

Instruction Manual for LAC series ovens

C-14



LAC Series Despatch ovens are bench ovens to 260°C (500°F) with forced convected airflow.

MODEL	VOLTS	HEATER WATTS	AMPS	HZ	PHASE
LAC 1-10	120	1000	11.6	60	1
LAC 1-38A	120	1600	16	60	1
LAC 1-38B	240	1800	9.4	60	1
LAC 1-67	240	2400	11.9	60	1
LAC 2-12	240	3600	18.8	60	1



DESPATCH
INDUSTRIES, INC.

Box 1320, Minneapolis, Minnesota 55440 (612) 331-1873 Telex 29-0704

3965 Nashua Dr., Mississauga, Ontario L4V 1P3 (416) 677-4951 Telex 06-983-598

11-78C

Read this instruction manual carefully before operating your Despatch oven.

WARNING: Failure to heed these restrictions can result in property damage, serious bodily injury or death.

DO NOT use any flammable solvent or other flammable materials or enclosed containers in the oven.

DO NOT use oven in wet, corrosive or explosive atmosphere.

DO NOT attempt any service on this equipment without disconnecting the main power switch or power cord.

DO NOT exceed maximum operating temperature, 260°C.

For best service, please complete the warranty card and return to Despatch promptly.

Unpacking, inspection and packing list

Remove all packing materials and inspect the oven and accessories for damage. If damage is due to shipment, contact your shipper immediately. If oven parts or accessories are damaged, or if you are missing parts or accessories, contact Despatch Customer Service Department at 612/331-1873.

You should have in this box: one oven, two shelves in the oven, one package of four rubber feet with four machine screws, one instruction manual and warranty card. Any optional accessories ordered will be shipped separately.

Installation

Attach the rubber feet to bottom corners of the oven with screws provided. Feet are required for proper cooling of control compartment and to prevent damage to counter surfaces.

Place oven on bench top or convenient location with minimum of 2" clearance in the rear to provide proper exhaust vent clearance. The oven can be placed next to another cabinet or oven with zero clearance (the doors will still open).

LAC 1-10 uses a standard 110 volt, 15 amp circuit. **LAC 1-38A** also uses 110 volts but requires 20 amp service. **LAC 1-38B** can plug into a 240 volt outlet, with 15 amp service, for which cord and plug are provided.

If you have an **LAC 1-67** or **LAC 2-12**, check the oven power requirements for amperage and voltage on the cover of this manual and follow local codes for proper wiring.

A note on line voltage: According to your geographical location, line voltage may vary. If line voltage is significantly lower than oven voltage rating, heat up times will be extended, and motor will operate more slowly. If line voltage varies $\pm 10\%$ from the oven voltage rating, temperature control will operate erratically.

Ovens designed for 240 volts (see spec plate on back of oven) will operate satisfactorily on a minimum of 208 volts, but with a reduction in heater power. If your power characteristics are lower, consult factory.

Operation

Heating oven to operating temperature

- Turn power switch to "on" (indicator light should light). This activates fan and control circuit.
- Press and hold the button labeled "push-to-set". The display will be in the set point mode as long as the button is depressed.

- Turn the knob labeled "turn-to-set" until the desired chamber temperature is displayed. Note that the minimum operating temperature for LAC ovens is 43°C (110°F) and the maximum operating temperature is 260°C (500°F). Release the set point button. **Note that the set point will be changed if knob is turned when button is not depressed.**
- Set high limit device by turning knob to 10-25° above process temperature. Set point should be low enough to prevent damage to the workload but high enough to allow Digitronic to control at set point. High limit will assume control of heater if chamber temperature exceeds high limit set point.
- Turn heater switch to "on" (indicator light should light). This activates the heating elements. When the desired temperature is reached, the Digitronic will proportion power to the heater as needed and the heater indicator light will flash on and off.
- The readout area will alternately display set point and actual chamber temperature. Set point is on display when the small light shows above the label "set point"
- Oven set point can be displayed at any time by manually depressing and holding the "push-to-set" button. This does not disengage the control function.

Loading the oven

1. Avoid spills of anything onto the heater elements or floor of the oven.
2. Two non-tip shelves are provided, which can be pulled out about halfway without tipping.
3. Support capacity of these shelves is rated at 25 pounds. Overloading the shelves is not recommended.
4. Do not place the load on the floor plate as the weight may cause shorting out of the heater elements.
5. Distribute work load evenly so airflow is not restricted. Allow room for air to recirculate around the load (for more details, refer to the section in our catalog on how to select an oven).
6. Do not overload your oven. Work load should not take up more than two-thirds of any dimension of the inside cavity.

Shutting down the oven

1. Turn heater switch to "off" after heating cycle is complete.
2. Do not turn power off until oven temperature is below 100°C (212°F). If oven is turned off before properly cooled, fan shaft and motor bearings may become overheated, which will shorten the life of the motor.

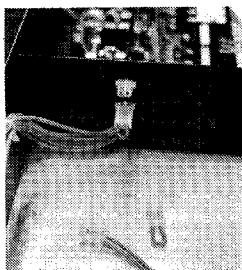
How to install LAC optional accessories.

Four optional accessories are available for LAC series ovens. They are available at any time from Despatch Industries' Customer Service Department, 612/331-1873.

When you order accessories, full instructions for mounting them in the control panel will be enclosed; however, in case they are misplaced, instructions are repeated here.

Process timers. Available for 60 minute or 6 hour cycles, these timers are electrically connected into oven control and will shut off the heater at end of cycle. (Tools needed: screwdriver, utility knife.)

- Disconnect power and remove control panel.
- From back of panel, locate pre-punched holes. Process timer can be mounted in either of the two far left sets of holes. From the front of panel, use utility knife to cut holes in the silver overlay.
- Put shaft and mounting screws through holes and screw timer into place.
- Remove one of the connectors (see photo) on back of control panel and replace it with the wired connector from the timer. (Connector is keyed to fit only one way.)
- Replace control panel.
- Peel top part of backing off black "Process Timer" sticker and apply it to front of control panel, using the two locating marks and shaft holes as location guides. Peel remaining backing off and smooth sticker down.
- Push knob onto shaft.

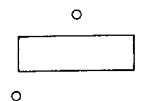


Signal Timer. This timer sounds an audible bell at the end of the cycle, up to 60 minutes. It is **not** electrically connected to oven and does **not** shut off heater. (Tools needed: screwdriver, utility knife.)

- Disconnect power and remove control panel.
- From back of panel, locate pre-punched holes. Signal timer can be mounted in either of the two far left sets of holes. From the front of panel, use utility knife to cut holes in the silver overlay.
- Put shaft and mounting screws through the holes and screw timer into place.
- Replace control panel.
- Peel top part of backing off black "Signal Timer" sticker and apply it to front of control panel, using the two locating marks and shaft hole as location guides. Peel remaining backing and smooth sticker down.
- Push knob onto shaft.

Running Time Meter. Digital meter counts up to 99,999.9 hours of process time. Runs continuously when oven is on. Not resettable. (Tools needed: screwdriver, utility knife.)

- Disconnect power and remove control panel.
- From back of panel, locate pre-punched holes. The running time meter can be positioned **only** in the lower left set of holes. Use the utility knife to cut four holes in the silver overlay (see diagram).



- Attach meter to panel with screws.
- Remove the connector on the terminal strip that is on the PC board side on back of control panel and replace it with the wired connector from the meter. (Connector is keyed to fit only one way.)
- Replace control panel.
- Peel top part of backing off black "Running Time" sticker and apply it to the front of the control panel using locating marks and meter hole as location guides. Peel remaining backing off and smooth sticker down.
- Meter will operate when oven is on.

Industrial Equipment Commercial Warranty

Despatch Industries, Inc. warrants equipment manufactured by Despatch Industries, Inc., to be free from defects in workmanship and materials under normal use and service for a period of one (1) year from the date of delivery or the period of twenty-one hundred (2100) accumulated hours of use, whichever period is shorter.

Components manufactured by others, including but not limited to expendable items, are excluded from this warranty and are warranted (if at all) only in accordance with the warranty, if any, issued by such other manufacturer.

Use or service with corrosive or abrasive chemicals or materials is not deemed normal.

If Purchaser gives written notice specifying the particular defect or defects within 14 days after discovery thereof, Despatch Industries, Inc. will correct without charge any workmanship that is demonstrated to Despatch Industries, Inc. satisfaction to have been defective at time of installation or erection and will repair or replace, at the warrantor's option, without charge, f.o.b. Despatch Industries, Inc. factory, parts covered by this warranty that upon inspection are found defective under normal use within the warranty period above stated.

All work of removal and reinstallation or installation of parts, whether or not found defective, and shipping charges for defective or replacement parts shall be at the sole expense of Purchaser.

The foregoing warranty shall not apply to equipment repaired or altered by others, unless such repairs or alterations were specifically agreed to in writing by an officer of Despatch Industries, Inc.

Despatch Industries, Inc. shall not be liable for incidental or consequential damages of any kind (whether for personal injury, lost profits or otherwise), whether arising from breach of this warranty, negligence or other tort or otherwise, which occur during the course of installation of equipment, or which result from the use or misuse by user, its employees or others of the equipment supplied hereunder, or from any malfunction or nonfunction of such equipment, and Purchaser's sole and exclusive remedy against Despatch Industries, Inc. for any breach of the foregoing warranty or otherwise shall be for the repair or replacement of the equipment or parts thereof affected.

The foregoing warranty shall be valid and binding upon Despatch Industries, Inc. if and only if user loads, operates and maintains the equipment supplied hereunder in accordance with the instruction manual to be provided upon delivery of the equipment.

Despatch Industries, Inc. does not guarantee the process of manufacture by user or the quality of product to be produced by the equipment supplied hereunder and Despatch Industries, Inc. shall not be liable for lost profits.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES AND REPRESENTATIONS WHATSOEVER, INCLUDING BUT NOT LIMITED TO THOSE OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

Trouble shooting.

Any equipment operating for as many hours a day as lab ovens often do, is likely to have problems now and then. Below are possible problems and suggested solutions. If you have a problem not listed and don't know what to do, call Despatch at 612/331-1873.

DIFFICULTY	PROBABLE CAUSE	SUGGESTED REMEDY
Failure to heat	No power	Check power source and/or oven and wall fuses
	Broken or frayed cord	Replace with new cord and plug set
	Burned out heating element	Replace element (see warranty statement)
	Control malfunction	Replace controller
Slow heat up	Loose wire connections	Disconnect power and check connections behind control panel
	Improperly loaded	Reduce load or redistribute load in chamber
	Low line voltage	Supply sufficient power and proper connections. Check to see if circuit is overloaded
	1 or 2 heating elements are burned out	Replace burned out element (see warranty statement)
Frequent heater element burn out	240 volt oven is connected to a 208 volt line	Raise line voltage
	Harmful fumes generated by load	Increase vent opening or discontinue process
	Spillage or splattering of material on heating elements	Disconnect power and clean oven chamber and elements
Erratic temperatures	Overheating oven	Do not operate over 260°C (500°F)
	Control malfunction	Replace control unit
Inaccurate temperatures	Control miscalibration	Recalibrate control (see section on offset adjustment)
Excess surface temperature on door	Door seal deterioration	Replace door seal
Improper airflow	Improperly loaded	Reduce load or redistribute load in chamber.
Oven will not control	Hi-limit set too low	Reset the hi-limit
	Hi-limit is out of calibration	Recalibrate the hi-limit (see directions on recalibrating the hi-limit)
	Triac malfunction	Replace Triac
	Control malfunction	Replace control (see warranty statement)

How to replace parts

WARNING — Disconnect main power switch or power cord before attempting any repairs or adjustments.

Replacing control unit (Tools needed: screwdriver, either an adjustable wrench or a nut driver, pliers)

- Disconnect power. Remove control panel and slide it forward.
- Locate the Digitronic's printed circuit (PC) board.
- Remove wires from terminal strip, noting which numbered wires connect to which terminals. Refer to wiring diagram in this manual.
- Remove the screws holding the terminal board onto sub-panel. Replace old PC board with new PC board. Attach board to sub-panel.
- Reattach wires to terminal strip making sure the correct ones are connected.
- Replace control panel.

Replacing heater unit (Tools needed: crescent wrench, screwdriver)

- Disconnect power. Remove floor plate by lifting it out.
- Disconnect heater leads from heater element with wrench. Note which wires go on which terminals.
- Unscrew the screws holding the frame to the oven body. Remove the heater and discard.
- Screw down new heater frame.
- Attach heater leads to appropriate terminals.
- Replace interior floor.

Replacing fan motor (Tools needed: screwdriver, 1/8" Allen wrench)

- Disconnect power and remove floor plate by lifting it out.
- Loosen set screws on fan wheel inside fan housing.
- Turn oven on its back and remove bottom plate.
- Unscrew the four screws holding the motor mounts to body.
- Remove motor (NOTE: After fan wheel runs at temperature for a while, it will stick to the shaft. Some force may be required to separate the two).
- Disconnect motor leads from terminal block on control sub-panel.
- Take motor mounts and shaft seal off motor.
- Put motor mounts and shaft seal onto new motor.
- Reattach fan wheel to shaft by inserting shaft into shaft collar. (Put wheel onto shaft inside of oven.)
- Reattach motor mounts to oven body making sure grommets are in place.
- Attach motor lead wires to terminal block (see wiring diagram).

- Replace oven bottom and turn oven rightside up.
- Adjust fan wheel for 3/16" clearance between wheel and inlet ring.
- Tighten set screws making sure set screws hit the flats machined into the motor shaft.
- Replace interior floor.

Replacing the hi-limit (Tools needed: small screwdriver)

- Disconnect power and tip oven on its back.
- Remove feet and oven bottom.
- Locate thermocouple and hi-limit bulb shield along the left side of the control chamber.
- Remove shield by removing retainer screw and pulling the shield out.
- Pull hi-limit bulb out of the shield. Note thermocouple is housed in the same shield — avoid rough handling.
- Carefully uncoil the new capillary tube, taking care not to kink it. Feed the new hi-limit bulb into the shield making sure that the thermocouple junction (welded end) is exposed at least 1" above the end of the shield. This junction point should not be touching anything.
- Reattach shield to original position.
- Peel off the "high limit" label on the outside of the control panel.
- Detach the old hi-limit body by unscrewing the screws that were underneath the label.
- Remove the hi-limit and discard.
- Attach the new hi-limit. Put on the new label. Reattach the knob.
- Replace oven bottom and feet.

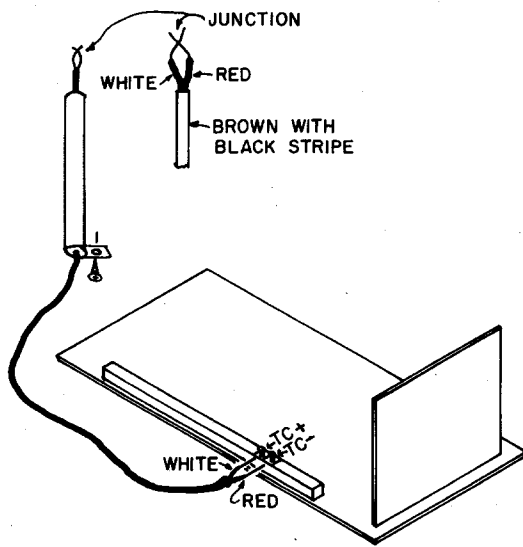
Thermocouple break protection

If the thermocouple breaks, the Digitronic will shut off power to the heater to prevent excessive temperature in the chamber. This condition will be indicated in the Digitronic digital display area by decimal points between the numerals.

The thermocouple is type "J" (iron/constantan) and is replaceable using the following procedure:

- Disconnect power and tip oven on its back.
- Remove feet and oven bottom.
- Locate thermocouple and hi-limit bulb shield along the left side of the control chamber.
- Remove shield by removing retainer screw and pulling shield out.
- Pull thermocouple out of shield.

- Feed new thermocouple into shield making sure that thermocouple junction (welded end) is exposed at least 1" above the end of the shield. Junction point should not be touching anything.
- Reattach shield into original position.
- Replace oven bottom and feet, and return oven to up-right position.
- Remove control panel and pull out for access to the terminal strip on the PC board.
- Remove old thermocouple from terminals marked "TC+" and "TC-".
- Attach new thermocouple to "TC+" and "TC-" making sure that white lead is attached to the "+" terminal and the red lead is attached to the "-".
- Replace control panel.
- If decimal points still appear between numerals, repeat procedure.



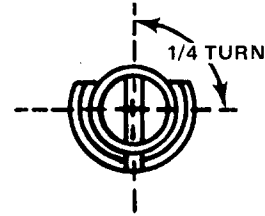
Recalibrating the hi-limit

(Tools needed: small screwdriver)

High limit device was calibrated at our factory; however it may need periodic checking and recalibration. If the high limit overrides the Digitronic when high limit is set above Digitronic set point, high limit needs recalibration. High limit is in control when heater indicator light is lit for 2-3 seconds at a time rather than for a fraction of a second. Recalibrate using the following procedure:

- Turn oven on and set controller at 100°C. It should be stabilized at temperature for about one hour before adjustments are made.
- Set hi-limit to 60°C. Pull hi-limit control knob off. Calibration screw is located in the center of the thermostat shaft.
- 1/4 turn of the screw equals approximately 20°C. (See diagram.)

- If the Digitronic maintains control when it and the hi-limit are set at same temperature, turn calibration screw **counter-clockwise** until hi-limit overrides Digitronic. If hi-limit controls heater when both instruments are at the same temperature setting, turn calibration screw **clockwise** until hi-limit releases control to the Digitronic.
- Replace knob on shaft.



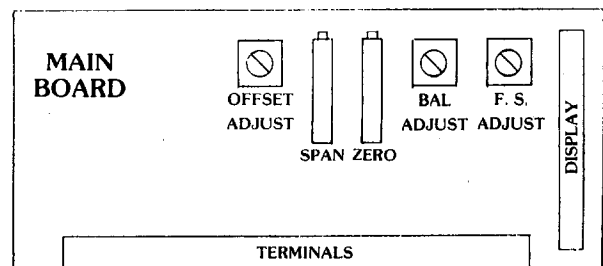
Offset adjustment

Each Digitronic control is calibrated at our factory; however, it is possible that during shipping the control may have been shaken slightly out of adjustment. After the chamber temperature has stabilized, if the actual chamber temperature shown in the display area does not agree with the displayed set point, offset adjustment is required.

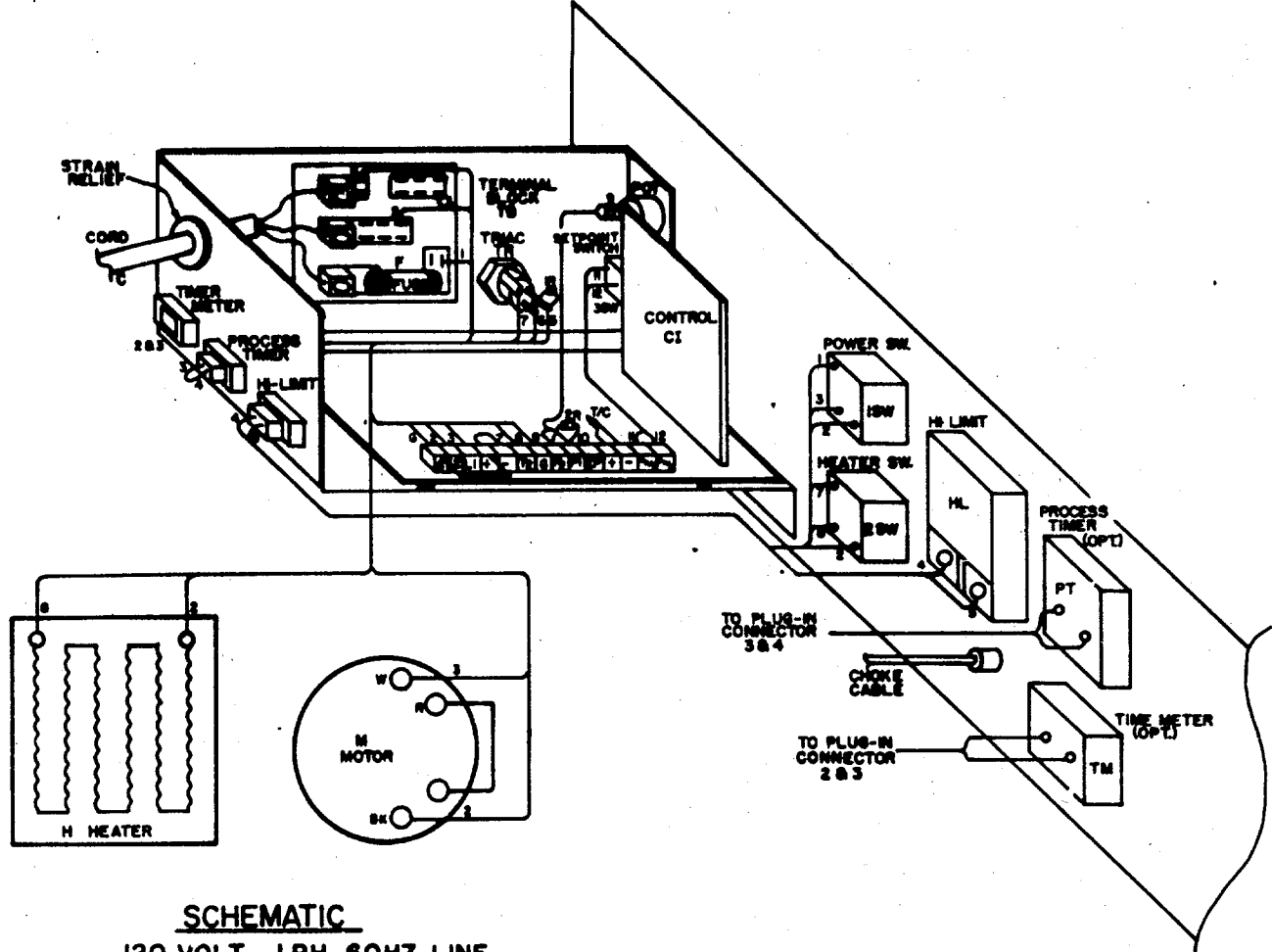
CAUTION: When adjusting control, power to the oven must be on. Take extreme care not to touch live terminals.

(Tools needed: small screwdriver)

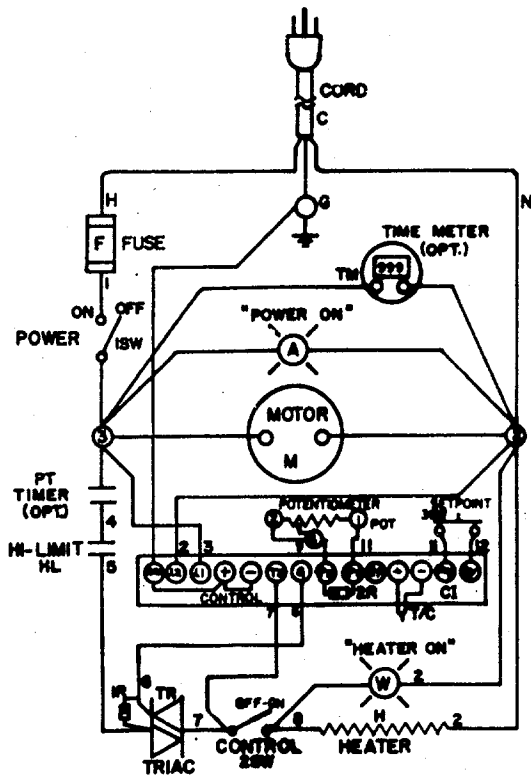
- Oven should be stabilized temperature for at least 15 minutes before attempting adjustment, which should be made at about 150°C (300°F).
- Remove control panel.
- Locate the trim pot on the circuit card labeled "offset adjustment". (See diagram.)
- With the screwdriver, turn the trim pot. 1/16 turn is approximately equal to 1°C (2°F). If the actual chamber temperature is higher than the setpoint, turn trim pot counter-clockwise and wait 2-5 minutes for heat to stabilize. If actual chamber temperature is lower than Digitronic setpoint, turn trim pot clockwise, again waiting for stabilization before further adjustment. Repeat if necessary.
- Replace control panel.



LAC 1-10 WIRING DIAGRAM



SCHEMATIC 120 VOLT - 1 PH - 60HZ LINE



MATERIAL LIST		
ITEM	QTY	DESCRIPTION OF PART
C	1	12/3 SPT CORD 20 AMP
CI	1	61-06-AF CONTROL
HL	1	B-10 HI-LIMIT
M	1	1/25HP MOTOR
F	1	A25K20 FUSE
H	1	1000WATT HEATER
TR	1	T6420D TRIAC
IR	1	100 OHM RESISTOR
2R	1	4.3K OHM RESISTOR
POT	1	5K OHM POTENTIOMETER
1SW	1	L7L-A51-6S-WH-A-NBL SWITCH
2SW	1	L7L-A51-6S-WH-W-NBL SWITCH
3SW	1	UP-10IM SWITCH
TB	1	DO-041877 TERMINAL BLOCK
TM	1	TIME METER (OPTIONAL)
PT	1	PROCESS TIMER (OPTIONAL)

CUST. NO.	
SERIAL NO.	
DESPATCH INDUSTRIES, INC. <small>Mississippi, Illinois 1948</small>	
LAC 1-10 WIRING DESIGNED FOR:	
DESIGNED	SCALE - 1 FT. DATE 5/29/75
CHECKED	
APPROVED	BE-7416-4

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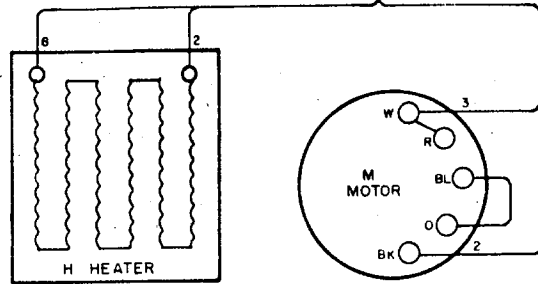
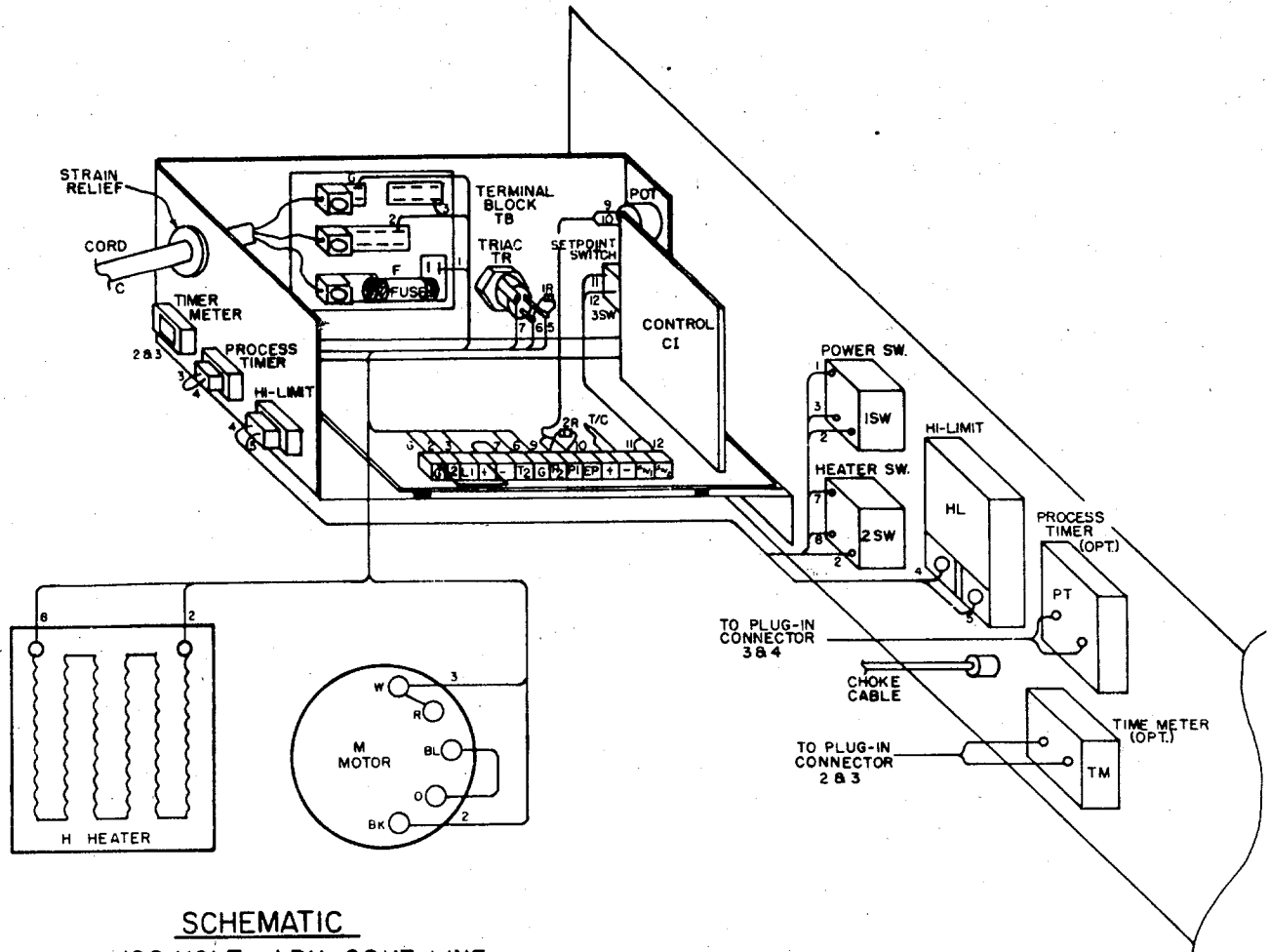
Material List

LAC1-10

Item	Part Number	Description
C	031233	14/3 Cord 20 Amp
CI	208745	DES2000 Digitronic Replacement Controller Kit
T/C	051443	Thermocouple Type J
HL	012383	B-10 Hi-limit
M	205692	Motor Kit
FW	007281	Fan Wheel 05.75X1.00X.31ALZ CCW
F	007456	A25X15 Fuse
H	007773	1000 Watt Heater 120V
TR	203580	SSR Relay replacement Kit
1SW	074182	Power Switch and Amber Light
2SW	074183	Heater Switch and White Light
TM	013439	Elapse Time Meter
PT	105068	6 Hour Process Timer Kit (Spring Wound)
	105069	1 Hour Process Timer Kit (Spring Wound)
	105070	12 Hour Process Timer Kit (Spring Wound)
Seal	011249	Door Seal
Latch	008199	Latch Adjustable

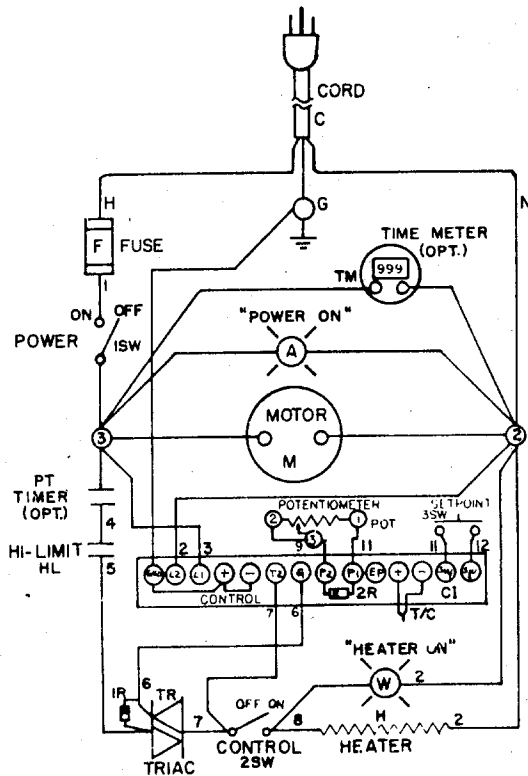
LAC I-38A

WIRING DIAGRAM



SCHEMATIC

120 VOLT - 1 PH-60HZ LINE



MATERIAL LIST		
ITEM	QTY	DESCRIPTION OF PART
C	1	12/3 SPT CORD 20 AMP
CI	1	61-06-AF CONTROL
HL	1	B-10 HI-LIMIT
M	1	1/4 HP MOTOR
F	1	A25X20 FUSE
H	1	1600 WATT HEATER
TR	1	T6420D THAIC
IR	1	100 OHM RESISTOR
2R	1	4.3K OHM RESISTOR
POT	1	5K OHM POTENTIOMETER
1SW	1	L7IL-A51-6S-WH-A-NBL SWITCH
2SW	1	L7IL-A51-65-WH-W-NBL SWITCH
3SW	1	UP-101M SWITCH
TB	1	DO-041877 TERMINAL BLOCK
TM	1	TIME METER (OPTIONAL)
PT	1	PROCESS TIMER (OPTIONAL)

CUST NO	
SERIAL NO	
DESPATCH INDUSTRIES INC Minneapolis, Minnesota 55440	
LAC I-38A WIRING DESIGNED FOR	

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DESIGNED BY	MB	DATE	9/27/78
CHECKED			
APPROVED			
BE-7416-5			

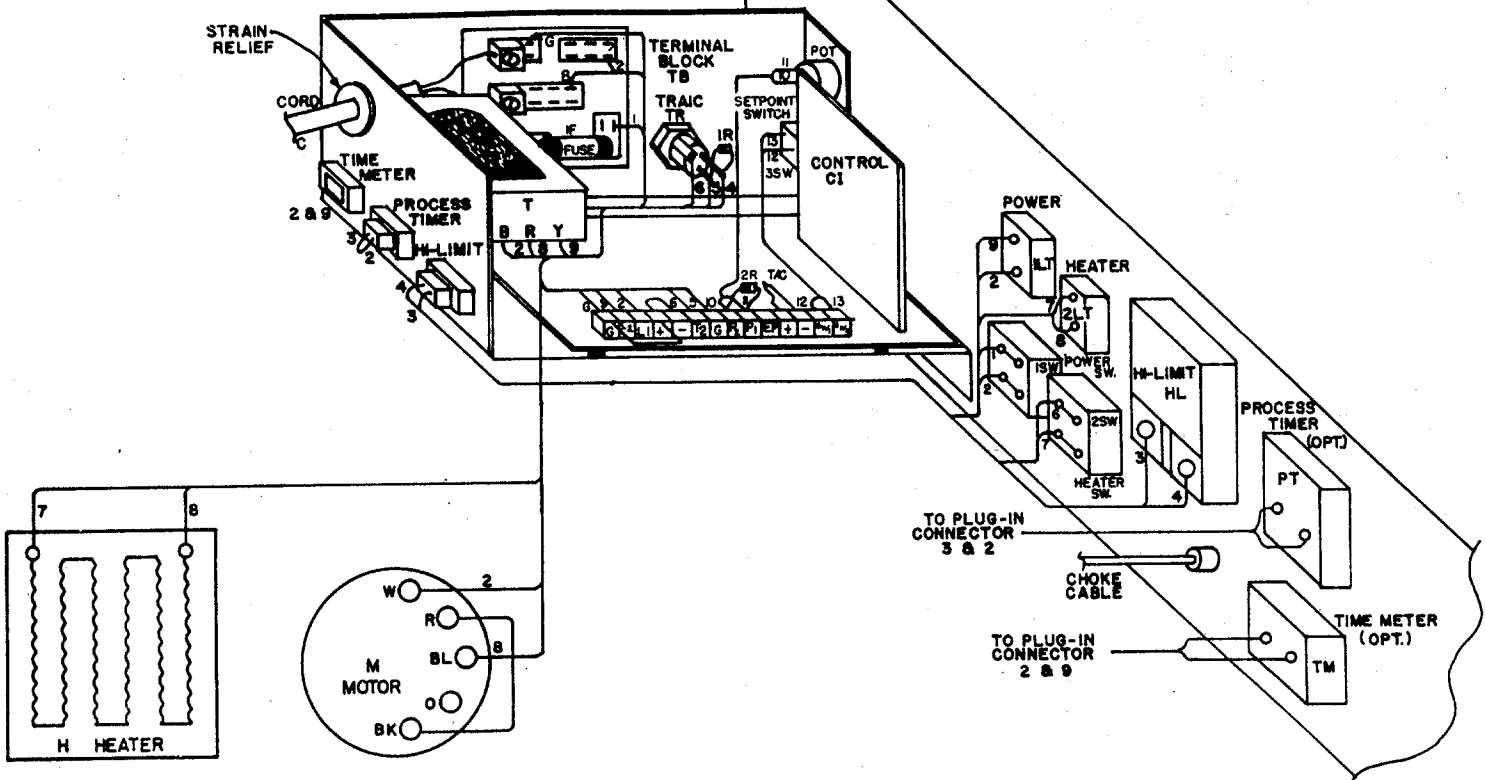
Material List

LAC1-38A

Item	Part Number	Description
C	074496	12/3 Cord 20 Amp 120V
CI	208745	DES2000 Digitronic Replacement Controller Kit
T/C	051443	Thermocouple Type J
HL	012383	B-10 Hi-limit
M	098097	Motor Kit
F	007457	A25X20 Fuse
H	007774	1600 Watt Heater 120V
TR	203580	SSR Relay replacement Kit
1SW	053094	Power Switch and Amber Light
2SW	074183	Heater Switch and White Light
TM	013439	Elapse Time Meter
PT	105068	6 Hour Process Timer Kit (Spring Wound)
	105069	1 Hour Process Timer Kit (Spring Wound)
	105070	12 Hour Process Timer Kit (Spring Wound)
Seal	011249	Door Seal
Latch	008199	Latch Adjustable

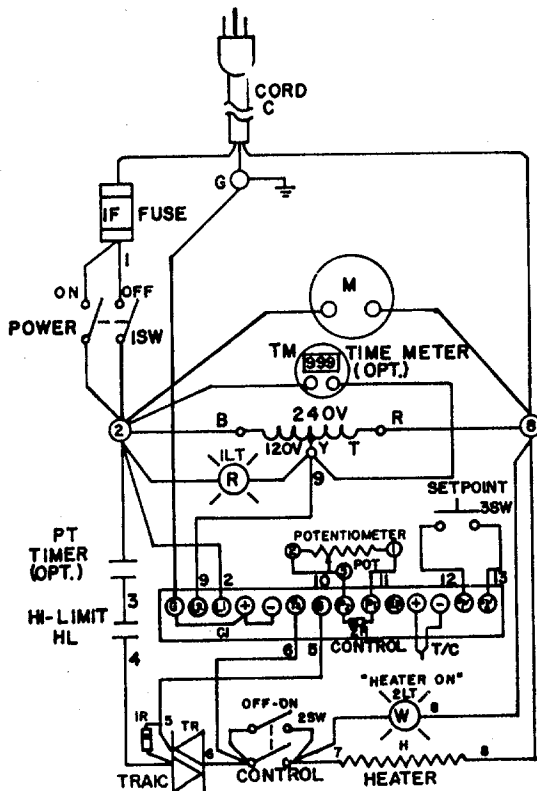
LAC I-38B AND LAC I-67

WIRING DIAGRAM



SCHEMATIC

240 VOLT-1PH-60HZ LINE



MATERIAL LIST

ITEM	QTY	DESCRIPTION OF PART
C	1	14/3 SJ CORD 15 AMP 250V
CI	1	6I-06-AF CONTROL
HL	1	B-10 HI-LIMIT
M	1	1/4 HP MOTOR
F	1	A25X15 FUSE
H	1	1800 WATT HEATER (LAC I-38B)
	1	2400 WATT HEATER (LAC I-67)
TR	1	T6420M TRAIAC
IR	1	100 OHM RESISTOR
2R	1	4.3K OHM RESISTOR
POT	1	5K OHM POTENTIOMETER
ILT	1	LT-C2-NR-NI-MF LIGHT
2LT	1	LT-C2-NW-N2-MF LIGHT
I-2SW	2	T1GK-5I-6S-WH-NBL SWITCH
3SW	1	UP-10IM SWITCH
TB	1	DO-04I877 TERMINAL BLOCK
T	1	50 VA TRANSFORMER
TM	1	TIME METER (OPTIONAL)
PT	1	PROCESS TIMER (OPTIONAL)

CUST. NO.
SERIAL NO.

DESPATCH
INDUSTRIES, INC.
Minneapolis, Minnesota 55440

LAC I-38B & LAC I-67
DESIGNED FOR

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ENGINEER: MB SCALE: 1" = 1" FT. DATE: 9/29/78
CHECKED: APPROVED: BE-7416-6

Material List

LAC1-38B

Item	Part Number	Description
C	105115	14/3 Cord 15 Amp 240V
CI	208745	DES2000 Digitronic Replacement Controller Kit
T/C	051443	Thermocouple Type J
HL	012383	B-10 Hi-limit
M	098097	Motor Kit
F	007456	A25X15 Fuse
H	007775	1800 Watt Heater 208/240V
TR	203580	SSR Relay replacement Kit
T	012479	Transformer 50VA
1LT	008662	Red Light 120V
2LT	008670	White Light 240V
1-2SW	074116	Power and Heater Switches
TM	013439	Elapse Time Meter
PT	105068	6 Hour Process Timer Kit (Spring Wound)
	105069	1 Hour Process Timer Kit (Spring Wound)
	105070	12 Hour Process Timer Kit (Spring Wound)
Seal	011249	Door Seal
Latch	008199	Latch Adjustable

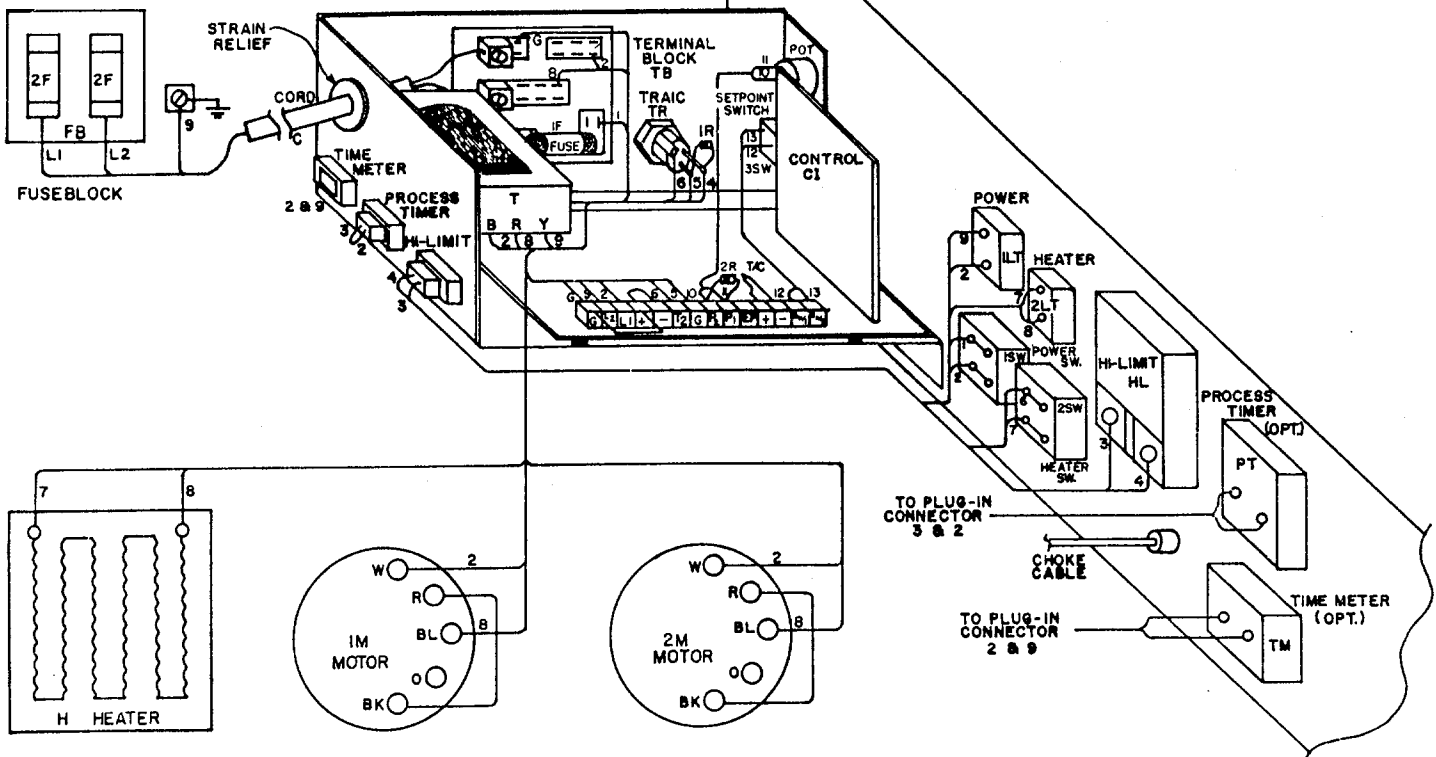
Material List

LAC1-67

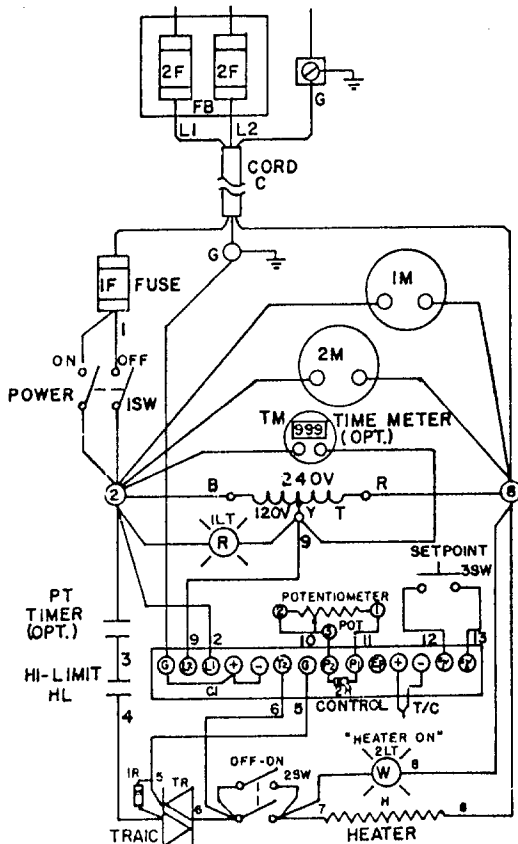
Item	Part Number	Description
C	105115	14/3 Cord 15 Amp 240V
CI	208745	DES2000 Digitronic Replacement Controller Kit
T/C	051443	Thermocouple Type J
HL	012383	B-10 Hi-limit
M	098097	Motor Kit
F	007456	A25X15 Fuse 250V
H	007776	2400 Watt Heater 208/240V
TR	203580	SSR Relay replacement Kit
T	012479	Transformer 50VA
1LT	008662	Red Light 120V
2LT	008670	White Light 240V
1-2SW	074116	Power and Heater Switches
TM	013439	Elapse Time Meter
PT	105068	6 Hour Process Timer Kit (Spring Wound)
	105069	1 Hour Process Timer Kit (Spring Wound)
	105070	12 Hour Process Timer Kit (Spring Wound)
Seal	011249	Door Seal
Latch	008199	Latch Adjustable

LAC 2-12

WIRING DIAGRAM



SCHEMATIC 240 VOLT 1PH



MATERIAL LIST		
ITEM	QTY	DESCRIPTION OF PART
C	1	10/3 50 CORD
CI	1	61-06-AF CONTROL
HL	1	B-10 HI-LIMIT ?
1-2M	2	1/4 HP MOTOR
IF	1	A25X25 FUSE
2F	2	250 VOLT 25 AMP FUSE
H	1	3600 WATT HEATER
TR	1	T6420M TRAIL
1R	1	100 OHM RESISTOR
2R	1	4.3 K OHM RESISTOR
POT	1	5K OHM POTENTIOMETER
1LT	1	LT-C2-NR-NI-MF LIGHT
2LT	1	LT-C2-NW-N2-MF LIGHT
1-2SW	2	TIGK-51-6S-WH-NBL SWITCH
3SW	1	UP-101M SWITCH
TB	1	DO-041877 TERMINAL BLOCK
FB	1	F30A2 FUSE BLOCK
T	1	50 VA TRANSFORMER
TM	1	TIME METER (OPTIONAL)
PT	1	PROCESS TIMER (OPTIONAL)

CUST. NO.	
SERIAL NO.	
DESPATCH INDUSTRIES, INC. Minneapolis, Minnesota 55440	
LAC 2-12 WIRING DESIGNED FOR	

THE DESIGN SHOWN ON THIS DRAWING IS THE EXCLUSIVE PROPERTY OF DESPATCH INDUSTRIES, INC. AND IS SUBMITTED WITH THE UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR ITS CONTENTS DISCLOSED WITHOUT THE WRITTEN CONSENT OF DESPATCH INDUSTRIES, INC.	ENGINEER	SCALE	DATE
	MB	1" = 1"	9/29/78
CHECKED			
APPROVED			
			BE-7416-7

Material List

LAC2-12

Item	Part Number	Description
CI	208745	DES2000 Digitronic Replacement Controller Kit
T/C	051443	Thermocouple Type J
HL	012383	B-10 Hi-limit
M	098097	Motor Kit
F	007471	Fuse Block 2 Pole 250V
	013217	A25X25 Fuse 250V
2F	007471	Fuse Block 2 Pole 250V
	007453	6 Amp Fuse 250V
H	007778	3600 Watt Heater 208/240V
TR	203580	SSR Relay replacement Kit
T	012479	Transformer 50VA
1LT	008662	Red Light 120V
2LT	008670	White Light 240V
1-2SW	074116	Power and Heater Switches
TM	013439	Elapse Time Meter
PT	105068	6 Hour Process Timer Kit (Spring Wound)
	105069	1 Hour Process Timer Kit (Spring Wound)
	105070	12 Hour Process Timer Kit (Spring Wound)
Seal	011249	Door Seal
Latch	008199	Latch Adjustable