



Models- 29000 - 29003  
29000UNI - 29003UNI  
29000HAM - 29003HAM  
29000-2M - 29003-2M  
29000 Series W/Exacta

Page 2	Product Information
Page 3	Specifications
Page 4	Important Safety Instructions
Page 5	Product Dimensions
Page 6-7	Installation
Page 7-10	Programming
Page 10	Operating Instructions
Page 11-12	Maintenance & Troubleshooting
Page 13-17	Parts List
Page 18-24	Wiring Diagram
Page 25-26	Free Vac Timer Set-up and Wire Diagram



# **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](http://www.jeadams.com)**

# Specifications

Unit specifications: (29000-29003, 29000UNI-29003UNI, 29000HAM-29003HAM)

Voltage: 120VAC, 60hz  
Amperage: (1) 30 amp dedicated service is required for this unit  
Weight: 260 lbs with pallet attached

Vac specifications: (29000-29003, 29000UNI-29003UNI, 29000HAM-29003HAM)

Motors: (3) 120VAC Vacuum motor  
Fuses: (3) 10 amp inline fuses

Shampoo specifications: (29000-29003, 29000UNI-29003UNI, 29000HAM-29003HAM)

Compressor: (1) Thomas 120VAC, 1/12th hp compressor  
Peristaltic pump: (2) Thomas peristaltic pumps, 12VDC

---

Unit specifications: (29000-2M thru 29003-2M)

Voltage: 120v, 60hz  
Amperage: (1) 20 amp dedicated service is required for this unit  
Weight: 260 lbs with pallet attached

Vac specifications: (29000-2M thru 29003-2M)

Motors: (2) 120VAC Vacuum motor  
Fuses: (2) 10 amp inline fuses

Shampoo specifications: (29000-2M thru 29003-2M)

Compressor: (1) Thomas 120v, 1/12th hp compressor  
Peristaltic pump: (2) Thomas peristaltic pumps, 12VDC

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:

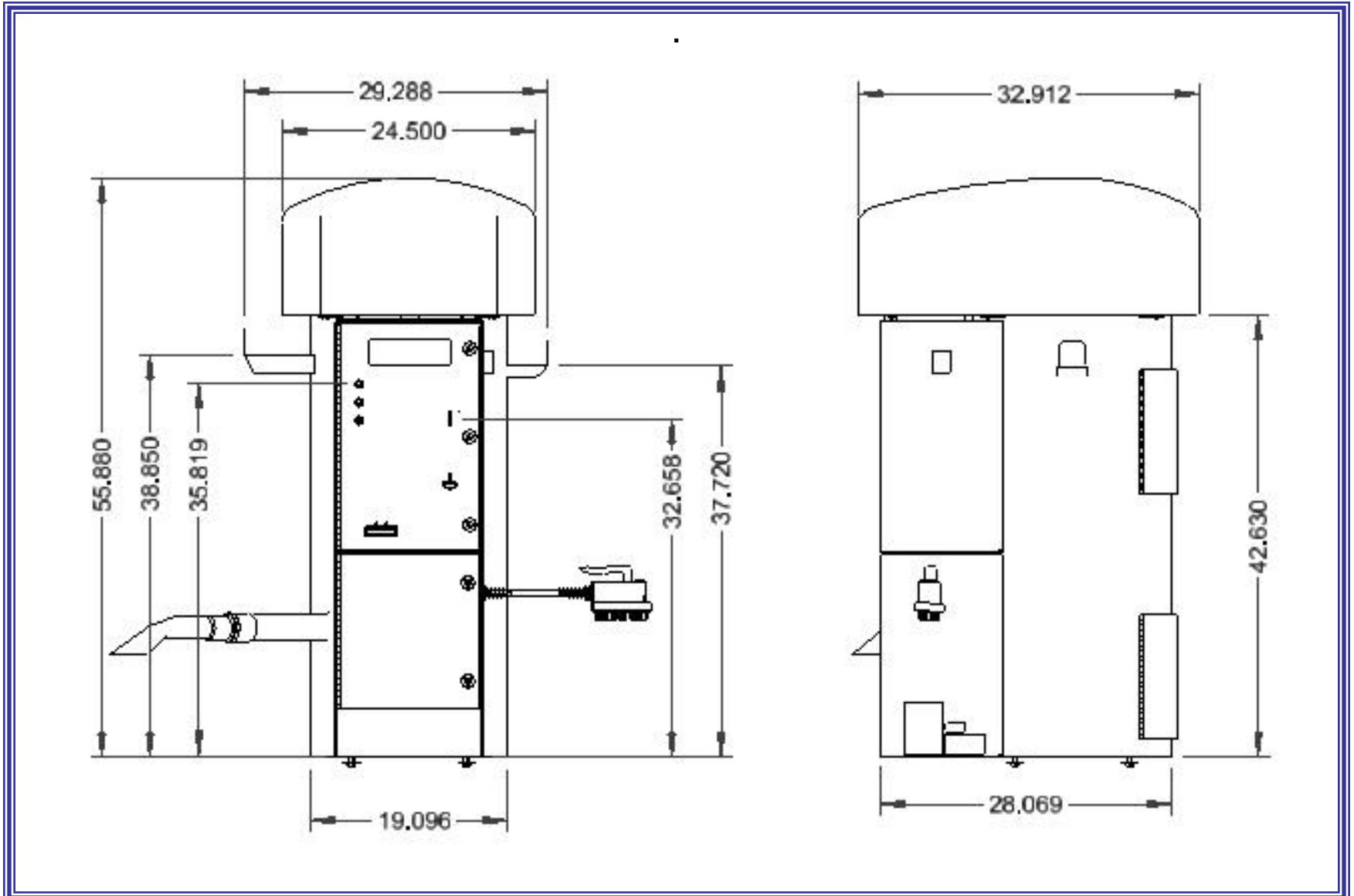
- Do not use on wet surfaces.
- Use only as described in manual. Use only manufactures recommended attachments.
- Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- Do not put any object into openings. Do not use with any opening blocked; keep free of dust, 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.



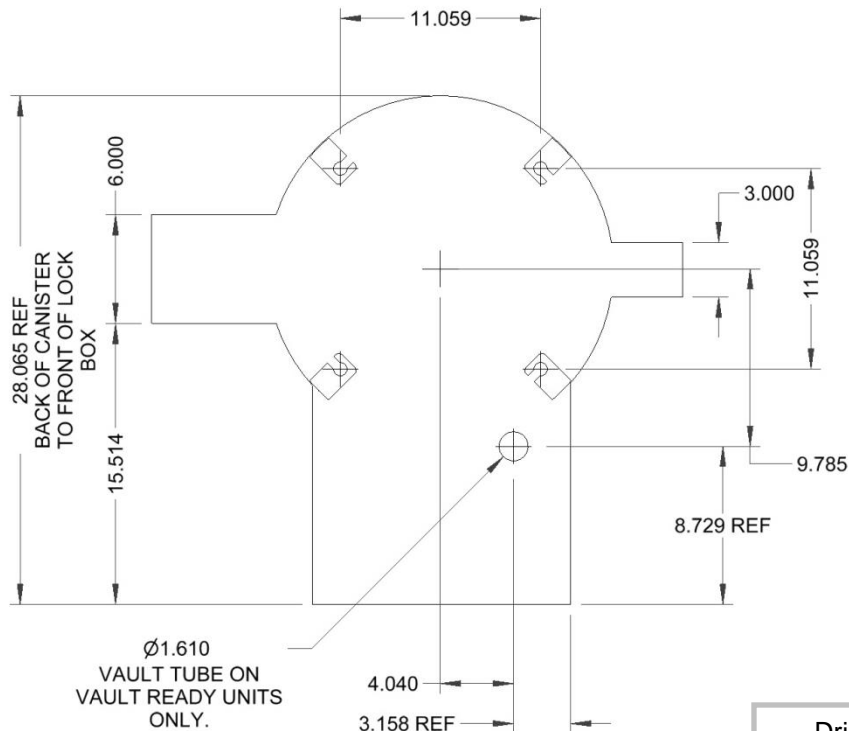
## SAVE THESE INSTRUCTIONS

- **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 30 amp 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



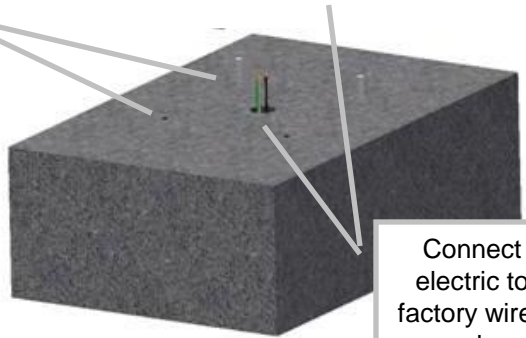
# PLAN VIEW



**NOTE:** when mounting, provide clearance so cleanout doors can open!!

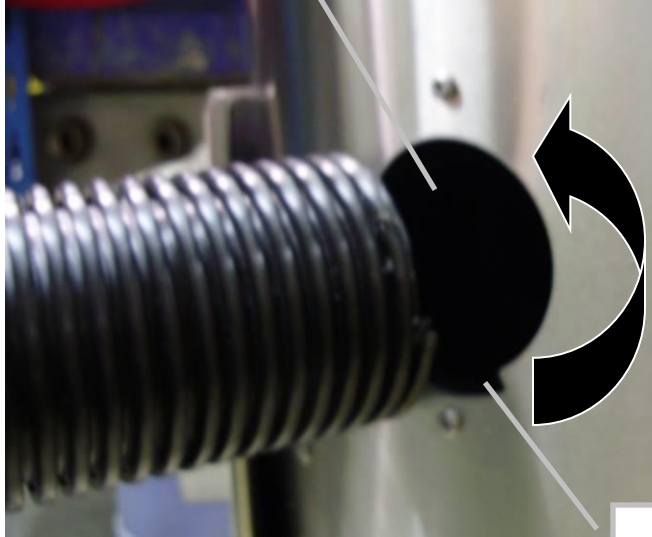
Drill holes into concrete surface and install 3/8" studs (4).

Once unit has been installed use 5871B8 cap plugs (supplied with unit) to seal holes in canister bottom located in lower cleanout door (see illustration on next page). Extra cap plugs are included with the unit in case plug becomes damaged during shipping removal. After cap plugs are installed unit can be turned on, place shampoo and spot formula into bottom door, and attach lids to appropriate bottles.

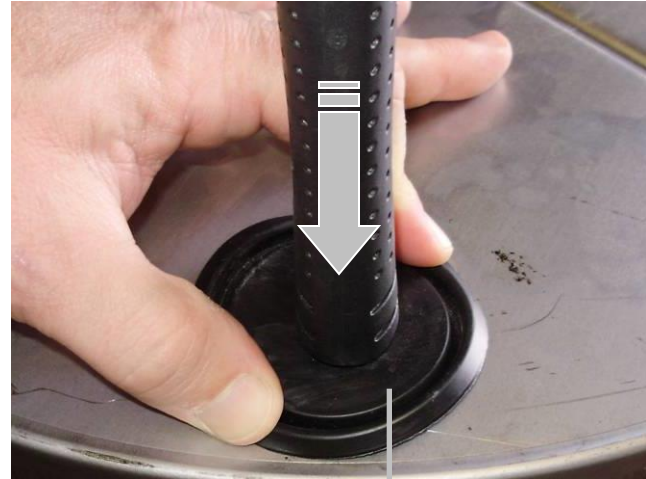


Connect electric to factory wires under vacuum can.

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: 30**) or may be different time. (**C**) Will be the time per coin for **SHAMPOO**. Set desired time per coin by using the **VOL -** to decrease or the **VOL +** to increase. Once time is entered move to next step.
- 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** and (C) **SHAMPOO**.
- 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 multiples 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 **S2**, which is used to change from item to item. One is labeled **S1** which is used to set desired value. If you hold down **S1** this will cause numbers to decrease. If you repeatedly push **S1** 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 shampoo/spot is selected, it is recommended that you vacuum before applying formula.
- 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.

### Operating Instructions 29000UNI-29003UNI or 29000HAM-29003HAM:

- Select desired function.
- Insert coins or bills or swipe credit card to start desired function. When credit card is selected swipe card and wait for activation.
- If shampoo/spot is selected, it is recommended that you vacuum before applying formula.
- 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.
- **NOTE: Unitec and Hamilton units are to be installed by qualified Unitec or Hamilton personnel. Failure to do so may result in improper installation and damage to electronics.**

### Changing fluids:

Disconnect power. Unscrew cap from empty bottle. Remove empty bottle. Insert new bottle into unit. Insert line into bottle and screw cap onto bottle. Reconnect power. **To avoid damage to pumps and lines, USE ONLY JE ADAMS FLUIDS!**

## 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.
- Check shampoo and spot formula bottles to assure that they are full.
- Check all shampoo lines and brush assembly for any signs of wear.
- 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 120V?	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.

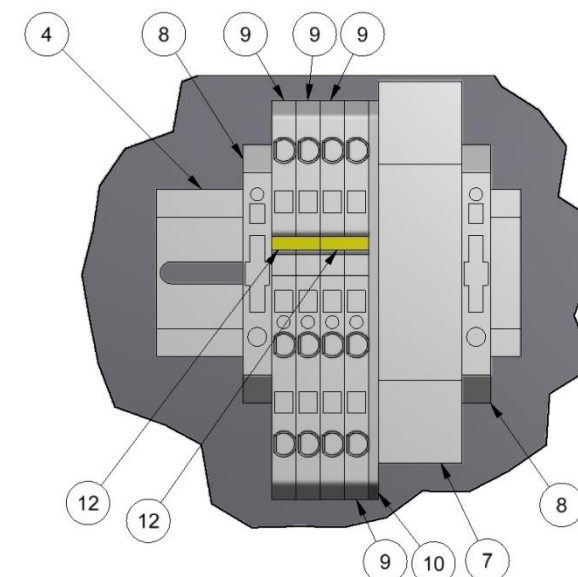
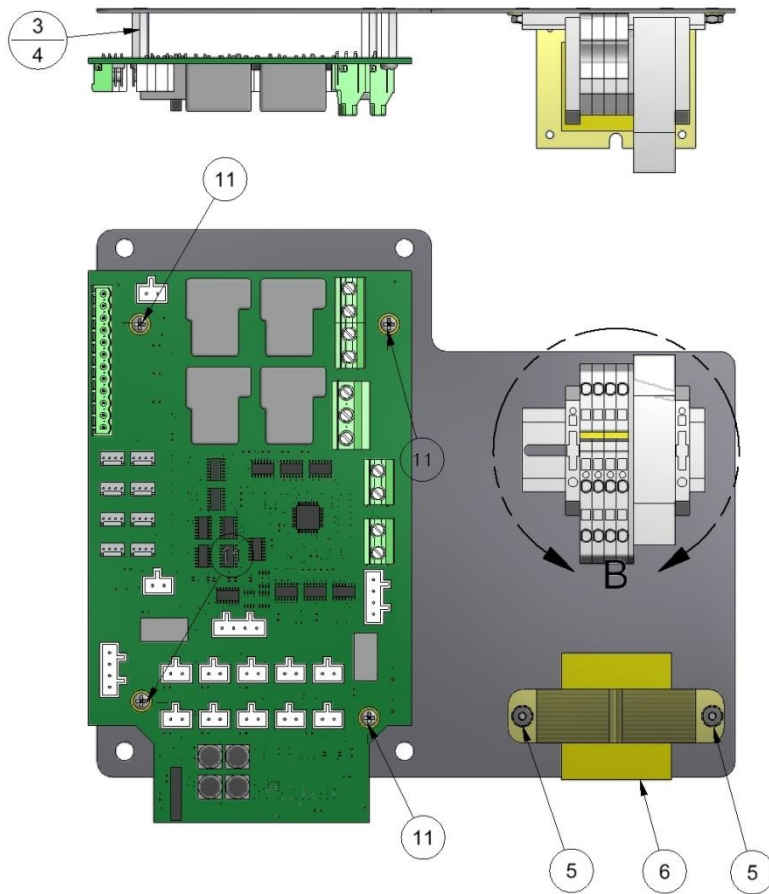
Display reads "closed" or "coin."	This indicates a continuous coin pulse coming to the timer or a shorted coin signal wire.	Disconnect coin signal wire at timer to see if problem goes away.
Display reads "error."	This indicated the program may be lost due to a bad battery or a power spike.	Reprogram timer, if problem comes back replace battery.
Display reads "aux."	This means continuous signal to auxiliary input.	
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 30 amp 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.
Fluid will not draw through lines.	Is the pump coming on and turning?	Visually inspect pump, replace if necessary.
	Are line connections tight?	Fluids can dry out lines, clip ends and reattach, cable ties <b>must be used</b> for air-tight connection.
	Are lines clogged?	Try using a bottle of hot water to draw through lines.

**NOTE 1:**  
ASSEMBLE ALL ITEMS AS SHOWN.

**NOTE 2:**  
USE WIRE ASSEMBLY CB-03-CONTROL TO WIRE THIS CONTROL PANEL ASSEMBLY.  
THE CB-03CONTROL IS LOCATED IN THE CB-03 WIREKIT PACKAGE.  
THE CB-03-WIREKIT IS CALLED OUT UNDER THE 29000 TOP LEVEL ASSEMBLY.

**NOTE 3:**  
USE WIRE DIAGRAM S29000\_CB\_CONTROL REV A

BILL OF MATERIALS			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	29000-5003W	BRACKET, CONTROL PLATE WELDMENT, CB-5003	1
3	5000D6	#6-32 x .75 FxF STANDOFF	4
4	28000-129	DIN RAIL CUT TO 3"	1
5	8157	NUT, #6-32 KEPP NUT STAINLESS	4
6	8131-2	TRANSFORMER, 110/220-24 1.66A	1
7	28000-128	MAGNETIC CIRCUIT BREAKER, 30AMP	1
8	28000-124	TERMINAL BLOCK STOP	2
9	28000-800	33A DIN BLOCK, 10 GA.	4
10	28000-820	END BARRIER, GREY	1
11	5662D5	6-32 x 3/8 PHIL. PAN -MACHINE SCREW	4
12	28000-155	JUMPER - CUT TO 2 POLE	2
15	8097	INSULATED CRIMP NUT	2
15	CB-5003	CIRCUIT BOARD, 29K SERIES UNIT	1



**DETAIL B**  
**SCALE 3 / 4**

REV	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				

TITLE		CONTROL PANEL ASSEMBLY, CB-5003	
UNSPECIFIED TOLERANCES	MATERIAL	DRAWN BY	
1 PL ±.030		CHAD K.	
2 PL ±.020		DATE	
3 PL ±.003		8/10/2015	
ANGLE ±1°	SCALE	SHEET	PART NO.
		1 / 1	29000-5003A

PART NO. 29000-7CBA-1

NOTE:

1) ASSEMBLY ALL ITEMS AS SHOWN.

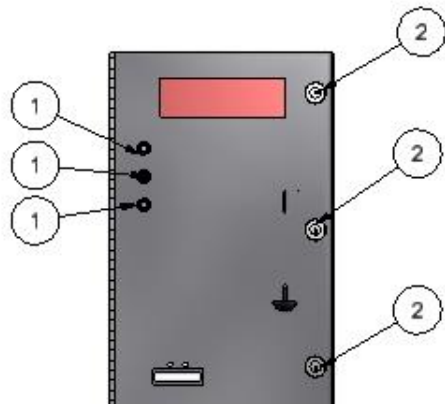
2) USE WIRE ASSEMBLY 00-CB-DOOR TO WIRE THIS DOOR ASSEMBLY. THE 00-CB-DOOR IS LOCATED IN THE 00-CB- WIRE KIT CABLE PACKAGE PURCHASED FROM TIMBERLINE. THE 00-CB-WIRE KIT IS CALLED OUT UNDER THE 29000 TOP LEVEL ASSEMBLY.

3) USE WIRE DIAGRAM S29000\_CB\_DOOR FOR 29000 UNIT OR S29035\_CB\_DOOR FOR A 29035 UNIT.

4) DO NOT OVER TIGHTEN PUSH BUTTONS ONTO DOOR. MAKE SURE THEY ARE SNUG AND CRINGS 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 LOOSENING 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 PROPERLY MAY RESULT IN MALFUNCTION OF DISPLAY OR POSSIBLE DAME TO THE CIRCUIT BOARD. IF IN DCUBT ASK QUESTIONS.



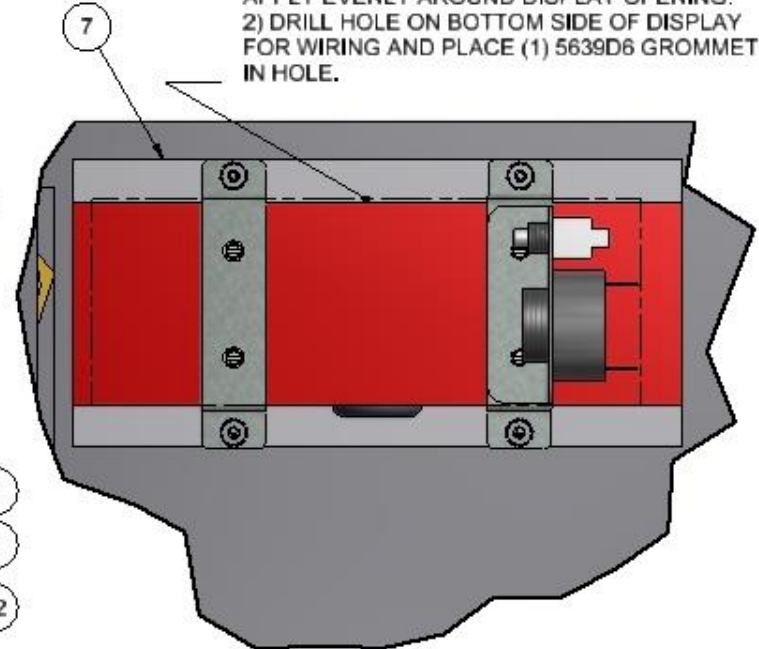
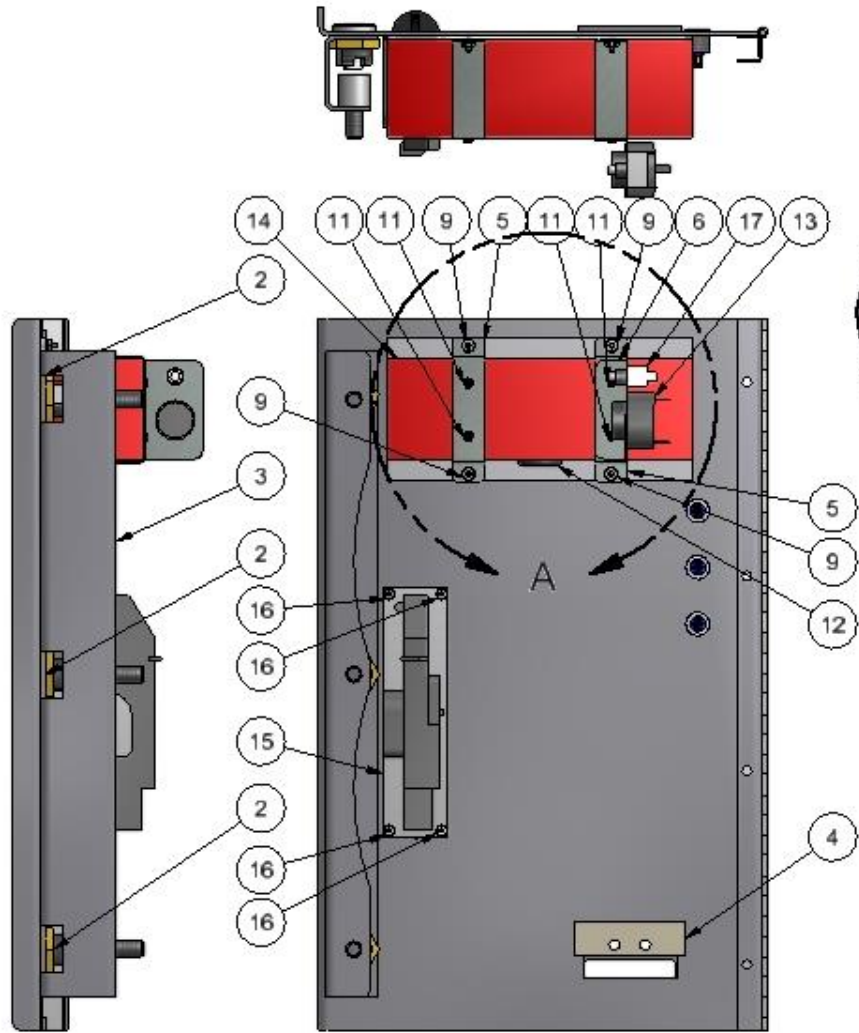
BILL OF MATERIALS

ITEM	PART NUMBER	DESCRIPTION	QTY
1	00-CB-D-05	BLUE PUSH BUTTON	3
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	29000-34	LEXAN WINDOW	1
8	29000-7CBW-1	CONTROL DOOR WELDMENT, PLUG LOCKS	1
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	8000-15	BIG DIXMOR DISPLAY	1
15	8149-92	IMONEX COIN ACCEPTOR - ELECTRIC	1
16	8157	NUT, #6-32 KEPP NUT STAINLESS	4
17	8726	PUSH BUTTON	1

TITLE		SHAMPOO DOOR ASSEMBLY-W/CB, PLUG LOCKS		
UNSPECIFIED TOLERANCES	MATERIAL	CEDAR RAPIDS, IOWA		
1 PL ±.030	SCALE			
2 PL ±.010	DRAWN BY			CHAD K.
3 PL ±.003	DATE			11/9/2012
ANGLE ±1.0°		PART NO.	29000-7CBA-1	
		REV.		

REV	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				

NOTE:  
 1) ATTACH LEXAN PLATE USING SILICONE.  
 APPLY EVENLY AROUND DISPLAY OPENING.  
 2) DRILL HOLE ON BOTTOM SIDE OF DISPLAY  
 FOR WIRING AND PLACE (1) 5639D6 GROMMET  
 IN HOLE.



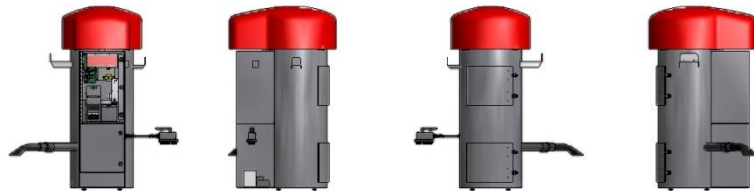
DETAIL A  
 SCALE 0.40 : 1

TITLE		SHAMPOO DOOR ASSEMBLY-W/CB, PLUG LOCKS	
UNSPECIFIED TOLERANCES	MATERIAL	CEDAR RAPIDS, IOWA	
1 PL ±.030	SCALE		
2 PL ±.010	DRAWN BY	CHAD K.	
3 PL ±.003	DATE	11/9/2012	
ANGLE ±1.0°	PART NO.	29000-7CBA-1	
		REV.	

REV	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				


PART NO.

29000



BILL OF MATERIALS			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	11000-15	SHAMPOO BRUSH ASSEMBLY	1
2	11000-22	Y-TUBE CONNECTOR	1
3	11000SPOT	SPOT REMOVER FORMULA	1
4	2036	HOSE, 2" X 15' BLACK VACUUM	1
5	2058	CLAW/CUFF ASSEMBLY, 2"	1
6	28000-36	MOTOR MOUNT	6
7	29000-14A-1	DOOR ASSEMBLY, BOTTOM, PLUG LOCK	1
8	29000-1W-2	CANISTER WELD COMPLETE, PLUG LOCKS	1
9	29000-29A-5	THOMAS PUMP ASSEMBLY	1
10	29000-30A	LIGHT BRACKET ASSEMBLY	1
11	29000-37A	COMPRESSOR ASSEMBLY	1
12	29000-44A	BILL ACCEPTOR ASSEMBLY, PLUG LOCK	1
13	29000-47A	COIN BOX ASSEMBLY, PLUG LOCK	1
14	29000-5003A	CONTROL PANEL ASSEMBLY, CB-5003	1
15	29000-7CBA-1	SHAMPOO DOOR ASSEMBLY-W/CB, PLUG LOCKS	1
16	29000KIT	COMPLETE DECAL KIT	1
17	5600D4	3/8-16 X 1.5 HHCS	4
18	5601D13	SCR, 1/4-20x1/2 PPHSqConeStepZP	10
19	5603D11	1/2 Std NF Nylock Nut	2
20	5603D2	1/4 Std NC Nylock Nut	4
21	5603D5	1/4 Std NC Nylock Nut	4
22	5606D10	WASHER, FLAT 1/2 SAE	2
23	5606D22	WASHER, 3/8 FENDER	8
24	5611D4	NUT, 5/16-18 UNC KEPP- SS	2
25	5639D4	RUBBER GROMMET	2
26	5639D9	ISOLATION MNT, 30 DUR NEOPRENE, 1/4-20	4
27	5647D2	RIVET 1/8"	16
28	5647D8	RIVET 3/16"	14
29	5871b8	PLUG, VAC BOTTOM 2-1/2"	8
30	8055EM	MOTOR, ELECTRO 120V	3
31	8055LEAD-EM	MOTOR LEAD	6
32	8057	MOTOR GASKET	3
33	8076	FILTER BAG	4
34	8108	#10 x 1/2 TAP SCREW	6
35	8153-1	LATCH, CLEANOUT DOOR	4
36	8159	DOOR GASKET	2
37	8183	DECAL, "DISCONNECT POWER"	2
38	8308R	PENINSULA DOME	1
39	8437D001	ETL DECAL, VACUUM	1
40	8549-1	FLEX STRAIN RELIEF	1
41	8615-5W	CLEANOUT DOOR WELDMENT	2
42	8630	CARDBOARD BOX	1
43	8732	NAMEPLATE SERIAL TAG, UL	1
44	8754	DECAL, DANGER, TRI-LING	1
45	8925	FLOURESCENT BULB	3
46	8939	PALLET, DUAL, OVAL, SPECIALITY, 30" X 40"	1
47	9500WIN	WINTER SHAMPOO FORMULA	1
48	B5722-002	NUT, 3/8-16 UNC HEX LOCK NUT	4
49	CB-03-WIREKIT	COMPLETE WIRE CABLE PACKAGE	1
50	SH6044	CARDBOARD BOX	1

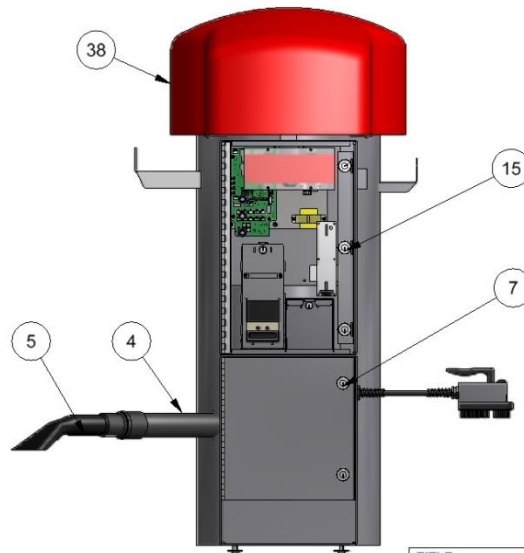
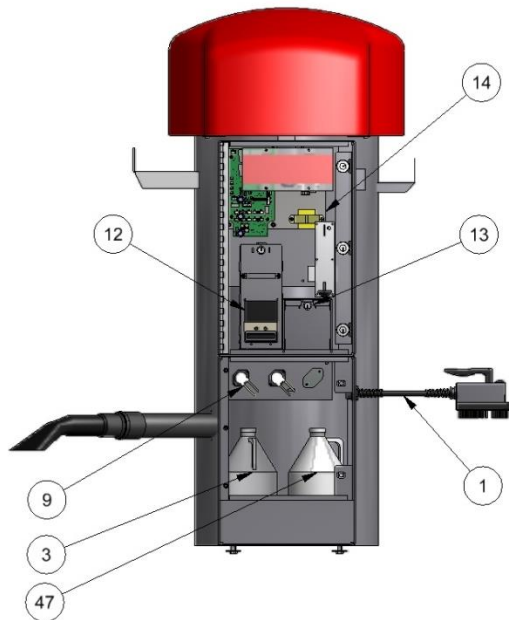
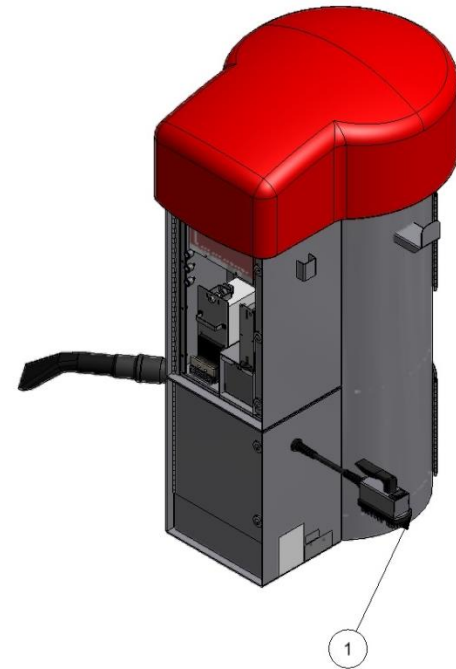
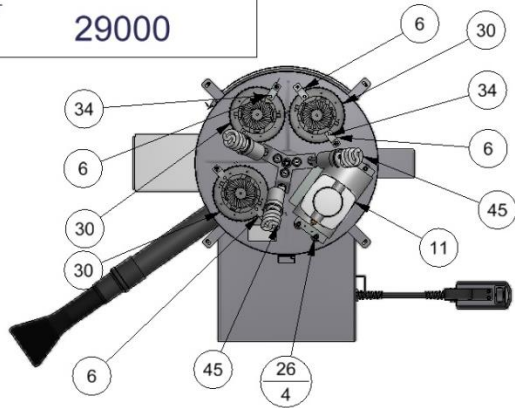
SHEET 1 OF 3

I	7540	REMOVED 29000-29A-4, 29000-250A, 00-CB-WIREKIT, SH6051 ADDED 29000-29A-5, 29000-5003A, CB-03-WIREKIT, SH6044	9-2-15	CK	TITLE	SHAMPOO-SPOT-VAC					
H	7051	REMOVED CREW LOCKS, CONVERTED TO PLUG LOCKS	11-12-12	CK	UNSPECIFIED TOLERANCES	MATERIAL	CEDAR RAPIDS, IOWA				
G	5015	CONVERTED UNIT TO CB-5002 CIRCUIT BOARD	2-09	CK	1 PL ±.030	SCALE					
REV	NO.	DESCRIPTION	DATE	BY	2 PL ±.010	DRAWN BY			CHAD K.		
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					3 PL ±.003	DATE			2/24/2009	PART NO.	29000
					ANGLE ±1.0°						




PART NO.

29000

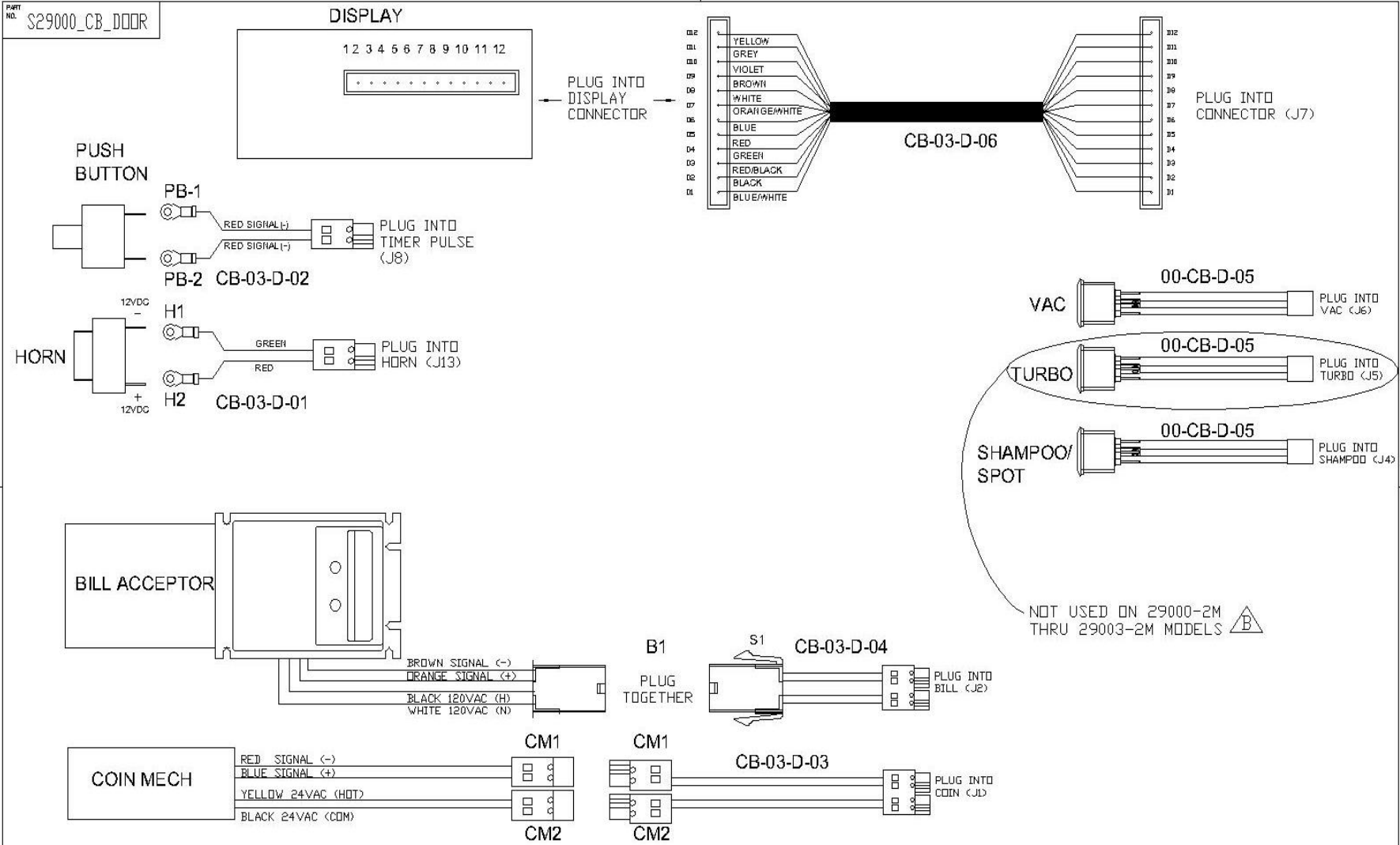


SHEET 2 OF 3

TITLE		<b>SHAMPOO-SPOT-VAC</b>	
UNSPECIFIED TOLERANCES		MATERIAL	
1 PL ±.030		SCALE	
2 PL ±.010		DRAWN BY CHAD K.	
3 PL ±.003		DATE 2/24/2009	
ANGLE ±1.0°		PART NO. 29000	
		CEDAR RAPIDS, IOWA	
			
		REV. 1	

REV	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				

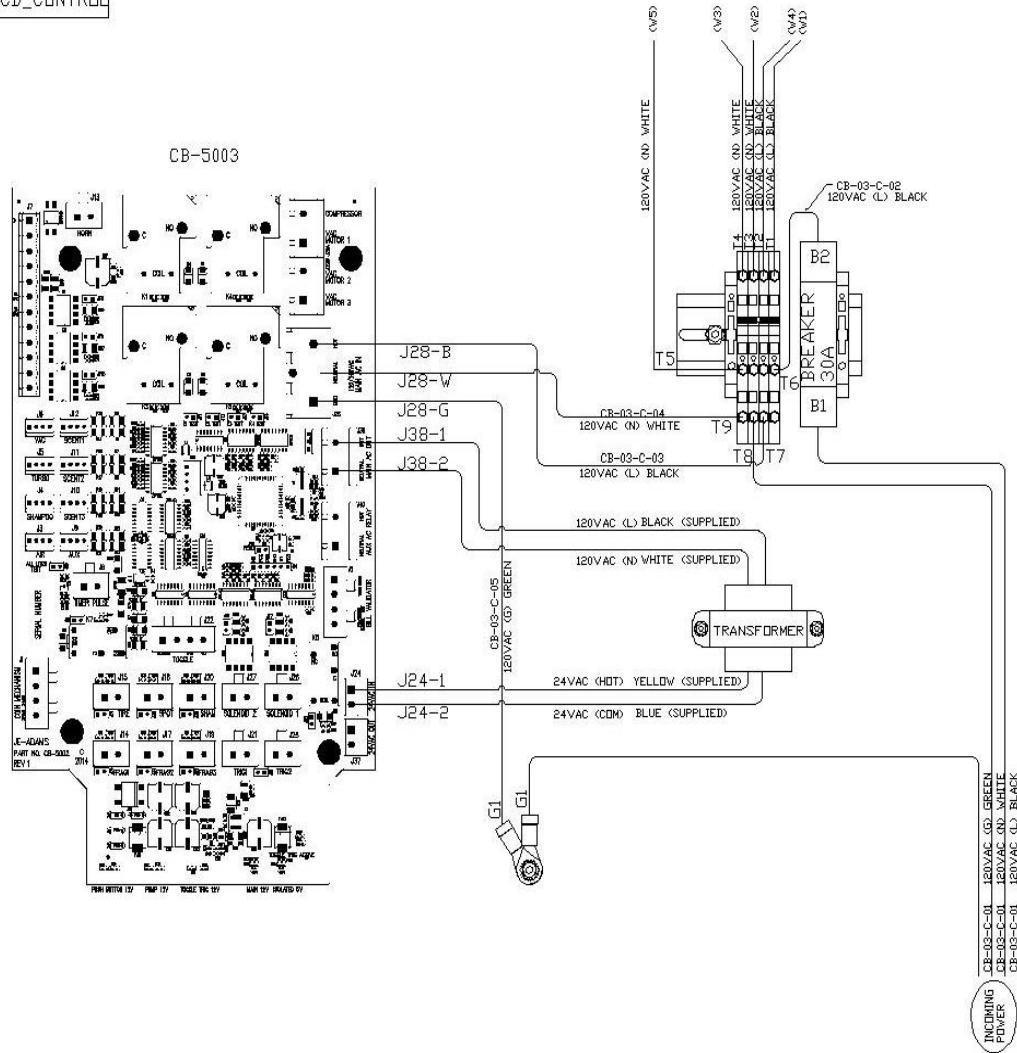
PART NO. S29000\_CB\_DOOR



REV	NO.	DESCRIPTION	DATE	BY
D	7540	UPDATED DRAWING TO SWITCH FROM CB-5002 TO CB-5003	8-7-15	CK
C	5948	REMOVE C-CARD NOTATION, CREATE NEW UNIVERSAL DRW	062510	JF
B	5891	ADDED NOTE	3-19-10	CK
A	5521	ADDED UNITEC CC TO DIAGRAM	2-10	CK

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		PART NO. S29000_CB_DOOR  CEDAR RAPIDS, IOWA	UNSPECIFIED TOLERANCES 1 PL ±.030 2 PL ±.010 3 PL ±.003 ANGLE ±1.0	TITLE CONTROL DOOR WIRING 29000 SERIES UNIT DRAWN BY CK DATE 3-2009 SCALE - REL. FOR PROD. - MATERIAL - PART NO. S29000_CB_DOOR REV. LEVEL D
---	--	---	--	---

PART NO. S29000\_CB\_CONTROL



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

PART NO. S29000\_CB\_CONTROL

CEDAR RAPIDS, IOWA

UNSPECIFIED TOLERANCES

1 PL ±.030

2 PL ±.010

3 PL ±.003

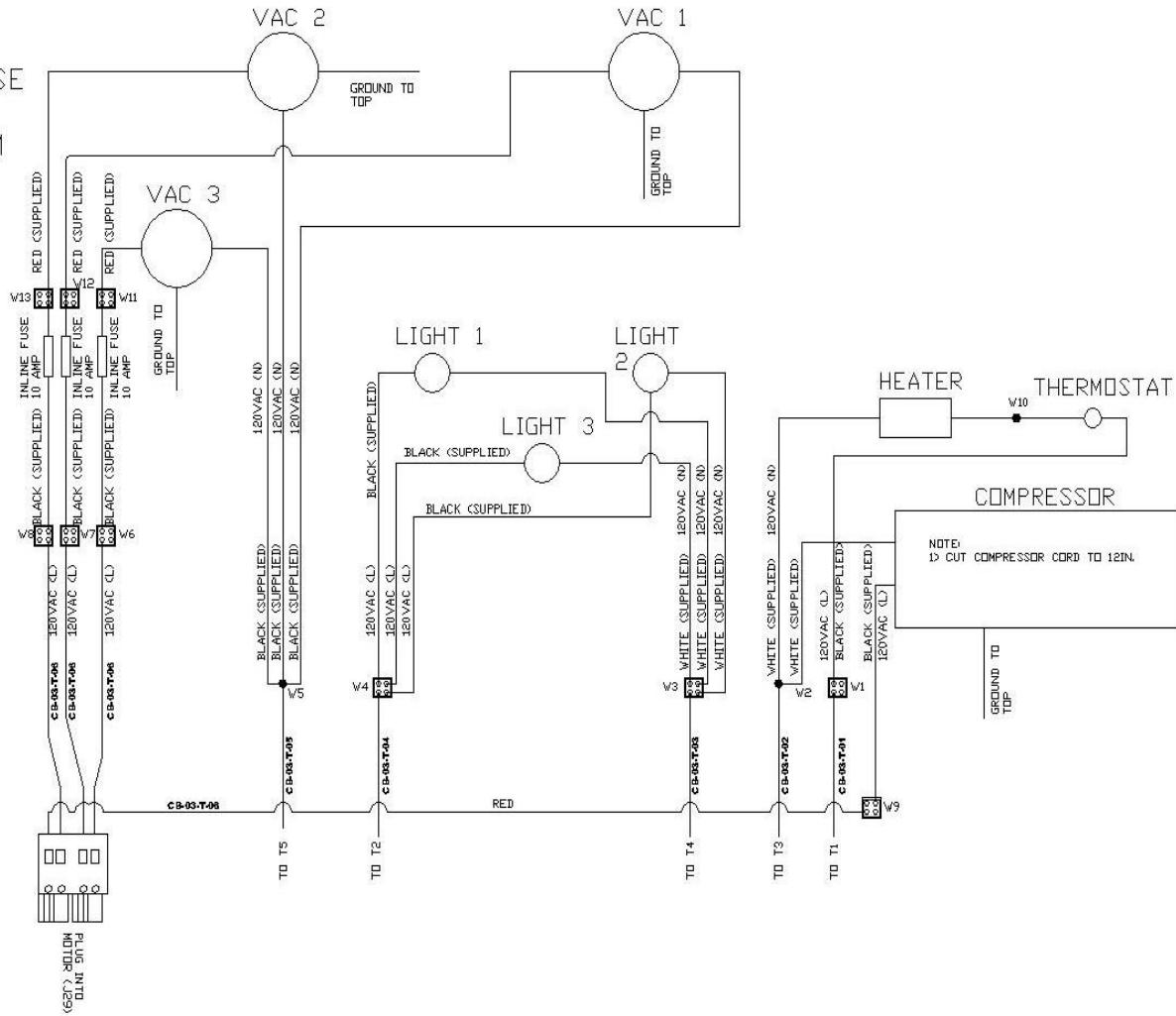
ANGLE 1:10

TITLE		CONTROL PANEL WIRING 29000 SERIES UNITS			
DRWN BY	CK	DATE	3-2009	SCALE	-
MATERIAL	-	REL. FOR PROD.	-	REV. LEVEL	A
PART NO.		S29000_CB_CONTROL			

A	7540	UPDATED WIRING FOR SWITCH FROM CB-5002 TO CB-5003	8-6-15	CK
REV	NO.	DESCRIPTION	DATE	BY

PART NO. S29000\_CB\_TOP

NOTE:  
 1) VAC 3 AND FUSE NOT USED ON MODELS 29000-2M THRU 29003-2M.



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

PART NO. S29000\_CB\_TOP

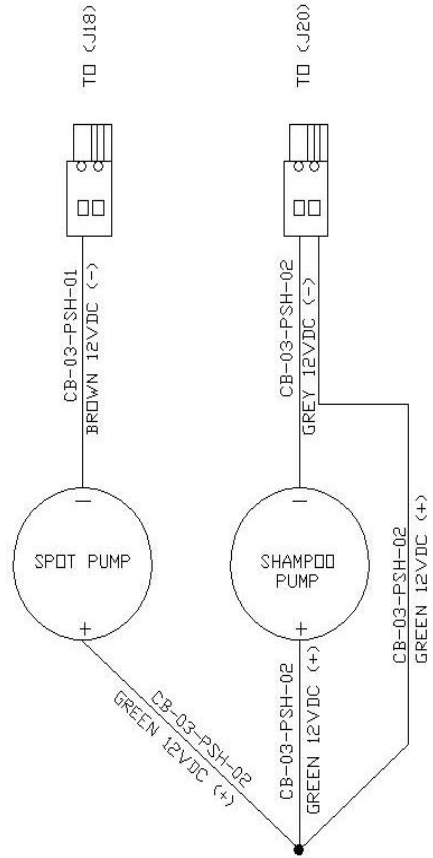


UNSPECIFIED TOLERANCES  
 1 PL ±.030  
 2 PL ±.010  
 3 PL ±.003  
 ANGLE ±1.0

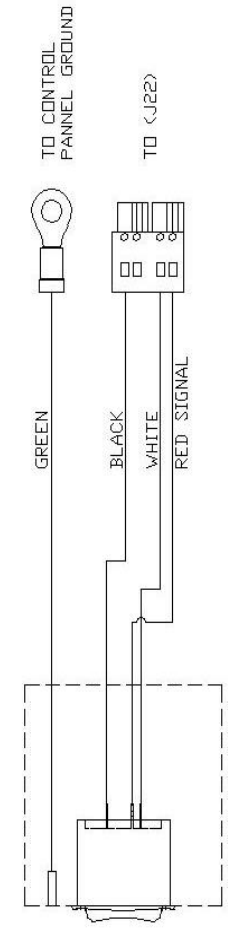
TITLE		UNIT TOP WIRING 29000 SERIES UNIT			
DRAWN BY	CK	DATE	3-2009	SCALE	-
MATERIAL	-	PART NO.	S29000_CB_TOP	REV. LEVEL	B

B	7540	UPDATED FOR SWITCH FROM CB-5002 TO CB-5003	8-7-15	CK
A	5892	ADDED NOTE 1	5-20-10	CK
REV	NO.	DESCRIPTION	DATE	BY

PART NO. S29000\_CB\_PUMP



PUMP ASSEMBLY



SHAMPOO BRUSH ASSEMBLY

A	7540	UPDATED DRAWING FOR SWITCH FROM CB-5002 TO CB-5003	8-7-15	CK
REV	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

PART NO. S29000\_CB\_PUMP



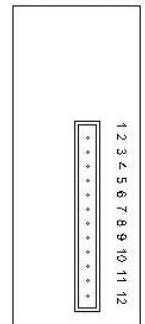
UNSPECIFIED TOLERANCES  
 1 PL ±.030  
 2 PL ±.010  
 3 PL ±.003  
 ANGLE ±1.0°

TITLE WIRE DIAGRAM, 29000 PUMP ASSEMBLY				
DRAWN BY CK	DATE 3-16-09	SCALE -	REL. FOR PROD.	-
MATERIAL -	PART NO. S29000_CB_PUMP	REV. LEVEL A		

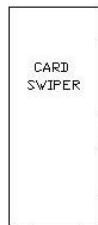
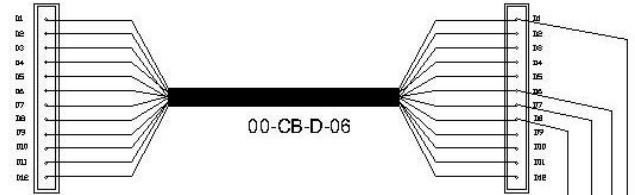


PART NO. CP SWIPE TO LED9

LED9 DISPLAY



PLUG INTO DISPLAY CONNECTOR

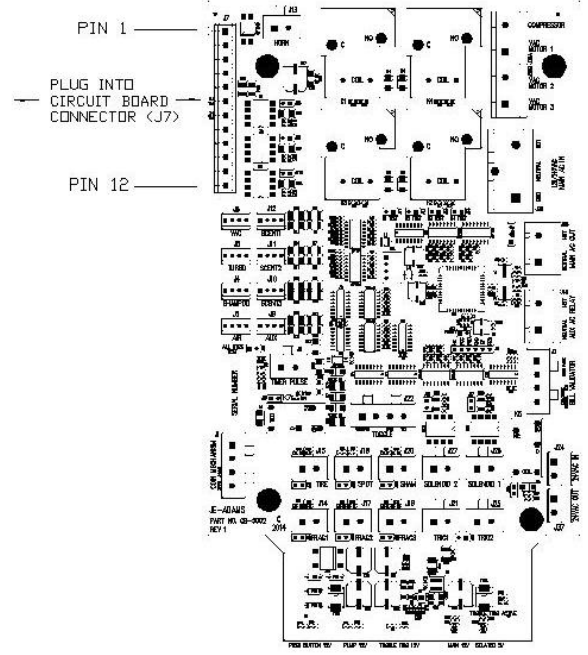


RED/GRN TO PIN 8  
 YELLOW TO 24VAC HOT PIN 7  
 BLACK TO 24VAC COMMON PIN 6  
 RED/GRN TO PIN 1

GRAY WIRES NOT USED

CIRCUIT BOARD

CB-5003



C	7996	NEW WIRES COMING OUT OF CP SWIPE	050917	JRF
B	7327	ADDED THE LABEL 'PIN 1' AND 'PIN 12' ON CIRCUIT BOARD	092414	CK
A	7148	REVISE TO SHOW RED WIRE FROM CARD READER	081913	JF
REV	NO.	DESCRIPTION	DATE	BY

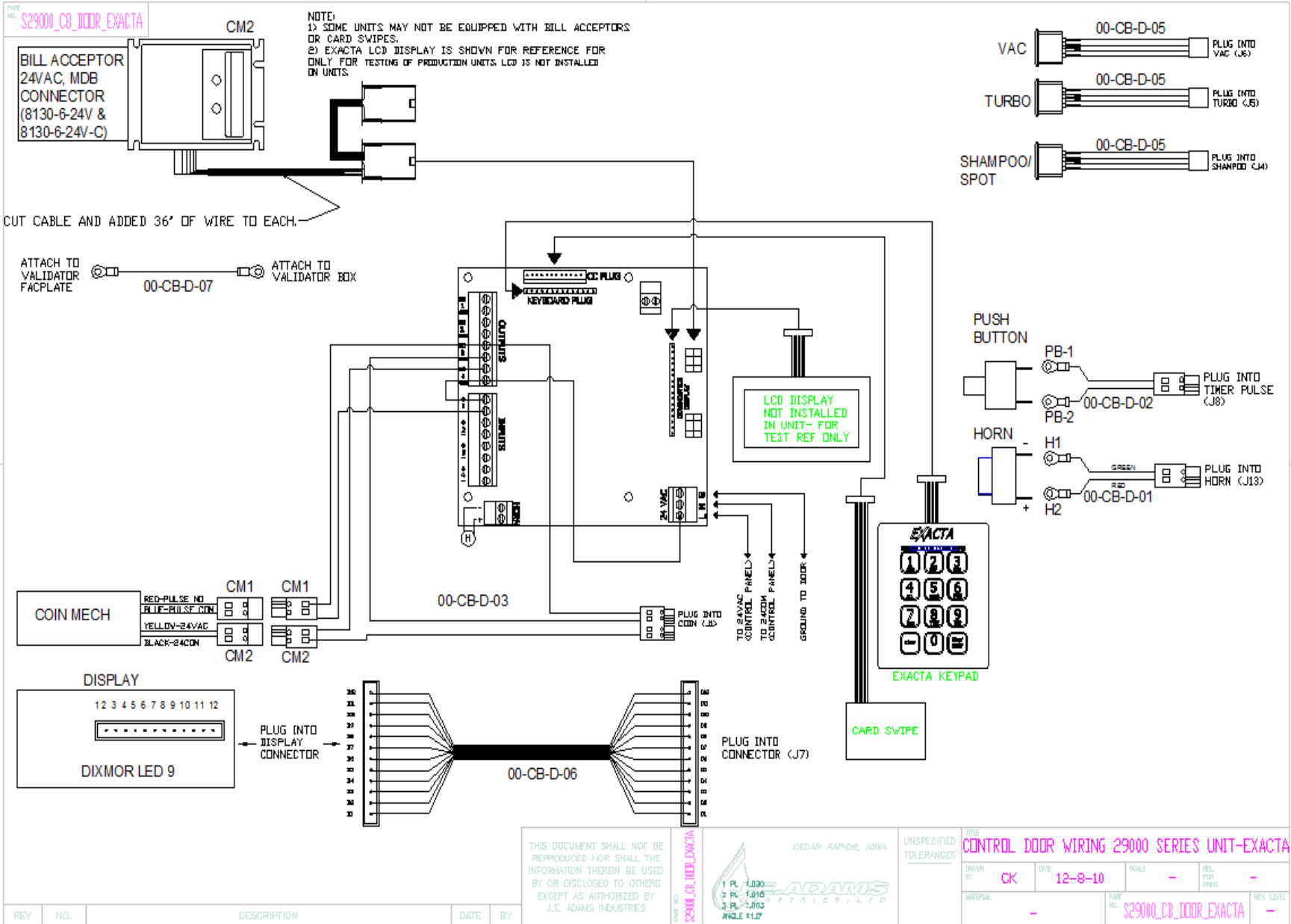
THIS DOCUMENT SHALL NOT BE REPRODUCED NOR SHALL THE INFORMATION THEREIN BE USED BY OR DISCLOSED TO OTHERS EXCEPT AS AUTHORIZED BY J.E. ADAMS INDUSTRIES

PART NO. CP SWIPE TO LED9



UNSPECIFIED TOLERANCES  
 1 PL ±.030  
 2 PL ±.010  
 3 PL ±.003  
 ANGLE ±1.0°

TITLE		CRYPTOPAY SWIPER TO DIXMOR LED 9		
DRAWN BY	JF	DATE	050212	SCALE
NATERIAL		-		REL. FOR PRD.
PART NO. CP SWIPE TO LED9			REV. LEVEL	C





## Programming:

The below timer pictured is the standard SSAC model that allows the end user to select the "coins to start" and the "total time" by settings series of dip switches. The number of "coins to start" dip switch is how many quarters are needed to make the machine come on. In the below example, the "one coin" dip is selected which makes the unit come on with one coin. The "total time" will then need to be set, but a good rule of thumb would be 4 minutes which requires dip switches 3.2 and .8 to be set to on. This scenario means 1 quarter will provide 4 minutes of vacuum time. The total time can always be changed by adding or subtracting time. If the operator would later decide to increase the cost of the unit to "2" quarters, the 2 dip switch would need to be in the on position (all others off) and the time dip switches would still be 3.2 and .8 dips selected for 4 minutes. Timer is non accumulating so "coins to start" setting is just to make the machine come on time and "time" is total time regardless of coins to start.

Time in minutes dip switch settings:

0.2 = 12 seconds

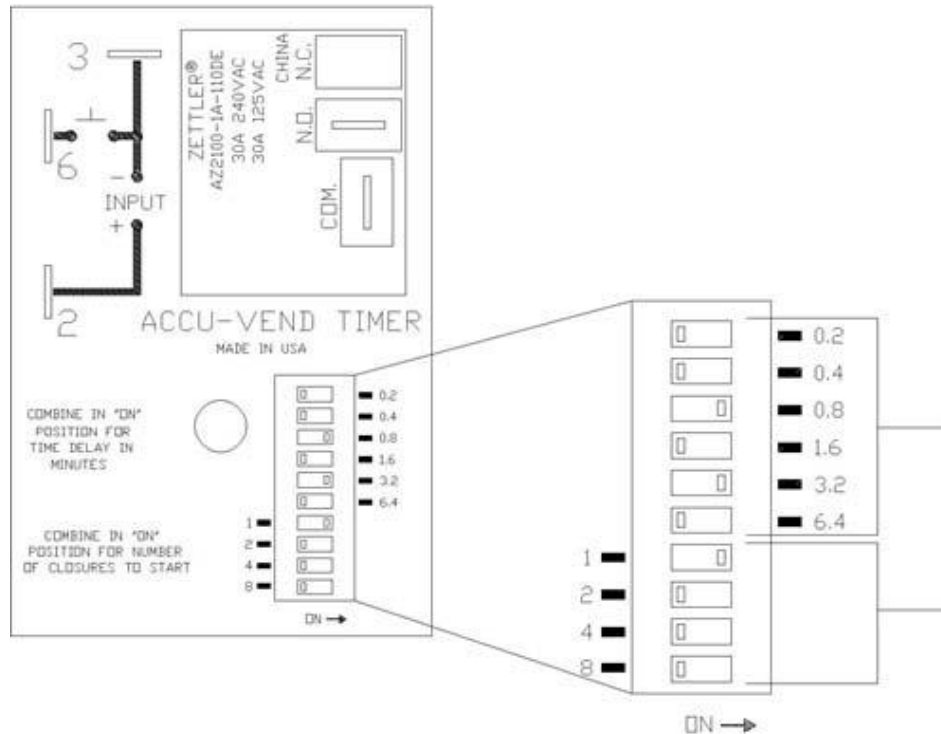
0.4 = 24 seconds

0.8 = 48 seconds

1.6 = 96 seconds

3.2 = 192 seconds

6.4 = 384 seconds

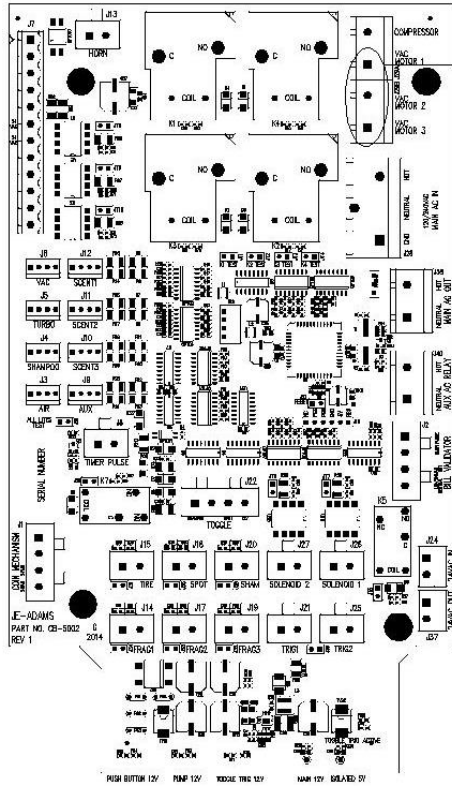


Total time  
(non accumulating)

Coins to start

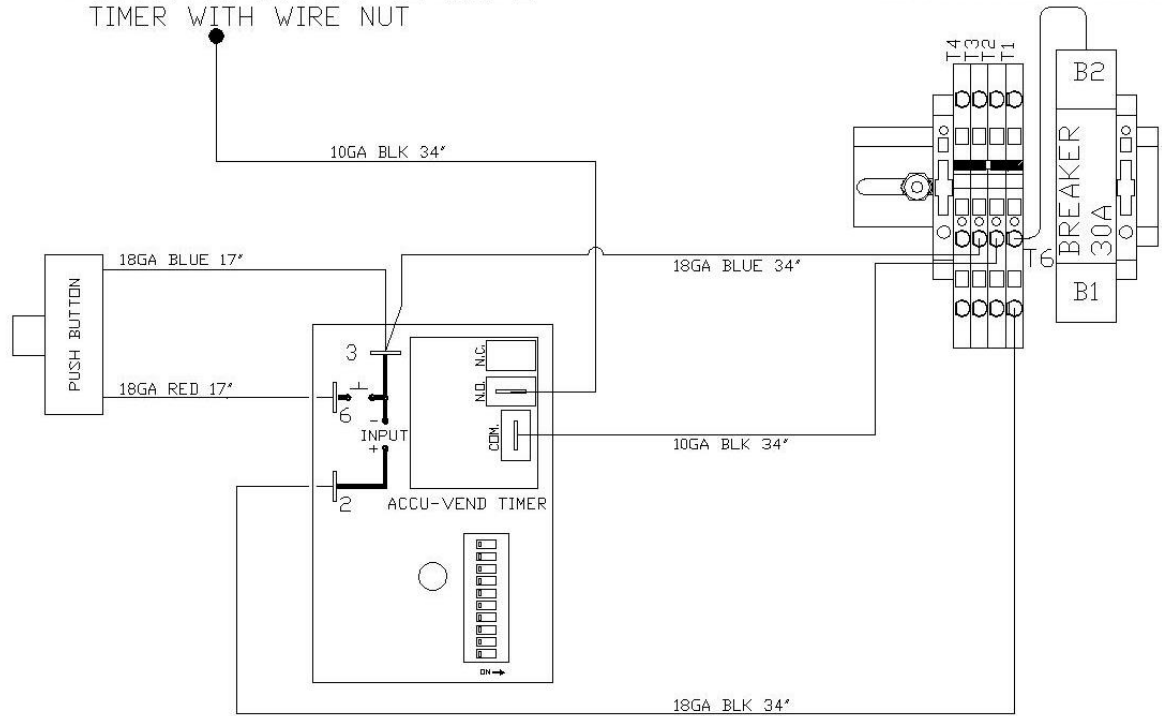
PART NO. **S29K-FR SERIES**

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



DO NOT CONNECT VAC MOTORS TO BOARD. CONNECT TO <NO> OF TIMER WITH WIRE NUT

EXISTING TERMINAL STRIP AND BREAKER IN ALL 29K SERIES



TITLE		29K SERIES FREE VAC	
MATERIAL		-	
UNSPECIFIED TOLERANCES	SCALE	NONE	
1 PL ±.030	DRAWN BY	CAK	
2 PL ±.010	DATE	7/9/2018	
3 PL ±.003	REL. FOR PROD.	-	
ANGLE ±1.0°			
		CEDAR RAPIDS, IOWA	
	PART NO.	S29K-FR SERIES	
	REV.	-	

-	8273	RELEASED	7/9/2018	CAK
REV	NO.	DESCRIPTION	DATE	BY