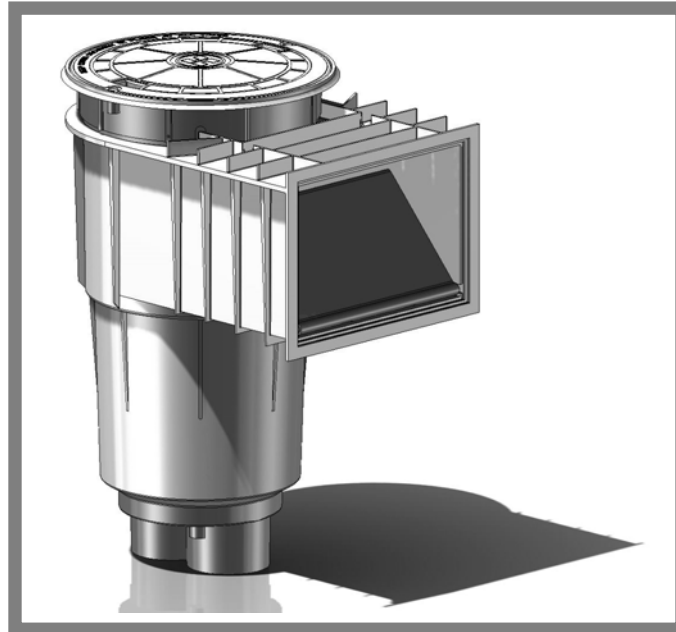


AUTOMATIC SURFACE SKIMMER

by **HAYWARD®**


Owner's Manual


Models SP1070-SP1071 SERIES SKIM-MASTER




IMPORTANT SAFETY INSTRUCTIONS

Basic safety precautions should always be followed, including the following: Failure to follow instructions can cause severe injury and/or death.

 This is the safety-alert symbol. When you see this symbol on your equipment or in this manual, look for one of the following signal words and be alert to the potential for personal injury.

 **WARNING** warns about hazards that **could** cause serious personal injury, death or major property damage and if ignored presents a potential hazard.

 **CAUTION** warns about hazards that **will** or **can** cause minor or moderate personal injury and/or property damage and if ignored presents a potential hazard. It can also make consumers aware of actions that are unpredictable and unsafe.

The **NOTICE** label indicates special instructions that are important but not related to hazards.



⚠ WARNING - Read and follow all instructions in this owner's manual and on the equipment. Failure to follow instructions can cause severe injury and/or death.

⚠ WARNING – Suction Entrapment Hazard.



Suction in suction outlets and/or suction outlet covers which are, damaged, broken, cracked, missing, or unsecured can cause severe injury and/or death due to the following entrapment hazards:



Hair Entrapment- Hair can become entangled in suction outlet cover.



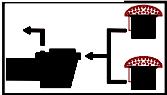
Limb Entrapment- A limb inserted into an opening of a suction outlet sump or suction outlet cover that is damaged, broken, cracked, missing, or not securely attached can result in a mechanical bind or swelling of the limb.



Body Suction Entrapment- A negative pressure applied to a large portion of the body or limbs can result in an entrapment.

Evisceration/ Disembowelment - A negative pressure applied directly to the intestines through an unprotected suction outlet sump or suction outlet cover which is, damaged, broken, cracked, missing, or unsecured can result in evisceration/ disembowelment.

Mechanical Entrapment- There is potential for jewelry, swimsuit, hair decorations, finger, toe or knuckle to be caught in an opening of a suction outlet cover resulting in mechanical entrapment.



⚠ WARNING - To Reduce the risk of Entrapment Hazards:

- o When outlets are small enough to be blocked by a person, a minimum of two functioning suction outlets per pump must be installed. Suction outlets in the same plane (i.e. floor or wall), must be installed a minimum of three feet (3') [1 meter] apart, as measured from near point to near point.
- o Dual suction fittings shall be placed in such locations and distances to avoid “dual blockage” by a user.
- o Dual suction fittings shall not be located on seating areas or on the backrest for such seating areas.
- o The maximum system flow rate shall not exceed the flow rating of as listed on Table 1.
- o Never use Pool or Spa if any suction outlet component is damaged, broken, cracked, missing, or not securely attached.
- o Replace damaged, broken, cracked, missing, or not securely attached suction outlet components immediately.
- o In addition two or more suction outlets per pump installed in accordance with latest ASME, APSP Standards and CPSC guidelines, follow all National, State, and Local codes applicable.
- o Installation of a vacuum release or vent system, which relieves entrapping suction, is recommended.

⚠ WARNING – Failure to remove pressure test plugs and/or plugs used in winterization of the pool/spa from the suction outlets can result in an increase potential for suction entrapment as described above.

⚠ WARNING – Failure to keep suction outlet components clear of debris, such as leaves, dirt, hair, paper and other material can result in an increase potential for suction entrapment as described above.

⚠ WARNING – Suction outlet components have a finite life, the cover/grate should be inspected frequently and replaced at least every ten years or if found to be damaged, broken, cracked, missing, or not securely attached.

⚠ CAUTION – Components such as the filtration system, pumps and heater must be positioned so as to prevent their being used as means of access to the pool by young children.

⚠ WARNING – Never operate or test the circulation system at more than 50 PSI.

⚠ WARNING – Never change the filter control valve position while the pump is running.

⚠ WARNING – To reduce risk of injury, do not permit children to use or climb on this product. Closely supervise children at all times. Components such as the filtration system, pumps, and heaters must be positioned to prevent children from using them as a means of access to the pool.



⚠ WARNING – 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 system, all system and pump controls must be in off position and filter manual air relief valve must be in open position. Before starting system pump, all system valves must be set in a position to allow system water to return back to the pool. Do not change filter control valve position while system pump is running. 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 or air and water) is discharged.



⚠ WARNING – Separation Hazard. Failure to follow safety and operation instructions could result in violent separation of pump and/or filter components. Strainer cover must be properly secured to pump housing with strainer cover lock ring. Before servicing pool and spa circulation system, filters manual air relief valve must be in open position. Do not operate pool and spa circulation system if a system component is not assembled properly, damaged, or missing. Do not operate pool and spa circulation system unless filter manual air relief valve body is in locked position in filter upper body.

USE ONLY HAYWARD GENUINE REPLACEMENT PARTS



⚠ WARNING – Risk of Electric Shock. All electrical wiring **MUST** be in conformance with applicable local codes, regulations, and the National Electric Code (NEC). Hazardous voltage can shock, burn, and cause death or serious property damage. To reduce the risk of electric shock, do **NOT** use an extension cord to connect unit to electric supply. Provide a properly located electrical receptacle. Before working on any electrical equipment, turn off power supply to the equipment.

⚠ WARNING – To reduce the risk of electric shock replace damaged wiring immediately. Locate conduit to prevent abuse from lawn mowers, hedge trimmers and other equipment.

⚠ WARNING – Electrical ground all electrical equipment before connecting to electrical power supply. Failure to ground all electrical equipment can cause serious or fatal electrical shock hazard.

⚠ WARNING – Do **NOT** ground to a gas supply line.

⚠ WARNING – To avoid dangerous or fatal electrical shock, turn **OFF** power to all electrical equipment before working on electrical connections.

⚠ WARNING – Failure to bond all electrical equipment to pool structure will increase risk for electrocution and could result in injury or death. To reduce the risk of electric shock, see installation instructions and consult a professional electrician on how to bond all electrical equipment. Also, contact a licensed electrician for information on local electrical codes for bonding requirements.

Notes to electrician: Use a solid copper conductor, size 8 or larger. Run a continuous wire from external bonding lug to reinforcing rod or mesh. Connect a No. 8 AWG (8.4 mm²) [No. 6 AWG (13.3 mm²) for Canada] solid copper bonding wire to the pressure wire connector provided on the electrical equipment and to all metal parts of swimming pool, spa, or hot tub, and metal piping (except gas piping), and conduit within 5 ft. (1.5 m) of inside walls of swimming pool, spa, or hot tub.

IMPORTANT - Reference NEC codes for all wiring standards including, but not limited to, grounding, bonding and other general wiring procedures.

⚠ WARNING – Risk of Electric Shock. Connect only to a branch circuit protected by a ground-fault circuit-interrupter (GFCI). Contact a qualified electrician if you cannot verify that the circuit is protected by a GFCI.

⚠ WARNING – Risk of Electric Shock. The electrical equipment must be connected only to a supply circuit that is protected by a ground-fault circuit-interrupter (GFCI). Such a GFCI should be provided by the installer and should be tested on a routine basis. To test the GFCI, push the test button. The GFCI should interrupt power. Push reset button. Power should be restored. If the GFCI fails to operate in this manner, the GFCI is defective. If the GFCI interrupts power to the electrical equipment without the test button being pushed, a ground current is flowing, indicating the possibility of an electrical shock. Do not use this electrical equipment. Disconnect the electrical equipment and have the problem corrected by a qualified service representative before using.

⚠ CAUTION – This pump is intended for use with permanently-installed pools and may be used with hot tubs and spas if so marked. Do not use with storable pools. A permanently-installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage. A storable pool is constructed so that it is capable of being readily disassembled for storage and reassembled to its original integrity.

SAVE THESE INSTRUCTIONS

HAYWARD® Pool Products Limited Warranty

To original purchasers of this equipment, Hayward Pool Products, Inc. warrants its skimmers to be free from defects in materials and workmanship for a period of ONE (1) year from the date of purchase, when used in single family residential applications.

The limited warranty excludes damage from freezing, negligence, improper installation, improper use or care or any Acts of God. Parts that fail or become defective during the warranty period shall be repaired or replaced, at our option, within 90 days of the receipt of defective product, barring unforeseen delays, without charge.

Proof of purchase is required for warranty service. In the event proof of purchase is not available, the manufacturing date of the product will be the sole determination of the purchase date.

To obtain warranty service, please contact the place of purchase or the nearest Hayward Authorized Service Center. For assistance on your nearest Hayward Authorized Service Center please visit us at www.haywardpool.com.

Hayward shall not be responsible for cartage, removal, repair or installation labor or any other such costs incurred in obtaining warranty replacements or repair.

The Hayward Pool products warranty does not apply to components manufactured by others. For such products, the warranty established by the respective manufacturer will apply.

The express limited warranty above constitutes the entire warranty of Hayward Pool Products with respect to its' pool products and is in lieu of all other warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose. In no event shall Hayward Pool products be responsible for any consequential, special or incidental damages of any nature.

Some states do not allow a limitation on how long an implied warranty lasts, or the exclusion of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

*Supersedes all previous publications.

Hayward Pool Products
620 Division Street
Elizabeth, NJ 07207

USE ONLY HAYWARD GENUINE REPLACEMENT PARTS

INSTALLATION INSTRUCTIONS:

The SP1070/1071 Series Skim-Master is a rugged and versatile automatic surface skimmer molded of non-corrosive ABS for residential or commercial installations. The SP1070/1071 is the basic skimmer unit, featuring totally corrosion-proof, uni-body construction, adjustable deck collar and round access cover, self-adjusting weir, large debris basket, auxiliary port (SP1071 only), and multiple plumbing connections for easier installation. The optional SP1070FV Float Valve/By-Pass Assembly installs easily in the SP1070 / 1071 basic skimmer to provide a suction outlet thru-skimmer system and an auto safety by-pass for low water conditions.

Where required for commercial installations, the SP1070FVEKIT Float Valve and Equalizer Check Valve Kit and cover WG1070C can easily make the skimmer of your choice for commercial application. Refer to illustrations for details.

BASIC SKIMMER UNIT

FLOW ADJUSTMENT For full flow, move Flo-Control Slide Plate to full open. To adjust flow, move Slide Plate to desired position over pump outlet.

TO VACUUM Remove cover and basket. Screw hose adapter into pump outlet. Fill vacuum hose with water and insert over hose adapter. Or use optional SP11063 Skim-Vac over basket vacuum plate.

SKIMMER INSTALLED WITH SUCTION OUTLET CONNECTION AND FLOAT VALVE /

SAFETY BYPASS

When used with the SP1070FV Float Valve, water is drawn by pump suction from the surface of the pool and from the suction outlet line. Flow is balanced by means of the Flo-Control Trimmer Plate under the float valve assembly. If obstruction to flow or evaporation occurs, causing a significant reduction of flow over the weir, the float will automatically snap shut. This diverts all flow to the pump from the suction outlet line and prevents possible air lock. When the pump is shut off, the float will rise back to the top of the float valve assembly, allowing for normal operation if the flow or water level condition has been remedied.

TO SWEEP / BRUSH To divert all suction to the suction outlet, simply hold the weir up above normal operating level and allow the float to "snap" shut. Or, lift out float valve assembly, close flo-control plate and replace. To reset float after sweeping, turn off pump for 10-15 seconds and allow float to rise.

WARNING: To prevent hair or body entrapment, a suction outlet fitting conforming to ANSI/ASME A112.19.8 must be installed.

TO VACUUM Remove cover, basket and float valve assembly. Screw hose adapter into pump outlet. Fill vacuum hose with water and insert over hose adapter. Or use optional SP11063 Skim-Vac. If Skim-Vac is used, block off suction outlet port for maximum efficiency.

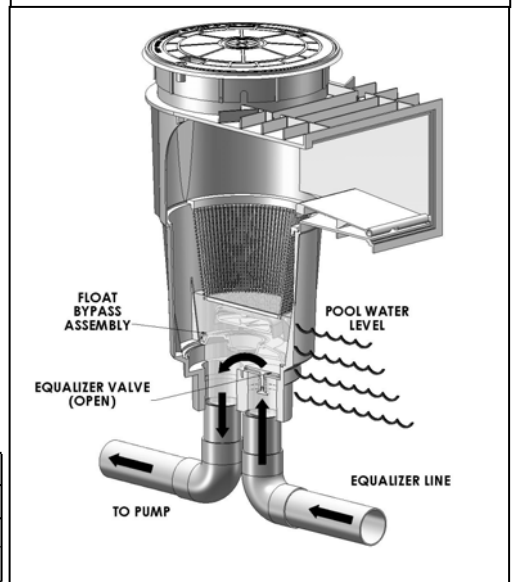
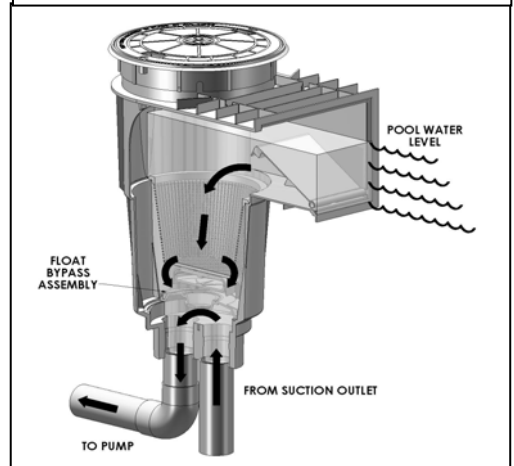
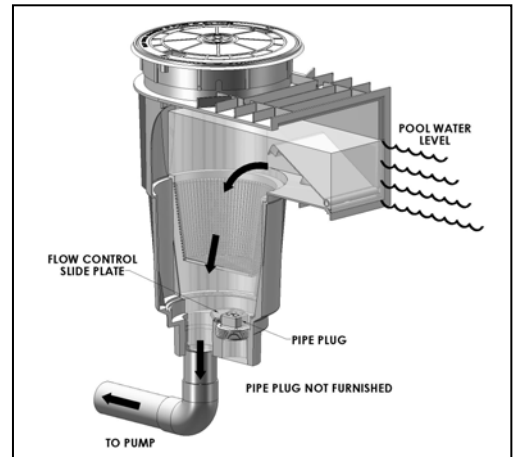
SKIMMER INSTALLED WITH EQUALIZER VALVE AND FLOAT VALVE

When using SP1070FVEKIT for commercial application, the Equalizer Check Valve installs over front port, and is used in conjunction with the Float Valve. If water level drops below skimmer opening, or if skimmer flow is obstructed, the float will automatically snap shut and the equalizer valve will open. This diverts all flow to the pump from the equalizer line and prevents airlock in the pump. When the pump is shut off, and the water level condition is corrected, the float will rise and the equalizer valve will close, allowing normal skimming operation when the pump is restarted.

WARNING: To prevent hair or body entrapment at the skimmer equalizer, an equalizer wall or a suction outlet fitting conforming to ANSI/ASME A112.19.8 must be installed.

FLOW RATING

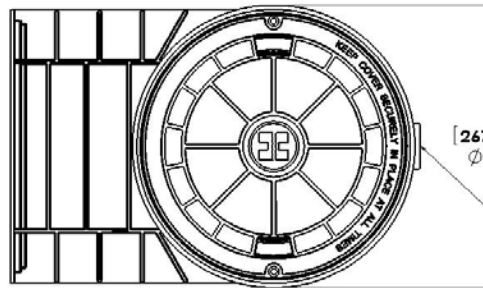
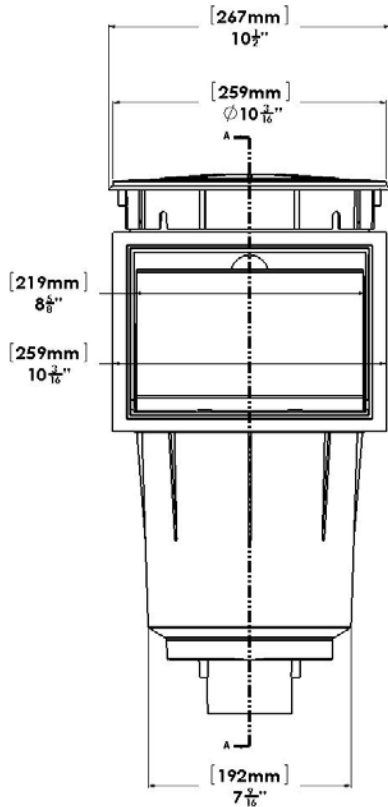
PIPE	MAX		MIN	
	GPM	LPM	GPM	LPM
1-1/2	36	136	10	37
2	63	238	20	75



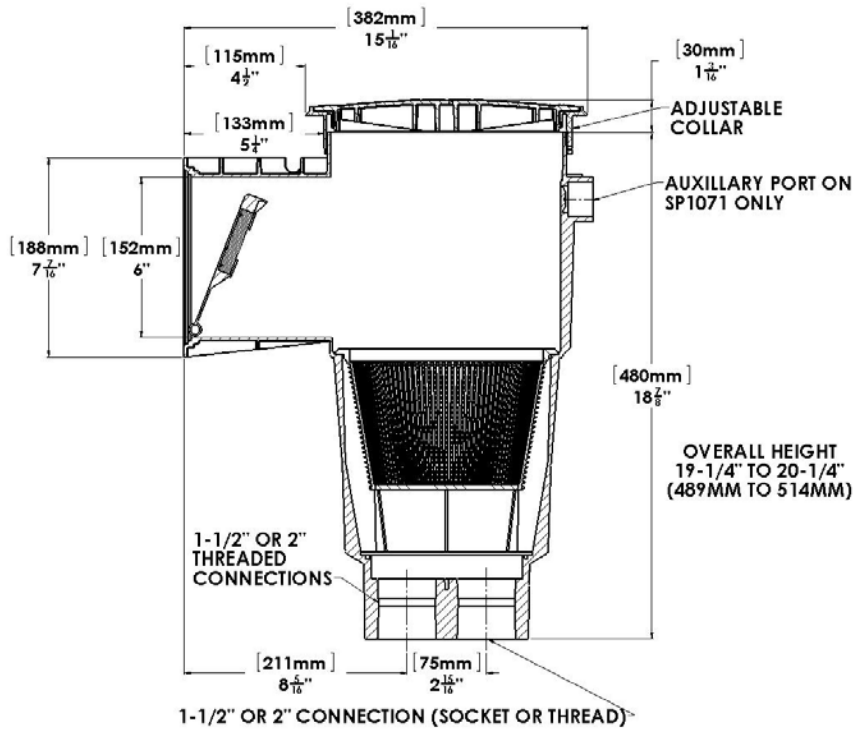
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**SP1070 & SP1071 SERIES
AUTOMATIC SKIMMER**

DIMENSIONS



AUXILIARY PORT ON SP1071 ONLY



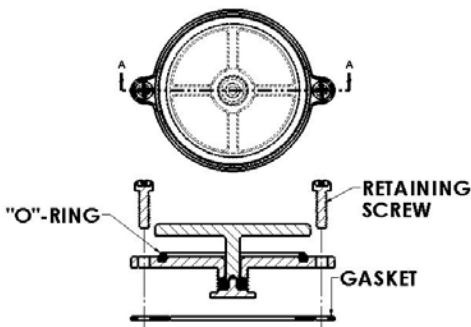
OVERALL HEIGHT
19-1/4" TO 20-1/4"
(489MM TO 514MM)

1-1/2" OR 2" CONNECTION (SOCKET OR THREAD)

SP1070FVKIT

**EQUALIZER VALVE ASSEMBLY
SP1078**

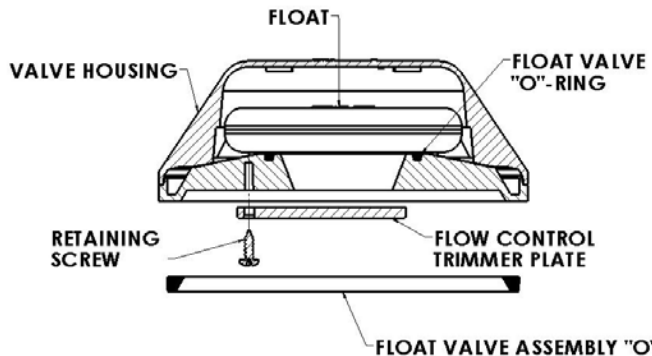
TOP VIEW



INSTALLATION INSTRUCTIONS

1. PLACE GASKET OVER EQUALIZER LINE PORT (FRONT) LINE UP SMALL HOLES OVER SCREW HOLES.
2. PLACE EQUALIZER ASSEMBLY OVER EQUALIZER PORT, SOLID SIDE UP
3. INSERT RETAINING SCREWS THROUGH EAR TABS AND GASKET AND TIGHTEN RETAINING SCREWS.

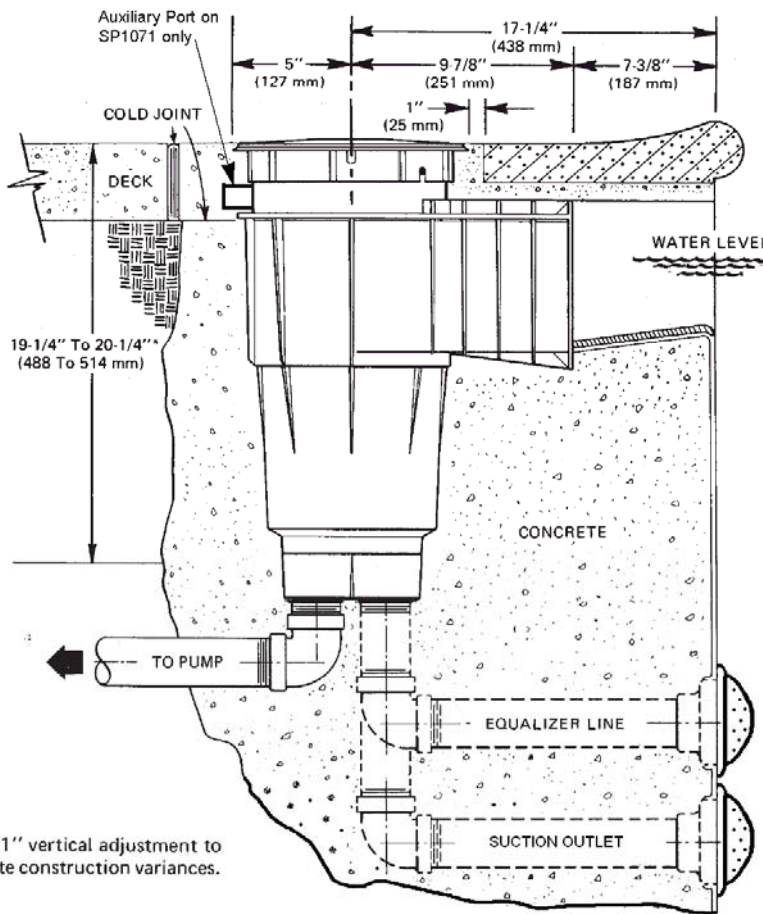
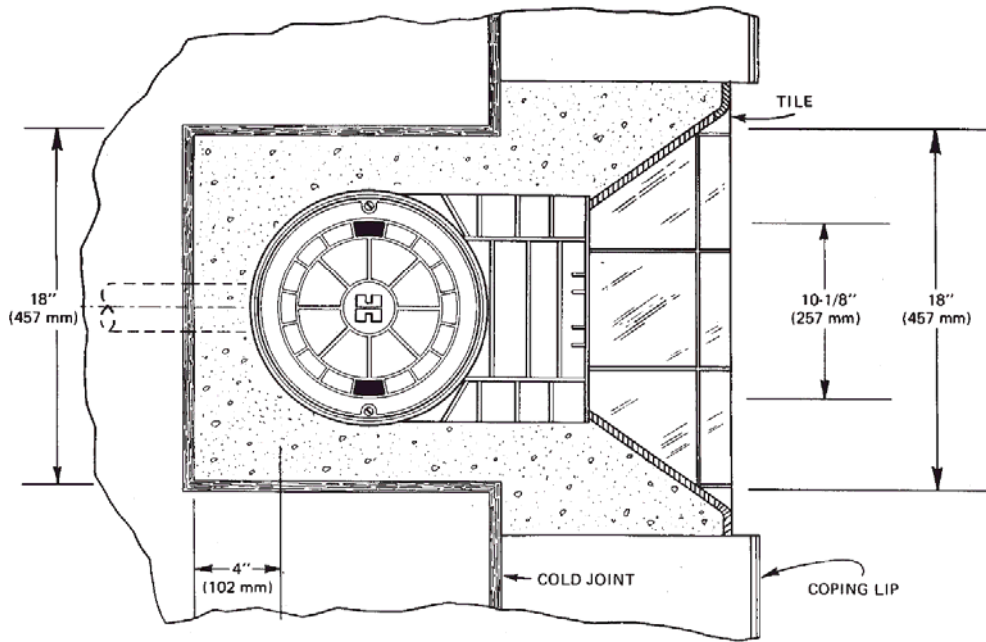
**SKIM / SUCTION OUTLET FLOAT / BY-PASS ASSEMBLY
SP1070FV**



INSTALLATION INSTRUCTIONS

1. REMOVE SCREW, PIPE PLUG (IF INSTALLED) AND FLO-CONTROL SLIDE PLATE (IF INSTALLED) FROM BOTTOM OF PLASTIC SKIMMER.
2. PLACE LARGE O-RING IN GROOVE IN THE BOTTOM OF THE SKIMMER BODY
3. ATTACH FLO-CONTROL TRIMMER PLATE TO FLOAT ASSEMBLY, USING SCREW PROVIDED.
4. PLACE FLOAT VALVE ASSEMBLY INTO SKIMMER. ADJUST FLO-CONTROL TRIMMER PLATE AS REQUIRED.

TYPICAL CONCRETE POOL INSTALLATION



LOCATION OF SKIMMERS

To obtain the most effective skimming action over the entire pool surface, locate the skimmers relative to the prevailing wind and drift, shape of pool and water circulation pattern. The use of directional inlet fittings will ensure the proper circulation pattern.

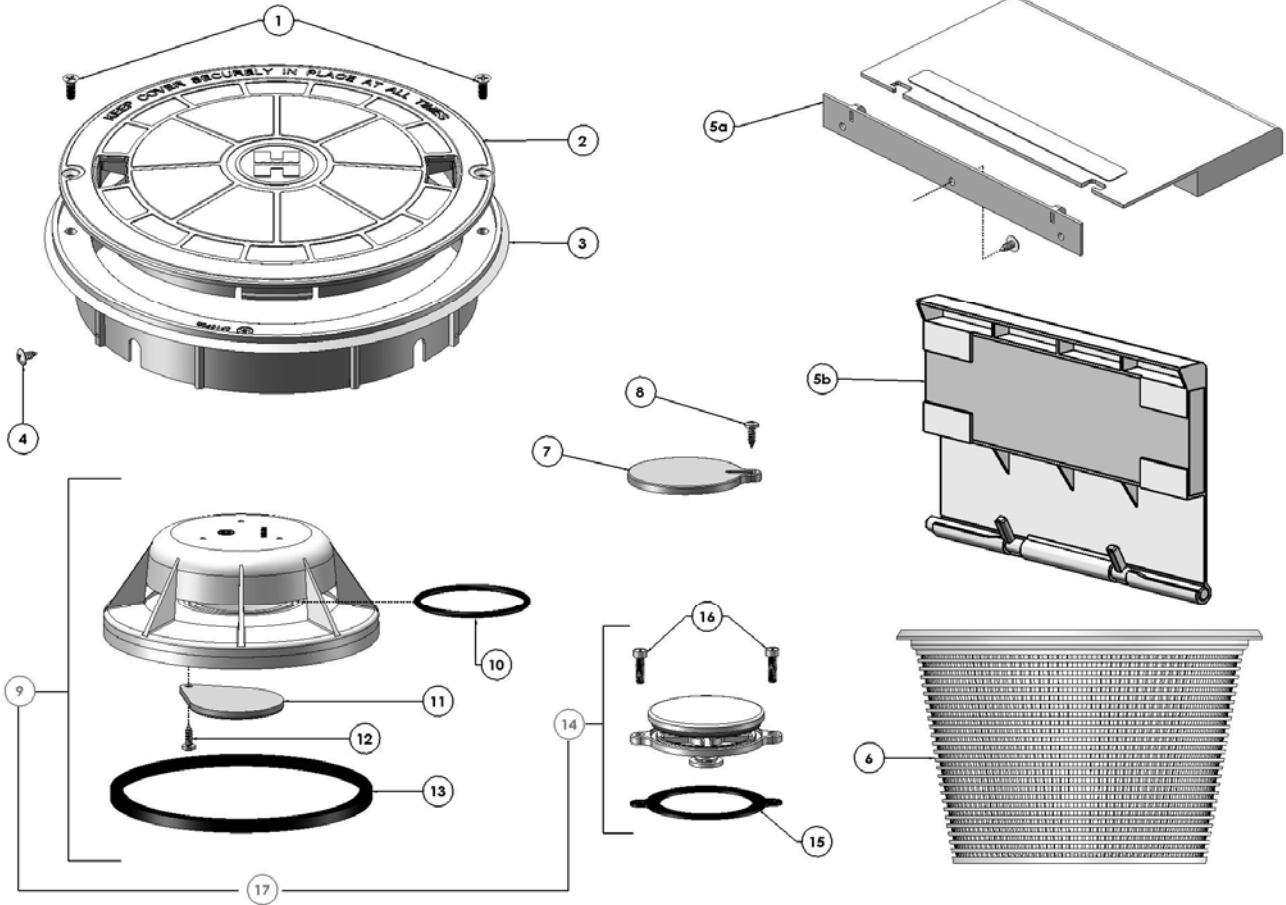
PVC CONNECTIONS:

The Hayward SP1070/1071 Series Skimmers are molded of ABS and require the appropriate glue for connecting with PVC.

← ASME 112.19.8 Cover

← ASME 112.19.8 Suction Fitting

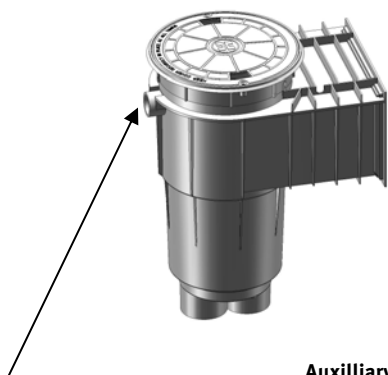
*Cover has 1" vertical adjustment to accommodate construction variances.

PARTS AND ACCESSORIES


REF NO.	PART NUMBER	DESCRIPTION	NO. REQ'D
1	SPX1070Z3	COVER RETAINING SCREW	2
2	SPX1070C WGX1070C	COVER COVER FOR COMMERCIAL APPLICATIONS	1
3	SPX1070B	ADJUSTING COLLAR	1
4	ECX1019	ADJUSTING COLLAR SCREW	3
5a	SPX1070KHR	WEIR ASSEMBLY (FOR SP1070 SERIES MANUFACTURED PRIOR TO MAY 2002 ONLY)	1
5b	SPX1071K	WEIR ASSEMBLY	1
6	SPX1070E	BASKET	1
7	SPX1082H1B	FLO-CONTROL SLIDE PLATE	1
8	SPX1070Z6	RETAINING SCREW	1
9	SP1070FV	FLOAT VALVE	1
10	SPX1070Z2	FLOAT VALVE O-RING	1
11	SPX1070F	FLO-CONTROL TIMER PLATE	1
12	SPX1070Z6	RETAINING SCREW	1
13	SPX1070Z1	FLOAT VALVE ASSEMBLY O-RING (BODY)	1
14	SP1078	EQUALIZER VALVE ASSEMBLY	1
15	SPX1078Z6	GASKET FOR EQUALIZER	1
16	SPX1078Z7	RETAINING SCREW	2
17	SP1070FVEKIT	FLOAT VALVE & EQUALIZER KIT	1

REPAIR PARTS ARE AVAILABLE THROUGH YOUR LOCAL AUTHORIZED HAYWARD DEALER

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Auxilliary Port Feature.

To remove "Knock-out," drill a small pilot hole in the center of the knock-out. Then, using a drill Up to but not exceeding 3/4", remove the remaining Material.

<p>PRODUCT REGISTRATION (Retain For Your Records)</p>
<p>DATE OF INSTALLATION _____</p>

▲ Retain this Warranty Certificate (upper portion) in a safe and convenient location for your records.



DETACH HERE: Fill out bottom portion completely and mail within 10 days of purchase/installation or register online.

AUTOMATIC SURFACE SKIMMER

Warranty Card Registration

Register online at www.haywardnet.com

Please Print Clearly:

First Name _____ Last Name _____

Street Address _____

City _____ State _____ Zip _____

Phone Number _____ Purchase Date _____

E-Mail Address _____

Model Number _____

Pool Capacity _____ (U.S. Gallons)

Please include me on all e-mail communications regarding Hayward® Equipment or promotions.

Mail to: Hayward Pool Products, 620 Division Street, Elizabeth, NJ 07207

Attn: Warranty Dept

Or REGISTER YOUR WARRANTY ON-LINE AT WWW.HAYWARDNET.COM

<p>Years Pool has been in service</p> <p><input type="checkbox"/> < 1 year <input type="checkbox"/> 1-3 <input type="checkbox"/> 4-5 <input type="checkbox"/> 6-10 <input type="checkbox"/> 11-15 <input type="checkbox"/> >15</p> <p>Purchased from _____</p> <p><input type="checkbox"/> Builder <input type="checkbox"/> Retailer <input type="checkbox"/> Pool Service <input type="checkbox"/> Internet/Catalog</p> <p>Company Name _____</p> <p>Address _____</p> <p>City _____ State _____ Zip _____</p> <p>Phone _____</p>

<p>Type of Pool:</p> <p><input type="checkbox"/> Concrete/Gunite <input type="checkbox"/> Vinyl <input type="checkbox"/> Fiberglass</p> <p><input type="checkbox"/> Other _____</p>

<p><input type="checkbox"/> New Installation <input type="checkbox"/> Replacement</p>

<p>Installation for:</p> <p><input type="checkbox"/> In Ground <input type="checkbox"/> Above Ground <input type="checkbox"/> Spa</p>



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