



# *BBAIR-2408-240V*

## *Conveyor Dryer*

24" wide by 8' long conveyor dryer with forced air and infrared  
Document # 16-444

### **Assembly and Operating Instructions**

Please review all these instructions prior to assembly.

The Big Buddy-Air is packaged in four cartons for shipment. Please make sure that all pieces have been received before attempting assembly.

**Tools Required:** Two ½" wrenches, ¼" Allen wrench, flat head screwdriver, Phillips screwdriver & needle nose pliers.

<b>Label on Box</b>	<b>Qty</b>	<b>Contents</b>
BB08-T	1	Conveyor Take-Up Assembly
	1	Chamber Floor
BBAIR-D	1	Conveyor Drive Assembly
	1	Conveyor Belt
	1	Junction Box Cover
BBAIR-C	1	Heating Chamber
	1	Assembly Instructions
BBAIR-LK	4	Conveyor Leg
	2	Cross Member
	4	#6 Sheet Metal Screws
	28	Serrated 5/16-18 Nut
	28	Serrated 5/16-18 Bolt

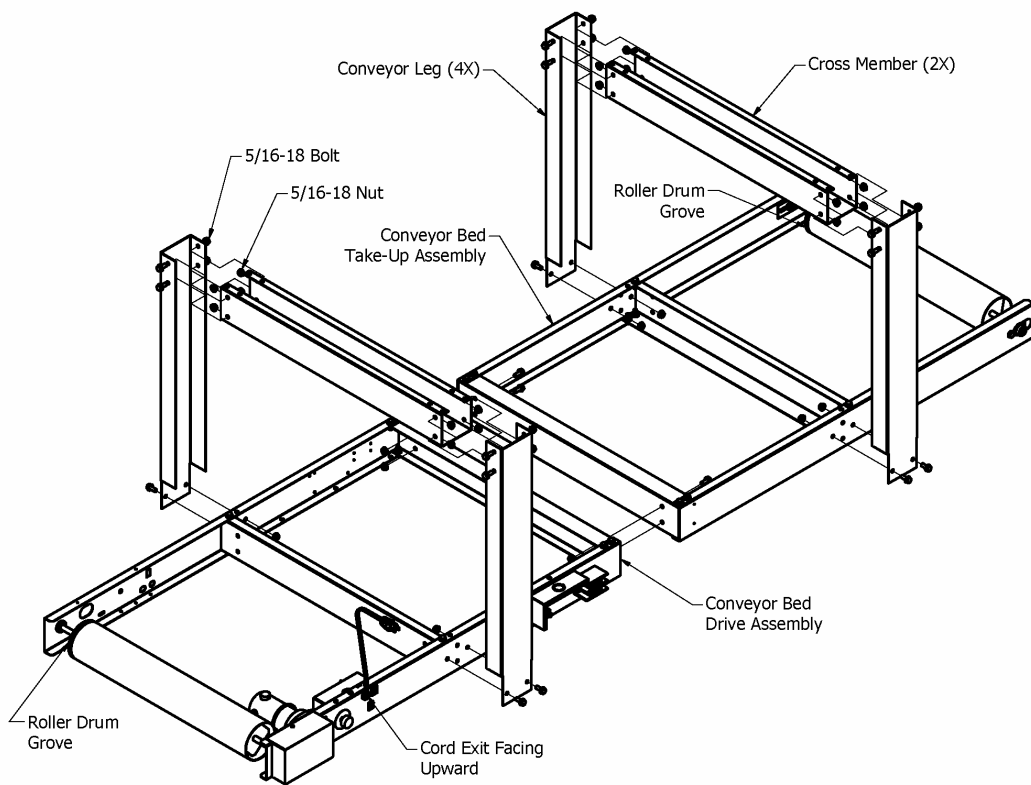
**Note:** Portions of the assembly procedure require two people.

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

Cover a 4' X 9' area on the floor with towels, cardboard, carpet, etc. to protect the painted parts from being scratched during assembly.

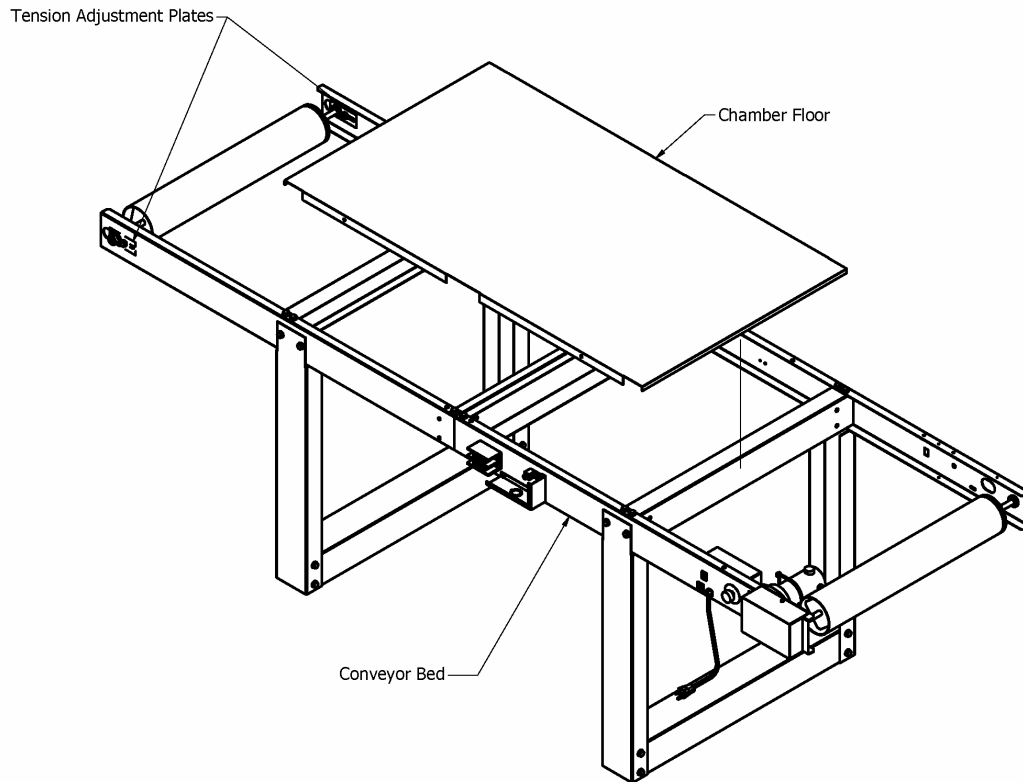
### Conveyor Bed Assembly:

1. Check to see if any of the bearings that capture the Roller Drums have come out of their respective holes in the Rail. Reseat if needed.
2. Place the Conveyor Drive Assembly on the covered floor upside-down with the cord exit facing upward (see Fig. 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 four 5/16-18 Bolts.
5. Bolt the Cross Members between the bases of the Conveyor Legs as shown using sixteen 5/16-18 bolts. Attach the Cross Member with the open channel facing toward the bottom of the conveyor leg (see Fig. 1).



**Figure 1 - Conveyor Bed Assembly**

6. Attach the Conveyor Leg Assemblies to the Conveyor Bed using the 5/16-18 Bolts.
7. **Using two people** turn conveyor bed over onto its legs.
8. Set Chamber Floor onto conveyor bed (see Fig. 2). The Chamber Floor is not fastened to the conveyor bed.



**Figure 2 - Chamber Floor Assembly**

### **Conveyor Belt Installation:**

1. Loosen (but do not remove) the bolts that secure the Tension Adjustment Plates (see Fig. 2) to allow the Take-Up roller drum to slide in the bearing slot.
2. Locate the rubber guide that is stitched onto one edge of the belt. This guide is designed to ride in the roller drum grooves to provide Hassle-Free-Tracking.
3. 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.
4. Lay the belt on the conveyor bed aligning the edge guide with the roller drum grooves.
5. 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. **BE SURE** to align the edges of the belt with one another. 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.
6. **Tighten belt tension** by pulling each side of the drum roller back by hand and tightening the Belt Tensioning Bolts. The tension needs only to be great enough to prevent the belt from slipping during operation. Over-tightening will cause damage to the belt over time.

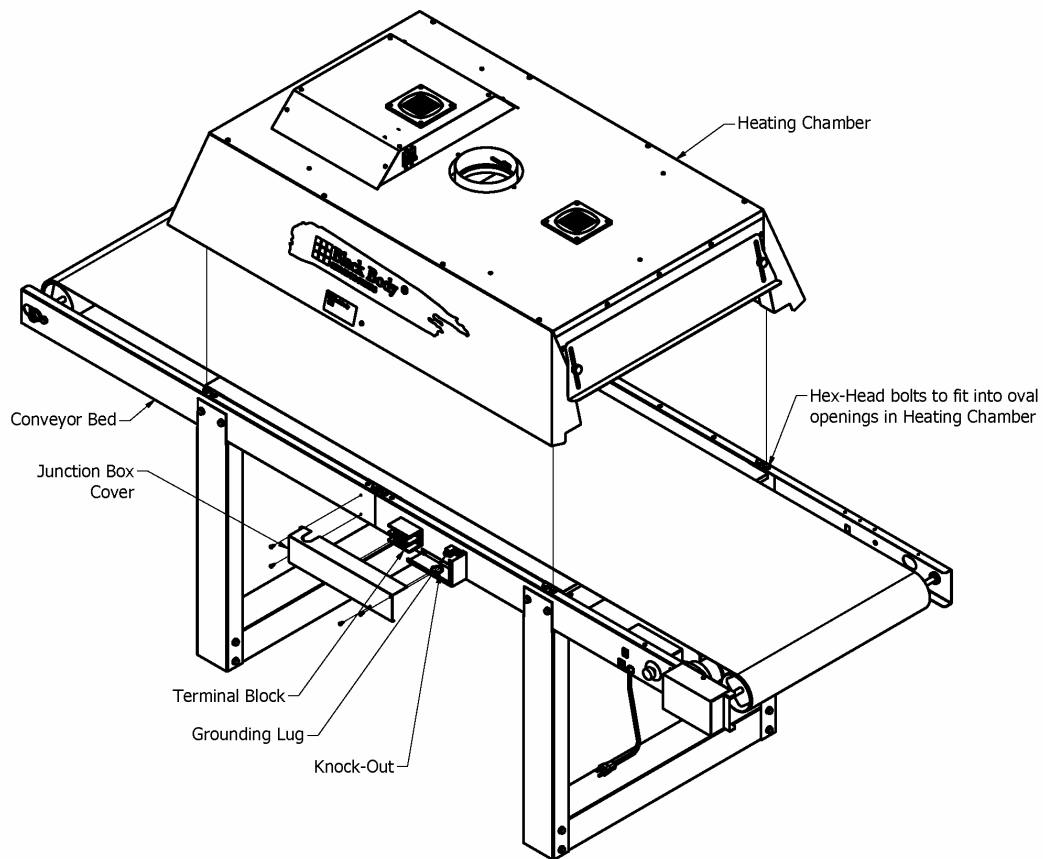
Proper tension = belt should sag 1 – 1.5 inches below the cross-members as the belt travels under the conveyor bed.

### Attaching Heating Chamber:

1. **Using two people** set the chamber onto the conveyor bed (see Fig. 3). The side of the Heating Chamber with the Power Label and connecting lead wires must be on the same side of the Conveyor Bed as the Junction Box.
2. The Heating Chamber has oval openings on the underside rails that fit over the hex-head bolts. The chamber should rest flatly on the conveyor bed.
3. The BBAIR-2408-240V does not come supplied with a cord. Have a certified electrician connect the unit to power through the Junction Box according to local electric code.

POWER	VOLTS	AMPS
10.51 / 7.9 kW	240 / 208 VAC	43.8 / 38.0 Amps

**Note:** The conveyor bed is powered by a standard 115 VAC circuit



**Figure 3 - Heating Chamber Assembly**

**Recommended Initial Start-Up Procedure:**

1. Locate the conveyor belt speed control side rail of the conveyor and switch it to the ON position. Turn knob to the halfway point and listen for any unusual noises. Check to see if the rubber edge guide is riding in the roller drum grooves.
2. Be sure the illuminated HEAT switch is in the OFF position.
3. Throw the main power switch located on the back of the Heating Chamber control box. The temperature controller will illuminate and the internal fans will energize.

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

4. Choose oven setting for either plastisol inks or water based inks (this includes direct-to-garment digital inks).
5. Set the oven controls to the settings listed:

**Note:** These temperature settings are suggestions only. Variations in inks, shirts as well as ambient air conditions will affect these temperatures as much as 25°F.

	Heating Element Temperature	Belt Speed / Chamber Time
Plastisol Ink Screen-Printing	850°F	:40 - :50
Water Based Ink Screen-Printing	825°F	1:30-2:00
Direct-to-Garment Digital Printing	800°F	3:30-4:00

6. Belt Speed / Chamber Time is set by placing an item on the belt (such as a coin) and measuring the length of time it take for the item to travel though the chamber.
7. Flip the illuminated HEAT switch to the ON position. Verify that the heating elements are 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 elements are exposed inside the chamber and are operation at very high temperatures. Keep your hand close to the moving belt.

**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.

**Note:** The chamber will function properly with only the duct start collar installed. Installing a two to three foot section of 6" diameter ductwork on the start collar will improve the capture of heat and vapors created during the curing process. Optional exhaust kit (LB02-EX) available.

8. Once the oven reaches the set temperature, allow a few minutes for the oven to fully stabilize.
9. **Shut-Down Procedure - Important:** DO NOT turn off oven by way of the main power switch! Heat from the Elements will damage the internal fans and controls. Turn OFF the Heater switch. Allow the oven temperature to fall below 250°F before turning off main power. The Conveyor Belt can be shut off as soon as power is cut to the heaters.

Test articles should be run to determine the optimal speed of the conveyor for your environment and products. It is recommended washing the processed garment as the definitive test.

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

**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.

## **MANUFACTURES WARRANTY**

All products are warranted against 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 without charge F.O.B. factory that may prove defective within 12 months from the date of shipment, which are returned to BBC Industries.

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, other than the respective manufacturer's warranty, if any.

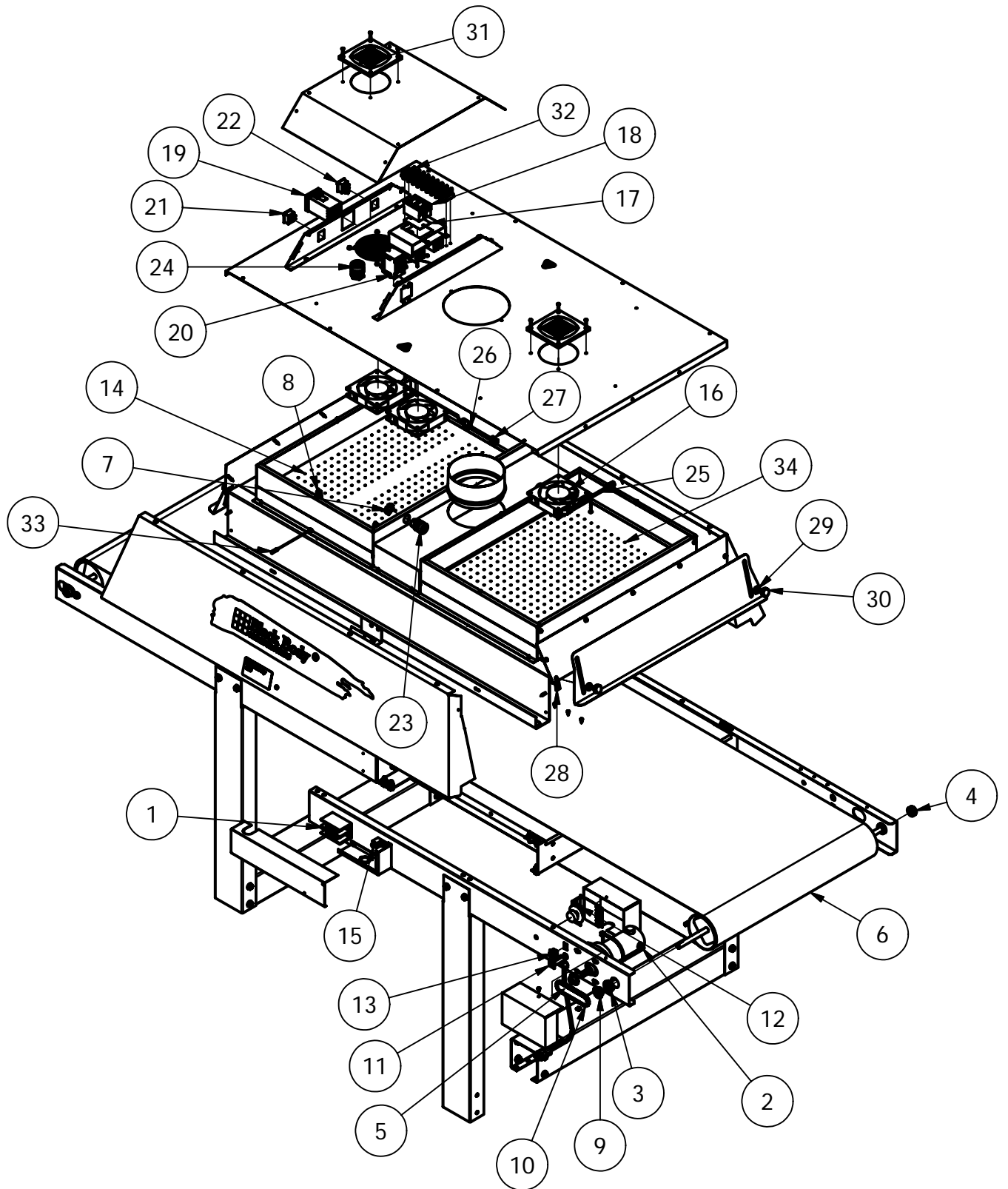
The warranty against defects shall not extend to damage caused from any of the following:

- 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 shall not be liable for 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 and the return shipment of any repaired or replacement parts from BBC Industries shall be the purchaser's/user's expense.

# REPLACEMENT PARTS LIST





PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	BB08-007	Side Rail-RH Drive
2	1	08-252	MOTOR 011-190-0096
3	4	11-108	BEARING 6384K361
4	3	97-100	COLLAR 1/2 SC50Z
5	1	90-490	CORD 8' 5-15P
6	1	BB08-300	BELT 24" W x 196.875" L w/ guide
7	3	92-267	1/2 NPT LOCKNUT
8	2	87-005	WIRE NUT (2PC) MODEL 22
9	2	08-213	SPROCKET 25B14 .5 BORE KEY SETSCREW
10	1	18-265	#25 CHAIN 41 LINKS W/MASTER
11	1	73-280	BREAKER 1/2 A
12	1	09-006-1	Speed Control-120-240VAC I, 90-180VDC O
13	1	98-093	Switch - SPST, 10A/120V, 6A/250V
14	1	33-017-6	Insulation Duraboard-Routed - 17 x 24
15	1	87-037	TERMINAL LUG LARGE 2/0-14Q
16	3	7208-17	FAN 230V (4710PS23TB20A00)
17	1	99-009	GASKET SSR 152918-2
18	1	82-315	RELAY- 75A SSR
19	1	80-613	Temp Control-Autonics TC4S-24R
20	1	97-251	BREAKER 50 AMP
21	1	98-098	SWITCH AMBER 2600HA21E
22	1	98-107	SWITCH Black 2602-11E
23	2	92-262	Cord Grip-.500-.625, 16/4 coil, CE (brn)
24	1	92-264	Cord Grip-.625-.750
25	1	FB-07	FAN CORD 12"
26	1	FB-06	FAN CORD 2 HEAD
27	4	87-007	WIRE NUT (2PC) MODEL 10
28	4	24-011	1/4-20 TINNEMAN NUT
29	4	23-003	WASHER 1/4 BO
30	4	93-011	KNOB 1/4-20 6479K33
31	2	08-507	FAN GUARD 4YD86
32	1	87-094	Terminal Block 8-pole, 65A, 300V
33	1	80-234	TC-"K", 1/16" Dia., 12"L, 60" Leads
34	1	A4900	Element - 23.6 x 17.25 4900W @240V