

Manual

No.1

Hot Tub Company in the
northeast

2020 Hot Tub Owner's Manual

POOLSpas



Spa Set Up Instructions

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WIRING

(Not applicable if you own 13amp hot tub)

Our hot tubs require a 32amp power supply with a RCD, you will need a 6mm armoured cable running to the hot tub with an ip65 isolated switch located no more than 2m away from the hot tub. All hot tubs will need installing by a part p qualified installer.

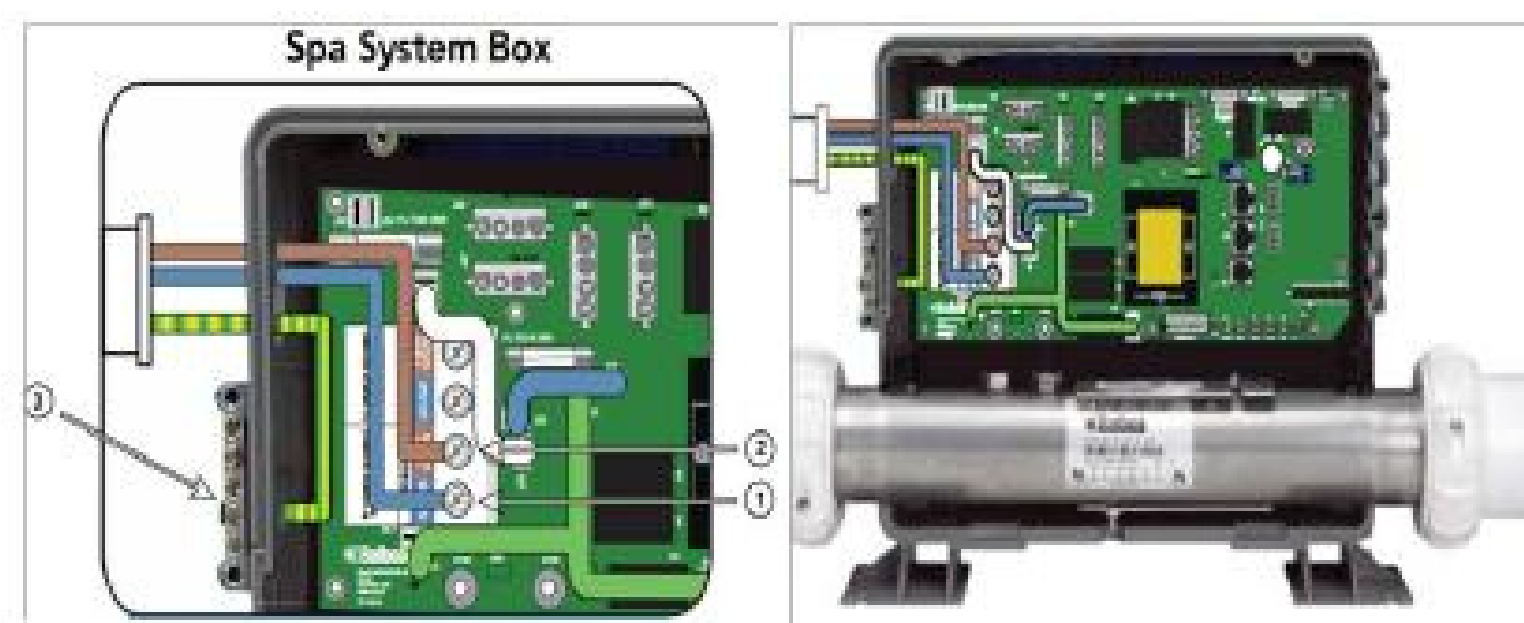
1. REMOVE THE VERTICAL SLATS FROM THE SIDE OF THE HOT TUB WHICH STATES "ELECTRIC SUPPLY" To do this you will need to pop the plastic grommets off the slats and then use a screwdriver to unscrew them



2. LOCATE THE MAINS BALBOA BOARD SHOWN BELOW, UNSCREW THE TWO SCREWS HIGHLIGHTED BELOW TO REMOVE THE FRONT PANEL.



3. WIRE IN AS BELOW



Initial Set Up

Before your hot tub has left the factory it is well tested for leaks, this means your hot tub is filled with water and all the functions are tested and the pipe work is tested for any leaks. You will need to sanitise the pipe work of the hot tub, this is to kill all bacteria that could be living in the water residue in the pipes from testing.

Before you use your spa you need to complete the following 8 steps;

1. Please remove the filter from the filter housing.
2. Fill the hot tub with cold water by putting the end of the hose into the filter housing. Failure to fill the tub in this way may cause airlocks. If you have an airlock it will display DR or DRY on your key pad.
3. When the hot tub is filling wipe the sides down with a sponge or shamus leather.
4. Use your Spa starter kit to clean your pipe work.
5. Run all Jet pumps and your circulation pump for two hours.
6. Drain the hot tub after 2 hours and clean out any debris left in the bottom.
7. Refill your hot tub again through the filter above the filter housing as before.
8. Before use you will need to add your desired chemicals to the water.

PLEASE NOTE THAT THIS PROCESS MUST BE FOLLOWED WHEN EVER YOU DRAIN YOUR SPA AND LEAVE IT EMPTY FOR A PERIOD OF TIME

Water Changing

How often you change your water will depend on your usage, as water can only be chemically maintained for so long before excess build up occurs and it needs replacing. However we recommend you change your water at least every 3 months.

Spa Maintenance

There are 7 main important aspects of spa maintenance that are essential in keeping your spa water safe.

- 1.Circulation and Filtration
- 2.Testing
- 3.Water Balance
- 4.Sanitising your water
- 5.Oxidising
- 6.Cleaning
- 7.Draining and Refilling.

1. Circulation and Filtration

The equipment supplied with spas varies from make to-make but all spas have at least one pump and a filtration system. It is the pump that creates the flow (circulation) of water to and from the spa and built into the circulation will be the filter. As the water circulates through the filter, particles are removed and collected within the filter media. The combination of removal of particles by the filter and good chemical water treatment is essential to keep your spa water clear, clean and healthy. Your spa is supplied with a cartridge filter, which will contain a cartridge element that removes particles from the water. The cartridge element will also collect oils and greases and over time the collection and retention of debris will begin to impair the filter efficiency and reduce the speed at which the water flows around the circulation system. It is therefore necessary to chemically clean cartridge elements typically every 4 – 6 weeks using either Immerse or Cartridge Cleaner. Or for a rapid intermediate clean use Instant Filter Cleaner.

The filter you require for your spa can be purchased through us at www.pool-spasco.uk or by telephone (01429 289450)

2. Testing

Regularly testing your spa water is an essential part of spa maintenance, as without testing you will have no idea what the chlorine or bromine, pH, total alkalinity and calcium hardness levels are. For the testing of domestic spas, test strips or pooltesters are normally used. It is important that you test your spa water regularly, ideally every day. Please note if you are using Spa 100 you will not need to test your water for Chlorine or Bromine.

3. Balancing your Water

Establishing and maintaining the correct water balance is important for a number of reasons:

- Chemical efficiency
- Bather comfort
- Protection of spa and spa equipment
- Water quality and appearance
- Makes it easier and less time consuming to look after the spa

Some people believe that keeping the right pH is all that is needed to achieve the correct water balance; this isn't the case and although pH is important there are other factors that also need to be considered. In the table below we have illustrated the properties that make up water balance and the ideal levels that should be maintained.

Ideal Spa Water Levels

Calcium Hardness	Total Alkalinity	pH	Total Dissolved Solids
100 - 200mg/l	80 - 150mg/l	7.2 - 7.6	Less than 1500mg/l

Ideal pH for Spas is between 7.2 and 7.6. If the pH of your spa water is either low or high it should be corrected using pH Plus or pH Minus. The following table will help you calculate the dose rate to suit your spa:

Spa volumes		Dose rates	
Litres	Gallons	5g	Re-check pH after a few hours & repeat dose
500	110	5g	
1,000	220	11g	
1,500	330	17g	

Spa volumes		Dose rates	
Litres	Gallons	5g	Re-check pH after 24 hours & repeat dose
500	110	5g	
1,000	220	11g	
1,500	330	17g	

Calcium hardness (or total hardness) is the measure of how hard or soft the water is. The level will vary depending on where your water supply comes from, for example in some parts of Scotland the water is very soft and in parts of Kent the water can be very hard. The hardness depends upon the amount of mineral salts (mainly calcium) that are dissolved in the water and the more salts there are the harder the water is. Total alkalinity is a measurement of the waters ability to resist pH change. If the total alkalinity is low then the pH can fluctuate making it difficult to control and maintain at the ideal level. If the total alkalinity is high then the pH can be difficult to change and will keep rising. A high total alkalinity can also lead to the formation of a bicarbonate scale on spa surfaces, within pipework and support equipment. If the total alkalinity of your spa water is below 80mg/l it should be increased using Spa T.A. Plus

4. Sanitising your water

The reason that sanitisers are used in spas is to ensure that the water is healthy by preventing and killing bacteria. This is achieved by continuously and consistently maintaining a level of sanitiser (disinfectant) in the water with either chlorine or bromine.

Chlorine is a commonly used chemical to achieve satisfactory bacteriological and chemical purity in spas. It must be present in the 'free' form to kill bacteria and oxidise organic matter derived from bathers. Provided the water is balanced, chlorine levels of between 3.0 to 5.0mg/l are sufficient to maintain healthy, clean water. A well managed chlorine treated spa will have no odour and levels of chloramines (combined chlorine) of less than 0.5mg/l.

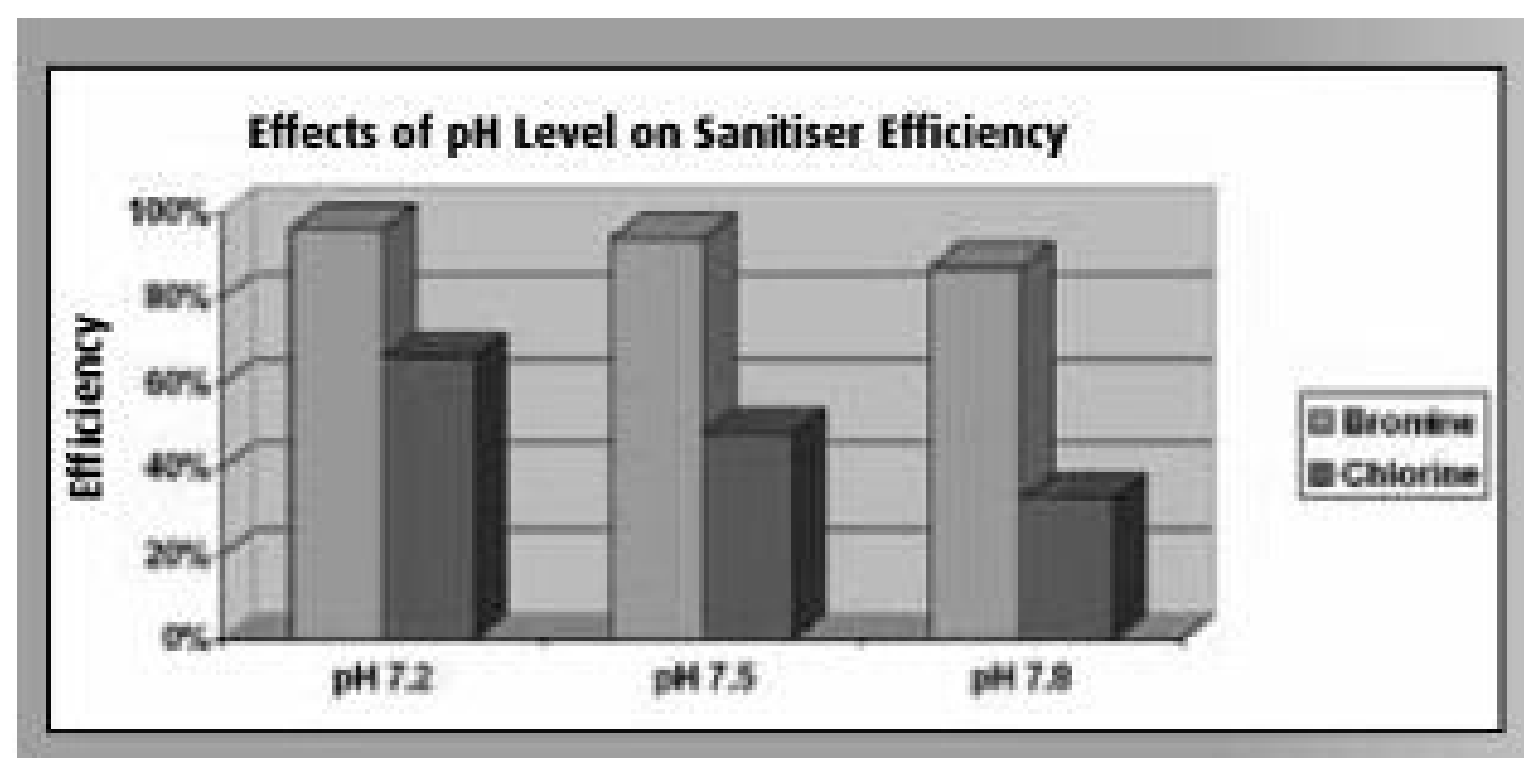
Spa Stabilised Chlorine Granules *Spa Multifunctional 20g Chlorine Tablets

Bromine is similar to chlorine in its effectiveness as a sanitiser but there are some important differences that make it an ideal product for using in a spa:

- Bromine tablets should be dosed into the spa via a floating dispenser.
- Bromine retains better levels of efficiency over a wider pH band than chlorine, see chart below, which makes it ideal for spas as the pH can fluctuate a fair amount.

* Bromine Granules

* Bromine Tablet



5.Oxidise

Oxidise your spa water. Regularly oxidising spa water, ideally weekly, will pay dividends in the prevention of water problems. Bather wastes such as perspiration, urine and cosmetics can build up in spa water providing nutrients for bacteria and algae. A weekly oxidising treatment or shock dose will destroy these wastes and help maintain comfortable bathing conditions.

Fusion Spa Fusion is the ultimate product for regular oxidisation of hot tub water. Supplied in a convenient 35g sachet, this powerful oxidiser not only destroys bather wastes but also clarifies the water. Non Chlorine Shock Granules are a granular product that is ideal for the regular oxidation of spa water as it will destroy organic waste and chloramines without increasing the chlorine level.

Rapid Shock Granules are a fast dissolving un-stabilised chlorine granule used for the oxidation of spa water, which will eliminate bather wastes and contaminants.

6. Cleaning your Spa

Floating debris such as suntan lotion, cosmetics, grass and insects will collect on the water surface and spa sides providing a source of food for bacteria and algae. A weekly clean around the waterline using Spa Surface Cleaner will easily remove unsightly waterline deposits.

Spa Surface Cleaner Specially formulated for use in spas this cleaner is easy to apply using a brush, sponge or cloth. Before applying Surface Cleaner ensure the area to be cleaned is wet then dispense a little on to the brush, sponge or cloth and gently apply it to the waterline, leave for a couple of minutes and then rinse area with plenty of water. Rubber gloves must be worn when using this product. After draining and before refilling the spa, Surface Cleaner should be used to clean all internal spa surfaces.

Instant Filter Cleaner should be used as part of a regular cleaning routine for your hot tub filter cartridges. Instant Filter cleaner will rapidly remove grease and oil from the filter cartridges so should be used on a fortnightly basis or more frequently if your hot tub sees heavy use. Remove filters from filter compartment and hose down with fresh water to remove loose matter. Thoroughly spray filters with Instant Filter Cleaner taking care to penetrate veins with product. Leave the filters to stand for 15 minutes then hose down thoroughly with fresh water. We advise to rotate between 2 filters

IMMERSE Filter has been designed to remove the grease and oils. This convenient 100g sachet is the ideal product to clean filter cartridges. Add one Immerse sachet into a clean plastic bucket containing clean water and stir well. Hose the cartridge to remove any loose debris, and then soak it in the cleaning solution for at least 8 hours. After soaking the cartridge rinse it thoroughly with fresh water and if possible allow it to dry before returning it to the spa

Hot tub conditioner is a single use 80ml sachet treatment, containing a blend of compounds which enhance the quality and feel of the water, reduce chemical consumption and prevent Biofilm formation in the pipework. Also contains lavender oil for an enhanced bathing experience. Spazazz fragrance crystals will also enliven your spa experience. They are available in a range of fragrances all enriched with skin moisturisers and water softeners

Spa Cartridge Cleaner is a highly effective traditional cartridge cleaner is used in a similar way to Immerse (see opposite or product label for full details). It can also be used to clean spa sand filters. Periodically, usually prior to draining and refilling your spa, it is advisable to purge the spa pipework of grease and grime that can build up over time. These pipework deposits can be an ideal breeding ground for bacteria if not chemically treated and removed.

HOT TUB FLUSH has been especially formulated to remove build-up of soap & oil deposits in spa plumbing. This product should be used just prior to draining out your spa. Dose directly into the spa skimmer basket with the pumps running. Leave for a minimum of 12 hours then drain down and refill spa with fresh water

In addition to the water treatments that have already been covered there are a couple of other products that may be needed from time to time, or you can include them within your routine spa management to prevent problems. Clarifying Spa water can become cloudy for a number of reasons: □ Incorrect water balance. Poor or insufficient filtration (filter needs cleaning) □ Low levels of sanitiser □ A build-up of bather wastes

Dealing with Foam From time-to-time it is likely that foam will form on the water surface this is usually caused by rem-nants of detergents left in bathing costumes after they have been washed. If possible it is always a good idea to encour-age spa bathers to shower, with their costumes on, before using the spa as this will not only help in removing detergents but will also remove cosmetics and lotions from the body. If foam does appear on the water surface it can easily be de-stroyed by using FoamAway. It is used to prevent and destroy unsightly foam on the surface of spa water this fast acting product quickly breaks the foam down. It comes in a liquid form that can be added directly to the spa water

Scaleaway is a liquid which will prevent scale deposits caused by mineral precipitation which can build up rapidly on spa surfaces due to high water temperatures. Dose monthly to prevent scale deposits within the filter, heater, pipework and on spa surfaces .

ALL THE PRODUCTS MENTIONED IN THIS BOOKLET ARE AVAILABLE FROM US HERE AT POOL SPAS AND CAN BE PURCHASED THROUGH OUR WEBSITE WWW.POOL-SPAS.CO.UK, VIA EMAIL SALES@POOL-SPAS.CO.UK OR BY CALLING OUR OFFICE ON 01429 289450

7.Draining & refilling

Although this is the last subject being covered within this guide it is an important part of any spa management programme. Over time spa water can become 'stale' as it absorbs minerals, chemicals and other soluble materials that cause the total dissolved solids level to increase. When the T.D.S. level reaches 1,500mg/l it is time to drain the water out of the spa and refill it with fresh new water. As a broad guide a spa will need draining and refilling every 2 – 3 months.

After draining and before refilling it is a good idea to clean all the spas internal surfaces with Spa Surface Cleaner and clean the cartridge element with Immerse or Spa Cartridge Cleaner. Remember, if the spa is going to be left empty for a period of time before being refilled it should be treated with a high dose of sanitiser before being switched back on

General Spa Safety

Do not allow water temperatures to exceed 40 °C (lower for children)

Never leave children unattended in the spa

Do not overload the spa

Never use inappropriate electrical equipment in the spa or close to the spa's edge

Never allow diving or jumping into the spa

Don't allow horseplay in or around the spa

Never allow glass objects in the spa

Do not drink alcoholic beverages before or during spa use

Always remove cover completely before using the spa

General Chemical Safety

Always read the instruction label on chemical products

Always adhere to the instructions printed on the product label

Always handle chemicals in a well ventilated area, preferably outdoors □ Always keep chemicals out of the reach of children

Always wash hands after handling chemicals

Always store chemicals in a cool, dry place

Always put the lids back on chemical containers

When pre-dissolving products always use a clean container

Never use chemicals that don't have an instruction label

Never mix chemicals

Never dose chemicals when there are bathers in the spa



Enjoy your Spa

**If you require any assistance please call
our friendly team on 01429 289450 or
email sales@pool-spas.co.uk**