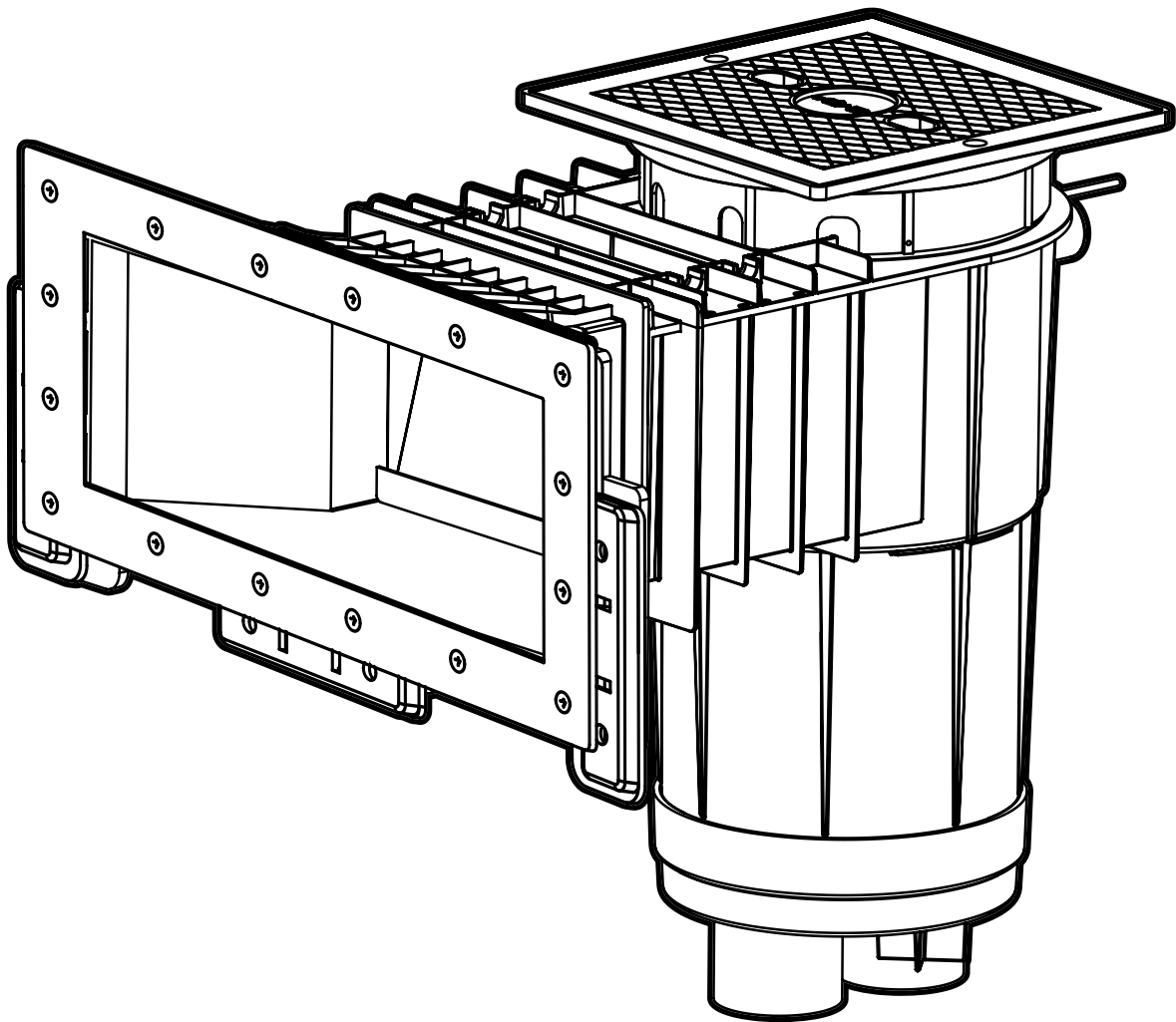




# IN GROUND VINYL/FIBERGLASS POOL SKIMMER INSTRUCTIONS

## INSTALLATION INSTRUCTIONS & PRODUCT MANUAL

25160-xxx-xxx



## A. SAFETY INSTRUCTIONS & PRECAUTIONS

# IMPORTANT SAFETY INSTRUCTIONS. READ AND FOLLOW ALL INSTRUCTIONS

 **CAUTION**

Follow all applicable local and national regulations (e.g. NEC, CEC whichever is applicable) during installation of the skimmer.

 **DANGER**

Plug equalizer line with plug using NSF listed PVC cement.

 **DANGER**

Do not stick hand into the skimmer pipe below the basket while the pump is running.

 **DANGER**

Risk of hair or body entrapment, drowning or disembowelment. Equalizer fittings can trap hair or body parts causing severe injury or death.

 **WARNING**

Follow all necessary precautions when connecting a vacuum pump and cleaning the skimmer. Avoid using a cracked or damaged skimmer. Do not step on cracked skimmer plate. Max weight 300 lbs.

 **WARNING**

Provide more than one suction source in pool system at all times.

 **WARNING**

If rusting is visible on Water Bond Kit (if installed), replace kit immediately

- Use one skimmer per 500 square feet of pool surface area. Suction line sizes are based on a water velocity of less than seven feet per second. Since building codes vary, check your local building code before installing pool and skimmer.
- 
- For optimum skimmer functionality, the skimmer should be placed relative to the prevailing wind and water flow direction.

## SAVE THESE INSTRUCTIONS

## B. INSTALLATION

### Your CMP Skimmer includes the following:

- Skimmer Body
- Skimmer Collar & Cover
- Collar Extension
- Removable Face Spacer
- Weir Door
- Faceplate and Gaskets
- Screws
- Debris Basket
- Float Valve (optional)

### 1. DECK & POOL PLACEMENT

- Support skimmer securely in position during installation. An "x" shaped support is provided on the bottom of the skimmer for temporary mounting on a 2in stand pipe.
- The deck ring collar has a friction fit that allows vertical adjustment. Extension collars (25526-200-000) may be stacked upon each other to accommodate deck height as needed. See product dimensions for precise measurements.
- If a concrete deck is to be poured around the perimeter of the pool, follow pool wall manufacturers recommendations for backfilling and soil preparation prior to concrete deck installation. This is important to reduce the possibility of excess settling of the backfill after concrete deck installation which may result in cracking of the concrete deck.
- After proper backfilling and soil preparation have been completed, the concrete deck may be poured following good standard concrete practices. Use high-quality concrete of sufficient strength for the size of deck being poured. Tool joints should be to reduce and localize any cracks that occur in the deck due to the minor amounts of settling that can happen, even in well-prepared soil.

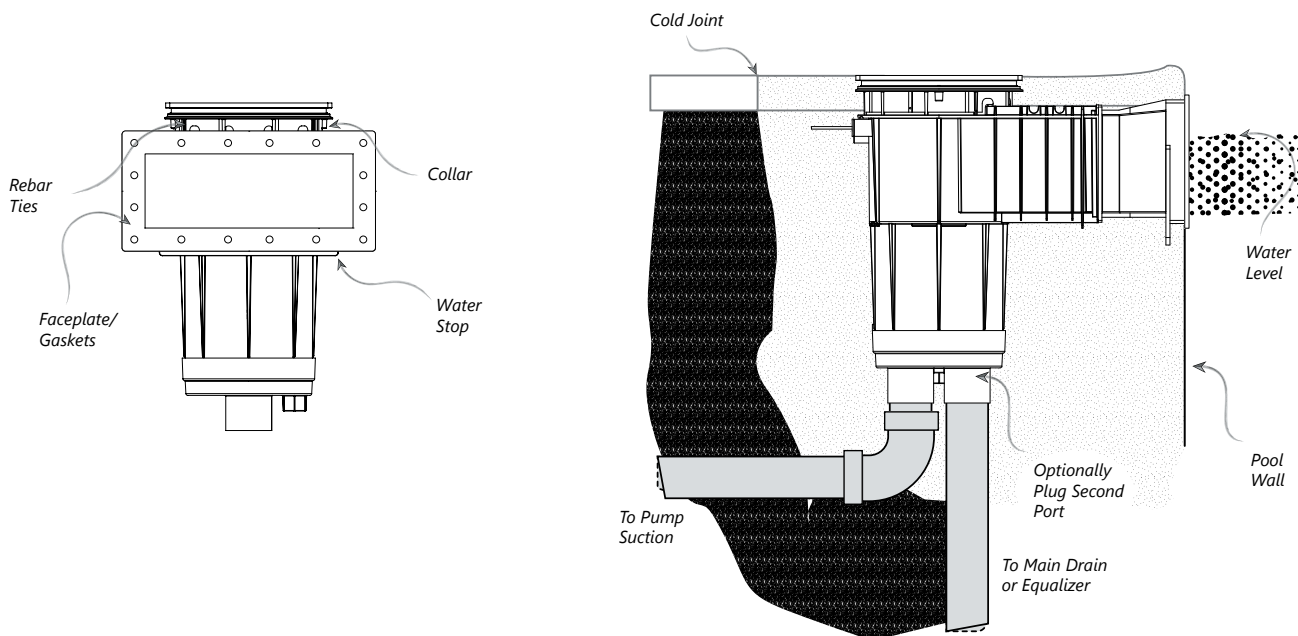


FIGURE 1

### 2. PLUMBING

- The skimmer has two 2" ports for plumbing. The rear port should connect to the pool suction. The front port may be used as an equalizer line or connect to the pool main drain. If the front port is not used it should be plugged.
- Assemble piping and pipe fittings to skimmer. All piping must conform to current local and state plumbing and sanitary codes.
- For good hydraulic balance, divide skimmers as equally as possible between the main branches of the piping layout.

## B. INSTALLATION

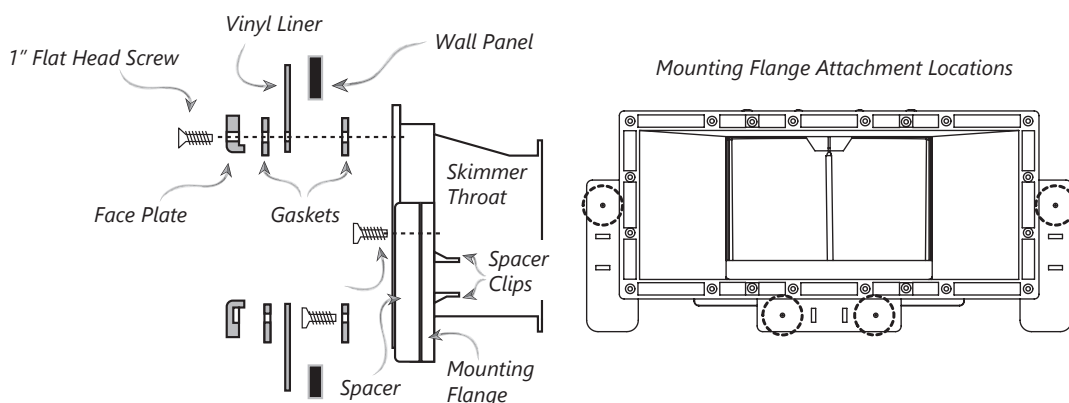
- Long pipe runs and elbows restrict water flow. For best efficiency, use the fewest possible fittings and 2" pipe for 2" skimmers. Using sweep 90° fittings or two 45° fittings in place of a single 90 is more efficient.
- For pressure testing seal off any unused ports.
- NOTICE: Over tightening the threaded plugs may result in failure of the plug or the skimmer body and will not be covered under the terms of the Limited Warranty. DO NOT use tapered metal plugs as this will void manufacturer's warranty.
- Ensure piping is adequately supported on undisturbed earth. If additional backfilling and tamping is necessary, do not stress pipe or skimmer port by lifting or moving pipe after skimmer port connections have been made.

### 3A. THROUGH-WALL INSTALLATION (FIG 2)

- If pool wall is not pre-punched or drilled: Cut wall panel section using dimensions listed in Table 1.
- Place skimmer face in opening and mark location of mounting holes onto pool wall.
- Drill 7/32" holes into the pool wall for securing screws at each location.
- Mounting flange spacers:
  - For metal panels, attach flange spacers.
  - For foam or wood panels that are between 11/16" and 3/4" thickness, do not use flange spacers. Remove flange spacers by pinching the two rear snap levers towards each other while pushing forward.
- Place gasket on skimmer face, making sure holes in gasket align with holes in skimmer face (a very light application of silicone will help hold the gasket in place).
- Align skimmer and mounting flange with drilled panel holes. Fasten to wall panel with mounting flange, using pan head securing screws (for 25160-010-000).
- If vinyl liner pool, install liner before proceeding to next step. Follow pool manufacturer's instructions for proper vinyl liner installations.
- Align second gasket and face plate outside the vinyl liner. Tightly fasten the skimmer face with 1" long flat head screws. Pierce vinyl liner through faceplate holes one at a time before inserting screws. Screws must go through face plate, gasket, liner, second gasket and into skimmer face.
- If vinyl liner pool, cut out liner along inside edge of faceplate.

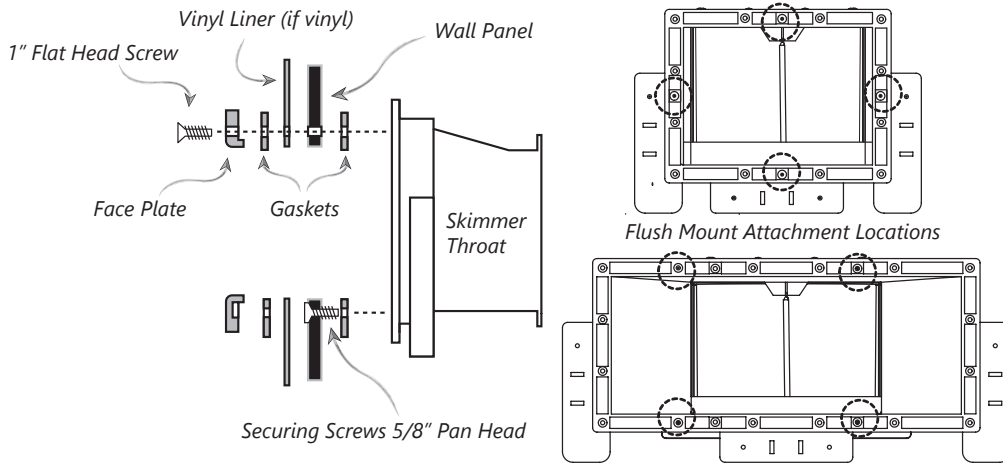
### 3B. BACK/FLUSH MOUNT INSTALLATION (FIG 3)

- If pool wall is not pre-punched or drilled: Cut wall panel section using dimensions listed in Table 1.
- Place skimmer face in opening and mark location of mounting holes onto pool wall.
- Drill 7/32" holes into the pool wall for securing screws at each location.
- Align skimmer face and gasket with drilled panel holes. Fasten to wall panel at locations noted in Figure 3 with pan head securing screws (for 25160-010-000).
- If vinyl liner pool, install liner before proceeding to next step. Follow pool manufacturer's instructions for proper vinyl liner installations.
- Align second gasket and face plate. Tightly fasten the skimmer face with 1" long flat head screws. If vinyl liner pool, pierce vinyl liner through faceplate holes one at a time before inserting screws. Screws must go through face plate, gasket, liner, wall panel, gasket, and into skimmer face.
- If vinyl liner pool, cut out liner along inside edge of faceplate.



# B. INSTALLATION

**FIGURE 2: THROUGH-WALL INSTALLATION**



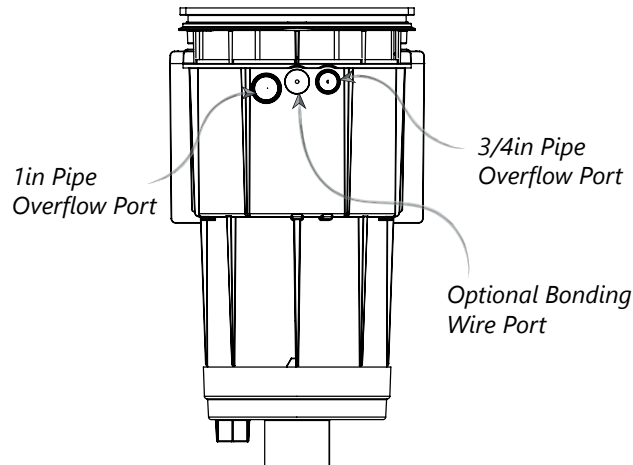
**FIGURE 3: FLUSH-MOUNT INSTALLATION**

	STANDARD MOUTH		WIDEMOUTH	
	MAX	MIN	MAX	MIX
<b>THROUGH-WALL</b>	7-11/16" H × 9-7/8" W	7-9/16" H × 9-3/4" W	7-3/4" H × 17-3/8" W	7-5/8" H × 17-1/4" W
<b>BACK/FLUSH MOUNT</b>	6-1/4" H × 8-1/4" W	6" H × 8" W	6-1/4" H × 15-13/16" W	6" H × 15-9/16" W

**TABLE 1: WALL PANEL CUT-OUT DIMENSIONS**

**4. OPTIONAL OVERFLOW PORTS (FIG 4)**

- Two overflow ports are provided on the rear of the skimmer, one for 3/4in pipe and one for 1 in pipe
- The ports are sealed from the factory. To utilize an overflow port, drill out using a 3/4in hole saw.
- Glue 3/4in or 1in pipe to the correct port using PVC cement and drain overflow to an appropriate area following all local building code and/or environmental requirements.



**FIGURE 4: OVERFLOW PORTS**

## B. INSTALLATION

### 5. WATER BONDING - POOL DEFENDER® MODELS ONLY (FIG 5)

- Pool Defender models include a bonding wire for integrated water bonding.
- Connect the copper wire in the rear of the skimmer to the pool bonding grid or loop using the provided connector.
- As required in NEC section 680.26(C) the bonding device:
  - Consists of at least 9 sq. in. of conductive material
  - Shall be in contact with the water 24/7, whether the circulation system is running or not
  - The connector (lug) must NOT be unable to "back off" (due to vibration, etc.)

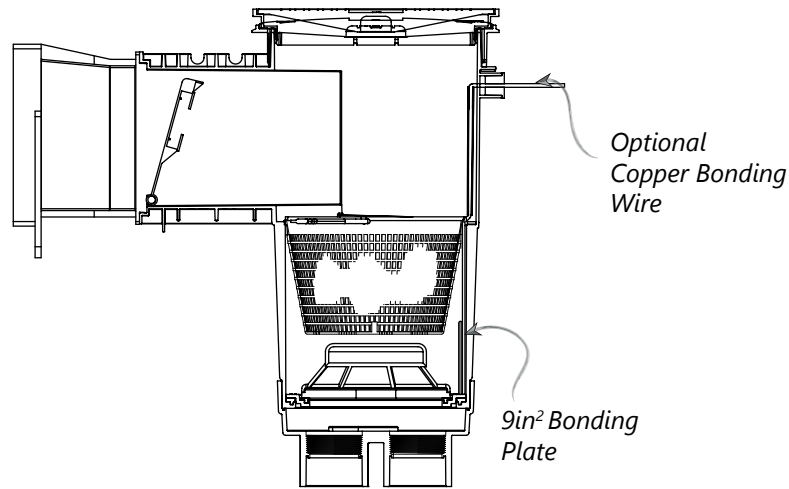


FIGURE 5: OPTIONAL WATER BONDING

Covered by one or more U.S. Patents or pending patent applications. See [c-m-p.com/patents](http://c-m-p.com/patents) for details.

# C. OPERATION

## 1. OPERATION FOR ALL SKIMMERS

- Water is pulled through the skimmer by the suction of the pump. Water flow carries floating debris into the skimmer where it is collected in the skimmer basket.
- The floating weir creates a better water flow and increases efficiency.
- The water level of the pool should be kept at least 2" above the bottom of the mouth of the skimmer to ensure proper operation.
- To adjust the skimmer flow rotate the diverter plate on the float valve or in the skimmer until the desired flow is achieved.
- If multiple skimmers are installed, rotate the diverter plate in each skimmer over the pump port to restrict and balance the flow from each skimmer.
- To vacuum the pool, remove the float valve and close the diverter plate over the main drain. Install the skimmer vacuum in the skimmer and connect to vacuum hose.
- Empty the skimmer basket as needed to maintain flow through the skimmer.
- To enhance skimming on low flow pump settings, set drain & skimmer three-way valve to divert suction to skimmer (if a valve is present).

## 2. OPERATION WITH DIVERTER PLATE

- For full flow, rotate diverter plate completely open.
- To adjust flow, rotate over the pump port until desired flow is achieved.
- To vacuum, either remove cover and basket OR insert the skimmer vacuum into skimmer on top of the basket. Screw the hose adapter into the pump port. Fill hose with water and insert over the hose adapter.

## 3. OPERATION WITH FLOAT VALVE (SOLD SEPARATELY)

- If the water level drops below the mouth of the skimmer or if the basket is clogged and no water can flow through it, the float valve will automatically close over the flow ports.
- This diverts all water flow to the pump from the main drain line and prevents possible air lock.
- When the pump is shut off or water level returns to normal, the float valve will float back to the top of the cavity, allowing normal operation to resume.

## 4. SWEEP/BRUSH POOL

- Divert all suction to the main drain by:
  - OPTION 1: Use valve to divert all water to the suction away from the skimmer.
  - OPTION 2: Hold the weir above normal operating level and allow the float to snap shut. To reset the float valve assembly, turn off the pump for 10-15 seconds. The float valve will rise to the top of the skimmer cavity.
  - OPTION 3: Remove the float valve assembly, close the diverter plate, and replace.

## 5. VACUUM POOL

- OPTION 1: Remove cover, basket and float valve assembly. Screw the hose adapter into the pump port, fill the hose with water, and insert over adapter.
- OPTION 2: Insert the skimmer vacuum into skimmer on top of the basket.

## C. OPERATION

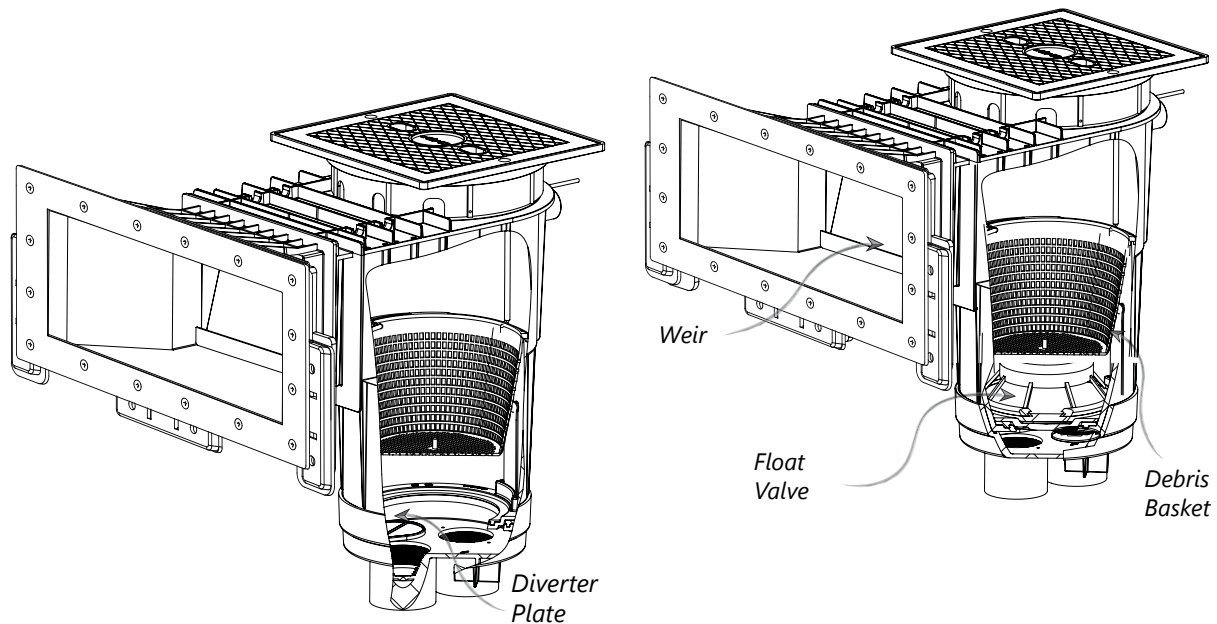


FIGURE 6: SKIMMER OPERATION COMPONENTS

### WINTERIZING

- Requirements for winter will vary depending on region - follow normal winter and freeze protection practices for your area.
- For areas that require partial drainage and/or clearing lines to prevent freeze damage:
  - Drain the pool water below the skimmer mouth.
  - Use a blower to clear the plumbing lines of water and cap or close the line with a valve to prevent freeze damage.
  - Optionally fill plumbing lines with foam rope/backer rod to protect from freeze damage.
- Use a CMP Winterizing tube to prevent freeze damage from accumulated water.

### WEIR

Periodically check weir for free operation. Replace if damaged or worn.

### STRAINER BASKET

Check strainer basket every few days for accumulated leaves, debris, etc. Empty basket as required. Reset float valve if it closed.

### FLOAT VALVE

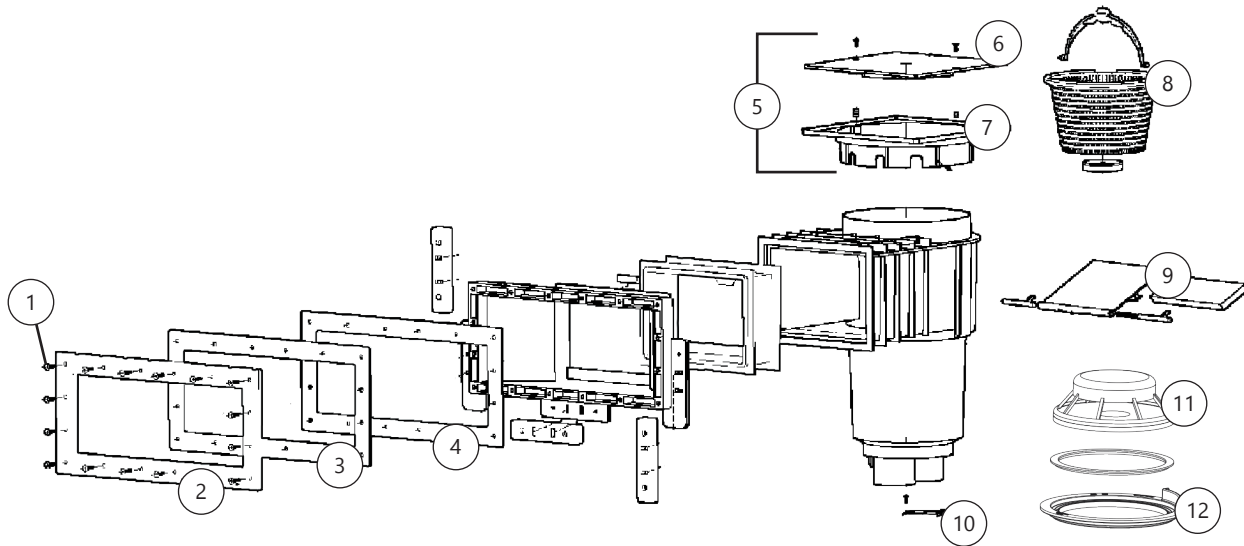
Periodically check that float valve is operating freely and is not waterlogged. If necessary, tighten trimmer plate pivot screw to maintain desired flow balance.

### WATER LEVEL

Maintain water level at least 1-1/2" to 2" above bottom of skimmer opening for proper operation. Adjust trimmer plate if necessary. Make sure set screw is tight.

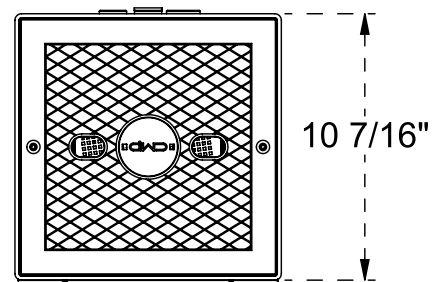
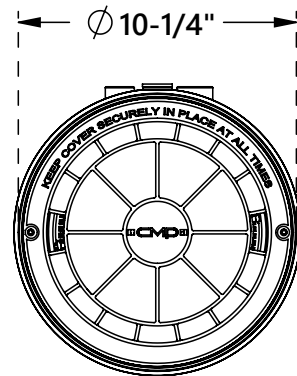
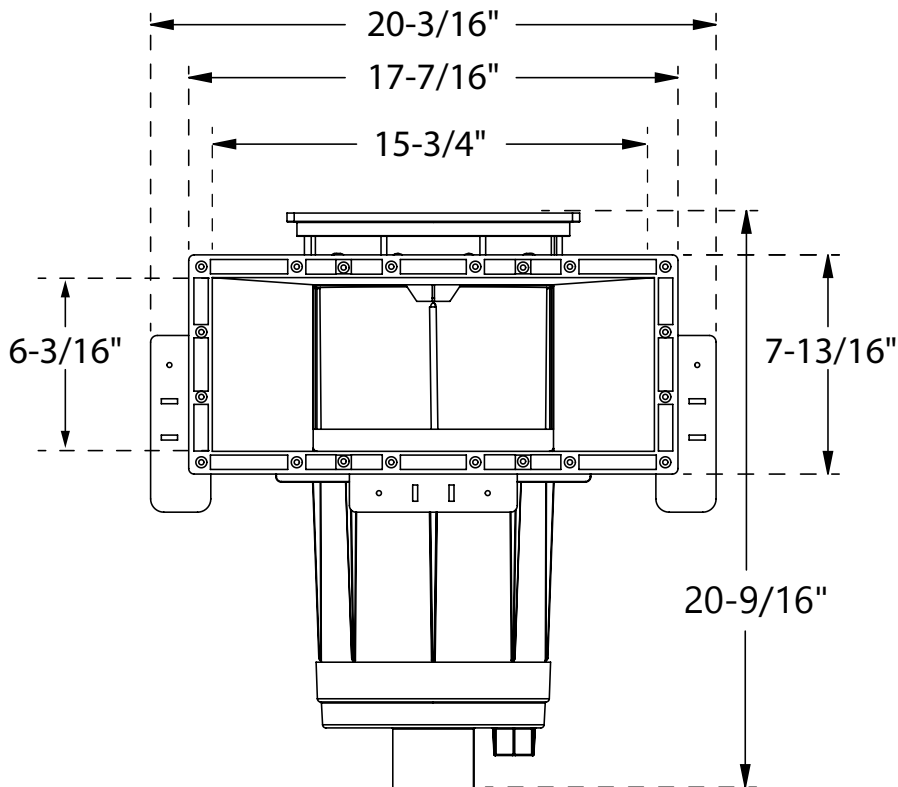
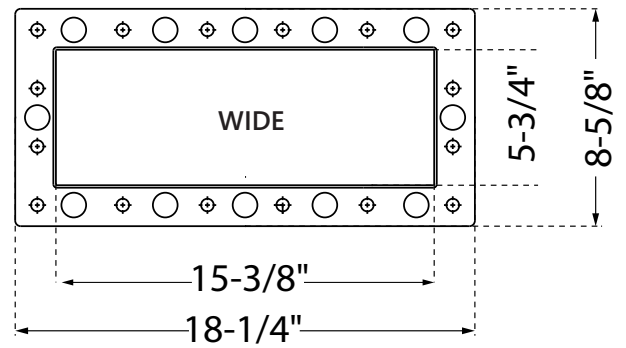
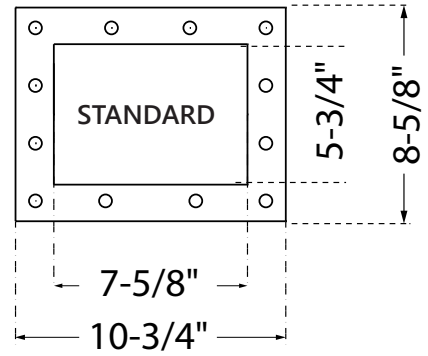
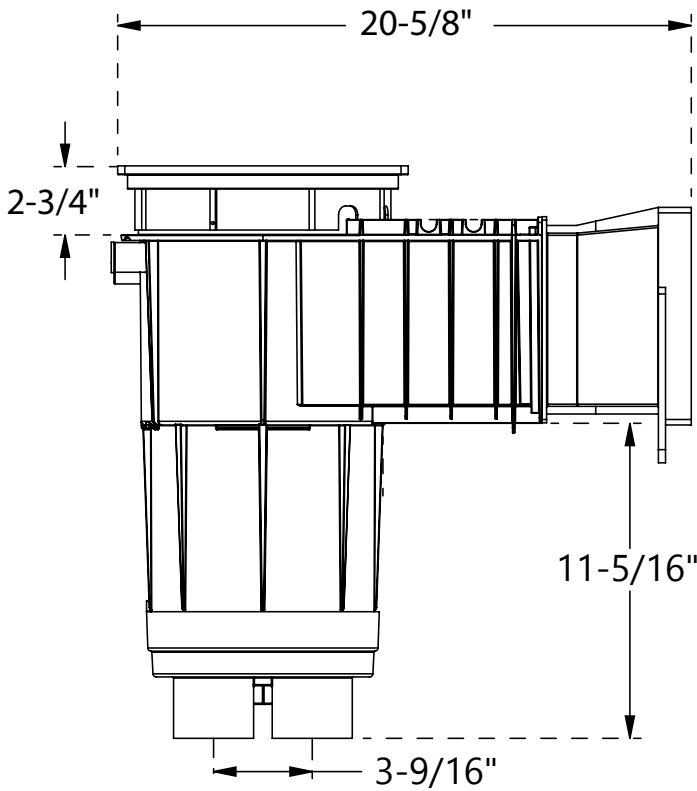


# D. PARTS



	CMP P/N	DESCRIPTION
1	61051-058-030	FACE PLATE SCREWS (12 FOR REGULAR, 16 FOR WIDE)
2	25541-000-010	FACE PLATE, WIDE MOUTH
2	25540-000-010	FACE PLATE, REGULAR MOUTH
3	25160-110-030	FRONT GASKET, WIDE MOUTH, W/O TABS
3	25160-010-060	FRONT GASKET, REGULAR MOUTH, W/O TABS
—	25160-000-130	SPACER FOR VINYL LINER SKIMMER
4	25160-110-020	BACK GASKET, WIDE MOUTH, W/ TABS
4	25160-010-050	BACK GASKET, REGULAR MOUTH, W/ TABS
5	25538-900-000	COVER & COLLAR ASSEMBLY, WHITE
6	25538-000-000	COVER, WHITE
7	25160-000-040	SKIMMER COLLAR, SQUARE, WHITE
8	25140-000-900	BASKET ASSEMBLY
9	25140-000-800	WEIR ASSEMBLY, WHITE
10	25140-000-060	DIVERTER PLATE
11	25140-000-700	FLOAT VALVE ASSY (FOR ALL STYLES)
—	25140-000-040	FLOAT VALVE GASKET (FOR ALL STYLES)
12	25140-000-003N	STOVE RING FOR FLOAT VALVE
—	25140-000-004N	STOVE RING GASKET
—	25140-500-110	REPLACEMENT WATER BOND PLATE (COPPER WIRE NOT INCLUDED)

# E. DIMENSIONS





**Record Information on this System Below & Keep for Your Records**

Installer \_\_\_\_\_

Purchased From \_\_\_\_\_

Installation Date \_\_\_\_\_

Model Number \_\_\_\_\_

Pool Size in Gallons \_\_\_\_\_

**CMP Customer Service & Tech Support**

Toll Free: 1-800-733-9060

FAX: 770-732-7115

support@c-m-p.com

**Warranty Questions**

RMA@c-m-p.com

**Support Resource & Videos Online**

c-m-p.com/resourcecenter

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