



De-icer

Model 1812D Owners Manual

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



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

884813
Rev. 02/11/13

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

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.**

Unit Specs

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

Water depth in de-icing area of 3 ft. or more recommended for best results.

NOTE: This De-Icer is not designed for salt water or brackish water use. Use of this product in salt water or

brackish water will void your warranty.

Battery Information:

This De-Icer 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.

General Owner's Instructions

INSPECT THE DE-ICER

Immediately inspect your Kasco De-Icer 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).

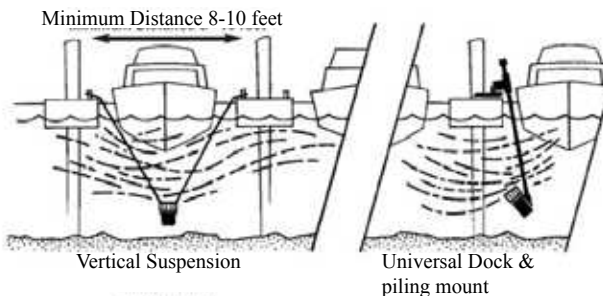
UNIT STORAGE

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.

Installation & Operating Instructions

Kasco offers two basic ways for De-Icer installation: Suspended by ropes as purchased, or Universal Dock Mounting. Please see the "Additional Accessories" page for more information.

Different De-Icing objectives may require different mounting/installation options. Positioning the unit depends on your De-Icing objectives; rapid removal of ice, or keeping an already thawed area open.



1. Install De-icer in pond

- If ice is present, you will need to break open a small area to install the De-Icer.
- When installing your Kasco De-Icer for suspended operation with the provided ropes, make sure the ropes or suspension lines are spread at least 8 to 10 feet apart. The high starting torque of your Kasco De-Icer may cause suspension lines that are too close together to twist up and possibly damage the electrical power cord. Tie each rope with a secure knot from the dock piling, cleat, boat etc. so the De-Icer hangs vertically.
- Angling your Kasco De-Icer with suspension operation can be accomplished easily by simply changing the mounting location of one suspension line. There is no need to remove the knot and splice of the rope, simply change the point at which the line leaves the propeller cage by looping the rope around the top circular band over 1 to 4 vertical cage wires (more than 4 not recommended). This will move the support lines off center and

allow the unit to hang at a slight angle. After installation and the unit is turned on, your Kasco De-Icer will swing up to an angle (the angle is dependent on how many cage wires you move the line) and the De-Icer will hold that angle during operation. This allows you to aim the flow of warmer water in the desired location.

- If the Universal Dock Mount was purchased, see its Assembly and Installation Instructions.
- Once your De-icer 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.



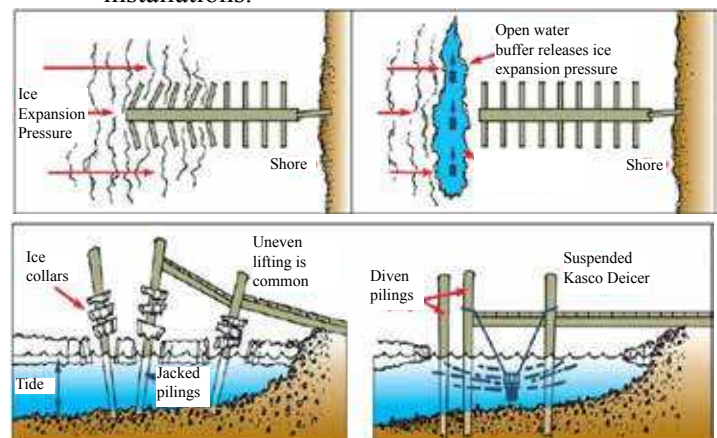
ON

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.

2. Location

- Locating a De-Icer depends on your De-Icing objectives. If ice expansion pressure is your concern, you may find it easier to have an open-water buffer between your dock or structure and the expanding ice pack.
- If ice lifting or a combination of lifting/expansion is your concern, you may wish to keep your dock, structure, or boat area completely ice free. These objectives are different and may require different installations.



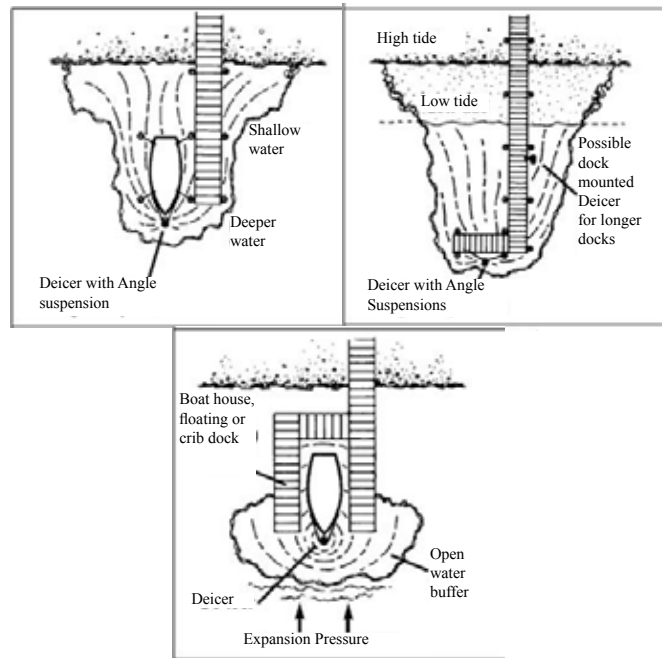
- Place as deep as possible but still able to maintain a lifting boil in front of the unit. A good guide is 4-6'

deep for vertical installation and 2'-3' depth for angled operation and/or installation with optional dock mount. The unit should be positioned at least 1' off the bottom to prevent clogging from debris. Deeper water will de-ice quicker, with sufficient surface movement. A more upward angle is preferred for faster de-icing. In colder climates, warmer water is a more important factor than surface circulation, so you may wish to install your De-Icer deeper than the above guide lines.

- If using from a dock deeper water, rope suspension is recommended.
- De-Icers generally will work in shallower water, but are less effective and due to the constraints of your installation, you may have to settle for a shallower installation. It is recommended that you experiment with more than one possible location for the best installation results.

Some useful tricks you may wish to consider are:

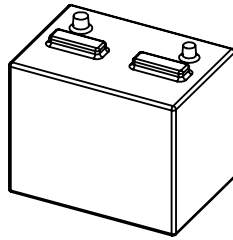
- De-Ice from the upstream side and let the current help, rather than hinder.
- Boats are designed to allow water to flow from the bow to the stern with the least resistance. It is generally easier to De-Ice a boat by installing the De-Icer at or near the bow, angled to push the De-Icing flow of water toward the stern.
- It is generally easier to De-Ice a shallow area by bringing the warmer water from a deeper area into the shallow area. Angle your De-Icer from the deeper water toward the shallow water.
- When using more than one unit, it is better to angle all units in one direction, creating a current rather than installing De-Icers in opposing directions.
- In tidal waters, split the difference in water depth so the De-Icer is in shallow water at low tide and deep water at high tide. If you are De-Icing a boat, it is easier to tie your De-Icer to the boat and allow the boat and De-Icer to rise and fall with the tide together.



3. Ice Clearing

- Ice thickness and water depth will greatly influence how quickly ice will be removed. In extreme cases, this can take several hours.
- As ice clears, you can reposition the De-Icer to expand your open water area by turning it a few degrees clockwise or counter clockwise.
- Any obstruction at the surface of the water may slow or stop the flow of warmer water. A natural current, such as in a river, will tend to force your De-Icing efforts downstream.

CUSTOMER SUPPLIED PARTS / EQUIPMENT



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

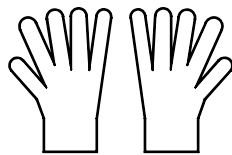
SUGGESTED ASSEMBLY TOOLS



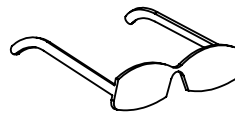
Anti-Seize



5/32 Allen Wrench

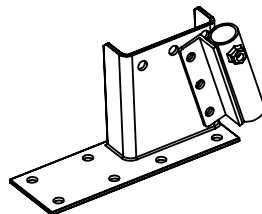


Safety Gloves



Safety Glasses

OPTIONAL EQUIPMENT



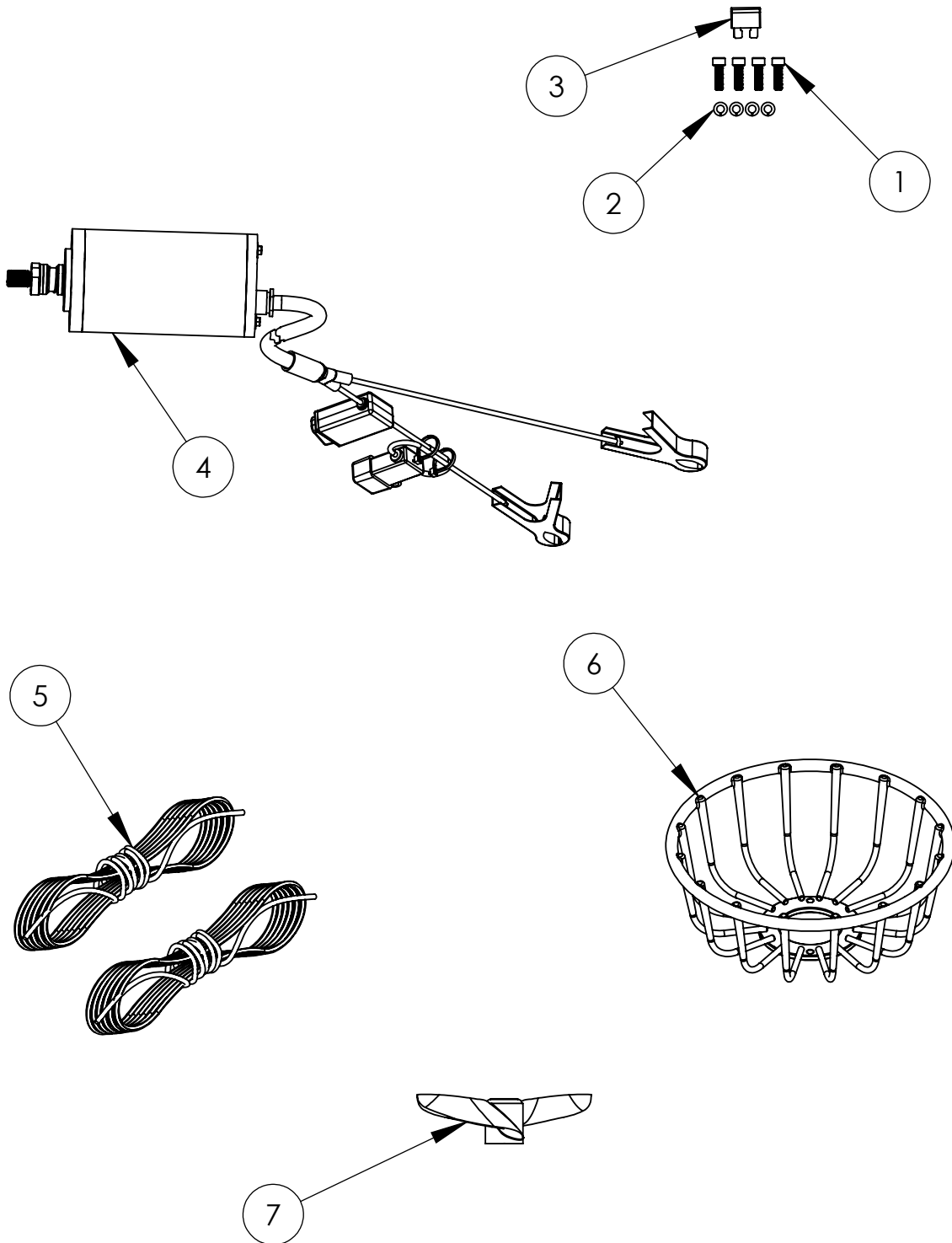
Universal Dock Mount Kit

NOTE: Optional Equipment is suggested in applications where the motor unit will be run horizontally or in a downward facing direction. This is not considered normal use.



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	ROPES, 15 FEET LONG, BLACK	2
6	PROPELLER GUARD	1
7	PROPELLER	1

INCLUDED PARTS

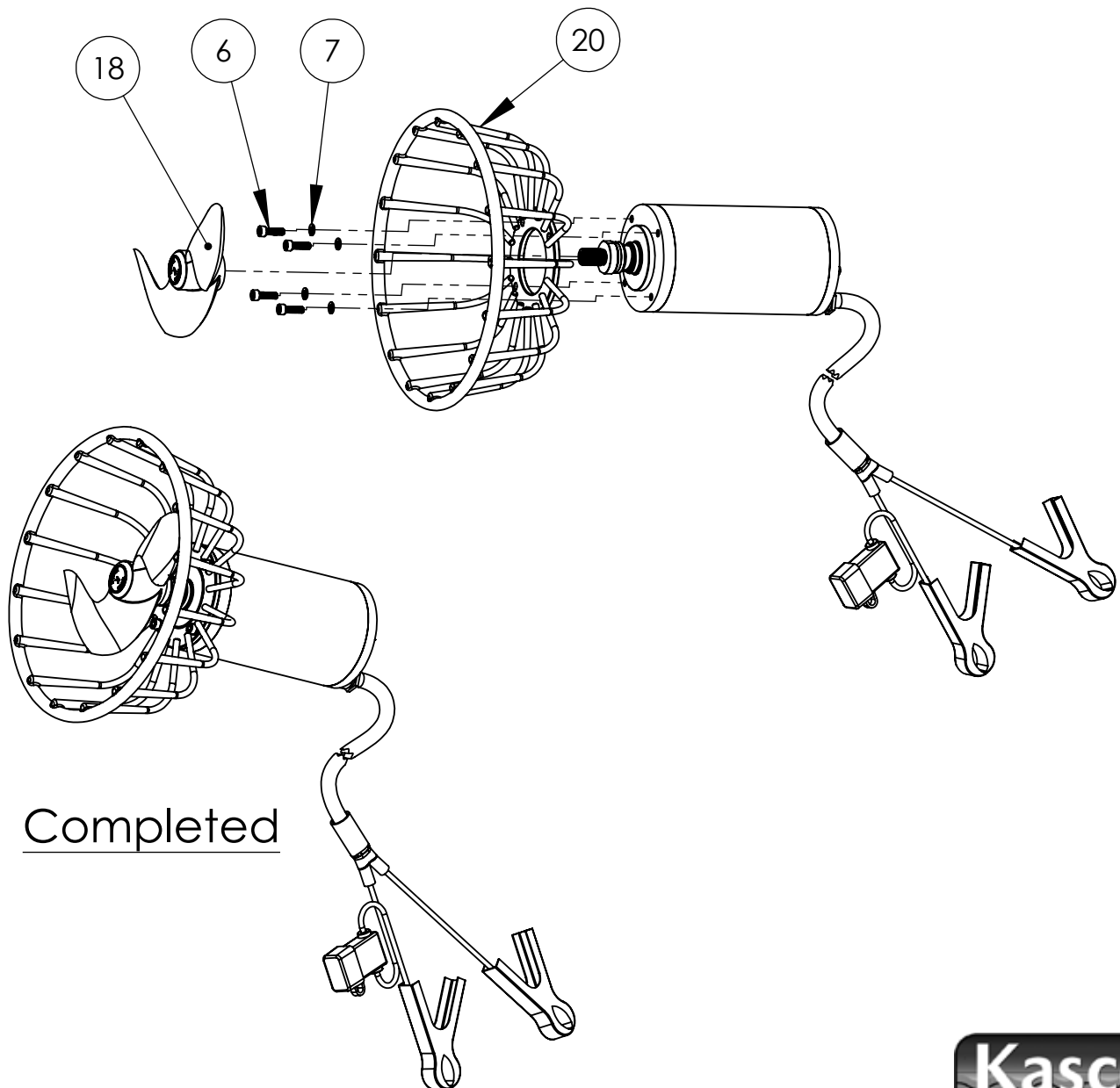


SAFETY GUARD AND PROPELLER INSTALL

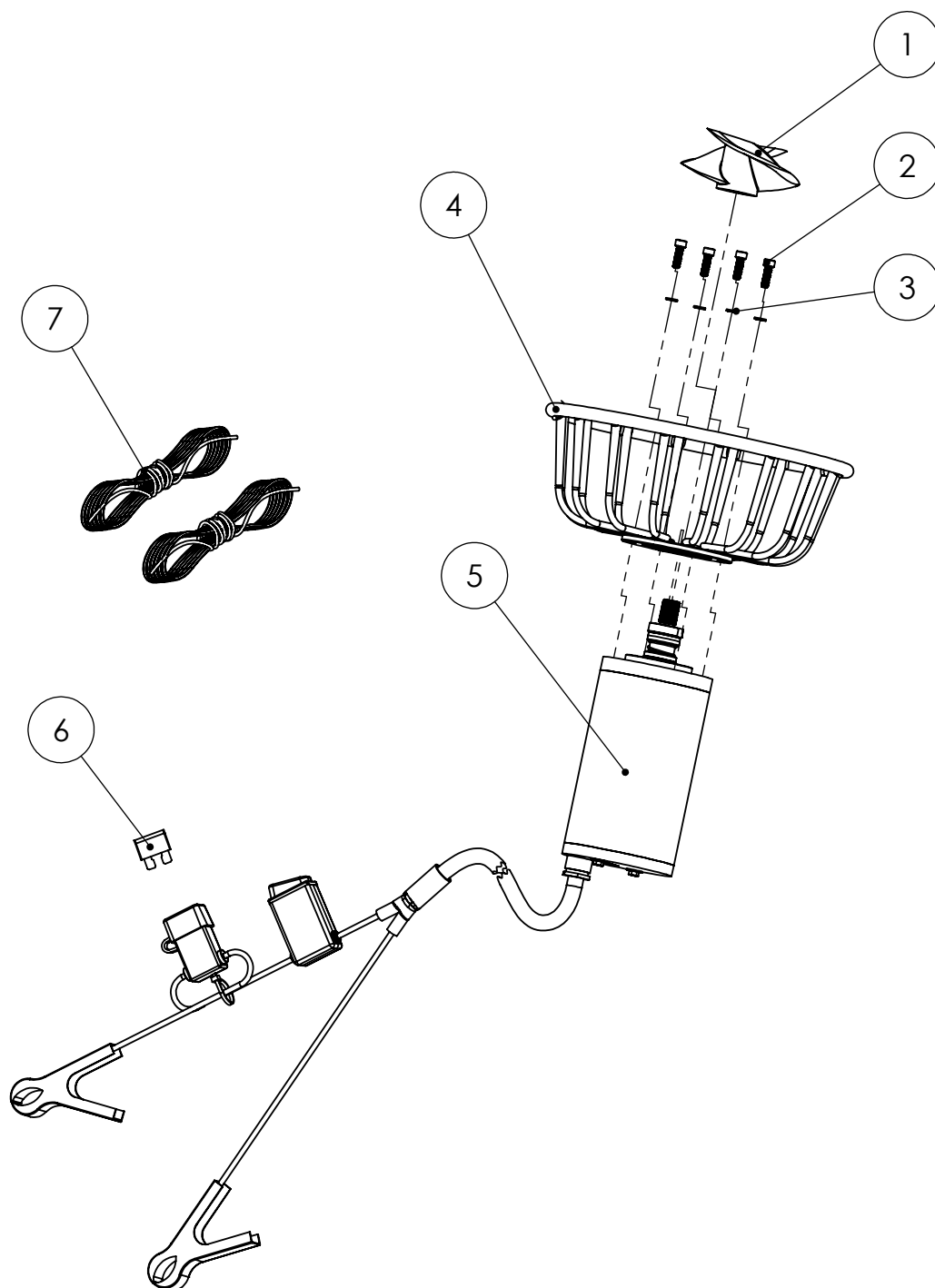
- 1) Align guard (20) onto motor body.
- 2) Insert screws (6) through lock washers (7)
- 3) Insert screw\washer assemblies through guard and tighten into motor body to 25 inch lbs.
- 4) Thread propeller (18) onto motor shaft in a clockwise rotation and hand tighten. Flats are provided on the threaded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



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
7	141110	ROPES, 15 FEET LONG, BLACK	2



REPLACEMENT PARTS

Warranty Policy

Warranty Period:
Model 1812D 1 year

Kasco® Marine, Inc. warrants this De-icer 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 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 De-icer is not maintained properly according to the Maintenance Recommendations supplied in this Owner's Manual.

The De-icer 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 De-icer is damaged by unauthorized tampering.

Warranty Claim Procedure:

The best method for establishing warranty period is by the original receipt. Also, register the De-icer online at: www.de-icer.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 a De-Icer 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 De-Icers 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.de-icer.com. (Under the Helpful Info tab)

“My De-Icer 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 De-Icer 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 De-Icer 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 De-Icer does not run”

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

Additional Accessories for Your Ice Blaster

Universal Dock or Piling Mount:



Kasco's heavy duty dock or piling mount is made from corrosion protected steel and stainless steel. This dock mount can be used with any of our Ice Blaster units. Users supply their own 10 foot 1" O.D. pipe. Includes a Qwiklock handle for easy installation and adjustments

Visit www.de-icer.com for more information on these accessories for your De-icer.



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

Customer Repair Form

* Important Reminders *

- All repairs sent in MUST be accompanied by a copy of this completed sheet!
- Routine maintenance consists of keeping the unit clean and having the seals replaced every 3 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 and for proper repair and shipping protection!

Today's Date: _____

Customer Information

Name: _____

Phone Number: _____

Address: _____

Alternate Number: _____

City: _____

Email Address: _____

State: _____

Zip Code: _____

Unit Information:

Model # (Ex. 1812D): _____

Serial # (Ex. 2101D181025): _____

Date Purchased: _____

Purchased From: _____

Earliest Date of Problem: _____

Description of Problem:

Comments:

Registration Information

Please register your fountain online at:

www.kascomarine.com

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

Model # (Ex. 1812D) _____

Serial # (Ex. 2101D181725) _____

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 • www.de-icer.com • sales@kascomarine.com