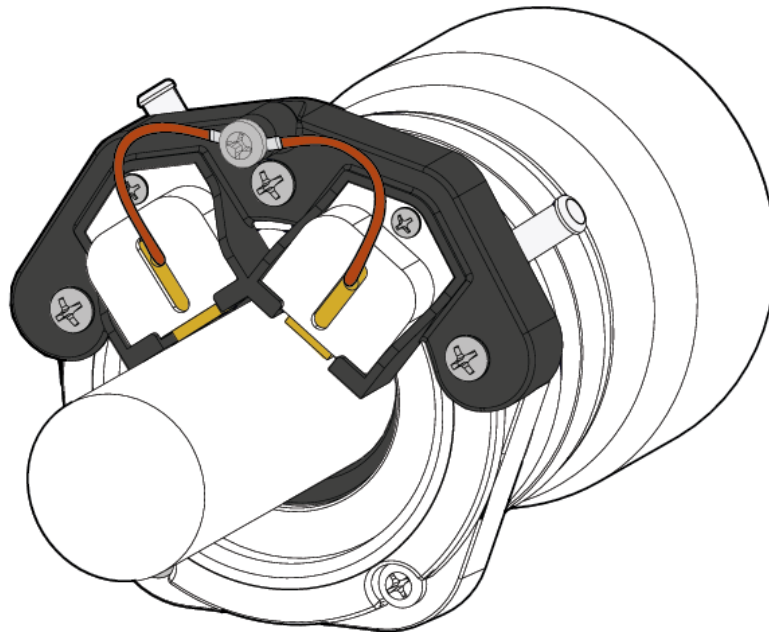


INSTALLATION MANUAL

GROUNDING BRUSH ASSEMBLY

For Pentagonal shaped caps only!



U.S. Patent No. D1,131,546 S

Questions, problems, or missing parts? Contact Tides Marine Customer Service:



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Safety Information

Proposition 65 Warning: Our products may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

The following types of safety messages are used in this manual:



NOTICE!

Indicates a situation that, if not avoided, can result in property damage.

Limited Warranty Policy

For the complete limited warranty statement, visit our website at www.tidesmarine.com/warranty-policy/

Product Description

The Grounding Brush Assembly electrically connects the vessel's drive shaft to the vessel's bonding system, reducing galvanic corrosion on metal drive components.

NOTE: The Grounding Brush Assembly can be ordered as a single or double unit, depending on the size of the propeller shaft. This manual provides the installation steps for the double unit; however, both types are installed following the same steps. **For Pentagonal shaped caps only!**

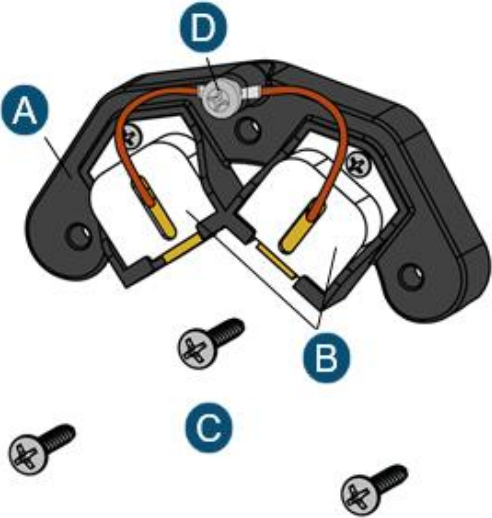


NOTICE!

Please read and follow all instructions and guidelines in this manual to ensure proper installation, use, and maintenance of the product.

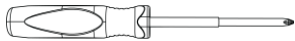
PARTS LIST

The following components are included in the Grounding Brush Assembly (Double Unit).



Part	Description	Quantity
A	Grounding Brush Assembly	1
B	Grounding Brush Modules	2
C	Longer Attachment Screws	3
D	Ground Screw	1

TOOLS REQUIRED



Phillips screwdriver

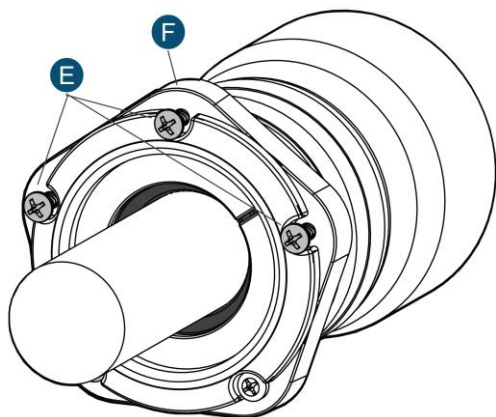


Length of grounding wire
with ring lugs at both ends

Installation

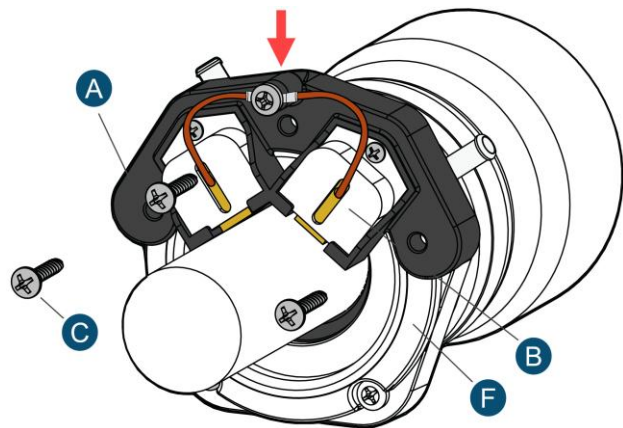
Follow these steps to install the Grounding Brush Assembly.

1 Remove Existing Screws



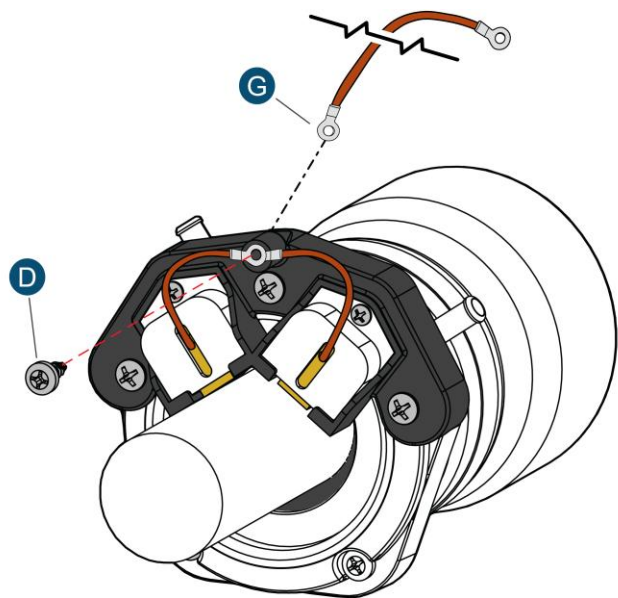
- A. Using a Phillips screwdriver, remove any three (3) consecutive screws (E) of the five (5) screws holding the existing pentagonal cap (F) to the housing.
- B. Discard the three (3) screws (E).

2 Attach Grounding Brush Assembly



- A. Set the Grounding Brush Assembly (A) in place, slightly pushing the assembly down toward the shaft until the mounting holes align.
NOTE: The Grounding Brush Module (B) contains a spring. By pushing down on the assembly, the spring is compressed so that only a small portion of the grounding brush is visible and the mounting holes align.
- B. Using a Phillips screwdriver and the three (3) longer attachment screws (C) provided, attach the Grounding Brush Assembly (A) to the pentagonal cap (F).
NOTE: Make sure the grounding brush makes contact with the shaft.

3 Attach the Ground Wire



- A. Using a Phillips screwdriver, unscrew the ground screw (D).
- B. Align a grounding wire ring lug (G) (not provided) with the ground screw hole.
- C. Reinsert and tighten the ground screw (D).

Troubleshooting

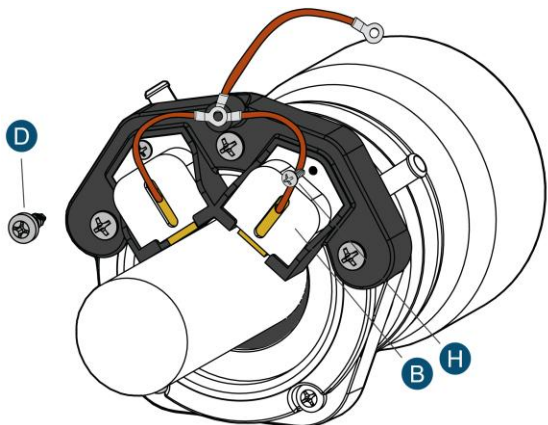
Symptom	Possible Cause	Solution
The grounding brush is not making contact with the shaft.	The copper wire or the spring in the Grounding Brush Module is stuck.	Gently push down on the copper wire to push the grounding brush toward the shaft until it makes contact.
The grounding brush is not making contact with the shaft.	The grounding brush has worn down and no longer makes contact.	See Replace the Grounding Brush Module .

Replace the Grounding Brush Module

Periodically check the Grounding Brush Module to ensure the grounding brush has not worn down to the end of use. If worn out, you will visually see the copper wire sitting at the bottom of the slot in the Grounding Brush Module.

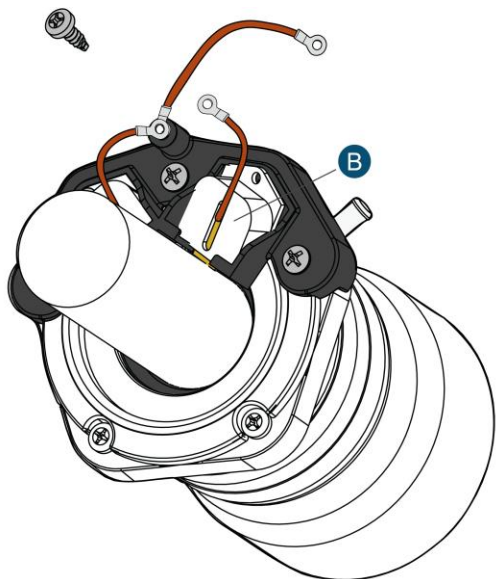
Follow the steps on the next page to replace a Grounding Brush Module.

1 Remove Grounding Brush Module



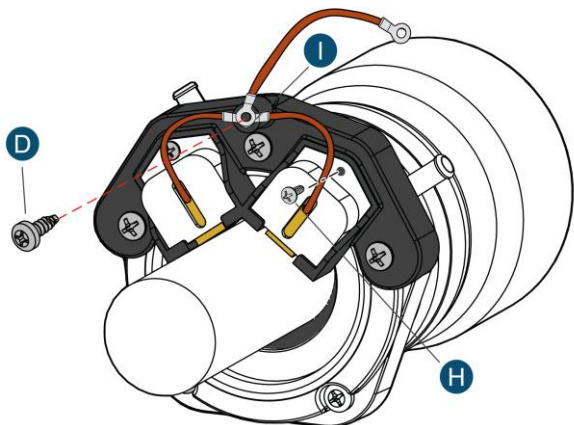
- A. Using a Phillips screwdriver, remove the ground screw (D).
- B. Using a Phillips screwdriver, remove the attachment screw (H) for the Grounding Brush Module (B) to be replaced.
- C. Remove the Grounding Brush Module (B) from the assembly.
- D. Discard the worn Grounding Brush Module (B) and its attachment screw (H).

2 Insert New Grounding Brush Module



- A. Slightly tilt the new Grounding Brush Module (B) and insert the base into the bracket.
- B. Push in the top part of the Grounding Brush Module (B) so that it sits flush with the back of the bracket.

3 Attach Grounding Brush Module



- A. Using a Phillips screwdriver, secure the Grounding Brush Module with the provided attachment screw (H).
- B. Align the module's grounding wire ring lug (I) with the ground screw hole.
- C. Reinsert and tighten the ground screw (D).

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