#71225/71233/71405

# HYDROTOOLS MALINE





# SAND FILTER & PUMP FILTRE À SABLE & POMPE FILTRO DE ARENA Y BOMBA

# **INSTRUCTIONS / INSTRUCCIONES**

#### **TOOLS REQUIRED**

Phillips Screwdriver Flat Head Screwdriver O-Ring Lube

#### **OUTILS NÉCESSAIRES**

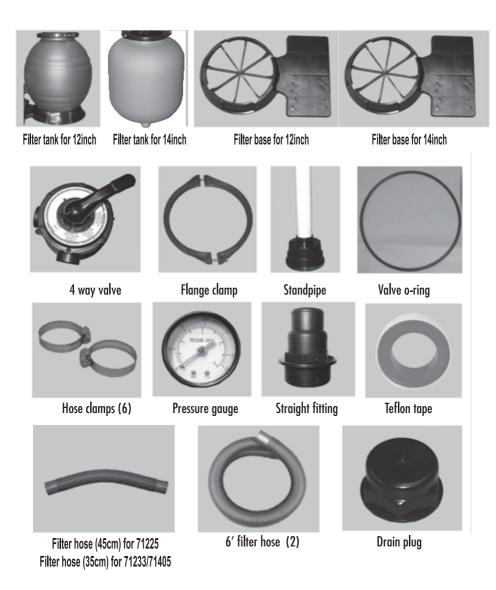
Tournevis pour vis à empreinte cruciforme Tournevis pour vis à fente Lubrificateur pour joint torique

#### HERRAMIENTAS NECESARIAS

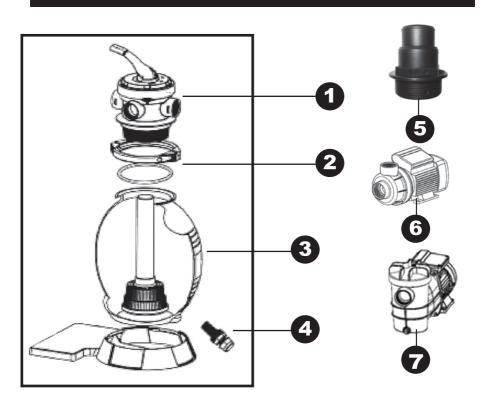
Destornillador Phillips Destornillador de paleta Lubricante para juntas tóricas

# PARTS FOR #71225/71233/71405 SAND FILTER

See breakdown on following page for model specific parts list

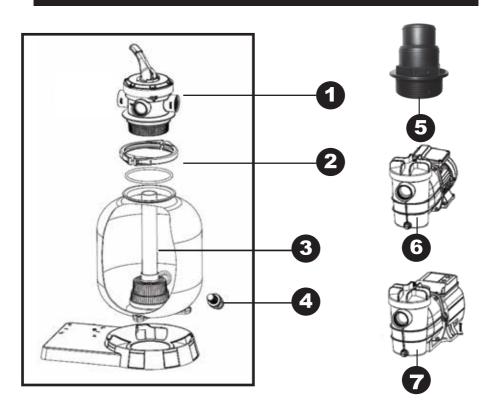


# PARTS FOR #71225/71233 SAND FILTER



REF#	PART#	DESCRIPTION	
1	71201	4 WAY VALVE	
2	71202	FLANGE CLAMP & O-RING	
3	71203	STAND PIPE & FILTER ASSEMBLY	
4	71204	DRAIN PLUG & O-RING	
5	71205	STRAIGHT FITTING & O-RING	
6	71206	PUMP FOR 71225	
7	71236	PUMP FOR 71233	

# PARTS FOR #71405 SAND FILTER



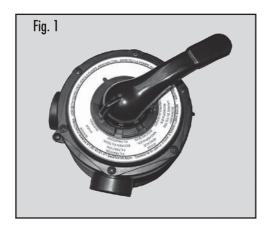
REF#	PART#	DESCRIPTION	
1	71201	4 WAY VALVE	
2	71202	FLANGE CLAMP & O-RING	
3	71403	STAND PIPE & FILTER ASSEMBLY	
4	71204	DRAIN PLUG & O-RING	
5	71205	STRAIGHT FITTING & O-RING	
6	71406	PUMP FOR 71405	

# **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 ONE - GETTING STARTED**

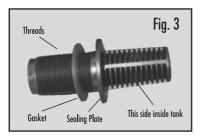


 Remove the valve (Fig.1) from the box and place it to the side until instructed to attach it.

 Inside the tank you will find the standpipe (Fig. 2) and a plastic bag containing various parts. Remove from tank and set aside.



#### STEP TWO - ATTACH DRAIN ASSEMBLY



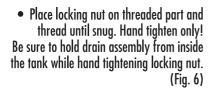
 If drain assembly (Fig. 3) is all together, take it apart. Take one rubber gasket and put over threaded part of the drain assembly. Flat part of gasket must be flush against sealing plate.

 From inside the tank, insert drain assembly through hole in bottom of tank. (Fig. 4) You will see the threaded part of the drain assembly on the outside of the tank.





 Place other gasket on threaded part of the drain assembly that is outside of tank, flat side to the tank. (Fig. 5)



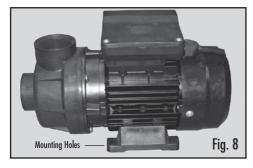




 Place drain cap over threaded part on outside of the tank. (Fig. 7) Hand tighten only!

#### STEP THREE - ATTACH THE PUMP

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



 Allign the pump motor with the four holes that match up to the filter base.
 This will require the use of four mounting bolts & nuts from the hardware supplied with the base.
 (Fig. 8)

 Place bolts underneath the base in the properly aligned mounting hole. (Fig. 9)

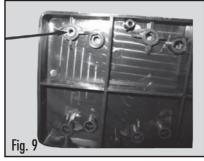
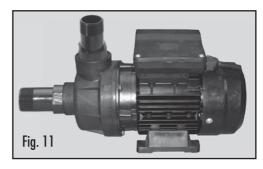


Fig. 10

 Bolt the housing of the pump through the base & tighten securely. (Fig. 10)

• Cover the threads of each straight fitting with teflon tape and thread one fitting into the front of the pump and one fitting into the top of the pump.

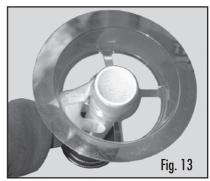
 Attach the hose with a clamp on each fitting. (Fig. 11)



#### **STEP FOUR - ADDING SAND**



 Place standpipe inside the filter, cover standpipe with the round plastic standpipe protector device to prevent sand from entering the standpipe.
 (Fig. 13)  Before filling tank with sand, align nub on bottom of tank into notched out piece of the base, twist to the right til snug. (Fig. 12)



Add filter grade sand (sold separately) to filter tank around standpipe. Your tanks should use 42lbs
of sand (for #71233/71225) or 60lbs of sand (for #71405). Remove plastic standpipe protector
and fill tank with water until the tank is filled right below opening of standpipe. (Save the
standpipe protector for future use.)



NOTE: Sand should be filled no LESS than 1/2 way up the tank and no MORE than 3/4 up the tank. OVERFILLING WILL RESULT IN PERMANENT DAMAGE TO YOUR FILTER SYSTEM!

#### STEP FIVE - INSTALLING VALVE



- Lubricate 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. (Fig. 14)

# **STEP FIVE - INSTALLING VALVE (continued)**

 Clean off any sand or debris on top of filter and position valve over the opening of the standpipe. Valve will slide ONTO standpipe when positioned properly in tank (Fig. 15).
 Push down firmly to make sure valve slides on all the way.

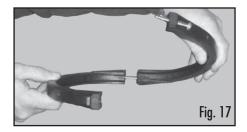




You CANNOT pull standpipe up to secure the valve. Pulling up can damage the filter and cause sand to get sent back with water flow into the pool!

 Place valve so that pump port is directly over the pump. (Fig. 16)

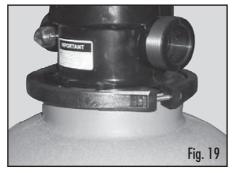
 Once valve is in place, hold clamp as shown and position clamp around lip of tank and over edge of valve.
 2 long screws and nuts are provided to secure clamp. (Fig. 17)



# STEP FIVE - INSTALLING VALVE (continued)

 The clamp should sit flat around the lip of the tank and edge of valve. If it is not sitting flat the clamp will leak.
 (Fig. 18)





 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. Alternate from side to side so that both sides are tightened equally.
 Failure to tighten correctly will result in a leak at the clamp. (Fig. 19)

 Cover threads of pressure gauge with Teflon tape. Remove temporary plug from valve and thread gauge into opening. (Fig. 20)



#### **STEP SIX - CONNECT HOSES**

- The valve ports are labeled "POOL", "PUMP" and "WASTE" with raised letters next to or on the openings. Attach one 6' hose to the bottom of your through-wall skimmer and to the front of the pump with hose clamps on each fitting. Attach second 6' hose to the fitting on the "POOL" valve port 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.

#### STEP SEVEN - OPERATING THE 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 system.

- Prior to setting up the filter system, ensure that the pump is off, as failure to do so will cause spider
  valve to malfunction and damage top mount valve. Pump must be off anytime valve handle is depressed
  and moved to any of the various functions.
- Prime filter prior to starting up filter system. DO NOT turn pump 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, etc.).
  - 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.
  - Be sure skimmer and return lines are filled with water. When water level is at proper height in
    pool this should happen naturally.
  - Plug in and switch on pump. When pump starts up, water will come out through backwash hose.
  - When all air is purged from the system, turn pump off. If all air is not purged 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 on 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 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 the
    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 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.
- If water level drops below skimmer level, you MUST turn pump OFF!
- NEVER MOVE SELECTOR HANDLE WHEN PUMP IS ON! PUMP MUST BE OFF.
   Failure to do so will cause damage to valve and will void WARRANTY!

#### **TROUBLESHOOTING**

LOW	SHORT	CLOUDY
WATER FLOW	FILTER CYCLES	WATER
Check skimmer basket for excess debris     Check for restrictions in intake and discharge lines     Check for air leak in intake line (Indicated by bubbles returning to pool)	<ol> <li>Check for algae in pool and superchlorinate as required.</li> <li>Be sure chlorine and pH levels are in proper range. Adjust as required.</li> <li>Check surface of filter sand for crusting or caking. Remove 1" of sand if necessary.</li> </ol>	1. Check chlorine, pH and total alkalinity levels and adjust as required.  2. Be sure flow rate through filter is sufficient.  3. Operate filter for longer periods.  4. Be sure valve is set to "Filter" position.  5. Be sure sand is between 1/2 and 3/4 full in tank.

#### WINTERIZING



**NOTE:** Failure to winterize your filter properly may result in damage to the system 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 ventillation through the valve to protect from cracking.
- Remove drain plug from bottom of filter tank to drain water out of the filter. Keep this plug
  off for the winter to allow any potential moisture build up to escape from tank.
- Empty ALL sand from the filter system and dispose of. 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 clean water (Not chlorinated water) through pump to rinse out and store in a warm, dry
  place for the winter.