

# THE PROTEKTOR GUIDELINES AND INSTALLATION INSTRUCTIONS

| INDIVIDUAL COMPONENTS   |   |   |   |   | TOOLS NEEDED  |
|---|---|---|---|---|---|
|  |  |  |  |  | - Scissors or Sharp Knife<br>- Screwdriver<br>- PVC Saw<br>NOTE: (1) 316 Screw is a Spare |
| The ProteKtor   | 2" Adapter Fitting  | 1.5" Adapter Fitting  | (2) 316 Grade Stainless Screws  | Roll of Shim Tape   |   |

Manufactured from an NSF-50 approved material for use with multiple suction outlets or a single submerged suction outlet. If only a single submerged suction outlet or main drain exists, it is recommended that a Safety Vacuum Release System (SVRS), a gravity drainage system, an automatic pump shutoff device, or a suction-limiting vent line system be employed as a secondary layer of backup protection. 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!

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



**STOP!!!**

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!!!**

\*\*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**

### STEP 1: REMOVE THE DRAIN COVER.

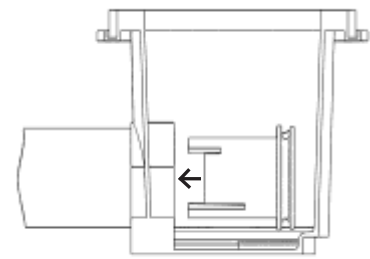
Save all screws and document the number of screws removed, condition of drain, refer to chart for cover compliance. Thoroughly clean all debris and foreign material from sump before proceeding.

### 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.

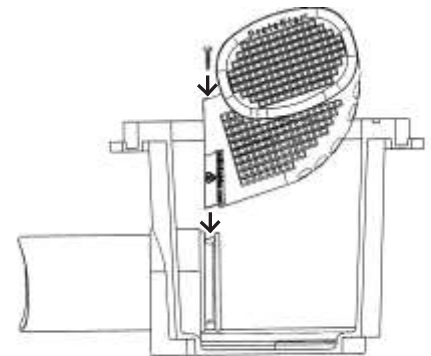
If the adapter fit is not secure, follow the shimming procedure on pg. 4 to adjust the fit of the adapter. Use **ONLY** the provided adhesive backed tape to shim the adapter. The adapter should fit firmly in the sump inlet port and be difficult but not impossible to turn or slide out. *See figure 1.*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



*figure 1.*

### STEP 4: INSTALL THE PROTEKTOR.

Once the adapter is secure (a firm, rattle-free fit that is difficult but not impossible to turn or slide out) 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. Electric or battery-powered tools can over-torque the screw threads and cause damage that may lead to an unsafe condition! (stripped threads).



*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.



**STOP!!!**

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!!!**

\*\*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**

## STEP 1: REMOVE THE DRAIN COVER.

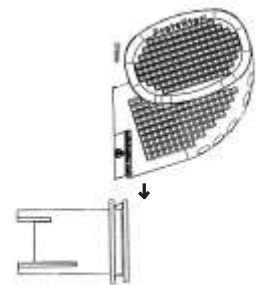
Save all screws and document the number of screws removed, condition of drain, refer to chart for cover compliance. Thoroughly clean all debris and foreign material from sump before proceeding.

## 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.

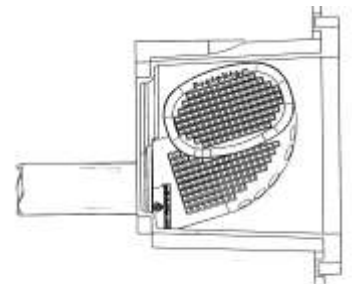
Attach the ProteKtor to the adapter by fitting the groove on the adapter to the opening of the ProteKtor and sliding it straight in. *see figure 3*. Insert the indexing nib in the ProteKtor to the socket in the adapter to align the screw holes. Secure the Protektor by fastening the provided 316 grade 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. Electric or battery powered tools can possibly over-torque the screw threads and cause damage that may lead to an unsafe condition! (stripped threads)



*figure 3.*

## STEP 4: TEST FIT THE ADAPTER/PROTEKTOR ASSEMBLY.

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 due to the single-piece configuration of the assembly used for a wall-mounted installation, PSD Industries recommends a tighter adapter-to-port fitment than used in a floor-mounted installation *see figure 4*. 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.



*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)!!

Frequently Asked Questions about the drain cover recall on the CPSC website :

<http://www.cpsc.gov/CPSCPUB/PREREL/prhtml11/11230faq.html#photos>

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.

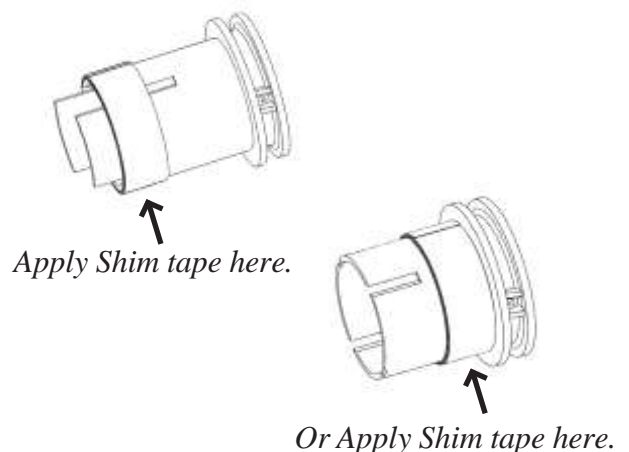
**LIMITED WARRANTY:** For 1 year from the date of purchase, PSD Industries LLC will repair or replace, at it's option, for the original owner any parts of it's Protektor or Adaptors which are found upon examination by PSD Industries LLC to be defective in materials and workmanship. Please call PSD Industries 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 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. \*\*\*Note: for safety and future maintenance purposes, the ProteKtor adapter should not be permanently installed! DO NOT use epoxies or other adhesives – adjust fit only with the provided shim tape. Fit should be firm and rattle-free, but it should not be impossible to remove the adapter if necessary for maintenance or in an emergency situation\*\*\* 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.



PSD Industries LLC – [www.psdindustries.com](http://www.psdindustries.com)