ASSOCIATION OF HOME APPLIANCE MANUFACTURERS

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WRITTEN STATEMENT

JOHN KEANE
MANAGER OF GOVERNMENT RELATIONS

ON BEHALF OF
THE ASSOCIATION OF HOME APPLIANCE MANUFACTURERS

HAWAII HOUSE OF REPRESENTATIVES
COMMITTEE ON HIGHER EDUCATION & TECHNOLOGY

HB 53- RELATIVE RIGHT TO REPAIR

FEBRUARY 1, 2023

Chair Perruso and Vice Chair Kapela and members of the Committee, thank you for the opportunity to share the view points of the home appliance manufacturing industry regarding the impacts of the concept of right to repair, HB 53.

AHAM represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry. AHAM's membership includes over 150 companies throughout the world. AHAM members employ tens of thousands of people and produce more than 95% of the household appliances that are shipped for sale within the United States. The factory shipment value of these products is more than $38 billion annually. The home appliance industry, through its products and innovation, is essential to consumer lifestyle, health, safety and convenience. Through its technology, employees and productivity, the industry contributes significantly to the US job market and the nation's economic security. Home appliances also are a success story in terms of energy efficiency and environmental protection. The purchase of new appliances often represents the most effective choice a consumer can make to reduce home energy use and costs.

AHAM believes that so-called "Right to Repair" concepts that are part of HB 53 raises more concerns and issues than it seeks to address. Home appliance manufacturers are continuously innovating in order to make better and more functionally convenient products for consumers. This includes ensuring that consumers have access to highly educated, trained and certified repair technicians. Home appliance manufacturers not only ensure that authorized repair providers are properly trained and certified, manufacturers also take necessary precautions so that when a repair provider enters a private home that the home owner as well as the property are safe and secure. The fact that repair providers enter consumers' homes to conduct appliance repairs presents a different set of circumstances regarding the repair of digital electronic equipment.

AHAM believes that HB 53 come into conflict with important industry doctrines:

- Safety: HB 53 poses serious product, property and consumer safety concerns.
- Cyber Security: HB 53 requires manufacturers to make certain technologies available to independent third parties who may not have the proper certification and training thus exposing the home to cyber threats.
- Manufacturer's Warranty: HB 53 could negate manufacturer's factory warranties.

Safety

Safety is a top priority for AHAM members. The industry designs appliances that are as safe as they are useful and consumers recognize this commitment. Today there are more than 860 million appliances in use largely without incident and 93 percent of consumers believe home appliance manufacturers do a good job in providing safe and quality appliances. Moreover, another 85 percent understand that safety policy is a top priority for the industry. The primary reason that so-called Right to Repair is of concern to the home appliance industry is the broad safety concerns raised. There are three principal safety concerns: product safety, consumer safety and property safety.

Product Safety

HB 53 requires that home appliance manufacturers make all diagnostic and repair documentation available to independent third parties or equipment owners. Today, home appliances contain highly advanced operating systems and many of these products are considered smart or connected devices.

Manufacturers develop diagnostic tools for certified engineers who have the educational and technical background and training necessary to troubleshoot, diagnose and conduct repairs to the appliance. A right to repair concept would broadly expand the universe of technicians that could access diagnostic tools and information. Also, manufacturer authorized servicers are typically required to perform repairs with manufacturer authorized parts that have been tested and qualified to meet the reliability and safety requirements of the home appliance product. Opening up the repair process to any third party services will loosen the control in this area significantly and could have a considerable impact on the safety and reliability of the product. In addition, manufacturers control the software used for service technicians. Without proper training, significant damage to the appliance and the home can occur if these tools are improperly used.

Today, modern appliances contain sophisticated and technologically advanced electronics and internal controls that are uniquely designed and programmed for specific products. These electronics and internal controls contain safety features (both software and hardware) that are relied upon for the safe operation of the appliance. Manufacturers very strictly and carefully control the access to these features by certified service professionals when performing any diagnostics and repair. Manufacturers often invest substantial resources to ensure diagnostic tools are impervious to failure and tampering by the manufacturers own agents, the manufacturer will employ software and Information Technology tools specific to its agents to guarantee the service. The same cannot be ensured once these tools are opened up to unaffiliated third party servicers. It could be detrimental to the inherent safety of the appliance if access were to be granted in the public domain where defeating any of these features (either intentionally or inadvertently) could happen during diagnostics and repair, which could then create potential safety hazards to the consumer.

For example, the home appliances industry is constantly innovating and advancing our products in order to deliver optimum solutions to consumers, which are energy efficient and continually better for the environment. Newer refrigerant gases that are non-ozone depleting and have very low global warming potential are an example. Comprehensive training is required in order for a technician to handle and conduct repairs on systems that contain different types of refrigerant. Mixing refrigerant types can be problematic and dangerous. An older product designed to operate with R134a gas refrigerant does not have the appropriately designed relays and electrical mechanical components for the newer R600a refrigerant. R600a gas is a flammable refrigerant gas that has positive attributes to reduce climate change and has started to be added to new refrigeration products in the U.S. market. It is critical that technicians are properly trained to identify which product utilizes which gas and how the gas is properly handled to ensure the utmost safety.

Authorized servicers can be directly trained and tools provided to 1) allow technicians to understand the systems included on every model and 2) repair those products appropriately. The same concerns hold true for the manipulation of LPG and natural gas in cooking products, dryers and water lines and the appropriate manipulation of 110V and 220V electrical connections. If not properly installed, leaks and overheating can occur.

Most appliance products are required by National Electric Code as well as other applicable building/mechanical codes to be listed or certified under applicable North American Safety Standards (such as Underwriter Laboratories or UL standard). These safety standards ensure a product and all of its components will operate in a safe and reliable manner. Right to Repair evades many of the safety provisions that Underwriters Laboratory (UL) and others test against.

For example:

Underwriters Laboratory North American Dryer Safety Standard (UL2158/CSA 22.2 no. 158)
This UL safety standard has safety requirements such as motor overload protection, door/lid opening or temperature limiting. These requirements were put in place to mitigate risks of electrical shock, injury or fire. Manufacturers often design the electronic controls which are embedded into either hardware or software and often both work together systematically to ensure the system operates safely and meets the UL requirements. To ensure the safety critical functionalities are reliable, both the hardware and software of these controls are certified to applicable safety standards (i.e. UL60730 or UL60335 or specific requirements of the product safety standard). These standards have rigorous requirements to test and validate the required safeguards. The standards are stringent to the point that any design or manufacturing changes to these components by a manufacturer often requires recertification by a Nationally Recognized Testing Laboratory (NRTL) to the applicable standard in order to ensure that the required safety functionality has not been compromised.

Manufacturers apply the same rigor to the repair and or replacement of these components when training their service personnel as well to the service parts themselves. More often than not, OEM service parts and components are also listed or certified to the same safety standards as the appliance product. The potential safety impacts of a repair and replacement are complex concepts and topics that manufacturers have to incorporate into service training on an ongoing basis. Authorized service personnel training is generally an interactive, detailed, time consuming and resource intensive process, utilizing trainers and engineers. An unauthorized or general service repair person will not have the benefit of this rigorous training and most likely will not understand nor be aware of the complex and integrated safety functionalities of the system and may compromise the integrity of the product during a repair.

Underwriters Laboratory (UL) North American Washer Safety Standard (UL 2157/CSA 22.2 no 169)
High efficiency (HE) washers employ electronic lid switches to ensure that no one can access the rotating basket while it is spinning very fast. These switches are often controlled by the Electronic control, which monitors the lid switch signal and employs a braking mechanism to stop the basket

from spinning if a user opens the lid. The same components are also utilized for other functional and safety requirements. Diagnosing and repairing a similar HE washing machine requires an in-depth understanding of the full system which authorized servicers are given as part of their training. An untrained servicer may employ a repair using a non-OEM part or incorrect connections can compromise the whole system that may result in a potential safety issue and/or performance degradation.

Property Safety

Appliance repairs when not performed correctly can be the cause of property damage, e.g., flooding and fires. Insurance claims as well as increases in homeowner's insurance premiums could result if independent third parties improperly perform in-home repairs. Additionally, in the event of significant property damage and/or personal injury, the manufacturer could face legal claims.

Manufactures, in general, have process and procedures in place that track repairs completed through their servicer network. This allows the manufacturer to create traceability of repairs for their customers/consumers and is one of the critical factors if fire or another sort of property damage were to occur. Opening up this domain to third-party servicers, inhibits the ability for manufacturers to track any repairs made to home appliance products and has the potential to create issues in determining liability if the source of the repairs cannot be readily identified. Traceability is also important because improper repair or servicing can be a cause of appliance fires. Finally, this assists insurance companies and other entities if the incident requires investigation.

Consumer Safety

The nature of appliance repairs requires repair technicians to enter the homes of consumers. In-home safety and security is of paramount importance to appliance manufacturers and we assume the same holds true for independent service technicians. Manufacturers who certify technicians may require extensive background checks as well as drug screening, and as previously mentioned technical and safety training. If manufacturers are required to make their technical information public knowledge, they no longer have the ability to address whether the technicians who are entering the homes of consumers have completed the necessary technical, safety and security checks. Under this bill, a repair person may only need a business license.

Cyber Security

In an increasingly connected world, the threat of cyber-attacks has extended into the home through connected technology. In fact, connected devices are in nearly every home, and the total number of those devices is expected to reach 26 billion. Home appliances touting "smart features" are already in the market. AHAM's member companies are leading the way in bringing connected appliances to customers around the world and are committed to addressing those concerns so that consumers are able to access the full, life-enhancing potential of connected appliances while minimizing potential cyber threats. Without the proper training, independent third party service providers could unknowingly expose consumers to cyber threats while conducting un-secured repairs to these products.

HB 53 disregards security implications brought to light by requiring the release of firmware and other software systems within home appliances. Hacking, data privacy, cyber threats are real concerns, as homes become more connected. Right to Repair concepts have ignored these very real threats and will likely make home appliances more vulnerable to cyber-threats and corruption. For example, security key pairings have to be embedded in the firmware. If a manufacturer is required to provide the firmware to third parties, the manufacturer is providing the keys to the operating system, once the keys become public it completely breaks the firmware security chain and the home appliance is not fully secure.

This also applies to remote and wireless interaction. Connected appliances in some circumstances require Wi-Fi connectivity to the consumer's personal in-home network. Manufacturer authorized technicians when performing repairs or instructing consumers on the use of such products could gain access to those private networks. Manufacturer authorized technicians are under contract, for whom the authorized service providers may have traceability. Opening that access up to independent third parties may give unauthorized personnel access to consumer's private Wi-Fi network and create opportunity for further risk exposure.

Manufacturer's Warranty

Of course consumers are free to choose their service provider and replacement parts. But most manufacturers explicitly state that the warranty on the product is void in case of defects or damage caused by the use of unauthorized parts or service. That means that if a repair goes wrong, the cost of future repairs that might have been covered under the warranty could now be the consumer's responsibility. As such, there is the potential to harm consumers rather than providing benefits.

Conclusion

Thank you for the opportunity to present this written statement to the hearing record. Right to Repair concepts raise serious safety, cyber-security and contractual concerns for the home appliance manufacturing industry. AHAM strongly urges that this Committee reconsider whether or not legislation is in the best interests of Hawaii consumers.

TESTIMONY OF TINA YAMAKI, PRESIDENT
RETAIL MERCHANTS OF HAWAII
February 1, 2023
Re: HB 53 RELATING TO RIGHT TO REPAIR

Good afternoon, Chair Perruso, and members of the House Committee on High Education & Technology. am Tina Yamaki, President of the Retail Merchants of Hawaii and I appreciate this opportunity to testify.

The Retail Merchants of Hawaii was founded in 1901 and is a statewide, not for profit trade organization committed to supporting the growth and development of the retail industry in Hawaii. Our membership includes small mom & pop stores, large box stores, resellers, luxury retail, department stores, shopping malls, on-line sellers, local, national, and international retailers, chains, and everyone in between.

We are strongly opposed to this measure. This bill requires manufacturers of digital electronic equipment to make available to owners and independent repair providers, on fair and reasonable terms, the documentation, parts, and tools used to diagnose, maintain, and repair the equipment. This measure is effective upon approval.

Not everything can be learned on social media or YouTube. We are concerned with user safety when digital items are not repaired by an authorized technician or a "Do It Yourselfer" (DIYer) who is not trained nor understands the complications and hazards involved. Repairing digital items is not as easy as changing a light bulb. If not done correctly a product could be destroyed if not opened up correctly, software coding and complex designs can be damaged, and erroneous repaired machines can malfunction and cause harm to users or products.

Improper handling of high-risk components or alterations threaten consumer safety and may lead to serious injuries such as burns, blindness, and death. If installed incorrectly or sensitive parts are mishandled or there are extra parts that came out of the equipment but not sure where is goes or if 3 party products are used instead of genuine parts. A few years back people were using cheaper 3 party chargers for their cellphones that caused the batteries to explode.

If the unauthorized technician or home DIYers get hurt trying to fix the item, the company could face a liability lawsuit not to mention social media could made the company go viral from having unsafe products when this is not the case.

We also want to point out that many of the tools needed are not standard size tools. Some of the tools needed are only available to licensed professionals. As we are seeing, electronics are getting smaller and smaller in size. Not using the correct tools could also damage the item trying to be repaired.

Also those unauthorized or DIYers could also compromise the efficiency of the item. Electronics are very sensitive and the industry is very competitive. If they are not working up the expectations of the consumer after they repaired it themselves or by a friend or by an unauthorized technician, they may think the items is "junk" when in reality the product is not working to its ultimate efficiency because it was not repaired properly. We must also be cautious that unauthorized technicians or DIYers also don't unlock the device to install custom software or find out proprietary information.

We also want to caution that if unauthorized technicians or DIYers fix electronic devices themselves, it may void the warranty of this product.

We respectfully ask that you hold this measure. Mahalo again for this opportunity to testify.

3610 Waialae Ave • Honolulu, HI 96816 (808) 592-4200 tyamaki@rmhawaii.org

Testimony of
LISA MCCABE
CTIA
Opposition to Hawaii House Bill 53
Before the Hawaii House Committee on Higher Education & Technology
February 1, 2023

Chair Perruso, Vice-Chair Kapela, and members of the committee, on behalf of CTIA®, the trade association for the wireless communications industry, I submit this testimony in opposition to House Bill 53, which places mandates on original equipment manufacturers regarding diagnostic and repair information for digital electronic equipment. CTIA's members include wireless service providers, infrastructure providers, suppliers and manufacturers. The marketplace already provides a wide range of consumer choice for repair with varying levels of quality, price and convenience without the mandates imposed by this legislation.

The marketplace continues to evolve and manufacturers continue to make changes to address consumer demand while offering consumers safe and reliable repair options. For example, manufacturers have relationships with authorized repair providers. These providers – which include local small businesses – have received the appropriate training from manufacturers and have the qualifications to help ensure that repairs are done properly and safely.

In addition to authorized repair providers, manufacturers may offer walk-in repair options at retail as well as mail-in services. Insurance providers may also offer repair options, including authorized third party remote technicians that will travel to the consumer to perform repairs. Moreover, consumers can currently avail themselves of numerous independent repair alternatives although manufacturers cannot guarantee the quality assurance of independent repair providers.

Additionally, many manufacturers have expanded repair options for consumers, from growing the number of authorized repair providers, to increasing access to tools, parts and manuals directly to consumers. It is important that with more repair options available to consumers, consumers continue to have access to professional repair providers with demonstrable competence to provide a safe and reliable repair.

To further address the repair marketplace, CTIA launched two programs related to repair, the Wireless Industry Service Excellence (WISE) Technician Certification Program and the WISE Authorized Service Provider (ASP) Certification Program. The WISE technician program educates and tests wireless device repair technicians on industry-recognized standards, certifying those that meet the highest standards for service quality and technical skill. The first certification of its kind, WISE-certified device repair technicians provide consumers with a predictable, high-quality repair experience.[1]

The WISE ASP program creates a network of certified retail locations, helping consumers identify qualified providers that meet the highest standards for service quality and wireless device repair.[2] Both programs were created by CTIA's Reverse Logistics and Service Quality Working Groups, which convene members representing the entire reverse logistics community to address the wireless industry's challenges and develop requirements for industry-recognized standards in repair and refurbishment of wireless devices.

While proponents of this legislation may cite to the release of a Federal Trade Commission policy statement regarding repair restrictions, it is important to note that the policy statement was

[1] https://www.ctia.org/news/ctia-launches-technician-certification-program
[2] https://www.ctia.org/news/ctia-launches-retail-certification-program-for-wireless-device-repair

based on information that is over three years old and does not reflect recent changes in the marketplace. Wireless companies, individually, and through industry associations have taken proactive steps to provide consumers with more device repair options, while accounting for the need to maintain device integrity and security and to protect intellectual property rights. These include the expansion of CTIA's WISE program to include over 16,000 certified technicians, nationally, continued growth of manufacturers' authorized repair networks, and the availability of access to tools, parts and manuals directly to consumers.

CTIA is also concerned that this bill would have the unintended consequence of negatively impacting consumers by eliminating the need for repairers to demonstrate to consumers that they have the technical competence to perform safe, secure, and reliable repairs. Manufacturers want to make certain the repair providers they work with understand the numerous components of the electronic products being repaired. Their authorization to perform repairs ensures that the changes made to the devices are compatible with current technology and the networks on which they operate.

Finally, CTIA is concerned that this legislation has the potential to weaken the privacy and security features of electronic products. The security of user information is of the utmost importance to consumers. The potential weakening of privacy and security protections will increase risks to consumers. With broad and unchecked access to technical information, security protections could be easily circumvented. In an era of sophisticated cyberattacks, we should not make it easier to hack devices and networks.

This bill is an unnecessary intervention in the marketplace, and its mandates could cause safety, privacy and security risks that compromise consumer safety and protection. For these reasons, CTIA respectfully asks that you not move this legislation.

January 31, 2023

Honorable Amy Perruso
Chair, Committee on Higher Education and Technology
Hawaii House of Representatives
415 South Beretania Street
Honolulu, HI 96813

RE: HB 53 Right to Repair (Woodson) - Oppose

Dear Chair Perruso,

On behalf of the Advanced Medical Technology Association (AdvaMed), Medical Device Manufacturers Association (MDMA), and Medical Imaging & Technology Alliance (MITA), we write today to express concerns with the right-to-repair legislation (HB 53) in Hawaii. Our membership comprises the full spectrum of health technology innovators and manufacturers, who work every day to deliver high-quality healthcare for patients worldwide.

Patient safety is our membership's top priority, and this legislation unnecessarily exposes patients to an increased risk of harm or death. As introduced, HB 53 requires medical technology providers to share proprietary design and repair information with third-party servicers. Often, these providers lack the necessary training to repair complex medical systems. Patients and consumers rely on a technology's accuracy to provide proper diagnosis and maintain safety standards.

Original Equipment Manufacturers (OEMs) are subject to strict regulations by the Food and Drug Administration (FDA) to ensure patient safety. These regulations protect the safety and efficacy of medical devices and include registration with the FDA, implementation of quality and safety controls, proper training, and qualification of replacement parts. Independent third-party service providers are not held to the same standards. A 2018 report by the FDA found more than 4,300 adverse events – including 294 serious injuries and 40 deaths – from devices repaired by unauthorized third-party providers.

These complex issues are accounted for in federal legislation known as the Fair Repair Act – a right-to-repair bill that provides a full exemption for

medical device manufacturers. Similar exemptions are provided in bills introduced in Minnesota, Washington, and recently signed legislation in New York.

Safety and security are paramount to our members and the patients they serve. We appreciate your consideration of our concerns and are committed to working with the legislature on this critical issue. Feel free to contact any of our organizations with additional questions. Thank you again, and we look forward to working with you.

Sincerely,

Darbi Gottlieb
Director, State Government and Regional Affairs
AdvaMed

Clayton Hall
EVP, Government Affairs
MDMA

Patrick Hope
Executive Director
MITA

HB-53
Submitted on: 1/31/2023 12:22:27 PM
Testimony for HET on 2/1/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Daniel J Mustico	Outdoor Power Equipment Institute, Inc.	Oppose	Written Testimony Only

Comments:

Attached please find the testimony of the Outdoor Power Equipment Institute.

DATE: January 31, 2023
TO: Chair Amy Perruso and Members of the Higher Education and Technology Committee
FROM: Tara Ryan
RE: HB 53 Relating to Right to Repair – Oppose

The Entertainment Software Association (ESA) respectfully opposes House Bill 53. The ESA is the U.S. trade association representing the publishers of computer and video games for play on consoles, personal computers, mobile devices, and the Internet.

The video game industry is a key economic sector that creates jobs, develops innovative technology, and keeps the United States competitive in the global marketplace. Not only do 75 percent of United States households have at least one gamer in their home, our industry has a footprint that creates jobs in every state.

ESA respectfully opposes HB 53 based on concerns that permitting console access to unauthorized third parties, over whom we have no control, could result in the modification of hardware and firmware that could compromise the vital security features that provide a secure media environment for the playback of copyrighted games of various game publishers. We recognize that the vast majority of repair shops would not use the provided tools and documentation for any illegal purposes (e.g., removal of security features). However, at the rate at which knowledge is spread via social media and other online communication channels, it would only take a few bad actors to have a rapid and severely detrimental impact on the industry.

Importantly, our video game console makers employ digital locks designed to protect their game consoles and provide a secure media environment for players and other video game publishers and developers. These protections, known as technological protection measures (TPMs), are so important to copyright industries that international treaties concluded in 1996 ensured these digital locks were protected, and since then over 100 countries have implemented this protection in their own laws.

All three major video game console makers—Microsoft, Nintendo, and Sony—are committed to providing consumers with repairs that are quick, reliable, and secure. And, they offer a variety of repair options for consoles that include repair services beyond the warranty period to ensure that their consoles remain in good working order because their respective success depends on consumers having reliable, versatile, and engaging platforms on which to play video games and enjoy digital content.

We appreciate the opportunity to provide testimony and would be happy to follow-up with any additional information as needed.

Sincerely,

Tara Ryan
Vice President, State Government Affairs
Entertainment Software Association

February 1st, 2023

The Honorable Amy A. Perruso
Chair
House Committee on Higher Education & Technology
415 S. Beretania St. Room 444
Honolulu, Hi, 96813

The Honorable Jeanne Kapela
Vice Chair
House Committee on Higher Education & Technology
415 S. Beretania St. Room 418
Honolulu, Hi, 96813

Re: HB 53 - An Act Relating to Right to Repair Act – Oppose or Amend

On behalf of our Hawaii members the Marine Retailers Association of the Americas (MRAA) and the National Marine Manufacturers Association (NMMA), we would like to thank you for the opportunity to express our opposition to HB 53.

The Marine Retailers Association of the Americas is the leading trade association of North American small businesses that sell and service new and pre-owned recreational boats and operate marinas, boatyards, and accessory stores. MRAA represents more than 1,300 individual member retail locations and conducts advocacy efforts on their behalf.

The National Marine Manufacturers Association (NMMA) is the premier trade association for the U.S. recreational boating industry, representing nearly 1,300 marine businesses, including recreational boat, marine engine, and accessory manufacturers. NMMA members collectively manufacture more than 85 percent of the recreational marine products sold in the U.S.

It is no secret that boating, fishing, and aquatic recreation are part of Hawaii's history and strong heritage. Not only is boating a favorite pastime and part of the state's culture, but it is also a major economic driver and part of Hawaii's diverse outdoor recreation economy. Currently, there are 12,100 vessels registered throughout the state. Every year boating in Hawaii generates more than $125,490,000 in economic impact, supporting more than 1,800 jobs at 202 businesses.

While we do not question the good intent of this legislation, we have concerns about how the broad language of this bill could affect the marine industry. If passed as written, HB 53 would pose serious threats to the marine industry, and the consumers that enjoy and depend our products. Proponents of the "Right to Repair" legislation want access to software, specialized tools, and mechanical, electrical, safety, and emissions features that are incorporated into marine engine and

marine electronic products. Granting consumers access to such information could result in modifications to the engine that could run afoul with federal emissions and safety requirements.

We do not oppose a consumer's right to make repairs on their own equipment; in fact, many of our members will work with their customers to sell the required parts and train them to do simple repairs themselves. However, we do oppose providing access to the proprietary code to the products our members sell due to concerns of safety, emissions, compliance, and product reliability. Providing this level of access to untrained individuals would negatively affect the products' compliance with federal safety, security, and emission standards. Marine manufacturers are required by U.S. EPA, under 40 CFR 1068.50 to ensure "adjustable parameters" are unable to be tampered with by unauthorized technicians, ensuring engines maintain their safety and emissions protocols. To maintain compliance as well as guarantee user safety, all legislation must account for federal anti-tampering requirements as well as account for emissions and safety standards.

Equipment manufacturers and dealerships have invested millions of dollars in educating and training their technicians, and obtaining certifications that qualify them to properly service their products. Marine manufacturers put their confidence in certified dealers and technicians to maintain a given engine through its lifetime.

For these reasons, MRAA and NMMA oppose HB 53 and respectfully asks you to protect the boating industry in Hawaii and the many Hawaiians on the water, by either opposing these bills or adding language to exempt the offroad sector, including but not limited to, marine engines, electronics, and other components. Please contact Chad Tokowicz at chad@mraa.com or Rachel Fischer at rfischer@nmma.org if you should have any questions.

Sincerely,

Chad Tokowicz
Government Relations Manager
Marine Retailers Association of the Americas

Rachel A. Fischer
Rachel Fischer
Western Policy and Engagement Manager
National Marine Manufacturers Association

Hawaii House Bill 53
Hawaii House Higher Education & Technology Committee
February 1, 2023

Joani Woelfel President& CEO, Far West Equipment Dealers Association

Honorable Chairwoman and members of the committee, my name is Joani Woelfel and I am providing testimony opposing House Bill 53 on behalf of equipment dealers. Far West Equipment Dealers Association represents agricultural, industrial, construction, outdoor power and rental equipment dealers in Arizona, California, Colorado, Hawaii, Nevada, Utah and Wyoming. This comprises hundreds of dealerships that employ thousands of individuals across seven states whose contributions serve to enhance a healthy economy.

"Right to Repair" legislation as represented in this and other similar bills can be misleading. To be clear, we are not suggesting this is the intent of the bill's sponsors. We are simply providing a perspective that these bill types have been introduced in state legislatures across the country for the past several years. Of the three dozen or more bills introduced, *NONE HAS PASSED*. It's important to emphasize the distinct difference between "right-to-repair" and modifying embedded software code that regulates safety, security and emissions controls as these bills propose.

Equipment dealers support the rights of their customers to diagnose and repair their equipment. Dealers and manufacturers already make these tools and diagnostics available to customers, consistent with an industry commitment to provide them by January 2021 in lieu of legislation such as HB 53 now before this committee. The American Farm Bureau Federation (AFBF) acknowledged its efforts to work with dealers and manufacturers to provide these tools and information toward a resolution that "doesn't entail any specific legislation," according to reports quoting R.J. Karney, director of congressional relations for the American Farm Bureau Federation. (Lincoln Journal Star, Feb. 3, 2020).

That effort was formalized Jan. 8, 2023, in a Memorandum of Understanding (MOU) between the AFBF and John Deere Co. This MOU was preceded by a similar MOU signed between FWEDA and the California Farm Bureau Federation (CFBF) in 2018. Please note that neither AFBF — the largest farmers' organization in the United States — nor the Hawaii Farm Bureau Federation (HFBF) list "right to repair" as policy priorities.

"A piece of equipment is a major investment. Farmers must have the freedom to choose where equipment is repaired, or to repair it themselves, to help control costs," AFBF President Zippy Duvall said. "The MOU commits John Deere to ensuring farmers and independent repair facilities have access to many of the tools and software needed to grow the food, fuel and fiber America's families rely on." AFBF adds, "The MOU has the potential to serve as a model for other manufacturers and AFBF has already begun those discussions."

Importantly: "Our members asked us to pursue a private sector agreement, and ***our members wanted to avoid a patchwork quilt of different rules across state lines, recognizing that manufacturers — not just Deere, but manufacturers in general — will need to be operating at the national level***, even internationally," Sam Kieffer, AFBF vice president of public policy, told NPR. AFBF encourages state farm

bureaus to “refrain from introducing, promoting, or supporting federal or state 'Right to Repair' legislation that imposes obligations beyond the commitments in this MOU.”

To further illustrate this commitment dealers and manufacturers host demonstrations of these tools and diagnostics across the country to help educate lawmakers on ways the equipment industry empowers customers to repair their equipment. FWEDA could gladly facilitate these demonstrations for members of this committee and any legislators who are interested in learning about how the equipment industry supports its customers.

We oppose “Right-to-Repair” legislation such as HB 53 that would allow inexperienced and unqualified individuals the ability to “reset” embedded source code, effectively “legalizing” tampering with equipment safety, security and emissions features.

Modern machinery is equipped with Engine Control Units (ECUs) and Diesel Exhaust Fluid (DEF) systems programmed to comply with state and federal safety and emissions standards. Proponents of this legislation demand access to this embedded software code, arguing that equipment owners should be able to manipulate machinery as they see fit.

Access to embedded software code enables users to alter engine performance and emissions controls outside the standards, *contrary to The Clean Air Act***:**

• Motor vehicle engines and off-road vehicles and engines must meet Clean Air Act standards, which apply to cars, trucks, buses, recreational vehicles and engines, generators, farm and construction machines, lawn and garden equipment, marine engines and locomotives.

• It is a violation of the Clean Air Act to manufacture, sell or install a part for a motor vehicle that bypasses, defeats, or renders inoperative any emission control device.

• The Clean Air Act prohibits anyone from tampering with an emission control device on a motor vehicle by removing it or making it inoperable prior to or after the sale or delivery to the buyer.
The EPA implement its “National Compliance Initiative: Stopping Aftermarket Defeat Devices for Vehicles and Engines,” in 2020 to “focus on stopping the manufacture, sale, and installation of defeat devices on vehicles and engines used on public roads as well as on nonroad vehicles and engines.”

It’s important to note the NCI objectives specifically address alterations this legislation seeks to permit: *“**Illegally-modified vehicles and engines** contribute substantial excess pollution that harms public health and impedes efforts by the EPA, tribes, states, and local agencies to plan for and attain air quality standards*.”

Modifying embedded software can also create unsafe operating conditions related to horsepower and performance, potentially endangering the public. These modifications not only create liability for an individual who changes the codes, they also jeopardize dealers who unknowingly accept trade-ins of modified equipment for resale, as well as the subsequent owners of this equipment.

Altering horsepower and emissions by other means including reprogramming software and the ECU causes extreme risk to the original customer, the secondary customer and the dealer. Reprogramming the ECU can accomplish the same result as installing a chip, but sometimes extends beyond the 20-percent change. Through reprogramming, users can also bypass emissions controls that are required by

federal law to be installed and working on modern engines. Companies that are regularly reprogramming ECUs through pirated software save the original settings so they can reprogram it back if the customer has a major failure and doesn't want to jeopardize the warranty coverage, or if the customer wants to trade it in.

Those who perform this service and the customer recognize the risks created (legal and component failure) so they commonly save the OEM settings for this reason. Unfortunately, the secondary customer and the dealer take on 100 percent of the risk once the machine is traded in because they don't know whether a machine has been chipped or reprogrammed.

If that customer has a major failure after unknowingly purchasing a tractor that's been modified, they are many times faced with a large, unexpected repair bill. Successful dealerships stand behind the products they sell and service. Even if a dealer unknowingly sold a tractor that had been modified, and it consequently had a major failure shortly after selling it, the dealer assumes the risk of major repair expense to protect their reputation.

Consumers ultimately bear the real burden of equipment alterations. "Chipping" or reprogramming a piece of equipment (tractor) to increase horsepower or bypass emissions could void the manufacturer warranty. Passage of these bills could also prompt manufacturers to reassess extending equipment warranties.

Engine components, transmissions and final drives can fail if they aren't engineered to accept high levels of horsepower or torque. Estimates for repairing a 9.0-liter engine can exceed $40,000; a final drive failure is a $15,000+ repair; and an IVT Transmission repair is estimated at $50,000. Subsequent issues caused by these failures can drive these costs even higher. Unfortunately, it's typically the dealer or the secondary customer who bears the brunt of these costly failures. Additionally, all machines are engineered with an expected life-cycle. During the engineering process, the horsepower created by the engine is matched by the drivetrain and all other components of the machine, so if parts are pushed beyond their capability, life-cycle diminishes.

For all these reasons we urge legislators to reject HB 53 and similar bills. Thank you for the opportunity to provide this testimony.

Joani Woelfel
President & CEO
Far West Equipment Dealers Association

Associated Equipment Distributors

Written Testimony of Daniel B. Fisher, Senior Vice President
of Associated Equipment Distributors
Before the House Committee on Higher Education and Technology

Hearing Relating to Right to Repair (H.B. 53)

Chair Perruso, Vice Chair Kapela, and Committee Members, Associated Equipment Distributors (AED) appreciates the opportunity to offer this testimony in conjunction with the House Committee on Higher Education and Technology's hearing relating to the Right to Repair (H.B. 53).

AED is the trade association representing companies that sell, rent, and service construction, farm, energy, forestry, and industrial equipment. Our members, which are predominantly small-medium-sized, independent, family-owned businesses, employ workers across Hawai'i, providing well-paying jobs and serving as a positive force within communities throughout the Aloha State. Attached please find a list of AED member companies and locations in Hawai'i.

AED and our Hawai'i-based members have significant concerns with H.B. 53 as currently drafted.

Unfortunately, a primary basis for applying so-called "right to repair" legislation to the equipment industry is based on a false narrative that customers are unable to fix their machinery. To the contrary, equipment manufacturers and distributors make available diagnostic tools, repair information, and parts. However, consumers do not have the ability to modify the complex environmental and safety protections on the equipment, and for reasons outlined below, lawmakers should refrain from mandating this type of unfettered access.

A broad right-to-repair mandate applied to the off-road equipment industry will be detrimental to safety and environmental compliance. Indeed, given that customers can already repair their equipment, the primary reason someone would want further access is to override emission controls and safety mechanisms to increase performance. This is not fixing equipment; this is modifying it.

The equipment industry has invested significant time and resources to meet the Environmental Protection Administration's (EPA) Tier 4 diesel emissions standards. These specifications, applicable to engines used in off-road equipment have resulted in a significant reduction in emissions. Unfortunately, right to repair threatens these gains as the public would have the ability to circumvent environmental protections on machinery to boost performance.

Furthermore, modern heavy equipment has numerous safety features to protect both equipment operators and the public, the latter of who oftentimes are driving or walking past construction sites and other areas while machinery is in use. Granting access to override safety features poses an undue risk to operators and bystanders in the vicinity while equipment is in use.

It is also important for policymakers to recognize a critical difference between equipment sold by AED members and other products, such as consumer electronics. Heavy machinery has a significantly longer life cycle that may be jeopardized by granting unfettered access to source code. In fact, equipment will oftentimes be sold to a customer, traded-in when the customers purchase a new machine, and subsequently, either resold or rented. Modifications to equipment can jeopardize its durability, which in turn can also have a negative environmental impact as machinery may need to be discarded and is deemed unusable prematurely.

Because of the nature of the used equipment sales, rental, and trade-in markets, allowing for modification of safety and environmental features also would subject AED members to significant, unnecessary legal liability issues due to an end-user's ability to tamper with machinery source code.

In conclusion, end-users of machinery have the information and parts they need to repair and fix their equipment. The only reason for greater access contemplated by right-to-repair policies is to circumvent safety and emissions standards or to access proprietary intellectual property.

Thank you for the Committee's consideration of my testimony.

Daniel B. Fisher, Esq.
Senior Vice President
Associated Equipment Distributors
dfisher@aednet.org
202-897-8799

AED's Hawai'i Dealer Locations

Bacon-Universal Co., Inc.	Hilo	HI
Bacon-Universal Co., Inc.	Honolulu	HI
Bacon-Universal Co., Inc.	Kailua-Kona	HI
Bacon-Universal Co., Inc.	Lihue	HI
Bacon-Universal Co., Inc.	Wailuku Maui	HI
Hawthorne Pacific Corp.	Hilo	HI
Hawthorne Pacific Corp.	Kahului	HI
Hawthorne Pacific Corp.	Lihue	HI
Western Pacific Crane & Equipment LLC	Kapolei	HI

HB-53
Submitted on: 2/1/2023 8:31:10 AM
Testimony for HET on 2/1/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Dustin Brighton	Repair Done Right Coalition	Oppose	Remotely Via Zoom

Comments:

Testimony

Dustin Brighton, Director, Repair Done Right Coalition

Hawai‘i House Committee on Higher Education and Technology

Wednesday, February 1, 2023

Madam Chair and members of the committee.

My name is Dusty Brighton, and I represent the Repair Done Right Coalition.

Thank you for allowing me to submit testimony in opposition of HB 53.

The Repair Done Right coalition is made up of companies, organizations, and people who care about ensuring that innovative products are repaired and maintained in an authorized manner.

These companies assisted in connecting consumers, businesses, and governments through products designed to assist in improving the lives of those who use them. During this pandemic products and services manufactured by these companies and organizations have been essential in ensuring commerce and personal relationships remain intact.

The Repair Done Right Coalition is opposed to HB 53 which would mandate original equipment manufacturers (OEMs) of digital electronic equipment, or a part of the equipment sold in Hawai‘i to provide independent repair providers with diagnostic and repair information, software, tools, and parts -- increases safety and cybersecurity risks for consumers and businesses -- while threatening the Hawai‘i innovation economy.

· OEM’s currently offer consumers a wide range of safe and secure repair options through their authorized repair networks. This enables manufacturers of consumer electronics, home appliances, HVACR, security equipment, toys, lithium-ion batteries, and other connected electronic products to stand behind the quality of their products.

· Most consumer technology products are comprised of complex electronics which require specialized training and sophisticated test instruments to repair safely. Some types of repairs can be extremely detailed, complicated, and dangerous to anyone without proper training. It is particularly important that products containing high-energy lithium-ion batteries are repaired only by trained professionals who understand and mitigate the hazards associated with installing, removing, or replacing these batteries.

· Manufacturers want to ensure that their products are serviced by professionals who understand the intricacies of their products and have spent time procuring the knowledge necessary to safely repair them and return them to consumers without compromising those standards or undermining the safety and security of their products.

· Consumers, businesses of all sizes, public schools, hospitals, banks, and industrial manufacturers all need reasonable assurance that those they trust to repair their connected products will do so safely, securely, and correctly. State law should not mandate that all manufacturers must provide a “how to” manual for any product and provide it to anyone who asks.

· There is currently litigation in process regarding the recently codified auto RTR statute. This legislation could possibly result in further litigation.

· Forcing OEMs to provide unauthorized repair facilities with information on how to bypass consumers’ safety locks presents unacceptable risks to consumers’ data privacy. A recent study found that privacy violations already occur when consumers seek computer or phone repairs,

with technicians accessing female customers' personal data at a higher rate than males. Without the contractual safeguards

Our members are committed to working with you to promote digital privacy and security, while resisting unwarranted intervention in the marketplace with mandates that compromise consumer safety and protection. However, HB 53 does not help the citizens of Hawai‘i. In fact, it could harm them.

Again, thank you for allowing me to submit this testimony to you today.

January 31, 2023

Chair Amy Perruso
Vice Chair Jeanne Kapela
Members, Hawaii House Committee on Higher Education & Technology

Re: Electronics Manufacturers Opposition to HB 53

Dear Chair Perruso, Vice Chair Kapela, and Committee Members:

On behalf of the hundreds of manufacturers and businesses our organizations represent, we respectfully oppose HB 53, legislation which would mandate original equipment manufacturers (OEMs) of digital electronic equipment sold or used in Hawaii to provide independent repair providers with diagnostic and repair information, software, tools, and parts – but without requiring any of the critical consumer protections afforded by authorized repair networks, such as training and competency certification, and putting at risk protections manufacturers have built in for consumer data privacy and security. Without any vetting process for qualified repair facilities, the potential for consumer harm is significant and undermines the innovations manufacturers have developed to protect customers.

Our organizations represent a broad spectrum of manufacturers of home appliances, consumer electronics, HVACR, security equipment, toys, lithium-ion batteries, and other connected electronic products, as well as companies that rely

on the secure operation of these devices. All of these companies stand behind the quality of their products. Our members develop products and services for a wide range of commercial, government, and consumer users. Their customers depend on these products to operate safely, securely, and accurately, whether they are being used to support banking and commercial transactions, transmit and store sensitive personal data, support industrial operations, medical applications, or securely offer and deliver entertainment and other services. As businesses, government agencies, and consumers continue to increase their reliance on connected devices to help deliver efficiency, convenience, and services, it is important to remain vigilant and focused on mitigating the risks associated with the safe and secure operation of those products.

HB 53 mandates that OEMs treat any independent repair provider in much the same way as authorized network providers – but without any contractual protections, requirements, or restrictions. In doing so, the bill places consumers and their data at risk, undermines the business of Hawaii companies that are part of OEM-authorized networks, and stifles innovation by putting hard-earned intellectual property in the hands of hundreds, if not thousands, of new entities. Further, the bill fails to account for the wide range of repair and refurbishment options currently available to Hawaii consumers from both OEM-authorized and independent repair sources. It also does not address advancements in sustainability by electronic product manufacturers.

For these reasons, we urge the committee against moving forward with this legislation.

HB 53 harms consumer security

One of our chief concerns with this legislation is its potential to weaken the privacy and security features of various electronic products. The security of user information on these products is of the utmost importance to consumers that rely on them. Computers, tablets, and smartphones are at risk of hacking, and weakening of the privacy and security protections of those products will increase risks to consumers. With access to technical information, criminals can more easily circumvent security protections, harming not only the product owner but also everyone who shares their network. In an era of sophisticated cyberattacks, we should not make it easier for criminals to hack security provisions.

Forcing OEMs to provide unauthorized repair facilities with information on how to bypass consumers' safety locks presents unacceptable risks to consumers' data privacy. A recent study found that privacy violations already occur when consumers seek computer or phone repairs, with technicians accessing female customers' personal data at a higher rate than males. Without the contractual safeguards created by authorized repair networks that allow OEMs to hold bad actors accountable, HB 53 will merely create new opportunities for snooping repair technicians to access and copy consumers' personal data.

Consumers, businesses of all sizes, public schools, hospitals, banks, and industrial manufacturers all need reasonable assurance that those they trust to repair their

connected products will do so safely, securely, and correctly. State law should not mandate that all manufacturers must provide a "how to" manual for any product and provide it to anyone who asks.

Ultimately, a connected system of tens of billions of products presents massive opportunities while posing unprecedented risks. The health of our collective privacy and our economy are intertwined with how we approach the security of this integrated system. HB 53 does not take into the account the new paradigm of a connected world.

HB 53 harms consumer safety

Manufacturers offer authorized repair networks to provide consumers with assurance that their products are serviced by properly trained and vetted repair professionals who have the necessary skills to safely and reliably repair electronic products.

Most consumer technology products are comprised of complex electronics which require specialized training and sophisticated test instruments to repair safely. Some types of repairs can be extremely detailed, complicated, and dangerous to anyone without proper training. It is particularly important that products containing high-energy lithium-ion batteries are repaired only by trained professionals who understand and mitigate the hazards associated with installing, removing or replacing these batteries. In January 2021, the U.S. Consumer Product Safety Commission released a consumer safety warning that rechargeable lithium-ion battery cells, when they are "loose" and not installed in a device or part of an integral battery, are "potentially hazardous to consumers when handled, transported, stored, charged, or used to power devices" and "can overheat and experience thermal runway, igniting the cell's internal materials and forcibly expelling burning contents, resulting in fires, explosions, serious injuries and even death."

Manufacturers want to ensure that their products are serviced by professionals who understand the intricacies of their products and have spent time procuring the knowledge necessary to safely repair them and return them to consumers without compromising those standards or undermining the safety and security of their products. Authorized repair networks not only include training requirements but also have the technical skills and test instruments to verify that repair parts meet all necessary performance and safety specifications. Consumers can be protected by warranties or other means of recourse. The legislation provides no such protections for consumers, repair shops, or manufacturers.

When an electronic product breaks, consumers have a variety of professional repair options, including using an OEM's authorized repair network, which often include local repair service providers as well as mail-in and even in-house repair options for some categories of products. Consumers may also choose to use one of many independent repair providers; although they do so without the quality assurance provided by using a manufacturer's authorized network provider. The point is that the free-market economy provides a wide range of consumer choice for repair with

varying levels of quality, price, and convenience without mandates imposed by the legislation.

Manufacturers' authorized networks of repair facilities guarantee that repairs meet OEM performance and safety standards. If an OEM's brand and warranty are to stand behind repair work and assume product liability, it is only reasonable that the repair facility demonstrates competency and reliability. Without the training and other quality assurance requirements of authorized service providers, manufacturers would not be able to stand behind their work, warranties, technical support, ongoing training, and business support.

HB 53 mandates the disclosure of protected proprietary information
Manufacturers make significant investments in the development of products and services, and the protection of intellectual property is a legitimate and important aspect of sustaining the health of the vibrant and innovative technology industry. However, HB 53 puts at risk the intellectual property that manufacturers have developed.

Consumer electronics' on-board software (i.e., firmware) are key to the functioning and operation of the hardware it is embedded in, and firmware helps protect against unauthorized access to other software and applications. That software is subject to copyright under federal law, and Section 1201 of the Digital Millennium Copyright Act, a related federal law, ensures that bad actors cannot tamper with the digital rights management that copyright owners use to protect this software. The problem is that making repairs to hardware components may require the circumvention of digital rights management and leave the software in an unprotected state – harming the copyright owners of the software.

Firmware controls many other product functions, and opening it up for repair purposes exposes other more sensitive functions, such as security features, to potential tampering. Given the scope of products covered and what must be provided under the legislation – including diagnostics, tools, parts, and updates to software – it is highly likely some of the information would be proprietary. Providing unauthorized repair facilities and individuals with access to proprietary information without the contractual safeguards currently in place between OEMs and authorized service providers places OEMs, suppliers, distributors, and repair networks at risk.

HB 53 fails to account for advancements in sustainability by electronic product manufacturers
The bill is partly based on an inaccurate assumption that the bill will aid in the reduction of electronic waste in the state of Hawaii. According to a recent study by Yale and Rochester Institute of Technology researchers, e-waste generation in the U.S. peaked in 2015 and is in a period of extended decline (see "Electronic Waste on the Decline, New Study Finds"). This trend is corroborated by the most recent data from the U.S. Environmental Protection Agency whose data shows consumer electronics as the fastest declining part of the municipal solid waste stream.

Electronic product manufacturers have developed robust policies and programs to ensure that they are continuously improving the sustainability of their products for their whole lifecycle, from design, to material sourcing, product performance, reuse, and responsible end of life management.

This has led to continued innovation and the use of new technologies which provide consumers improved devices while simultaneously reducing the overall amount of e-waste generated – all under the existing product repair environment. And with new technologies like OLED and additional light-weighting across the electronics industry, additional declines in e-waste generation are expected to continue during the coming decades.

Repair and reuse are important elements of electronics manufacturers sustainability efforts. Not only is repair and reuse in the OEM's best interest so that consumers can continue to enjoy their products, but many OEMs are returning still-useful electronic products to active service to get the maximum benefits out of the resources used to make them.

Additionally, under revised "green" procurement standards, federal agencies and other purchasers will be required to purchase computers that meet certain environmental performance criteria under the Electronic Product Environmental Assessment Tool (EPEAT) rating system. These existing policies and programs promote repair and reuse without the consumer safety, security or business concerns raised by the bill.

Conclusion

Thank you for considering our perspective on this complicated issue. Our members bear a significant responsibility to the businesses, governments, and individual consumers that depend on us to protect the safety and security of their electronic products, as well as the sensitive data that they contain. We are committed to working with you to promote digital privacy and security, while resisting unwarranted intervention in the marketplace with one-size-fits-all mandates that compromise consumer safety and protection. For those reasons, we oppose HB 53.

Sincerely,

Air Conditioning, Heating and Refrigeration Institute (AHRI)
Association of Home Appliance Manufacturers (AHAM)
Consumer Technology Association (CTA)
CTIA – The Wireless Association
Entertainment Software Association (ESA)
Information Technology Industry Council (ITI)
Internet Coalition
Medical Imaging & Technology Alliance (MITA)
National Electronic Manufacturers Association (NEMA)
NetChoice
PRBA – The Rechargeable Battery Association
Repair Done Right

Security Industry Association (SIA)
State Privacy and Security Coalition, Inc.
TechNet
Telecommunications Industry Association (TIA)
The Toy Association

Truck & Engine Manufacturers Association®
Bringing Clean Power to the World™

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Chicago, Illinois, 60606
Phone/Fax: (312) 929-1970
www.truckandenginemanufacturers.org

Testimony of the Truck and Engine Manufacturers Association
By
Tia Sutton Sysounthorn

House Bill 53

Public Hearing of the House Committee on Higher Education & Technology
Hawai'i State Legislature

February 1, 2023

Chair Perruso, Vice Chair Kapela and Members of the Committee:

The Truck and Engine Manufacturers Association (EMA) opposes Hawai'i House Bill 53 (HB53). EMA represents the world's leading manufacturers of commercial vehicles as well as on- and off-road engines used in several applications, including: trucks; buses; construction and farm equipment; locomotives; marine vessels; lawn and garden equipment; and stationary generators.

HB53, the "digital fair repair" act, simply goes too far. Among other things, it will create unnecessary confusion, complications, burdens, and risks for Hawai'i users and manufacturers alike; and will lead to significant adverse safety, environmental, and security impacts.

The bill's overly broad definition of "digital electronic equipment" would apply to many of the engines, vehicles and equipment manufactured by EMA's members. Further, the bill specifically excludes "motor vehicles," yet lacks clarity on the exclusion of other similarly complex machinery (e.g., off-road engines and equipment) that would face the same significant impacts.

As currently written, the bill would allow anyone – whether trained or not – to access and change the microprocessors on engines, vehicles and equipment that control critical safety, emissions, and performance systems. Thus creating significant adverse unintended consequences to the products manufactured by EMA's members. Such legislation simply is not needed for vehicles or off-road equipment, and creates a solution in search of a problem.

The correct use of service information, such as diagnostic and repair tools, on the complex machinery manufactured by EMA members requires highly trained and skilled personnel. Allowing unfettered access to service information to untrained individuals will undermine the integrity of the equipment and allow for safety features on heavy equipment – such as braking systems and electronic stability (anti-rollover) controls – to be altered and compromised. Unfettered access also will increase the likelihood that untrained personnel will intentionally or unintentionally, and illegally, alter or disable federally mandated emission control systems. Such illegal tampering is increasingly occurring today, especially on off-highway equipment and trucks,

and the U.S. EPA has undertaken a National Compliance Initiative[1] to respond to the numerous instances of tampering[2] across the country, some of which include the use of software to alter or disable digitally controlled emission technologies. Tampering contributes substantial excess pollution that harms public health and air quality.

Further, the bill fails to contain meaningful safeguards or restrictions that would prevent or mitigate the risk of cybersecurity incidents. Widespread and unfettered access to service information increases the opportunity for hackers to improperly obtain or tamper with such information – creating enormous cybersecurity risks. Today's legislation will simply make those efforts easier.

Lastly, we note that the State of New York recently recognized the significant adverse unintended consequences that would be created in including heavy machinery in legislation focused on consumer electronic products. New York Assembly bill A.7006B/S.4104A, which was signed into law in 2022, is similar in scope to HB53 and excludes motor vehicles and offroad equipment (*see Sec. 4(a)-(c)*).

For all of these reasons, EMA requests that any digital right to repair legislation clarifies that all on- and off-highway engines, vehicles, and equipment are expressly excluded. Those products are not the type of consumer goods that appear to be the focus of this bill, and they are already covered by existing state and federal laws and existing manufacturer commitments. HB53 otherwise will create enormous safety, environmental, and security risks and liability exposure for owners and the general public. Finally, the bill will limit the availability – and/or increase the costs – of products sold in Hawai'i, as those products will be forced to have unique characteristics.

Thank you for the opportunity to provide our comments. I would be happy to answer any questions following the hearing at: tsutton@emamail.org, (312) 929-1976.

[1] U.S. EPA National Compliance Initiative: https://www.epa.gov/enforcement/national-compliance-initiative-stopping-aftermarket-defeat-devices-vehicles-and-engines
[2] U.S. EPA Clean Air Act Vehicle and Engine Enforcement Case Resolutions: https://www.epa.gov/enforcement/clean-air-act-vehicle-and-engine-enforcement-case-resolutions

HB-53
Submitted on: 1/30/2023 6:25:55 PM
Testimony for HET on 2/1/2023 2:00:00 PM

Submitted By	Organization	Testifier Position	Testify
Michael I Rice	Individual	Support	Written Testimony Only

Comments:

I stand in strong support of this bill. I tinker with and repair electronics frequently, this bill would greatly help me. It would also help combat planned obsolescence and reduce E-Waste.