

WELDMATE™

10006 Santa Fe Springs Road
Santa Fe Springs, CA 90670 USA
Made in China

80000
Rev 80000-20080214



Owner's Manual and Operating Instructions



120Volt 60-70A

ARC WELDER

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Introduction

Congratulations on your purchase of a Champion Power Equipment portable welder. CPE designs and builds welders to strict specifications. With proper use and maintenance, this welder will bring years of satisfying service.

Portable Welder

This unit is an AC (alternating current) ARC Welding machine. It is designed for light duty welding (up to 3/16”).

This Booklet

Every effort has been made to ensure the accuracy and completeness of the information in this manual. We reserve the right to change, alter and/or improve the product and this document at any time without prior notice.

Record the model and serial numbers as well as date and place of purchase for future reference. Have this information available when ordering parts and when making technical or warranty inquiries.

Champion Power Equipment Support
1-877-338-0999
Model Number
80000
Serial Number
Date of Purchase
Purchase Location

Manual Conventions

Manual Conventions

This manual uses the following symbols to help differentiate between different kinds of information. The safety symbol is used with a key word to alert you to potential hazards in operating and owning power equipment.

Follow all safety messages to avoid or reduce the risk of serious injury or death.

DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, *will* result in death or serious injury.

WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, *could* result in death or serious injury.

CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, *may* result in minor or moderate injury.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, *may* result in property damage.

NOTE

If you have questions regarding your welder, we can help. Please call our help line at 1-877-338-0999.

Safety Rules

WARNING

Read this manual thoroughly before operating your welder. Failure to follow instructions could result in serious injury or death.

DANGER

Breathing welding fumes can be hazardous to your health

Keep head and face away from welding fumes. Use enough ventilation to avoid the buildup of gas and fumes in the immediate area. Do not breathe in fumes.
Use of a ventilating fan may be necessary.

DANGER

Electric Shock can kill

Electric Shock can occur from wiring or welding electrode

Do not touch electrode with bare hand.
Wear dry insulating gloves.
Do not touch live electrical parts.
Protect yourself from electric shock by insulating yourself from work or ground.
Properly install and ground all equipment.

DANGER

Welding can cause fire or explosion.

Do not weld near flammable material.
Welding sparks can cause fires.

It is suggested that you have a fire extinguisher nearby.
Do not weld on drums, tanks, or other closed containers
Do not use welder in thermal overload condition – prevent overheating

DANGER

ARC rays can burn eyes and skin.

Use welding helmet with correct shade of filter lens.
Wear welders cap and safety glasses underneath helmet. Use ear protection if welding in an area with heavy sound reverberation.
Button shirt collar all the way up.
Wear oil-free protective clothing: leather gloves, heavy shirt, cuff less pants, and high boots

WARNING

Hot parts

Do not touch hot parts bare handed.
Allow cooling period before adjusting gun or torch
Use proper tools and/or wear heavy, insulated gloves and clothing to prevent burns

WARNING

Magnetic fields can affect pacemakers.

Pacemaker wearers keep away

WARNING

Noise can damage hearing.

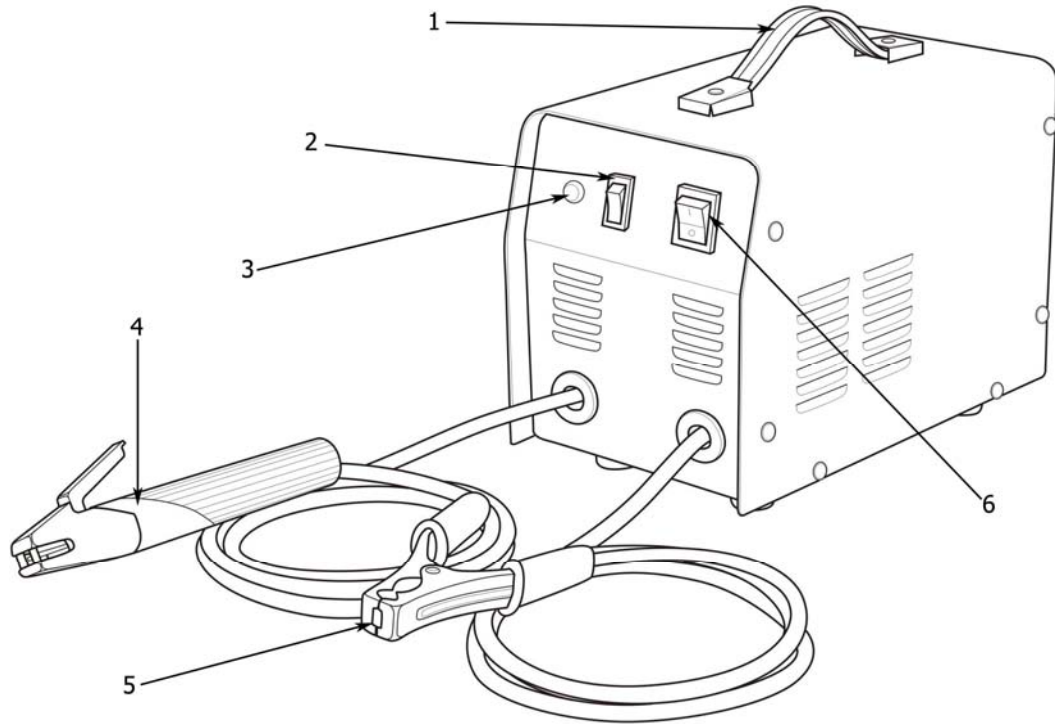
Wear appropriate ear protection if noise level is high

Controls and Features

Controls and Features

Read this owner's manual before operating your ARC welder. Familiarize yourself with the location and function of the controls and features. Save this manual for future reference.

ARC Welder



Carrying Handle (1)

Amperage Control (2) – Adjust to operate with either 60 or 70 amps

Thermal Overload Indicator (3) – Lights when duty user exceeds duty cycle. Allow unit to cool, and reduce duty cycle

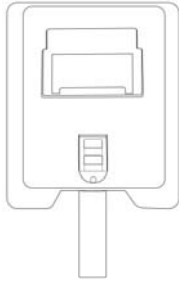
Insulated Electrode holder (4) – Holds stick electrode

Ground clamp (5) – “work clamp” Place clamp as close to the weld as possible

On/Off switch (6) – Power On, Power Off

Parts Included

Your 80000 ARC Welding unit ships with the following parts:



Handheld Welding Mask



Wire Brush/Slag Hammer

Operation

Welder Location

Place on a flat surface free of vibration.

This unit may be placed on a certified welding cart (not included) and can be set at an angle of 10 degrees.

Place the welder in a well-ventilated area.

DO NOT place the welder near vents or intakes where exhaust fumes could be drawn into occupied or confined spaces. Carefully consider wind and air currents when positioning welder. Place the welder in a clean, dry place.

Starting the Welder

1. Check your environment. Make sure there are no flammable materials in close range.
2. Plug unit into power source
3. Turn on power switch of welder.
4. Adjust welding current – use current adjust switch.
5. Attach electrode (welding rod) to electrode clamp.
6. Attach ground clamp to work surface (as close to the weld as possible).
7. **Welding current starts as soon as electrode touches the workpiece.**



Striking an ARC

There are two basic techniques for striking an ARC.

1. Drag start - Drag electrode across workpiece like striking a match; lift electrode slightly after touching work. If electrode sticks to workpiece, use a quick twist to free it. If ARC goes out, electrode was lifted to high.
2. Tap start – Bring electrode straight down on top of workpiece; then lift slightly to start ARC. If electrode sticks to workpiece, use a quick twist to free it. If ARC goes out, electrode was lifted to high.


Maintenance

The owner/operator is responsible for all periodic maintenance.

 WARNING
Never operate a damaged or defective welder.
 WARNING
Improper maintenance will void your warranty.

Welder Maintenance

Make certain that the welder is kept clean and stored properly. Only operate the unit in a clean, dry operating environment. DO NOT expose the unit to extreme conditions, excessive dust, dirt, moisture or corrosive vapors.

 CAUTION
DO NOT use a garden hose to clean the welder.
Water will enter the welder through the cooling slots and damage the electrical connections.

Use a soft bristle brush to remove dirt.
Use an air compressor (25 PSI) to clear dirt and debris from the welder.
Inspect all air vents and cooling slots to ensure that they are clean and unobstructed.

Every 3 months
Repair or replace cracked cables
Every 6 months
Vacuum or blow out inside. During heavy service, clean out inside monthly

Storage

1. Allow the welder to cool completely before storage.
2. Store in a clean, dry place out of direct sunlight.

Specifications

Specifications

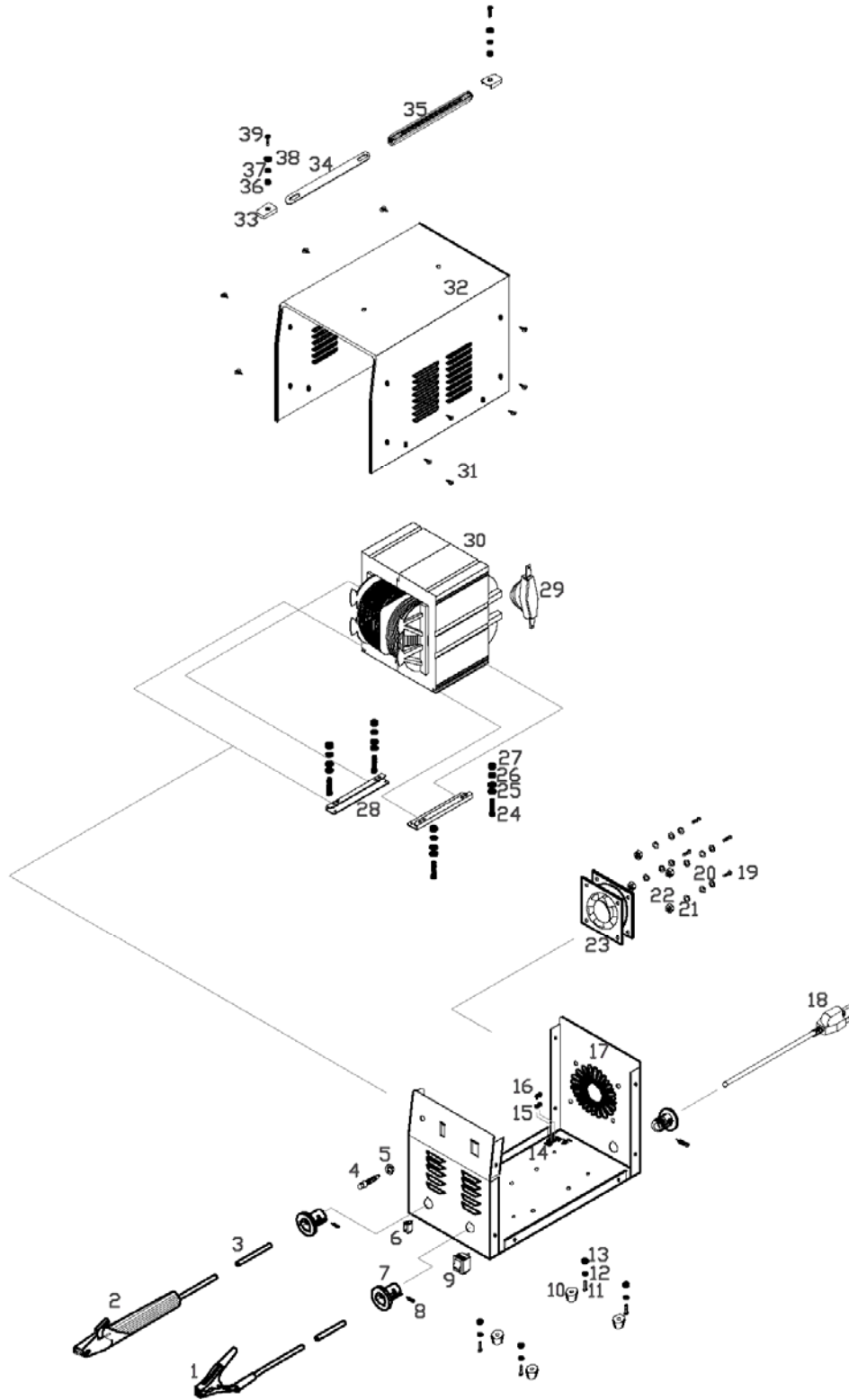
Rated Input	
Voltage	120V
Phase	1
Frequency	60Hz
Current	20A

Duty Cycle and Overheating

Duty Cycle is a percentage of 10 minutes that the unit can weld at a given rated load without overheating. For example a 20% duty cycle means 2 minutes welding, 8 minutes resting. If the unit overheats, wait 15 minutes for unit to cool, reduce amperage or duty cycle when welding resumes.

	Max. Output	Rated Output
Current	70A	60A
Duty Cycle	15%	20%
Voltage	22.8V	22.8V
Max Output Voltage	41VAC	41VAC

Parts Diagram



Specifications

Parts List

No.	Description	Qty
1	Ground Clamp, KDC-1200	1
2	Welding Holder, KDH-1250	1
3	Welding Cable H01N2-D1 x 10mm2	1
4	Bolt M5 x 20	1
5	Nut M5	1
6	Indicator, AD-16Y-1, 230VAC, 2mA, 50/60Hz	1
7	Rubber	2
8	Screw M4	2
9	Power Switch, KCD-25, 250VAC, 25A, 50/60Hz	1
10	Rubber Mount	4
11	Bolt M5 x 18	4
12	Nut M5	4
13	Spring Washer Φ 5	4
14	Steel shelf	1
15	Bolt M5 x 2	2
16	Nut M5	2
17	Fan, KDF-120	1
18	Plug, 16A	1
19	Bolt M5 x 4	4
20	Flat-Washer Φ 5	8
21	Lock washer Φ 5	4
22	Nut M5	4
23	Fan, Steel	1
24	Bolt M5 x 4	4
25	Flat - Washer Φ 5	8
26	Spring Washer Φ 5	4
27	Nut M5	4
28	Fastener, Steel	2
29	Thermal Cutout, Metal	1
30	Transformer Included Primary Windings: Bobbing Coil Secondary Windings Bobbing Coil Outer Insulation Paper Silicon-Steel Piece Core, Aluminum	1
31	Screw M4 x 10	10
32	Cover, steel	2
33	Clasp, Metal	2
34	Handle I	1
35	Handle II	1
36	Bolt M4 x 2	2
37	Flat-Washer Φ 4	2
38	Flat-Washer Φ 5	2
39	Nut M5	2

Troubleshooting

Problem	Cause	Solution
No weld output and fan is not running	Power switch is OFF	Switch ON
	Fuse overload	Reset breakers if necessary
Weld output but fan does not run	Blocked fan movement	Remove item that is blocking fan or replace fan motor
Erratic weld current	Loose cable connections	Clean and tighten cable connections
Erratic arc with excessive spatter	Poor, damaged electrodes	Use dry, properly stored electrodes
	Long arc length	Shorten arc length
	High amperage setting	Reduce amperage setting
Electrode continually sticking to work	Low amperage	Increase amperage
	Arc length too short	Increase arc length
	Defective electrode	Use dry, properly stored electrodes

Warranty

CHAMPION POWER EQUIPMENT 1 YEAR LIMITED WARRANTY

Effective September 1, 2006. Replaces all undated warranties and all warranties dated before September 1, 2006.

Warranty Qualifications

Champion Power Equipment (CPE) will register this warranty upon receipt of your Warranty Registration Card and a copy of your sales receipt from one of CPE's retail locations as proof of purchase.

Please submit your warranty registration and your proof of purchase within ten (10) days of the date of purchase.

Repair/Replacement Warranty

CPE warrants to the original purchaser that the mechanical and electrical components will be free of defects in material and workmanship for a period of one (1) year from the original date of purchase (90 days for commercial & industrial use). Transportation charges on product submitted for repair or replacement under this warranty are the sole responsibility of the purchaser. This warranty only applies to the original purchaser and is not transferable.

Do not return the unit to the place of purchase

Contact CPE's Technical Service and CPE will troubleshoot any issue via phone or e-mail. If the problem is not corrected by this method, CPE will, at its option, authorize evaluation, repair or replacement of the defective part or component at a CPE Service Center. CPE will provide you with a case number for warranty service. Please keep it for future reference. Repairs or replacements without prior authorization, or at an unauthorized repair facility, will not be covered by this warranty.

Warranty Exclusions

This warranty does not cover the following repairs and equipment:

Normal Wear

This warranty does not cover repair when normal use has exhausted the life of a part or the equipment as a whole.

Installation, Use and Maintenance

This warranty will not apply to parts and/or labor if this product is deemed to have been misused,

neglected, involved in an accident, abused, loaded beyond the specifications, modified, or installed improperly. Normal maintenance is not covered by this warranty.

Other Exclusions

This warranty excludes:

- Cosmetic defects such as paint, decals, etc.
- Wear items.
- Accessory parts.
- Failures due to acts of God and other force majeure events beyond the manufacturer's control.
- Problems caused by parts that are not original Champion Power Equipment parts.

Limits of Implied Warranty and Consequential Damage

Champion Power Equipment disclaims any obligation to cover any loss of time, use of this product, freight, or any incidental or consequential claim by anyone from using this product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE

A unit provided as an exchange will be subject to the warranty of the original unit. The length of the warranty governing the exchanged unit will remain calculated by reference to the purchase date of the original unit.

This warranty gives you certain legal rights which may change from state to state. Your state may also have other rights you may be entitled to that are not listed within this warranty.

Contact Information

Address

Champion Power Equipment, Inc.
Customer Service
10006 Santa Fe Springs Rd.
Santa Fe Springs, CA 90670

Customer Service

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)
Toll Free: 1-877-338-0999
Fax no.: 1-562-236-9429

Technical Service

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)
Toll Free: 1-877-338-0999
tech@championpowerequipment.com

Notes