

DUAL SUBMERGED SUCTION OUTLET FRAMES and COVER SET and REPLACEMENT COVERS

[Commonly called main drains]

Owner's Manual



For Models: **WG1031HF2PAK2, WG1032HF2PAK2, WG1033HF2PAK2, WG1061HF2PAK2**
Covers: **WGX1031BHF2, WGX1032BHF2, WGX1033BHF2** which are suitable for these models as well as
Replacement for **WG1031BLV2, WG1032BLV2, WG1033BLV2, WG1061BLVPAK2**

When installing and using this equipment basic safety precautions shall always be followed including the following:

IMPORTANT SAFETY INSTRUCTIONS

READ, FOLLOW AND UNDERSTAND ALL WARNINGS AND INSTRUCTIONS

- ▲ 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.

Hayward Industries
1415 Vantage Park Dr., Suite 400
Charlotte, NC 28203
Phone: (908) 355-7995
www.hayward.com



HAYWARD®



▲ WARNING - READ, FOLLOW AND UNDERSTAND ALL WARNINGS AND 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 improperly secured 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.



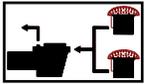
Body Suction Entrapment- A negative pressure applied to a large portion of the body or limbs can result in an entrapment.

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 center to center.
- o Dual suction fittings installed closer than three feet center to center shall be located on two different planes, i.e. one suction fitting assembly shall be on the pool floor, and one shall be located on a vertical wall, or one fitting shall be located on each of two separate walls.
- o 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 Chart 1 for the Branch piping.
- o The maximum specific flow rating of the Suction Outlet Assembly shall not be exceeded at any time the pool is open to bathers.
- 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, before bathers are allowed to use the pool.
- o In addition to two or more suction outlets per pump which should be installed in accordance with latest ASME, APSP Standards and CPSC guidelines, all applicable National, State, and Local codes should be followed.
- o Installation of a vacuum release or vent system, which relieves entrapping suction, is recommended.
- o Only Hayward specified fasteners (screws) shall be used to secure the suction outlet cover.



▲ 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 increased potential for suction entrapment as described above.

▲ WARNING – Suction outlet components have a finite life. The cover/grate and screws should be inspected frequently and replaced at least every seven years or if found to be damaged, broken, cracked, missing, or not securely attached. All other SOFA components should be inspected frequently and replaced at least every 28 years or if found to be damaged, broken, cracked. Service life begins in the month and year of installation.

▲ 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. To reduce risk of injury, do not permit children to use or climb on these products. 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 the 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 the filter control valve position while the system pump is running. Before starting the 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. The strainer cover must be properly secured to pump housing with the strainer cover lock ring. Before servicing a pool and spa circulation system, the filter's manual air relief valve must be in the open position. Do not operate a 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. **Never operate or test the circulation system at more than 50 PSI. Do not purge the system with compressed air.** Purging the system with compressed air can cause components to explode, with risk of severe injury or death to anyone nearby. Use only a low pressure (below 5 PSI), high volume blower when air purging the pump, filter, or piping.

Any modification that increases the flow rate of the circulation system shall require re-evaluation of the cover/grate and sump to ensure that the flow rating of the Suction Outlet Fitting Assembly (SOFA) is not exceeded.

Missing, broken, or cracked covers/grates, sumps, mud-frames, or any other SOFA component shall be replaced before bathers are allowed to use the pool. Loose cover/grates shall be reattached before bathers are allowed to use the pool.



HAYWARD®



▲ 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 the power supply to the equipment. To reduce the risk of electric shock replace damaged wiring immediately. Locate conduit to prevent abuse from lawn mowers, hedge trimmers and other equipment. Do **NOT** ground to a gas supply line.

▲ WARNING – Risk of Electric Shock. Failure to ground all electrical equipment can cause a serious or fatal electrical shock hazard. Electrical ground all electrical equipment before connecting to electrical power supply.

▲ WARNING – Risk of Electric Shock. Failure to bond all electrical equipment to the 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 to bond all electrical equipment. A licensed electrician shall also be consulted 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. 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 – HAYWARD® pumps are 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.

▲ WARNING – Risk of Hyperthermia. To avoid hyperthermia the following “Safety Rules for Hot Tub” are recommended by the U.S. Consumer Product Safety Commission.

1. Spa or hot tub water temperatures should never exceed 104°F [40°C]. A temperature of 100°F [38°C] is considered safe for a healthy adult. Special caution is suggested for young children. Prolonged immersion in hot water can induce hyperthermia.
2. Drinking of alcoholic beverages before or during spa or hot tub use can cause drowsiness, which could lead to unconsciousness and subsequently result in drowning.
3. Pregnant women beware! Soaking in water above 100°F [38°C] can cause fetal damage during the first three months of pregnancy (resulting in the birth of a brain-damaged or deformed child). Pregnant women should adhere to the 100°F [38°C] maximum rule.
4. Before entering the spa or hot tub, users should check the water temperature with an accurate thermometer; spa or hot tub thermostats may err in regulating water temperatures by as much as 4°F (2.2°C).
5. Persons taking medications, which induce drowsiness, such as tranquilizers, antihistamines or anti-coagulants, should not use spas or hot tubs.
6. If the pool/spa is used for therapy, it should be done with the advice of a physician. Always stir pool/ spa water before entering the pool/spa to mix in any hot surface layer of water that might exceed healthful temperature limits and cause injury. Do not tamper with controls, because scalding can result if safety controls are not in proper working order.
7. Persons with a medical history of heart disease, circulatory problems, diabetes or blood pressure problems should obtain a physician’s advice before using spas or hot tubs.
8. Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above normal body temperature of 98.6°F [37°C]. The symptoms of Hyperthermia include: drowsiness, lethargy, dizziness, fainting, and an increase in the internal temperature of the body.

The effects of Hyperthermia include:

1. Unawareness of impending danger.
2. Failure to perceive heat.
3. Failure to recognize the need to leave the spa.
4. Physical inability to exit the spa.
5. Fetal damage in pregnant women.
6. Unconsciousness resulting in danger of drowning.

SAVE THESE INSTRUCTIONS

ACCEPTABLE PIPE SIZE FOR MAXIMUM RECOMMENDED SYSTEM FLOW RATE PER ANSI/PHTA/ICC-7 (6 FT/SEC IN THE BRANCH LINE)

Pipe Size	Flow rate	Pipe Size	Flow rate
[mm]	GPM [Liter/Min]	[mm]	GPM [Liter/Min]
2 1/2"	90	4"	238
[75]	[340]	[100]	[900]
3"	138	6"	540
[90]	[522]	[150]	[2040]

CHART 1

The Head loss curves were measured in schedule 40 piping of the size of the sump port, 24 inches from the sump with the cover installed. Piping loss was accounted for on these curves.

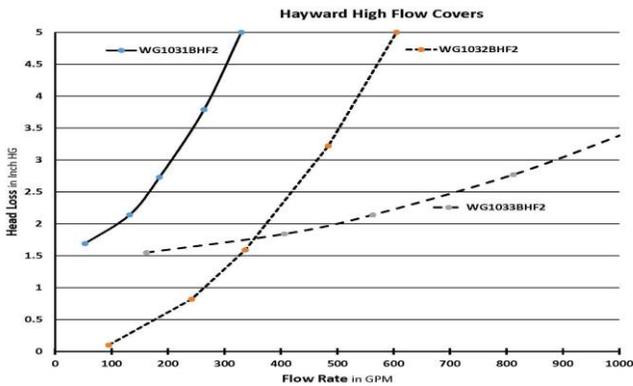


FIG 1

The Cover and Sump combination are rated at the following
MAXIMUM ALLOWABLE FLOW RATES

WG1031BHF2	9" x 9"	GPM
2 1/2" Side Port Floor Mounted		172
3" Side Port Floor Mounted		264
2 1/2" Bottom Port Wall Mounted		224
3" Bottom Port Wall Mounted		224
2 1/2" Side Port Wall Mounted		184
3" Side Port Wall Mounted		224
WG1032BHF2	12" x 12"	GPM
3" Side Port Floor Mounted		416
4" Side Port Floor Mounted		448
3" Bottom Port Wall Mounted		308
4" Bottom Port Wall Mounted		308
WG1033BHF2	18" x 18"	GPM
3" Side Port Floor Mounted		484
4" Side Port Floor Mounted		656
6" Side Port Floor Mounted		815
3" Bottom Port Wall Mounted		484
4" Bottom Port Wall Mounted		688
6" Bottom Port Wall Mounted		732

Chart 2

RECOMMENDED SYSTEM SPECIFICATIONS:

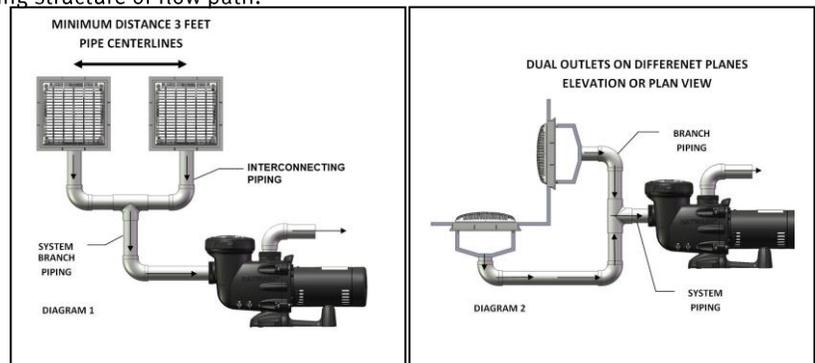
WG1031BHF2, WG1032BHF2, and WG1033BHF2 Suction Outlet Covers (Sold as per the model numbers on the cover page.) are rated for the Floor and the Wall per chart 2. The Suction Outlet Fitting assemblies that include the listed covers are considered "Blockable" by the latest APSP-16 standard. In new pools the Suction Outlet Assemblies shall be installed in multiples. In existing pools with a single "Blockable" Suction Outlet Assembly, the flow rating is the flow rating of the Suction Outlet Assembly, only when also installed in conjunction with an additional device or system designed and qualified to ASME 112.19.17 to prevent suction entrapment. A Suction Outlet Assembly in a system that does not also include one of the additional devices or systems shall result in a flow rating of zero. The flow rating for pools with multiple blockable SOFAs in one body of water without isolation valves: combine all SOFAs minus the flow rate of one. If all are not equal, use the largest flow rate.

The flow ratings of the Suction outlet Assemblies are performance based. These flow limits are designed to prevent suction entrapment. No field modifications shall be made to a Suction Outlet fitting structure or flow path.

In the event of one suction outlet being blocked, the remaining suction outlets serving that system shall have a flow rating capable of the full flow of the pump(s) for the specific suction system. **Skimmers, gutters, and other outflow systems may not always be operational and could divert all the pump(s) flow through the Suction Outlet Fitting Assembly suction system, therefore the flow capacity of the Skimmers, gutters and other outflow systems shall not be included when evaluating an individual suction system flow rating.**

Example: In the System shown in **Diagram 1**, two (2) 12" Square (WG1032HF2PAK2) suction outlet assemblies are selected and mounted on the floor. These covers are individually rated for 515 GPM. For a desired flow of 130 GPM, a minimum pipe size from **Chart 1** is selected at 3". At the desired flow of 130 GPM one cover could be partially blocked and the total suction outlet flow would be below the rated 515 GPM of the remaining suction outlet. Since there are two outlets flowing in normal operation, and the allowable velocity in the branch piping is only 3ft/sec with both outlets flowing, the branch piping would require 3" pipe size.

Example: In the System shown in **Diagram 2**, two (2) 12" Square (WG1032HF2PAK2) suction outlet covers are selected and mounted, on one the floor and the other on the wall. These covers are individually rated for 515 GPM on the floor and 308 GPM when wall mounted. For a desired flow of 110 GPM, a minimum pipe size from **Chart 1** is selected at 3". At the desired flow of 110 GPM one cover could be partially blocked and the total suction outlet flow would be below the rated 308 GPM of the remaining suction outlet. Since there are two outlets flowing in normal operation, and the allowable velocity in the branch piping is only 3ft/sec with both outlets flowing, the branch piping would require 3" pipe size.





INSTALLATION INSTRUCTIONS: - All SOFA's shall be installed according to these instructions.

Use a #2 Philips head Screwdriver.

NOTICE: When installing WG1031HF2PAK2, WG1032HF2PAK2 or the WG1033HF2PAK2 refer to Fig 2 below on the minimum dimensional requirements for construction of a field-fabricated sump to comply with the latest APSP-16 standard. The frame WG1031A, SP1032A, or WG1033A must be securely attached to the pool structure, and flat to the pool finished surface. The WG1031HF2Pak2 has been qualified for 2 1/2" and 3" piping only. The WG1032HF2Pak2 has been qualified for 3" and 4" piping only. The WG1033HF2Pak2 has been qualified for 3", 4" and 6" piping only.

All these Suction outlets frames are for a concrete or gunite pools. They are designed to be plastered with the top surface flush to the pool surface. All these frames are held in place by the interior finish of the pool, the finished surface shall be free of deterioration and voids.

For new installations the Inner Frame must be secured to the outer frame using the four self-tapping #13-9 screws. The screws are designed to be started by hand to ensure proper thread engagement and to prevent cross threading. Finish assembling all screws by hand to a torque of 30 in*lb.

DO NOT USE POWER TOOLS TO INSTALL FASTENERS.

Four (4) #10 machine screws (WG1030Z1L) MUST be used to secure the cover to the suction outlet fitting Inner Frame. The screws are designed to be started by hand to ensure proper thread engagement and to prevent cross threading. Finish assembling all screws by hand to a torque of 15 in*lb. Check by hand the snugness of the cover to the frame after installation.

DO NOT USE POWER TOOLS TO INSTALL FASTENERS.

Unauthorized field modifications void the SOFA certification

No modifications can be made to SOFA structure/flow without recertifying.

Winterization:

Unless the suction outlet fitting is wall mounted and contains a manufactured sump, there is no need to winterize it. For wall mounted suction outlet fittings in areas where the piping is above the freeze line, it is recommended that the cover be removed, an air blower be utilized to remove the water in the line and a plug with an O-ring be installed to keep the water out of the pipe for the winter.

▲ WARNING Suction Entrapment Hazard. Failure to remove Winterization plug can create a Suction Entrapment Hazard that can cause severe injury and/or death. To avoid it is important to remove the winterizing plug before swimmers are allowed in the pool.

Fastener/ threaded insert repair or reinstallation:

The integrity of the suction outlet fitting assembly relies on having the covers firmly attached to the mating frame or sump. The screws that attach the cover must be inspected for thread damage, and/or corrosion, every time the cover is removed. If there is visible damage to the screws, they must be replaced, by pushing on the end and unscrewing. They must be replaced by like screws from Hayward.

If even one of the threaded inserts is damaged, the Inner Frame MUST be removed and replaced. Full instructions are included on the following pages. If the self-tapping screws that hold the inner frame to the outer frame cannot be torqued to the proper level, the outer frame must be replaced.

▲ WARNING— Suction outlet components have a finite life, the cover/grate and screws, should be inspected frequently and replaced at least every seven years, other components should be inspected frequently and replaced at least every 28 years. Components must be replaced if found to be damaged, by change in color, have brittle components with missing pieces, broken, cracked, missing, or not securely attached or no longer integral to the pool interior surface.

The use of adhesives or other cover/grate attachment methods that prevent access to suction piping or SOFA components requiring servicing is prohibited.

By design and per the latest APSP 16 standard, covers when installed shall not protrude more than 2" from the finished surface of the pool.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

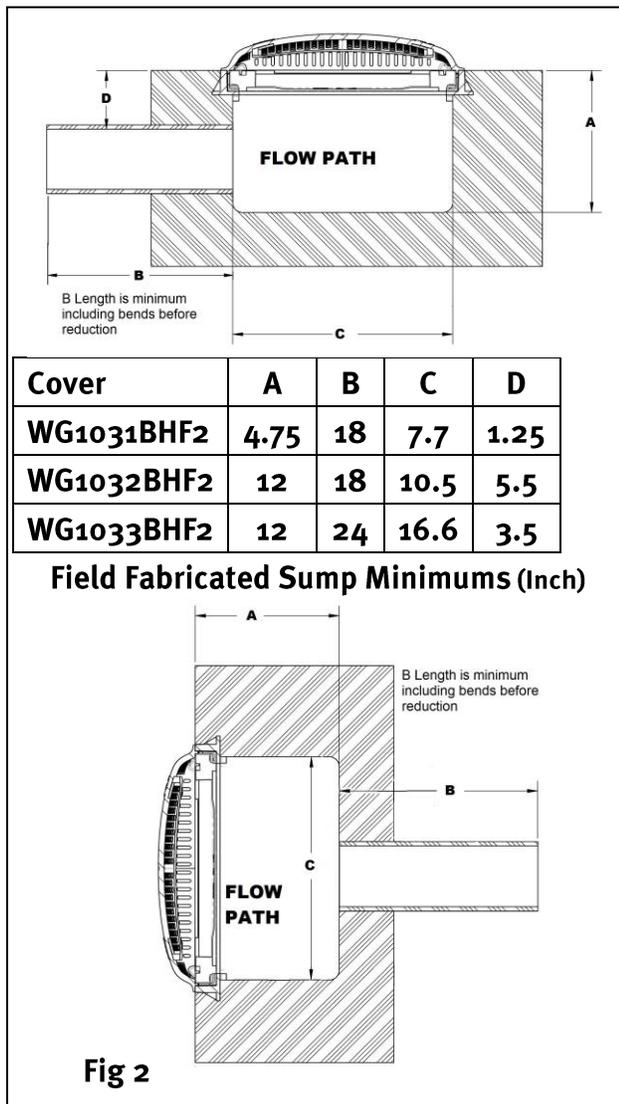


Fig 2

Field Fabricated Sump Minimums (Inch)

For installations utilizing a hydrostatic relief valve (SP1056), using a collector tube (SP1055) will maintain a clear path to the hydrostatic valve. At least one hydrostatic relief valve in a set of suction outlets will allow hydrostatic uplift pressure caused by ground water to be relieved into the pool or spa.



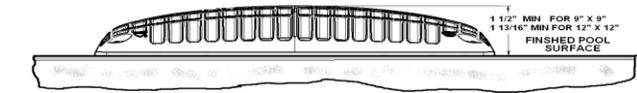
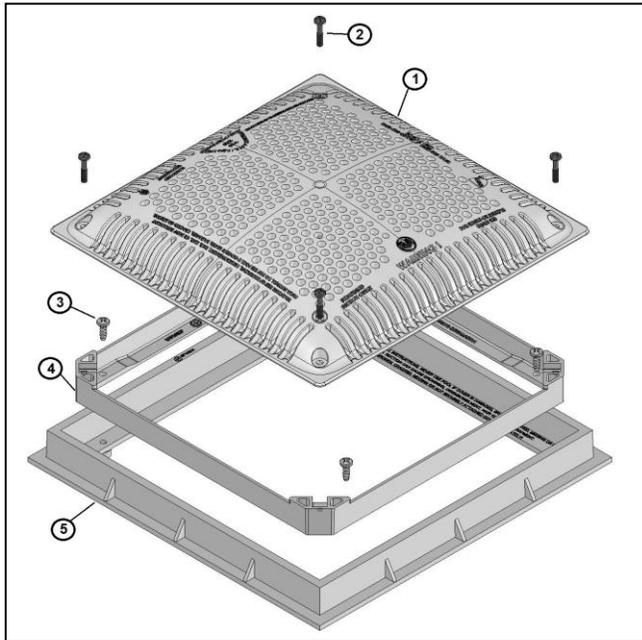
OPERATION:

Each operational day the covers, including the fasteners, shall be observed for damage or tampering. During installation of the cover and fasteners the Suction Outlet fitting assembly components, including the fasteners shall be clean and free of debris and/or obstructions.

Replace damaged, broken, cracked, missing, or not securely attached suction outlet components, including fasteners immediately, before bathers are allowed to use the pool.

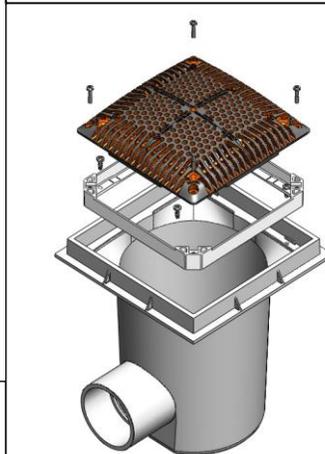
All these frames are held in place by the interior finish of the pool, the finished surface shall be free of deterioration and voids.

SPARE PARTS LISTS

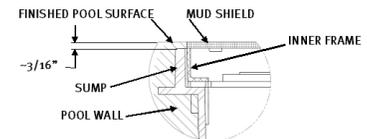


ITEM	SPARE PART	DESCRIPTION	QTY
1	WGX1031BHF2	9" x 9" Cover, Inner Frame, Screw Set	1
	WGX1032BHF2	12" x 12" Cover, InnerFrame, Screw Set	
2	WGX1030Z2A	Machine Screw #10 x 15/16" (Pack of 2)	4
	WGX1030Z8A	#13-9 x 5/8" Self-Tapping Screw (Pack of 4)	1
4	Included with the cover	Inner Frame	1
5	Not Available	Square Outer Frame	1

WG1031HF2PAK2, WGX1031BHF2 (9" X 9")
 WG1061HF2PAK2 Shown Below
 WG1032HF2PAK2, WGX1032BHF2 (12" X 12")



Installation Notes for WG1061HF2PAK2:
 When properly installed, the sump lip will be about 3/16" below finished surface of the pool. The finished surface of the pool should be flush to the top of the mud shield.



USE a #2 Phillips head screwdriver. Hand torque cover screws to 15 in*lb. DO NOT USE POWER TOOLS TO INSTALL FASTENERS

▲ Warning – Suction Entrapment Hazard. Suction in suction outlets and/or suction outlet covers which are installed in a small area and/or below the surrounding surface can cause severe injury or death due to body entrapment hazard.

•To reduce the risk of body entrapment, installation of the field fabricated sumps must be such that the top of the mounted cover is a minimum of 1 1/2" for the 9" x 9" or 1 13/16" for the 12" x 12" above the finished pool surface over an area larger than 40" on a diagonal.

When replacing a Flat 12" x 12" Hayward grate with a replacement cover WGX1032BHF2, in an existing Hayward Outer Frame (One that does not have inner frame installed), the grate is removed and discarded.

When replacing a Flat 9" x 9" Hayward grate with a replacement cover WGX1031BHF2, in an existing Hayward Outer Frame (One that does not have inner frame installed), the grate is removed and discarded.

Locate the Inner Frame (Item 4) and using four (4) screw #13-9 x 5/8" (Item 3) **Screw** the Inner Frame to Outer Frame by hand to 30 in*lb screw torque. Should you not be able to secure the Inner Frame to the Outer Frame using the existing holes in the Outer Frame; drill four.149" (#25) diameter holes in the Outer Frame, using the holes in the Inner Frame to locate the holes to drill in the Outer Frame. Using four (4) screw #13-9 x 5/8" (Item 3) **Screw** the Inner Frame to Outer Frame utilizing the four (4) new holes and the four self-tapping crews to 30 in*lb. **DO NOT USE POWER TOOLS TO INSTALL FASTENERS.**

Locate the Cover (Item 1) and using four (4) #10-24 x 15/16" long screws (Item 2) Secure to the Inner Frame, by hand to 15 in*lb. **DO NOT USE POWER TOOLS TO INSTALL FASTENERS.**

When replacing a Cover, **Do Not** remove the Inner Frame from the Square Frame unless it, or a threaded insert is damaged. The four screws in the corners of the cover are retained in the cover. New cover screws should be used whenever the cover is replaced.

USE ONLY HAYWARD GENUINE REPLACEMENT PARTS INCLUDING SCREWS.



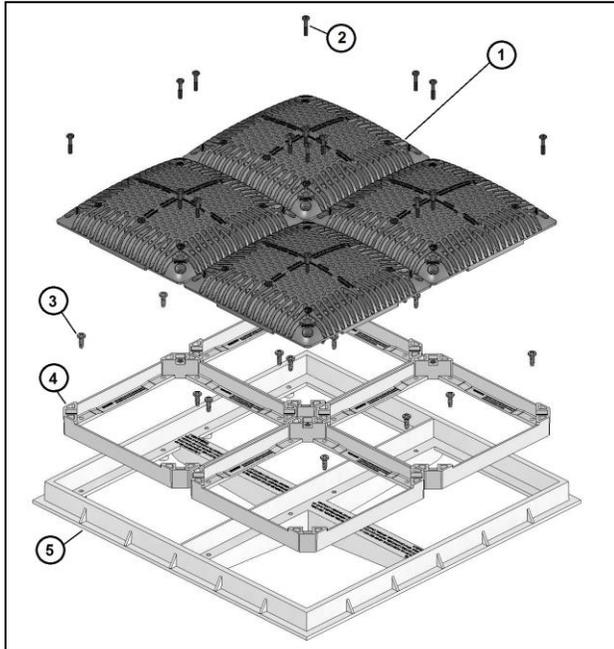
OPERATION:

Each operational day the covers, including the fasteners, shall be observed for damage or tampering. During installation of the cover and fasteners the Suction Outlet fitting assembly components, including the fasteners shall be clean and free of debris and/or obstructions.

Replace damaged, broken, cracked, missing, or not securely attached suction outlet components, including fasteners and threaded inserts immediately. Loose cover/grates shall be reattached before bathers are allowed to use the pool.

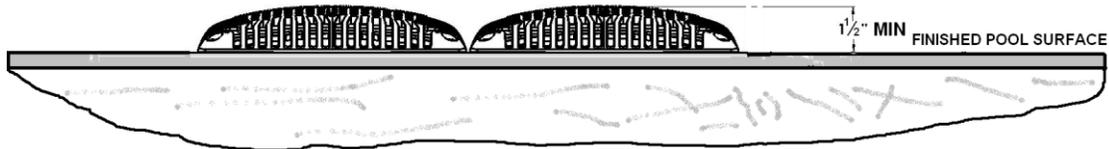
All these frames are held in place by the finished surface. The finished surface shall be free of deterioration and voids.

SPARE PARTS LISTS:



ITEM	SPARE PART	DESCRIPTION	QTY
1	WG1033BHF2	18" x 18" Cover, Inner Frame, Screw Set (Includes four (4) covers and inner frames)	1.0
2	WG1030Z2A	Machine Screw #10 x 15/16" (Pack of 2)	8.0
3	WG1030Z8A	#13-9 x 5/8" Self-Tapping Screw (Pack of 4)	4.0
4	Not Available	Inner Frame	4.0
5	Not Available	Square Outer Frame	1.0

WG1033HF2PAK2, WG1033BHF2 (18" X 18")
 Note: To replace only one cover of the set a WG1031BHF2 can be purchased. However, it is recommended that the covers be replaced as sets. New Cover Fasteners are required.



▲ Warning – Suction Entrapment Hazard. Suction in suction outlets and/or suction outlet covers which are installed in a small area and/or below the surrounding surface can cause severe injury or death due to body entrapment hazard. To reduce the risk of body entrapment, installation of the field fabricated sumps must be such that the top of the mounted cover is a minimum of 1 1/2" above the finished pool surface over an area larger than 40" on a diagonal.

When replacing the Flat Hayward grates with replacement covers WG1033BHF2, in an existing Hayward 18" x 18" Outer Frame (One that does not have inner frame installed), the grates are removed and discarded.

Locate the Inner Frame (Item 4) and using four (4) screws #13-9 x 5/8" (Item 3). **Screw** the Inner Frame to Outer Frame by hand to 30 in*lb screw torque. **DO NOT USE POWER TOOLS TO INSTALL FASTENERS.** Should you not be able to secure the Inner Frame to the Outer Frame using the existing holes in the Outer Frame; drill four .149" (#25) diameter holes in the Outer Frame, using the holes in the Inner Frame to locate the holes to drill in the Outer Frame. Using four (4) screws #13-9 x 5/8" (Item 3) **Screw** Inner Frame to Outer Frame utilizing the four (4) new holes.

Locate the Covers (Item 1) and using four (4) #10-24 x 15/16" long machine screws (Item 2) Secure to the Inner Frame by hand to 15 in*lb. **DO NOT USE POWER TOOLS TO INSTALL FASTENERS.**

When replacing a WG1033B or a WG1033BHF cover, **Do Not** remove the Inner Frame from the Square Frame unless it, or a threaded insert is damaged. The four screws in the corners of the cover are retained in the cover. New cover screws should be used whenever the cover is replaced.

USE ONLY HAYWARD GENUINE REPLACEMENT PARTS INCLUDING SCREWS.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.



HAYWARD®

HAYWARD® LIMITED WARRANTY

To Buyer, as original purchaser of this equipment, Hayward Industries Inc., 1415 Vantage Park Dr., Suite 400, Charlotte, NC 28203, warrants its products free from defects in materials and workmanship for a period of **ONE (1)** year from the date of purchase.

Parts which fail or become defective during the warranty period, except as a result of freezing, negligence, improper installation, use, or care, shall be repaired or replaced, at our option, without charge, within 90 days of the receipt of defective product, barring unforeseen delays.

To obtain warranty replacements or repair, defective components or parts should be returned, transportation paid, to the place of purchase, or to the nearest authorized Hayward service center. For further Hayward dealer or service center information, contact Hayward customer service department. No returns may be made directly to the factory without the express written authorization of Hayward Pool Products.

To original purchasers of this equipment, Hayward Industries warrants its products to be free from defects in materials and workmanship for a period of **ONE (1)** year from the date of purchase.

Filters which become defective during the warranty period, except as a result of freezing, negligence, improper installation, use or care, shall be repaired or replaced, at our option, without charge. All other conditions and terms of the standard warranty apply.

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

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.

Some states do not allow a limitation on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion 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.

Hayward Industries Inc.
1415 Vantage Park Dr., Suite 400, Charlotte, NC 28203

Supersedes all previous publications.

PRODUCT REGISTRATION

(Retain For Your Records)

DATE OF INSTALLATION _____

Serial Number _____

Please place the date of installation on the "INSTALLATION INFORMATION LABEL" included with each cover. These labels shall be permanently posted as near as feasible to the pump control.

▲ Retain this Warranty Certificate in a safe and convenient location for your records.

"For warranty registration, please use the following link -
<https://www.hayward-pool.com/shop/en/pools/warranty-registration>"



Hayward is a registered trademark of Hayward Industries, Inc.
© 2023 Hayward Industries, Inc.