of such older types and of inferior or "home brew" concoctions will void the warranty of both the torch and cooler.***

## Which Coolant Fluid(s) Should I Stay Away From?

Stay away from any of the following coolants. Use of these coolants will void your warranty:

- **Any** Automotive type, regardless of color or similarity to commercial TIG low conductivity coolants.
- Propylene Glycol
- Alcohol, including Isopropyl.
- RV type and other similar Pink or Blue non TIG labelled coolants.
- Low quality or cheap repackaged coolants sold by some companies that are designed for use in other industries.
- TIG coolant not specified as low conductivity by the manufacturer.
- Any TIG coolant that you suspect may be of low quality, or repackaged coolant, not originally intended or labelled specifically for low conductivity HF TIG use.
- Well water, or municipal supplied water, or any water not labelled as distilled or deionized.
- Deionized or Distilled water for time periods over 3 months, unless required to dilute a concentrated coolant.

# Setup Guide

## Getting Started

### UNPACK YOUR UNIT.

Upon arrival, you will need to completely unpack your unit, and check things over. This is a time sensitive matter. Do not delay or hold the cooler unopened in the box. First, make sure the unit is opened from the top. Be careful with using knives and sharp objects so you won't cut cords and cables inside the boxes. Lay all items out and inspect them.

You should have the following in your box:

1. Water Cooler.
2. Four (4) Plastic Cooler Foot Pads.
3. Two (2) welder to Cooler Connection Brackets
4. Six (6) M4 Screws
5. Four (4) M5 Screws
6. Cooler line extensions (some regions)

When you receive your package, inspect the cooler for damage. Check for the presence and general condition of the unit. Some slight rubbing or chaffing of some of the accessories may be present, but this is considered normal. **There may be some moisture present in the box, particularly if the unit has been turned upside down during shipping. This is normal as the unit has been factory tested before shipping. A small amount of water may remain in the pump or coolant tank and leak out.** If any item is damaged or missing, please inform Everlast within 72 hours of product receipt. See pages 4 and 5 for more details.

### POWER UP AND TEST YOUR UNIT.

You will need to fully test the unit as soon as possible. Within 72 hours after receipt of the unit, be sure to have every thing you need at hand to test the unit such as the proper coolant. Then, power up your machine with the torch installed. Allow the unit to idle for 5 minutes. Check and observe operation of the cooler. Make sure the fan is running at full speed. Check for leaks. After the test is completed, turn the unit off, See page 5 for more information. If the cooler was delivered before your welder, please make note of that, and let Everlast know you may have a delay in testing the unit properly until it arrives.

**NOTICE:** *Cosmetic damage claims after 30 days will not be accepted, unless Everlast is contacted and informed of such delay and reason for such a required delay (i.e. Overseas in deployment).*

### CHECK FOR AIR LEAKS.

Be sure to check for gas leaks before attempting to weld. Connect all the lines and tighten and recheck any related clamps, plugs and fittings.

### DISTANCE YOUR WELDER/COOLER FROM YOUR WORK.

As a best practice technique, be sure to locate your welder/cooler combination away from the immediate area you are welding. Sparks and debris thrown by the welding and cutting processes can enter the unit and cause damage. Do not intentionally cut or grind near the units. *Keep in mind the fan draws air in from the rear and exhausts out the front and the sides of the unit.*

### GIVE YOUR WELDER/COOLER SPACE TO COOL.

The welder/cooler units need room to cool itself. Place the unit in a place that will allow 18" from all sides to allow for proper cooling. The unit pulls air in from the rear, and pushes it through the units heat

sinks and radiator. The air is then exhausted through the front panel and side louvers of the unit. If any of sides is blocked or restricted, the duty cycle will be reduced, and overheating will occur, leading to possible damage if the restriction is severe enough. Never attempt to restrict air flow by attaching filters to the vents or by modifying your fans for "on demand" service.

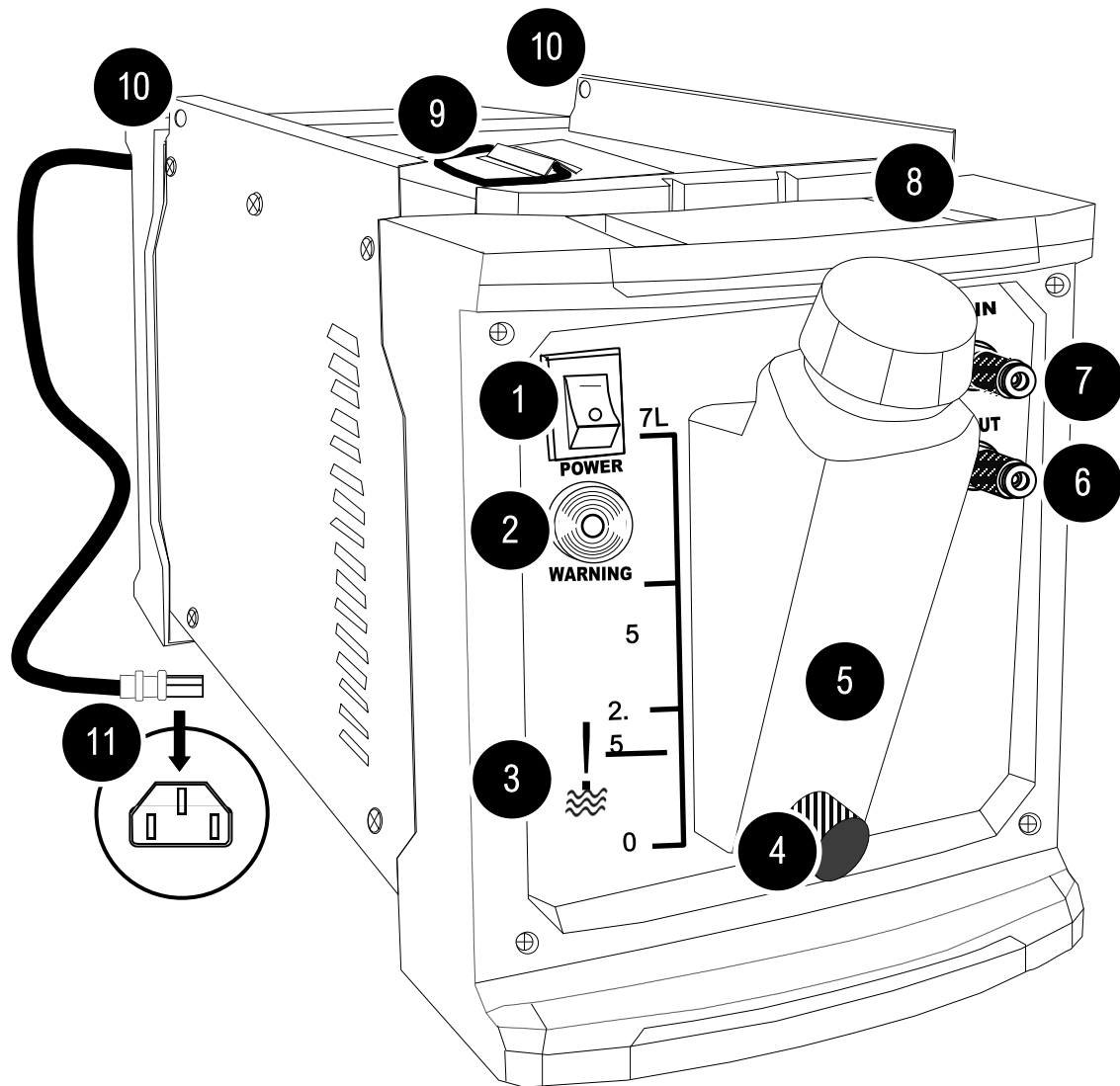
### PRIMING THE PUMP/REMOVING THE AIR LOCK

When you receive your unit, and you connect it to the TIG torch for the first time, you will need to make sure the pump has been properly primed and water is flowing through the torch before you begin welding. This unit is equipped with a flow alarm. Usually this will sound if flow is not sufficient or blocked. **This may also be required if the cooler has been emptied or has sat for long periods of time without use.**

To do this:

- Fill the cooler with coolant.
- Connect the torch per color code.
- Plug the unit into the welder and switch the welder on.
- Disconnect the return from the torch and discharge it directly into the opening of the coolant tank. (Alarm should sound)
- Watch to see if coolant is being discharged directly into the tank.
- If water is flowing, and a steady stream, reinstall the line. (Flow is approximately 1qt/minute)
- If water is not flowing, allow the pump to continue to pump for a couple of minutes to see if it will prime by itself.
- If water does not begin to flow, you will need an air compressor regulated down to 25 psi at the output side of the compressor, an air gun, and a shop rag.
- Connect the air gun and wrap the shop rag around the air gun nozzle.
- Remove the torch hose from the opening of the coolant tank, and stick it in a small jar or can.
- Insert the air gun into the tank, so that the rag offers a light seal. This should not be 100% air tight, but enough to build slight pressure in the coolant tank.
- Give several quick, but successive shots of air into the coolant tank while the cooler is running.
- This should clear the air lock and force water into the pump.
- Repeat until it water is flowing.
- **CAUTION!** Do not use extremely high air pressure, or use long pressurizations, or attempt to make a completely air tight seal around the opening of the coolant tank. The rag should form a light seal, so that some air can escape if over pressurized.

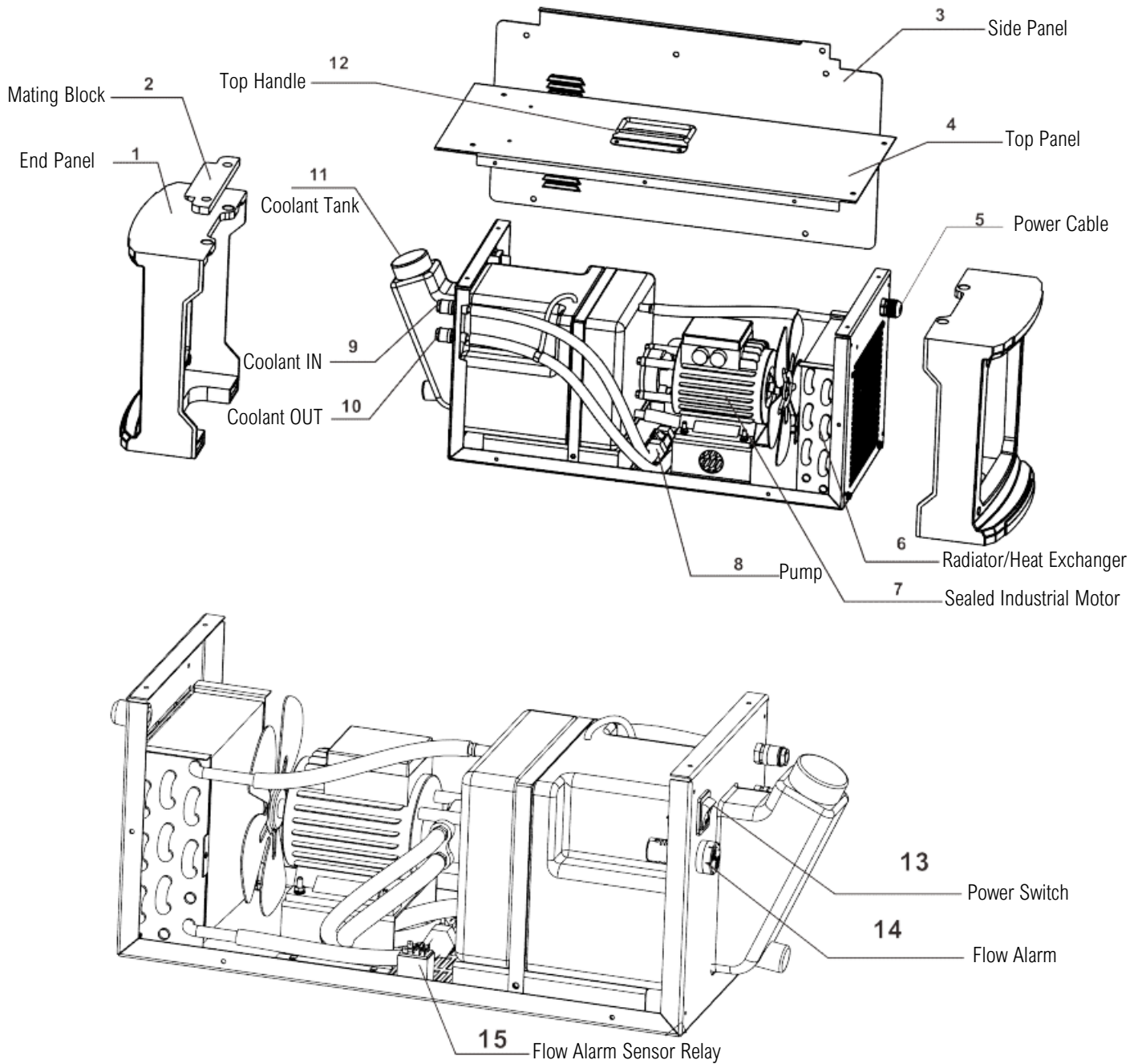
# Specifications and Components



#	Item	Description
1	Power Switch	The cooler power switch may be left in the on position if it is connected to an Everlast welding product if the unit is to be used on and off during a production cycle. This will allow the main power switch on the welder to control the power. If storing, or if not in use overnight, switch the cooler off with the power switch.
2	Warning Alarm (Coolant Alarm)	The warning alarm is designed to sound if coolant flow is interrupted. This will protect the torch hoses from being damaged in the event of coolant flow interruption. Common causes that will trigger this alarm are: Low Coolant Level, Disconnected or Improperly connected torch cables, plugged torch head (from defect or algae), too thick of coolant, leak, or damaged quick connector.
3	Low Coolant Level	If the coolant reaches this water level mark, immediately stop and refill the cooler tank to the full level with approved coolant.
4	Drain	Periodically drain and replace coolant. This will help prevent algae growth and breakdown of the coolant while maximizing torch life.
5	Coolant Tank	This tank holds approximately 7 liters. This is approximately 2 gallons.
6	Coolant Out (Blue)	This quick connect fitting provides cooled water under pressure to the torch. It should be connected to the blue torch line if color coded.
7	Coolant In (Red)	This quick connect fitting provides return water from the torch that has been heated and now needs to be cooled. It should be connected to the red torch line if color coded.
8	Connector Seat	This area positively engages the welder when the welder is stacked onto the top of the cooler. The upper unit should sit flat.
9	Carry Handle	The cooler can be independently carried to where it is needed. This handle is removeable if vibration occurs while both units are running.
10	Rear Connection	These holes are connected to the welder via the brackets provided with the cooler. See following pages for more information.
11	IEC 60320-1 C-13 Power Plug	This plug is designed to work correctly with all Everlast products with rear water cooler power connections in the rear. Do not convert or change this plug.

# Specifications and Components

## Side View of Disassembled Components



# Setup Guide

## CONNECTING TORCH LINES AND WHAT TO DO IF THE LINES ARE NOT COLOR CODED.

Most water cooled torches feature color coding which makes it easy to connect the torch to the welder. The blue torch line connects to the blue color coupling, and the red torch line connects to the red coupling. The remaining line (usually black in color) connects to the gas connection.

In some instances, some companies do not color code their torch lines, but may be labeled as to where each goes. Be sure to look closely for instructions on where to connect the lines. They'll usually have a paper tag on the torch lines near the fitting. If using a torch other than Everlast, the connections themselves for the water lines will have left handed threads and will tighten in the opposite direction of conventional fittings. These fittings will require adapters to connect to the quick couplings. These are available usually from the torch supplier, or some universal type are available from Everlast to convert your torch, but your original fittings will have to be removed first.

In some cases, the torch manufacturers rely on customer knowledge and tradition to connect the lines properly. If you do not have a torch with color coded gas and water lines, then use the following information as a guide to properly connecting your torch:

- The line from the DINSE connector is the hot water return line. This should be connected directly to the red coupling (IN). This line is usually larger than the others. At the very least the line to the DINSE connector from the torch is larger than the other lines.
- Gently blow low pressure air through the other lines to determine which is the gas line.
- If you are blowing air through a line and the air escapes from the torch head, you have identified the gas line. Connect it to the gas coupling on the welder.
- If you are blowing air through a line and the air escapes from the line coming from the DINSE connector, this is the cool water line that supplies cooled water to the torch. Connect this to the blue coupling (OUT).

## MAINTENANCE

Every 3 to 6 months, the cover of the water cooler should be removed to access it for cleaning and to inspect it for leaks. Pay special attention to the cooling fins on the radiator. Shine a light behind the fins while looking on the other side to see if the radiator fins are plugged or dirty. Clean with light compressed air. Do not use coil cleaner on the fins to clean the radiator. If they are completely plugged, then the radiator will need to be removed and the fins rinsed with water and a mild detergent.

The cooler tank should be drained regularly (at least yearly), depending upon the type of coolant used, and inspected for algae growth, and debris buildup in the bottom of the tank. If algae has been discovered, rinse tank with water completely. Then, fill with a 5% mix of bleach to water and allow to sit for 20 minutes. Remove water/bleach mixture, and thoroughly rinse again. Additionally, check torches for plugs by blowing through the lines with air pressure set to no more than 25 psi. Cycle fresh, distilled water through torch. Connect both the torch and cooler together and fill with distilled water. Allow the cooler to run for 10 minutes. Drain the tank again. Replace coolant with fresh coolant. Recycle or properly discard the used coolant. Do not reuse coolant that has had algae, sludge or debris in it.

## CHECK FOR LEAKS

When you receive your unit, the units have been factory tested for leaks. However, due to shipping damage, and possible loosening or hidden damage, some leaks may be possible after initial startup.

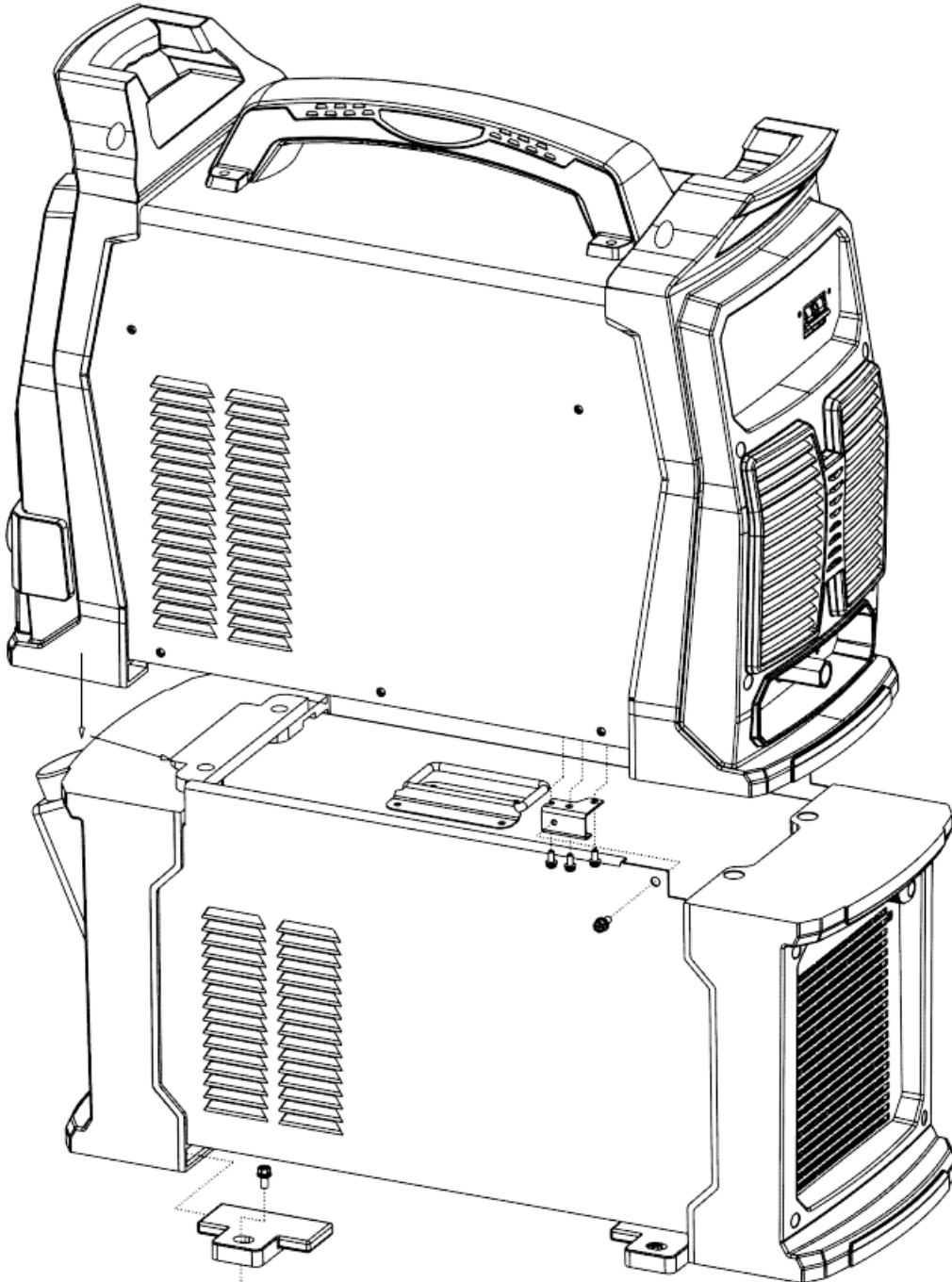
After the pump has been primed, and the torch has been properly connected, switch the cooler on, and allow it to run for at least 15 minutes, checking for any drips, leaks or abnormal wetness around the cooler and torch fittings.



# Setup Guide

## SECURING THE COOLER AND THE WELDER TOGETHER

This cooler is designed specifically for the new generation panel design. It is designed to make a seamless match to the upper welder unit, completing the stylish new look of the welder/cooler package. The cooler and welder can be attached together semi-permanently through the exclusive new mating system. This will allow the units to be more stable while moving and transporting and make theft (due to the combined size/weight) more difficult of either unit. Use this over-view image and the detailed images and instructions on the next few pages to properly assemble the unit.

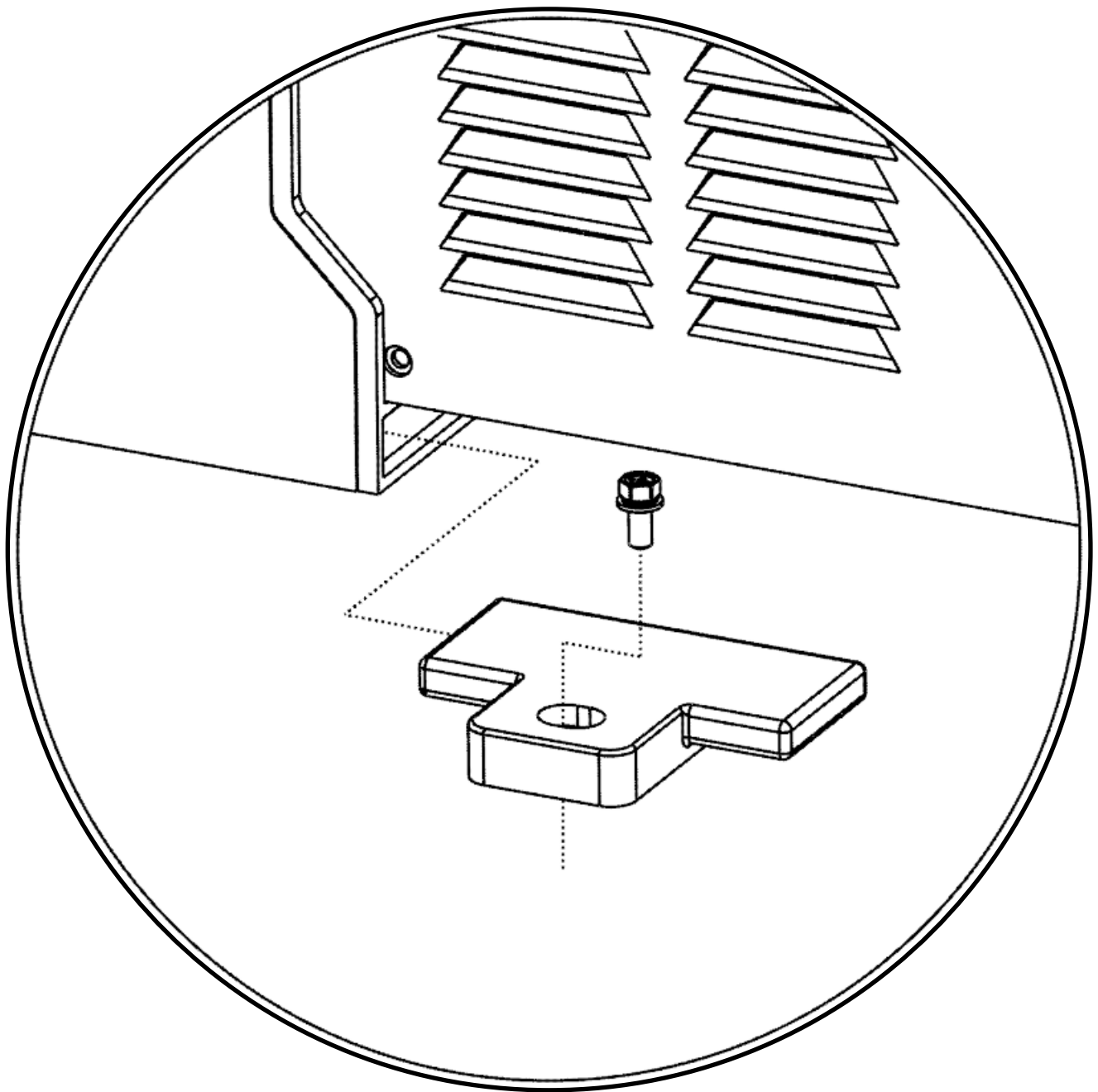


# Setup Guide

## INSTALL LOCKING PADS TO CART AND COOLER

In order to offer complete package, Everlast has designed the new PowerCart 330 to mate securely to the welder and cooler package. The locking pads are designed to hold the cart and cooler together. In turn the mounting system between the welder and cooler also offer a "locked together" function so that all the components can be secured together. This helps to reduce chance of theft, and also makes the whole package more stable while transporting.

Slide all four of the cooler locking pads up into the edge of the plastic housing on the cooler as shown below. Then use the m5 screws to secure the cooler to the cart.

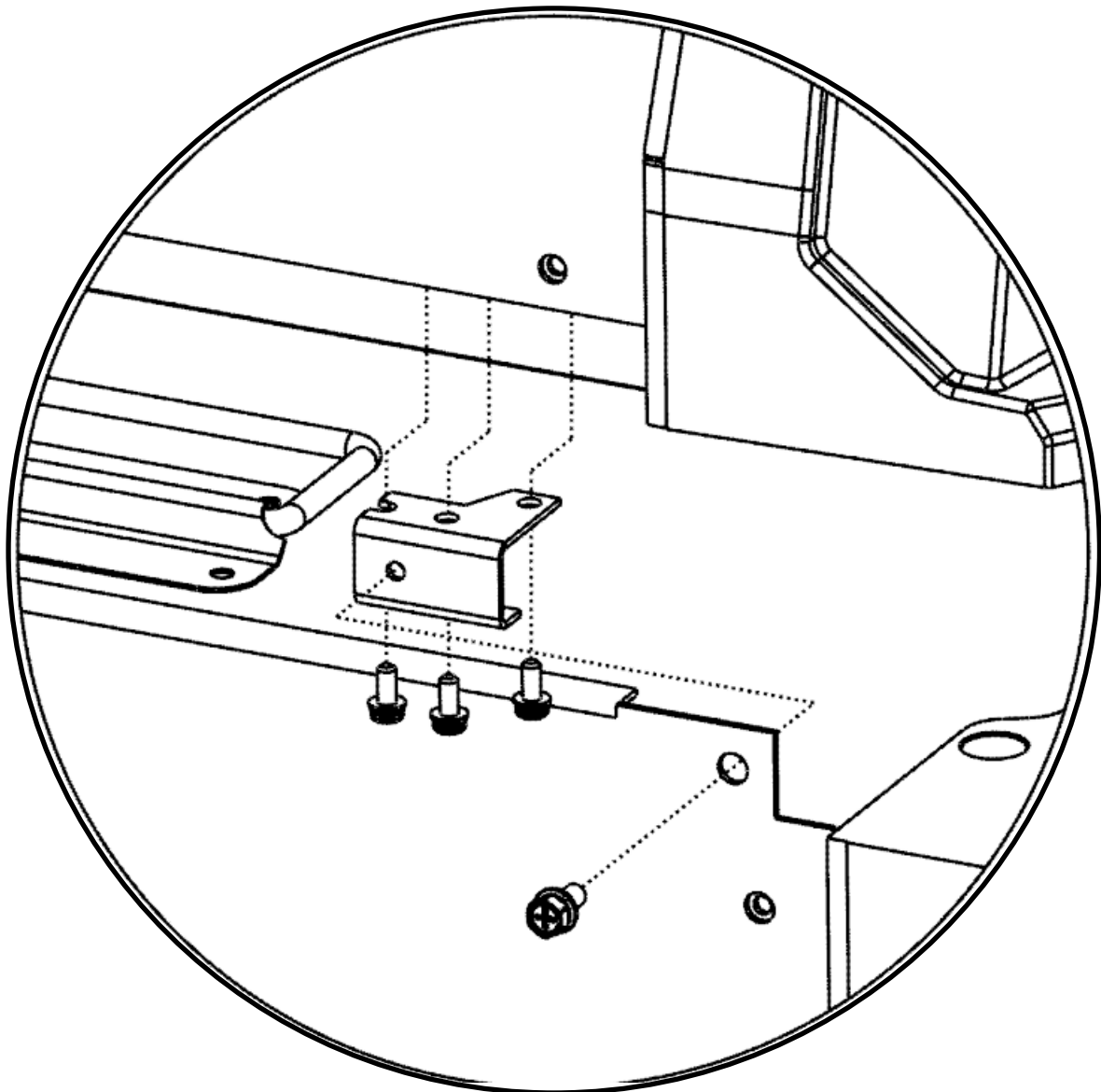


# Setup Guide

## INSTALL SECURING BRACKETS TO THE WELDER

The cooler includes two small connector brackets that help secure the cooler to the welder for semi-permanent mounting. Locate the brackets and install the bracket to the bottom of the welder first using three m4 screws. For ease of installation, lay the welder on its side to access the bottom plate of the welder.

Once the machine has been mated to the unit (see next page), make sure the remaining screw hole in the bracket aligns with the hole in the water cooler and install the remaining m4 screws. If necessary, align the holes with a small drift or screw driver.

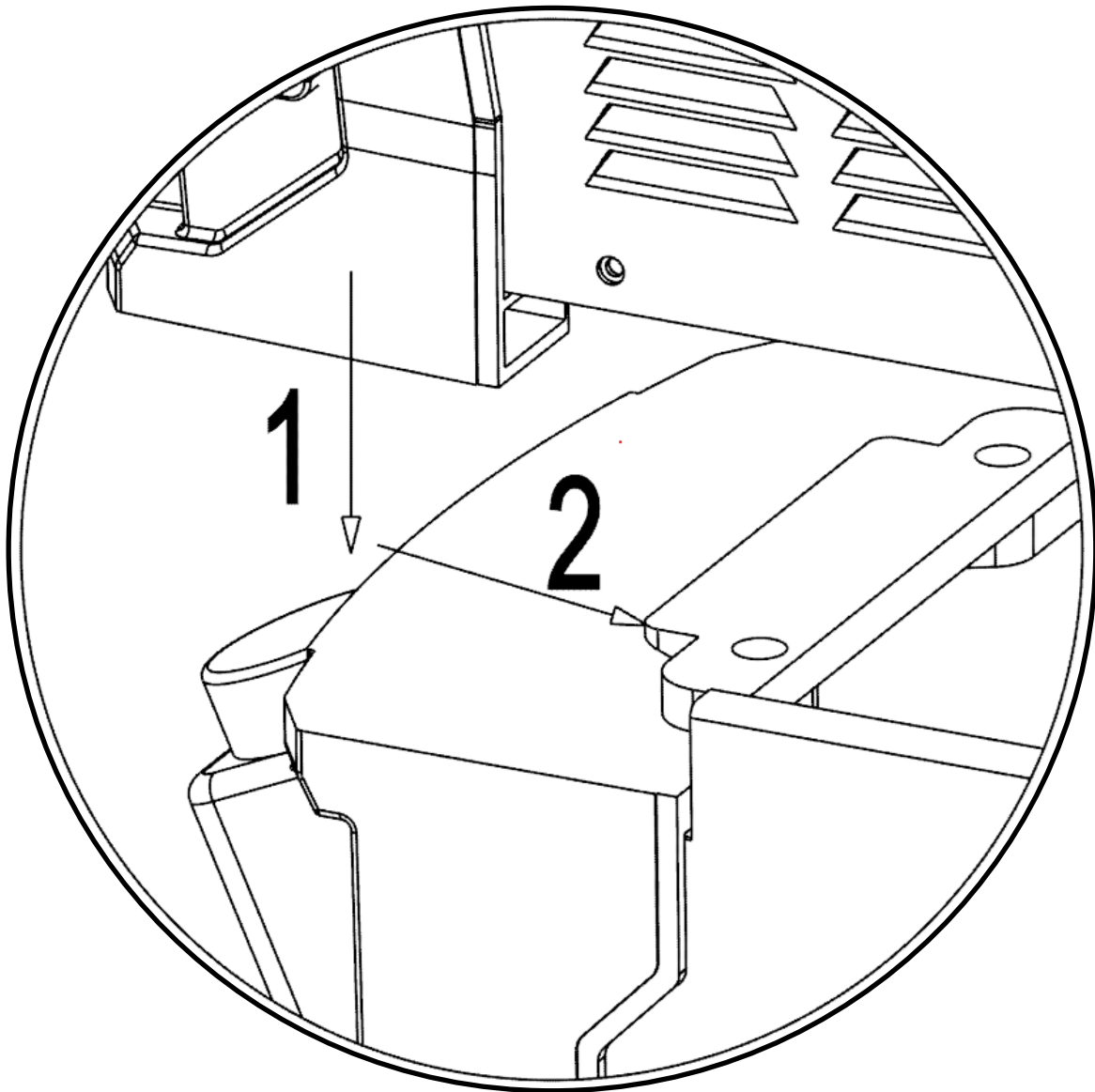


# Setup Guide

## INSTALL THE WELDER TO THE COOLER

Install the welder to the cooler after installing the securing brackets to the welder (See previous page). Line up the welder and cooler so that the mating surfaces roughly match, making sure the bottom lip of the welder is slightly in front of the cooler lip before they touch. Once the welder is on top of the cooler, and engaging the mounting blocks on top of the cooler, slide the cooler to the rear until they surfaces are flush along all planes.

Be sure to install the two securing screws at the rear of the unit (see previous page) to hold the welder and cooler in place.



# Trouble Shooting

## Flow Alarm Issues

The flow alarm has been designed to both illuminate and sound an audible alarm when flow is less than optimal. The flow alarm can be activated for several reasons:

- Twisted, kinked or melted torch water line.
- Restricted or plugged torch head (defective/narrow torch passages or algae could be a possible cause).
- Low water level.
- Quick connects not fully seated.
- Defective or damaged quick connects (male or female side).
- Too thick of coolant (Check and change).
- Wrong type of coolant.
- Internal leaking of cooler.
- Leaking torch.
- Frozen lines.

## No Run Issues

The Flow Alarm protects the unit from blockages and low coolant level, however it will not protect it against a unit that does not turn on or pump water. When starting the cooler, always verify that the fan and pump are turning. If they are not, check the following:

- Make sure cooler is securely plugged in and that plug has not been modified.
- Make sure the unit is not operating on 120V power. Cooler is designed only for 240V operation.
- Switch is damaged.
- Pump or motor has seized.
- Bad start capacitor on motor.
- Fan blades have come in contact with radiator.
- Welder has not been turned on.
- Coolant has frozen causing pump damage or seizure of motor.

