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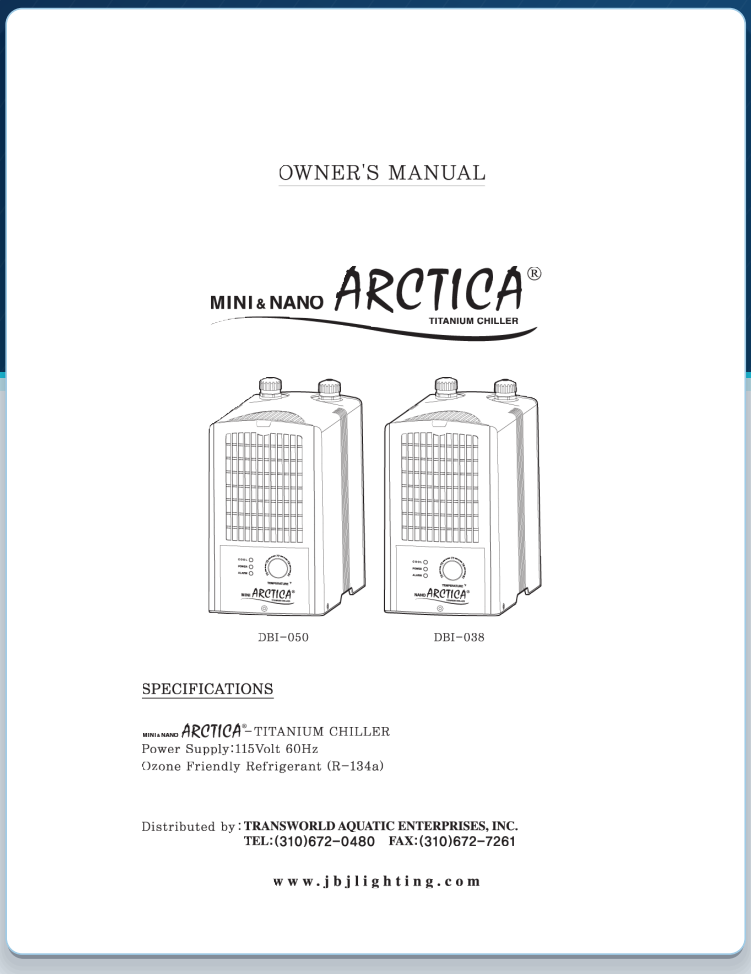
Compressor Chiller

Older compressor nano and mini chillers

DBI-038 DBI-050


OWNER'S MANUAL

MINI & NANO ARCTICA® TITANIUM CHILLER

DBI-050 DBI-038

SPECIFICATIONS

MINI & NANO ARCTICA®-TITANIUM CHILLER
Power Supply:115Volt 60Hz
Ozone Friendly Refrigerant (R-134a)

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Size calculator

Details by email: Jbjnanocubes@gmail.com

Nano chillers ›

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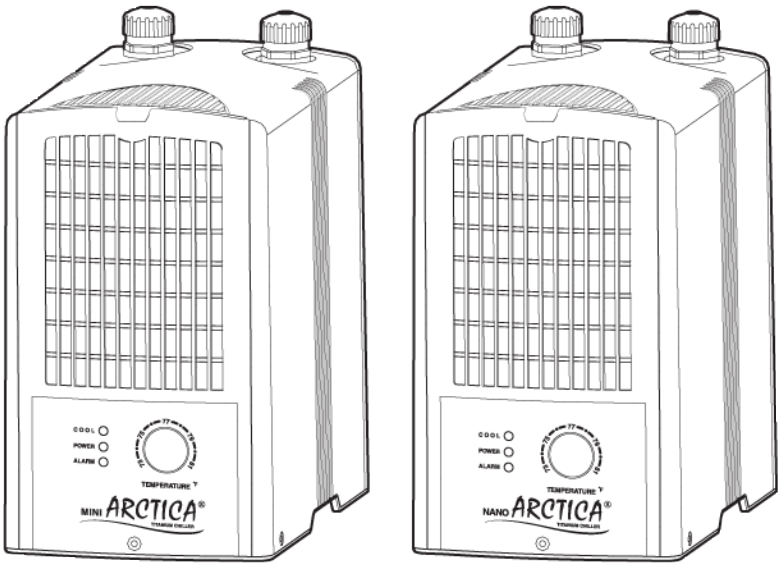
MINI & NANO ARCTICA®
TITANIUM CHILLER



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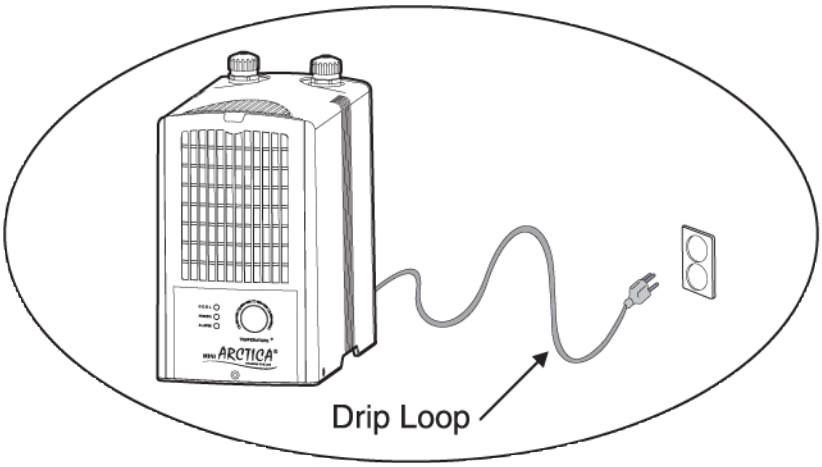
1. IMPORTANT SAFETY INSTRUCTIONS

WARNING: To guard against injury, basic safety precautions should be observed, including the following:

a) READ AND FOLLOW ALL SAFETY INSTRUCTIONS

b) DANGER: To avoid possible electric shock, special care should be taken since water is employed in the use of aquarium equipment. For each of the following situations, do not attempt repairs by yourself; return the appliance to an authorized service facility for service or discard the appliance:

1. If the appliance falls into the water, DON'T reach for it! First unplug it and then retrieve it. If electrical components of the appliance get wet, unplug the appliance immediately.
2. Carefully examine the appliance after installation. It should not be plugged in if there is water on parts not intended to be wet.
3. Do not operate any appliance if it has a damaged cord or plug, or if it is malfunctioning or has been dropped or damaged in any manner.
4. To avoid the possibility of the appliance plug or receptacle getting wet, position aquarium stand and tank to one side of a wall-mounted receptacle to prevent water from dripping onto the receptacle or plug. A "drip loop", shown in the figure below, should be arranged by the user for each cord connecting an aquarium appliance to a receptacle, or the connector if an extension cord is used, to prevent water traveling along the cord and coming in contact with the receptacle. If the plug or receptacle does get wet, DON'T unplug the cord. Disconnect the fuse or circuit breaker that supplies power to the appliance. Then, unplug and examine for presence of water in the receptacle.



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c) Close supervision is necessary when any appliance is used by or near children.

d) To avoid injury, do not contact moving parts or hot parts such as heater, reflectors, lamp bulbs, and the like.

e) Always unplug an appliance from an outlet when not in use, before putting on or taking off parts, and before cleaning. Never yank cord to pull plug from outlet. Grasp the plug and pull to to disconnect.

f) Do not install or store the appliance where it will be exposed to the weather or to temperatures below freezing.

h) Make sure an appliance mounted on a tank is securely installed before operating it.

i) Read and observe all the important notices on the appliance.

j) If an extension cord is necessary, a cord with a proper rating should be used. A cord rated for less amperes or watts than the appliance rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.

k) This appliance has a polarized plug (one blade is wider than the other). As a safety feature, this plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. Never use with an extension cord unless plug can be fully inserted. Do not attempt to defeat this safety feature.

l) Make sure the chiller is not allowed to overheat, chiller MUST have a minimum clearance of 1 foot before the intake of condenser and 1 foot behind the exhaust to evacuate heat.

m) Chiller should NOT be placed inside a cabinet stand. This will impede air flow and may reduce the efficiency of the chiller, and may cause permanent damage to appliance.

n) Always check water connections before operation for leaks.

CLEANING

It is important to keep this appliance clean. Always unplug the appliance before performing maintenance or cleaning of the exterior of this chiller. Wipe exposed surfaces carefully with a damp terry cloth to remove any dust or mineral deposits which may collect over time. Make sure all surfaces are dry before re-plugging into an electrical outlet.

SERVICING

In order to assure proper electrical connections and polarity, replacement parts and servicing should be performed by a qualified electrician.

OPERATION

Please carefully read the entire "Owner's Manual" for proper operation procedures before proceeding with turning on this appliance.

SAVE THESE INSTRUCTIONS

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1-1. Warning Icons

Warning Icons in this manual are boldfaced for emphasis.The signal words **DANGER**, **WARNING** and **CAUTION** are used to indicate hazard seriousness levels as follow:

DANGER - Immediate hazard which WILL result in severe injury or death.

WARNING - Hazard or unsafe practice which COULD result in severe injury or death.

1-2. Data Label

The Chiller data label contains identification information. If the data label is missing or damaged, contact your local distributor and request a replacement.

MINI ARCTICA®
TITANIUM CHILLER
THE MOST ADVANCED AQUARIUM COOLER

ITEM	MINI
Model	DBI-050
Horsepower	1/15HP
BTU	900 BTU/h
Amps	2.0A
Voltage	115V
Fuse Size	5A / 250V
Flow rate	110~160 gal/h
Dims-(W×D×H)	7.72"x12.6"x14.1"
Weight	28.66lbs
Water Connection	1/2"

Serial NO.

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NANO ARCTICA®
TITANIUM CHILLER
THE MOST ADVANCED AQUARIUM COOLER

ITEM	NANO
Model	DBI-038
Horsepower	1/20HP
BTU	600 BTU/h
Amps	1.8A
Voltage	115V
Fuse Size	5A / 250V
Flow rate	110~160 gal/h
Dims-(W×D×H)	7.72"x12.6"x14.1"
Weight	26.461lbs
Water Connection	1/2"

Serial NO.

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2. INTRODUCTION

Thank you for purchasing the MINI & NANO ARCTICA® **Titanium Chiller**. This powerful cooling system guarantees consistent water temperatures with the most advanced features on the market.

All models are specifically designed for longterm performance with proper maintenance and operation and provide the **BEST VALUE** in the industry.

Quality: 1 Year Limited Warranty on all parts & labor from the date of purchase.

Service: Qualified technicians are available for topics ranging from chiller sizing, performance troubleshooting, and providing detailed instructions for maintenance procedures.

3. RECEIVING AND INSPECTION

Inspect the chiller closely when it is received. Record any indication of damage on the delivery receipt, especially if the chiller will not be immediately uncrated. Obtain the delivery person's signed agreement to recorded damages to facilitate future insurance claims.

Since the chiller is shipped F.O.B. Factory, the manufacture's responsibility for the shipment ceases when the carrier signs the bill of lading.

If goods are received short or damaged condition, notify the carrier and insist on a notation of the loss or damage across the face of the freight bill. Otherwise no claim can be enforced against the carrier.

If concealed loss or damage is discovered, notify your carrier at once and request an inspection. This is absolutely necessary. Unless you do this, the carrier will not consider any claim for loss or damage. The carrier will make an inspection and may grant a concealed damage notation. If you give the carrier a clear receipt for the goods that have been damaged or lost in transit, you do so at your own risk and expense.

The manufacturer is willing to assist you in collecting claims for loss or damage. Willingness does not make the manufacturer responsible for collecting claims or replacing material. Claim filing and processing is your responsibility.

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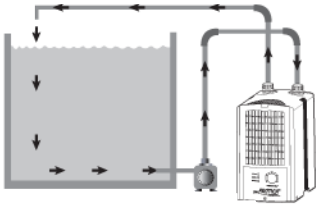
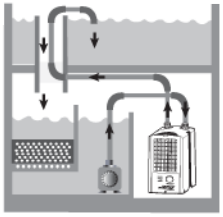
4. INSTALLATION

Place the chiller in a ventilated place and away from sources of heat, making sure that the front and rear of the chiller have at least 1 foot clearance for air flow. The chiller must have proper air flow to function correctly. **DO NOT PLACE INSIDE AQUARIUM STANDS THAT ARE ENCLOSED!**

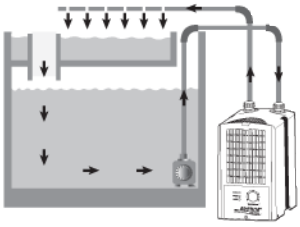
4-1. Installation to Aquarium (or Tank)



1. Connection of outside circulation pump



2. Connection of circulation pump in the filter



3. Connection of inside circulation pump

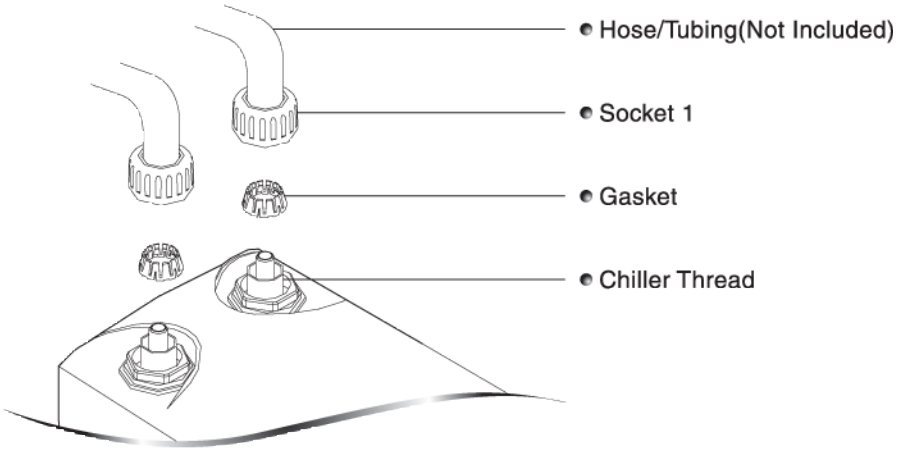
4-2. How to Connect Hose

1.) method of connecting hose to **chiller.**

① Unscrew hose.
② Insert hose tube into socket 1.
③ Insert hose tube into gasket.
④ Screw onto **chiller** and hand tighten.

2.) Checking equipment connection.

⚠ These units have been performance tested and may contain moisture in the heat exchange chamber.



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5.1GETTING STARTED

5-1. Start Up

1.) Once all connections are made, circulate water through chiller before plugging into an electrical outlet.

2.) Check all connections for leaks.

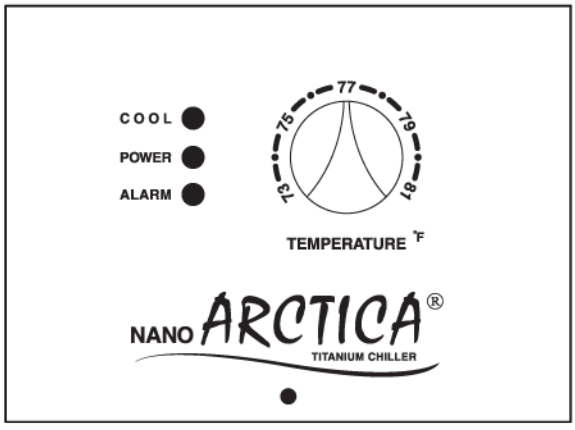
3.) Verify electricity rating. And then plug power cord into a dedicated electrical outlet. The LED for POWER on the controller will illuminate at this time.

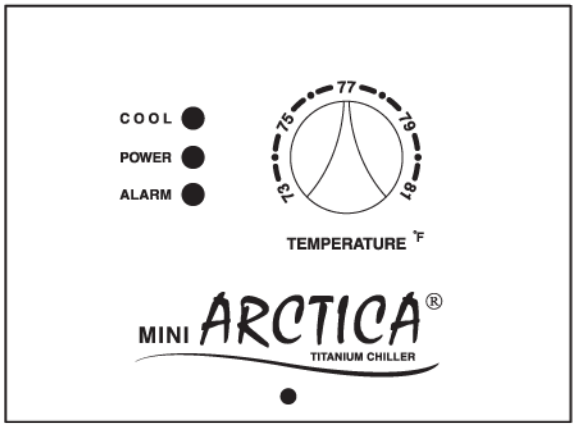
4.) Turn the dial on the controller to your desired set temperature. This unit contains an Auto Analog Temperature Control System.
This built-in thermostat will turn itself on/off within +/- 1F according to the desired set temperature.

5.) Chiller will automatically turn on, the LED for COOL on the controller will illuminate when in cooling mode.

6.) Always use a thermometer to verify aquarium water temperature.

* This chiller incorporates a LED ALARM SYSTEM that displays when the water temperature reaches 2 F degrees below the desired set temp. The LED for ALARM on the controller will illuminate at this time.





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6. MAINTENANCE

WARNING

Always unplug the chiller from the electrical outlet when performing maintenance procedures

6-1. Operations To Be Carried Out Every 6 Months

- Cleaning of the filter

  Remove the filter and with a vacuum cleaner or jet of air to clean dust and debris from impeding air flow.

- Cleaning of the Heat exchanger

  The elimination of deposits of impurities, bacteria, or metabolic waste not captured by the pre-filter are vital for the performance of this chiller. Circulate clean water in the opposite direction through heat exchange chamber for 30 minutes.

Table 1 **CHILLER SPECIFICATIONS**

ITEM	MINI	NANO
Model	DBI-050	DBI-038
Horsepower	1/15HP	1/20HP
BTU	900 BTU/h	600 BTU/h
Amps	2.0A	1.8A
Voltage	115V	115V
Fuse Size	5A / 250V	5A / 250V
Flow rate	110~160 gal/h	110~160 gal/h
Dims-(W×D×H)	7.7"×12.6"×14."1	7.7"×12.6"×14.1"
Weight	28.66lbs	26.461lbs
Water Connection	1/2"	1/2"

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ELECTRIC WIRING DIAGRAM OF MINI&NANO ARCTICA
MODEL:DBI-050/DBI-038

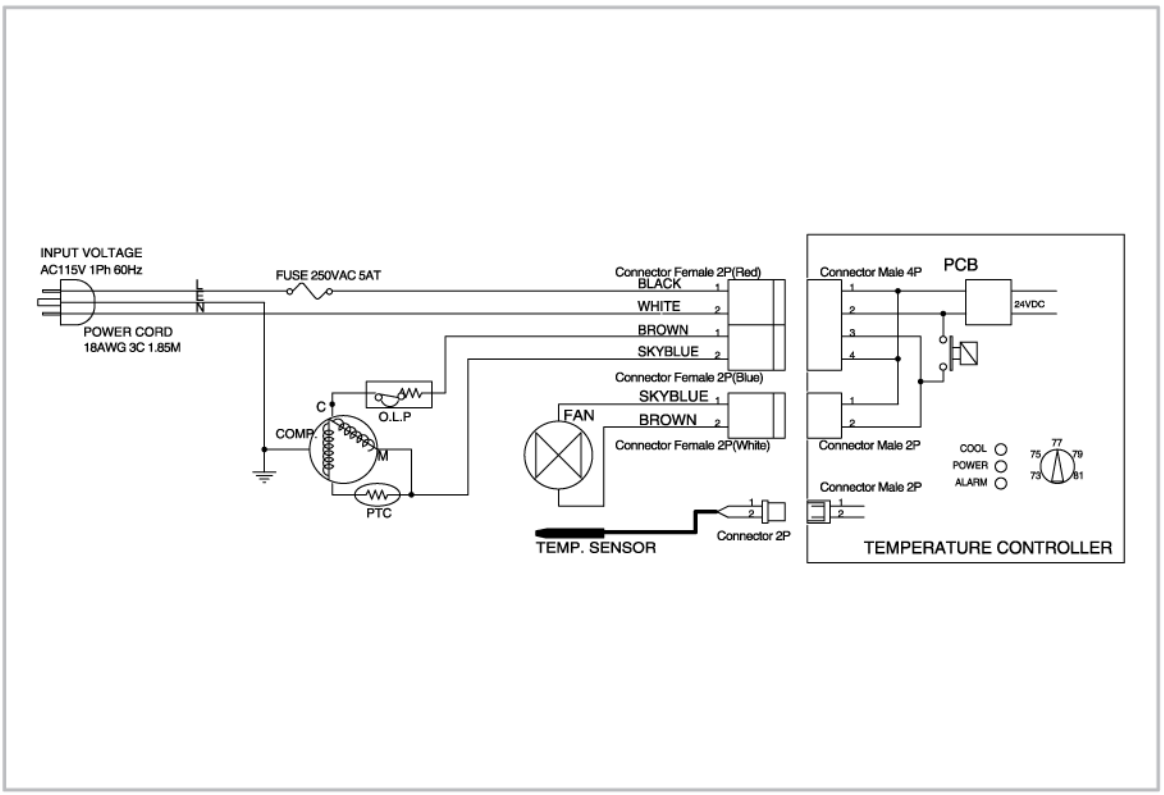

Figure 1
Electrical Diagram

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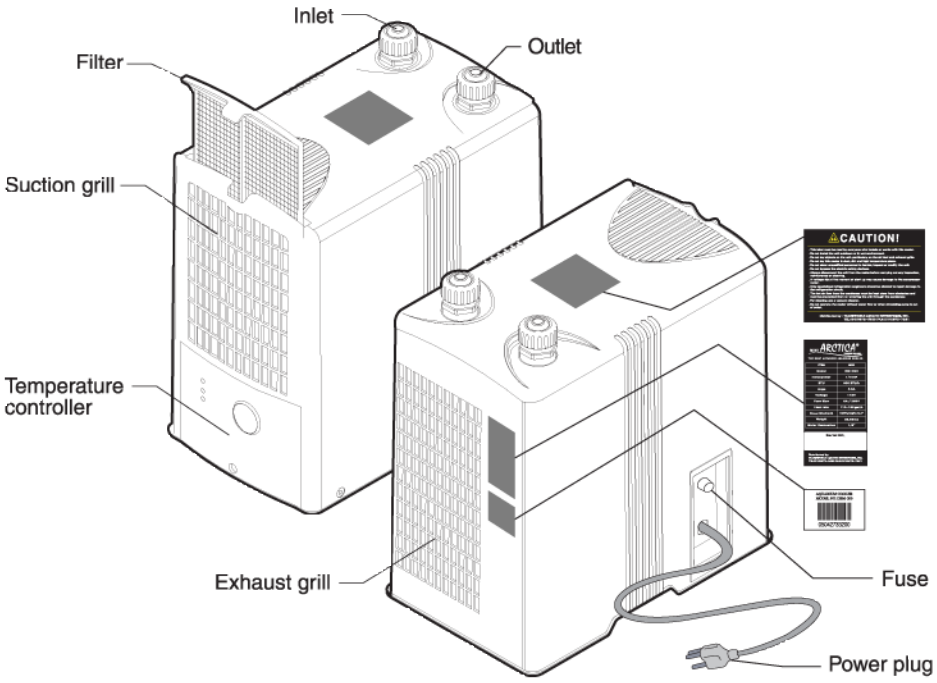

TEMPERATURE CONTROLLER

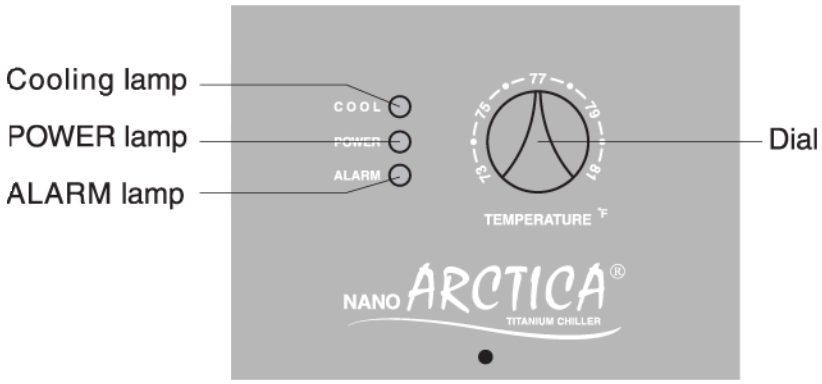

Figure 2
Part Name for Chiller

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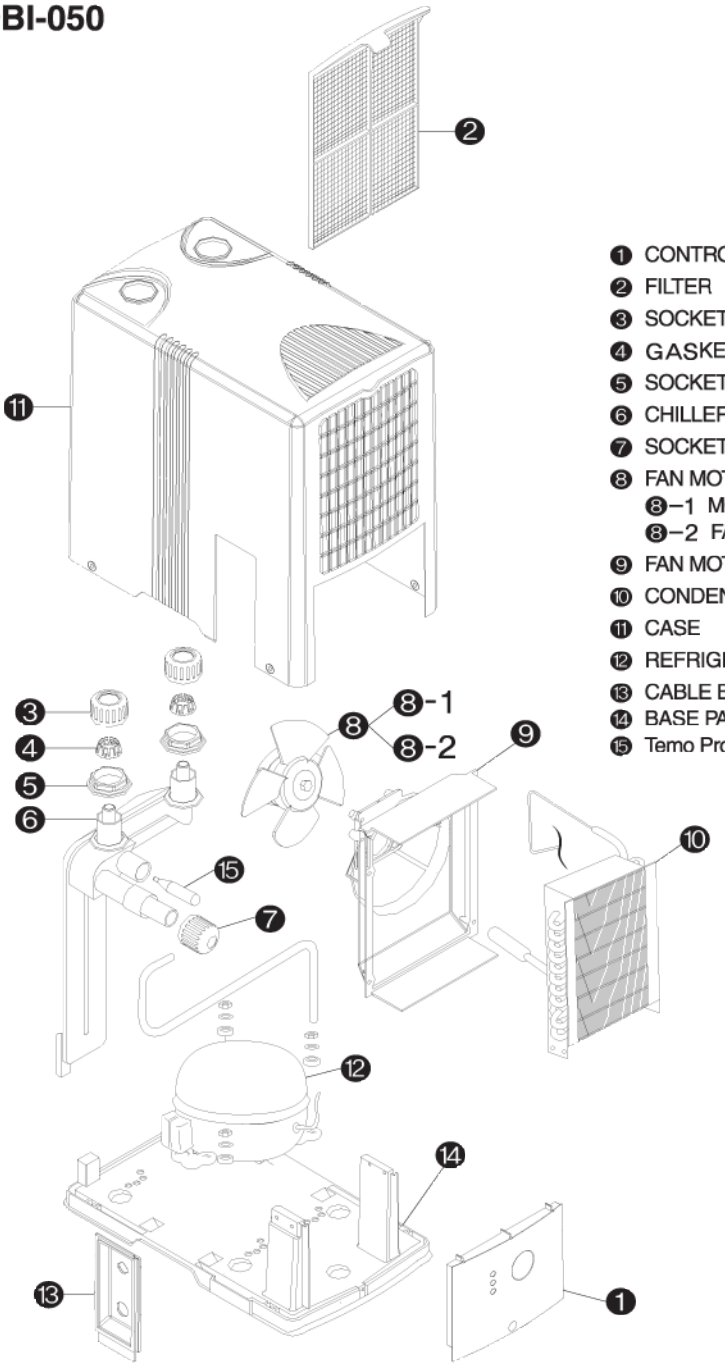

Figure 3
Exploded View and Part Name

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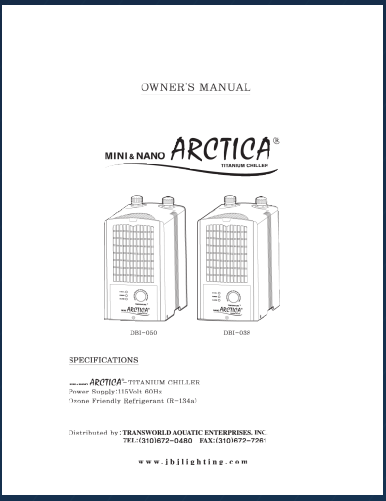
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MINI & NANO ARCTICA®
TITANIUM CHILLER

DBI-050 DBI-038

SPECIFICATIONS

ARCTICA®-TITANIUM CHILLER
Power Supply:115Volt 60Hz
Ozone Friendly Refrigerant (R-134a)

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