

ELECTRIC CONVEYOR OVEN FC16

**IMPORTANT SAFETY INSTRUCTIONS
SAVE THESE INSTRUCTIONS**

**DANGER
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
CAREFULLY FOLLOW THESE INSTRUCTIONS**

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INTRODUCTION

The manufacturer suggests to read this manual carefully and to keep it for future reference.

This Jet Air oven is manufactured with first quality material by experienced technicians. Proper installation and maintenance will guarantee a reliable service for years to come.

A nameplate fixed at the back of the oven specifies the model number, serial number, voltage, amperage and frequency.

Drawings, electrical diagram and replacement part numbers are included in this manual. The electrical diagram is affixed in the control panel under the hood of the oven.

ATTENTION

DOYON is not responsible for damages to the property or the equipment caused by personnel who is not certified by known organisations. The customer is responsible for finding qualified technicians in electricity and plumbing for the installation of the oven.

CONSTRUCTION

You just bought the most advanced electric oven in the world, "DOYON" technology at its best. This electric oven is manufactured using the highest quality components and material.

The oven gives a perfect uniform baking with its unique Jet Air convection system. The DOYON electric oven is designed with parts that are easy to find.

SHIPPING

For your safety, this equipment is verified by qualified technicians and carefully crated before shipment. The freight company assumes full responsibility concerning the delivery in good condition of the equipment in accepting to transport it.

IMPORTANT

RECEPTION OF THE MERCHANDISE

Take care to verify that the received equipment is not damaged before signing the delivery receipt. If a damage or a lost part is noticed, write it clearly on the receipt. If it is noticed after the carrier left, contact immediately the freight company in order that they do their inspection.

We do not assume the responsibility for damages or losses that may occur during transportation.

INSTALLATION WARNINGS

POWER FAILURE WARNING

WHEN YOU HAVE A POWER FAILURE, SHUT OFF THE OVEN POWER SWITCH TO PROTECT THE ELECTRONIC COMPONENTS WHEN THE POWER COMES BACK.

FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPOURS AND LIQUIDS IN THE VICINITY OF THIS OR ANY APPLIANCE.

INSTALLATION AND SERVICE

WARNING

IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, INJURY OR DEATH. READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

Installation and service must be done by specialised technicians. Contact a certified electrician for set up.

The oven must be connected to the utility and electrically grounded in conformity to the effective local regulations. If these are not established, the oven must be connected according to the Canadian Electrical Code (CSA-C22.1- XX) or National Electrical Code (NFPA 70-XX). Refer to last edition year for XX.

Do not permit fans to blow directly at the oven and whenever possible, avoid open windows next to oven sides or back and wall type fans which create air cross currents the room.

DISTANCES TO RESPECT

- A) Back of the oven: 4 inches
- B) Top of the oven: a clearance of 12 inches from above the top of the oven must exist to permit adequate venting.
- C) Floor: 4 inches minimum (legs)
- D) Sides of the oven: No clearance required from the end of the conveyor. Do not install other than easily removable equipment for service and maintenance.

INSTALLATION

IN GENERAL

Take off the packaging material with care. Take off all the material used for packing and accessories.

Install the legs on the oven.

1. To the electrician.

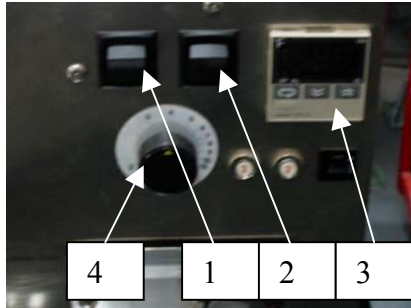
Electrical supply installation must be in accordance with the electrical rating on the nameplate.

WARNING

The electrician must make sure that the supply cable does not come in contact with the oven top which becomes hot.

OPERATION / INSTRUCTION

1. Turn the main switch to the position "ON" [I].
2. Turn the conveyor switch to the position "ON" [I or II].



3. Adjust the thermostat at the desired temperature (see THERMOSTAT INSTRUCTIONS below).
4. Adjust baking time according to your product. Use the up and down arrows on the speed control to set your baking time.
(see suggestions in the tables next page.)

N.B. The thermostat display must be "ON". (If not, press the breaker on the front)

5. Heat the unit until you reach the baking temperature.
When the desired temperature is reached, the red light ON goes out on the thermostat.
6. Place your products on the conveyor.
We recommend to use perforated pan or pizza screen.
7. To stop the oven, just turn the main switch to "OFF" [O] position. After the oven is off, the main fan motor will run for 10 minutes to cool down the oven.

THERMOSTAT INSTRUCTIONS

To obtain a very good thermal stability, we use a digital temperature controller with thermocouple. The Omron E5CS thermostat controls the heat at the SP (set point).

The temperature of the oven is always shown on the display of the thermostat and an arrow indicates if the temperature is over or below the SP. When the green light is lit, it indicates that the temperature is at the $SP \pm 1\%$.

To adjust the SP value, you just have to press the key on the left and use the up and down keys to set temperature and alarm value. Press the left key to return to run mode.

COOKING TIME AND TEMPERATURE RECOMMENDATION

REGULAR PIZZA BAKING TIME

Temperature	Pizza	Approximate baking time
515 ⁰ F	PEPPERONI	5.30 minutes
515 ⁰ F	3 TOPPING	6.20 minutes
515 ⁰ F	EXTRA TOPPING	7.00 minutes
490 ⁰ F	SPECIAL HOUSE	8.00 minutes

PIZZA PAN BAKING TIME

Temperature	Pan pizza	Approximate baking time
480 ⁰ F	ALL DRESS	7.20 minutes
540 ⁰ F	ALL DRESS	5.00 minutes

IMPORTANT: You must adjust your baking time according to your own recipes. We recommend that you conduct a few baking tests at the beginning and note your baking time for future reference.

INSTRUCTIONS TO REMOVE THE CONVEYOR AND CLEAN THE OVEN FC16

Take out the conveyor extension and crumb tray at each end of the conveyor (picture A, B, C, D).

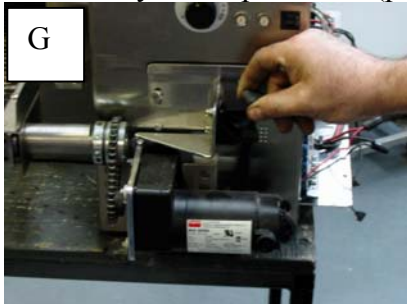


Pull out the conveyor motor cover (picture E & F).



Remove rubber strap (picture G). Lift gearbox to remove the chain (picture H).

Lift conveyor and pull it out (picture I).



Open the front door (photo J). Remove the heat diffusers (picture K & L).

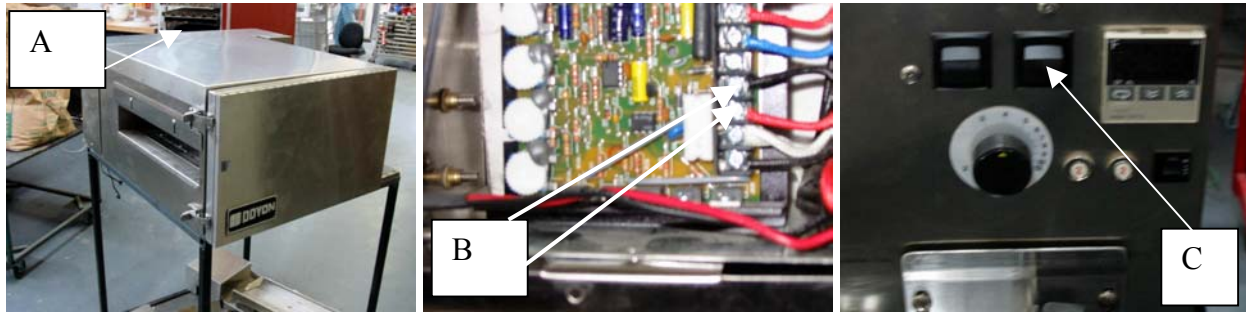


INSTRUCTIONS TO REVERSE DIRECTION OF THE CONVEYOR

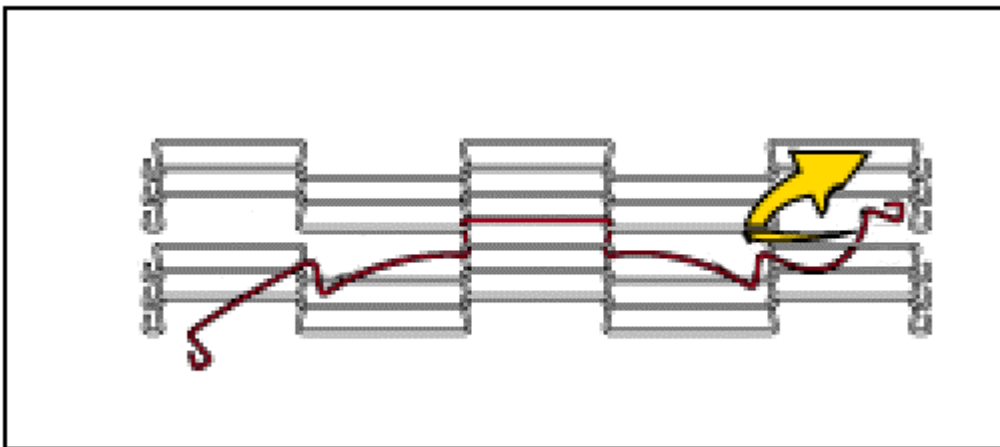
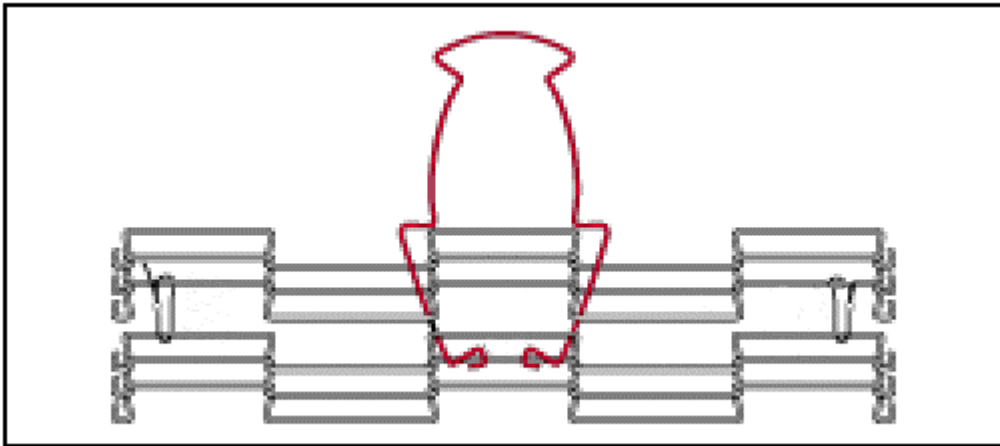
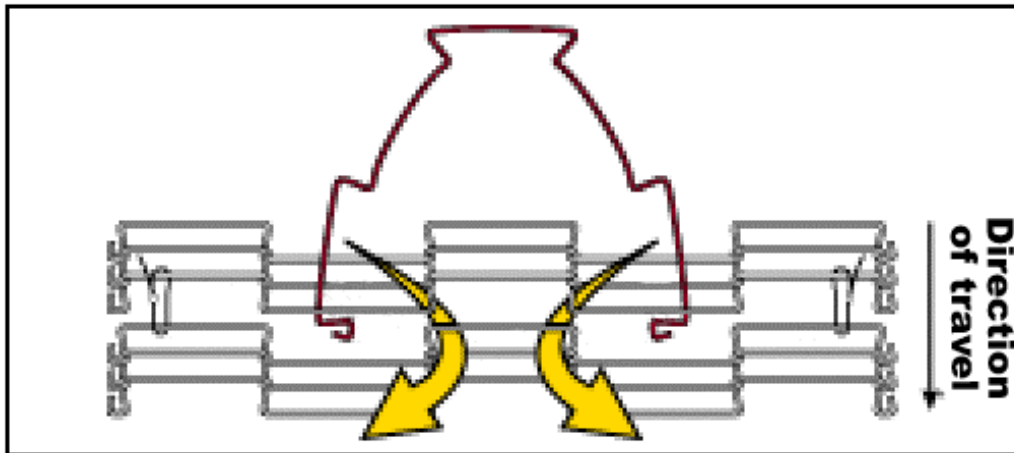
FC16

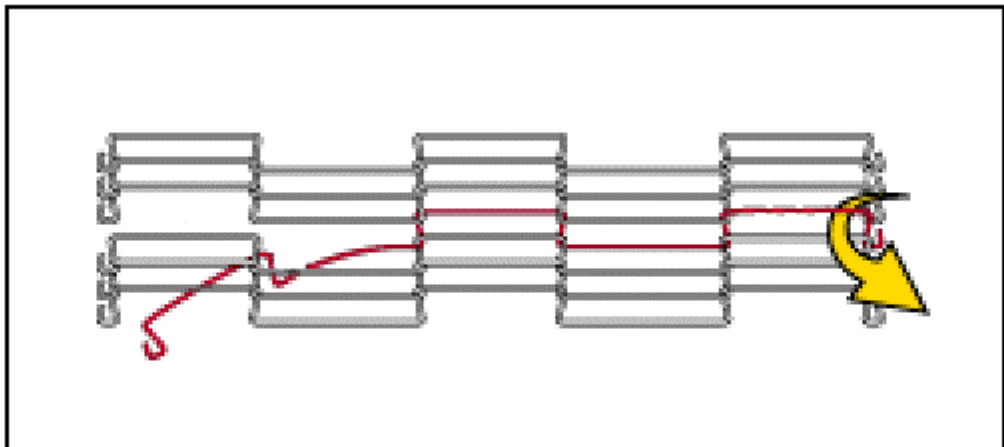
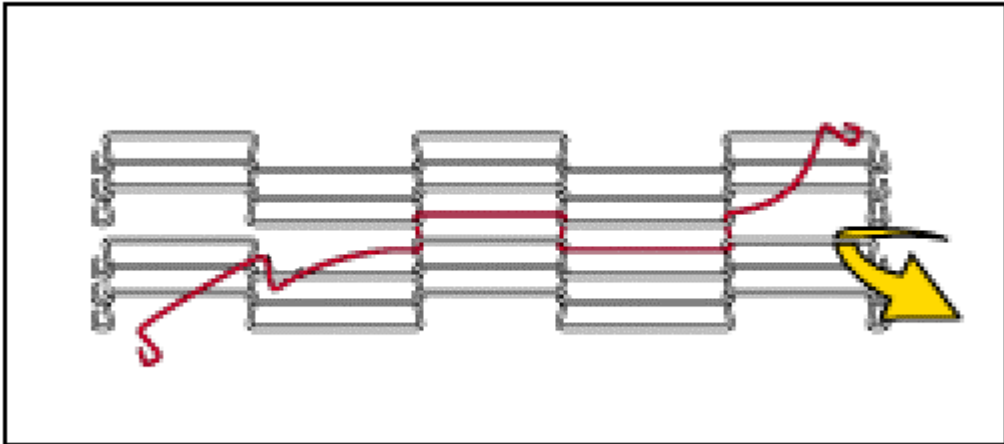
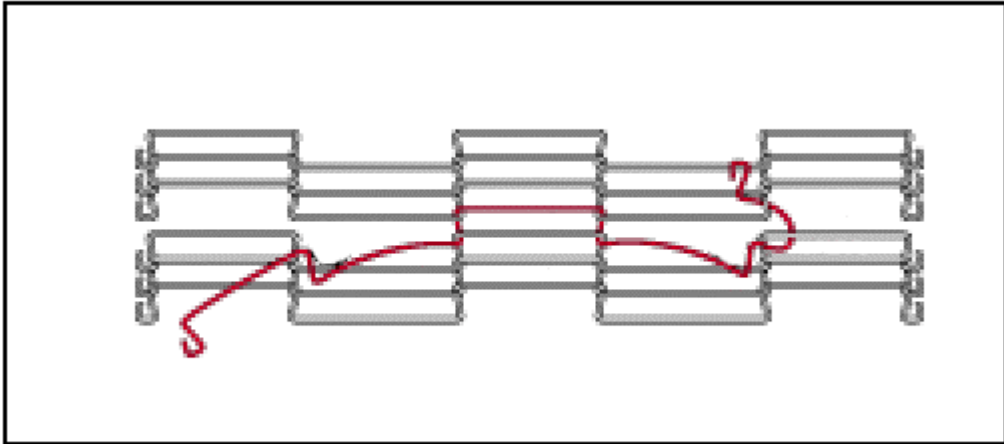
To reverse the direction of the conveyor on FC16 oven, open the back panel of the oven (**picture A**). Disconnect the red [A+] and black [A-] wire (**picture B**) of the conveyor motor on the electronic board and invert the two wires (**picture B**). The conveyor should run in the other direction.

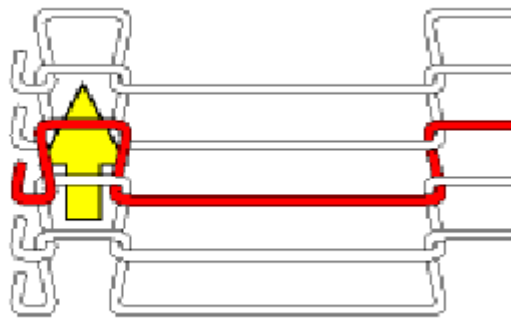
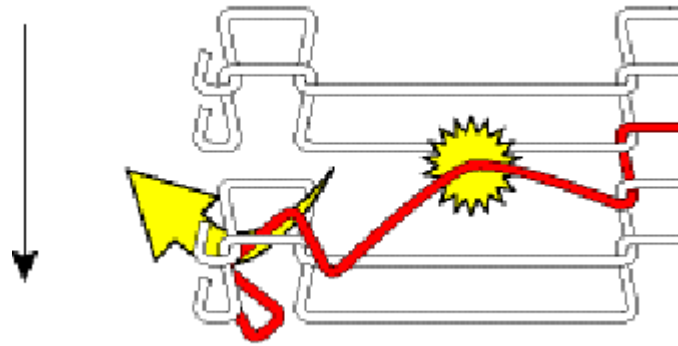
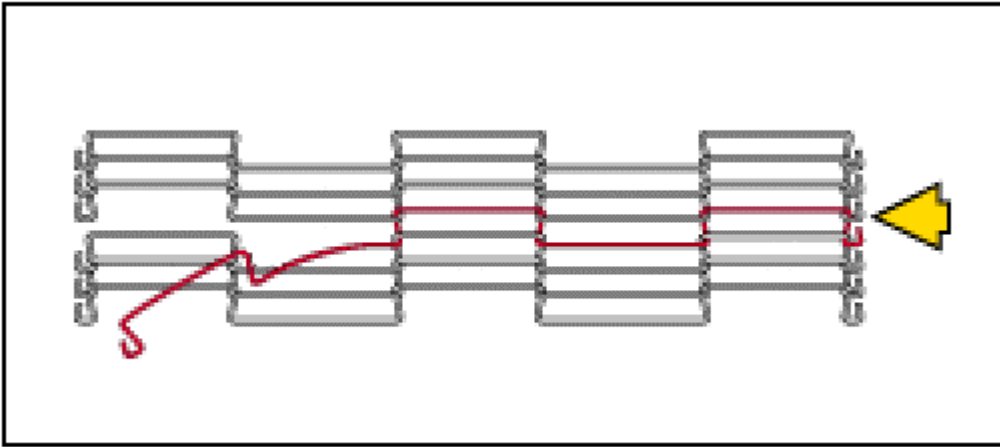
To reverse on some models with the optional directional switch, change the position of the conveyor switch (**picture C**) located beside the conveyor motor from position [I] to [II] or [O] for not operational conveyor.

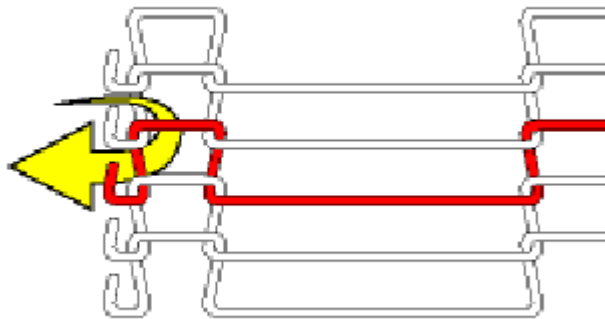
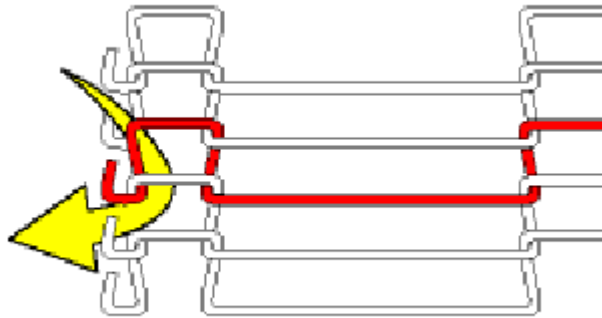
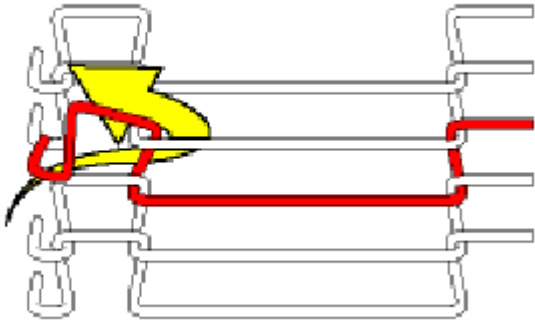


INSTRUCTIONS TO REMOVE THE BELT ON THE CONVEYOR









TROUBLESHOOTING

BEFORE CALLING FOR SERVICE ANSWERS TO MOST FREQUENT QUESTIONS

Questions	Solutions
The oven is "ON", but does not function.	<ul style="list-style-type: none"> • Check the main breaker (the one on the building panel) and also the breaker located at the front of the oven (5 amps).
The fan runs but the oven does not heat.	<ul style="list-style-type: none"> • Check if the thermostat is adjusted high enough to fire the oven. <p>Check the power on the heating contactor.</p>
The oven heat too much or does not produce enough heat.	<p>Measure the temperature with an oven thermometer and compare it with the temperature indicated on the thermostat</p> <p>Made the complete clean up maintenance procedure.</p>
The conveyor chain is not tight enough.	<p>To tighten:</p> <ul style="list-style-type: none"> • Take off the protector on the conveyor motor located on the sides of the oven. With a 7/16" key, lightly unscrew the 2 screws having an adjustment on each side; • Tighten the belt of the conveyor and the screws; • Put back the protectors.
The conveyor does not turn.	<ul style="list-style-type: none"> • Check the 0.5 amps breaker on the side of the oven. • If the breaker is "tripped", check if the conveyor is free from any obstructions before resetting the breaker. • Check the conveyor main shaft if the security clutch is not slipping.

FOR MORE INFORMATION,
PLEASE CONTACT OUR OFFICE :

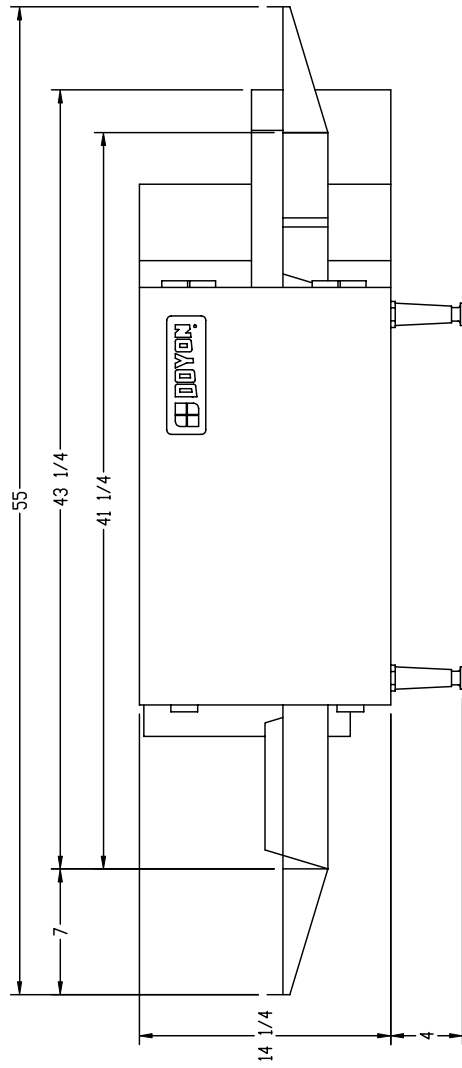
DOYON EQUIPMENT INC.
1255, rue Principale
Linière, Qc, Canada G0M 1J0

Tel. : 1 (418) 685-3431
Canada : 1 (800) 463-1636
U.S. : 1 (800) 463-4273
FAX : 1 (418) 685-3948

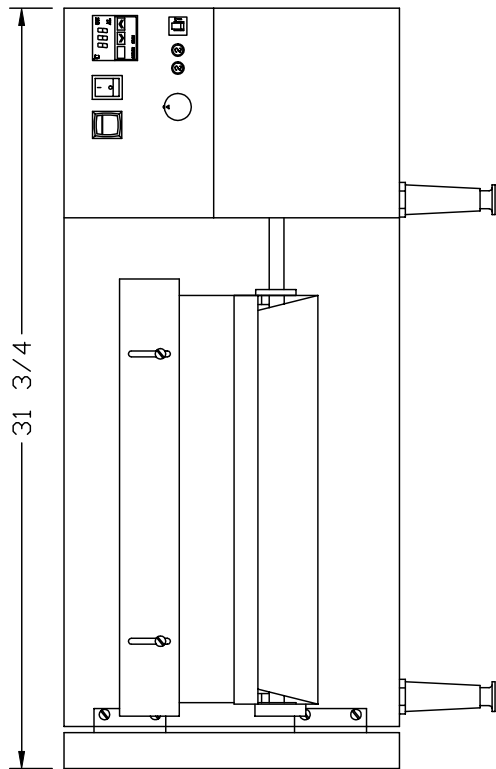
Internet: <http://www.doyon.qc.ca>
E-Mail : doyon@doyon.qc.ca

SECTION
B

DIMENSIONS

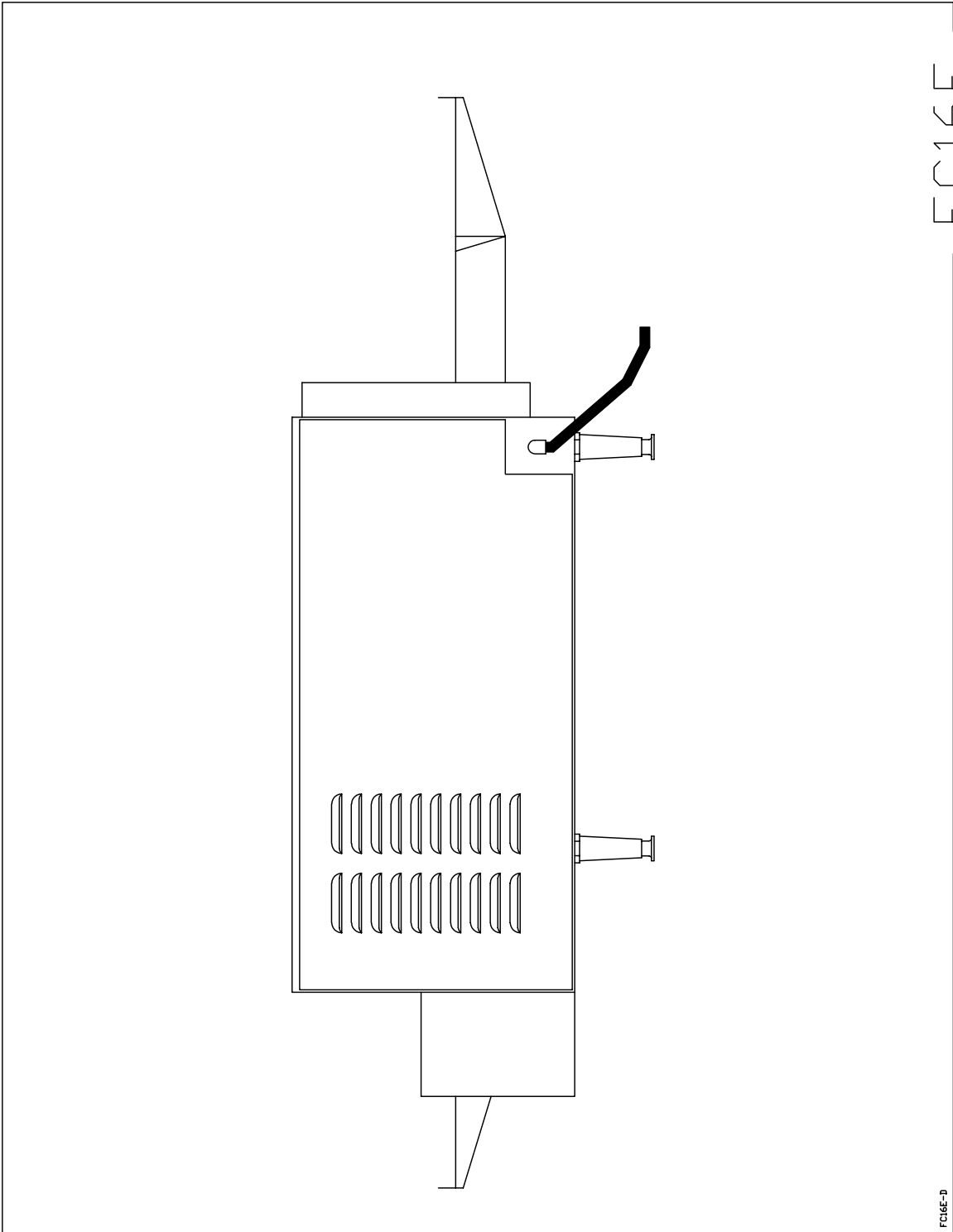


FC16E



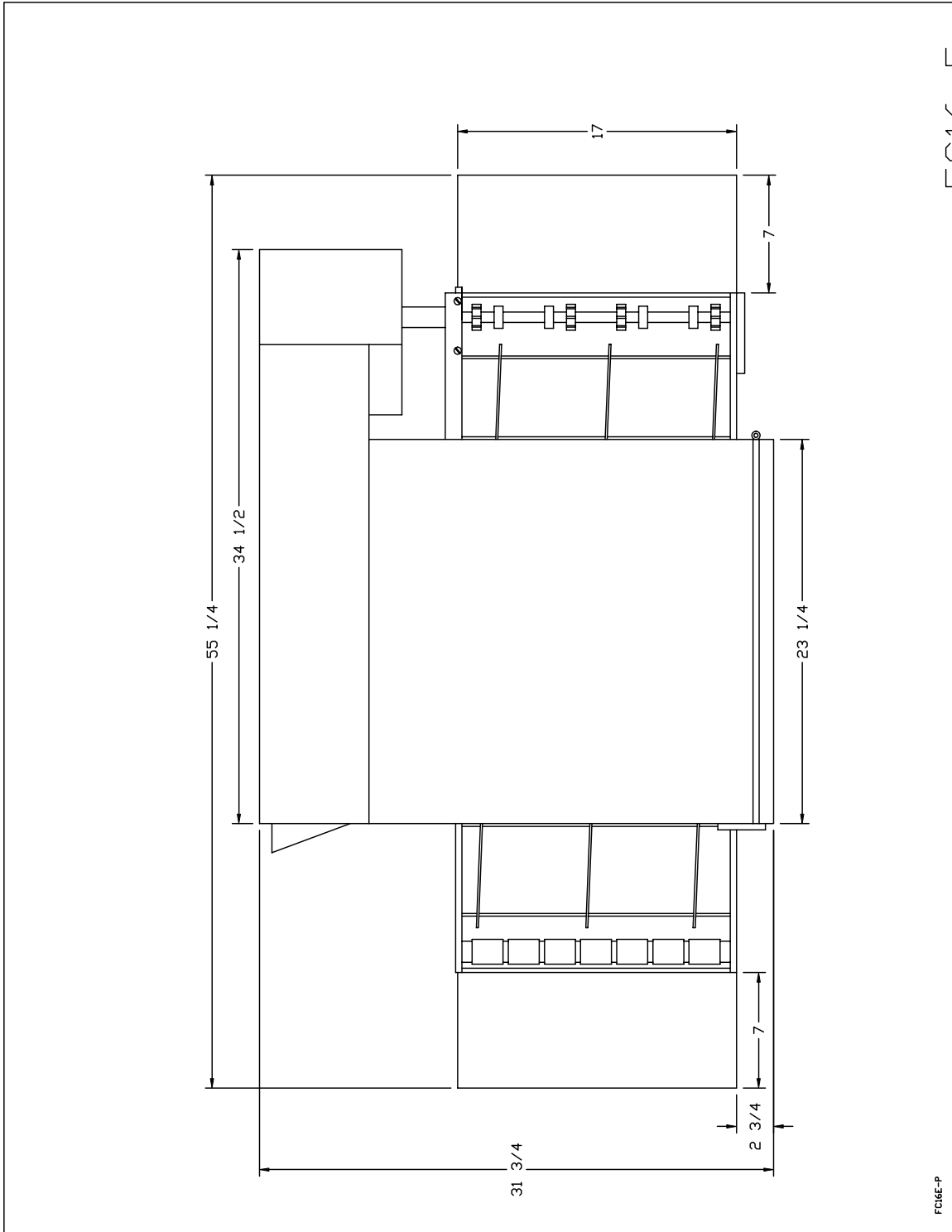
FC16E

FC16E-C



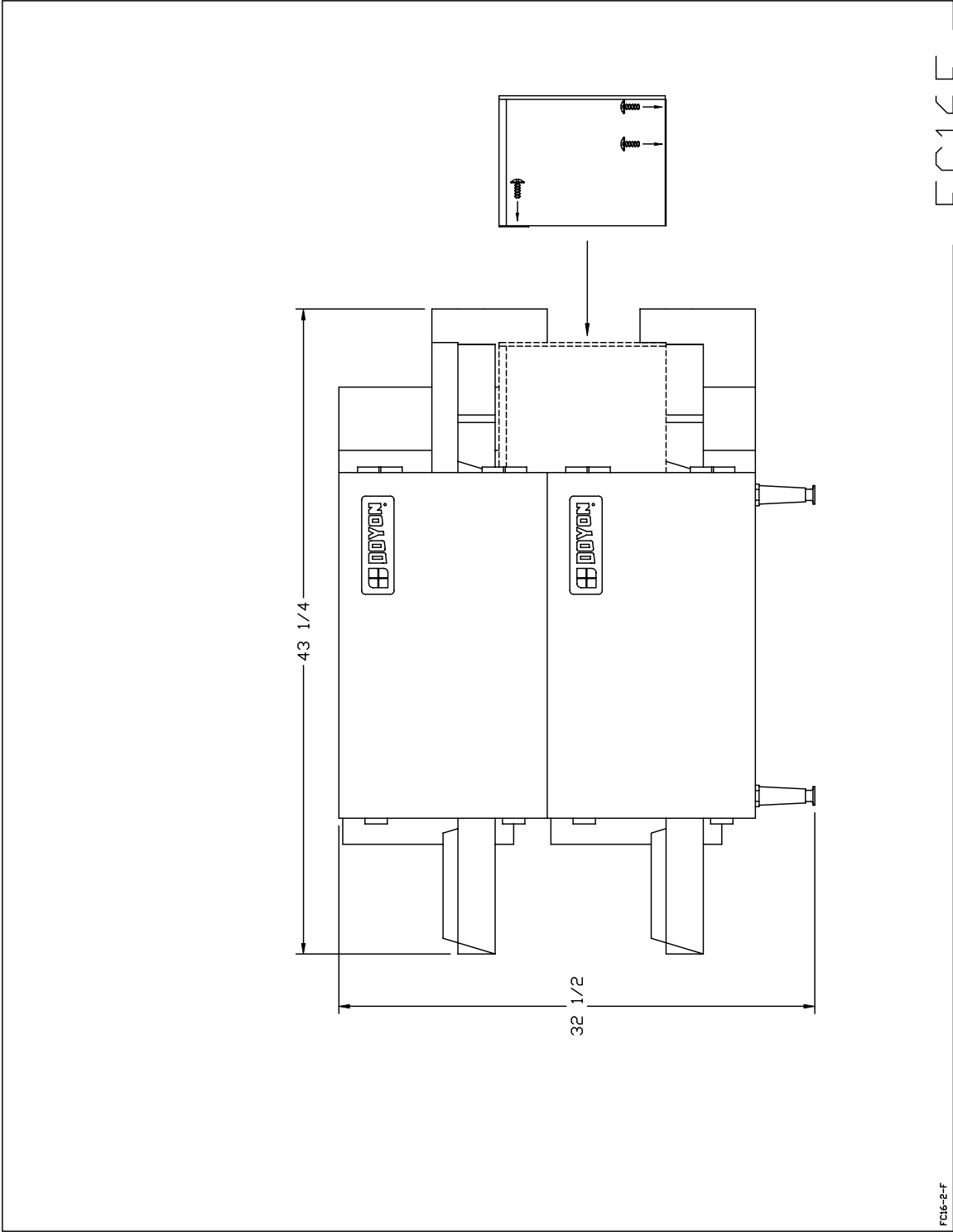
FC16E

FC16E-D



FC16E-P

FC16-E

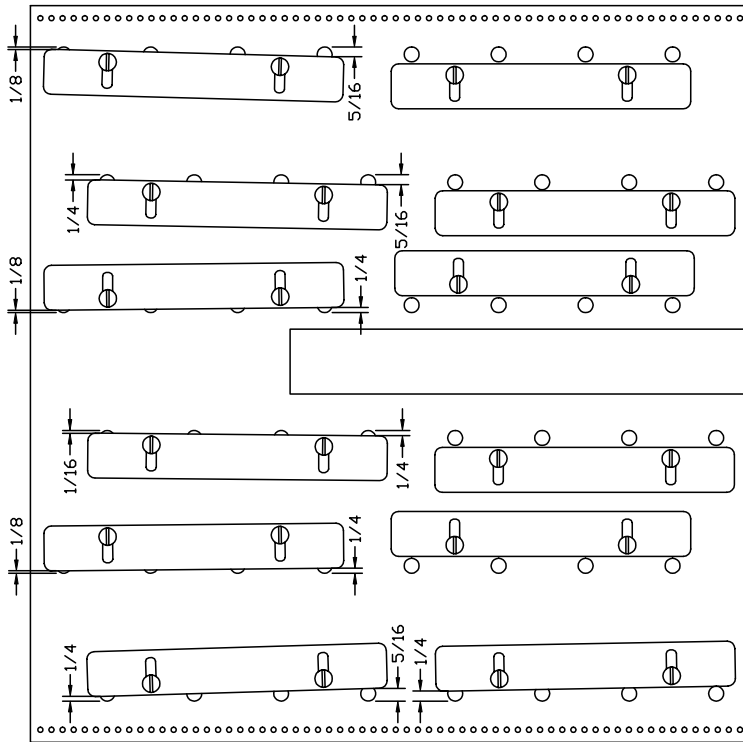


FC16E

FC16-2-F

SECTION
D

HEAT DIFFUSER ADJUSTMENTS



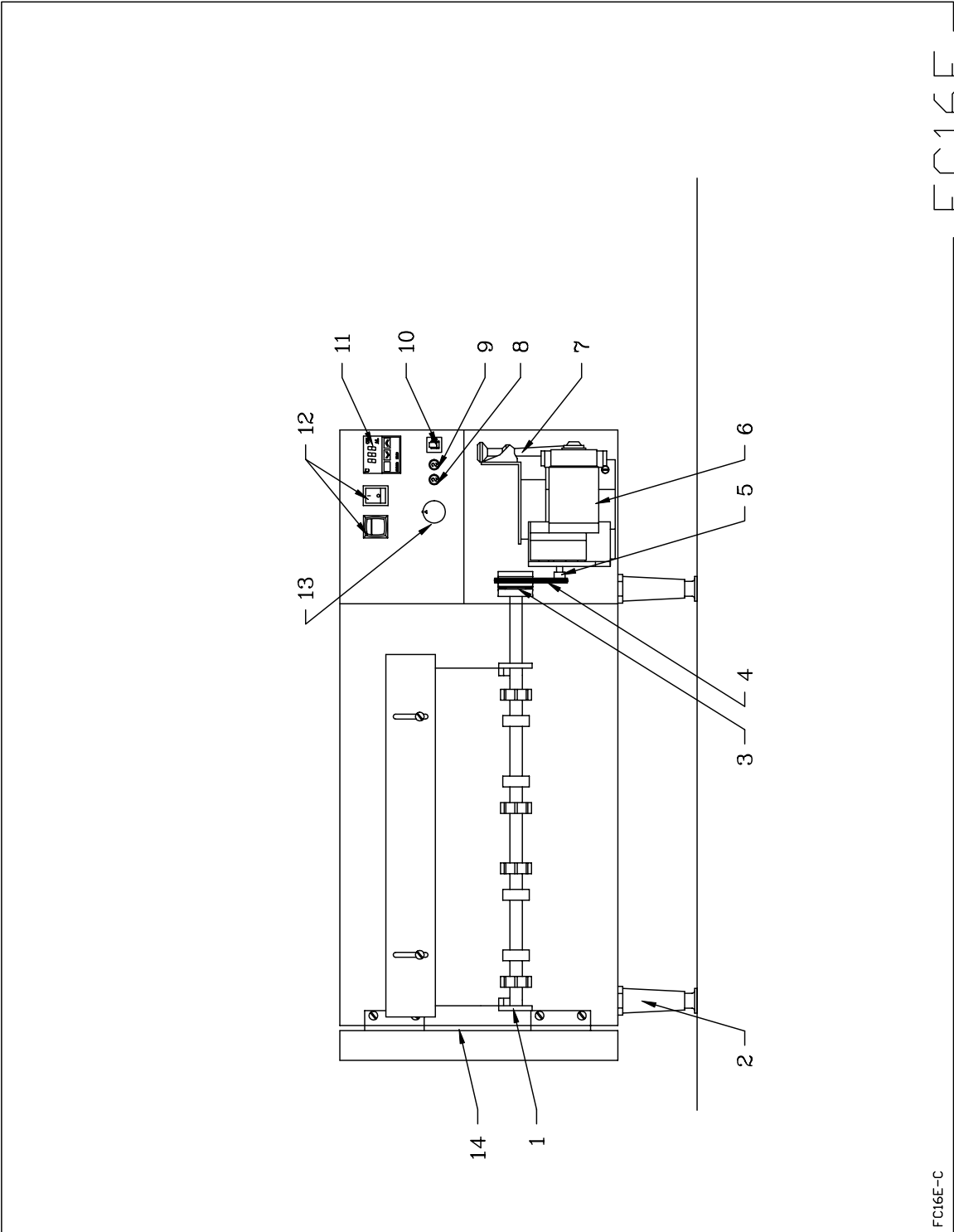
EQUIPMENT
DOYON

TOP AIR ADJUSTMENT FC-16

MATERIAL		DATE		DES.		REV.	
TOLERANCE	GEN.	17-01-00	E.L.EBEL			1	
X.XXX	±0.002	ECH.	±0.005				
X.XX	±0.01	QTE.	±0.01				
X.X	±1/64	1-4	1	AJ-AIR		FC16REV	
X/X	±1/64	1-4	1				
NO.	REV.	DATE					

SECTION
E

COMPONENT PARTS



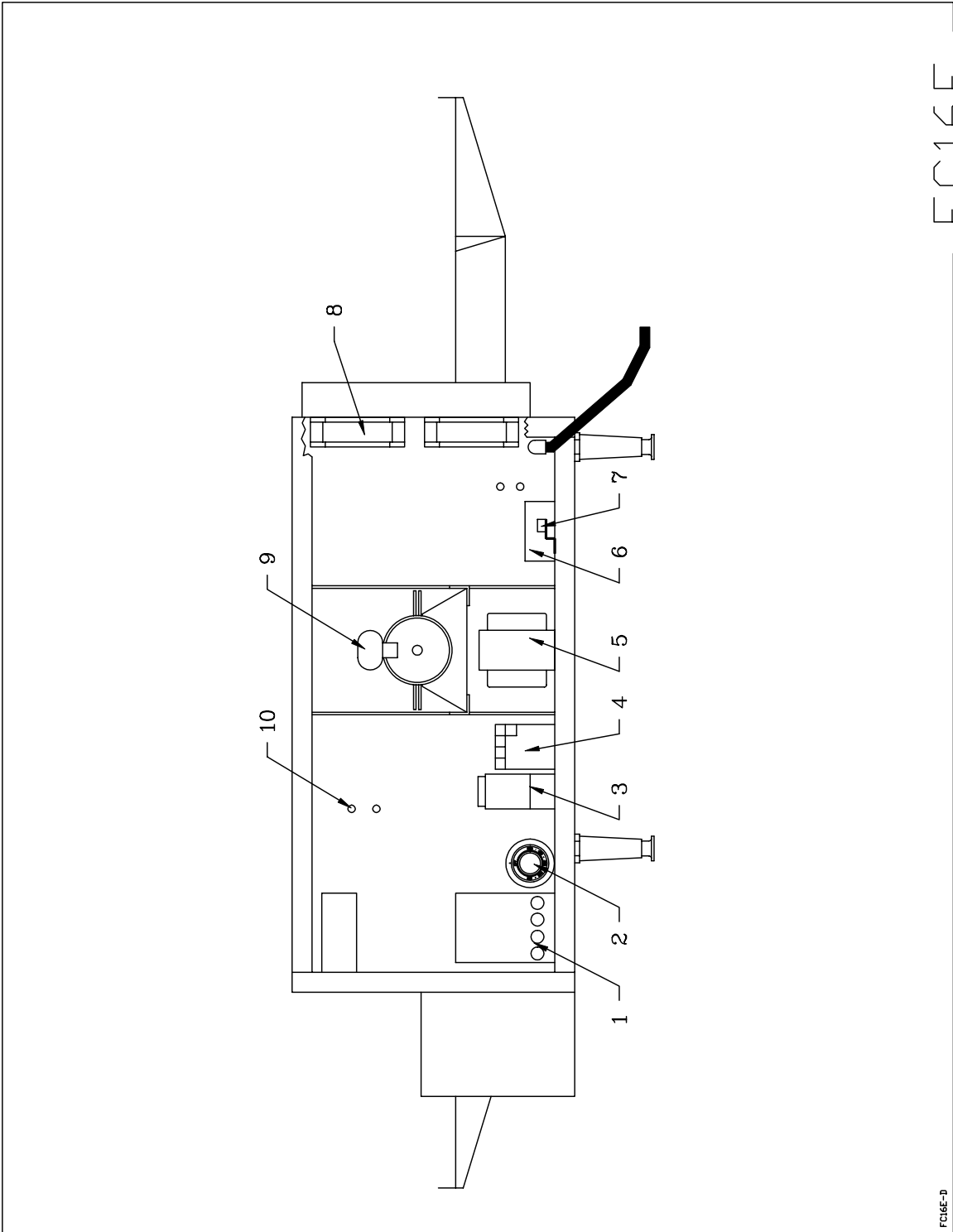
FC16E-C

FC16E

Item	Part Number	Description	Quantity
1	QURB65	BEARING R102RS (SPROCKET CONV) (EXIT CONVEYOR SHAFT)	2
AND	QURB05	BEARING 69032RS (ROL CONV) (INFEED CONVEYOR SHAFT)	2
2	PAP200	LEG 4" LONG.	4
3	50093010	SPROCKET CLUTCH ASSEMBLY	1
4	QUC305	#25 CHAIN	1
5	QUC355	CHAIN SPROCKET (17 TEETH)	1
6	ELM942	CONVEYOR MOTOR GEARBOX	1
7	QUS600	CORD, LATCH	1
AND	QUS610	LATCH CUP	1
AND	QUS620	WASHER	1
8	ELB098	2A BREAKER	1
9	ELB098	2A BREAKER	1
10	ELB093	BREAKER 0.5 AMPS.	1
11	ELT515	OMRON THERMOSTAT E5CS	1
AND	ELT532	THERMOCOUPLE TYPE K	1
12	ELI637	ROCKER SWITCH DOUBLE POLE	1
AND	ELI638	CONVOYOR SWITCH	1
13	ELP050	FC-16 DART CONTROL POTENTIOMETER	1
14	QUE100	FIBERGLASS DOOR GASKET ((6`))	1

Model : FC-16-E

View : SIDE



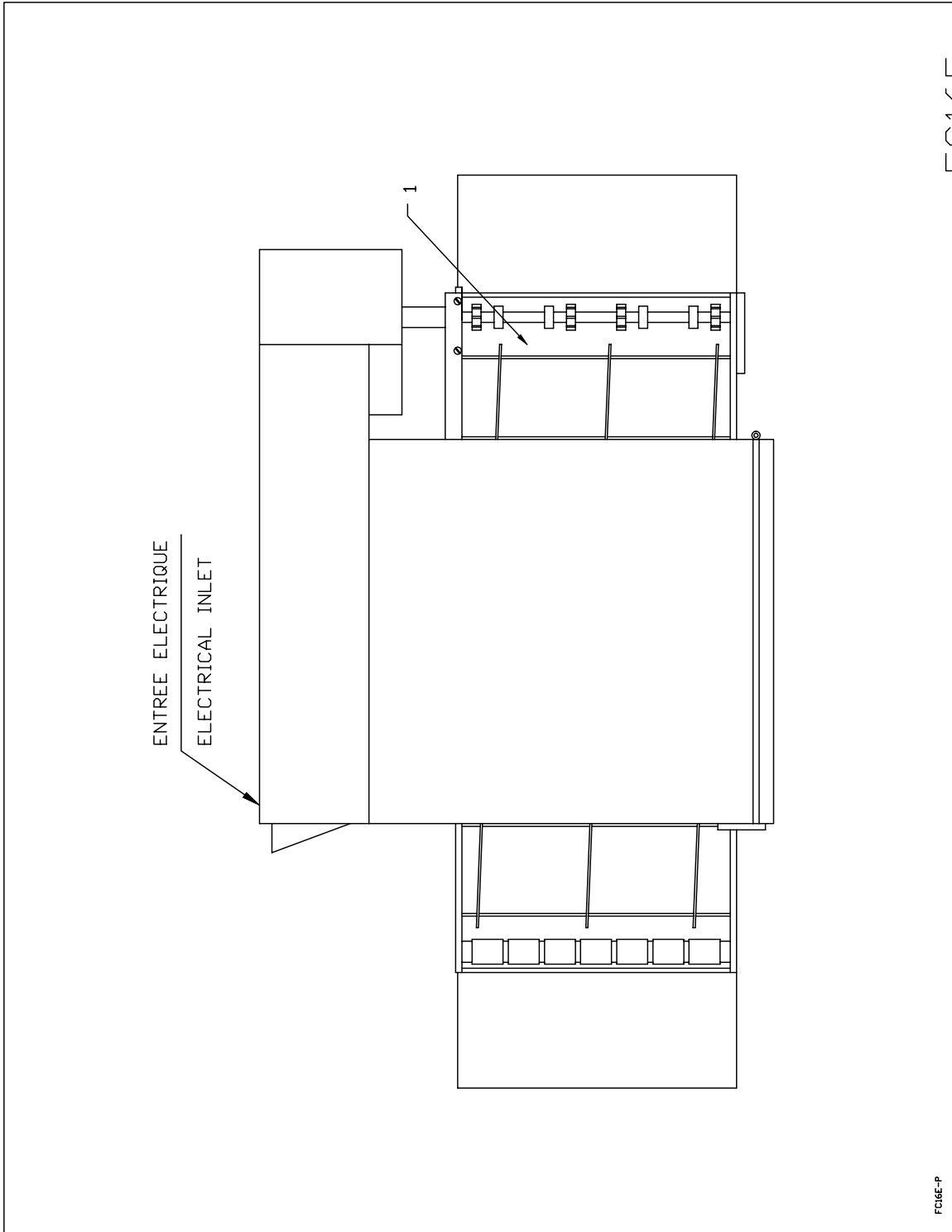
FC16E

FC16E-D

Item	Part Number	Description	Quantity
1	ELM958	CONTROL DART FOR FC16	1
2	ELT680	THERMOSTAT 700°F	1
AND	ELT681	THERMOSTAT KNOB 700°F	1
AND	ELT620	THERMOSTAT BEZEL	1
3	ELM729	11 PIN BASE	1
AND	ELM720	OMRON CONTROL TIMER (11 PIN) H3CR	1
4	ELC908	HEATING CONTACTOR	1
5	ELT715	TRANSFORMER 240>120 100VA	1
6	ELB071	TERMINAL BLOCK 2P 175A	1
7	ELL050	GROUND LUG	1
8	ELM760	MOTOR BLOWER	2
9	ELM934	MOTOR 240 VOLTS FOR FC16	1
10	ELE300	STRAIGHT ELEMENT 3000W 208 VOLTS	2
AND	ELE310	STRAIGHT ELEMENT 2500W 208 VOLTS	2

Model : FC-16-E

View : BACK



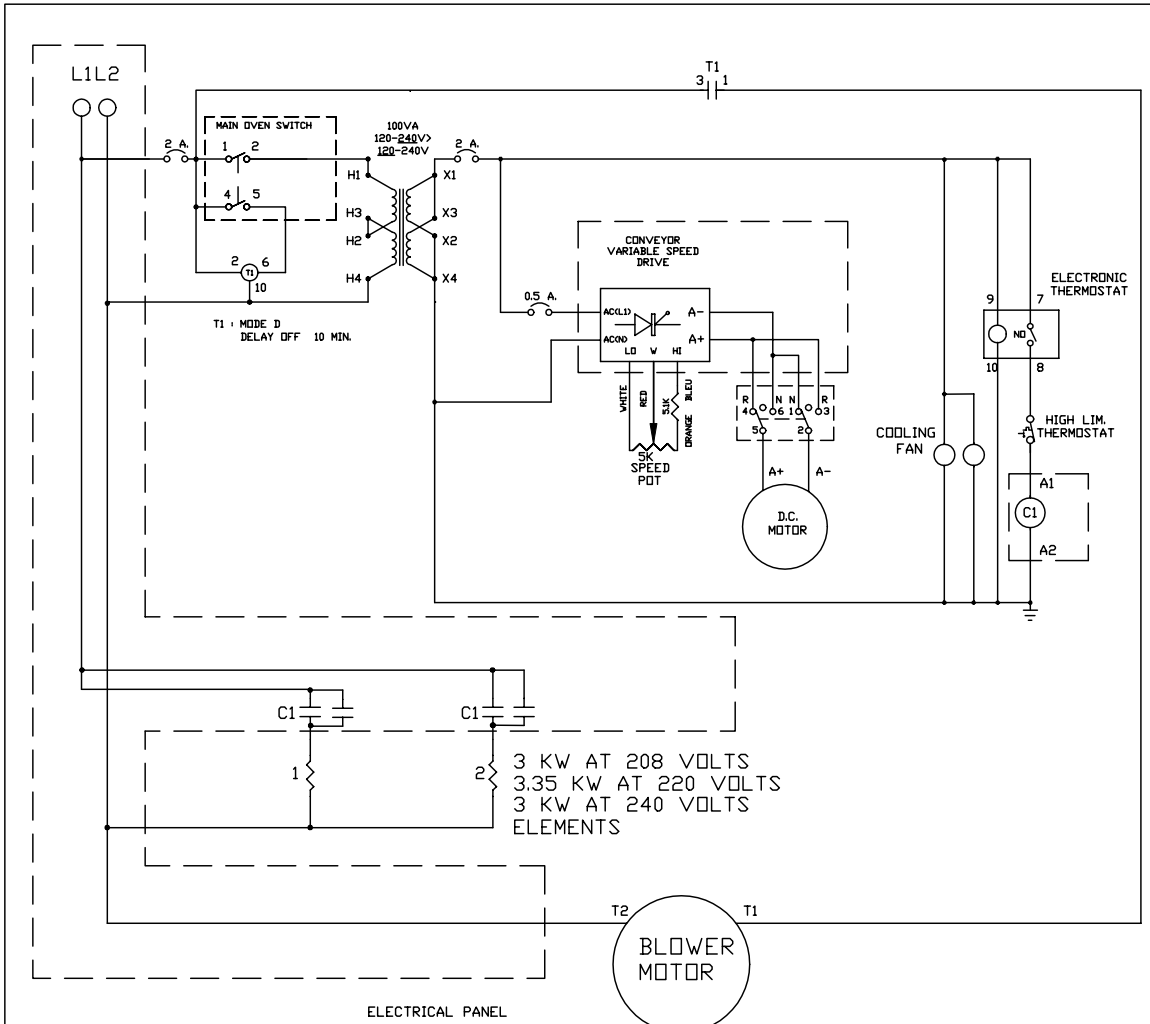
Item	Part Number	Description	Quantity
1	QUC920	CONVEYOR CHAIN 16" WIDE	1

Model : FC-16-E

View : TOP

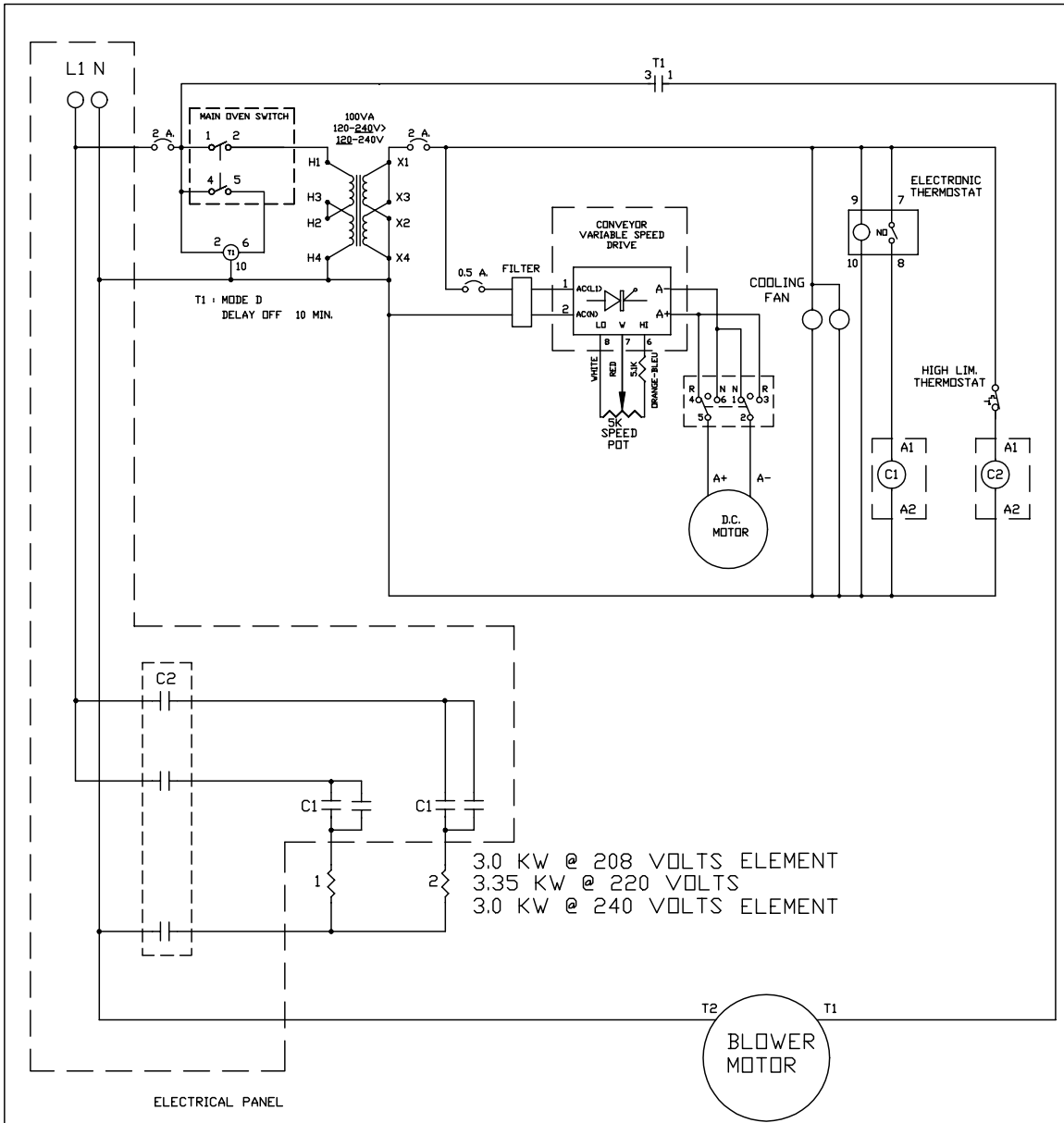
SECTION
G

ELECTRIC SCHEMATICS



VOLTAGE	L1	L2
208	29 AMPS	29 AMPS
240	26 AMPS	26 AMPS
TOTAL POWER 60 Hz: 6.1 KW		
220	31 AMPS	31 AMPS
TOTAL POWER 60 Hz: 6.8 KW		

EQUIPEMENT		
DOYON		
FC16E 60 Hz 1 Ph		
DATE 13-02-02	DES. M. FAUCHER	REV # 2
SER. 100	MODEL Dart	NO. FC16E_1



VOLTAGE	KW	L1	N
220	6.8 KW	31 AMPS	31 AMPS
240	6.1 KW	26 AMPS	26 AMPS

TOTAL POWER AT 50 Hz

EQUIPEMENT

DOYON

FC16E 50 Hz 1 Ph

DATE 20-06-02	DES. P. POIRIER	REV # 2
SER. 100	MODEL Dart	NO. FC16E_2R

LIMITED WARRANTY

(Continental United States Of America And Canada Only)

Doyon Equipment Inc. guarantees to the original purchaser only that its product are free of defects in material and workmanship, under normal use.

This warranty does not cover any light bulbs, thermostat calibration or defects due to or resulting from handling, abuse, misuse, nor shall it extend to any unit from which the serial number has been removed or altered, or modifications made by unauthorised service personnel or damage by flood, fire or other acts of God. Nor will this warranty apply as regards to the immersion element damaged by hard water.

The extent of the manufacturer's obligation under this warranty shall be limited to the replacement or repair of defective parts within the warranty period. The decision of the acceptance of the warranty will be made by Doyon Equipment service department, which decision will be final.

The purchaser is responsible for having the equipment properly installed, operated under normal conditions with proper supervision and to perform periodic preventive maintenance.

If any parts are proven defective during the period of one year from date of purchase, Doyon Equipment Inc. hereby guarantees to replace, without charge, F.O.B. Linière, Quebec, Canada, such part or parts.

Doyon Equipment Inc will pay the reasonable labour charges in connection with the replacement parts occurring within one year from purchase date. Travel over 50 miles, holiday or overtime charges are not covered. After one year from purchase date, all labour and transportation charges in connection with replacement parts will be the purchaser's responsibility.

Doyon Equipment Inc. does hereby exclude and shall not be liable to purchaser for any consequential or incidental damages including, but not limited to, damages to property, damages for loss of use, loss of time, loss of profits or income, resulting from any breach or warranty.

In no case, shall this warranty apply outside Canada and continental United States unless the purchaser has a written agreement from Doyon Equipment Inc.