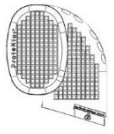
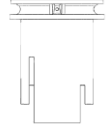


THE PROTEKTOR GUIDELINES AND INSTALLATION INSTRUCTIONS

INDIVIDUAL COMPONENTS



The ProteKtor



2" Adapter Fitting



1.5" Adapter Fitting



(2) 316 Grade Stainless Screws



Roll of Shim Tape

TOOLS NEEDED

- Scissors or Sharp Knife
 - Screwdriver
 - PVC Saw, Glue
- NOTE: (1) 316 Screw is a Spare

Manufactured from an NSF-50 approved material for use with multiple suction outlets or a single submerged suction outlet. All Pools and Spas must be in compliance with the Virginia Graeme Baker Pool and Spa Safety Act, as well as all other State and Federal Requirements. The ProteKtor is NOT meant as a replacement for an approved ANSI/ASME A112.19.8 drain cover, it is for use ONLY as a backup layer of protection under an existing approved cover. DO NOT alter or modify the ProteKtor in any way! This may present a mechanical or hair entrapment hazard!! DO NOT drill or ream additional holes in the ProteKtor or adapter as this will negatively affect the structural integrity of the device! Use only hand powered tools to install the ProteKtor and all main drain covers. Electric or battery-powered tools can over-torque the screw threads and cause damage (stripped threads) that will result in an unsafe condition! The ProteKtor has been tested with many different sumps, however it is possible there are sumps in which the ProteKtor will not fit.



STOP!!! For all applications, horizontal or vertical:

Before you start, shut down the filtration system, chemical feeders/chlorinators, heaters, etc. and disable electric power to all pump motor(s) before removing the drain cover and attempting installation of the ProteKtor!!** With the pump(s) running, dangerous vacuum levels may be experienced in the immediate vicinity of the main drain sump, especially with the drain cover removed!!** DO NOT attempt installation of the ProteKtor with the pump running!!** The ProteKtor should be installed by a certified pool/spa professional or a certified scuba diver ONLY!!



WARNING!!! For all applications, horizontal or vertical:

DO NOT use the ProteKtor over a combination 2"/1.5" hydrostatic valve installed in a 1.5" port!! The hydrostatic valve WILL NOT have sufficient room to open!! The ProteKtor does not protect against full body entrapment or evisceration. Improper use of this product may present a risk of hair, limb, or mechanical entrapment. Regularly inspect all drain covers for damage, cracks, or deterioration from chemical imbalance or UV exposure (see Step 5). If a drain cover is loose, damaged, cracked or missing, CLOSE THE POOL/SPA IMMEDIATELY!! Do not reopen the facility until an appropriate certified drain cover is properly installed.

FOR EASE OF INSTALLATION BEFORE INSTALLING, PRETHREAD SCREW THROUGH PROTEKTOR AND ADAPTER

INSTALLATION OF PROTEKTOR IN MAIN DRAIN SUMPS (HORIZONTAL APPLICATIONS):

STEP 1: REMOVE THE DRAIN COVER.

Save all screws and document the number of screws removed, condition of drain, verify drain cover is in compliance with current standards. Thoroughly clean all debris and foreign material from sump before proceeding.

STEP 2: DETERMINE SIZE/TYPE OF DRAIN ORIFICE.

1 1/2" or 2", NPT threaded fitting or slip-fitted/solvent-welded pipe.

STEP 3: INSERT PROPER SIZE ADAPTER.

If the adapter fit is not secure, follow the shimming procedure on pg. 4 to adjust the fit of the adapter. Use **ONLY** the provided adhesive backed tape to shim the adapter. The adapter should fit firmly in the sump inlet port and be difficult to turn or slide out. *See figure 1.*

Should the adapter encounter a change in pipe size or other mechanical obstruction that prevents full insertion, it is permissible to trim the length of the adapter with a PVC saw to fit the specific application. The indexing socket with screw hole should be oriented to 12 o'clock for proper security of the ProteKtor. **TEST FIT: Slide the ProteKtor onto the adapter without the screw and lay the drain cover in place to be sure everything fits.** Now remove the drain cover and ProteKtor and proceed with gluing procedure. Once the appropriate amount of tape is determined, apply glue to Adapter as well as tape and secure Adapter into drain orifice. See "Glue Recommendation".

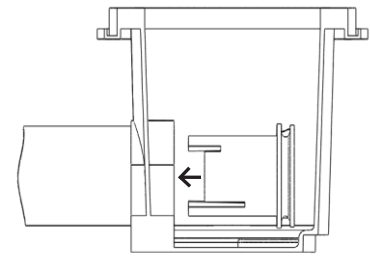


figure 1.

STEP 4: INSTALL THE PROTEKTOR.

Once the adapter is glued and secure, attach the ProteKtor to the adapter by fitting the opening to the groove on the adapter and sliding it straight down into the sump. *see figure 2.* Insert the indexing nib in the ProteKtor to the socket in the adapter to line up the screw holes. Secure the ProteKtor by fastening the provided 316 grade stainless steel set screw (part # PSD300), through the ProteKtor into the adapter. **DO NOT substitute screws!! Sub-standard screws WILL deteriorate rapidly resulting in a dangerous condition! Use only hand-powered tools to install the ProteKtor and all main drain covers.**

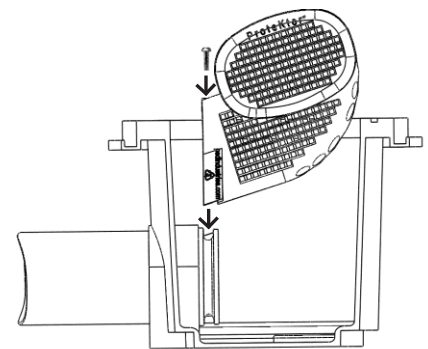


figure 2.

STEP 5: INSPECTION OF EXISTING DRAIN COVER(S).

Covers shall be free of cracks, breakage or distortion. Covers shall appear clean, bright and shiny. Discoloration of the surface finish, especially browning of white goods, is indicative of UV damage from the sun's rays. A surface finish that appears dull and chalky (especially if white dust rubs off on fingers and clothes while handling) is indicative of damage due to severe chemical imbalance. Cover conditions meeting these descriptions mandate immediate replacement of the drain cover. Covers should also be compliant with the Virginia Graeme Baker Pool/Spa Safety Act/ANSI A112.19.8 and should be plainly marked as such. Covers that are not plainly marked as "VGB Compliant" and "ANSI A112.19.8" should be immediately replaced.

STEP 6: ATTACH THE PROPER DRAIN COVER.

Drain cover must be in compliance with the VGB Pool/Spa Safety Act/ANSI A112.19.8 AND in acceptable usable condition or replacement is mandated by law. Cover(s) **MUST** be properly attached using the manufacturers' specified number and type of screws before re-starting the filtration system. **DO NOT** use sub-standard screws; they **WILL** deteriorate rapidly resulting in a dangerous condition! If not to code, **DO NOT TURN ON POOL/SPA PUMPS!!**

INSTALLATION OF THE PROTEKTOR IN WALL-MOUNTED OR BENCH-MOUNTED DRAIN SUMPS (VERTICAL APPLICATIONS) OR ANY OTHER APPLICATIONS WHERE THE BOTTOM SUMP INLET PORT IS CONNECTED TO A PUMP.

FOR EASE OF INSTALLATION BEFORE INSTALLING, PRETHREAD SCREW THROUGH PROTEKTOR AND ADAPTER

STEP 1: REMOVE THE DRAIN COVER.

Save all screws and document the number of screws removed, condition of drain, verify drain cover is in compliance with current standards. Thoroughly clean all debris and foreign material from sump before proceeding.

STEP 2: DETERMINE SIZE/TYPE OF DRAIN ORIFICE.

1 1/2" or 2", NPT threaded fitting or slip-fitted/solvent-welded pipe.

STEP 3: PRE-ATTACH THE ADAPTER TO THE PROTEKTOR.

Attach the ProteKtor to the adapter by fitting the groove on the adapter to the opening of the ProteKtor and sliding it straight in. *see figure 3*. Insert the indexing nib in the ProteKtor to the socket in the adapter to align the screw holes. Secure the ProteKtor by fastening the provided 316 grade stainless steel set screw (part # PSD300), through the ProteKtor into the adapter. **DO NOT substitute screws!!** Sub-standard screws WILL deteriorate rapidly resulting in a dangerous condition! Use only hand-powered tools to install the ProteKtor and all main drain covers.

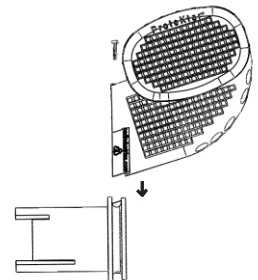


figure 3.

STEP 4: TEST FIT THE ADAPTER/PROTEKTOR ASSEMBLY.

If the adapter fit is not secure within the pipe; follow the shimming procedure on pg. 4 to adjust the fit of the adapter. Use **ONLY** the provided adhesive backed tape to shim the adapter. **At this point, prior to gluing adapter in place you must test for future removal of the ProteKtor. If you are unable to reach the screw with a tool for future removal when test fitting, using the ProteKtor in this sump may not be feasible as you will not be able to remove the ProteKtor once the adapter is glued in place. If you are able to remove the screw and the ProteKtor while test fitting, proceed with installation. If the ProteKtor sticks out of the sump, test fit the drain cover fitment by holding the cover in place while ProteKtor is in place to verify cover fits securely on sump.** Remove the ProteKtor from the adapter. Finish fitting the adapter into the pipe/orifice using provided shim tape if needed. Once the adapter is difficult to turn or slide out, apply glue to adapter as well as tape and secure adapter into drain orifice. See "Glue Recommendation". NOTE: Should the adapter encounter a change in pipe size or other mechanical obstruction that prevents full insertion, it is permissible to trim the length of the adapter with a PVC saw to fit the specific application. Once adapter is glued in place, reattach ProteKtor onto adapter using only provided screw.

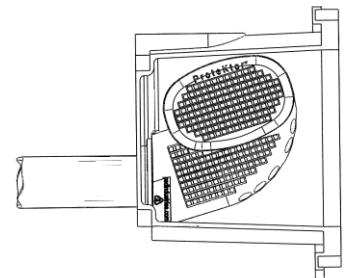


figure 4.

STEP 5: INSPECTION OF EXISTING DRAIN COVER(S).

Covers shall be free of cracks, breakage or distortion. Covers shall appear clean, bright and shiny. Discoloration of the surface finish, especially browning of white goods, is indicative of UV damage from the sun's rays. A surface finish that appears dull and chalky (especially if white dust rubs off on fingers and clothes while handling) is indicative of damage due to severe chemical imbalance. Cover conditions meeting these descriptions mandate immediate replacement of the drain cover. Covers should also be compliant with the Virginia Graeme Baker Pool/Spa Safety Act/ANSI A112.19.8 and should be plainly marked as such. Covers that are not plainly marked as "VGB Compliant" and "ANSI A112.19.8" should be immediately replaced.

STEP 6: ATTACH THE DRAIN COVER.

Drain cover must be in compliance with the VGB Pool/Spa Safety Act AND in acceptable usable condition or replacement is mandated by law. Cover(s) MUST be properly attached using the manufacturers' specified number and type of screws before re-starting the filtration system. DO NOT use sub-standard screws; they WILL deteriorate rapidly resulting in a dangerous condition! If not to code, DO NOT TURN ON POOL/SPA PUMP(S)!!

CE compliant - under harmonized standard CEN EN ISO 4126-5:2013; and also, will be enforced by Directive 2014/68/EU of the European Parliament and of the Council of 15 May 2014, which will fully enter into force on July 20, 2016.

Inspect this unit before it is used. Occasionally products are damaged during shipment. If any component is damaged, please contact PSD Industries directly for a replacement. Failure to do so could result in serious injury or death.

LIMITED WARRANTY: For 1 year from the date of purchase, PSD Industries LLC will repair or replace, at its option, for the original owner any parts of its ProteKtor or Adaptors which are found upon examination by PSD Industries LLC to be defective in materials and workmanship. Please call PSD Industries for instructions. Be prepared to provide a receipt when exercising this Limited Warranty.

The ProteKtor should be replaced whenever the drain cover is replaced, either due to meeting the replacement time required by the drain cover manufacturer or due to damage or a recall of the current drain cover.

PSD Industries, LLC will not be held liable or responsible for costs, damages or loss resulting directly or indirectly from the use of this product. Any unauthorized adaptations to the ProteKtor or adapter will void warranty.

Any additional labor costs incurred as a result of the installation of the ProteKtor are the sole responsibility of the purchaser.

Shimming Procedure: Packed with the ProteKtor is a small roll of adhesive-backed Shim tape. Apply Shim Tape as best suited to the application. This tape is used to shim a loose fitting adapter if necessary. Test fit the ProteKtor adapter and add wraps of tape accordingly until a snug fit is achieved. Should the adapter encounter an obstruction or change in pipe size that prevents full insertion, it is permissible to trim the length of the adapter to fit the specific application.

Glue Recommendation: For underwater applications, PSD Industries recommends Boxer 100 Vinyl Adhesive or an equivalent underwater adhesive.

PSD Industries LLC – www.psdindustries.com

