MAIN DRAIN OWNER'S MANUAL

Model Number: 640-212X V Ultra 10" Drain

VGBA 2017

WARNING:
IMPORTANT SAFETY INSTRUCTIONS. READ, UNDERSTAND, AND FOLLOW ALL WARNINGS AND INSTRUCTIONS. SAVE THESE INSTRUCTIONS.

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.

SOFA INSTRUCTIONS

When installing and using this equipment, basic safety precautions shall always be followed, including the following: IMPORTANT SAFETY INSTRUCTIONS. READ, FOLLOW, AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS.

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 cover/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.
SAVE THESE INSTRUCTIONS.

IMPORTANT SAFETY INSTRUCTIONS



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.

USE ONLY GENUINE WATERWAY REPLACEMENT PARTS.

Designed, Engineered & Manufactured in the USA.

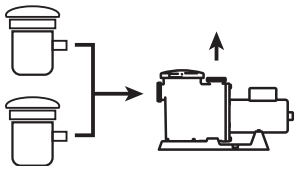
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TO REDUCE THE RISK OF ENTRAPMENT HAZARDS:



- 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') / 1 meter apart, as measured from suction pipe center to suction pipe center.
- Dual suction fittings shall be placed in such locations and distances to avoid "dual blockage" 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) suction outlet cover installed. In the event of one suction outlet being completely blocked, the remaining suction outlets serving the system shall have a flow rating capable of the full flow of the pump(s).
- Never use a pool or spa if any suction outlet component is damaged, broken, cracked, missing, or not securely attached.
- Replace damaged, broken, cracked, missing, or not securely attached suction outlet components immediately.
- Two or more suction outlets per pump should be installed in accordance with latest APSP Standards and CPSC guidelines, and follow all National, State, and Local codes applicable.
- Replace the suction within 7 years from the installation date.
- Installation of a vacuum release system, which relieves entrapping suction, is recommended.

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 increased potential for suction entrapment as described on the previous page.

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 on the previous page.

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.

This suction fitting is rated at 224 GPM for floor and 192 GPM for wall. If the fitting is missing or broken, replace with a fitting of equivalent rating or higher. Use of a lower rated suction fitting could result in entrapment of the body which could result in serious injury including drowning.

Do not use or operate pool, spa, or hot tub if this suction fitting is missing, broken or not secured per instructions. The suction fitting is intended to prevent entrapment of the body. Use of the spa hot tub with a missing, broken or improperly secured suction grate may result in serious personal injury including drowning.

When the pool, spa or hot tub is in operation, suction is created at this fitting. Users of the spa or hot tub must be instructed not to come in contact with this fitting in such a way as to block its orifice. If a user of the spa or hot tub blocks this fitting with his/her body, serious personal injury or drowning may occur.

In order to remove the suction cover (for service or winterization), using a Phillips-head screw driver remove the screws. Inspect both the suction cover and suction fitting for any cracks or damages.

It is imperative to securely attach the suction cover to the wall fittings (use only the original supplied screws or obtain original replacements). Do not over tighten the screws. Inspection of fasteners and observation for damaged/tampered with suction fittings is required.

Any and all broken or missing parts must be replaced prior to starting spa or pool pump. Never operate spa or pool without drain cover in place and properly affixed, death or serious injury can result.

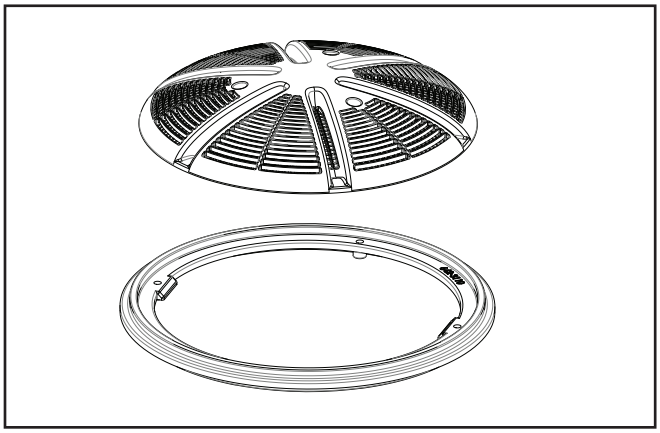
Do not exceed the safe flow rate. Do not increase flow through system by increasing pump size or horsepower.

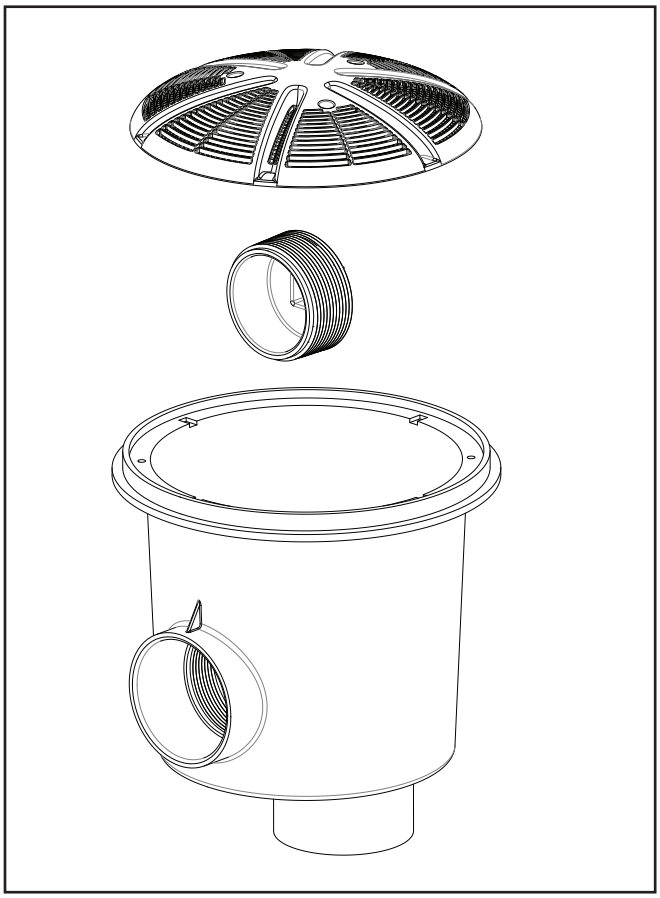
Do not allow children to sit, play or interact with main drains or suction outlet.

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INSTRUCTIONS FOR CONCRETE MAIN DRAINS (DUAL PORT)



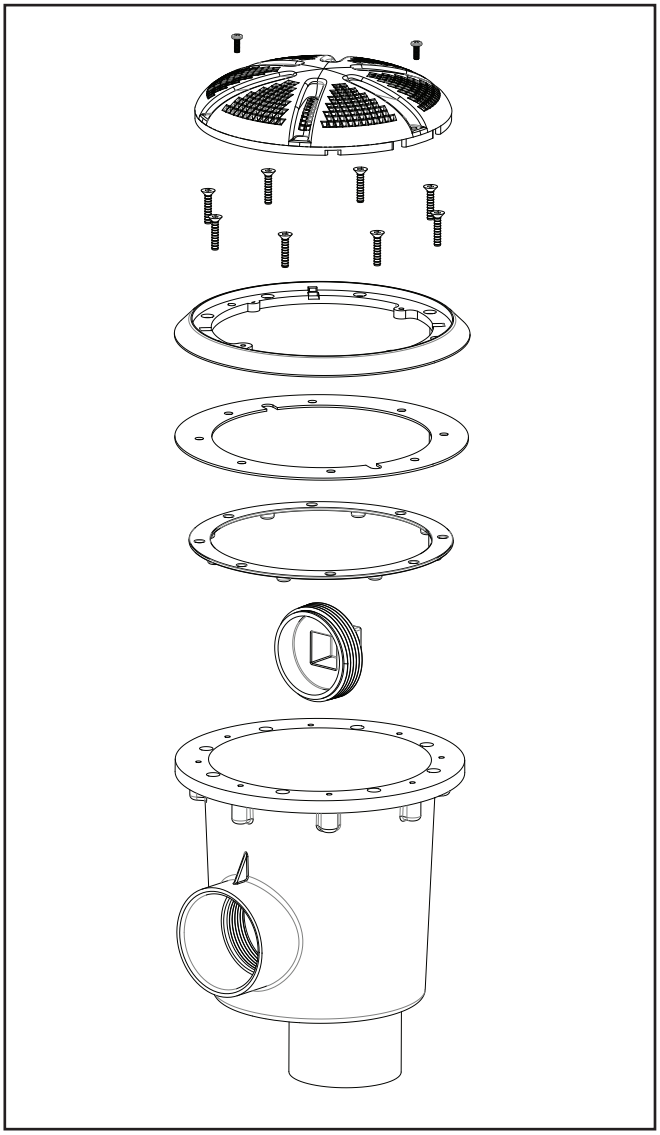


CONCRETE ASSEMBLY

1. Align cover holes with brass inserts.
2. Hand-tighten supplied screws. **DO NOT USE POWER TOOLS.**
3. A minimum 2" connecting pipe should be used.

INSTRUCTIONS FOR VINYL LINER MAIN DRAINS (DUAL PORT)

- **Cover is contoured to keep auto-cleaners from sticking**
- **Vinyl liner mounting plate is angled for auto-cleaners to climb over**
- **Body is type 1 PVC: better for glue joints**



VINYL LINER ASSEMBLY

1. Install rubber gasket to body by pushing in raised alignment cups into slots in body (see Diagram A).
2. Lay vinyl liner over main drain.
3. Put fiber gasket and mounting plate on top of vinyl liner over main drain.
4. Install all eight screws. (If this is your first time, ask where you purchased this drain exactly how to do it with the pool you bought.)
5. Align cover holes with brass inserts and install screws.

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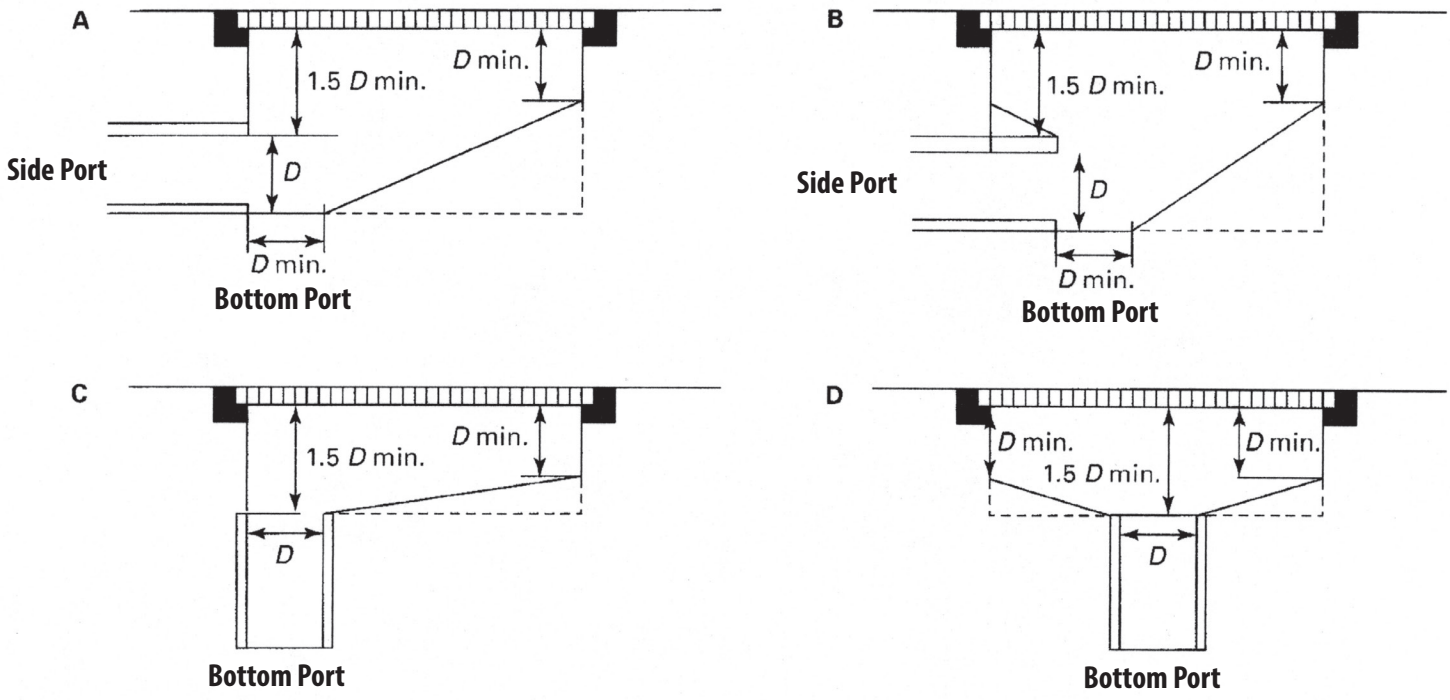
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INSTRUCTIONS FOR THE USE OF FIELD BUILT SUMPS

1. A minimum 2" connecting pipe should be used.

2. A minimum distance of 1.5 times the pipe diameter should be provided between the pipe and the cover/grate assemblies, according to the image below:

FIELD BUILT SUMP (SINGLE OR DUAL PORT)

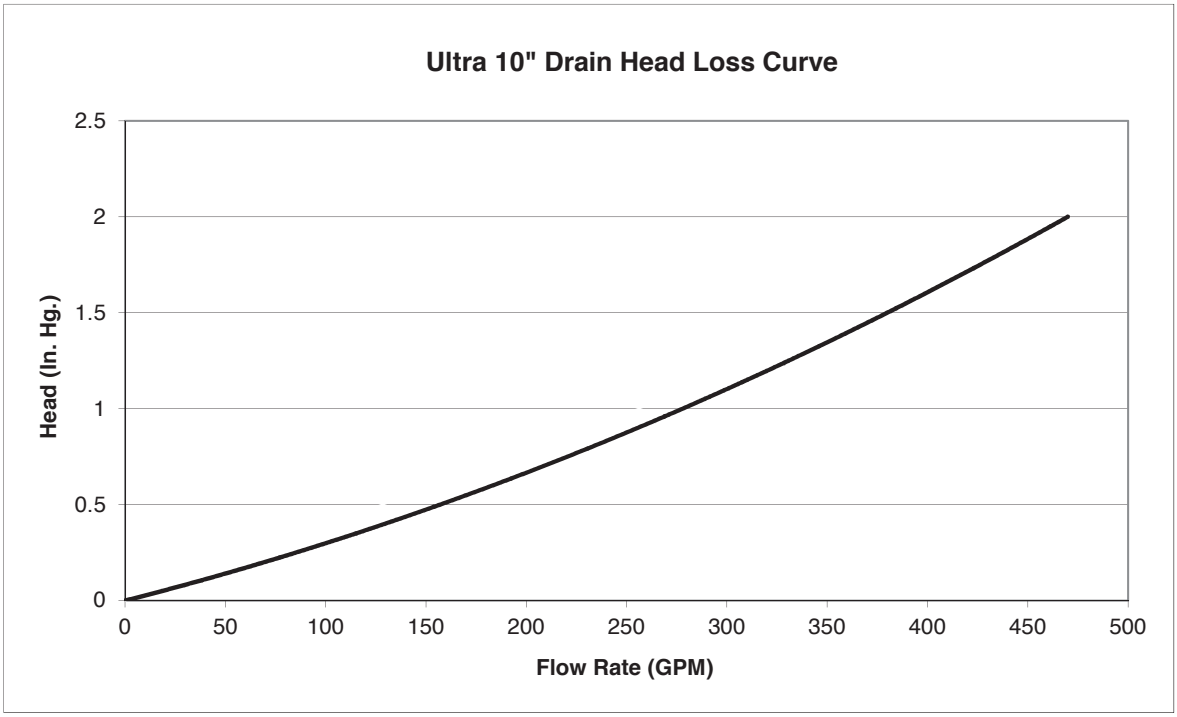


GENERAL NOTES:
(a) *D* = inside diameter of pipe.
(b) All dimensions shown are minimums.
(c) A broken line (_ _ _) indicates suggested sump configuration.

3. **The design of field fabricated sumps shall be further specified by a Registered Design Professional so as to fully address the considerations of cover/grate loadings, durability, hair, finger, and limb entrapment issues, as well as features particular to the site.**

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WARRANTY

For product registration visit: www.waterwayplastics.com.
For Warranty questions or claims please contact point of purchase.

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Installation Information Label
10" Vinyl Ultra Retro Suction

Cover/Grate Model#: 640-212x V, 640-213x V, 640-214x V
Life & years from the date of installation: 7 Years

	Flow Ratings
Floor Flow Rate:	178 GPM @ 3.53 fps
Wall Flow Rate:	132 GPM @ 3.03 fps

Cover/Grate Model#: 640-215x V
Life & years from the date of installation: 7 Years

	Flow Ratings
Floor Flow Rate:	191 GPM @ 3.53 fps
Wall Flow Rate:	160 GPM @ 3.03 fps

Location of the Installed SOFA, such that it can be successfully identified in the future:

_____

The date the cover/grate was installed in the pool, where the month and year indicators on the label are easily activated in the field:

_____

Installer shall fill-in the location of the installed SOFA and the cover/grate Installation before giving this information label to the pool owner. This Installation Information Label shall be permanently posted as near feasible to the pump control, and that a copy of this information be given to the pool owner, to be kept with other important pool related documents.

10" Round Ultra Retro Suction Outlet -Vinyl: 640-212x V, 640-213x V, 640-214x V

Floor Flow Rate: 178 GPM @ 3.53 fps Wall Flow Rate: 132 GPM @ 3.03 fps

10" Round Ultra Retro Suction Outlet -Vinyl: 640-215x V

Floor Flow Rate: 191 GPM @ 3.53 fps Wall Flow Rate: 160 GPM @ 3.03 fps

Removable Tags for Blockable Cover/Grate Packaging
"READ, FOLLOW, AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS". "This VGBA Suction outlet has an installation specific flow rating and this product SHALL NOT be installed on a pumping system that is capable of exceeding this limit, which varies based on the number and location of installed suction outlets. READ and FOLLOW this section of the included installation instructions explaining how to calculate the suction system flow ratings and that of the installed pumping system.

⚠"WARNING! This is a BLOCKABLE VGBA Suction Outlet that must ONLY be installed in a multiple VGBA Suction Outlet System." (9.8.2.1)

This is a BLOCKABLE VGBA Suction Outlet. It must ONLY be installed in a suction system that also includes one or more of the following devices or systems designed to prevent suction entrapment, when and if the suction cover marked for single use and used as the sole source of water for a single suction outlet :

- Safety Vacuum Release System
- Suction Limiting Vent System
- Gravity Drainage System
- Automatic Pump Shut-Off System
- Drain Disablement
- Other Systems determined by Consumer Product Safety Commission to be equally effective as , or better than above-mentioned systems at preventing or eliminating the risk of injury or death associated with pool drainage system.

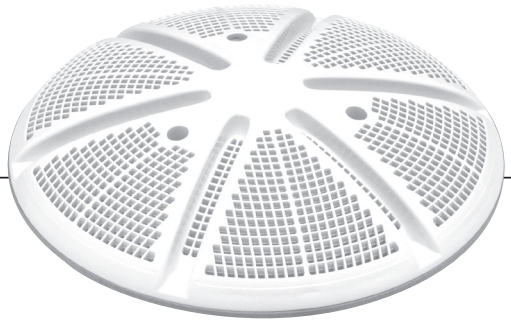
THIS TAG/LABEL IS TO BE CUT & REMOVED BY THE INSTALLER ONLY

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CERTIFICATION OF COMPLIANCE

10" ROUND, VINYL ULTRA RETRO SUCTION OUTLET: P/N 640-212x V



Contents:	1
Part Number:	**640-212x V**
Description:	**Round Ultra Retro Suction Outlet - Vinyl**
Size:	**10"**
Type:	**Blockable**
Life:	**7 year**
Open Area:	**20.4 in²**
GPM @ 1.5 fps:	**95**
Floor Flow Rate:	**178 GPM**
Wall Flow Rate:	**132 GPM**
Place of Manufacturer:	**Oxnard, CA**

NSF

VGBA 2017

For Date of Manufacture please see the manufacture mark on product



Date of Installation: _____

Name of Installer: _____

Signature of Installer: _____

This product has been tested to ANSI/ASME 112.19.8-2007 (ANSI/APSP - 16. 2017) per §1404 of the Virginia Graham Baker Pool and Spa Safety Act. Certified by: NSF International, Inc., 729 N. Dixboro Rd., Ann Arbor, MI 48105, 734-769-8670. Testing report from May, 2021.

This product is certified to comply with §1404 of the Virginia Graham Baker (VGBA 2017) Pool and Spa Safety Act. A copy of the test results for the above may be found at www.waterwayplastics.com or go to www.nsf.org. This product is manufactured by Waterway Plastics, Oxnard, CA 93030. Test records are kept by Ray Mirzaei at Waterway Plastics.

Designed, Engineered & Manufactured in the USA.

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