

CIRCUIT BOARD REPLACEMENT GUIDELINES

Please find enclosed your new HQBP5 Series Circuit Board to replace the BP501 Series Circuit board (#56488, #56944, #56585, #56961, #56483 , #56965)

Please refer to the included Diagram for wiring to assist you in a successful installation.

Identify your system original configuration in the following chart to match the set -up number for the new circuit board

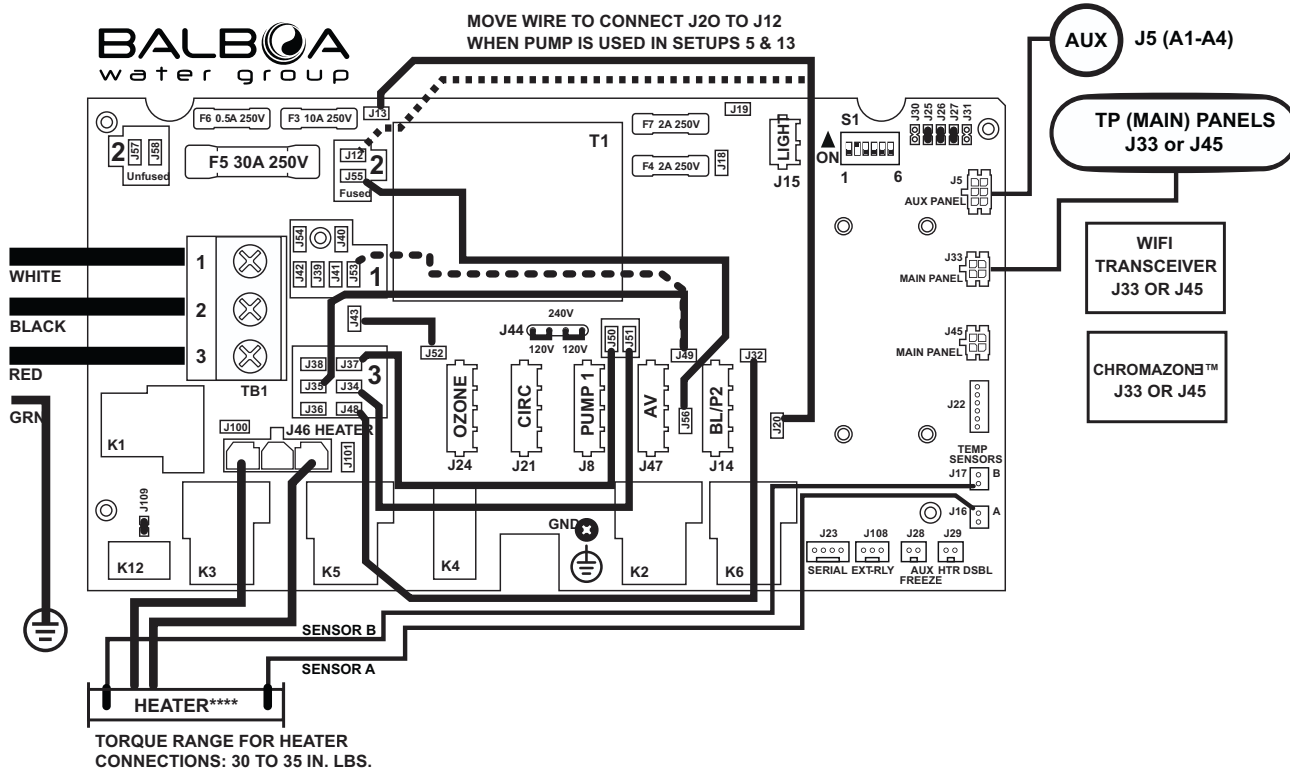
BP501-G1 Replacing Original PCB #56488 or #56944	Installing New PCB #59375	See Page 2
Set-Up #	Corresponding Set-Up #	
1	13	
2	5	
3	13	
4	5	
5	15	
6	7	

BP501-G2 Replacing Original PCB #56483 , #56965	Installing New PCB #59375	See Page 3
Set-Up #	Corresponding Set-Up #	
1	19	
2	18	
3	20	

BP501-G3 Replacing Original PCB #56585 or #56961	Installing New PCB #59375	See Page 4
Set-Up #	Corresponding Set-Up #	
1	9	
2	8	
3	11	
4	10	
5	12	
6	13	
7	14	
8	15	

Universal PCB 59375

Wiring Diagram for Setups 5, 7, 13 & 15



**** HEATER MAY
BE EITHER 4.0kW
OR 5.5kW. CHECK
HEATER LABEL FOR
ACTUAL VALUE.

SETUP #	CIRC PUMP	PUMP 1	P2/BLO	TEMP SCALE
1				
2				
3				
4				
5	PROGRAMMABLE FILTRATION + POLLING	1-SPEED	1-SPEED	°F
6				
7	PROGRAMMABLE FILTRATION + POLLING	1-SPEED		°F
8				
9				
10				
11				
12				
13	NONE	2-SPEED	1-SPEED	°F
14				
15	NONE	2-SPEED		°F

LOCATION	DEVICE	VOLT	MAX AMPS	FROM	TO
J8	2/1-SP PUMP 1	240V**	11A MAX		
J14	BLOWER	240V	4A MAX	J32	AREA 3
J14	1-SP P3/P4 OPT	240V	11A MAX	J32	AREA 3
J15	SPA LIGHT	10V	2A		
J21	CIRC	240V**	2A MAX		
J24	OZONE	240V**	0.5A		
	P1/CIRC/OZONE LINE 1 CONNECTION			J50/J51	AREA 3
J47	AV	240V***	2A	J49	AREA 3
J46	HEATER	240V	4.0 OR 5.5 kW****		

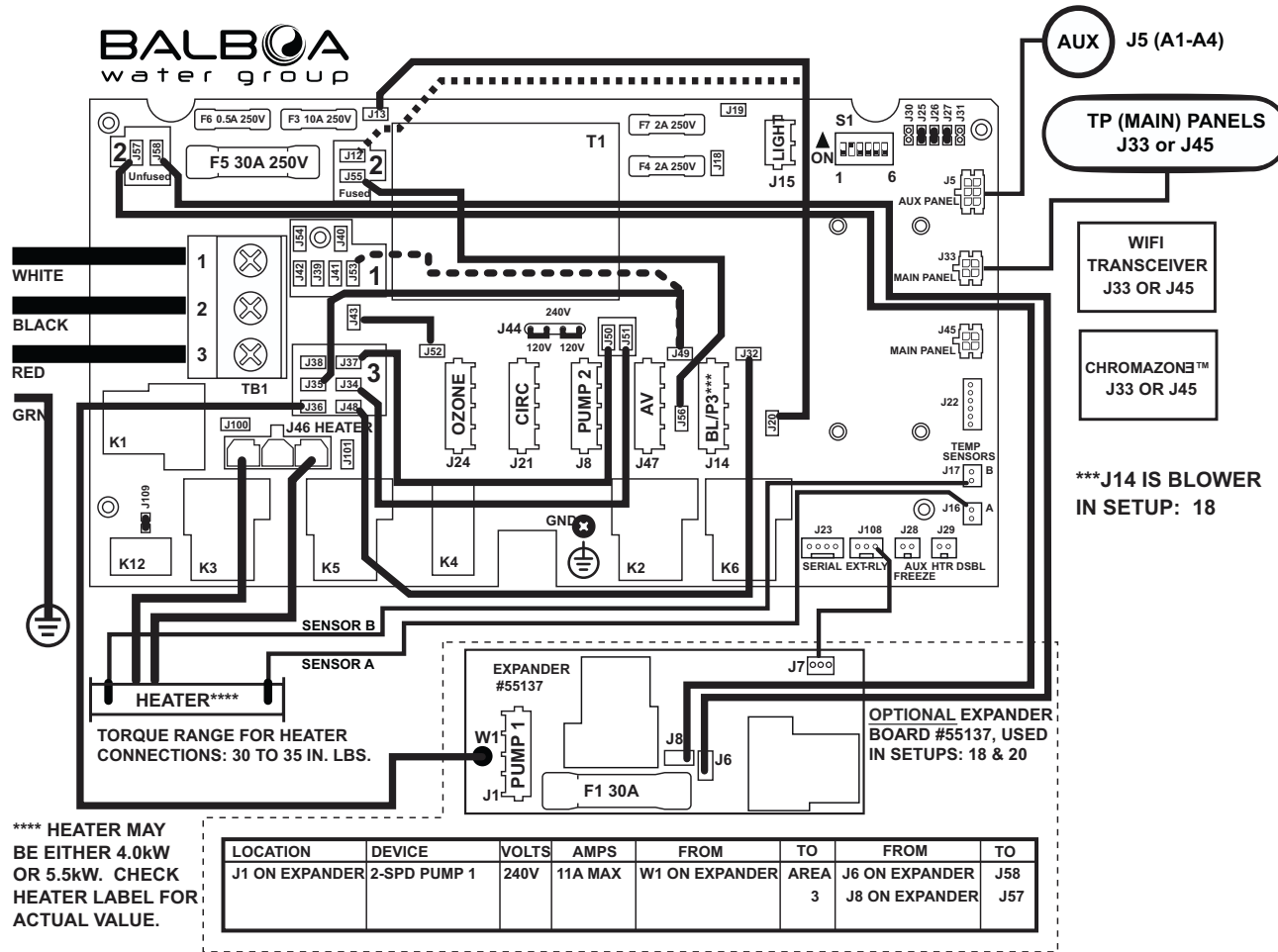
**PUMP 1, CIRC AND OZONE ALL MUST BE THE SAME VOLTAGE.

* 2A LIMIT IS SHARED BY J15 SPA LIGHT AND CHROMAZONE™

*** AV CAN BE CHANGED TO 120V BY MOVING J49 TO AREA 1, BUT IN THAT CASE, IT MAY NEED MORE THAN 2A.

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Wiring Diagram for Setups 18 - 20



SETUP #	CIRC PUMP	PUMP 1	PUMP 2	PUMP 3	PUMP 4	BLOWER	TEMP SCALE
16							
17							
18	PROGRAMMABLE FILTRATION + POLLING	2-SPEED	NONE	NONE	NONE	1-SPEED	°F
19	PROGRAMMABLE FILTRATION + POLLING	2-SPEED	1-SPEED	NONE	NONE	NONE	°F
20	PROGRAMMABLE FILTRATION + POLLING	2-SPEED	NONE	NONE	NONE	NONE	°F

LOCATION	DEVICE	VOLTS	MAX AMPS	FROM	TO
J8	1-SP PUMP 2	240V**	11A MAX		
J14	BLOWER	240V	4A MA	J32	AREA 3
J14	1-SP P3 OPT	240V	11A MAX	J32	AREA 3
J15	SPA LIGHT	10V	2A		
J21	CIRC	240V**	2A MAX		
J24	OZONE	240V**	0.5A		
	P1/CIRC/OZONE LINE 1 CONNECTION			J50/J51	AREA 3
J47	AV	240V***	2A	J49	AREA 3
J46	HEATER	240V	4.0 OR 5.5 kW****		

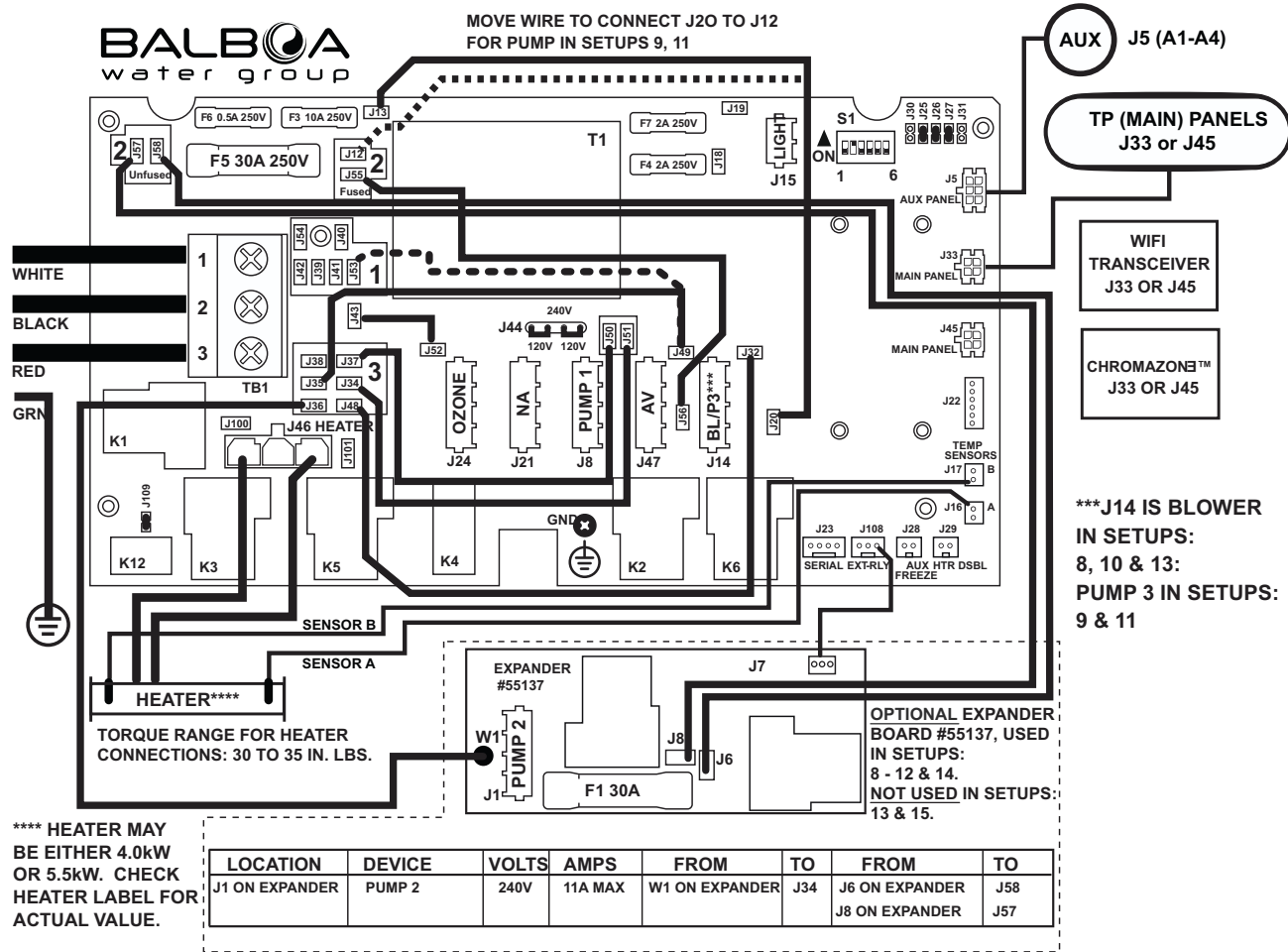
**PUMP 2 (WHEN USED), CIRC AND OZONE ALL MUST BE THE SAME VOLTAGE.

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*** AV CAN BE CHANGED TO 120V BY MOVING J49 TO AREA 1, BUT IN THATCASE, IT MAY NEED MORE THAN 2A.

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Wiring Diagram for Setups 8 - 15



SETUP #	CIRC PUMP	PUMP 1	PUMP 2	PUMP 3	PUMP 4	BLOWER	TEMP SCALE
1							
2							
3							
4							
5							
6							
7							
8	NONE	2-SPEED	2-SPEED	NONE	NONE	1-SPEED	°F
9	NONE	2-SPEED	2-SPEED	1-SPEED	NONE	NONE	°F
10	NONE	2-SPEED	1-SPEED	NONE	NONE	1-SPEED	°F
11	NONE	2-SPEED	1-SPEED	1-SPEED	NONE	NONE	°F
12	NONE	2-SPEED	2-SPEED	NONE	NONE	NONE	°F
13	NONE	2-SPEED	NONE	NONE	NONE	1-SPEED	°F
14	NONE	2-SPEED	1-SPEED	NONE	NONE	NONE	°F
15	NONE	2-SPEED	NONE	NONE	NONE	NONE	°F

LOCATION	DEVICE	VOLT	MAX AMPS	FROM	TO
J8	2/1-SP PUMP 1	240V**	11A MAX		
J14	BLOWER	240V	4A MAX	J32	AREA 3
J14	1-SP P3/P4 OPT	240V	11A MAX	J32	AREA 3
J15	SPA LIGHT	10V	2A		
J21	CIRC	240V**	2A MAX		
J24	OZONE	240V**	0.5A		
	P1/CIRC/OZONE LINE 1 CONNECTION			J50/J51	AREA 3
J47	AV	240V***	2A	J49	AREA 3
J46	HEATER	240V	4.0 OR 5.5 kW****		

**PUMP 1, CIRC AND OZONE ALL MUST BE THE SAME VOLTAGE.

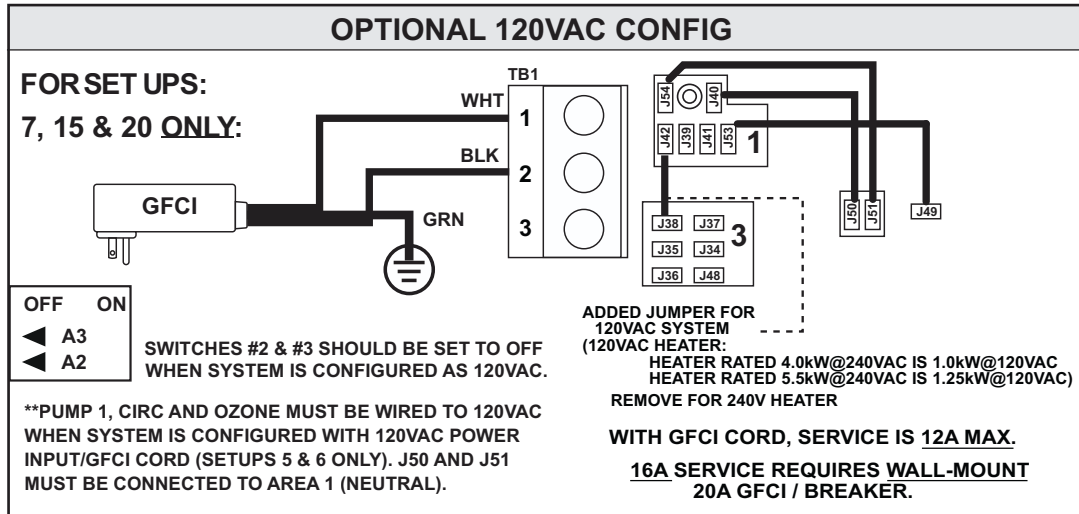
* 2A LIMIT IS SHARED BY J15 SPA LIGHT AND CHROMAZONE™

*** AV CAN BE CHANGED TO 120V BY MOVING J49 TO AREA 1, BUT IN THAT CASE, IT MAY NEED MORE THAN 2A.

SYSTEM SETUP & WIRE CONNECTION CHART

Setup #	Circ Pump	Ozone	Pump 1	Pump 2	Pump 3	Pump 4	Blower	Temp
1								
2								
3								
4								
5*	Yes (J21)	J24	J8 (1-Spd)	None	None	None	J14	°F
6								
7	Yes (J21)	J24	J8 (1-Spd)	None	None	None	None	°F
8	None	J24	J8 (2-Spd)	J1 (2-Spd)	None	None	J14	°F
9*	None	J24	J8 (2-Spd)	J1 (2-Spd)	J14 (1-Spd)	None	None	°F
10	None	J24	J8 (2-Spd)	J1 (1-Spd)	None	None	J14	°F
11*	None	J24	J8 (2-Spd)	J1 (1-Spd)	J14 (1-Spd)	None	None	°F
12	None	J24	J8 (2-Spd)	J1 (2-Spd)	None	None	None	°F
13*	None	J24	J8 (2-Spd)	None	None	None	J14	°F
14	None	J24	J8 (2-Spd)	J1 (1-Spd)	None	None	None	°F
15	None	J24	J8 (2-Spd)	None	None	None	None	°F
16								
17								
18	Yes (J21)	J24	J1 (2-Spd)	None	None	None	J14	°F
19	Yes (J21)	J24	J1 (2-Spd)	J8 (1-Spd)	None	None	None	°F
20	Yes (J21)	J24	J1 (2-Spd)	None	None	None	None	°F

NOTE: * Wiring change required - Move Black J20 wire from J13 to J12 (Setups: 5, 9, 11, & 13 only)



S1 DIP SWITCH SETTINGS

OFF POSITION	S1 SWITCH #	ON POSITION
TEST MODE OFF	◀ 1	TEST MODE ON
DON'T ADD 1 HS PUMP W/HTR	2 ▶	ADD 1 HS PUMP WITH HEAT
DON'T ADD 2 HS PUMPS W/HTR	◀ 3	ADD 2 HS PUMPS WITH HEAT
1 MIN HTR COOLDOWN (ELEC)	◀ 4	5 MIN HTR COOLDOWN (GAS)
SPECIAL AMPERAGE RULE OFF	◀ 5	SPECIAL AMPERAGE RULE ON
STORE SETTINGS*	◀ 6	MEMORY RESET*

***SWITCH # 6 SHOULD BE SET TO OFF UPON FINAL INSTALLATION.**
ALL UNUSED SWITCHES SHOULD BE OFF

LEFT BLANK

LEFT BLANK



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