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THE WORLD'S LARGEST AND BEST SPA COMPANY

1992

CalSpa®
A DIVISION OF CALIFORNIA ACRYLIC INDUSTRIES, INC.

Installation & Operation Manual

*Portable and Inground
110V & 220V Spas and
Gas Packs*



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IMPORTANT SAFETY INSTRUCTIONS

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

1. READ AND FOLLOW ALL INSTRUCTIONS.

2. **DANGER** — To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
3. **WARNING RISK** of child, drowning. Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents ensure that children cannot use a spa or hot tub unless they are supervised at all times.
4. **Unit attachment cord:** A flexible cord of a water resistant material with a grounding conductor and an attachment plug. The cord shall extend at least 10', but no more than 15'.
5. (For cord and plug connected units) Do not bury cord.
6. (For cord and plug connected units) **WARNING** — To reduce the risk of electric shock, replace damaged cord immediately.
7. (For all units) **DANGER** — To Reduce a risk of injury to persons, do not remove suction fitting. To reduce the risk of injury:
 - A. The water in a spa or hot tub should never exceed 40°C (104°F). Water Temperatures between 38°C (100°F) and 40°C (104°F) are considered safe for a healthy adult. Lower water temperatures are recommended for extended use (exceeding 10-15 minutes and for young children. **TO ADJUST WATER TEMPERATURE, ROTATE MIDDLE DIAL ON TOP SIDE CONTROL PANEL— FOLLOWING TEMPERATURES INDICATORS.**
 - B. Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit spa or hot tub water temperatures to 38°C (100°F).
 - C. Before entering a spa or hot tub, the user should measure the water temperature with an accurate thermometer since the tolerance of water temperature-regulating devices may vary as much as plus/minus 3°C (5°F).
 - D. The use of alcohol, drugs, or medication before or during spa or hot tub use may lead to unconsciousness with the possibility of drowning.
 - E. Persons suffering from obesity or with a medical history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa or hot tub.
 - F. Persons using medication should consult a physician before using a spa or hot tub since some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.
 - G. Prolong **IMMERSION** in hot water may induce hyperthermia. Long exposure may result in nausea, dizziness or fainting. Observe a reasonable time limit, leave the spa then shower, cool down and, if you wish, return for another brief stay.
8. (For cord and plug connected units only). A pressure wire connector is provided on the surface of the control box inside the spa (or hot tub) to permit connections of a bonding wire between this point and any metal equipment, metal enclosures of electrical equipment, metal water pipe or conduit within five feet of the spa (or hot tub) as needed to comply with local requirements. The bonding wire must be at least a No. 8 AWG solid copper wire.
9. (For permanently installed units only) A green color terminal (or a wire connector marked "GR", or "Grounding") is provided within the control box. To reduce the risk of electrical shock, connect this terminal or connector to the grounding terminal of your electrical service or supply panel with a continuous green insulated copper wire connector equivalent in size to the circuit conductors supplying this equipment, but no smaller than No.12 AWG (3.3mm²). In addition, a second wire connector is provided for bonding to local ground points. To reduce the risk of electric shock this connector should be bonded with a No.6 (8.4mm²) copper wire to any metal ladders, water pipes, or other metal within 5 feet (1.52m) of the tub.
10. (For cord and plug connected type only). This equipment is provided with a ground fault circuit interrupter (give location). Before each use of your spa (or hot tub), with the plug connected to the power, push the test button, A red light should appear. Push the reset button. The red light should disappear. If the interrupter fails to operate in this manner, there is a ground current flowing indicating the possibility of an electric shock. Disconnect the plug from the receptacle unit; the source of the breakdown has been identified and corrected.
11. (For floor-recessed hot tubs and spas). Install to permit access for servicing from above or below floor.
12. (For all units). Install to provide drainage of compartment for electric components.
13. (For assemblies with air blowers). Install in accordance with the diagram to keep tub water out of electrical equipment. (To be accompanied with diagram and information for mounting height, routing of air hose, and use of furnished check valves, if any).
14. (For assemblies). Install with nonmetallic pipe connections to tub and at least 5 feet (1.52m) from metal enclosure of assembly to inside wall of tub.
15. (For all spas) **DANGER — RISK OF ELECTRIC SHOCK.** Install at least 5 feet (1.52m) from all metal surfaces. (A spa may be installed within 5 feet of metal surfaces if , in accordance with the National Electrical Code, ANSI/NFPA 70-1984, and each metal surface is permanently connected by a No. 8 AWG (8.4mm) copper conductor attached to the wire connector on the terminal box that is provided for this purpose).
16. (For units with gas heaters that are intended only for outdoor use). **WARNING** — Do not install indoors. This unit employs a gas heater that requires proper ventilation and is intended for out door use only.
17. **DANGER — RISK OF ELECTRICAL SHOCK.** Do not permit any electrical appliances such as a light, telephone, radio, or television within 5 feet of the spa or hot tub.
18. **SAVE THESE INSTRUCTIONS**

IMPORTANT SAFETY INSTRUCTIONS (continued)

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

18. A ground-fault-circuit-interrupter must be provided if this device is used to control an underwater lighting fixture. The conductors on the load side of the ground-fault-circuit-interrupter shall not occupy conduit, boxes, or enclosures containing other conductors unless the additional conductors are also protected by a ground-fault-circuit-interrupter.

19. The electrical supply for this product must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with Section 422-20 of the National Electrical Code, ANSI/NFPA 70-1987. The disconnecting means must be readily accessible to the tub occupant but installed at least 5 feet (1.5m) from tub water.

20. **SAVE THESE
INSTRUCTIONS**

THERAPEUTIC POOLS (SPAS) SAFETY RULES

Therapeutic pools or "spas" are usually piped and controlled so that very warm water or hot water, often with air injection, is forced at high velocity into a confined area of a swimming pool or into a small separate pool. Both the energy of the water and the heat furnish certain hydro-therapeutic benefits. These pools are excellent for relaxation, body conditioning and for arthritis and rheumatic problems, but can be hazardous to the user.

Each person's body and circulation system has different tolerances and responds differently to warm/hot immersion. The amount of time that safe, therapeutic use of spas or hot tubs will vary. Most people in good health find a water temperature about 102°F to be satisfying and limit time in water at this temperature to 20-30 minutes. Use of alcoholic beverages and certain medications may affect the way your body's system reacts to warm water/hot water immersion. Consult your physician for recommendations.

The Consumer Product Safety Commission has recommended the following "Safety Rules for Hot Tubs":

- A.** Spa or hot tub water temperature should never exceed 104°F (40°C). A temperature of 102°F (39°C) is considered safe for a healthy adult. Special caution is suggested for young children.
- B.** Drinking of alcoholic beverages before or during spa or hot tub use can cause drowsiness which could lead to unconsciousness and subsequently result in drowning.
- C.** Pregnant women beware! Soaking in water above 102°F (39°C) can cause fetal damage during the first three months of pregnancy (resulting in the birth of a brain damaged or deformed child). Pregnant women should stick to the 100°F (38°C) maximum rule.
- D.** Before entering the spa or hot tub, users should check the water temperature with an accurate thermometer; some spa or hot tub thermostats may be off in regulation water temperatures by as much as 4°F (2.2°C).
- E.** Persons with medical histories of heart disease, circulatory problems should obtain their physician's advice before using the spas or hot tubs.
- F.** Persons taking medications which induce drowsiness such as tranquilizers, antihistamine or anticoagulant, should not use spas or hot tubs.
- G.** Never touch or come in contact with any electrical accessory when in your spa or when your body is wet.
- H.** Prior to performing any service to the Spa Pack, turn off ALL power to the system at the main power source breaker.
- I.** Never turn equipment pack on unless spa is filled with water to the center of the skimmer.

Read all instructions very carefully and completely before installation of the spa may void the warranty. If you have any questions that are not explained in this manual, consult your spa dealer. Consult your local building department for any questions that may need, i.e. plumbing, electrical, etc. Some areas may require a swimming pool or building permit.

WARNING

**Do Not Exceed 104°
Excessive Temperature Voids Warranty**

GLOSSARY OF TERMS

AIR BLOWER	The Air blower supplies air to the air channel caps in the lower portion of the spa, creating the hydro massage action. The blower works independently off the pump, filter, and heater.
AIR LOOP	A back-up system for the check valve.
AIR VENTURI	Mounted generally on the lip of the spa and regulated the functions of the jets.
BLEEDER VALVE	Located at the top of the filter. Used for releasing air out of filter.
CHECK VALVE	To prevent water back flow to blower.
CONTROL PANEL	Mounted generally on the lip of the spa and controls the functions of the spa.
DOOR INTERLOCK	Mounted in the doors of the spa skirting.
FILTER	The filter cleans the spa by passing the water through a filtering system where debris and impurities are removed. Top loading means the filter is accessible on the top of the spa, generally by skimmer, in-line filters are under the cabinet near the equipment.
GATE VALVES	T-handled valves located at the inlets and outlets of the equipment. Use while cleaning the filter, the gate valve blocks or opens the water line by the equipment.
HEATER	The thermostatically controlled heater raises the temperature of the water to the desired degree.
HOSE BIB	Used in the draining of the spa, looks like an outdoor faucet and fits standard garden hose.
JETS:	
A - HYDRO	"Cal Maxi-Flow Jets" produces a straight, yet adjustable flow for a therapeutic massage.
B - SWIRL	"Cal Maxi-Swirl Jets" provides a moving, circular therapeutic massage.
C - WHIRLPOOL	Provides an overall swirling therapy similar to what doctors and hospitals recommend for treatment of sore or damaged muscles.
D - AIR INJECTORS	The multiple, smaller 9 hole "buttons" into the air channel which offer tingling, bubbling sensation type of therapy.
E - VERTISSAGE	The large slotted jet which offers a vertically moving massage up and down your back while you sit & enjoy.
F - NECK BLASTER	The dual jet, above water neck massage system with adjustable power.
G - BULLET	Our smallest hydrotherapy jet.

GLOSSARY OF TERMS

MAIN DRAIN

During the operation of the equipment, the main drain works in conjunction with the skimmer to return water to the filter along with the surface and bottom debris, keeping the spa sparkling clean.

NO FREEZE PROTECTION

Used for continuous heating of spa or in colder months to prevent pipes from freezing. Also maintains proper filtration when spa is not being used.

VALVE KNOB

Use to divert air or water to various channels.

SKIMMER

This is the rectangular outlet at the water level. The skimmer moves surface debris to the filter. The water level in the spa should be kept at the center of the skimmer for optimum operation.

TIMER OPERATION

Allows you to set the filtering and heating time of the spa.

USE NO ACID,
Tri-Chlor or Algecide Solutions -
They Ruin Acrylic Spas.

SET-UP AND DELIVERY GUIDELINES

GETTING READY FOR DELIVERY AND SET-UP OF YOUR NEW SPA

ELECTRICAL REQUIREMENTS—ALL SELF-CONTAINED SPAS—110 VOLT OR 220 VOLT ELECTRIC HEATERS.

1. Your 110 volt spa requires an isolated (no other appliances or lights on this circuit at any time) 110 volt, 20 amp circuit breaker.
2. Depending on the model, your 220 volt spa will require a 40, 50 or 60 amp circuit breaker.
3. Extension cords are not to be used in conjunction with operation of the spa. Low voltage damage could result, which is not covered by warranty.
4. If you have any doubts, have your electrical system checked by a qualified electrician.

SURFACE AND PAD REQUIREMENTS:

1. Your new portable spa must be placed on a uniformly firm, flat and level concrete pad. (we recommend a 3 1/2" thick slab). Alternate decking methods require approval.
2. If your spa is to be placed near where sprinklers may hit, adjust or cap them to prevent from hitting on the skirt or spa equipment.

REQUIREMENTS FOR DECKING, GATES AND BALCONIES:

1. Decking must be constructed to support 150 pounds per square foot.
2. Gates must be self-closing and self-locking (California requirements).
3. Balconies must be constructed to current state and local codes (spa load requirements are 150 pounds per square foot).

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BASIC INFORMATION

INTRODUCTION:

Congratulations on the purchase of your new Cal Spa. Our purpose is to provide you with a warm and relaxing bath which incorporates a soothing water massage. In order to maximize the pleasure of your spa, you will need to understand how it works.

All spas work in the same general fashion. A high-powered pump pushes water through the jets which can be very relaxing to sore muscles. Spas today have controls that allow the spa owner to manipulate the water and air flow. All spas will vary in regard to the amount of controls, the size of the spa and the amount of options purchased with it.

Do not be afraid to push buttons and turn knobs. Your new Cal spa is built with quality materials and craftsmanship. It is very hard to harm anything by experimenting with the controls. In fact, this is the best way to get to know your spa.

The following operating and maintenance instructions are very important, and must be followed carefully. With the proper care and maintenance, your Cal spa will provide you with years of satisfaction and performance with a minimum of effort.

- A.** The pump and heater should be operated a minimum of two hours per day for cleaning and heating. (Refer to page 10 for more information on programming the time clock).
- B.** The length of time required to heat your spa to the desired temperature will vary depending on the heater size, season, water temperature, wind velocity, etc. Therefore, this is something each owner must adjust to their liking. We highly recommend using a solar blanket and/or vinyl hard cover to minimize heat loss and to protect your spa when not in use. Covers are available from your local Cal Spas dealer.
- C.** Operating the air blower should be limited to when the spa is in use. Continuous operation increases heat loss and dissipates the chemicals.
- D.** The replaceable filter cartridge is easy to clean and trouble-free. A routine cleaning is the best practice. Make sure the pump is off, remove the cartridge, wash it off with a water hose and reassemble. (Be sure not to over tighten the filter retaining ring). This should be done on a routine basis, whether you feel necessary or not. For more information on filter maintenance, refer to page 9.
- E.** Keep spa filled half (1/2) way up the face of the skimmer plate with water. Never allow water level to drop below the bottom of the skimmer opening. If the water level is too low, the skimmer will allow air into the water lines of the pump, causing it to lose its prime (water flow). Running the pump without water flow will damage the pump seal assembly.
- F.** The power pack system is located under the wood skirt (on portables). The equipment can be serviced by simply opening the doors. Again, because of the safety power shut-off interlock, the doors must be closed for the equipment to operate.
- G.** When spa is on "NO FREEZE PROTECTION" the thermostat will turn the low speed pump "ON" and "OFF" to maintain desired temperature.
- H.** If your spa has a redwood skirt, we recommend to be protected by any wood sealer of your choice, repeat as directions suggest.
- I.** You should drain spa water at least every 3 months and clean it. Use a liquid cleaner that contains no abrasives. Such cleaners would be, for example: 409, Fantastic, or Soft Scrub. DO NOT use a cleanser or hard brushes. After cleaning, we recommend waxing your spa with Spa Gloss. Fill with regular tap water and chemically treat the water for a clean and healthy spa.
- J.** All white lines are air lines. All blue lines are water lines. All red lines are ozonator lines.

**USE NO ACID,
Tri-Chlor or Algecide Solutions -
They Ruin Acrylic Spas.**

GENERAL PRE-OPERATION INSTRUCTIONS

THREE BUTTON PANEL

Different model have different control panels. However, the basic panel consists of three buttons: "Jet", "Light", and "Air". The "Jet" button activates the pump pushing water through the jets. The "Light" button operates on two modes "ON" and "Off". Most spas have the option to add air. The "Air" button activates the air blower injecting air through the air channel producing a soft bubbling effect.



PRIMING PUMP

It is important to make sure that all of the air is out of the equipment pack before operating. To do this follow the procedures below.

- A. Turn power off at the breaker.
- B. Fill spa with water half-way up the face of the "SKIMMER".
- C. Open doors and bleed air from **AIR RELIEF VALVE** located at the top of the pressure Filter located in the equipment area. (SEE FILTER DIAGRAM A, PAGE 9), also bleed the air from the vacuum filter. (SEE DIAGRAM B, PAGE 9).
- D. Make sure **GATE VALVES** are in the up position, and hand tighten all fittings or QUICK DISCONNECTS.
- E. Set **TOGGLE SWITCH** on **NO FREEZE** protection and turn **THERMOSTAT** down.
- F. Turn power on at the breaker.
- G. Close doors and turn **Jets** on for 1 minute, then turn off.
- H. Open doors, turn **THERMOSTAT** to desired temperature. (LOCATED ON EITHER TOP SIDE CONTROL PANEL OR CONTROL BOX).
- I. Leave **TOGGLE SWITCH** on **NO FREEZE PROTECTION** and continue heating until desired temperature has been reached. Usual heating time is 4 to 7 hours. (Remember spa doors must be closed for the equipment to operate).
- J. After Spa has reached desired temperature, set **TOGGLE SWITCH** to **TIMER OPERATION** and set **TIMER**. (SEE TIMER DIAGRAM, PAGE 10).

WARNING

**Do Not Exceed 104°
Excessive Temperature Voids Warranty**

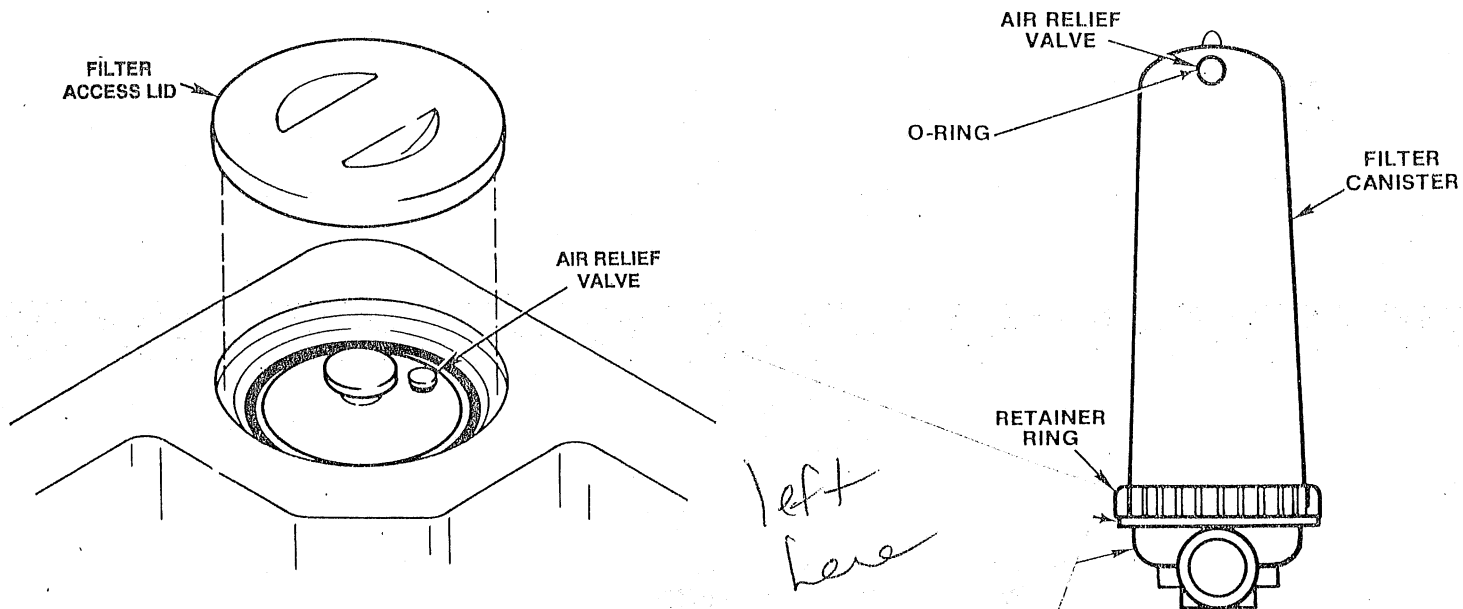
FILTER MAINTENANCE

Filtration starts as soon as flow is steady through the filter. As the filter cartridge removes the dirt from the spa water, the accumulated dirt causes flow resistance. A dirty cartridge will decrease flow and may cause spa not to heat properly.

CLEANING AND REPLACING CARTRIDGE

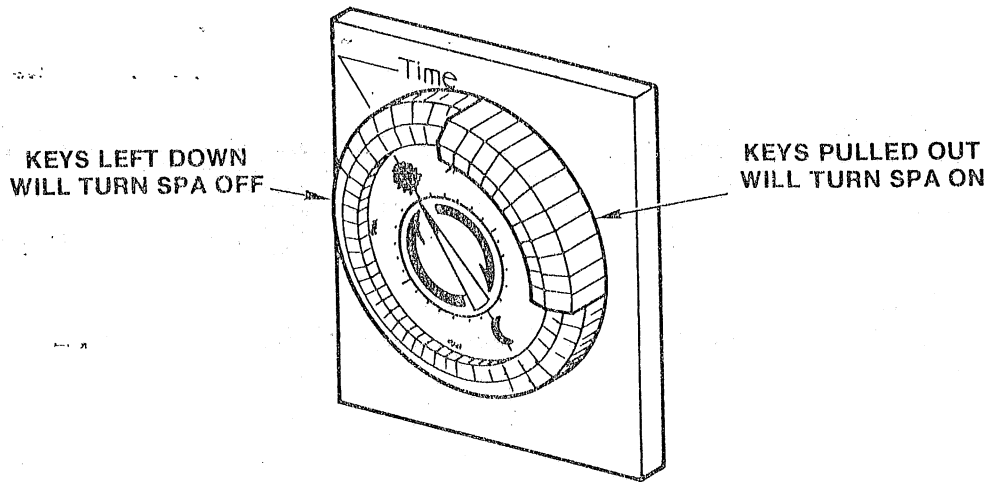
Your Cal Spa filter has been designed to maintain as easy as 1-2-3. The filter should be cleaned at least once every two weeks.

- A. Turn power off at the breaker.
- B. Close **GATE VALVES**. This will prevent spa from draining. (SEE EQUIPMENT DIAGRAM, PAGE 14 or 15).
- C. Unscrew **RETAINING RING** and remove **FILTER CANISTER**.
- D. Remove **CARTRIDGE** and clean with a high pressure nozzle attached to garden hose or soak in cartridge cleaner.
- E. Clean **O-RINGS** and apply a very light film of vaseline to all **O-RINGS** and threads. (SEE FILTER DIAGRAM FOR LOCATION).
- F. Re-install **CARTRIDGE** in **FILTER CANISTER** and place back on **FILTER BASE**.
- G. Screw **RETAINING RING** into **FILTER CANISTER**. **DO NOT OVER TIGHTEN**.
- H. Close **HOSE BIB**, and remove garden hose.
- I. Open **GATE VALVES** and release air from filter **CANISTER** by opening the **AIR RELIEF VALVE** at the top of the **FILTER CANISTER**. When a steady stream of water comes out, hand tighten.



Note: DO NOT overtighten retaining ring, air relief valve, drain plug, or other connections.

TIME CLOCK (220 VOLT UNITS)



TO SET TIMER

- A.** Simply pull out keys to set time desired for the spa to run. (Each key is equivalent to 1/2 hour). We recommended 2 hours a day— one in the A.M. and one in the P.M.
- B.** Keys left pushed in will turn spa off. (As shown above).
- C.** Turn dial clockwise to set the time of day.
- D.** Your spa will be heated and filtered daily, to the temperature set on the thermostat, for the programmed time.

NOTES

Your time clock control units are equipped with a "TOGGLE SWITCH" located above the timer dial on the control box.

Timer operation — The time clock will turn the low speed pump ON or OFF at times selected by user. This is when the spa water is filtered and heated. (Water will heat to temperature set on thermostat, provided running time is adequate). Unit heats 5° to 7° per hour with cover on (220 V).

For ease of operation, use the no freeze protection during the initial starting and heating of your spa. No freeze protection is the same as automatic, with lower temperature setting.

WINTERIZING AND DRAINING YOUR SPA

WINTERIZING:

In areas of the country where the temperature drops below 32° F, it is important to follow these instructions:

1. If the spa is not going to be used, drain completely and store in garage.
2. If you are going to use your spa, set the toggle switch on **NO FREEZE PROTECTION**. This will allow the spa to stay warm. Do not turn unit off with water in the spa, as frozen water may burst plumbing.
3. In areas where sub-freezing temperatures can be expected, the filter should be drained and/or removed from its operating location and stored indoors. Remove and clean cartridge, store with filter housing in secure place. (SEE DIAGRAM, PAGE 9).

DRAINING:

Your spa should be drained once every year using the Ozonator, or once every 3 months without using Ozonator, and filled with clean tap water. There are two recommended methods of spa draining.

METHOD ONE:

1. Turn off power at breaker.
2. Hookup a garden hose to the **hose bib** located in spa equipment area and open **hose bib**.
3. When water begins to drain out of the hose, open **air relief valve** at the top of the **pressure filter** (SEE FILTER DIAGRAM, PAGE 9) and drain water in a convenient place.

METHOD TWO:

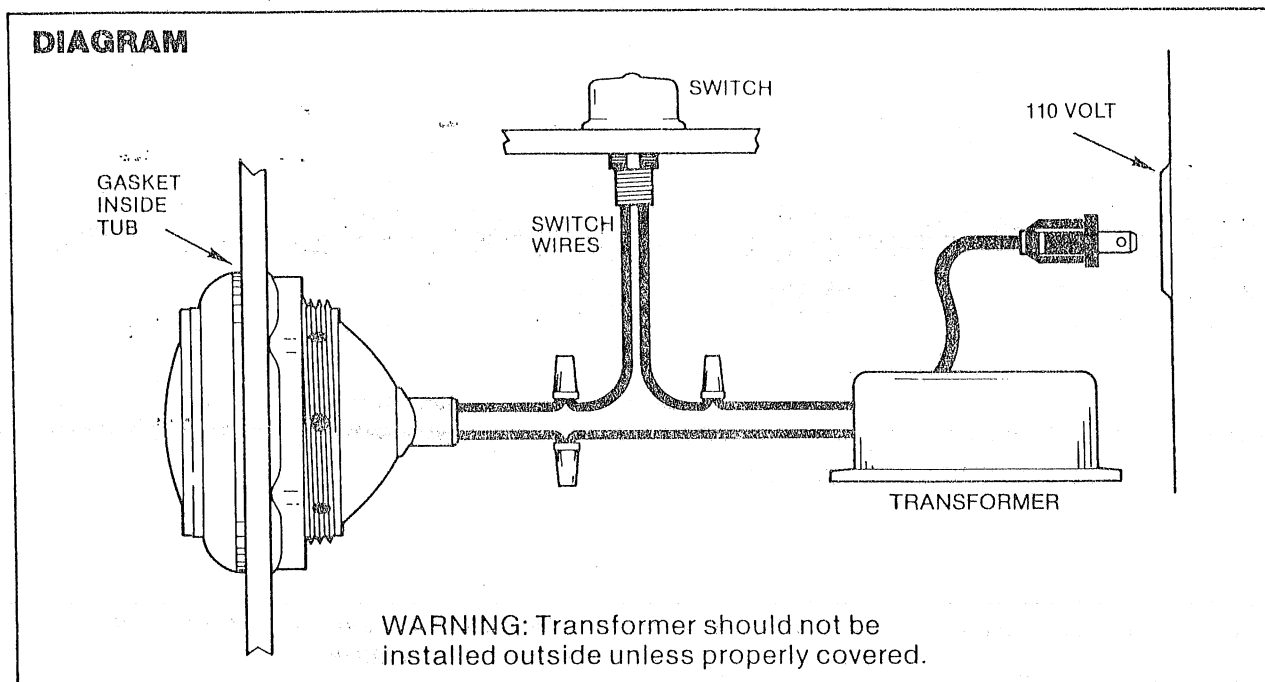
1. Using a garden hose or 1 1/2" flex, place one end in a convenient place for draining.
2. Hold other end of hose on the center of a jet, turn jets on. When water starts to flow out of the other end of the hose, submerge hose into the spa and turn off jets, an automatic syphon will begin.

A small amount of water will remain in the bottom of the spa. This can be taken out by hand or with a WET/DRY vacuum.

WARNING

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SPA LIGHT



SPECIFICATIONS

12 Volt, 20 VA
Flushing — energy limiting
UL listed power supply

Cord Length — 20 feet
Bulb Life — 120 hours
Bulb Type — 912

LAMP REPLACEMENT

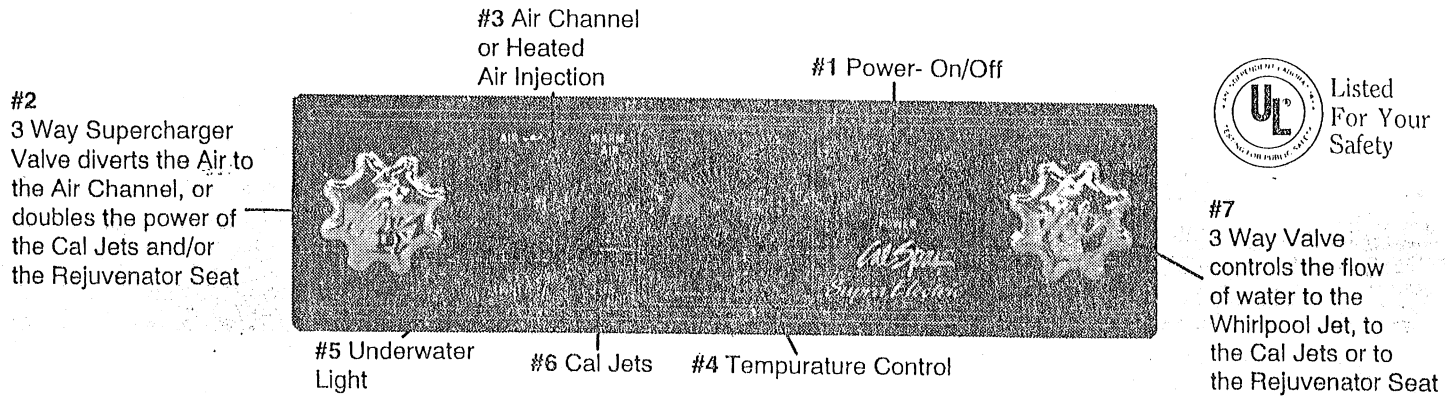
Open doors to spa. Remove lamp from back of light assembly by turning and pulling at the same time. Replace lamp with a 912 bulb and reinsert socket completely in light fixture.

CAUTION

Due to possible overheating, the vent holes at the back of the light housing must be left open. Do not insulate to the point of contact with this part of the light.

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They Ruin Acrylic Spas.**

SUPRA ROTARY SWITCH CONTROL PANEL



Power to the top side control panel is operated by knob #1. Knob #1 does not control the low speed pump. The low speed pump is controlled by either the thermostat setting or the timer.

After air blower being activated by either knob #3, Valve knob #2 is a three-way Supercharge valve which diverts the air to the air channel, or doubles the power to the Cal Jets and/or the Rejuvenator Seat.

Knob #3 activates the Air Blower on high speed mode or low speed mode blowing warm air.

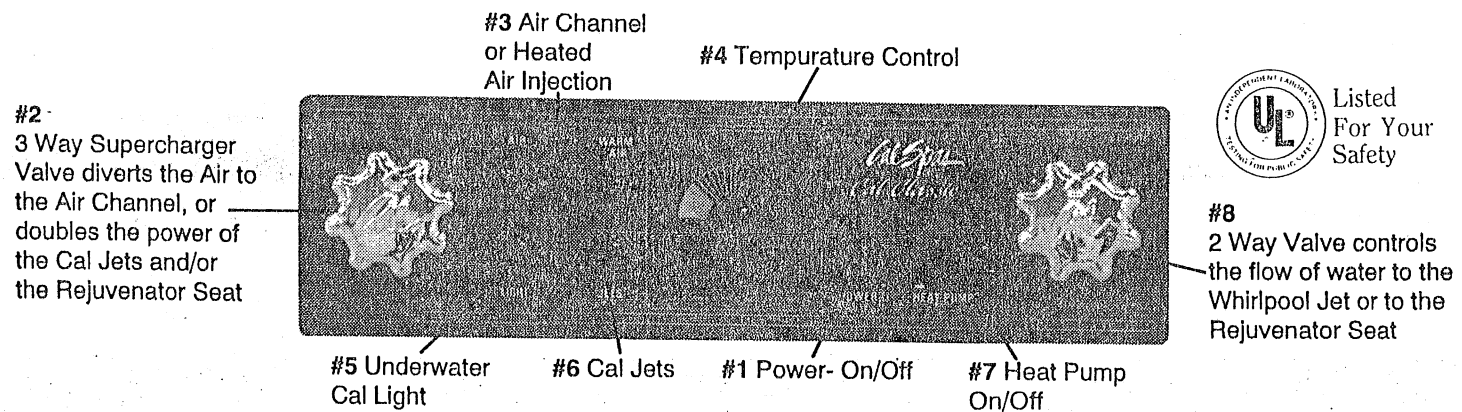
Knob #4 controls the temperature activating the heater and low speed pump.

Knob #5 controls the spa light.

Knob #6 activates the high speed pump for stronger water pressure.

Knob #7 is a three-way valve which controls the flow of water to the Jets, Whirlpool Jet or the the Rejuvenator Seat.

CAL CLASSIC ROTARY SWITCH CONTROL PANEL



Power to the top side control panel is operated by Knob #1. Knob #1 does not control the low speed pump. The low speed pump is controlled by either the thermostat setting or the timer.

After air blower being activated by either Knob #3, Valve Knob #2 is supercharge valve which diverts the air to the air channel, or doubles the power to the Cal Jets and/or the Rejuvenator Seat.

Knob #3 activates the air blower on high speed mode or low speed mode blowing warm air.

Knob #4 controls the temperature activating the heater and low speed pump.

Knob #5 controls the spa light.

Knob #6 activates the high speed pump for stronger water pressure.

Knob #7 activates the heat pump in conjunction with the heater on two positions, Whirlpool and Rejuvenator Seat.

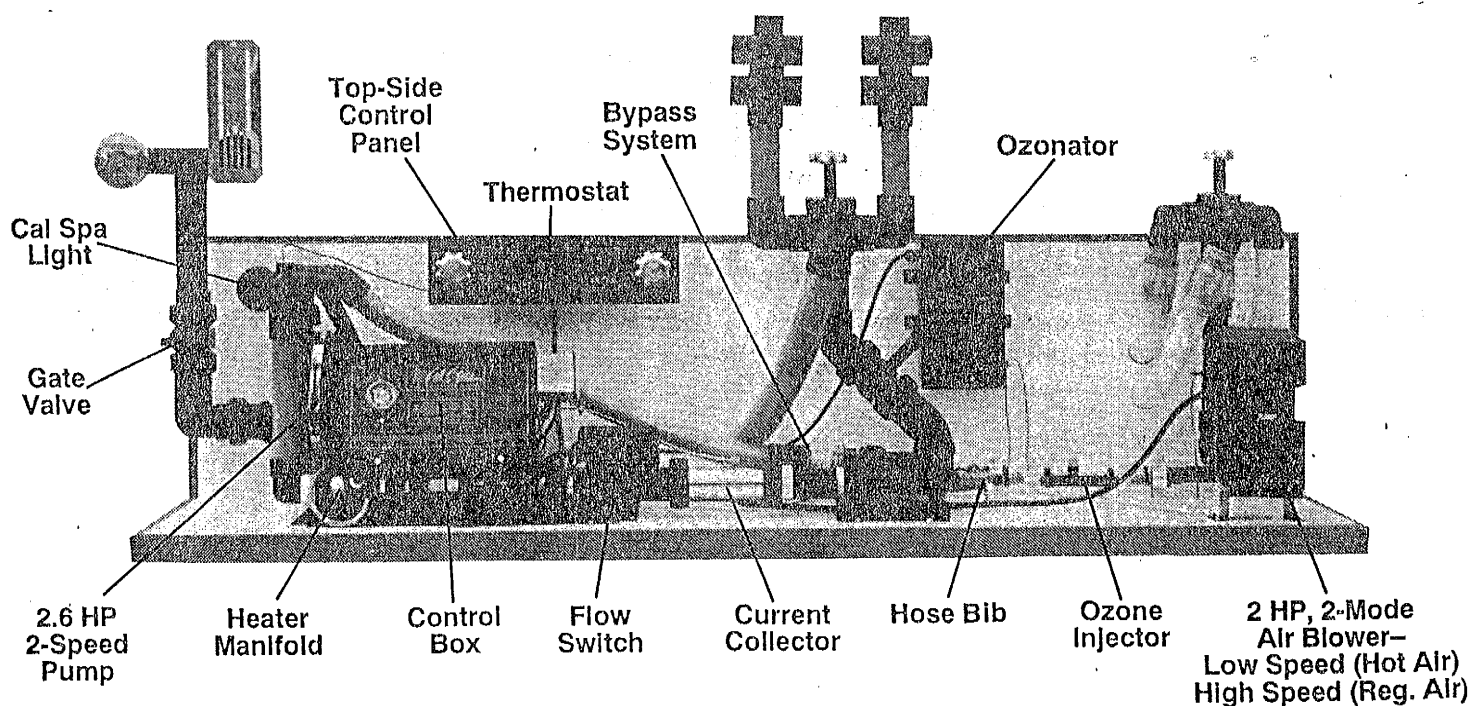
Valve Knob #8 is a two way valve which controls the flow of water to the Whirlpool Jet or the the Rejuvenator Seat.

SUPRA OPERATIONS

The Cal Spa state-of-the-art equipment is designed to be able to identify and locate individual parts for trouble shooting or repair. Remember, whenever you open the doors to the equipment area the system will automatically shut off because of the interlock device located inside the doors. The following information will help you learn how to properly locate and maintain **your spa equipment**.

TURN BREAKER OFF AT HOUSE BEFORE YOU BEGIN. OPEN BOTH DOORS TO SPA.

1. Fill spa to the proper level half-way up to the face of the skimmer. Open **GATE VALVES** (T-handled valves pulled upwardly), hand tighten all fittings including hose bib and air relief valve.
2. Check all plugs, verifying all plugs are in **RECEPTACLES**.
3. Priming the pump or bleeding the air out of the system is an important factor. To insure that all air is out of the equipment pack before operating, open the **AIR RELIEF VALVE** on the top of the **PRESSURE FILTER CANISTER**. Once a steady stream of water is coming out, hand tighten **AIR RELIEF VALVE**, being careful not to over tighten. The **SKIMMER FILTER** is bled through the **AIR RELIEF VALVE**, located on the top of the **FILTER LID**, except that the **SKIMMER FILTER** is a vacuum type, therefore there will always be some air in the canister.
4. When the pump priming is accomplished, follow Pre-Operation Instructions on page 8, items D-J.
5. Appropriate timer use is two hours every day. We suggest 1 hour in the morning, and the second in the evening. This will allow the spa to properly filter the water, and at the same time heat the spa. The timer rotates in a clockwise direction and the time is verified by lining up the time on the dial at the indicator arrow in correlation with the time of day.

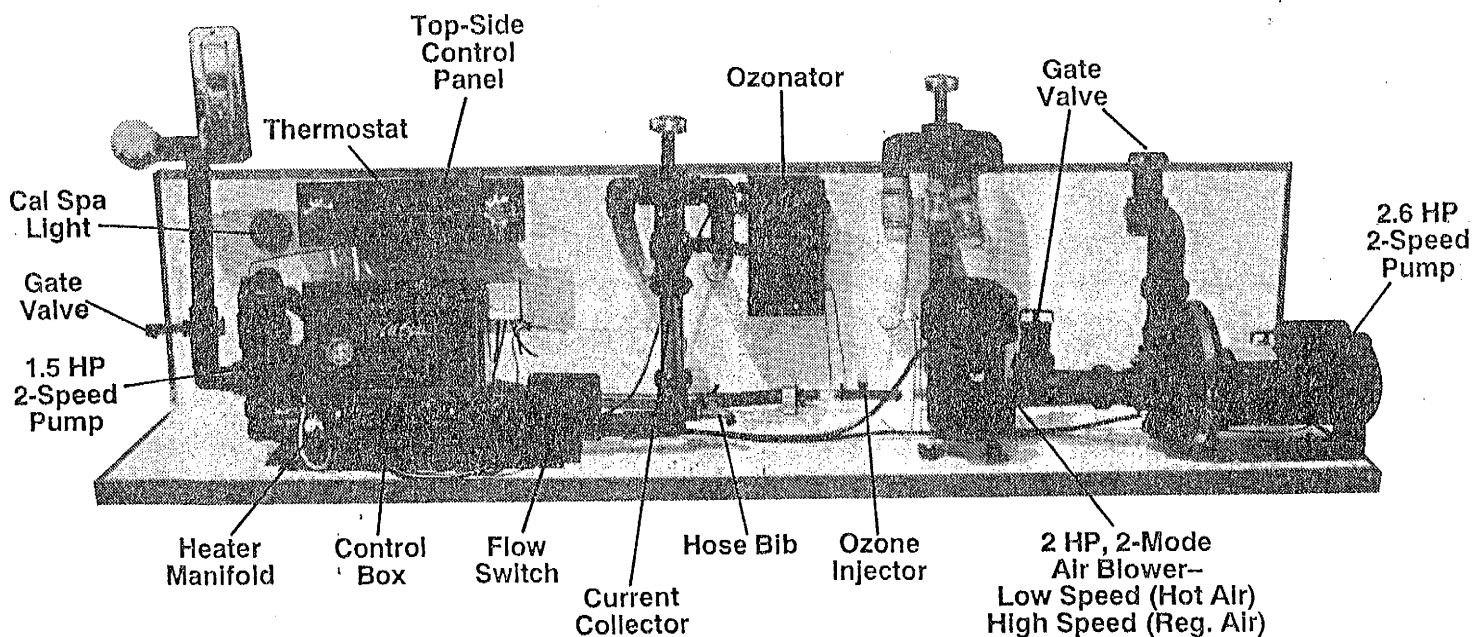


CALIFORNIA CLASSIC OPERATION

The California Classic Electric 220 Spa System is quite unique from the others because it offers a Dual Pump System. One pump has been dedicated to the jets, delivering a true penetrating hydro-massage. The other pump has been plumbed to the Rejuvenator Seat, Whirlpool Jet and filtration system. Like all other Cal Spas Equipment, this unit has been designed for the consumers ease of operation.

TURN BREAKER OFF AT HOUSE BEFORE YOU BEGIN. OPEN BOTH DOORS TO SPA.

1. Fill spa to the proper level-half way up to the face of the skimmer-open gate valves (T-handled valves pulled upwardly). Hand tighten all fittings that may have come loose in shipping or delivery including hose bib and air relief valve.
2. Check all plugs, verifying all plugs are in receptacles.
3. To insure that all air is out of the equipment before operating, open the air relief valve at the top of the pressure filter canister. Once a steady stream of water is coming out, hand tighten air relief valve, being careful not to over tighten.
4. The Hydro Jet pump is located behind the pressure filter. To insure all air is out of the lines, slightly open union at the suction side of the pump. Once all air has ben released, hand tighten the union.
5. The skimmer filter is bled through the air relief valve located on the top of the filter lid, except that the skimmer filter is a vacuum-type filter, therefore there will always be some air in the canister. When pump priming is accomplished, follow Pre-Operation Directions on Page 8 items D-J.
6. Appropriate time use is 2 hours everyday. We suggest one hour in the AM and the other in the PM. This will allow the spa to properly filter the water and at the same time on the dial of the indicator arrow in correlation with the time of day.



PRE-PLANNING STEPS FOR INGROUND INSTALLATION

Selecting the right site for installing your spa is very important. Ease of access, surrounding, architectural styling, landscaping, and other recreational areas are factors in choosing your location.

In order to determine the amount of supplies and length of pipes needed, carefully lay out the measurements of the spa site on paper. The following are a number of considerations that will be helpful in planning.

1. Local codes pertaining to fences, gates, electrical, and plumbing.
2. Finished height of spa rim.
3. Location of pump, filter, and heater.
4. Good site drainage.
5. Wind direction and shielding.
6. Surrounding decking.

DO NOT INSTALL PUMP AND HEATER MORE THAN 20 FEET FROM SPA IF POSSIBLE.

DO NOT INSTALL EQUIPMENT HIGHER THAN SIX INCHES ABOVE WATER LEVEL OF SPA OR LOWER THAN THE BOTTOM LEVEL OF THE SPA

EXCAVATION

Check local codes for trench depths. Dig hole 4 inches deeper than finished spa depth for sand base and one foot large all around to allow for plumbing and back fill. See drawing.

PRE-PLUMBING SPA

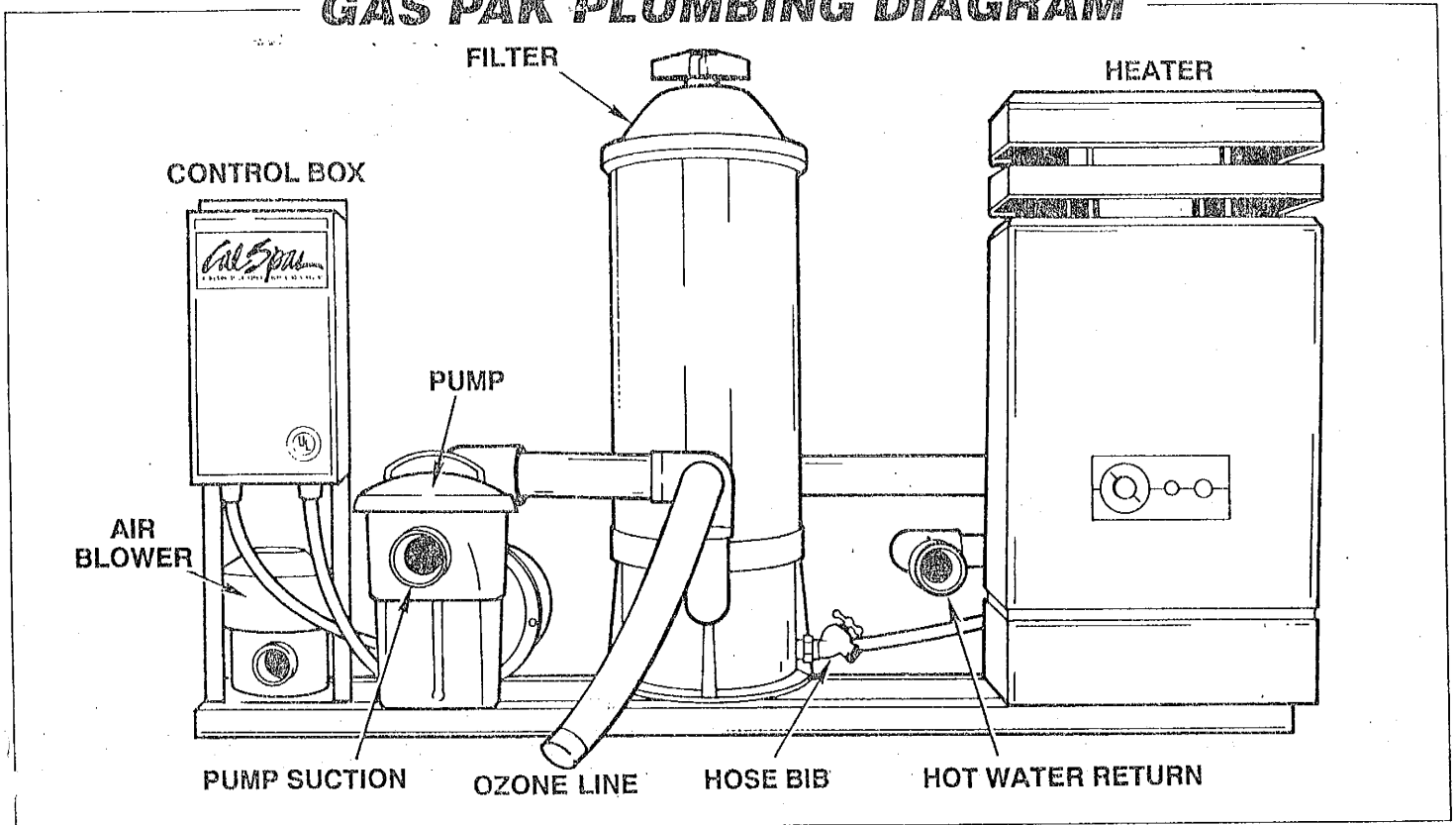
The spa should be pre-plumbed and "water-tested" before setting it into the hole. Without enough people to help carefully set this spa into the hole, pipes and fitting can be knocked loose. Be sure to have plenty of help at this critical time.

WARNING

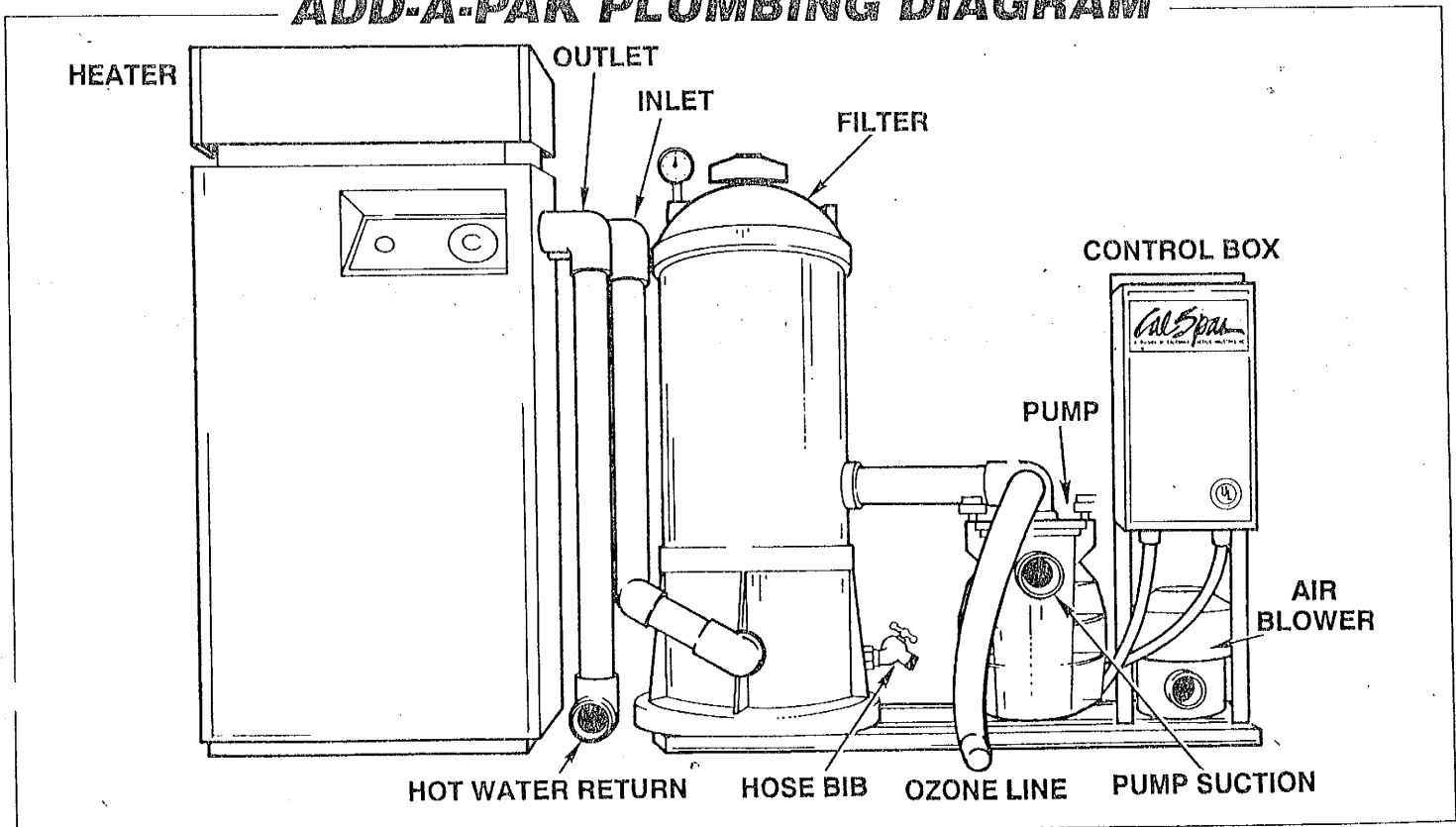
**Do Not Exceed 104°
Excessive Temperature Voids Warranty**

SPA INSTALLATIONS

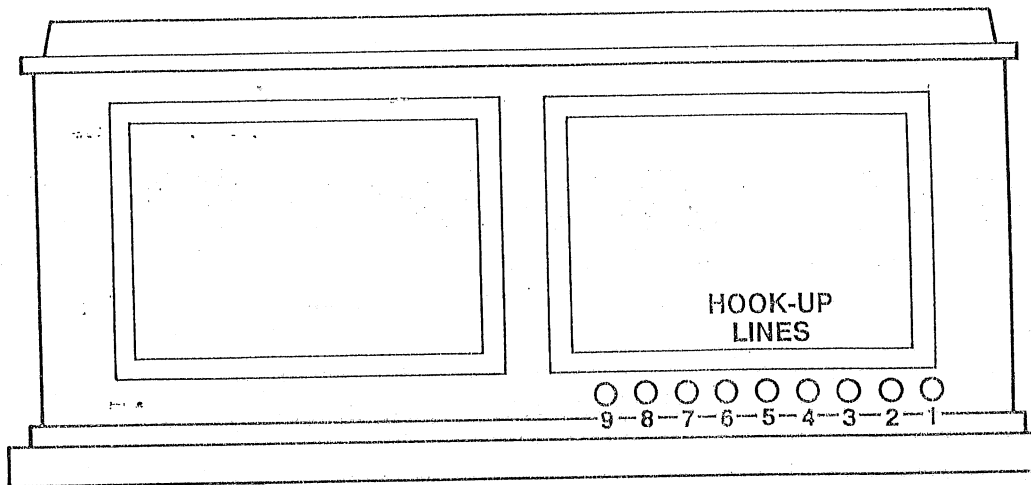
GAS PAK PLUMBING DIAGRAM



ADD-A-PAK PLUMBING DIAGRAM



PLUMBING



PORTABLE SPA GAS PACK HOOK-UP

The hook-up lines are located on the back side of your portable spa. Facing the back side the hook-up is generally located in the lower right-hand portion of the spa.

Waterfall:

The waterfall spa has nine hook-up lines.

Line #1 is for the air line.

Line #2 is for the inground light.

Line #3 is for the booster pump suction.

Line #4 is for the skimmer suction.

Line #5 is for the waterfall/swim jets.

Line #6 is for the super charged jets.

Line #7 is for the jets return/rejuvenator

Line #8 is for the air line.

Line #9 is for the ozonator.

Cal Classic:

The Cal Classic spa has seven hook-up lines.

Line #1 is for the skimmer suction.

Line #2 is for the booster pump suction.

Line #3 is for the water return valve.

Line #4 is for the jets return.

Line #5 is for the super charged jets.

Line #6 is for the air line.

Line #7 is for the ozonator.

Swim Spa:

The Swim Spa has six hook-up lines.

Line #1 is for the booster pump suction.

Line #2 is for the super charged jets.

Line #3 is for the heating pump suction.

Line #4 is for the rejuvenator seat return.

Line #5 is for the air line.

Line #6 is for the ozonator.

Supra:

The Supra spa has four hook-up lines.

Line #1 is for the air line.

Line #2 is for the suction.

Line #3 is for the jets return.

Line #4 is ozonator.

A quick method to verify the location of each line is to:

A. Set the Air Control Diverter Valve to the Air Channel position.

B. Set the Water Control Diverter Valve to the Jet position.

C. From the back side of your spa, place a garden hose into one of the lines. Wrap a cloth around the hose and the line so that the water will not back out of the line.

D. Turn on the garden hose and watch for water spurting into your spa. If water is spurting through the Air Channel, this would indicate the Air Inlet line. If water is entering through the Jets, this would indicate the Water Inlet line.

PLUMBING

After it has been decided where the jets are to be installed and marked, the holes can be cut in the spa wall. A standard hole saw of the proper size can be used. Next, the thru-wall fittings and the jets can be installed. Depending on the fitting manufacturer and how the assembly of the jet is accomplished, it is recommended that a fine bead of clear silicone be placed on the inner flange flush to the spa wall.

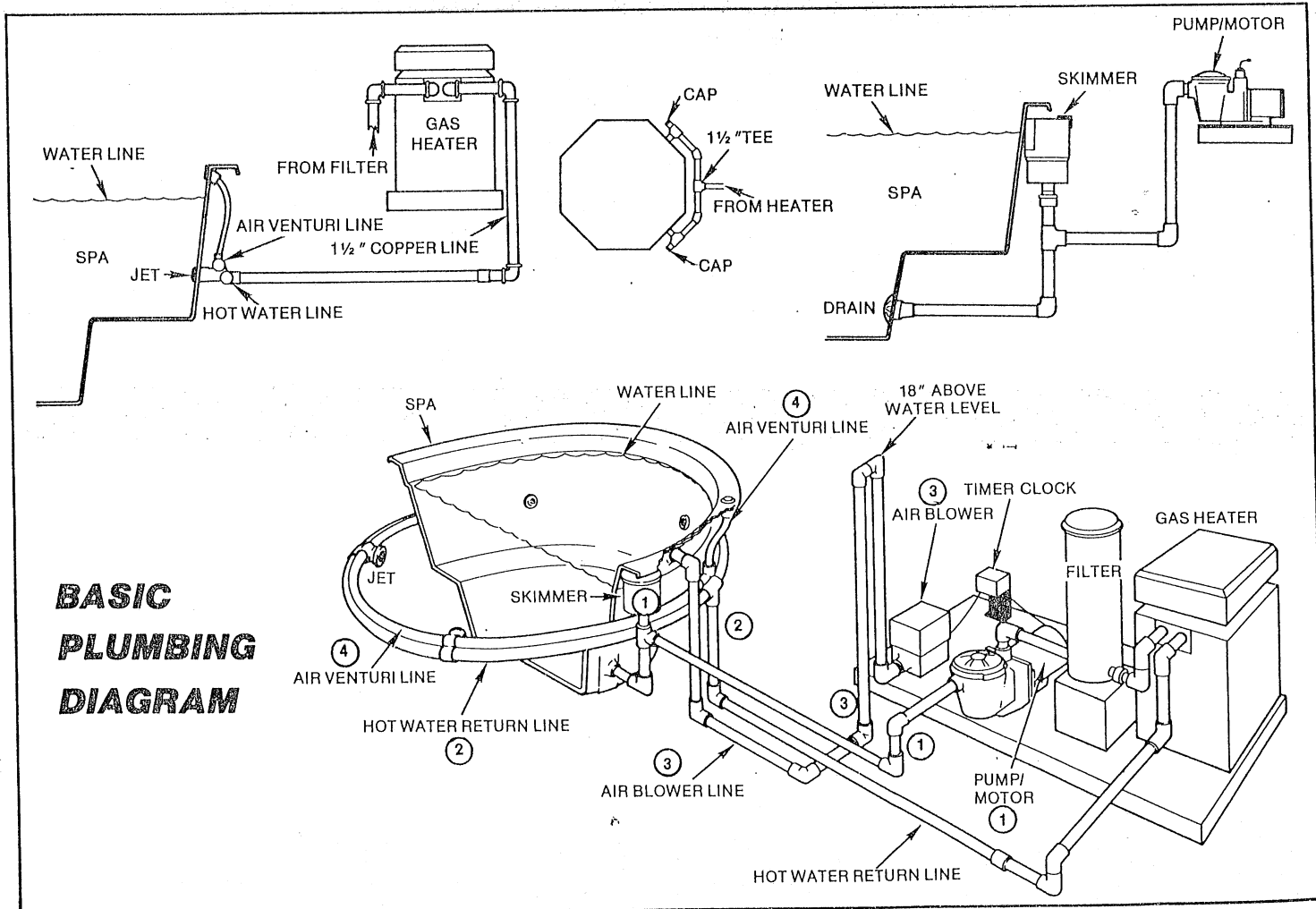
When tightening the jet to the wall fitting, never over-tighten. A good rule is approximately one and one-half turns beyond tight.

Prior to plumbing the spa, it should be predetermined at which point on the spa it should be stubbed out. The plumbing should be stubbed out to line up with all piping that goes to the equipment.

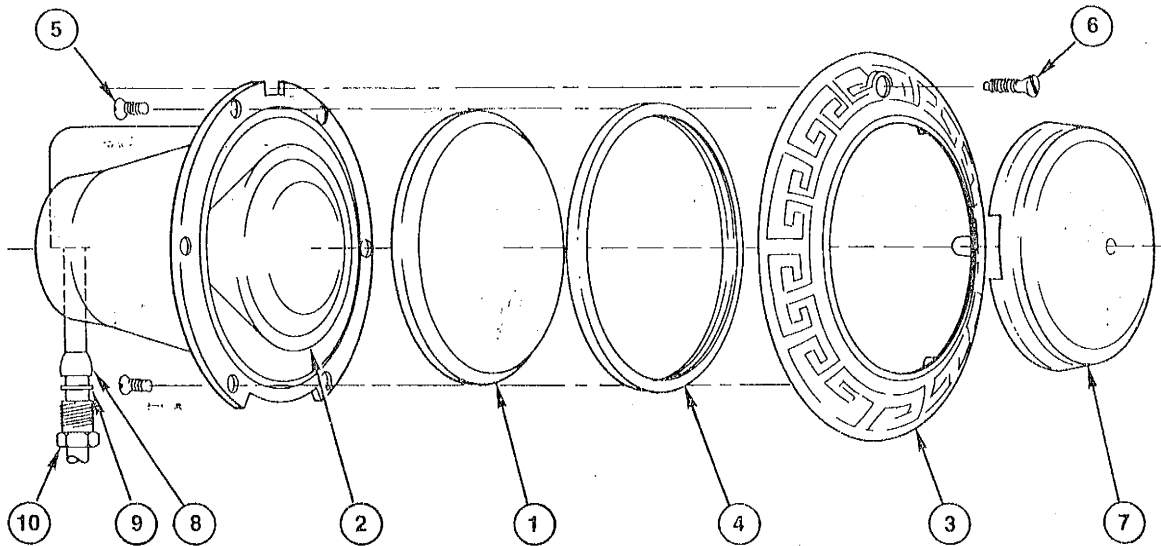
The manifold piping around the spa can now be completed. The jets that have been installed in the spa can now be joined together through common plumbing. It isn't necessary to completely loop the plumbing to all the jets to get equal flow. It is, however, necessary that the inlet from the pump be split equally among the jets. The line that supplies the air to the venturi should be plumbed in the same manner. This air line should be brought up to the highest point possible on the water much faster than if it is plumbed at a lower depth.

The main drain can be installed in the same manner as the jets using a hole saw or a jigsaw to cut the hole, and silicone to insure a proper seal. The main drain plumbing should be interconnected with the skimmer plumbing by the way of a "T" fitting. The line from this "T" to the pump should be 1-1/2" inches. The main drain should be equipped with an approved anti-vortex cover or other safety device.

The main lines that run from the equipment to the spa should never be reduced in size from that recommended by the manufacturer. Any reduction in size could dramatically impair the performance. Straight runs of pipe, eliminating turns and 90° angles, will also improve performance. Several diagrams are included in this booklet that should be helpful in pre-plumbing and setting up the equipment.

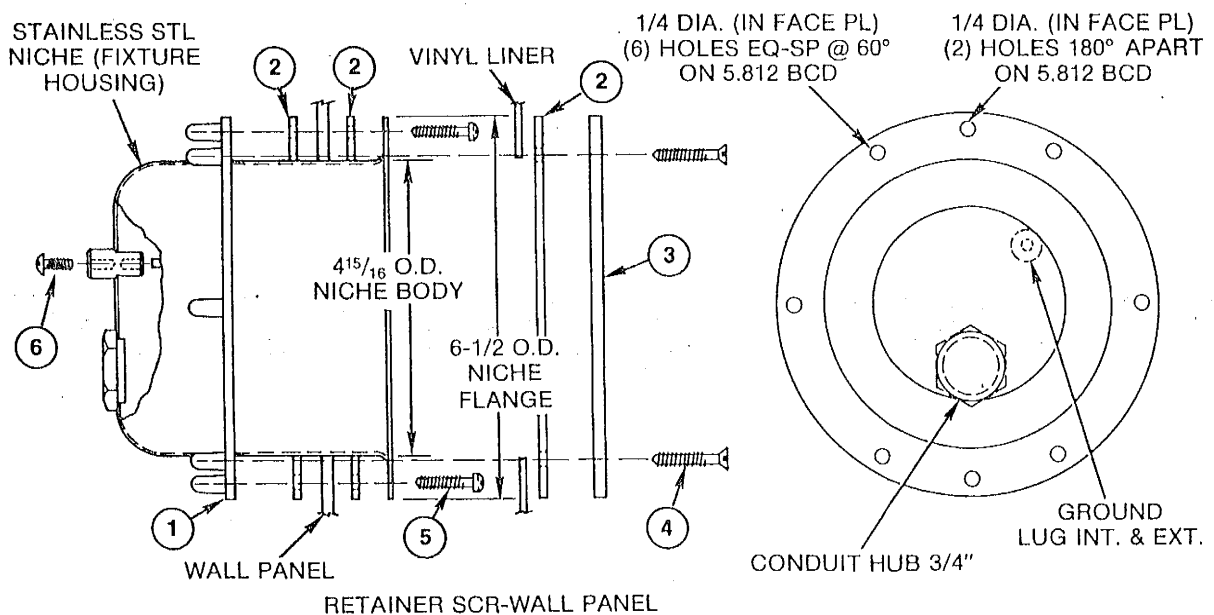


INGROUND SPA LIGHT UNIT



- | | |
|---|--|
| <ul style="list-style-type: none"> 1. Lens clear, 4" diameter, tempered 2. Floodlamp, medium base, 100 watt 120 volt (protected by GFCI) 2. Floodlamp, medium base, 10 watt 12 volt 3. Face ring, brass-chrome 4. Gasket for 4" diameter lens 5. Screw, stainless steel 10-24 x 1/2" (6 required) | <ul style="list-style-type: none"> 6. Pilot screw captive gum washer 7. Kwik-change color lens, red 7. Kwik-change color lens, blue 8. Grommet, 1/2" 9. Friction ring, 1/2" 10. compression plug |
|---|--|

INGROUND SPA LIGHT NICHE



- | | |
|--|---|
| <ul style="list-style-type: none"> 1. Back-up ring, brass, for niche 2. Gasket, each for niche (3 required) 3. Sealing ring, brass-chrome for niche | <ul style="list-style-type: none"> 4. Sealing screw, each 10- 24" x 1-1/8" flat head stainless steel for niche (6 required) mounting ring, brass 5. Screw, retainer, fillister head, 12-24" x 3/4" 6. Screw, grounding 10-24" x 1/2" |
|--|---|

INGROUND INSTALLATION

Water test spa above ground prior to placing in ground. Also, install no decking around spa until spa has operated for an adequate amount of time to assure all parties that there are no leaks.

Mound 8" of wet sand in bottom of excavation for spa to rest on.

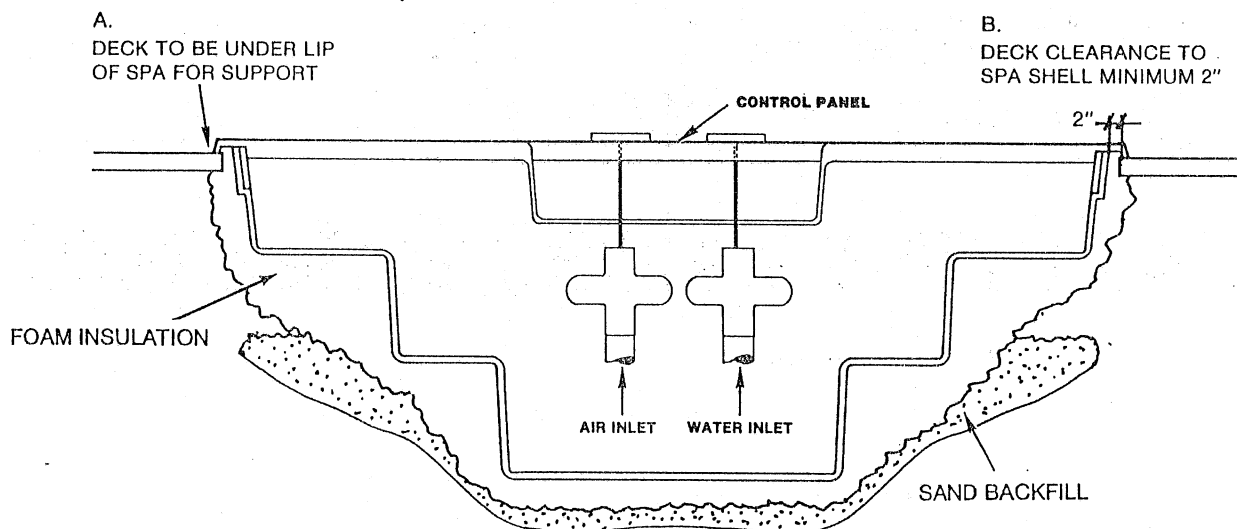
Before lowering spa into excavation, be sure that the finished rim elevation is established in relation to ground level.

Carefully lower spa into excavation centering on the mound of sand. With a downward force and slightly rotating back and forth, work spa into measured level. Pack sand around main drain and under bottom of spa leaving no voids.

Set 2 x 4 on rim of spa with level, then rotate 2 x 4 checking level in all directions. Make sure that sand is filling all voids under bottom.

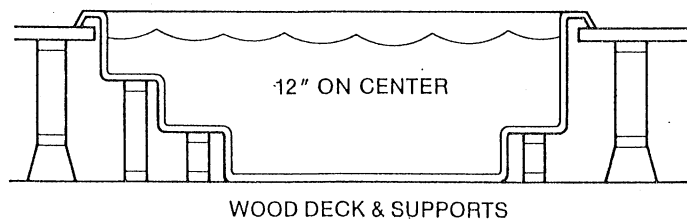
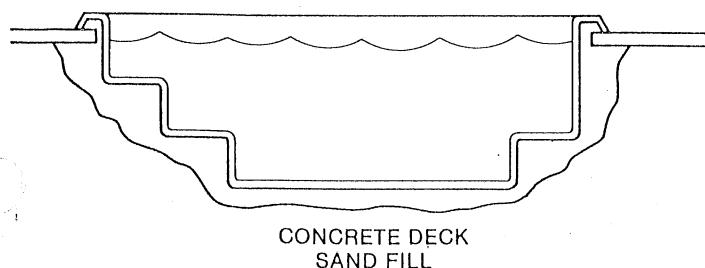
Prior to backfilling the remainder, fill the footwell area of the spa with water to assist in leveling. During the backfilling, fill all voids under bottom.

Backfill in one foot increments. After each level, use a water hose to swirl water in and around backfill being careful not to flood the excavation. This process will ensure that all the sand is formed around the sides of the spa leaving no voids after the water has drained through. Do not backfill sand around jet plumbing of the spa until spa has been completely hooked to the equipment and run to check for possible leaks.



INGROUND SPA DECK REQUIREMENTS

- A. Deck must go under lip of spa uniformly for proper lip support. Lip is not to bear any weight from spa. Deck is only to stop lip from flexing when stepped or sat on.
- B. Deck must not be poured up against spa, since cement expands and contracts as temperature changes. Leave a gap of 2" from shell for proper structure protection.



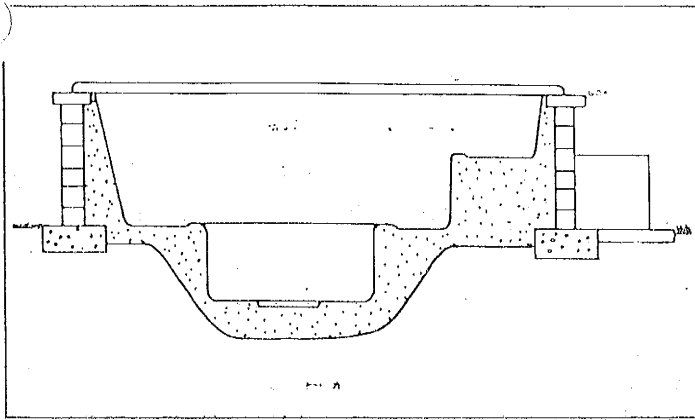
SPA MUST SET ON A SOLID BASE.

SPA AND LIP MUST SET ON A SOLID BASE.

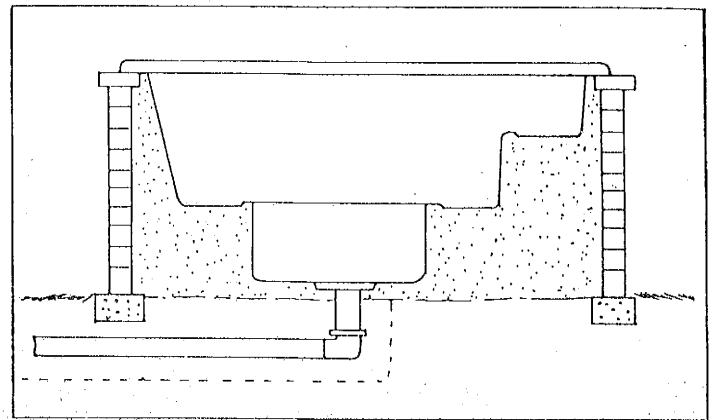
SUPPORTS MUST BE 12" MIN. O.C. ON STATS.

LIPS MUST SET ON A SOLID SURFACE.

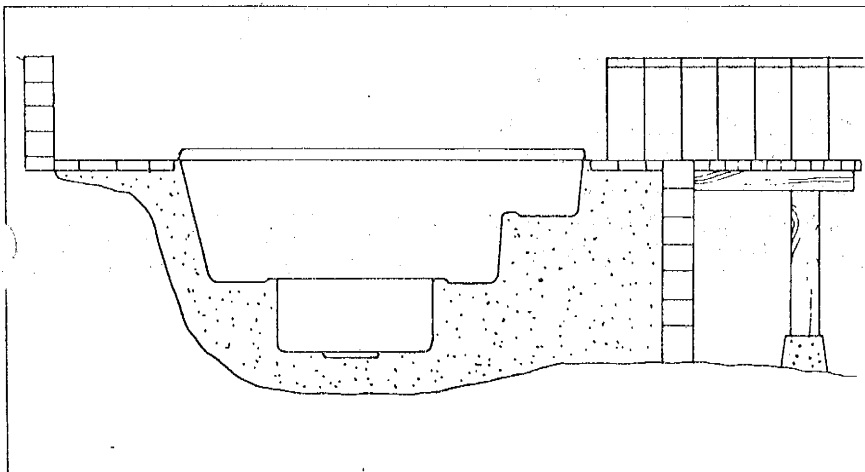
INSTALLATION TECHNIQUES



LEFT: Excavation for partially above-ground spa will depend on how deep you want to set it. In this example, excavation is required for the footwell area of the spa and for concrete footings for retainer walls.



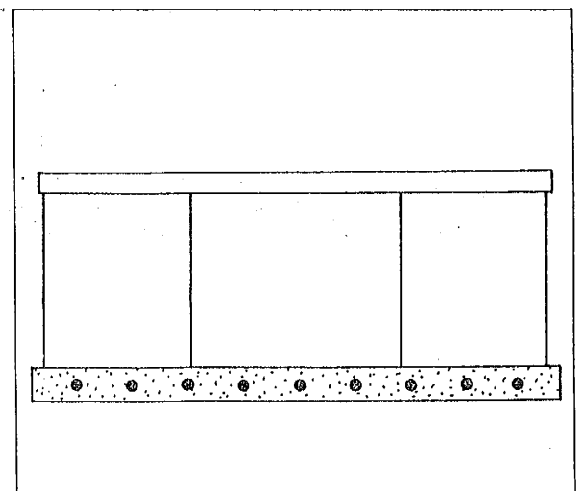
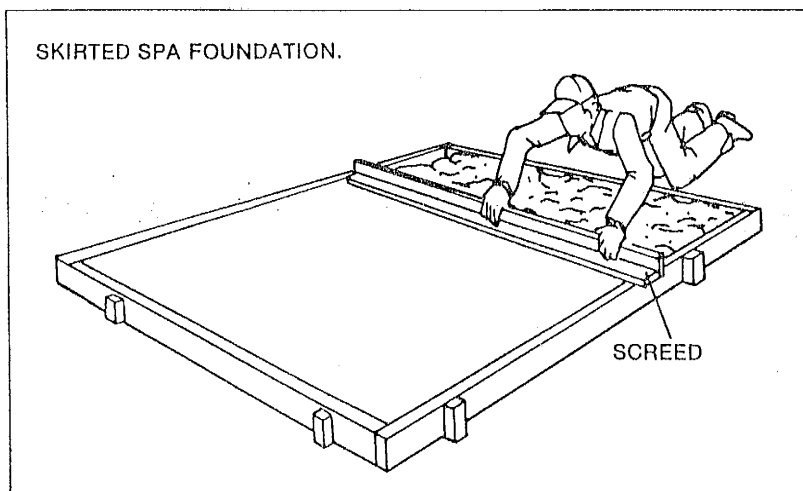
RIGHT: Above ground spa require a trench under wall footings for plumbing. Walls can be brick, concrete block or poured concrete.



On a steep hillside, retainer walls are used on both the uphill and downhill sides of the spa excavation. In some situations, this method may be easier than trying to level a large area around the spa.

Hillside tub must have a retaining wall on uphill side only. This installation requires a minimum of decking. Deck should have safety railing.

SKIRTED SPA FOUNDATION.



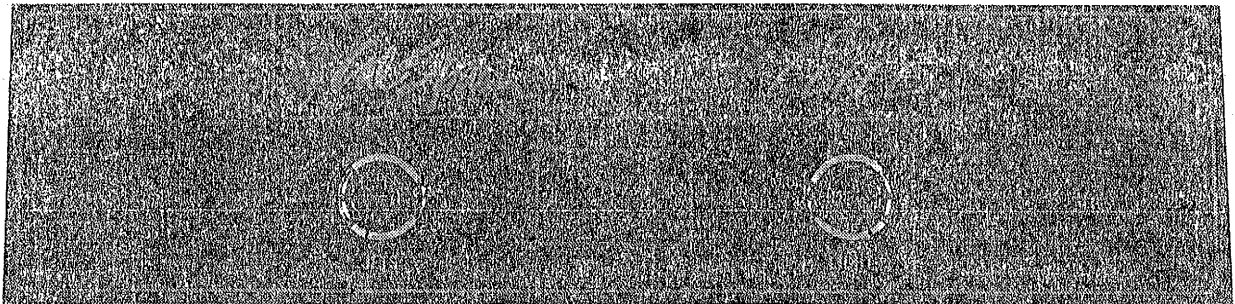
Build concrete form of 2 x 4 and 1 x 2 stakes as shown. Excavate 2 inches below bottom of forms and fill with clean sand. Lay a 1-foot-square grid of 1/2 inch reinforcing rods over leveled sand bed. Tie rods together with bailing wire. Mix concrete and pour it in the form. Spread concrete evenly with a sturdy steel rake.

Level concrete with a screed built from 1 x 4's as shown. Pull the screed toward you with a side-topside zigzag motion. When concrete is leveled, smooth out with a large mason's float. Allow concrete to cure at least one week before setting tub.

QUICK CONTROL PANEL GUIDE

Cal Spas introduces the Econo-Line and Eliminator Series portable spas, where luxury meets with affordable prices. These units, like all other Cal Spa control panels, have been designed for the consumer's ease of operation. These few basic steps will guide you.

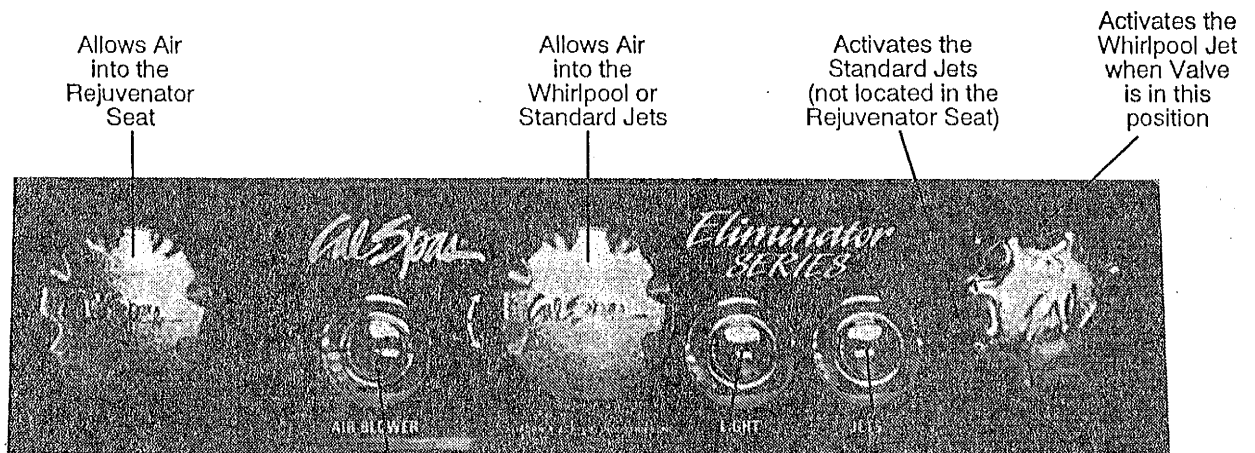
ECONO-LINE



Activates the Jets

Activates the Spa Light

ELIMINATOR SERIES



Allows Air into the Rejuvenator Seat

Allows Air into the Whirlpool or Standard Jets

Activates the Standard Jets (not located in the Rejuvenator Seat)

Activates the Whirlpool Jet when Valve is in this position

Activates Air Blower

Activates Spa Light

Activates the Jets

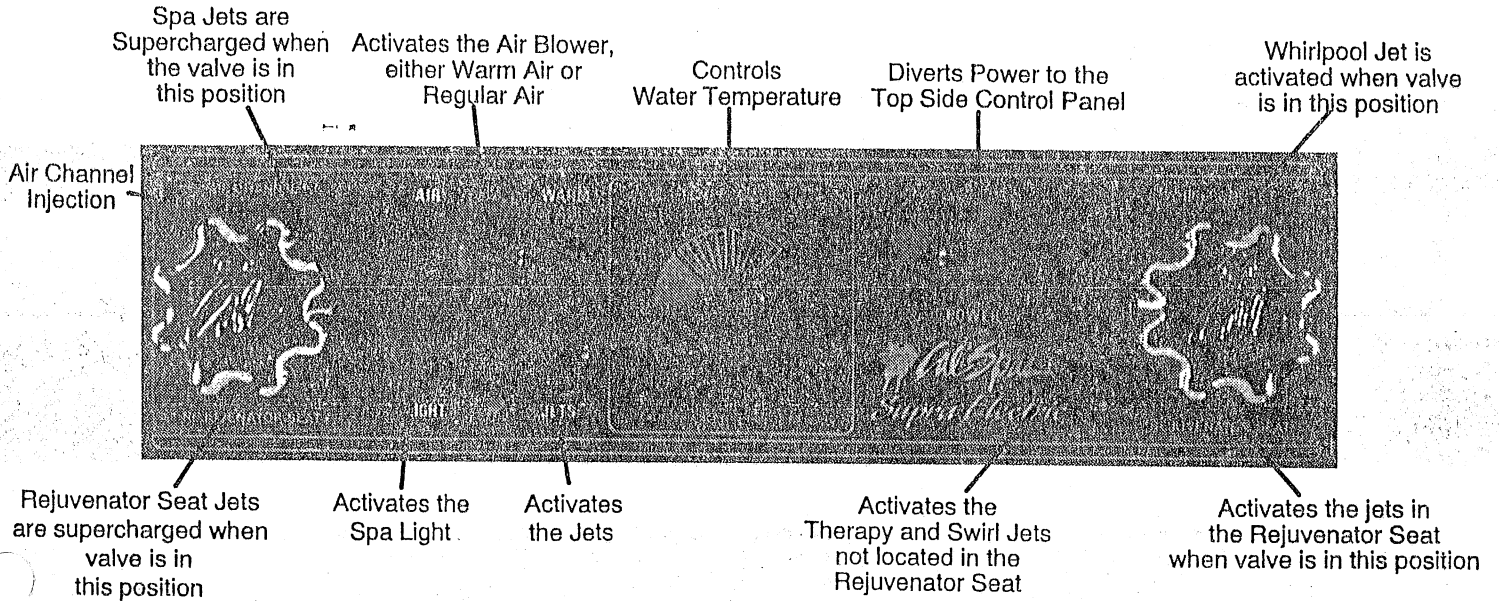
Activates the Jets in the Rejuvenator Seat when Valve is in this position

QUICK CONTROL PANEL GUIDE

SUPRA SERIES

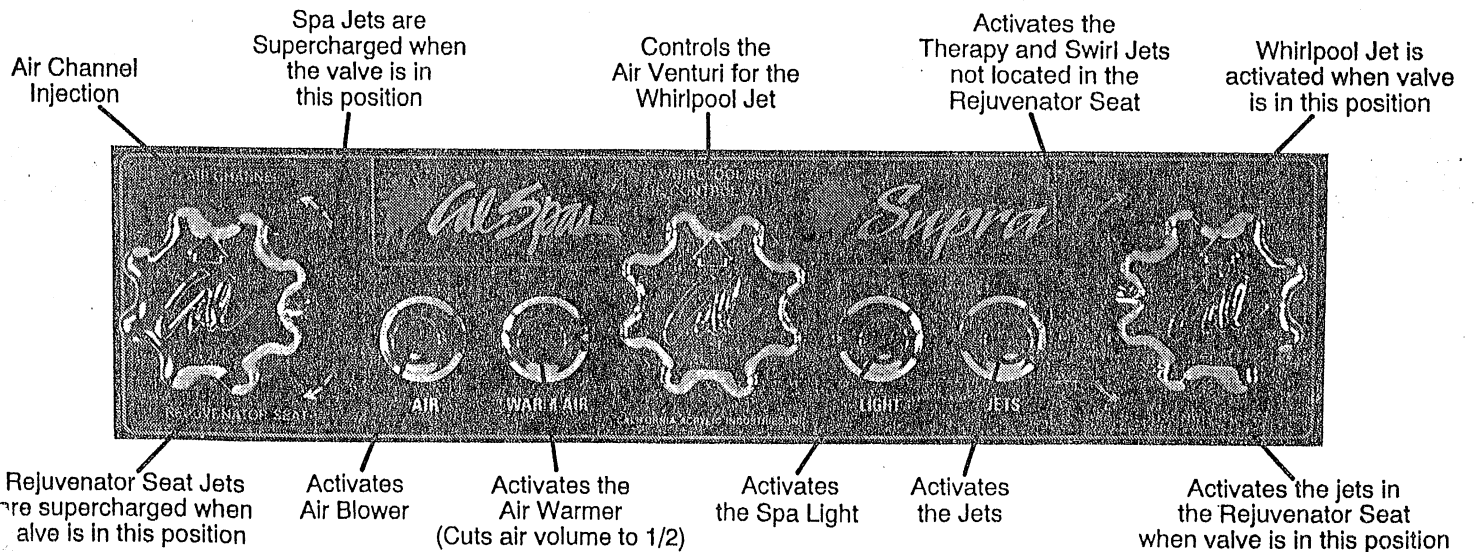
The Supra Spa control panel shown below is used on our electric equipment packs only. These few basic explanations will guide you to complete control.

This particular control panel has three (3) large knobs. The left knob controls your air functions. The center knob controls your temperature and the right knob controls your water functions.



The Supra control panel shown below is used on our gas equipment packs only. These few basic explanations will guide you.

This particular control panel has three (3) large knobs. The left knob controls your air functions. The center knob controls your air venturi and the right knob controls your water functions.

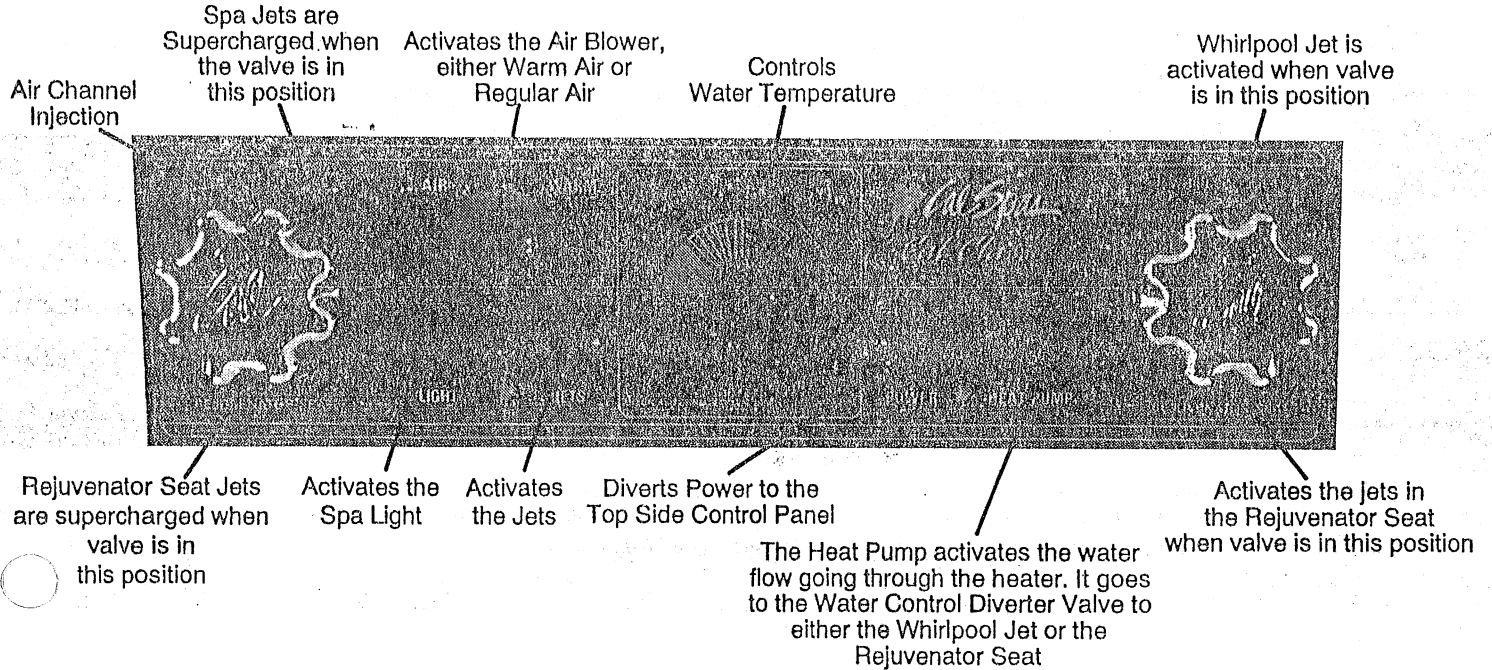


QUICK CONTROL PANEL GUIDE

CALIFORNIA CLASSIC

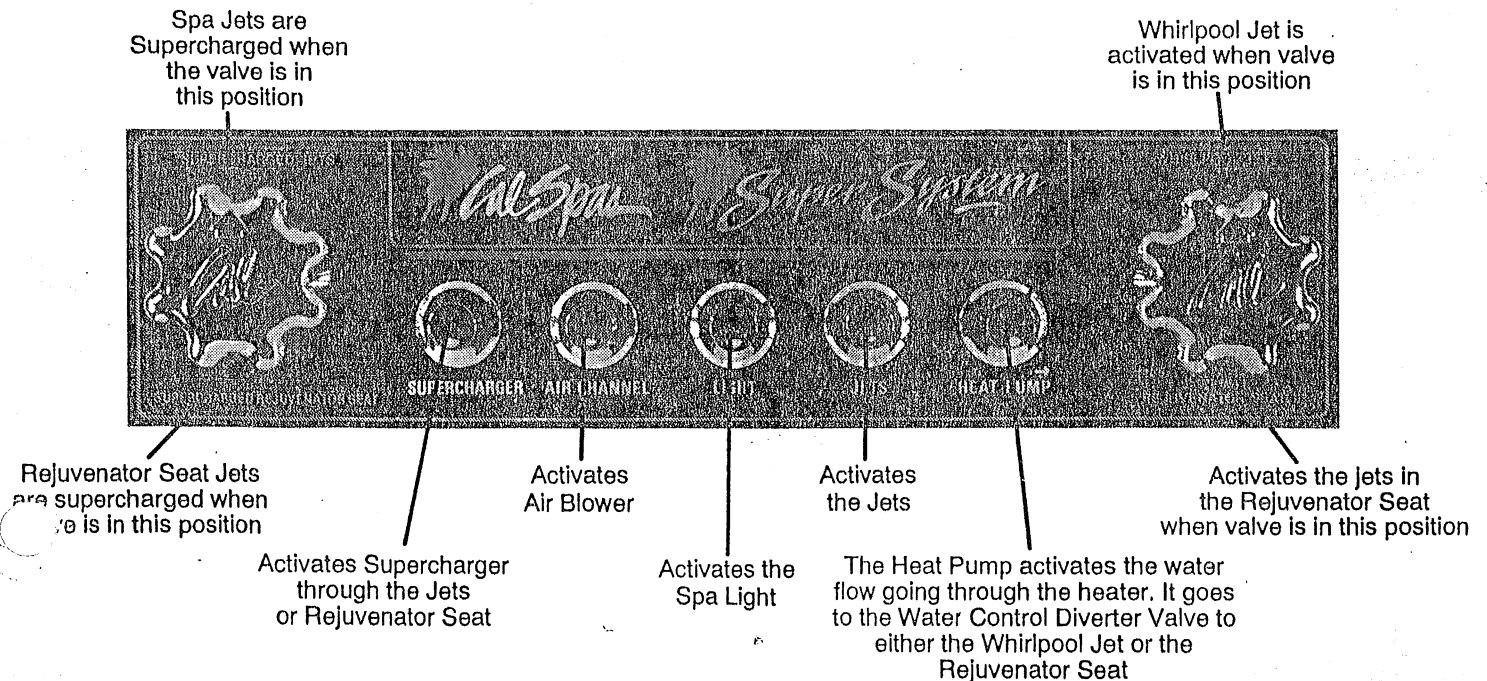
The Classic Spa control panel shown below is used on our electric equipment packs only. These few basic explanations will guide you to complete control.

This particular control panel has three (3) large knobs. The left knob controls your air functions. The center knob controls your temperature and the right knob controls your water functions.



The Classic Spa control panel shown below is used on our gas equipment packs only. These few basic explanations will guide you to complete control.

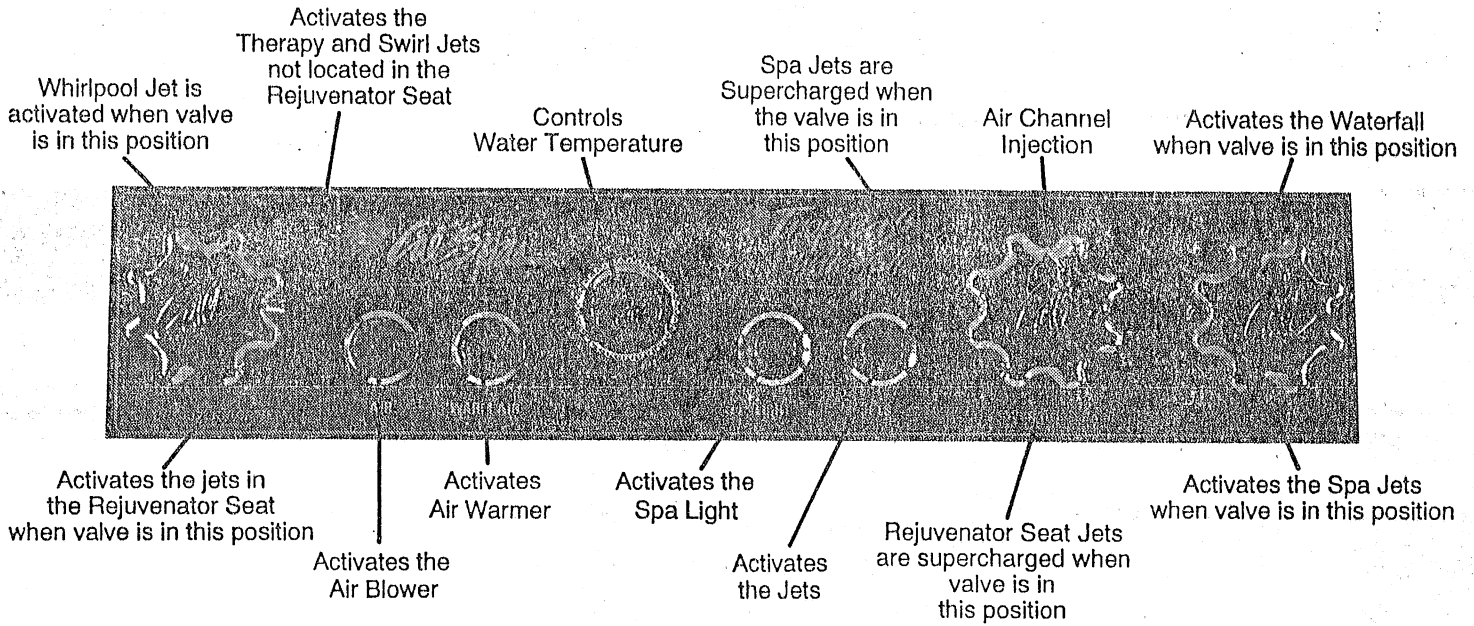
This particular control panel has two (2) large knobs. The left knob controls your air functions. The right knob controls your water functions.



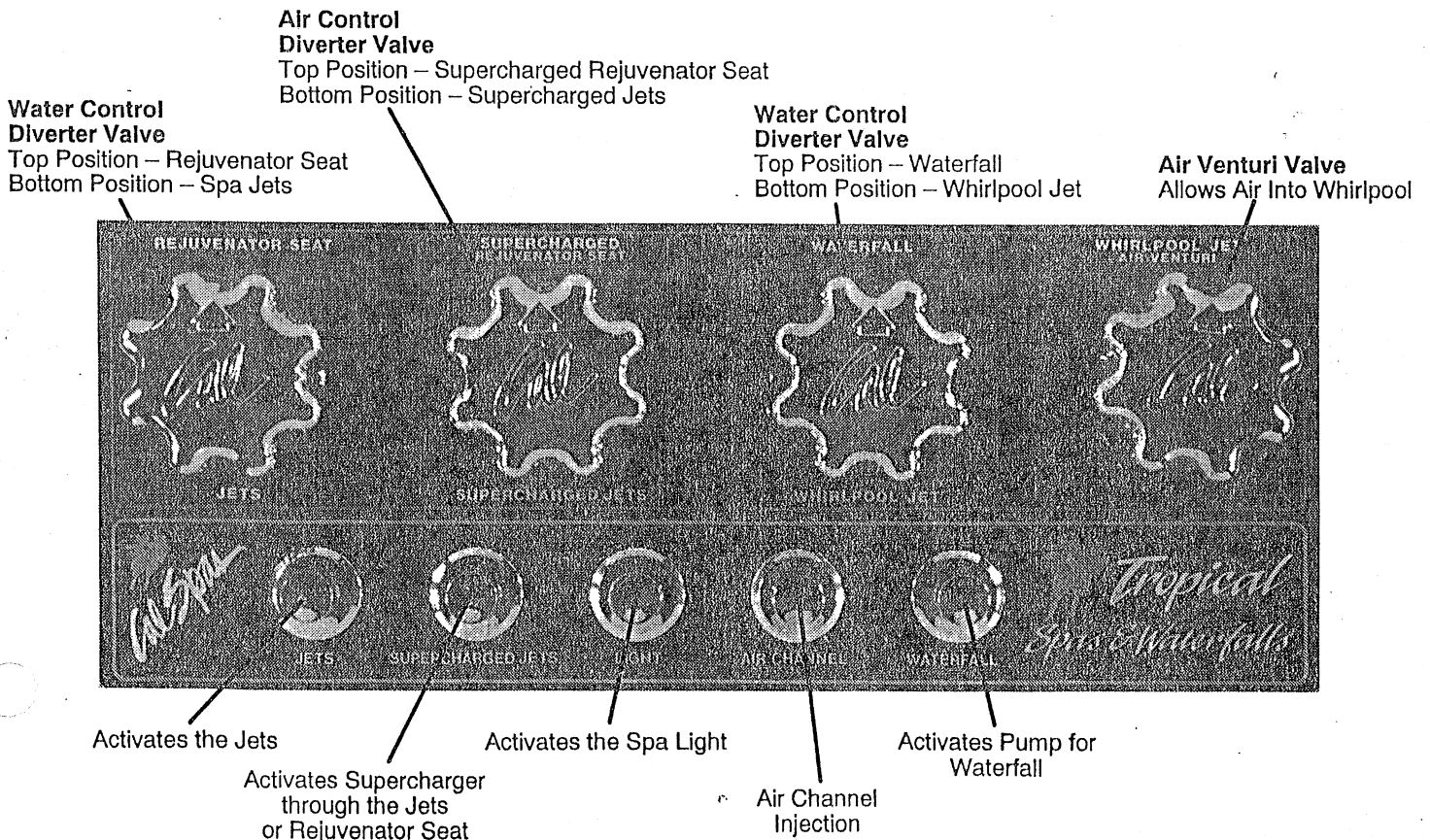
QUICK CONTROL PANEL GUIDE

TROPICAL WATERFALL SPA 8'x10'

This Waterfall control panel is used on our electric equipment packs only. These few basic explanations will put you in complete control.



TROPICAL WATERFALL SPA 12'x18'



QUICK CONTROL PANEL GUIDE

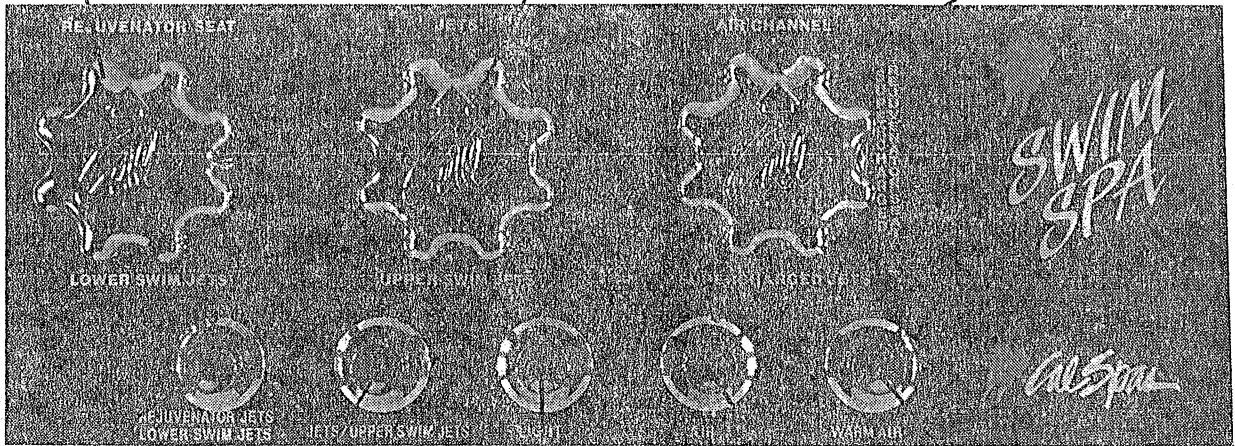
SWIM SPA

The control panel shown below is used with the incredible Swim Spa. These few basic explanations will put you in complete control.

2 Way Valve – controls the power of the 2.6 hp, 2 speed water pump. Top activates the Rejuvenator Seat, bottom activates the lower Swim Jets.

2 Way Valve – controls the power of the 2.6 hp (or 4.0 hp on upgraded models), 1 speed water pump. Top activates all jets including the Neck Blaster, bottom activates upper Swim Jets.

3 Way Valve – controls the power of the 2.0 hp Air Blower. Top activates Air Channel, middle-right supercharges the Rejuvenator Seat, bottom supercharges Jets.



Activates hi-speed to Rejuvenator Seat or hi-speed to lower Swim Jets

Hi-speed to jets or hi-speed to upper Swim Jets

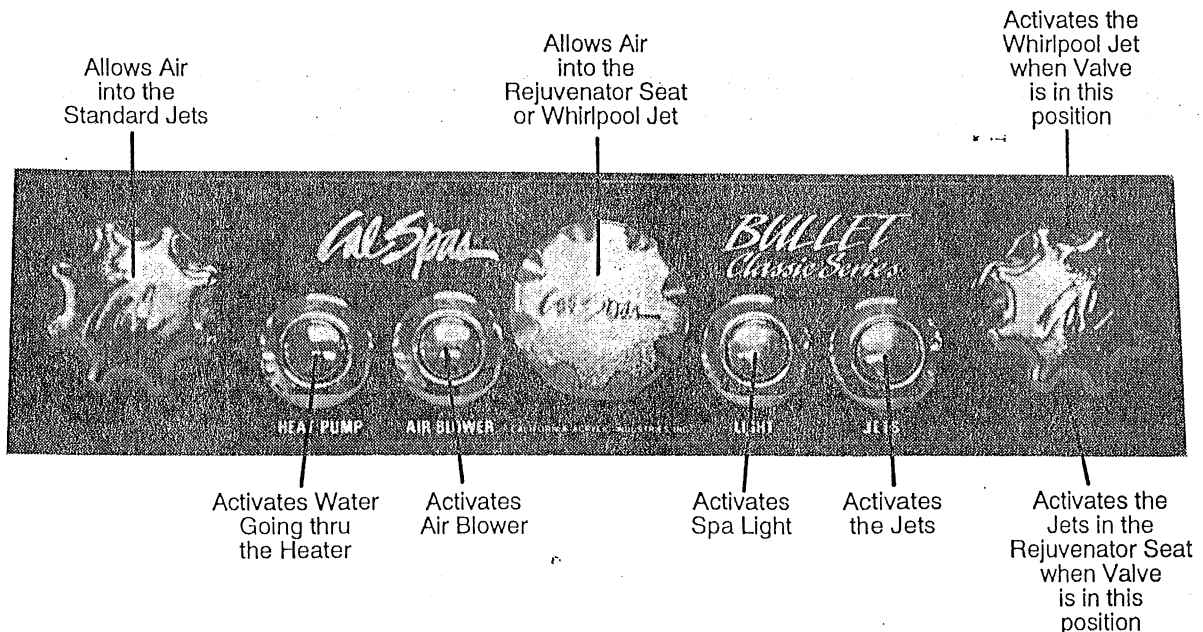
Turns on & off dual underwater Spa Lights

Turns on & off hi-speed to Air Channel

Turns on & off Heated Air to Air Channel

BULLET SERIES SPA

The control panel shown below is for our new Bullet Series Spas. These few basic explanations will put you in complete control.



Allows Air into the Standard Jets

Allows Air into the Rejuvenator Seat or Whirlpool Jet

Activates the Whirlpool Jet when Valve is in this position

Activates Water Going thru the Heater

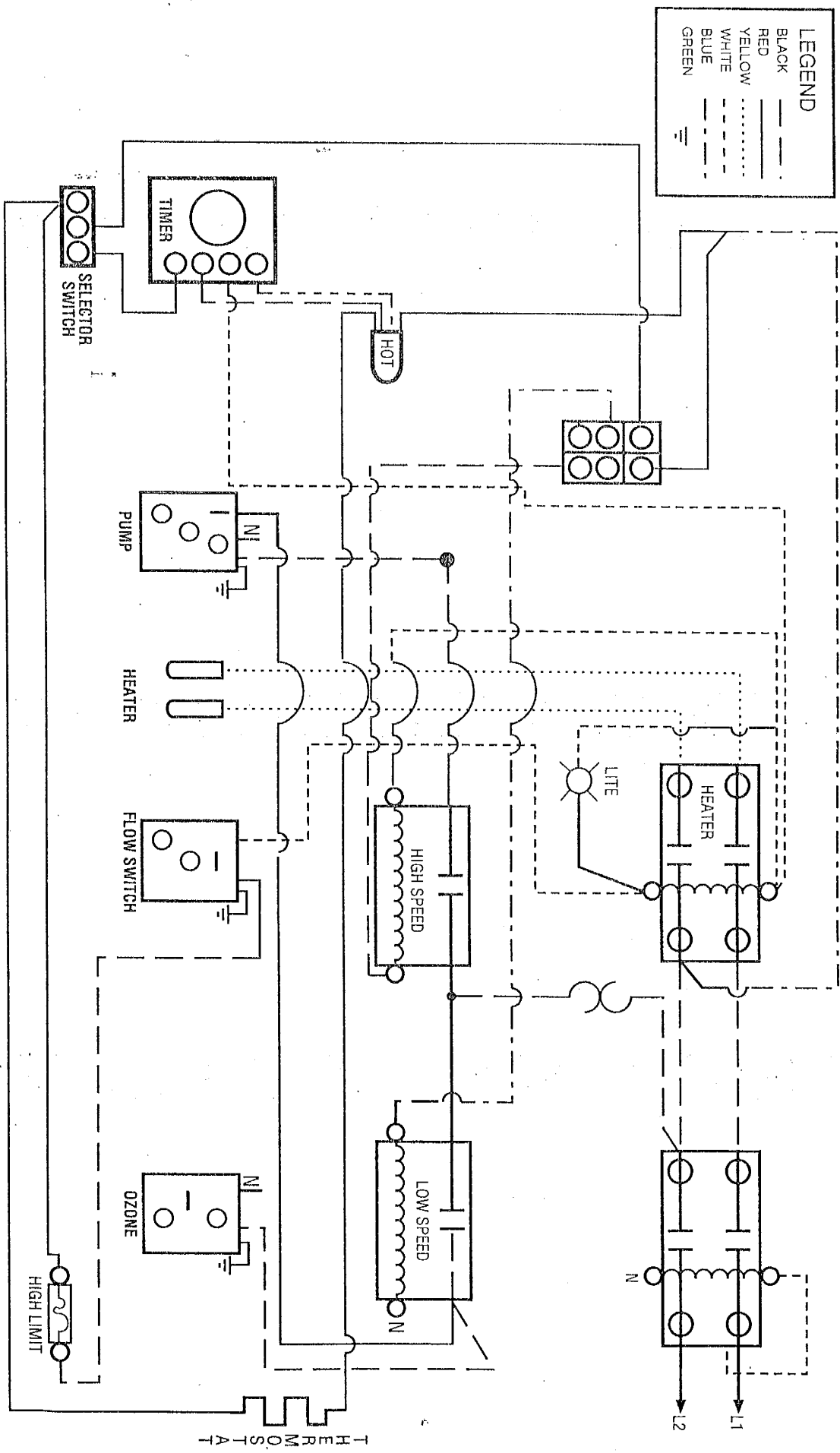
Activates Air Blower

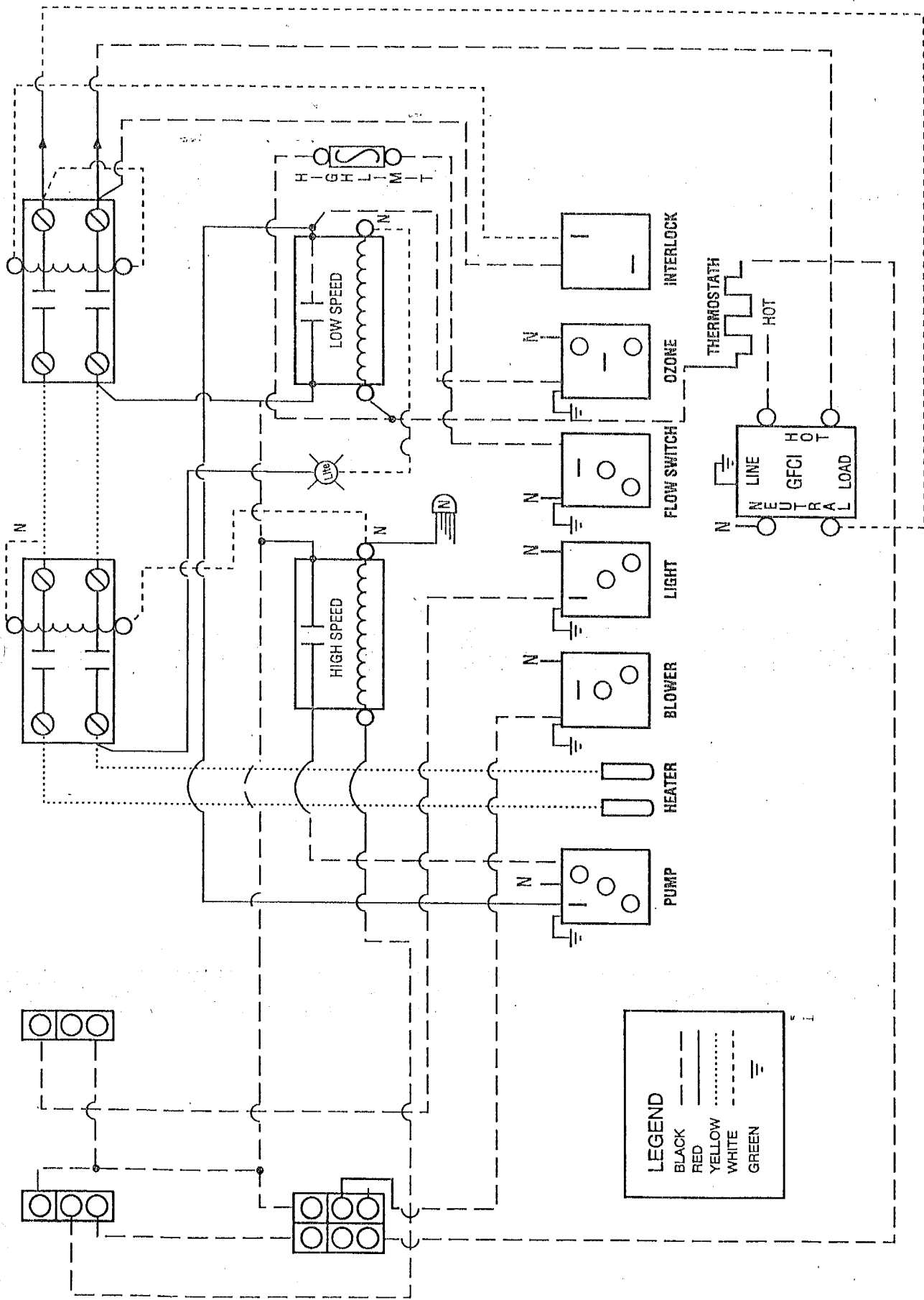
Activates Spa Light

Activates the Jets

Activates the Jets in the Rejuvenator Seat when Valve is in this position

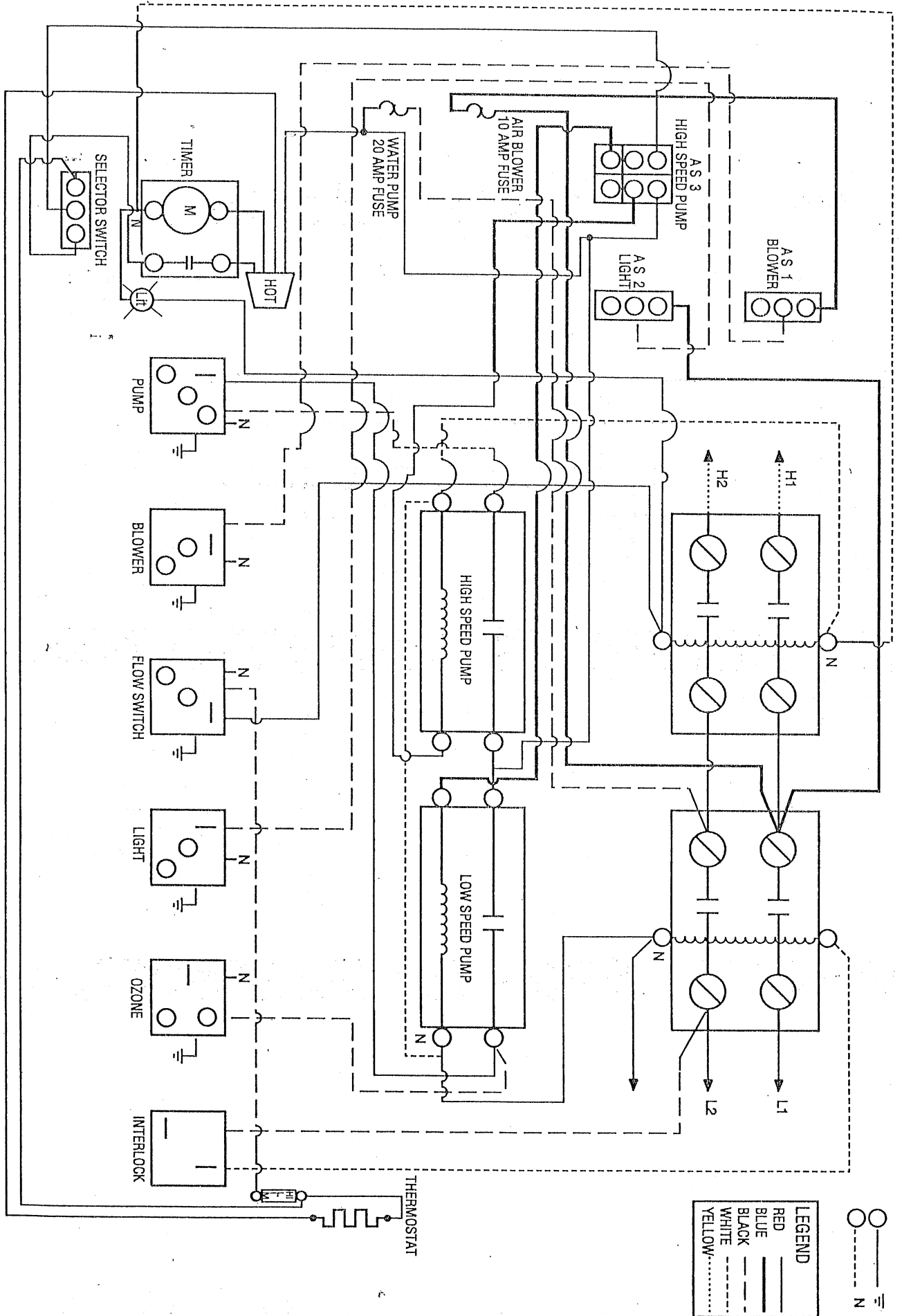
220 VOLT ECONO U.R. PNEUMATIC SWITCH ELECTRIC SCHEMATIC



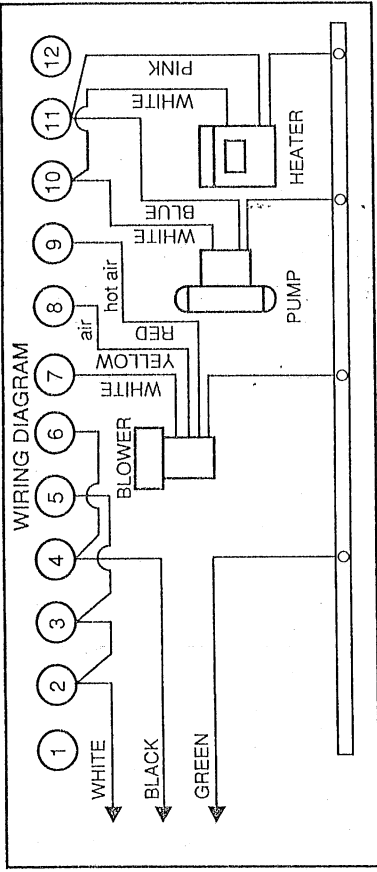


110 VOLT PREMIER U.R. PNEUMATIC SWITCH
ELECTRICAL SCHEMATIC

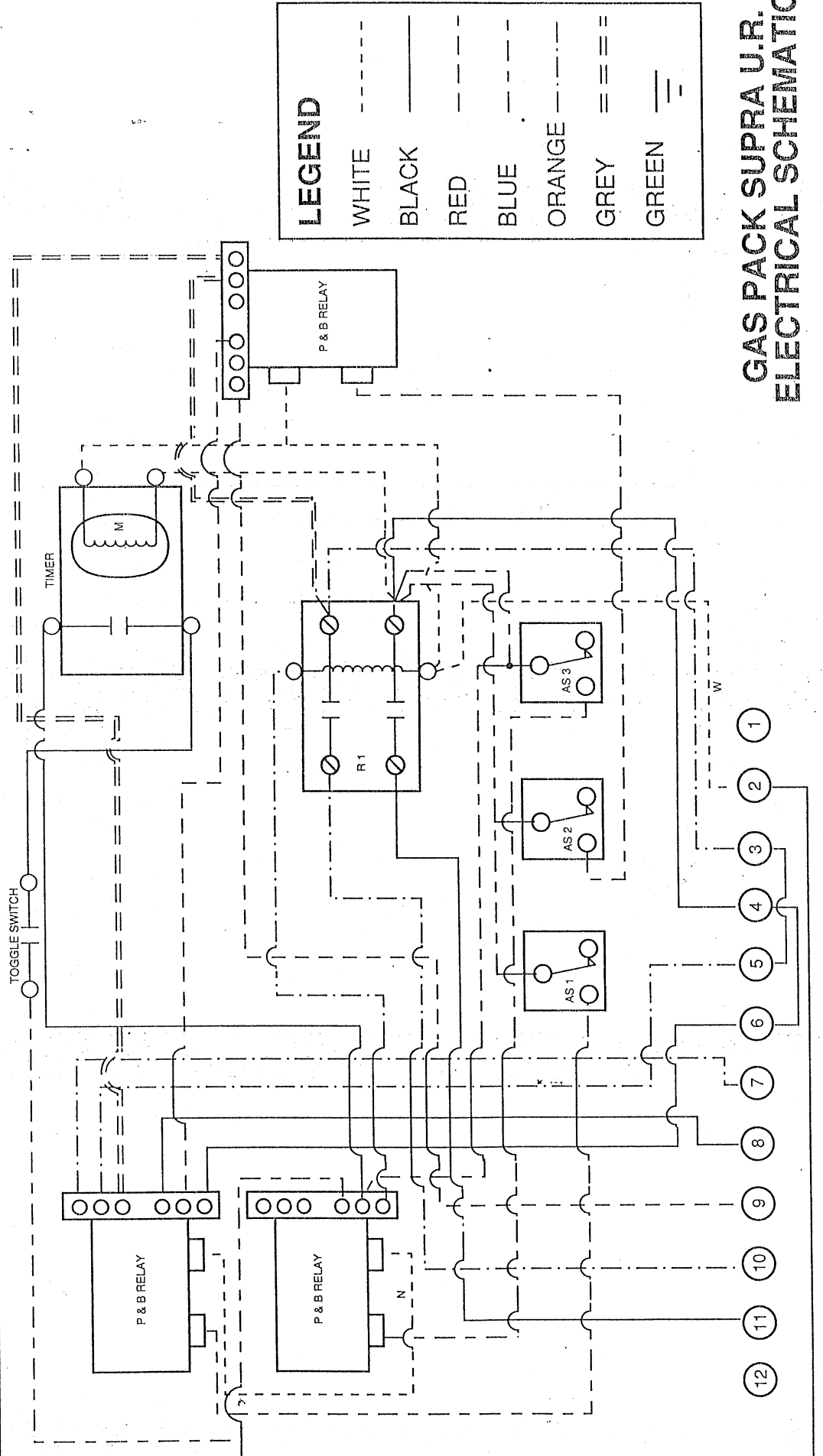
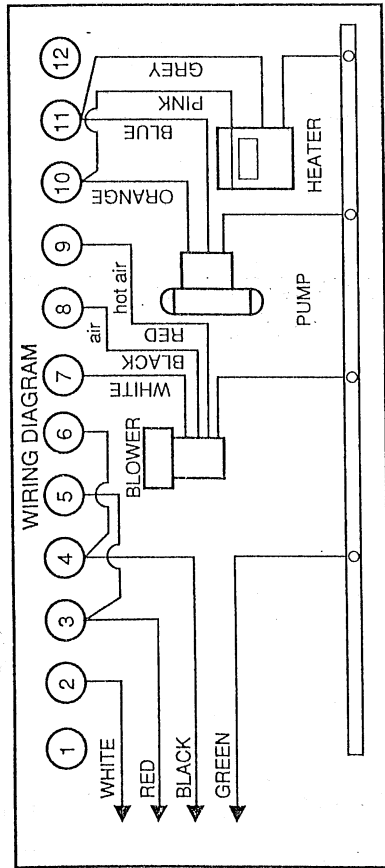
220 VOLT PREMIER U.R. PNEUMATIC SWITCH ELECTRICAL SCHEMATIC



CTC - 221 110 VOLT SUPRA



C - 221 220 VOLT SUPRA

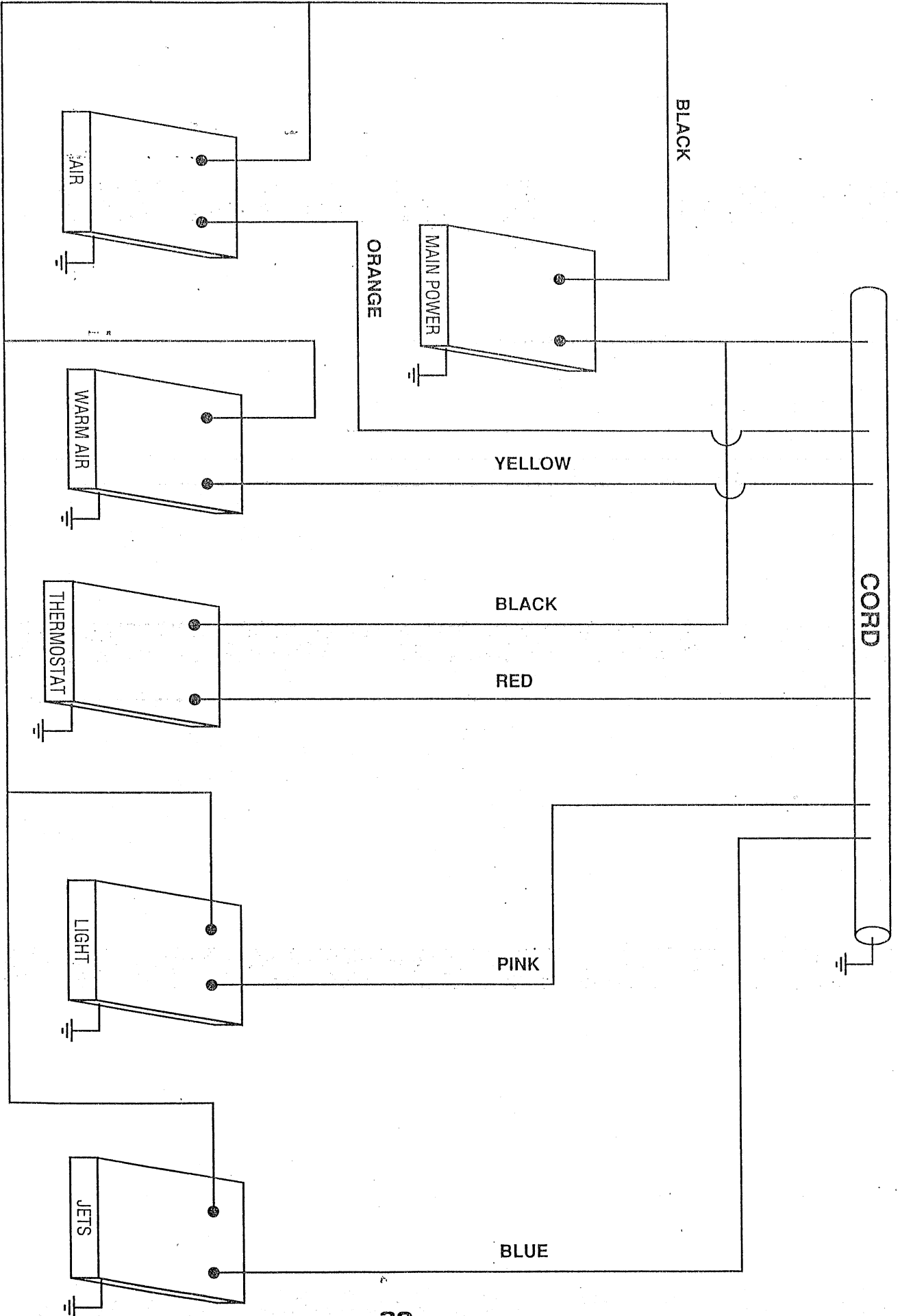


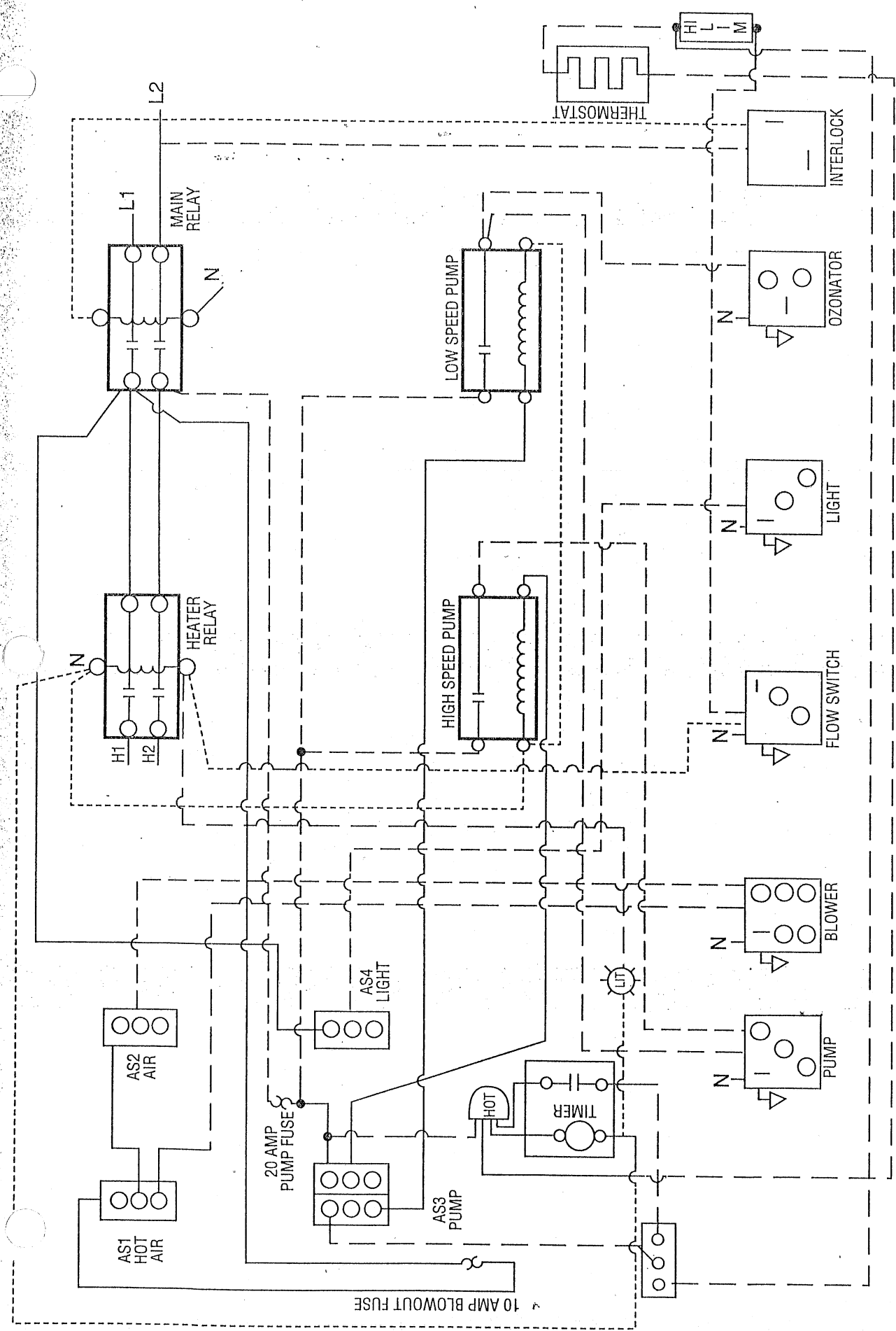
LEGEND

WHITE	---
BLACK	—
RED	---
BLUE	---
ORANGE	---
GREY	===
GREEN	---

GAS PACK SUPRA U.R.
ELECTRICAL SCHEMATIC

SUPRA TOP SIDE CONTROL PANEL ELECTRICAL SCHEMATIC



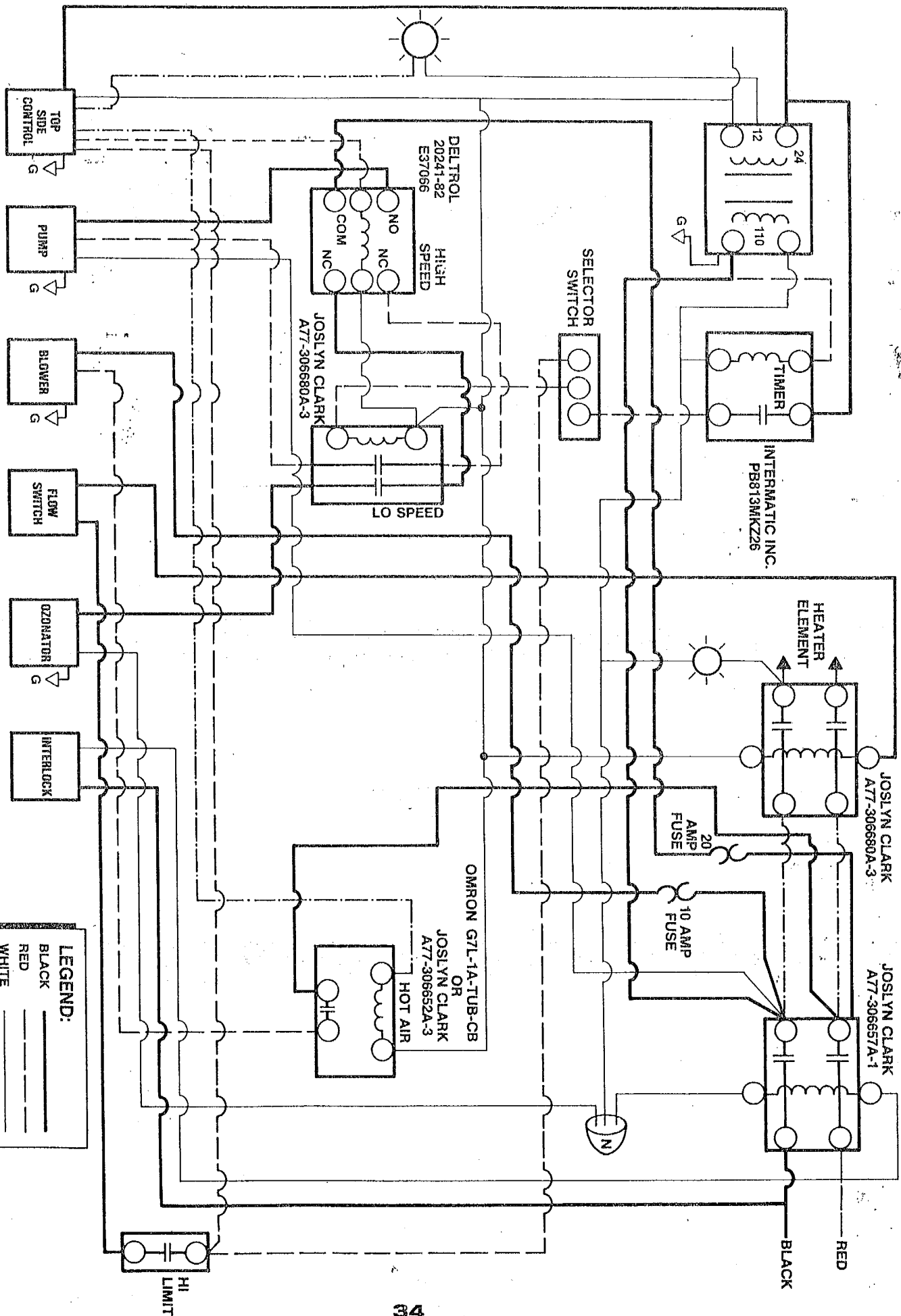


LEGEND

RED	---
BLK	- - -
WHITE	· · ·
BLUE	— · —

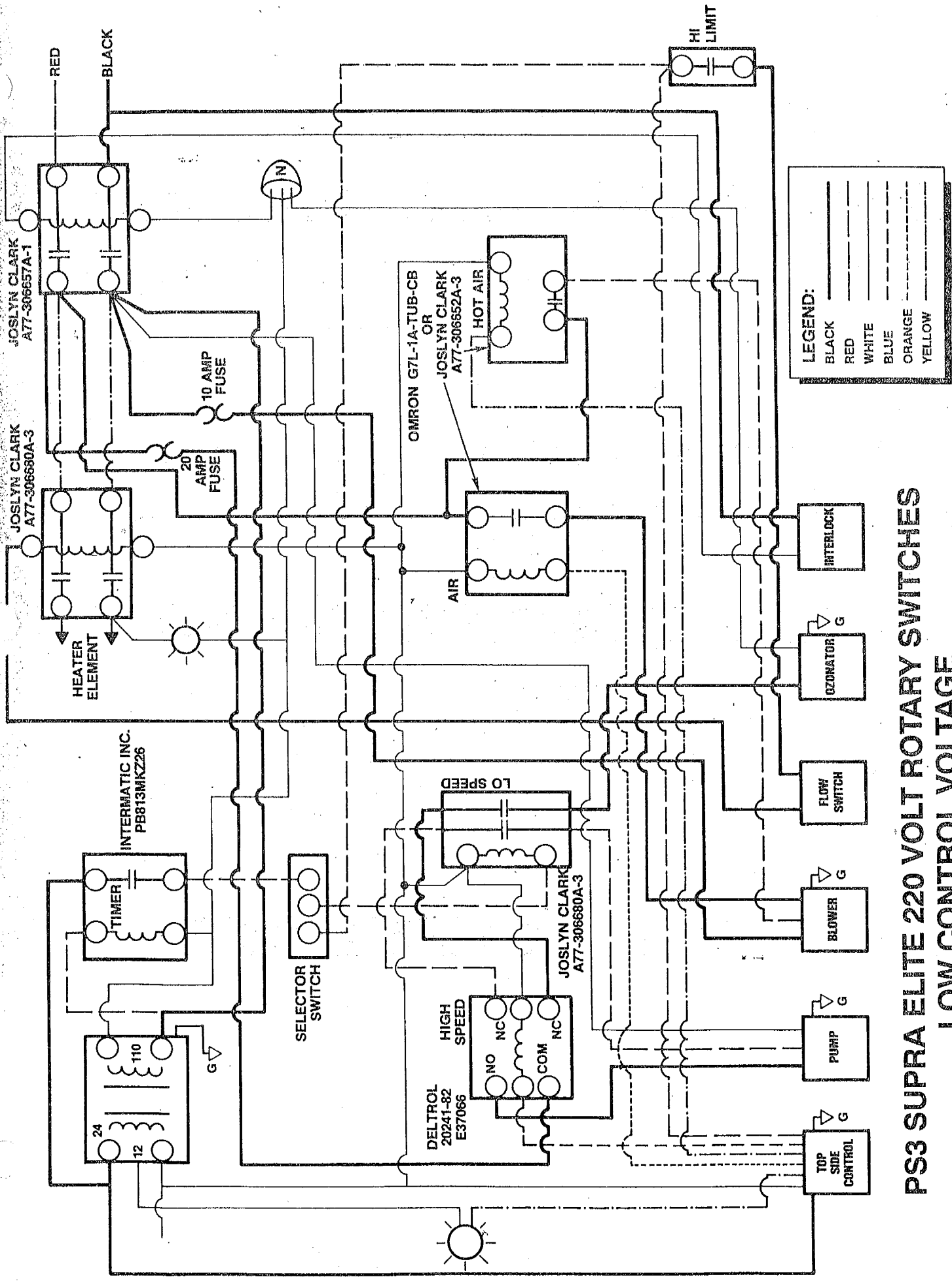
**220 VOLT SUPRA U.R. PNEUMATIC SWITCH
ELECTRICAL SCHEMATIC**

PS3 DELUXE ELITE 220 VOLT ROTARY SWITCHES LOW CONTROL VOLTAGE



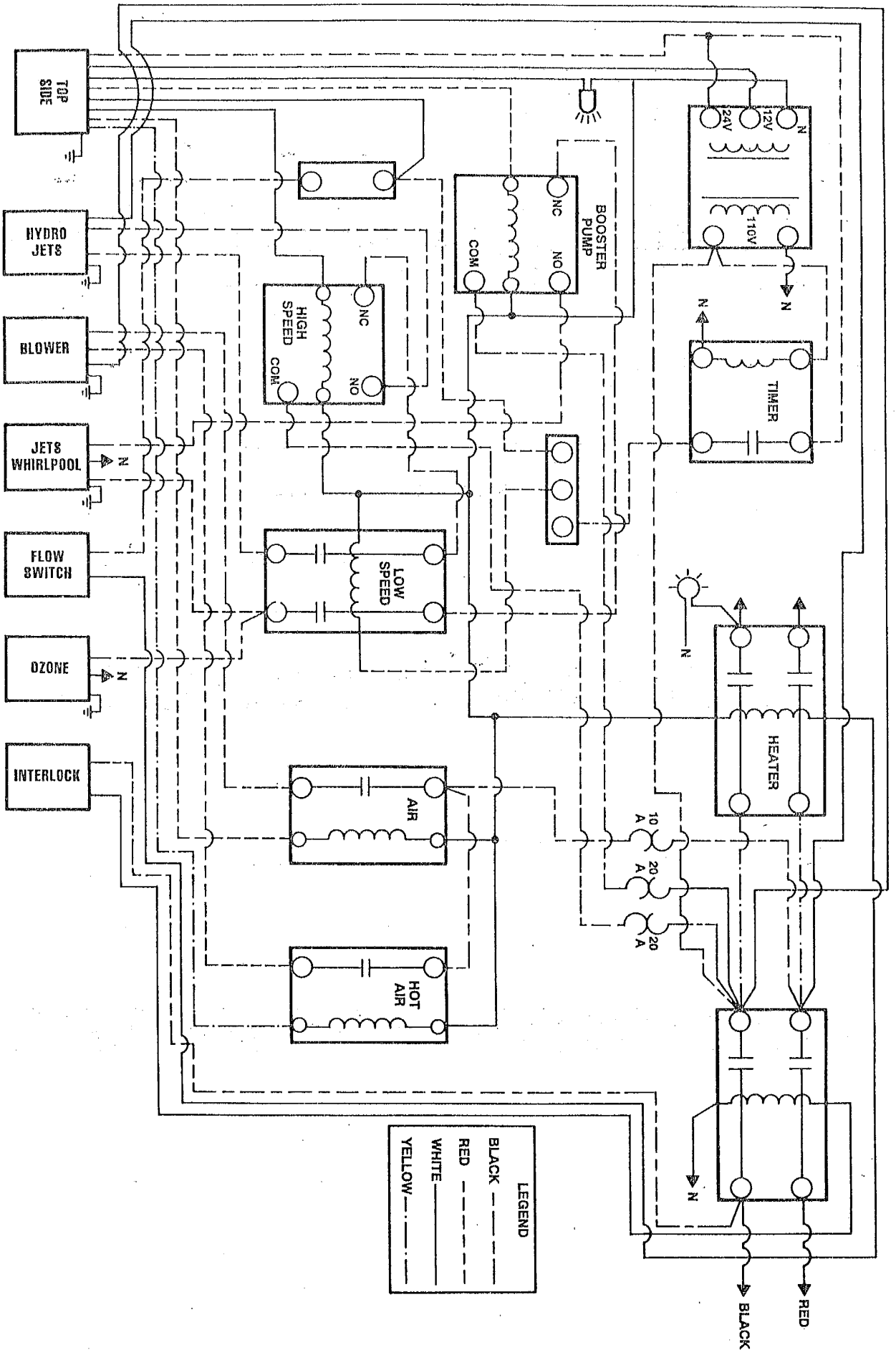
LEGEND:

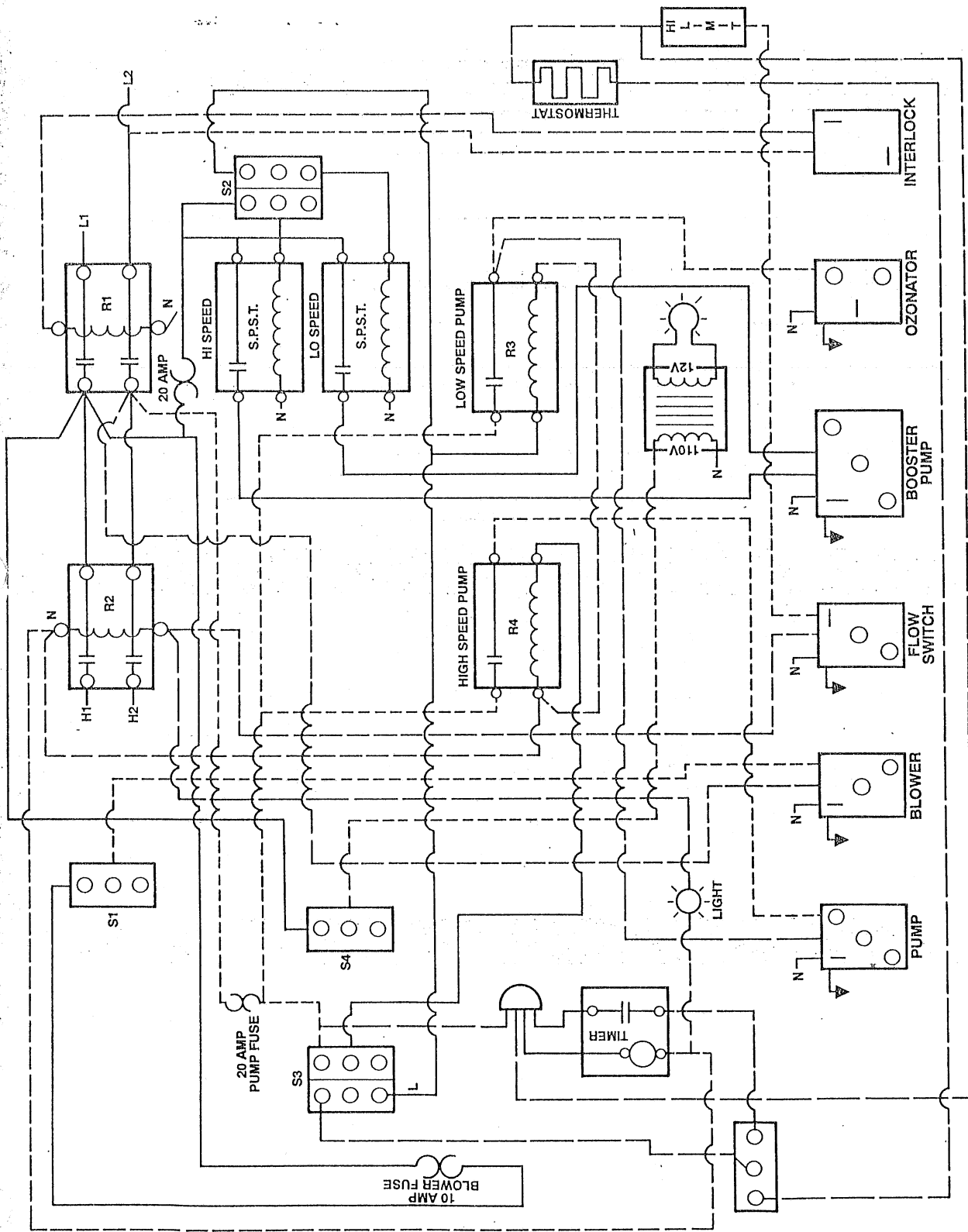
BLACK	_____
RED	_____
WHITE	_____
BLUE	_____
ORANGE	_____
YELLOW	_____



**PS3 SUPRA ELITE 220 VOLT ROTARY SWITCHES
LOW CONTROL VOLTAGE**

CAL CLASSIC ELITE 220 VOLT ELECTRICAL SCHEMATIC





LEGEND

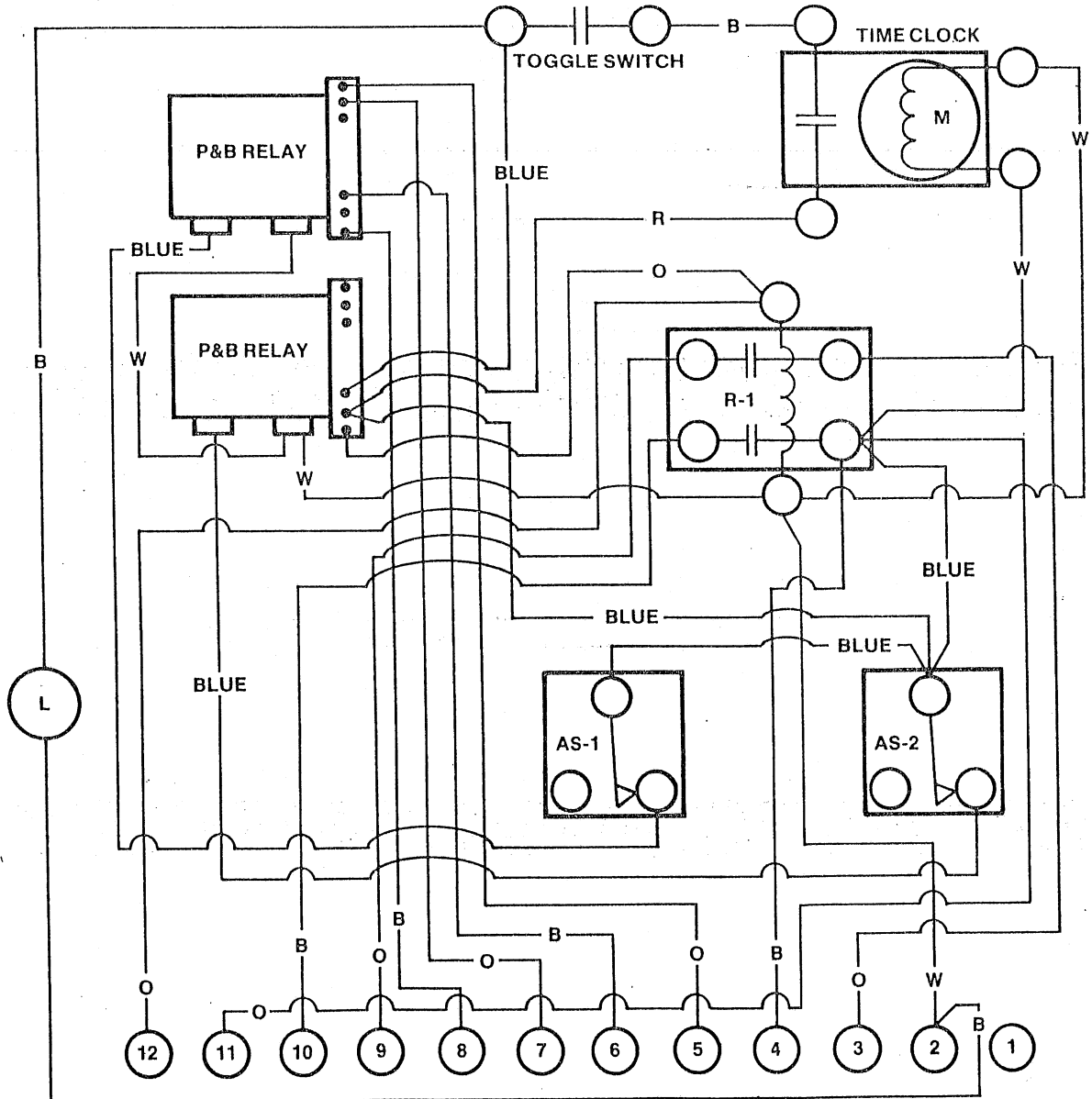
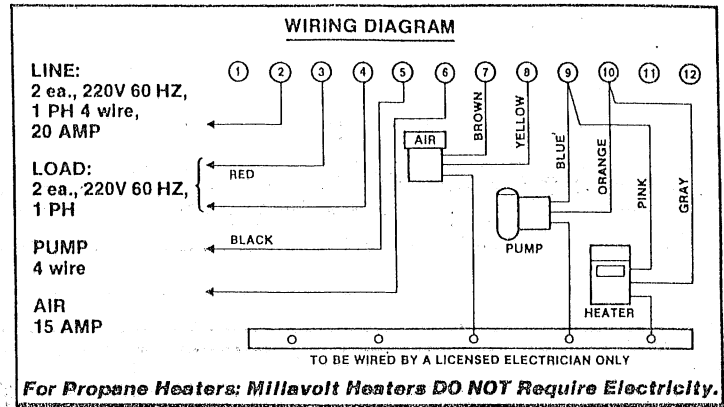
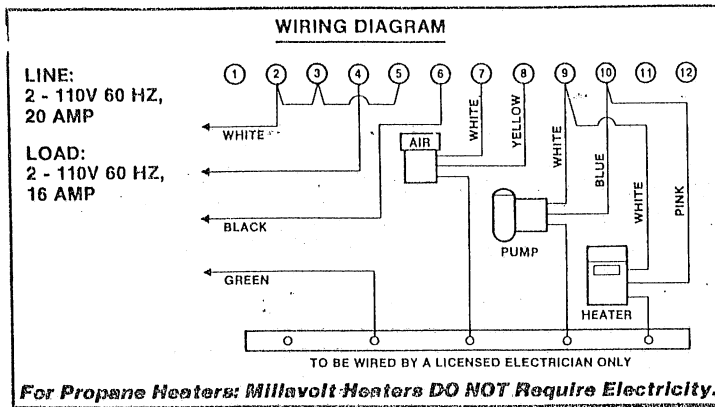
RED	———
BLACK	- - - - -
WHITE	_____
BLUE	_____

**CAL CLASSIC BULLET 220 VOLT
ELECTRICAL SCHEMATIC**

GAS PACKS

CTC-221 110 Volt U.L.

CTC-221 220 Volt U.L.



CTC-221 110V
LINE: 2-110 Volt
60 HZ 20 Amp Circuits

LOAD: 2-110 Volt
60 HZ 16 Amp Circuits

CTC-221 220V
LINE: 2 each 220 Volt
60 HZ 1 PH
4 Wire 20 Amp Circuit

LOAD: 2 each 220 Volt
60 HZ 1 PH
4 Wire 15 Amp Circuit

TROUBLESHOOTING GUIDE

NO HEAT OR HEAT TOO LOW

- PROBABLE CAUSE #1:* Breaker at house off.
RECOMMENDED ACTION: Reset breaker at house. Breaker can appear to be on & one pole can be off.
- PROBABLE CAUSE #2:* Thermostat not on Max. Temp.
RECOMMENDED ACTION: Turn thermostat all the way up. Thermostat (depending on model) will either be located on the control box or on the control panel. If you have a top mounted thermostat cable, follow the cable from the top, down to the control box, loosen the set screw, turn thermostat knob clockwise until it stops, then reconnect. This will ensure both are set on maximum setting.
- PROBABLE CAUSE #3:* Heater not plugged in.
RECOMMENDED ACTION: Check heater plug, making sure it is pushed all the way in receptacle.
- PROBABLE CAUSE #4:* Inadequate water flow due to dirty filter.
RECOMMENDED ACTION: Clean filter cartridge(s). (See page 9).
- PROBABLE CAUSE #5:* Highlimit "popped out".
RECOMMENDED ACTION: Reset **Red Button** on control box.
- PROBABLE CAUSE #6:* Pump not primed.
RECOMMENDED ACTION: Refer to pump priming. (See page 8).
- PROBABLE CAUSE #7:* Improper line voltage.
RECOMMENDED ACTION: Have **Licensed Electrician** check the line voltage.
- PROBABLE CAUSE #8:* Spa cover left off.
RECOMMENDED ACTION: Heat spa with cover on.

NO HEAT OR HEAT TOO LOW-- GAS UNITS

- PROBABLE CAUSE #1:* Temperature knob set too low.
RECOMMENDED ACTION: Loosen set screw at temperature knob and increase as desired, retighten set screw.

SPA LIGHT WON'T COME ON

- PROBABLE CAUSE #1:* Light bulb burnt out.
RECOMMENDED ACTION: Replace bulb. (See page 12).
- PROBABLE CAUSE #2:* Dirty connection.
RECOMMENDED ACTION: Check to see if there is anything covering the connection on the housing that holds the light bulb.
- PROBABLE CAUSE #3:* Light plug not in all the way.
RECOMMENDED ACTION: Check plug, making sure it's pushed in all the way into receptacle.

TROUBLESHOOTING GUIDE

JETS WON'T COME ON

PROBABLE CAUSE #1: Operation of spa with doors open.

RECOMMENDED ACTION: Doors must be closed all the way because of the door interlock safety system.

PROBABLE CAUSE #2: Pump plug not in all the way.

RECOMMENDED ACTION: Check pump plug, making sure it's pushed in all the way in receptacle.

PROBABLE CAUSE #3: Pump not primed.

RECOMMENDED ACTION: Refer to pump priming. (See page 8).

PROBABLE CAUSE #4: Air tubing disconnected.

RECOMMENDED ACTION: Check air line tubing to see if disconnected at either end of the tubes.

PROBABLE CAUSE #5: Gate Valves closed.

RECOMMENDED ACTION: Check to see if both Gate Valves are in the up positions. (See page 14 or 15).

LOW WATER FLOW

PROBABLE CAUSE #1: Dirty filter.

RECOMMENDED ACTION: Remove filter cartridge and clean.

PROBABLE CAUSE #2: Closed valves or blocked lines.

RECOMMENDED ACTION: Open all valves (2) in system.

PROBABLE CAUSE #3: Low voltage or incorrect voltage.

RECOMMENDED ACTION: Wiring to be corrected by licensed electrician.

SPA IS LEAKING

PROBABLE CAUSE #1: Loose connection.

RECOMMENDED ACTION: Hand tighten all quick disconnects and fittings. Check gaskets and O-rings.

MOTOR DOES NOT RUN

PROBABLE CAUSE #1: No power to motor.

RECOMMENDED ACTION: Check power switches & circuit breakers. Check motor wiring at terminals.

PROBABLE CAUSE #2: Pump not plugged in.

RECOMMENDED ACTION: Check plug, making sure it is plugged in all the way into receptacle.

PROBABLE CAUSE #3: Pump jammed from foreign matter in impeller.

RECOMMENDED ACTION: Call Cal Spas for recommended action.

PROBABLE CAUSE #4: Pump ran dry.

RECOMMENDED ACTION: Call Cal Spas for recommended action.

MOTOR RUNS HOT

PROBABLE CAUSE #1: Poor ventilation.

RECOMMENDED ACTION: Do not tightly cover or enclose pump motor.

PROBABLE CAUSE #2: Restricted suction line.

RECOMMENDED ACTION: Make sure all valves are open.

NOTE: These motors will feel hot to the touch. This is normal. The internal overload protector will turn the motor off if there is an overload or high temperature problem.

TROUBLESHOOTING GUIDE

PUMP WILL NOT PRIME

PROBABLE CAUSE #1: No water in pump.
RECOMMENDED ACTION: Make sure water level in spa is midway in skimmer mouth.

PROBABLE CAUSE #2: Air lock.
RECOMMENDED ACTION: Bleed off air at Air Relief Valve.

PROBABLE CAUSE #3: Closed valves or blocked lines.
RECOMMENDED ACTION: Open all valves (2) in system.

BLOWER WILL NOT COME ON

PROBABLE CAUSE #1: Blower plug not plugged in.
RECOMMENDED ACTION: Check plug, making sure it is plugged all the way into receptacle.

PROBABLE CAUSE #2: Air tubing disconnected.
RECOMMENDED ACTION: Check air tubing at either end to see if it is disconnected.

BLOWER COMES ON WHEN JET BUTTON IS PUSHED

PROBABLE CAUSE #1: Lines crossed.
RECOMMENDED ACTION: Reverse air lines at the control box.

AIR BLOWER WILL NOT OPERATE

PROBABLE CAUSE #1: Improper setting of air button control switches.
RECOMMENDED ACTION: Air button sequencer is on air position.

PROBABLE CAUSE #2: Blower not plugged in.
RECOMMENDED ACTION: Plug blower in.

PROBABLE CAUSE #3: Air tubing disconnected.
RECOMMENDED ACTION: Check air line tubing to see if it is disconnected.

BLOWER COMES ON BY ITSELF (Gas Pack Units)

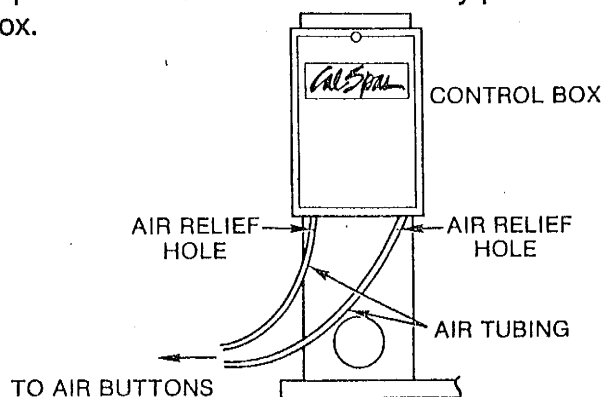
PROBABLE CAUSE #1: Pressure builds up in the air lines.
RECOMMENDED ACTION: Pressure builds up in the air lines and you need to install a small air relief hole in the air tubing. Simply puncture air lines with a hot safety pin in the air lines coming out of control box.

JETS COME ON BY THEMSELVES

PROBABLE CAUSE #1: Pressure builds up in the air lines.
RECOMMENDED ACTION: Pressure builds up in the air lines and you need to install a small air relief hole in the air tubing. Simply puncture air lines with a hot safety pin in the air lines coming out of control box.

For Gas Packs

NOTE: Air lines require small relief holes to keep pressure from building in air lines which could cause equipment to stay on or come on by itself. To correct this, puncture air lines with a hot safety pin where noted in diagram. Simple solutions to small problems as this can and should be learned by owner, as this will be considered a maintenance call, and not a warranty call. A trip charge could result if the service department is called out on this account.



**Equipment Warranty
Limited Warranty**

CAL SPAS (seller), warrants each of the designated pumps, filters, heaters, air blowers and Cal control boxes against defects in materials and workmanship for a period of one year on parts and 90 days on labor from the date of original purchase. If any component fails to perform in normal use during the warranty period, the parts that prove to be defective will either be repaired or replaced at Seller's option. The right is reserved by the Seller to replace the whole product in lieu thereof. The Seller will warrant the replacement or repair for only the unexpired portion of the original warranty. Should repair become necessary during the warranty period, return the component, postage or freight, prepaid, to the Seller's factory.

EXCLUSIONS. This contract does not cover services made necessary as a result of fire, theft, vandalism, acts of God, accidental damage, abuse, neglect (dirt or lack of routine recommended maintenance), unauthorized alterations, or any other cause originating outside the product(s) covered, including failures or inadequacies in customer's water, gas, or electric supply. Also excluded from coverage are all parts exterior to the equipment pak including but not limited to the plumbing.

IMPORTANT. CAL SPAS warrants its products against defective materials and workmanship, not against failure due to improper installation techniques. It is the responsibility of the purchaser to assure that those installing this equipment are well trained in correct and proper installation techniques.

SERVICE AND/OR REPAIR. Should your equipment require service following the warranty period, or should it require service and/or repair for non-warranty failure, return it to the factory, freight prepaid. In writing, indicate the problem you are experiencing with your component. A reasonable charge will be made for labor and material, if any.

ALL LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, TIME CHARGES OR ANY OTHER LOSSES INCURRED IN CONNECTION WITH THE PURCHASE, INSTALLATION, REPLACEMENT OR REPAIR OF THE SELLER'S PRODUCT IS DISCLAIMED AND EXCLUDED HEREFROM.

ASSIGNMENT. This contract is personal to and for the sole benefit of the original purchaser at the original site of purchase and, except with the consent in writing of California Acrylic Industries, Inc., is not assignable.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

HOMEOWNER—COMPLETE AND RETAIN FOR YOUR RECORDS

EQUIPMENT MODEL # _____ SERIAL # _____

DATE OF PURCHASE _____

BUILDER/DEALER _____

HOMEOWNER'S NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

TELEPHONE# () _____ DATE OF START UP _____

**The World's Largest
Spa Manufacturer**

CalSpa[®]
A DIVISION OF CALIFORNIA ACRYLIC INDUSTRIES, INC.

California Acrylic Industries, Inc.
1462 E. Ninth St., Pomona, CA 91766
(714) 623-8781

LIMITED WARRANTY

This spa is hereby warranted to be free of all defects in material and workmanship from the date of delivery, TO THE ORIGINAL PURCHASER AND THE ORIGINAL PURCHASER ONLY AT THE ORIGINAL SITE OF DELIVERY:

FIVE (5) YEARS: The SPA SHELL and the spa shell only is warranted against defects in materials or workmanship within the said period for retail replacement or repair cost. For purposes of express definition, the term "retail replacement or repair cost" shall mean the then-current retail price of the model spa shell or the then-current repair charge for the same or similar problem for which manufacturer is then offering said shell or repair to the general public, excluding sales or special offers. Additionally, for the purpose of express definition, the term "spa shell" specifically excludes its interior finish (acrylic or other substance), all factory installed accessories and pre-plumbing, and all equipment. Manufacturer reserves the right to replace or repair at its sole option, and any such replacement or repair shall assume as its warranty period only the remaining time under this warranty for the original product.

ONE (1) YEAR: The INTERIOR FINISH as applied to the Spa Shell, which by express definition excludes all factory installed accessories and pre-plumbing, and all equipment, is warranted against defects in materials and workmanship within said period of retail replacement or repair cost. The term "retail replacement and repair cost" shall be expressly defined as set forth above. In this regard, Buyer is advised that should it be determined in good-faith that the spa finish cannot be repaired to reasonably function satisfactorily, the replacement of said spa finish will require the replacement of the spa shell as well, which cost shall be determined as defined above. Manufacturer reserves the right to replace or repair at its sole option, and any such replacement or repair shall assume as its warranty period only the remaining time under this warranty for the original product.

Pre-plumbing and factory installed accessories, including air jets, skimmer, suction fittings, tile, air switch, and skirting are warranted for a period of ONE (1) year.

WOODCHUCK PRODUCTS GAZEBOS are guaranteed to be constructed with the finest quality redwood and workmanship, and under normal care, will last indefinitely. But due to the nature of this product, along with the possibility of abuse and/or improper assembly, Cal Spas can only give a 90 day warranty on workmanship and materials with the purchase of this gazebo.

ALL OF THE ABOVE WARRANTIES APPLY ONLY TO THE ITEM OR PRODUCT SPECIFIED THEREIN. REPLACEMENT UNDER WARRANTY OF A SPA SHELL GIVES ABSOLUTELY NO ENTITLEMENT TO THE REPLACEMENT OF ANY OTHER ITEM, SUCH AS ACCESSORIES, FINISH, OR EQUIPMENT, NOR DOES THE REPAIR OF THE SPA FINISH, EXCEPT UNDER THE CIRCUMSTANCES WHERE THE SPA FINISH IS UNREPAIRABLE, IN WHICH EVENT A REPLACEMENT SHELL SHALL ALSO BE PROVIDED AT THE REDUCED COST AS SPECIFIED ABOVE.

EQUIPMENT: California Acrylic Industries, Inc. equipment is warranted against defects in materials or workmanship for ONE (1) year on parts and 90 days on labor. IMPROPER VOLTAGE SUPPLY OR USE OF AN EXTENSION CORD WILL VOID WARRANTY. REFER TO OWNER'S MANUAL FOR ELECTRICAL REQUIREMENTS.

THIS WARRANTY DOES NOT APPLY to any defects caused by negligence, misuse, accidents or intentional vandalism. Examples of the more common acts of negligence which will invalidate this warranty are (1) the use of acid or acid products in said spa. NO ACID OR ACID PRODUCTS MAY BE UTILIZED IN THIS SPA; (2) failure to adequately protect your spa from extremes in temperature; spa covers and other accessories are available to assist you in this regard; and (3) improper installation by Buyers who either install or personally arrange installation of their spa. AS SPECIFIED IN YOUR OWNERS MANUAL, YOUR SPA MUST BE INSTALLED ON A LEVEL SURFACE, IF PORTABLE, OR ADEQUATELY BACKFILLED WITH SAND IF INSTALLED INGROUND. Failure to follow these simple precautions will result in excessive stress in areas of your spa with resulting cracking.

Within the above specified periods, CALIFORNIA ACRYLIC INDUSTRIES, INC., is obliged to repair or replace any specified part proving defective in accordance with the above warranty provisions; provided, however, that should a prorata charge be payable by Buyer under the provisions of the above warranties, manufacturer shall not be obligated to perform the required repair or replacement until payment of said charge by Buyer. Buyer is instructed to contact directly the Dealer from whom he or she had purchased the spa who will arrange warranty service. IN THE EVENT THE BUYER SHOULD BE UNABLE, FOR ANY REASON, TO EITHER OBTAIN SUCH SERVICE OR OBTAIN SATISFACTORY SERVICE, HE OR SHE IS INSTRUCTED TO CONTACT MANUFACTURERS SERVICE CENTER. CUSTOMER SERVICE DEPARTMENT, LOCATED AT 1481 E. NINTH ST., POMONA, CA 91766, TELEPHONE: (714) 623-9975, (800) 822-SPAS, WHICH WILL IMMEDIATELY TAKE STEPS TO PROVIDE ALL SERVICE TO WHICH BUYER MAY BE ENTITLED UNDER THIS WARRANTY. All expenses related to replacing or repairing a defective spa or spa finish shall be assumed by the manufacturer while under a One Hundred Percent (100%) warranty. Said expenses shall be included within and shall become a part of the "retail replacement or repair cost", as defined above, under circumstances requiring Buyer to pay a prorata share. PROVIDED, HOWEVER, under no circumstances shall manufacturer be responsible for payment, or any part thereof, of expenses incurred in Buyer providing reasonable access to the part to be repaired, or, in circumstances requiring replacement, to the removal of the spa, including without limitation circumstances where such access or removal is blocked or prevented by modification, alterations or improvements constructed by Buyer after original purchase, and/or where actual access to the spa location has been modified subsequent to original delivery (if spa was delivered by manufacturer or its agent) to either prevent such access or cause it to be more costly.

BUYER MUST NOTIFY manufacturer of any defect, malfunction, or nonconformity promptly upon discovery: Notification by Buyer to his or her selling Dealer will satisfy this requirement. Within TWENTY (20) days after giving notice to said Dealer, Dealer will commence and diligently pursue warranty service to completion or Buyer is advised to contact manufacturer as specified hereinabove.

Manufacturer neither assumes nor authorizes any Dealer or other representative or person to assume for it any other liability in connection with the sale or shipment of the above specified products. Manufacturer reserves the right to make changes or improvements in our products without incurring any obligation to similarly alter products previously purchased.

A buyer of this product in California has the right to have this product serviced or repaired during the warranty period. The warranty period will be extended for the number for whole days that the product has been out of the buyer's hands for warranty repairs. If a defect exists within the warranty period, the warranty will not expire until the defect has been fixed. The warranty period will also be extended if the warranty repairs have not been performed due to delays caused by circumstances beyond the control of the Buyer, or if the warranty repairs did not remedy the defect and the Buyer notifies the manufacturer or seller of the failure of the repairs within 60 days after they were completed. If, after a reasonable number of attempts, the defect has not been fixed, the Buyer may return this product for a replacement or a refund subject, in either case, to deduction of a reasonable charge for usage. This time extension does not affect the provisions or remedies the Buyer has under other laws.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. The Buyer has the right to bring any action at law or equity to resolve disputes concerning or to enforce the provision of this warranty.