



Aerator

Model 1812AF Owners Manual

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Congratulations on your purchase of Kasco's 12 Volt DC powered Aerator. We'd love to hear your stories from this season on our Facebook page. Thank you for choosing our aerator.



Kasco Marine, Inc.
800 Deere Rd.
Prescott, WI 54021
U.S.A.
Phone 715-262-4488
Fax 715-262-4487
sales@kascomarine.com
www.kascomarine.com

884814
Rev. 02/18/16

STOP: For any questions, issues, or problems with your Aerator, please contact Kasco at:
sales@kascomarine.com
715-262-4488

Battery Information:

This Aerator will operate with any deep cycle marine 12 volt battery. For best results use with a battery of at least a 100 ampere hour rating. As a general operating estimate a 100 ampere hour rated battery will provide you with over 4.5 hours of full performance use. If additional run time is required you can select a battery with a higher ampere hour rating, or have an additional battery charged and ready for use.

For best results maintain your battery at full charge. Proper care will ensure having battery power when you need it, and will significantly improve the battery life. Failure to recharge lead acid batteries within 12-24 hours is the leading cause of premature battery failure. Be certain to read all warnings supplied by your battery and charger manufacturers and adhere to all safety requirements.

Safety Instructions



CAUTION

- **Danger: When connecting or disconnecting to a battery or switching power on and off, a small spark may result. Do not use in any application that may have combustible vapors or fumes.**
- **Under NO circumstances should anyone enter the water with the electrical equipment connected and/or in operation. 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.**
- **NEVER lift or drag the unit by the power cord. If you need to pull the unit to the side of the pond, use the anchoring ropes tied to the units propeller guard.**
- **Do not use waders in deep areas of ponds/lakes or areas with drop-offs, drastic slopes, or soft bottom material.**
- **Do not use boats that tip easily for unit installation, such as a canoe, and follow all boating safety rules and regulations, including wearing a PFD. (Personal Flotation Device)**
- **Do not go near the unit when it is running as you may be injured by the propeller.**
- **Your Kasco unit contains an inline, cord mounted fuse designed to protect the unit, cord and battery while providing maximum, safe operation. Never replace the fuse with a different size than provided, and never change the wire length of your unit. Changing fuse size or extending the wiring will create a dangerous situation, equipment failure, and will void your warranty.**

General Owner's Instructions

INSPECT THE AERATOR

Immediately inspect your Kasco Aerator 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 Kasco Marine at 715-262-4488, 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, dogs, 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 Assembly and Installation Instructions enclosed in this manual, it is specific for your product.

WARRANTY

Kasco products are the result of over 40 years of design and engineering. Kasco products are built to withstand the toughest conditions. Kasco Marine backs your product with a 1 Year Warranty. This warranty covers any and all manufacturers defects within 1 year from the date of purchase (See Warranty Policy).

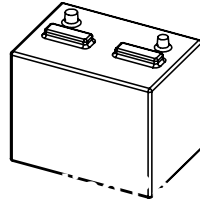
UNIT STORAGE

When storing units during the off season, it is important to check for any damage to your unit, or corrosion of painted metal parts. If corrosion does exist, simply clean the area and repaint with a good quality epoxy paint. This will help ensure your unit gives you trouble free service.

Unit Specs

Model	Voltage	Operating amps	lock rotor amps
1812A	12 VDC	22	32

CUSTOMER SUPPLIED PARTS / EQUIPMENT

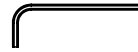


12 Volt DC Deep Cycle Battery
Recommended 100 AMP
Hour or Greater Capacity.

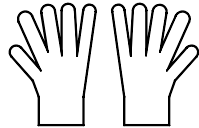
SUGGESTED ASSEMBLY TOOLS



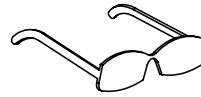
Anti-Seize



5/32 Allen Wrench



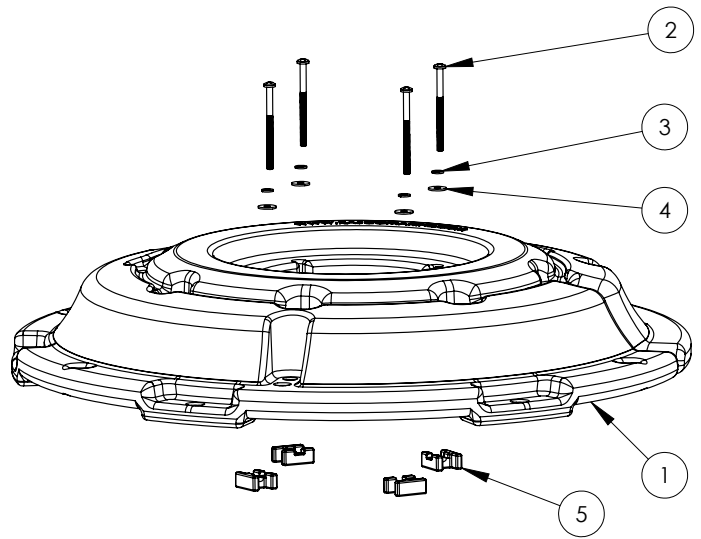
Safety Gloves



Safety Glasses

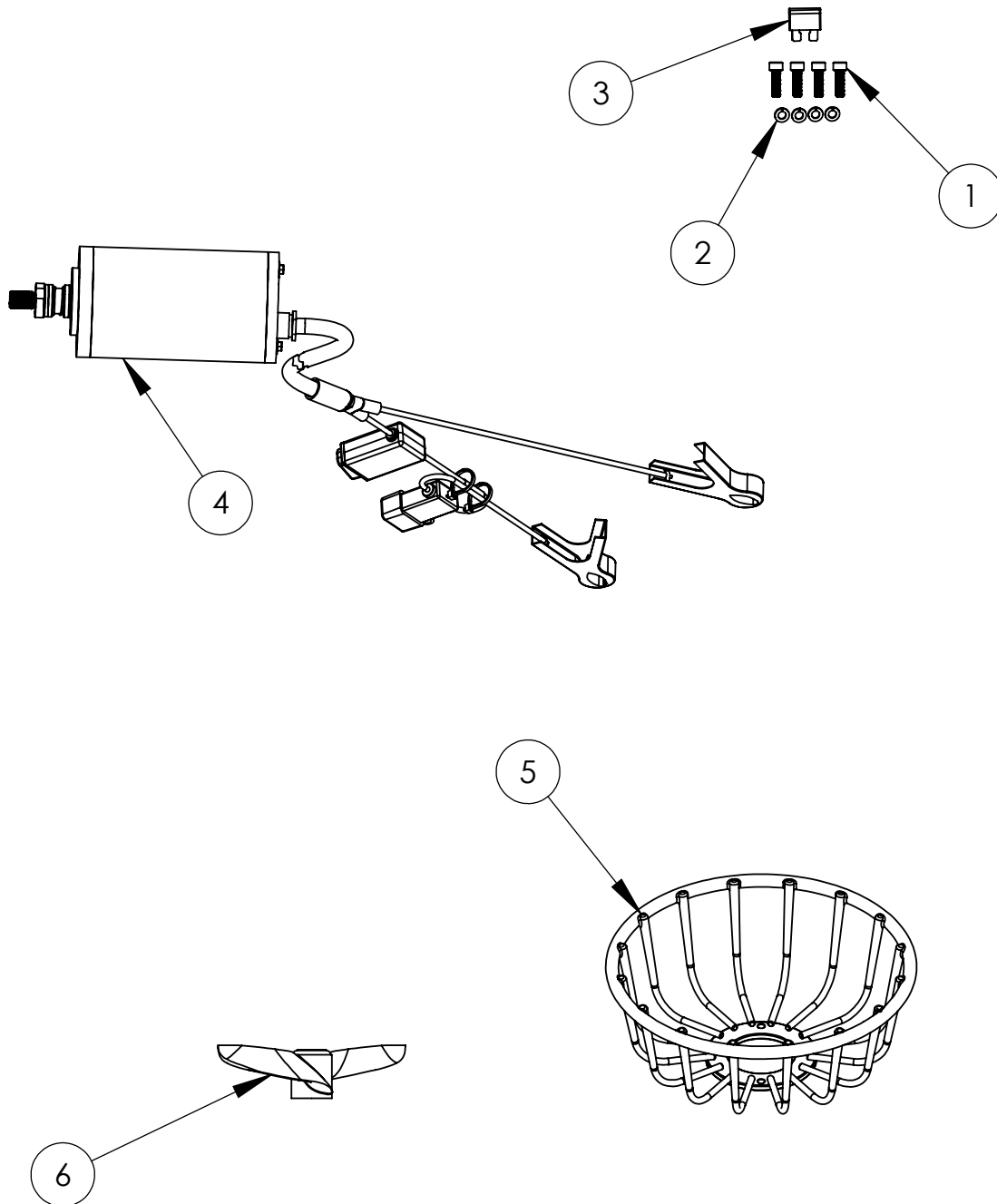
Float Assembly Parts Included

Item No.	Description	Qty.
F1	Float (with three 50' mooring ropes attached)	1
F2	1/4-20 x 3 1/2" Phillips Pan Head Screw	4
F3	1/4" split washers	4
F4	1/4" (3/4" outer diameter) Flat Washer	4
F5	Float Retaining Clips	4



ITEM NO.	DESCRIPTION	QTY.
1	SCREW, 10-32 X 5/8 LONG	4
2	WASHER, #10 SPLIT LOCK	4
3	FUSE, 25 AMP	1
4	MOTOR ASSEMBLY	1
5	PROPELLER GUARD	1
6	PROPELLER	1

INCLUDED PARTS

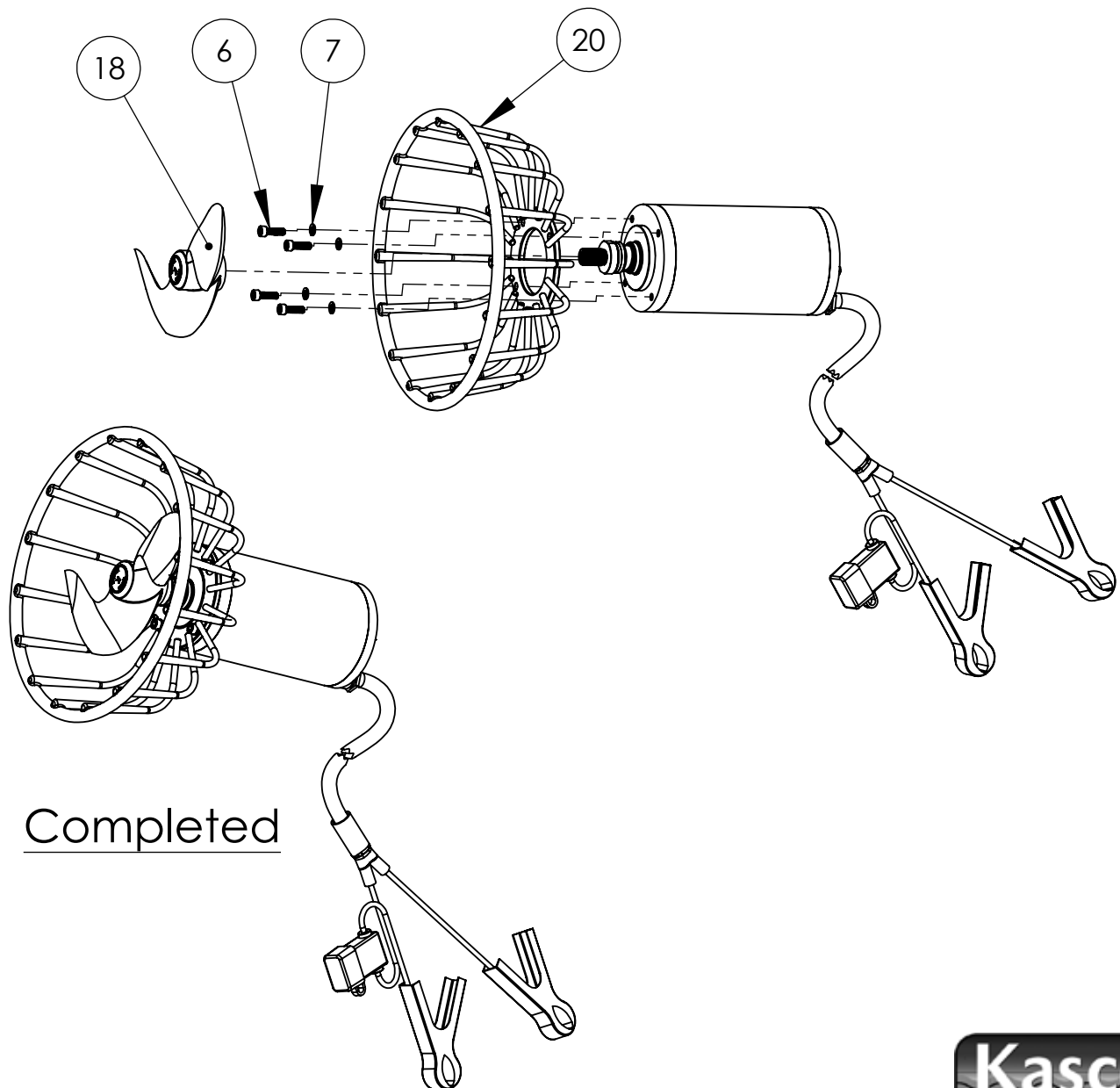


SAFETY GUARD AND PROPELLER INSTALL

- 1) Align guard (20) onto motor body.
- 2) Insert screws (6) through lock washers (7)
- 3) Insert screw\washer assemblies through guard and tighten into motor body to 25 inch lbs.
- 4) Thread propeller (18) onto motor shaft in a clockwise rotation and hand tighten. Flats are provided on the threaded shaft to keep it from turning during propeller install if needed.

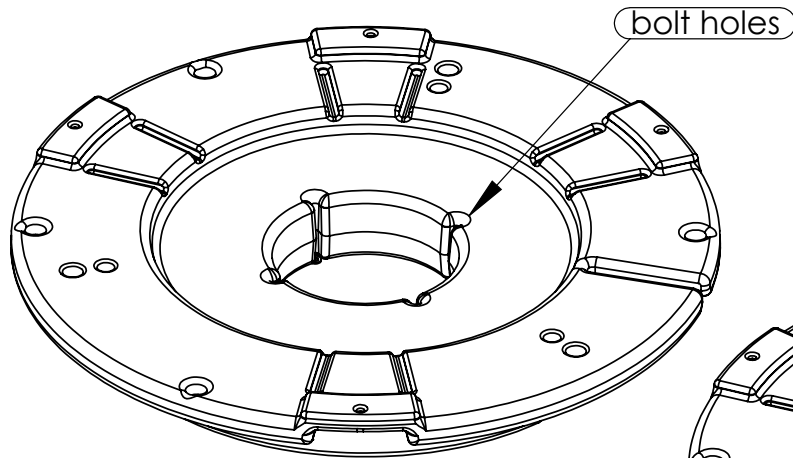
CAUTION: Use of gloves is recommended for installing propeller to avoid injury.

NOTE: Use of anti-seize compound on screw threads is recommended.

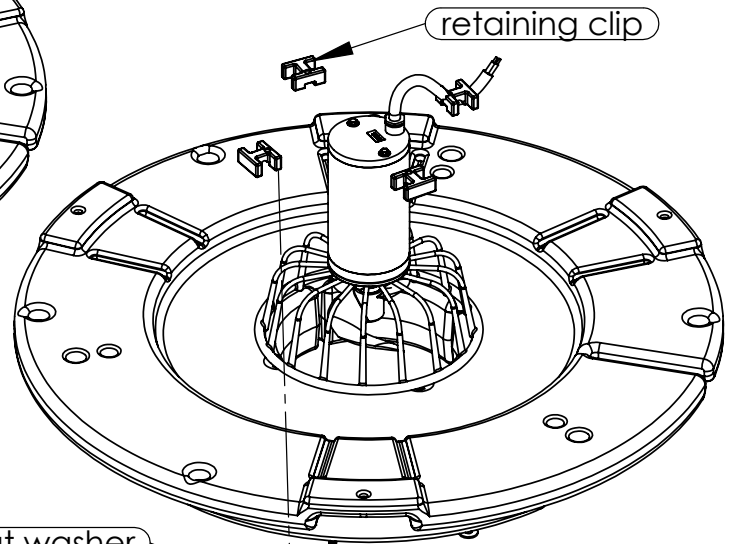


Assembly to Float

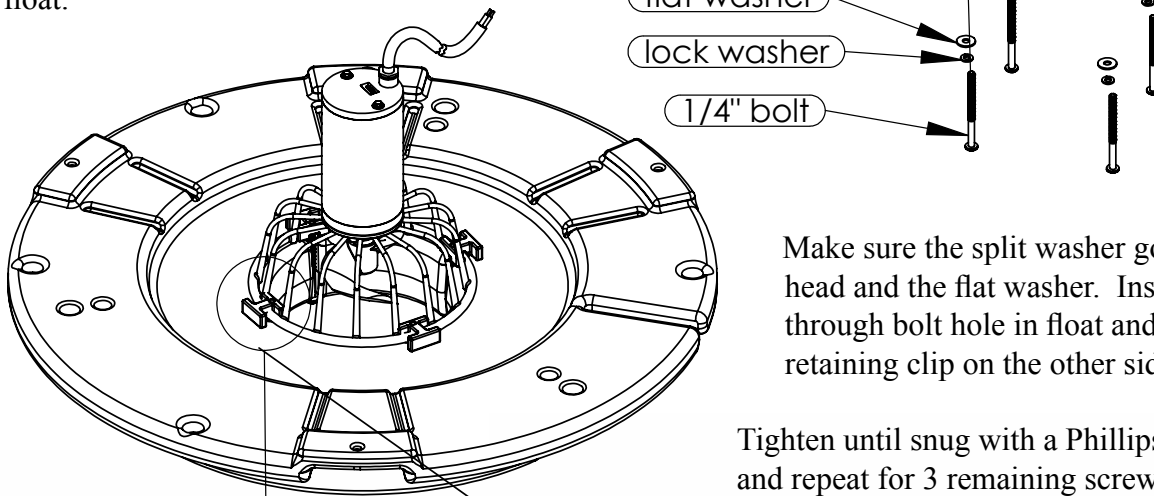
1. Rest the float upside down on the side of a table



2. Set the unit upside down on the float with the prop guard resting near the float bolt holes. Place the 4 retaining clips (Part F5) over the ring of the prop guard so the threaded hole is lined up with the float bolt holes. There is a U-shaped indent in the clip that will fit snug against the top ring of the cage.

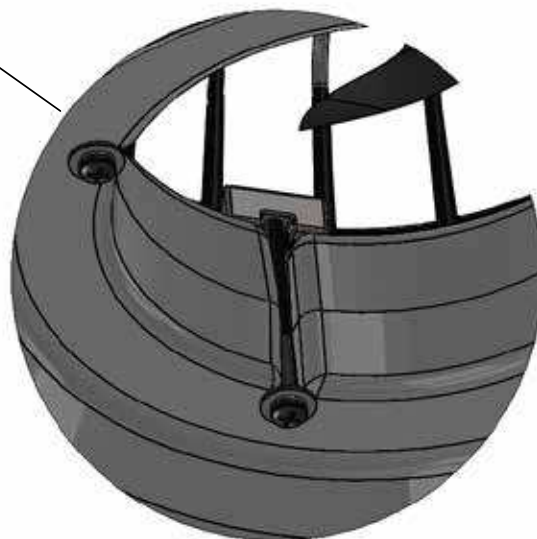
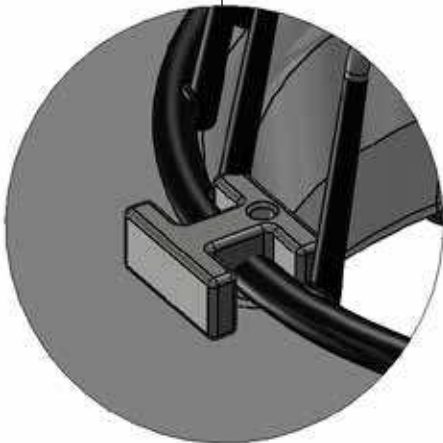


3. Letting one edge of the float overhang the edge of a table so you have access to one of the float bolt holes on the top side, use one of the 1/4" Screws, one split washer, and a Flat Washer to secure the float.



Make sure the split washer goes between the bolt head and the flat washer. Insert screw with washer through bolt hole in float and thread into the float retaining clip on the other side.

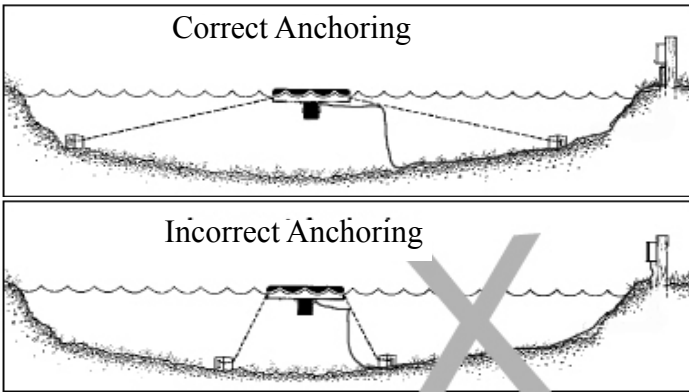
Tighten until snug with a Phillips Head screw driver and repeat for 3 remaining screws.



Installation & Operating Instructions

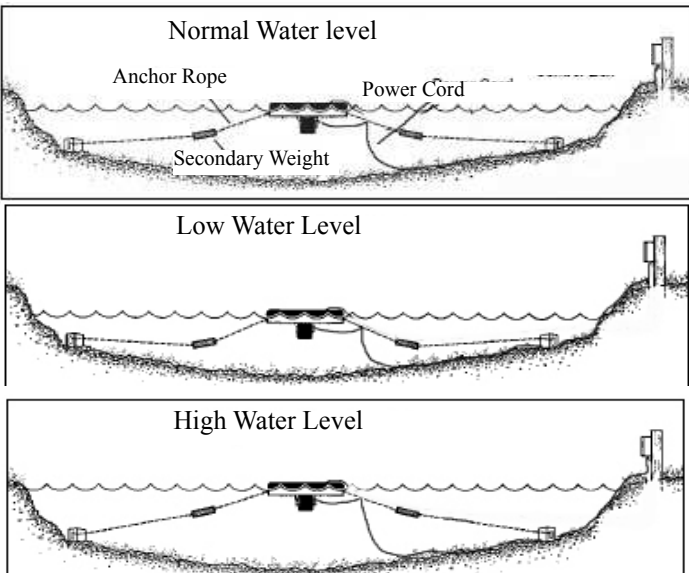
Use the ropes to position the Aerator in the desired location in the pond/lake. Anchor the ropes or secure them to the shoreline so the ropes are free of slack, but not tight. To prevent twisting of the unit due to torque, you should place the anchor at least 3 feet from the float for each foot of depth (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 TWO (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 Aerator can rise as the water level rises. This can also help hide ropes by sinking them further below the surface.



STEP THREE

At this time the Aerator is ready for operation.

Once your Aerator is properly installed and secured, you can now connect the unit to a 12 Volt DC battery.

Warning! Spark \ Explosion hazard, make sure switch is in the off position before connecting or disconnecting clamps to battery or replacing fuse.



ON

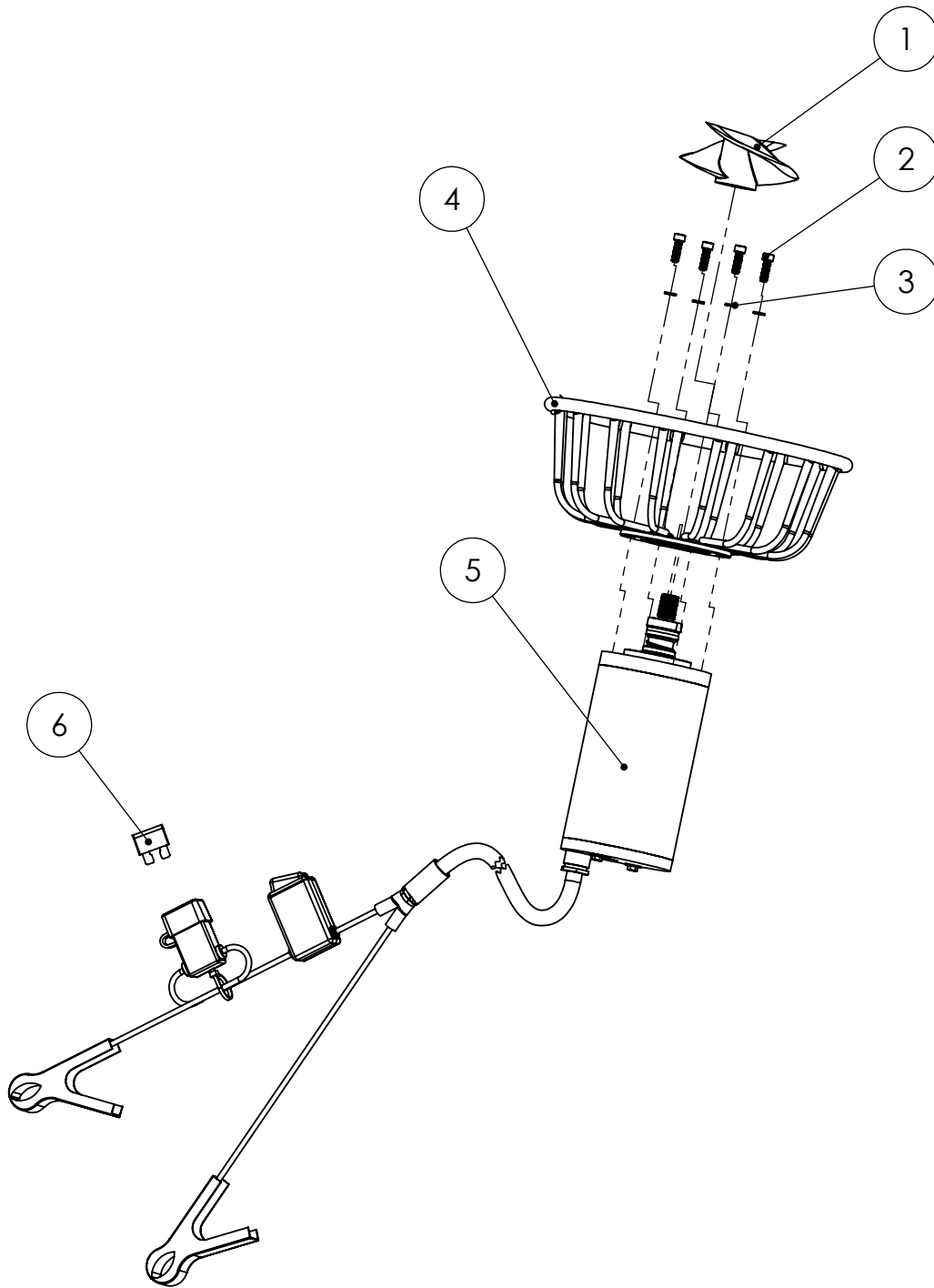
OFF

The Red clamp connects to the Positive (+) side of the battery, and the Black clamp connects to the Negative (-) side of the battery. It is recommended to momentarily connect to verify the unit is stable in operation before letting the unit run unattended.

CAUTION: Your Kasco unit contains an inline, cord mounted fuse designed to protect the unit, cord and battery while providing maximum, safe operation. Never replace the fuse with a different size than provided, and never change the wire length of your unit. Changing fuse size or extending the wiring will create a dangerous situation, equipment failure, and will void your warranty.

ENJOY YOUR NEW KASCO EQUIPMENT!

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	150595	PROP, TRIMMED, PORTABLE DE-ICER	1
2	150557	SCREW, 10-32 X 5/8 LONG	4
3	771037	WASHER, #10 SPLIT LOCK	4
4	150512	PROP GUARD, VINYL COATED	1
5	150101	MOTOR ASSEMBLY, 12VDC	1
6	150565	FUSE, 25 AMP	1



REPLACEMENT PARTS

Warranty Policy

Warranty Period:
Model 1812AF 1 year

Kasco® Marine, Inc. warrants this Aerator to be free from defects in material or workmanship (except for the 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. 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 WHATSOEVER 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 Aerator is not maintained properly according to the Maintenance Recommendations supplied in this Owner's Manual.

The Aerator is returned for repair without the power cord or if the unit, or power cord are altered in any way from original shipment. Cuts in the power cord are not covered under warranty.

The Aerator is damaged by unauthorized tampering.

Warranty Claim Procedure:

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

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 any updated information 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 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.

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 updated information and/or Repair Form.

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 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 estimate 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

Maintenance Recommendations



Under No Circumstances should anyone enter the water while an aerator is operating. Turn Off and Disconnect electrical power prior to any Maintenance or Servicing

Your product is protected with a 25 Amp replaceable fuse. If you have repeat, consistent trips of your fuse, the equipment should be disconnected and removed from the water. The power cord should be inspected for damage and you should call a Kasco Marine distributor or representative for further instructions.

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 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 DISCONNECT POWER TO THE UNIT BEFORE ATTEMPTING TO REMOVE CLOGS.**

CLEANING: Equipment should be removed from the water at least once per month to clean the exterior of the system, especially the painted steel motor housing. 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 most cases a power washer will be sufficient if the unit and algae are still wet. If corrosion of the painted surfaces exists, clean and repaint with a good quality epoxy paint.

SEAL REPLACEMENT: This is a sealed motor assembly and the seal will wear out over time (similar to brake pads on a car). Replacement of the seal after three years may add longevity to the operation of the motor, saving you the cost of more expensive repairs.

Seal replacement and all other repair services should be performed by Kasco Marine or a Kasco trained Authorized Repair Center. Please contact your Kasco Marine, Inc. distributor or representative for your nearest Authorized Repair Center.

UNIT STORAGE: When storing units during the offseason, it is important to check for any damage to your unit, or corrosion of painted metal parts. If corrosion does exist, simply clean the area and repaint with a good quality epoxy

paint. This will help ensure your unit gives you trouble free service.

Troubleshooting Tips

Below are some helpful troubleshooting tips. If a problem occurs, please double check the assembly and installation instructions and required power to drive your unit. More troubleshooting tips can be found at www.kascomarine.com (Under the Helpful Info tab)

“My Aerator 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.

Note: If the Aerator has been stored or exposed to cold for an extended period without running, it may take a minute for the prop to get to full speed once power is supplied.

“My Aerator 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, disconnect the unit from power and clean away the debris that is clogging up the prop guard. 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 disconnected from power, check the prop for damages and replace if damage is found.

“My Aerator does not run”

This can occur because the user replaceable fuse has blown. Check and replace if necessary.

In warmer climates you may experience a blown fuse due to heat buildup in the fuse holder. If you experience this try to keep the fuse and holder as cool as possible by keeping it in the shade or reducing the run time of the unit between battery charging or changes.



800 Deere Rd

Prescott, WI 54021

Phone: 715-262-4488 Fax: 715-262-4487

www.Kascomarine.com Sales@kascomarine.com

Repair Contact Form

- ❖ Kasco requires all Repairs sent in **MUST** be accompanied by this form and marked to Repairs attention. (ex. Attn: Repairs)
- ❖ Repairs returned should include upper pump housing or wire basket for Aerators and De-Icers. These parts protect the motor during shipping.
- ❖ Kasco is **NOT** responsible for shipping damage accrued in return shipment.
- ❖ It is the responsibility of customer to ship and pay freight to Kasco.
- ❖ Do not ship float or control panel with unit, unless otherwise instructed
- ❖ A fee of \$60 per hour will be assessed for cleaning excessively dirty units and float disassembly
- ❖ Refer to the Owner's manual for easy-to-follow troubleshooting rule out site issue.

Note: Contact Information Should be that of the person or company to contact for repair.

Company	First Name	Last Name
Address	City	State
Zip code	Phone #	Alternate Phone #
Email Address	Preferred method of contact (Circle) Phone Email	Purchase order #

Submersible Pump Information (Complete if sending unit)	Light kit Information (complete if sending lights)	Parts Included (For office use)
Model #	Model #	Unit <input type="checkbox"/>
Serial #	Serial #	Cord <input type="checkbox"/>
Cord Length:	Cord Length:	Light Kit <input type="checkbox"/>
Purchased from:	Purchased From	Float <input type="checkbox"/>
Purchase Date:	Purchase Date:	Control Panel <input type="checkbox"/>

Additional notes for technician.

Registration Information

Fill in the information below and keep for your records.

Model # (Ex. 1812AF) _____

Serial # (Ex. 5101A181725) _____

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