

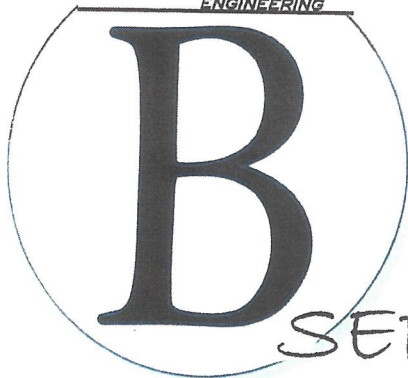
**B-Series**

# **UdderGuard**

→ **Operating Manual** ←

B-12  
B-16  
B-24S

**EXCALIBUR**  
ENGINEERING



**SERIES**

*Excalibur Engineering 1260 N. 200 E. #2 Logan, UT 84341 (435) 755-9221 FAX (435) 755-9321*

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**\*\*Please read all instructions in this manual and included with your unit before use.\*\***

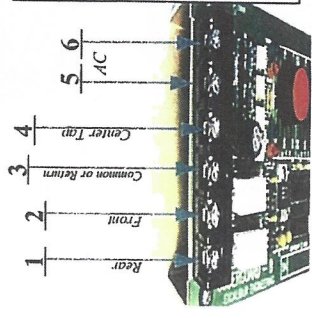
1. When using any Udderguard "B"™ Series Controller, always follow basic Safety precautions to reduce the risk of electric shock and Personal injury.
2. Keep environment clean and dry to avoid electric shock.
3. Do not touch back side of the unit circuitry while in operation.

**Warning!!**  
*To reduce the risk of injury, always unplug the unit before performing Any maintenance or removal.*

### B12, B16, B24S Installation

The Udderguard B™ series Controllers are designed as a "drop-in" replacement for a **Baumatic®** style barn. We recommend installing the Controller in a vertical position for optimal performance.

*Ensure all Power has been turned off!*



- From the transformer, hook the two "AC" wires to pin 5 and 6 on the black connector of the controller. Hook the center tap wire from the transformer to pin 4 on the controller.
- From the pulsator(s), hook the Rear wire to pin 1 on the connector. Hook the Front wire to pin 2 on the connector. Hook the Common or Return wire to pin 3 on the connector.

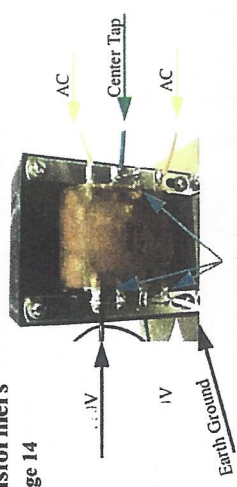
*Baumatic® is a Trademark of Dairy Equipment Corporation*

-If you are wiring in a new transformer, wiring should be as follows.

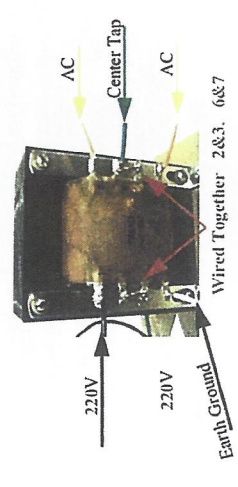
**B16 & 24S Require two transformers**

Transformer Chart shown on page 14

**Option A**  
-220V AC Operation  
-5 Amp Fuse



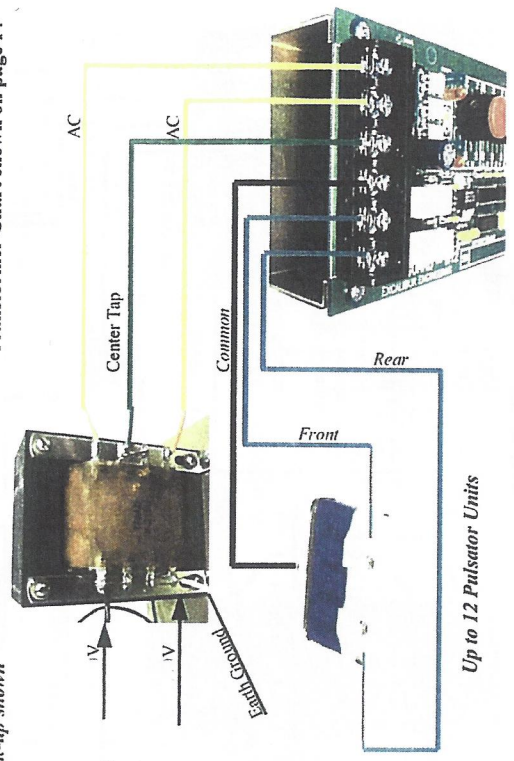
**Option B**  
-220V AC Operation  
-3 Amp Fuse

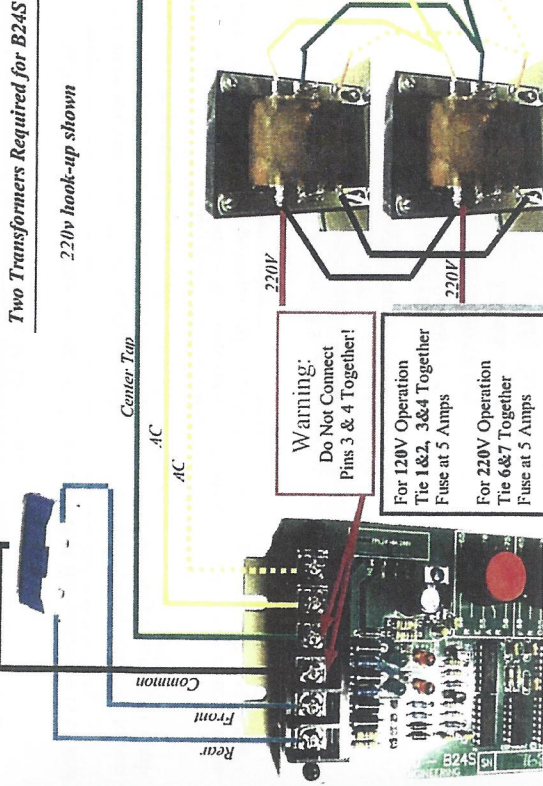
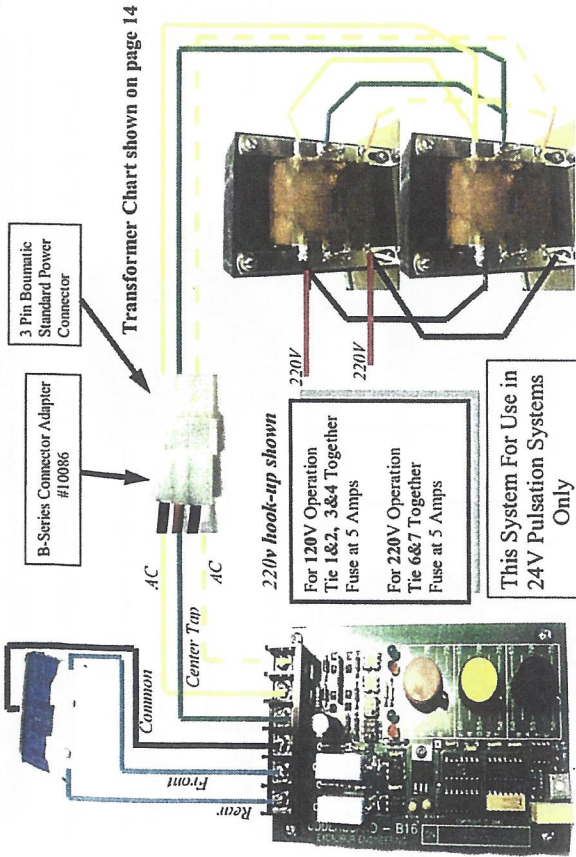


Transformer Chart shown on page 14

hook-up shown

220v Hook-up shown on page 4 (option B)







After proper installation apply power to the controller.

Two green lights will begin pulsating on and off. This shows that the controller is on and that the Rear

And Front lines are running. To select how many pulsations per minute you wish to run - adjust the Rate knob to the desired number. A setting of 60 means the pulsators will pulsate 60 times per minute.

To select the Front and Rear Milk - to - Rest ratios, adjust each knob to the desired number. A setting of 60 means the pulsator will milk 60% of the time, and be off 40% of the time.

If any or both of the red lights come on it is an indication that there is probably a short in the lines in the barn, or, on rare occasions it may be that the controller is damaged.

For repairs or questions contact:

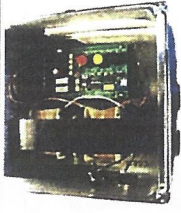
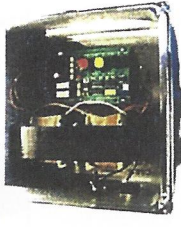
**Excalibur Engineering**  
1260 North 200 East #2  
Logan, UT 84341  
(435) 755-9221

### **Warning!!**

*To reduce the risk of injury, always unplug the unit before performing any maintenance or removal.*

To keep your controller in good running condition, we recommend installing the unit in a vertical position to allow maximum airflow.

Keep in dry conditions. Do not spray water directly on the controller whether it is running or not. Do not use heavy tools to adjust or remove the controller.



System

1

2

3



**On/Off Switch**

Order #10032



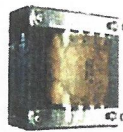
**Rubber Boot for On/Off Switch**

Order #10035



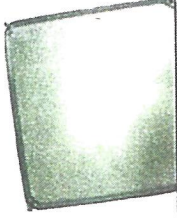
**Large Heyco Connector**

Order #10036



**48 Volt Transformer**

Order #10013



**Clear Lid**

Order #10041



**Fuse Holder**

Order #10033



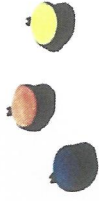
**Fuse**

Order #10031

**Replacement Knobs**

Indicate Knob Color

Order #10034





## Transformer Chart

<i>Transformer</i>	<i>Standard</i>	<i>Oerrated</i>
F-215U	192 Watts	230 Watts
F-58U	250 Watts	300 Watts
<i>Load Condition</i>	<i>Standard</i>	<i>Use Transformer</i>
16 Unit 50/50 50/50	230 Watts	F-215U
16 Unit 55/45 55/45	253 Watts	F-58A
16 Unit 60/40 60/40	276 Watts	F-58A
16 Unit 65/35 65/35	299 Watts	F-58A
16 Unit 70/30 70/30	322 Watts	Two F-215U's
16 Unit 75/25 75/25	345 Watts	Two F-215U's