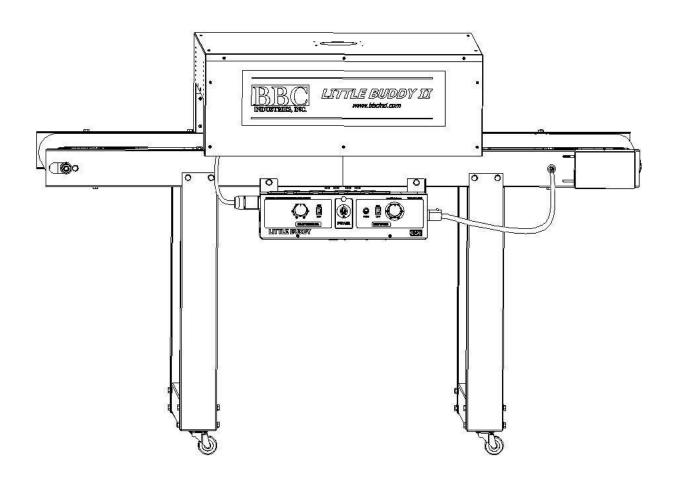


# Little Buddy™ II Conveyor Dryer

18" wide by 5' long conveyor dryer Document # 16-437 Rev. T



Serial Number: \_\_\_\_\_ Date: \_\_/\_/

(Record your machine's serial number and date of purchase for future reference)

#### **IMPORTANT INSTRUCTIONS:**

Read all these instructions before installing or using this equipment. Verify that the proper tools, materials, and personnel are available for the safe and successful use of the dryer.

BBC Industries, Inc. is interested in the safe operation of its equipment. All wiring to this equipment must be connected to the electrical source in strict accordance with *National Electrical Code (N. E. C.)* and local codes having jurisdiction.

Do Not use extension cords to power this equipment.

Before installing this equipment, the user must be aware of the safety requirements as specified by the *National Fire Protection Association (NFPA)*..



**CAUTION:** Puncture of the element face may result in a shock hazard.

This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, etc. and away from the dryer.

Extreme caution is necessary when any dryer is used by or near children or invalids and whenever the heater is left operating and unattended.

Do not operate any heater after it malfunctions. Disconnect power at service panel and have heater inspected by a reputable electrician before reusing.

Do not use outdoors.

To disconnect dryer, turn off power to dryer circuit at main disconnect panel.

Do not insert or allow foreign objects to enter any ventilation opening as this may cause an electric shock or fire, or damage to the dryer.

A dryer has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint, or flammable vapors or liquids are used or stored.

Use this dryer only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.

### SAVE THESE INSTRUCTIONS

### Assembly and Operating Instructions RETAIN THIS MANUAL FOR FUTURE REFERENCE

Please review all of these instructions prior to assembly. The *Little Buddy* is packaged in 5 cartons for shipment.

Please make sure all pieces have been received before attempting assembly.

Tools Required: One 1/2" wrench & needle nose pliers

Label on Box	Qty	Contents
LB17-D &	1	Drive half of Conveyor Bed, with motor
LB17-T	1	Take Up half of Conveyor Bed
	4	Conveyor Leg Assembly
LB17-LK	2	Leg Cross Assembly
	30	Bolts
LB09-300	1	Conveyor Belt
LB17-CP-120, LB17-CP-200, LB17-CP-240, or LB17-CP-CE	1	Control Panel
LB17-2000C, LB17-3000C, or LB17-3000CJ	1 1 1 2	Assembly Instructions Heating Chamber 4-inch Duct Collar End Shield



**Note:** DO NOT plug the equipment in (or apply power) until instructed to do so.

Note: The Little Buddy LB17-2000 requires a 120 Volt, 20 Amp circuit. The Little Buddy LB17-3000 & LB17-3000-CE requires a 240 Volt, 20 Amp circuit. The Little Buddy LB17-3000J requires a 200 Volt, 20 Amp circuit. Any attempt to operate the Riley Cure-6500 without the cord/plug provided by the manufacturer will void the warranty.

#### Accessories available:

- LB02-EX Exhaust Kit
- LB15-HK Height Kit (Raises chamber 5")
- LB17-S Shelf
- 90-409 Motor Cord (For Control Panel Assembly Opposite Side)

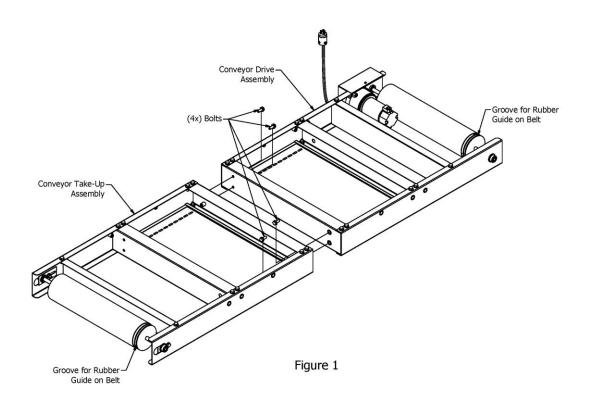
**Note:** Portions of the assembly procedure require 2 people.

Unpack, identify, and inspect all parts. Report any missing or damaged items.

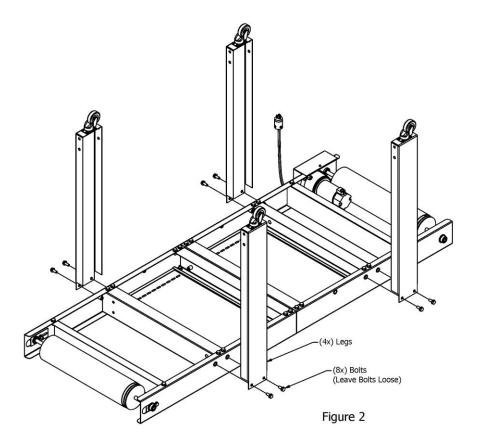
Cover a 3' x 7' area on the floor with towels, cardboard, carpet, etc. to protect the painted parts from being scratched during assembly.

#### **Conveyor Bed Assembly:**

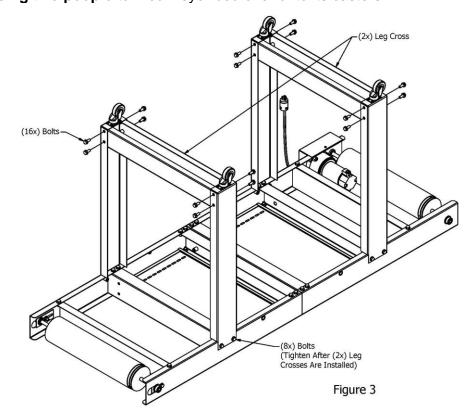
- 1. Remove (4x) bolts from LB17-LK carton.
- 2. Place the Conveyor Drive Assembly on the covered floor. (See Figure 1)
- 3. Butt the Conveyor Take-Up Assembly to the Drive Assembly. Be sure that the groove on each roller drum is on the same side of the bed.
- 4. Bolt the bed assembly together using (4x) bolts.



5. Fasten (4x) legs with (8x) bolts. Leave bolts loose. (See Figure 2)

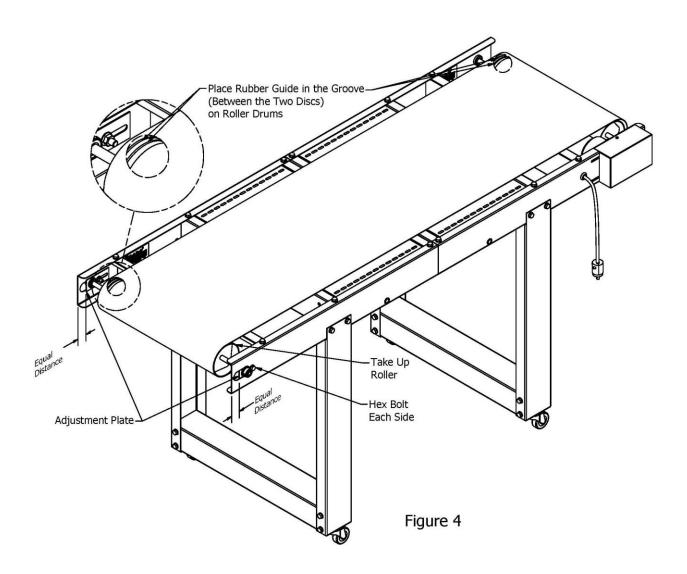


- 6. Install (2x) leg crosses to legs with (16x) bolts. (See Figure 3)
- 7. Tighten all bolts.
  8. Using two people turn conveyor bed over onto its casters.



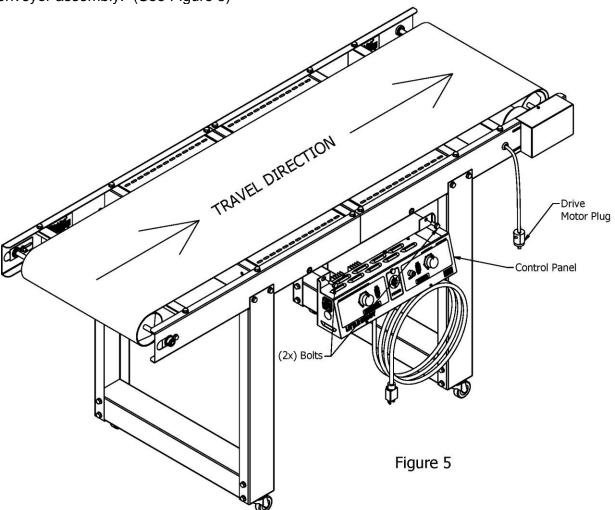
#### **Conveyor Belt Installation:**

- 1. Determine the side of the belt that will convey product. A rubber guide is stitched onto one edge of the belt. This guide is designed to ride in the roller drum grooves to provide Hassle-Free-Tracking. (See Figure 4)
- Carefully remove the splice pin from the inside teeth of the splice connector by pulling gently with needle nose pliers. DO NOT BEND; this pin will be reinserted later.
- 3. Lay the belt on the conveyor bed aligning the edge guide with the roller drum grooves.
- 4. Pull the ends of the belt together meshing the teeth of the splice while a **second person** reinserts the splice pin (removed earlier) into the channel formed by the interlocked metal teeth. It may be easier to rotate the belt so that the splice is on top of the conveyor bed before inserting pin. Using needle nose pliers, fully insert the pin until it is centered.
- 5. **Adjust belt tension:** Loosen (2x) hex bolts at Take Up Roller (See Figure 4). Pull roller at groove end till you have sag of 1 1.5 inches below the cross-members as the belt travels under the conveyor bed. Tighten hex bolt.
- 6. Adjust opposite end of roller to same location and tighten hex bolt.

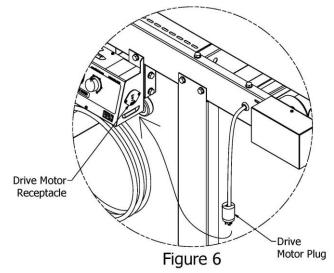


#### **Control Panel Installation:**

1. Use the remaining (2x) bolts from LB17-LK carton to fasten the control panel to the conveyor assembly. (See Figure 5)

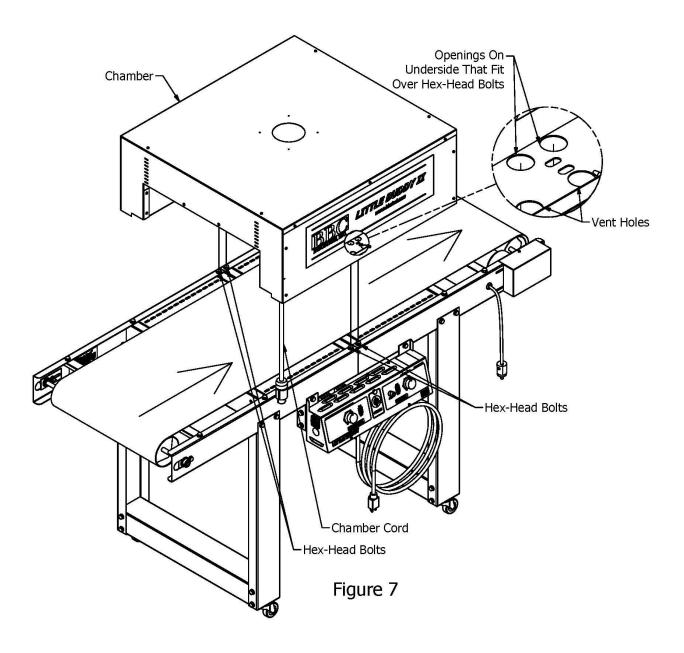


2. Insert drive motor plug into drive motor receptacle. Twist plug to lock in place. (See Figure 6)

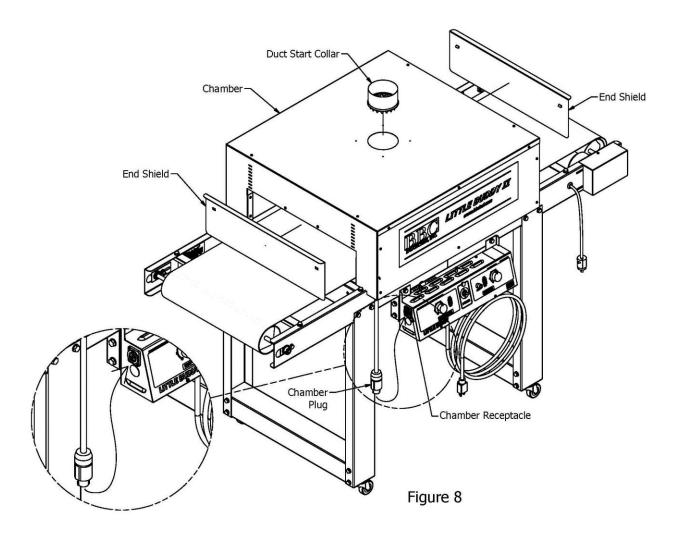


#### **Attaching Heating Chamber:**

- Using two people set the chamber onto the conveyor bed. (See Figure 7) The Heating Chamber cord must be on the same side of the Conveyor Bed as the Control Panel.
- 2. The Heating Chamber has openings on the underside rails that fit over the hex-head bolts. (See Magnified View, Figure 7) The chamber should rest flatly on the conveyor bed.

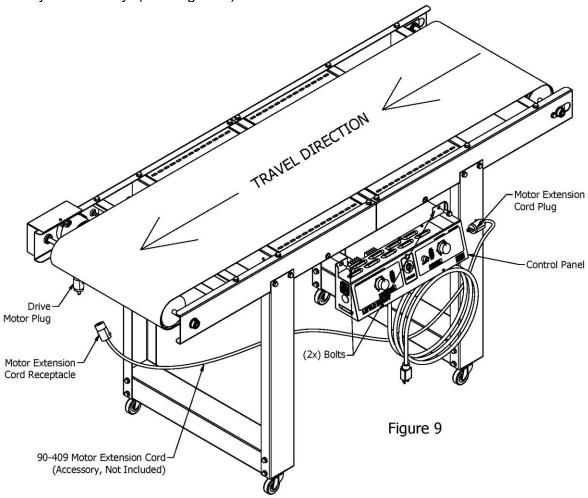


- 3. Insert the Duct Start Collar into the hole in the top of the Heating Chamber. Once in position, bend the tabs at the base of the collar outward to secure it in place. Note: The chamber will function properly with only the duct start collar installed. Installing a two to three foot section of 4" diameter ductwork on the start collar will improve the capture of heat and vapors created during the curing process. Installing the 4" diameter ductwork will also make the top of the Heating Chamber cooler. Optional exhaust kit (LB02-EX) available.
- 4. Place End Shields at desired height on the entrance and exit of the Heating Chamber.
- 5. Plug the Heating Chamber cord into the receptacle on the Control Panel. (See Magnified View, Figure 8)

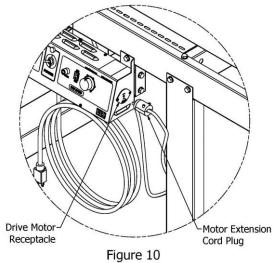


#### Control Panel Installation Opposite Side: (90-409 Extension Cord Sold Separately)

1. Use the remaining (2x) bolts from LB17-LK carton to fasten the control panel to the conveyor assembly. (See Figure 9)

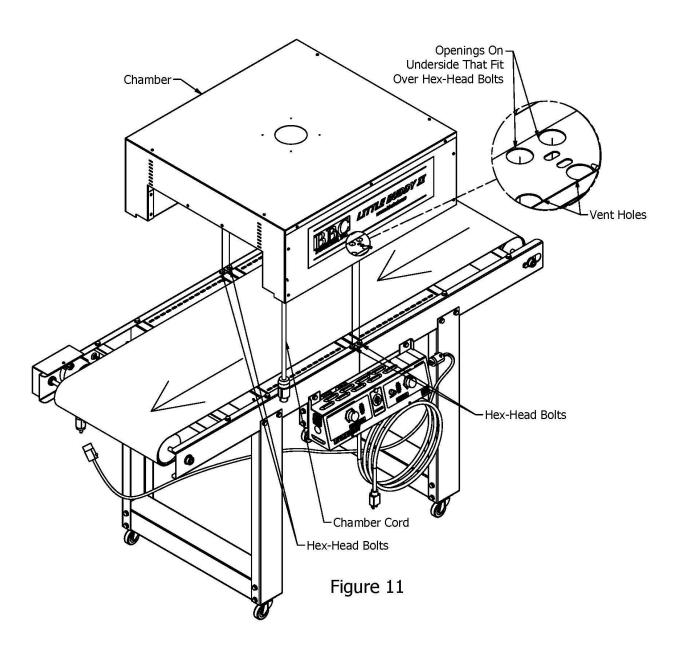


2. Insert drive motor plug into motor extension cord receptacle. Twist plug to lock in place. Insert motor extension cord plug into drive motor receptacle. Twist plug to lock in place. (See Figure 10)

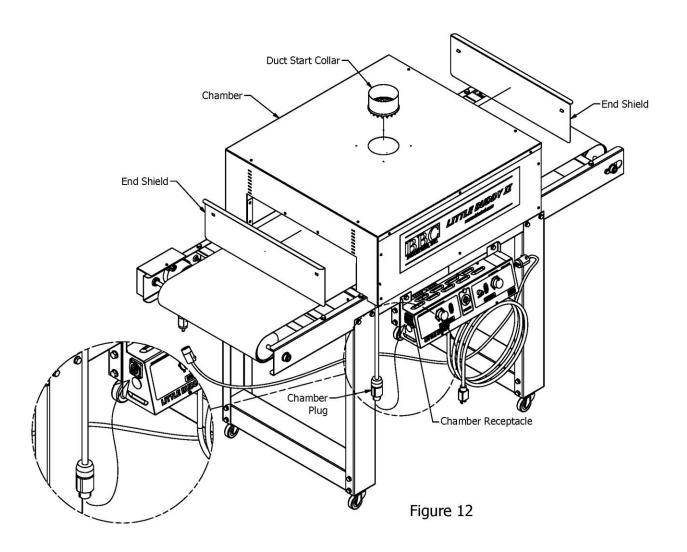


#### **Attaching Heating Chamber Opposite Side:**

- Using two people set the chamber onto the conveyor bed. (See Figure 11) The Heating Chamber cord must be on the same side of the Conveyor Bed as the Control Panel.
- 2. The Heating Chamber has openings on the underside rails that fit over the hex-head bolts. (See Magnified View, Figure 11) The chamber should rest flatly on the conveyor bed.



- 3. Insert the Duct Start Collar into the hole in the top of the Heating Chamber. Once in position, bend the tabs at the base of the collar outward to secure it in place. **Note:** The chamber will function properly with only the duct start collar installed. Installing a 2 3 foot section of 4" diameter ductwork on the start collar will improve the capture of heat and vapors created during the curing process. Installing the 4" diameter ductwork will also make the top of the Heating Chamber cooler. Optional exhaust kit (LB02-EX) available.
- 4. Place End Shields at desired height on the entrance and exit of the Heating Chamber.
- 5. Plug the Heating Chamber cord into the receptacle on the Control Panel. (See Magnified View, Figure 12)



#### **Recommended Initial Start-Up Procedure:**

1. **DO NOT** plug the equipment in (or apply power) until instructed to do so.

Note: The Little Buddy LB17-2000 requires a 120 Volt, 20 Amp circuit. The Little Buddy LB17-3000 & LB17-3000-CE requires a 240 Volt, 20 Amp circuit. The Little Buddy LB17-3000J requires a 200 Volt, 20 Amp circuit. Any attempt to operate the Little Buddy without the cord/plug provided by the manufacturer will void the warranty.

- 2. Plug the Control Panel into a suitable power source.
- 3. Turn the Main Power Switch to ON position. The green indicator light will illuminate.
- 4. Turn Belt Speed to 5. Flip rocker switch for Belt Speed to ON position to start belt. Listen for any unusual noises. Check to see if the rubber edge guide is riding in the roller drum grooves.
- Turn Heat Control to 5. Flip rocker switch for Heat Control to ON position.
   Note: These are not production settings. They are intended for initial startup only.



**Caution:** DO NOT operate Heating Chamber unless belt is moving. Heat will damage an idle belt.

6. Verify that the heating element is functioning: after about a minute of operation, briefly feel just inside both the entrance and exit ends of the chamber. The area should be warm.



**Caution:** Heating element is exposed inside the chamber and is operating at very high temperatures. Keep your hand close to the moving belt (without touching it).

**Note:** Some smoke/vapor and odor may be noticed during initial start-up due to residual material from the manufacturing process burning off the elements.

7. Working temperature will be reached after a ten-minute warm-up.

Test articles may be run to determine the optimal production speed and heat setting for your environment and products.

Belt speed can be determined by placing a small item that will not melt, like a coin, on the conveyor belt and recording the time it takes to travel through the chamber.

**Note:** The speed and temperature of the unit may vary slightly with fluctuations in power/voltage servicing the equipment.

Process an item through the dryer. Evaluate the completed article according to your quality standards. If the equipment is being used for curing of ink on garments, we recommend washing the processed garment as the definitive test.

For multiple determined settings you may, use a dry erase marker on the screen-printed portion of the Control Panel to indicate the Heat Control and Belt Speed settings.

The conveyor dryer is now ready for normal **Use and Operation**.

**Control Panel Maintenance:** Performed at initial installation, 30 days after initial installation, and 120 days after initial installation.

1. Turn *OFF* the power serving the main control panel where it is connected to the building electrical distribution system.

**Note:** Assure that appropriate "Lock-Out / Tag-Out" procedures are followed before conducting any of these activities.

2. After double checking that the power is off, confirm that all electrical terminations inside of the main control panel are secure by checking the "tightness" of each termination screw (or wire nut as may be applicable) and then "tugging" on each conductor.

Routine Maintenance: Performed after first week and every 100 hours of operation.

- 1. The belt should be replaced if it has any tears, voids, separations, fraying, or no longer rides in the roller drum groove due to excessive wear.
- 2. Belt tension: the belt will relax over time and tension may have to be adjusted by the instructions above.

#### **Troubleshooting:**

Symptom	What to Check
	<ul> <li>Incoming power, correct voltage</li> </ul>
No heat, belt not moving, & power light is off	Main power switch
	Power cord plugged in
	<ul> <li>Chamber cord plugged into control</li> </ul>
No heat, belt moving, & power light is on	panel
	<ul> <li>Heat control knob not turned up</li> </ul>
Oven temperature too low	<ul> <li>Heat control knob not turned up</li> </ul>
Over temperature too low	<ul> <li>Incorrect power to heater</li> </ul>
Oven temperature too high	<ul> <li>Incorrect power to heater</li> </ul>
Temperature fluctuates	<ul> <li>Curtains too high</li> </ul>
	<ul> <li>Eliminate wind or draft through heater</li> </ul>
	<ul> <li>Motor power cord plugged in, twist &amp;</li> </ul>
	locked into place
	Fuse on control panel
Belt stopped or is erratic	Sprockets & chain
	<ul> <li>Speed control knob turned down</li> </ul>
	<ul> <li>Brushes in motor, contact BBC for</li> </ul>
	replacements
Excessive motor noise	<ul> <li>Brushes in motor, contact BBC for</li> </ul>
LYCESSIVE HIDIOI HOISE	replacements



## WARRANTY

BBC Industries, Inc. warrants their products to be free from defects in workmanship at the time of shipment.

The obligation under the above warranty shall be limited to the repair or replacement of any part or parts manufactured by BBC Industries, Inc. without charge F.O.B. factory that may prove defective within 12 months from the date of shipment, which are returned to BBC Industries, Inc.

The above warranties are the only warranties made with respect to the equipment. There is no implied warranty of merchantability or of fitness.

#### **EXCLUSIONS:**

There is no warranty on parts not manufactured by BBC Industries, Inc., other than the respective manufacturer's warranty, if any.

The warranty against defects shall not extend to damage caused from any of the following:

- Transport by carrier
- Corrosion
- Operation or use in a manner inconsistent with specifications and/or operating instructions
- Ordinary wear, accident, improper installation, or maintenance
- Alterations made to equipment in any way

BBC Industries, Inc. shall not be liable for any losses or damages, including but not limited to incidental or consequential damages, suffered or incurred because the equipment proves to be defective either upon installation or during its operation or use.

Shipment of defective parts to BBC Industries, Inc. and the return shipment of any repaired or replacement parts from BBC Industries, Inc. shall be the purchaser's/user's expense.

BBC Industries, Inc. - (800) 654-4205 - www.bbcind.com