

#### **SF MEDIA FILTER**



#### INSTALLATION AND OPERATION MANUAL

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## PLEASE READ THESE INSTRUCTIONS BEFORE OPERATING.

Please pass these instructions on to the owner of this equipment.

SF24-40SF24-50 SF28-50 SF31-50



## CONGRATULATIONS ON PURCHASING YOUR **OASIS**SF MEDIA FILTER.

## THIS MANUAL HAS BEEN CAREFULLY DEVELOPED TO GIVE YOU ALL THE INFORMATION YOU NEED TO GET THE BEST VALUE FROM YOUR PURCHASE.

It is important that you read through the manual to identify the key areas you need to understand, particularly the following:

- Health and Safety Concerns
- Installation requirements
- How to operate the major features of the unit
- The importance of maintenance
- If you have a problem, what to trouble shoot before you contact your professional
- Finally, your entitlements under your product warranty.

Oasis have developed their product to provide you with the ultimate experience and are sure you will be delighted with your purchase.

Please note: This manual has been designed to cater for installation rules and codes in the USA, Canada and Australia. Specific rules and regulations for each country has been highlighted by the National flag of each country. Please ensure you follow the installation rules specific to your country.

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#### WE CARE ABOUT YOUR SAFETY



#### **IMPORTANT WARNINGS**

Warning – read and follow all instructions in this owners manual and on the equipment. Failure to follow instructions can cause severe injury and/or death.

Oasis highly recommend the installation of all their equipment by a suitably qualified pool professional who will ensure your high performance Oasis products are installed to your local standards and codes to ensure optimum safety and performance.

#### CAUTION

All components of the filtration system including Pumps, Filters, Heaters must be positioned so to prevent being used as means of access to the pool by young children. To reduce risk of injury, do not permit children to use or climb on this product. Closely supervise children at all times.

#### WARNING- HAZARDOUS PRESSURE.

Hazardous Pressure. Pool and Spa water circulation systems operate under hazardous pressure during start up, normal operation, and after pump shut off. Stand clear of circulation system equipment during pump start-up. Failure to follow safety and operation instructions could result in violent separation of the pump housing and cover, and/or filter housing and clamp due to pressure in the system, which could cause property damage, severe personal injury, or death. Before servicing pool and spa water circulation systems, all system and pump controls must be in the off position and filter manual relief valve must be in open position. Before starting system pump, all system valves must be set in a position that allows system water to return back to the pool. Do not change filter control valve position whilst system pump is operating. Before starting system pump, fully open filter manual air relief valve. Do not close filter manual air relief valve until a steady stream of water (not air) is discharged.

Cleaning the Sand Filter by BACKWASHING and RINSING is essential to providing clean, safe and healthy swimming water. A regular cleaning program is highly recommended especially in Commercial applications, the time between cleans and length of cleaning time will depend on size of pool, bather load and other environmental conditions. Discuss with your local pool professional to work out a program that best suits your pool.

#### WARNING- RISK OF ELECTRICAL SHOCK OR ELECTROCUTION

# WE WANT YOU TO BE DELIGHTED WITH YOUR PURCHASE, CORRECT INSTALLATION WILL PROLONG LIFE AND MAXIMISE THE PERFORMANCE OF THIS UNIT.

Your filter is high performance and corrosion proof designed with superior flow characteristics that is easy to operate. Everything is made simple from installation, operation, to the maintenance of the filter. Your Oasis filter will provide crystal clear, healthy swimming water with minimal maintenance.

Oasis highly recommend the use of qualified service technicians to ensure the best performance as well as the health and safety of your family.

#### HOW IT WORKS

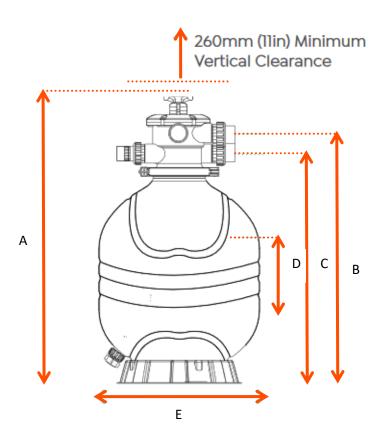
Your Oasis Media filter is designed to use the high-quality filter elements to remove dirt particles from pool water. These elements are specifically designed for your Oasis Media filter and if looked after will provide you with years of trouble-free operation. The pool water which contains dirt particles is pumped through your system to the filter. As pool water passes through the filter, dirt particles will be caught by the filter element and removed from the water. The cleaned pool water is returned back to the pool through your piping system. The entire process is continuous and automatic. It is this process that provides the filtration and removal of organic material such as dust, dirt and fine particles in your pool water.

During this process, dirt will accumulate in the filter element and gradually increase the pressure in the tank and reduce the flow of water through your filtration system. This means it is time to clean your filter element. A good indication when to clean the filter element is by checking the pressure gauge reading. Cleaning should be performed when you notice the pressure has increased by 5 PSI or 35 kPa from when it was clean. Following the cleaning procedure for the best results.



#### SPECIFICATIONS AND DIMENSIONS

Model #	SF24-40	SF24-50	SF28-50	SF31-50
Filtration Area (m²)	0.28	0.28	0.36	0.47
Max Flow Rate (litres pm)	250	320	350	400
Turnover Capacity – 8 Hours (Litres)	120,000	153,600	168,000	192,000
Turnover Capacity – 8 Hours (Gallons)	31,680	40,320	44,160	50,400
Sand Required (kg)	125	125	185	320
A (mm)	980	1,032	1,133	1,178
B (mm)	860	873	976	1,021
C (mm)	800	807	910	955
D (mm)	280	280	300	370
E (mm)	600	600	675	775



#### INSTALLATION

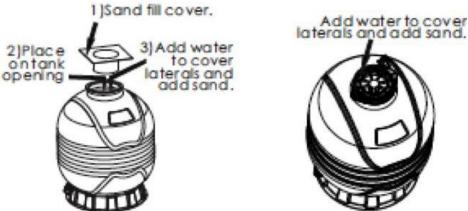


The Filter should be installed as close to the pool as possible but keep a distance of at least 1.5m. Locate the Filter on rigid, level surface, preferably in a dry, shaded, and well-ventilated area. Prior to installation take into consideration the following conditions:

- Position of suction and return PVC connections
- Access for backwashing operation and servicing
- Protection from sun, rain, splashing etc
- Drainage of filter room
- Ventilation and protection of the full filtration system

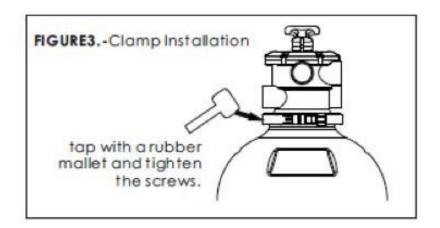
Once you are happy that the above has been considered, follow these steps:

- 1. Place the empty tank in position
- 2. Fill the tank with water to the level that covers the laterals, or about 1/3 of the tank height. This will avoid damage to the laterals by the force of the sand when pouring into the filter



- 3. Pour the recommended amount of sand into the tank, ensuring that the centre-pipe remains centred and vertical
- 4. Level the surface of the sand upon completion
- 5. Remove the Sand Fill Cover
- 6. Carefully remove all sand particles from the valve mounting surface
- 7. Place the O-ring into the groove on the tank
- Lower the Multiport Control Valve carefully into position so that its underside engages
  with the centre-pipe. Rotate the valve until the inlet is approximately in line with the
  pump.
- 9. Place the clamp set around the tank and the valve. Secure using the screw provided.
- 10. Firmly tap with a rubber mallet outside of the clamps as you tighten the screw, refer to Figure below
- 11. Tighten the screw until the Multiport Control Valve is properly assembled to create a water tight seal. Do not over tighten.

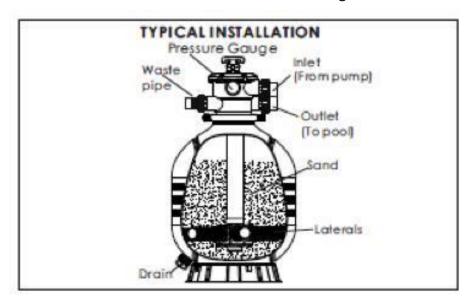






#### WARNING

Is it important when connecting the WASTE line that you adhere to any local standards and codes in relation to the disposal of the waste water. It is also highly recommended to use minimum 40mm (1.5") PVC Pipe with the SF24-40 Filter and minimum 50mm (2.0") PVC Pipe with all other SF Filters. To reduce any pressure to provide the best clean possible reduce the distance and amount of bends used for the WASTE discharge line.



To prevent water leakage, be sure all pipe connections are tight

Prior to starting the filtration process by turning on the pump, we highly recommend that you read through the pump instruction manual to ensure proper installation and to avoid the risk of electric shock.

## CONGRATULATIONS, YOU HAVE NOW INSTALLED YOUR NEW OASIS AQUATICS FILTER.

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#### START-UP PROCEDURE

- 1. Be sure the correct amount of filter sand media is in the tank and all connections have been made and are secure.
- 2. Turn the Multiport Control Valve handle to the "Backwash" position. Press the handle downward before turning.
- 3. Start the pump according to pump instruction manual (be sure all suction and return lines are open).
- 4. Once water flow is steady out the waste line, run the pump for at least 2 minutes. The initial backwashing of the filter is recommended to remove any impurities or fine sand particles in the sand media.
- 5. Turn the pump off and set the control valve to RINSE position. Start pump and operate until water in sightglass is clear. Turn pump off, set valve to FILTER position and restart pump. Your filter is now operating in the normal filter mode, filtering particles and dirt from the pool water.
- 6. Take note of the initial pressure gauge reading for future reference. Variation may occur from pool to pool.
- 7. Adjust pool suction and return valves to achieve desired flow. Check system and filter for water leaks and tighten connections, bolts, nuts as required.

NOTE: During the initial clean-up of the pool water, it may be necessary to backwash frequently due to the unusually heavy initial dirt load in the water.

IMPORTANT: To prevent unnecessary strain on piping system and control valve, always turn off the pump before changing the operation of the control valve. To prevent damage to the pump and filter and for proper operation of the system, clean pump strainer (basket) and skimmer basket(s) regularly.



### MULTIPORT CONTROL VALVE FUNCTIONS

The Multiport Control Valve controls the direction of water flow throughout your filter allowing you to easily filter your swimming pool water and then clean your filter tank. Correct operation of the Multiport Control Valve will give you healthy, clean water for many years. It is important to understand the functions of each setting which is explained below.

Please take a moment to read and understand.

#### 1) FILTER

This is the standard position when your filtration system is in normal operation. The water flows in from your pool and is distributed across the top of the sand bed in the filter. Through pressure this water is pushed down through the Sand allowing debris to be removed from the water and collected in the sand bed. Water is then taken up through the laterals and the centre stem pipe and returned to the pool, usually via some form of sanitation and/or heating. The filter position can also be used for manual vacuuming and cleaning.

#### 2) BACKWASH

This position is used when the sand bed requires cleaning. Use the Pressure Gauge to indicate when this is required, usually 5 PSI or 35 kPa above operation of a clean filter. When backwash is selected the water flow is reversed and goes down the stem pipe and out through the laterals. This lifts the sand bed and allows debris to be taken up the filter and out through the waste pipe. The sight glass will show the quality of the water and you need to backwash until this water is clear.

#### 3) WASTE

The waste position allows you to pump excess water from the pool directly down the waste pipe. This position is useful after heavy rains where the water level is too high. Water is directed straight through the Multiport Control Valve and bypasses the filter, going directly to waste. You can also use this position to vacuum heavy concentration of debris from the pool.

#### 4) RECIRCULATE

Similar to the Waste setting, Recirculate allows the water to bypass the filter but goes straight back to the pool. This is a useful setting if you have applied some chemicals that need to be circulated, but not removed by the filter. In addition, if a leak develops in the filter use recirculate to continue circulating water until it is fixed.

#### 5) RINSE

Rinse is a very important setting to use after you have completed the Backwash cycle. In the Rinse setting, water is taken from the pool and distributed on the sand bed. This downward flow settles the sand bed after backwashing and carries any remaining loose dirt through to the waste line. By using Rinse after Backwashing you will eliminate any debris returning to the pool water. Rinse until you see clear water in the Sightglass and should take half the time of a Backwash cycle.

#### 6) CLOSED



Closed setting acts like a Valve and prevents flow of water through the Tank, particularly useful if doing any maintenance on the filtration system.

#### BACKWASHING YOUR FILTER

Cleaning your Filter will give you the best quality swimming water that is clean, clear and safe for swimming. It is highly recommended to clean on a regular basis and to monitor the pressure gauge and BACKWASH when an increase of 5 PSI or 35 kPa is indicated from your clean filter.

#### TO PERFORM THE BACKWASH OPERATION, YOU MUST FOLLOWING THESE STEPS:

- 1. Turn off Pump
- 2. Change the position of the Multiport Control Valve handle from FILTER to BACKWASH
- 3. Turn Pump back on. The water flow is automatically reversed through the Filter so the water is directed from the bottom of the tank, up through the sand, flushing the trapped dirt and debris out of the waste line.
- 4. Check Sight Glass. The duration of the backwash operation will depend on how dirty your filter is. Continuously check the sight glass to see when the water becomes clear, then
- 5. Turn off Pump
- 6. Change the position of the Multiport Control Valve handle from BACKWASH to RINSE
- 7. Turn Pump back on. The water flow will now be directed back through the Sand bed and then out through the waste line. This will settle the sand bed back for normal operation.
- 8. Check Sight Glass. Continue until water in Sight Glass is clear, usually about half the time of the backwash cycle.
- 9. Turn off Pump
- 10. Change the position of the Multiport Control Valve handle from RINSE to FILTER.
- 11. Turn on Pump



#### WARNING

Turn off the pump before switching the control valve handle.



#### WARNING

Cleaning the Sand Filter by BACKWASHING and RINSING is essential to providing clean, safe and healthy swimming water. A regular cleaning program is highly recommended especially in Commercial applications, the time between cleans and length of cleaning time will depend on size

of pool, bather load and other environmental conditions. Discuss with your local pool professional to work out a program that best suits your pool.

#### WHEN VACUUMING THE POOL

If using your Manual Vacuum System to clean the pool. The following can be used as a guide for settings on your Multiport Control Valve.

- Light Soil, general clean set the control valve to FILTER position
- Heavy Soil, specific clean set the control valve to WASTE position. If using the WASTE position, ensure that the pool water level is well above your skimmer box level as the water will be directed down the waste line.

#### WINTERISING

Winterising is preparing your pool for freezing conditions which can potentially damage all pool filtration equipment due to water expanding when frozen. We highly recommend the following steps when preparing your filter for winter conditions:

- 1. Backwash the filter for at least thirty minutes before closing down the pool for winterising. This will clean the filter bed thoroughly and remove any debris from the system.
- 2. Drain the filter tank by removing the drain cap at the base of the filter tank. Leave the cap off during winter.
- 3. Set the control valve handle between the RINSE and FILTER. This will lift the handle and help with the draining process by allowing air to enter into the tank.
- 4. Unscrew the pressure gauge from the control valve and store the gauge indoors.
- 5. Drain and winterise pump according to pump instructions.

This is an ideal time for any repairs that may be required during the off-season. Most pool professionals will recommend want is needed before the next pool season.



#### **TROUBLESHOOTING**

The chart below identifies some of the main issues you may encountered with your sand filter. This should assist with the majority of problems. OASIS highly recommends regular checks and maintenance of your swimming pool equipment by a qualified pool professional.

This will extend the life of your equipment and give you the best performance.

WHAT IS THE PROBLEM?	WHAT YOU CAN DO ABOUT IT?
Sand Entering the Pool	Sand too small and getting through Laterals
	<ul> <li>Flow rate on Pump is too high and pushing sand through Laterals</li> </ul>
	<ul> <li>Sand Bed Calcified due to poor water chemistry</li> </ul>
	Broken Lateral
	• Loose Centre-Pipe
	Too much Sand in Tank
	Multiport Control Valve not correctly in Filter position
	• Too much Air in Filter
Sand coming out of Waste Line	<ul> <li>Flow rate on Pump is too high and lifting Sand too high on Backwash</li> </ul>
Pool Water is Cloudy due to poor	Sand Bed is dirty and requires Backwashing
Filtering	Incorrect Sand has been installed
	Sand Bed is too low
	Algae build-up in Filter due to poor water chemistry
	Excessive dirt in pool
	Calcified Sand Bed due to poor water chemistry
	Heavy Swimmer Load
	<ul> <li>Flow rate on Pump is incorrect for Filter size and Pool size</li> </ul>
	Backwashing Cycle is too Short
	Backwash line is too small restricting water flow
Filter Leaking Water	Tank Cracked
J. Company of the com	Drain Plug not tight
	Valve to Tank O-ring damaged
Multiport Control Valve Leaks	Handle is not properly located in selected setting
	Valve to Tank O-ring damaged
	Valve Cover O-ring damaged
	Pressure Gauge O-ring damaged



Abnormal Loss of Pool Water	<ul><li>Leak inside Control Valve</li><li>Leak from Pool or PVC Piping</li></ul>
High Pressure Filter	<ul> <li>Filter requires Backwashing</li> <li>Calcified Sand Bed due to poor water chemistry</li> <li>Return lines too small for flow rate of Pump</li> </ul>
Low Pressure in Filter	<ul> <li>Multiport Control Valve incorrectly set</li> <li>Pump Flow Rate is too slow, check speed and other control valves</li> <li>Air leak in Pump Suction</li> </ul>

NOTE: If the recommendation in this manual does not solve your particular problem(s), please contact your local dealer for service.

#### POOL CHEMISTRY GUIDELINES

To get the best performance out of any of your pool equipment, it is important that you manage your water chemistry to the ideal swimming levels. This could vary according to your location and OASIS highly recommend that you employ the services of your local pool professional to get your pool set-up to exactly what is required.

The below chart gives some guidelines to the major water chemistry areas to provide the best performance and to maximise your equipment life. Should your chemistry fall outside the suggested ranges, this could be damaging to the equipment and its performance.

IMPORTANT POOL CHEMISTRY LEVELS	RANGE
рН	7.2 to 7.6
Total Alkalinity	100 to 130 ppm
Total Chlorine	1.0 to 3.0 ppm
Stabiliser (Cyanuric Acid)	40 to 70 ppm
Salt / Mineral	Max 5,000 ppm



#### PRO-ACTIVE MAINTENANCE PROGRAM

Like your motor vehicle it is important to maintain a regular service program for your pool equipment to ensure the best operation and long lasting results.

The below chart provides a guideline to follow to best look after your valuable equipment. Regular maintenance can identify any potential issues early and save on expensive maintenance at a later date

WHEN?	WHAT ARE YOU LOOKING FOR?	HOW CAN YOU FIX?
Weekly	Check Pressure Gauge	If pressure increases by5 PSI / 35 KPA, then BACKWASH and RINSE the filter as per instructions.
Quarterly	Check all Gaskets & Pressure Gauge	Isolate and turn off the Pump. Remove all Gaskets and turn over. You can also apply a silicon based grease to extend the life. If dry, then contact your local pool professional to replace.
	Check around the unit for leaves/debris or signs of flooding.	Replace any debris that is restricting air circulation around the Filter. If in a flood prone location, rectify
	Check for any Insects/Ants etc	It is a good practice to use a good quality surface spray around your equipment. Make sure all units are turned off and then spray around all units to eliminate any insect/ants etc
	Check for any leaks	If you notice any water leaking from the filter or other equipment. Check gaskets first and reseal. If continues, contact your local pool professional to assess and rectify.



#### REPLACEMENT PARTS OF FILTER

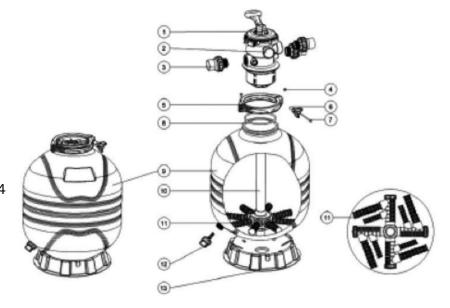
Key No	Part No	Description
1	88281550B	6 Way 1.5" Valve with 1.5" union set x3 pressure gauge
1	88281551B	6 Way 2" Valve with 2" union set x3 pressure gauge
2	06021013	Plastic Pressure Gauge with O Ring
2	01111048	Connector for Pressure Gauge / Stopper
3	89280102B	1.5" Union Set (Black) with O Ring
3	89280102W	1.5" Union Set (White) with O Ring
3	89280103B	2" Union Set (Black) with O Ring
3	89280103W	2" Union Set (White) with O Ring
4	03021035	M6 Nut
5	89012512	Clamp Kit
6	01111101	Star-Shaped Nut
7	03011166	M6 x 110 mm Screws
8	02010007	O Ring
9	89012501	Filter Tank for MF17
9	89012502	Filter Tank for MF20
9	89012503	Filter Tank for MF24
9	89012504	Filter Tank for MF27 / Filter Tank for MF27 A
9	89012505	Filter Tank for MF35 / Filter Tank for MF35 A
9	89012506	Filter Tank for MF35
10	89012507	Lateral Assembly with Centre Pipe for MFV17
10	89012508	Lateral Assembly with Centre Pipe for MF20
10	89012509	Lateral Assembly with Centre Pipe for MF24
10	89012510	Lateral Assembly with Centre Pipe for MF27A
10	89012513	Lateral Assembly with Centre Pipe for MF27
10	89012511	Lateral Assembly with Centre Pipe for MF31A
10	89012514	Lateral Assembly with Centre Pipe for MF31
10	89012515	Lateral Assembly with Centre Pipe for MF35
11*	01172007	Laterals (115mm)
11*	01172008	Laterals (126mm)
11*	011720010	Laterals (186mm)
12	89011601	Water Drain Ser
13	01111059	16-21 Inch Filter Base
13	01111062	21 – 21 Inch Filter Base
13	01112037	31 – 35 Inch Filter Base

#### Notes:

11\* MFV17 Should have 8 pcs of Lateral (115mm)

11\* MFV20/ MFV24/ MFV27 A Should have 8 pcs of Lateral (126mm)

11\* MFV27/ MFV31/ MFV35 Should have 4 pcs of Lateral (115mm) and 4 pcs of Lateral (185mm)



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#### WARRANTY

Oasis Aquatics warrants that, subject to the exclusions and limitations that follow, the product will be free from defects in materials and workmanship during the warranty period of **five (5)** years. The warranty period for your Filter is set our below and commences from the date of purchase which must be proved by the retailer invoice.

This warranty is not assignable and applies to the original retail purchaser only and the original receipt, invoice or any other proof of purchase must be retained and produced if requested by the Company.

Nothing in this warranty shall apply to any defects caused by misuse or abuse, neglect, accident, extremes of climate, dampness, humidity, reasonable fair wear and tear and/or any causes other than detects in manufacturing and materials. Proper care and maintenance information is detailed in the Owner's Manual for this product which you must follow.

Where a defect is physically visible or otherwise affects the exterior surfaces of the product, you must notify the Company of such defect within fourteen (14) days from the date of your purchase.

If a defect in materials or workmanship occurs within the warranty period Oasis Aquatics will, at its discretion repair or replace product or the defective part of the product free of charge or cause the product or the defective part to be repaired or replaced by an Authorised Oasis Aquatics Service Agent free of charge.

Oasis Aquatics reserves the right to substitute defective parts or the Product with parts or product of similar quality, grade and performance where an identical part or product is not available. Parts or products may be replaced by refurbished goods of the same type rather than be repaired.

If the product is bought as a demonstration, refurbished, ex-rental, discontinued or otherwise previously unboxed unit, the warranty applicable shall be limited to twelve (12) months only.

#### Warranty Procedure

If a fault that is deemed to be covered by warranty occurs, the customer must first contact their retailer and/or builder from which the product was purchased and/or installed.

Any claim must be justified with the following details:

- Proof of Purchase date along with relevant invoice details,
- Full details of the fault, and
- Customer Name, Address and Contact details

The retailer and/or builder will assess the problem and assist Oasis Aquatics with the warranty procedure.

The product must be made available to Oasis Aquatics or its authorized service agents for full inspection, diagnosis, testing and repair.

If advised to return the product, place the defective product in secure packaging, clearly label it and send it to the address of the authorised service agent which will be advised by your dealership.

If the installation of the product is outside a radius of 30 km (20 miles) from an Authorised Oasis Aquatics Service Agent, a service technician travelling fee will apply.

If no defect in materials or workmanship is found, a fee must be paid for Oasis Aquatics's costs of service, diagnosis and testing. If such a circumstance you request that Oasis Aquatics or Authorised Service Agent complete the non-warrantable repair, a fee will apply for labour and parts used to repair the product.

#### **EXCLUSIONS**

#### The warranty will not apply where

- The customer has not complied with Oasis Aquatics terms and conditions of sale
- The product was used in an application for which is wasn't intended
- The product was altered, modified or repaired by any other person than Oasis Aquatics or its Authorised Service Agents
- The Product has not been installed, maintained or operated in accordance with Installation and Operating Instructions
- The product has been subject to misuse, abuse, negligence, alteration or accident
- Environmental influences such as flooding, storm, lighting, fire
- Running filtration system without water

SF MEDIA FILTER INSTALLATION AND OPERATION MANUAL

CUSTOMER RECORD	(To be retained by the customer)
DEALER / INSTALLER NAME	
SERIAL NUMBER	
DATE INSTALLED	



#### Commercial Installations.

Commercial Installation are defined as installations where the pool user pays for the use of the pool either directly or indirectly through hiring or renting of accommodation or membership of a gym, health centre or public pool AND where the pool equipment is operating for more than 16 hours per day.

In such installations the warranty period is limited to 1 year.

#### Consequential Damages

Oasis Aquatics shall have no liability for incidental or consequential damages or delays caused either directly or indirectly by any malfunction, defect or failure of the equipment.

No person is authorized to make any representation or warranty on behalf of Oasis Aquatics without express written consent from Oasis Aquatics.









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