J.E. ADAMS INDUSTRIES, LTD

Models- 9200, 9210, 9213 Series Vacuums
9200-1, 9200-3, 9200-4, 9200-5 Series Vacuums*
9209, 9209-6 Series Vacuums
9220, 9230, 9230-3 Series Vacuums
9240, 9250, 9253 Series Vacuums
**not pictured*

9200

9209

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Page 4	Important Safety Instructions
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Page 19	Operating Instructions
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Page 31-34	Wiring Diagram

9230

9250

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: *(All 2 vacuum motor units)*

Voltage:	120VAC, 60Hz
Amperage:	(1) 20 amp service is required for this unit
Weight:	135-155 lbs
Motors:	(2) 120VAC vacuum motor
Fuses:	(2) 10 amp inline fuses

Unit specifications: *(All 3 vacuum motor units)*

Voltage:	120VAC, 60Hz
Amperage:	(1) 30 amp service is required for this unit
Weight:	135-155 lbs
Motors:	(3) 120VAC vacuum motor
Fuses:	(3) 10 amp inline fuses

220VAC units:

Unit specifications: *(All 2 vacuum motor units)*

Voltage:	220VAC, 50Hz
Amperage:	(1) 10 amp service is required for this unit
Weight:	135-155 lbs
Motors:	(2) 220VAC vacuum motor
Fuses:	(2) 8 amp inline fuses

Unit specifications: *(All 3 vacuum motor units)*

Voltage:	220VAC, 50Hz
Amperage:	(1) 15 amp service is required for this unit
Weight:	135-155 lbs
Motors:	(3) 220VAC vacuum motor
Fuses:	(3) 8 amp inline fuses

Duty cycle time 4 minutes on, 4 minutes off.

NOTE: “UNIT INTENDED FOR COMMERCIAL 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)

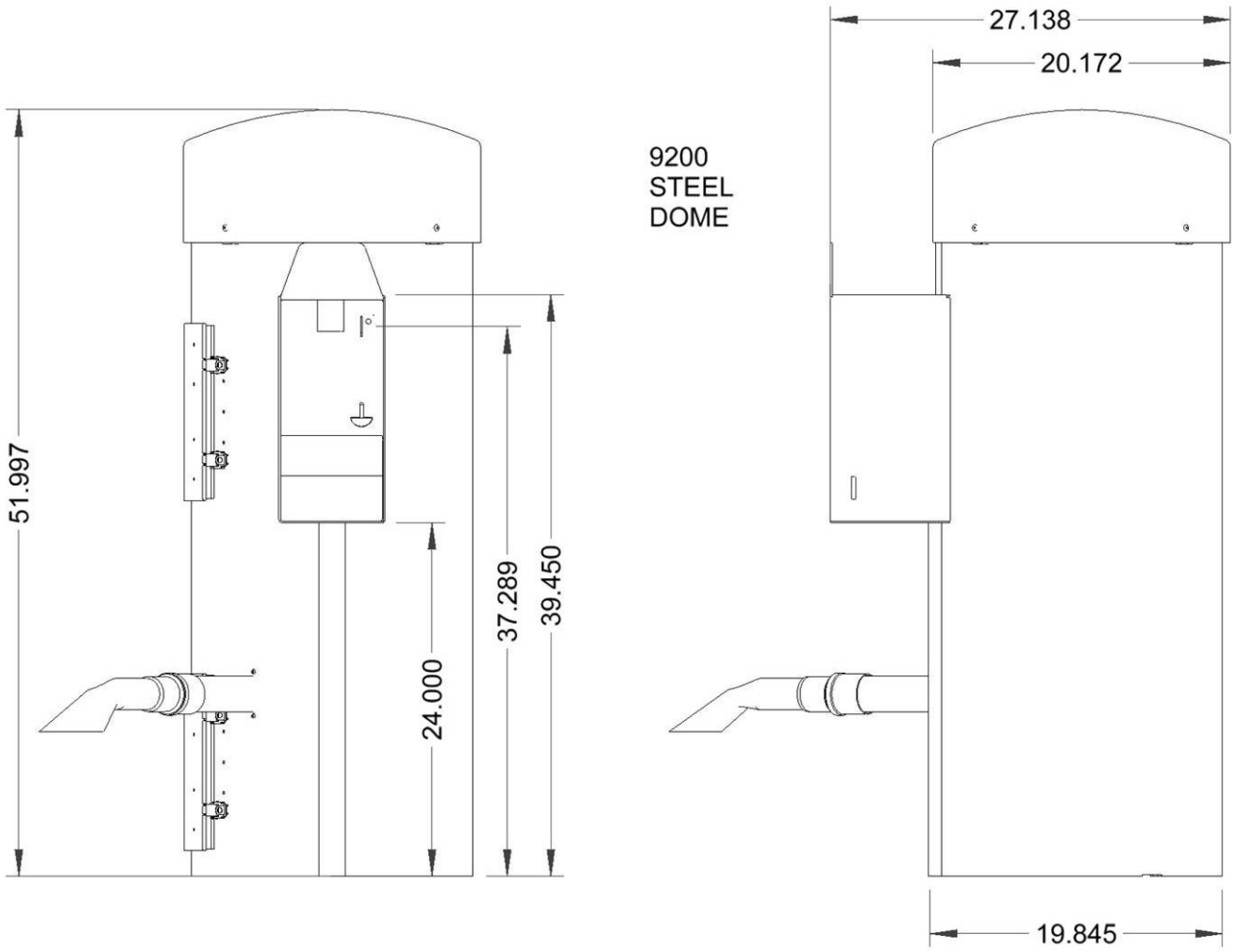
WARNING – To reduce the risk of fire, electric shock, or injury:

- 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.

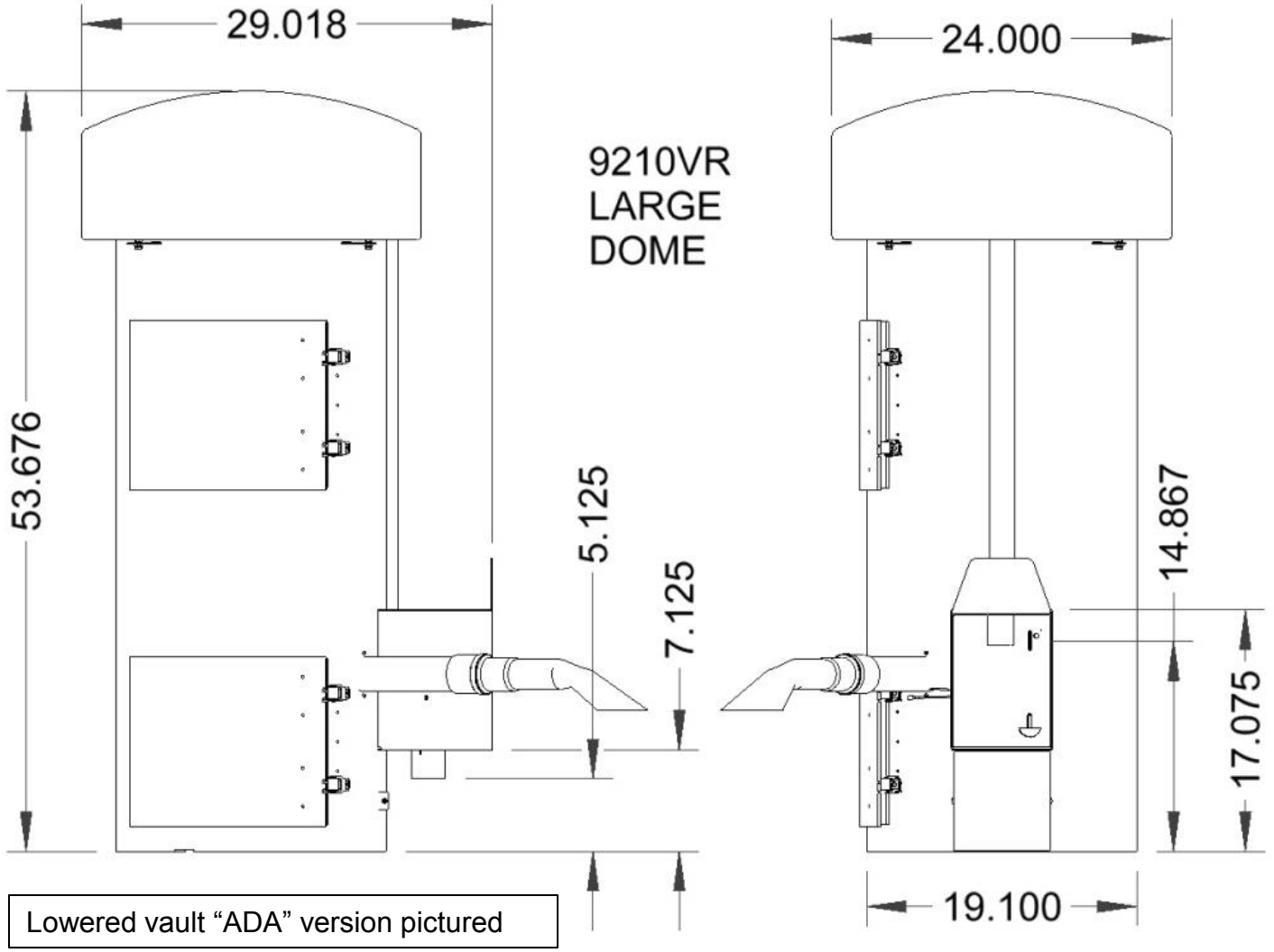
SAVE THESE INSTRUCTIONS

- **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 service to the location
- **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.
- All local and national electric codes must be followed for installation and use.
- Licensed electricians are recommended for installation.

Product Dimensions



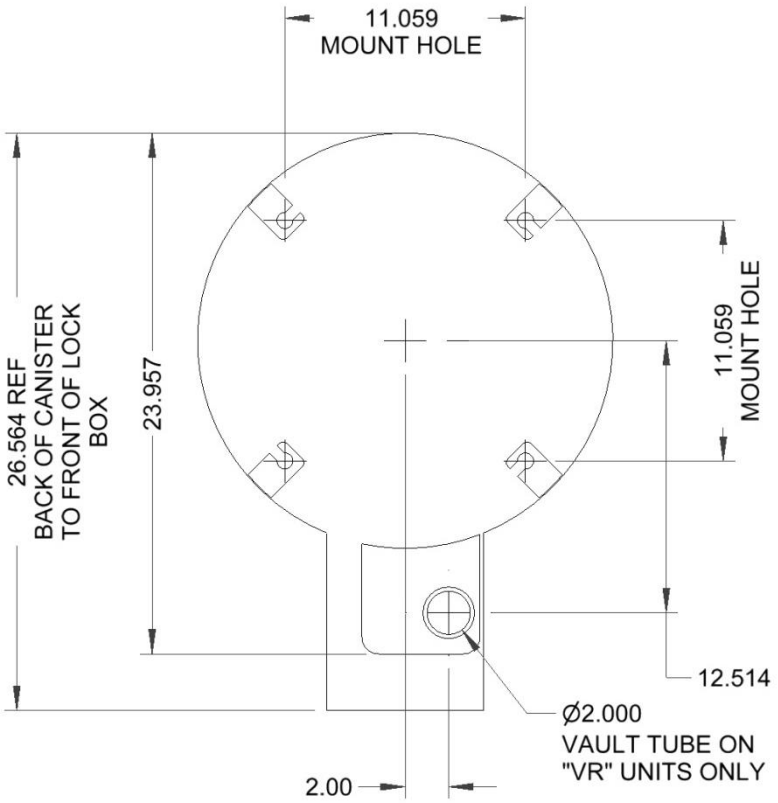
Product Dimensions



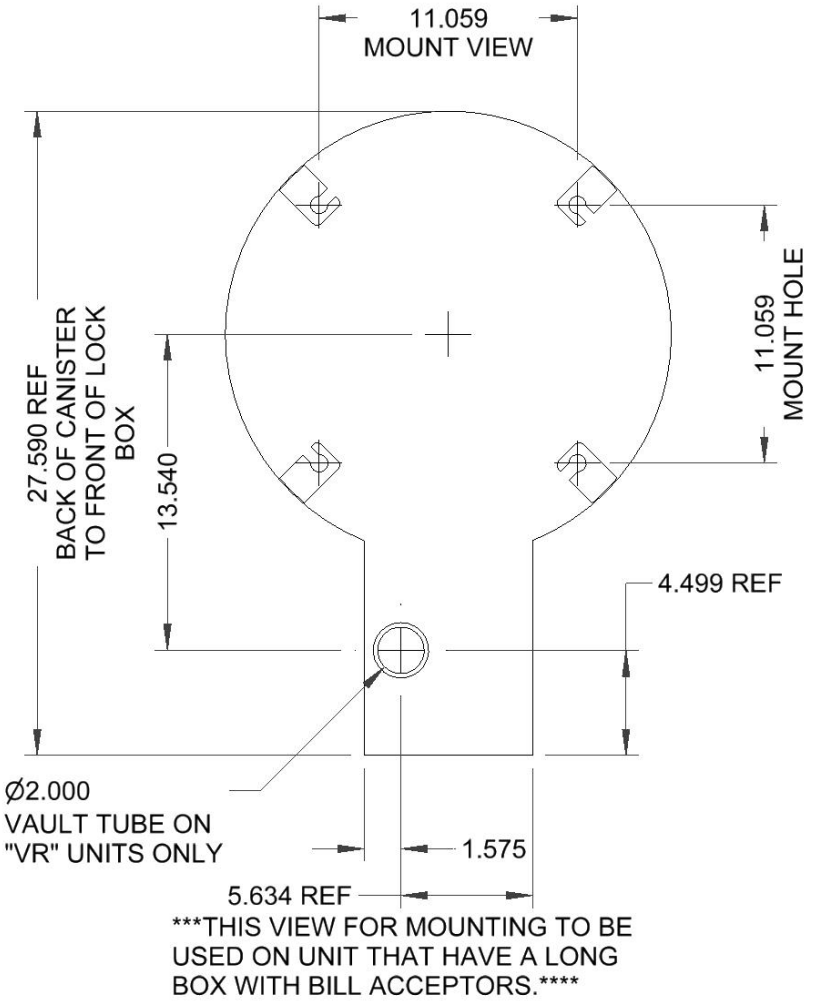
Lowered vault “ADA” version pictured

Installation:

PLAN VIEW



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



Installation:

Lowered vault “ADA” version pictured.

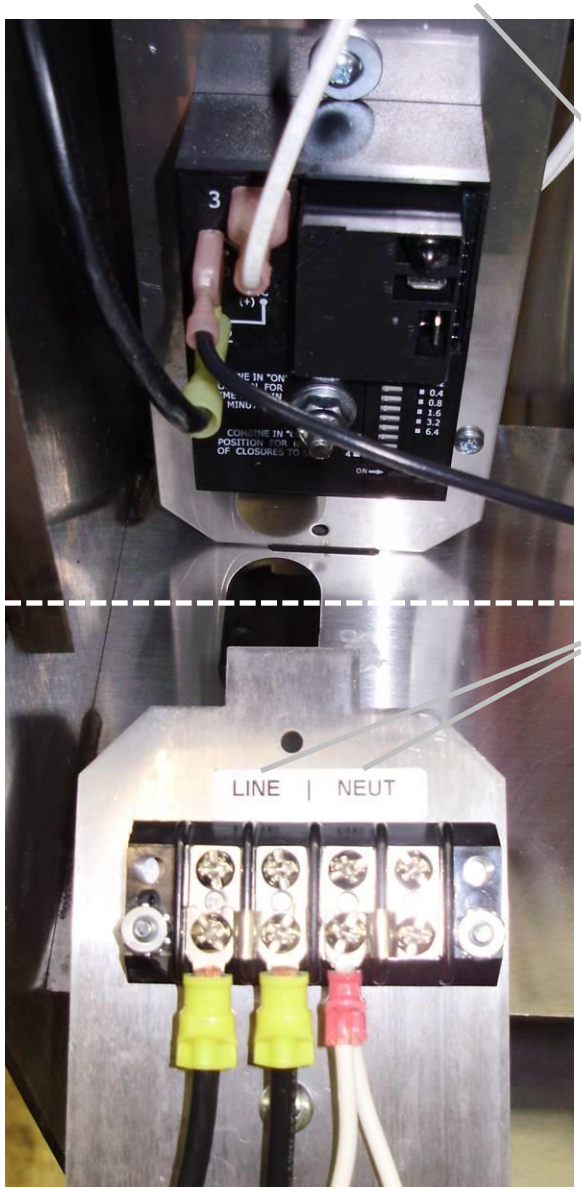
NOTE: when mounting, provide clearance so cleanout doors can open!!

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

Bring electrical in underneath can and route up front channel to terminal strip.

Bring electrical in underneath can and route up front channel to terminal strip.

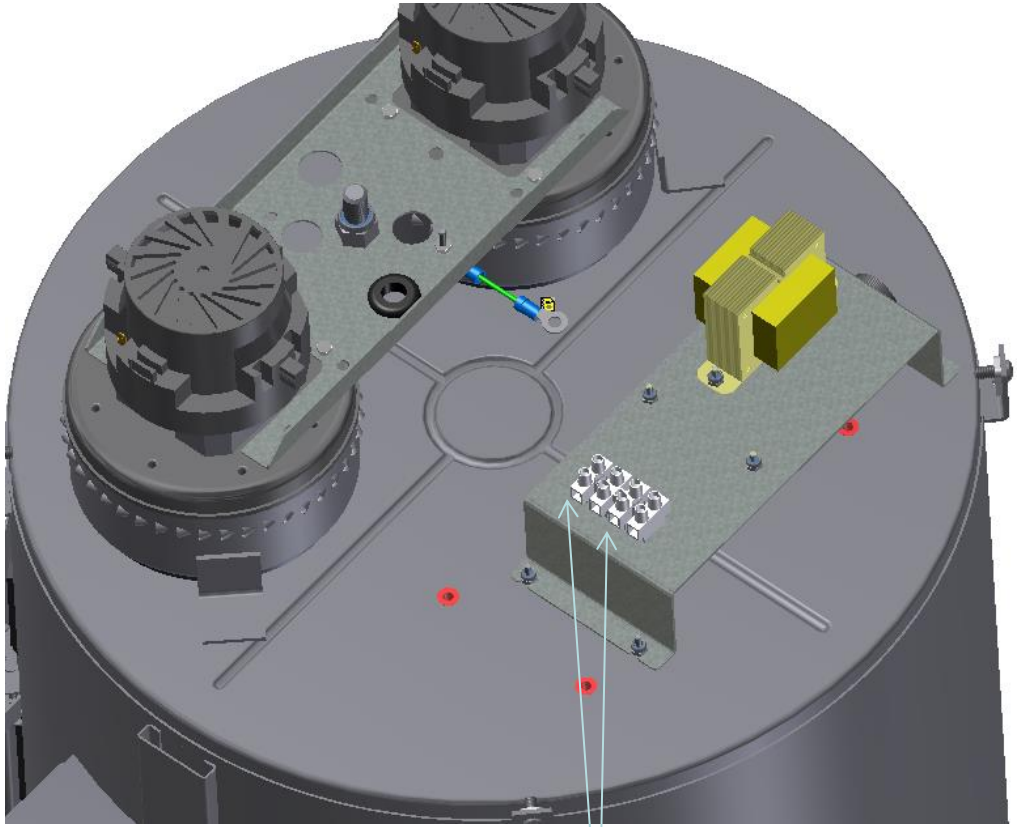
9200 Style Vacs



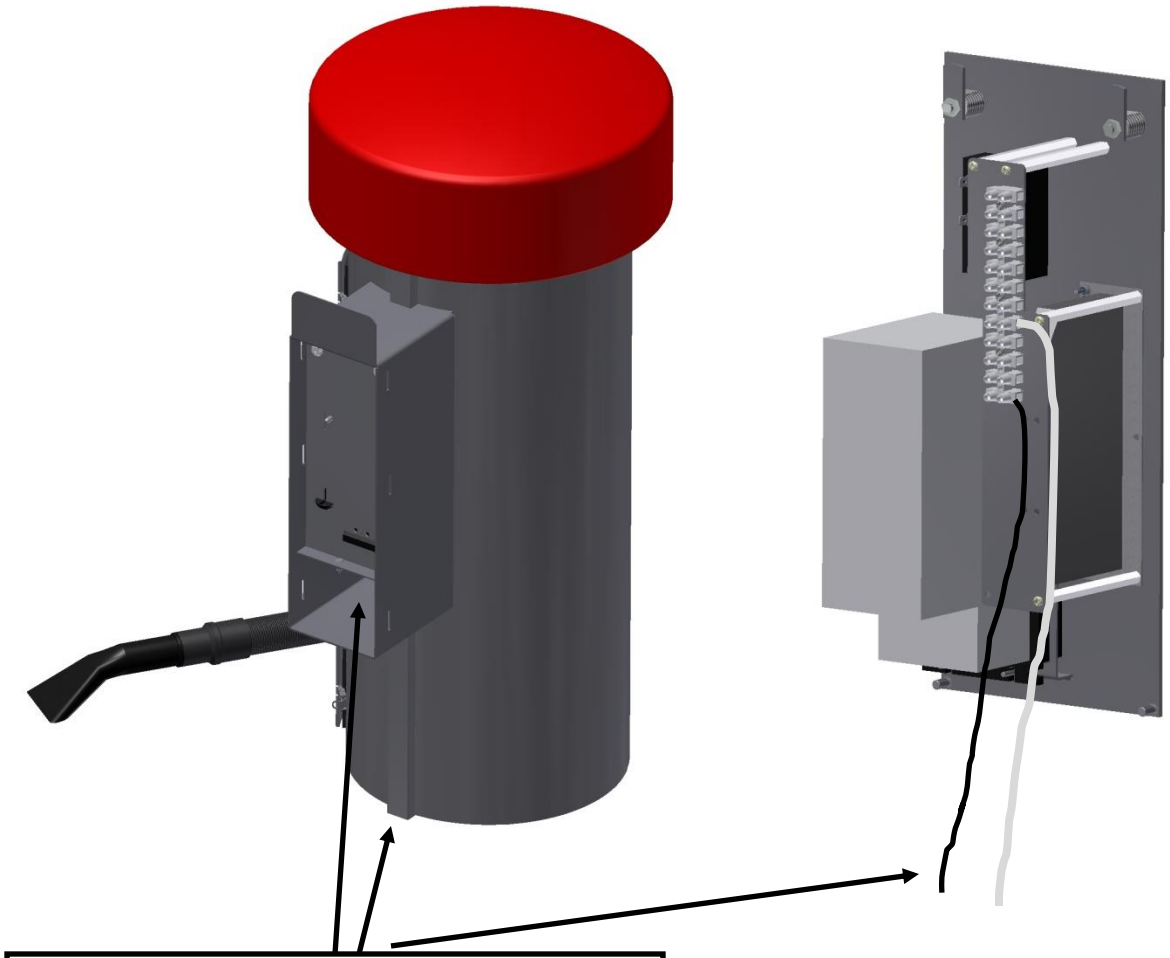
Remove screw from uppermost point of timer plate and tilt/ flip down as shown below.

With timer plate flipped down as shown, add incoming power "line and neutral" to terminal strip. (120V) . Green to ground.

Bring electrical in underneath can and route up front channel to terminal strip.



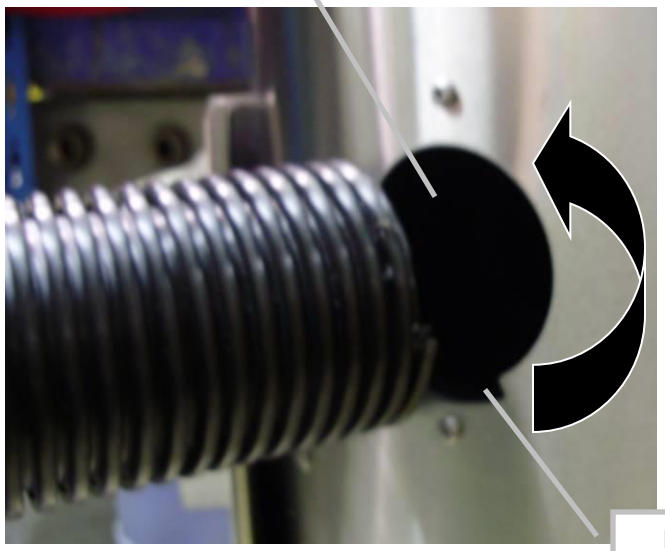
For 9200-1 thru 9200-5 installations: Wire is to be ran from bottom of machine thru raceway to box and then thru raceway to top of machine. Connections are to be made to terminal strip shown above. Black to black (LINE) and white to white (NEUTRAL). Terminal will be labeled LINE and NEUTRAL, green to ground..



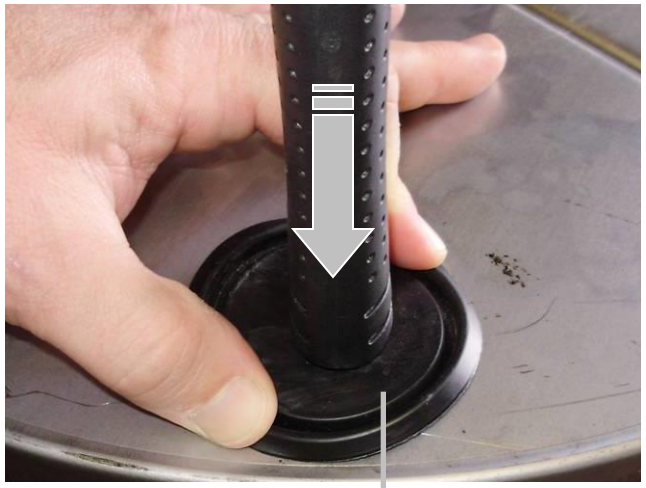
For 9209 style vacuums, - bring electrical in underneath can and route up thru front channel raceway to behind coin box where factory has supplied a wiring harness to tie into. Black to black (LINE) and white to white (NEUTRAL). Green to ground.

To attach hose, thread into metal hole counter clockwise.

Once unit has been installed use 5871B8 cap plugs (supplied with unit) to seal holes in canister bottom located in lower cleanout door. Extra cap plugs are included with the unit in case plug becomes damaged during shipping removal.



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:

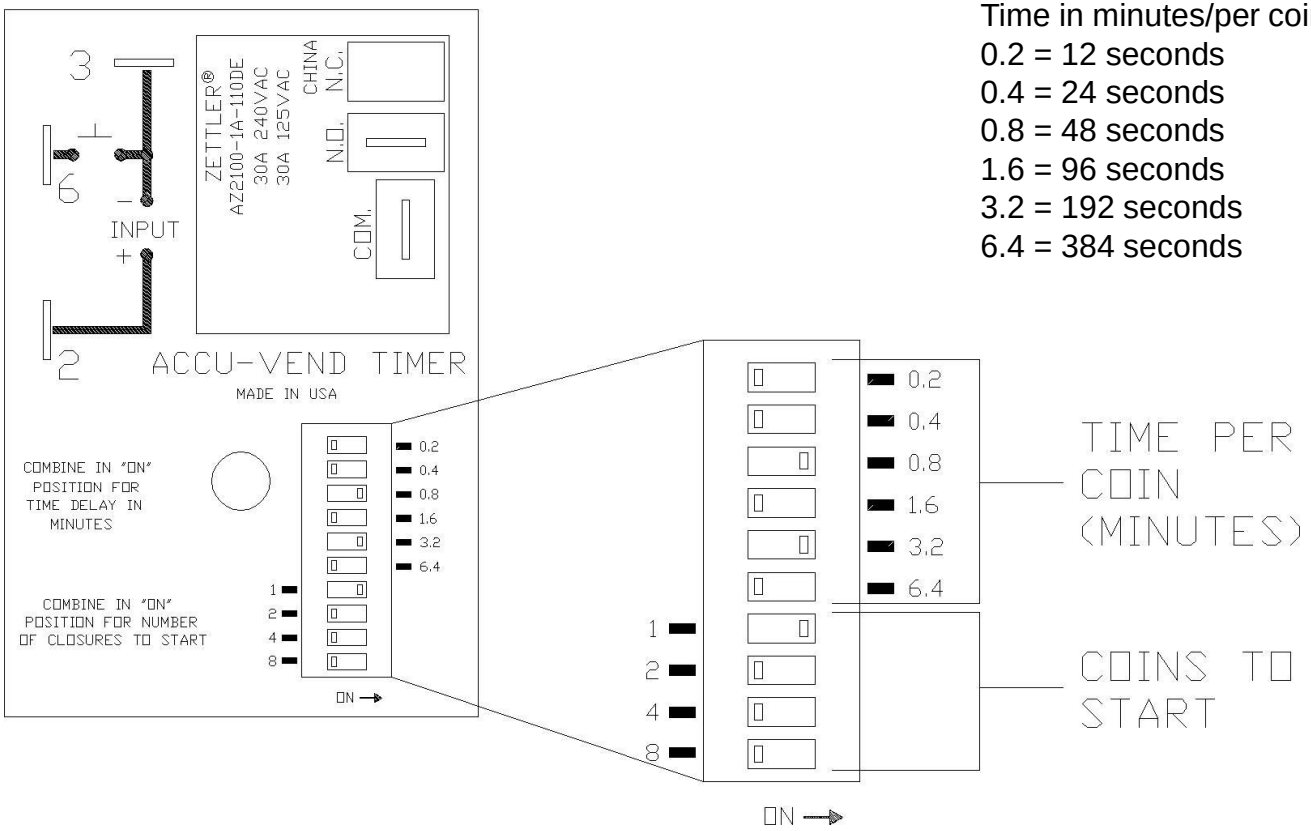
No programming to acceptor needed if unit was purchased with the standard Imonex Z3 acceptor (8149 JEA part number) as it is built to accept US quarters.

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

Programming:

The below timer pictured is the standard SSAC model that allows the end user to select the "coins to start" and the "time per coin" 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 "time per coins" 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 time per coin setting can be modified as desired by simply 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 need to have the 1.6 and 0.4 dips selected. This would allow 2 minutes of time for each quarter for a total of 4 minutes for two quarters.

Time in minutes/per coin 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



Bill acceptor (optional on some models):

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

Display (optional on some models):

Unit may be pre-programmed when received depending on the information given at that the time of order.
To program the optional digital display, follow the steps below or go to JEADAMS.COM and visit the Learning Center:

Dixmor LED 7 operating and programming instructions

Push MODE to change from item to item. Push SET to set desired value or choose option for that item. Pushing SET repeatedly causes numbers to increase. Holding SET causes numbers to decrease. The letter "*X*" below represents a programmable digit. Default values are shown in [ ].

ITEM	DISPLAY	REPRESENTS
1	COIN VALU [$.25]	The monetary value assigned to a single coin pulse. Adj from $.05 to $5.00.
2	C: *XX* [30]	Time per coin/pulse. Adj from 0:01 to 9:59.
3	S *XXX* [008]	Number of coins/pulses to start. Adj from 1 to 200.
4	AUX VALU CN. *XX* [4]	Auxiliary coin/pulse input pulse multiplier. Adj from 1 to 80.
5	B *XXX* [9]	Coin/pulses to bonus. Bonus time is given when this coin/pulse is received.
6A	BONUS TIME *XX*:##	Amount of time added for bonus coin/pulse.
6B	*XXXX* [00:00]	Adj from 00:00 to 99:59.
7	[SINGLE BONUS]	Bonus time is only added one time when bonus coin pulse is received.
	MULTIPLE BONUS	Bonus time is added for every coin after bonus coin pulse is received.
8	[DEBIT MODE]	Money counts down as coins are inserted.
	CREDIT MODE	Money counts up as coins are inserted.
	BOTH	Money counts up as coins are inserted, plus a prompt of "ADD $X MORE" if start price is not reached.
9	[DELAYED START]	Two second delay before timing starts after start price is reached.
	INSTANT START	Timing starts as soon as start price is reached.
10	HL *XX* [10]	Length of warning horn in seconds at one minute of time remaining.

11	[PULSED HORN]	Horn output will pulse for amount of time set in HL:XX.
	CONTINUOUS HORN	Horn output will stay on continuously for entire last minute.
12	[RESTART OFF]	Restart feature turned off. Full price required after time expires.
	RESTART ON	Timer may be restarted with one coin for 20 seconds after time expires.
13	[STD]	Standard greeting message displayed.
	USER	User programmed custom message is displayed.
	MIX	Standard and custom message are displayed.
14	M *X:XX* [5:00]	Length of washdown cycle using remote control. Adj from 0:00 to 9:59.
15	*XXXX* [1 2 3 4]	Adjustable remote access code (1234 is default).
16	CC PULSE VALUE $X:XX [$.25]	Monetary value assigned to credit card pulse received on pin #8 during count up.
17	[ENG]	Standard message and prompt is displayed in English.
	SPH	Standard message and prompt is displayed in Spanish.
	E & S	Standard message and prompt is displayed in English then Spanish.
18	EXIT	Timer returns to standby.

Inventory

Timer keeps a running count of coins deposited, auxiliary pulses and manual cycles.
To show inventory press ***SET***. Timer will display COINS XXXX (Number of coin pulses since last cleared), AUX XXXX (Number of pulses on auxiliary input) then MANUAL XXXX (Number of washdown cycles used since last cleared).

To clear inventory: Press ***SET*** to display inventory. Press and hold ***MODE*** until display reads “CLR?”. Release ***MODE***. Press and hold ***MODE*** again until timer reads “DONE”.

Bonus Time Settings

Amount of time set in bonus time is added to time remaining on timer when bonus coin/pulse is received.
Bonus is disabled by setting bonus time to 00:00.
If “SINGLE BONUS” is selected, bonus time is only added once, when bonus coin/pulse is received. Any coins deposited after that bonus coin will receive the regular time per coin.
If “MULTIPLE BONUS” is selected, every coin deposited after bonus coin/pulse is reached will receive amount of time set in “BONUS TIME”.

Debit/Credit Mode:

Debit Mode: As coins are deposited display shows “$1.75 MORE, $1.50 MORE, $1.25 MORE” etc. until start price is reached. 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 mode, 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.

Credit Card Input:

Count up mode: No pre-set amount is charged to card. Timer will count up and run until terminated by credit card system. For count up: Close pin #9 (input) to 24 VAC common for more than 400ms. Timer will continue to count up until closure is released for more than 400ms.
To have timer display amount charged to card at end of cycle: Close input as above. Open input for less than 400ms and re-close at intervals determined by pulse value set in “CC PULSE VALUE” (For example: if time per coin is set at 30 sec and “”CC Pulse Value” is set at $ .25, open and close input every 30 seconds. If time per coin is set at 30 sec and “CC Pulse Value” is set at $ .05, open and close input every 6 seconds.)

Pre-pay mode: A pre-determined amount is charged to credit card each time card is swiped and credit card system sends pulses to input.

Pulses between 16ms and 200ms will register on timer like coin pulses. A pulse between 200ms and 400ms will cause timer to display “VERIFYING CARD”. Should a second pulse of 200ms to 400ms be received on input timer will display “TRY DIFFERENT CARD”. Minimum time between pulses is 16ms.
Note: Not all credit card systems can utilize all modes of operation. Contact your credit card system manufacturer for more information on what your system can do.

Messages

Standard greeting message (English): “PLEASE DEPOSIT $2.00 TO START”.
Standard greeting message (Spanish): “POR FAVOR DEPOSITO $2.00 PARA EMPEZAR”
Standard exit message (English): “THANK YOU”
Standard exit message (Spanish): “GRACIAS”

Custom Message Programming:

A custom message can be programmed up to 64 characters (a space counts as a character).

To program a custom message: Push ***MODE*** until STD appears on display. Push ***SET*** until USER appears on display. Push and hold ***MODE*** until “***I***” appears on right side of display. Push ***SET*** until first letter of your custom message appears on right side of display. Push ***MODE***. The first letter of your message will move over one position to the left and an “A” will appear on the far right. Push ***SET*** until the second letter of your message appears on the right. Continue in this fashion until you message is complete. (Push ***MODE*** to advance to the next space in your message, push ***SET*** to display the letter or character you need. The character you are programming will always be the far right digit.) At the end of your message you MUST put a “***/***” to indicate the end of the message. Once your message is complete, push and hold ***MODE*** until USER appears on the display. Push ***MODE*** until EXIT appears. Message programming is now complete.

Count Up Message:

During count up mode an operator programmable message of up to 31 characters can be displayed every five seconds. To program message push and hold ***MODE*** when timer is displaying “CC PULSE VALUE” until “ ***/*** “ appears on display, then proceed as above, use ***SET*** to set letter or character required then press ***MODE*** to advance to next space. When message is complete, hold ***MODE*** until timer shows “DONE”.

Remote Control Operation & Method of Programming:

Remote control will hold program setup for 15 minutes without batteries to allow you to change batteries without reprogramming remote. If remote loses its program for any reason use the following instructions.

1. Hold down the set button until the red LED blinks twice, then release the button.
2. Enter **0000**

Wash Down: Press red power button. Display will show **0000**. Enter your four digit access Code (Default is 1 2 3 4). Timer will show **OK** if code is correct.
Press red power button on remote control. Timer will display **M0:00** and start counting up. Timer will continue to run until washdown cycle length is reached or washdown cycle is stopped by operator. Note: to stop washdown cycle press red power button .

Inventory: Press red power button . Display will show 0000. Enter your four digit access code (Default is 1 2 3 4). Timer will show **OK** if code is correct. Press **VOL +** on remote control.
Timer will show **COINS 0000 AUX 0000 MANUAL 0000**. Press **VOL +** again to return to standby message. Coins represents coins deposited. Manual represents the number of washdown cycles.
To clear inventory: With inventory showing, press and hold **CH +** until **CLR?** appears on timer. Press and hold **CH +** again until **DONE** appears on timer. Inventory has now been reset to zero. Clearing inventory resets both coins and manual to zero.
Press **VOL +** to return to standby.

Timer Programming: Press red power button. Timer will show **0000**. Enter four digit access code (Default is 1 2 3 4). Timer will show **OK** if code is correct.
Press **CH +** . Timer will display **COIN VALU $ .25**. Use **VOL +** or **VOL -** to set monetary value of one coin pulse.
Press **CH +** to advance to next item. Use **VOL +** or **VOL –** to set value or make choice for that item.
Continue in this manner until all modes have been programmed. Use **CH +** to move to the next mode. Use **VOL +** or **VOL –** to set required value.

NOTE: Remote control access will automatically become disabled when no buttons have been pushed for approximately one minute.

Operating Instructions:

- Insert payment (coins, bills, or credit card) to start vacuum.
- 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 door and motor gaskets periodically for signs of wear or damage and replace as needed.
- 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 every month for excessive wear. Motor brushes should be changed immediatley if they are shorter than ¼". ***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.
	One of the vac motors is not working?	Check line motor fuse and replace. Replace motor if necessary.

PART NO. 9200

BILL OF MATERIALS

ITEM	PART NUMBER	DESCRIPTION	QTY
33	8211RW	FACEPLATE WELDMENT, R.H	1
34	8221SS4	TIMER ASSY, 110 SSAC	1
35	8221WH2	WIRING HARNESS, 2 MOTOR	1
36	8423-2	DECAL, VACUUM DOME	1
37	8424-1	DECAL, CANISTER	1
38	8429-1	DECAL, HANG HOSE	1
39	8437D001	DECAL, ETL LISTED	1
41	8615-5W	CLEANOUT DOOR WELDMENT	2
42	8631	11 X 55 PAD FOR VACS	1
43	8638	PIN LOCK	2
44	8673-11	GROUND WIRE 28"	1
45	8732	NAMEPLATE, PRODUCT SPEC'S	1
46	8754	DECAL, WARNING	1
47	9200FPD	DECAL, FACEPLATE	1
48	9201W	CAN W/C 2DRVAC ECONO/PIN	1
49	B5722-002	NUT, 3/8-16 UNC HEX LOCK NUT	4
35	8605	PALLET, VAC, 26" X 30.5"	1

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	5600D4	3/8-16 X 1.5 HHCS	4
4	5603D1	10 Std NC Nylock Nut	1
5	5603D11	1/2 Std NC Nylock Nut	1
6	5606D22	WASHER, 3/8 FENDER	8
7	5606D7	FLAT WASHER, .160 ID X .500 OD	1
8	5619D1	SCR, HEX SOC BUT, HD CPCW, 1	4
9	5627D2	Pan Head, Slotted, 6-32 x 5/8	1
10	5629D1	#8 x 1 SELF TAPPING SCREW	1
11	5639D4	RUBBER GROMMET	1
12	5647D2	1/8" SS POP RIVET	16
13	5647D8	3/16" SS POP RIVET	14
14	5871B9	PLASTIC VAC LID PLUG	4
15	5871b8	PLUG, VAC BOTTOM 2-1/2"	8
16	6082	BAG 9 X 12	1
17	8047	BAG, 60 X 72	1
18	8051G	BRACKET, MOTOR MOUNT	1
19	8055EM	MOTOR, ELECTRO 120V	2
20	8055LEAD-EM	WIRE LEAD, EM VAC MOTOR	4
21	8057	MOTOR GASKET	2
22	8076	FILTER BAG	4
23	8081	CABLE TIE MOUNT	2
24	8084	CABLE TIE	4
25	8101	20" STAINLESS STEEL DOME	1
26	8108	#10 x 1/2 TAP SCREW	4
27	8149	IMONEX COIN ACCEPTOR	1
28	8153-1	LATCH, CLEANOUT DOOR	4
29	8157	NUT, #6-32 KEPP NUT STAINLESS	5
30	8159	DOOR GASKET	2
31	8183	DISCONNECT POWER DECAL	2
32	8204RW	WELDMENT, COIN BOX	1

TITLE 2DR VAC, ECONO DOME PIN LOCK

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

MATERIAL

SCALE

DRAWN BY CHAD K.

DATE 3/8/2011

CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD

PART NO. 9200

REV.

REV	NO.	DESCRIPTION	DATE	BY

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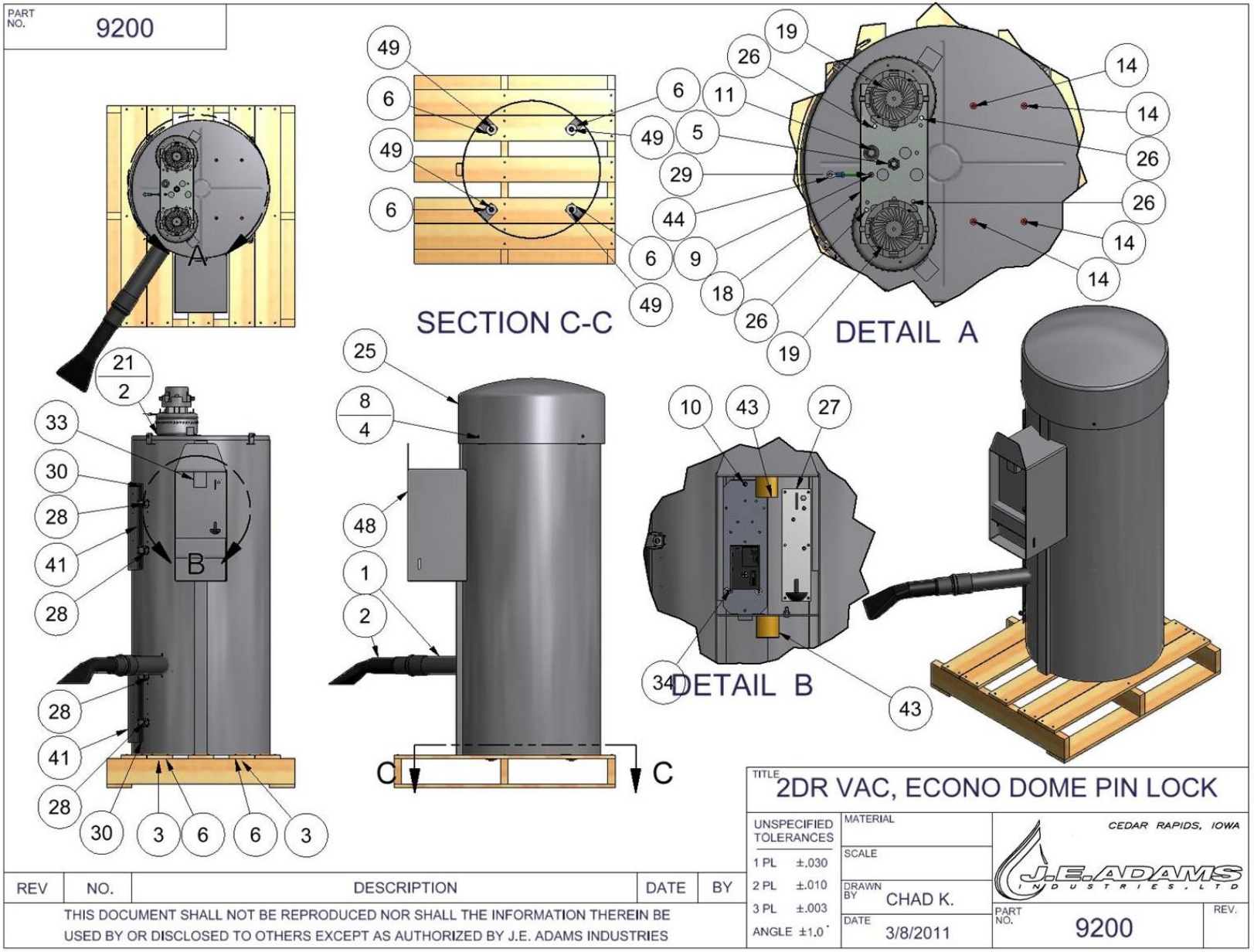
PART NO. 9200
A
B
SECTION C-C
DETAIL A
DETAIL B
C
C
TITLE 2DR VAC, ECONO DOME PIN LOCK
UNSPECIFIED TOLERANCES
1 PL ±.030
2 PL ±.010
3 PL ±.003
ANGLE ±1.0°
MATERIAL
SCALE
DRAWN BY CHAD K.
DATE 3/8/2011
CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD
PART NO. 9200
REV.
REV NO. DESCRIPTION DATE BY
THIS DOCUMENT 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. 9200-1LD

BILL OF MATERIALS

ITEM	PART NUMBER	DESCRIPTION	QTY
40	8437D001	DECAL, ETL LISTED	1
41	8543K	2 MOTOR LIGHT KIT	1
42	8605	PALLET, VAC, 26" X 30.5"	1
43	8615-5W	CLEANOUT DOOR WELDMENT	2
44	8630	TUBE, 30.5 X 26 X 60	1
45	8638	PIN LOCK	1
46	8673-11	GROUND WIRE 28"	1
47	8732	NAMEPLATE, PRODUCT SPECS	1
48	8754	WARNING DECAL	1
49	8761	RELAY, 3PDT-24VAC-20A@1HP	1
50	8900-7VW	FACEPLATE WELDMENT, W/VALI	1
51	8900-82	TERMINAL BRACKET, VAC-SCENT	1
52	8925	FLOURESCENT BULB	2
53	8953	MEDECO CAM LOCK W/2 KEYS	2
54	9200-10	BRACKET, 9200 W/VALIDATOR	1
55	9200-1D-1-10	DECAL, FACEPLATE	1
B 56	9200-1D-1-10-BA	DECAL, INSERT BILL	1
B 57	9200-1D-1-10-LC	DECAL, LAST COIN	1
58	9200-1WKIT	WIRING KIT	1
59	9200FPD	DECAL, FACEPLATE	1
60	9201W2	CANISTER WELDMENT, BILL ACEPTOR, 2M	1
61	B5722-002	NUT, 3/8-16 UNC HEX LOCK NUT	4

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	5000D5	STAND-OFF, 6-32	4
4	5600D4	3/8-16 X 1.5 HHCS	4
5	5601D13 B	SCR,1/4-20x1/2 PPHSqConeStepZP	4
6	5603D1	10 Std NC Nylock Nut	1
7	5603D10	6 Std NC Nylock Nut	16
8	5603D11	1/2 Std NF Nylock Nut	1
9	5606D22	WASHER, 3/8 FENDER	8
10	5606D7	FLAT WASHER, .160 ID X .500 OD	1
11	5627D1	6-32 x 1.0 PHIL. PAN -MACHINE SCREW	6
12	5627D2	6-32 x .625 PHIL. PAN -MACHINE SCREW	1
13	5647D2	1/8" SS POP RIVET	16
14	5647D8	3/16" SS POP RIVET	14
15	5662D2	6-32 x 1/2 PHIL. PAN -MACHINE SCREW	8
16	5871B9	PLASTIC VAC LID PLUG	4
17	5871b8	PLUG, VAC BOTTOM 2-1/2"	8
18	5913D8	LAMP, PANEL MT-3/8, 12V,LED, GRN	1
19	5944D001	TERMINAL STRIP, 12 POLES, 8AMP MAX	1
20	5944D004	TERMINAL STRIP, C-60 SERIES, 4 POLE	1
21	6082	BAG, 9 X 12	1
22	8000-10	DIXMOR DISPLAY TIMER	1
23	8000-11	ALARM, LAST COIN ALERT	1
24	8047	BAG, 60 X 72	1
25	8055EM	MOTOR, ELECTRO 120V	2
26	8057	MOTOR GASKET	2
27	8076	FILTER BAG	4
28	8081	CABLE TIE MOUNT	2
29	8084	CABLE TIE	4
30	8108	#10 x 1/2 TAP SCREW	4
31	8130-6	MEI MARS, 110V BILL VALIDATOR	1
32	8131-2	TRANSFORMER, 110/220-24 1.66A	1
33	8149	IMONEX COIN ACCEPTOR	1
34	8153-1	LATCH, CLEANOUT DOOR	4
35	8157	NUT, #6-32 KEPP NUT STAINLESS	5
36	8159	DOOR GASKET	2
37	8183	DECAL, WARNING	2
38	8204RW	WELDMENT, COIN BOX	1
39	8306	24" PLASTIC DOME	1

TITLE: 2DR VAC, 2MTR, DISPLAY, BILL ACCEPTOR VAC, LD

REV	NO.	DESCRIPTION	DATE	BY
B	7413	ADD DECALS, ADD DOME SCREWS	031015	JF
A	6552	REVISED AND DRAWN TO INVENTOR; NO PREVIOUS DRAWING	6-14-11	CK

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

MATERIAL
SCALE
DRAWN BY CHAD K.
DATE 6/13/2011

CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD

PART NO. 9200-1LD
REV. B

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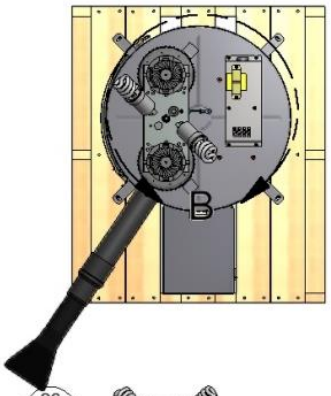
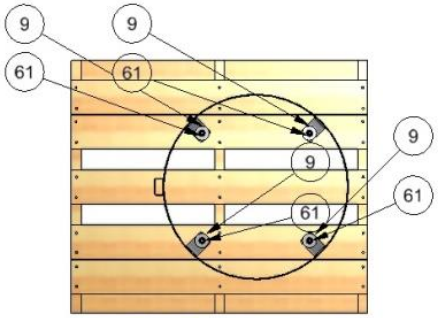
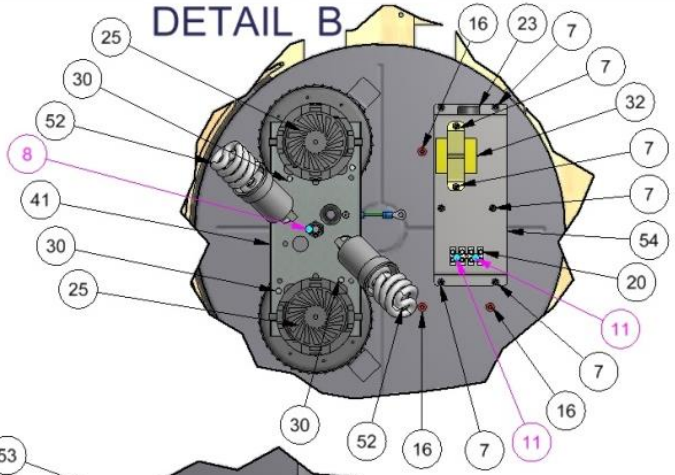
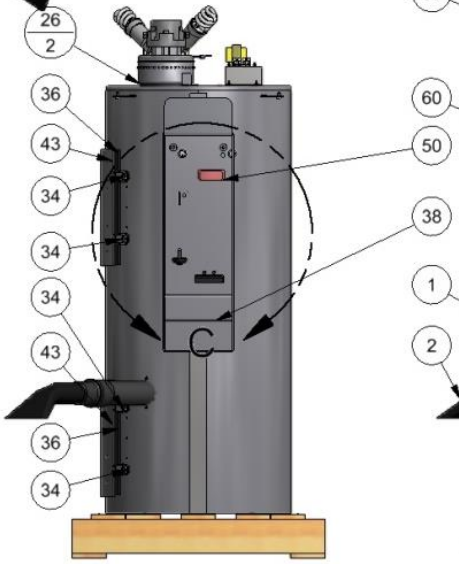
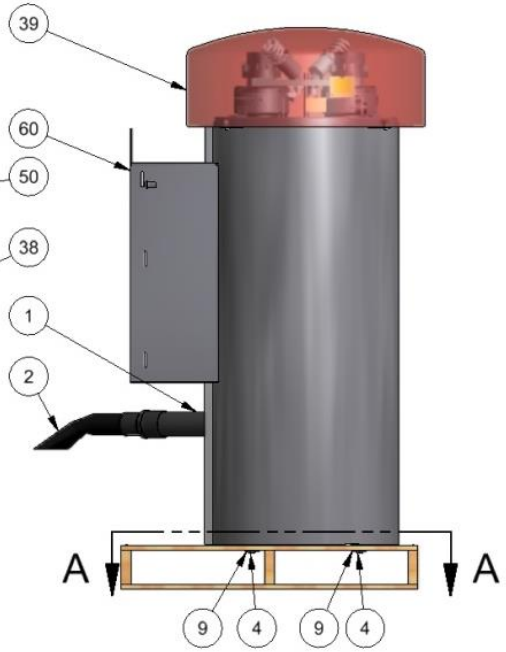
PART NO. 9200-1LD

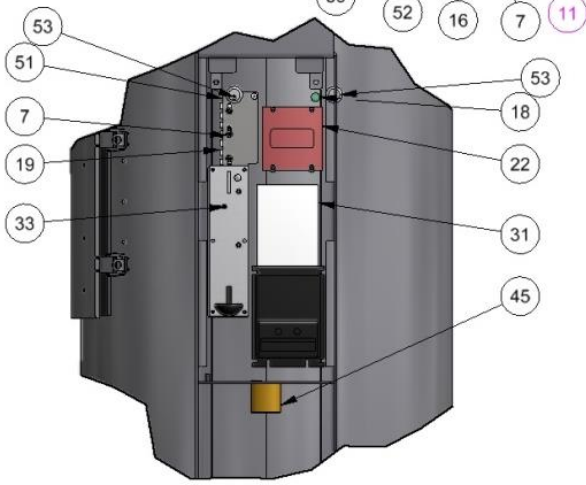












TITLE: 2DR VAC, 2MTR, DISPLAY, BILL ACCEPTOR VAC, LD

REV	NO.	DESCRIPTION	DATE	BY

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

MATERIAL
SCALE
DRAWN BY CHAD K.
DATE 6/13/2011

CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD

PART NO. 9200-1LD
REV. B

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PART NO. 9200-3LD

BILL OF MATERIALS

ITEM	PART NUMBER	DESCRIPTION	QTY
41	8437D001	DECAL, ETL LISTED	1
42	8543K-3	3 MOTOR LIGHT KIT	1
43	8605	PALLET, VAC, 26" X 30.5"	1
44	8615-5W	CLEANOUT DOOR WELDMENT	2
45	8630	TUBE, 30.5 X 26 X 60	1
46	8638	PIN LOCK	1
47	8673-11	GROUND WIRE 28"	1
48	8732	NAMEPLATE, PRODUCT SPEC'S	1
49	8754	WARNING DECAL	1
50	8761	RELAY, 3PDT-24VAC-20A@1HP	1
51	8900-7VW	FACEPLATE WELDMENT, W/VALI	1
52	8900-82	TERMINAL BRACKET, VAC-SCENT	1
53	8925	FLOURESCENT BULB	3
54	8953	MEDECO CAM LOCK W/2 KEYS	2
55	9200-10	BRACKET, 9200 W/VALIDATOR	1
56	9200-1D-1-10	DECAL, FACEPLATE	1
B 57	9200-1D-1-10-BA	DECAL, INSERT BILL	1
B 58	9200-1D-1-10-LC	DECAL, LAST COIN	1
59	9200-1WKIT	WIRING KIT	1
60	9200FPD	DECAL, FACEPLATE	1
61	9201W6	CANISTER WELDMENT, BILL ACEPTOR, 3M	1
62	B5722-002	NUT, 3/8-16 UNC HEX LOCK NUT	4
63	B5996-010	10AMP INLINE FUSE	1
64	B5997-001	INLINE FUSE HOLDER	1

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	5000D5	STAND-OFF, 6-32	4
4	5600D4	3/8-16 X 1.5 HHCS	4
5	5601D13	SCR,1/4-20x1/2 PPHSqConeStepZP	4
6	5603D1	10 Std NC Nylock Nut	1
7	5603D10	6 Std NC Nylock Nut	16
8	5603D11	1/2 Std NC Nylock Nut	1
9	5606D22	WASHER, 3/8 FENDER	8
10	5606D7	FLAT WASHER, .160 ID X .500 OD	1
11	5627D1	6-32 x 1.0 PHIL. PAN -MACHINE SCREW	6
12	5627D2	6-32 x .625 PHIL. PAN -MACHINE SCREW	1
13	5647D2	1/8" SS POP RIVET	16
14	5647D8	3/16" SS POP RIVET	14
15	5662D2	6-32 x 1/2 PHIL. PAN -MACHINE SCREW	8
16	5871b8	PLUG, VAC BOTTOM 2-1/2"	8
17	5913D8	LAMP, PANEL MT-3/8, 12V,LED, GRN	1
18	5944D001	TERMINAL STRIP, 12 POLES, 8AMP MAX	1
19	5944D004	TERMINAL STRIP, C-60 SERIES, 4 POLE	1
20	6082	BAG, 9 X 12	1
21	8000-10	DIXMOR DISPLAY TIMER	1
22	8000-11	ALARM, LAST COIN ALERT	1
23	8047	BAG, 60 X 72	1
24	8055EM	MOTOR, ELECTRO 120V	3
25	8057	MOTOR GASKET	3
26	8076	FILTER BAG	4
27	8081	CABLE TIE MOUNT	2
28	8084	CABLE TIE	4
29	8108	#10 x 1/2 TAP SCREW	6
30	8130-6	MEI MARS, 110V BILL VALIDATOR	1
31	8131-2	TRANSFORMER, 110/220-24 1.66A	1
32	8149	IMONEX COIN ACCEPTOR	1
33	8153-1	LATCH, CLEANOUT DOOR	4
34	8157	NUT, #6-32 KEPP NUT STAINLESS	5
35	8159	DOOR GASKET	2
36	8183	DECAL, WARNING	2
37	8204RW	WELDMENT, COIN BOX	1
38	8306	24" PLASTIC DOME	1
39	8423-2	DECAL, VACUUM DOME	1
40	8424-1	DECAL, CANISTER	1

TITLE: 2DR VAC, 3MTR, DISPALY, BILL ACCEPTOR VAC, LD

REV	NO.	DESCRIPTION	DATE	BY
B	7419	ADD DECALS	031315	JF
A	6538	REVISED AND DRAWN TO INVENTOR; NO PREVIOUS DRAWING	5-26-11	CK

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

MATERIAL
SCALE
DRAWN BY CHAD K.
DATE 5/26/2011

CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD

PART NO. 9200-3LD
REV. B

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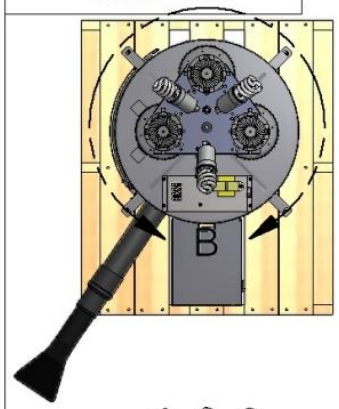
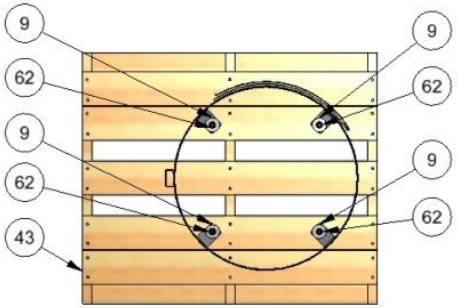
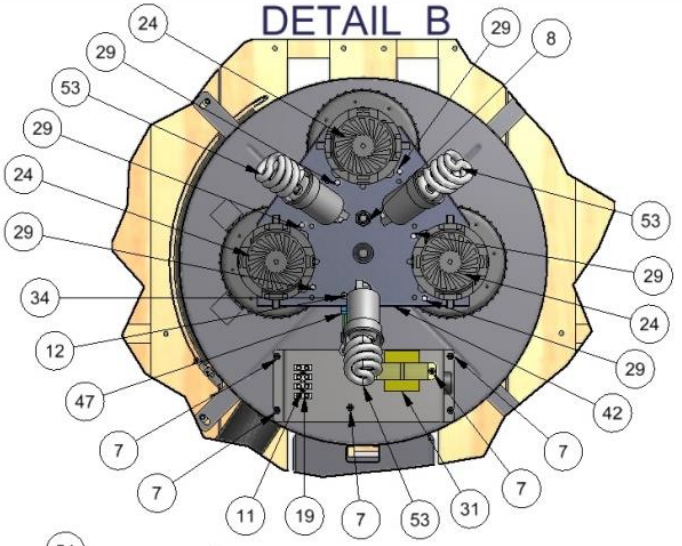
PART NO. 9200-3LD

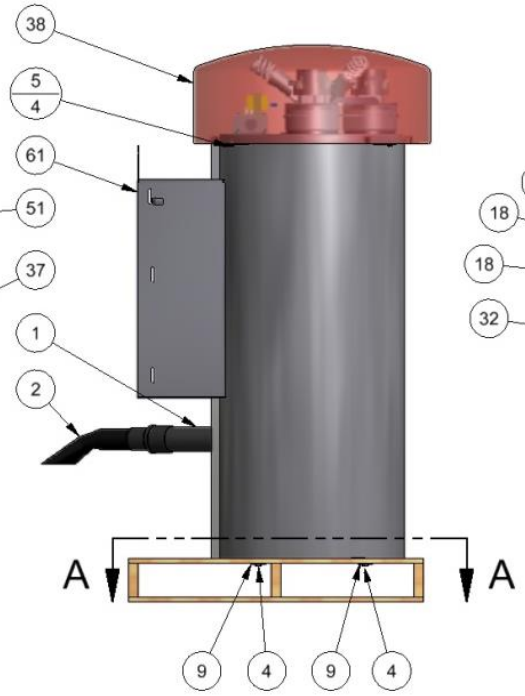


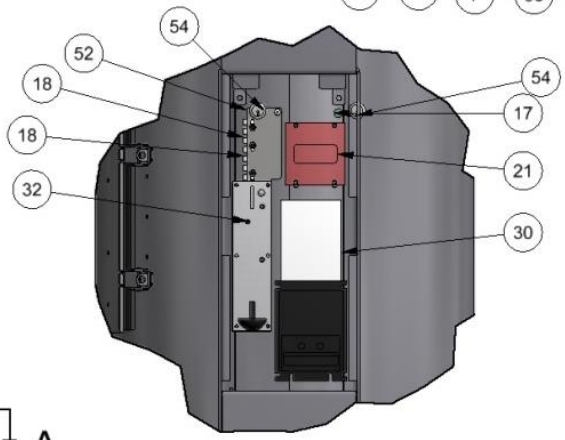


SECTION A-A

DETAIL B







DETAIL C

REV	NO.	DESCRIPTION	DATE	BY

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TITLE: 2DR VAC, 3MTR, DISPALY, BILL ACCEPTOR VAC, LD

UNSPECIFIED TOLERANCES	MATERIAL	CEDAR RAPIDS, IOWA	
1 PL ±.030	SCALE	J.E. ADAMS INDUSTRIES, LTD	
2 PL ±.010	DRAWN BY CHAD K.		
3 PL ±.003	DATE 5/26/2011	PART NO. 9200-3LD	REV. B
ANGLE ±1.0°			

PART NO 9209LD

BILL OF MATERIALS			
ITEM	PART NUMBER	DESCRIPTION	QTY
41	8630	BOX	1
C 42	8638	PIN LOCK	1
44	8712SS4	SSAC TIMER, 24-240VAC, ACCUMULATING	1
45	8732	NAMEPLATE, PRODUCT SPEC'S	1
46	8754	WARNING DECAL	1
47	8900-82	TERMINAL BRACKET, VAC-SCENT	1
48	8925	FLOURESCENT BULB	2
49	8953	MEDECO CAM LOCK W/2 KEYS	2
50	9200-1D-1-10	FACEPLATE DECAL	1
51	9200-1D-1-10-BA	DECAL, INSERT BILL	1
52	9200FPD	DECAL KIT	1
53	9209-2W	FACEPLATE WELDMENT, SHAMPOO	1
54	9209-4W	WELDMENT, VAC CANISTER	1
55	B5722-002	NUT, 3/8-16 UNC HEX LOCK NUT	4
C 56	9209WH1	WIRE HARNESS, 9209 VAC	1
57	8221WH2	2 MTR HARN, 110VAC W 10A FUSE	1

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	5000D5	STAND-OFF, 6-32	4
4	5600D4	3/8-16 X 1.5 HHCS	4
5	5601D13	SCR,1/4-20x1/2 PPHSqConeStepZP	4
6	5603D1	10-24 Std NC Nylock Nut	2
7	5603D10	NUT NYLOCK, #6-32, SS	6
8	5603D11	1/2 Std NF Nylock Nut	1
9	5606D22	WASHER, 3/8 FENDER	8
10	5606D7	FLAT WASHER, .160 ID X .500 OD	1
11	5627D1	6-32 x 1.0 PHIL. PAN -MACHINE SCREW	4
12	5627D2	6-32 x .63 PD, PH, MS	1
13	5647D2	1/8" SS POP RIVET	16
14	5647D8	3/16" SS POP RIVET	14
15	5662D2	6-32 x 1/2 PHIL. PAN -MACHINE SCREW	4
16	5871B9	PLASTIC VAC LID PLUG	4
17	5871b8	PLUG, VAC BOTTOM 2-1/2"	8
18	5901D1	YELLOW WIRE NUT	2
19	5944D001	TERMINAL STRIP, 12 POLES, 8AWG MAX	1
20	6082	BAG, 9 X 12	1
21	8047	BAG, 60 X 72	1
22	8055EM	MOTOR, ELECTRO 120V	2
23	8057	MOTOR GASKET	2
24	8076	FILTER BAG	4
25	8081	CABLE TIE MOUNT	2
26	8084	CABLE TIE	4
27	8108	#10 x 1/2 TAP SCREW	4
28	8130-6	MEI MARS, 110V BILL VALIDATOR	1
29	8149	IMONEX COIN ACCEPTOR	1
30	8153-1	LATCH, CLEANOUT DOOR	4
31	8157	NUT, #6-32 KEPP NUT STAINLESS	1
32	8159	DOOR GASKET	2
33	8183	DECAL, WARNING	2
34	8204RW	WELDMENT, COIN BOX	1
35	8306	24" PLASTIC DOME	1
36	8424-1	DECAL, CANISTER	1
37	8437D001	ETL LISTED DECAL	1
38	8543K	2 MOTOR LIGHT KIT	1
39	8605	PALLET, VAC, 26" X 30.5"	1
40	8615-5W	CLEANOUT DOOR WELDMENT	2

REV	NO.	DESCRIPTION	DATE	BY
C	7712	REMOVED B5996-010, B5997-001, 8673-11, ADD 9209WH1, 8221WH2	3/15/16	MWS
B	7431	REMOVE 9209-D-1-10, ADD NEW DECALS	032415	JF
A	6806	REVISED AND DRAWN TO INVENTOR; NO PREVIOUS DRAWING	2-8-12	CK

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TITLE: 2DR VAC, 2MTR, SSAC, BILL ACCEPTOR VAC, LD

UNSPECIFIED TOLERANCES
1 PL ±.030
2 PL ±.020
3 PL ±.003
ANGLE ±1°

MATERIAL

DRAWN BY: CHAD K.

DATE: 2/8/2012

J.E. ADAMS INDUSTRIES, LTD

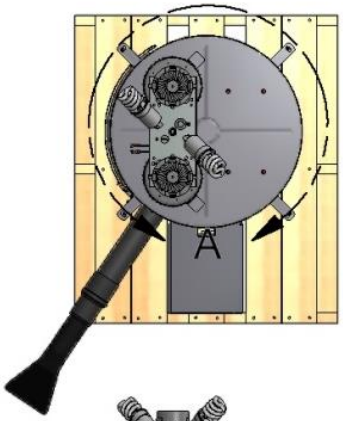
SCALE

SHEET 1 / 2

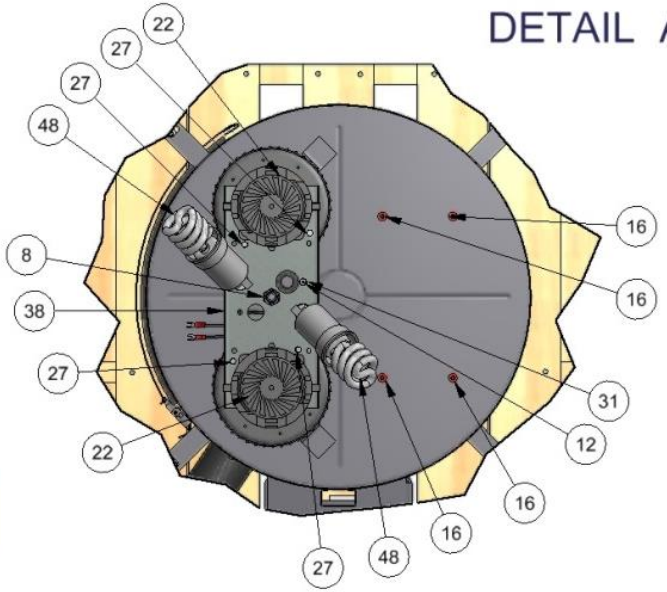
PART NO 9209LD

REV C

PART NO 9209LD



DETAIL A



REV	NO.	DESCRIPTION	DATE	BY

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TITLE: 2DR VAC, 2MTR, SSAC, BILL ACCEPTOR VAC, LD			
UNSPECIFIED TOLERANCES 1 PL ± .030 2 PL ± .020 3 PL ± .003 ANGLE ± 1°	MATERIAL	J.E. ADAMS INDUSTRIES LTD	
	DRAWN BY: CHAD K.		
	DATE: 2/8/2012		
	SCALE	SHEET 2 / 2	PART NO 9209LD — REV. C

PART NO. 9230

BILL OF MATERIALS

ITEM	PART NUMBER	DESCRIPTION	QTY
35	8424-1	DECAL, CANISTER	1
36	8429-1	DECAL, HANG HOSE	1
37	8437D001	DECAL, ETL LISTED	1
38	8605	PALLET, VAC, 26" X 30.5"	1
39	8615-5W	CLEANOUT DOOR WELDMENT	2
40	8631	11 X 55 PAD FOR VAC'S	1
41	8673-11	GROUND WIRE 28"	1
42	8732	NAMEPLATE PRODUCT SPEC'S	1
43	8754	DECAL, WARNING	1
44	8952W	FACEPLATE WELDMENT, CAM LOCK	1
45	8953	MEDECO CAM LOCK W/2 KEYS	1
46	8954W	COIN BOX WELDMENT, SCREW LOCK	1
47	8955	MEDECO SCREW LOCK	1
48	9200FPD	DECAL, FACEPLATE	1
49	9231W	VAC CANISTER W/C	1
50	B5722-002	NUT, 3/8-16 UNC HEX LOCK NUT	4

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	5600D4	3/8-16 X 1.5 HHCS	4
4	5603D1	10 Std NC Nylock Nut	1
5	5603D11	1/2 Std NC Nylock Nut	1
6	5606D22	WASHER, 3/8 FENDER	8
7	5606D7	FLAT WASHER, .160 ID X .500 OD	1
8	5627D2	6-32 x .625 PHIL. PAN -MACHINE SCREW	1
9	5629D1	#8 x 1 SELF TAPPING SCREW	1
10	5639D4	RUBBER GROMMET	1
11	5644D1	CAGE NUT 5/16-18	1
12	5647D2	1/8" SS POP RIVET	16
13	5871B9	PLASTIC VAC LID PLUG	4
14	5871b8	PLUG, VAC BOTTOM 2-1/2"	8
15	5947D8	3/16" SS POP RIVET	14
16	6082	BAG, 9 X 12	1
17	8047	BAG, 60 X 72	1
18	8051G	BRACKET, MOTOR MOUNT	1
19	8055EM	MOTOR, ELECTRO 120V	2
20	8055LEAD-EM	WIRE LEAD, EM VAC MOTOR	4
21	8057	MOTOR GASKET	2
22	8076	FILTER BAG	4
23	8081	CABLE TIE MOUNT	1
24	8084	CABLE TIE	3
25	8108	#10 x 1/2 TAP SCREW	4
26	8149	IMONEX COIN ACCEPTOR	1
27	8153-1	LATCH, CLEANOUT DOOR	4
28	8157	NUT, #6-32 KEPP NUT STAINLESS	5
29	8159	DOOR GASKET	2
30	8183	DECAL, WARNING	2
31	8221SS4	TIMER ASSY, 120 VAC ACCUMULATING TIMER	1
32	8221WH2	WIRE HARNESS	1
33	8305	ASSEMBLED SS DOME	1
34	8423-2	DECAL, DOME	1

TITLE: 2DR VAC, CAM LOCK, SCREW LOCK, LARGE DOME

REV	NO.	DESCRIPTION	DATE	BY
A	6874	REVISED AND DRAWN TO INVENTOR; NO PREVIOUS DRAWING	2-23-12	CK

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

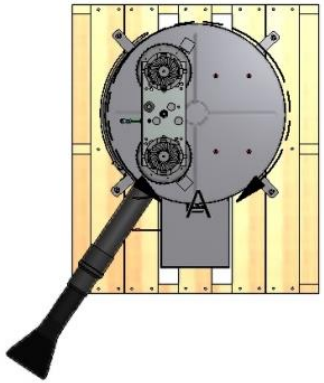
MATERIAL
SCALE
DRAWN BY CHAD K.
DATE 2/23/2012

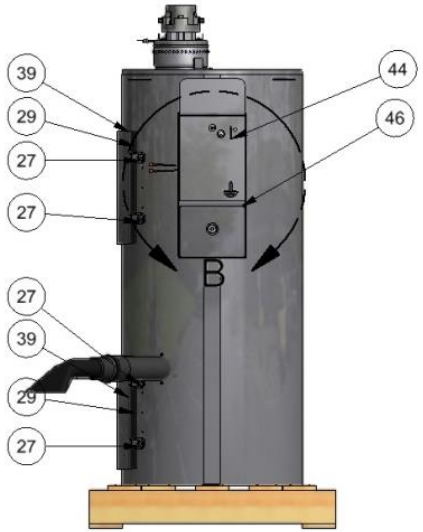
CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD

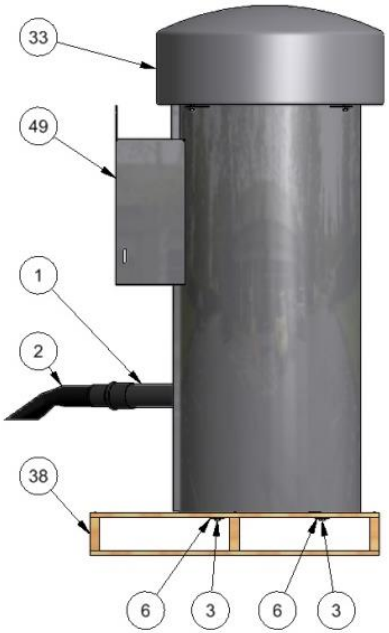
PART NO. 9230
REV. A

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

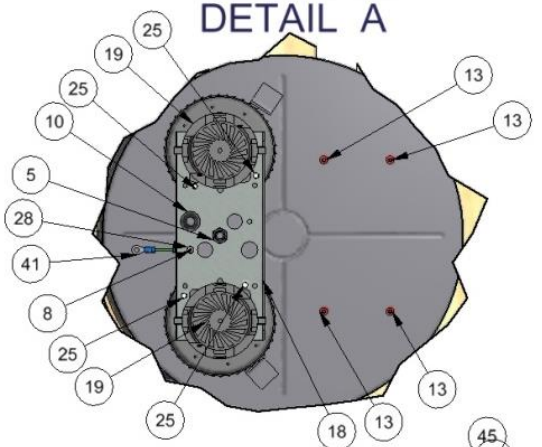
PART NO. 9230

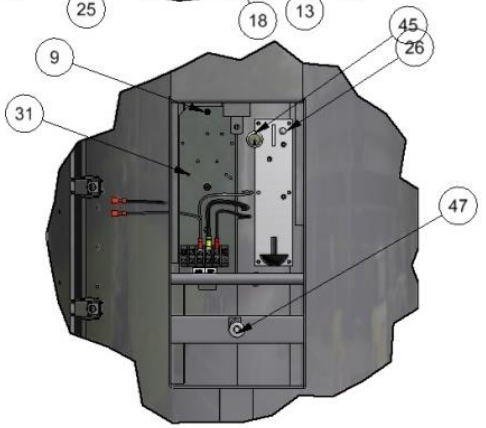






DETAIL A





DETAIL B

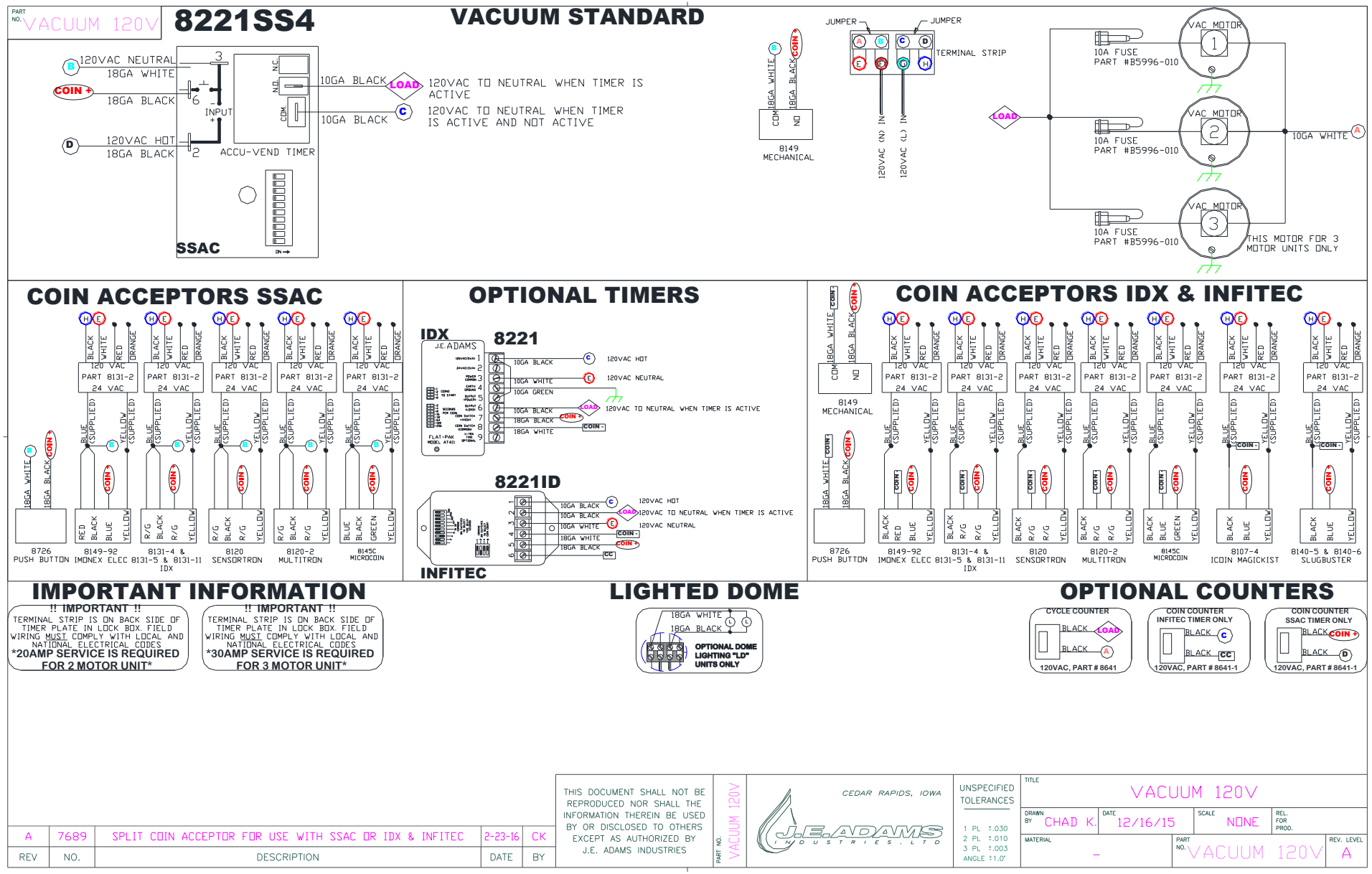
REV	NO.	DESCRIPTION	DATE	BY

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: 2DR VAC, CAM LOCK, SCREW LOCK, LARGE DOME

UNSPECIFIED TOLERANCES		MATERIAL	CEDAR RAPIDS, IOWA J.E. ADAMS INDUSTRIES, LTD
1 PL	±.030	SCALE	
2 PL	±.010	DRAWN BY: CHAD K.	
3 PL	±.003	DATE: 2/23/2012	PART NO. 9230 — REV. A
ANGLE	±1.0°		

Basic vacuum models



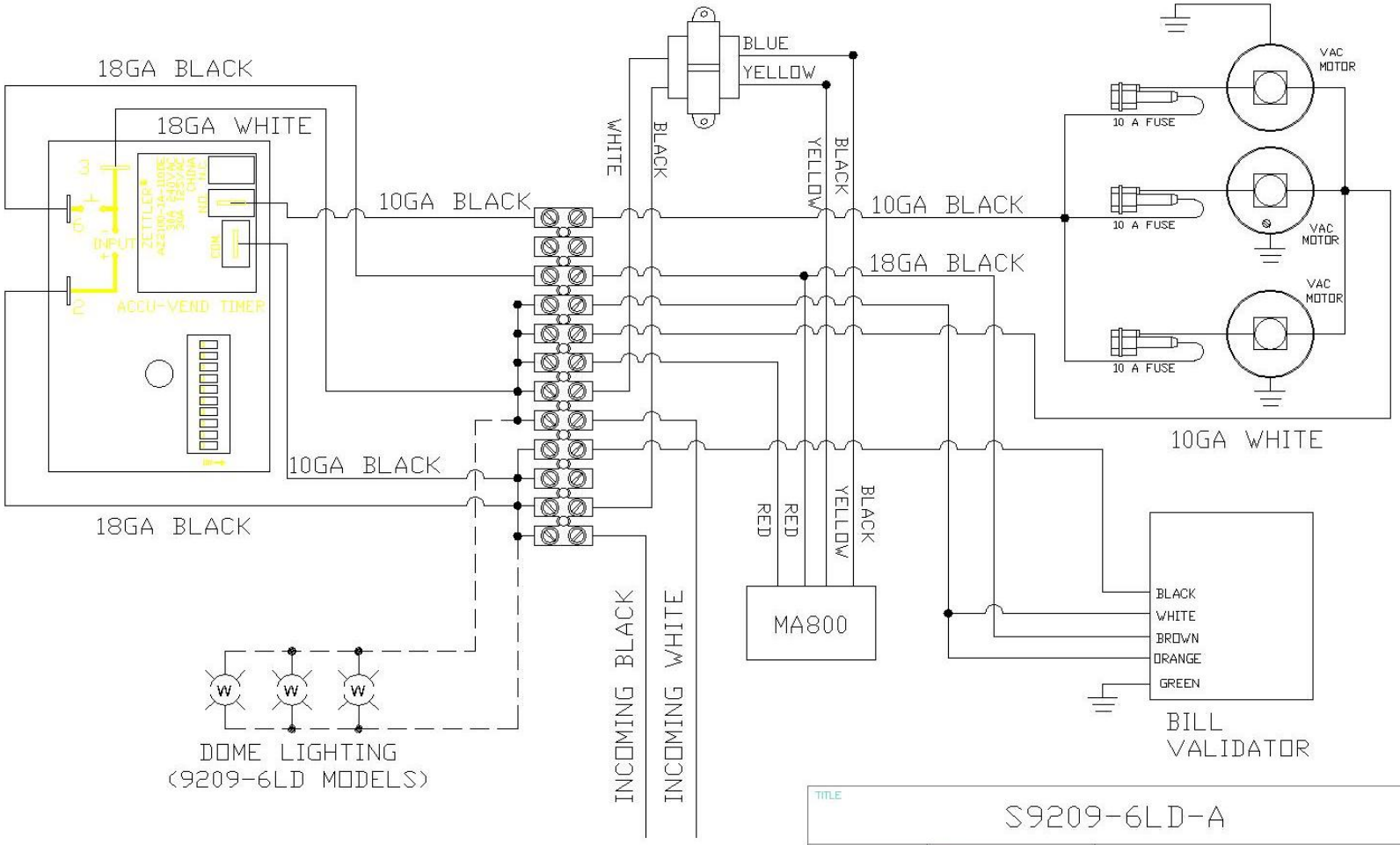
PART NO. S9209-6LD-A

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

BILL OF MATERIAL

ITEM NO.	PART NO.	DESCRIPTION	QTY.

NOTE: FIELD WIRING MUST COMPLY WITH LOCAL AND NATIONAL ELECTRICAL CODES.



Electronic coin mech model

REV	NO.	DESCRIPTION	DATE	BY

TITLE: S9209-6LD-A

UNSPECIFIED TOLERANCES
FRACT. ±1/32
2 PL ±.020
3 PL ±.010
ANGLE ±1.0°

SCALE

DRAWN BY: CAI

DATE: 4/06

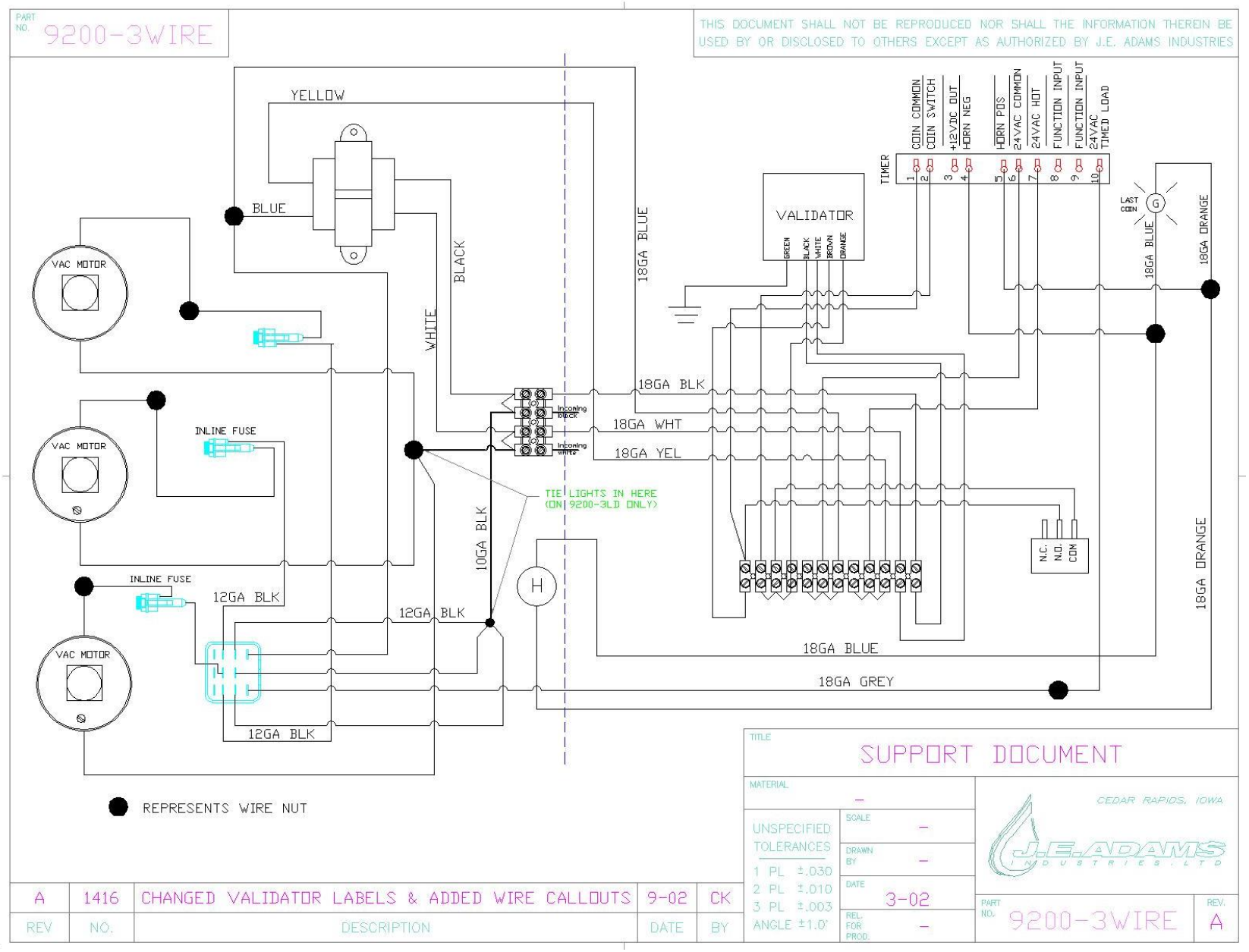
REL. FOR PROD.

CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD

PART NO. S9209-6LD-A

REV.

DIGITAL DISPLAY MODEL

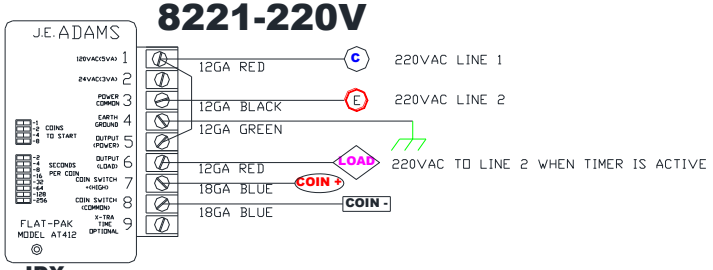


220 VOLT MODEL

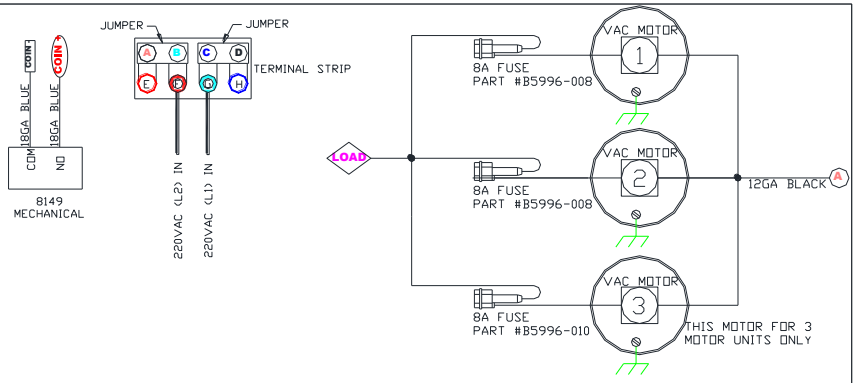
PART NO. VACUUM 220V

VACUUM STANDARD

8221-220V

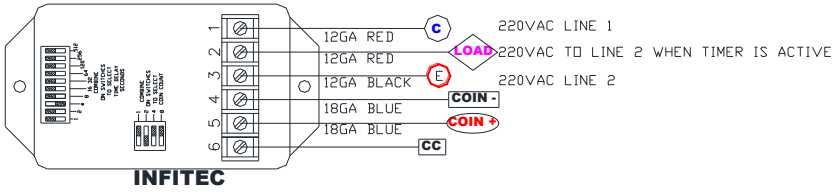


IDX



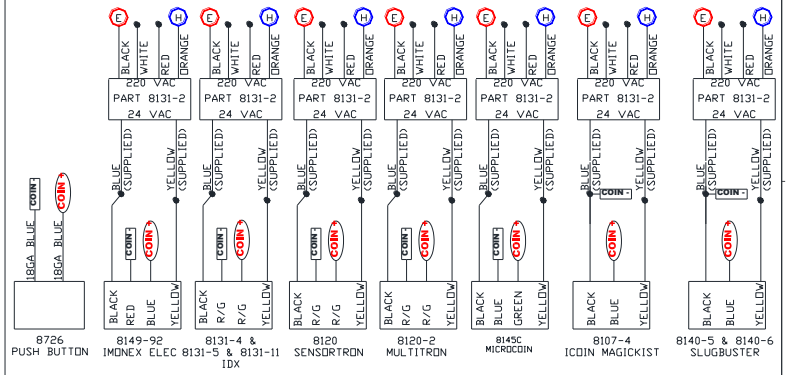
OPTIONAL TIMERS

8221I-220



INFITEC

COIN ACCEPTORS IDX & INFITEC

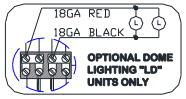


IMPORTANT INFORMATION

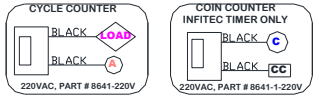
!! IMPORTANT !!
TERMINAL STRIP IS ON BACK SIDE OF TIMER PLATE IN LOCK BOX. FIELD WIRING MUST COMPLY WITH LOCAL AND NATIONAL ELECTRICAL CODES
15AMP SERVICE IS REQUIRED FOR 2 MOTOR UNIT

!! IMPORTANT !!
TERMINAL STRIP IS ON BACK SIDE OF TIMER PLATE IN LOCK BOX. FIELD WIRING MUST COMPLY WITH LOCAL AND NATIONAL ELECTRICAL CODES
20AMP SERVICE IS REQUIRED FOR 3 MOTOR UNIT

LIGHTED DOME



OPTIONAL COUNTERS



REV	NO.	DESCRIPTION	DATE	BY

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PART NO. VACUUM 220V

CEDAR RAPIDS, IOWA
J.E. ADAMS INDUSTRIES, LTD

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

TITLE: VACUUM 220V
DRAWN BY: CHAD K.
DATE: 3-7-16
SCALE: NONE
REL. FOR PROD.
MATERIAL: -
PART NO.: VACUUM 220V
REV. LEVEL