

NEW FEDERAL REQUIREMENT FOR RECREATIONAL BOATS

ENGINE/PROPULSION CUT-OFF DEVICES

Recent federal legislation¹ has made the use of Engine Cut Off Switches & Links mandatory on some recreational vessels which has raised many questions in the boating community. Below you will find some 'frequently asked questions' regarding this new requirement which the Coast Guard published.

Q1. What is an Engine Cut-off Switch (ECOS)?

A1. An Engine Cut-Off Switch is a safety mechanism used to shut off propulsion machinery when the operator is displaced from the helm.

Q2. What is an Engine Cut-Off Switch Link (ECOSL)?

A2. An ECOSL is the device that connects the operator to the ECOS. The link must be attached to the operator, the operator's clothing, or operator's personal floatation device. It is typically a coiled lanyard, but may also be an electronic fob.

Q3. Who needs to use an Engine Cut-off Switch Link ECOSL?

A3. All operators of recreational boats less than 26' in length that have an Engine Cut-Off Device installed.

Q4. Why is it important to use an Engine Cut-Off Switch Link?

A4. Boats can make sudden and forceful turns that create enough torque to eject an operator from the helm area or completely out of the boat. If thrown out of the boat, there is always the danger of a spinning propeller, especially since an unmanned boat can often start traveling in circles at the point where the ejection took place. Wearing your Engine Cut-Off Switch Link immediately stops the engine and allows the operator to regain control of the boat.

¹ Section 503 of the Coast Guard Authorization Act of 2018 required manufacturers of covered recreational boats (less than 26 feet in length, with an engine capable of 115 lbs. of static thrust) to equip the vessel with an ECOS installed as of December 2019. Owners of recreational vessels produced after December 2019 are required to maintain the ECOS on their vessel in a serviceable condition. It is recommended that recreational vessel owners regularly check their existing ECOS system to ensure it works, following manufacturer's instructions.

Section 8316 of the National Defense Authorization Act of 2021 requires individuals operating covered recreational vessels (less than 26 feet in length, with an engine capable of 115 lbs. of static thrust; 3 HP or more) to use ECOS "links." Using the ECOSL is required only when the primary helm is not within an enclosed cabin, and when the boat is operating on plane or above displacement speed. Common situations where ECOSL use would not be required include docking/trailering, trolling and operating in no-wake zones.

Q5. What are the benefits of using my Engine Cut-Off Switch and Engine Cut-Off Switch Link?

A5. Engine cut-off switches are an important tool to prevent unnecessary accidents, injuries and deaths caused by a recreational vessel operator being unexpectedly displaced from the helm. This includes situations where the operator is ejected from the vessel, which typically leads to a runaway vessel. In these scenarios anyone in the water is a potential propeller-strike victim, all other vessels on the water face a collision hazard, and maritime law enforcement officers face additional risk in trying to bring the runaway vessel to a stop.

Q6. What boats need to have an Engine Cut-Off Switch installed?

A6. Boats less than 26 feet in length that generate more than 115lbs of static thrust (~ 2-3hp) and were built beginning in January 2020. If the boats' primary helm is inside an enclosed cabin it is not required to have an Engine Cut-Off Switch.

Q7. I recently bought a 2020 model year boat; am I required to ensure that the Engine Cut-Off Switch and Engine Cut-Off Switch Link work?

A7. Maybe. It depends on when the boat was built. If the boat was built in January 2020 or later, the Engine Cut-Off Switch systems must be maintained in working condition for the life of the boat. Just like navigation lights or exhaust blowers.

Q8. What is a "covered recreational vessel"?

A8. The term "covered recreational vessel" means a recreational vessel that is (A) less than 26 feet overall in length; and (B) capable of developing 115 pounds or more of static thrust (which equates to about 3 horsepower).

Q9. My boat doesn't have an Engine Cut-Off Switch, do I need to install one?

A9. No, unless the boat was built on or after 1 JAN 2020. The installation requirement applies to manufacturers, distributors and dealers of "covered recreational vessels" after 1 JAN 2020. For those boats, an Engine Cut-Off Switch must be installed and the owner is required to maintain it.

Q10. How do I tell if my boat was built after 1 January 2020?

A10. The ECOS installation requirement was implemented in the middle of the 2020 model year, so determining the model year is the first step. This is done by checking your boats hull identification number (HIN), which all boats are required to have. The HIN is usually found on the starboard outboard side of the transom, but can also be found on the boat's certificate of number (i.e., registration).

Characters 11 and 12 of the HIN represent the model year. If the model year is 19 or lower, the boat DOES NOT need an ECOS to be installed. If the model year is 21 or later, the boat DOES need an ECOS to be installed. If the model year is 20, then the date of certification needs to be determined.

Characters 9 and 10 represent the date of certification of the boat. Character 9 represents the month, A-L for January-December, respectively. The 10th character represents the year of certification, with the last digit corresponding to the last digit of a specific year (e.g., "0" = 2020). For a model year 2020 boat to be required to have an ECOS installed, it would have an "A0" – "G0" certification date for the 9th and 10th characters of the HIN, and "20" for the 11th and 12th characters of the HIN. Please note that a "0" as the 10th character of the HIN could represent 2010 or any other year ending in a "0" including 2020, which is why the model year represented by the 11th and 12th characters must be considered (e.g., "A010" would represent a boat certified in January 2010, and "E000" would represent a boat certified in May 2000.)

Q11. Are there exemptions to the Engine Cut-Off Switch law?

A11. The laws are only applicable to recreational vessels, so they do not apply to law enforcement vessels or other government-owned vessels. There are two exemptions for recreational vessels. The first is there is no requirement to wear the Engine Cut-Off Switch Link if either the main helm of the covered vessel is installed within an enclosed cabin, or if the vessel does not have an engine cut-off switch and is not required to have one.

Q12. Do I need to keep the Engine Cut-Off Switch Link attached at all times?

A12. No. The Engine Cut-Off Switch Link doesn't need to be attached when the vessel is idling or performing docking maneuvers. The Engine Cut-Off Switch Link must be attached whenever the boat is operating on plane or greater than displacement speed

Q13. What does "on plane" mean?

A13. For a boat, "on plane" means the boat has reached a speed that moves the boat from a "displacement" mode to a "planing" mode. As more power (and speed) is applied, lift increases, and the boat, in effect, rides over its bow wave, reducing wetted area of the hull and thus reducing drag. At this point, the boat is said to be "on a plane" or simply "planing." Sailing vessels are generally not capable of getting "on plane" because of their displacement hull, whereas a ski boat, bass boat or runabout can usually achieve planing with little effort.

Q14. How does the Engine Cut-Off Switch work?

A14. When the operator moves, or is thrown, a certain distance away from the Engine Cut-Off Switch, the link is disengaged from the switch. This causes the engine to shut off. Once the link is reinstalled to the switch, the boat can be restarted.

Q15. To what size boats and horsepower does the new Engine Cut-Off Switch laws apply?

A15. The law applies to all boats less than twenty-six (26) feet in length that generate more than 115lbs of static thrust, which is approximately 3 horsepower.

Q16. My boat has an enclosed wheelhouse, am I required to wear the Engine Cut-Off Switch Link?

A16. No, the law gives an exemption to recreational vessels where the main helm of the covered vessel is installed within an enclosed cabin

Q17. My new 25-foot boat that I purchased in 2020 has an Engine Cut-Off Switch installed by the manufacturer. Do I need to use it?

A17. Yes. Assuming the main helm is not in an enclosed cabin. Because your boat is less than 26-feet and equipped with an engine cut-off switch installed by the manufacturer, you will need to use it while the boat is on plane or above displacement speed.

Q18. My 22-foot boat (1995 model) had an Engine Cut-Off Switch but it was removed by a prior owner many years ago, leaving a hole at the helm. Do I need to repair it and use it?

A18. No. However, the Coast Guard recommends that you repair the switch and use it when operating on plane or above displacement speed.

Q19. My 18-foot boat (2019 model) has an Engine Cut-Off Switch but it is broken and does not function. Do I need to use it?

A19. No. However, the Coast Guard recommends that you repair the Engine Cut-Off Switch and use it when operating on plane or above displacement speed.

Q20. My 27-foot boat has a working Engine Cut-Off Switch. Do I need to use it while operating on plane or above displacement speed?

A20. No. The law does not require the use of an Engine Cut-Off Switch for any vessel equal to or greater than 26-feet in length, regardless of when the vessel was manufactured. However, the Coast Guard recommends that you repair the switch and use it when operating on plane or above displacement speed.

Q21. My 26-foot sailboat has a 50 horsepower engine that allows me to travel on plane / above displacement speed. Do I need to use an Engine Cut-Off Switch?

A21. No. Regardless of when it was built, a boat 26-feet in length and greater does not require use of an engine cut-off switch, even if equipped.

Q22. My new 20-foot boat that was purchased in January 2020 doesn't have an engine cut-off switch. Is it supposed to have an ECOS and do I need to use one?

A22. If you purchased a boat in 2020, there is a good chance that boat was built before the ECOS installation requirement was in place. The ECOS installation requirement was implemented in the middle of the 2020 model year, so determining the model year is the first step in determining whether or not your boat is required to have an ECOS. This is done by checking your boat's hull identification

number (HIN), which all boats are required to have. The HIN is usually found on the starboard outboard side of the transom, but can also be found on the boat's certificate of number (i.e., registration). Characters 9 and 10 represent the date of certification of the boat. Character 9 represents the month, A-L for January-December, respectively. The 10th character represents the year of certification, with the last digit corresponding to the last digit of a specific year (e.g., "0" = 2020). For a model year 2020 boat to be required to have an ECOS installed, it would have an "A0" – "G0" certification date for the 9th and 10th characters of the HIN, and "20" for the 11th and 12th characters of the HIN. Please note that a "0" as the 10th character of the HIN could represent 2010 or any other year ending in a "0" including 2020, which is why the model year represented by the 11th and 12th characters must be considered (e.g., "A010" would represent a boat certified in January 2010, and "E000" would represent a boat certified in May 2000.) If the boat has an ECOS installed you have to use it.

Q23. I bought my 22-foot boat many years ago and it did not have an engine cut-off device installed by the manufacturer, so last year I added a new wireless engine cut-off devices. Am I required to use it?

A23. Yes. If an engine cut-off switch is present, it must be used.