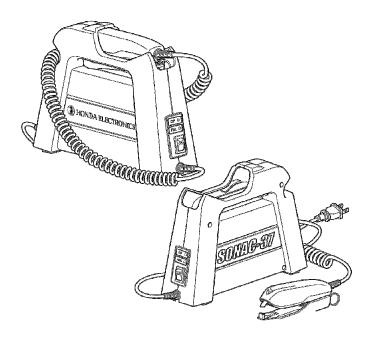
# Ultrasonic Welder **SONAC-37**

# — Operation Manual —



- Be sure to read the entire Operation Manual in order to operate the product safely and properly.
- Make sure to keep it in a convenient place so that you can refer to it at any time.



## Introduction

Thank you for purchasing the Honda Electronics Ultrasonic Welder.

- ■This operation manual was designed so that users can properly and safely operate the ultrasonic welder.
- ■Make sure to read this operation manual and fully and understand the contents before using the ultrasonic welder.
- ■Make sure to follow the procedures in this operation manual in order to safely use the ultrasonic welder, and always pay close attention to dangerous items, warnings, and precautions. Failure to do so could result in serious accident or property damage.
- ■After reading this operation manual, make sure to keep it in a safe place so that it is not lost or damaged and so you can read it immediately when necessary.
- ■Make sure to include this operation manual when reselling or transferring the product to another user.
- ■According to product liability law (PL Law), Honda Electronics accepts no responsibility whatsoever for any bodily harm or other damages arising from incorrect usage of the product, or usage not described in this operation manual

- Do not reproduce this operation manual in whole or in part without the express permission of Honda Electronics.
- Please note that changes to specifications, etc. may result in some differences between the actual product and the operation manual.
- Please contact us using the information on the back of the operation manual if you notice any errors, confusing sections, or missing information.

# Contents

1. Safety Precautions	(read this section first)	2
2. Features of this mach	ine	6
3. Main Contents		7
4. Optional Item		7
5. Specifications		7
6. Dimensional Outline I	Orawing	8
7. Part Names		8
8. Operation Method		9
9. Empty weld prevention	n Mechanism	10
10. Replacing the weldir	ng tip (optional)	11
11. Troubleshooting		12
12. Cleaning		13
13. After-sales service		13

## 1. Safety Precautions (read this section first)

This section contains important information for preventing harm to people and preventing property damage during the use of this product.

Definitions of Symbols				
⚠ DANGER	Indicates the possibility of accidents that could highly lead to death or serious injury if handled incorrectly.			
⚠ WARNING	Indicates the possibility of accidents that could result in death or serious injury if warnings are not heeded.			
A CAUTION	Indicates the possibility of minor injury or damage to property if precautions are not heeded.			
$\Diamond$	This symbol indicates prohibited actions.			
	This symbol indicates necessary actions.			
Do Not Disassemble	Do Not Remove General Get Wet Power Plug Instructions			

## **A DANGER**



Do not modify or disassemble the product.

Never disassemble, repair, or modify the product.
 Doing so could result in fire, electrical shock, or injury.



Do not insert foreign objects such as pins, needles, or other metal items in openings or gaps in the product.

• Doing so could result in electrical shock or short circuit.



Never handle any part of this product with wet hands. Make sure not to spill water or other liquids on the product.

 Doing so could result in electrical shock. If water or another liquid is spilled on the main unit, immediately stop using the product and contact Honda Electronics.



Do not use any other current than 100V (50/60 Hz). (Within Japan)

• Doing so could result in fire or electrical shock.

Do Not Get Wet	Do not get the product wet, and do not leave it in a place that could become wet.  • Doing so could result in malfunction, electric shock, and short circuit.		
Prohibited	Do not let children use the product without supervision, and do not store it within reach of children.  • Doing so could result in electrical shock or injury.		
Prohibited	<ul> <li>Never use the product in the following environments.</li> <li>- Areas subject to direct sunlight and high temperatures</li> <li>- Areas subject to dust, dirt, and corrosive gases</li> <li>- Areas subject to strong vibrations or shocks</li> <li>- Wet locations, or areas subject to high humidity</li> <li>• Doing so could result in malfunction, or even electrical shock, or other serious accidents.</li> </ul>		
0	Make sure the hand piece does not fall off when carrying the main unit.		
Prohibited	<ul> <li>Do not forcefully bend, pull on, twist, bunch, or place heavy objects on the cord.</li> <li>Doing so could damage the cord and result in fire or electrical shock.</li> </ul>		
Prohibited	Do not use the cord or plug if they are damaged.  • Doing so could result in electrical shock, short circuit, or fire.		
Prohibition	Do not touch the horn during oscillation or immediately after use.  • Heat or ultrasonic vibration of the horn may cause injury such as burns.		

Prohibition	Do not topple, drop, or apply physical shocks to the main unit or hand piece.  • Doing so may cause failure.	
Prohibited	Do not spray the product with insecticides, hairstyling products, or cleaners, etc.  • Doing so could deteriorate plastic or painted parts, and cause interior damage.	
0	When removing the power plug, always make sure to pull the power plug and do not pull the power cord.  •Failure to do so could result in electrical shock, short circuit or fire.	
Remove Power Plug	When not in use, or if the main unit emits a strange smell or smoke, immediately remove the power plug from the outlet.  •Failure to do so could result in accidents.	
Remove Power Plug	Remove the power plug from the outlet before attaching, removing, or cleaning the horn.  • Failure to do so could result in injury.	
Prohibited	Do not carry the main unit by holding only the power cord.  •Doing so could result in malfunction or accidents.	
Prohibited	Do not disconnect the cord while using the product.  • If the cord is not fully inserted or if it is disconnected, the product will not work and could result in malfunction.	
Prohibition	Do not weld anything other than intended.  • Doing so may cause property damage.	

## **ACAUTION**



Do not forcefully squeeze the hand piece.

- Doing so can result in improper welding and malfunction.
- This product welds using the frictional heat of ultrasonic vibration. Because it is not a thermal welder, you can weld by lightly squeezing the device.

After the first weld is complete, make sure to open the hand piece before moving on to the next weld.



•This device is equipped with a shutoff function for protecting the horn which is activated for 5 seconds after each weld. Lightly loosening the hand piece after the first weld, then moving on to the next weld location will activate the 5-second shutoff timer, resulting in poor welds.

#### Note

Do not squeeze the hand piece without a welding material inserted (empty weld).

• Doing so will wear out the welding tip and horn.

Do not use benzine, thinner, etc. when cleaning the device.

• Doing so could deteriorate plastic or painted parts resulting in damage.

#### 2. Features of this machine

#### It is compact.

Save space by storing the hand piece inside the main unit.

•It can be used immediately after turning the power on.

It welds using ultrasonic vibration, so there is no need to preheat.

#### It is simple.

Simply squeeze the hand piece. Even first-time users can easily use the device.

#### •It is economical.

It only operates when squeezing the hand piece, so electricity is not wasted.

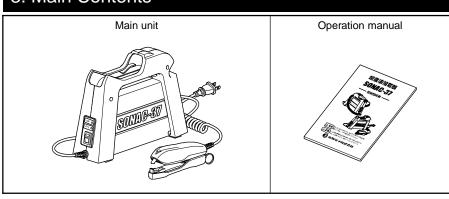
#### •It won't make you tired.

Lightly squeeze the hand piece to quickly weld.

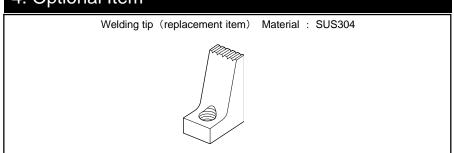
#### Main welding purposes

- Materials with a thickness of 5 mm or less
   Food packaging
   Chemical fibers
- Non-woven fabric
   Industrial product packaging (blister pack, film)

## 3. Main Contents



## 4. Optional Item

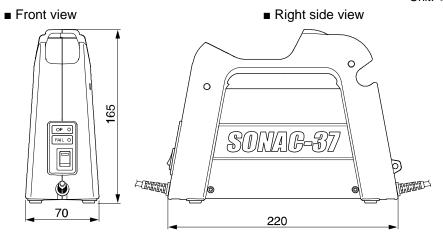


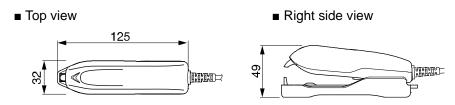
#### 5. Specifications Oscillation frequency 57kHz 22W Max, power output Max. power consumption 30W Power source AC100V 50/60Hz 70×220×165 Oscillator (main unit) External dimensions (without protrusions) (Unit:mm) Hand piece 32×125×49 (when open) Oscillator (main unit) Approx. 680g Weight Hand piece Approx. 240g (Including output cable) Output cord 50 cm (curl cord) Protective equipment Thermostat, Empty weld prevention mechanism Effective welding range 6×3 mm

<sup>\*</sup> Please note that specifications and external appearance are subject to change without notice in order to make product improvements.

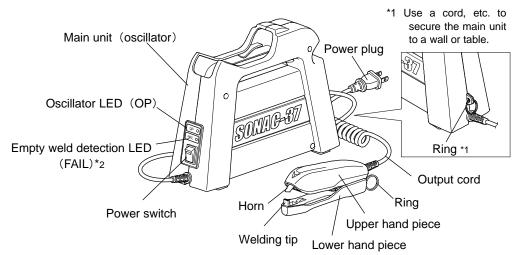
# 6. Dimensional Outline Drawing

Unit: mm





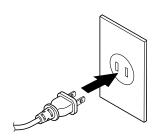
## 7. Part names



\*2 Welding is not possible if the empty weld detection LED (FAIL) is on.

# 8. Operation method

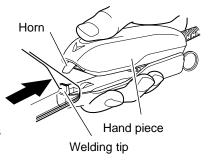
1 Insert the power plug into an outlet.



- **2** Turn the main unit power switch on .
  - Check that the LED light on the switch is on.



- **3** Hold the hand piece and place the section to be welded between the horn and welding tip of the hand piece.
  - It is OK if the section to be welded is at a slight angle.

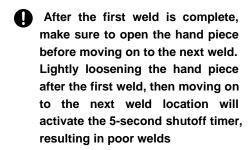


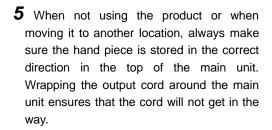
**4** Squeeze the hand piece. (There is no need to squeeze the hand piece forcefully. When squeezing the hand piece, apply force directly from above.)

Hold the upper and lower of the hand piece. The oscillation LED (OP) on the main unit will turn green.

When the oscillation LED (OP) turns off, welding is complete. Loosen your grip on the hand piece.

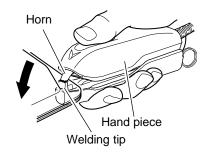
(Timer is set to approximately 5 seconds)

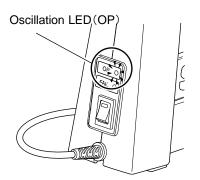


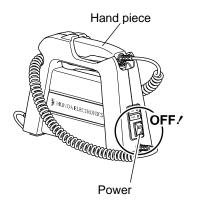


#### **Precautions**

•The welding capability of the product differs depending on the package type and material.







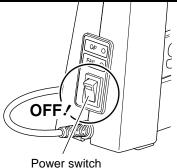
## 9. Empty weld prevention mechanism

**1** SONAC-37 is equipped with an empty weld prevention mechanism. If the horn and weld tip touch (empty weld) the empty weld detection LED (FAIL) is on, and the welding operation is stopped.

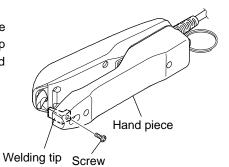
Preventing empty welds extends the life of the weld tip.

## 10. Replacing the weld tip (optional)

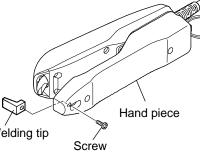
1 Make sure the power is off.

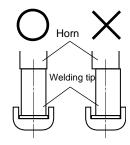


**2** Use a Phillips screwdriver to remove the screw from the rear mount of the weld tip on the hand piece, then remove the weld



- 3 Align the screw hole on the replacement weld tip and with the hole on the hand piece, then use a Phillips screwdriver to tighten the screw.
  - Make sure the weld tip is straight when attaching it. After attaching the weld tip, squeeze the hand Welding tip piece to make sure the horn and weld tip fit together normally.
  - Make sure the screw is securely tightened. A loose screw can cause the weld tip to be improperly attached, resulting in horn and tip misalignment and improper welds.





# 11. Troubleshooting

•If the welder is not working properly, check the following items before requesting repairs.

Problem	Item to check	Solution
	• Is the power cord connected to the receptacle?	Connect the power cord to the receptacle.
Cannot turn on power (the LED light is not on).	●Is this oscillator hot?	The oscillator overheat protection function may have been activated. Turn off the power and wait a bit before turning it back on again.
The hand piece	Is the power switch on?	Turn on the power switch.
does not oscillate even when it is squeezed.	Is it an empty weld? (Is the empty weld detection LED (FAIL) on?)	Insert an item to be welded, then squeeze the hand piece.
Cannot weld.	•Did you forget to release your grip on the hand piece until the weld timer completed?	Continue squeezing the hand piece until the oscillation LED (OP) is turned off.
	Is there anything stuck to the weld tip or tip of the hand piece?	Tighten, clean, or replace the weld tip.
	•Is the weld tip loose?	Tighten the weld tip.
	●Is the weld tip damaged	Replace the weld tip.
The hand piece is hot.	<ul> <li>Have you been using the device for a long period of time without taking breaks?</li> </ul>	Turn the power off and wait for the hand piece to cool down before using it again.

## 12. Cleaning

Periodically clean the tip of the horn and weld tip.

- Before cleaning, make sure that the power is turned off.
- If foreign objects become stuck to the tip of the hand piece it may not oscillate properly, resulting in poor welds.

#### Cleaning method

Wipe horn part (metal part at the tip of the hand piece) and welding tip with a cloth with alcohol, cotton swab, or brush.

• Never wash the entire until or hand piece.

### 13. After-sales service

#### **♦**Requesting a repair service

Check the product according to "Troubleshooting" in this document. If the problem still exists, do the following.

- After the warranty period expires
   Make a request to your dealer. A repair service is provided at cost if the product is repairable.
  - \* When requesting a repair service, provide detailed information about the failure and its location.



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