



WATERMAID®

SAND FILTERS



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OTHER QUALITY WATERMAID® PRODUCTS INCLUDE:

Salt Water Chlorinators
Water Treatment Units
Pool & Spa Pumps

INSTALLATION AND OPERATING INSTRUCTIONS

Models: Rapid Kleen 26", Rapid Kleen 26" DUO & Rapid Kleen 32"

www.watermaid.com

RECORD PURCHASE DATE _____

**RECORD STARTING PRESSURE AFTER INITIAL STARTUP
BACKWASHING:**

_____ **PSI/kPa.**

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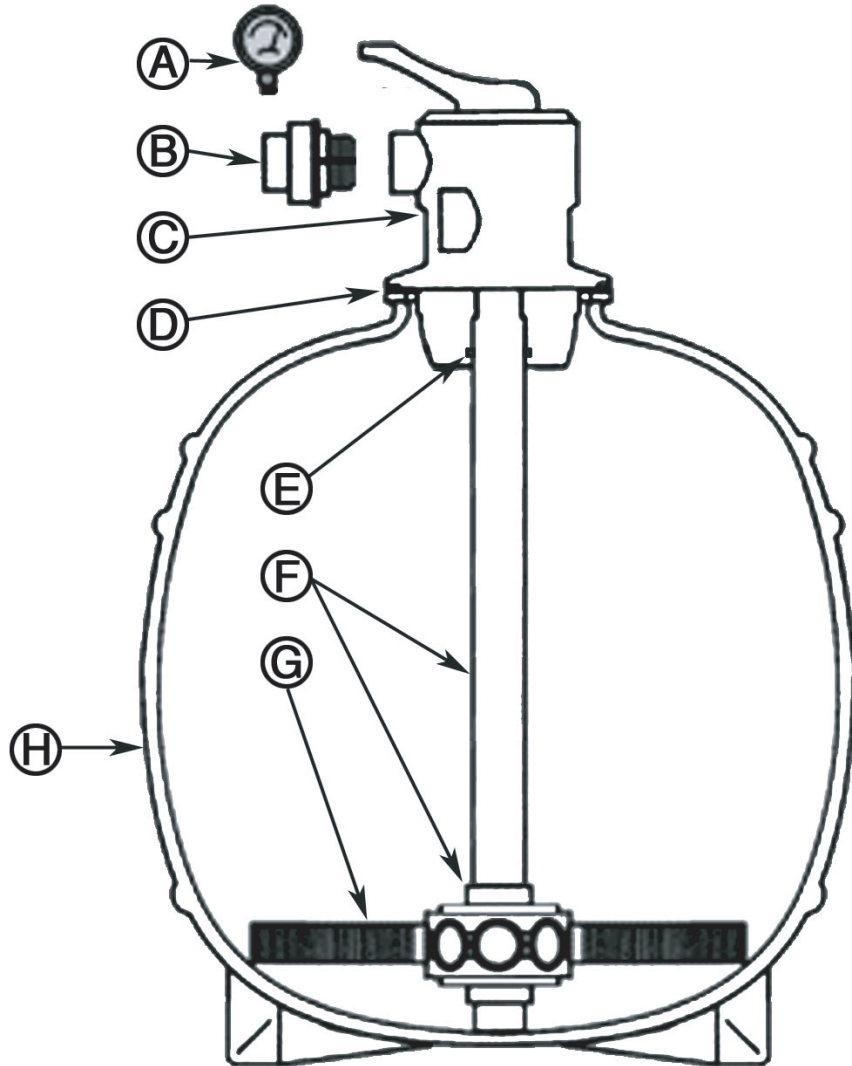
TERMS AND CONDITIONS

1. This guarantee applies to all states and territories of Australia only and is subject to the provisions of the Trade Practices Act and Goods and Consumer Protection Legislation of the various states.
2. The Guarantee period commences on the date of original purchase of the equipment. Evidence of this date of original purchase must be provided when claiming repairs under guarantee. It is recommended you retain all receipts in a safe place.
3. This guarantee is subject to due compliance by the original purchaser with all directions and conditions set out in the Installation & Operating Instructions. Failure to comply with those instructions, damage or breakdown caused by fair wear and tear, negligence, misuse, incorrect installation, or through unauthorised persons attempting repairs are not covered under this guarantee.
4. Without limiting the original purchaser's entitlements under the Trade Practises Act and Goods and Consumer Protection Legislation of the various states, Watermaid Pty Ltd shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever arising directly or indirectly from the product or defect.

WATERMAID® 10 YEAR TANK GUARANTEE

Rapid Kleen and Rapid Kleen Duo models are guaranteed to be free of material or manufacturing defects at the time of original purchase. Should the tank fail as a result of such defects within 10 years of original purchase, a new WATERMAID® tank will be supplied free of charge. The WATERMAID® multiport valve is guaranteed for 24 months from original purchase and all other product components are guaranteed for 12 months from original purchase.

EXPLODED DIAGRAM



YOUR WATERMAID® SAND FILTER

Congratulations on your purchase of this quality, Australian made WATERMAID® product.

WATERMAID® sand filters will give you peace of mind in knowing that one of your major investments is being treated by a quality filtration system which can be relied upon to perform efficiently over the period of its long life.

The WATERMAID® sand filter is backed by a 10 year Tank Guarantee* (see Terms & Conditions page).

Please Note: It should not be used for any other purpose.

INSTALLATION AND OPERATION INSTRUCTIONS

LOCATION

* The WATERMAID® filter should be placed as close to the pool as possible on a concrete slab as large as dimension "C" given on page 6.

* Allow sufficient space around the filter for routine maintenance which will also allow for adequate ventilation and drainage.

* Place the filter in a position on the slab that will be convenient to access plumbing fittings and electrical connections.

* Ensure the clamps for the multiport valve are tightened.

* Clearance of at least 250mm above the multiport valve is required for easy removal and 150mm clearance is required behind the filter.

ASSEMBLY

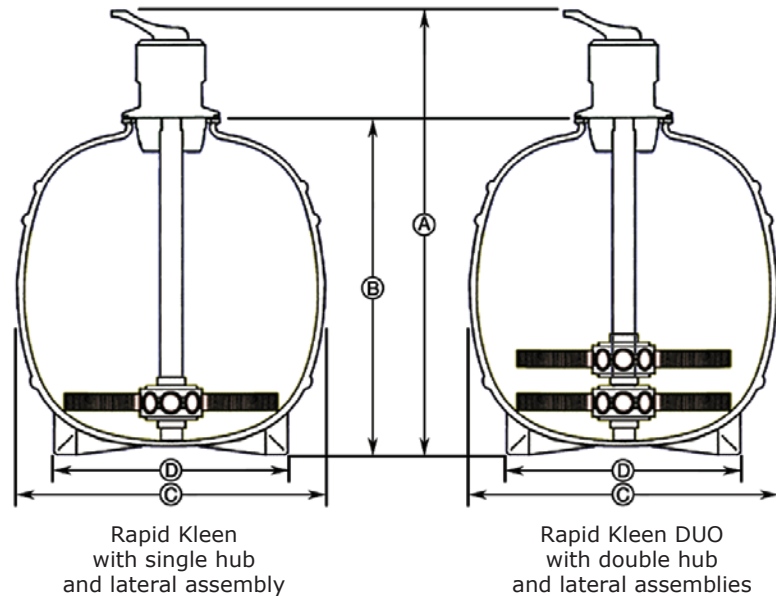
1. Remove the sand filter from the carton.
2. Check inside the filter that the laterals are clipped firmly into the hub and that there is no damage.
3. Place the red sand cap in the top of the 40mm down tube to stop sand entering the down tube.
4. Make sure the lateral hub down tube is central in the bottom of the tank.
5. Pour water into the filter casing, approximately one third to one half full to allow the sand to settle around the laterals without damaging them.
6. Pour the correct amount (see specification label) of 16/30 grade filtration sand into the tank, evenly distributing it around the central pipe. Level out the top of the sand bed.
7. Check that the down tube is central and all sand is removed from the top tank surface.
8. Ensure that O'rings are clean and fitted correctly in the 'O' ring grooves of the multiport valve outlet, where the down tube fits and on the valve flange. Clean the flange of any dirt.
9. Remove the down tube sand cap.
10. Place silicone grease (supplied) on the tank O'ring and slide the multiport valve over the down tube, positioning the ports to suit the pump and pool plumbing.

PARTS LIST

ITEM	DESCRIPTION	QTY
A	Stainless Steel Oil Filled Pressure Gauge	1
B	Barrel Union	3
C	Multiport control valve	1
D	Valve 'O'Ring	1
E	Down Tube 'O'Ring	1
F	Down Tube Hub Assembly	1
G	Laterals	8
H	Filter Casing	1

Note: Specify Model Number when ordering parts.

SPECIFICATIONS



MODEL	TANK WEIGHT (Kg)	Flow Rate @ 50kPa (Litres Per Minute)	Flow Rate @ 75kPa (Litres Per Minute)
Rapid Kleen 26"	18	183	266
Rapid Kleen Duo 26"	18	205	306
Rapid Kleen 32"	32	267	390

MODEL	Clearance Height (mm) A	Tank Height (mm) B	Tank Diam. (mm) C	Feet Diam. (mm) D	Filter Area (m ²)	Sand Capacity 16/30 (Kgs)	Lateral Flow Area (cm ²)	Valve Size (mm)
Rapid Kleen 26"	950	715	660	560	0.33	120	30	40
Rapid Kleen 26" Duo	950	715	660	560	0.33	160	60	40
Rapid Kleen 32"	1100	850	880	400	0.52	220	45	50

11. Place the valve flange clamps in place and checking the alignment of the ports, tighten firmly (by hand).

12. Apply Teflon tape to the thread on the pressure gauge and screw into the multiport valve body.

13. Complete all plumbing connections using the barrel unions provided on the WATERMAID® sand filter multiport valve.

14. Pump Installation - Follow the pump manufacturer's instructions.

CAUTION

On installation, where the waste line is more than 3 metres below pool water level and more than 12 metres in length, a vacuum break should be fitted in the waste line close to the filter.

If an auxiliary pump is installed inline downstream of the filter, it should be protected against causing negative pressure in the filter tank. A flow or pressure switch which only enables the auxiliary pump to run when main filter pump is running will achieve this.

If the pump and filter are located below pool water level, it is necessary to fit isolating valves in the pipe between the pump and the skimmer box and in the return pipe from the multiport valve to the pool. This prevents water draining from the pool during maintenance.

PIPE CONNECTIONS

Use Teflon tape on all male threads (at least two layers). Tighten the fitting by hand first and then not more than an additional 1 to 1½ turns with a wrench. Piping should be independently supported and not impose heavy loads on the filter or pump. Use 40 or 50mm (1½ or 2") pipe from the pump to the skimmer box, return pipe from the multiport valve to the pool and from the multiport valve to the drain. 40 or 50mm flexible hose may be used with the WATERMAID® sand filter with the use of suitable adaptors (not supplied).

40/50mm barrel unions are provided at the multiport valve for connection of P.V.C pipe to 'pump', 'pool return' and 'waste'.

NOTE: ENSURE PIPEWORK IS CONNECTED TO APPROPRIATELY LABELLED MULTI-PORT VALVE CONNECTIONS.

FILTER START UP

Before starting up the filter, the pool should be overfilled slightly and the filter run on BACKWASH until the discharge water becomes clear (to prevent dust and fine particles that may be in the sand bed returning to the pool).

1. Position the valve handle to BACKWASH.
2. Start the pump and run until water in valve sight glass becomes clear.
3. Stop the pump and position the valve to RINSE.
4. Start the pump for 10 to 15 seconds. Stop the pump.
5. Position the valve handle to FILTER and start pump.
6. To determine the correct operating conditions, check the pressure gauge reading is 12PSI (80kPa) or below.

NOTE: THIS FILTER TANK MUST NOT BE OPERATED UNDER VACUUM. SHOULD LEAF BASKETS OR SUCTION LINES BECOME CLOGGED, BLOCKED OR CLOSED, FILTER DAMAGE MAY OCCUR. (Particularly if an auxiliary pump is installed in line, down stream of the filter).

FILTER OPERATION

The multiport valve controls flow of water through the filter. The handle on top can be moved to any one of six positions. (With pump turned off) as follows;

VALVE POSITION	FUNCTION
FILTER	Normal filtration and vacuuming through the filter
BACKWASH	Clear the filter
RINSE	Use on filter start up and after backwash to prevent dirt in the sand returning to the filter
WASTE	By-passes the filter; used for vacuuming to waste, or draining the pool
RECIRCULATE	By-passes the filter for circulating water to the pool
CLOSED	Shuts all flow to the filter

NOTE: NEVER CHANGE THE VALVE HANDLE POSITION WHILE THE PUMP IS RUNNING.

NORMAL FILTER CYCLE

1. Position the handle on the valve to 'FILTER' and start the pump.
2. With a clean filter, record the pressure gauge reading in the space provided on the specifications sticker or mark the needle position on the pressure gauge.
3. Operate the filter each day for a sufficient time to turn over the water in the pool once everyday. The filter should also be operated at all times the pool is in use and for about one hour afterwards. During the winter, the running times may be reduced.
4. When the pressure gauge reading is 6-7 PSI (40-50kPa) higher than the clean filter gauge reading as in (2) above, it will be necessary to backwash the filter.

BACKWASHING THE FILTER

When the filter gauge reading is 6-7 PSI (40-50kPa) above the clean filter gauge reading, cleaning or backwashing is required. To perform the backwash operation: -

1. Shut off the pump. Be sure to disconnect any automatic pool cleaner.
2. Shift the valve handle to 'BACKWASH'.
3. Start the pump and run until the water runs clear through the sight glass. (This will take 2 -3 minutes)
4. Shut off the pump and turn the valve handle to 'RINSE'.
5. Start the pump and run for approximately 30 seconds.
6. Shut off the pump and turn the valve handle to 'FILTER'.
7. Start the pump; a new filter cycle has begun.

NOTE: NEVER VACUUM WHILE BACKWASHING.

TROUBLESHOOTING

Reduced flow of water into the pool usually indicates that the filter is ready to be backwashed. Check the filter pressure gauge. If backwashing is required, perform the steps as described in this section of the manual titled 'Backwashing The Filter'. If there is still reduced flow on completion of backwashing, check for blocked lines.

Large quantities of sand returning to the pool during the filter cycle indicates that one of the lower laterals are damaged. Correcting this condition requires removal of sand from the filter so that the damaged lateral(s) may be replaced. In the event of installation or operation difficulties with your product, contact the supplier from whom the equipment was purchased.