

Blue  
Wave  
**SandMan**  
Sand Filter System

**INCLUDES BASE FOR FILTER AND PUMP**

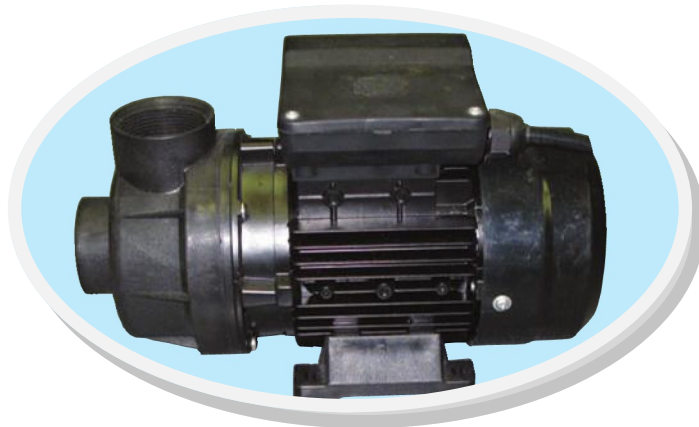


**NE6145**

**TOOLS REQUIRED**

- Phillips head screwdriver
- Flat head screwdriver
- O-ring lube

**⚡ WARNING ⚡**  
**AVOID DAMAGING YOUR PUMP**



**PUMPS NOT EQUIPPED WITH HAIR AND LINT STRAINERS SHOULD ONLY BE USED IN CONJUNCTION WITH A SKIMMER WITH A STRAINER BASKET.** The strainer basket is designed to collect debris, such as leaves and twigs, and prevent them from clogging the pump chamber.

Typical  
Thru Wall Skimmer



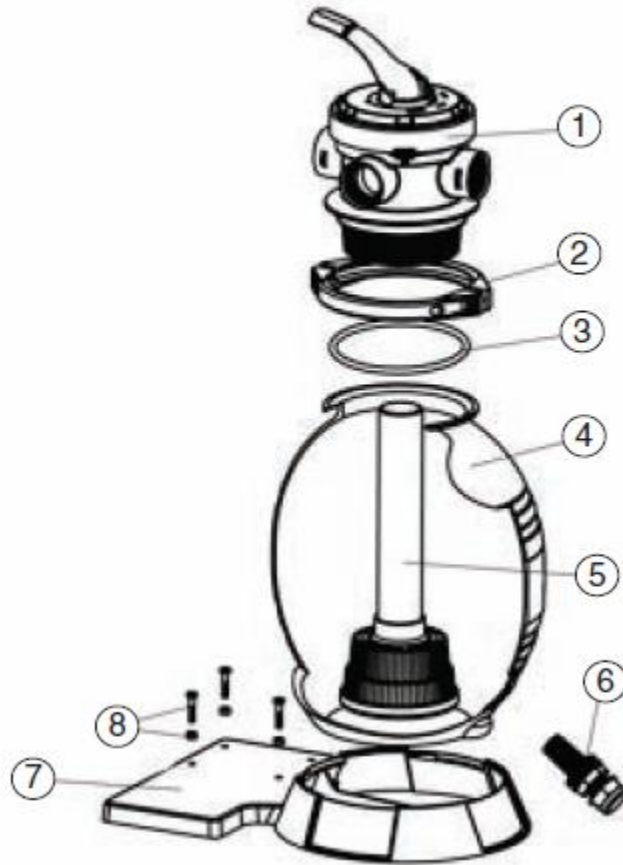
Typical  
Skimmer Basket

**Your skimmer's strainer basket should be in place whenever your pump is operating, especially when vacuuming the pool floor.**

**If you live in an area where smaller debris, such as pine needles, may enter your pool, you can purchase skimmer basket liners which easily install over your existing basket. These basket liners can capture much smaller debris than the standard basket and are reusable.**

**It is important to check and clean your basket regularly to ensure an adequate flow of water to your pump. Failure to do so will cause your pump to run dry and overheat. This situation can cause permanent damage to your pump.**

## NE6145 FILTER PARTS BY MODEL



KEY #	ITEM #	DESCRIPTION
1	NEP6371	4-WAY VALVE
2	NEP2165	FLANGE CLAMP
3	NEP2166	O-RING
4	NEP2167	FILTER TANK
5	NEP2168	STAND PIPE
6	NEP2169	DRAIN PLUG
7	NEP2170	FILTER BASE
8	NEP2154	SCREW M6 x 25 and NUT M6
Not pictured	NEP6368	1.5' FILTER HOSE EXTENSION

# PARTS FOR SAND FILTER

**NOTE** See breakdown on following page for model specific part lists.



**FILTER TANK**



**BASE**



**4 WAY VALVE**



**CLOSURE CLAMP**



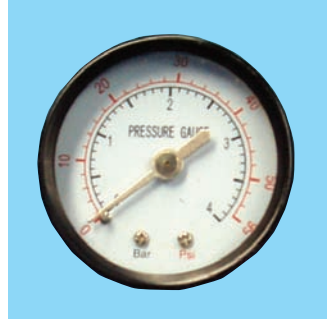
**STANDPIPE**



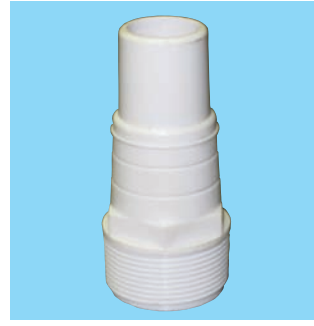
**VALVE O-RING**



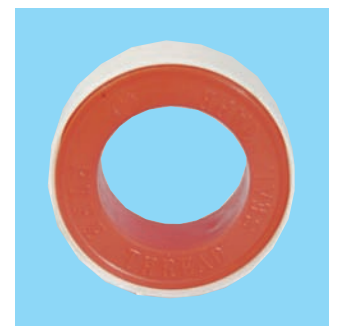
**HOSE CLAMPS (6)**



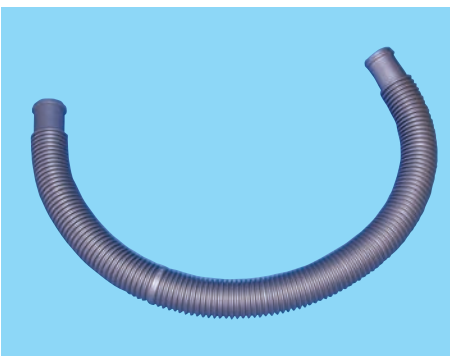
**PRESSURE GAUGE**



**STRAIGHT FITTING (3)**



**TEFLON TAPE**



**2' HOSE (1)**

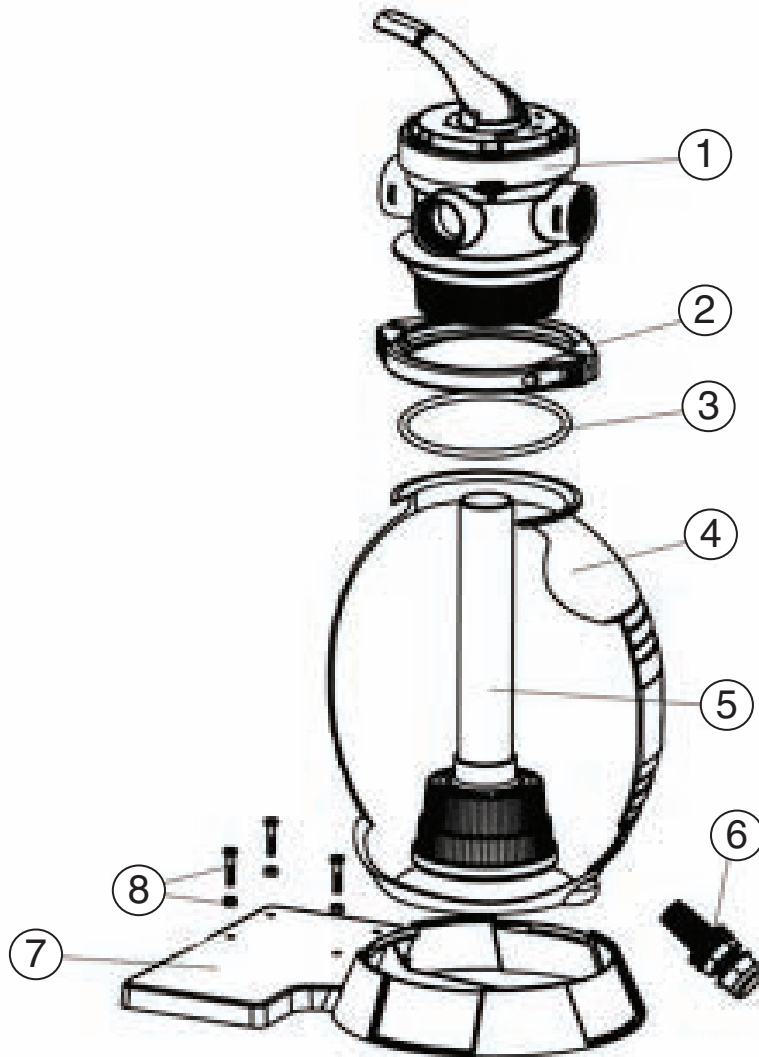


**6' HOSE (2)**



**DRAIN PLUG**

# NE6145 FILTER PARTS BY MODEL



REF #	MODEL	DESCRIPTION
1	AC 83321	4 Way Valve
2	AC 83364	Flange Clamp
3	AC 83348	O-Ring
4	AC 83399	Filter Tank
5	AC 83380	Stand Pipe
6	AC 83402	Drain Plug
7	AC 85685	Filter Base
8	AC 84514	Screw M6 x 25 and Nut M6

# ASSEMBLY INSTRUCTIONS FOR SAND FILTER



**NOTE** Filter may be partially assembled; however, nothing has been properly tightened. **DO NOT** operate filter system without completing assembly instructions.

## STEP 1

- Remove the valve **(1)** from the box and place it to the side until instructed to attach it.



- Inside the tank you will find the standpipe **(5)** and a plastic bag containing various parts, remove from tank and set aside.



## STEP 2

### ATTACHING THE DRAIN ASSEMBLY



**1** If drain assembly is all together, take it apart. Take one rubber gasket and put over threaded part of the drain assembly. Flat part of gasket must be flush against sealing plate.

**2**

From inside the tank insert drain assembly thru hole in bottom of tank, you will see the threaded part on the outside of the tank.



**3**

Place other gasket on threaded part of the drain assembly that is outside of tank flat side to the tank.



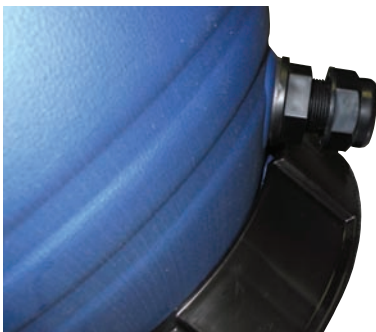
**4**

Place locking nut on threaded part and thread until snug. Hand tighten only. **Be sure to hold drain assembly from inside while tightening locking nut.**



**5**

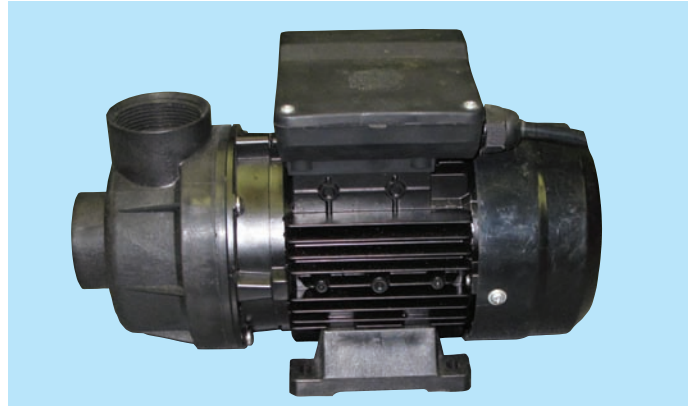
Place drain cap over threaded port on outside of tank. Hand tighten only.



## STEP 3

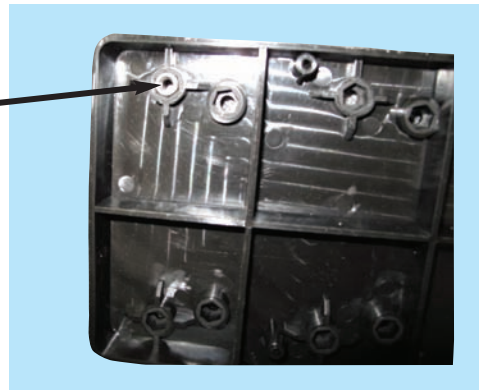
- The filter and pump should be attached to the base prior to filling the filter with sand as it will be difficult to maneuver after the tank is full.

### A. CRADLE STYLE MOUNT



- Pumps with cradles located directly under the motor should be aligned with the 4 holes that match up to the cradle. This type of mount will require the use of four mounting bolts and nuts from the hardware supplied with the base.

- Place nuts underneath the base, in the properly aligned hole



- Bolt the housing of the pump through the base and tighten.

- Cover the threads of each straight fitting with teflon tape and thread one fitting into the front of the motor and one fitting to the top of the motor.
- Attach the 1" hose with a clamp on each fitting.





## STEP 4



- Before filling tank with sand, place nub on bottom of tank into notched out piece of the base, twist to the right till snug.

- Place standpipe inside the filter, cover standpipe with the round plastic standpipe protector to prevent sand from entering standpipe.



**NOTE** Sand should be filled no less than 1/2 way up the tank and no more than 3/4. Over-filling will result in permanent damage to your Filter System.

- Add filter grade sand (sold separately) to filter tank around standpipe.

12" Tank ..... 50 Lbs.



**NOTE** NEVER FILL SAND TANK MORE THAN 1/2 TO 3/4 OF THE WAY. Adding too much sand can cause weak return flow.

- Remove plastic protector and fill tank with water until the tank is filled right below opening of standpipe.

## STEP 4 — CONTINUED



- Locate o-ring (3) in bag with various parts.
- Lubricate with o-ring lube to ensure proper seal on tank. (O-Ring lube not included)
- Push o-ring against the lip of the valve. It **MUST** sit flat against the lip to protect from leaking at the valve.

- Clean off any sand or debris on top lip of filter and position valve over the opening of the standpipe.
- Valve will slide **ONTO** standpipe when positioned properly in tank (as shown). Push down firmly to make sure valve slides on all the way.

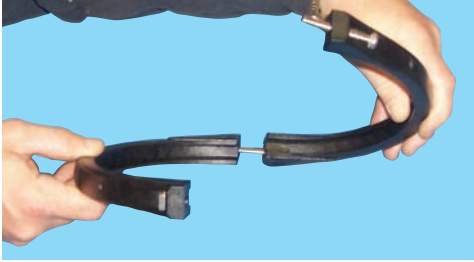


- Place valve so that pump port is directly over the pump.



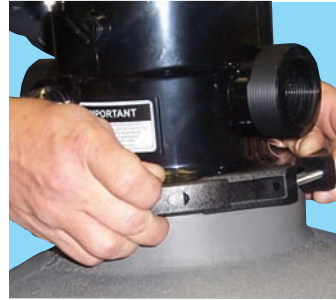
**NOTE** You **CANNOT** pull standpipe up to secure the valve. Pulling up can damage the hub and cause sand to get sent back with water flow to pool.

## STEP 4 — CONTINUED



- Once valve is in place, hold clamp **(2)** as shown and position clamp around lip of filter and over edge of valve. 2 long screws and nuts are provided to put clamp together.

- The clamp should sit flat around the lip of the tank and valve. If it is not sitting flat the clamp will leak.



- **Make sure that the screws of the clamp are lined up with the seams of the tank.** Tighten two screws on clamp a little at a time. Alternating from side to side so that both sides are tightened equally. Failure to follow these instructions will result in a leak at the clamp.

- Cover threads of pressure gauge with Teflon tape. Remove temporary plug from valve and thread gauge into opening.



## STEP 5

- The valve ports are labeled **“RETURN”**, **“PUMP”** and **“WASTE”** with raised letters next to or on the the openings.
- Attach one 6' hose to the bottom of the thru-wall skimmer and to the front of the pump with hose clamps on each fitting.
- Attach second 6' hose to the fitting on the **“RETURN”** and to the pools return fitting with hose clamps on each fitting.
- **“WASTE”** port will accept a standard fitting and a backwash hose **(sold separately)** which will be used during maintenance.
- Check drain plug at bottom of filter to ensure that it is screwed on tight.



# OPERATING YOUR FILTER

**NOTE** Your filter cannot be run if the water is not at the proper level in the pool. Running the filter without water can cause serious damage to your pump and filter.

- Prime filter prior to starting up filter system. **DO NOT** turn motor on until system has been primed, you can damage your pump.
  - Make sure water in pool is up to middle of skimmer(s) and that there is nothing blocking water flow from return(s) and skimmer(s) (i.e. plug, plate).
  - Push down selector handle on valve and turn to notch labeled **BACKWASH**. Let go of handle and the valve is now in backwash position. Make sure backwash hose (sold separately) is attached to the waste port so water will not spray all over you once pump is started.
  - Remove lid of strainer basket on pump (if applicable) and fill with water. Skimmer and return lines should be filled with water as well (when water level is in proper place in pool this will happen naturally).
  - Place cover back on basket and plug in/switch on pump. When pump starts up, water will come out through the backwash hose. If the pump is properly primed, the water in the strainer basket will fill completely and air pocket will be eliminated.
  - Repeat above until all air is purged from the system then turn off the pump. If this does not get air out of system, double check all connections to make sure they are properly tightened and try again.
- To use filter, with pump **OFF**, push down selector handle on valve and turn to notch labeled **FILTER**.
  - Connect pump to power to start filter operation.
  - Note pressure gauge reading at this time.
- When pressure through return fades and pressure gauge reads 5 psi above starting pressure, you will need to backwash the filter system to remove debris.
  - Turn pump off before moving selector to **BACKWASH** position. Once in backwash, turn pump back on.
  - Water will come out through the waste port, so position backwash hose where you would like water to run out.
  - **NEVER** backwash for longer than **ONE MINUTE** at a time! Backwashing longer than one minute will cause sandblasting of internal components and can lead to damage of standpipe and/or hub and **VOIDS WARRANTY**.
  - Turn pump off and move selector to **RINSE** position. Rinse will allow water to flow through to clear out the lines and prevent a puff of sand or debris back into the pool after backwashing.
  - Rinse for approximately 15 seconds and turn off pump again. Move selector back to filter and turn pump back on. You are now filtering water.
- The **WASTE** position does not allow water to pass through the filter.
  - If there is a point where you would like to take water directly out of the pool, this is the option available to do so.
  - You may also vacuum on waste to take serious debris straight out of the pool if/when necessary.
  - Remember, this is taking water out of the pool so watch the water level to protect your pump and filter. If water drops below skimmer level you **MUST** turn pump off.



**NOTE** NEVER move selector handle while pump is on. Pump **MUST** be switched off to change the position of the valve. Failure to comply will cause damage to your valve and is not covered by **WARRANTY**.

## TROUBLESHOOTING

LOW WATER FLOW	SHORT FILTER CYCLES	POOL WATER WON'T CLEAR UP
<ol style="list-style-type: none"> <li>1. Check skimmer and pump strainer baskets for debris.</li> <li>2. Check for restrictions in intake and discharge lines.</li> <li>3. Check for air leak in intake line (indicated by bubbles returning to pool).</li> <li>4. Backwash filter.</li> <li>5. Bring sand level in filter down to 1/2 full.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check for algae in pool and superchlorinate as required.</li> <li>2. Be sure chlorine and pH levels are in proper range. Adjust as required.</li> <li>3. Check surface of filter sand for crusting or caking. Remove 1" of sand if necessary.</li> <li>4. Check hair and lint basket on pump for possible air leak, lubricate basket lid O-Ring as necessary.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check chlorine, pH and total alkalinity levels and adjust as required.</li> <li>2. Be sure flow rate through filter is sufficient.</li> <li>3. Operate filter for longer periods.</li> <li>4. Be sure valve is set on "Filter" position.</li> <li>5. Be sure sand is between 1/2 and 3/4 full in tank.</li> </ol>

## WINTERIZING

**NOTE** Failure to winterize your filter properly may result in damage to the tank which is **NOT** covered under any warranty.

- At the end of the season once you disconnect filter system, remove the valve from the tank. Valve selector handle should be positioned **BETWEEN** any of the notches to allow for air ventilation through the valve to protect from cracking.
- Remove drain plug from bottom of sand tank to drain water out of the filter tank. Keep this plug off for the winter to allow any potential water build-up to escape from the tank.
- Empty **ALL** sand from the filter system and dispose of as it is recommended to replace sand **EACH** season.
- Rinse out inside of tank and air dry. Remove standpipe from tank.
- Store tank in an area where it will be protected from the elements and keep valve and tank stored **APART** to protect from condensation forming and causing cracks in the tank or valve.
- Run hose water through pump to rinse out and store in a warm, dry place for the winter.