

# Changing a Main board on a dryer

Write down all setpoints before turning power off.

413731     A

FOR NORMAL USE:  
J1 WILL BE JUMPERED AT 6-4 AND 5-3  
FOR SPI OPTION:  
J1 WILL BE JUMPERED AT 4-2 AND 3-1

P5 AC INPUTS		CHIP LOCATION	FUNCTION
25	16	U28	BED INDEX LIMIT SWITCH
26	13	U30	DIRTY FILTER INDICATOR
27	12	U29	BLOWER DIRECTION INDICATOR
28	11	U31	PROCESS BLOWER OVERLOAD HEATER
29			INPUT COM 1B25-2B
30	10	U32	REGEN BLOWER OVERLOAD HEATER (4B0 & ABOVE)
31	9	U34	AIR CYLINDER LIMIT SWITCHES (4B0 & ABOVE)
32	15	U33	COMPRESSED AIR INDICATOR (4B0 & ABOVE)
33	14	U35	SPARE
34			INPUT COM 1B30-33

P6 AC OUTPUTS		CHIP LOCATION	FUNCTION
15	1	U16	PROCESS BLOWER
16	2	U17	PROCESS HEATERS
17	3	U18	REGEN BLOWER
18	4	U19	REGEN HEATERS
19			OUTPUT COM 1B15-1B
20	5	U20	BED INDEX RELAY (AIR CYLINDER SOL 4B0 & ABOVE)
21	6	U21	ALARM
22	7	U22	(BED INDEX RELAY 4B0 & ABOVE)
23	8	U25	SPARE
24			OUTPUT COM 1B20-23

P7 A/D		FUNCTION
1		POWER 8VDC
2		POWER 8VDC
3		SPARE
4		SPARE
5		ANALOG GROUND (-)
6		SPARE THERMISTOR
7		SPARE THERMISTOR
8		DELTA-1 THERMISTOR
9		PROCESS THERMISTOR
10		REGEN THERMISTOR
11		DEW POINT (+)
12		CFM (+)
13		REGEN POWER SAVER THERMISTOR
14		THERMISTOR COM (-)

P4	5VDC TB#	LED#	CHIP LOCATION	FUNCTION
	35			OUTPUT COM
	36	24	U27	-5VDC OUTPUT
	37	23	U27	-5VDC OUTPUT
	38	22	U27	-5VDC OUTPUT
	39	21	U27	-5VDC OUTPUT
	40			INPUT COM
	41	20	U26	-5VDC INPUT
	42	19	U26	-5VDC INPUT
	43	18	U26	-5VDC INPUT
	44	17	U26	-5VDC INPUT

P1	1	xxx	RIBBON CABLE PLUG TO EXPANDER BOARD
P2	1	413905	RIBBON CABLE PLUG TO DISPLAY BOARD
P3	1	xxx	6 PIN PC PLUG
P4,5,6	3	xxx	10 PIN PC PLUG
P7	1	xxx	2 PIN PC PLUG
P7	1	xxx	12 PIN PC PLUG
U2	1	413892	EPROM CHIP, 27C512
U12	1	xxx	PIC
U16-U25	8	411282	DPA4111 AC SWITCH CHIP
U26, U27	2	412682	PC817 OPTO ISOLATOR
U28-U35	8	xxx	MID400 SWITCH CHIP

DESCRIPTION	SYMBOL	AM'T	PART NO.	DESCRIPTION
REVISION				MAIN CONTROL BOARD (DRYER)
				MIQUEST
DATE				THORESON McCOSH
				1885 THUNDERBIRD ST. TROY, MICHIGAN
MK.				PH. 248-362-0960 FAX 248-362-5270
				SCALE DATE DR.BY DRAWING NO.
				NOT TO SCALE 07-22-98 G L K 413731-A

- 1) Disconnect power from the dryer.
- 2) Unplug the P5,P6,P7, terminal blocks and the Ribbon cable at P2.
- 3) If unit has SPI option (P3) or R8I/O connected (P1) disconnect these as well.
- 4) Remove the 4 corner screws from the board. (Some boards will also have a 5<sup>th</sup> screw in the middle of the board.
- 5) Gently pry the EPROM chip (U2) from the old board.
- 6) Press the EPROM chip into the new board at location U2. Ensure the notch in the chip lines up with the notch in the silkscreen on the board. **(NOTE: IF THE CHIP IS PUT IN BACKWARDS, THE CHIP WILL BE DAMAGED WHEN POWER IS APPLIED.)**
- 7) Plug the terminal blocks and the ribbon cable into the new board.
- 8) Reconnect power and turn the unit on. All of the setpoints will need to be reset before using for production.