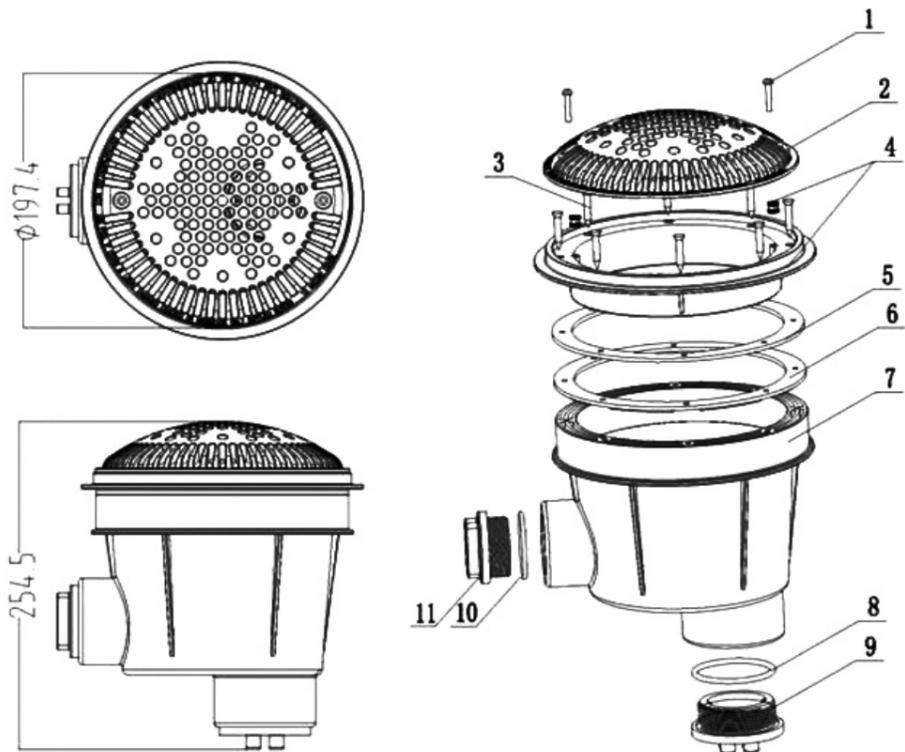


### Replacement Parts

Key No.	Part No.	Description	Qty
1	03011347	M4*25 Machine wire	2
2	01050062	Cover	1
3	03011334	M5*30 screws	8
4	03022022	Copper nut	2
4	01050061	Clamping ring	1
5	02010226	NBR circular pads	1
6	02010227	NBR circular pads	1
7	01050063	Body	1
8	02020017	O-Ring	1
9	01051029	2-inch plug	1
10	02020013	O-Ring	1
11	01051023	1.5 inch plugs	1



### EM2815V, EM2815C MAIN DRAIN OPERATING MANUAL DUAL SUBMERGED SUCTION OUTLET SET



Basic safety precautions should always be followed, including the following: Failure to follow instructions can cause severe injury and/or death. Read, then keep these instructions for future reference.

**⚠** This is the safety-alert symbol. When you see this symbol on your equipment or in this manual, look for one of the following signal words and be alert to the potential for personal injury.

**⚠ WARNING** warns about hazards that could cause serious personal injury, death or major property damage and if ignored presents a potential hazard.

**⚠ CAUTION** warns about hazards that will or can cause minor or moderate personal injury and/or property damage and if ignored presents a potential hazard. It can also make consumers aware of actions that are unpredictable and unsafe. The **NOTICE** label indicates special instructions that are important but not related to hazards.



**⚠ - WARNING - 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.**

### 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 or death due to the following entrapment hazards:



**Hair Entrapment** - Hair becomes knotted or snagged in an outlet cover.



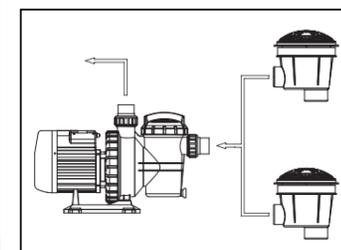
**Limb Entrapment** - A limb sucked or inserted into an opening of a circulation outlet with a broken or missing cover in the pool resulting in a mechanical bind or swelling



**Body Suction Entrapment** - Suction applied to a large portion of the body or limbs resulting in an entrapment.



**Mechanical Entrapment** - Potential for jewelry, swimsuit, hair decorations, finger, toe or knuckle to be caught in an opening of an outlet or cover.



#### 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 (the floor), must be installed a minimum of three feet (3'[.91 meter] apart, as measured from one suction center to another suction center. (See Diagram 1)

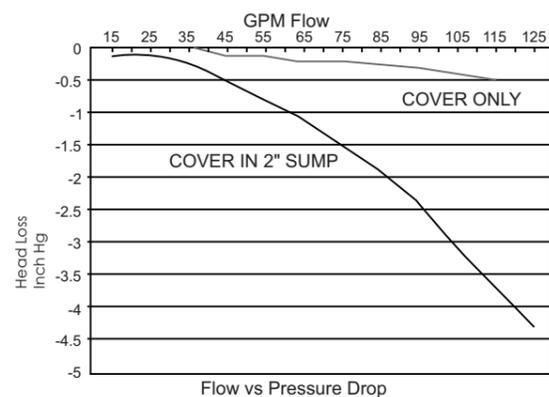
- Dual suction fittings shall be placed in such locations and distances to avoid "dual blockage" by a user.
- Dual suction fittings shall not be located on seating areas or on the backrest for such seating areas.
- The maximum system flow rate shall not exceed the maximum allowable flow rate stated on the suction fitting(per ANSI/APSP-16 2011)
- Keep suction outlet components clear of debris, such as leaves, dirt, hair, paper and other material.
- Never use a Pool or Spa if any suction outlet component is damaged, broken, cracked, missing, or not securely attached.
- Prior to each use of the swimming pool and/or spa, observe and replace damaged, broken, cracked, missing, or not securely attached suction outlet components immediately.
- Remove pressure test plugs and/or plugs used in winterization of the pool/spa from the suction outlets.
- Two or more suction outlets per pump should be installed in accordance with latest APSP Standards and CPSC guidelines. Follow all National, State, and Local codes applicable.
- Multiple layers of protection are available including installation of a vent pipe system, a gravity flow system, or a vacuum release system.
- 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.
- Do not exceed maximum flow rate stated on suction fitting.
- Only replace a pump with one with a similar flow curve, avoid a pump with a higher horsepower rating.

**RECOMMENDED SYSTEM SPECIFICATIONS:**

**ACCEPTABLE PIPE SIZE FOR MAXIMUM RECOMMENDED SYSTEM FLOW RATE PER APSP-7 (6 FT/SEC IN THE BRANCH LINE)**

Pipe Size [mm]	Flow rate GPM [Liter/Min]	Pipe Size [mm]	Flow rate GPM [Liter/Min]
1 1/2" [50]	40 [150]	2 1/2" [75]	90 [340]
2" [63]	63 [240]	3" [90]	138 [522]

**Chart 1**



**FIG 1**

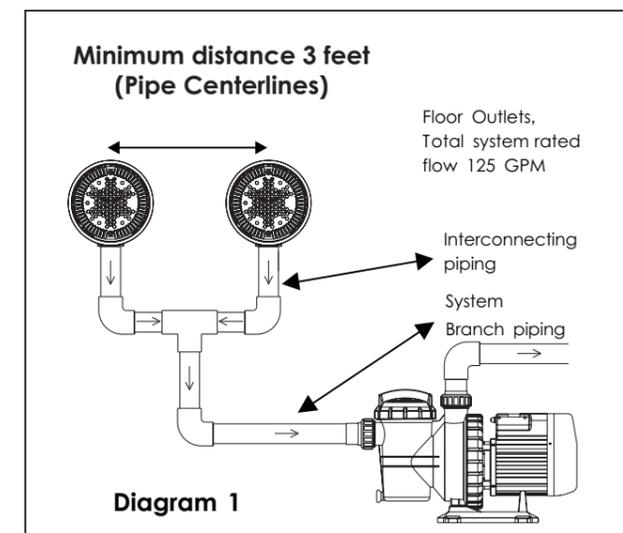
Note: 1"Hg = 1.13 Ft of Head

EM2815C and EM2815V Suction Outlet Covers are rated for Floor Only at 125 GPM

In the event of one suction outlet being blocked, the remaining suction outlets serving that system shall have a flow rating capable of the full flow of the pump(s) for the specific suction system.

**Example:** In the System shown in **Diagram 1**, two (2) "Floor Only" suction outlet covers are selected and mounted. These covers are individually rated for 125 GPM. For a desired flow rate through the pump of 100 GPM, a minimum pipe size from the **Chart 1** is selected at 3". At the desired flow of 100 GPM one cover could be partially blocked and the other suction outlet flow would be below the rated 125 GPM of the "Floor" mounted suction outlet cover. Since there are two outlets flowing in normal operation, and the allowable velocity in the interconnecting piping is only 3ft/sec, the same pipe size is required in the interconnecting piping.

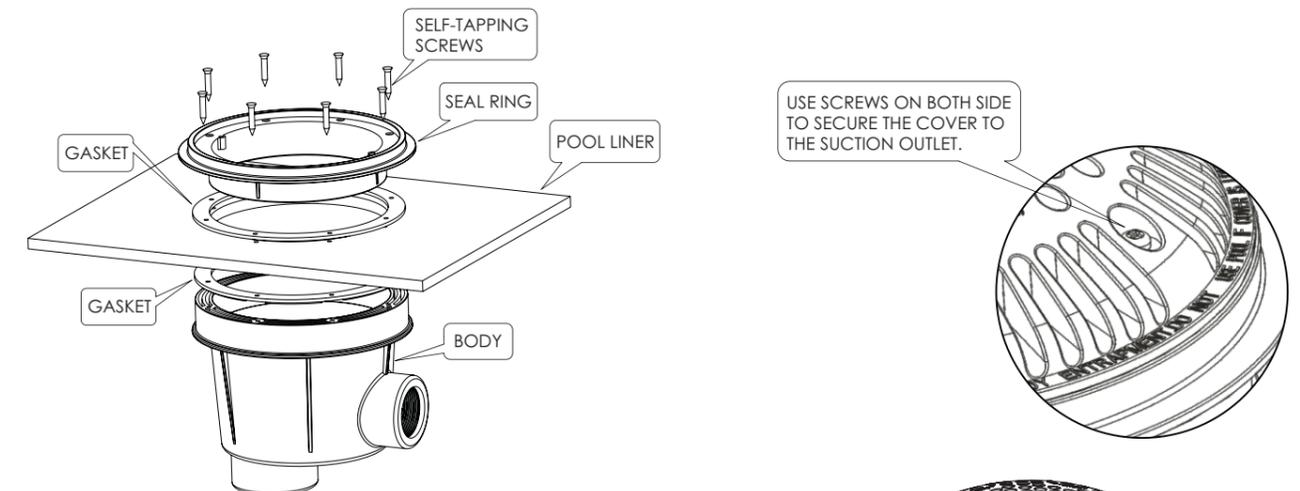
Cautionary: increasing flow by increasing pump size



**INSTALLATION INSTRUCTIONS:** - Use a #2 Philips head Screwdriver.

**NOTICE:** When installing EM2815V and EM2815C refer to ANSI/APSP-16 2011 for the proper instructions.

Suction outlets for a pool with a vinyl liner and for fiberglass pools are provided with a EM2815V mounting ring and two (2) gaskets. The gaskets should be placed such that they sandwich the liner or fiberglass, that is, one gasket on each side. The ring is attached to the suction outlet by eight (8) screws that pass through both gaskets and the liner. See diagram below.



Suction outlets for a concrete or gunite pools are designed to be plastered with the top surface flush to the pool surface. An Adjustable Collar EM2815C may be used to aid in obtaining the desired configuration.

Two screws MUST be used to secure the cover to the suction outlet. USE ONLY EMAUX GENUINE REPLACEMENT PARTS INCLUDING THE SCREWS.

