



Making a Splash!

8400JF, 3.1JF, & 5.1JF Aerating Fountain

Owners Manual



CONTENTS

I. Safety Instructions	2
II. General Owner's Instructions.....	3
III. 8400JF Parts Included, Tools Needed, & Unit Specs.....	4
IV. 3.1JF Parts Included, Tools Needed, & Unit Specs.....	5
V. 8400JF & 3.1JF Assembly & Installation Instructions....	6-8
VI. 5.1JF Parts Included, Tools Needed, & Unit Specs.....	9
VII. 5.1JF Assembly & Installation Instructions.....	10-12
VIII. Nozzles & Pattern Sizes.....	13
IX. C-85 Control Panel Instructions (For 8400JF & 3.1JF).....	14
X. C-95 Control Panel Instructions (For 5.1JF).....	15
XI. Maintenance Recommendations.....	16
XII. Warranty, Warranty Claim, & Return Policy.....	17-18
XIII. 8400JF Replacement Parts & Assembly Diagram.....	19
XIV. 3.1JF Replacement Parts & Assembly Diagram.....	20
XV. 5.1JF Replacement Parts & Assembly Diagram.....	21
XVI. Troubleshooting Tips.....	22
XVII. Customer Repair Form.....	23
XVIII. Warranty Registration Information.....	24



Kasco Marine, Inc.

800 Deere Rd.

Prescott, WI 54021

Phone (715) 262-4488 * Fax (715) 262-4487

www.KascoMarine.com * sales@kascomarine.com



Made in the USA

Rev. 5/2/07

Thanks!

We at Kasco Marine, Inc. would like to both thank and congratulate you on your purchase of the JF model aerating fountain. We appreciate you choosing Kasco and for your purchase. Your decision to purchase Kasco's 8400JF, 3.1JF, or 5.1JF Aerating Fountain will not disappoint you. The JF Series Aerating Fountain will be a great addition to your body of water. It will help improve the water quality by adding much needed oxygen and circulation. It will also enhance the aesthetics of the pond or lake with beautiful fountain patterns. The lighting package (if purchased) will illuminate your fountain for beauty day and night. We thank you for choosing Kasco for your fountain needs and want you to be completely satisfied with your

IMPORTANT SAFETY & HANDLING INSTRUCTIONS

Please read and follow these extremely important safety and handling instructions for your Kasco equipment. Following these instructions will help ensure your safety and the quality performance of your equipment.

- Under **NO** circumstances should anyone enter the water with the electrical equipment plugged in and/or in operation. All Kasco equipment is ETL approved to UL and CSA standards for safety in water and all fountain models included control panels with GFI protection. However, it is **NEVER** recommended to enter the water with the equipment in operation.
- Caution should be used when dealing with any electrical and/or moving equipment.
- **NEVER** run the unit out of water. It will damage the seals and create a dangerous situation for the operator.
- Extreme caution should be used around water, especially **cold water**, such as in Spring, Fall, and Winter. Cold water poses a hazard in and of itself.
- **NEVER** lift or drag the fountain by the power or light cord. If you need to pull the unit to the side of the pond, use the anchoring ropes.
- Do not use waders in deep ponds/lakes or ponds/lakes with drop-offs, drastic slopes, or soft bottom material.
- Do not use boats that tip easily for fountain installation, such as a canoe, and follow all boating safety rules and regulations, including wearing a PFD (Personal Flotation Device).
- The fountain is supplied with an internal grounding conductor and a grounding-type attachment plug. To reduce the risk of electrical shock, be certain that the fountain is plugged/wired into the C-85 Control Panel (240/208V for 8400JF and 3.1JF) or C-95 Control Panel (240/208V for 5.1JF) supplied by Kasco and that the panel is wired properly. The GFCI breakers should be tested upon each installation and every month thereafter to ensure proper operation.
- This control panel must be installed a minimum of 5ft(3m in Canada) from the inside wall of the pond, unless separated from the body of water by a fence wall, or other permanent barrier that will make the unit inaccessible to persons in the water.

INSPECT THE SHIPMENT

Immediately inspect your Kasco Fountain shipment for any visible damages. Also cross reference the parts supplied with the Parts Included sheet to check for shortages. Shortages should be reported immediately to your Kasco Marine distributor or representative and damages reported to your carrier and Kasco Marine.

CAUTION

WARNING: *Under NO circumstances should anyone enter the water with the unit in operation.*

Always operate the unit in the water and keep people and objects clear of the propeller. Do not lift or pull the unit by the electrical cord. Always use extreme caution around electrical equipment and water situations.

ASSEMBLY & INSTALLATION

Please see the proper Assembly and Installation Instructions enclosed in this manual. Each is specific for your model and size of Fountain. **Note:** Use a nylon tie to help keep the power cords for the unit and lights free of the propeller by tying each cord to either side of the float. If you have a light kit, make sure that the unit cord is tied to one side of the float and the light cord to the other for balance. **Note:** It is extremely important to test the GFI breaker in the control panel upon each installation/reinstallation of the unit to ensure proper functioning.

WARRANTY

Kasco Fountains are the result of over 35 years of design and engineering. Kasco products are built to withstand the toughest conditions. Kasco Marine backs each 8400JF, 3.1JF, and 5.1JF Aerating Fountain with a 2 Year Warranty. This warranty covers any and all manufacturers defects within 2 years from the date of purchase (See Warranty, Warranty Claim, & Return Policy on pages 17 & 18).

Please register your Fountain online at:

www.kascomarine.com/general_info_warranty_registration.htm .

USE AND OPERATION

Kasco Fountains are designed and engineered for continuous duty, such as on fish farms or other aquaculture applications, or on-demand use, as needed in a recreational water feature.

During flotation operation, the water is pulled from 360^o around the unit and from below the unit. The water is pulled upward and thrust through the flotation collar into the air.

Your Kasco Marine Fountain is ready for immediate use (after installation). The motor and ball bearings are submerged in oil and no further lubrication is needed. ***Make sure to keep the motor housing clean from hard water deposits and/or algae. (See Maintenance Recommendations on page 16.)***

It is extremely important that proper and sufficient voltage (240/208V) is supplied to the Fountain motor. Each 240V Fountain is supplied with a UL and CSA approved GFCB Protected Control Panel. The Fountain is to be plugged into the external outlet on the C-85 or hardwired into the C-95 panel. The panel must have 4 wire service (L1, L2, neutral, and ground) installed by a qualified electrician. (See Instructions on pages 14 and 15).

Kasco Fountains are lightweight, energy efficient, and easy to install and operate. We strive to produce products that exceed customer expectations. We hope you enjoy your Kasco Fountain.

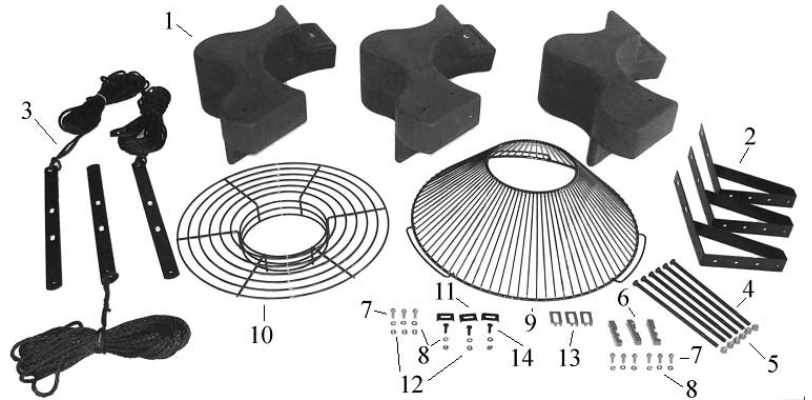
8400JF PARTS INCLUDED

A. 8400JF Aerating Fountain (Unit with cord or unit with Disconnect) (1)

A1. Cord in separate box (1) (depending on size of cord)

B. Float in separate box (1) (Diagram to Right)

1. 3 Float Sections (1)
2. Top Float Bracket (3)
3. Bottom Float Bracket w/ 50' rope (3)
4. 9" x 3/8" Black Coated Bolt (6)
5. 3/8" Lock Nut (6)
6. Unit Mounting Bracket (3)
7. 1/4" x 3/4" Bolt (9)
8. 1/4" Lock Washer (12)
9. Bottom Screen (1)
10. Top Screen (1)
11. Top Screen Clip (3)
12. 1/4" Nut (6)
13. Bottom Screen Clip (3)
14. 1/4-20 x 3/4" Brass Screw (3)



C. C-85 Control Panel in separate box (1)

D. Set of Five Interchangeable Nozzles (5) (Diagram to Right)

1. #6 x 1/2" Phillip Pan Head Self Tapping Screw (3)
2. 3/8" x 4" bolt (1)
3. Linden Nozzle (1)
4. Redwood Nozzle Y Insert (comes installed in #7)(1)
5. Juniper Nozzle (1)
6. Willow Nozzle (1)
7. Redwood & Spruce Nozzle (1)



NOTE: Extra hardware may be included.

TOOLS & SUPPLIES NEEDED

- A. Anchors or stakes for installing unit (3)
- B. Philips head screw driver for mounting C-85
- C. 240V Electrical Supply near pond on a post with room for mounting the C-85
- D. Three 12" galvanized pipe for weighting ropes (optional)
- G. #10 x 1" long or longer screw(s) for mounting the C-85 (4)
- H. 7/16" Socket & Wrench (1)
- I. 7/16" Wrench (1)
- J. 9/16" Socket & Wrench (1)
- K. 9/16" Wrench or adjustable crescent wrench (1)
- L. Flat head screw driver (1)

8400JF Power Cords

Length	Voltage	Gauge	Cord Shipped Separately
50	240	14	No
100	240	12	Yes
150	240	12	Yes
200	240	12	Yes
250	240	12	Yes

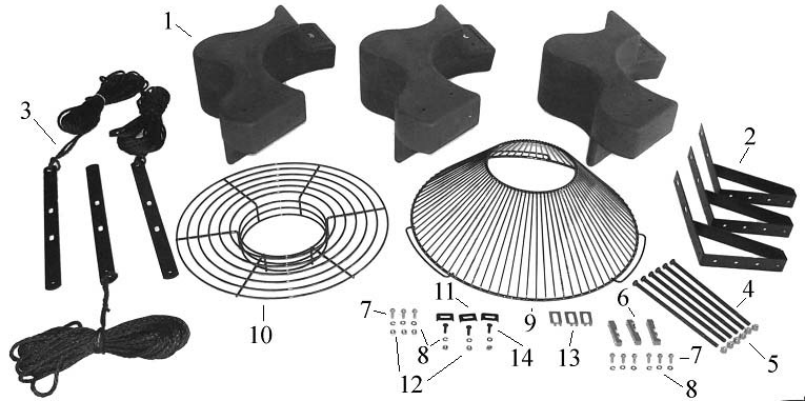
UNIT SPECS.

Model	Voltage	Operating Amps	Lock Rotor Amps	Control Box Connection	Fountain Connection
8400JF	208-240	10.5 @ 240V	40 @ 240V	C-85 Hardwired at shore	Plug or Hard-Wire in C-85

3.1JF PARTS INCLUDED

- A. 3.1JF Aerating Fountain (Unit with cord or unit with Disconnect) (1)
- A1. Cord in separate box (1) (depending on size of cord)
- B. Float in separate box (1) (Diagram to Right) **Note: If you purchased 6 lights, refer to 5.1JF Float Assembly.**

- 1. 3 Float Sections (1)
- 2. Top Float Bracket (3)
- 3. Bottom Float Bracket w/ 50' rope (3)
- 4. 9" x 3/8" Black Coated Bolt (6)
- 5. 3/8" Lock Nut (6)
- 6. Unit Mounting Bracket (3)
- 7. 1/4" x 3/4" Bolt (9)
- 8. 1/4" Lock Washer (12)
- 9. Bottom Screen (1)
- 10. Top Screen (1)
- 11. Top Screen Clip (3)
- 12. 1/4" Nut (6)
- 13. Bottom Screen Clip (3)
- 14. 1/4-20 x 3/4" Brass Screw (3)



- C. C-85 Control Panel in separate box (1)
- D. Set of Five Interchangeable Nozzles (5) (Diagram to Right)
 - 1. #6 x 1/2" Phillip Pan Head Self Tapping Screw (3)
 - 2. 3/8" x 4" bolt (1)
 - 3. Linden Nozzle (1)
 - 4. Redwood Nozzle Y Insert (comes installed in #7)(1)
 - 5. Juniper Nozzle (1)
 - 6. Willow Nozzle (1)
 - 7. Redwood & Spruce Nozzle (1)



NOTE: Extra hardware may be included.

TOOLS & SUPPLIES NEEDED

- A. Anchors or stakes for installing unit (3)
- B. Philips head screw driver for mounting C-85
- C. 240V Electrical Supply near pond on a post with room for mounting the C-85
- D. Three 12" galvanized pipe for weighting ropes (optional)
- G. #10 x 1" long or longer screw(s) for mounting the C-85 (4)
- H. 7/16" Socket & Wrench (1)
- I. 7/16" Wrench (1)
- J. 9/16" Socket & Wrench (1)
- K. 9/16" Wrench or adjustable crescent wrench (1)
- L. Flat head screw driver (1)

3.1JF Power Cords

Length	Voltage	Gauge	Cord Shipped Separately
50	240	14	No
100	240	12	Yes
150	240	12	Yes
200	240	10	Yes
250	240	10	Yes

UNIT SPECS.

Model	Voltage	Operating Amps	Lock Rotor Amps	Control Box Connection	Fountain Connection
3.1JF	208-240	13.4 @ 240V	61 @ 240V	C-85 Hardwired at shore	Plug or Hard-Wire in C-85

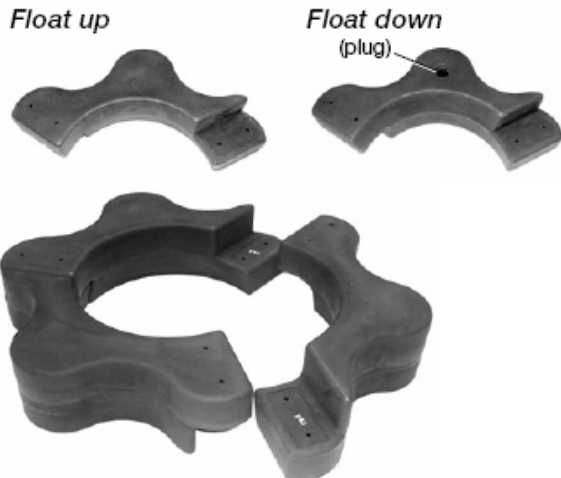
84000JF & 3.1JF ASSEMBLY AND INSTALLATION INSTRUCTIONS

STEP ONE

Remove all contents from package and place on a clean, flat surface. Inspect the shipment for any damages. If damages are found, immediately notify your carrier and your Kasco Marine, Inc. representative. Next, cross reference the parts included in the shipment with the Parts Included sheet in this manual on page 4 and 5. Make sure you have all the parts needed. If any shortages are found, contact your Kasco representative immediately.

STEP TWO

Arrange the three Float Sections (Part #B1) upright (plug on bottom) so the overlap of one section aligns with the next section and loosely push the three sections together to form a continuous ring.



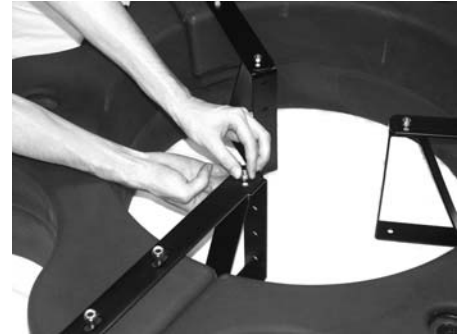
STEP THREE

Position one Top Float Bracket (Part #B2) so that the bolt holes in the bracket align with the bolt holes in the two adjoining float sections and insert two 9" Coated Bolts (Part #B4) through the assembly. This may require some minor repositioning of the float sections as you push the bolt all the way through. *Do not force the bolt through.* Repeat for the remaining two joints.



STEP FOUR

Turn the assembly upside down and place the Bottom Float Brackets (Part #B3) over the bolts, the ends of which should now be extending through the assembly. Loosely install the six 3/8" Lock Nuts (Part #B5) on the ends of the bolts (do not tighten yet). Connect the Top and Bottom Float Brackets using three 1/4" x 3/4" Bolts (Part #B7) with three 1/4" Lock Washers (Part #B8) and three 1/4" Nuts (Part #B12) and tighten using the 7/16" wrench and socket.



STEP FIVE

Stand the assembly on its side and center the Top Screen (Part #B10) inside the three Top Float Brackets. Attach the screen by spanning each Top Screen Clip (Part #B11) across the two innermost rings on the screen and the hole in the float bracket. Insert the 3/4" Brass Screws (Part #B14) and attach with 1/4" Lock Washers and 1/4" Nuts to secure the screen to the float assembly.



STEP SIX

Return the assembly to the upside down position and place the motor assembly (Stainless Steel can side up, black pump down) in the center of the float. Attach the motor to the float using the Unit Mounting Brackets (Part #B6). The notch in the center of the Unit Mounting Brackets should be positioned over the top ring of the cage and should be attached to the float bracket using the two middle holes of the float bracket. Tighten using the 1/4" x 3/4" Bolts with 1/4" Lock Washers using the 7/16" socket and wrench. (See pictures on next page) *Note: If you have trouble positioning the Unit Mounting Bracket between the Cage and Fountain Housing, you can use a screwdriver to gently pry open enough space.*



Pictures correspond with Step Six on previous page

STEP SEVEN

Position the Bottom Screen (Part #B9) over the float so the motor housing (can) passes through the large hole in the center of the screen. Remove the center three 3/8" Lock Nuts from the 9" Bolts and place the Bottom Screen Clips (Part #B13) over the bolts as shown. The power cord can be slid under the bottom screen between the float and screen where two float sections come together before the 3/8" Lock Nuts are replaced. Replace the three inside Lock Nuts and tighten all 3/8" Lock Nuts using the 9/16" wrench and socket.



Note: Extra hardware may be included

STEP EIGHT

Return the unit to its upright position and select a nozzle (See page 13 for Nozzle and Pattern Options). Insert the Shaft Bolt (Part #D2) into the Nozzle Head so it fits snugly into the molded socket for those nozzles that use the bolt. Install the Nozzle by threading it into the inner cone of the pump. Make sure to tighten the Nozzle all the way down.



To install the Redwood nozzle, make sure the Y Insert (Part #D4) is installed and seated properly into the Nozzle Housing (Part #D7). Push the nozzle down over the cone assembly (it may require light taps with a rubber mallet to seat properly). Next, use the 3 Self Tapping Screws (Part #D1) provided in the 3 holes on the nozzle and tighten the screws into the cone assembly. Once you feel resistance, two more turns will be sufficient. To install the Spruce nozzle, follow the same steps, but do not install the Y Insert.



STEP NINE

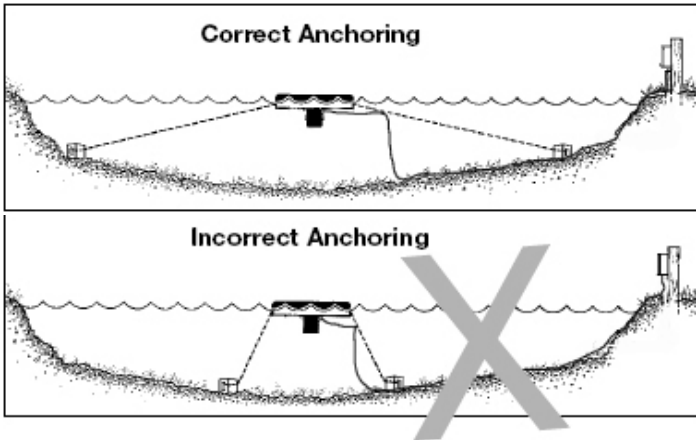
On power cord lengths of 100 feet or longer with the watertight Quick Disconnect, the power cord is shipped separately. It should now be attached to the stub cord by lining up the male and female halves of the disconnect and hand tightening the blue collar. On these cords, the Additional Strain Relief should be attached to one of the lower float brackets as pictured. If there is not Strain Relief, use the Nylon Cable Tie provided to secure the cord to a rope to prevent damage by the propeller. Double check the Quick Disconnect to make sure the threaded collar has not come loose in shipping before placing in the water. If installing a new Quick Disconnect, please refer to Quick Disconnect instructions. Also, at this time, lights can be installed if purchased.



STEP TEN

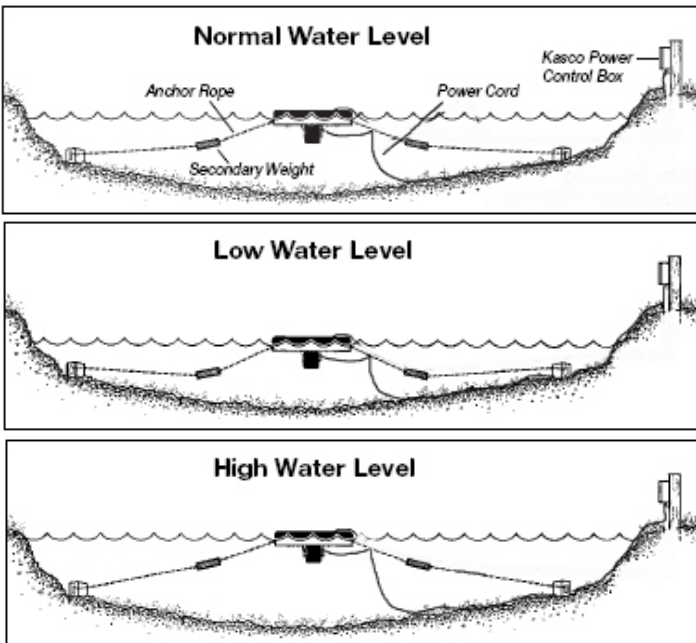
Use the ropes to position the Fountain in the desired location in the pond/lake. Anchor the ropes or secure them to the shoreline so the ropes are free of slack, but not tight. To prevent twisting of the unit due to torque, you should place the anchor at least 3 feet from the float for each foot of depth (Ex. A 6 foot deep pond would require an anchor 18 feet horizontally from the float.)

For ease of removal, you may choose to keep at least one anchor within reach from shore, just below the water's surface.



STEP ELEVEN (ALTERNATE INSTALLATION)

In ponds where the water level fluctuates significantly, you may need to suspend a small weight (12" of 1" galvanized pipe works well) at the mid-point of the rope to take up any slack as the water level drops. The weight should be light enough so the Fountain can rise as the water level rises. This can also help hide ropes by sinking them further below the surface.



STEP TWELVE

Install the C-85 control panel on the post with the power supply. Use the #10 x 1" long or longer screws and the screw placements on the control panel to secure the panel to the post. **NOTE:** The control panel must be hung upright in order to be waterproof.

STEP THIRTEEN

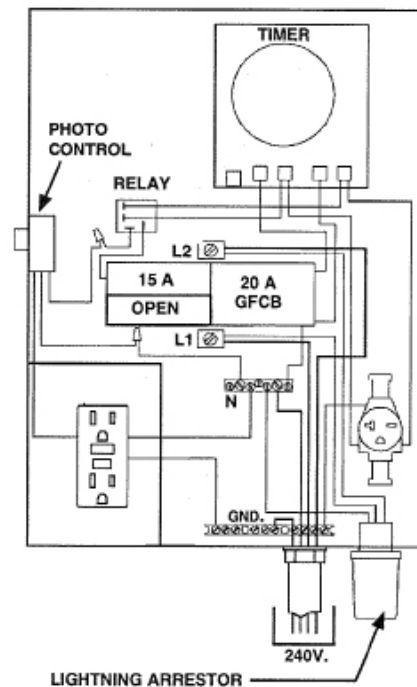
Set Timer in the control panel to desired ON and OFF times per the Instructions on page 14.

STEP FOURTEEN

Hardwire the 240V/208V, 4 wire service into the C-85 control panel per the Instructions on page 14 of this manual. The aerating fountain can either be plugged into the 240V outlet on the right hand side of the C-85 panel or hardwired into the panel.

PLUG: Insert the plug on the unit into the outlet and securely close the outlet cover until it snaps into place. **Test the GFCB with the test button now and every 30 days.**

HARDWIRE: The bottom of the C-85 control panel has several knock-outs for hardwiring the unit. Remove a knock-out that is not used for the main power as well as the internal metal barrier plate in the panel. Remove the plug from the power cord on the unit and strip back 12" of cord jacket to expose the wires (2 hot and 1 ground). With the main power disconnected, connect the bare wire (stripped) portion of the **GREEN** ground wire to the grounding strip (GND) at the bottom of the panel and secure tightly. Locate and remove the plastic shield under the yellow timer (black or clear depending on model). Under shield, lug #2 and #4 are LOAD lugs. Loosen the screws and insert the bare wire (stripped) portion of the **WHITE** wire into #2 and the bare wire (stripped) portion of the **BLACK** wire into #4. Tighten both lugs securely. Replace metal barrier plate in panel. **Test the GFCB with the test button now and every 30 days.** If lights are installed, they can now be installed per Instructions included with the lights.



Once completed, power can be restored to the panel. **ENJOY YOUR NEW KASCO AERATING FOUNTAIN!**

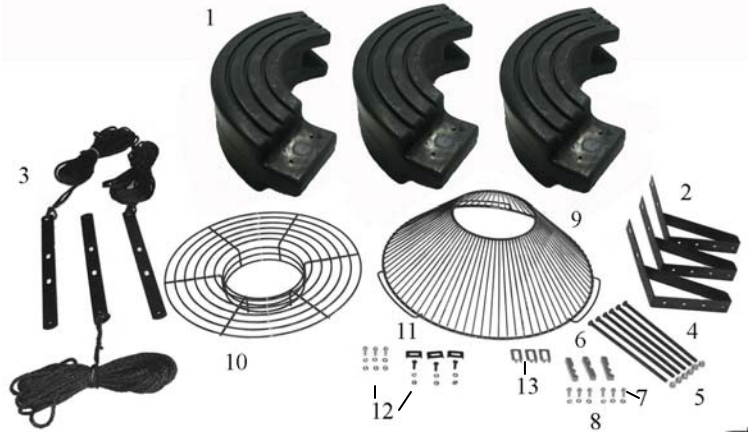
5.1JF PARTS INCLUDED

A. 5.1JF Aerating Fountain (Unit with cord or unit with Disconnect) (1)

A1. Cord in separate box (1) (depending on size of cord)

B. Float in separate box (1) (Diagram to Right)

1. 3 Float Sections (1)
2. Top Float Bracket (3)
3. Bottom Float Bracket w/ 50' rope (3)
4. 9" x 3/8" Black Coated Bolt (6)
5. 3/8" Lock Nut (6)
6. Unit Mounting Bracket (3)
7. 1/4" x 3/4" Bolt (9)
8. 1/4" Lock Washer (12)
9. Bottom Screen (1)
10. Top Screen (1)
11. Top Screen Clip (3)
12. 1/4" Nut (6)
13. Bottom Screen Clip (3)
14. 1/4-20 x 3/4" Brass Screw (3)



C. C-95 Control Panel in separate box (1)

D. Set of Five Interchangeable Nozzles (5) (Diagram to Right)

1. #6 x 1/2" Phillip Pan Head Self Tapping Screw (3)
2. 3/8" x 4" Bolt (1)
3. Linden Nozzle (1)
4. Redwood Nozzle Y Insert (comes installed in #7)(1)
5. Juniper Nozzle (1)
6. Willow Nozzle (1)
7. Redwood & Spruce Nozzle (1)
8. Sequoia Nozzle
9. 3/8" x 2.5" Bolt (1)



NOTE: Extra hardware may be included.

TOOLS & SUPPLIES NEEDED

- A. Anchors or stakes for installing unit (3)
- B. Philips head screw driver for mounting C-95
- C. 240V Electrical Supply near pond on a post with room for mounting the C-95
- D. Three 12" galvanized pipe for weighting ropes (optional)
- G. #10 x 1" long or longer screw(s) for mounting the C-95 (4)
- H. 7/16" Socket & Wrench (1)
- I. 7/16" Wrench (1)
- J. 9/16" Socket & Wrench (1)
- K. 9/16" Wrench or adjustable crescent wrench (1)
- L. Flat head screw driver (1)

5.1JF Power Cords

Length	Voltage	Gauge	Cord Shipped Separately
100	240	12	Yes
150	240	10	Yes
200	240	10	Yes
250	240	8	Yes

* No plugs on all 5.1JF Cords. Unit must be hardwired into the C-95.

UNIT SPECS.

Model	Voltage	Operating Amps	Lock Rotor Amps	Control Box Connection	Fountain Connection
5.1JF	208-240	20 @ 240V	97 @ 240V	C-95 Hardwired at shore	Hardwire in C-95

5.1JF ASSEMBLY AND INSTALLATION INSTRUCTIONS

STEP ONE

Remove all contents from package and place on a clean, flat surface. Inspect the shipment for any damages. If damages are found, immediately notify your carrier and your Kasco Marine, Inc. representative. Next, cross reference the parts included in the shipment with the Parts Included sheet in this manual on page 9. Make sure you have all the parts needed. If any shortages are found, contact your Kasco representative immediately.

STEP TWO

Arrange the three Float Sections (Part #B1) upright (plug on bottom) so the overlap of one section aligns with the next section and loosely push the three sections together to form a continuous ring.



STEP THREE

Position one Top Float Bracket (Part #B2) so that the bolt holes in the bracket align with the bolt holes in the two adjoining float sections and insert two 9" Coated Bolts (Part #B4) through the assembly. This may require some minor repositioning of the float sections as you push the bolt all the way through. *Do not force the bolt through.* Repeat for the remaining two joints.



STEP FOUR

Turn the assembly upside down and place the Bottom Float Brackets (Part #B3) over the bolts, the ends of which should now be extending through the assembly. Loosely install the six 3/8" Lock Nuts (Part #B5) on the ends of the bolts (do not tighten yet). Connect the Top and Bottom Float Brackets using three 1/4" x 3/4" Bolts (Part #B7) with three 1/4" Lock Washers (Part #B8) and three 1/4" Nuts (Part #B12) and tighten using the 7/16" wrench and socket.



STEP FIVE

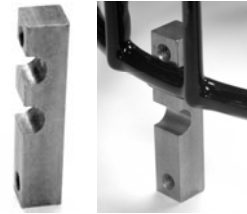
Stand the assembly on its side and center the Top Screen (Part #B10) inside the three Top Float Brackets. Attach the screen by spanning each Top Screen Clip (Part #B11) across the two innermost rings on the screen and the hole in the float bracket. Insert the 3/4" Brass Screws (Part #B14) and attach with 1/4" Lock Washers and 1/4" Nuts to secure the screen to the float assembly.



STEP SIX

Return the assembly to the upside down position and place the motor assembly (Stainless Steel can side up, black pump down) in the center of the float. Attach the motor to the float using the Unit Mounting Brackets (Part #B6). The lower notch of the Unit Mounting Bracket should be positioned over the top ring of the cage and should be attached to the Float Bracket using the two lowest holes (closest to the Lower Bracket) of the Top Float Bracket. Tighten using the 1/4" x 3/4" Bolts with 1/4" Lock Washers using the 7/16" socket and wrench.

(See pictures on next page) **Note: If you have trouble positioning the Unit Mounting Bracket between the Cage and Fountain Housing, you can use a screwdriver to gently pry open enough space.**



Pictures correspond with Step Six on previous page



STEP SEVEN

Position the Bottom Screen (Part #B9) over the float so the motor housing (can) passes through the large hole in the center of the screen. Remove the center three 3/8" Lock Nuts from the 9" Bolts and place the Bottom Screen Clips (Part #B13) over the bolts as shown. The power cord can be slid under the bottom screen between the float and screen where two float sections come together before the 3/8" Lock Nuts are replaced. Replace the three inside Lock Nuts and tighten all 3/8" Lock Nuts using the 9/16" wrench and socket.



Note: Extra hardware may be included

STEP EIGHT

Return the unit to its upright position and select a nozzle (See page 13 for Nozzle and Pattern Options). Insert the Shaft Bolt (Part #D2) into the Nozzle Head so it fits snugly into the molded socket for those nozzles that use the bolt. Install the Nozzle by threading it into the inner cone of the pump. Make sure to tighten the Nozzle all the way down.



To install the Redwood nozzle, make sure the Y Insert (Part #D4) is installed and seated properly into the Nozzle Housing (Part #D7). Push the nozzle down over the cone assembly (it may require light taps with a rubber mallet to seat properly). Next, use the 3 Self Tapping Screws (Part #D1) provided in the 3 holes on the nozzle and tighten the screws into the cone assembly. Once you feel resistance, two more turns will be sufficient. To install the Spruce nozzle, follow the same steps, but do not install the Y Insert.



STEP NINE

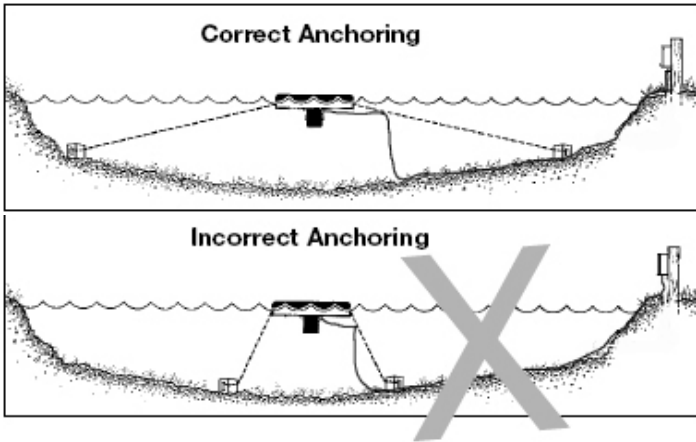
All 5.1JF power cords have a watertight Quick Disconnect and the power cord is shipped separately. It should now be attached to the stub cord by lining up the male and female halves of the disconnect and hand tightening the blue collar. The Additional Strain Relief should be attached to one of the lower float brackets as pictured. If there is not Strain Relief, use the Nylon Cable Tie provided to secure the cord to a rope to prevent damage by the propeller. Double check the Quick Disconnect to make sure the threaded collar has not come loose in shipping before placing in the water. If installing a new Quick Disconnect, please refer to Quick Disconnect instructions. Also, at this time, lights can be installed if purchased.



STEP TEN

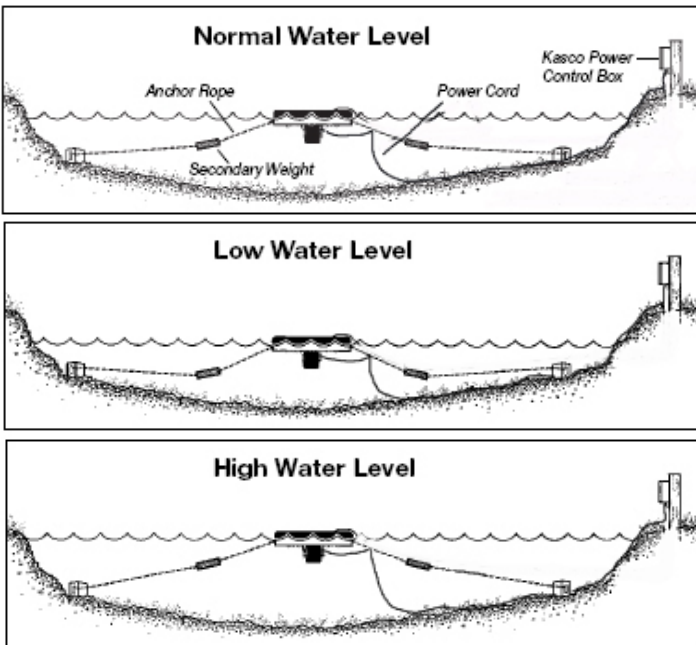
Use the ropes to position the Fountain in the desired location in the pond/lake. Anchor the ropes or secure them to the shoreline so the ropes are free of slack, but not tight. To prevent twisting of the unit due to torque, you should place the anchor at least 3 feet from the float for each foot of depth (Ex. A 6 foot deep pond would require an anchor 18 feet horizontally from the float.)

For ease of removal, you may choose to keep at least one anchor within reach from shore, just below the water's surface.



STEP ELEVEN (ALTERNATE INSTALLATION)

In ponds where the water level fluctuates significantly, you may need to suspend a small weight (12" of 1" galvanized pipe works well) at the mid-point of the rope to take up any slack as the water level drops. The weight should be light enough so the Fountain can rise as the water level rises. This can also help hide ropes by sinking them further below the surface.



STEP TWELVE

Install the C-95 control panel on the post with the power supply. Use the #10 x 1" long or longer screws and the screw placements on the control panel to secure the panel to the post. **NOTE:** The control panel must be hung upright in order to be waterproof.

STEP THIRTEEN

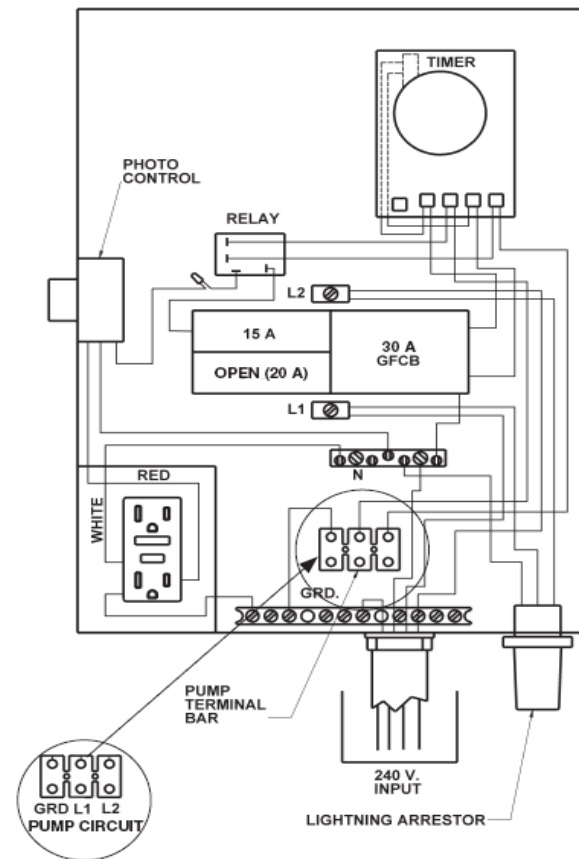
Set Timer in the control panel to desired ON and OFF times per the Instructions on page 15.

STEP FOURTEEN

Hardwire the 240V/208V, 4 wire service into the C-95 control panel per the Instructions on page 15 of this manual. The aerating fountain must be hardwired into the panel.

HARDWIRE: The bottom of the C-95 control panel has several knock-outs for hardwiring the unit. Remove a knock-out that is not used for the main power as well as the internal metal barrier plate in the panel. With the main power disconnected, connect the bare wire (stripped) portion of the GREEN ground wire to the grounding strip (GND) at the bottom of the panel and secure tightly. Locate and remove the plastic shield under the yellow timer (black or clear depending on model). Under shield, lug #2 and #4 are **LOAD** lugs. Loosen the screws and insert the bare wire (stripped) portion of the WHITE wire into #2 and the bare wire (stripped) portion of the BLACK wire into #4. Tighten both lugs securely. Replace metal barrier plate in panel.

Test the GFCB with the test button now and every 30 days. If lights are installed, they can now be installed per Instructions included with the lights.




Once completed, power can be restored to the panel. **ENJOY YOUR NEW KASCO AERATING FOUNTAIN!**

NOZZLE OPTIONS & PATTERN SIZES


NOTE: Pattern sizes listed are approximate. Variations in voltage caused by regional electrical differences or voltage drop due to long power cords may result in reduced pattern sizes.

- All five (or six) nozzles are included with the package.
- The Linden, Willow, and Juniper nozzles use the 3/8" x 4" bolt.
- The Sequoia (5.1JF only) uses the 3/8" x 2.5" bolt.
- The Redwood nozzle must have the Y Insert installed prior to nozzle placement.
- The Spruce nozzle must have the Insert removed prior to nozzle placement.
- The Birch display does not require a nozzle.

REDWOOD




The Redwood nozzle uses the 3 self tapping screws to attach over the pump housing and the **Y Insert must be installed.**




Model	HP	Height	Width
8400JF	2	22'	7'
3.1JF	3	24'	8'
5.1JF	5	26'	8'

LINDEN




The Linden nozzle (marked L inside one of the fins) uses the 3/8" x 4" bolt.




Model	HP	Height	Width
8400JF	2	18'	30'
3.1JF	3	19'	35'
5.1JF	5	20'	35'

WILLOW




The Willow nozzle (marked W on the inside of the cone) uses the 3/8" x 4" bolt.




Model	HP	Height	Width
8400JF	2	12.5'	28'
3.1JF	3	13'	25'
5.1JF	5	14'	36'

JUNIPER




The Juniper nozzle (marked with J on inside of the nozzle cone) uses the 3/8" x 4" bolt.




Model	HP	Height	Width
8400JF	2	8'	46'
3.1JF	3	9'	48'
5.1JF	5	10'	50'

SPRUCE




The Spruce nozzle uses the three self tapping screws to attach over the pump housing and the **Y Insert must be removed.**



Model	HP	Height	Width
8400JF	2	19'	10'
3.1JF	3	21'	13'
5.1JF	5	24'	15'

BIRCH

The Birch display does not use a nozzle or bolt. It is the fountain unit running without any nozzle and allows for the best flow rate and oxygen transfer!



Model	HP	Height	Width
8400JF	2	12'	11'
3.1JF	3	14.5'	10'
5.1JF	5	14'	12'

SEQUOIA



The Sequoia nozzle (marked S on the inside of the cone) uses the 3/8" x 2.5" bolt.
5.1JF ONLY



Model	HP	Height	Width
5.1JF	5	21'	10'

MAINTENANCE RECOMMENDATIONS

**** Under No Circumstances should anyone enter the water while a fountain is operating. ****

**** Please keep the original box for maintenance shipping. ****

The following maintenance procedures can be utilized to ensure many years of quality performance from your Kasco Fountain and reduce the need for more costly repair work.

- **PROPER INSTALLATION:** Proper installation of Kasco equipment will include a power source with ground fault interruption. For Fountain models, the C-85 or C-95 (240/208V) included with the unit have built-in ground fault interruption that is sufficient. Ground fault interrupters are a safety feature that can also alert you to electrical leaks in the equipment. *It is extremely important to test the GFI upon installation, each reinstallation, and monthly thereafter to ensure proper operation.* If you have repeat, consistent trips on your ground fault, the equipment should be disconnected and removed from the water. The power cord should be inspected for damage and you should call Kasco Marine at 715-262-4488 for further instructions or email Kasco at service@kascomarine.com.
- **OBSERVATION:** Operating equipment should be observed on a regular basis (daily, if possible) for any reduction or variation in performance. If a change in performance is observed, the equipment should be disconnected from power and inspected for any material that may have clogged the system or wrapped around the shaft of the motor, especially plastic bags and fishing line. Even though Kasco Aerators and Fountains are among the most clog-resistant on the market, it is impossible to protect against all items that can clog equipment and still maintain a flow of water. These materials can be very damaging to the equipment under continued operation and must be removed as soon as possible. **ALWAYS UNPLUG THE UNIT BEFORE ATTEMPTING TO REMOVE CLOGS.**
- **WINTER STORAGE:** In regions where there is significant freezing in the wintertime, the fountains should be removed from the water to protect them from the expansion pressure of the ice. In many areas, fountains will keep some amount of ice open through the winter. However, when the water is thrust into the air, it is exposed to the colder air temperatures longer and can actually make ice thicker on the pond/lake. Storage over winter is best in a location that is out of the sun and cool, but above 32°F. It is not necessary to store Kasco motors upside down. All internal seals are fully lubricated while stored in an upright position.
- **CLEANING:** Fountains should be removed from the water at least once per year (at the end of the season in cold climates) to clean the exterior of the system, especially the stainless steel motor housing (can). The motor housing is the surface that dissipates heat into the water and any algae, calcium, etc. build-up will become an insulator that blocks heat transfer. In warmer regions it is recommended that the motor is removed and cleaned at least two to three times per year depending on conditions. In most cases a power washer will be sufficient if the unit and algae are still wet.
- **SEAL AND OIL REPLACEMENT:** This is a sealed motor assembly and seals will wear out over time (similar to brake pads on a car). Replacement of the seals and a change of oil after three to five years may add longevity to the operation of the motor, saving you the cost of more expensive repairs. In warmer climates where the fountain runs most or all of the year, it is a good idea to replace seals more regularly than you would need to in colder climates where the unit is removed from the water for several months.
- **ZINC ANODE:** A Sacrificial Zinc Anode is supplied on the shaft of all 8400JF, 3.1JF, and 5.1JF Model Fountains for protection of the equipment from corrosion and electrolysis. The zinc anode should be updated (replaced) if reduced to half the original size or if white in color. Corrosion from electrolysis is more commonly associated with saltwater or brackish water, but as a matter of precaution, it is important to periodically check the zinc anode in all installations (at least every two to three months).

Seal replacement and all other repair services should be performed by Kasco Marine or a Kasco trained Authorized Repair Center. Any alterations or changes made to Kasco units by an unauthorized source will void the warranty. This includes tampering with the unit, power cord, and/or control box. Please contact Kasco Marine, Inc. at 715-262-4488 for your nearest Authorized Repair Center.

WARRANTY, WARRANTY CLAIM, & RETURN POLICY

2 Year Limited Warranty: Kasco® Marine, Inc. warrants this Fountain to be free from defects in material or workmanship (except for the ropes, power cord, and propeller) under normal use and service. The Kasco Marine, Inc. obligation under this warranty is limited to replacing or repairing free of charge any defective part within two (2) years from the date of shipment. Customer shall pay shipping charges for returning the unit to Kasco or an Authorized Repair Center.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND ANY OTHER OBLIGATION OR LIABILITY WHATEVER ON THE PART OF KASCO MARINE, INC. AND IN NO EVENT SHALL KASCO MARINE, INC. BE LIABLE FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES.

Warranty is void if:

- The Fountain is not maintained properly according to the Maintenance Recommendations supplied in this Owners Manual.
- The Fountain is returned for repair without the power cord or if the unit, control box, or power cord are altered in any way from original shipment. **Cuts in the power cord are not covered under warranty.**
- The Fountain is damaged by unauthorized tampering.
- The Sacrificial Zinc Anode around the propeller shaft shows significant deterioration. (The Anode must be inspected periodically and replaced if necessary.)

Warranty Claim Procedure:

Check the ten or eleven-digit serial number printed either on the black cover of the motor or on the blue nameplate and determine the year of manufacture according to the serial number scheme below:

Sample Serial

70 01 J 8 1725

- The first two digits represent the reverse of the last two digits of the year of manufacture.
Example: 70 = 2007 model year.
- The third and fourth digits represent the week of the year. (Ex. "01" for 1st week in Jan.)
- The fifth digit represent the model. (Ex. "J" for 8400JF)
- The sixth or sixth and seventh digit represents the horsepower of the unit:
 - 8 = 2HP
 - 31 = 3HP
 - 51 = 5HP
- The remaining four digits are sequential.

The best method for establishing warranty period is by registering your fountain online at the below address and/or the original receipt. If the customer has registered the Fountain online at: www.kascomarine.com/general_info_warranty_registration.htm, Kasco Marine will have a record of the purchase and will be able to determine whether or not the unit still carries warranty coverage.

Once the warranty coverage has been established, the unit may be sent to any Kasco Authorized Repair Center for evaluation and repair. Please call Kasco Marine at 715-262-4488 prior to shipping to receive a Return Authorization Number and/or Repair Form, then ship to:

Kasco Marine, Inc.
800 Deere Rd.
Prescott, WI 54021
Attn: Repairs

Or call Kasco Marine at 715-262-4488 to locate your nearest Authorized Repair Center. You can also email Kasco at service@kascomarine.com.

Note: Only complete motor assemblies will be accepted for warranty repair. The power cord and all other components must be returned with the motor as originally assembled. Any missing parts will be replaced at the customer's expense and, if determined to have caused the failure, could void the entire warranty. Some parts are essential for structural support during shipping and others, such as the power cord, are essential to properly diagnose potential causes of failure. It is not necessary to return the control box, float, or nozzles with the motor assembly, unless specifically asked to by a Kasco representative.

Please include the Repair Form received from Kasco Marine or your local distributor with the shipment. If no Repair Form is available, include your name and physical address for return delivery of the repaired unit and a daytime phone number and/or e-mail address for correspondence regarding the warranty claim.

Any expedited shipping method for the return of the unit is at the customer's expense. Kasco Marine will return units repaired under warranty at our expense via ground freight within the continental United States.

Other Repairs:

Most failed equipment can be repaired at substantially lower costs than replacement with new. Please ship according to the instructions in the previous section. Again, it is best to call ahead for a Return Authorization Number and/or Repair Form so we know the repair is coming.

Kasco Marine offers *free estimates* on repairs at the request of the customer. The request for estimate should be included in the letter that accompanies the returned unit and must include a daytime phone number and/or e-mail address. ***Estimate options are as follows:***

- We will contact the customer with a total after the unit has been evaluated, but before the work is performed.
- We will repair the unit only if repair costs are under a stated dollar amount. Example: "Please repair if total is under \$150.00 before shipping charges."

All estimates that are rejected for repair will be destroyed unless otherwise directed by the customer. If the customer would like the unit returned, the unit will be restored as closely as possible to the condition in which it was received and shipped at the customer's expense for shipping and handling charges.

Billing:

All non-warranty repairs will be returned to the customer and billed C.O.D. unless otherwise directed. Kasco Marine also accepts Visa and MasterCard credit card payments. Kasco Marine will call for credit card information upon completion of the repair at the customer's request.

All other warranty and repair inquiries should be directed to Kasco Marine, Inc. at 715-262-4488 or returns@kascomarine.com.

TROUBLESHOOTING TIPS

Below are some helpful troubleshooting tips. If a problem occurs, please double check the assembly and installation instructions as well as the instructions for the proper control panel. More troubleshooting tips can be found at www.kascomarine.com/general_info_troubleshooting.htm.

“My Fountain trips the ground fault interrupter in the C-85 or C-95.”

This is the most common symptom of several possible problems. To correctly diagnose the problem, you will need to collect more information. A Ground Fault Interrupter (GFI) breaker that trips can indicate an electrical service problem, water contamination in the unit and/or cord, bad breaker, control box problems, motor problems, etc. Try to find out the answers to these questions before you contact Kasco to narrow down the problem.

- * How long does it take to trip the breaker?
- * Does it always take the same amount of time to trip?
- * How many times has it tripped?
- * Has there been any electrical problems in the area recently?

“My Fountain seems to run slowly.”

This can also be a symptom of several possible problems. There could be an electrical problem where the unit is not getting the proper voltage. This could also indicate a problem with the motor of the unit, which needs to be looked at by an Authorized Repair Center. Check that the unit is receiving the proper voltage, and, if so, contact Kasco for further steps.

“My Fountain hums, but will not start. When I spin the prop with a stick, it starts up.”

This indicated a problem with the Starting Capacitor. Each Kasco Fountain is equipped with a Starting Capacitor to get the unit going when it is first plugged in. If it is operating, but not spinning and can be started by spinning the prop with a stick, the Starting capacitor needs to be replaced by an Authorized Repair Center.

“My Fountain turns itself off and back on without the timer and without tripping the GFI breaker.”

Each Kasco Fountain has a Thermal Overload built in that will turn the unit off when it overheats. Once the unit has cooled down, it will start back up. If you are noticing these symptoms, the unit should be unplugged immediately because the Thermal Overload will continue to turn on and off until it burns out and damages the motor. The unit should be unplugged and taken out of the water to find the cause of the problem. The problem could be one of many, such as, low water levels, build-up on the unit to prevent heat dissipation, something inhibiting the free rotation of the shaft, etc. If something is caught in the unit or there is a build-up on the unit, remove the debris and, if caught early enough, the unit should be fine. Contact a Kasco representative before restarting the unit.

“My Fountain flow seems to fluctuate and/or be less than usual.”

This can occur because of a few different reasons. Most of the time, this symptom is caused from unit being clogged with debris. A mat of weeds, many leaves, plastic bags, etc. can clog up the unit and cause it to be starved of water. If the unit does not have the proper amount of water, the flow or pattern will fluctuate up and down and look sporadic. If you are seeing these symptoms, unplug the unit and clean away the debris that is clogging up the screen. Another possibility if these symptoms are noticed, is a chipped or damaged prop that is causing the unit to wobble and not pump properly. When the unit is unplugged, check the prop for damages and replace if damage is found.

“The GFI breaker trips randomly and sporadically. Sometimes it is a few hours of operation, other times it can be days or weeks.”

This is referred to as a Nuisance Trip. This usually occurs where the unit is installed a great distance from the initial electric service on the property where the ground stake is placed. It is caused by either induced current in the ground wire or a base voltage difference due to soil pH levels. A possible resolution to the problem, contact an electrician and install a local grounding stake. This may eliminate the induced current and any base voltage differences.



800 Deere Rd.
 Prescott, WI 54021
 Phone: 715-262-4488 - Fax: 715-262-4487
www.KascoMarine.com Sales@KascoMarine.com

Kasco Repair Sheet — Customer Info.

*** Important Reminders ***

- **All repairs sent in MUST be accompanied by a copy of this completed sheet!**
- Routine maintenance consists of checking the zinc anode regularly and replacing if necessary, keeping the unit clean, keeping the stainless steel can clean, and having the seals and oil replaced every 3-5 years depending on use.
- Address your Repair to Kasco Marine, Attn: Repairs (or to your Authorized Repair Center).
- Shipping to Kasco or an Authorized Repair Center is paid for by the customer.
- You must include the power cord and cage assembly with each unit sent in for repair to be considered for warranty repair!
- Do not ship the float and/or control box with the unit for repair, unless otherwise instructed.

Today's Date: _____

Customer Information

Name: _____

Phone Number: _____

Address: _____

Alternate Number: _____

City: _____

Email Address: _____

State: _____

Zip Code: _____

Unit Information:

Model # (Ex. 8400JF): _____

Serial # (Ex. 6001J84025): _____

Date Purchased: _____

Purchased From: _____

Earliest Date of Problem: _____

Description of Problem

Comments

Fountain Warranty Information

Please register your fountain online at

www.kascomarine.com/general_info_warranty_registration.htm

Also fill in the information below and keep for your records.

Model # (Ex. 3.1JF): _____

Serial # (Ex. 7001J311725): _____

Purchase Date: _____

Purchased From: _____

Registration Date: _____



Kasco Marine, Inc.

800 Deere Rd.

Prescott, WI 54021

Phone (715) 262-4488 * Fax (715) 262-4487

www.kascomarine.com * sales@kascomarine.com * service@kascomarine.com