



Owners Manual

J Series Fountain

3400JF & 3400HJF
4400JF & 4400HJF



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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. The JF model Fountain will help improve water quality by adding much needed oxygen and circulation and enhance the aesthetics of the pond or lake with a beautiful fountain pattern. The lighting package (if purchased) will illuminate your fountain for beauty at night. We thank you for choosing Kasco for your fountain needs and want you to be completely satisfied with your purchase.

Important Safety

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 include 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 equipment with moving parts.
- 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, which 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 into the C-25 Control Box (120V) or C-85 Control Panel (240/208V) supplied by Kasco and that the C-25 is plugged into a properly grounded, grounding type receptacle or the C-85 is wired properly. The GFCI breakers should be tested upon each installation and every month thereafter to ensure proper operation.

General Instructions

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.

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.

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° around the unit and from below the unit. The water is pulled upward and thrust through the flotation collar into the air.

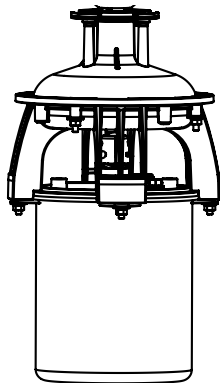
Your Kasco Marine Fountain is ready for immediate use (after installation). The motor and ball bearings are submerged in oil and no further lubrication is needed. Make sure to keep the motor housing clean

from hard water deposits and/or algae.
(See Maintenance Recommendations.)

It is extremely important that proper and sufficient voltage (120V or 240/208V) is supplied to the Fountain motor. Each 120V Fountain is supplied with a UL and CSA approved C-25 GFI Protected Control Box. The Fountain is to be plugged into the C-25 outlet labeled "UNIT" and the C-25 plugged into a properly grounded receptacle (See C-25 Instructions on page 12). Each 240V Fountain is supplied with a UL and CSA approved C-85 GFCB Protected Control Panel. The Fountain is to be hardwired into C-85 panel. The C-85 must have 4 wire service (L1, L2, neutral, and ground) installed by a qualified electrician. (See Wiring Instructions). It is extremely important to test the GFI breaker in the control panel upon each installation and reinstallation and every month thereafter to ensure proper operation.

UNIT STORAGE

When storing units during the offseason, it is important to store them upside down if they are going to be sitting for long periods of time. Units that sit upright on a shelf for many months, or even years have a greater likelihood of seals drying out. Storing upside down will ensure oil is lubricating the seals and prevent drying.



Cord Gauge Chart

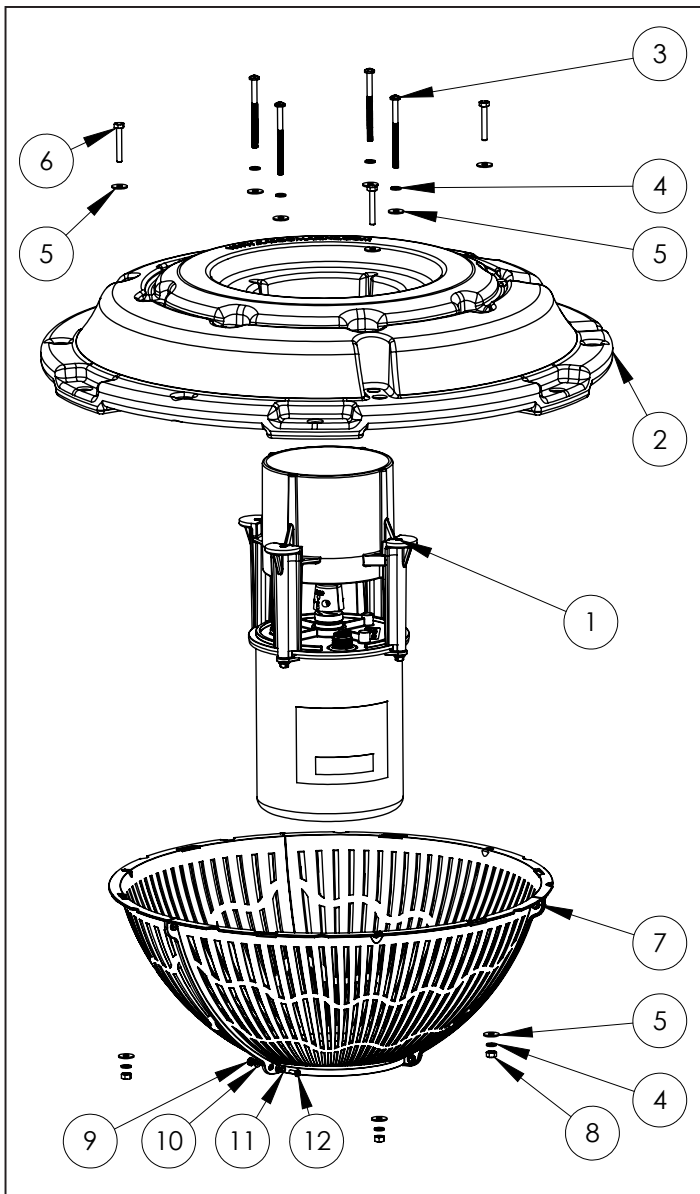
Length	Gauge	3400	3400H 4400H	4400
50'	16	x		
50'	14		x	x
100'	14	x	x	
100'	12			x
150'	12	x	x	
150'	10			x
200'	12	x	x	
200'	10			x
250'	12		x	
300'	12		x	
400'	12		x	

Unit Specs

Model	Voltage	Amps	Lock rotor amps	Control box connection	Fountain connection
3400JF	110-120	6.7	18	C-25 plug in	Plug into C-25
3400HJF	208-240	3.3	9	Hardwire C-85	plug into or hardwire C85
4400JF	110-120	10.7	40	C-25 plug in	Plug into C-25
4400HJF	208-240	5.3	20	Hardwire C-85	plug into or hardwire C85

Parts Included

#	Item	Part#	Qty
1	Fountain		1
2	Float	242001	1
3	1/4-20 x 4" Phillips Pan Head Screw	251220	4
4	1/4" split washers	840537	7
5	1/4" (3/4" OD) Flat Washer	251300	10
6	1/4 -20 x 1-3/4" Hex Head Bolt	475630	3
7	Bottom Screen Section	361540	3
8	1/4"-20 Nut	840536	3
9	#8 nut	771034	6
10	#8 flat washer	361543	12
11	#8 lock washer	771033	6
12	#8 x 3/4" screw	361545	6
	Mooring ropes	990700	2
	cable ties	415038	9



Also Included:

- Cord in separate box (1) (depending on length of cord)
- Control Box (C-25 for 120V units in Float box or C-85 for 240V units in separate box) (1) (Not Pictured)

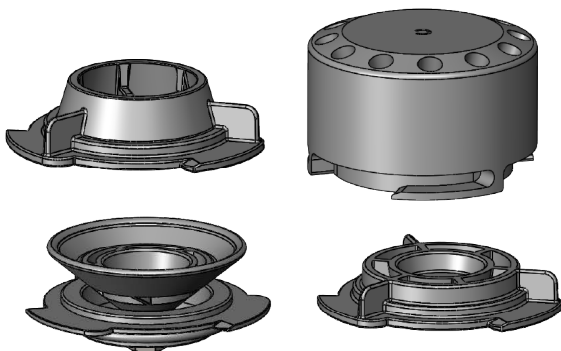
TOOLS & SUPPLIES NEEDED

- Anchors or stakes for installing unit (2)
- # 2 Phillips head screw driver
- 120V or 240V Electrical Supply near pond on a post with room for mounting the C-25 or C-85
- #10 x 1" long or longer screw(s) for mounting the C-25 (3) or C-85 (4)
- 7/16" Socket and Ratchet
- 7/16" Wrench
- 11/32" wrench (for #8 fasteners)

Assembly instructions on next page

Set of Interchangeable Nozzles (4)

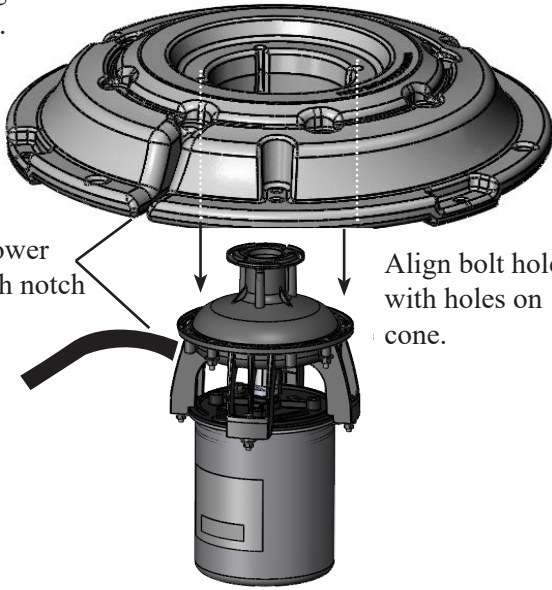
#	Item	Part #	Qty
1	Sequoia Nozzle	431230	1
2	Linden Nozzle assembly	431232	1
3	Birch Nozzle	431234	1
4	Cypress Nozzle	431236	1



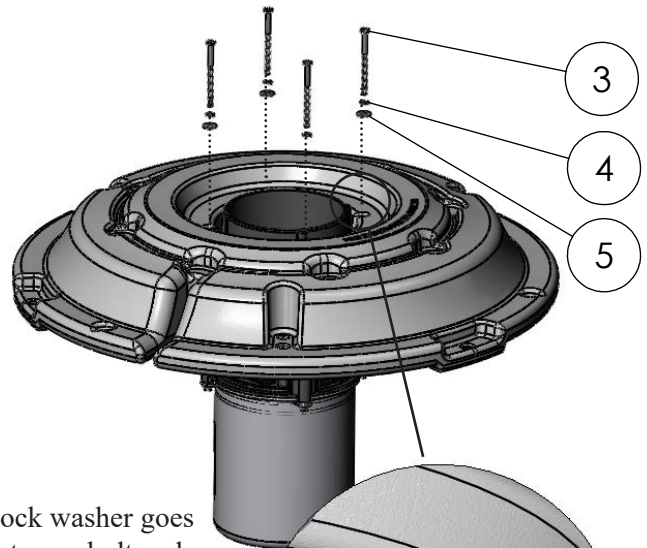
Assembly Instructions

1. Rest the float on the 4 legs of the housing.

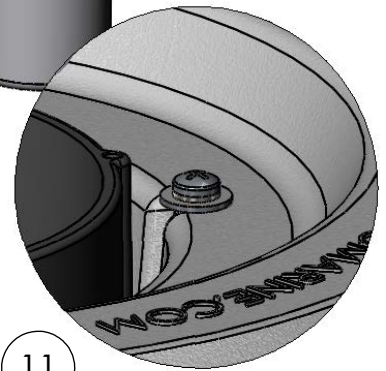
Align power cord with notch



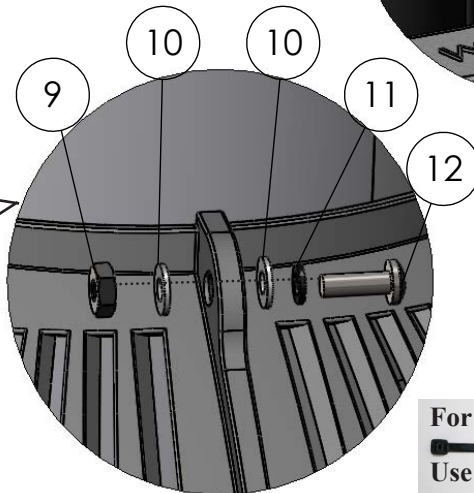
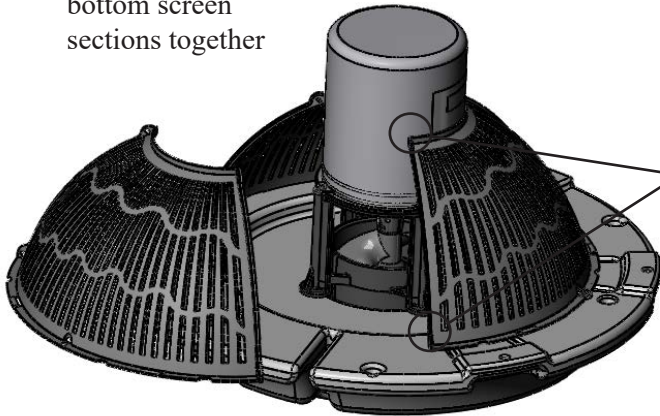
Align bolt holes with holes on cone.



2. Lock washer goes between bolt and flat washer. Tighten down in 4 places



3. Turn over. Bring bottom screen sections together

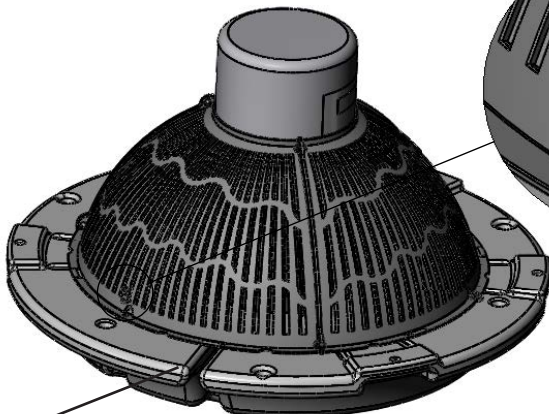


4. Tighten down in 6 places to hold the screen together.

For quicker assembly:

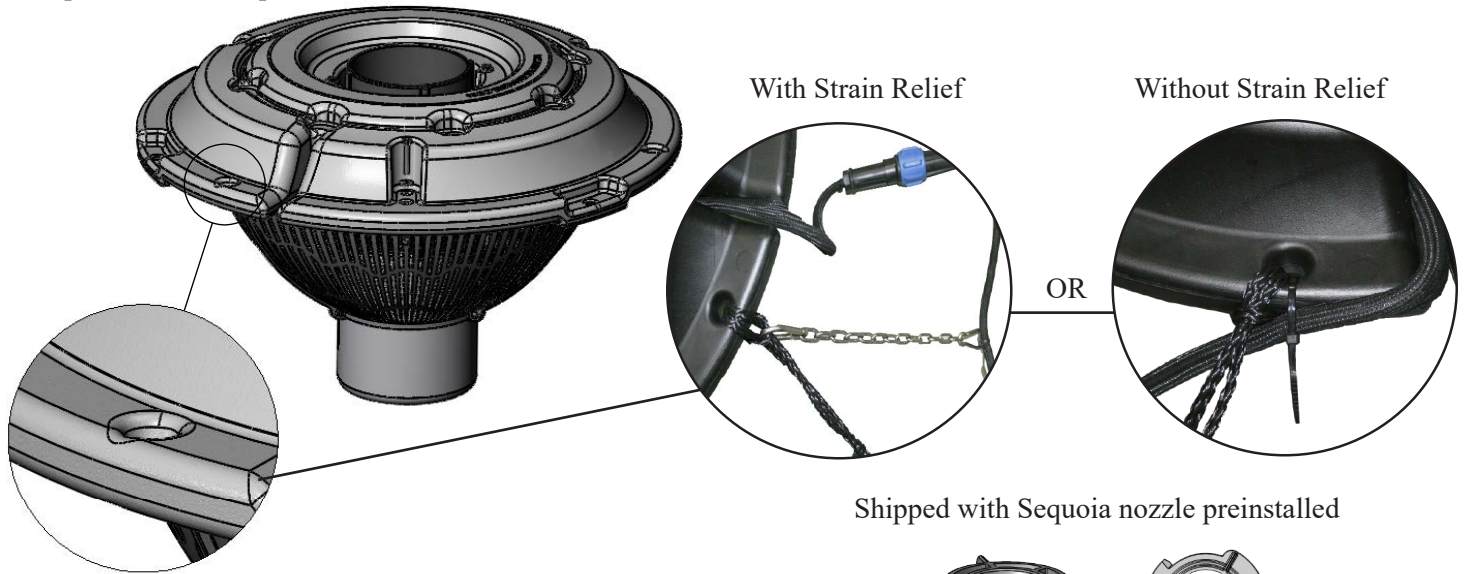
Use cable tie instead

5. Secure the bottom screen to the float in 3 places.

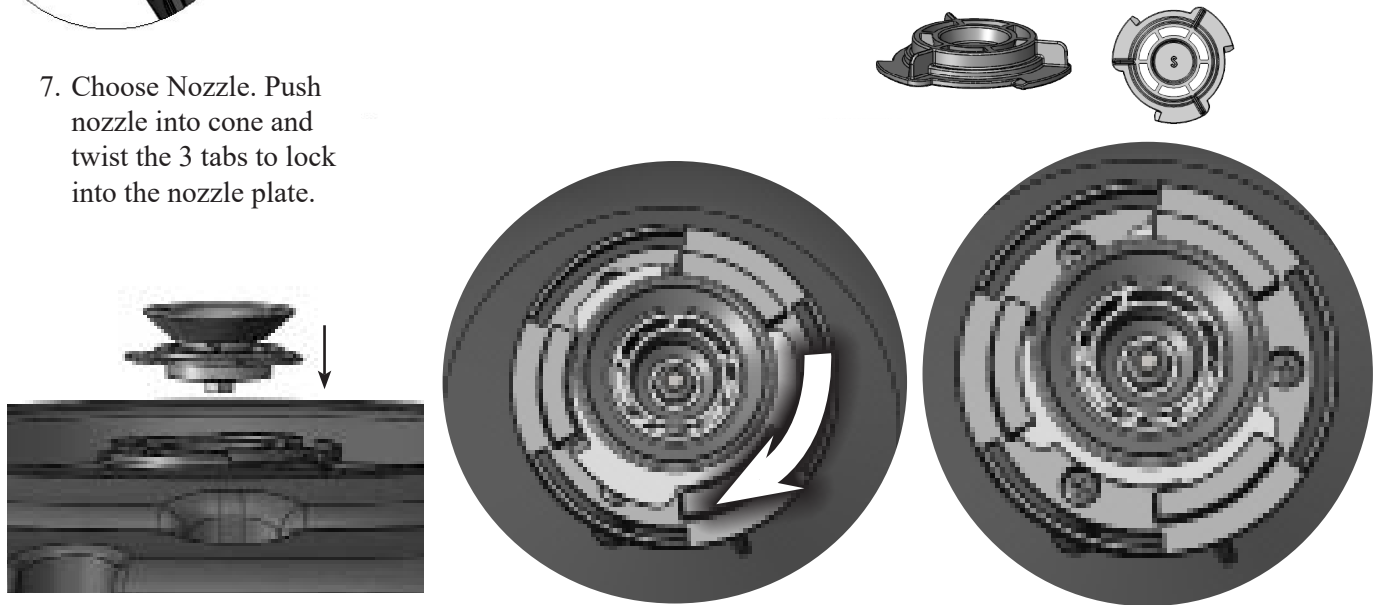


Make sure cord is sticking out of notch

6. Turn upright. Secure power cord to rope hole



7. Choose Nozzle. Push nozzle into cone and twist the 3 tabs to lock into the nozzle plate.



8. If ready to install in the pond, go to Installation instructions. Light Kits can also be installed at this time, go to Light kit instructions.

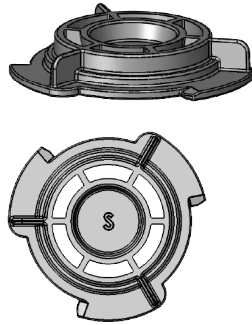
Nozzle Options

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.

To install, place oring around outlet and simply twist the nozzle into the 3 locking tabs.

Sequoia Display:

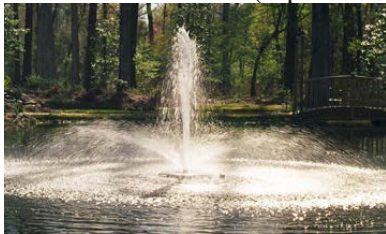
The Sequoia nozzle (marked S on the part)



Model	Height	Width
3400JF/HJF	13'	8'
4400JF/HJF	18'	11'

Linden Display:

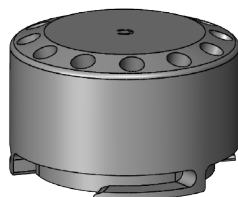
The Linden nozzle (2 piece assembly with bolt)



Model	Height	Width
3400JF/HJF	9'	29'
4400JF/HJF	12'	31'

Cypress Display:

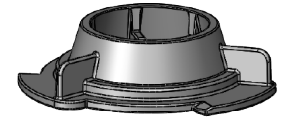
The Cypress nozzle (marked C on part)



Model	Height	Width
3400JF/HJF	7'	17'
4400JF/HJF	9'	28'

Birch Display:

The Birch nozzle (marked B on the part)



Model	Height	Width
3400JF/HJF	7'	5'
4400JF/HJF	11'	8'

Willow Display:

No nozzle installed



Model	Height	Width
3400JF/HJF	6.5'	21'
4400JF/HJF	9'	31'

Installation Instructions

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.)

Maintenance Recommendations

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

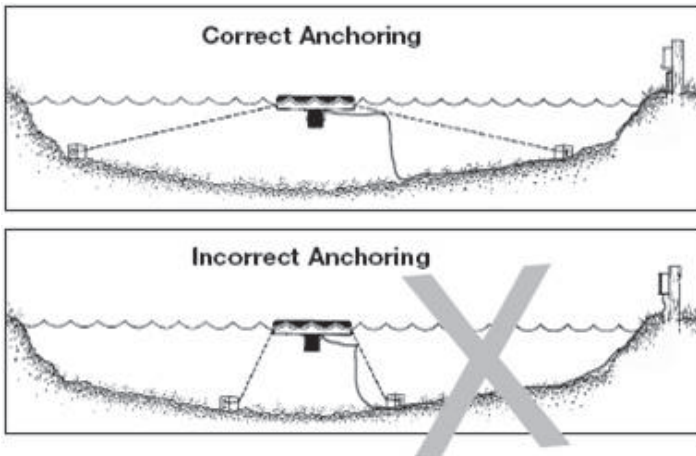
** Please keep the original box for maintenance shipping. **

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 (GFI). For Fountain models, the C-25 control (120V) or C-85 (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 sales@kascomarine.com.

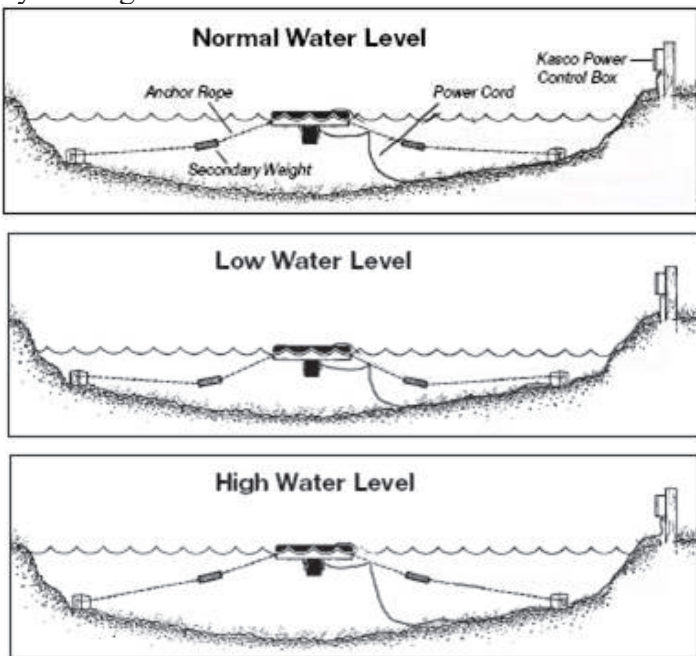
OBSERVATION: Operating equipment should be observed on a regular basis (daily, if possible) for any reduction or variation in performance. If a change in performance is observed, the equipment should be disconnected from power and inspected for any material that may have clogged the system or wrapped 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,



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.



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. When storing units during the offseason, it is important to store them upside down if they are going to be sitting for long periods of time. Units that sit upright on a shelf for many months, or even years have a greater likelihood of seals drying out. Storing upside down will ensure oil is lubricating the seals and prevent drying.

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 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.

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.

ZINC ANODE: A Sacrificial Zinc Anode is supplied on the shaft 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).

Warranty Policy

Warranty Period:

Models:

3400JF, 3400HJF, 4400JF, 4400HJF - 2 years

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 the warranty period 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 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 VX 2 1725

The first two digits represent the reverse of the last two digits of the year of manufacture.

Example: 80 = 2008 model year.

The third and fourth digits represent the week of the year. (Ex. "01" for 1st week in Jan.) model.

The best method for establishing warranty period is by keeping your original receipt. Also register the Fountain online at: www.kascomarine.com

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.

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 sales@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 or float with the motor assembly.

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 does 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 prepaid with Visa or Mastercard or shipped C.O.D. with C.O.D. charges unless otherwise directed. Kasco Marine will contact for credit card information upon completion of the estimate.

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

“My Fountain trips the ground fault interrupter in the C-25, 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 of algae, calcium or organic matter on the unit, remove the debris and, if caught early enough, the unit should be fine. Contact a Kasco representative before restarting the unit.

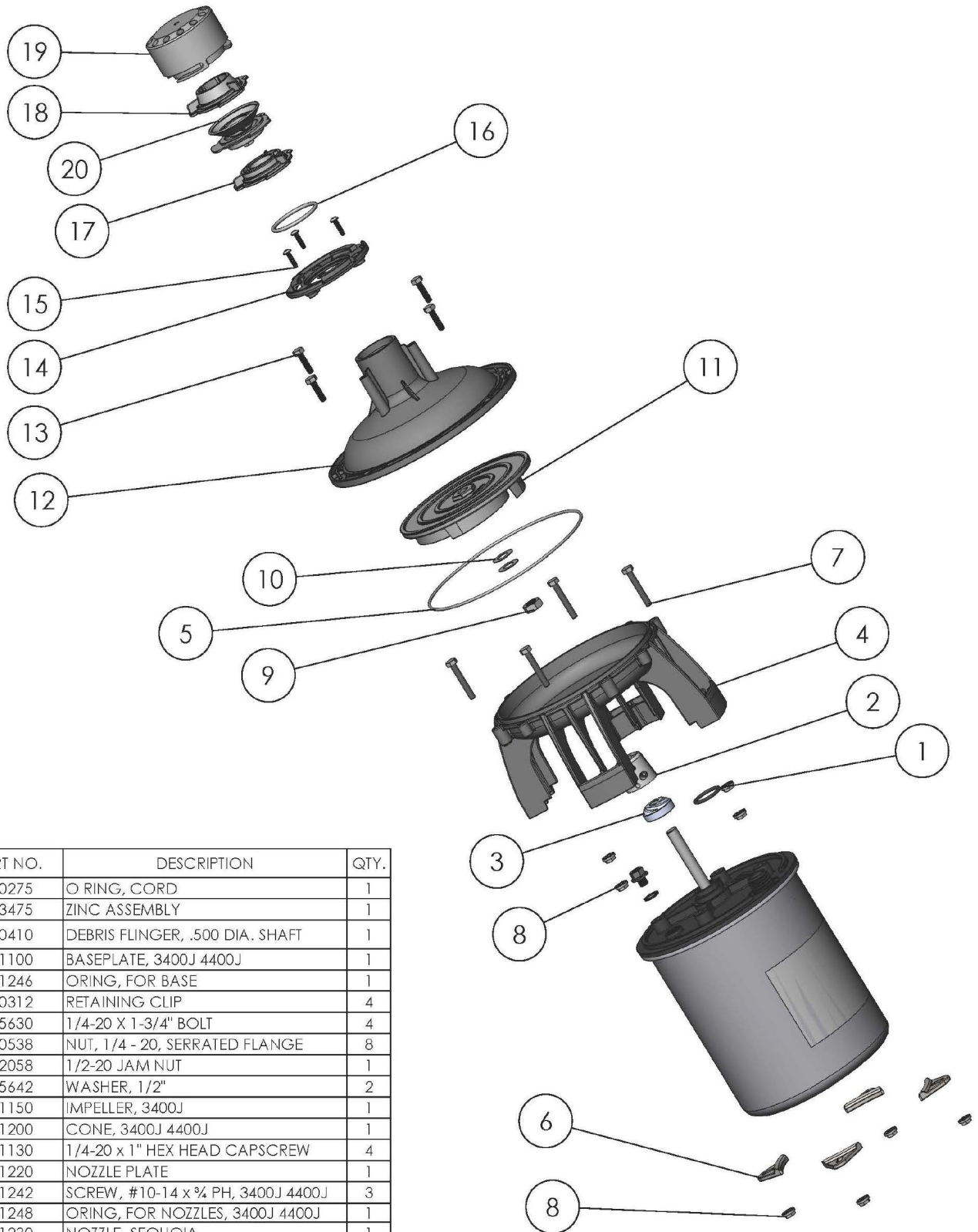
“My Fountain flow seems to fluctuate and/or be less than usual.”

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.”

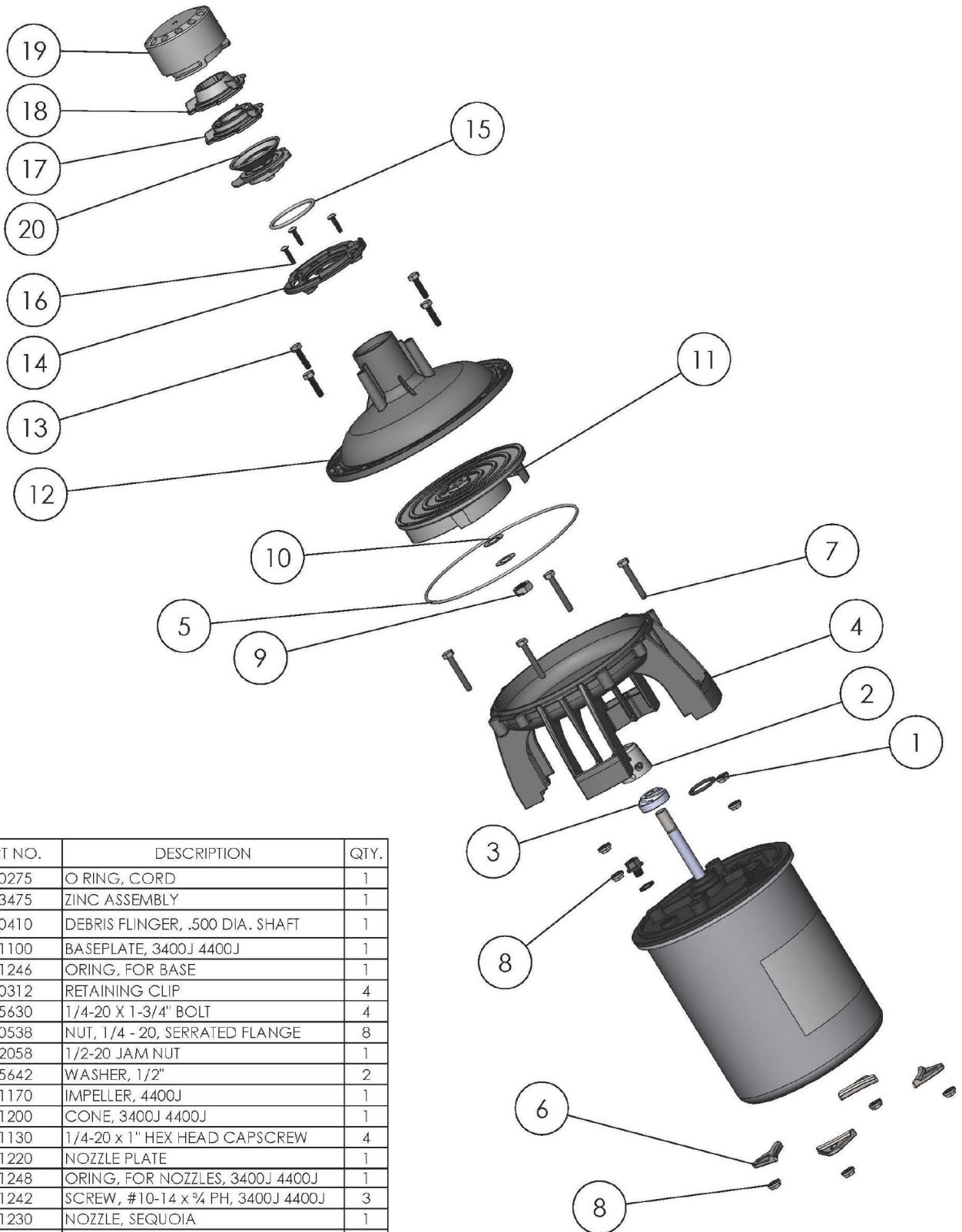
This is referred to as a Nuisance Trip. This usually occurs where the unit is installed a great distance from the initial electric service on the property where the ground stake is placed. It is caused by either induced current in the ground wire or a base voltage difference due to soil pH levels. To resolve the problem, contact an electrician and install a local grounding stake. This may eliminate the induced current and any base voltage differences. This problem can also be caused by a bad breaker or receptacle or having unbalanced incoming voltage lines.

3400J REPLACEMENT PARTS



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	990275	O RING, CORD	1
2	243475	ZINC ASSEMBLY	1
3	990410	DEBRIS FLINGER, .500 DIA. SHAFT	1
4	431100	BASEPLATE, 3400J 4400J	1
5	431246	ORING, FOR BASE	1
6	140312	RETAINING CLIP	4
7	475630	1/4-20 X 1-3/4" BOLT	4
8	840538	NUT, 1/4 - 20, SERRATED FLANGE	8
9	342058	1/2-20 JAM NUT	1
10	475642	WASHER, 1/2"	2
11	431150	IMPELLER, 3400J	1
12	431200	CONE, 3400J 4400J	1
13	451130	1/4-20 x 1" HEX HEAD CAPSCREW	4
14	431220	NOZZLE PLATE	1
15	431242	SCREW, #10-14 x 3/4 PH, 3400J 4400J	3
16	431248	ORING, FOR NOZZLES, 3400J 4400J	1
17	431230	NOZZLE, SEQUOIA	1
18	431234	NOZZLE, BIRCH	1
19	431236	NOZZLE, CYPRESS	1
20	431232	NOZZLE, LINDEN ASSEMBLY	1

4400J REPLACEMENT PARTS



ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	990275	O RING, CORD	1
2	243475	ZINC ASSEMBLY	1
3	990410	DEBRIS FLINGER, .500 DIA. SHAFT	1
4	431100	BASEPLATE, 3400J 4400J	1
5	431246	ORING, FOR BASE	1
6	140312	RETAINING CLIP	4
7	475630	1/4-20 X 1-3/4" BOLT	4
8	840538	NUT, 1/4 - 20, SERRATED FLANGE	8
9	342058	1/2-20 JAM NUT	1
10	475642	WASHER, 1/2"	2
11	431170	IMPELLER, 4400J	1
12	431200	CONE, 3400J 4400J	1
13	451130	1/4-20 x 1" HEX HEAD CAPSCREW	4
14	431220	NOZZLE PLATE	1
15	431248	ORING, FOR NOZZLES, 3400J 4400J	1
16	431242	SCREW, #10-14 x 3/4 PH, 3400J 4400J	3
17	431230	NOZZLE, SEQUOIA	1
18	431234	NOZZLE, BIRCH	1
19	431236	NOZZLE, CYPRESS	1
20	431232	NOZZLE, LINDEN ASSEMBLY	1