

Doheny's®

Pool Supplies FAST!

Cartridge Filters

Item #s 5166 & 2609

INSTALLATION, OPERATION & PARTS



▲ WARNING

This equipment must be installed and serviced by a qualified technician in accordance with all applicable codes and ordinances. Improper installation can create hazards which could result in property damage, serious injury or death. Improper installation will void the warranty. **The NOTICE label indicates special instructions that are important but not related to hazards.**

Notice to Installer

This manual contains important information about the installation, operation and safe use of this product. Once installation is complete, this manual must be given to the owner / operator of this equipment.

CHAPTER 1: IMPORTANT SAFETY INSTRUCTIONS

READ AND FOLLOW ALL INSTRUCTIONS

1. The installation should be carried out in accordance to the safety instructions of swimming pools and the specific instructions for each facility.
2. The user should make sure that the installation is carried out by qualified authorized persons and that these persons have first carefully read the following instructions. Incorrectly installed equipment may fail, causing severe injury or property damage.
3. The operating safety of the filter is only guaranteed if the installation and operation instructions are correctly followed.
4. To reduce the risk of injury, do not permit children to use this product.
5. Chemical spills and fumes can weaken Swimming Pool or Spa. Corrosion can cause filters and other equipment to fail, resulting in severe injury or property damage. Do not store pool chemicals near your equipment.
6. Any modification of the filter is not authorized. The supplier assumes no liability for the damage and injuries caused by unauthorized replacement parts and accessories.

CHAPTER 2: INSTALLATION INSTRUCTIONS

▲WARNING This product should be installed and serviced only by a qualified professional.

It is important to first determine where your pump and filter will be located. If above the water line, a self-priming pump must be used. Self-priming pumps have the ability to lift water from a lower level and prime automatically.

1. Position the filter next to the Swimming Pool or Spa.
2. The filter should be placed on a level concrete slab, very firm ground, or equivalent. Ensure that the ground will not subside, preventing any strain from the attached plumbing.
3. Position the filter so that the piping connections, Multi-Port Valve and winter drain is convenient and accessible for operation, servicing and winterizing.
4. Ensure that the compliance label is facing the front to allow easy identification in the case of service difficulties.
5. If practical, place pump and filter in the shade to shield it from continuous direct heat from the sun.

Plumbing

1. Use 1-1/2 inch or 2 inch piping. When making permanent connections, be sure to provide unions for easy servicing.
2. Refer to the diagrams for basic suggested valving. Ball valves are recommended where needed. While all systems vary, the main consideration is to provide the desired control of water flow from the pool to the pump and filter, and back to the pool. When the filter is located below water level, provide valves to prevent back flow of water to the filter during cleaning and routine servicing.
3. All plumbing on these cartridge filters are 1-1/2 inch or 2 inch Male and Female National Pipe Threading (NPT). Use plastic adapters when making threaded connections to the filter. Take the Teflon tape and wrap the male threads three times in a clockwise direction. Screw the male adapter into the female adapter with your hand till its tight. Don't tighten too tight as the adapters are plastic and can break.
4. Connect the pool suction plumbing between the skimmer, pool outlet, and the pump.
5. Install the pool return plumbing.
6. If pressure gauge is not installed, apply the Teflon tape to the gauge threads (just like you did to the male adapter) and carefully screw the threaded hole into the filter head.
7. A filter drain is furnished with each filter and is needed for complete filter draining. A manual air relief valve is furnished to aid in bleeding off unwanted when starting the filter. The auto air relief valve provides air removal during operation.
8. All electrical connections should be made in accordance with local codes and done by a qualified authorized person.
9. Check for joint leaks before operating.
10. Refer to pump manual for pump information.

Starting the Filter

1. Make sure filter drain is closed. Open the manual air relief valve by turning it counter-clockwise a few times and open the suction and return valves.

▲CAUTION All suction and discharge valves must be open when starting the system. Failure to do so could cause severe personal injury and/or property damage. Make sure locking ring is secure (hand tighten, only slight pressure is required).

2. Stand clear of the filter, prime and start the pump, following the manufacturer's pump manual.
3. Air trapped in the system will automatically vent to the pool and out the air relief valve. Close air relief valve as soon as air is vented by turning the valve counter-clockwise.

CHAPTER 3: FILTER MAINTENANCE

Filtering

1. Filtration starts as soon as flow is steady through the filter. As the filter cartridge removes dirt from the pool water, the accumulated dirt causes a resistance to flow. As a result, the gauge pressure will rise and the flow will decrease.
2. Clean or replace the cartridge filter element when the pressure rises 7-10psi above the starting pressure, or when flow decreases below desired rate.

Remove/Reinstall Cartridge Filter Element

1. **Removing Cartridge Filter Element:** Shut the pump off.
 2. If filter is located below water level, close valves to prevent backflow of water from the pool.
 3. Open air relief valve by turning it counter-clockwise until loose.
 4. Loose drain plug so water will drain.
 5. Open locking ring counter-clockwise and remove the filter element.
 6. Lift out the cartridge filter element and clean or replace if needed.
1. **Reinstalling Cartridge Filter Element:** Clean any collected debris from the bottom of filter body.
 2. Carefully place the cartridge filter element over the tie rod and into filter body ensuring that the cartridge sits evenly on the collector hub in bottom of filter body.
 3. Tighten locking ring by turning it clockwise. (Hand tighten only.)
 4. Now go back to the **Starting the Filter** section and follow the remaining steps.

Cleaning Cartridge Filter Element

1. The cartridge filter element can be cleaned by pressure washing with a garden hose. You can also use attachments such as a Filter Flosser Cartridge Cleaner (item #6304) or a Magic Filter Cleaning Wand (item #1734). **Note:** The cartridge is easier to clean when dry.
2. Allow the cartridge filter element to fully dry and carefully brush pleated surface areas to remove the fine dirt and particles.
3. Algae, suntan oil and body oils can form a coating on the cartridge filter element pleats which may not be thoroughly removed by hosing. To remove such materials, use **Doheny's Cartridge Cleaner** (item #4848) solution to soak the cartridge filter element in. Follow the **PRECAUTIONARY STATEMENTS** and the **DIRECTIONS FOR USE** on the back label of the cleaning solution.
5. **Note:** Having a spare cartridge filter element on hand ensures that your filter will always be ready to operate at peak efficiency.

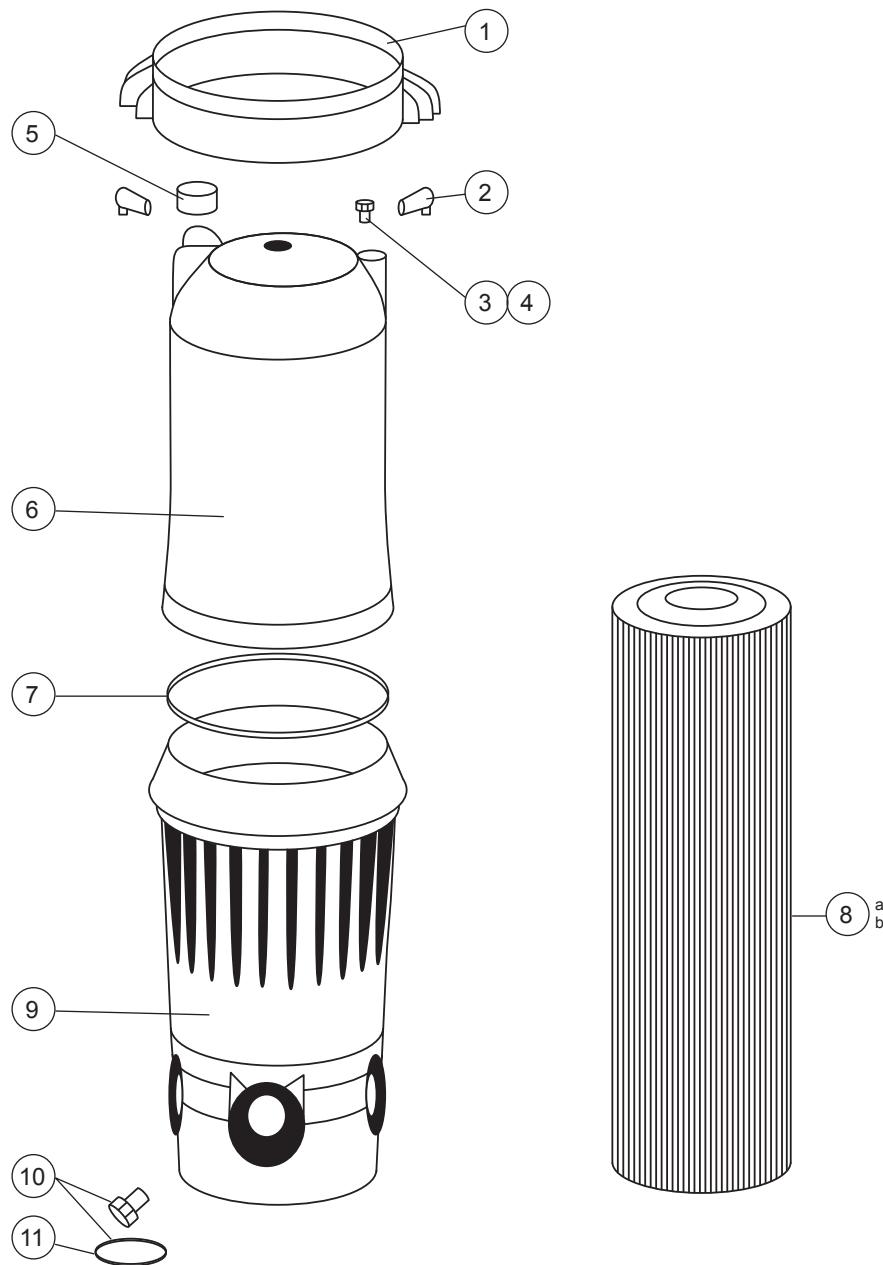
Winterizing the Filter

1. The filter should be drained and/or removed from its operating location and stored in a cool, dry place where temperatures are expected to fall below freezing.
2. Remove and clean the cartridge filter element by following the Remove/Install and Cleaning sections of this manual. Reinstall cartridge filter element in the filter tank.
3. Tighten locking ring by turning clockwise by hand.

Filter Specifications

MODEL NO.	5166	5215
EFFECTIVE FILTRATION AREA	150FT ²	200FT ²
DESIGN-FLOW RATE	130GPM	150GPM
MAXIMUM WORKING PRESSURE	50PSI 3.5BAR	50PSI 3.5BAR

Inground Cartridge Filter Item # 5166 & 5215



REF No.	PART NUMBER	DESCRIPTION	No. REQ'D
1	47310303080	Locking Ring	1
2	47310304080	Locking Ring Latch	1
3	48860105	Drain Plug with Gasket	1
4	5432002080	Gasket	1
5	5024002000	Pressure Gauge	1
6	47310302080	Seal Cover	1
7	5431093080	O-Ring	1
8a	5022035000	Cartridge Element for 5215	1
8b	5022037000	Cartridge Element for 5166	1
9	473103010804	Body	1
10	9102607080	Plug with O-Ring 2 inch	1
11	5431030080	O-Ring	1