

# Salt Water

## FUEL CELL CAR KIT


**OWIKIT™**

**WARNING :**  
CHOKING HAZARD  
Small parts  
Not for children under  
3 years

This is a concept of environmentally friendly fuel cell vehicle.

A great chance for children to learn about this new energy, see how amazing it is to just add salt water to make the car run. FC module includes 3 parts, the Magnesium metal sheet is a consumable item, one sheet can make the car run for about 4 hours continuously. Kit includes 3 Magnesium metal sheets.

All materials used in this kit are environmentally safe and clean, no toxic substances or disposal concerns.

### Tools You May Need



Cup



Salt



Stick



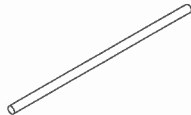
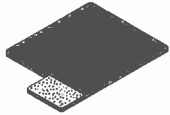
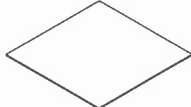
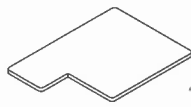
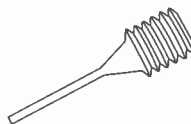
Slotted Screwdriver



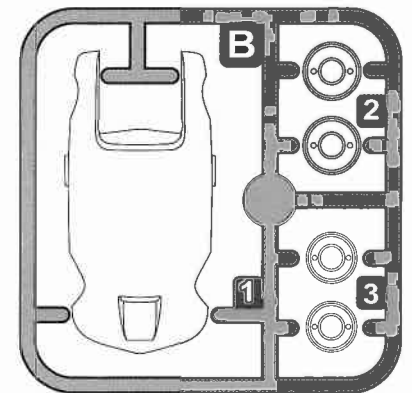
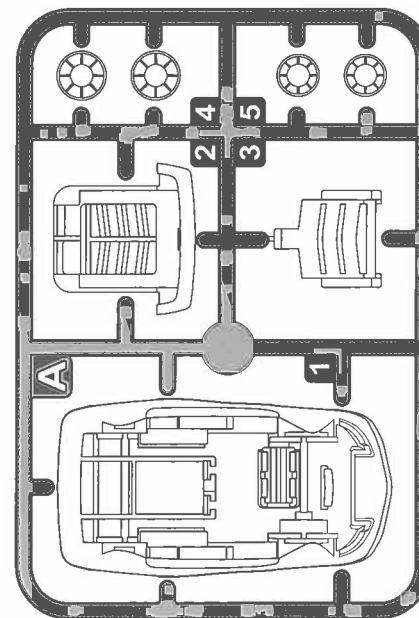
Diagonal Cutter

### Mechanical Parts List

P1	Motor With Connectors		P2	Pinion Gear (Yellow)		P3	Gear With Shaft	
		QTY			QTY			QTY
	Red Black	1			1			1

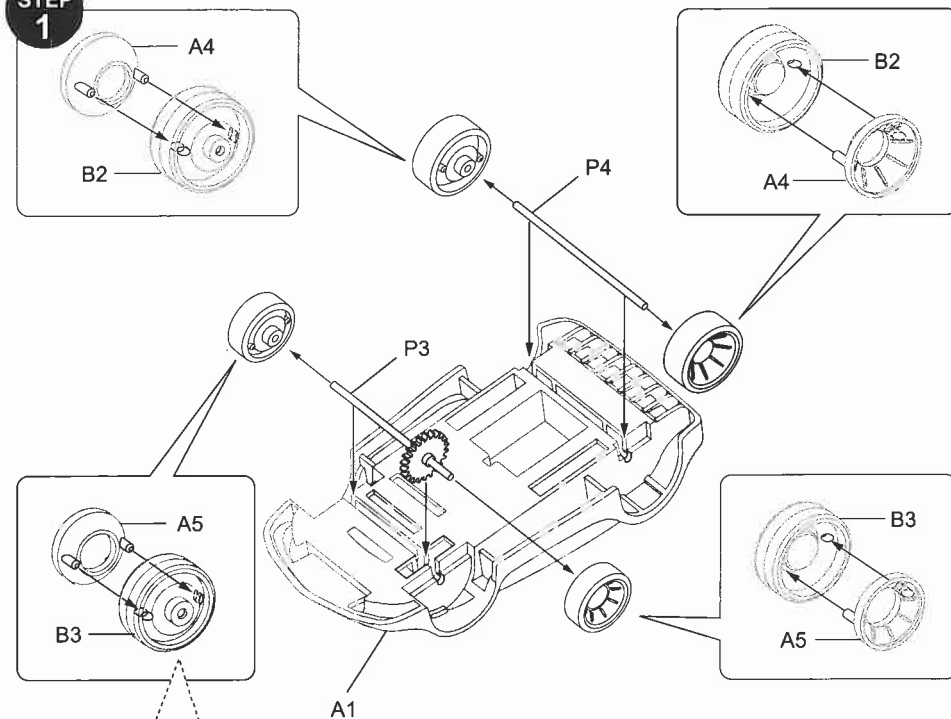
<b>P4 Round Shaft</b>  <b>QTY</b> 1	<b>P5 Air Cathode(Black)</b>  <b>QTY</b> 1	<b>P6 Nonwoven Fabric</b>  (Spare part:1pc) <b>QTY</b> 1
<b>P7 Magnesium Sheet</b>  (Spare parts:2pcs) <b>QTY</b> 1	<b>P8 Plastic dropper</b>  <b>QTY</b> 1	

## Plastic Parts

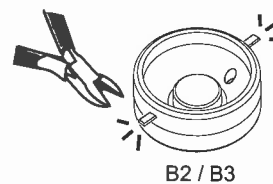


## Mechanical Assembly

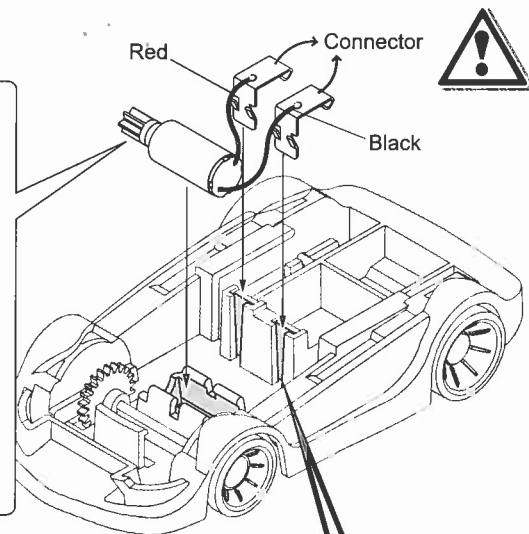
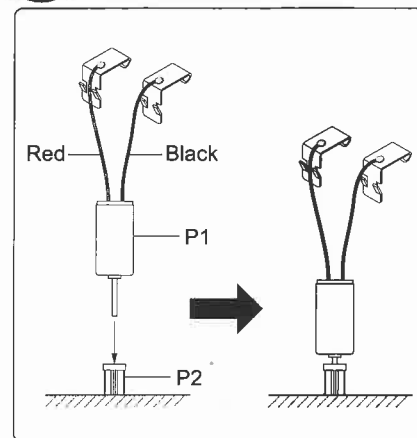
STEP  
1




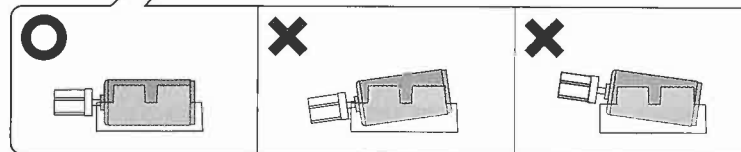
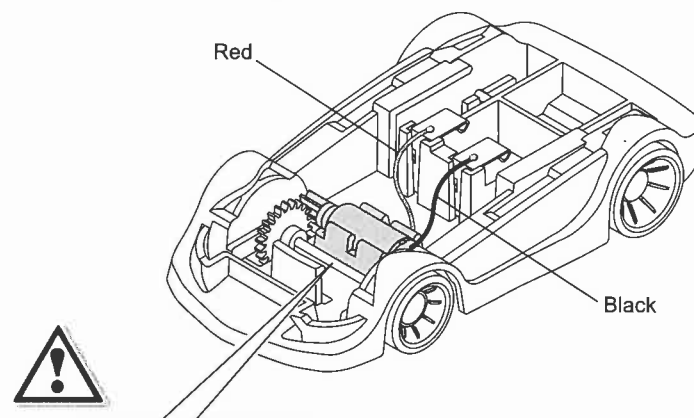
Cut off the two burrs  
before assembly.



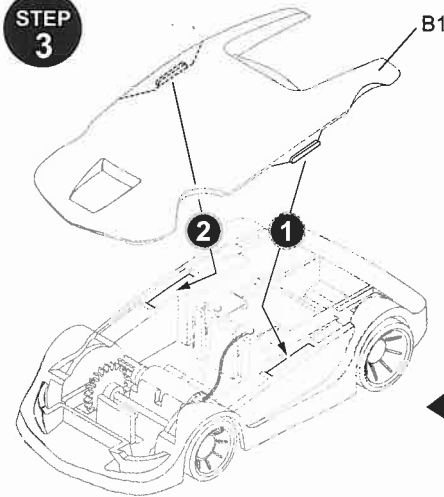
STEP  
2



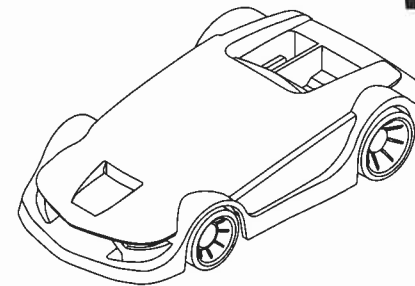
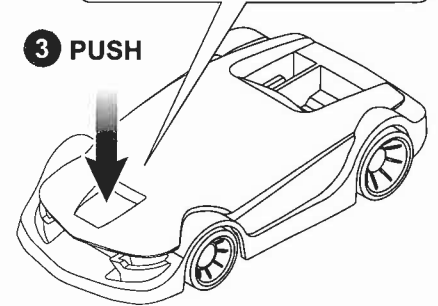
 **Noted:** each connector must be set in right position



STEP  
3

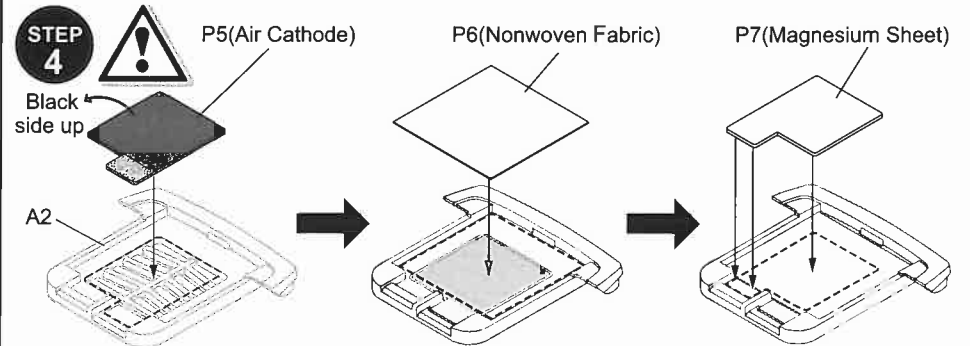


3 PUSH



How to take off cover.

STEP  
4



Black  
side up

P5(Air Cathode)

P6(Nonwoven Fabric)

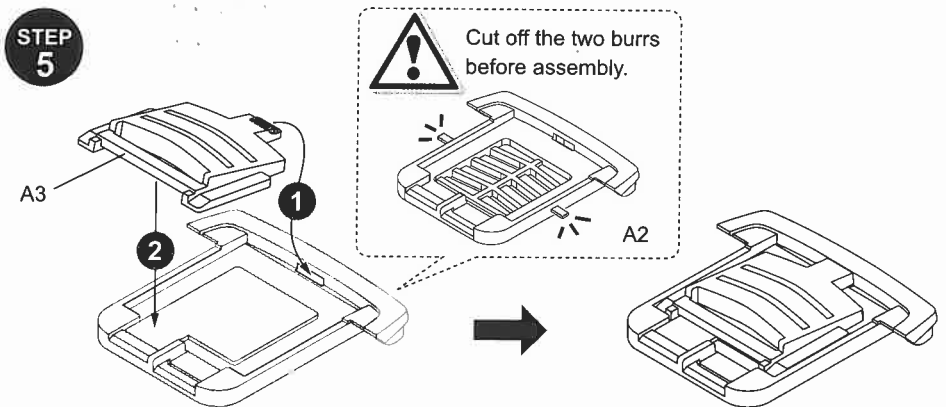
P7(Magnesium Sheet)

A2

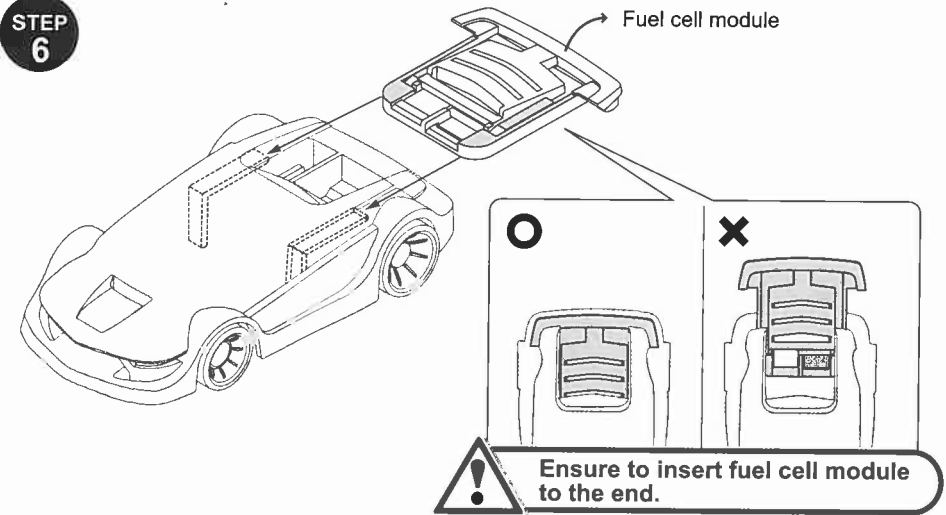


Make sure the above 3 parts placed in correct sequence and position.

**STEP**  
**5**

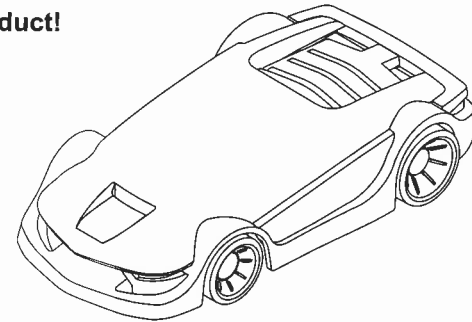


**STEP**  
**6**



**STEP**  
**7**

**Finished product!**



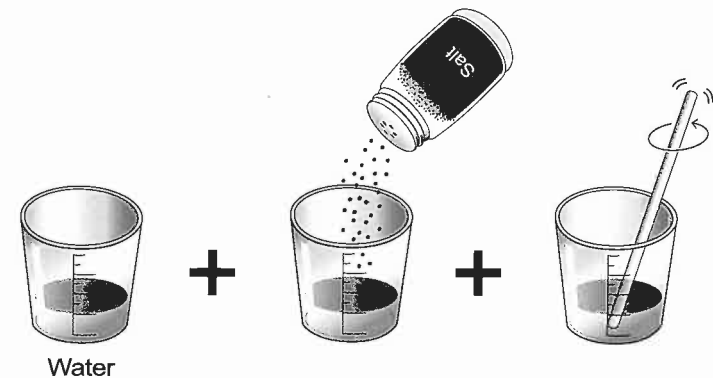
## How It Works

- The salt water will be exhausted after a period time of using ( about 15 minutes), car will be getting slow and stop. Add few more salt water drops to start it again (as below fig. 6).
- Each Magnesium sheet can work for 4 hours continuously, then becomes fragmentarily, replace a new one to work it continuously. Kit included 3 refills.
- All materials used in this kit are environmentally safe and clean, no toxic substances or disposal concerns.

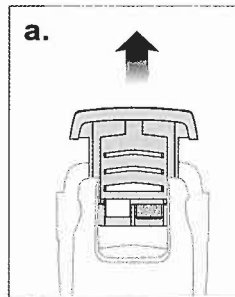


**Please pay full attention to the below mentioned before use!**

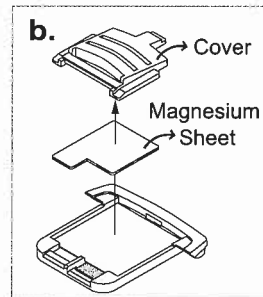
- 1 How to make salt water solution: Add salt to tap water or distilled water at ratio of **1(salt) : 5(water)**. Any percentage ratio from 20% to 99% salt water is workable although the 20% will be the most efficient.



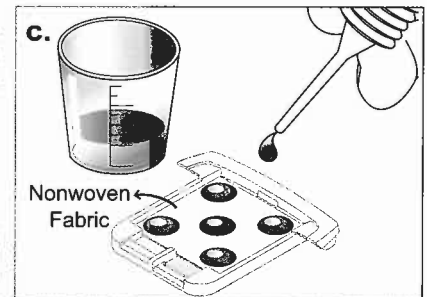
- 2 How to fill the car with salt water:



Remove FC module

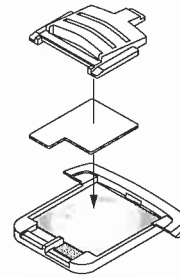


Remove cover and magnesium sheet



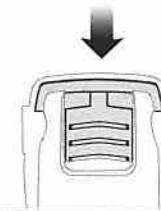
Add salt water on nonwoven fabric

d.



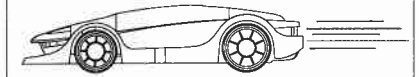
Reassemble cover and magnesium sheet

e.



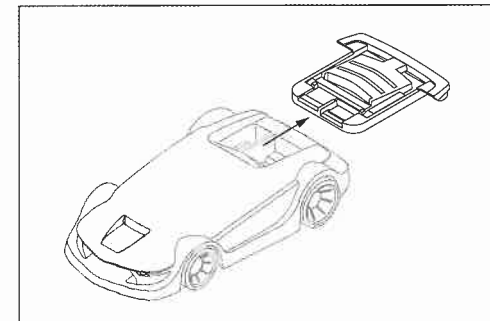
Insert FC module

f.

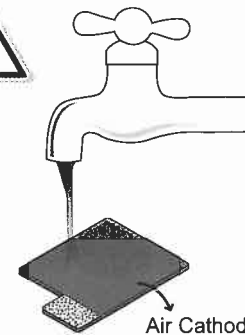


Run your car now

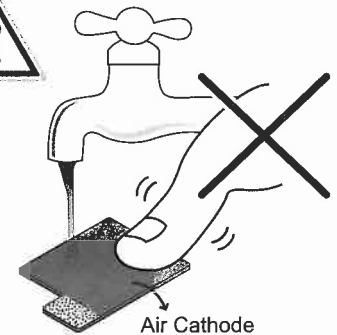
**3** Remove FC module to stop your car as shown below:



**4** It is necessary to clean FC module every time when not in use, gently rinse air cathode under tap water, don't hand rub the surface to ensure the quality of air cathode.



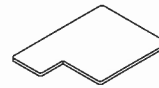
Air Cathode



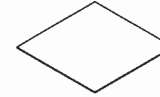
Air Cathode



- 5 Flush below parts and hand rub the surface, make sure no salt residue. Dry all parts separately. (**Important:** If salt is residual on the magnesium sheet, it will shorten it's life .)



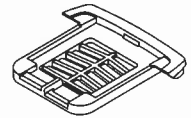
1.Magnesium



2.Nonwoven Fabric

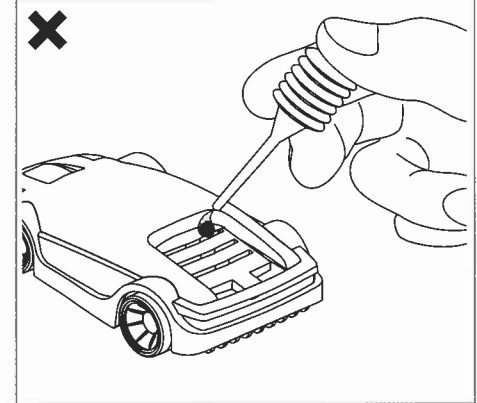
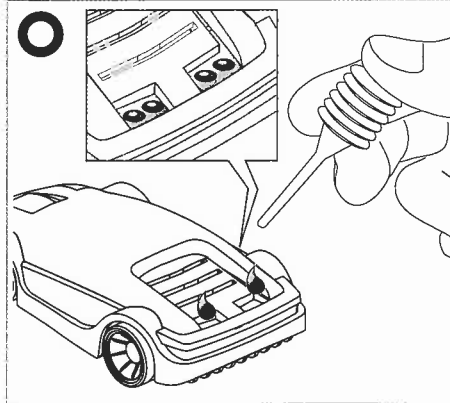


3.Cover



4.Bottom base

- 6 When car is getting slow or stop, suck salt water and add few drops into the position as shown on the left, don't drop into the polarity of connectors to avoid oxidization. (**Important:** If the fabric is totally dry, disassemble FC module and add salt water as per figure 2 C, or it will take few minutes to have the fabric wet completely.)



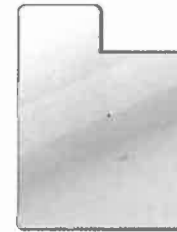
## Trouble Shooting

**Check below steps if car doesn't move after adding salt water.**

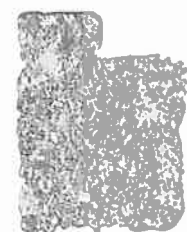
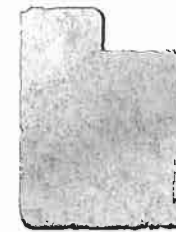
**1** Make sure motor and wheels are installed smoothly without any barriers.  
(Ref: **STEP 1**, **STEP 2**)

**2** Make sure FC module is inserted entirely. (Ref: **STEP 6**)

**3** Replace a new magnesium sheet if it is eroded as shown below.



(New)



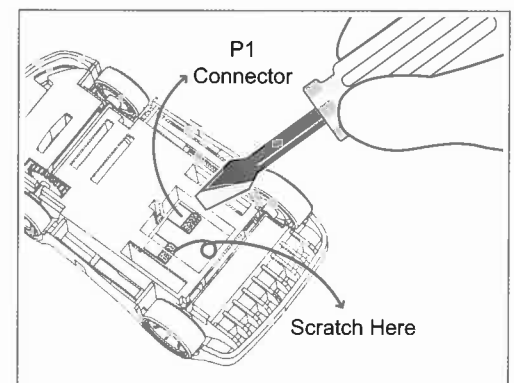
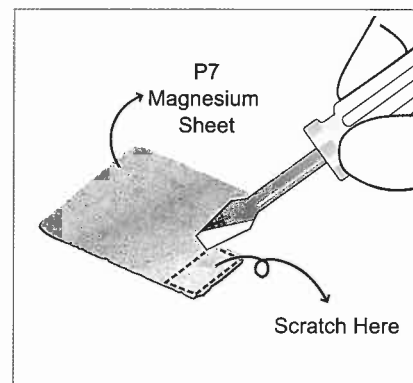
(Need to replace)

**4** Make sure FC module placed in correct sequence and position: air cathode → nonwoven fabric → magnesium sheet. (Ref: **STEP 4**)

**5** Make sure air cathode black side face up. (Ref: **STEP 4**)

**6** Nonwoven fabric is also used to isolate air cathode and magnesium sheet, make sure the 2 parts do not come into contact each other or it may cause short circuit. (Ref: **STEP 4**)

**7** Salt water will easily cause oxidization, scratch oxide from the battery connectors and also magnesium sheet by slotted screwdriver before reuse. See below figures:





## PARTS LIST and ORDER FORM

When ordering parts please include the following:

- 1.Name, address (no P.O. Box) and telephone number
- 2.Model name and number
- 3.Part number, name, and quantity

Make check or money order payable to OWI Inc., and mail with parts order.

Please add \$5.00 (shipping & handling) for domestic and \$10.00 for international.

California, Florida, Illinois, and New York residents, please add sales tax.

OWI Inc.

17141 Kingsview Avenue

Carson, California 90746

Attn: OWIKIT Parts Department

T: 310.515.1900

F: 310.515.1606

info@owirobot.com

Part Number	Part Name	Price	Quantity
750001(P1)	Motor W/ Connectors	3.00	
750002(P2)	Pinion Gear (Yellow)	0.75	
750003(P3)	Gear W/ Shaft	1.00	
750004(P4)	Round Shaft	0.75	
750005(P5)	X5pcs Magnesium Sheet Air Cathode, Nonwoven Fabric	5.00	
750008(P8)	Plastic Dropper	0.75	
750009	Plastic Part A	3.00	
750010	Plastic Part B	3.00	
750011	Instruction Manual	4.00	

OWI INC.®  
LIMITED WARRANTY  
OWIKIT™

1. The product is warranted for 30 days from the date of purchase. It is the owner's responsibility to establish the date of purchase by acceptable evidence at time service is sought.
2. Under the warranty period:
  - A. The warranty on this kit shall be limited to the replacement of part(s), if the part(s) was found to be missing, incorrect or defective.
3. WARRANTY PART(S) REPLACEMENT: In case of incorrect, missing, damaged or defective part(s), mail your request to OWI Inc. Include the following information with your request:
  - A. Type or print your name, address (No PO Box), and telephone number
  - B. Model name and model number
  - C. Copy of the receipt of purchase
  - D. Part number and description
  - E. Reason for replacement (defective, missing, etc)
4. This warranty will be considered void if the unit has been dropped, misused, abused, altered in any manner, or has been damaged by improper soldering.
5. OWI Inc. shall have no liability whatsoever for consequential damage. The sole responsibility of OWI Inc. under this warranty shall be limited to the replacement of parts(s) and/or repair of the model at the sole discretion of OWI Inc.
6. IMPORTANT: This warranty will be considered void unless the Warranty Registration form is completed to OWI Inc. for registration within 10 days following the date of purchase.
7. For any repair work NOT under warranty, send the unit POSTAGE PREPAID to OWI Inc. accompanied with a check in the amount of \$25.00 USD made payable to OWI Inc., and a brief description of the problem. Include with the unit, your name, address, return address and telephone number. Do not use a PO Box. Do not include any batteries with the unit. Allow 30 days for repair.

OWI Inc.  
17141 Kingsview Avenue  
Carson, California 90746 USA  
Customer Service: 310-515-1900  
Hours: 9:00am to 4:00pm PST  
Fax: 310-515-1606  
E-mail: info@owirobot.com

Keep for your record:

Date of purchase \_\_\_\_\_  
Model Number \_\_\_\_\_  
Model Name \_\_\_\_\_  
Lot Number \_\_\_\_\_

-----  
Please cut out, complete and mail this form

LIMITED WARRANTY REGISTRATION

(Please type or print)

Model Number: \_\_\_\_\_ Model Name: \_\_\_\_\_ Lot Number: \_\_\_\_\_

Date Purchased: Month: \_\_\_\_\_ Day: \_\_\_\_\_ Year: \_\_\_\_\_. Please attach proof of purchase.

Owner's Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Purchased from - Dealer's Name \_\_\_\_\_

Specific reason for replacement part or repair: \_\_\_\_\_

When ordering replacement part(s), under warranty, please refer to the "Parts List" in the instruction manual. We'll require the "part number", "part name", and quantity. If part is defective, please return the defective part, and complete section below.

Part Number: _____	Part Name _____	Quantity _____
Part Number: _____	Part Name _____	Quantity _____
Part Number: _____	Part Name _____	Quantity _____