

**Owners Manual** 

## OWNER'S MANUAL INSTALLATION, OPERATION, & PARTS DUAL SUBMERGED SUCTION OUTLET FRAMES & COVERS [Commonly called main drains]



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.

**A 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.

# **IMPORTANT SAFETY INSTRUCTIONS**

# SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

USE ONLY HAYWARD GENUINE REPLACEMENT PARTS



# **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 Entrapment**- 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 entrapment.

**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.



### To Reduce the risk of Entrapment Hazards:

- 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  $(3\phi)$  [.94 meter] apart, as measured from suction pipe center to suction pipe center. (See Diagram 1 below). If suction outlets are to be located closer then three feet  $(3\phi)$  [.94 meter] apart, they shall be located in different planes (i.e., one on the bottom, and one on the vertical wall, or one on each of two separate vertical walls.) (See Diagram 2)
- Dual suction fittings shall be placed in such locations and distances to avoid õdual blockageö by a user.
- Dual suction fittings shall not be located on seating areas or on the backrest for such seating areas.
- The maximum system flow rate shall not exceed the flow rating of any listed (per ASME/ANSI A112.19.8M-1987, ASME A112.19.8-2007, APSP-7) suction outlet cover installed.
- Keep suction outlet components clear of debris, such as leaves, dirt, hair, paper and other material.
- Never use a Pool or Spa if any suction outlet component is damaged, broken, cracked, missing, or not securely attached.
- Prior to each use of the swimming pool and/or spa, observe and replace damaged, broken, cracked, missing, or not securely attached suction outlet components immediately.
- Remove pressure test plugs and/or plugs used in winterization of the pool/spa from the suction outlets.
- Two or more suction outlets per pump should be installed in accordance with latest APSP Standards and CPSC guidelines, follow all National, State, and Local codes applicable.
- Multiple layers of protection are available including installation of a vent pipe system, a gravity flow system, or a vacuum release system.
- Suction outlet components have a finite life, the cover/grate should be inspected frequently and replaced at least every seven years or if found to be damaged, broken, cracked, missing, or not securely attached.
- Do not exceed maximum flow rate stated on suction fitting.
- Only replace a pump with one with a similar flow curve, avoid a pump with a higher horsepower rating.



**DUAL SUBMERGED SUCTION OUTLET** 

# **RECOMMENDED SYSTEM SPECIFICATIONS:**

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ACCEP	TABLE PIPE SI	ZE FOR M	IAXIMUM	
	RECOMM	ENDED		
SYSTEM FLOW RATE PER APSP-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 ½ö	90	4ö	238	
[75]	[340]	[100]	[900]	
3ö	138	6ö	540	
[90]	[522]	[90]	[2040]	
CHART 1				

HEAD LOSS on these covers was less than 1"Hg up to the full rated flow.

WG1031B Suction Outlet Cover (Replacement sold as a WGX1031B) is rated for 84 GPM Wall Mounted or 112 GPM Floor Mounted for single or multiple suction outlet use.

WGX1032B Suction Outlet Cover (Replacement sold as a WGX1032B) is rated for 112 GPM Wall Mounted or 256 GPM Floor Mounted for single or multiple suction outlet use

- 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.
- **Example:** In the System shown in **Diagram 1**, two (2) 12ö Square (WG1032PAK2) suction outlet covers are selected and mounted on the floor. These covers are individually rated for 256 GPM. For a desired flow of 180 GPM, a minimum pipe size from **Chart 1** is selected at 4ö. At the desired flow of 180 GPM one cover could be partially blocked and the other suction outlet flow would be below the rated 256 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 4ö pipe size.
- **Example:** In the System shown in **Diagram 2**, two (2) 12ö Square (WG1032PAK2) suction outlet covers are selected and mounted, on one the floor and the other on the wall. These covers are individually rated for 256 GPM on the floor and 112 GPM when wall mounted. For a desired flow of 110 GPM, a minimum pipe size from **Chart 1** is selected at 3ö. At the desired flow of 110 GPM one cover could be partially blocked and the other suction outlet flow would be below the rated 112 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 3ö pipe size.





### **DUAL SUBMERGED SUCTION OUTLET**

# **INSTALLATION INSTRUCTIONS:** - Use a #2 Philips head Screwdriver.

**NOTICE:** When installing WG1032PAK2 or WG1033PAK2 refer to ASME A112.19.8-2007 for the proper instructions on how to construct the field-fabricated sump. See Illustration on Page 7

# • PARTS LISTS



#### WG1032PAK2 12" x 12" Frame and Cover Dual Pack

Item	Description	Qty
1	Cover	2
2	Inner Frame	2 (Installed)
3	Machine Screw #10-24	8
4	#13-9 Self Taping Screw	8 (Installed)
5	Outer Frame	2

#### WGX1032B 12" x 12" Spare Part Cover and Inner Frame

ltem	Description	Qty
1	Cover	1
2	Inner Frame	1
3	Machine Screw #10-24	4
4	#13-9 Self Taping Screw	4

When replacing a SP1032B grate with a replacement cover WGX1032B, in an existing SP1032A Outer Frame (One that does not have inner frame installed), the grate is removed and discarded.

Locate the Inner Frame (Item 2) and using four (4) screw  $#13-9 \times 5/8+(Item 4)$  **Secure** Inner Frame to Outer Frame. 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  $#13-9 \times 5/8+(Item 4)$  **Secure** Inner Frame to Outer Frame utilizing the four (4) new holes.

Locate the Cover (Item 1) and using four (4) #10-24 x 5/8+long screws (Item 3) Secure to the Inner Frame.

When replacing a WG1032B cover, **Do NOT** remove the Inner Frame from the Square Frame unless it is damaged. The four screws in the corners of the cover are retained in the cover. New screws should be used whenever the cover is replaced.

### USE ONLY HAYWARD GENUINE REPLACEMENT PARTS INCLUDING SCREWS.



- **INSTALLATION INSTRUCTIONS:** Use a #2 Philips head Screwdriver. NOTICE: When installing WG1032PAK2 or WG1033PAK2 refer to ASME A112.19.8-2007 for the proper instructions on how to construct the field-fabricated sump. See Illustration on Page 7
- PARTS LISTS



#### WG1033PAK2 18" x 18" Frame and Cover Dual Pack

ltem	Description	Qty
1	Cover	8
2	Inner Frame	8 (Installed)
3	Machine Screw #10-24	32
4	#13-9 Self Taping Screw	32 (Installed)
5	Outer Frame	2

#### WGX1031B 9" x 9" Spare Part Cover and Inner Frame

Item	Description	Qty
1	Cover	1
2	Inner Frame	1
3	Machine Screw #10-24	4
4	#13-9 Self Taping Screw	4





When replacing a SP1032B grate with a replacement cover WGX1032B, in an existing SP1032A Outer Frame (One that does not have inner frame installed), the grate is removed and discarded.

Locate the Inner Frame (Item 2) and using four (4) screw #13-9 x 5/8+(Item 4) Secure Inner Frame to Outer Frame. 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 4) Secure Inner Frame to Outer Frame utilizing the four (4) new holes.

Locate the Cover (Item 1) and using four (4) #10-24 x 5/8+long screws (Item 3) Secure to the Inner Frame.

When replacing a WG1032B cover, **Do NOT** remove the Inner Frame from the Square Frame unless it is damaged. The four screws in the corners of the cover are retained in the cover. New screws should be used whenever the cover is replaced.

USE ONLY HAYWARD GENUINE REPLACEMENT PARTS INCLUDING SCREWS.



### HAYWARD<sup>®</sup> LIMITED WARRANTY

To Buyer, as original purchaser of this equipment, Hayward Pool Products, 620 Division Street, Elizabeth, New Jersey, 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

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.

\*Supersedes all previous publications.

Hayward Pool Products 620 Division Street Elizabeth, NJ 07207



Field built sumps must be built in accordance with the following:



#### **GENERAL NOTES:**

- (a) D= inside pipe diameter.
- (b) All dimensions shown are minimums.
- (c) A broken line (-----) indicates suggested sump configuration.



#### PRODUCT REGISTRATION (Retain For Your Records)

DATE OF INSTALLATION \_\_\_\_\_

▲ 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 YOUR WARRANTY ONLINE AT <u>WWW.HAYWARDNET.COM</u>

loago print cloarly	n-line at www.haywardnet.com
lease print clearly.	Years pool has been in service
rst Name Last Name	1 year or less 2-3 4-5 6-10 11-15 >1
treet Address	Purchased from
2	Builder Petaller Pool Maintenance Internet/Cata
tyState	Company name
none NumberPurchase Date	Address
-mail address	CityState Zip
erial Number (10-17 DigitNumber)	Phone
odel Number	Type of Pool: Concrete/Gunite Vinyl Pitberglass Other
pol Capacity(U.S. Gallons)	New installation Replacement
Please include me on all e-mail communications regarding Hayward equipment or promo	tions. Inground Aboveground Spa

# HAYWARD Pool Products

#### USE ONLY HAYWARD GENUINE REPLACEMENT PARTS

Pomona, CA Clemmons, NC Nashville, TN West Palm Beach, FL North Kingstown, RI Oakville, ON, Canada St. Vulbas, France Wuxi, China

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