# Microcomputer Fructose Dispenser ET-9CSN Technical Manual We won



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Made by Y-FANG SEALING MACHINE LTD.

# ET-9CSN Microcomputer controlled Fructose Dispenser Operator's Manual

# I. Specifications:

2013.06

Model Number	Dimensions	Power Supply	Weight	Capacity	Fill Volume
ET-9CSN	220x450x370mm	110/220V 500W	9kg	8 liter	5-200ml ±3ml



### **Characteristic Introduction:**

- 1. Front Panel 2. Stainless Steel Cover 3. Filling Nozzle Indicator Introduction
- 1. **YF Power Indicator**" : Indicating the power is online, after displaying power indicator, the machine begins to service you.
- 2. **Supply Indicator** : If the fructose level becomes too low during operation, the screen will display supply indicator. Please refill with fructose immediately.
- 3. **Heat Indicator** : Lighting up as increasing temperature.
- 4. **Fill Indicator** : The machine is automatically doing filling process when the screen displays fill indicator.

## **II.** Operating Instructions:

- 1. Fill the fructose reservoir before you power on the machine. If the fructose level becomes too low during operation the machine will emit 5 beeps and the indicator light will begin to flash. Please refill with fructose immediately to avoid malfunction.
- 2. If the ambient temperature is lower than 32°C at power-on the machine will not operate. Please wait until the display shows [YFCC] before continuing.
- 3. If uninterrupted dispensing is needed, long press the "Continue/Stop" key (6 seconds) until 5 beeps are heard and then release to start dispensing. To stop, press "Continue/ Stop" once briefly.
- Check the counter by pressing the "▲" key. Press the "Save" key to check the temperature.
- 5. For single unit flow rate settings: press the "Setting" key → select the key set to be defined → press the "▲" or "▼" key to increase or decrease → when all the settings are done → press the "Save" key again to finish.
- 6. Turn on the power each day and wait for 5-10 minutes for the machine to heat up. Then run the dispenser for 2 to 3 cycles to release unheated fructose (about 100ml) from the output tube to ensure output accuracy; 100ml is approximately equal to the pump system capacity of 60ml + dispensing tube 20ml + filling head 20ml.

## III. Notes:

- 1. Before using the machine for the first time, use warm water (60°C)to clean the interior of the reservoir. It can then be filled with fructose after it has been wiped clean. Run the machine through 2 or 3 cycles by pressing the "Continue" key to drive out any air and residual water before putting it into use.
- 2. Fill with fructose slowly to avoid the generation of air bubbles which will affect the accuracy of the output volume.
- 3. The interior of the reservoir and fructose transfer pipelines should be cleaned using warm water (60°C) every 3 months to ensure output accuracy.

# IV. Function setting instruction table:

(It is recommended that setup be performed by a technician)

\*\*Long press the "Setting" key (5 seconds) to enter the setting mode. After completing the settings press the "Setting" and "Save" keys to end the task and exit.

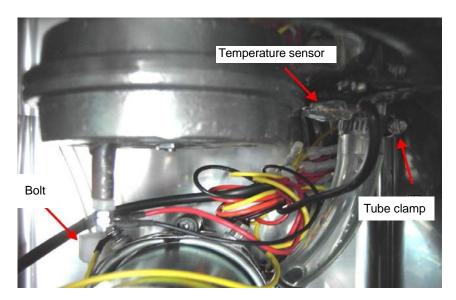
# **%** (P4, P5 are setting functions for ET-9H)

Item	Function	Default Value	Remarks
P1	Define fruetone output retie: 1 2000	180	Press ▲: to reduce output
FI	Define fructose output ratio: 1-2000	160	Press ▼: to increase output
			Long press "Setting"
P2	Detect the viscosity of the fructose	15	(5 seconds) under P1 to
			enter P2
			Press ▲: to increase
P3	Temperature adjustment	22	temperature
	(password "1-2""3-2""2-2")	32	Press ▼: to decrease
			temperature
	Refill delay time: 1-30	30	Press ▲: to increase time
P4			(seconds)
	(normal 0.1-3 seconds)		Press ▼: to reduce time
			(seconds)
	Refill time: 1-200 (x2 seconds)	150	Press ▲: to increase time
DE			(seconds)
P5			Press ▼: to reduce time
			(seconds)

# **Attachment 1: Internal structure and disassembly**

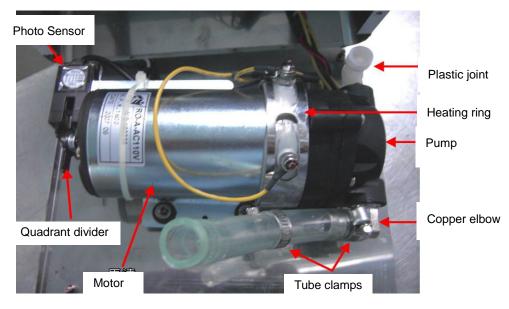


1. Open rear cover and bottom plate.

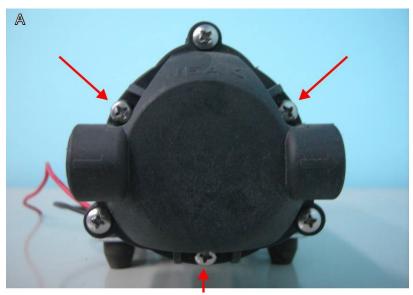


2. After dismantling the tube clamp, plastic joint (bolt) and temperature sensor, the base and body can be completely disassembled for easy maintenance.





# **Attachment 2: Replacing the pump**



Unfasten these three screws to remove the pump



# ET-9CSN Maintenance

# **Troubleshooting Guide**

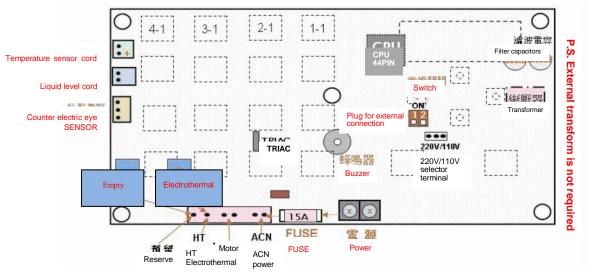
Item	Cause of Failure	Troubleshooting
1	Fructose leaking	<ol> <li>Check that the connection between plastic joints and pump is tight.</li> <li>Check that the connection between the copper elbow and the pump is tight.</li> <li>Check that the screws between the motor and pump are tight.</li> <li>Check that the liquid level fixing cover (white PE) is not cracked.</li> </ol>
2	Fructose does not flow out	1. Motor failure 2. Pump failure 3. IC board crash 4. Heating plate quadrant divider/motor fastening screws are loose.
3	Fructose output end (filling head) leaking fructose	<ol> <li>Check for foreign objects in the check valve (clean).</li> <li>Air in the pump. Press the "Continue" key for 5 seconds to expel any air inside the pump.</li> </ol>
4	Heating system issues	<ol> <li>Heating wires are broken.</li> <li>Heating plate malfunction.</li> <li>IC board crash.</li> <li>The temperature defined in EDY has not been reached.</li> </ol>
5	Flow does not stop	Sensor eye malfunction (ECN).     IC board crash.
6	Dispenser not working due to power failure.	<ol> <li>Power cord plug not properly plugged in or bad connection.</li> <li>Blown fuse on IC board.</li> <li>Selector terminal plug on IC board loose.</li> <li>IC board crash.</li> </ol>
7	Flow rate shows serious error	Press "Setting" key for 5 seconds to enter P1 total flow rate and re-calibrate.

# Technical Note 16 ET 9CSN Fructose Dispenser IC board [44 pins] Wiring Diagram

ET-9CSN Fructose Dispenser IC board [updated 2007.6] Wiring Diagram:

2007. Dec. 5 CIOU,JHEN-TAI

# YF/N9CSN PCB



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# New IC board settings, error code descriptions:

E-rr	Abnormal voltage	E-CN	Counter electric eye failure
E-17	Cannot read parameters	E-18 Cannot write parameters into memory	
E-19	Computer board (IC board) failure	OPEN Temperature sensor open circuit	
CLOS	Temperature sensor short circuit		

Item	Function	Recommended Value	Settings
P1	Define fructose output ratio: 1-2000	180	Press ▲ or ▼ to increase or decrease fructose output ratio
P2	Define viscosity of fructose	15	P1 → long press for 5 seconds to enter → P2
P3	Temperature adjustment (password "1-2""3-2""2-2")	32°C	Press ▲ or ▼ to increase or decrease temperature
Normal	state of Switch SW1, 2 is OFF		

# **ET-9CSN Maintenance**

## **Fructose Dispenser Cleaning Procedures**

- 1. Press the "Continue" key to drive out residual fructose.
- 2. Use absorbent paper or a dry cloth to clean off any remaining fructose.
- 3. Use warm water and a sponge to wash and wipe. Then press the "Continue" key to drain out the water. Use a dry cloth to remove the any water that remains in the bottom of the reservoir.

### **Notes**

- 1. Hot water must *never* be used for cleaning. Only use warm water (60°C).
- Do not invert or tilt the dispenser to pour fructose out of the reservoir.Fructose or water may reach the IC board through the gap and cause a short circuit.

# Fructose dispenser delivery and handover procedures (these must be followed)

- Use warm water to clean the interior of the reservoir. Use absorbent paper or a dry cloth to remove residual water.
- 2. Pour in fructose until the reservoir is about 1/4 full. The fructose level should reach the end position of the sensor.
- 3. Drain out 300ml of fructose (to ensure at least 100ml of liquid is removed.)
- 4. Use a measuring cup to calibrate the flow rate because each brand of fructose has a different viscosity.

# Warranty:

Product Description	Microcomputer Fructose Dispenser	Telephone		Address		
Model Number	ET-9CSN	Warranty Conditions:				
Company Finished Product Certificate Seal:		from the factory. and part of charg  2. Failure runautho transport not cove will be ruparts.  3. Charges parts aft	esulting fror	oment from period main ent will be m incorrect cation, dan stural disast varranty and cost of re- de for repart the warran	in the intenance made free of operation, mage during ster etc is and charges pairs and	
Void if company qualification seal is not present						

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