100th Issue
Boating Safety Circular

This is the 100th edition of the USCG’s Boating Safety Circular, and it is the most important publication you are not reading. Twice a year, the USCG’s Office of Auxiliary & Boating Safety compiles articles, data and regulatory clarification to keep manufacturers informed on a number of topics related to our business. Inside the Circular you can expect to read about policy changes, inspection information, staff information as well as valuable recall data. As a boatbuilder or associated equipment manufacturer you really need to be reading this free publication to gain some insight on the federal agency that regulates our industry. The staff at the Office of Auxiliary & Boating Safety carefully compiles information they know you’ll need so you can be informed on how the latest technology interacts with existing regulations. Download it, read it, you’ll be glad you did.

John Adey
President, ABYC

Editors note: Mr. Adey is the President of the American Boat & Yacht Council (ABYC), which is a non-profit, member organization that develops voluntary global safety standards for the design, construction, maintenance, and repair of recreational boats. More information can be found on ABYC at https://www.abycinc.org.

USCG/ABYC Risk Mitigation Series 4: Staying Current with Electrification

The U.S. Coast Guard and the American Boat and Yacht Council announce the fourth edition of the Risk Mitigation Series; “Staying Current with Electrification”, scheduled for May 3, 2023, from 2:00 to 4:00 Eastern Standard Time. The USCG Risk Mitigation Series is a biannual virtual, free event hosted by ABYC every May and November.

The fourth webinar in the series, the overview states, “Electrification is here. As component manufacturers, boat builders, repair yards, and marine surveyors, we need to better understand how it functions. While there are no new electric propulsion related standards or regulations being published in 2023, both the USCG and ABYC are getting together to discuss the current state of electrification and to clear up any misconceptions the industry may have about this evolving technology.”

This seminar is free, you can register here: https://abycinc.org/events/EventDetails.aspx?id=1722015&group=

Once registered, you will be sent a link to view the seminar via Zoom.
Mechanically Propelled Personal Hydrofoils (eFoils) and Motorized Surfboards

E Foils are a new type of vessel...yes, vessel. Technically speaking, the Coast Guard refers to them as mechanically propelled personal hydrofoils, but they are commonly referred to as eFoils or electric hydrofoils. The term eFoil is not intended for electric foiling boats even though the term may seem to apply.

In addition to eFoils, motorized surfboards, also known as “jetboards”, have become more popular. These products are not as new, but battery technology has made them more practical than previous incarnations. Using the legal definition of vessel found in 1 USC 3, the Coast Guard has determined eFoils and jetboards to be vessels. Therefore, both are subject to all laws and regulations pertaining to recreational vessels propelled by machinery.

"Bottom line...from a regulatory compliance perspective, eFoils and motorized surfboards are subject to all of the requirements set forth within 46 USC Chapter 43 and 33 CFR Subchapter S.

Bottom line...from a regulatory compliance perspective, eFoils and motorized surfboards are subject to all of the requirements set forth within 46 USC Chapter 43 and 33 CFR Subchapter S. This means manufacturers must have a Manufacturer’s Identification Code (MIC) and the eFoils and motorized surfboards they produce must have engine cut-off switches, Hull Identification Numbers (HIN), certification and capacity labels and meet flotation requirements. Regulations on electrical systems and ventilation may also apply to jetboards depending on the exact specifications of the device in question. Finally, eFoils and jetboards are required to have a certification of number issued by the State of principal operation and that number must be displayed in accordance with 33 CFR 173.27. The operator of an eFoil or jetboard must also comply with equipment carriage requirements found in 33 CFR 175.

However, in accordance with 46 USC 4305, if the Coast Guard considers that recreational vessel safety will not be adversely affected, eFoils and/or jetboards may be exempted from specific sections of 46 USC Chapter 43 or a regulation prescribed under that chapter. Exemptions may only be granted to a specific model of eFoil or jetboard, so it is important to understand that if a manufacturer wishes to utilize an exemption they must apply for one for the products they produce – a manufacturer cannot use another manufacturer’s exemption. Exemption requests can be emailed to rbscompliance@uscg.mil. It is also important to know that exemptions are granted for a period of 5 years. After which, the manufacturer must apply for a renewal of the exemption for that particular model. Finally, exemption renewals are not guaranteed. If the Coast Guard becomes aware of adverse safety information, exemptions may be re-evaluated and not renewed.

Hull identification numbers or HINs will not be exempted and must be affixed as specified by 33 CFR 181.29 (c). Efoils and jetboards, just like any other vessel, are required to have two identical HINs applied. The primary HIN positioned on the aft right-hand side of the board and then a secondary HIN (sometimes called a hidden HIN) placed at the discretion of the builder.

The CG-BSX Policy Letter 22-02, CH-1 on eFoils and jetboards can be downloaded here: https://safeafloat.com/policies-letters/
Recreational Boat Manufacturer and Dealer Communication and Responsibilities

The Coast Guard’s Recreational Boating Product Assurance Branch regularly inspects recreational boats throughout the United States at factories, dealerships, and boat shows. As a result, we see trends regarding non-compliance and confusion with the application of the federal regulations. This article will discuss two of those topics involving manufacturer and dealer communication and responsibilities, and how to avoid any pitfalls that may arise.

Our first topic details issues around compliance with capacity and flotation requirements - primarily for monohull outboard powered boats; however, it is valuable information for all builders. All monohull boats under 20 feet in length are required to have a capacity label and have sufficient flotation depending on the boat type. To determine this the manufacturer needs to know what the boat weighs. Among other weights “Boat Weight” includes the weight of all permanent appurtenances. What is a permanent appurtenance you ask? They are any equipment that is mounted or fastened so that it is not removable without the use of tools. So, what does that mean, and where does the problem lie?

Often when a boat is purchased, the buyer wants to add things from decorative lighting to T-tops and everything in between. In order for the manufacturer to determine the boats’ capacities and flotation plan they must take into account everything intended to be installed on the boat whether it leaves the factory with that or not. Therefore, the manufacturer needs to clearly communicate with the dealer what are intended add-ons, and conversely any items that should not be installed.

However, this does not necessarily relieve the manufacturer of responsibility when a dealer adds something to the boat. One thing the Coast Guard looks for when testing or inspecting a boat is if provisions were made where it could reasonably be anticipated that a component is designed to be installed on the boat. A good example of this is when a builder provides blocking for the addition of a T-top. Therefore, the builder made engineering design allowance for the structure to be added and would need to consider those in the design of the boat. Conversely, if a dealer adds a component that the manufacturer did not make provisions for then the dealer may become the liable party.

Bottom line, the boat builder needs to have clear, open, and documented conversations with their dealer(s) about their boats and what allowances have been made for options. The builder, as the Manufacturer’s Identification Code (MIC) holder, is the responsible party for the boat as sold to the first purchaser and needs to educate the dealer so they do not install anything on the boat that could cause it to fail flotation or capacity testing.

This leads directly into the second issue the Coast Guard often sees. Suppose in the above situation, sufficient flotation was not provided, and a federal safety recall will be necessary. Federal regulation requires that all first purchasers for other than resale are notified of the recall. There are two things to take out of this statement:

1. The dealer is not considered the first purchaser for a recall, and
2. It is the manufacturers responsibility to provide that notification to the first purchaser (boat buyer).

Where we see issues with this typically falls where the manufacturer assumes that the dealer will have contact info for the people who bought the boat. 46 USC 4310 c(1)(A) states:

“The notification required by subsection (b) of this section shall be given to the following persons in the following manner: (A) by first class mail or by certified mail to the first purchaser for other than resale, except that the requirement for notification of the first purchaser shall be satisfied if the recreational vessel manufacturer exercises reasonable diligence in establishing and maintaining a list of names and addresses of all purchasers.”

“All monohull boats under 20 feet in length are required to have a capacity label and have sufficient flotation depending on the boat type.”
Both of these issues, dealer added options and first purchaser lists, have one common denominator. They may be easily minimized with close two-way communication between the manufacturer and their dealer(s). This makes clear the manufacturers responsibility for what they’ve designed their boats to accommodate, while at the same time reducing the risk a dealer installing options. Finally, while no one ever wants to have one of their boats subject to a federal safety recall, the maintenance, by the builder, of a first purchaser list makes that process more efficient and effective for all involved.

Defect Notification—When is a Recall Necessary and Who Initiates One?  
(Recall Series Part 1 of 2)

If a recreational vessel or associated equipment has a defect, it may be subject to a recall. 46 USC 43 grants the Coast Guard authority to recall recreational vessels and associated equipment and the rules implementing this authority are found in 33 CFR 179. The defect notification and safety recall process is overseen by the Recreational Boating Product Assurance Branch (CG-BSX-23) of the Coast Guard’s Office of Auxiliary & Boating Safety. This article will discuss:  
1. When a recall is necessary; and  
2. Who initiates a recall.

WHEN IS A RECALL NECESSARY?  
A boat recall occurs for one of two reasons:  
1. Regulatory Non-Compliance – When the manufacturer or the Coast Guard determines that a recreational vessel fails to comply with minimum safety standards found in 46 USC 43 and 33 CFR Subchapter S; or  
2. Substantial Risk Safety Defect – When the manufacturer or the Coast Guard determines that a recreational vessel contains a defect that creates a substantial risk of personal injury or death.

Regulatory non-compliance is straightforward. If a recreational vessel fails to comply with Coast Guard safety standards, that vessel may be subject to a recall. A Substantial Risk Safety Defect determination is a little more complicated. As discussed in the fall 2022 edition of the Boating Safety Circular, a Substantial Risk Safety Defect exists if ALL the following criteria are met:  
1. The hazard must occur virtually without warning - an obvious risk or normal wear and tear does not normally create the basis for a defect;  
2. The defect must occur with some frequency - one isolated occurrence usually does not constitute the basis for a finding of a defect; and  
3. The defect must clearly present the risk of death or serious injury.

There may be times when an issue meets some of the criteria for a substantial risk safety defect but may not meet the
other criteria requirements. The Coast Guard will open a case file for future reference to support the determination of “Without Warning”, “Frequent”, and “Presents Serious Risk”. In order to accomplish this, the Coast Guard requires data to support its’ decision-making process with accurate and timely reports from accidents, manufacturer notes, warranty claims, and consumer complaints. In the absence of data, the Coast Guard may have to defer taking action.

WHO INITIATES A RECALL?
The recall process can be initiated by:
- A manufacturer; or
- The Coast Guard.

Manufacturers are required by 33 CFR 179.05 to notify the Coast Guard within 30 days of discovering or acquiring information of a defect or failure to comply with Coast Guard regulations. This applies only to a defect or failure of compliance discovered within one of the following appropriate periods:

1. **10 years from the date of certification** if a recreational vessel or associated equipment required by regulation to have a date of certification affixed; or
2. **10 years from the date of manufacture** if a recreational vessel or associated equipment is not required by regulation to have a date of certification affixed.

The Coast Guard may notify a manufacturer of a defect discovered through:
- Inspection and/or testing of recreational vessels conducted by the Coast Guard to ensure regulatory compliance;
- Safety defect reports received from the public; or
- Boat accident reports submitted by the States.

In all instances the Coast Guard establishes the facts of the regulatory non-compliance or potential substantial risk safety defect and determines if a recall is warranted.

FINAL THOUGHTS
Recalls can be inconvenient, but they are actually a good thing. While they can vary in terms of severity, a recall means that a manufacturer is taking corrective action to address a safety issue. Generally, recalls have no expiration date and will transfer from one owner to another. If a used boat is purchased and there is an open recall, the customer is entitled to the repair. A recall does not signify the vessel is of poor quality. It simply means that there is a defective or poorly performing component that needs to be repaired. It is not an indictment of the boat, brand, or manufacturer as a whole. When in doubt about an issue, report it to the USCG! We want to work with the builder, while ensuring the public is safe. Simply reporting does not mean we will start a recall for everything. Communication is important. There have been issues reported by manufacturers that have not risen to the level of a safety recall. Remember that manufacturers are required to notify the USCG of potential safety issues and BSX-23 will determine how they should be handled.

If you have a question about defect notification and safety recalls, please contact the Coast Guard engineer assigned to your company. If you are unsure who that is, please send an email to rbscompliance@uscg.mil, and include the company name and location to ensure it is routed to the proper engineer. Stay tuned this fall for Recall Series Part 2, Defect Notification Procedures and Best Management Practices.

“Recalls can be inconvenient, but they are actually a good thing.”
U.S. Coast Guard Boat Inspection and Test Data

Admiral Linda Fagan, the Coast Guard’s first female Commandant, assumed her duties on June 1, 2022. Two weeks later she released her Commandant’s intent. In it, she says:

“In order to sharpen our competitive edge, Admiral Fagan says we must leverage data as the catalyst to transform the Coast Guard’s strategic advantage.”

She goes on to lay out three priorities:
- Transform our total workforce;
- Sharpen our competitive edge; and
- Advance our mission excellence.

In order to sharpen our competitive edge, Admiral Fagan says we must leverage data as the catalyst to transform the Coast Guard’s strategic advantage.

In the Office of Auxiliary & Boating Safety, we have been analyzing our inspection program, its results, and evaluating data to reallocate limited resources with the goal to most positively impact boating safety.

The first step to adopting a data driven approach is to understand the current state of business. The Recreational Boating Product Assurance Branch is responsible for overseeing recreational boat manufacturing and ensuring boats introduced into the United States market meet the minimum federal safety standards. This is done through inspecting boats at manufacturing facilities, dealers, and boat shows, and testing boats bought on the open market for compliance with flotation requirements.

A manufacturer visit typically occurs at the manufacturing facility. This facilitates direct one on one interaction with the builder and the Coast Guard’s Compliance Inspector (CI) and gives the CI access to the boat while it is under construction. Dealer and boat show visits are similar, and in both cases the CI is looking over multiple boats without the manufacturer present. As these boats are typically ready for sale, this is a noninvasive inspection that is a spot check for compliance, and an opportunity for our CIs to stay abreast of current trends. Boat tests are conducted in a test facility, where the CI is given the opportunity to inspect a boat for regulatory compliance AND perform flotation testing in a controlled environment. The inspection and testing is a thorough process, but it also does not facilitate interaction between the builder and CI.

Table (1) shows the distribution of our efforts from Jan 2020 to the end of Sep 2022 (33 months).

<table>
<thead>
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<th>Type of Inspection</th>
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<td>Manufacturer</td>
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<tr>
<td>Boat Test</td>
<td>85</td>
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<tr>
<td>Dealer</td>
<td>497</td>
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<tr>
<td>Boat Show</td>
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</table>

Table 1 - Inspection types.

For the same period, manufacturer inspections and boat tests had a 29% deficiency rate, while retail and boat show inspections had only a 7% deficiency rate. This is to be expected as the retail and boat show visits are much less rigorous. Figure 1 (next page) shows that CIs conducted a total of 857 manufacturer inspections and boat tests, and 247 had at least one deficiency. On the contrary, of 5,544 dealer and boat show visits, only 362 had at least one deficiency. While it appears manufacturer visits and boat tests are much more effective, dealer and boat show visits provide benefit as it allows our CIs to inspect multiple boat brands in one location and to have visibility of the 3,000+ manufacturers that are active in the United States.

What are we finding? Hull Identification Numbers (HINs) are the biggest deficiency noted in all inspection types. This is because every recreational vessel is required to have a HIN. For example, even a kayak needs a HIN, but all other federal safety standards don’t
apply to it. Deficiencies with flotation are found primarily during boat tests, as this is tested during this inspection. Figure 2 shows high level categories of deficiencies that are noted during inspections. It is clear that HINs, safe loading, flotation, and display of capacity and certification are most often noted as deficient.

Before drawing conclusions, it is important to look closely at Boat Tests.

“It is clear that HINs, safe loading, flotation, and display of capacity and certification are most often noted as deficient.”
“Before drawing conclusions, it is important to look closely at Boat Tests.”

While it is a small subset of Coast Guard inspections, it is the most thorough. During a boat test, the Coast Guard will physically test a boat to determine if it complies with flotation requirements. The results of recent boat tests indicate about half of tested boats are deficient in the quantity or the location of flotation materials and they do not comply with flotation regulations. This leads to costly boat recalls and puts boaters at risk in the event that they experience a sinking, swamping, or capsizing event.

While the deficiencies in figure 2 (page 7) may be alarming to some, an obvious question may be, what about fuel and electrical systems as boats become larger and more advanced? The short answer is that 33 CFR Subchapter S, Subpart I, Electrical Systems and Subpart J, Fuel Systems do not apply to gasoline powered outboard boats, which are the overwhelming percentage of boats sold in the United States. So, these results are not surprising. We expect this trend in the industry of bigger boats, and a higher proportion of outboard boats to continue, and in the absence of federal standards, voluntary standards fill the gap.

Reviewing inspection results provides some insight into industry risk. However, it is important to understand the limitations of our current inspection program, as federal safety standards were written nearly 50 years ago to address the risks in boating at that time. As discussed, because the Coast Guard’s regulations for fuel and electrical do not apply to the overwhelming majority of the boats inspected and produced today, we do not see many deficiencies in those categories. However, the Coast Guard is currently reviewing all of its recreational boat manufacturing regulations to determine if they are still adequate or if changes need to be made. Regardless, conducting inspections provides the opportunity for the Coast Guard to interact with manufacturers, understand and mitigate the risks associated with recreational boating, and provide guidance standards for an evolving industry that will improve safety. We will follow the Commandant’s intent and:

- Provide an update on this data in the spring Boating Safety Circular every year so recreational boat manufacturing stakeholders can see inspection trends;
- Use this data to seek continuous improvement in our compliance program; and
- Analyze this data for to inform possible changes to Coast Guard recreational boat manufacturing regulations.

For more information on our inspection program, please feel free to reach out to Kevin Ferrie at kevin.b.ferrie@uscg.mil.
From the Archives...

A Short History of the Boating Safety Circular

The first Boating Safety Circular was published on November 1, 1969, and to quote from the Foreword to that issue:

"The Commandant, U.S. Coast Guard has established the Boating Safety Circular as a means to 'pass the word' to boat and equipment manufacturers, distributors, dealers, and to certain others concerned with boating safety. The need for a way to do this became evident soon after the establishment of the Office of Boating Safety [now the Office of Navigation Safety and Waterway Services]. Many letters we received asked for explanations of various rules and regulations for pleasure craft or requested information which would be of general interest. This Circular will give us the means to communicate better on these matters and help us all to work toward our common goal of safe boating. The Boating Safety Circular are informational only -- nothing appearing in them will establish or change any law or regulations -- and will be of direct value as a source of information on established or proposed regulations or standards. They will improve coordination and help us to provide better service to the public. The Circular will not be a regular periodical but will be issued from time to time as needed to maintain good communications. Issues will be consecutively numbered so that readers will know if an issue has failed to reach them."

Although we have changed our layout from time to time, tried various issue number systems and made the Circular a quarterly rather than an "as needed" publication, very little has changed in the purpose of the Boating Safety Circular or in its content. Because of increased interest in the Circular and numerous requests for back issues, in addition to our regular features, this issue contains a compendium of articles from all previous BSCs which contain material we still consider important. Some of the articles on the following pages have been edited to include stories covering the same subjects published in later issues. Others have been rewritten to reflect changes in applicability, availability of materials and differences in technology or the "state of the art." Although each article ends with a reference to the issue in which it appeared for the benefit of readers who want to review them, we will no longer provide copies of back issues.

Editors Note: The article above originally ran in the December 1986 edition of the Boating Safety Circular. Some things have changed about how we produce and distribute the Boating Safety Circular since then, but what has not changed is our commitment to providing recreational boat and associated equipment manufacturers with timely and educational articles pertinent to compliance with U.S. Coast Guard safety standards for recreational boats. In this edition we are excited to roll out a new self-service subscription feature (found on front page), which allows anyone with an interest in the Boating Safety Circular to sign up for notifications of when the latest edition of the BSC is published on our website. Please spread the word.

“This Circular will give us the means to communicate better on these matters and help us all to work toward our common goal of safe boating.”
## Calendar of Events

<table>
<thead>
<tr>
<th>Event Description</th>
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<tr>
<td><strong>ABYC Online Training</strong>: <a href="https://abycinc.org/events/event_list.asp">https://abycinc.org/events/event_list.asp</a></td>
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<td>Staying Current with Electrification [<a href="https://abycinc.org/events/EventDetails.aspx?id=1722015&amp;grou=">https://abycinc.org/events/EventDetails.aspx?id=1722015&amp;grou=</a>]</td>
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<td><strong>ABYC Standards Week</strong></td>
<td>Annapolis, Maryland</td>
<td>01/08/2024 - 01/12/2024</td>
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<tr>
<td><strong>National Marine Manufacturers Association (NMMA) Meetings</strong></td>
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<tr>
<td><strong>International Boatbuilders Exhibition and Conference (IBEX) Trade Show</strong></td>
<td>Tampa, Florida</td>
<td>10/03/2023 - 10/05/2023</td>
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<td><strong>National Association of State Boating Law Administrators (NASBLA)</strong></td>
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<tr>
<td><strong>Annual Conference</strong></td>
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<td>09/19/2023 - 09/22/2023</td>
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<td><strong>National Boating Safety Advisory Council</strong></td>
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<tr>
<td><strong>Spring Meeting</strong></td>
<td>Annapolis, Maryland</td>
<td>05/10/2023—05/12/2023</td>
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</tbody>
</table>

### Websites of Note:

- [uscgboating.org](http://uscgboating.org) - U.S. Coast Guard’s Boating Safety Division
- [Facebook.com/USCG Boating Safety](https://www.facebook.com/USCGBoatingSafety) - U.S. Coast Guard Boating Safety
- [safeafloat.com](http://safeafloat.com) - Recreational Boating Product Assurance Branch Boat Building Compliance Website
- [abycinc.org](http://abycinc.org) - American Boat and Yacht Council
- [nmma.org](http://nmma.org) - National Marine Manufacturers Association
- [nasbla.org](http://nasbla.org) - National Association of State Boating Law Administrators (NASBLA)

### Email Addresses of Note:

- [rbscompliance@uscg.mil](mailto:rbscompliance@uscg.mil) - for all manufacturer inquiries except for MICs
- [rbsinfo@uscg.mil](mailto:rbsinfo@uscg.mil) - for general boating safety questions
- [MICAPP@uscg.mil](mailto:MICAPP@uscg.mil) - for all inquiries related to manufacturer’s identification codes (MIC)
- [TypeApproval@uscg.mil](mailto:TypeApproval@uscg.mil) - for all inquiries about equipment and materials that receive Coast Guard approval (life jackets, visual distress signals, inflatable life rafts, etc.)
**Boating Safety Circular Index 2000 — 2022**

**Boat Building**
Are you Building a Canoe or a Power Driven Vessel?........................................... Fall 2020, Issue 95

**Boat Kits**
Kit Boat Manufacturers and Coast Guard Safety Standards and Regulations……... December 2013, Issue 87
Kit Boat Manufacturers and CG Standards......................................................... March 2007, Issue 85

**Backyard Boat Builders**
Backyard Built Boats; Things You May Not Know................................. Spring 2016, Issue 89

**Carbon Monoxide**
Boating and Carbon Monoxide Poisoning a Dangerous Combination......... August 2008, Issue 86
Carbon Monoxide Brochure ................................................................. January 2004, Issue 84
Carbon Monoxide Hazard Mitigation Revisited........................................ Fall 2014, Issue 88
Coast Guard Advisory On Carbon Monoxide Hazard Caused By Generator Ex-
haust Gas Accumulations ................................................................. August 2008, Issue 86
Decals ABYC and NMMA Carbon Monoxide Warning Decals................. March 2001, Issue 82

**Certification**
Does the Coast Guard Certify Boats?....................................................... Spring 2016, Issue 89

**Citations/Violations**
Notice of Violation................................................................. Fall 2014, Issue 88
Summary of MIBS 2019 Inspection Citations by Type............................. Spring 2019, Issue 92

**Compliance Program**
Compliance Testing Policy Guidelines................................................. September 2003, Issue 83
Factory Visit Program............................................................................... January 2004, Issue 84
Recreational Boat Factory Visit ................................................................. March 2001, Issue 82
Recreational Boat Factory Visit Program.................................................. December 2013, Issue 87
Recreational Boat Testing and Compliance Program................................ Fall 2014, Issue 88
Update on Recreational Boat Factory Visit Program.................................. September 2003, Issue 83
When the USCG Buys Your Boat for Testing........................................... Spring 2021, Issue 96

**Electric Boats**
The Coast Guard and ABYC Announce Virtual Forum to Discuss Issues Related to Electric Boats................................................. Fall 2021, Issue 97
Electric Propulsion.................................................................................. Fall 2022, Issue 99

**Engines**
Is a gasoline outboard kicker too much horsepower?................................. Spring 2017, Issue 90

**Exemptions**
Grant of Exemption: An Overview ....................................................... Spring 2017, Issue 90
**Frequently Asked Questions**

FAQs for Engine Cut Off Switches, Manufacturers Identification Codes and Navigation Lights .............................................. Fall 2021, Issue 97

**Flotation**

Best Manufacturing Practices in Quality Controls for Flotation Foam in Recreational Vessels .................................................. Spring 2022, Issue 98

**Fuel**

Fuel Tank Pressure Test ≠ Fuel System Pressure Test .......................... Spring 2021, Issue 96
Pain in the Gas ........................................................................ March 2007, Issue 85

**Hulls**

Bare Hulls; What Are They? ........................................................ December 2013, Issue 87
Boats vs. Bare Hulls ................................................................. March 2007, Issue 85

**Hull Identification Number (HIN)**

Country of Origin Codes and HINs .............................................. September 2003, Issue 83
Final Rule: Country of Origin Codes and HINs ............................. Spring 2019, Issue 92
HINs for Racing Vessels ............................................................. Spring 2019, Issue 92
Verification of Hull Identification Number .................................. Fall 2014, Issue 88

**Importer**

Responsibility of a Recreational Boat Importer ........................... Spring 2016, Issue 89
Sale of Foreign-Built Boats by Importers ................................... December 2013, Issue 87

**Labels**

Capacity Label 101 — Back To The Basics .................................. Spring 2019, Issue 92
Certification Label Requirements .............................................. Spring 2020, Issue 94
Proper Capacity Label Placement .............................................. Spring 2020, Issue 94

**Management**

Case Management ..................................................................... Spring 2019, Issue 92
Coast Guard Conducting Study to Improve Nation’s Shallow Draft Waterways
ATON System .......................................................................... Fall 2020, Issue 95
New Email ................................................................................ Spring 2022, Issue 98
Remote Fuel Delivery Grant ...................................................... Fall 2020, Issue 95

**Manufacturers Identification Code (MIC)**

Coast Guard Manufacturer Identification Code Database .................. December 2013, Issue 87
Manufacturer ID Codes ................................................................ March 2007, Issue 85
Manufacturer Identification Code (MIC) Data ............................... August 2008, Issue 86
New Point of Contact for Manufacturer’s Identification Codes ....... Fall 2018, Issue 91

**Navigation Lights**

Final Rule; Certification of Navigation Lights ............................. September 2003, Issue 83
Manufacturer’s Responsibilities for Obstructed Navigation Lights .......................... Spring 2021, Issue 96
Navigation Lights, The rules are for your safety .......................... Spring 2016, Issue 89
Sidelight Sector Illumination................................................................. Fall 2020, Issue 95

**Office of Boating Safety**

Departure of Mr. Lou Novak............................................................... Spring 2021, Issue 96
Mr. Po Chang Retires from BSX-23.................................................. Fall 2020, Issue 95
New Point of Contact for Manufacturer’s Identification Codes......... Fall 2022, Issue 99
Now Hiring!...................................................................................... Spring 2021, Issue 96
Two New Engineers Join the Recreational Boating Product Assurance Branch... Fall 2021, Issue 97

**Personal Flotation Device (PFD)**

Belt Pack Inflatable PFD Tests (1)...................................................... January 2004, Issue 84
Belt Pack Inflatable PFD Tests (2)...................................................... January 2004, Issue 84
Lifejacket Approval Harmonization................................................ Fall 2018, Issue 91

**Propeller Guard**

Propeller Guard Test Procedure Report ........................................ December 2013, Issue 87

**Regulatory**

Model Year..................................................................................... Fall 2018, Issue 91
Mudboat and Airboat Flotation Exemption to End......................... Spring 2022, Issue 98
New Engine Cut-Off Switch Law Goes Into Effect on April 1, 2021... Spring 2021, Issue 96
Safe Loading and Flotation Regulations......................................... December 2013, Issue 87
Updated Outboard Engine Weights................................................ Fall 2018, Issue 91

**Safety**

After 31 December 2006 Boaters Must Not Operate 121.5/243 MHZ EPIRB...... March 2007, Issue 85
Alternatives to Pyrotechnic Distress Signals.................................. Fall 2018, Issue 91
Coast Guard Infoline Termination.................................................... August 2008, Issue 86
Conducting Drills For Your Kids...................................................... Spring 2017, Issue 90
Don’t Build a Boat without Them..................................................... Spring 2020, Issue 94
Hull Reflective Stripe Can Save Lives............................................. Fall 2014, Issue 88
My Boat is Defective...or is it?......................................................... Spring 2017, Issue 90
National Boating Safety Advisory Council..................................... Fall 2018, Issue 91
News from CPSC............................................................................ August 2008, Issue 86
Switlik Liferaft Inflation System Defect........................................... August 2008, Issue 86
We’ve Got an App for That............................................................. Spring 2016, Issue 89
What is a Substantial Risk Safety Defect?...................................... Fall 2022, Issue 99

**Texas Flats Boats**

Shallow Water Boats Including Texas Flats Boats Stability Study Update...... Spring 2016, Issue 89
Texas Flats Boat Stability Study....................................................... Fall 2014, Issue 88

**Ventilation**

Openings in Ventilation Systems.................................................... March 2007 Issue 85
## Recalls

**CRESTLINER INC**
- **Campaign #** 23MF0011
- **Year**: 2013—2023
- **Model(s)**: XF 17, XF 18, XFC17, XFC18, and C17STM-17 Storm
- **Problem**: Flotation

**LOWE BOATS**
- **Campaign #** 23MF0007
- **Year**: 2018—2023
- **Model(s)**: Stinger 175, 175PC, 195, 195PC, 195DC, and Skorpion 17
- **Problem**: Flotation

**iROCKER**
- **Campaign #** 23MF0006
- **Year**: 2021
- **Model(s)**: Blackfin SUP (X,XL,V)
- **Problem**: Seam Defect

**BOMBARDIER RECREATIONAL PRODUCTS INC**
- **Campaign #** 22MF0628
- **Year**: 2021-2022
- **Model(s)**: Various Models
- **Problem**: Passenger seat may unlatch

**DOMETIC / SIERRA INTERNATIONAL**
- **Campaign #** 22MF0613
- **Year**: N/A
- **Model(s)**: N/A
- **Problem**: Fuel System

**ALK 2 POWERBOATS LLC**
- **Campaign #** 22CG0014
- **Year**: 2023
- **Model(s)**: 18 CRS
- **Problem**: Flotation and Capacity Label

**MERCUY MARINE**
- **Campaign #** 22MF0526
- **Year**: 2016-2022
- **Model(s)**: Design 2 Joystick
- **Problem**: Steering Issues

**DOMETIC**
- **Campaign #** 22MF0454
- **Year**: 2022
- **Model(s)**: Various Models
- **Problem**: Steering Cable

**BD XTREME HOLDINGS LLC**
- **Campaign #** 22CG0012
- **Year**: 2022
- **Model(s)**: River Skiff 1645 SS
- **Problem**: Flotation and Stability

**PURSUIT BOATS HOLDCO LLC**
- **Campaign #** 22MF0375
- **Year**: 2022-2023
- **Model(s)**: C238, S268, S288, S328
- **Problem**: Steering

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**2023**

**2022**
EBBTIDE HOLDINGS LLC
Campaign #: 22MF0295
Year: 2018-2022
Model(s): Aquasport 21CC, 23CC/DC, 25CC
Problem: Fuel System—potential for static electricity to build up and discharge while fueling

WELD CRAFT MFG INC
Campaign #: 22CG0009
Year: 2022
Model(s): 1652 MUV Sportsman X83
Problem: Stability

ROBALO BOATS LLC
Campaign #: 22MF0267
Year: 2021-2022
Model(s): R180, R200,R202EX, R206, R207, R222, R222EX, R226, R227, R230, R242, R242EX, R246, R246SD, R247, and R266 Robalo vessels
Problem: Steering

MI TIDE BOATS LLC
Campaign #: 22CG0008
Year: 2012-2022
Model(s): Mi Tide V1503
Problem: Flotation

RECREATION UNLIMITED LLC
Campaign #: 22CG0007
Year: 2020-2021
Model(s): Raptor 180
Problem: Flotation and Capacity

WHITE RIVER MARINE GROUP LLC
Campaign #: 22MF0187
Year: 2019
Model(s): Targa V19, Ranger VX
Problem: Electrical

LEISURE PROPERTIES LLC
Campaign #: 22MF0128
Year: 2021
Model(s): 330SY, 350SY, 335SS
Problem: Electrical

SKIMMER SKIFFS LLC
Campaign #: 22CG0003
Year: 2021-2022
Model(s): 14’ Rolled Deck Tiller
Problem: Flotation

CAMPION MARINE INC
Campaign #: 22CG0002
Year: 2022
Model(s): A18 OB BR
Problem: Horsepower

WHITE RIVER MARINE GROUP LLC
Campaign #: 22MF0188
Year: 2018-2022
Model(s): Targa V19, Ranger VX
Problem: Electrical

LEISURE PROPERTIES LLC
Campaign #: 22MF0129
Year: 2021
Model(s): 330SY, 350SY, 335SS
Problem: Electrical

SEA FOX BOAT COMPANY INC
Campaign #: 22MF0111
Year: 2019
Model(s): 180 - 268 Series
Problem: Battery Charger / Electrical

INVINCIBLE BOAT COMPANY
Campaign #: 22MF0133
Year: 2021
Model(s): 40' Cat, 46' Cat/PH
Problem: Fuel Tank

INVINCIBLE BOAT COMPANY
Campaign #: 22MF0133
Year: 2021
Model(s): 40' Cat, 46' Cat/PH
Problem: Fuel Tank

The safety lanyard might under certain rare circumstances not work as intended due to hardware tolerances inside the control lever that are too wide vs. the software setting, to determine if the lanyard is attached or detached.
YAMAHA MOTOR CORP USA
Campaign #: 22MF0350
Year: 2021, 2022
Model(s): F200JET1L, 200LET1XF, 225LET1L, F250QET1L, F250RET1X outboards
Problem: Engine

VOLVO PENTA
Campaign #: 22MF0035
Year: 2021
Model(s): D8, D11, D13 and D16 engines
Problem: The safety lanyard might under certain rare circumstances not work as intended due to that the hardware tolerances inside the control lever.

VOLVO PENTA
Campaign #: 22MF0034
Year: 2021
Model(s): D8, D11, D13 and D16 engines
Problem: Software issue involving the Helm Control.

KAWASAKI MOTORS CORP USA
Campaign #: 22MF0029
Year: 2020, 2021, 2022
Model(s): JT1500RLF, JT1500RMFNN and JT1500RNFNN
Problem: Front Hatch Cover

WHITE RIVER MARINE GROUP LLC
Campaign #: 22MF0005
Year: 2022
Model(s): Various
Problem: Electrical

2021

WILCOX FABRICATION/MARINE INC
Campaign #: 21CG0036
Year: 2018-2022
Model(s): Whaly 370
Problem: Capacity and Flotation

PARKS MANUFACTURING LLC
Campaign #: 21CG0025
Year: 2022
Model(s): 1900 STL
Problem: Flotation

CLEARWATER SPORT FISHING LLC
Campaign #: 21CG0024
Year: 2022
Model(s): Clearwater 1900 CC
Problem: Flotation

VOLVO PENTA
Campaign #: 21MF0503
Year: 2021
Model(s): R0040 Schrader Valve
Problem: Fuel System

WACO MFG INC
Campaign #: 21CG0020
Year: 2022
Model(s): Edge 1856
Problem: Flotation

RABCO BOATS
Campaign #: 21CG0010
Year: 2021
Model(s): Buccaneer 14
Problem: Flotation

BLAVER BOAT MANUFACTURING
Campaign #: 21CG0004
Year: 2018-2021
Model(s): 1752 SC JON
Problem: Flotation

VOLVO PENTA
Campaign #: 21MF0504
Year: 2021
Model(s): Various Models
Problem: Fuel System
**VOLVO PENTA**

Campaign #: 21MF0506
Year: 2021
Model(s): Various Models
Problem: Fuel System

Campaign #: 21MF0213
Year: N/A
Model(s): Various
Problem: Transfer case may not have correct torque

**YAMAHA MOTOR CORP USA**

Campaign #: 21MF0508
Year: 2021
Model(s): Various Models
Problem: Engine

Campaign #: 21MF0343
Year: 2021
Model(s): KPT/KXT1800
Problem: Fuel System

Campaign #: 21MF0509
Year: 2022 and 2021
Model(s): TX1800A (AR190), TX1800B (SX190), TP1800A (AR195), TP1800B (SX195), TP1800C (195S), UX1800A (190FSH SPORT), UX1800B (190 FSH DELUXE), UP1800A (195 FSH SPORT), UP1800B (195 FSH DELUXE), KXT1800A (252 FSH SPORT) AND KPT1800A (255 FSH SPORT E) BOATS
Problem: Fuel System

**RHINO MARINE INC**

Campaign #: 21CG0014
Year: 2021
Model(s): 14 Lil Bull
Problem: Capacity and Flotation

Campaign #: 21MF0381
Year: 2021
Model(s): Ranger 622
Problem: Engine

Campaign #: 21MF0428
Year: 2021
Model(s): Various Models / Fuel Pump
Problem: Fuel pump leak

**RANGER BOATS**

Campaign #: 21MF0381
Year: 2021
Model(s): Various Models
Problem: Fuel System

Campaign #: 21CG0023
Year: 2022
Model(s): Stealth 166 DC
Problem: Capacity Label

Campaign #: 21MF0507
Year: 2021
Model(s): R0040 Schrader Valve
Problem: Fuel System

**DOMETIC**

Campaign #: 21MF0428
Year: 2021
Model(s): Various Models
Problem: Fuel pump leak

Campaign #: 21MF0507
Year: 2021
Model(s): R0040 Schrader Valve
Problem: Fuel System

**WHITE RIVER MARINE GROUP LLC**

Campaign #: 21CG0035
Year: 2022
Model(s): TAHOE T18
Problem: Flotation

Campaign #: 21CG0026
Year: 2021
Model(s): Twin Troller X10
Problem: Capacity Label

Campaign #: 21CG0023
Year: 2022
Model(s): Stealth 166 DC
Problem: Capacity Label

**VOLVO PENTA**

Campaign #: 21MF0507
Year: 2021
Model(s): R0040 Schrader Valve
Problem: Fuel System

Campaign #: 21MF0213
Year: N/A
Model(s): Various
Problem: Transfer case may not have correct torque

**YAMAHA MOTOR CORP USA**

Campaign #: 21MF0343
Year: 2021
Model(s): KPT/KXT1800
Problem: Fuel System

Campaign #: 21MF0509
Year: 2022 and 2021
Model(s): TX1800A (AR190), TX1800B (SX190), TP1800A (AR195), TP1800B (SX195), TP1800C (195S), UX1800A (190FSH SPORT), UX1800B (190 FSH DELUXE), UP1800A (195 FSH SPORT), UP1800B (195 FSH DELUXE), KXT1800A (252 FSH SPORT) AND KPT1800A (255 FSH SPORT E) BOATS
Problem: Fuel System

**MERCURY — MOTOGUIDE**

Campaign #: 21MF0547
Year: 2021
Model(s): N/A
Problem: GPS system
**VOLVO PENTA**

Campaign # 21MF0560  
Year: 2021  
Model(s): Various Models  
Problem: Control Lever, neutral interlock could be abnormally sluggish to operate or even get stuck in the unlocked position.

**VOLVO PENTA**

Campaign # 21MF0561  
Year: 2021  
Model(s): Various Models  
Problem: The neutral interlock could be abnormally sluggish to operate or even get stuck in the unlocked position.

**WHITE RIVER MARINE GROUP LLC**

Campaign #: 21MF0574  
Year: 2022-2021  
Model(s): Bass Tracker Classic, Bass Buggy 16, Bass Buggy 18, Fishing Barge 20, Fishing Barge 22, Fishing Barge 24, Super Guide V16, Super Guide V165, Pro Team 175, Pro Team 190, Pro Team 195, and Pro 170  
Problem: Seat

**YAMAHA MOTOR CORP USA**

Campaign #: 21MF0575  
Year: 2021  
Problem: Engine shut-off switch

**SEA HUNT BOAT MFG CO INC**

Campaign #: 21MF0577  
Year: 2022  
Model(s): Ultra, BX and GameFish  
Problem: Fuel System

**VOLVO PENTA**

Campaign #: 21SD0005  
Year: No model year  
Model(s): D3, D4, D6, V6, and V8 engines  
Problem: Lanyard Safety Strap Housing

**LIPPET**

Campaign #: 21MF0212  
Year: No model year  
Model(s): N/A  
Problem: Seat

**SEA PRO BOATS**

Campaign #: 21CG0005  
Year: 2016-2021  
Model(s): 172 Bay  
Problem: Flotation

**NOVAK ENTERPRISES**

Campaign #: 21CG0013  
Year: 2020-2021  
Model(s): Dorado 14  
Problem: Capacity Label

**YAMAHA MOTOR CORP USA**

Campaign #: 21MF0344  
Year: 2021  
Model(s): KPT/KXT 1800  
Problem: Electrical and/or Fuel Tank

**SKEETER PRODUCTS, INC.**

Campaign #: 21MF0279  
Year: 2021  
Model(s): Various Models  
Problem: Steering Tiler Arm

**NAUTIC STAR, LLC**

Campaign #: 21DL0926  
Year: 2019-2021  
Model(s): 191 Hybrid, 193SC, 215 XTS, 215 XTS SB, 227 XTS, 243 DC, 2102 Legacy, and the 2602 Legacy  
Problem: Capacity Label

**SEA RAY BOATS**

Campaign #: 21MF0200  
Year: 2021  
Model(s): SDX250  
Problem: Electrical
**YAMAHA MOTOR CORP USA**  
Campaign #: 21MF0187  
Year: 2021  
Model(s): GP1800A, GP1800B, VX1050 and VX1080  
Problem: Electrical

**MARATHON BOAT GROUP INC**  
Campaign #: 20CG0007  
Year: 2020  
Model(s): Otisco 14 Jon  
Problem: Capacity Label and Flotation

**MERCURY**  
Campaign #: 21SD0004  
Year: 2021  
Model(s): 85-115 HP 2.1L and 150 HP 3.0L  
Problem: Outboard Engines

**SEA RAY**  
Campaign #: 20SD0025  
Year: 2018-2017  
Model(s): 230SLW and SLW230  
Problem: Weakness within the supporting fiberglass structure at the rudder

**MALIBU BOATS LLC**  
Campaign #: 21SD0001  
Year: 2020-2021  
Model(s): Wakesetter  
Problem: Electrical

**SCOUT BOATS INC**  
Campaign #: 20CG0021  
Year: 2017-2021  
Model(s): 175 Sport Dorado  
Problem: Flotation

**MARLON RECREATIONAL PRODUCTS**  
Campaign #: 21CG0002  
Year: 2021  
Model(s): SP12  
Problem: Flotation

**PELICAN INTERNATIONAL INC**  
Campaign #: 20CG0026  
Year: 2020  
Model(s): Predator 103  
Problem: Capacity Label and Flotation

**NOVAK ENTERPRISES**  
Campaign #: 21CG0013  
Year: 2020  
Model(s): Panga Corvina 14  
Problem: Capacity Label

**RECREATION UNLIMITED LLC**  
Campaign #: 20CG0013  
Year: 2019-2020  
Model(s): Key Largo 1800  
Problem: Flotation

**XTREME BOATS**  
Campaign #: 20CG0017  
Year: 2019  
Model(s): River Skiff 1648T  
Problem: Flotation

**LEGEND CRAFT BOATS LLC**  
Campaign #: 20CG0027  
Year: 2015-2021  
Model(s): Ambush 1548  
Problem: Flotation

**COMPOSITE RESEARCH INC**  
Campaign #: 20CG0019  
Year: 2019-2021  
Model(s): Sundance K168D  
Problem: Capacity Label and Flotation

**TITAN MARINE LLC**  
Campaign #: 20CG0029  
Year: 2019-2021  
Model(s): 1656MR  
Problem: Capacity Label
RHINO ROTO MOLDING
Campaign #: 20CG0034
Year: 2010-2021
Model(s): Beavertail Final Attack
Problem: Capacity Label

HONDA
Campaign #: 20SD0007
Year: No model year
Model(s): Honda Marine accessory key panel kit
Problem: Electrical

SIERRA INTERNATIONAL
Campaign #: 200001T
Year: Not Built by Model Year
Model(s): QI Auto
Problem: Fuel System

SEA RAY BOATS
Campaign #: 20SD0019
Year: 2016-2021
Model(s): 250SLN, 250 SLX, 280SLN, 280SLX
Problem: Electrical

MASTERCRAFT
Campaign #: 20SD0026
Year: 2019-2021
Model(s): Aviara: 2020 AV32, 2020 AV36 (Stern Drive Versions only)
MasterCraft: Model Year 2019, 2020 and 2021; ProStar, NXT20, NXT22, X22, X24, X26, XT20, XT21, XT22, X-Star; also Model Year 2021 NXT24.
Problem: Fuel System

HEIDAY BOATS
Campaign #: 20SD0006
Year: 2018-2020
Model(s): 2019 and 2020 WT-2DC and 2018 and 2019 WTSURF
Problem: Ventilation

THUNDER JET BOATS
Campaign #: 20SD0011
Year: 2020
Model(s): Various Models
Problem: Electrical

AVIARA BOATS LLC
Campaign #: 20SD0024
Year: 2020 and 2021
Model(s): AV32 (Outboard), AV36 (Stern Drive and Outboard)
Problem: Fuel System

MERCURY MARINE
Campaign #: 20SD0027
Year: 2020
Model(s): 4.5L, 6.2L, and 8.2L Sterndrive
383 MPI Inboard, and Quicksilver 8.1L Horizon
Mercury Racing 520 and 540
Problem: Water Failure leak

YAMAHA MOTOR CORP
Campaign #: 20SD0018
Year: 2019-2020
Model(s): FPT1800A
Problem: Steering

G3 BOATS
Campaign #: 20SD0014
Year: 2018-2021
Model(s): 18CCJ/CCJDLX
Problem: Level Flotation

TRITON BOATS
Campaign #: 20SD0009
Year: 2018-2020
Model(s): 18 TRX, 189 TRX, 19 TRX
Problem: Level Flotation

KRASH INDUSTRIES
Campaign #: 20DL0869
Year: 2020
Model(s): VARIOUS
Problem: Safe Loading and Hull ID Number

MERCURY
Campaign #: 20SD0017
Year: 2019-2020
Model(s): 35-60 EFI 75-115 SEA
Problem: Engine: Gasoline
THUNDER JET BOATS
Campaign #  20SD0010
Year:  2012-2019
Model(s):  176 ECOJET, 180 ECOJET
Problem:  Flotation

HIGHWATER MARINE
Campaign #  20SD0021
Year:  2016-2020
Model(s):  Various Godfrey models
Problem:  Electrical

NAUTIC STAR, LLC
Campaign #  20SD0020
Year:  2020
Model(s):  32 XS
Problem:  Structural Integrity

CAROLINA SKIFF LLC
Campaign #  20SD0004
Year:  2017-2019
Model(s):  22 HFC, 24 HFC
Problem:  Electrical System

BRP
Campaign #  20SD0008
Year:  2018-2019
Model(s):  MANTOU RFX/RFXW
Problem:  Hull Cracks

SEA RAY BOATS
Campaign #  20SD0003
Year:  2015-2018
Model(s):  VARIOUS
Problem:  Electrical System

MALIBU BOATS
Campaign #  20SD0012
Year:  2017
Model(s):  Wakesetter
Problem:  Fuel System

2019

MERCURY
Campaign #:  190048T
Year:  Not Built by Model Year
Model(s):  Some 4.5 L and 6.2 L
Problem:  Fuel System

TITAN MARINE LLC
Campaign #:  19CG171S
Year:  2018-2020
Model(s):  450 RDB
Problem:  Capacity Label

SEA RAY BOATS
Campaign #:  190051S
Year:  2020
Model(s):  310SXO
Problem:  Electrical System

SEA RAY BOATS
Campaign #:  190052T
Year:  2015-2020
Model(s):  SDX290, SDO290
Problem:  Electrical System

SEA RAY BOATS
Campaign #:  190053T
Year:  2018-2020
Model(s):  SLX250, SLX280
Problem:  Electrical System

HURRICANE BOATS
Campaign #:  190050S
Year:  2019-2020
Model(s):  196, 198 FUNDECK
Problem:  Level Flotation

LUND BOATS
Campaign #:  190027T
Year:  2019
Model(s):  189 TYEE GL, 189 PRO-V GL
Problem:  Engine Mount
<table>
<thead>
<tr>
<th>Company</th>
<th>Campaign#</th>
<th>Year</th>
<th>Model(s)</th>
<th>Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LUND BOATS</strong></td>
<td>190003S</td>
<td>2019</td>
<td>SSV-16</td>
<td>Level Flotation</td>
</tr>
<tr>
<td><strong>MERCURY MARINE</strong></td>
<td>190022T</td>
<td>Tech Bulletin 2019</td>
<td>V-8 200-300, V-6 175-225, V8 250</td>
<td>Engine: Gasoline</td>
</tr>
<tr>
<td><strong>MARLON RECREATIONAL PRODUCTS</strong></td>
<td>19CG152S</td>
<td>2019</td>
<td>WVI4L</td>
<td>Level Flotation</td>
</tr>
<tr>
<td><strong>PIRANHA BOATWORKS LLC</strong></td>
<td>19CG170S</td>
<td>2019</td>
<td>P140T RASO</td>
<td>Level Flotation and Safe Loading Max Person Weight</td>
</tr>
<tr>
<td><strong>MERCURY MARINE</strong></td>
<td>190037T</td>
<td>2016-2019</td>
<td>DESIGN 2 JOYSTICK</td>
<td>Dynamic Instability</td>
</tr>
<tr>
<td><strong>CUSTOM FIBERGLASS PROD INC</strong></td>
<td>19CG169S</td>
<td>2019</td>
<td>MITZI SKIFF 17 CC</td>
<td>Basic Flotation and Navigation Lights</td>
</tr>
<tr>
<td><strong>BRP USA INC</strong></td>
<td>190043T</td>
<td>2019</td>
<td>PW GTX 230 LBBM</td>
<td>Dynamic Instability</td>
</tr>
<tr>
<td><strong>YAMAHA MOTOR CORP USA</strong></td>
<td>190025T</td>
<td>2019</td>
<td>SAT1800E/F</td>
<td>Engine Shift Control</td>
</tr>
<tr>
<td><strong>SMOKER CRAFT INC</strong></td>
<td>19CG153S</td>
<td>2010-2019</td>
<td>VOYAGER 14 BENCH</td>
<td>Level Flotation and Safe Loading Persons</td>
</tr>
<tr>
<td><strong>SEA RAY BOATS</strong></td>
<td>190031S</td>
<td>2019</td>
<td>SXO400</td>
<td>Ventilation</td>
</tr>
<tr>
<td><strong>SEA RAY BOATS</strong></td>
<td>190038T</td>
<td>2019</td>
<td>DA320 DA350 DAC350 DAC350 DAC320</td>
<td>Electrical System</td>
</tr>
<tr>
<td><strong>SEA RAY BOATS</strong></td>
<td>190039T</td>
<td>2019</td>
<td>DA320 DA350 DAC350</td>
<td>Steering</td>
</tr>
<tr>
<td><strong>KLAMATH BOAT CO LLC</strong></td>
<td>19CG157S</td>
<td>2019</td>
<td>152 WESTCOASTER</td>
<td>Level Flotation and Safe Loading Maximum Persons Weight</td>
</tr>
<tr>
<td><strong>INDMAR PRODUCTS</strong></td>
<td>190032T</td>
<td>2019</td>
<td>SUPRA 400, 450, 575 and MOOMBA 450</td>
<td>Electrical</td>
</tr>
</tbody>
</table>
CENTURION & SUPREME
Campaign # 190040T
Year: 2019
Model(s): ZS232
Problem: Dynamic Instability

BOSTON WHALER INC
Campaign # 19X047AS
Year: 2019
Model(s): 190OR
Problem: Safe Loading Maximum Weight

LUND BOATS
Campaign # 19CG151S
Year: 2019
Model(s): SSV 14
Problem: Level Flotation

BOMBARDIER
Campaign # 190034T
Year: 2019
Model(s): SEA-DOO FISH PRO
Problem: Not Specified

TORQUEEDO
Campaign #: 190042T
Year: 2010-2018
Model(s): TRAVEL AND ULTRALIGHT
Problem: Electrical System

BLACK RIVER CANOES
Campaign # 190054T
Year: 2016-2018
Model(s): LEGACY, XT, LT, X-PLODE
Problem: Hull Cracks

SEA RAY BOATS
Campaign # 190024S
Year: 2018
Model(s): SLX400
Problem: Electrical System

PIRANHA BOATWORKS LLC
Campaign # 19CG170S
Year: 2019
Model(s): P140T RASO
Problem: Flotation and Capacity

MIRAGE MANUFACTURING CO
Campaign # 18CG144S
Year: 2016
Model(s): TPS 18
Problem: Capacity Label and Flotation

DRAGONFLY BOATWORKS LLC
Campaign # 18CG141S
Year: 2010, 2012-2019
Model(s): MARSH HEN
Problem: Capacity Label and Flotation

SEA RAY
Campaign # 180012S
Year: 208-2014
Model(s): 260 DA
Problem: Fuel Tank

MALIBU BOATS INC
Campaign # 180015T
Year: 2016
Model(s): Malibu and Axis boats (Excluding Malibu TXi Response)
Problem: Electrical System

CAROLINA COMPOSITES LLC
Campaign # 18X042CS
Year: 2019
Model(s): BULLS BAY 2000
Problem: Capacity Label

LUND BOATS
Campaign # 180005T
Year: 2019
Model(s): 189 TYEE, 189 PRO-V
Problem: Engine Mount
<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>DOUGLAS MARINE CORP</td>
<td>18R6022S</td>
<td>2019</td>
<td>'380' INBOARD</td>
<td>Full System and Hull ID Number</td>
</tr>
<tr>
<td>TEAM WARD INC</td>
<td>18CG143S</td>
<td>2019</td>
<td>1542</td>
<td>Level Flotation and Basic Flotation</td>
</tr>
<tr>
<td>CAROLINA SKIFF LLC</td>
<td>18CG123S</td>
<td>2018</td>
<td>16 JVX CC</td>
<td>Hull ID Number and Label: Certification</td>
</tr>
<tr>
<td>SANTEE BOATS LLC</td>
<td>18CG122S</td>
<td>2018</td>
<td>160 CC</td>
<td>Label: Certification and Navigation Lights</td>
</tr>
<tr>
<td>HEY DAY</td>
<td>180009S</td>
<td>2018</td>
<td>WT-SURF</td>
<td>Electrical and Fuel Systems</td>
</tr>
<tr>
<td>MARQUIS-LARSON</td>
<td>180013S</td>
<td>2018</td>
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<td>TRACKER</td>
<td>180016S</td>
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<td>DEEP V GRIZZLY HELM</td>
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<td>ULTRA BOATS</td>
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<td>2018</td>
<td>28 SHADOW DECK INBOARD</td>
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<td>HARBOR COTTAGE LLC</td>
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<td>COBALT BOATS LLC</td>
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<td>LUND BOAT COMPANY</td>
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<td>2075, 2175 PRO-V</td>
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<td>WELD CRAFT MFG INC</td>
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<td><strong>Model(s):</strong></td>
<td>KOKUSAN VOLTAGE</td>
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<td><strong>Problem:</strong></td>
<td>Hydraulic hose fittings may not be secured at steering cylinder</td>
<td><strong>Problem:</strong></td>
<td>Electrical</td>
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