BIOTIC INDUSTRIES INC.
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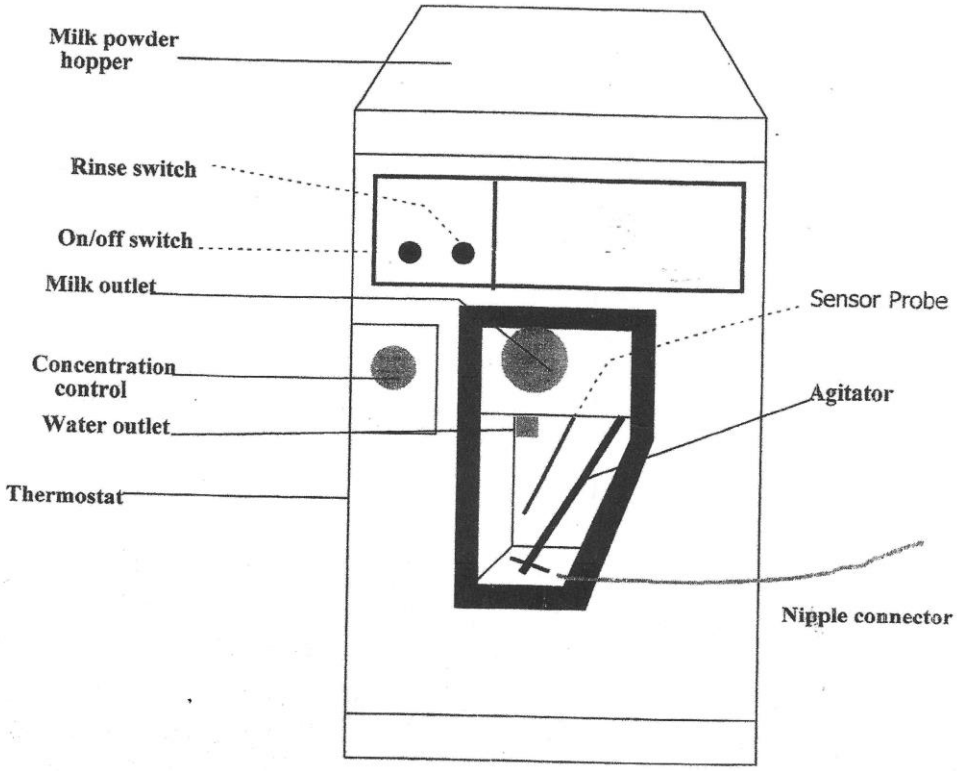
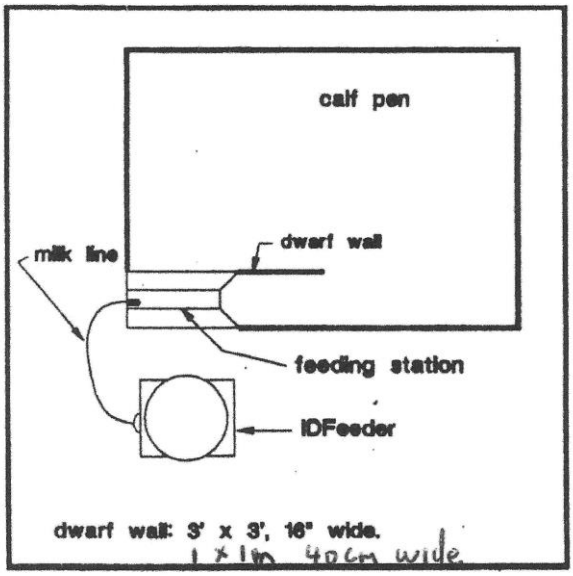
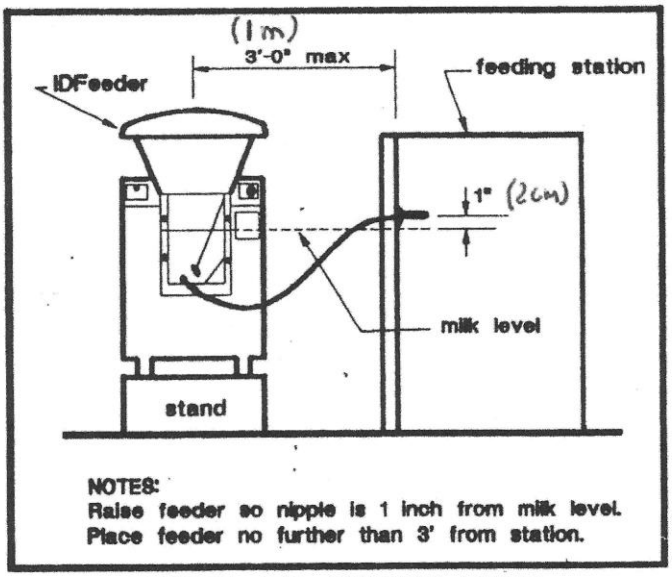
ID-TEK ID-TEK II



AUTOMATIC MILK FEEDING

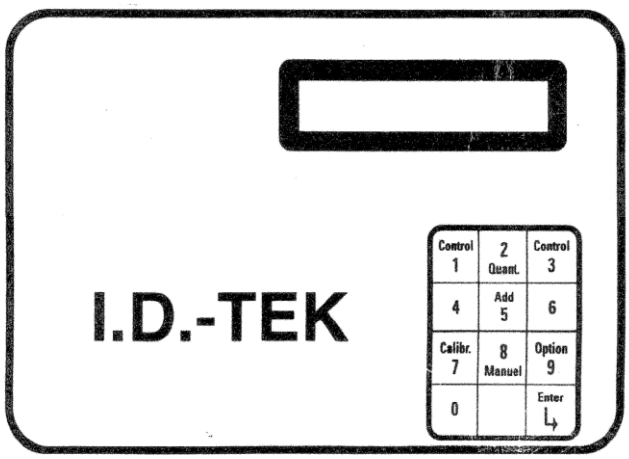


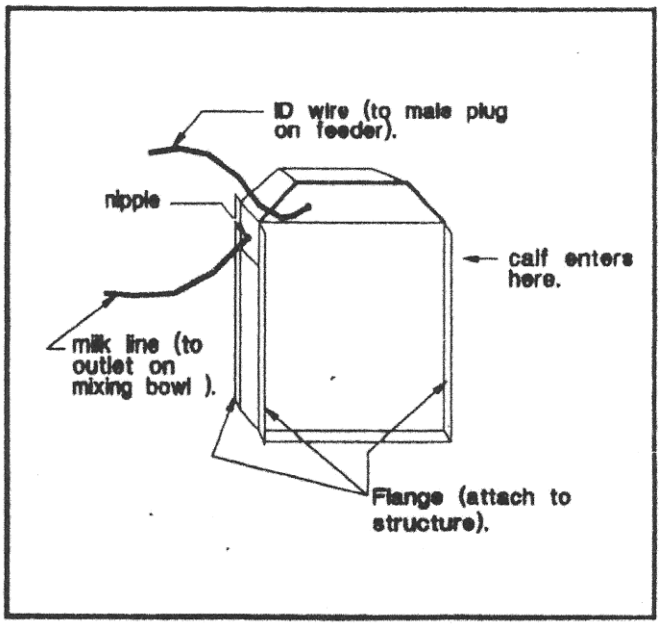
SUGGESTED HOUSING LAYOUT
DIAGRAM E



FEEDER AND STATION SETUP
DIAGRAM F

CONTROL PANEL
DIAGRAM D





FEEDING STATION
DIAGRAM C

The operator's satisfaction with this unit will depend to a great extent on his management of other factors involved in the raising of young animals, such as proper housing, good sanitation practices, control of diseases and types of milk replacer used. All these factors, including the number of calves on the ID-TEK should be considered in selecting the proper location and setting up the machine.

All advice given in this manual is intended to serve as a guideline only.

SAFETY PRECAUTIONS

Read this section carefully before proceeding.

Before connecting the electricity, make sure that the Main Switch (ON/OFF) is on the off position and THE THERMOSTAT IS SET AT ZERO.

Do not open the control panel without removing the electric plug from the socket. Shut off the main power source (breaker) before attempting this.

When filling up the hopper, make sure that there is no foreign matter (measuring cup, string, paper, etc.) in the powder.

SPECIFICATIONS

The ID-TEK is an automatic dispenser designed to provide a control, uniform and easily accessible supply of milk replacer/formula for calves.

The machine automatically mixes small quantities of powdered milk replacer/formula with warm water at a desired concentration. The animals take the mixed liquid by means of a rubber nipple located in the feeding station.

The machine consists of a hopper, water tank and heater, mixing bowl with outlets for the nipples and an electro-mechanical system which mixes the powdered milk substitute and water in desired proportion and temperature. The water enters the heating tank via a valve where it is heated by a thermostatically controlled element.

The mix is control by a computer .The ID-TEK feeds each calf a preset (set by the farmer) quantity of milk per day each calf wears an ear tag

The concentration of the mix is regulated in the following manner:

The milk replacer flow is always constant.

The water flow to the mixing-bowl is adjustable.

Capacity	:	25 calves
Feeding station	:	1 for calves
Capacity of hopper	:	25 lbs. (12 kg), IDTEK II 50lbs (24 kg)
Capacity of water tank	:	2 .5 gal. (5 l)
Current rating:	:	110 v, 1500 watts, IDTEK II 110 v or 220 v, 1500 watts
Power requirement	:	15 amps
Dimension	:	17X19X28" (42.5X47.5X 70.0 cm)

INSTALLATION OF THE ID-TEK

Where to Place the ID-TEK and Feeding Station

Your ID-TEK should be set up in a sheltered area (barn, shed etc.). Provide access to:

- Cold water (hose with 3/4" male fitting on both ends).
- Electricity (110 volt, 15 amp receptacle within 3 feet (1 m)of feeder).
- Drainage (provide adequate drainage for feeder cleaning runoff).

Please refer to diagram E & F when choosing a location to set up your feeder and feeding station. Follow these general rules:

- The station should be no further than 3 feet (1 m) from the feeder.
- The station should be securely attached to a wall or fence--see diagram C.
- You will need to access both sides of the feeder.
- The feeder needs to be placed on a stand at a height that will provide appropriate milk flow to the nipple--see diagram F.

If using more than one feeder Ear Tag Reader need to be at least 4 feet apart

Setting Up the ID-TEK

Once you have installed your feeder and station you are ready to set-up your feeder.
1. Connect the water line to the feeder and open the faucet.
2. Make sure the THERMOSTAT knob is set to ZERO degrees. This is very important because the heating element will fail if it is not covered with water when it is turned on.
3. Attach one end of the tubing onto the mixing bowl outlet (see Diagram A) and the other to the white connector on the nipple in the station (see Diagram C).
4. Turn ON/OFF switch to OFF. Plug the feeder in to the receptacle and . The control panel screen will light up (shows clock) and the water tank will fill with water. This will take about 5 minutes.

5. When the water tank is full.
Make sure that there is no foreign matter (measuring cup, string, etc.) in the powder.

Turn ON/OFF Switch ON
Press **8**-Manuel
ID-TeK should come on:
Powder and Mixing motor turning.
Water coming to the bowl. and stop when bowl is full.
Drain water by milk line until it doesn't touch sensor probe:
ID-Tek Should come on again until mixing bowl is full.

Press **8**-Manuel to go back to the clock display

Set up Clock

Press **9** -option	**OPTION 1-9**
Press **2**	**Time 0/1**
Press **1**	**H=** Type Hour
	(in military time 1PM=13, 2PM=14, etc)
	Press enter (Enter key is the **#** key)
	M= type minutes
	Press Enter (Enter key is the **#** key)

CALIBRATION OF THE ID-TEK

1. Fill the hopper with milk replacer.

MAKE SURE THERE ARE NO CUPS OR OTHER FOREIGN MATERIALS IN THE MILK REPLACER.

To calibrate the Id-Tek you need to decide the concentration of the milk (powder/water ratio) and the size of the mix in the mixing bowl.
Example:

we want to give a concentration of 4oz per quart (120 g / liter) and mix size of 1 pint (0.5 l)

therefore

we will need 2oz (60g) of powder per pint(½ liter) (there is 2 pints in one quart).

First we have to calibrate the powder

1 Hold a cup under the powder outlet

2 Press **7**-Calibr.

MIX SIZE 0/1

3 Press **1**

POW ON (the powder is coming out for a certain time)
POW ON P=?55 (this number may be different)

4 Weight powder

If you have more than 2 oz (60g) of powder type a lower number (ex: 40) and Enter.
If you have less than 2 oz (60 g) of powder type a higher number (ex:58) and Enter.

Go back to step 1 until you have the right amount of powder.

Next, we have to calibrate of water:

1 Turn powder switch on RINSE

2 Press **7**-Calibr.

MIX SIZE 0/1

3 Press **1**

POW ON (the water is coming out for a certain time)
POW ON P=?55 (this number may be different)

Drain water by nipple hose into a measuring cup
If you have more than 1 pint (1/2 liter) turn Concentration Knob Counterclockwise
If you have less than 1 pint (1/2 liter) turn Concentration Knob Clockwise
(This knob make several complete turns about 10)

REGISTERING CALF

Before a calf can drink from the feeder, it has to have an "ID" tag. You have to first give each tag a number (the calf's number) so the computer can know which calf is in the feeding station. To give each calf's tag a number.
Press **5**

ADD Waiting (SHOW TAG)

Place a tag in the station next to the reader.
When computer read tag it displays **#?** Type calf number Enter

Type a number 1 to 25 Enter

When you enter a new tag the feeder will always set the calf : Mixing per day 8 and credit 1

SETTING UP CALF

You can set the quantity of milk that calf will drink per day by setting up the number of mixing the calf will drink per day.

Please note typing Calf # 99 will set all the calves at once

Example
If you have calibrate the ID-TEK to have mix size of 1 pint (1/2 liter) with 2 oz (60 gr) of powder
and you want the calf # 5 to drink 1 gallon a day
Press **2**-Quant.

Q-#?

Enter calf number "5"

Q=? 8

There is 8 pints per gallons so the calf # 5 need to drink 8 mixing per day to have 1 gallons (4 liter) per day (Calf #5 will also have 16 oz (1 lb) (480 gr)of powder per day because there 2 oz per pint of water. (60 gr per ½ liter of water))

Type **8** press **Enter**

The computer will take 24 hour, divides them by the number of mixing to know when a calf can drink. In this example calf#5 can drink one pint every 3 hours because 24/8= 3
If a calf doesn't drink its mixing or credit during that time the credit is carry over to next hour. If a calf doesn't come to drink for a long time the number of credit can become important. If the number of credit are bigger the computer will automatically reduce to 4 so the calf cannot drink more than 4 mixing at the time.

How to Check Your Calves

Each day you should check to see if each calf has drank its milk. The calves that did not drink their milk yesterday will be shown first in this function.
Press **1**/CONTROL

#5 Q8 Y8 D3 C1:

This one screen shows all the information for one calf. For this
Example we are using calf number #5.

- **Q: 8.0** = amount of mixing set for 1 day. This calf is allowed to drink 8 mixings .If the ID-TeK is calibrate at 1 pint (1/2 liter) per mixing this calf can drink 1 gallon(4 liter) per day. **w:8.0** = This calf in on the auto wean option (The number of mixing per day will decrease by one per day)

- **Y:8.0** = the amount of milk this calf drank yesterday. He drank 8.0 pint(8 of ½ liter) of milk yesterday.

Notice that this calf drank what it should have drank yesterday. This is easy to notice because the 'set' is equal to 'Y' or what the calf was set to drink is the same as what the calf drank yesterday. If you notice a calf that did not drink all it was set to drink, this could indicate that the calf is sick and requires attention. The calf whose amounts drank do not equal the set amount will be shown first in this function.
Press enter to view the next calf's information or press '.' to return to the main screen.

- **D3** = this calf has drink so far 3 mixing.

- **C:1** = this calf's credit at this time, i.e.: the amount of milk this calf can drink at this moment. This calf has 1 pint left to drink if it come to the feeder.

Delete a calf number

If a calf has been wean or you need to reuse the ear tag it is necessary to delete this calf number to erase the data for that calf
Press **9-1**
Type ear tag number to be erasing

Please note that if you want to erase all the calves number you can
press **9-3**

AUTO WEAN

At the clock display Type **6**- wean

W=#?
Enter calf number (Example calf number 4)
4
Enter

0/1
(Any number other than 1 will exit this function without any change)

If you type **2** the number of mixing will decrease per 1 per day

This function can be used to wean the calves.
The next question will set the number of mixing per day

Q=? set the number of mixing per day to start

The computer will decrease the number of mixing per day starting a the number you just enter until it reaches 1 mixing per day and will stay there.

You can remove a calf from function 6 by changing the number of mixing per day with function 2

The display will indicate the status a the calf

W8 (wean calf)
#5 Q8 #5 Q8 Y8 D3 C1:

MAINTENANCE

The importance of thorough daily cleaning and regular maintenance cannot be over-emphasized. Clean bowl, nipple hoses, nipples, and nipple-plates daily.

For the daily cleaning operation,
Press **8** MANUAL.

Disconnect the nipple tubing from the nipple connectors. Turn the POWDER SWITCH to the RINSE position and allow warm water to circulate in the mixing bowl. Drain waste water into a suitable container. (A safe dairy cleaner-sanitizer solution can be used). All parts exposed to the liquid milk substitute should be thoroughly cleaned and rinsed.

CAUTION:

Turn off the main switch before removing the bottom part of the mixing bowl cover, then clean the bowl and bowl covers with a soft sponge or soft bristle brush.

Inspect agitator blade to be sure no foreign material has collected around the blade or shaft.

Make sure that the opening in the bowl for the milk powder is clean and free of any foreign objects.
DO NOT WASH THE PANEL BOARD OR COMPUTER WITH WATER: YOU COULD RUN THE RISK OF A SHORT-CIRCUITS.

Do not let the ID-TEK run out of milk replacer/formula as young calves tend to scour when drinking plain warm water. Should the ID-TEK become inoperative and the calves become very hungry, control feed them until they are over their hunger as over-eating will also tend to make them scour.

STORAGE

When the ID-TEK is to be inactive or stored, for even a day, it is important that all the above cleaning and maintenance steps be performed and all feed should be removed from the hopper. Apply a thin film of vegetable grease to the pressure switch membrane in the bowl.

The water tank in the ID-TEK should be drained, particularly if the ID-TEK is shut-off, stored, or in the event of a power-failure during freezing weather. To do this, simply remove the drain plug in the bottom of the tank.

HOUSING

The ID-TEK is versatile and adaptable. It can be used in many existing farm buildings with a minimum of conversion costs.

A good building should be peaceful and comfortable, i.e. stress free.

Exposure to drafts, wet and humid conditions, as well as sudden changes in temperature should be avoided as they can be a major contributor to mortality.

Provide for your calves dry, clean, and sanitary group pens of sufficient size. A minimum of 24 square feet (2.2 square meters) per calf should be provided.

This machine is not designed to be used in locations where it may be exposed to the weather.

TRAINING THE ANIMALS

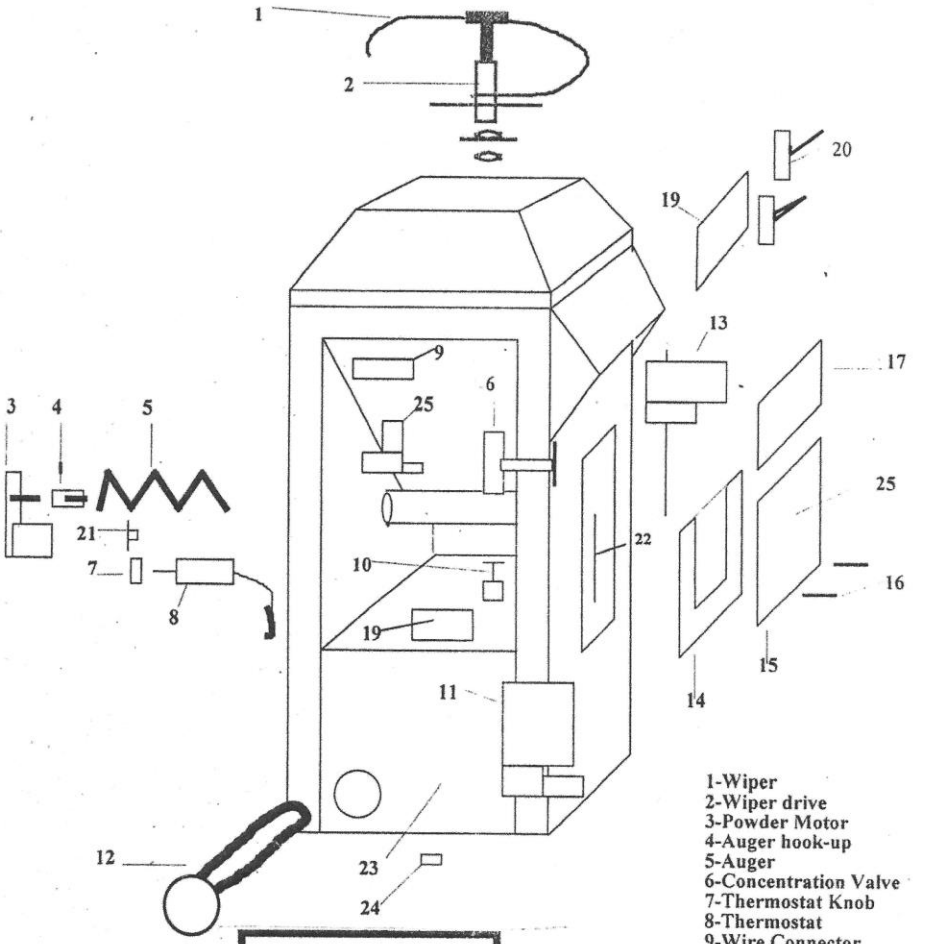
Animals can be trained on the machine after three days of colostrum.

Teach the animals to drink from the ID-TEK by showing it the nipple and that it can get milk. Watch animals the first few days to assure that they are nursing.

In the following days, it is not necessary to force the animals to feed; unless a calf has never fed from the ID-TEK, it will come back to feed again when it is hungry, and it will not be necessary for you to intervene. All you have to do is check and be sure that all the animals have fed from the machine at least once.

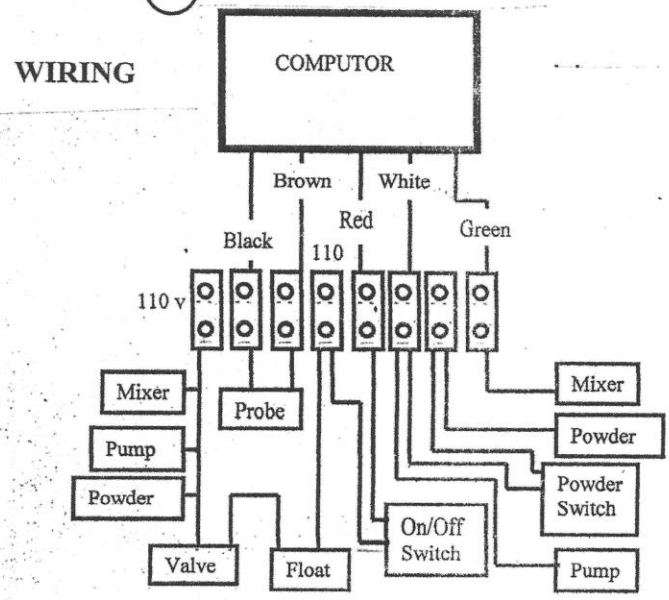
LIABILITY DISCLAIMER

Individual results from the use of this machine may vary due to management, environment, genetics, and type of milk replacer/formula used, health and sanitation. Therefore, Biotic Industries, Inc. does not warrant or guarantee individual results.



1-Wiper
2-Wiper drive
3-Powder Motor
4-Auger hook-up
5-Auger
6-Concentration Valve
7-Thermostat Knob
8-Thermostat
9-Wire Connector
10-Float Switch
11-Water Pump
12-Heating Element
13-Mixing Motor
14-Bowl gasket
15-Bowl Cover Bottom
16-Nipple Hose Connector
17-Bowl Cover Top
19-Panel board for probe
20-On/Off Switch
21-Red Lamp
22-Probe
23-Water Tank
24-Drain Plug
25-Water Valve

WIRING



TROUBLE SHOOTING

CAUTION: DO NOT OPEN THE SIDE PANEL WITHOUT FIRST TURNING OFF POWER TO THE MACHINE.

*. Feeder do not start	- Breaker off - Machine unplugged - Switch is off - Bowl full
*. No water but powder and Agitator motor working	- No water going to feeder (faucet shut, etc.) - Concentration knob turned clockwise all the way - Valve filter dirty - Inlet valve defective (replace)
*. Mixing bowl filled with powder	- Same as above
*. A small amount of water Flowing into bowl	- Water tank pump dirty - Check water supply
*. **No powder but water and Agitator motor working**	- Powder switch on RINSE - Powder motor stuck -**Auger unhooked** - Powder motor defective (replace)
*. Mixing motor not working	- Mixing motor dirty - PC Probe defective (replace) - Mixing motor defective (replace)
*. Mixing motor does not stop	-PC Probe defective (replace)
*. Milk overflows, feeder does not Stop	-Too much water turn concentration knob down -PC Probe defective (replace)
*. Water too warm	- set thermostat to 40øC - Thermostat out of order (replace)
*. Water does not heat up	- set thermostat to 40øC - heating element burned up (replace)

WARRANTY

BIOTIC INDUSTRIES, INC. warrants that automatic feeding system number_____ has been factory calibrated and tested and is free of defects. Biotic Industries, Inc. will replace any part or parts that fail due to defective material or workmanship within six months from date of delivery provided the warranty card is duly filed within ten (10) days of purchase.

We reserve the right to change specifications or design without notice. Any parts contained in your unit that are different than those listed in this book were changed either to improve your unit or were necessary due to material substitutions.

BIOTIC INDUSTRIES, INC. reserves the right to determine cause of failure and the owner agrees to return defective parts to the factory upon request, shipping charges prepaid.

This warranty is not transferable.

WARRANTY REGISTRATION CARD

NOTICE:
This form must be completed and returned within ten (10) days of delivery to validate the warranty.

Name of Owner:_____

Address of Owner:_____City_____
State:_____Zip_____

BIOTIC INDUSTRIES, INC. automatic animal feeding system

Serial No:_____

The primary application of this machine will be:
Replacement heifers___Veal___Lambs___Other_____

Dealer:_____Date:_____

Signature of Owner:_____

Mail to: BIOTIC INDUSTRIES, INC.
147 Ebb Joyce Rd.
Bell Buckle, TN 37020 USA