SERVICE DATA SHEET

318047490 (1108) Rev. A

Appliance with Electronic Oven Control

NOTICE

This service data sheet is intended for use by persons having electrical and mechanical training and a level of knowledge of these subjects generally considered acceptable in the appliance repair trade. The manufacturer cannot be responsible, nor assume any liability, for injury or damage of any kind arising from the use of this data sheet.

SAFE SERVICING PRACTICES

To avoid the possibility of personal injury and/or property damage, it is important that safe servicing practices be observed. The following are examples, but without limitation, of such practices.

- 1. Do not attempt a product repair if you have any doubts as to your ability to complete it in a safe and satisfactory manner.
- 2. Before servicing or moving an appliance, remove power cord from electric outlet, trip circuit breaker to OFF, or remove fuse and turn off gas supply.
- 3. Never interfere with the proper installation of any safety device.
- 4. USE ONLY REPLACEMENT PARTS CATALOGED FOR THIS APPLIANCE. SUBSTITUTIONS MAY DEFEAT COMPLIANCE WITH SAFETY STANDARDS SET FOR HOME APPLIANCES.

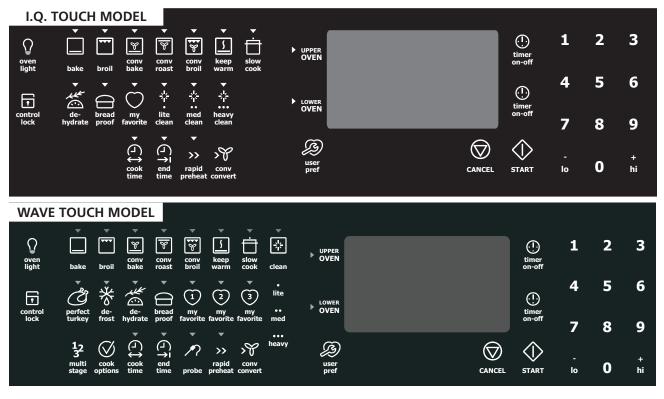
ground wires is GREEN OR GREEN WITH YELLOW STRIPES. Ground leads are not to be used as current carrying conductors. IT IS EXTREMELY IMPORTANT THAT THE SERVICE TECHNICIAN REESTABLISH ALL SAFETY GROUNDS PRIOR TO COMPLETION OF SERVICE. FAILURE TO DO SO WILL CREATE A POTENTIAL HAZARD.

- 6. Prior to returning the product to service, ensure that:
- All electric connections are correct and secure.
- All electrical leads are properly dressed and secured away from sharp edges, high-temperature components, and moving parts.
- All non-insulated electrical terminals, connectors, heaters, etc. are adequately spaced away from all metal parts and panels.
- All safety grounds (both internal and external) are correctly and securely reassembled.
- All panels are properly and securely reassembled.

5. GROUNDING: The standard color coding for safety

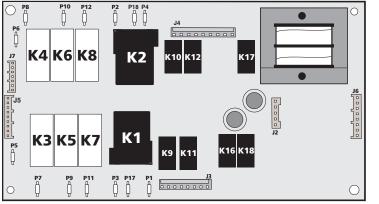
ELECTRONIC OVEN CONTROL (DOUBLE WALL OVEN)

- 1. This self-cleaning controller offers Bake, Broil, Convection Bake, Convection Roasting and Convection Broil modes, Dehydrating, Bread Proof, Keep Warm and Cleaning functions.
- 2. Convection operates with an element and a fan dedicated to convection.
- 3. This controller includes a display board, a relay board and oven light control board.



NOTE: The controllers are not field repairable. Only temperature settings can be changed. See oven calibration. Printed in Canada

ELECTRONIC OVEN CONTROL RELAY BOARD



This relay board serves to energize the upper and lower oven heating elements, door lock motor and cooling fan.

- P1 L2 Out, Upper Oven
- P2 L2 Out, Lower Oven
- P3 L2 In, Upper Oven
- P4 L2 In, Lower Oven
- P5 L1, Upper Oven
- P6 L1, Lower Oven
- P7 Broil, Upper Oven
- P8 Broil, Lower Oven
- P9 Bake, Upper Oven
- P10 Bake, Lower Oven
- P11 Convection Element, Upper Oven

0

P1 - Upper Oven Probe Input

P3 - Keyboard (touch panel)

P4 - Supply for cooling fan sensor

Connector Legend:

P7 - Touch Panel LEDs

sensor input.

- P12 Convection Element, Lower Oven
- P17 Not Used
- P18 Not Used

0

ELECTRONIC OVEN DISPLAY BOARD

P2 - Communication with Oven Light Control Board

P6 - Microprocessor Programming (not used)

 \cap



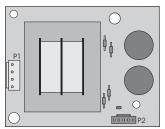
Connector present on wave touch model only.

- P13 Relay Control Output (cooling fan, convection fan
 - low speed) for Upper and Lower Ovens
 - P16 DC Power Supply Input
 - P18 Upper and lower oven meat probe (Wave touch model only)
 - P20 Lower Oven Probe Input
- P8 DC Power Supply Input P9 - Relay Control Output (heating elements, DLB, motor door latch, convection fan high speed) for Upper Oven
- P10 Switches Input (motor door latch switch, door switch, rack switch) for Upper Oven
- P11 Relay Control Output (heating elements, DLB, motor door latch, convection fan high speed) for Lower Oven P12 Switches Input (motor door latch switch, door switch, rack switch) for Lower Oven and cooling fan speed

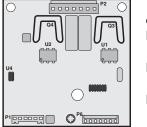
Relay Board Legend:

- K1. Double Line Break Upper Oven
- K2. Double Line Break Lower Oven
- K3. Broil Relay Upper Oven
- K4. Broil Relay Lower Oven
- K5. Bake Relay Upper Oven
- K6. Bake Relay Lower Oven
- K7. Convection Element Relay Upper Oven
- K8. Convection Element Relay Lower Oven
- K9. Convection Fan High Speed Upper Oven
- K10. Convection Fan High Speed Lower Oven
- K11. Motor Door Latch Upper Oven
- K12. Motor Door Latch Relay Lower Oven
- K16. Cooling Fan Relay
- K17. Convection Fan Low Speed Lower Oven
- K18. Convection Fan Low Speed Upper Oven
- J2 DC Power Output To Display Board
- J3 AC Power Output (motor door latch, cooling fan, convection fan) - Upper Oven
- J4 AC Power Output (motor door latch, cooling fan, convection fan) - for Lower Oven and Power Input (L1, Neutral)
- J5 Relay Control Inputs (bake and broil elements, motor door latch, DLB, convection fan high speed) for Upper Oven
- J6 Relay Control Inputs (cooling fan, conv element, convection fan low speed) for Both Ovens
- J7 Relay Control Inputs (bake and broil elements, motor door latch, DLB, convection fan high speed) for Lower Oven

POWER SUPPLY BOARD



This board provides power to the oven control display. P1 - AC Power Input (L1 and Neutral) P2 - DC Power Output



OVEN LIGHTS CONTROL BOARD

This board controls the oven lights of the 2 cavities.

- P1 Communication with display board and power supply input
- P2 AC power output for oven lights, power inputs (L1, neutral)
- P3 Microprocessor programming (not used)

CONVECTION MODE

The convection oven uses the addition of a fan and an element to heat and to move the air already in the oven. Moving the heated air helps to de-stratify the heat and cause uniform heat distribution. The air is drawn in through a fan shroud and the element located on the rear wall of the oven. It is then discharged around the outer edges of this shroud. The air circulates around the food and then enters the shroud again. As with conventional electric wall ovens, there is still an oven vent which discharges above the door. In preheat of non-convection cooking modes, the convection fan will be operating until the oven has reached the target temperature. To set the control in convection mode, follow these steps:

1. On a double wall oven: Select oven by pressing either UPPER OVEN OVEN or LOWER OVEN OVEN.

2. Press CONVECTION BAKE Tor CONVECTION ROAST To CONVECTION BROIL.

- 3. Press **START** $\bigoplus_{i=1}^{n}$ The oven will automatically start and the fan will begin to run.
- 4. Press **CANCEL** O to stop or cancel the Convection feature at any time.
- **NOTE:** The fan runs continuously while in the convection mode. The fan will stop if the door is opened while convection baking/roasting/broiling. The convection element will stop operating if the door is opened. The speed of the convection fan will vary depending on which cooking function is used. Convection Roast uses a fast fan speed, while convection bake uses a slower fan speed after preheat.

CONVECTION FAN MOTOR

The 120V fan motor is located on the outside of the rear of the oven.

The fan motor runs continuously while in convection mode unless the door is opened. It is normal to see the fan speed changing depending on the cooking function that is used. This appliance uses the optimum fan speed for each convection function. There are 2 speeds (High and Low) controlled by relays.

OVEN CALIBRATION

Set the electronic oven control for normal baking at 350°F. Obtain an average oven temperature after a minimum of 5 cycles.

The oven calibration can be modified using the oven control display. Please refer to the Owner's Guide manual. **Note:** Changing calibration affects all the cooking modes but not the clean and the broil modes.

FIRST RISE

It is normal to see a temperature overshoot in the first rise of all modes when you monitor the temperature.

First rise overshoot set point

⊳ t (sec)

MEAT PROBE	RESISTANCE (Wave	Touch Model Only)	
Meat Prob	e Temperature VS	- Probe MTG Nut —	
Temp. Celsius	Temp. Fahrenheit	Probe Resistance	
25°C	77°F	49.478 Kohm +/- 7%	Probe Receptacle
50°C	122°F	17.737 Kohm +/- 4.9%	
80°C	176°F	6.107 Kohm +/- 3.3%	Meat Probe
100°C	212°F	3.264 Kohm +/- 4.6%	N icat Hobe

	ELECTRONIC OVEN	CONTROL (EOC) FAULT CODE DESCRIPTIONS
Note	Generally speaking "F1X" implies a co	ntrol failure, "F3X" an oven probe problem, and "F9X" a latch motor problem.
Failu	re Code/ Condition/Cause	Suggested Corrective Action
F10	Control has sensed a potential runaway oven condition. Control may have shorted relay, RTD sensor probe may have a gone bad.	Check RTD sensor probe and replace if necessary. If oven is overheating, disconnect power. If oven continues to overheat when power is reapplied, replace relay board and/or display board.
F11	Shorted Key: a key has been detected	Press any key to clear the error.
	as pressed for a long period and will be considered a shorted key alarm and	If fault returns, replace the keyboard (touch panel).
	will terminate all oven activity.	If the problem persists, replace the display board.
F13	Control's internal checksum may	Press any key to clear the error.
	have become corrupted.	Disconnect power, wait 30 seconds and reapply power. If fault returns upon power-up, replace display board.
F14	Misconnected keyboard cable	Verify connection between display board and touch panel (2 ribbon cables). Make sure the cables are well connected at both ends.
		If the cables are good, replace the touch panel.
		If the problem persists, replace the display board.
F15	Controller self check failed.	Verify if relay board receives 120VAC between J4 pin 1 and 3.
		Verify the wiring between J2 on the relay board and P16 on the display board.
		If wiring and 120VAC supply is good replace the display board.
		If problem persists replace the relay board.
F23	The controller failed to communicate with the oven lights control board.	Verify wiring between P2 on the display board and P2 on the oven lights control board.
		If wiring is good, replace oven lights board.
		If the problem persists, replace the display board.
F30	Open RTD sensor probe/ wiring problem.	Check wiring in probe circuit for possible open condition.
Note:	EOC may initially display an "F10", thinking a runaway condition exists.	Check RTD resistance at room temperature (compare to probe resistance chart). If resistance does not match the chart, replace the RTD sensor probe.
F31	Shorted RTD sensor probe / wiring	Let the oven cool down and restart the function.
	problem.	If the problem persists, replace the display board.
Note:	$\ensuremath{\textbf{F30}}$ or $\ensuremath{\textbf{F31}}$ is displayed when oven is	in active mode or an attempt to enter an active mode is made.
F43	The cooling fan speed, as read by the tachometer input of the EOC-display board, is abnormally too slow.	Determine first if the problem appears to be caused by a cooling fan not turning or turning slowly or by a problem with the sensing of the fan speed. Start a Bake and check during the first 15 seconds if the fan is turning (should feel air flowing through the vent above the upper oven door).
		If the fan does not appear to be turning or turn slowly check the 120VAC at the fan. If 120VAC is present at the fan motor but the fan does not turn replace the fan motor. If 120VAC is not present at the fan motor when a Bake is started check the connection to the relay board (J3 pin 7) and Neutral: is there 120VAC on J3 pin 7? Does it reach the fan motor? Is the other terminal of the fan motor connected to Neutral? If the harness or relay board are faulty replace them.
		If the fan appears to be normally turning but an F43 error code is generated, it means there is a problem with the reading of the fan speed sensor. Make sure the connection of the fan speed sensor is properly made (refer to wiring diagram), between the sensor on the fan and the EOC- display board.
		For trouble-shooting purposes, it is possible to enter a test mode that will indicate on the display the reading of the fan speed in RPM: to enter the test mode, power- up the unit and within 30 seconds press and hold the upper oven Bake and Broil keys for 3 seconds (until you see all segments in the screen illuminated). Once in the test mode, pressing the upper oven Light key once will display the fan speed in RPM. In normal client mode the F43 error is generated for a fan speed below approximately 700 RPM.

	ELECTRONIC OVEN	CONTROL (EOC) FAULT CODE DESCRIPTIONS					
F44	The cooling fan speed, as read by the tachometer input of the EOC-	Inspect the cooling fan. Does it appear to be turning normally (air flow, noise)? Verify the fan blade is well assembled.					
	display board, is abnormally too fast.	Verify there is nothing blocking the air flow of the fan (that could make the fan turn faster).					
		Check the 120VAC voltage on the fan. A voltage higher than 120VAC + 10 could make it go too fast.					
		Make sure the connection of the fan speed sensor is properly made (refer to wiring diagram), between the sensor on the fan and the EOC- display board.					
		For trouble-shooting purposes, it is possible to enter a test mode that will indicate on the display the reading of the fan speed in RPM: to enter the test mode, power-up the unit and within 30 seconds press and hold the upper oven Bake and Broil keys for 3 seconds (until you see all segments in the screen illuminated). Once in the test mode, pressing the upper oven Light key once will display the fan speed in RPM. In normal client mode the F44 error is generated for a fan speed above approximately 2500 RPM.					
		If problem persists replace both the fan+sensor assembly and the EOC- display board.					
F90	Door motor mechanism failure.	Press any key to clear the error.					
		If it does not eliminate the problem, turn off power for 30 seconds, then turn on power.					
		Check wiring of Lock Motor, Lock Switch and Door Switch circuits.					
		Unplug the lock motor from the board and apply power (L1) directly to the Lock Motor. If the motor does not rotate, replace Lock Motor Assembly.					
		Check Lock Switch for proper operation (do they open and close, check with ohmmeter). The Lock Motor may be powered as in above step to open and close Lock Switch. If the Lock Switch is defective, replace Motor Lock Assembly.					
		If all above steps fail to correct situation, replace the display board and/or the relay board in the event of a motor that does not rotate.					
		If all the above steps fail to correct the situation, replace the display board in the event of a motor that rotates endlessly.					

	RTD SCAL	E
Temp. °F	Temp. °C	Resistance (ohms)
32 ± 1.9	0.0 ± 1.1	1000 ± 4.0
75 ± 2.5	23.9 ± 1.4	1091 ± 5.3
250 ± 4.4	121.1 ± 2.4	1453 ± 8.9
350 ± 5.4	176.7 ± 3.0	1654 ± 10.8
450 ± 6.9	232.2 ± 3.8	1852 ± 13.5
550 ± 8.2	287.8 ± 4.6	2047 ± 15.8
650 ± 9.6	343.3 ± 5.3	2237 ± 18.5
900 ± 13.6	482.2 ± 7.6	2697 ± 24.4

	ELECTR	ICAL RATIN	G
Kw Rating 240/208V	See Nameplate	Bake Element Wattage	27" Models 1450W/1089W 30" Models 2200W/1653W
Broil Element Wattage	27" Models 3400W/2554W 30" Models 4000W/3004W	Convection Element Wattage	2500W/1879W
	OVEN	TEMPERATURE	SENSOR

SIN	IGLE	WALL	OVEN	/ UPPE		ON D	OUBLE WALL C	OVEN CIRC		IS MATR	X
			On R	elay Boa	rd		On Oven lights control board	On Dis	olay Board	On Rel	ay Board
	E	LEMEN	TS		Convect	tion Fan	control bound	Door			
	Bake P9	Broil P7	Conv. P13	Door Motor J3-5	Low speed J3-8	High speed J3-4	Light P2-1	Switch P10-3/ P10-5	Rack Sense Switch P10-2/ P10-5	DLB L2 out P1	Cooling Fan J3-7
Bake	Х	Х	X*		Х*					Х	Х
Keep Warm	X									Х	Х
Broil		Х								Х	Х
Conv. Bake	Х	Х	х		X**	X				Х	Х
Conv. Roast	X	X	х			X				Х	Х
Conv. Broil		X				X				Х	Х
Clean	X	Х	1	1	1	1				Х	Х
Locking		ļ	ļ	X							
Locked											
Unlocking				X							
Unlocked		ļ							ļ		
Light							X		ļ		
Door Open			ļ				Х				
Door Closed								Х			
Bread Proof	X				Х					Х	Х
Rack Support	s not in	stalled							Х		
_		LO	WER C	VEN O	N DOUI	BLE WA	LL OVEN CIRCI	JIT ANALY	SIS MATRIX		
			On R	VEN O elay Boa	rd		On Oven lights		SIS MATRIX	On Rel	ay Board
	E		On R				1	On Dis		On Rel	ay Board
	E Bake P10		On R		rd		On Oven lights			On Rel DLB L2 out P2	ay Board Cooling Fan J3-7
Bake	Bake	LEMEN Broil	On R	elay Boa Door Motor	rd Convect Low speed	tion Fan High speed	On Oven lights control board Light	On Dis Door Switch P12-3 /	olay Board Rack Sense Switch	DLB L2 out	Cooling Fan
Bake Keep Warm	Bake P10	LEMEN Broil P8	On R TS Conv. P16	elay Boa Door Motor	rd Convect Low speed J4-9	tion Fan High speed	On Oven lights control board Light	On Dis Door Switch P12-3 /	olay Board Rack Sense Switch	DLB L2 out P2 X X	Cooling Fan J3-7 X X
Keep Warm Broil	Bake P10 X X	LEMEN Broil P8 X X	On R TS Conv. P16 X*	elay Boa Door Motor	rd Convect Low speed J4-9 X*	tion Fan High speed J4-5	On Oven lights control board Light	On Dis Door Switch P12-3 /	olay Board Rack Sense Switch	DLB L2 out P2 X X X X	Cooling Fan J3-7 X X X X
Keep Warm Broil Conv. Bake	Bake P10 X X X	LEMEN Broil P8 X X X X	On R TS Conv. P16 X* X	elay Boa Door Motor	rd Convect Low speed J4-9	tion Fan High speed J4-5 X	On Oven lights control board Light	On Dis Door Switch P12-3 /	olay Board Rack Sense Switch	DLB L2 out P2 X X X X X	Cooling Fan J3-7 X X X X X
Keep Warm Broil Conv. Bake Conv. Roast	Bake P10 X X	LEMEN Broil P8 X X X X X	On R TS Conv. P16 X*	elay Boa Door Motor	rd Convect Low speed J4-9 X*	tion Fan High speed J4-5 X X	On Oven lights control board Light	On Dis Door Switch P12-3 /	olay Board Rack Sense Switch	DLB L2 out P2 X X X X X X X X	Cooling Fan J3-7 X X X X X X X X
Keep Warm Broil Conv. Bake Conv. Roast Conv. Broil	Bake P10 X X X X X	LEMEN Broil P8 X X X X X X	On R TS Conv. P16 X* X	elay Boa Door Motor	rd Convect Low speed J4-9 X*	tion Fan High speed J4-5 X	On Oven lights control board Light	On Dis Door Switch P12-3 /	olay Board Rack Sense Switch	DLB P2 X X X X X X X X X X	Cooling Fan J3-7 X X X X X X X X X X
Keep Warm Broil Conv. Bake Conv. Roast Conv. Broil Clean	Bake P10 X X X	LEMEN Broil P8 X X X X X	On R TS Conv. P16 X* X	elay Boa Door Motor J4-6	rd Convect Low speed J4-9 X*	tion Fan High speed J4-5 X X	On Oven lights control board Light	On Dis Door Switch P12-3 /	olay Board Rack Sense Switch	DLB L2 out P2 X X X X X X X X	Cooling Fan J3-7 X X X X X X X X
Keep Warm Broil Conv. Bake Conv. Roast Conv. Broil Clean Locking	Bake P10 X X X X X	LEMEN Broil P8 X X X X X X	On R TS Conv. P16 X* X	elay Boa Door Motor	rd Convect Low speed J4-9 X*	tion Fan High speed J4-5 X X	On Oven lights control board Light	On Dis Door Switch P12-3 /	olay Board Rack Sense Switch	DLB P2 X X X X X X X X X X	Cooling Fan J3-7 X X X X X X X X X X
Keep Warm Broil Conv. Bake Conv. Roast Conv. Broil Clean Locking Locked	Bake P10 X X X X X	LEMEN Broil P8 X X X X X X	On R TS Conv. P16 X* X	elay Boa Door Motor J4-6	rd Convect Low speed J4-9 X*	tion Fan High speed J4-5 X X	On Oven lights control board Light	On Dis Door Switch P12-3 /	olay Board Rack Sense Switch	DLB P2 X X X X X X X X X X	Cooling Fan J3-7 X X X X X X X X X X
Keep Warm Broil Conv. Bake Conv. Roast Conv. Broil Clean Locking Locked Unlocking	Bake P10 X X X X X	LEMEN Broil P8 X X X X X X	On R TS Conv. P16 X* X	elay Boa Door Motor J4-6	rd Convect Low speed J4-9 X*	tion Fan High speed J4-5 X X	On Oven lights control board Light	On Dis Door Switch P12-3 /	olay Board Rack Sense Switch	DLB P2 X X X X X X X X X X	Cooling Fan J3-7 X X X X X X X X X X
Keep Warm Broil Conv. Bake Conv. Roast Conv. Broil Clean Locking Locked Unlocking Unlocked	Bake P10 X X X X X	LEMEN Broil P8 X X X X X X	On R TS Conv. P16 X* X	elay Boa Door Motor J4-6	rd Convect Low speed J4-9 X*	tion Fan High speed J4-5 X X	On Oven lights control board Light	On Dis Door Switch P12-3 /	olay Board Rack Sense Switch	DLB P2 X X X X X X X X X X	Cooling Fan J3-7 X X X X X X X X X X
Keep Warm Broil Conv. Bake Conv. Roast Conv. Broil Clean Locking Locked Unlocking Unlocked Light	Bake P10 X X X X X	LEMEN Broil P8 X X X X X X	On R TS Conv. P16 X* X	elay Boa Door Motor J4-6	rd Convect Low speed J4-9 X*	tion Fan High speed J4-5 X X	On Oven lights control board Light	On Dis Door Switch P12-3 /	olay Board Rack Sense Switch	DLB P2 X X X X X X X X X X	Cooling Fan J3-7 X X X X X X X X X X
Keep Warm Broil Conv. Bake Conv. Roast Conv. Broil Clean Locking Locked Unlocking Unlocked Light Door Open	Bake P10 X X X X X	LEMEN Broil P8 X X X X X X	On R TS Conv. P16 X* X	elay Boa Door Motor J4-6	rd Convect Low speed J4-9 X*	tion Fan High speed J4-5 X X	On Oven lights control board Light	On Dis Door Switch P12-3 / P12-6	olay Board Rack Sense Switch	DLB P2 X X X X X X X X X X	Cooling Fan J3-7 X X X X X X X X X X
Keep Warm Broil Conv. Bake Conv. Roast Conv. Broil Clean Locking Locked Unlocking Unlocked Light Door Open Door Closed	Bake P10 X X X X X X	LEMEN Broil P8 X X X X X X	On R TS Conv. P16 X* X	elay Boa Door Motor J4-6	rd Convect J4-9 X* X**	tion Fan High speed J4-5 X X	On Oven lights control board Light	On Dis Door Switch P12-3 /	olay Board Rack Sense Switch	DLB L2 out P2 X X X X X X X X L2 out P2	Cooling Fan J3-7 X X X X X X X X X
Keep Warm Broil Conv. Bake Conv. Roast Conv. Broil Clean Locking Locked Unlocking Unlocked Light Door Open	Bake P10 X X X X X X	LEMEN Broil P8 X X X X X X X	On R TS Conv. P16 X* X	elay Boa Door Motor J4-6	rd Convect Low speed J4-9 X*	tion Fan High speed J4-5 X X	On Oven lights control board Light	On Dis Door Switch P12-3 / P12-6	olay Board Rack Sense Switch	DLB P2 X X X X X X X X X X	Cooling Fan J3-7 X X X X X X X X X X

Relay will operate in this condition only.

* Convection element and fan are used for the first rise of temperature. ** Convection Bake uses convection fan high speed during preheat and low speed after preheat.

COOLING FAN & FAN SPEED SENSOR

This double wall oven is equipped with a cooling fan located on top of the upper cavity. The fan is controlled by the EOC. The cooling fan is activated anytime the oven is used for cooking or cleaning. It may also remain ON for some time after the oven has been used, until the oven cavity has cooled down enough. The fan motor is energized using relay K16 on the EOC- relay board.

The oven is equipped with a sensor that monitors the speed of the cooling fan. The sensor is connected to the EOC - display board, where the speed is read. Anytime the cooling fan is supposed to be active, the EOC checks the speed against a "speed too low" and a "speed too high" threshold. If the speed falls out of range, the EOC will generate an F43 error code (detecting fan is turning too slowly or not turning) or F44 error code (detecting fan is turning too fast).

OVEN LIGHT

This appliance is equipped with electronics that control the intensity of the oven lights. This is done with the Oven Lights Control Board that modulates the AC voltage going to the 120V halogen lamps. When the light key is pressed or when the oven door is opened the display board communicates with the Oven Lights Control Board to specify the required light intensity. The Oven Lights Control Board also add a "theater-like" effect on the light: the light intensity is gradually ramp-up or ramp-down as the light is turned on or off.

The upper and lower cavity lights will turn ON and OFF at the same time. That is, if the light key is pressed, the light of both ovens will turn ON.

If the oven lights do not operate, check the following:

- If you are getting an F23 error code it means the display board is not able to communicate with the Oven Lights Control Board, thus the oven light will not operate. Check connections between the display board and the Oven Lights Control Board. Refer to the fault code section for corrective actions.
- If the lights are always ON (even with the door closed), it could be because the control mistakenly thinks the door is opened. Verify door switch and its wiring.
- Check connections on the Oven Lights Control Board. On connector P2: pin 3 should be Neutral, pin 5 should be L1 (120VAC) pin 1 should go to the oven lights of the upper oven, pin 7 should go to the oven lights of the lower oven. The other terminal of the light should be connected to Neutral.
- Verify is light bulbs need to be replaced.
- If there is no error code, the wiring is good and still the oven lights are not working then replace the Oven Lights Control Board.

BLOCK DIAGRAM AND SYSTEM INTERCONNECTIONS

0	ter a l	T		Design and the second				7			
Oven Con				Power supply board		,					
D9	pin 1 = gnd pin 2 = and	•		pin 1 = gnd pin 2 = and	P2		pin 1 = 120VAC in pin 2 not used	4	L1		
P8 power supply	pin 2 = gna pin 3 not used	•		pin 2 = gna pin 3 not used	P2 power supply	line voitage	pin 2 not used pin 3 not used				
input	pin 4 = V_LED2 (8.5 VDC ±2.5VDC)	•		pin 4 = V_LED2 (8.5 VDC ±2.5VDC)	output		pin 4 = neutral	4	Neutral	1	
	pin 5 = V_LED2 (8.5 VDC ±2.5VDC)	4		pin 5 = V_LED2 (8.5 VDC ±2.5VDC)			r				
				Light Control upper and lo	wer oven						
							pin 1 = Upper Ove	n light(s) control		Upper Oven light	Neutral
	pin 1 not used	T		pin 1 not used			pin 2 not used				
P2	pin 2 = Communication (0 - 5VDC) 1			pin 2 = Communication (0 - 5VDC) 几几			pin 3 = Neutral		•	_ Neutral	
Communication	pin 3 = gnd			pin 3 = gnd	Comm and	output	pin 4 not used		_	14	
	pin 4 = power (5VDC ±1VDC)			pin 4 = power (5VDC ±1VDC) pin 5 not used don't connect	power input		pin 5 = L1 pin 6 not used		•	-L1	
							pin 7 = Lower Ove	n light(s) control		Lower Oven light	Neutral
P1					1						
Upper Oven	pin 1 = upper oven probe		1	Upper oven probe							
Probe	pin 2= upper oven probe	•									
		ļ			-						
P20	pin 1 = lower oven probe			Lower oven probe							
Lower Oven	pin 2 = lower oven probe	•									
Probe	pin 3 not used										
		1			_						
	pin 1 = upper meat probe			Upper meat probe*							
P18	pin 2 = upper meat probe	←				* meat probe o	n Wave Touch mo	dels only			
Meat Probes	pin 3 = lower meat probe			Lower meat probe*]						
	pin 4 = lower meat probe	←		20101 mode probo	-						
		ļ			-						
	pin 1 = MDL switch			Upper MDL switch							
P10	pin 2 = rack sense $\Pi \Pi$			Upper rack sense switch							
Switch sense upper oven	pin 3 = door switch 几		•	Upper door switch							
upper oven	pin 4 = not used pin 5 = sense return (common)										
	н · · · · · · · · /	1			_						
	pin 1 = MDL switch 八八			Lower MDL switch							
P12	pin 2 = rack sense 几几 pin 3 = door switch 几			Lower rack sense switch Lower door switch							
Switch sense	pin 4 not used		-	Lower door switch							
lower oven	pin 5 = cooling fan speed sensor	↓									
	pin 6 = sense return (common) 几几	•									
	pin 1 not used	t		Cooling fan Speed Sensor							
P4 Sensor supply	pin 2 = Supply (5VDC ±1VDC)			pin 1 = Supply	1						
Tyco 103639-3	pin 3 not used			pin 2 = ground							
Tyco 103639-3	pin 3 not used pin 4 = ground			pin 2 = ground pin 3 = speed signal]	(Oven Relay	Board			
Tyco 103639-3	pin 4 = ground			pin 3 = speed signal]	(Oven Relay		DE	1	
P16	pin 4 = ground pin 1 = gnd			pin 3 = speed signal pin 1 = gnd] 		Oven Relay	Board Fast-on Connectors	P5		nor Polis element
Tyco 103639-3 P16 Power supply	pin 4 = ground pin 1 = gnd pin 2 unused			pin 3 = speed signal pin 1 = gnd pin 2 unused	J2 Power supply	(Oven Relay		P9		per Bake element
Tyco 103639-3 P16 Power supply input for control	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC)	▲		pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC)	J2 Power supply output		Oven Relay		P9 P7		per Broil element
Tyco 103639-3 P16 Power supply	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used	↓ ↓ ↓ ↓		pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used	Power supply	(Oven Relay	Fast-on Connectors	P9 P7 P11		
Tyco 103639-3 P16 Power supply input for control	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC)	• • • • •		pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC)	Power supply		Oven Relay		P9 P7 P11 P3		per Broil element
Tyco 103639-3 P16 Power supply input for control	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used	• • • •		pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used	Power supply	(]]	Oven Relay	Fast-on Connectors	P9 P7 P11 P3 P1 P6		per Broil element
P16 Power supply input for control board	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL relay	4 		pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL	Power supply	(]]	Oven Relay	Fast-on Connectors	P9 P7 P11 P3 P1 P6 P10	↓ Up ↓ Up ↓ Up ↓ L2 ↓ L1 ↓ L0	per Broil element
P16 Power supply input for control board P9	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed	4 4 4		pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL pin 3 = Upper Conv Fan High Speed	Power supply output	(]]	Oven Relay	Fast-on Connectors	P9 P7 P11 P3 P1 P6 P10 P8	↓ Up ↓ Up ↓ Up ↓ L2 ↓ L1 ↓ Lo	per Broil element
P16 Power supply input for control board	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper CML relay pin 4 = Upper CML relay	• • • •		pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal ∬∬ pin 1 not used pin 1 not used pin 2 = Upper MDL pin 3 = Upper CNr Fan High Speed pin 4 = upper DLB	Power supply		Oven Relay	Fast-on Connectors (L2 in) (L2 out)	P9 P7 P11 P3 P1 P6 P10 P8 P12		per Broil element
P16 Power supply input for control board P9 Relay control output to relay board - Upper	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper Conv element relay	• • • • • •		pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>∏</u> pin 1 not used pin 1 not used pin 2 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay	Power supply output		Dven Relay	Fast-on Connectors (L2 in) (L2 out) L2 in)	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18	↓ Up ↓ Up ↓ Up ↓ L2 ↓ L1 ↓ Lo	per Broil element
P16 Power supply input for control board P9 Relay control output to relay	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 5 = Upper Conv element relay pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 5 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay	Power supply output	(Oven Relay	Fast-on Connectors (L2 in) (L2 out)	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element
P16 Power supply input for control board P9 Relay control output to relay board - Upper	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper Conv element relay	• • • • • • •		pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>M</u> pin 1 not used pin 2 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper Conv element relay pin 5 = Upper Conv element relay pin 5 = Upper Bake element relay pin 6 = Upper Broil element relay pin 8 not used	Power supply output	(Oven Relay	Fast-on Connectors (L2 in) (L2 out) L2 in)	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_LR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL relay pin 4 = Upper Conv Fan High Speed pin 5 = Upper Conv element relay pin 5 = Upper Conv element relay pin 5 = Upper Broil element relay pin 7 = Upper Broil element relay pin 8 not used pin 9 = wiggler stimulus			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>M</u> pin 1 not used pin 2 not used pin 2 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Broil element relay	Power supply output	(Oven Relay	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out pin 1 = Neutral pin 2 not used	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18	→ Up → U2 ↓ U2	per Broil element
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Broil element relay pin 8 not used pin 9 = wiggler stimulus			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>M</u> pin 1 not used pin 2 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Broil element relay pin 7 = Upper Broil element relay pin 8 not used pin 9 = wiggler stimulus <u>M</u>	Power supply output		Dven Relay	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 not used pin 3 = L1	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>III</u> pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Bake element relay pin 7 = Upper simulus <u>III</u> 3.3VDC = relay closed. 0V = relay open pin 1 not used			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 1 not used pin 1 not used pin 2 = Upper MDL pin 3 = Upper CDN Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = upper Bake element relay pin 7 = Upper Bake uternent relay pin 8 not used pin 9 = wiggler stimulus IM pin 1 not used	Power supply output		J3 120VAC outputs	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out pin 1 = Neutral pin 3 = L1 pin 4 = K9 Relay	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element per Conv element wer Bake element wer Broil element ver Conv element ral vy Fan High Speed
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board loven all relay control:	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>ЛЛ</u> pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper Conv element relay pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Broil element relay pin 8 not used pin 9 = wigder stimulus <u>ЛЛ</u> 3.3VDC = relay closed. 0V = relay open pin 1 not used			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	J5 Relay control input - Upper oven		J3	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>III</u> pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Bake element relay pin 7 = Upper simulus <u>III</u> 3.3VDC = relay closed. 0V = relay open pin 1 not used			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 1 not used pin 1 not used pin 2 = Upper MDL pin 3 = Upper CDN Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = upper Bake element relay pin 7 = Upper Bake uternent relay pin 8 not used pin 9 = wiggler stimulus IM pin 1 not used	Power supply output J5 Relay control input - Upper oven J6		J3 120VAC outputs	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 = Neutral pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay pin 7 = K16 Relay	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element per Conv element wer Bake element wer Broil element ver Conv element ral vy Fan High Speed
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13 Relay output to	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>M</u> pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper Conv element relay pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Broil element relay pin 8 not used pin 9 = wiggler stimulus <u>M</u> 3.3VDC = relay closed. 0V = relay open pin 1 not used pin 4 = Upper Conv Fan Low Speed pin 4 = Cooling fan relay pin 5 = Upper Conv Ean Low Speed pin 4 = Cooling fan relay pin 5 not used			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>M</u> pin 1 not used pin 2 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Broil element relay pin 1 not used pin 1 not used pin 1 not used pin 2 = Upper Conv Fan Low Speed pin 4 = Upper Conv Fan Low Speed pin 5 not used	J5 Relay control input - Upper oven		J3 120VAC outputs	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay pin 6 not used	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18	→ Up → U2 ↓ U2 ↓ U2 ↓ L2 ↓ L2	Per Broil element Per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed Upper MDL Net
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 - Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper Conv Fan High Speed pin 5 = Upper Conv element relay pin 6 = Upper Broil element relay pin 6 = Upper Broil element relay pin 7 = Upper Conv element relay pin 8 not used pin 7 = Upper Broil element relay pin 8 not used pin 1 not used pin 3 = Upper Conv Fan Low Speed pin 4 = Cooling fan relay pin 6 = Lower Conv Fan Low Speed			pin 3 = speed signal pin 1 = gnd pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>M</u> pin 1 not used pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Broil element relay pin 7 = Upper Broil element relay pin 8 not used pin 9 = wiggler stimulus <u>M</u> pin 1 not used pin 3 = Upper Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed	Power supply output J5 Relay control input - Upper oven J6		J3 120VAC outputs	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 = Neutral pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay pin 7 = K16 Relay	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18	→ Up → U2 ↓ U2 ↓ U2 ↓ L2 ↓ L2	per Broil element per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed Upper MDL Cooling fan
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13 Relay output to	pin 4 = ground pin 1 = gnd pin 2 urused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>JU</u> pin 1 not used pin 2 - Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Boil element relay pin 8 not used pin 9 = wiggler stimulus <u>JU</u> 3.3VDC = relay closed. 0V = relay open pin 1 = to used pin 3 = Upper Conv Fan Low Speed pin 4 = Cooling fan relay pin 6 = Lower Conv Fan Low Speed pin 7 not used			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = v_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>M</u> pin 1 not used pin 1 not used pin 3 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Bake element relay pin 8 not used pin 9 = wiggler stimulus <u>M</u> pin 1 not used pin 3 = Upper Conv Fan Low Speed pin 4 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 7 = Upper Sued	J5 Relay control input - Upper oven		J3 120VAC outputs	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay pin 6 not used pin 7 = K16 Relay	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed Upper MDL Cooling fan v Fan Low Speed
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13 Relay output to relay board	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>M</u> pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Boil element relay pin 7 = Upper Boil element relay pin 8 not used pin 9 = wiggler stimulus <u>M</u> 3.3VDC = relay closed. OV = relay open pin 1 not used pin 2 not used pin 3 = Upper Conv Fan Low Speed pin 4 = Lower Conv Fan Low Speed pin 5 not used pin 6 not used pin 6 = Lower Conv Fan Low Speed pin 7 not used pin 8 = PWM relays <u>M</u>			pin 3 = speed signal pin 1 = gnd pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>M</u> pin 1 not used pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Broil element relay pin 7 = Upper Broil element relay pin 8 not used pin 9 = wiggler stimulus <u>M</u> pin 1 not used pin 3 = Upper Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed	J5 Relay control input - Upper oven		J3 120VAC outputs	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay pin 6 not used pin 7 = K16 Relay pin 8 = K18 Relay pin 1 = Neutral	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18	→ Up → U2 ↓ U2 ↓ U2 ↓ L2 ↓ L2	per Broil element per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed Upper MDL Cooling fan v Fan Low Speed
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13 Relay output to	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 + V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>III</u> pin 1 not used pin 2 - Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Boil element relay pin 7 = Upper Boil element relay pin 7 = Upper Soil element relay pin 7 = Upper Soil element relay pin 7 = Upper Conv Fan Low Speed pin 3 = Upper Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 7 not used pin 8 = PWM relays <u>III</u> 3.3VDC = relay closed. 0V = relay open			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_U(16 VDC ±5VDC) pin 4 not used pin 5 = Sync signal <u>M</u> pin 1 not used pin 1 not used pin 3 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Bake element relay pin 8 not used pin 9 = wiggler stimulus <u>M</u> pin 1 not used pin 3 = Upper Conv Fan Low Speed pin 4 = Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 7 not used pin 8 = PWM relays <u>M</u>	J5 Relay control input - Upper oven		J3 120VAC outputs Upper oven	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay pin 6 not used pin 7 = K16 Relay pin 8 = K18 Relay	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed Upper MDL Cooling fan v Fan Low Speed
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13 Relay output to relay board all relay control:	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>M</u> pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv element relay pin 4 = Upper DLB pin 5 = Upper Conv element relay pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Boil element relay pin 9 = wiggler stimulus <u>M</u> 3.3VDC = relay closed. 0V = relay open pin 4 = coling fan relay pin 5 = Lower Conv Fan Low Speed pin 4 = coling fan relay pin 5 not used pin 6 = Lower Conv Fan Low Speed pin 8 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 7 = to used pin 8 = PWM relays <u>M</u> 3.3VDC = relay closed. 0V = relay open			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>M</u> pin 1 not used pin 2 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Broil element relay pin 8 not used pin 9 = wiggler stimulus <u>M</u> pin 1 not used pin 4 = upper Conv Fan Low Speed pin 4 = Cooling fan relay pin 5 = Lower Conv Fan Low Speed pin 4 = Cooling fan relay pin 5 not used pin 6 = Lower Conv Fan Low Speed pin 7 not used pin 7 not used pin 7 not used pin 7 not used pin 8 = PWM relays <u>M</u>	J5 Relay control input - Upper oven		J3 120VAC outputs Upper oven J4	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 = K9 Relay pin 6 not used pin 7 = K16 Relay pin 8 = K18 Relay pin 1 = Neutral pin 3 = L1 pin 4 not used	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed Upper MDL Cooling fan w Fan Low Speed ral
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13 Relay output to relay board all relay control: P11 P11	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper DLB pin 5 = Upper Conv Fan High Speed pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 8 not used pin 9 migler stimulus pin 1 not used pin 3 = Upper Conv Fan Low Speed pin 4 = Cooling fan relay pin 6 = Lower Conv Fan Low Speed pin 7 not used pin 6 = Lower Conv Fan Low Speed pin 7 not used pin 6 = Lower Conv Fan Low Speed pin 7 not used pin 6 = Lower Conv Fan Low Speed pin 7 not used pin 6 = Lower Conv Fan Low Speed pin 7 not used pin 8 = PWM relays 3.3VDC = relay closed. 0V = relay open			pin 3 = speed signal pin 1 = gnd pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>M</u> pin 1 not used pin 2 = Upper MDL pin 3 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Broil element relay pin 7 = Upper Broil element relay pin 8 not used pin 9 = Vpper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 4 = Looling fan relay pin 5 not used pin 4 = Looling fan relay pin 6 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 6 = Lower Broil element relay pin 1 = Lower Broil element relay	J5 Relay control input - Upper oven J6 Relay control input		J3 120VAC outputs Upper oven J4 120VAC outputs	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay pin 6 not used pin 7 = K16 Relay pin 8 = K18 Relay pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 not used pin 3 = L1 pin 4 not used pin 5 = K10 Relay	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed ral vy Fan High Speed vy Fan High Speed
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13 Relay output to relay board all relay control: P11 Rel	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>III</u> pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Sine element relay pin 7 = Upper Sine element relay pin 7 = Upper Conv Fan Low Speed pin 3 = Upper Conv Fan Low Speed pin 4 = Upper Conv Fan Low Speed pin 5 not used pin 6 = Lower Conv Fan Low Speed pin 7 not used pin 8 = FWM relays <u>III</u> 3.3VDC = relay closed. 0V = relay open pin 7 not used pin 8 = FWM relays <u>III</u> 3.3VDC = relay closed. 0V = relay open pin 1 not used pin 8 = FWM relays <u>III</u> pin 1 = Lower Broil element relay pin 3 = Lower Conv element relay pin 3 = Lower Conv element relay			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = Sync signal <u>M</u> pin 1 not used pin 1 not used pin 3 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Bake element relay pin 8 not used pin 9 = wiggler stimulus <u>M</u> pin 1 not used pin 3 = Upper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 5 = 0.0000 fan relay pin 6 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 6 = Lower Broil element relay pin 1 = Lower Broil element relay pin 3 = Lower Broil element relay pin 3 = Lower Conv element relay	J5 Relay control input - Upper oven J6 Relay control input		J3 120VAC outputs Upper oven J4	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay pin 8 = K18 Relay pin 3 = L1 pin 4 not used pin 3 = L1 pin 4 not used pin 5 = K10 Relay pin 5 = K10 Relay	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed Upper MDL Cooling fan w Fan Low Speed ral
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13 Relay output to relay board all relay control: P11 P11	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper Conv Fan High Speed pin 4 = Upper Conv element relay pin 6 = Upper Broil element relay pin 7 = Upper Broil element relay pin 8 not used pin 9 = wiggler stimulus pin 9 = Upper Conv Fan Low Speed pin 4 = Cooling fan relay pin 6 = Lower Conv Fan Low Speed pin 7 = Upper Broil element relay pin 6 = Lower Conv Fan Low Speed pin 7 not used pin 6 = Lower Broil element relay pin 6 = Lower Broil element relay pin 1 = Lower Broil element relay pin 3 = Lower Conv element relay pin 4 = Lower Conv Eant Relay pin 4 = Lower Conv Eant Relay pin 4 = Lower Conv Eant High Speed			pin 3 = speed signal pin 1 = gnd pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>M</u> pin 1 not used pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Broil element relay pin 7 = Upper Broil element relay pin 8 not used pin 9 = Upper Stroil element relay pin 8 not used pin 9 = Upper Stroil element relay pin 6 not used pin 1 not used pin 3 = Upper Conv Fan Low Speed pin 4 = Cooling fan relay pin 5 not used pin 6 = Lower Conv Fan Low Speed pin 8 = PWM relays <u>M</u> pin 1 = Lower Broil element relay pin 2 = Lower Conv element relay pin 3 = Lower Conv Fan High Speed	J5 Relay control input - Upper oven J6 Relay control input J7 Relay control input		J3 120VAC outputs Upper oven J4 120VAC outputs	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay pin 6 not used pin 7 = K16 Relay pin 8 = K18 Relay pin 1 = Neutral pin 4 not used pin 5 = K10 Relay pin 7 not used	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed v Fan Low Speed lower MDL Vet
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13 Relay output to relay board all relay control: P11 Relay control: P11 Relay control output to relay P11 P1	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>III</u> pin 1 not used pin 2 upper MDL relay pin 3 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Sini element relay pin 7 = Upper Sini element relay pin 7 = Upper Sini element relay pin 7 = Upper Conv Fan Low Speed pin 3 = Upper Conv Fan Low Speed pin 4 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 8 = PWM relays <u>III</u> 3.3VDC = relay closed. 0V = relay open pin 1 not used pin 8 = PWM relays <u>III</u> 3.3VDC = relay closed. 0V = relay open pin 1 = Lower Broil element relay pin 3 = Lower Conv Fan High Speed pin 4 = Lower DLB relay			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = Sync signal <u>M</u> pin 1 not used pin 1 not used pin 3 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Bake element relay pin 8 not used pin 9 = wiggler stimulus <u>M</u> pin 1 not used pin 3 = Upper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 5 = 0.0000 <u>M</u> pin 5 = User Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 7 = Upper Broil element relay pin 6 = Lower Broil element relay pin 3 = Lower Broil element relay pin 3 = Lower Conv Fan High Speed pin 6 = Lower MDL relay	J5 Relay control input - Upper oven J6 Relay control input		J3 120VAC outputs Upper oven J4 120VAC outputs	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 4 = K9 Relay pin 5 = K11 Relay pin 6 not used pin 7 = K18 Relay pin 1 = Neutral pin 4 not used pin 3 = L1 pin 4 not used pin 5 = K10 Relay pin 6 = K12 Relay pin 6 = K12 Relay pin 6 = K12 Relay pin 6 = K12 Relay	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed ral vy Fan High Speed vy Fan High Speed
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13 Relay output to relay board all relay control: P11 Relay control: P11 Relay control output to relay board - Lower oven	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Broil element relay pin 7 = Upper Broil element relay pin 8 = not used pin 9 = wiggler stimulus pin 9 = not used pin 4 = Cooling fan relay pin 6 = Lower Conv Fan Low Speed pin 4 = Cooling fan relay pin 6 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 7 = Upper Broil element relay pin 8 = PWM relays pin 1 = Lower Broil element relay pin 3 = Lower Conv element relay pin 3 = Lower Conv element relay pin 3 = Lower Conv Fan High Speed pin 4 = Lower DLB relay			pin 3 = speed signal pin 1 = gnd pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>M</u> pin 1 not used pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Broil element relay pin 7 = Upper Broil element relay pin 8 not used pin 9 = Upper Stroil element relay pin 8 not used pin 9 = Upper Stroil element relay pin 6 not used pin 1 not used pin 3 = Upper Conv Fan Low Speed pin 4 = Cooling fan relay pin 5 not used pin 6 = Lower Conv Fan Low Speed pin 8 = PWM relays <u>M</u> pin 1 = Lower Broil element relay pin 2 = Lower Conv element relay pin 3 = Lower Conv Fan High Speed	J5 Relay control input - Upper oven J6 Relay control input J7 Relay control input		J3 120VAC outputs Upper oven J4 120VAC outputs	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay pin 6 not used pin 7 = K16 Relay pin 8 = K18 Relay pin 1 = Neutral pin 4 not used pin 5 = K10 Relay pin 7 not used	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed v Fan Low Speed lower MDL Vet
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13 Relay output to relay board all relay control: P11 Relay control: P11 Relay control output to relay board - Lower oven	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal <u>III</u> pin 1 not used pin 2 upper MDL relay pin 3 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Sini element relay pin 7 = Upper Sini element relay pin 7 = Upper Sini element relay pin 7 = Upper Conv Fan Low Speed pin 3 = Upper Conv Fan Low Speed pin 4 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 8 = PWM relays <u>III</u> 3.3VDC = relay closed. 0V = relay open pin 1 not used pin 8 = PWM relays <u>III</u> 3.3VDC = relay closed. 0V = relay open pin 1 = Lower Broil element relay pin 3 = Lower Conv Fan High Speed pin 4 = Lower DLB relay			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = Sync signal <u>M</u> pin 1 not used pin 1 not used pin 3 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Bake element relay pin 8 not used pin 9 = wiggler stimulus <u>M</u> pin 1 not used pin 3 = Upper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 5 = 0.0000 <u>M</u> pin 5 = User Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 7 = Upper Broil element relay pin 6 = Lower Broil element relay pin 3 = Lower Broil element relay pin 3 = Lower Conv Fan High Speed pin 6 = Lower MDL relay	J5 Relay control input - Upper oven J6 Relay control input J7 Relay control input		J3 120VAC outputs Upper oven J4 120VAC outputs	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay pin 6 not used pin 7 = K16 Relay pin 8 = K18 Relay pin 1 = Neutral pin 4 not used pin 5 = K10 Relay pin 7 not used	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed v Fan Low Speed lower MDL Vet
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13 Relay output to relay board all relay control: P11 Relay control: P11 Relay control output to relay board - Lower oven	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal //// pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Broil element relay pin 7 = Upper Broil element relay pin 8 = not used pin 9 = wiggler stimulus //// 3/WDC = relay closed. 0V = relay open pin 1 not used pin 4 = Cooling fan relay pin 6 = Lower Conv Fan Low Speed pin 7 = Upper Conv Fan Low Speed pin 4 = Cooling fan relay pin 6 = Lower Conv Fan Low Speed pin 8 = PWM relays /// 3/WDC = relay closed. 0V = relay open pin 1 = Lower Conv element relay pin 3 = Lower Conv element relay pin 3 = Lower Conv Fan High Speed pin 4 = Lower DLB relay pin 5 = Lower Conv Fan High Speed pin 6 = Lower MDL relay pin 7 = Ubed 3.3VDC = relay closed. 0V = relay open			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = Sync signal <u>M</u> pin 1 not used pin 1 not used pin 3 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Bake element relay pin 8 not used pin 9 = wiggler stimulus <u>M</u> pin 1 not used pin 3 = Upper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 5 = 0.0000 <u>M</u> pin 5 = User Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 7 = Upper Broil element relay pin 6 = Lower Broil element relay pin 3 = Lower Broil element relay pin 3 = Lower Conv Fan High Speed pin 6 = Lower MDL relay	J5 Relay control input - Upper oven J6 Relay control input J7 Relay control input		J3 120VAC outputs Upper oven J4 120VAC outputs	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay pin 6 not used pin 7 = K16 Relay pin 8 = K18 Relay pin 1 = Neutral pin 4 not used pin 5 = K10 Relay pin 7 not used	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed v Fan Low Speed lower MDL Vet
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13 Relay output to relay board all relay control: P11 Relay control: P11 Relay control output to relay board - Lower oven	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper Conv element relay pin 6 = Upper Bake element relay pin 6 = Upper Boil element relay pin 8 not used pin 9 = wiggler stimulus pin 8 not used pin 9 = uiggler stimulus pin 6 = Lower Conv Fan Low Speed pin 4 = Cooling fan relay pin 6 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 6 = Lower Broil element relay pin 6 = Lower Conv Fan High Speed pin 1 = Lower Conv element relay pin 3 = Lower Conv element relay pin 4 = Lower DLB relay pin 5 = Lower Conv Pan High Speed pin 6 = Lower MDL relay pin 7 not used Pin 6 = Lower MDL relay pin 7 not used Pin 9 = relay closed. 0V = relay open Pin 5 = Lower Conv Fan High Speed pin 6 = Lower MDL relay pin 7 not used Pin 2005 (0000 - 10000 - 10000 - 100000 - 100000 - 100000 - 1000000 - 100000000			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 nused pin 5 = sync signal \frac{1}{M} pin 1 not used pin 1 not used pin 2 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 7 = Upper Broil element relay pin 7 = Upper Broil element relay pin 1 not used pin 1 not used pin 3 = Upper Conv Fan Low Speed pin 4 = cooling fan relay pin 5 not used pin 8 = DVEM relays \frac{M}{M} pin 8 = DVEM relays \frac{M}{M} pin 1 = Lower Broil element relay pin 5 = Lower Conv Fan Low Speed pin 5 = Lower Conv Fan Low Speed pin 4 = Lower DLE pin 4 = Lower DLE pin 5 = Lower Conv Fan Low Speed pin 5 = Lower Conv Fan High Speed pin 5 = Lower Conv Fan High Speed pin 5 = Lower Conv Fan High Speed pin 6 = Lower MDL relay pin 7 = Lower MDL relay pin 6 = Lower MDL relay pin 7 = Lower Sonv Fan High Speed	J5 Relay control input - Upper oven J6 Relay control input J7 Relay control input J7 Relay control		J3 120VAC outputs Upper oven J4 120VAC outputs	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay pin 6 not used pin 7 = K16 Relay pin 8 = K18 Relay pin 1 = Neutral pin 4 not used pin 5 = K10 Relay pin 7 not used	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed v Fan Low Speed lower MDL Vet
Tyco 103639-3 P16 Power supply input for control board P9 Relay control output to relay board - Upper oven all relay control: P13 Relay output to relay board all relay control: P11 Relay control: P11 Relay control output to relay board - Lower oven	pin 4 = ground pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = sync signal //// pin 1 not used pin 2 = Upper MDL relay pin 3 = Upper Conv Fan High Speed pin 4 = Upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Broil element relay pin 7 = Upper Broil element relay pin 8 = not used pin 9 = wiggler stimulus //// 3/WDC = relay closed. 0V = relay open pin 1 not used pin 4 = Cooling fan relay pin 6 = Lower Conv Fan Low Speed pin 7 = Upper Conv Fan Low Speed pin 4 = Cooling fan relay pin 6 = Lower Conv Fan Low Speed pin 8 = PWM relays /// 3/WDC = relay closed. 0V = relay open pin 1 = Lower Conv element relay pin 3 = Lower Conv element relay pin 3 = Lower Conv Fan High Speed pin 4 = Lower DLB relay pin 5 = Lower Conv Fan High Speed pin 6 = Lower MDL relay pin 7 = Ubed 3.3VDC = relay closed. 0V = relay open			pin 3 = speed signal pin 1 = gnd pin 2 unused pin 3 = V_UR (16 VDC ±5VDC) pin 4 not used pin 5 = Sync signal <u>M</u> pin 1 not used pin 1 not used pin 3 = Upper MDL pin 3 = Upper Conv Fan High Speed pin 4 = upper DLB pin 5 = Upper Conv element relay pin 6 = Upper Bake element relay pin 7 = Upper Bake element relay pin 8 not used pin 9 = wiggler stimulus <u>M</u> pin 1 not used pin 3 = Upper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 4 = upper Conv Fan Low Speed pin 5 = 0.0000 <u>M</u> pin 5 = User Conv Fan Low Speed pin 6 = Lower Conv Fan Low Speed pin 7 = Upper Broil element relay pin 6 = Lower Broil element relay pin 3 = Lower Broil element relay pin 3 = Lower Conv Fan High Speed pin 6 = Lower MDL relay	J5 Relay control input - Upper oven J6 Relay control input J7 Relay control input J7 Relay control		J3 120VAC outputs Upper oven J4 120VAC outputs	Fast-on Connectors (L2 in) (L2 out) L2 in) (L2 out) pin 1 = Neutral pin 2 not used pin 3 = L1 pin 4 = K9 Relay pin 5 = K11 Relay pin 6 not used pin 7 = K16 Relay pin 8 = K18 Relay pin 1 = Neutral pin 4 not used pin 5 = K10 Relay pin 7 not used	P9 P7 P11 P3 P1 P6 P10 P8 P12 P18		per Broil element per Conv element wer Bake element wer Broil element wer Conv element ral v Fan High Speed v Fan Low Speed lower MDL Vet