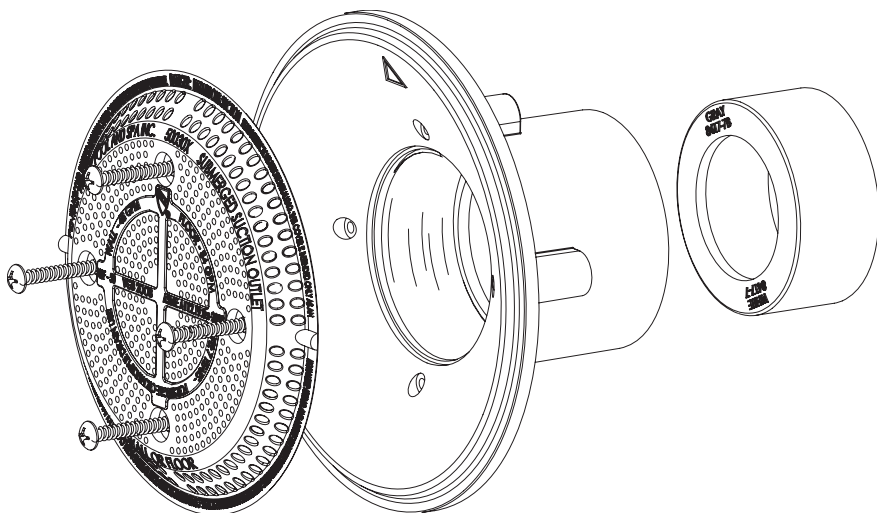


Equalizer Suction Fitting

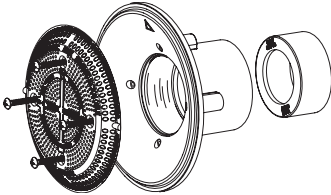


Installation Guide

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

Contents

WARNINGS and IMPORTANT SAFETY PRECAUTIONS.....	ii
The Virginia Graeme Baker Pool and Spa Safety Act	v
Acts Codes and Standards.....	vi
Hydraulic System Specifications.....	1



Section 1	
Flat Face Equalizer Suction/ Fitting Installation.....	4
P/N 500300 - 500309	

Required tools

- #2 Philips head screwdriver - (for cover screws)
- Torque driver (in/lbs) - (for cover screws)

Technical Support

Sanford, North Carolina (8 A.M. to 5 P.M. ET.)

Moorpark, California (8 A.M. to 5 P.M. PS.)

Phone: (800) 831-7133

Fax: (800) 284-4151

Web sites

<http://www.pentairpool.com> and staritepool.com

© 2010 Pentair Water Pool and Spa, Inc. All rights reserved

1620 Hawkins Ave., Sanford, NC 27330 • (919) 566-8000

10951 West Los Angeles Ave., Moorpark, CA 93021 • (800) 831-7133 • (805) 555-5000

IntelliFlo®, Pentair Pool Products®, American Products®, Pentair Water Pool and Spa® are trademarks and/or registered trademarks of Pentair Water Pool and Spa, Inc. Unless noted, names and brands of others that may be used in this document are not used to indicate an affiliation or endorsement between the proprietors of these names and brands and Pentair Water Pool and Spa, Inc. Those names and brands may be the trademarks or registered trademarks of those parties or others.

P/N 510591 Rev C 03-05-10

WARNINGS AND IMPORTANT SAFETY PRECAUTIONS



WARNING INSTALLERS, POOL OPERATORS AND POOL OWNERS MUST READ THESE WARNINGS AND ALL INSTRUCTIONS BEFORE USING THIS PRODUCT!



DANGER SERIOUS BODILY INJURY OR DEATH CAN RESULT IF THIS PRODUCT IS NOT INSTALLED AND USED CORRECTLY.



DANGER THIS EQUALIZER/SUCTION FITTING COVER MUST ONLY BE INSTALLED AND USED WITH THE SUPPLIED PENTAIR WATER POOL AND SPA® BODY OR WITH AN EXISTING PENTAIR POOL PRODUCTS® OR STA-RITE® BODY THAT IS IN GOOD CONDITION. THIS COVER IS INCOMPATIBLE WITH ANY OTHER BODY. DO NOT INSTALL THIS COVER ON ANY OTHER MANUFACTURER'S BODY. DO NOT INSTALL THIS COVER ON ANY FIELD FABRICATED INSTALLATIONS. FAILURE TO FOLLOW THIS WARNING MAY RESULT IN A SUCTION ENTRAPMENT HAZARD AND CAN CAUSE LIMB AND BODY ENTRAPMENT OR EVISCERATION.

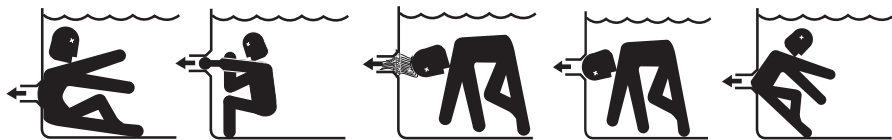


WARNING IMPROPER INSTALLATION OR USE OF THIS PRODUCT MAY PRESENT A RISK OF HAIR OR BODY ENTRAPMENT AND DROWNING. INSTALL THIS EQUIPMENT IN ACCORDANCE WITH THE INSTRUCTIONS PROVIDED. USE ONLY WITH THE COMPONENTS AND MOUNTING HARDWARE PROVIDED. FAILURE TO FOLLOW THESE INSTRUCTIONS AND/OR USE WITH COMPONENTS NOT PROVIDED BY PENTAIR POOL PRODUCTS® AND INTENDED TO BE USED WITH THIS PRODUCT MAY RESULT IN IMPROPER POSITIONING OR FUNCTIONING OF DRAIN COVER AND MAY CAUSE SEVERE PERSONAL INJURY OR DEATH.



WARNING An ANSI/ASME A112.19.8 approved cover must be used for each Equalizer Fitting drain. If an Equalizer Fitting cover becomes loose, broken or is missing, close the pool or spa immediately and shut off the pump until an approved anti-entrapment cover is properly installed with the supplied stainless steel screws. Only the supplied 316 stainless-steel screws should be used with the drain cover. Substitute screws such as masonry screws, sheet rock screws or other types of screws should never be used. Screws put into the body anywhere except in the original screw holes will not hold and will allow the cover to come off the body, causing an entrapment hazard, including possible limb and body entrapment or evisceration/disembowelment. If the screw holes of the body are stripped or the brass inserts are missing, loose, or damaged, replace the body. DO NOT DRILL NEW SCREW HOLES IN THE BODY AS THIS WILL DAMAGE AND WEAKEN THE BODY.

WARNINGS AND IMPORTANT SAFETY PRECAUTIONS



SUCTION ENTRAPMENT HAZARD

Pool and spa pumps produce high levels of suction, which can pose extreme danger if a person comes in close proximity to an open pool or spa drain or if a drain cover is loose, cracked, broken or missing.

Pool and spa pumps move large volumes of water, which can pose extreme danger if a person's hair comes in close proximity to a drain that is not the proper size for the pump or pumps.

Suction entrapment dangers include:

Hair Entanglement – When the hair tangles or knots in the drain cover, trapping the swimmer underwater. This hazard is present when the flow rating of the cover is too small for the pump or pumps.

Limb Entrapment – When a limb is sucked or inserted into an opening resulting in a mechanical bind or swelling. This hazard is present when a drain cover is missing, broken, loose, cracked or not properly secured.

Body Entrapment – When a portion of the body is held against the drain cover trapping the swimmer underwater. This hazard is present when the drain cover is missing, broken or the cover flow rating is not high enough for the pump or pumps.

Evisceration/Disembowelment – When a person sits on an open pool (particularly a child wading pool) or spa outlet and suction is applied directly to the intestines, causing severe intestinal damage. This hazard is present when the drain cover is missing, loose, cracked, or not properly secured.

Mechanical Entrapment – When jewelry, swimsuit, hair decorations, finger, toe or knuckle is caught in an opening of an outlet or drain cover. This hazard is present when the drain cover is missing, broken, loose, cracked, or not properly secured.



Be cautious of flow rating. Never exceed the maximum stated

– Use these fittings only with a pumping system rated for the corresponding flow or less for two (2) inch plumbing (see sump diagram on page 4). **FAILURE TO DO SO CAN RESULT IN HAIR OR BODY ENTRAPMENT WHICH CAN CAUSE SEVERE PERSONAL INJURY OR DEATH.** If in doubt about the rating of your system, consult a qualified pool or spa professional.

IMPORTANT NOTICE: Regularly inspect all covers for cracks, damage and advanced weathering. If a cover becomes loose, cracked, damaged, broken or is missing, close the pool or spa immediately, post a notice and keep the pool or spa closed until an appropriate VGB 2008 certified cover is properly installed. Covers deteriorate over time due to exposure to sunlight and pool chemicals. This cover must be replaced within seven (7) years from installation (or earlier if the cover becomes damaged in any way).

WARNINGS AND IMPORTANT SAFETY PRECAUTIONS



IMPORTANT NOTICE

Attention Installer: This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner and/or operator of this equipment.

Please refer to **www.pentair.com** for all warnings and instructions related to the Equalizer/Suction Fitting.

WARNING

Before installing this product, read and follow all warning notices and instructions which are included. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage. Call (800) 831-7133 for additional free copies of these instructions. It is absolutely critical that the suction plumbing be installed in accordance with the latest APSP standards and CPSC guidelines. Follow all applicable national, state and local codes. If you have any questions about installation or maintenance of this product, please contact your pool professional. Never attempt to alter or repair the cover or fitting on your own.

DANGER

A pool/spa pump produces high levels of suction, which can pose extreme danger if a person comes in close proximity to an open pool or spa drain or a loose or broken drain cover or grate.

Entrapment Avoidance Notice:

The covers used on suction outlets should be approved and listed as conforming to the currently published edition of ANSI/ASME A112.19.8 Standard. These covers should be inspected regularly and replaced if cracked, broken or older than the design lifetime indicated on them by the manufacturer. The maximum possible flow rate of the pump should be less than or equal to the maximum approved flow rate indicated on the suction outlet cover by the manufacturer. **THE USE OF UNAPPROVED COVERS OR ALLOWING USE OF THE POOL OR SPA WHEN COVERS ARE MISSING, CRACKED OR BROKEN CAN RESULT IN BODY OR LIMB ENTRAPMENT, HAIR ENTANGLEMENT, EVISCERATION AND DEATH.**

WARNING

Pumps improperly sized or installed or used in applications other than for which the pump was intended can result in severe personal injury or death. These risks may include but not be limited to electric shock, fire, flooding, suction entrapment or severe injury or property damage caused by a structural failure of the pump or other system component.

WARNING

The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia in hot tubs and spas.

WARNING

To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.

WARNING

When setting up pool water turnovers or flow rates the operator must consider local codes governing turnover as well as disinfectant feed ratios.

WARNING

DO NOT increase pump size; this will increase the flow rate through the system and exceed the maximum flow rate stated on the drain cover.

WARNINGS AND IMPORTANT SAFETY PRECAUTIONS

⚠ WARNING

Most states and local codes regulate the construction, installation, and operation of public pools and spas, and the construction of residential pools and spas. It is important to comply with these codes, many of which directly regulate the installation and use of this product. Consult the local building and health codes for more information.

- Dual suction fittings shall not be located on seating areas or on the back rests for such seating areas.
- If the pool or spa has only a single suction outlet or main drain, a Safety Vacuum Release System (SVRS) such as the Pentair Water Pool and Spa IntelliFlo® VS+SVRS pump, a gravity drainage system, an automatic shut-off system or a suction-limiting vent system **MUST** be used.
- In the event one suction outlet is completely blocked, the remaining suction outlets serving the system shall have a flow rating capable of the full flow of the pump(s) for the specific system.
- An approved anti-entrapment suction outlet cover must be used for each drain.
- Never exceed the maximum flow rate stated on the drain cover.
- Regularly inspect drain covers for cracks and signs of advanced weathering.
- Close the pool or spa if any suction outlet component is loose, cracked, broken, missing or not securely attached. Replace loose, cracked, damaged, broken or missing drain covers.
- In addition to two or more suction outlets per pump (Figure 2) installed in accordance with the latest APSP standards and CPSC guidelines, follow all applicable national, state and local codes.

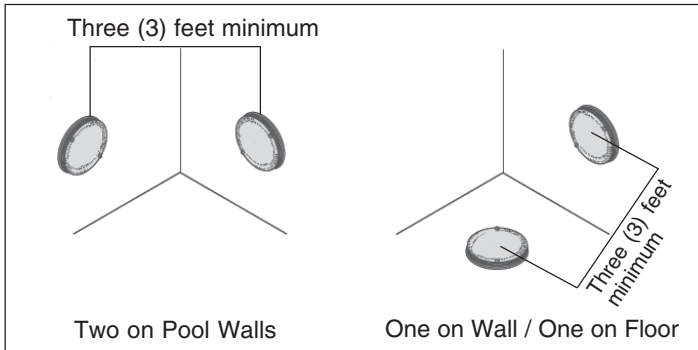


Figure 1. Alternate Location for Suction Outlets

WARNINGS AND IMPORTANT SAFETY PRECAUTIONS

- **WINTERIZING:** Remove the pressure test plugs and/or plugs used in winterization of the pool/spa from the suction outlets.
- Before each use of the facility, the **SUCTION FITTING**, including fasteners, should be inspected for damage or tampering.
- **READ, THEN KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE.**
- The suction outlet to a swimming pool pump pulls a high vacuum. If pump is used with only one suction pipe, anyone blocking pump suction with hair or body will be trapped and held against the suction fitting. Disembowelment or drowning can result.
- To prevent entrapment, install at least two suction outlet (main drains) fittings per pump in pool. Separate these outlets by either of the following procedures.
- **TYPE DESIGNATION:** Submerged suction outlets.

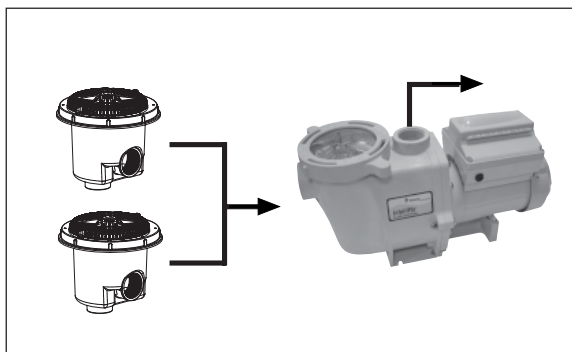


Figure 2: Two Suction Outlets per Pump

If you have any questions about installation or maintenance of this drain cover, please contact your pool professional. Never attempt to alter or repair the cover or frame on your own.

NOTE: VIRGINIA GRAEME BAKER POOL AND SPA SAFETY ACT

The Virginia Graeme Baker Pool and Spa Safety Act raises certain new requirements on owners and operators of swimming pools and spas.

Pools or spas constructed on or after December 20, 2008, shall utilize:

- (A) No submerged suction outlets, a gravity drainage system with ASME/ANSI cover(s), one or more unblockable outlets; or
- (B) A multiple main drain system without isolation capability with suction outlet covers that meet ASME/ANSI A112.19.8 Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs and either:
 - (i) A safety vacuum release system (SVRS) meeting ASME/ANSI A112.19.17 Manufactured Safety Vacuum Release Systems (SVRS) for Residential and Commercial Swimming Pool, Spa, Hot Tub, and Wading Pool Suction Systems and/or ASTM F2387 Standard Specification for Manufactured Safety Vacuum Release Systems (SVRS) for Swimming Pools, Spas and Hot Tubs or
 - (ii) A properly designed and tested suction-limiting vent system or
 - (iii) An automatic pump shut-off system.

Pools and spas construction prior to December 20, 2008, with a single submerged suction outlet shall use a suction outlet cover that meets ASME/ANSI A112.19.8 and either:

- (A) A multiple main drain system without isolation capability, or
- (B) A safety vacuum release system (SVRS) meeting ASME/ANSI A112.19.17 and/or ASTM F2387, or
- (C) A properly designed and tested suction-limiting vent system, or
- (D) An automatic pump shut-off system, or
- (E) Disabled submerged outlets, or
- (F) Suction outlets shall be reconfigured into return inlets.

For more information about the Virginia Graeme Baker Pool and Spa Safety Act, contact the Consumer Product Safety Commission at (301) 504-7908 or visit www.cpsc.gov.

NOTE: Always turn off all power to the pool pump before installing the cover or working on any suction outlet.

ACTS CODES AND STANDARDS

Important Codes and Standards Information

Equalizer/Suction Fittings and all suction outlet fittings are federally regulated by the U.S. Consumer Product Safety Commission (CPSC). This authority was given to the CPSC in 2007 as part of the Virginia Graeme Baker Pool and Spa Safety Act. Visit www.cpsc.org for more information.

ASME/ANSI A112.19.8 - 2007 Certification

Equalizer/Suction Fittings are certified by IAPMO in accordance with ASME/ANSI A112.19.8 - 2007 and/or ASME/ANSI A112.19.8a - 2008 Suction Fitting for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs. To download a current copy of the IAPMO certification, go to <http://www.pld.iapmo.org/>.

IAPMO Certification

IAPMO Research and Testing, 5001 E. Philadelphia St., Ontario, CA 91761 USA
877-4UPCMARK.

NSF/ANSI-50

Equalizer/Suction Fittings are certified to comply with NSF/ANSI 50 Circulation system components and related materials for swimming pools, spas/hot tubs. To download a current copy of the IAPMO certification, go to <http://pld.iapmo.org/>.

Virginia Graeme Baker Pool and Spa Safety Act

Equalizer/Suction Fittings are certified to comply with the Virginia Graeme Baker Pool and Spa Safety Act, Section 1404(b). This section requires all suction outlet fittings (drain covers) to conform to ASME/ANSI A112.19.8 - 2007 and/or ASME/ANSI A112.19.8a - 2008.

International Code Council

Equalizer/Suction Fittings are an approved component as required by the International Code Council (ICC) building codes, which include the International Residential Code (IRC), and the International Building Code (IBC), collectively known as the iCodes. The ICC updates the iCodes every three years. For more information, visit www.iccsafe.org.

International Residential Code (IRC)

Many states and local jurisdictions have adopted the IRC, including Appendix G. Section AG106 addresses Suction Entrapment Avoidance requirements that regulate residential swimming pools and spas. It is important to know if these codes are in effect where the residential pool or spa is being built and which version is being required. Effective in the 2009 version of the IRC is the requirement to build in accordance with ANSI/APSP 7 - 2006 American National Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs, and Catch Basins. 2003 and 2006 versions do not include a reference to the ANSI/APSP 7 standard, instead they included the requirement that all pools and spas be equipped with dual-drains and a vacuum relief system that can be either an Approved Gravity Drainage System, or a Safety Vacuum Release System (SVRS) such as the IntelliFlo® VS+ SVRS pump. Visit www.iccsafe.org for more information.

ACTS CODES AND STANDARDS

International Building Code (IBC)

Many states and local jurisdictions have adopted the International Building Code which regulates commercial building projects, including public swimming pools and spas. Section 3109.5 addresses Suction Entrapment Avoidance requirements that regulate public swimming pools and spas. It is important to know if these codes are in affect where the public pool or spa is being built and which version is being required. Effective in the 2009 version of the IBC is the requirement to build in accordance with ANSI/APSP 7 - 2006 American National Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs, and Catch Basins. 2003 and 2006 versions do not include a reference to the ANSI/APSP 7 standard, instead they included the requirement that all pools and spas be equipped with dual-drains and a vacuum relief system that can be either an Approved Gravity Drainage System, or a Safety Vacuum Release System (SVRS) such as the IntelliFlo® VS+ SVRS pump. Visit www.iccsafe.org for more information.

ANSI/APSP-7 Suction Entrapment Avoidance Standard

The Association of Pool and Spa Professionals publishes many swimming pool and spa related standards, including ANSI/APSP 7 - 2006 American National Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs, and Catch Basins. ANSI/APSP 7 is referenced by the iCodes, and is required by some states and local jurisdictions. It requires all suction outlet fittings (drain covers) to be tested and Listed by a nationally recognized testing laboratory as conforming to most recent version of ASME/ANSI A112.19.8. Visit www.apsp.org for more information.

State and Local Codes

Most states and local codes regulate the construction, installation, and operation all public pools and spas, and the construction of residential pools and spas. It is important to comply with these codes, many of which directly regulate the installation and use of this product. Consult the local building and health codes for more information.

Hydraulic System Specifications

POOL PUMP SUCTION REQUIREMENTS

Pump suction is hazardous and can trap and drown or disembowel bathers. Do not use or allow anyone else to use a pool, spa, or hot tub unless it has at least two (2) suction outlets to each pump suction line (see Figure 1, Outlets Per Pump, below). Do not use or operate swimming pools, spas, or hot tubs if a suction outlet cover is missing, broken, or loose. Follow the guidelines below for a pump installation which minimizes risk to users of pools, spas, and hot tubs.

Entrapment Protection

The pump suction system must provide protection against the hazard of suction entrapment or hair entrapment/entanglement.

Suction Outlet Covers

All suction outlet covers must be maintained. They must be replaced if cracked, broken, or missing. See page vii for outlet cover certification requirements. All suction outlets must have correctly installed, screw-fastened covers in place.

Outlets Per Pump

Provide at least two (2) hydraulically balanced main drains, with covers (see Figure 1), for each swimming pool pump suction line. The centers of the main drains (suction fittings) must be at least three (3) feet apart.

The system must be built so that it cannot operate with the pump drawing water from only one (1) main drain (that is, there must be at least two (2) main drains connected to the pump whenever it is running, see Figure 1). However, if two (2) main drains run into a single suction line, the single suction line may be equipped with a valve which will shut off both main drains from the pump (see Figure 1).

For existing single drain pools and spas, or multiple main drains located less than three feet (3) apart, a backup system must be installed, such as the IntelliFlo® VS +SVRS. Other backup systems include, approved gravity draining systems, or suction-limiting vent.

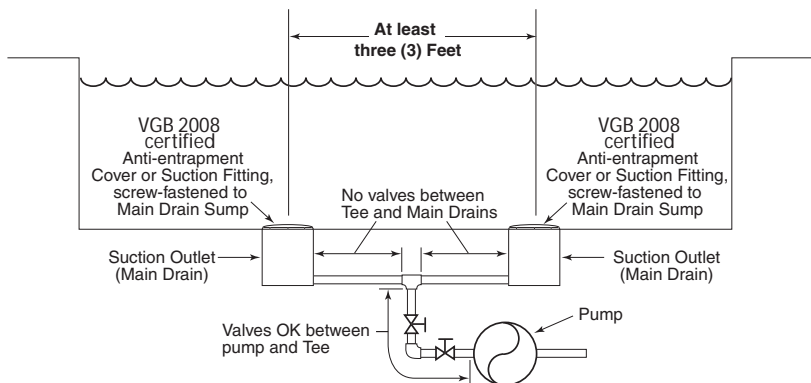


Figure 1: Outlets Per Pump

Water Velocity and Flow Rates

The maximum water velocity through drain covers is limited by some local regulations, for example some state health departments limit the velocity through public pool drain covers to 1-1/2 feet per second. This velocity limit is lower than the flow rating provided by the ASME A112.19.8 certification, therefore local limit applies and must be followed. Never exceed the flow rating listed on the cover even if local code does not provide a velocity limit (see Chart 2).

Piping – General

For new installations, the piping between drains must be sized to limit the velocity to six (6) feet per second. This limit applies to the branch piping and all fittings between multiple outlets and the tee leading back to the pump. If code requires a lower water velocity, comply with the code. See Chart 1 for information on pipe size flow ratings at six (6) feet per second.

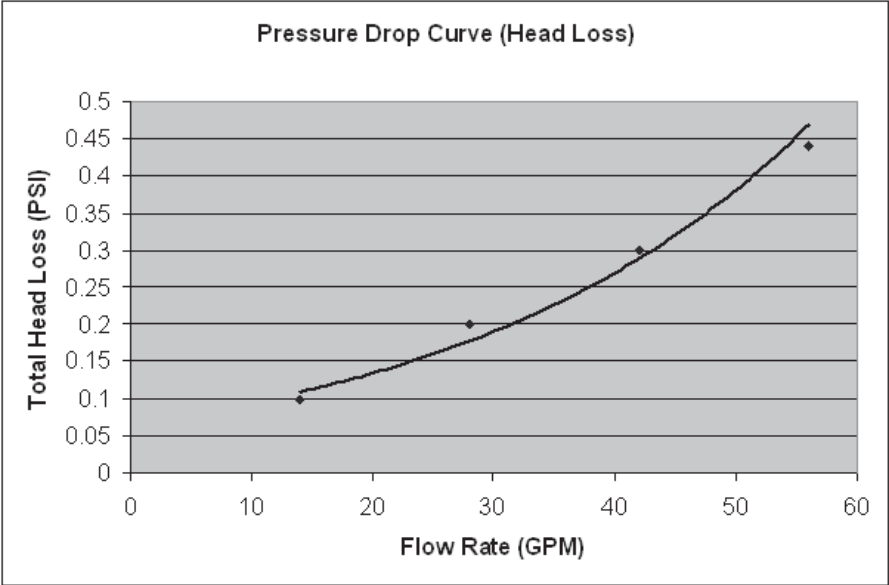
Acceptable Pipe Size for Maximum Recommended System Flow Rate Per APSP-7 (6 ft. /sec inch the Branch Line)

CHART 1	
Pipe Size Inch (mm)	Flow Rate GPM (L/Min.)
1-1/2" (50)	37 (140)
2" (63)	62 (233)
2-1/2" (75)	88 (332)
3" (90)	136 (514)

**Flow rate based on velocity
and open area $Q=Av$ (Applies to P/N 50030X)**

CHART 2		
Velocity in/sec. (V)	Open Area (in ²)	Flow GPM (Q)
0.5	3.7500	5.8
1.0	3.7500	11.7
1.5	3.7500	17.5
2.0	3.7500	23.4
2.5	3.7500	29.2
3.0	3.7500	35.1
3.5	3.7500	40.9
4.0	3.7500	46.8
4.5	3.7500	52.6
5.0	3.7500	58.4
5.5	3.7500	64.3
6.0	3.7500	70.1

**Equalizer Suction Fitting Cover
Pressure Drop Curve (Head Loss) - 50030X**



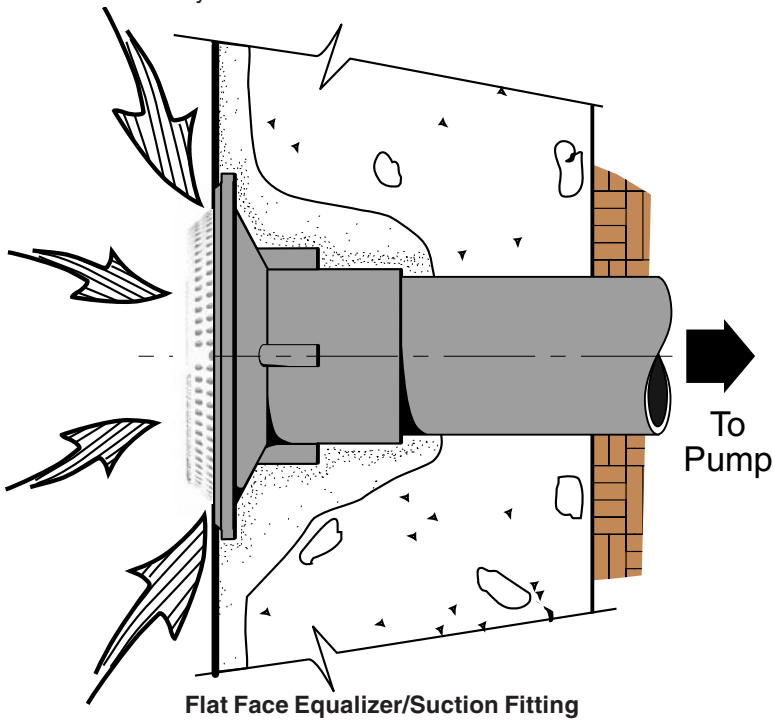
Section 1

Flat Face Equalizer/Suction Fitting Installation

The following describes how to install a new or replacement Equalizer/Suction Fitting.

Flat Face Equalizer/Suction Fitting

Model	Description
500300	VGBA Flat Face Equalizer/Suction Fitting 2" Slip, White ABS w/ 1.5" reducer
500301	VGBA Flat Face Equalizer/Suction Fitting 2" Slip, Black ABS w/1.5" reducer
500302	VGBA Flat Face Equalizer/Suction Fitting 2" Slip, Gray ABS w/1.5" reducer



New Installation

To install the Flat Face Equalizer Suction/Fitting:

- ⚠ WARNING** ONLY USE THE 316 STAINLESS STEEL #8 THREAD CUTTING SCREWS PROVIDED. SUBSTITUTE SCREWS SUCH AS MASONRY SCREWS, SHEET ROCK SCREWS OR OTHER TYPES OF SCREWS SHOULD NEVER BE USED, WILL CAUSE THE COVER TO COME LOOSE AND COULD RESULT IN LIMB OR BODY ENTRAPMENT, HAIR ENTANGLEMENT OR EVISCERATION/ DISEMBOWELMENT.

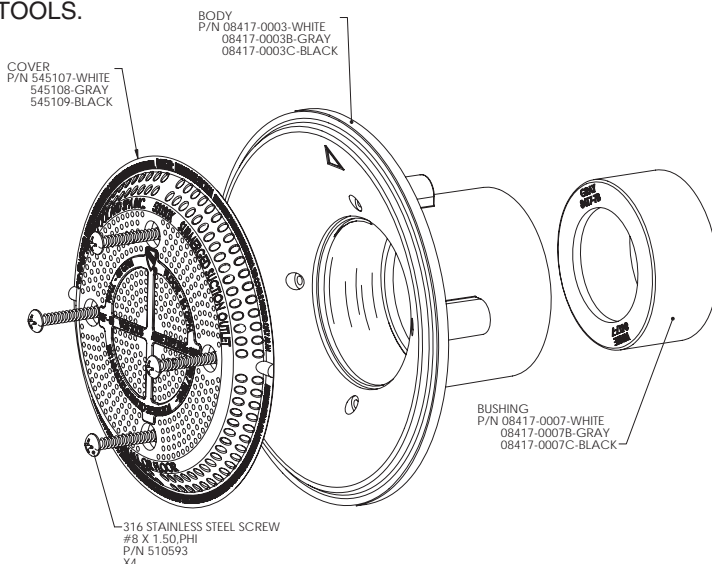


WARNING BEFORE INSTALLING THIS PRODUCT, INSTALLERS, POOL OPERATORS AND POOL OWNERS MUST READ AND UNDERSTAND ALL WARNINGS AND SAFETY PRECAUTIONS SET FORTH ON PAGES I-VIII AND PAGES 1-3 OF THIS INSTALLATION GUIDE.



WARNING IF THE FITTING BODY, SCREW OR SCREW HOLES ARE DAMAGED IN ANY WAY THAT PREVENTS COMPLETE INSERTION OF THE SPECIFIED SCREW, THE FITTING BODY OR DAMAGED SCREW MUST BE REPLACED. DO NOT ATTEMPT TO MODIFY OR ALTER ANY COMPONENT IN ANY WAY.

2. **Note:** This wall fitting body and 2" to 1.5" reducer are molded with A.B.S. plastic. The body has a 2" solvent weld connection. If a 1.5" pipe is used, solvent weld the reducer to the body with A.B.S. cement. Use A.B.S. to PVC transition cement to connect slip joint of wall fitting to PVC pipe. Use PVC primer on PVC pipe only. Mount equalizer/suction pipe perpendicular to inside wall of pool.
3. Use a 2" NPT plug on inside thread of fitting when cementing or plastering the pool wall. Cover and protect the four (4) screw mounting holes and conical surface of body to prevent plaster or concrete from adhering to it. Remove plug after cementing, plastering or pressure testing. Clean inside conical surface of wall fitting, making sure screw holes are open and free of debris.
4. Place the cover plate on wall fitting. Rotate the cover to align the screw holes.
5. Install the four (4) 316 stainless steel #8 x 1.5" thread cutting screws (provided) into the holes in the top of the cover. Using a #2 Philips head screwdriver, tighten each retaining screw to a **torque value of 5.0 (minimum) to 10.0 (maximum) in-lbs** to secure the cover. Make sure all screws are tight and cover plate is flush to wall fitting body. **DO NOT OVER TIGHTEN THE SCREWS. DO NOT ASSEMBLE WITH POWER TOOLS.**



Replacement Cover Installation

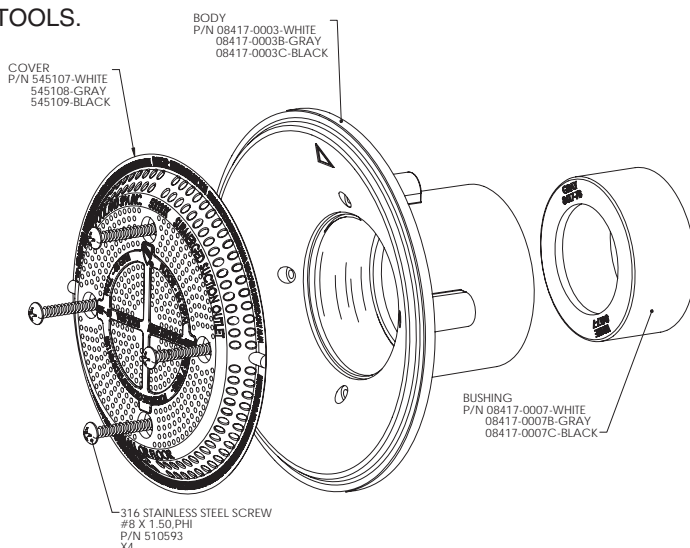
To replace the Cover:

1. **⚠ WARNING** ONLY USE THE 316 STAINLESS STEEL #8 THREAD CUTTING SCREWS PROVIDED. SUBSTITUTE SCREWS SUCH AS MASONRY SCREWS, SHEET ROCK SCREWS OR OTHER TYPES OF SCREWS SHOULD NEVER BE USED, WILL CAUSE THE COVER TO COME LOOSE AND COULD RESULT IN LIMB OR BODY ENTRAPMENT, HAIR ENTANGLEMENT OR EVISCERATION/ DISEMBOWELMENT.

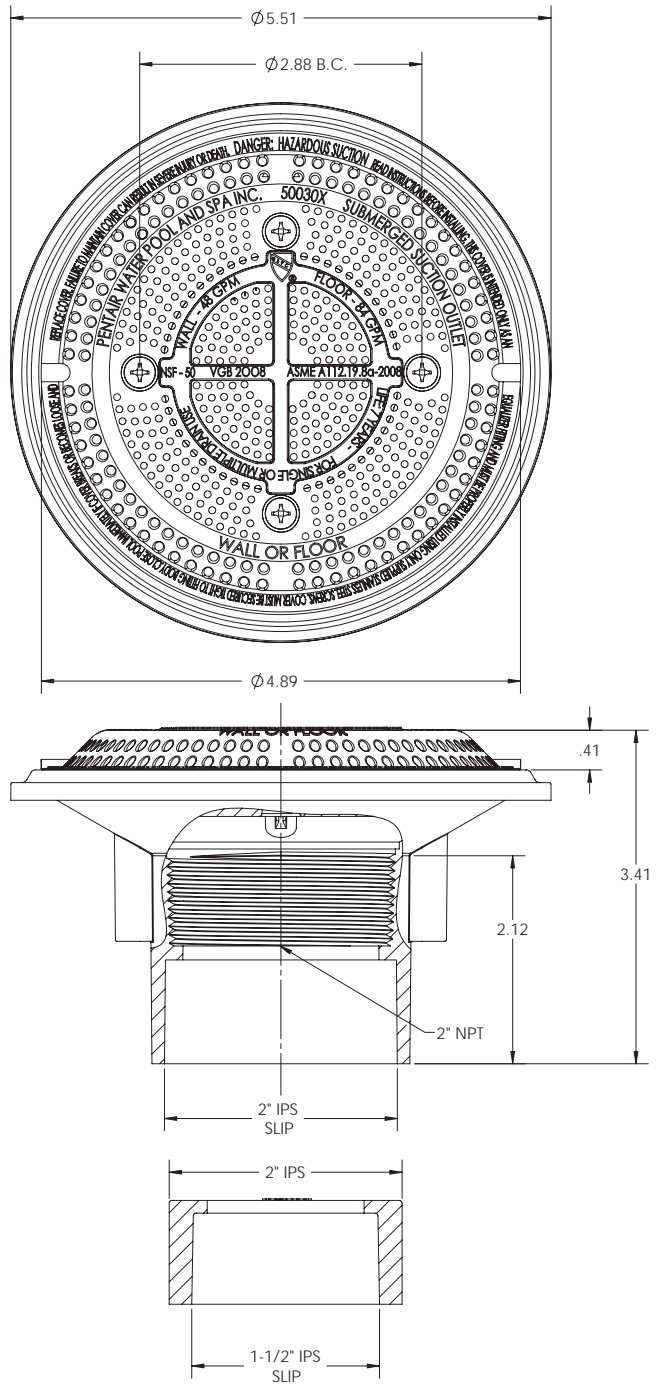
⚠ WARNING BEFORE INSTALLING THIS PRODUCT, INSTALLERS, POOL OPERATORS AND POOL OWNERS MUST READ AND UNDERSTAND ALL WARNINGS AND SAFETY PRECAUTIONS SET FORTH ON PAGES I-VIII AND PAGES 1-3 OF THIS INSTALLATION GUIDE.

⚠ WARNING IF THE FITTING BODY, SCREW OR SCREW HOLES ARE DAMAGED IN ANY WAY THAT PREVENTS COMPLETE INSERTION OF THE SPECIFIED SCREW, THE FITTING BODY OR DAMAGED SCREW MUST BE REPLACED. DO NOT ATTEMPT TO MODIFY OR ALTER ANY COMPONENT IN ANY WAY.

2. Unscrew existing screws and remove cover, discard cover and screws.
3. Clean inside conical surface of wall fitting, making sure screw holes are open and free of debris.
4. Place the new cover plate on wall fitting. Rotate the cover to align the screw holes.
5. Install the four (4) 316 stainless steel #8 x 1.5" thread cutting screws (provided) into the holes in the top of the cover. Using a #2 Philips head screwdriver, tighten each retaining screw to a **torque value of 5.0 (minimum) to 10.0 (maximum) in-lbs** to secure the cover. Make sure all screws are tight and cover plate is flush to wall fitting body. **DO NOT OVER TIGHTEN THE SCREWS. DO NOT ASSEMBLE WITH POWER TOOLS.**



Dimensions - Flat Face Equalizer Suction Fitting



Blank Page

CERTIFICATION OF COMPLIANCE

Pentair Water Pool and Spa Inc., 1620 Hawkins Ave., Sanford, NC 27330, (800) 831-7133, hereby certifies that the following model numbers meet or exceed the requirements of Section 1404 of the Virginia Graeme Baker Act Pool & Spa Safety Act, VGB 2008 and ASME/ANSI A112.19.8-2007 (addendum 8a-2008) standards and safety regulations as set forth by the Consumer Products Safety Commission:

CHART 1			
Part No.	Open Area	Flow Floor Rating	Flow Wall Rating
50030X	3.75 in ²	84 GPM	48 GPM

These products were tested and certified to the aforementioned safety regulations, by IAPMO Research and Testing, 5001 E. Philadelphia St., Ontario, CA 91761 USA 877-4UPCMARK. Product certification commenced April 2009, test results can be obtained from:

www.pentairwater.com and/or <http://pld.iapmo.org/>

Each product contains a circular date stamp on the top or bottom of the product showing the month and year of manufacture. These products are manufactured at Pentair Water Pool and Spa, Inc., Chino, California in the United States of America.

A copy of this certificate is available on the Pentair Water Pool and Spa Inc. website: www.pentairwater.com and/or <http://pld.iapmo.org/>

Note to installer/owner:

Enter the information below: Please keep this page as a record of the installation date.

Date of Installation: _____

1620 Hawkins Ave., Sanford, NC 27330 • (919) 566-8000
10951 West Los Angeles Ave., Moorpark, CA 93021
• (800) 831-7133 • (805) 555-5000 - (Rev A)



Cut along line



P/N 510591 Rev C