

Model 29027-220V

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PRODUCT INFORMATION

Please take a moment to fill out the information below in order to aid us with any future sales or service inquiries. Model number and serial number information can be found on the serial tag located inside the control box and/or on the lower exterior of the can. Key number can be found on the tag that comes attached to the keys. There may be more than one key number depending on unit.

Please keep this information with your records.

MODEL#:	
SERIAL#:	
KEY NUMBER(S):	
DATE PURCHASED:	
DISTRIBUTOR:	

J.E. Adams Industries 1025 63rd Ave. S.W. Cedar Rapids, IA 52404 1-800-553-8861

www.jeadams.com

Specifications

Unit specifications:

Voltage: 220VAC, 50/60Hz

Amperage: (1) 20 amp service is required for this unit

Weight: 250 lbs with pallet attached

Vac specifications:

Motors: (3) 220VAC Vacuum motor Fuses: (3) 8 amp inline fuses

Duty cycle time 4 minutes on, 4 minutes off.

NOTE: "UNIT INTENDED FOR COMMECIAL USE ONLY"

IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precautions should always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING (THIS APPLIANCE)

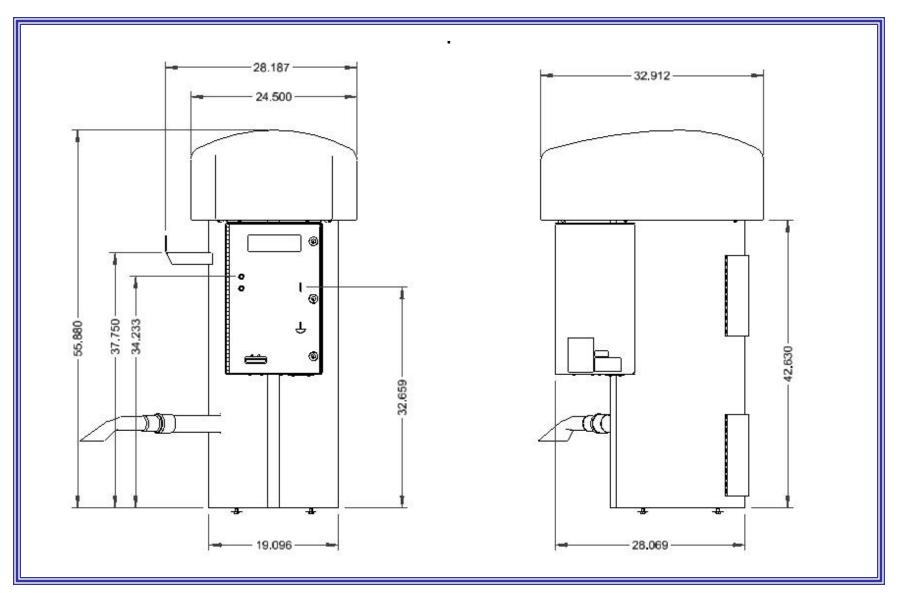
WARNING – To reduce the risk of fire, electric shock, or injury:

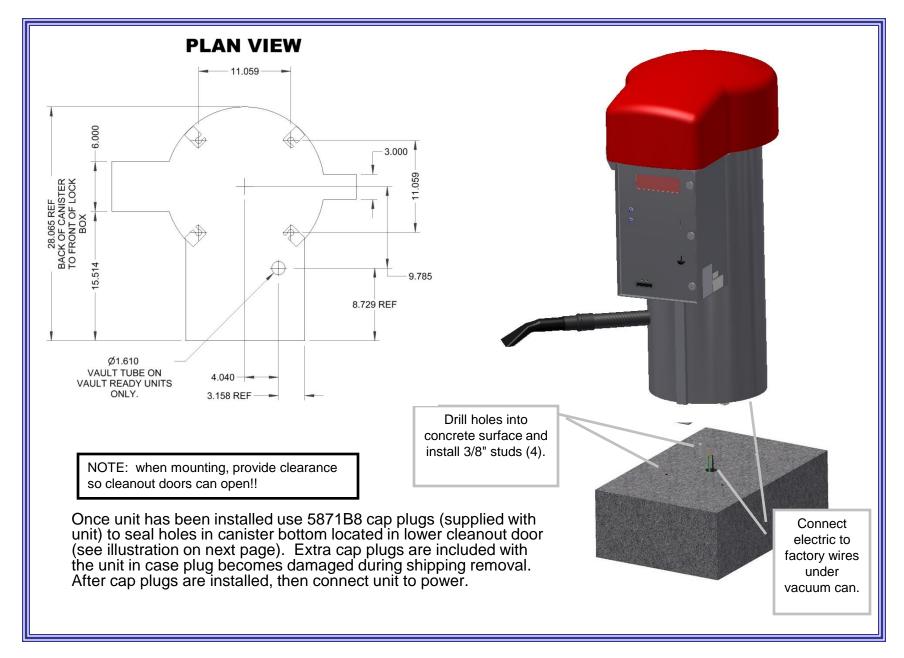
- Do not use on wet surfaces.
- Use only as described in manual. Use only manufactures recommended attachments.
- Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair and anything that may reduce air flow.
- Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- Do not use to pick up flammable or combustible liquids, such as gasoline, or use in areas where they may be present.
- Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- Do not use without dust bag and/or filters in place.

SAVE THESE INSTRUCTIONS

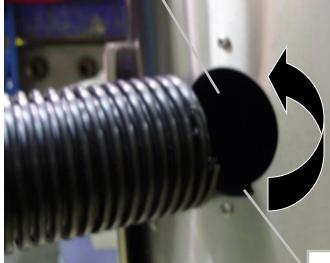
- Installation Instructions:
- Determine location to mount unit ("DANGER" "THIS EQUIPMENT INCORPORATES PARTS SUCH AS SWITCHES, MOTORS, OR THE LIKE THAT TEND TO PRODUCE ARCS OR SPARKS THAT CAN CAUSE AN EXPLOSION. WHEN LOCATED IN GASOLINE-DISPENSING AND SERVICE STATIONS INSTALL AND USE AT LEAST 20 FEET (6 M) HORIZONTALLY FROM THE EXTERIOR ENCLOSURE OF ANY DISPENSING PUMP AND AT LEAST 18 INCHES (450 MM) ABOVE A DRIVEWAY OR GROUND LEVEL."
- Run electrical service to that location (NOTE UNIT HAS WIRE PROVIDED UNDERNEATH TO CONNECT INCOMING POWER SUPPLY)
- **Grounding Instructions**: This appliance must be connected to a grounded metal, permanent wiring system; or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment-grounding terminal or lead on the appliance.
- Circuit must be protected by GFCI device.
- All local and national electric codes must be followed for installation and use.
- Licensed electricians are recommended for installation.

Product Dimensions

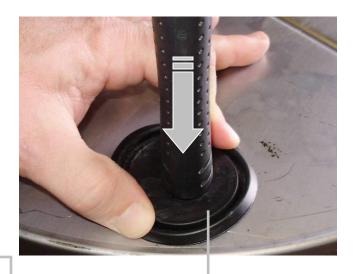




To attach hose, thread into metal hole counter clockwise.



Edge of hose will need to start here.



To insert 5871B8 cap plugs into bottom holes, pinch cap plug into place using index finger and thumb. With edges of plug resting against edges of hole, firmly push down on plug with end of hammer or other blunt object until plug snaps into place.

Now the unit can be turned on and programmed.

Programming Instructions:

Coin acceptor:

No programming to acceptor needed if unit was purchased with the standard Imonex Z32 electronic acceptor (8149-92 our part number) is pre-programmed to accept US quarters, .984 tokens, US \$1 coin and 1.073 token. Acceptor is pre-programmed before it is sent to J.E. Adams.

If different acceptor was purchased, see additional literature sent along with unit for programming info.

Bill acceptor:

Bill acceptor comes pre programmed from J.E. Adams and should not require any changes. If additional programming is needed to acceptors please refer to additional literature sent along with this unit.

Display:

Unit may be programmed when received depending on information given at that the time of order.

To program follow the instructions below.

Display programming with remote:

- 1) Press the red power button.
- 2) Timer will display 0000. At this time type in 4 digit access code. Note code will be 1234 until changed by customer.
- 3) Once code has been entered display should read ok. If display does not read ok, repeat step 1 and 2.
- 4) Press **CH** + button. Timer will display coin value. This should \$.25 and should not be changed.
- 5) Press the **CH** +button. Display will now read (**A**: **30**) or may be a different time. (**A**) Will be the time per coin for the **VAC**. Set desired time per coin by using the **VOL** to decrease or the **VOL** + to increase. Once time is entered move to next step.
- 6) Press the **CH** + button. Display will now read (**B**: **30**) or may be different time. (**B**) Will be the time per coin for **TURBO**. Set desired time per coin by using the **VOL** to decrease or the **VOL** + to increase. Once time is entered move to next step.
- 7). Press the **CH** + button. Display will now read **C**. **C** is not used.
- 8) Press the **CH** + button. Display will now read **D**. **D** is not used.
- 9) Press the **CH** + button. Display will now read **E**. **E** is not used.
- 10) Press the **CH** + button. Display will now read **F**. **F** is not used.
- 11) Press the **CH** + button. Display will now read (on A). This is the number of coins to start **VAC**. Use the **VOL** and **VOL** + to adjust. Once this is done press the **CH**+ button and repeat for (B) **TURBO**.
- 12) Press the **CH** + button. Display will read bonus time. Set if desired. See explanation at the end programming instructions.
- 13) Press the *CH* + button. Display will debit mode. Set if desired. See explanation at the end programming instructions.
- 14) Press the *CH* + button. Display will delayed start. Set if desired. See explanation at the end programming instructions.
- 15) Press the *CH* + button. Display will read *HLxx*. Set if desired. See explanation at the end programming instructions.
- 16) Press the *CH* + button. Display will read Restart off or restart on depending on what is set. Restart off will require a person to put in full amount after unit is turned off to reactivate. Restart on allows for additional coins to be put in the machine to keep unit running. To set use *VOL* or *VOL* + to change.

- 17) Press the **CH** + button. Display will now read **STD** or **USER** or **MIX**. To make a custom message use **VOL** + button to scroll to USER. At this point press and hold **CH** + button until original message appears. At this time you may change the message simply by using the **VOL** or **VOL** + buttons to change letters. **Once message has been entered you must put the symbol** / **at the end of message.** This will tell display that this is the end of the message.
- 18) Press the **CH** + button now 5 more times to exit programming.
- 19) Unit should now be programmed.

Program definitions:

Bonus time settings:

- Amount of time set in bonus time is added to regular time per coin/pulse(e.g. if you want to give 45 seconds for bonus time and your regular time per coin is 30 seconds, you would set bonus time at 00:15)
- Bonus is disabled by setting bonus time to 00:00.
- If bonus time is set to less than one minute, bonus time is added when bonus coin is reached and every coin after that until time expires.
- If bonus time is set at 1:00 or more, bonus will be a "one time" bonus. Bonus time will only be added for bonus coin or multiplies of bonus coin (e.g. 16th coin, 32nd coin, etc). Any other coin will on receive regular time per coin.
- If bonus time is set to 99:00, when bonus coin is deposited, timer will show "-on-" and timer will continue to run until coin switch wire is shorted to ground by a loop detector or other switch closure for a minimum of two seconds.

Debit and credit mode:

- Debit mode: As coins are deposited display shows "\$1.75 MORE, \$1.50 MORE, \$1.25 MORE" etc.
 until start price is reaches. Once start price is reached display switches to time accumulating until no
 more coins have been deposited.
- Credit mode: As coins are deposited display shows money accumulating (\$.25, \$.50, \$.75 etc). If
 timer is also set to delayed start mode timer will continue to show money accumulating until no more
 coins have been deposited. If timer is set to instant start, as soon as start price is reached, timer will
 change to time counting down.
- Both mode: As coins are deposited display shows money accumulating (\$.25, \$.50, \$.75 etc). If start
 price is not reached, after 5 seconds timer will alternate between "add \$x.xx more" and amount of
 money already deposited.

Display programming with push button:

- Unit can be programmed using buttons that are located inside display. One is labeled **\$2**, which is used to change from item to item. One is labeled **\$1** which is used to set desired value. If you hold down **\$1** this will cause numbers to decrease. If you repeatedly push **\$1** numbers will increase.
- When programming with buttons use same instructions as remote except for the following. Where it says to press **CH** + use **S2** and where it says to use **VOL** + or use **S1**.

Operating Instructions:

- Select desired function.
- Insert coins or bills to start desired function.
- If other function is selected other than original selected item unit will recalculate timer based on the amount of money it takes to start the specific function.
- Once service is used, hang up hose.

Maintenance:

- All servicing of machine should be conducted by an authorized service representative!
- Filter bags should be accessed and shaken down weekly. It is recommended to keep a new set of bags on hand so that once every few months the bags can be replaced and then laundered.
- To maintain performance, empty dirt bin from the canister on a regular basis.
- Periodically inspect wires and connections for wear or fatigue.
- Check vac hose for cracks on a weekly basis.
- Clean canister with a stainless steel cleaner as needed. Decals can be cleaned with mild soap and water.
- Check motor brushes approx. every 3 months for excessive wear. Motor brushes should be changed if they are shorter than 1/4". *Please disconnect power before doing this.*







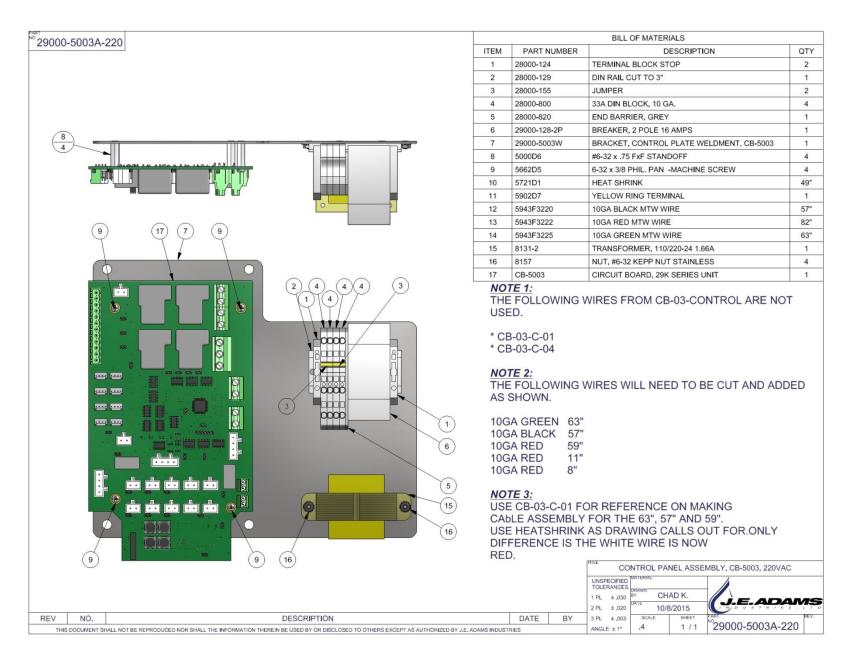


DISCONNECT POWER BEFORE SERVICING OR TROUBLESHOOTING!

Troubleshooting:

Problem	Possible cause	Solution		
Unit is not powered.	Breaker inside unit is not in the on position.	Flip breaker on.		
	No power to machine.	Check incoming power.		
	Loose connection.	Check incoming power connection.		
Display is not powering.	Breaker inside unit is not in the on position.	Flip breaker on.		
	Open unit and check 24 volts coming out of transformer.	If no voltage, replace transformer.		
Machine is behaving erratically.	Is the incoming power at 220V?	Check voltage and monitor while machine runs. Low voltage can cause erratic behavior.		
	Are any of the machines wires worn through or connections not making contact?	Inspect wiring and connections. Look for sharp bends in wires and places where wire is against the metal chassis.		

Display reads "closed" or "coin."	This indicates a continuous coin pulse coming to the timer or a shorted coin signal wire.	Disconnect coin signal wire at timer to see if problem goes away.			
Display reads "error."	This indicated the program may be lost due to a bad battery or a power spike.	Reprogram timer, if problem comes back replace battery.			
Display reads "aux."	This means continuous signal to auxiliary input.	Topiado battery.			
Display reads "fail."	Coin acceptor putting out continuous pulse.	Press mode button on display. If fail does not go away replace coin acceptor.			
	Program in display may be lost.	Reprogram display. If fail goes away and then comes back, replace battery in display.			
Unit keeps tripping breaker.	Inadequate wire size ran to machine.	Call electrician and install proper wire size for 30amp service versus length or run.			
	Wrong size breaker.	Install correct breaker (only if wire size is adequate to handle 20A breaker).			
Fuses for vac motors keep blowing.	Inadequate wire size ran to machine.	Call electrician and install proper wire size for 30amp service versus length or run.			
-	Motor brushes may be bad or too short.	Replace motor brushes.			
Lack of vacuum suction.	Vac hose clogged?	Clean debris from vac hose.			
	Filter bags need cleaned or dirt chamber needs emptied?	Shake or clean filter bags or replace and empty lower dirt chamber.			
	Vac hose is split?	Replace/repair vac hose.			
	Cleanout door gaskets torn or worn?	Replace gaskets.			
	Vac motor gaskets are worn or motor is not tight against.	Inspect/replace gaskets and assure motor is tight against them.			
	Lower chamber cap plugs/mounting hole covers have popped out?	Open lower chamber and inspect plugs, order new if needed.			
	Cleanout door gaskets torn or worn?	Replace gaskets.			
	One of the vac motors is not working?	Check line motor fuse and replace. Replace motor if necessary.			
Fluid will not draw through	Is the pump coming on and turning?	Visually inspect pump, replace if necessary.			
lines.	Are line connections tight?	Fluids can dry out lines, clip ends and reattach cable ties must be used for air-tight connection.			
	Are lines clogged?	Try using a bottle of hot water to draw through lines.			





NOTE:

REV

1) ASSEMBLY ALL ITEMS AS SHOWN.

2) USE WIRE ASSEMBLY 00-CB-DOOR TO WIRE THIS DOOR ASSEMBLY, THE 00-CB-DOOR IS LOCATED IN THE 00-CB- WIRE KIT CABLE PACKAGE PURCHASED FROM TIMBERLINE. THE 00-CB-WIRE KIT IS CALLED OUT UNDER THE 29000 TOP LEVEL ASSEMBLY.

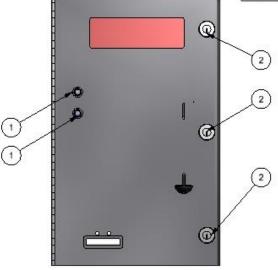
3) USE WIRE DIAGRAM \$29025 CB DOOR. (IF BUILDING 29000-2M THRU 29001-2M USE WIRE DIAGRAM \$29000 CB DOOR.)

4) DO NOT OVER TIGHTEN PUSH BUTTONS ONTO DOOR, MAKE SURE THEY ARE SNUG AND ORINGS ARE NOT PROTRUDING FROM SIDE OF PUSH BUTTON. IF SO THEY ARE TO TIGHT.

5) APPLY A GENEROUS AMOUNT OF HOT GLUE TO THE BACK OF THE NUT AND SWITCH. THIS WILL KEEP THE NUT FROM LOSENING UP.

6) WIRE ASSEMBLY 00-CB-D-06 FOR DISPLAY COMES WIRED TO PLUG DIRECTLY INTO CIRCUIT BOARD, WIRES MUST BE RAN THRU THE HOLE THAT IS DRILLED IN THE BOTTOM OF THE DISPLAY AND WIRED ACCORDING TO CONNECTOR THAT IS SUPPLIED WITH THE DISPLAY. THE YELLOW WIRE WHICH SHOULD BE LABELED D12 MUST GO INTO THE CONNECTOR LABELED 12 AND ALL OTHER WIRES WIRED IN DECENDING ORDER, FAILURE TO WIRE DISPLAY PROPERELY MAY RESULT IN MALFUNCTION OF DISPLAY OR POSSIBLE DAMGE TO THE CIRCUIT BOARD. IF IN DOUBT ASK QUESTIONS.

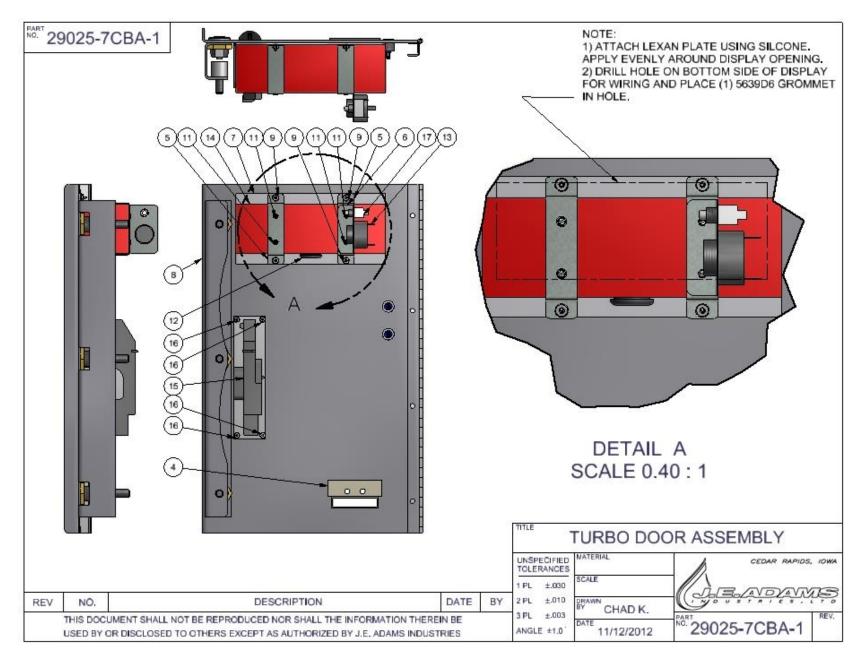
ITEM	PART NUMBER	BILL OF MATERIALS DESCRIPTION	QTY	
HEM		CB-D-05 BLUE PUSH BUTTON		
_1	00-CB-D-05			
2	22001-6A	PLUG LOCK, LARGE, WITH LOCK CORE	3	
3	29000-100W	LOCK BRACKET WELDMENT	1	
4	29000-199	GASKET, VALIDATOR MOUNT	1	
5	29000-24	DISPLAY BRACKET	2	
6	29000-25	HORN BRACKET	1	
7	7 29000-34 LEXAN WINDOW			
8	8 29025-7CBW-1 CONTROL DOOR WELDMENT		1	
9	9 5611D2 NUT, 10-24 UNC KEPP- ZINC		4	
10	5619D3	1/2" - 13 HEX SOC HEAD SCREW	3	
11	5629D2	#8 x 1/2 SELF TAPPING SCREW	4	
12	5639D6	RUBBER GROMMET	1	
13	8000-11	ALARM, LAST COIN ALERT	1	
14	14 8000-15 BIG DIXMOR DISPLAY		- 1	
15	15 8149-92 IMONEX COIN ACCEPTOR - ELECTRIC		1	
16	8157	NUT, #6-32 KEPP NUT STAINLESS	4	
17	8726	PUSH BUTTON	1	



NO. DESCRIPTION DATE BY THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION THEREIN BE

USED BY OR DISCLOSED TO OTHERS EXCEPT AS AUTHORIZED BY J.E. ADAMS INDUSTRIES

IIILE		TURBO DO	OR ASSEMBLY
	CIFIED	MATERIAL	CEDAR RAPIDS, IOWA
1 PL	±.030	SCALE	
2 PL 3 PL	±.010 ±.003	CHAD K.	PART REV.
ANGLE		11/12/2012	29025-7CBA-1



29027-220V

NOTE 1 5871B8 CAP PLUGS ARE TO BE BAGGED AND SENT WITH UNIT.

USE WIRE DIAGRAMS S29027-220V_CB_DOOR, TOP, AND CONTROL. THERE IS IMFORMATION ON THE SCHEMATICS NEEDED FOR WIRING THE UNIT DIFFERENTLY THAN A NORMAL 29027.



		BILL OF MATERIALS	
ITEM	PART NUMBER	DESCRIPTION	QTY
1	2036	HOSE, 2" X 15' BLACK VACUUM	1
2	2058	CLAW/CUFF ASSEMBLY, 2"	1
3	28000-36	MOTOR MOUNT	6
4	29000-30A-220	BRACKET ASSEMBLY, 220V	1
5	29000-47A	COIN BOX ASSEMBLY, PLUG LOCK	1
6	29000-5003A-220	CONTROL PANEL ASSEMBLY, CB-5003, 220VAC	1
7	29000-ALLEN	3/8 ALLEN, 29000 PLUG LOCK SCREW	1
8	29025-1W-2	CANISTER WELD COMPLETE, PLUG LOCK	1
9	29025KIT	DECAL SET	1
10	29027-7CBA-1	TURBO DOOR ASSEMBLY, PLUG LOCKS	1
11	29029-12	COVER, VAULT HOLE	1
12	5600D4	3/8-16 X 1.5 HHCS	4
13	5601D13	SCR,1/4-20x1/2 PPHSqConeStepZP	14
14	5603D11	1/2 Std NF Nylock Nut	2
15	5603D2	1/4 Std NC Nylock Nut	3
16	5603D5	1/4 Std NC Nylock Nut	4
17	5606D10	WASHER, FLAT 1/2 SAE	2
18	5606D22	WASHER, 3/8 FENDER	8
19	5635D1	1/4-20x1/2 CARRIAGE BOLT	11
20	5647D2	RIVET 1/8	16
21	5871b8	PLUG, VAC BOTTOM 2-1/2"	8
22	8055AE-220V	ELECTRO MOTOR 220V	3
23	8055LEAD-EM	WIRE LEAD, EM VAC MOTOR	6
24	8057	MOTOR GASKET	3
25	8076	FILTER BAG	4
26	8108	#10 x 1/2 TAP SCREW	6
27	8153-1	LATCH, CLEANOUT DOOR	4
28	8159	DOOR GASKET	2
29	8183	DECAL, "DISCONNECT POWER"	2
30	8308R	PENINSULA DOME	1
31	8615-5W	CLEANOUT DOOR WELDMENT	2
32	8630	CARDBOARD BOX	1
33	8732	NAMEPLATE SERIAL TAG, UL	1
34	8754	DECAL, DANGER, TRI-LING	1
35	8925-220 H	FLOURESCENT BULB, 13W-230VAC, SPIRAL MINI	3
36	8939	PALLET, DUAL, OVAL, SPECIALITY, 30" X 40"	1
37	B5722-002	NUT, 3/8-16 UNC HEX LOCK NUT	4
38	CB-03-WIRE KIT	WIRE KIT	1

							TURBO VA	C- 220VAC
Н	8050	REMOVE ALL 5647D8 3/16 RIVETS, ADD 220 LIGHT BULBS	07/21/17	JRF	UNSPECIFIED TOLERANCES	MATERIAL		CEDAR RAPIDS, IOWA
G	7761	REMOVED 5639D4 AND ADDED 29000-ALLEN	5-12-16	CK	1 PL ± .030	BY CH	AD K	
F	7540	CONVERTED TO CB-5003	10-9-15	CK	2 PL ± .020	12/	5/2005	(John John Jay M. J.
REV	NO.	DESCRIPTION	DATE	BY	3 PL ± .003	SCALE	SHEET	PART NO COCO 7 COCO /
THIS	DOCUMENT SHALL NOT BE	E REPRODUCED NOR SHALL THE INFORMATION THEREIN BE USED BY OR DISCLOSED TO OTHERS EXCEPT AS AUTHORIZED BY J.E. ADA	MS INDUSTRIES		ANGLE ±1°		1 / 1	29027-220V H

