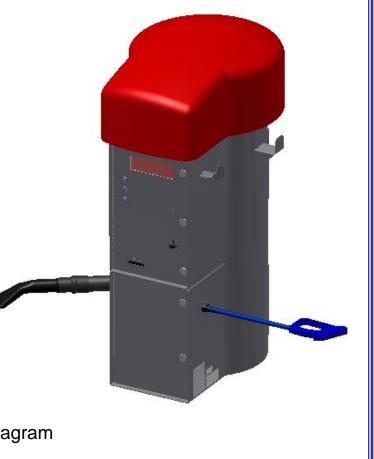


Models- 29035 - 29038 29035UNI - 29038UNI 29035HAM - 29038HAM 29035-2M - 29038-2M 29035 Series W/Exacta

- 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:	

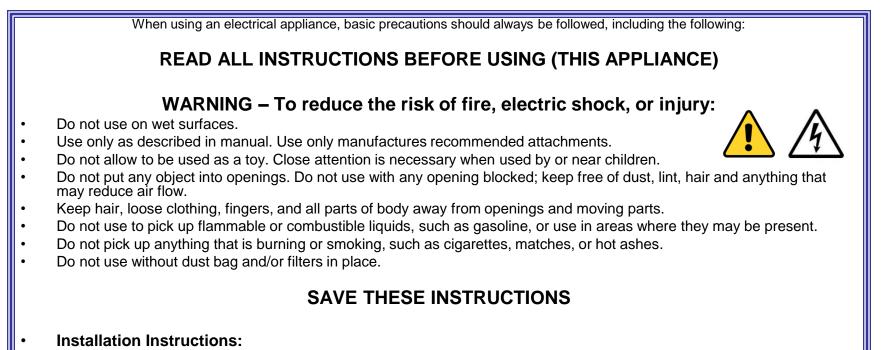
J.E. Adams Industries 1025 63rd Ave. S.W. Cedar Rapids, IA 52404 1-800-553-8861 www.jeadams.com

Specifications

I management of the second sec				
Unit specifications: (29035-29038, 29035UNI-29038UNI, 29035HAM-29038HAM)				
Voltage:	120VAC, 60Hz			
Amperage:	(1) 30 amp dedicated service is required for this unit			
Weight:	260 lbs with pallet attached			
, i signi				
Vac specifications.	_(29035-29038, 29035UNI-29038UNI, 29035HAM-29038HAM)			
Motors:	(3) 120VAC Vacuum motor			
Fuses:	(3) 10 amp inline fuses			
1 0303.				
Fluid specifications	<u>s: (</u> 29035-29038, 29035UNI-29038UNI, 29035HAM-29038HAM)			
Compressor:	(1) Thomas 120VAC, 1/12th hp compressor			
Peristaltic pump:				
Pensiallic pump.	(T) Thomas pensiallic pumps, T2VDC			
	(20025 214 thru: 20028 214)			
-	(29035-2M thru 29038-2M)			
Voltage:	120v, 60Hz			
Amperage:	(1) 20 amp dedicated service is required for this unit			
Weight:	260 lbs with pallet attached			
	_(29035-2M thru 29038-2M)			
Motors:	(2) 120VAC Vacuum motor			
Fuses:	(2) 10 amp inline fuses			
Fluid specifications: (29035-2M thru 29038-2M)				
Compressor:	(1) Thomas 120v, 1/12th hp compressor			
Peristaltic pump:	(1) Thomas peristaltic pumps, 12VDC			
	Duty cycle time 4 minutes on, 4 minutes off.			

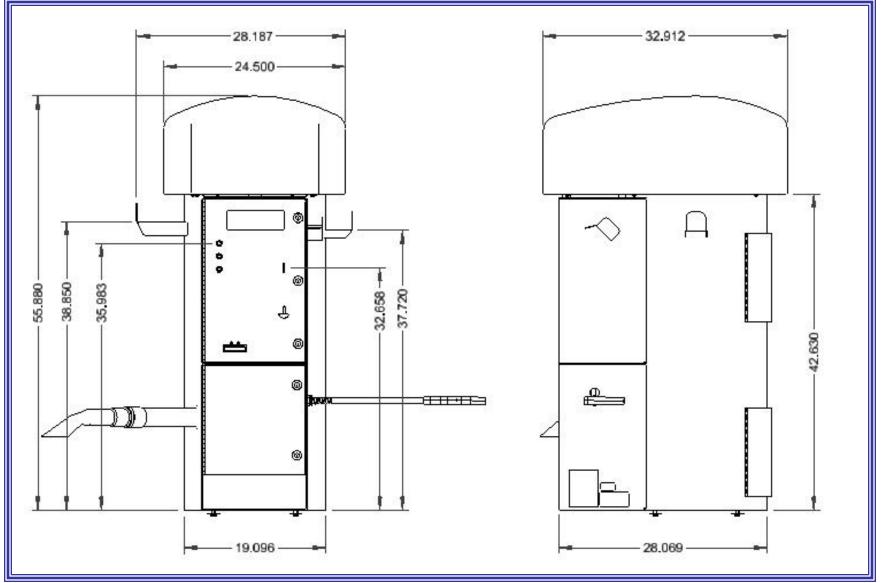
NOTE: "UNIT INTENDED FOR COMMECIAL USE ONLY"

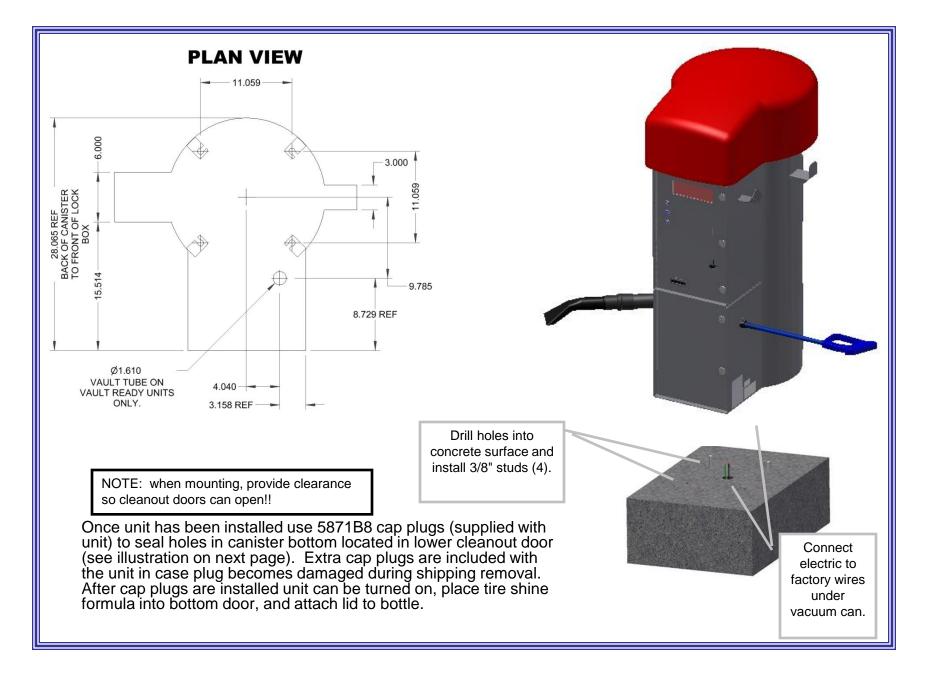
IMPORTANT SAFETY INSTRUCTIONS

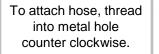


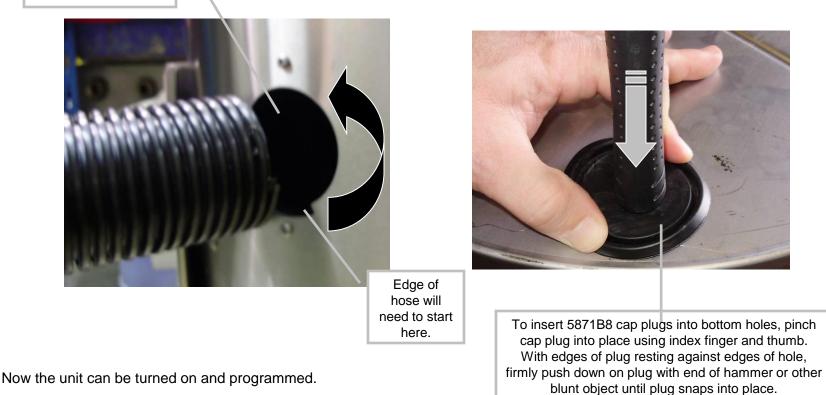
- Determine location to mount unit ("DANGER" "THIS EQUIPMENT INCORPORATES PARTS SUCH AS SWITCHES, MOTORS, OR THE LIKE THAT TEND TO PRODUCE ARCS OR SPARKS THAT CAN CAUSE AN EXPLOSION. WHEN LOCATED IN GASOLINE-DISPENSING AND SERVICE STATIONS INSTALL AND USE AT LEAST 20 FEET (6 M) HORIZONTALLY FROM THE 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









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: 30) or may be different time. (E) Will be the time per coin for TIRE. Set desired time per coin by using the VOL to decrease or the VOL + to increase. Once time is entered move to next step.
- 10) Press the CH + button. Display will now read F. F is not used.
- 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 (E) TIRE
- 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 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 tire shine is selected, it is recommended that you clean tires 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 29035UNI-29038UNI or 29035HAM-29038HAM:

- 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 tire shine is selected, it is recommended that you clean tires 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.

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 tire shine bottle to assure it is full.
- Check tire shine lines and gun 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.*



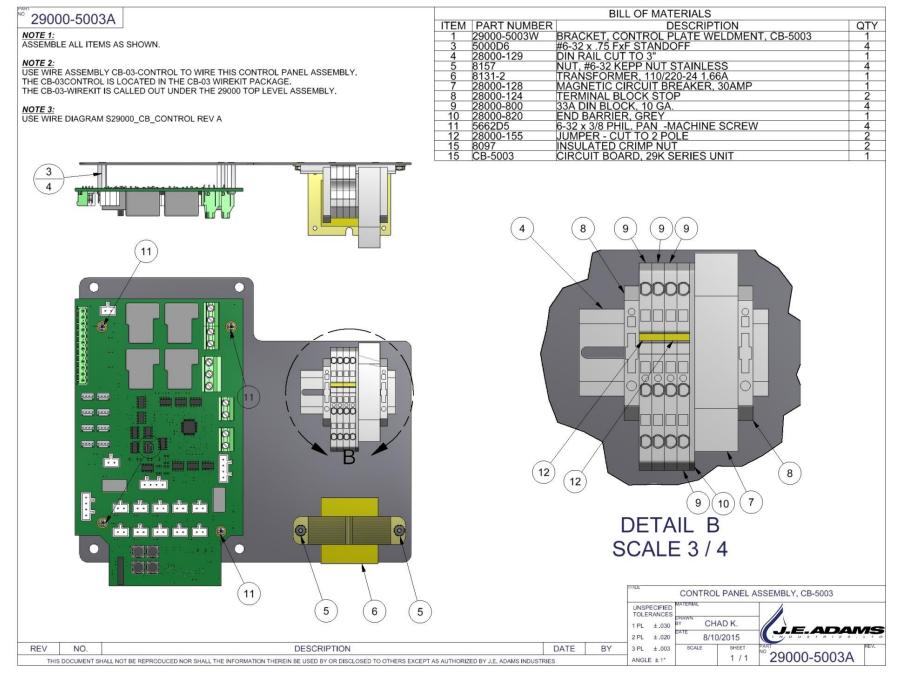
DISCONNECT POWER BEFORE SERVICING OR TROUBLESHOOTING!



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	Is the incoming power at 120V?	Check voltage and monitor while machine runs.
erratically.		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		Disconnect coin signal wire at timer to see if	
coin. a shorted coin signal wire.		problem goes away.	
Display reads "error."	This indicated the program may be lost due to a bad battery	Reprogram timer, if problem comes back	
	or a power spike.	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	Inadequate wire size ran to machine.	Call electrician and install proper wire size for	
breaker.		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	Inadequate wire size ran to machine.	Call electrician and install proper wire size for	
blowing.		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	Open lower chamber and inspect plugs, order	
	popped out?	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.	
-	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	
L		lines.	



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.

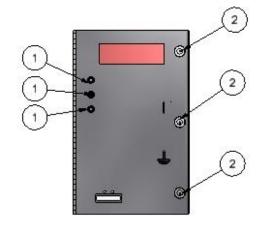
3) USE WIRE DIAGRAM \$29000_CB_DOOR FOR 29000 UNIT OR \$29035_CB_DOOR FOR A 29035 UNIT.

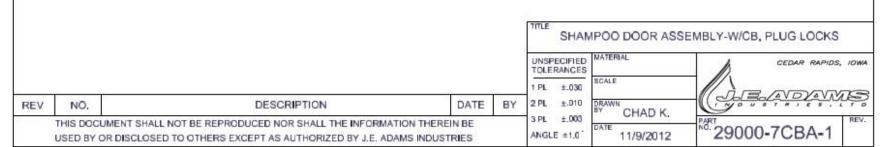
4) DO NOT OVER TIGHTEN PUSH BUTTONS ONTO DOOR, mAKE SURE THEY ARE SNUG AND ORINGS ARE NOT PROTRUDING FROM SIDE OF PUSH BUTTON. IF SO THEY ARE TO TIGHT.

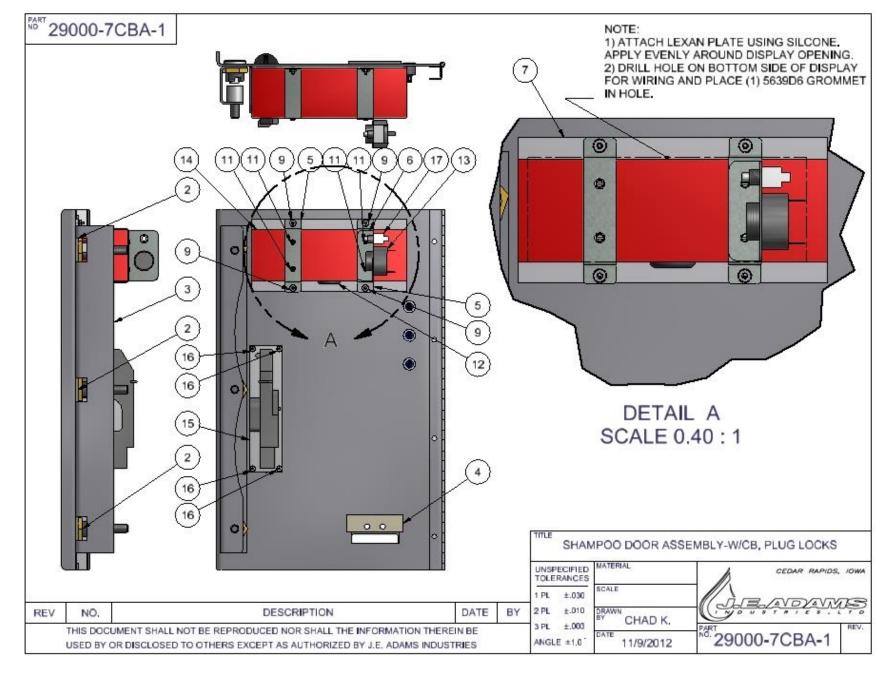
5) APPLY A GENEROUS AMOUNT OF HOT GLUE TO THE BACK OF THE NUT AND SWITCH. THIS WILL KEEP THE NUT FROM LOSENING UP.

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.

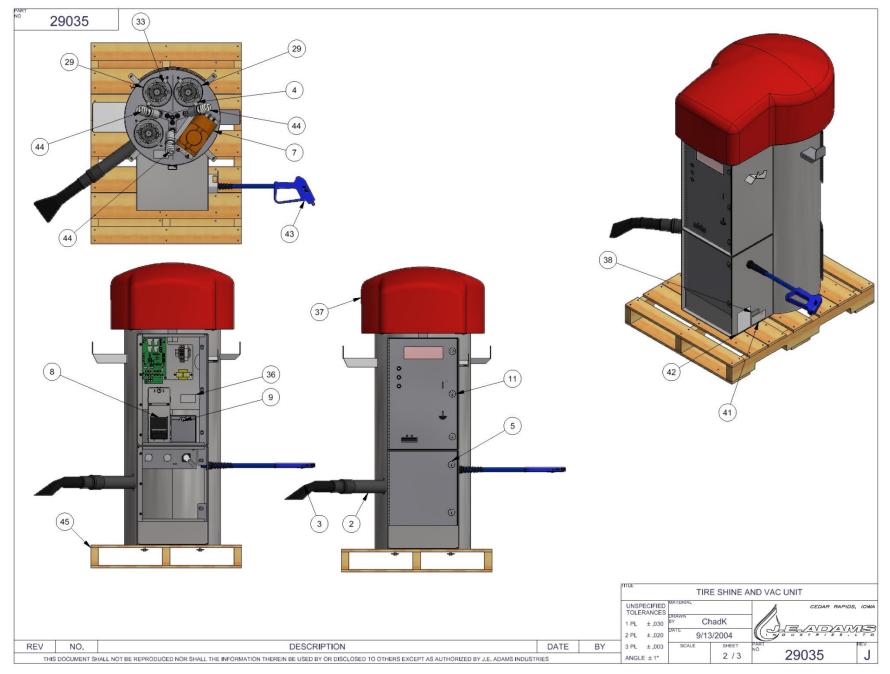
TEM	PART NUMBER	BER DESCRIPTION			
1 00-CB-D-05		0-CB-D-05 BLUE PUSH BUTTON			
2	22001-6A	PLUG LOCK, LARGE, WITH LOCK CORE	3		
3	29000-100W	LOCK BRACKET WELDMENT	1		
4	29000-199	GASKET, VALIDATOR MOUNT	1		
5	29000-24	DISPLAY BRACKET	2		
6	29000-25	HORN BRACKET	1		
7	7 29000-34 LEXAN WINDOW		1		
8 29000-7CBW-1 CONTROL DOOR WELDMEN		CONTROL DOOR WELDMENT, PLUG LOCKS	1		
9	9 5611D2 NUT, 10-24 UNC KEPP- ZINC		4		
10	5619D3	1/2" - 13 HEX SOC HEAD SCREW	3		
11	1 5629D2 #8 x 1/2 SELF TAPPING SCREW		4		
12	5639D6	RUBBER GROMMET	1		
13	13 8000-11 ALARM, LAST COIN ALERT		1		
14	14 8000-15 BIG DIXMOR DISPLAY		1		
15	5 8149-92 IMONEX COIN ACCEPTOR - ELECTRIC		1		
16	8157	NUT, #6-32 KEPP NUT STAINLESS	4		
17	8726	PUSH BUTTON	1		

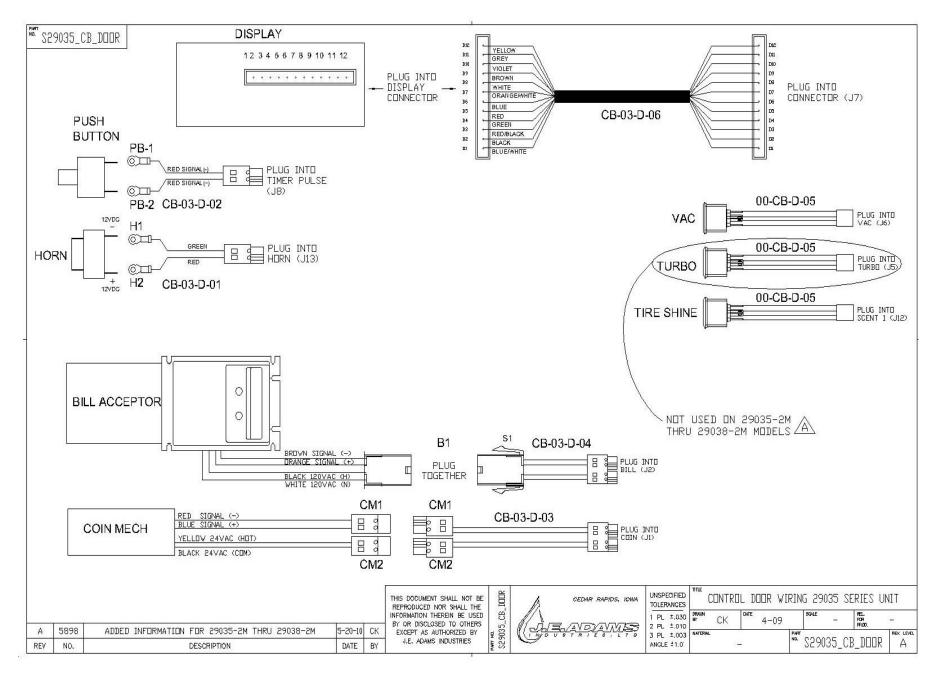


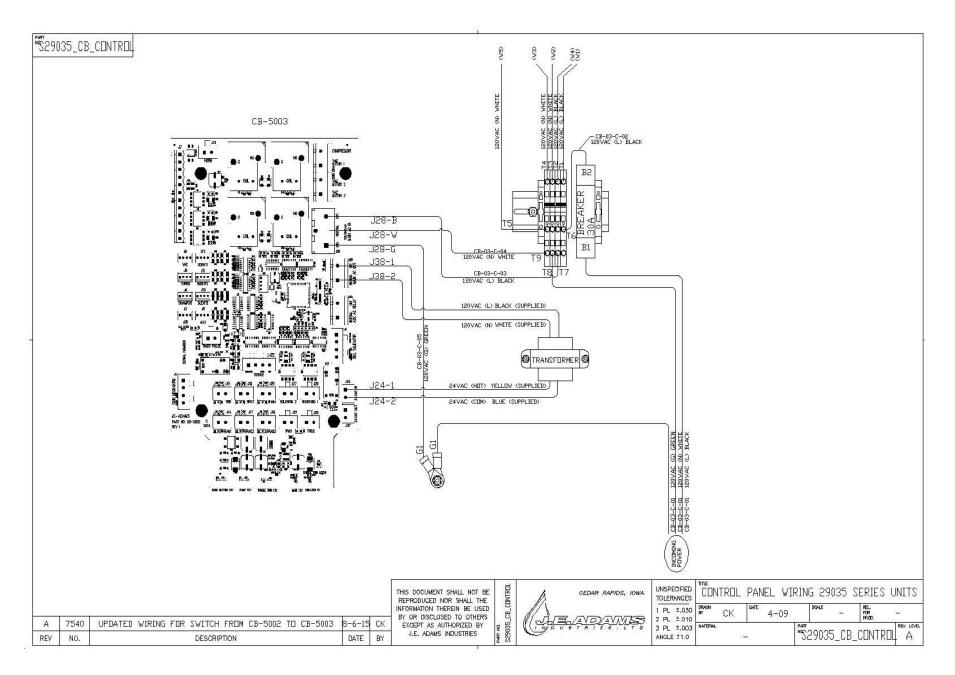


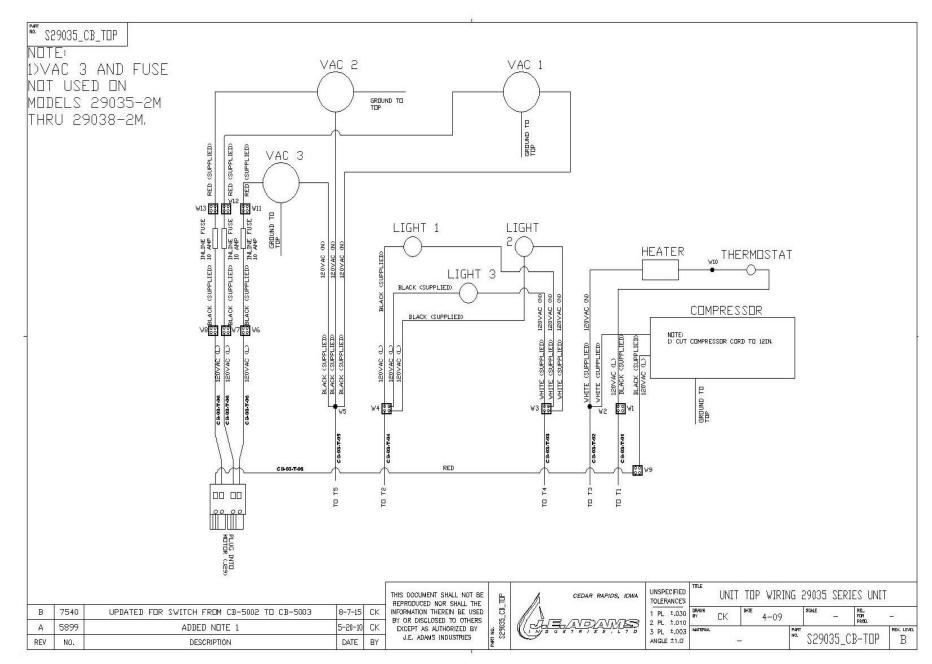


PART						BILL OF MATERIALS	
	29035		ITEM	PART NUMBER 11000-22	TUR	DESCRIPTION	QTY
			2	11000-22 2036 2058 28000-36 29000-14A-1 29000-37A 29000-37A 29000-47A 29000-47A 29000-7CBA-1 29000-7CBA-1 29000-ALLEN 29000-ALLEN 29035-29A-3 290352-9A-3 29035E-KIT-1 5600D4 5601D13 5603D1	HOS	E, 2" X 15' BLACK VACUUM	1
			3	2058	CLA MOT	W/CUFF ASSEMBLY, 2"	6
			5	29000-14A-1	DOC	R ASSEMBLY, BOTTOM, PLUG LOCK	1
			7	29000-30A 29000-37A	CON	IPRESSOR ASSEMBLY	1
			8	29000-44A	BILL	ACCEPTOR ASSEMBLY, PLUG LOCK	1
			10	29000-47A 29000-5003A	CON	TROL PANEL ASSEMBLY, CB-5003	1
		Δ.	11	29000-7CBA-1	SHA	MPOO DOOR ASSEMBLY-W/CB, PLUG LOCKS	1
		<pre>//</pre>	13	29000-ALLEN 29000-1W-2	CAN	ISTER WELD COMPLETE, PLUG LOCKS	1
			14 15	29035-10 29035-29A-3	TIRE	SHINE FORMULA	1
			16	29035B-KIT-1	DEC	AL KIT	1
			17 18	5600D4 5601D13	3/8-1 SCR	1/4-20x1/2 PPHSgConeStepZP	10
			19	5603D11	1/2 5	td NF Nylock Nut	2
			20 21	5603D2	1/4 5	Std NC Nylock Nut	4
			21 22 23 24	5606D10	WAS	HER, FLAT 1/2 SAE	2
			23	5611D4	NUT	, 5/16-18 UNC KEPP- SS	2
			25	5639D9 5647D2	ISOL	ATION MNT, 30 DUR NEOPRENE, 1/4-20	4 16
			27	5647D8	RIVE	T 3/16	14
		©	28	6601D13 6603D1 6603D2 5603D5 5606D10 5606D10 5601D4 6639D9 5647D2 5647D8 5871b8 8055EM 8055LEAD-EM 8057 8057 8076	PLU	BILL OF MATERIALS DESCRIPTION E CONNECTOR E, 2" X 15" BLACK VACUUM WCUFF ASSEMBLY, 2" OR MOUNT R ASSEMBLY, BOTTOM, PLUG LOCK IT BRACKET ASSEMBLY PRESSOR ASSEMBLY PRESSOR ASSEMBLY PRESSOR ASSEMBLY, PLUG LOCK NOVA SSEMBLY, PLUG LOCK ITROL PANEL ASSEMBLY. VICB, PLUG LOCKS MOO DOOR ASSEMBLY. VICB, PLUG LOCKS ITROL PANEL ASSEMBLY. VICB, PLUG LOCKS ITROL PANEL ASSEMBLY-WICB, PLUG LOCKS SHINE FORMULA ISTER WELD COMPLETE, PLUG LOCKS SHINE FORMULA ISTALTIC PUMP ASSEMBLY-TIRE SHINE AL KIT 6 X 1.5 HHCS 1/4-20x1/2 PPHSqConeStepZP 30 NC NVIOCK NUL 30 NC NVIOCK NUL 40 NC	5
			30	8055LEAD-EM	MOT	OR LEAD	6
		÷	31	8057	FILT	ER BAG	4
		(i)	33	8108	#10 :	x 1/2 TAP SCREW	6
			35	8159	DOC	DR GASKET	2
			36	80/6 8108 8153-1 8159 8183 8308R 8437D001 8445 EW	DEC	AL, "DISCONNECT POWER"	2
			38	8437D001	ETL	DECAL, VACUUM	1
			39 40	8615-5W 8630	CAR	ANOUT DOOR WELDMENT	2
			41	8637/2001 8630 8732 8754 8898-2 8925 8925 8925	NAM	IEPLATE SERIAL TAG, UL	1
	_		42 43	8754	TIRE	AL, DANGER, TRI-LING SHINE GUN ASSY, 3/4 OD HOSE	1
			44 45	8925	FLO	URESCENT BULB	3
			46	6939 B5722-002 CB-03-WIRE KIT	NUT	, 3/8-16 UNC HEX LOCK NUT	4
			47	CB-03-WIRE KIT	WIR	E KIT	1
J	8372	29000-1W-2 WAS 29015-1W-2		12/10/18	MWS]	
н	7761	REMOVED 5639D4 AND ADDED 29000-ALLEN		5-12-16	СК		
0	7540	REMOVED 29035-29A-2, 29000-250A, 00-CB-WIREKI	Г	0.0.15			
G	7540	ADDED 29035-29A-3, 29000-5003A, CB-03-WIREKIT		9-9-15	СК	UNSPECIFIED TOLERANCES	R RAPIDS, IOWA
	_					1 PL ±.030 BY ChadK	
F	7051	CHANGED UNIT FROM SCREW LOCKS TO PLUG LOCKS		11-20-12	СК	2 PL ±.020 9/13/2004	ES, LTD
REV	NO.	DESCRIPTION		DATE	BY	3 PL ± 003 SCALE SHEET NO 2002E	REV.
TI	HIS DOCUMENT SHALL NO	OT BE REPRODUCED NOR SHALL THE INFORMATION THEREIN BE USED BY OR DISCLOSED TO OTHERS EXCEPT AS AUT	HORIZED BY J.E.	ADAMS INDUSTRIES		ANGLE ± 1* 1 / 3 29035	J

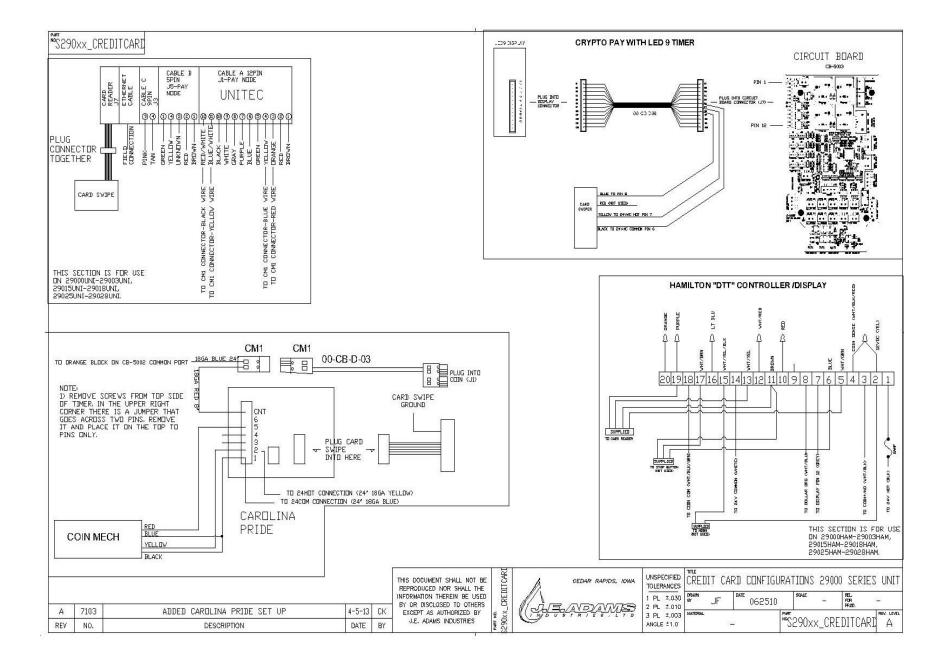


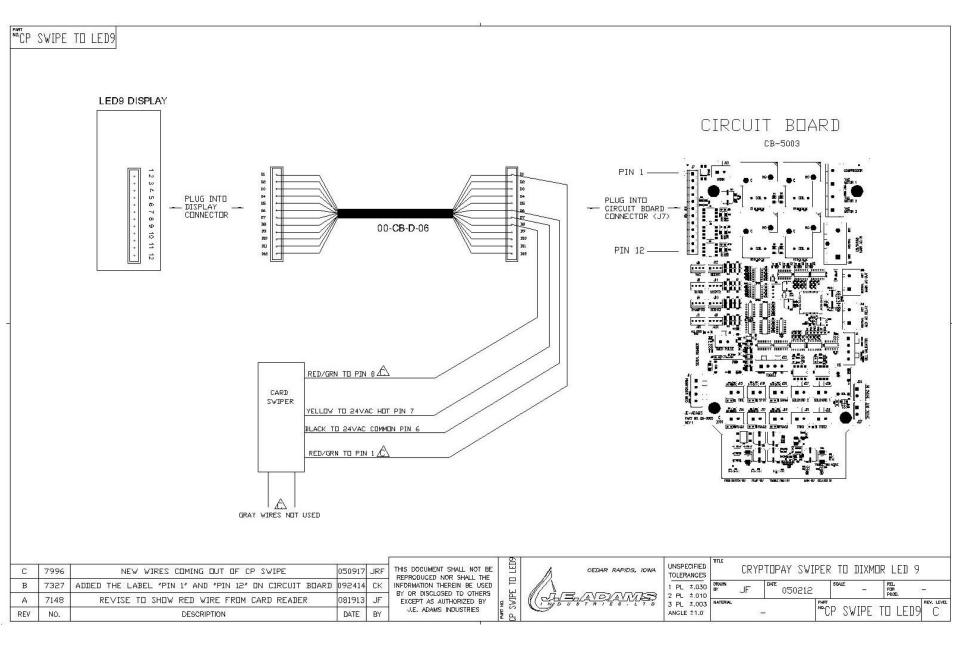


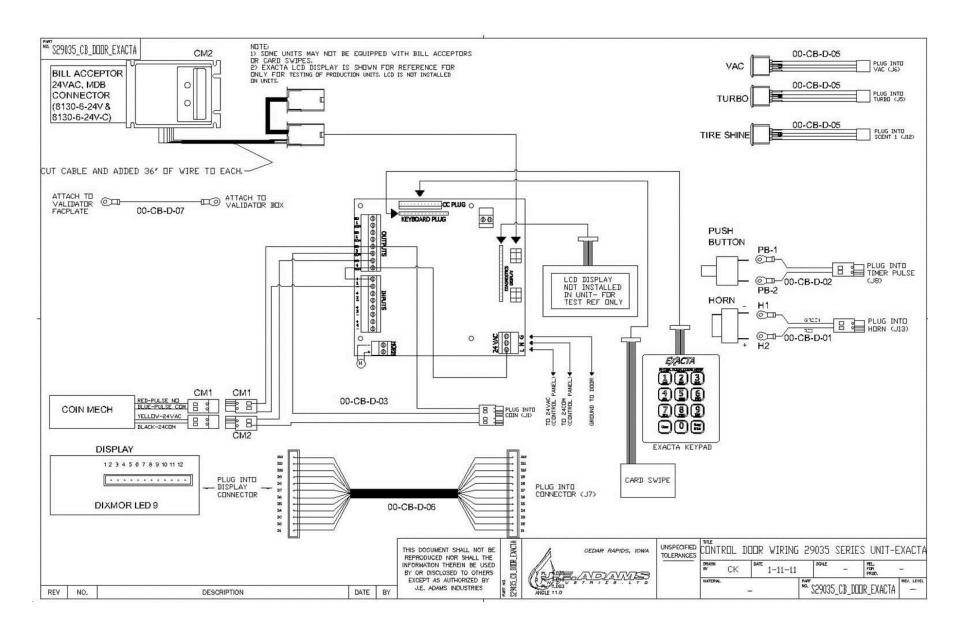




рият I		
^{₩#} 529035_CB_PUMP		
	GREEN IZVDC (+) CB-03-PSH-02 C (-) CB-03-PSH-02 (-) CB-03-PSH-03 (-) (-) (-) (-) (-) (-) (-) (-) (-) (-)	BLACK BLACK TO (J23)
	PUMP ASSEMBLY	FRAGRANCE GUN ASSEMBLY
C 7766 CHANGED ONE FRAG GUN WIRE FROM RED TO BLACK B 7719 INCORRECT WIRE COLOR, PURPLE SHOULD BE GREY A 7540 UPDATED FOR SWICTH FROM CB-5002 TO CB-5003 REV NO. DESCRIPTION	B-24-16 CK REPRODUCED NOR SHALL THE BY OR DISCLOSED TO OTHERS 8-7-15 CK EXCEPT AS AUTHORIZED BY BY OR DISCLOSED TO OTHERS BY OR DISCLOSED TO OTHERS B	SPECIFIED TITLE WIRE DIAGRAM, 29035 PUMP ASSEMBLY LERANCES WIRE DIAGRAM, 29035 PUMP ASSEMBLY PL ±.030 PMIN CK IMM 4-09 SOLE PI P







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.

