

## Cartridge Filter Installation and Operation Manual

### **WARNING**

Before installing this product, read and follow all warning notices and instructions that accompany this filter. Failure to follow warning notices and instructions may result in property damage, severe injury, or death.

**FOR YOUR SAFETY** - This product must be installed and serviced by authorized personnel, qualified in pool/spa installation. Improper installation and/or operation can create unwanted high pressure which can cause serious injury, property damage, or death. Improper installation and/or operation will void the warranty.

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## Equipment Information Record

Initial Pressure Gauge Reading  
(with clean filter) \_\_\_\_\_

Pump Model \_\_\_\_\_ Horsepower \_\_\_\_\_

Filter Model \_\_\_\_\_ Serial Number \_\_\_\_\_

Notes: \_\_\_\_\_

\_\_\_\_\_

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## SECTION 1. Safety Information

### 1A. Important Safety Warning

**⚠ WARNING - NEVER OPERATE THE FILTER SYSTEM AT MORE THAN 50 PSI**



THIS FILTER OPERATES UNDER HIGH PRESSURE. WHEN ANY PART OF THE CIRCULATING SYSTEM, i.e., FILTER, PUMP, VALVE(S), CLAMP, ETC. IS SERVICED, AIR CAN ENTER THE SYSTEM AND BECOME PRESSURIZED WHEN THE SYSTEM IS RESTARTED. PRESSURIZED AIR CAN CAUSE THE FILTER LID TO BE BLOWN OFF. TO AVOID THIS POTENTIAL HAZARD, FOLLOW ALL OF THE INSTRUCTIONS IN THIS MANUAL.

### 1B. General Safety Instructions



#### **ATTENTION INSTALLER:**

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

1. Before repositioning valve(s) and before beginning the assembly, disassembly, or adjustment of the clamp, or any other service of the circulating system; (A) **turn the pump off** and shut off any automatic controls to ensure the system is not inadvertently started during servicing; (B) open the pressure release valve; (C) wait until all pressure is relieved.
2. Whenever installing the filter clamp **follow Section 6D "Clamp Installation"** of this manual.
3. Once service on the circulating system is complete, **follow Section 4 "Start-up and Operation"** of this manual.
4. Maintain circulation system properly. Replace worn or damaged parts immediately.
5. Be sure that the filter is properly mounted and positioned according to these installation instructions.
6. Do not pressure test above 50 PSI. Pressure testing must be done by a trained pool professional.
7. **SAVE THESE INSTRUCTIONS.**

## SECTION 2. General Information

### 2A. Introduction

This manual contains information for the proper installation and operation of the Jandy™ Cartridge Filters. Procedures in this manual must be followed exactly. To obtain additional copies of this manual contact us at 707-776-8200, ext. 237. For address information see back cover.

### 2B. Description

Cartridge filters do not require sand or diatomaceous earth as the filter medium. Instead, the filter, contains a filter cartridge element which is easily removed for cleaning or replacement.

Dirty water flows into the filter tank and is directed through the filter cartridge. The debris is collected in the filter and the clean water flows through the lower piping, at the bottom of the filter, and into the lower bulkhead. Clean water is returned through the piping system to the pool.

As debris collects in the filter, the pressure will rise and water flow to the pool will diminish. The filter will eventually become so plugged with debris that it will be necessary to remove the filter cartridge and clean it with soap and water.

**Note that a filter removes dirt and other suspended particles but does not sanitize the pool. Pool water must be sanitized and chemically balanced for clear water.** The filtration system should be designed to meet local health codes. As a minimum, the system should turnover the total volume of water in your pool at least two to four times in a 24 hour period.

### 2C. General Requirements

1. For best overall performance locate the system as close as possible to the pool.
2. The filter should be located on a level concrete slab so that the orientation of the valve outlets and the pressure gauge are convenient and accessible for the installation and operation of the unit.
3. Provide for protection from the weather.
4. If fitting a chlorinator and/or any other device into the filtration plumbing circuit, great care must be exercised to ensure that the appliance is installed in accordance with the Manufacturer's Instructions and any Standards that may exist.
5. Use barrel unions to convert each component of the water conditioning system for future servicing. All Teledyne Laars/Jandy filters come with these type of fittings.
6. **The maximum working pressure for this filter is 50 psi. Never subject the filter to pressure exceeding 50 psi, even when conducting hydrostatic pressure tests. Pressures above 50 psi can cause the lid to be blown off.**

When performing hydrostatic pressure tests or when testing for external leaks of the completed filtration and plumbing system, ensure that the maximum pressure the filtration system is subjected to **does not exceed the maximum working pressure of any of the components within the system.**

### 2D. Specifications and Dimensions

1. See Tables 1, 2, and 3.

Table 1. Cartridge Filter Specifications

Model No.	CT 50	CT 75	CT100	C 200	C 300	C 400
Filter Area (ft <sup>2</sup> )	50	75	100	200	300	400
Max. Flow (gpm)	50	70	100	172	172	172
Max. Working Pressure (psi)	50	50	50	50	50	50

Table 2. Dimensions for Jandy™ Cartridge Filters

Model #	A	B	C	D
C200	33½"	24¼"	3¾"	20.0"
C300	41¼"	24¼"	3¾"	20.0"
C400	49¼"	24¼"	3¾"	20.0"

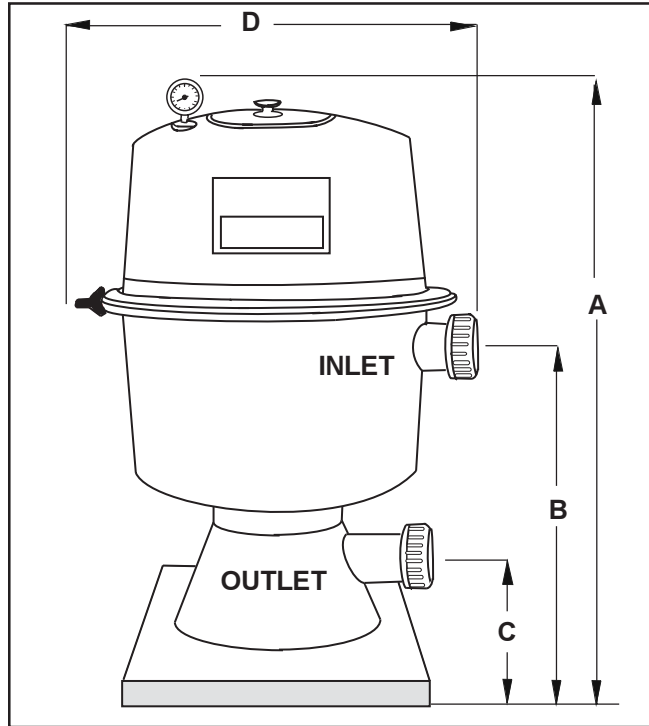


Figure 1- Dimensions, Jandy Cartridge C Series

Table 3. Dimensions for Jandy™ Cartridge Filter

Model #	A	B	C
CT 50	24¼"	2¾"	13½"
CT 75	29"	2¾"	13½"
CT 100	39"	2¾"	13½"

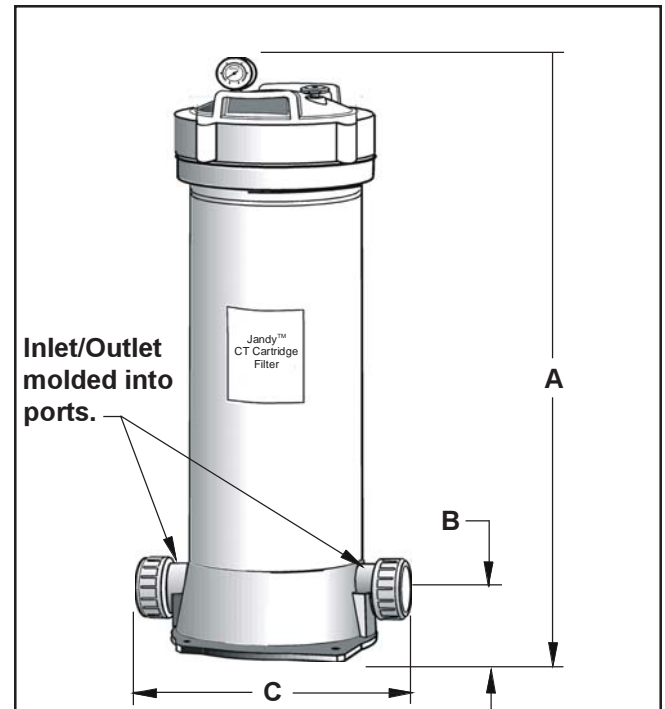


Figure 2- Dimensions, Cartridge CT Series

## SECTION 3. Installation Instructions

### 3A. Filter Preparation

1. Check carton for any damage due to rough handling in shipment. If carton or any filter components are damaged, notify carrier immediately.
2. Carefully remove the accessory package and the filter tank from the carton.
3. A visual inspection of all parts should be made now. See parts list on page 9.
4. Mount the pressure gauge to the top of the filter tank in the threaded hole marked "NPT pressure gauge".
5. Place the o-ring onto the pressure release valve and install the valve onto the top of the filter.

### 3B. Filter Location

1. Select a well-drained area, one that does not flood when it rains. Damp, non-ventilated areas should be avoided.
2. Provide solid mounting for the filter and pump system. Install system on a concrete slab or solid concrete blocks to avoid risk of settlement. Do not use sand to level the filter as the sand will wash away. Filter systems can weigh up to 400 lbs.
3. Install electrical controls at least five (5) feet from the filter. This will allow enough room to stand away from the filter during start-up.
4. **Applies to C series only:** Allow sufficient clearance around the filter to permit a visual inspection of the clamp ring (see Fig. 3).

5. Allow sufficient space above the filter to remove the filter top and filter element for cleaning and servicing.
6. Position the filter to safely direct water drainage. Align the pressure release valve to safely direct purged air or water.
7. If the entire system is to be located above water level it can be raised 2.5 ft., without affecting the pump efficiency. A check valve is recommended on the suction line to the pump.

**⚠ WARNING**

Water discharged from an improperly positioned filter or valve can create an electrical hazard and can damage property.

**⚠ Caution**

The pressure gauge is the primary indicator of how the filter is operating. Maintain your pressure gauge in good working order.

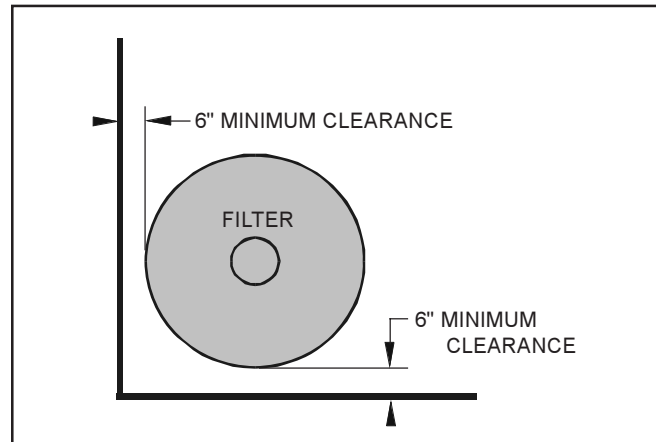


Figure 3- Filter Location

### 3C. Filter Installation

1. This filter operates under pressure. When clamped properly and operated without air in the water system, this filter will operate in a safe manner.
2. If doubt exists as to the pressure which the system will be subjected to, install an ASME approved automatic Pressure Relief Valve or Pressure Regulator in the circulation system for the lowest working pressure of any of the components in the system.

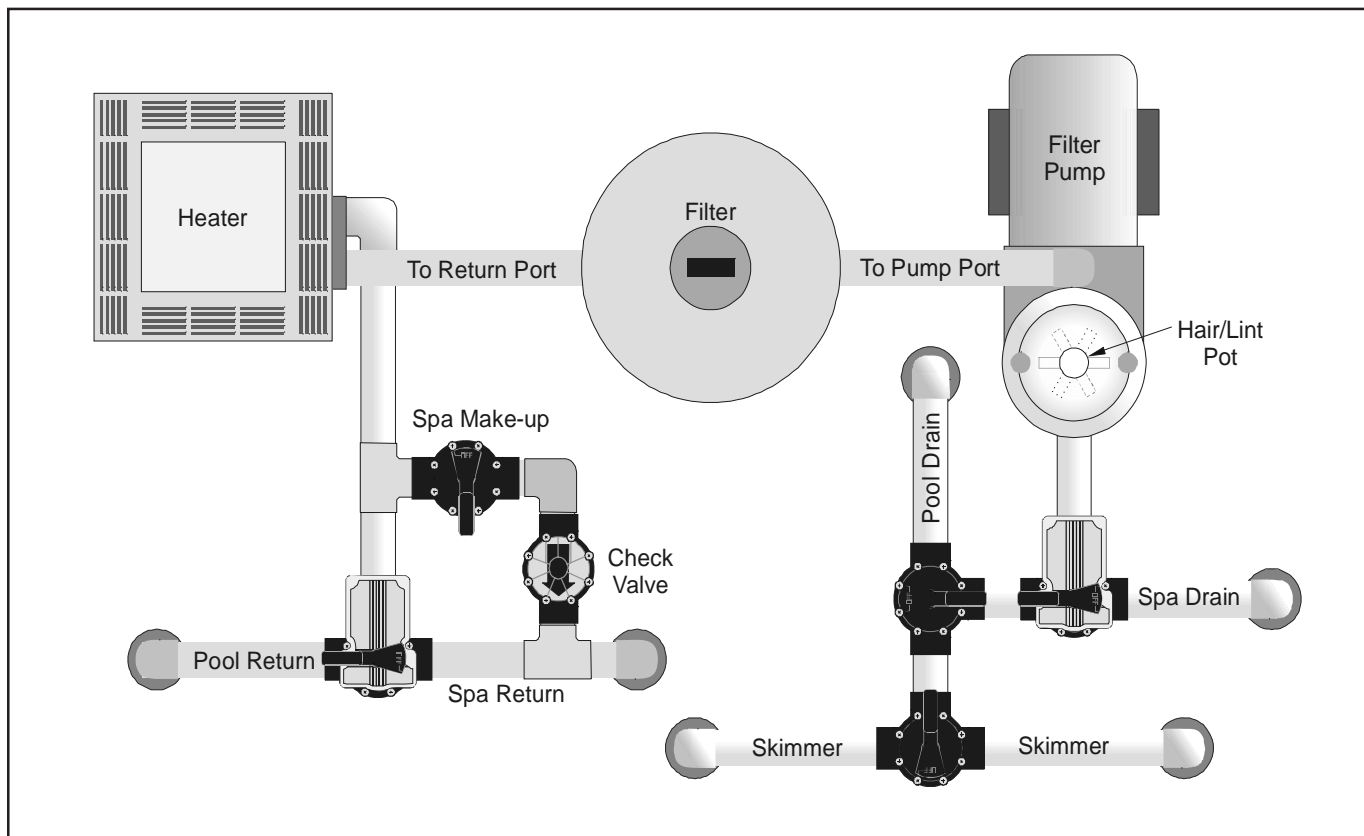


Figure 4- Basic Pool/Spa Combination Plumbing

3. Place the filter on the concrete pad, lined up with the inlet/outlet pipes (see Fig. 4).
4. To reduce pressure losses, 2" (minimum) piping is recommended for plumbing the system.
5. For best efficiency use the fewest possible fittings. This will prevent a restriction in the water flow.
6. Make all plumbing connections in accordance with local plumbing and building codes. Filter connections are provided with an O-ring seal. To avoid damage to the O-rings, use only a silicone base lubricant on the O-rings. **Do not use pipe joint compound, glue or solvent on bulkhead connections.**
7. Keep piping tight and free of leaks. Pump suction line leaks may cause air to be entrapped in filter tank or loss of prime at the pump. Pump discharge line leaks may show up as dampness or jets of water.
8. Support the inlet/outlet pipes independently to prevent any undue strains on the filter valve.
9. Connect the pipes using the unions supplied with the filter. **Do not use teflon tape or pipe dope on any unions.** Assemble the unions dry and hand tighten.

**⚠ WARNING**

**NEVER** operate the filter system at more than 50 pounds per square inch pressure. Operating the filter system in excess of 50 psi can cause the filter lid to be blown off, which can cause death, serious personal injury or property damage.

**⚠ WARNING**

**NEVER** start pump while standing within five (5) feet of the filter. Starting the pump while there is pressurized air in the system can cause the filter lid to be blown off, which can cause death, serious personal injury or property damage.

**⚠ Caution**

**DO NOT** operate filter at water temperatures above 120° F (65.5° C).

## SECTION 4. Start-Up and Operation

### 4A. New Pool and Seasonal Start-Up

1. Turn the pump **off**. Shut off all parts of the circulating system and fill the Hair/Lint Pot with water. Replace the lid.
2. Open pressure release valve on the filter a few turns (do not remove).

3. Stand clear of the filter, start the pump and circulate the water. When water starts to come out of the pressure release valve, close the valve.

### 4B. Normal Operation

1. Turn the pump **off** and shut off all parts of the circulating system.
2. Fill the Hair/Lint Pot, on the pump, with water and replace the lid.
3. Open filter pressure release valve, stand clear of the filter and turn the pump **on**.
4. When a steady stream of water comes from the pressure release valve, close the valve.
5. With the filter/pump operating, record the initial pressure gauge reading in the Owner's Manual. When reading is 10 to 12 psi above the initial reading it is time to clean the filter.

## SECTION 5. Disassembly/ Assembly

**⚠ WARNING**

**NEVER** attempt to assemble, disassemble or adjust the filter when there is any pressure in the filter.

### 5A. Filter Disassembly/Assembly

1. Turn **off** the pump and disconnect the power.
2. Open pressure release valve on top of the filter tank to release all pressure from inside the tank and system. Close any isolation valves.
3. **C series;** loosen the tank clamp band and remove. **CT series;** Unscrew the ring at the top of the filter and remove.
5. Pull the cartridge out of the filter tank and clean the cartridge using the instructions in section 6C.
6. Using a new cartridge, or the clean old one, put the cartridge back into the filter tank.
7. **C series;** Inspect the O-ring for cracks or wear marks. Place the O-ring and the stainless steel band back onto the filter tank bottom.
8. **C series;** Place the filter tank top onto the filter tank bottom.
9. **C series;** - See Section 6D for clamp installation. **CT series;** Place the ring back onto the filter and screw to hand tight.



## SECTION 6. Maintenance

### 6A. General Maintenance

1. Wash outside of filter with a mild detergent and water. Rinse off with a hose. Do not use solvents to clean the filter, solvents will damage the plastic components of the filter.
2. Check pressure during operation at least once a week.
3. Remove any debris from the skimmer basket and hair/lint pot on pump.
4. Check pump and filter for any leaks. If any leaks develop, turn **off** the pump and call a qualified pool service technician.

### 6B. Pressure Gauge

#### Caution

The pressure gauge is the primary indicator of how the filter is operating. Maintain your pressure gauge in good working order.

1. During operation of the filtration system, check the pressure gauge for air or water leaks at least once a week.
2. Keep the pressure gauge in good working order. If you suspect a problem with the gauge, Teledyne Laars/Jandy Products recommends you call a qualified service technician to do any work on the filter/pump system.

### 6C. Cleaning the Filter Cartridge

1. With the pump **off**, open the pressure release valve on top of the filter.
2. If the filter is installed below pool level, close isolation valves to avoid flooding.
3. Open filter tank and remove cartridge element, place it upright in an area suitable for washing.
4. Use a garden hose and nozzle, wash each pleat of the element.

**Note:** Algae, suntan oil, calcium and body oils can form coatings on filter element which may not be removed by normal hosing. To remove such materials, soak the element in de-greaser and then a de-scaler. Your local pool shop will be able to recommend suitable products.

5. Replace the cartridge back into the filter tank.  
**C series;** Inspect the O-ring for cracks or wear marks. Place the O-ring and the stainless steel band back onto the filter tank bottom. Replace the top of the tank. Place the filter clamp band around the filter and tighten. Hand tight only.  
**CTL series;** Place the top ring back onto the filter and screw to hand tight.
6. Reopen the isolation valves if they were closed.
7. Stand clear of the filter, start the pump and circulate the water until water sprays out of the pressure release knob. Close the pressure release valve. The filter is now back in operating mode.

### 6D. Clamp Installation, C Series Only

#### WARNING

Follow these instructions carefully. Improper clamp installation can result in personal injury.

1. Ensure the pump is **off** and shut off all parts of the circulating system.
2. **Never attempt to assemble, disassemble or adjust the filter clamp when there is any pressure in the filter.**
3. Be certain the O-ring and stainless steel band are in position in the lower tank half. Press the filter lid over the lower half sandwiching the O-ring in-between.
4. Holding the ends of the filter clamp apart, position the hinged segment of the filter clamp over both upper and lower tank flanges. Bring the ends of the filter clamp together, while inserting the T-bolt into the tightening knob (see Fig. 5). Partially hand tighten and recheck filter clamp for proper seating on tank flanges by visually inspecting around the entire circumference of the filter clamp band.

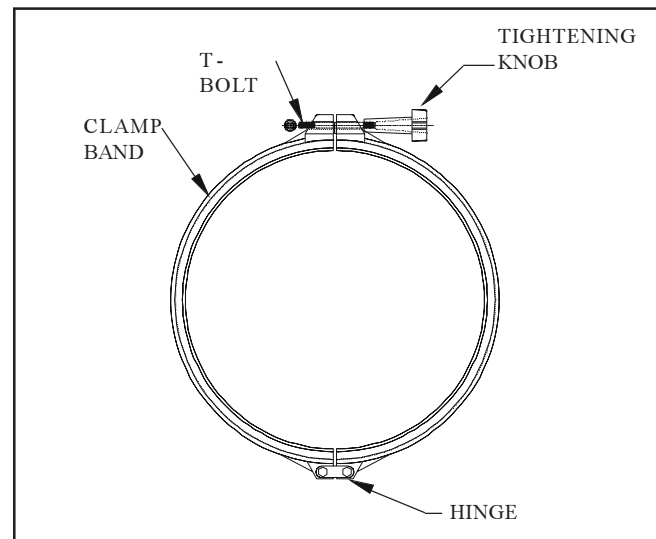


Figure 5- C Series Clamp Band



5. To finish hand tightening the knob, lightly tap around the outside of the filter clamp with a rubber mallet. This will ensure proper uniform loading and sealing of the filter clamp.
6. Check the filter clamp at least once a month.

## SECTION 7. Winterizing

### 7A. Winterizing

1. Turn **off** the pump and circuit breakers.
2. Open pressure release valve on top of the filter.
3. Loosen the union at the base of the filter to ensure that the tank is empty.

4. Drain system piping of all water.
5. Cover the system with a tarpaulin or plastic sheet to protect from the weather.

## SECTION 8. Troubleshooting

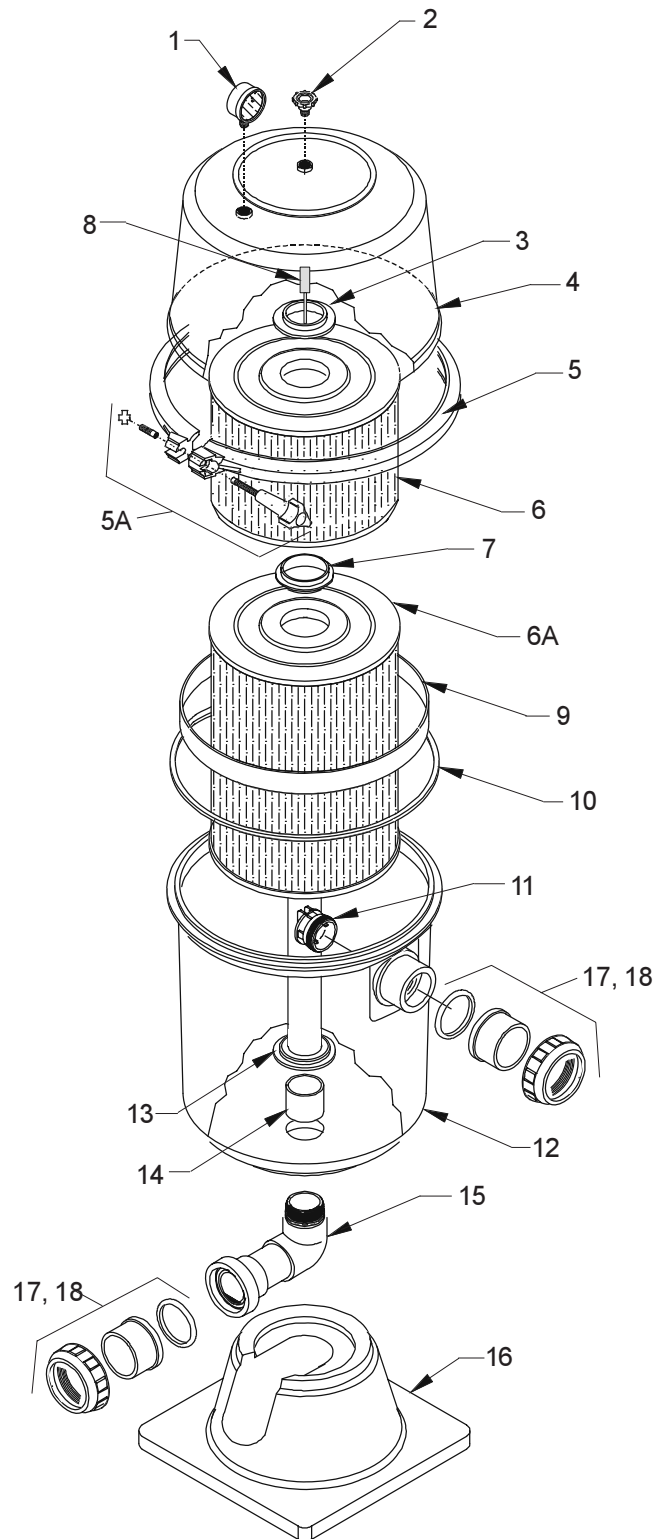
### 8A. Troubleshooting

1. Teledyne Laars/Jandy Products recommends that you call a qualified service technician to do any work on the filter/pump system. For technical service call 707-776-8200, ext. 260.

Troubleshooting Guide	
<u>Fault Symptom</u>	<u>Possible Problems/Solutions</u>
Water is not clear.	Insufficient disinfectant level. Incorrect pool chemistry. Heavy bathing and/or dirt loads. Incorrect flow. Insufficient running times. (Increase pump run time.) Filter is dirty. (Clean per instructions.) Hole in filter element
Low water flow.	Check strainer baskets for debris. Check for air leaks on suction side. Check for restrictions or blockage in either suction or return lines. Filter needs to be cleaned or replaced. Pool water level too low. Pump not primed. Pump impeller vanes blocked. Strainer baskets not being used and/or not being cleaned regularly. Pump operating under speed (low voltage).
Short filter cycles.	Presence of algae, check disinfectant content. Check pH and total alkalinity. Pump output exceeds design flow rate of filter, check pump performance. Ineffective cleaning, check conditions, replace filter cartridge
High pressure on start-up.	Small eyeball fitting in Pool/Spa. Partially closed valve on return line. Too large of pump, check selection.
Dirt returns to pool.	Hole in filter cartridge, replace filter cartridge. Worn o-ring seal inside filter, replace o-ring.

## SECTION 9. Exploded Views and Parts List

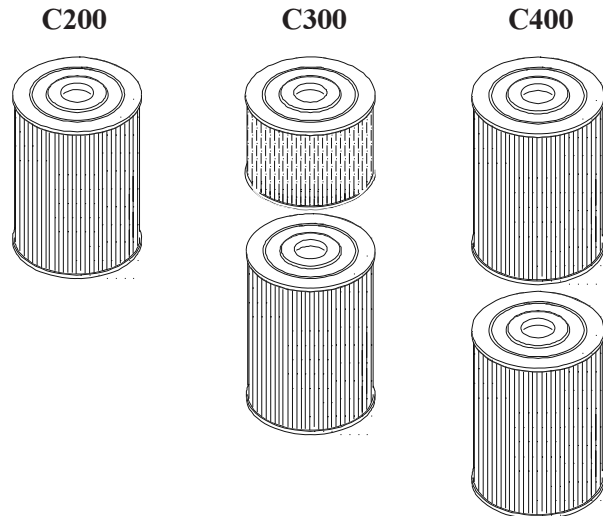
### 9A. Jandy™ Cartridge Filter, C Series



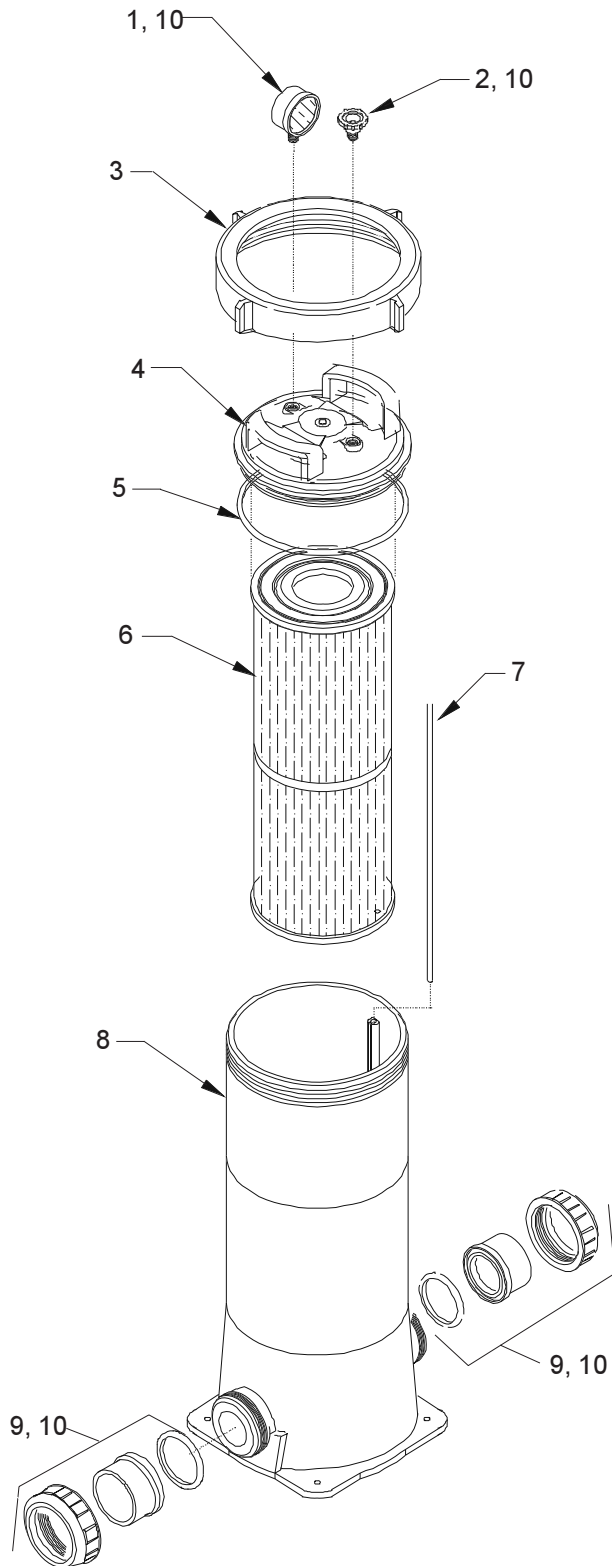
Key No.	Description	Size	ORDER PART NO:
1	Pressure Gauge w/o-ring	All	R0349300
2	Pressure Relief Valve w/o-ring	All	R0349200
3	Top Cap, Cartridge	All	R0352000
4	Tank Top	C200	R0352101
4	Tank Top	C300	R0352102
4	Tank Top	C400	R0352103
C	Clamp Ring Assembly w/knob, bolt, lug	All	R0352200
5A	Knob, Bolt, & Lug (for Clamp Ring)	All	R0352300
6	Filter Cartridge, 100 sq. ft. <sup>1</sup>	C300	R0342000
6A	Filter Cartridge, 200 sq. ft. <sup>1</sup>	C200,400	R0341900
7	Center Cap, Cartridge	All	R0352400
8	Breather Tube Assembly	All	R0352500
9	Inner Band, Stainless Steel	All	R0350000
10	Tank O-ring	All	R0350600
11	Inlet Baffle	All	R0352600
12	Tank Bottom	All	R0352702
13	Bottom Cap, Cartridge	All	R0352800
14	Cartridge Element Extension	All	R0352900
15	90° Elbow Assembly	All	R0353000
16	Tank Base	All	R0353100
17	Half Unions (2)	C Models	R0339500
18	Accessory Bag, w/Half Unions(2), Pressure Gauge, Pressure Relief Valve, Instructions	C Models	R0355600

**Notes:**

1. C200 requires one (1) 200 sq. ft. cartridge.  
C300 requires one (1) 100 sq. ft. cartridge and one (1) 200 sq. ft. cartridge.  
C400 requires two (2) 200 sq. ft. cartridge.  
Replacement cartridges do not include top, center or bottom caps.



### 9B. Jandy™ Cartridge Filter, CT Series



Key No.	Description	Size	ORDER PART NO:
1	Pressure Gauge w/o-ring	All	R0349300
2	Pressure Relief Valve w/o-ring	All	R0349200
3	Locking Ring	All	R0353200
4	Tank Top	All	R0353300
5	O-ring, Tank Top	All	R0353400
6	Filter Cartridge, 50 sq. ft.	CT50	R0342101
6	Filter Cartridge, 75 sq. ft.	CT75	R0342102
6	Filter Cartridge, 100 sq. ft.	CT100	R0342103
6	Filter Cartridge, 120 sq. ft.	CT120	R0342104
7	Breather Tube	All	R0353500
8	Tank Body	All	
9	Coupling Nuts (2)	All	R0355300
10	Accessory Bag, w/Half Unions(2) Pressure Gauge, Pressure Relief Valve, Instructions	All	R0355500

## LIMITED WARRANTY

Thank you for purchasing Jandy® pool and spa products. Jandy Pool Products, Inc. warrants all parts to be free from manufacturing defects in materials and workmanship for a period of one year from the date of retail purchase, with the following exceptions:

- AquaLink® RS units installed with Jandy Surge Protection Kits will be covered for two years.
- NeverLube® valves are warranted for the life of pool and/or spa on which they were originally installed.
- AquaPure™ Electronic Chlorine Generator Electrolytic Cells carry a 5 year limited warranty on a prorated basis.

This warranty is limited to the first retail purchaser, is not transferable, and does not apply to products that have been moved from their original installation sites. The liability of Jandy Pool Products, Inc. shall not exceed the repair or replacement of defective parts and does not include any costs for labor to remove and reinstall the defective part, transportation to or from the factory, and any other materials required to make the repair. This warranty does not cover failures or malfunctions resulting from the following:

1. Failure to properly install, operate or maintain the product(s) in accordance with our published Installation, Operation and Maintenance Manuals provided with the product(s).
2. The workmanship of any installer of the product(s).
3. Not maintaining a proper chemical balance in your pool and/or spa [pH level between 7.2 and 7.8, Total Alkalinity (TA) between 80 to 120 ppm, Total Dissolved Solids (TDS) less than 2000 not including salt ppm].
4. Abuse, alteration, accident, fire, flood, lightning, rodents, insects, negligence or acts of God.
5. Scaling, freezing, or other conditions causing inadequate water circulation.
6. Operating the product(s) at water flow rates outside the published minimum and maximum specifications.
7. Use of non-factory authorized parts or accessories in conjunction with the product(s).
8. Chemical contamination of combustion air or improper use of sanitizing chemicals, such as introducing sanitizing chemicals upstream of the heater and cleaner hose or through the skimmer.
9. Overheating; incorrect wire runs; improper electrical supply; collateral damage caused by failure of O-Rings, DE grids, or cartridge elements; or damage caused by running the pump with insufficient quantities of water.

### LIMITATION OF LIABILITY:

This is the only warranty given by Jandy Pool Products, Inc. No one is authorized to make any other warranties on behalf of Jandy Pool Products, Inc. **THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY. JANDY POOL PRODUCTS, INC. EXPRESSLY DISCLAIMS AND EXCLUDES ANY LIABILITY FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT OR PUNITIVE DAMAGES FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY.** This warranty gives you specific legal rights. You may also have other rights which vary by state or province.

### WARRANTY CLAIMS:

For prompt warranty consideration, contact your dealer and provide the following information: proof of purchase, model number, serial number and date of installation. The installer will contact the factory for instructions regarding the claim and to determine the location of the nearest designated service center. If the dealer is not available, you can locate a service center in your area by visiting [www.jandy.com](http://www.jandy.com) or by calling our technical support department at (707) 776-8200 extension 260. All returned parts must have a Returned Material Authorization number to be evaluated under the terms of this warranty.

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