

SPA SUCTION 25200-×××-×× / 25201-×××-××





All Custom Molded Products main drains & suctions are listed and tested in strict accordance to the requirements of ANSI/APSP - 16 2017, the current standard of reference for the Virginia Graeme Baker Act, and compliant to the latest Consumer Product Safety Commission (CPSC) requirements.

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Please read through the entire manual before installing your new unit. Your pool drain fitting must be installed and operated as specified.

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A. SAFETY INSTRUCTIONS & PRECAUTIONS

IMPORTANT SAFETY INSTRUCTIONS. READ AND FOLLOW ALL INSTRUCTIONS ALWAYS PLUMB AND INSTALL ALL SUCTION FITTINGS ACCORDING TO ALL BUILDING CODES THAT APPLY IN YOUR AREA.

⚠WARNING

When using two or more suction fittings on a common suction line, suctions must be separated by a minimum of 3 ft or they must be located on two different planes.

WARNING

WARNING: DO NOT locate suction outlets on seating areas or on backrests for such seating areas.

NOTICE

Attention Installer: This manual contains important information about the installation, operation and safe use of this product. Before installing this product, read and follow all warning notices and instructions which are included. This information should be given to the owner and/or operator of this equipment.

MARNING

To reduce the risk of drowning from hair and body entrapment, install suction fittings with a marked flow rate in gallons per minute that exceeds the flow rate of your system by at least 25%. Always use multiple suction outlets. If the fitting/cover breaks, is damaged, or is missing, shut the system down immediately. Do not use the system until damaged parts have been replaced.

NOTICE

Keep hair and clothing a minimum of 12 inches from all suction fittings and drains at all times. Persons with long hair should secure hair to a minimal length or wear swimming cap. Children should never be left unattended at any time in a swimming pool, spa, or bathtub. Be sure the temperature of the water never exceeds the manufacturer's recommendations.

NOTICE

To reduce the risk of injury, installation and service should be done by a qualified Service Professional, certified electrician or authorized CMP representative.

NOTICE

NOTE: In the event that one suction outlet is completely blocked, the remaining suction outlet(s) serving that system MUST have a flow rating capable of the full flow of the pump(s) for the specific suction system.

↑ WARNING

Increasing size of the pump may increase flow rate of suction beyond rated safety limits causing entrapment or death.

NOTICE

All Suction Outlet Fitting Assemblies (SOFAs) shall be installed in accordance with the manufacturer's installation instructions, or for Registered Design Professional SOFAs, in accordance with the registered design professional's engineering plans. Field modification made to a SOFA not authorized by the manufacturer's installation instructions shall void the SOFA certification.

/ WARNING

Hair or body parts blocking the spa or pool suctions may become trapped and held against the suction fitting. Entrapment against the suction fittings can result in drowning or other severe injury. Never sit on or lean up against suction fittings. Never exceed the maximum allowable flow rate stated on the suction fitting. The suction fitting and fasteners should be inspected for damage or tampering before use. Missing, broken, or cracked suction fittings shall be replaced. Loose suction fittings shall be reattached or replaced before use of this facility.

NOTICE

Self-contained spa SOFAs shall be used only in self-contained factory-manufactured spas tested and certified in accordance with ANSI/UL 1563. Self-contained spa SOFAs shall be installed into the body or shell of the spa at the time that the spa is manufactured. Self-contained spa SOFAs shall be connected to a tee leading to the pump utilizing only the SOFA manufacturer's specified size(s) of PVC hose or pipe.

NOTICE

The maximum hose length difference between any self-contained spa SOFA and the tee leading to the pump shall not exceed 13 feet (3.96 m).

SAVE THESE INSTRUCTIONS

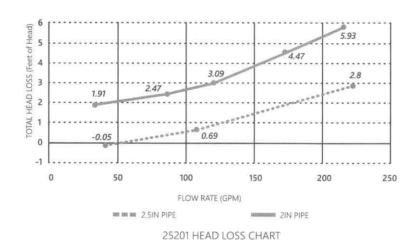
B. SIZING & SPECIFICATION REFERENCE

- · Suction fitting-configuration specific flow ratings NOT be exceeded at any time the pool is open to bathers.
- A system must install a suction fitting, or combination of multiple suctions, such that the resulting individual suction system flow rating is greater than the pumping system's maximum system flow rate.
- The flow rating for spas with multiple, blockable suction fittings piped together in one body of water without isolation valves shall be determined by combining the flow rating of all suction fittings, minus the flow rating of one. If the flow ratings of all suction fittings are not equal, subtract the flow rating of the suction with the highest flow rating.

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DI ECHTERHONS	
FLOW RATES - 2in PIPE	25200-XXX: 172 GPM Wall / 160 GPM Floor 25201-XXX: 170 GPM Wall / 170 GPM Floor
FLOW RATES - 2.5in PIPE	25200-XXX: 196 GPM Wall / 220 GPM Floor 25201-XXX: 196 GPM Wall / 216 GPM Floor
PIPE SIZE	2" SOCKET OR 2.5" SPIGOT
	DO NOT adapt suction fitting to any pipe size smaller than ASTM $2^{\prime\prime}$ SCH 40 PVC.
DRAIN COVER LIFE	7 Years. Replace drain cover and screws every seven years.

- · Floor or wall installation
- Multiple drain use
- PVC Sump Body. Use PVC glue to attach plumbing fittings



3.15 TOTAL HEAD LOSS (Feet of Head) 2 1.9 0.46 @ 0.35 0 -1.03 -1.6 -3 0 50 100 150 200 250

25200 HEAD LOSS CHART

mm 2.5IN PIPE

FLOW RATE (GPM)

2IN PIPE

C. INSTALLATION & MAINTENANCE

1. INSTALLATION LOCATION

- a. This suction fitting is designed for installation on side wall or floor of portable spa and hot tubs in conjunction with at least one other suction fitting per pump. Mount suction fittings on the wall or floor of portable spas and hot tubs.
- b. Do not mount directly under seats.
- c. When using two or more suction fittings on a common suction line, suctions must be separated by a minimum of 3 ft or they must be located on two different planes.

SAFETY CHECKLIST:

- d. DO NOT adapt suction fitting to any pipe size smaller than ASTM 2" SCH 40 PVC.
- e. Suction fitting and fasteners should be observed for damage or tampering before each use.
- f. Missing, broken, or cracked suction fittings shall be replaced before use. Loose suction fittings shall be reattached or replaced before use.

2. INSTALLATION PROCEDURE

A. TOOLS REQUIRED:

- Hole Saw
- Torque Wrench
- · Phillips Head Screwdriver

B. INSTALLATION:

- 1. Using hole saw, cut/drill the installation hole.
- 2. If optional gasket is used, gasket must be placed around threads of suction wall fitting at this time.
- 3. Place threads of wall fitting through hole from the inside (water side) of tub.
- 4. Install nut from dry side of tub onto the threads of the wall fitting. Start install of screws by hand to ensure proper thread engagement and to prevent cross threading. DO NOT USE POWER TOOLS TO INSTALL FASTENERS.
- 5. If silicone is used on fitting, verify that silicone is compatible with ABS and PVC plastics. No adhesives are to be used on covers, or other attachment methods that prevent access to suction piping or SOFA components requiring periodic servicing
- 6. Using torque wrench, torque nut to <44.0 ft. lbs. (60Nm). Apply a small amount of silicone to the threads to ensure proper tightening torque
- 7. Verify that the suction cover is properly tightened with the #8 316 steel 61000-000-012 stainless steel screw in brass inserts to 10 in-lbs.

C. INSTALLATION NOTES: When installing and using this equipment, basic safety precautions shall always be followed, including the following.

- 1. Mount suction outlets on the floor. DO NOT locate suction outlets on seating areas or on backrests for seating areas.
- 2. Always use multiple suction outlets. DO NOT use with single drain applications. Use with single drain applications will void any and all warranties.
- 3. At least two self-contained spa Suction Outlet Fitting Assemblies (SOFAs) shall be piped so that water is drawn through them simultaneously through a common line to the related pump(s). The use of valves or fittings capable of isolating one self-contained spa SOFA from any other on the common line to the related pump is prohibited.
- 4. Cover/grates, when installed, shall not protrude more than 2 in. (51 mm) from the finished surface of the pool in which the SOFA is installed.
- 5. Blockable SOFAs shall be installed in a multiple SOFA system only.
- 6. To reduce the risk of drowning from hair and body entrapment, install suction fittings with a marked flow rate in gallons per minute that exceeds the flow rate of your system by at least 25%. Increasing size of the pump may increase flow rate of suction beyond rated safety limits causing entrapment or death.
- 7. Any modification that increases the flow rate of the circulation system shall require reevaluation of the cover/grate and

C. INSTALLATION & MAINTENANCE

- sump to ensure that the flow rating of the Suction Outlet Fitting Assembly is not exceeded.
- 8. CMP drain covers are only certified for use with CMP sumps and frames. Do not mismatch with parts from other manufacturers.
- DO NOT over-torque the cover screw. Excessive torque can cause premature failure of threads or damage to suction
 fitting increasing risk of entrapment. Start install of screws by hand to ensure proper thread engagement and to prevent
 cross threading. DO NOT USE POWER TOOLS TO INSTALL FASTENERS.
- 10. SOFA components and fastener receptacles shall be clean and free of debris or obstructions during installation of cover/ grate and fasteners. Hand-check cover/grate for snugness to the sump/ frame after installation. Loose cover/grates shall be reattached before bathers are allowed to use the spa.
- 11. Missing broken, or cracked SOFA component shall be replaced before bathers are allowed to use the spa.
- 12. NOTICE: No modification shall be made to a SOFA structure or flow path unless the new configuration has been certified as new SOFA.

3. MAINTENANCE PROCEDURE

- a. Covers/grates and all other SOFA components shall be replaced before the end of their service life. Service life begins the month and year in which a SOFA component is installed with or without water. The cover/grate and screws should be replaced at least every seven (7) years.
- b. Wall fitting service life is 30 years.
- c. Inspect spa regularly to ensure that the drain cover/grate is in place and secure.
- d. If the cover is found with color changed, broken, cracked, missing, brittle components with chunks or pieces broken off, it must be replaced. Do not use the spa/facility until a repair or replacement is made.
- e. If there are stripped screw holes, the wall fitting must be replace. Do not use the spa/facility until a repair or replacement is made.
- f. If the cover is found to be missing screws, the screws must be replaced. Do not use the spa/facility until a repair or replacement is made.
- g. If a drain cover/grate does not pass inspection:
 - Close the spa immediately
 - Post a closure notice
 - Keep the facility closed until a new drain cover and screws are properly installed.
- h. WINTERIZING: Lower the spa water level below the suctions and drain/blow out all system plumbing lines. Also follow any additional winterizing instructions and recommendations supplied by the spa manufacturer.

G. PARTS LIST







WALL FITTING



NUT

CMP P/N	
25200-202-010	
25201-039-000	
25201-034-000	
25200-110-000	
25200-010-000	
25200-040-010	
61000-050-012	

DESCRIPTION

172 GPM STAINLESS STEEL COVER* 170 GPM CLASSIC GRAY COVER* 170 GPM BLACK GRAY COVER* WALL FITTING - 2IN SLIP WALL FITTING - 2.5IN SLIP NUT SCREW*

^{*}Replace within 7 installed years or immediately upon evidence of degradation or damage.