THE SPIRIT, MIRAGE, AND WISH





UNDERWATER AND ENTRYWAY LIGHTS

Press the LIGHT pad to turn the underwater and entryway lights on and off. The low-voltage system produces a night light for evening use and makes entering and exiting the spa safer. After being on for 30 minutes, the lights automatically turn off.

OPTIONAL WATERCOLORS™*

Press LIGHT pad to turn on step one. Press LIGHT pad again to turn off for one second. Then press LIGHT pad again for step two. Repeat for all eight options: 1) color wash, 2) white, 3) blue/green, 4) violet, 5) blue, 6) yellow, 7) green, 8) red. *(12 LED)



JET



AUXILIARY JET CONTROL PANEL



JET



JETS

Use the JET pad on the bather panel or auxiliary jet control panel. First press of the JET pad activates pump on low-speed (and starts soak timer). Second press of the JET pad activates pump on high-speed. Third press of the JET pad turns jets off for all-quiet mode. Fourth press of the JET pad turns pump back to low-speed. If the pump is already on low (heating, filter cycle) then the first press starts the soak timer. After running on low- or high-speed for 15 minutes, the pump automatically turns off (unless in heating or filtering cycle).

SOAK TIMER AND SOAK FEATURE

The soak timer starts the first time you press a JET pad. The LCD window displays the elapsed time (1-30) for 55 seconds then switches to the current water temperature for five seconds then back to the timer. It continues to alternate for the entire 30 minutes. The timer runs for 30 minutes regardless of other functions in use (jets, temperature, or light). You can manually cancel the timer by pressing the TEMP+- pad and then the LIGHT pad.

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CONSTANT CLEAN WATER MANAGEMENT WITH SMART LOGIC (Spirit, Mirage, Wish)

Factory Default Settings:

- Filter Cycle Duration: F2 (2 hours)Filter Cycles: 2C (twice per day)
- Smart Logic: 1H (1 hour)

These settings represent the most commonly used settings, but your use may be different, depending upon many variables – frequency, number of bathers, duration, water capacity, etc. These variables affect the quality of water and the way it should be managed to achieve the most effective cleansing. Selectable choices for the settings of the operation systems allows flexibility and ensures your Marquis spa remains easy to maintain for your particular set of circumstances.

SOLID-STATE OZONATOR

The ozonator greatly reduces the amount of chemical sanitizer you need in the water to keep your water clean. The ozonator functions whenever the pump is running on low speed. You should occasionally inspect your ozonator to ensure it continues to light (see MAINTENANCE, Every Three to Four Months). A good time to do this is when you drain and fill your spa.

CONSTANT CLEAN FILTRATION

Your spa is preset at the factory with a default setting to filter itself using the jet pump on low-speed for two hours twice in a 24-hour period. These settings represent the filter settings necessary for average use. The timing of the first filter cycle is determined by when the spa was initially energized. The first cycle begins six minutes after this initial power-up. The second filter cycle begins 12 hours after the first cycle.

To adjust the filter settings

First press of the SETTINGS pad displays the filter time settings (F1, F2, F4, F6). Use the TEMP+- pad to scroll through the options. When desired selection has been reached, press the SETTINGS pad again to enter selection and advance to the filter cycle settings (2C, 1d, 1n). For example, if you select 2C and F2, your spa will filter two hours twice a day for a total of four hours of filtration daily.



Marquis Ozonator reduces the need for chemical sanitizers.



SETTINGS



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Use the TEMP+- pad to scroll through filter cycle options. When desired selection has been reached, press the SETTINGS pad to enter selection and advance to the smart logic settings.

Selectable filter cycles and cycle duration

- 2C: twice per day (once every 12 hours)
- 1d: once during the day
- 1n: once during the night
- F1: 45 minutes
- F2: 2 hours
- F4: 4 hours
- F6: 6 hours

SMART LOGIC

Since a spa is always covered when not in use, it stays fairly free of debris or outside contamination. Contamination to a spa's water occurs during usage, so filtering immediately after usage is the most effective time to clean the spa water. Your spa is preset at the factory with a default setting to filter for one hour (1H) every time your spa is used. This filtration cycle begins 30 minutes after the spa light or jet pump has been deactivated. The pump runs on low-speed to filter the water for the cycle's duration.

Selectable Smart Logic Settings

- 1H: 1 hour
- 2H: 2 hours
- 3H: 3 hours
- 4H: 4 hours
- OH: Off





To adjust the Smart Logic settings:

Use the TEMP+- pad to scroll through options. When desired selection has been reached. Press SET-TINGS pad to enter selection and exit settings mode.

TEMPERATURE DISPLAY AND ADJUSTMENT Factory Default Settings:

• Temperature: 102°F (39°C)

The LCD window displays the actual water temperature. Pressing the TEMP+- pad makes the numbers flash, then pressing the pad again (repeatedly) increases the set temperature one degree at a time, up to 104°F (40°C). After a short pause, the actual temperature displays. Press TEMP+- pad repeatedly to decrease the set temperature to 80°F (27°C).

*NOTE: In event of a power outage, all settings revert to the preset, default settings.

HEAT LIGHT

The HEAT ON light illuminates when the heater is on. The pump circulates on low-speed whenever the thermostat calls for heat.

SYSTEM LOCK

Once you find and establish the settings that work best for your individual needs, use system lock to keep from inadvertently changing the settings.





Press the TEMP +- pad and then immediately press the SETTINGS pad. Unlock by repeating sequence. While the system is locked, you may still operate the jets and light. The LCD window displays LC to indicate the system is locked when you try to change the temperature or settings.

THE QUEST, DESTINY, REWARD, EUPHORIA, SILVER ANNIVERSARY FUPHORIA





PUMP PRIMING (Pr)

Pump priming feature begins at start-up. When your spa is energized, the LCD window displays a "Pr" message. This mode lasts approximately four to five minutes, if not exited manually by pressing the TEMP pad.



UNDERWATER AND ENTRYWAY LIGHTS

Press the LIGHT pad to turn the underwater and entryway lights on and off. The low-voltage system produces a night light for evening use and makes entering and exiting the spa safer. After being on for 30 minutes, the lights automatically turn off. The bather's control panel is backlit for ease of use after dark.

OPTIONAL WATERCOLORSTM*

Press LIGHT pad to turn on step one. Press LIGHT pad again to turn off for one second. Then press LIGHT pad again for step two. Repeat for all eight options: 1) color wash, 2) white, 3) blue/green, 4) violet, 5) blue, 6) yellow, 7) green, 8) red. *(12 LED)



JET



SOAK TIMER AND SOAK FEATURE

The soak timer starts the first time you press a JET pad. The LCD window displays the elapsed time (1-30) for 55 seconds then switches to the current water temperature for five seconds then back to the timer. It continues to alternate for the entire 30 minutes. The timer runs for 30 minutes regardless of other functions in use (jets, temperature, or light). You can manually cancel the timer by pressing the TEMP- pad and then the LIGHT pad.

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CONSTANT CLEAN WATER MANAGEMENT WITH SMART LOGIC (Quest, Destiny, Reward, Euphoria, Silver Anniversary Reward, and Silver Anniversary Euphoria)

Factory Default Settings:

- Filter Cycle Duration: FC2 (2 hours)
- Filter Cycles: 2C (twice per day)
- Smart Logic: SL1 (1 hour)

These settings represent the most commonly used settings, but your use may be different, depending upon many variables – frequency, number of bathers, duration, water capacity, etc. These variables affect the quality of water and the way it should be managed to achieve the most effective cleansing. Selectable choices for the settings of the operation systems allows flexibility and ensures your Marquis spa remains easy to maintain for your particular set of circumstances.

SOLID-STATE OZONATOR

The ozonator greatly reduces the amount of chemical sanitizer you need in the water to keep your water clean. The ozonator functions whenever the pump is running on low-speed. You should occasionally inspect your ozonator to ensure it continues to light (see MAINTENANCE, Every Three to Four Months). A good time to do this is when you drain and fill your spa.

CONSTANT CLEAN FILTRATION

Your spa is preset at the factory with a default setting to filter itself using the jet pump on low-speed for two hours twice in a 24-hour period. These settings represent the filter settings necessary for average use. The timing of the first filter cycle is determined by when the spa was initially energized. The first cycle begins six minutes after this initial power-up. The second filter cycle begins 12 hours after the first cycle.

To Adjust the Filter Settings

First press of the SETTINGS pad displays the filter time settings (FC1, FC2, FC4, FC6). Use the TEMP-pad to scroll through the options. When desired selection has been reached, press SETTINGS pad again to enter selection and advance to the filter cycle settings (2C, 1Cd, 1Cn).



Marquis Ozonator reduces the need for chemical sanitizers.





TEMP-

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TEMP-

Use the TEMP- pad to scroll through filter cycle options. When desired selection has been reached, press the SETTINGS pad to enter selection and advance to the smart logic settings.

Selectable Filter Cycles and Cycle Duration:

- 2C: twice per day (once every 12 hours)
- 1Cd: once during the day
- 1Cn: once during the night
- FC1: 45 minutes
- FC2: 2 hours
- FC4: 4 hours
- FC6: 6 hours

SMART LOGIC

Since a spa is always covered when not in use, it stays fairly free of debris or outside contamination. Contamination to a spa's water occurs during usage, so filtering immediately after usage is the most effective time to clean the spa water. Your spa is preset at the factory with a default setting to filter for one hour (SL1) every time your spa is used. This filtration cycle begins 30 minutes after the spa light or jet pump has been deactivated. The pump runs on low-speed to filter the water for the cycle's duration.

Selectable Smart Logic Settings

- SL1: 1 hour
- SL2: 2 hours
- SL3: 3 hours
- SL4: 4 hours
- SLO: Off



To Adjust the Smart Logic Settings:

Use the TEMP- pad to scroll through options. When desired selection has been reached. Press SET-TINGS pad to enter selection and exit settings mode.

TEMPERATURE DISPLAY AND ADJUSTMENT Factory Default Settings:

• Temperature: 102°F (39°C)



TEMP+

The LCD window displays the actual water temperature. Pressing the TEMP+ pad makes the numbers flash, then pressing the pad again (repeatedly) increases the set temperature one degree at a time, up to 104°F (40°C). After a short pause, the actual temperature displays. Press TEMP- pad repeatedly to decrease the set temperature to 80°F (27°C).

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HEAT LIGHT

The HEAT ON light illuminates when the heater is on. The pump circulates on low-speed whenever the thermostat calls for heat.

HEAT MODE

Your spa comes preset in the standard heat mode. For most applications, the standard mode should be used. If you are in a warm weather climate and the spa does not require as much heat, the economy mode may work best. For a vacation home or for very infrequent use, the sleep mode provides filtration and circulation with lower energy demand. In economy mode your spa heats only during the filter cycle. In sleep mode your spa will maintain a water temperature that is 20°F (7°C) below the set temperature. This ensures your spa will be ready to use more quickly (allow about one hour per one degree F for heating your spa's water) when increasing the temperature to the desired level.

The spa's heat mode can be adjusted to one of three different settings:

Standard Mode

The spa water heats to the temperature as set at the bather's panel. In this mode the filtration pump turns on for two minutes every half-hour to "poll" or check the water. If heat is needed the unit heats to the set temperature. The LCD window steadily displays the actual temperature in this mode.

Economy Mode

In this mode the spa only heats to the set temperature during a filter cycle. The LCD window displays "Ecn" alternately flashing with the actual temperature when the spa is up to temperature and "Ecn" steadily when the spa's water temperature is below the set temperature.

Sleep Mode

Your spa will maintain a water temperature that is 20°F (7°C) below the set temperature. Heater functions only during a filter cycle. The LCD window displays "SLP" flashing alternately with the actual temperature when the spa is up to set temperature and displays "SLP" steadily when below set temperature.



SETTINGS



TEMP-



LOCK

To Adjust the Heat Mode:

First press the SETTINGS pad to display the heat mode settings (Std, Ecn, SLP). Use the TEMP- pad to scroll through the options. When desired selection has been reached, press SETTINGS pad again to enter selection and advance to the filter cycle settings (FC1, FC2, FC4, FC6).

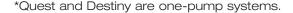
SYSTEM LOCK

Once you find and establish the settings that work best for your individual needs, use system lock to keep from inadvertently changing the settings.

Press LOCK then press the TEMP- pad. Unlock by repeating sequence. While the system is locked, you may still operate the jets and light. The LCD window displays LC to indicate the system is locked when you try to change the temperature or settings.

JETS

Use JET pad on either bather's panel or jet control panel. First press JET pad to activate pump(s)* on low-speed (and start the soak timer). Second press of JET pad activates pump(s) on high-speed. Third press of JET pad turns jets off for all-quiet soak setting. Fourth press of JET pad returns pump(s) to low-speed. After running on low- or high-speed for 15 minutes, the pump(s) automatically turns off.

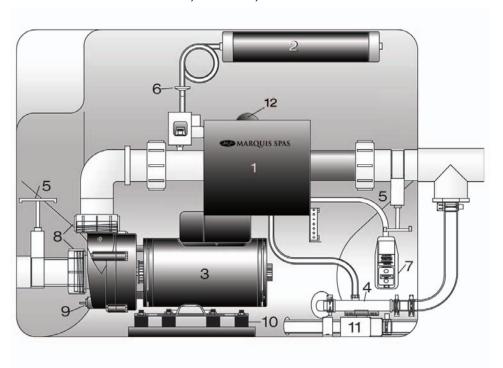






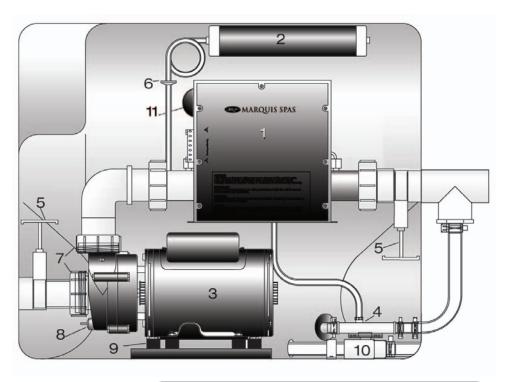
JET CONTROL PANEL

SPIRIT, MIRAGE, AND WISH



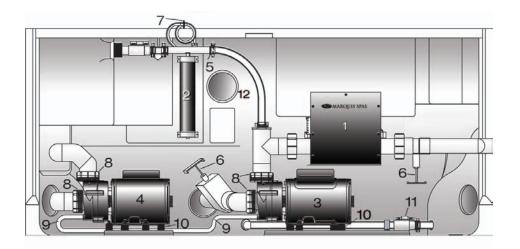
#	Component	Quantity
1	Control box and heater	1
2	Ozonator	1
3	MP120 pump	1
4	Mazzei injector	1
5	Slice valves	2
6	Check valve	1
7	GFCI cord	1
8	Pump unions	2
9	Pump plug	1
10	Motor mounts	4
11	Drain valve	1
12	Light	1

QUEST AND DESTINY



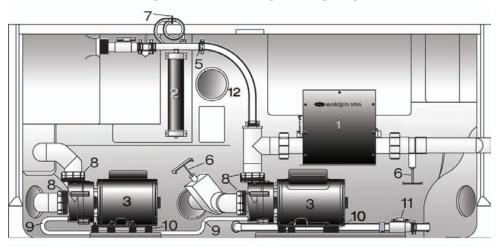
#	Component	Quantity
1	Control box and heater	1
2	Ozonator	1
3	MP160 pump	1
4	Mazzei injector	1
5	Slice valves	2
6	Check valve	1
7	Pump unions	2
8	Pump plug	1
9	Motor mounts	4
10	Drain valve	1
11	Light	1

REWARD AND EUPHORIA



#	Component	Quantity
1	Control box and heater	1
2	Ozonator	1
3	MP160 pump 1	
4	MP130 pump	1
5	Mazzei injector	1
6	Slice valves	2
7	Check valve	1
8	Pump unions	4
9	Freeze line	1
10	Motor mounts	8
11	Drain valve	1
12	Light	1

SILVER ANNIVERSARY REWARD AND SILVER ANNIVERSARY EUPHORIA



#	Component	Quantity
1	Control box and heater	1
2	Ozonator	1
3	MP160 pumps	2
5	Mazzei injector	1
6	Slice valves	2
7	Check valve	1
8	Pump unions	4
9	Freeze line	1
10	Motor mounts	8
11	Drain valve	1
12	Light	1

troubleshooting

PLEASE NOTE: The following corrective actions may be performed by the spa owner. If the trouble cannot be corrected in the steps below, please contact your Marquis spa dealer for service. (Improper servicing by an unauthorized service provider or spa owner could result in damage not covered by the warranty and could cause serious injury.)

EQUIPMENT WILL NOT OPERATE

- Check the control panel LCD window for diagnostic code.
- 240V Spas: Check the circuit breaker on the main circuit panel.
- 120V Spas: Check the GFCI power cord and reset if necessary (see IMPORTANT SAFETY INSTRUCTIONS at beginning of manual).
- Check the condition of the power cord.

INADEQUATE JET ACTION

- Be sure the shut-off valves are completely open.
- Open the jets by turning the jet face to allow for maximum water flow.
- Check that the air control valve is open (rotate lever counterclockwise to open).
- Check for obstruction or restrictions at suction guard(s) or filters, such as leaves, etc.

NO HEAT

- Check temperature displayed in the LCD window for desired temperature setting.
- Inspect the filter cartridge(s) for dirt and debris.
- Check that the water is at proper level, 2/3 up the Vortex skimmer opening(s).
- Lower ambient temperatures may result in heat loss.

NOTE: Do not expect instant hot water from the jets. It will take the heater 12-24 hours to heat the water to the temperature you desire.

LIGHT DOES NOT WORK

- Press the LIGHT pad on the control panel.
- Reposition the light bulb in the socket. (See REPLACING LIGHT BULB.)
- Replace the light bulb with a 6 WATT BULB (GE 918 ONLY).

troubleshooting

LCD DIAGNOSTIC MESSAGES

The advanced technology built into the spa allows it to perform a number of self-diagnostic system checks and it can display a variety of messages in the LCD window on the control panel.

CL:

This appears every 30 days as a reminder to clean the filter. (See INSTALLATION INSTRUCTIONS, Filter Cartridge(s).)

CH:

This appears every 120 days as a reminder to drain and refill the spa. (See SPA MAINTENANCE, Draining and Filling the Spa.)

FL:

A pressure switch may have malfunctioned. Contact you dealer for service.

HFL or drY:

The filter may be plugged.
The spa water level may be too low.
A shut-off valve may be closed.

ICE:

Freeze protection has been activated. Contact your dealer for service.

OH:

Over heat protection. If a malfunction occurs and the spa water reaches 112°F (44°C), the system completely shuts down. In such a condition, DO NOT ENTER THE WATER. Turn off all power to the spa and contact your dealer for service. Several conditions could lead to overheating, for example, low water level, shut-off valves closed while heater is on, dirty filter, and restriction in the plumbing lines. After the power if turned back on, the spa will not restart itself until the water temperature within the spa drops to a lower, predetermined temperature. As a double safety feature, a secondary high-limit sensor shuts the system off if the water temperature in the heater housing reaches 118°F (48°C). In this case, the spa may be restarted by pressing any panel pad after the water has cooled to 110°F (42°C). If the switch trips repeatedly, do not use the spa and contact your dealer for service.

troubleshooting

OHH or OHS:

Over heat protection. If a malfunction occurs and the spa water reaches 112°F (44°C), the system completely shuts down. In such a condition, **DO** NOT ENTER THE WATER. Turn off all power to the spa and contact your dealer for service. Several conditions could lead to overheating, for example, low water level, shut-off valves closed while heater is on, dirty filter, and restriction in the plumbing lines. After the power if turned back on, the spa will not restart itself until the water temperature within the spa drops to a lower, predetermined temperature. As a double safety feature, a secondary high-limit sensor shuts the system off if the water temperature in the heater housing reaches 118°F (48°C). In this case, the spa may be restarted by pressing any panel pad after the water has cooled to 108°F (42°C). If the switch trips repeatedly, do not use the spa and contact your dealer for service.

SN:

A sensor has malfunctioned. The spa turns off. Contact your dealer for service.

SNS:

Contact you dealer for service.

Snt or SnH:

A sensor has malfunctioned. The spa turns off. Contact your dealer for service.

*NOTE: If power is shut off or a power outage occurs the 240V system has a battery backup. All user settings are retained.

MARQUIS SPACARE™ START-UP KIT



Built-in sanitation system

Because we want you to enjoy your spa right away – every Marquis spa includes a start-up kit featuring the Spa Frog® system. The instructions guide you through the initial elements of spa water care. After the initial start-up, your dealer can provide everything you need for ongoing care and familiarize you with specialty products you may need for the specific water conditions in your area.

To ensure the most enjoyment possible from your Marquis spa, we have compiled this easy to follow guide. Keep this guide by the spa for a day-to-day reference of Marquis spa care.

water

Water Treatment

This includes a step-by-step water treatment regimen and familiarization with the products that make Marquis spa water care a breeze.

Important Chemical Safety Procedures	55
Understanding Water Balance	56-57
Water Treatment	58
Balancing the Spa Water	59-60
Spa Frog Cartridges	61
Water Care Regimen	62
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maintenance

Maintenance

Includes an easy to follow program to care for all of the spa components. Specific product recommendations included in this section may extend the life of your Marquis spa and remove the guesswork.

Weekly Maintenance	68
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Every Three to Four Months	
As Needed	72
Suspended Use and Winterizing	73
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spa enhancements

Spa Enhancements

What would a Marquis spa be without amenities to make it an even more luxurious experience? See some of the favorites.

Spa Enhancement Products 75-76

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IMPORTANT CHEMICAL SAFETY PROCEDURES

- 1 Always keep chemicals out of reach of children.
- 2. Read product labels carefully prior to use.
- 3. When dissolving, always add chemicals to water, do not add water to chemicals. Some dry chemicals should be dissolved prior to adding them to the spa. Using a clean container, dip some water from the spa. Mix until dissolved, then add to circulating water. NOTE: Broadcasting dry chemicals into the spa water may cause damage to surrounding surfaces.
- 4. **CAUTION:** Do not add chemicals together. Add them separately to the spa water.
- 5. All chemical products should be stored in a cool, dry, well-ventilated area where the average temperature does not exceed 90°F (32°C). Keep storage area clean of debris such as rags, newspaper, and combustible materials.
- 6. Keep chemicals away from open flame or other heat source. Do not smoke near chemicals. If a dry chlorine chemical fire should occur, use water only. Do not use a dry chemical fire extinguisher to attempt to put out the fire.
- 7. When adding chemicals, always keep the water circulating in the spa with jets in a downward circular pattern for better chemical distribution. Add chemicals to the spa water one at a time. Allow several minutes between any new chemical additions using the jet action to evenly distribute throughout the spa.
- 8. Wait approximately 15 minutes after adding chemicals to retest your water for an accurate reading. Retest your spa water before using.
- 9. If you have any questions or concerns about the correct procedures for handling chemicals, please contact your spa dealer or Marquis Spas.

UNDERSTANDING WATER BALANCE

Water balance is the interrelation of factors that determine the quality of the spa water. The effectiveness of chemicals and other additives are dependent on all these factors working together or "in balance". The primary elements to water balance are sanitizing, monitoring pH and alkalinity levels, and oxidizing or shocking.

Before we begin, it's important to understand that a spa is not just a "small swimming pool" and that the care of a spa needs to be handled differently. In addition to the fact that a spa is kept at a temperature of up to 104°F (40°C) and pool chemicals are designed for cool water, the ratio of people per gallon in a spa is also very different. Four people in a spa is the equivalent of having 200 people in a typical backyard pool. This increased "bather load" increases the residue from soaps, perfumes, body oils, cosmetics, and other contaminants. Always use water treatment products designed for spa use.

Sanitizing Methods

All Marquis spas are equipped with the exclusive Marquis Ozonator. The use of an ozonator greatly reduces the amount of chemical sanitizer you need in the water. Ozone works by delivering activated oxygen gas into the spa water via an ozone injector fitting. The ozone gas combines with contaminants to sanitize the water. Although sometimes promoted as a stand-alone chemical free alternative, we recommend that you maintain a small residual of bromine (or chlorine) in the water while using any ozone system. Supplementing the water with sanitizer controls and prevents bacteria growth. Instead of the normal 3 - 5 ppm of sanitizer recommended, you only need to maintain a 0.5 ppm level of bromine (or chlorine) when using an ozonator.

Only the use of ozone, bromine (or chlorine if not using the Spa Frog® system) are recommended. Use of other alternative sanitizer systems may void the warranty. Important: Cal Hypo and TriChlor compounds are not recommended for use with a Marquis spa.



All Marquis Spas are equipped with our exclusive Marquis Ozonator.

Alkalinity

Alkalinity acts as a buffer to prevent the pH level from changing as other substances are added to the water. Proper alkalinity is directly related to the stability of the pH. The alkalinity should be between 80 - 120 ppm. Alkalinity levels below 80 ppm make it very difficult to stabilize the pH level. Levels above 120 ppm may increase pH levels and cause cloudy water, scaling, and decreased efficiency of the sanitizer.

pH Level

The pH level measures the relative acidity and basicity of the water. The ideal pH level is 7.2 - 7.8. When the pH level falls below 7.2 the water can become corrosive. Low pH can cause damage to metal in the equipment pack and heaters, excessive sanitizer consumption, and skin irritation. A pH level above 7.8 can be scaleforming and allows metals or minerals in the water to form deposits and stain spa surfaces.

Shocking

Once bacteria and other wastes are neutralized by the sanitizer, they stay in the water unless oxidized or shocked. Often called chloramines or bromamines, they create dull, cloudy water and can cause odor and eye or skin irritation. Marquis Shock Treatment rids your spa of these wastes for clear, sparkling water. Shocking is recommended once a week or whenever the water appears dull or cloudy or has a strong chlorine odor.

NOTE: A strong chlorine odor indicates that the spa needs to be shocked - not that there is too much chlorine in the water. A properly balanced spa that is shocked regularly will not have a chlorine odor.

WATER TREATMENT

Because Marquis cares about the life of the spa, your warranty, and your ultimate happiness, we have developed the Marquis SpaCare™ line of water treatment products with three things in mind:

- Crystal Clear Water
- Ease of Use
- Peace of Mind

We recommended Marquis SpaCare brand water treatment products to help you achieve the most clean and clear water possible.

All Marquis products have easy to use instructions, and won't harm your spa's internal components when used properly.

All Marquis SpaCare products meet or surpass EPA requirements. Marquis SpaCare products are available only through authorized Marquis Dealers.

SPA FROG® BUILT-IN SANITATION SYSTEM*

The Spa Frog® system, with its patented design, is built right into the spa for easy top loading of the cartridges. Simply open the cap, pull up the dispenser and snap in the cartridges.

Spa Frog® system uses mineral and bromine cartridges. The unique mineral formula helps control bacteria while helping keep the pH in balance. With minerals in the water, the spa needs only a fraction of support from bromine. All you need is 1-2 ppm of bromine, which is 50% to 80% lower than standard bromine spas. In conjunction with Constant Clean™ Water Management system, it's super easy and convenient to maintain crystal clean water. See Adjusting the Spa Frog® Cartridges for complete startup instructions.

*Spa Frog® system is not available on spas in Canada.

Balancing the Water

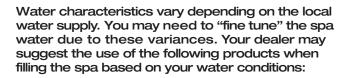
When initially filling or refilling your spa follow these steps to achieve proper water balance.

Important! Always circulate the water for at least 15 minutes after making any chemical additions, before retesting water, or adding any additional products.

- Test the spa water using a test strip (see label for easy dip and read directions).
- 2. Determine the pH and alkalinity level of the water using the color comparison chart on the bottle.
- If changes need to be made to the pH and/or alkalinity level to put them within the recommended range, always balance the alkalinity before balancing the pH.

The product(s) you should use to adjust pH and/or alkalinity are Marquis pH & Alkalinity Increase or pH & Alkalinity Decrease. Make any chemical additions per the directions on the bottle and then test and repeat if necessary until all readings are in the desired range.

4. After pH and alkalinity levels are in the recommended range, you can establish a sanitizer residual of 0.5 ppm (with an ozonator) or 1 - 2 ppm (without an ozonator).





Metal and Stain Control

If minerals such as calcium, iron, copper, or manganese exist in your water supply, they can stain spa surfaces. Marquis SpaCare Metal & Stain Control prevents spa staining. Add per label directions for the gallons of your spa each time you freshly fill the spa with water.

Calcium Hardness Increase

It is critical to have some calcium in your water, however, the level of calcium should be between 200 – 400 ppm. High calcium levels can cause scale buildup on spa surfaces and equipment. Your spa is protected against high calcium by using Marquis Metal & Stain Control when initially filling your spa. Low calcium levels can cause spa water to become highly corrosive and damaging to the spa equipment and plumbing. To raise calcium levels, use Marquis SpaCare Calcium Hardness Increase.



pH Lock

If your water supply requires constant adjustments to keep your pH in balance, we suggest the use of Marquis SpaCare pH Lock. pH Lock "locks-in" the pH level when added to a freshly filled spa. pH Lock maintains the ideal pH level for approximately three to four months – until it is time to drain your spa.

Water characteristics vary depending on the local water supply. You may need to "fine tune" the spa water due to these variances. Your dealer may suggest the use of the following products when filling the spa based on your water conditions:

Metal and Stain Control

If minerals such as calcium, iron, copper, or manganese exist in your water supply, they can stain spa surfaces. Marquis SpaCare Metal & Stain Control prevents spa staining. Add per label directions for the gallons of your spa each time you freshly fill the spa with water.

ADJUSTING THE SPA FROG® CARTRIDGES* Blue Mineral Cartridge

While holding the top of the unit, turn the bottom counterclockwise until the number 6 appears in the setting window. **NOTE:** This cartridge should be replaced every four months. You may still feel the "spent" minerals inside, but they are no longer effective and need to be replaced.

Yellow Bromine Cartridge

The Yellow Bromine Cartridge should initially be set on number two or three (depending on the gallons of your particular spa) for 24-48 hours until you achieve a bromine reading in the spa. While holding the top of the unit, turn the bottom counterclockwise until the number two or three appears in the setting window. If necessary, adjust the setting by 1/2 increments per day until a residual is achieved (1-2 ppm with or without an ozonator). Adjusting to a higher setting will increase the bromine output while a lower setting will decrease the bromine output. **NOTE:** This cartridge should be replaced every two to four weeks. Bromine usage varies depending on spa size and number of spa users.

INSTALLING THE CARTRIDGES

Open the Spa Frog cap on the top of the spa lip. Push down and turn the holder counterclockwise to unlock. Pull holder out. Snap the Blue Mineral Cartridge into the area of the holder marked "Minerals" (top portion) making sure to line up the indentation near the top of the cartridge with the raised line on the holder. Then snap the Yellow Bromine Cartridge into the area of the holder marked "Bromine only". Be sure to line up the indentation on the cartridge with the raised line on the holder. When cartridges are snapped in, replace the holder, push down and lock into place. Replace the cap. **CAUTION:** Hand tighten only; avoid overtightening; and avoid bending the holder to help prevent damage to the holder.

REMOVING THE CARTRIDGES

Reverse above procedures for removing cartridges.

SAFE STORAGE AND DISPOSAL

- Keep out of the reach of children.
- Keep this product dry in original tightly closed container when not in use.
- Store in a cool, dry, well ventilated area away from heat.
- Do not reuse container, but place in trash collection.
- Rinse container thoroughly before disposal.







Spa Frog cap



Install cartridges in the holder.

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*Spa Frog® system is not available on spas in Canada.

MARQUIS SPAS

WATER CARE REGIMEN

Marquis SpaCare products are classified by easy to follow usage guidelines. Labels indicate whether the product should be used daily, weekly, monthly, when filling, or as needed – if special water conditions arise.

DAILY



Sanitizer is the only product in this category. You should maintain the recommended sanitizer level at all times. This does not mean you may have to add sanitizer daily, just that you need to test the sanitizer level regularly and especially before and after each spa use.

When using bromine in conjunction with the Marquis Ozonator, you should maintain a level of 0.5 ppm. As a stand-alone sanitizer without the aid of ozone, you should maintain a level of 1 - 2 ppm.

WEEKLY

The following products should be added once a week:

Shock Treatment

Sanitizer combines with bacteria and neutralizes it on contact. However, the used sanitizer/bacteria particle is still present in the spa water. Used sanitizer in the water emits a chlorine odor and causes cloudy water. To oxidize, or rid the spa of this used sanitizer, you must shock the spa once a week.

AS NEEDED PRODUCTS

pH & Alkalinity Increase and pH & Alkalinity Decrease

These two products work to raise or lower the pH and alkalinity levels in the spa and are only needed if the test strip indicates the levels are not in the ideal range.

Crystal Clear Clarifier

Microscopic particles can pass right through the spa filter and create cloudy water. The use of Marquis SpaCare Crystal Clear Clarifier combines these microscopic particles into larger particles that can be trapped in the filter to clear cloudy water.

Foam Eliminator

If foam appears in your spa, the action of the jets will keep it from dissipating. The use of Marquis SpaCare Foam Eliminator instantly rids your spa water of foam.

Spa Perfect

This natural enzyme breaks down body oils and lotions before they form a ring around the water line and clog the spa filter.



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MARQUIS SPAS

TROUBLESHOOTING GUIDE

C: Cause S: Solution

CLOUDY WATER

- C: Inadequate filtration or dirty filter.
- **S:** Check that the filter is securely installed. Clean or replace filter.
- C: Water is not balanced.
- S: Treat water with Shock and test water with a Water Test Strip.
 - Adjust sanitizer level, pH, and alkalinity levels as needed.
- C: Unfiltered particles or chemically saturated water.
- **S:** Use Crystal Clear Clarifier to combine particles; or drain, clean, and refill the spa.

CHEMICAL ODOR

- C: Too many chloramines/bromamines in the water.
- **S:** Treat water with Shock then adjust sanitizer level as necessary.

MUSTY ODOR

- **C:** Not enough sanitizer in water bacteria or algae in water.
- **S:** Add sanitizer as necessary and shock. Readjust sanitizer level if necessary.

YELLOW WATER

- C: Low pH.
- S: Adjust pH with pH and Alkalinity Increase.

FOAMING

- **C:** High concentration of body oils, lotions, or soaps as well as high temperatures and excessive contaminants.
- **S:** Use Foam Eliminator and adjust pH and sanitizer levels as needed.

SCUM LINE IN SPA

- C: Body oils and dirt.
- **S:** Use Spa Perfect once a week to break down oils and lotions to prevent scum from forming.

FAILURE TO GET A SANITIZER READING ON TEST STRIP

- C: Sanitizer level is too low.
- **S:** Add bromine until the sanitizer registers in the recommended range on the test strip.
- C: Algae present.
- **S:** Dirty water consumes the sanitizer as soon as it is added. Add more bromine until the sanitizer registers and stays in the recommended range on the test strip.
- C: Test strip remains "white" even after sanitizer has been added.
- **S:** Sanitizer level is extremely high. It can bleach the reagents on the test strip and give a false reading. (See below.)

TOO MUCH SANITIZER IN THE WATER

- **C:** Too much bromine added or dispensed into the spa.
- S: Remove DuraCover and activate jets and air control. Allow jets to run for 30 minutes. Test water with a Water Test Strip to see if desired level has been reached.

EYE OR SKIN IRRITATION

- **C:** Contaminants or excessive amount of chloramines/bromamines in water.
- S: Treat water with Shock. Adjust sanitizer level.
- C: pH level is low.
- S: Adjust pH level as needed.

CORROSION OF METAL

- C: Low pH level.
- S: Adjust pH level with pH and Alkalinity Increase.

GREEN WATER/ALGAE

- C: Low sanitizer level or high pH.
- S: Adjust pH and sanitizer as necessary.

ERRATIC pH TEST COLOR

- C: Sanitizer level is too high. (See TOO MUCH SANITIZER IN THE WATER.)
- S: Test pH again when sanitizer level is below 5 ppm.

glossary

TERMS AND PRODUCT DEFINITIONS

Alkalinity - The concentration of alkaline materials in the water. Proper alkalinity is directly related to the stability of the pH. High alkalinity makes the pH impossible to adjust. Low alkalinity makes the pH unstable and difficult to maintain.

Bacteria - The germs that contaminate your spa water.

Balanced Water - The correct balance of alkalinity, pH and sanitizer.

Bromamines - Created when bromine combines with bacteria.

Bromine - A bromine based sanitizer.

Calcium Hardness - The amount of dissolved calcium in the spa water. This should be approximately 200 - 400 ppm. High levels of calcium can cause cloudy water and scaling. Low levels of calcium can cause permanent damage to the equipment.

Calcium Hardness Increase - Increases calcium levels in your water to avoid damage to the equipment seals and metal in your spa. Especially needed if using soft water.

Chloramines - Created when chlorine combines with bacteria.

Chlorine Demand - The amount of chlorine that must be added to the spa to destroy existing bacteria and algae and to establish a chlorine residual.

Chlorine Residual or Free Chlorine – The available chlorine left in the spa water to destroy harmful organisms after the chlorine demand has been met. The correct amount of free available chlorine is 3 - 5 ppm (0.5 ppm when used in conjunction with an ozonator).

glossary

Chlorine Sanitizer - A fast dissolving, granular product used for sanitizing the spa water. Dispensed manually into the water as needed.

Crystal Clear Clarifier - Restores clarity to dull water by combining unfilterable microscopic particles into larger particles that can be effectively filtered.

Filter Revive - Keeps your filter operating efficiently by removing grease, grime, and other buildup that can impair the filtration process.

Foam Eliminator – Instantly rids the spa of undesired foam.

Metal and Stain Control – Rids spa of minerals and metals that can interfere with filtration, affect sanitizer efficiency, and stain spa surfaces. Necessary if you have well water or water with a high metal/mineral concentration.

Ozonator - A device that produces bacteria killing ozone gas to assist in water sanitation. The use of an ozonator significantly reduces the amount of chemical product needed to maintain clean, fresh water.

pH - The pH level is the measure of acidity and alkalinity of the water. It is measured on a scale of 0 - 14. The ideal pH level is 7.2 - 7.6. When the pH level falls below 7.2, damage to metal in the equipment can occur. A pH level above 7.8 can reduce the effectiveness of the sanitizer, and cause cloudiness and scale formation. Improper pH levels can be irritating to the eyes.

pH and Alkalinity Decrease - Decreases the pH and alkalinity level of the water in your spa.

pH and Alkalinity Increase – Increases the pH and alkalinity level of the water in your spa.

glossary

ppm – Parts per million. The measurement of chemical concentration in the water.

Sanitizer - Any product or device that kills bacteria living in the water.

Shock - Also known as shocking or oxidation. Shocking oxidizes used up chloramines and bromamines in the water that cause odor and irritation.

Shock Treatment - Rids the water of chloramines or bromamines through oxidation (shocking).

Spa Perfect - Naturally biodegrades body oils and grime that can cloud water, clog filter, and produce scum.

Water Balance - The interrelation of factors which determine the quality of spa water. The effectiveness of chemicals and additives is dependent on other chemicals or water characteristics present in the spa water. Chemicals, minerals, or other substances vary depending on your municipal water system, ground well, or other water supply.

Water Test Strip - An accurate dip test that measures the spa water for sanitizer, pH, and alkalinity levels.

WEEKLY MAINTENANCE

1. Removing Debris

Remove any debris and leaves from the Vortex skimmers and suction guard(s) on the inside of the spa. Blocked intakes can impede the flow of water through the jetting system.

2. Water Level

Replenish the water level if necessary so that it is approximately two-thirds up the Vortex skimmer opening. (See STARTING YOUR SPA.)



Paradise Spa Vac uses simple air and water pressure to suction matter from deep in the footwell. Telescopic aluminum pole provides user flexibility for hardto-reach areas.



Water level should be two-thirds up the Vortex skimmer opening.

MONTHLY MAINTENANCE

1. Filter Care

We cannot stress enough the importance of a clean filter for proper water filtration. Dirty filters can restrict water flow, cause hazy water, and prevent your chemicals from working properly. Many water treatment products clear or clarify the water by clumping microscopic particles and minerals together so that these larger particles can be effectively trapped in the filter. A filter clogged with debris and calcium deposits does not trap particles properly.

The Maintenance Reminder on the spa-side Control Panel indicates a CL every 30 days to remind you to clean your filter.

Removing the Filter

Grasp the edge of the dome-shaped Vortex filter top, pull up firmly, but gently, to remove it.

Turn the filter cartridge counterclockwise to unscrew it from its base. Lift out the filter cartridge.

Use a hose to clean the filter cartridge or use the Marquis Maintenance Kit bucket and Filter Revive to soak the filters (you will need to flip the filter after the designated time to completely clean the entire length). Or a Filter Soak Canister is available from your dealer to assist in the filter cleaning process.

NOTE: Keep an extra set of filters on hand so you always have a clean set ready for immediate spa enjoyment. Remember to replace the filter cartridge(s) at least once a year.

Reinstalling the Filter

Repeat the steps above in reverse. Do not overtighten the filter as it may cause the threads on the bottom to strip and fail to hold the filter in place. When replacing the Vortex filter top, center the top over the raised filter ring and press down firmly until the top snaps into place. (See INSTALLATION INSTRUCTIONS, Filter Cartridges.)



Grasp edge of Vortex filter top, pull gently.



Turn filter cartridge counterclockwise to unscrew.



Filter Soak Canister is perfect for soaking the spa filter. Fitted lid keeps pets away.

EVERY THREE TO FOUR MONTHS

Draining and Filling the Spa

The average spa needs to be drained every three to four months. After months of continually adding chemicals to the water and introducing body oils and lotions, the water can be difficult to manage and chemicals are not as effective as usual. You may also notice excessive foaming. A maintenance reminder appears on the control panel as "CH" to remind you to change water. More frequent draining may be required depending on use.

1. Leakage Detection

Open the equipment door and check for signs of water leakage around the pump(s). Pump seals wear out over time, especially with improper water chemistry. Early detection of pump seal failure can significantly reduce repair costs.

2. Ozonator Operation

Check to see if the bulb is lighted. Run spa in lowspeed. The end caps of the ozonator should have a green glow if functioning properly. If not, the bulb has burned out. Contact your dealer for service.

3. Draining the Spa Using the External Drain and Fill Connection

- A. Turn off the power to the spa.
- B. Remove the hose bib plug from the external drain and fill connection and attach a hose.
- C. Open the drain valve in the equipment compartment. (See EQUIPMENT DIAGRAM.) Gravity causes the water to drain out of the hose.
- D. When the spa is empty, close the drain valve and remove the hose. Reinstall the hose bib plug.

NOTE: Keep the drain valve closed at all times except when draining the spa (do not rely on the cap to stop the flow of water). Not doing so could result in damage to the drain valve due to freezing water.

Replacing the Spa Frog Mineral Cartridge

This cartridge should be replaced every four months. You may still feel the "spent" minerals inside, but they are no longer effective and need to be replaced. See ADJUSTING THE SPA FROG® CARTRIDGES, Blue Mineral Cartridge.



Check the end caps of the ozonator for a green glow.



Remove hose bib plug from external drain and fill connection.



Open drain valve in equipment compartment.



Replace blue mineral cartridge every four months.

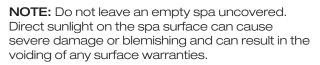
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4. Clean the DuraShell® Interior

Once the spa is drained, clean the DuraShell interior thoroughly – especially at the water line. We suggest the DuraMitt to clean without scratching.

Following is a list of approved cleaning agents for DuraShell – any other products should be avoided:

- Soap and water
- Formula 409
- Liquid Comet Cleaner
- Mr. Clean Cleaner
- Clorox Bleach (diluted)
- Fantastic Cleaner
- Spic and Span Powder
- Soft Scrub Cleanser





Fill the spa with fresh water from a garden hose and balance the water as described in the Water Treatment section.

The use of a A Fill Filter™ is recommended when filling especially in areas of high mineral content in the water. Attach to the end of a garden hose to filter out any grit and sediment that could accumulate in the spa and potentially scratch the spa surface.



Fill Filter eliminates grit and debris that can enter the spa through your hose.

AS NEEDED MAINTENANCE



Marquis Maintenance Kit includes: DuraWood Cleaner, Cover Care Cleaner, Fill Filter, Filter Revive, Swirl Away Plumbing Cleaner, interior DuraMitt, and a scrubby hand mitt for exterior cabinet and cover cleaning, all in a handy storage bucket.

1. Cover Care

It is recommended that you use Marquis Cover Care Cleaner to keep the DuraCoverTM clean and conditioned. Proper care of the cover increases the life and keeps it looking great in even the harshest conditions. **NOTE:** Do not use regular household products or products that contain silicone, alcohol, steel wool, or bleach.

2. DuraWood Care

Clean the exterior of the spa with Marquis Dura-Wood Cleaner. Our specially formulated cleaner does not contain alcohol or high levels of solvents. These ingredients (along with Acetone, Nitrobenzene, and Cyclohexanol) can dissolve and discolor the DuraWood exterior. For small cleaning jobs, you can also use a mild soap and water solution.

3. Shiplap Cedar Care

The natural cedar exterior is available either stained or unstained. Restain the exterior every three years with the high-performance coating, or as needed (depending on environmental exposure). The high-performance coating is available through your Marquis Dealer. If unstained, immediately apply a protective stain or preservative to the wood.



Grit and debris tracked into the spa should be removed with a spa vacuum.

5. Water Line

To avoid buildup of oils and lotions at the water line, clean the interior when needed. We suggest the DuraMitt to clean without scratching.

NOTE: Do not use the same brush or mitt to clean the exterior of the spa and the interior of the spa. Soap and other product residue used on the outside of the spa can cause foaming of the spa water and scratches to the spa surface if used on the inside of the spa.

6. Light Bulb Replacement:

- A. Turn off the power to the spa.
- B. Remove the equipment area door to find the light access. (See EQUIPMENT DIAGRAM.)
- C. Remove the lamp socket from the back of the light assembly by turning counterclockwise and pulling at the same time.
- D. Gently pull the bulb out of the lamp socket and replace it with a 6 watt bulb only (GE #918) available from your spa dealer.
- E. Install the lamp socket back into the light assembly and replace door.



DuraMitt cleans the interior of the spa without scratching.



Remove lamp socket from back of light assembly.

SUSPENDED USE OR WINTERIZING THE SPA

Your spa was designed for year-round use and many people find the combination of hot water, therapy jets, and cool winter temperatures to be especially soothing. However, if you decide to discontinue the use of your spa for any extended period of time, we suggest you follow the steps below.

NOTE: During long periods of inactivity, damage can occur to equipment from condensation within the equipment compartment.

- 1. Turn off the power to the spa.
- 2. Drain the spa. (See DRAINING AND REFILLING THE SPA.)
- Remove all residual water from the seating and footwell. If necessary, bail out the remaining water then dry the spa with towels. A wet/dry vacuum is recommended for best results.
- 4. Using the wet/dry vacuum, place vacuum nozzle over each jet nozzle to remove water from plumbing lines, starting with the highest jet and finishing with the lowest jet.

NOTE: The spa is equipped with a Tri-Zone control which is used to divert water between different jet zones. The valve must be "open" to the particular jets you are vacuuming.

- Unscrew the pump plug(s) from the pump(s) or disconnect the freeze protection line. (See STARTING YOUR SPA.)
- Again, using the wet/dry vacuum, place nozzle over the exposed pump opening(s) to remove excess water. The pump(s) should be removed from the spa and stored in a climatecontrolled room.
- 7. Clean the spa interior.
- 8. Clean the filter cartridge(s).
- Reinstall the DuraCover[™] and lock in place.
 NOTE: Direct sunlight on the spa surface can cause severe damage or blemishing and can result in the voiding of any surface warranties.
- 10. For added protection, cover the entire spa with a Marquis Protective Spa Cover.



Tri-Zone control must be "open" to the jets you are vacuuming, in this case, the upper and mid back jets.

owner maintenance record

DATE	MAINTENANCE PERFORMED	NOTES

spa enhancements

There are several products you won't want to leave out of your Marquis spa experience. Whether you add a towel tree to keep robes and towels handy, or find the need for the Paradise Spa Vac, we have the items you need, and the items you want.



Your Marquis spa is equipped with underwater light colored lens covers that simply snap into place. To further enhance your spa experience, ask you dealer about Marquis WaterColors. WaterColors transforms your spa into a color-filled oasis at the touch of a button. Relax in waves of blue/green, violet, blue, yellow, green, red or white or a colorwash of all the colors.

Remote Comfort Control

The Marquis Remote Comfort Control monitors spa functions from comfortably inside your home. Turn on lights, confirm your spa is operating, check the temperature – it offers the same functions as your spa control from the location of your choice.

DuraLift™ Cover Lifts

Marquis offers two options to easily lift the spa cover up and out of the way. The original DuraLift opens your cover with ease and places it slightly behind the spa. The DuraLift Upright places your spa cover on the back edge of the spa requiring minimal clearance behind it. Additional gas springs encourage easy, one hand operation when lifting or lowering the cover.

Jet EXchange™ System

For the ultimate in customized hydrotherapy, the Marquis spa is designed to accommodate different jet inserts. Interchange any Power Boost or Cyclo Boost jet with a Power Swirl or Cyclo Swirl jet available for purchase through your Marquis dealer.

Entry Options

Marquis DuraWood steps are made of all-weather material that maintains its beauty – just like the Marquis spa! Available in single- or double-wide versions in colors to complement your Marquis spa exterior. Optional storage compartments are available to conveniently keep water treatment products and accessories close by.



WaterColors



Remote Comfort Control



DuraLift Cover Lift



Jet EXchange System



DuraWood Step

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