

TP600, TP600CE Control Panels
(Spa Owner's Manual insert)

P.N. 7876A
February 6, 2015

For All Spas equipped with PBP501, TBP6013 controllers and TP600(CE) panel.

US/CANADA. Parts#: PBP501-P.N.56713, TP600CE-P.N.50015-05

EXPORT. Parts#: PBP6013-P.N.56719 (2kw heater), P.N.56715(3kw heater),TP600CE-P.N.50015-05

Menus and Panel Operation

Panel Navigation

Navigating the entire menu structure is done with 2 or 3 buttons on the control panel.



TP600 panel has separate **WARM**(Up) and **COOL**(Down) buttons, while others have a single **Temperature** button. In the navigation diagrams "Temperature" buttons are indicated by a single button icon.

Panels that have two Temperature buttons (Warm and Cool) can use both of them to simplify navigation and programming where a single Temperature icon is shown.

The **LIGHT** Button is also used to choose the various menus and navigate each section.

Typical use of the Temperature button(s) allows changing the Set Temperature while the numbers are flashing in the LCD.

Pressing the **LIGHT** button while the numbers are flashing will enter the menus.

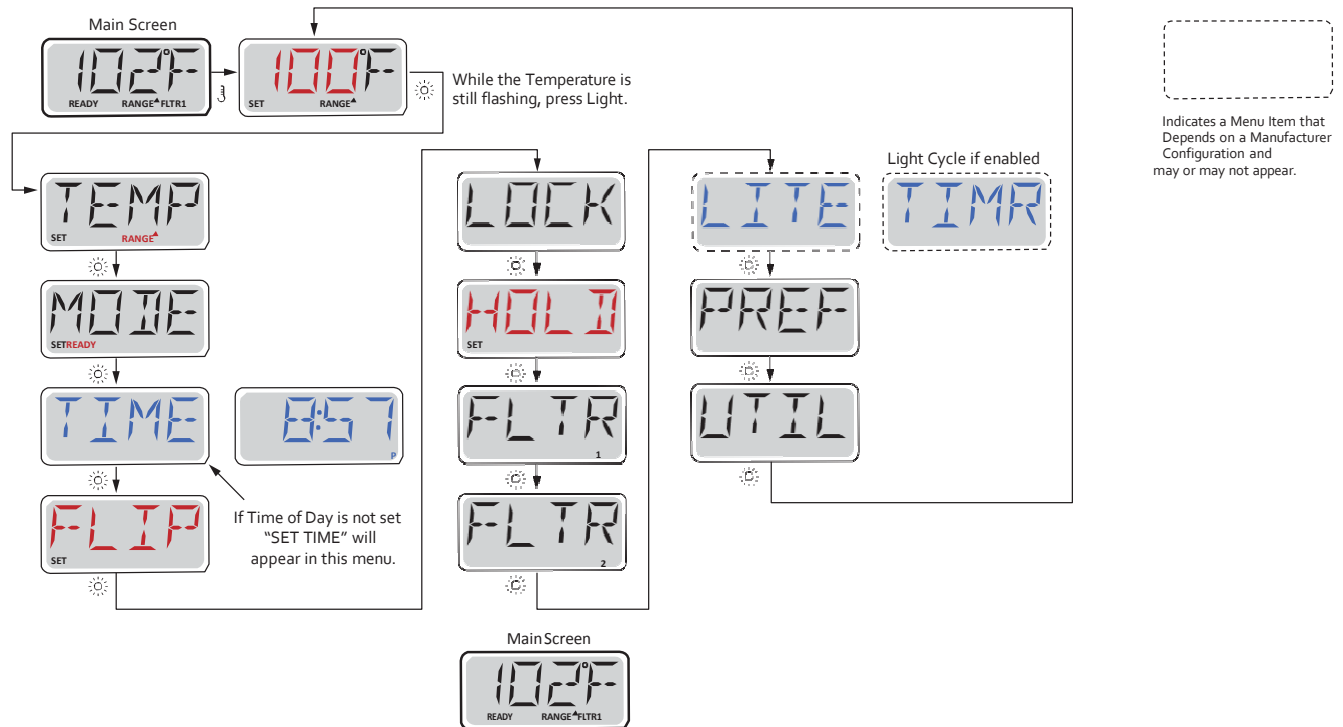
The menus can be exited with certain button presses. Simply waiting for several seconds will return the panel operation to normal.

Power-up Screens

Each time the System powers up, a series of numbers is displayed. After the startup sequence of numbers, the system will enter Priming Mode.

Key

- Indicates Flashing or Changing Segment
- Indicates Alternating or Progressive Message - every 1/2 second
- A temperature button, used for "Action"
- Light or dedicated "Choose" button, depending on control panel configuration
- Waiting time that keeps the last change to a menu item.
- ***** Waiting time (depends on menu item) that reverts to original setting and ignores any change to that menu item.



Waiting Several Seconds in the Main Menu will allow the display to revert to the Main Screen. Most changes are not saved unless Light is pressed. Refer to Key above.

Operational Checking Your Spa

Energizing Hot Tub equipment

Before applying voltage to power up your spa, it is very important that you understand the sequence of events that occur when system is activated in order that pumps can be primed efficiently and damage can be avoided.

Turn on the GFCI breaker and test the spa GFCI breaker (Ground-Fault Circuit Interrupter), by pushing the small “Test” button. This should automatically trip the spa’s GFCI. If this breaker does not trip, immediately call your electrician. Do not use your spa! Only if pushing “Test” button trips GFCI should you reset this breaker and proceed next step.

After turning the power on at the main power panel, the top-side panel display will go through specific sequences. These sequences are normal and display a variety of information regarding the configuration of the hot tub control.

Priming Mode – M019*

This mode will last for 4-5 minutes or you can manually exit the priming mode pressing Temperature button after the pump(s) have primed.



Regardless of whether the priming mode ends automatically or you manually exit the priming mode, the system will automatically return to normal heating and filtering at the end of the priming mode. During the priming mode, the heater is disabled to allow the priming process to be completed without the possibility of energizing the heater under low-flow or no-flow conditions. Nothing comes on automatically, but the pump(s) can be energized by pushing the “Jets1”, “Jets2” buttons (if equipped). If the spa equipped with a Blower, pushing “Aux” button will activate the Blower.

If the spa has a Circ Pump, it can be activated by pressing the “Light” button during Priming Mode only.

Priming the Pumps

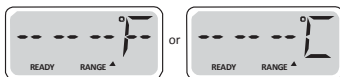
As soon as the above display appears on the panel, push the “Jets1” button once to start Pump 1 in low-speed and then again to switch to high-speed. Also, push the Pump 2 or “Jets2” button, if you have a 2nd pump, to turn it on. The pumps will now be running in high-speed to facilitate priming. If the pumps have not primed after 2 minutes, and water is not flowing from the jets in the spa, do not allow the pumps to continue to run. Turn off the pumps and repeat the process. Note: Turning the power off and back on again will initiate a new pump priming session. Sometimes momentarily turning the pump off and on will help it to prime. Do not do this more than 5 times. If the pump(s) will not prime, shut off the power to the spa and call for service.

Important: A pump should not be allowed to run without priming for more than 2 minutes. Under NO circumstances should a pump be allowed to run without priming beyond the end of the 4-5 minute priming mode. Doing so may cause damage to the pump and cause the system to energize the heater and go into an overheat condition.

Exiting Priming Mode

You can manually exit Priming Mode any time by pressing a “Temp” button (“Up” or “Down”). If you do not manually exit the priming mode as described above, the priming mode will be automatically terminated after 4-5 minutes. Be sure that the pump(s) have been primed by this time.

Once the system has exited Priming Mode, the top-side panel will momentarily display the set temperature but the display will not show the temperature yet, as shown below. This is because the system requires approximately 1 minute of water flowing through the heater to determine the water temperature and display it.



*M019 is a Message Code.

Operational Checking Your Spa

Pumps

Press the “Jets1” button once to turn pump 1 on or off, and to shift between low- and high-speeds.

If left running, the pump1 will turn off after a time-out period. The pump1 low-speed will time out after 30 minutes. The high-speed will time out after 15 minutes. Press the “Jets2” button once to turn pump 2 on or off.

If left running, the pump2 will turn off after a time-out period. The pump 2 will time out after 15 minutes.

On non-circ systems, the low-speed of pump 1 runs when the blower or any other pump is on. If the spa is in Ready Mode, Pump 1 low may also activate for at least 1 minute every 30 minutes to detect the spa temperature (polling) and then to heat to the set temperature if needed. When the low-speed turns on automatically, it cannot be deactivated from the top side panel, however the high speed may be started.

Circulation Pump

If the system is equipped with a circ pump, it will be configured to work as programmable circulation pump.

A programmable circ pump will come on when the system is checking temperature (polling), during filter cycles, during freeze conditions, or when another pump is on.

Filtration and Ozone

On non-circ systems, Pump 1 low and the ozone generator will run during filtration. On circ systems, the ozone will run with the circ pump.

The system is factory-programmed with two filter cycles that will run twice per day (start 8:00AM and 8:00PM), duration is 2hours. The filter time and duration are programmable. A second filter cycle can be disabled as needed.

At the start of each filter cycle, the blower (if there is one) and(or) Pump 2 (if there is one) will run briefly to purge its plumbing to maintain good water quality. Blower for 30 seconds, Pump 2 for 60 seconds.

Freeze Protection

If the temperature sensors within the heater detect a low enough temperature (44°F/7°C), then the pump(s) and the blower automatically activate to provide freeze protection. The pump(s) and blower will run either continuously or periodically depending on conditions.

In colder climates, an optional additional freeze sensor may be added to protect against freeze conditions that may not be sensed by the standard sensors. Auxiliary freeze sensor protection acts similarly except with the temperature thresholds determined by the switch. See your dealer for details.

Clean-up Cycle (optional)

When any pump or blower is turned on by a button press, a clean-up cycle begins 30 minutes after the pump or blower is turned off or times out. The pump and the ozone generator will run for 30 minutes or more, depending on the system.

Adjusting the Set Temperature

When using a panel with Warm(Up) and Cool(Down) buttons (temperature buttons), pressing Up or Down will cause the temperature to flash. Pressing a temperature button again will adjust the set temperature in the direction indicated on the button. When the LCD stops flashing, the spa will heat to the new set temperature when required.

If the panel has a single temperature button, pressing the button will cause the temperature to flash. Pressing the button again will cause the temperature to change in one direction (e.g. UP). After allowing the display to stop flashing, pressing the Temperature Button will cause the temperature to flash and the next press will change the temperature in the opposite direction (e.g. DOWN).

Press-and-Hold

If a Temperature button is pressed and held when the temperature is flashing, the temperature will continue to change until the button is released. If only one temperature button is available and the limit of the Temperature Range is reached when the button is being held, the progression will reverse direction.

Dual Temperature Ranges

This system incorporates two temperature range settings with independent set temperatures. The High Range designated in the display by an “up” arrow, and the Low Range designated in the display by a “down” arrow.

These ranges can be used for various reasons, with a common use being a “ready to use” setting vs. a “vacation” setting. The Ranges are chosen using the menu structure below. Each range maintains its own set temperature as programmed by the user. This way, when a range is chosen, the spa will heat to the set temperature associated with that range.

For example:

High Range might be set between 80°F and 104°F.

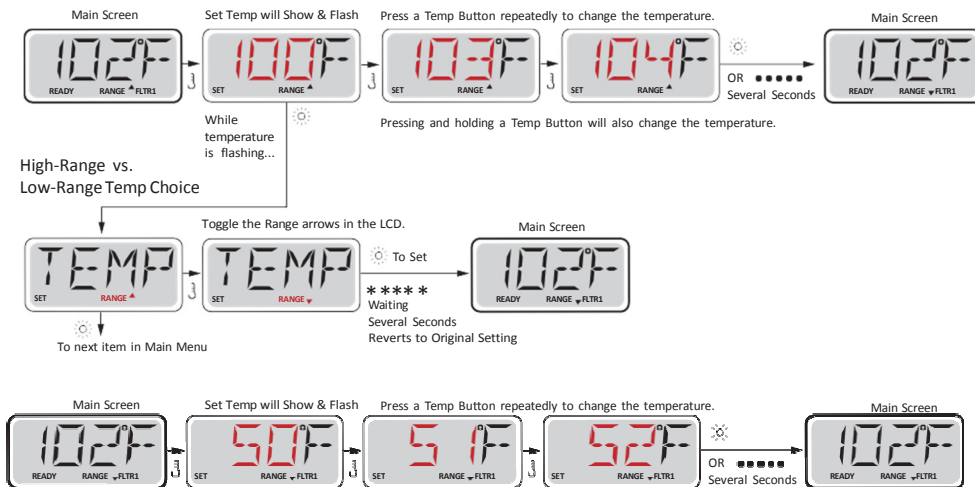
Low Range might be set between 50°F and 99°F.

Hi Range Default Temp.100°F, Lo Range Default Temp.70°F

Freeze Protection is active in either range.

Freeze Threshold 44°F (7°C). Freeze Type is rotating with pumps at lowest speed.

See Ready and Rest modes for additional heating control information.



Mode-Ready and Rest

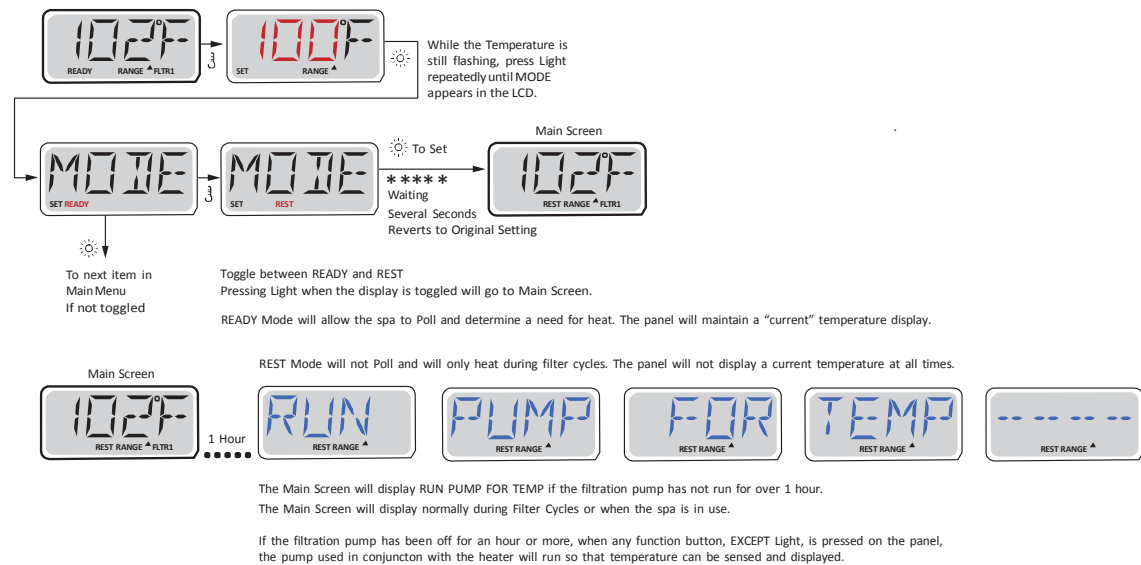
In order for the spa to heat, a pump needs to circulate water through the heater. The pump that performs this function is known as the “heater pump.” The heater pump can be either a 2-Speed Pump 1 or a circulation pump.

If the heater pump is a 2-Speed Pump 1, READY Mode will circulate water every 1/2 hour, using Pump 1 Low, in order to maintain a constant water temperature, heat as needed, and refresh the temperature display. This is known as “polling.”

REST Mode will only allow heating during programmed filter cycles. Since polling does not occur, the temperature display may not show a current temperature until the heater pump has been running for a minute or two.

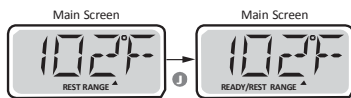
If the spa equipped with programmable circ pump the circ pump in READY Mode will circulate water every 1/2 hour to maintain a constant water temperature, heat as needed, and refresh the temperature display.

REST Mode will only allow heating during programmed filter cycles. Since polling does not occur, the temperature display may not show a current temperature until the heater pump has been running for a minute or two.



Ready-in-Rest Mode

READY/REST appears in the display if the spa is in Rest Mode and Jet 1 is pressed. It is assumed that the spa is being used and will heat to set temperature. While Pump 1 High can be turned on and off, Pump 1 Low will run until set temperature is reached, or 1 hour has passed. After 1 hour, the System will revert to Rest Mode. This mode can also be reset by entering the Mode Menu and changing the Mode.



Show and Set Time-of-Day

Setting the time-of-day can be important for determining filtration times and other background features. When in the TIME menu, SET TIME will flash on the display if no time-of-day is set in the memory.

12 or 24-hour time display can be set under the PREF menu. 12hrs is default time format. Can be changed at any time (see Preference Menu).

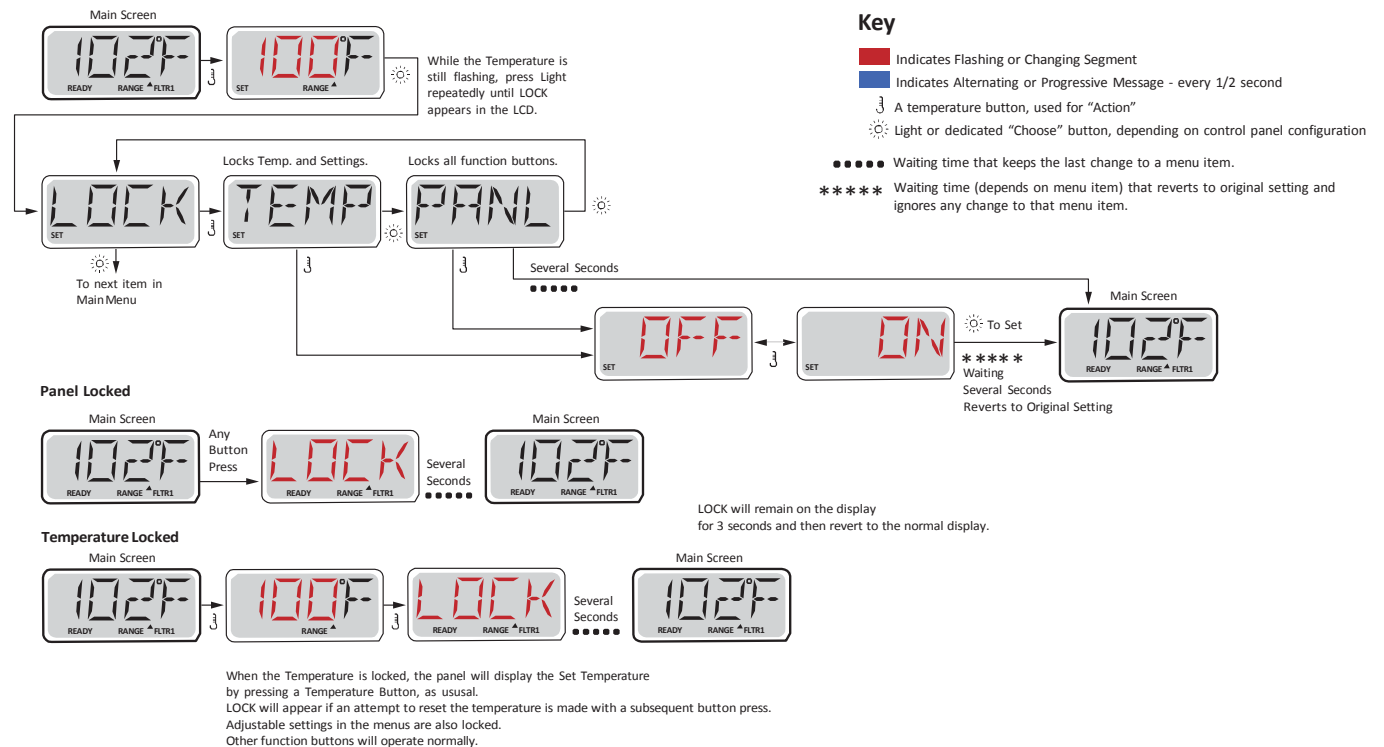
Restricting Operation

The control can be restricted to prevent unwanted use or temperature adjustments.

Locking the panel prevents the controller from being used, but all automatic functions are still active.

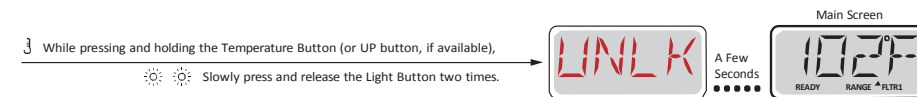
Locking the Temperature allows Jets and other features to be used, but the Set Temperature and other programmed settings cannot be adjusted.

Temperature Lock allows access to a reduced selection of menu items, which include Set Temperature, FLIP, LOCK, UTIL, INFO and FALT LOG.



Unlocking

This Unlock sequence may be used from any screen that may be displayed on a restricted panel.



Your panel has both a Warm(UP) and a Cool(DOWN) buttons, the ONLY button that will work in the Unlock Sequence is the Warm(UP) button.

Hold (Standby)

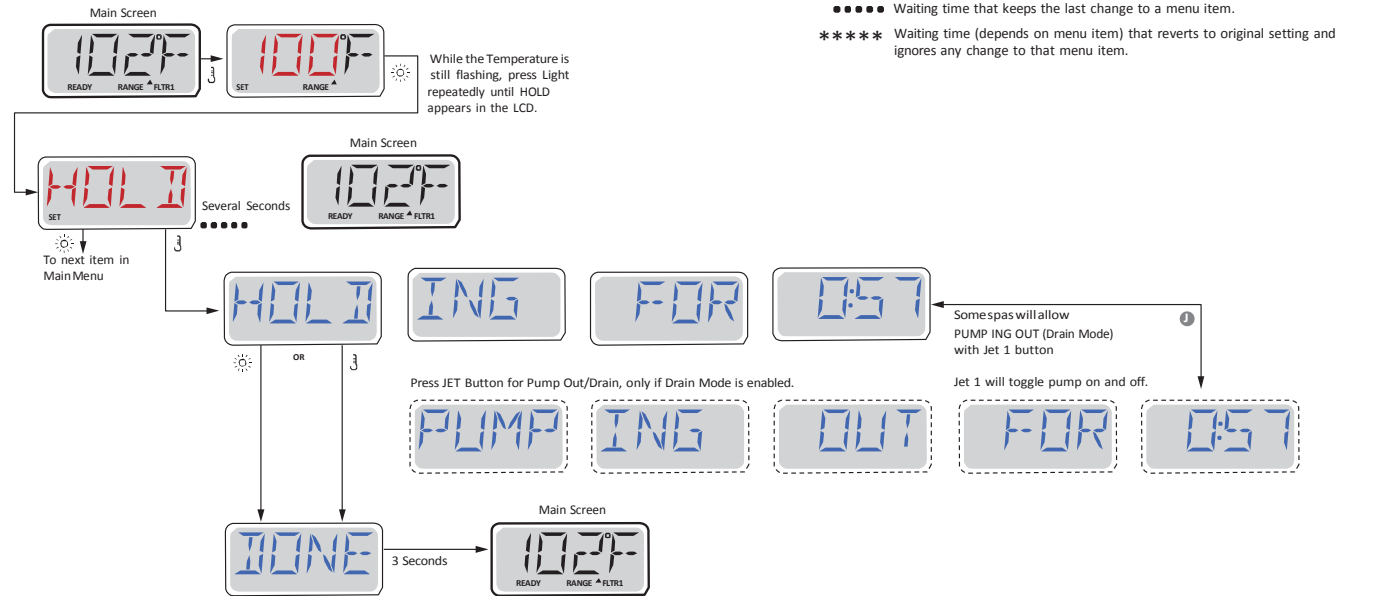
Hold Mode - M037

Hold Mode is used to disable the pumps during service functions like cleaning or replacing the filter. Hold Mode will last for 1 hour unless the mode is exited manually.

Drain Mode (Disabled)

Some spas have a special feature that allows a pump to be employed when draining the water. It is disabled in your spa.

When available, this feature is a component of Hold Mode.



M037 is a Message Code.

Preferences

F / C (Temp Display)

Change the temperature between Fahrenheit and Celsius.

12 / 24 (Time Display)

Change the clock between 12 hr and 24 hr display.

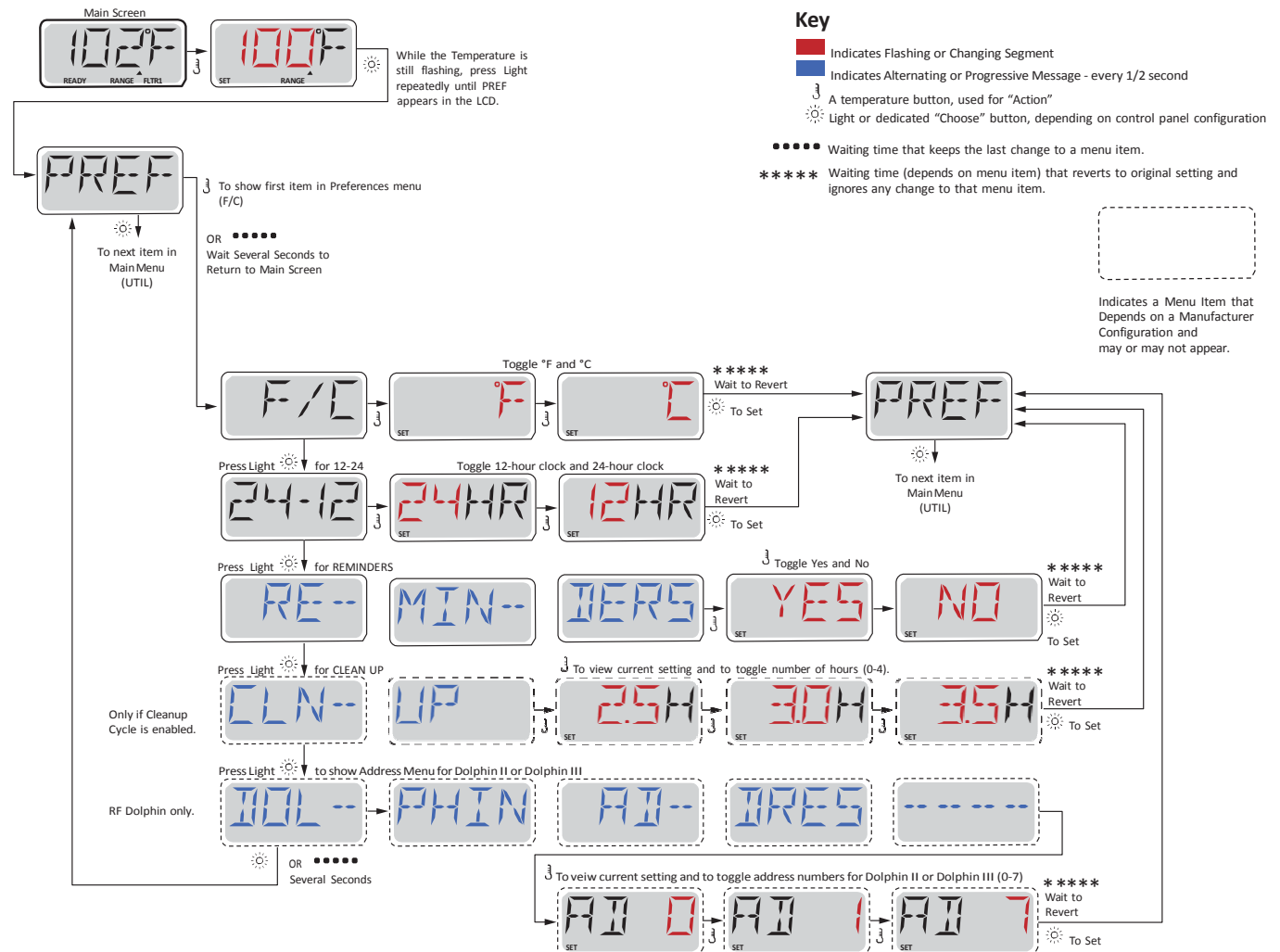
RE-MIN-DERS (Reminders)

Turn the reminder messages (like "Clean Filter") On or Off.

CLN-UP (Cleanup)

Cleanup Cycle Duration is not always enabled, so it may not appear. When it is available, set the length of time Pump 1 will run after each use. 0-4 hours are available.

30 minutes is default setting.



Utilities and Information

INFO (System Information sub-menu)

The System Information Menu displays various settings and identification of the particular system. As each item in the menu is highlighted, the detail for that item is displayed at the bottom of the screen.

SSID (Software ID)

Displays the software ID number for the System.

MODL (System Model)

Displays the Model Number of the System.

SETP (Current Setup)

Displays the currently selected Configuration Setup Number.

SIG (Configuration Signature)

Displays the checksum for the system configuration file.

Heater Voltage (Feature not used on CE rated systems.)

Displays the operating voltage configured for the heater.

Heater Wattage as Configured in Software (CE Systems Only.)

Displays a heater kilowatt rating as programmed into the control system software (1-3 or 3-6).

H _ (Heater Type)

Displays a heater type ID number.

SW _ (Dip Switch Settings)

Displays a number that represents the DIP switch positions of S1 Switch on the main circuit board.

PANL (Panel Version)

Displays a number of the software in the topside control panel.

Utilities

In addition to INFO, The Utilities Menu contains the following:

GFCI (GFCI Test)

(Feature not available on CE rated systems.)

GFCI Test is not always enabled, so it may not appear. This screen allows the GFCI to be tested manually from the panel and can be used to reset the automatic test feature.

A / B (A/B Sensor Temperatures)

When this is set to On, the temperature display will alternate to display temperature from Sensor A and Sensor B in the heater.

FALT LOG (Fault Log)

The Fault Log is a record of the last 24 faults that can be reviewed by a service tech.

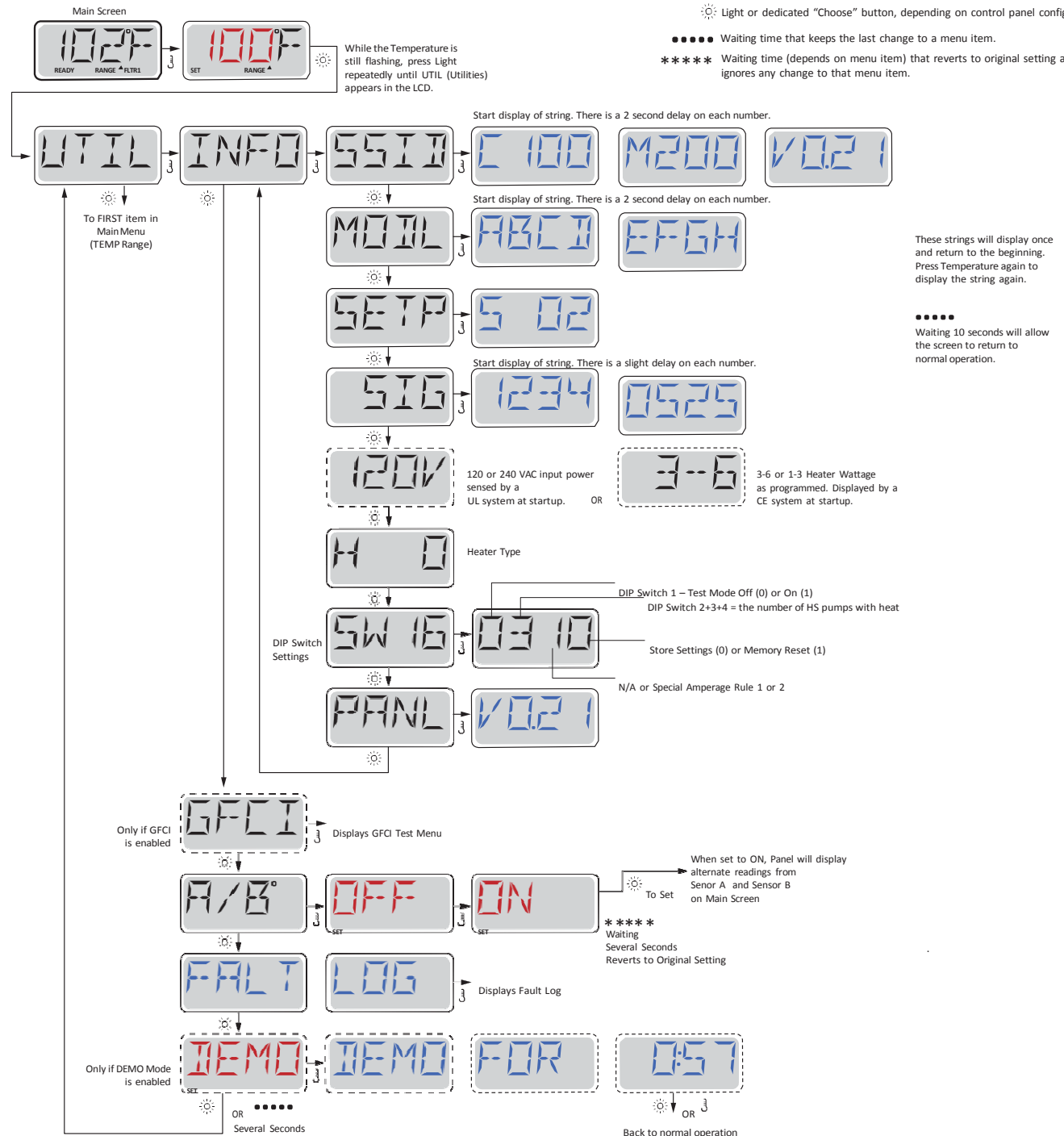
DEMO (Demo Mode)/Disabled

Demo Mode is not enabled. This is designed to operate several devices in a sequence in order to demonstrate the various features of a particular hot tub.

Utilities (INFO, GFCI, A/B, FALT)

Key

- Indicates Flashing or Changing Segment
- Indicates Alternating or Progressive Message - every 1/2 second
- ⌋ A temperature button, used for "Action"
- ☀ Light or dedicated "Choose" button, depending on control panel configuration
- Waiting time that keeps the last change to a menu item.
- **** Waiting time (depends on menu item) that reverts to original setting and ignores any change to that menu item.



Utilities – GFCI Test Feature

Not Available on CE Rated Systems.

A GFCI is an important safety device and is required equipment on a hot tub installation.

Your spa equipped with a GFCI Trip enabled and automatic GFCI Test disabled. Only for UL rated systems.

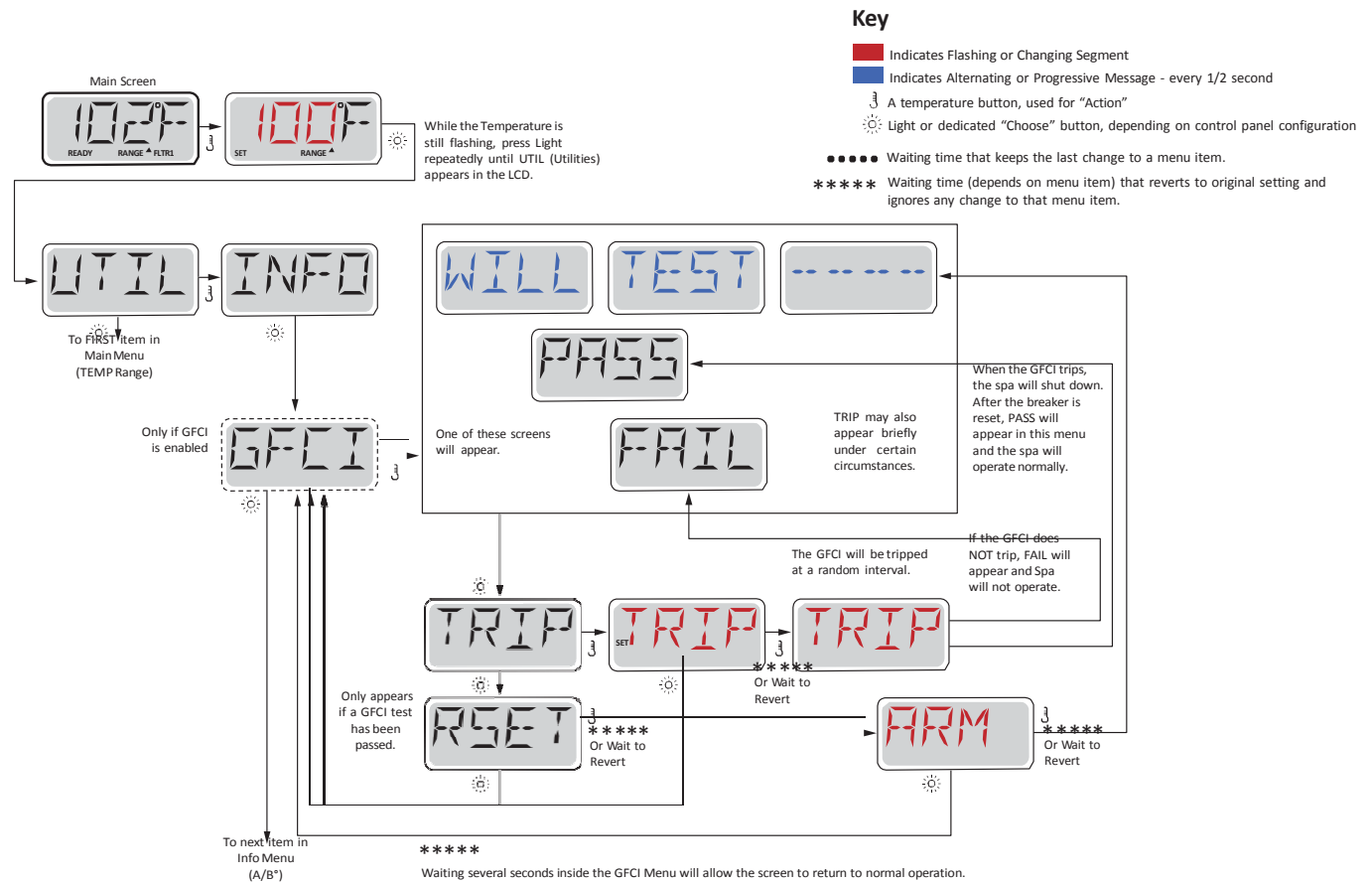
The installer can cause the GFCI Trip Test to occur by initiating it using this menu.

The GFCI should trip within several seconds and the spa should shut down. If it does not, shut down the power and manually verify that a GFCI breaker is installed and that the circuit and spa are wired correctly. Verify the function of the GFCI with its own test button. Restore power to the spa and repeat the GFCI Trip Test.

Once the GFCI is tripped by the test, reset the GFCI and the spa will operate normally from that point. You can verify a successful test by navigating to the above menu. PASS should appear after a temp button is pressed from the GFCI screen.

Warning:

If freezing conditions exist, a GFCI should be reset immediately or spa damage could result. The end user should always be trained to test and reset the GFCI on a regular basis.

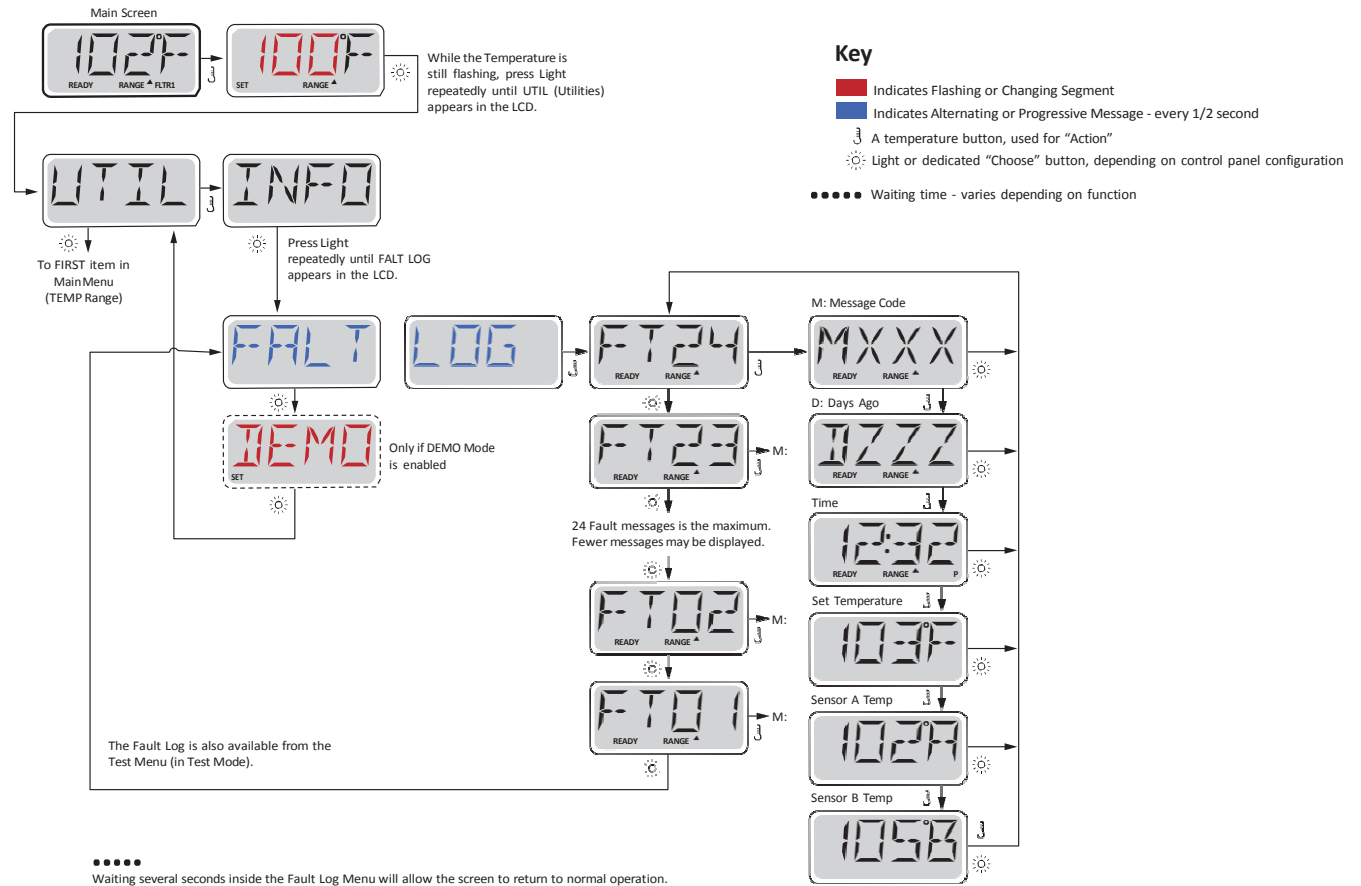


Utilities – Fault Log

A Little spa history can tell a lot

The Fault Log stores up to 24 events in memory and they can be reviewed under the Fault Log Menu.

Each event captures a Fault Message Code, how many days have passed since the fault, Time of the fault, Set Temperature during the fault, and Sensor A and B temperatures during the fault.



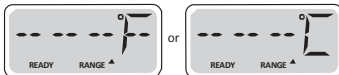
General Messages



Priming Mode – M019

Each time the spa is powered up, it will enter Priming Mode. The purpose of Priming Mode is to allow the user to run each pump and manually verify that the pumps are primed (air is purged) and water is flowing. This typically requires observing the output of each pump separately, and is generally not possible in normal operation. Priming Mode lasts 4 minutes, but you can exit it earlier by pressing any Temp button. The heater is not allowed to run during Priming Mode.

NOTE: If your spa has a Circ Pump, it will turn on with Jets 1 in Priming Mode. The Circ Pump will run by itself when Priming Mode is exited.



Water Temperature is Unknown

After the pump has been running for 1 minute, the temperature will be displayed.



Too Cold - Freeze Protection

A potential freeze condition has been detected, or the Aux Freeze Switch has closed, and all pumps and blower are activated. All pumps and blower are ON for at least 4 minutes after the potential freeze condition has ended, or when the aux freeze switch opens.

In some cases, pumps may turn on and off and the heater may operate during Freeze Protection.

This is an operational message, not an error indication.



Water is too Hot (OHS) – M029

One of the water temp sensors has detected spa water temp 110°F (43.3°C) and spa functions are disabled. System will auto reset when the spa water temp is below 108°F (42.2°C). Check for extended pump operation or high ambient temp.



Safety Trip - Pump Suction Blockage* – M033

The Safety Trip error message indicates that the vacuum switch has closed. This occurs when there has been a suction problem or a possible entrapment situation avoided. (Note: Your spa has not this feature).

Heater-Related Messages



Heater Flow is Reduced (HFL) – M016

There may not be enough water flow through the heater to carry the heat away from the heating element. Heater start up will begin again after about 1 min. See “Flow Related Checks” below.



Heater Flow is Reduced (LF)* – M017

There is not enough water flow through the heater to carry the heat away from the heating element and the heater has been disabled. See “Flow Related Checks” below. After the problem has been resolved, you must press any button to reset and begin heater start up.



Heater may be Dry (dr)* – M028

Possible dry heater, or not enough water in the heater to start it. The spa is shut down for 15 min. Press any button to reset the heater start-up. See “Flow Related Checks” below.



Heater is Dry* – M027

There is not enough water in the heater to start it. The spa is shut down. After the problem has been resolved, you must press any button to reset and restart heater start up. See “Flow Related Checks” below.



Heater is too Hot (OHH)* – M030

One of the water temp sensors has detected 118°F (47.8°C) in the heater and the spa is shut down. You must press any button to reset when water is below 108°F (42.2°C). See “Flow Related Checks” below.



A Reset Message may appear with other Messages.

Some errors may require power to be removed and restored.

Flow-Related Checks

Check for low water level, suction flow restrictions, closed valves, trapped air, too many closed jets and pump prime. On some systems even when spa is shut down, some equipment may occasionally turn on to continue monitoring temperature or if freeze protection is needed.

* This message can be reset from the topside panel with any button press.

Sensor-Related Messages



Sensor Balance is Poor – M015

The temperature sensors MAY be out of sync by 2°F or 3°F. Call for Service.



Sensor Balance is Poor* – M026

The temperature sensors ARE out of sync. The Sensor Balance is Poor fault has been established for at least 1 hour. Call for Service.



Sensor Failure – Sensor A: M031, Sensor B: M032

A temperature sensor or sensor circuit has failed. Call for Service.

Miscellaneous Messages



No Communications

The control panel is not receiving communication from the System. Call for Service.



Pre-Production Software

The Control System is operating with test software. Call for Service.



°F or °C is replaced by °T

The Control System is in Test Mode. Call for Service.

System-Related Messages



Memory Failure - Checksum Error* – M022

At Power-Up, the system has failed the Program Checksum Test. This indicates a problem with the firmware (operation program) and requires a service call.



Memory Warning - Persistent Memory Reset* – M021

Appears after any system setup change. Contact service, if this message appears on more than one power-up, or if it appears after the system has been running normally for a period of time.



Memory Failure - Clock Error* – M020 - Not Applicable on the BP501, 6013

Contact service.



Configuration Error – Spa will not Start Up

Contact service.



GFCI Failure - System Could Not Test/Trip the GFCI – M036

NORTH AMERICA ONLY. May indicate an unsafe installation. Contact service.



A Pump Appears to be Stuck ON – M034

Water may be overheated. **POWER DOWN THE SPA. DO NOT ENTER THE WATER.** Contact your dealer or service organization.



A Pump Appears to have been Stuck ON when spa was last powered – M035

POWER DOWN THE SPA. DO NOT ENTER THE WATER. Contact service.

Reminder Messages

General maintenance helps.

Reminder Messages can be suppressed by using the PREF Menu.

They may be disabled entirely, or there may be a limited number of reminders on a specific model.

The frequency of each reminder is different.

Press a Temperature button to reset a displayed reminder message.



Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 7 days (Disabled).

Check pH with a test kit and adjust pH with the appropriate chemicals.



Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 7 days (Disabled).

Check sanitizer level and other water chemistry with a test kit and adjust with the appropriate chemicals.



Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 30 days.

Clean the filter media as instructed by the manufacturer. See HOLD on page 6.



Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 65 days (only for UL rated spas).

The Ground Fault Circuit Interrupter (GFCI) or Residual Current Device (RCD) is an important safety device and must be tested on a regular basis to verify its reliability.

Every user should be trained to safely test the GFCI or RCD associated with the hot tub installation.

A GFCI or RCD will have a TEST and RESET button on it that allows a user to verify proper function.

Warning:

If freezing conditions exist, a GFCI or RCD should be reset immediately or spa damage could result. The end user should always be trained to test and reset the GFCI or RCD on a regular basis.

Reminder Messages Continued



Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 100 days.

Change the water in the spa on regular basis to maintain proper chemical balance and sanitary conditions.



Alternates with temperature or normal display(OFF).

Appears on a regular schedule, e.g. every 180 days.(Disabled).

Vinyl covers should be cleaned and conditioned for maximum life.



Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 180 days. (Disabled)

Wood skirting and furniture should be cleaned and conditioned per the manufacturers instructions for maximum life.



Alternates with temperature or normal display.

Appears on a regular schedule, e.g. every 365 days.

Filters should be replaced occasionally to maintain proper spa function and sanitary conditions.



Alternates with temperature or normal display (OFF).

As needed.

Install new cartridge

PPP501X PN 56713

01-13-15

TP (MAIN) PANELS
J33 OR J45

CONNECT ONLY TO CIRCUITS PROTECTED BY A CLASS A GFCI.
A DISCONNECTING MEANS MUST BE INSTALLED WITHIN SIGHT FROM THE EQUIPMENT AND AT LEAST 3 FEET CLEAR FROM THE INSIDE WALLS OF THE POOL, SPA, OR HOT TUB.
FOR SUPPLY CONNECTIONS, USE COPPER CONDUCTORS ONLY. USE CONDUCTORS SIZED ON THE EMPLOYER'S UNIFORM BASIS OF 80°C AMPACITY BUT DES CONDUCTORS DE CUIVRE RATED MINIMUM OF 90°C. #6 AWG MIN. WIRE= 90°

WIFI
TRANSCIEVER
J33 OR J45

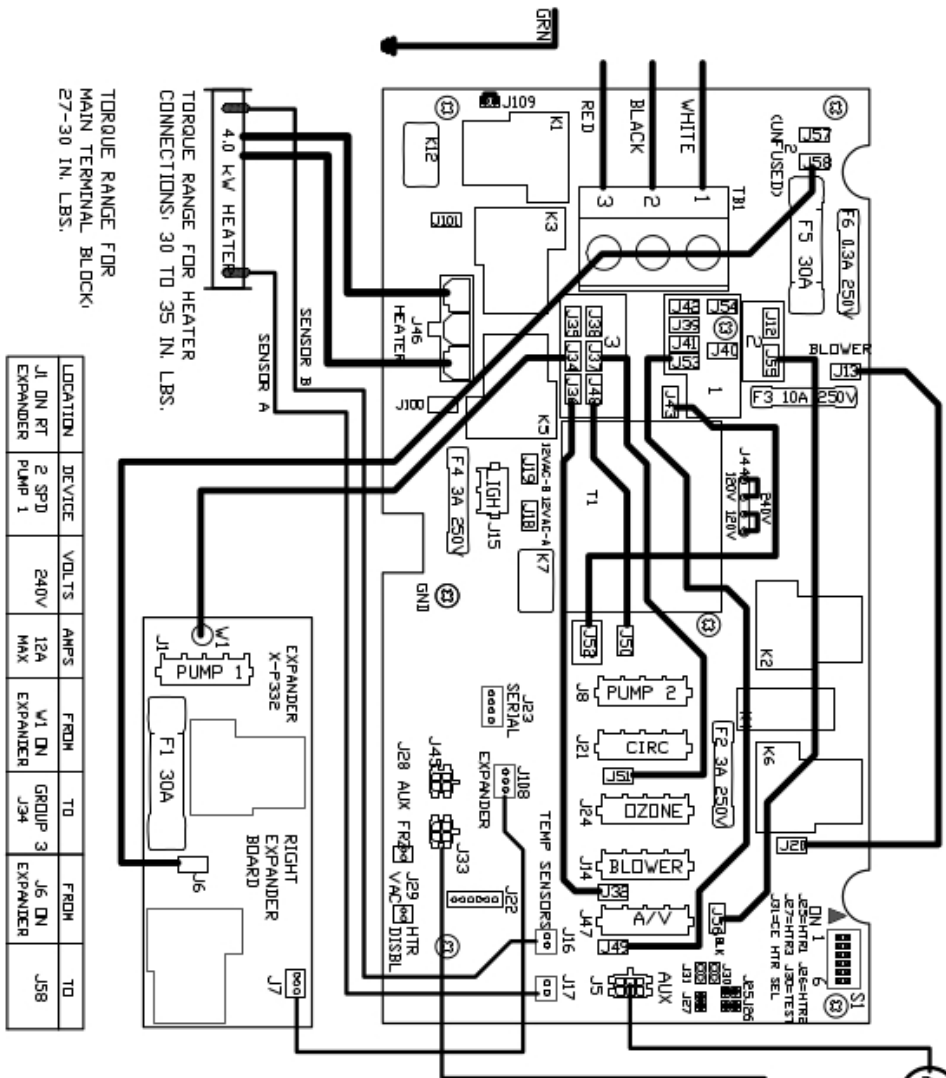
TEST MODE OFF	S1 SWITCH #	ON POSITION
TEST MODE OFF	1	TEST MODE ON
DO NOT ADD 1 HS PUMP W/HTR	2	ADD 1 HS PUMP WITH HEAT
DO NOT ADD 2 HS PUMPS W/HTR	3	ADD 2 HS PUMPS WITH HEAT
1 MIN HTR COOL DOWN (ELEC)	4	5 MIN HTR COOL DOWN (GAS)
SPECIAL AMPERAGE RULE OFF	5	SPECIAL AMPERAGE RULE ON
STORE SETTINGS*	6	MEMORY RESET*

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

SETUP #	CIRC PUMP	PUMP 1	PUMP 2	BLOWER TEMP SCALE
1	FILTERS + POLLING	2-SPEED	1-SPEED	°F
2	FILTERS + POLLING	2-SPEED	1-SPEED	°F
3	FILTERS + POLLING	2-SPEED	1-SPEED	°F
4	FILTERS + POLLING	2-SPEED	NONE	°F
5	NONE	2-SPEED	1-SPEED	°F
6	NONE	2-SPEED	1-SPEED	°F
7	NONE	2-SPEED	1-SPEED	°F
8	NONE	2-SPEED	NONE	°F

INSTEAD OF SETUP #6,
THIS SYSTEM IS
CONFIGURED
IN SETUP #:

LOCATION	DEVICE	VOLTS	AMPS	FROM	TO
J8	1-SP PUMP	2 240V	12A MAX	J50	J48-AREA 3
J14	BLOWER	240V	4A MAX	J32	J38-AREA 3
J15	SPA LIGHT	10V	1A		
J21	CIRC	240V	2A MAX		
J24	OZONE	240V	1A		
J47	GFCI AND OZ TV / AV	LINE 1 CONNECTION 120V	2A	J49	J57-AREA 3 J55-AREA 1
J46	HEATER	240V	4.0 kW		



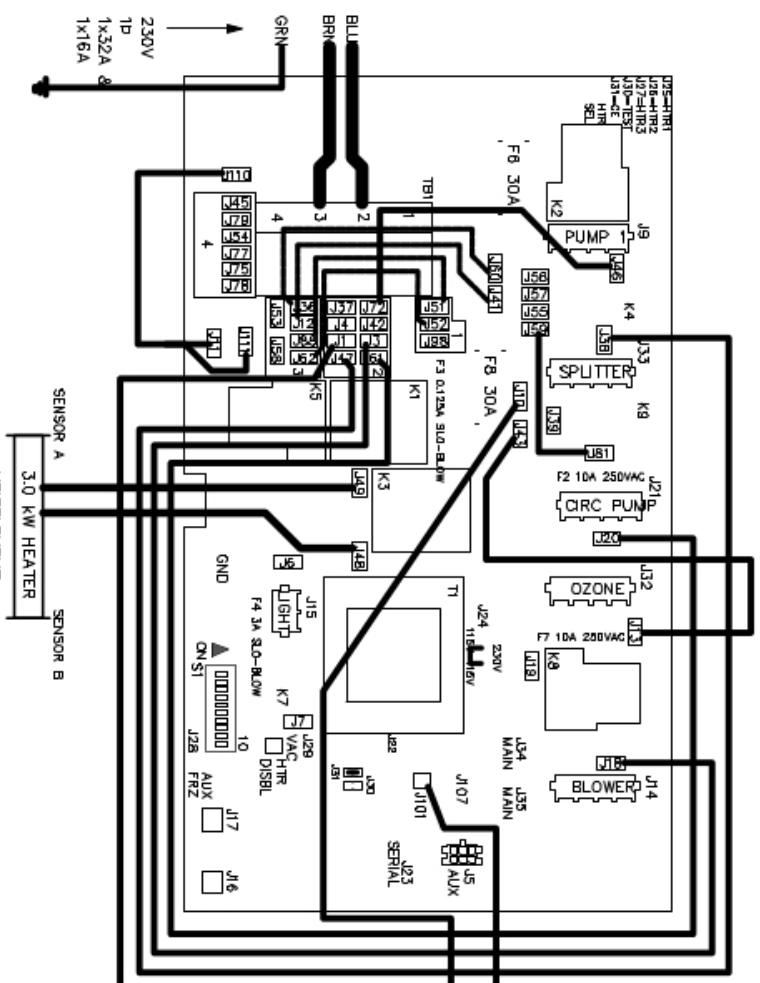
TORQUE RANGE FOR MAIN TERMINAL BLOCK:
27-30 IN. LBS.

LOCATION	DEVICE	VOLTS	AMPS	FROM	TO
J1 DN RT EXPANDER	2 SPD PUMP 1	240V	12A MAX	J1 DN	J58

Wiring Diagram PPP501

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WIFI TRANSCEIVER J34 OR J35

AUX J5 (A1-A4)

TP (MAIN) PANELS J34 OR J35

LOCATION	DEVICE	VOLTS	AMPS	FROM	TO	GROUP 1	GROUP 2	GROUP 3
J1	ON EXPANDER PUMP 2	230V	MAX	W12 ON EXPANDER	J1	J4 ON EXPANDER	J53	

NETZSTROMVERSORGUNG
 1-GESCHW.-PUMPE 2
 ALIMENTATION POMPE 2
 A 1 VITESSES

W12 J6 PUMP 2

SETUP # CIRC PUMP PUMP 1 PUMP 2 BLOWER TEMP SCALE

1	FILTERS + POLLING	2-SPEED	1-SPEED	1-SPEED	1-SPEED	°C
2	FILTERS + POLLING	2-SPEED	1-SPEED	1-SPEED	1-SPEED	°C
3	FILTERS + POLLING	2-SPEED	NONE	1-SPEED	1-SPEED	°C
4	FILTERS + POLLING	2-SPEED	NONE	NONE	1-SPEED	°C
5	NONE	2-SPEED	1-SPEED	1-SPEED	1-SPEED	°C
6	NONE	2-SPEED	1-SPEED	1-SPEED	1-SPEED	°C
7	NONE	2-SPEED	NONE	1-SPEED	1-SPEED	°C
8	NONE	2-SPEED	NONE	NONE	1-SPEED	°C

INSTEAD OF SETUP #6, THIS SYSTEM IS CONFIGURED IN SETUP #:

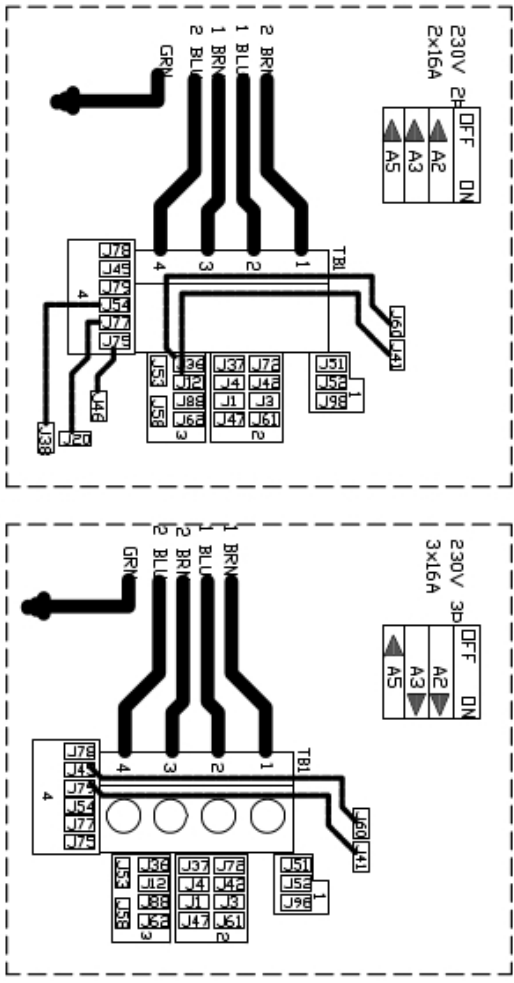
Wiring Diagram PBP6013

PART A

Settings

SINGLE SERVICE 230V 1p / 1x32A & 1X16A, TWO-SERVICE 230V 2p / 2x16A, THREE-SERVICE 230V 3p / 3x16A

LOCATION	DEVICE	MAX AMPS
J9	NETZTROMVERBODING 2-GESCH.-PUMPE 1 ALIMENTATION PUMP 1 A 2 VITESSES 2-SPEED PUMP 1	11A MAX
J14	1-SPEED BLOWER	4A MAX
J15	BLOWER LINE 1 CONNECTION J19 to J43	4A MAX
J15	UV BELEUCHTUNG - ECLAIRAGE BAIN HYDRO SPA LIGHT	1A MAX
J21	KREISLAUF PUMPE POME DE CIRCULATION CIRC PUMP	1A MAX
J22	OZONGENERATOR GENERATOROZONE OZONE GENERATOR	0.5A MAX
J22	CIRC AND OZONE LINE 1 CONNECTION J41 to J59	0.5A MAX
J33	AV / BROMINE	4A MAX
J5	AUX PANEL(S) - AX10, AX20, AX30, AX40	



FOR SUPPLY CONNECTIONS, USE COPPER CONDUCTORS ONLY. TORQUE RANGE FOR MAIN TERMINAL BLOCK (TBI) 27-30 IN. LBS. (31.1-34.5 kg cm)

USE EMPLOYER UNIFORMEMENT DES CONDUCTEURS DE CUIVRE. TORQUE RANGE FOR MAIN TERMINAL BLOCK (TBI) 27-30 IN. LBS. (31.1-34.5 kg cm)

USE CONDUCTORS SIZED ON THE BASIS OF 60°C AMPACITY BUT DES CONDUCTEURS DE CUIVRE. TORQUE RANGE FOR MAIN TERMINAL BLOCK (TBI) 27-30 IN. LBS. (31.1-34.5 kg cm)

RATED MINIMUM OF 90°C.

230V 1p / 1x32A

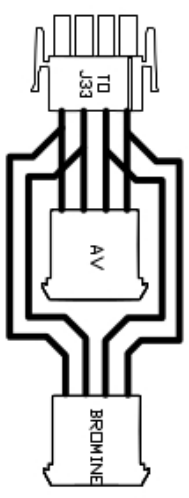
SWITCHBANK S1 OFF	SWITCHBANK S1 ON
TEST MODE OFF	TEST MODE ON
DON'T ADD 1 HS PUMP W/HTR	ADD 1 HS PUMP WITH HEAT
DON'T ADD 2 HS PUMPS W/HTR	ADD 2 HS PUMPS WITH HEAT
DON'T ADD 4 HS PUMPS W/HTR	ADD 4 HS PUMPS WITH HEAT
SPECIAL AMPERAGE RULE A	SPECIAL AMPERAGE RULE B
STORE SETTINGS*	MEMORY RESET*
1 MIN HTR COOL DOWN (ELEC)	5 MIN HTR COOL DOWN (GAS)
NOT ASSIGNED	NOT ASSIGNED
NOT ASSIGNED	NOT ASSIGNED
NOT ASSIGNED	NOT ASSIGNED
NOT ASSIGNED	NOT ASSIGNED

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

230V 1p / 1x16A

SWITCHBANK S1 OFF	SWITCHBANK S1 ON
TEST MODE OFF	TEST MODE ON
DON'T ADD 1 HS PUMP W/HTR	ADD 1 HS PUMP WITH HEAT
DON'T ADD 2 HS PUMPS W/HTR	ADD 2 HS PUMPS WITH HEAT
DON'T ADD 4 HS PUMPS W/HTR	ADD 4 HS PUMPS WITH HEAT
SPECIAL AMPERAGE RULE A	SPECIAL AMPERAGE RULE B
STORE SETTINGS*	MEMORY RESET*
1 MIN HTR COOL DOWN (ELEC)	5 MIN HTR COOL DOWN (GAS)
NOT ASSIGNED	NOT ASSIGNED
NOT ASSIGNED	NOT ASSIGNED
NOT ASSIGNED	NOT ASSIGNED
NOT ASSIGNED	NOT ASSIGNED

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



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Notes
