



Thank you for purchasing Candoopro! Please read the following information before using the system for the first time. If you have any questions about the use of the system, please contact us at [Sales@candoopro.com](mailto:Sales@candoopro.com), or visit our Forum at <http://forums.candoopro.com/>.

## Quick Start Guide – Yamaha Outboard Engines and Waverunners

***NOTE: Yamaha Outboard Engines have a dedicated Diagnostic Port to connect the harness. However, Waverunners do NOT have a dedicated Diagnostic Port! Please read instructions below how to connect the diagnostic system!***

Hardware and Cable Guide; what's included:

**NOTE: If you ordered Yamaha capability as an add-on to an existing Marine version of Candoopro, , you will only receive the appropriate cable to connect the Marine Main Diagnostic Cable to the Yamaha vehicle.**

The Candoopro system setup for Yamaha includes the following parts:

**The Vehicle Diagnostic System Box, which connects between your PC and the Outboard Engine or Waverunner**



**The USB Cable, which connects the Vehicle Diagnostic System Box to the PC:**



**The Marine Main diagnostic cable, which connects to the Vehicle Diagnostic System Box and to the Yamaha Diagnostic Adapter Cable:**



**The Yamaha Diagnostic Adapter Cable, which attaches between the Marine Main Cable and the Yamaha Vehicle Diagnostic Connector:**



**The Marine Main diagnostic cable is fastened to the Honda Diagnostic Adapter cable by carefully aligning the slot of the connected to the mating slot, then screwed hand tight**



## Getting Started- Loading Software and Starting up the Program:

### First Time: (Internet Connection is REQUIRED)

- Install USB Drivers, by entering the following into your web browser
  - <http://www.candopro.com/candoinstall/driver/usbdriver.exe>
- Connect CANDoo Professional System to the PC with the provided USB Cable
- Install CANDoo Professional Software, by entering the following into your web browser
  - <http://www.candopro.com/candoinstall/CanDooPro.msi>
- Start CANDoo Professional by going to start menu and launching CANDoo Professional
  - When prompted to download the new update, you must select “YES”

### Each Use: (Internet Connection is Optional)

- Connect CANDoo Professional System to the PC with the provided USB Cable
- Start CANDoo Professional by going to start menu and launching CANDoo Professional
- If you have a multi-brand version of software , select Yamaha
- Bottom left of the CANDoo Professional software shows the current status



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- Connect the Candopro system to the Yamaha Outboard Engine or Waverunner diagnostic connector.

## Connecting to Yamaha Waverunners:

**NOTE:** Before connecting to the vehicle, please read the service manual for the particular model of engine or Waverunner!

In general, starting a diagnostic session involves two steps:

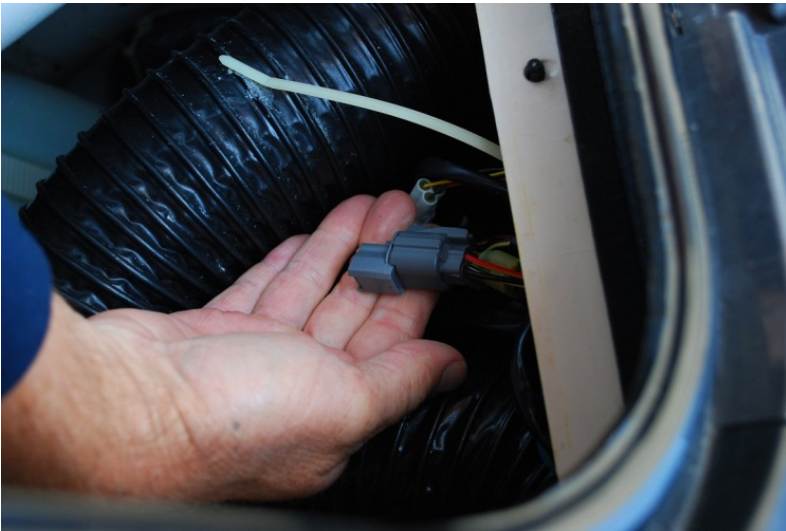
1. Connecting the Candopro system to the Vehicle diagnostic connector
2. “Waking up” the engine ECU to enable the Candopro system to talk to the ECU

## Connecting the Diagnostic Cable to the Waverunner:

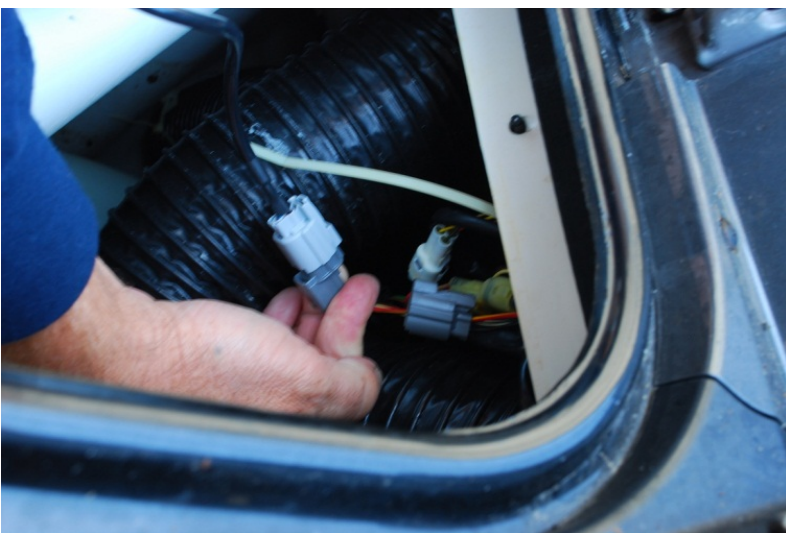
Some Yamaha engines (like the outboard motors) have a dedicated 3-pin diagnostic connector, but Waverunners do not have a dedicated diagnostic connector. The gauges/clusters on Waverunners “speak” to the ECU in the same way that their diagnostics tools communicate with the ECU, so Yamaha Waverunners have a standard 3-pin connector in the front storage area that is used to communicate information to the cluster during normal ski operation, and is used for the diagnostic tool (Candopro diagnostic system) for a diagnostic session.

**Steps to connect:**

1. Locate the 3-pin cluster/diagnostic connector in the front storage compartment of the ski. You may need to open an access panel on some models to get to the connector. The connector is a three-pin dark gray connector:



2. Disconnect this connector, and plug the Candopro Yamaha adapter cable light gray connector into the mating connector on the Waverunner harness:



3. You are now ready to “wake up” the ECU and start a diagnostic session.

**Waking up the ECU:**

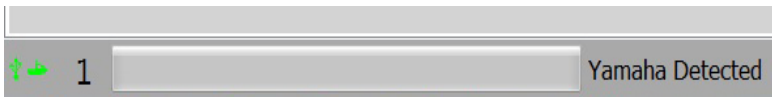
In order to initiate a diagnostic session, you need to “wake up” or turn on the ECU. This is done by simply tapping the start button to turn on the gauges and wake up the ECU, or by starting the ski. (or attempting to start the ski if it will not run!)

1. If you do not wish to run the engine while doing diagnostics (for example, to read and clear faults) you can either tap the start button to wake up the ECU, or just briefly start the ski, start the diagnostic session with Candoopro, and shut off the engine. Once the ski is in diagnostic mode, the ECU should continue to stay active. (if it should happened to shut down, just tap the start button and start the diagnostic session over)
2. If you wish to do an active diagnostic session while the engine is running (for example, using the engine monitor function, or to drop a cylinder while running) please follow the instructions and warnings in the service manual for this vehicle, and make sure you supply cooling water to the engine per the service manual. Start the Waverunner engine.

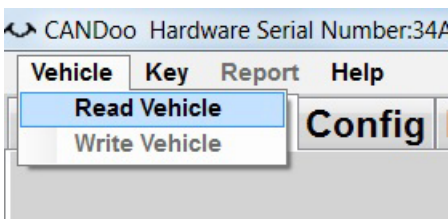
### Starting the Diagnostic Session:

When the Candoopro application is running, and the ECU has been woken up, you are ready to start the diagnostic session.

Once the ECU is woken up, the Candoopro application should detect the Yamaha ECU, indicated by the ski icon on the lower left of the screen changing from red to green, and the status should change from “Looking for Vehicle”, to “Yamaha Detected”.



Once “Yamaha Detected” appears, go to the upper left of the screen, select “Vehicle”, then “Read Vehicle”.



The Candoopro system will read the data from the ECU. You are now ready to read and clear faults, view operating history, activate various functions available for that particular model.

## **Connecting to Yamaha Outboard Engines:**

**NOTE:** Before connecting to the vehicle, please read the service manual for the particular model of Outboard Engine!

In general, starting a diagnostic session involves two steps:

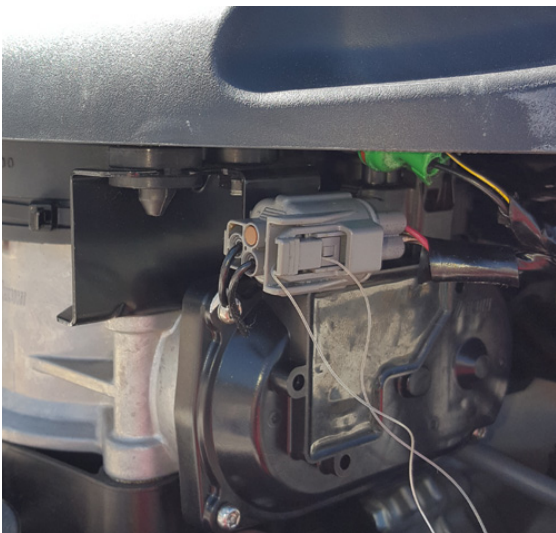
1. Connecting the Candoopro system to the outboard diagnostic connector
2. “Waking up” the engine ECU to enable the Candoopro system to talk to the ECU

### **Connecting the Diagnostic Cable to the Outboard Engine:**

Yamaha Outboards have a dedicated connector that looks just like the connector on the Candoopro cable.

#### **Steps to connect:**

1. Locate the 3-pin diagnostic connector. Most engines have the protective cap mounted to the body of the engine. Some have this connector in the lower frame. The connector is a three-pin gray connector:



2. Disconnect this connector, and plug the Candoopro Yamaha adapter cable light gray connector into the mating connector on the Outboard harness.
3. You are now ready to “wake up” the ECU and start a diagnostic session.

### **Waking up the ECU:**

In order to initiate a diagnostic session, you need to “wake up” or turn on the ECU. This is done by turning on the ignition switch of the boat.

1. If you do not wish to run the engine while doing diagnostics (for example, to read and clear faults) you just need to turn on the ignition switch without starting the engine. Once the engine is in diagnostic mode, the ECU should continue to stay active
2. If you wish to do an active diagnostic session while the engine is running (for example, using the engine monitor function, or to drop a cylinder while running) please follow the instructions and

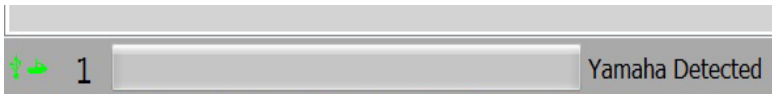


warnings in the service manual for this vehicle, and make sure you supply cooling water to the engine per the service manual. Start the engine.

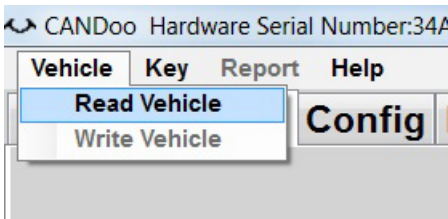
## Starting the Diagnostic Session:

When the Candoopro application is running, and the ECU has been woken up, you are ready to start the diagnostic session.

Once the ECU is woken up, the Candoopro application should detect the Yamaha ECU, indicated by the ski icon on the lower left of the screen changing from red to green, and the status should change from “Looking for Vehicle”, to “Yamaha Detected”.



Once “Yamaha Detected” appears, go to the upper left of the screen, select “Vehicle”, then “Read Vehicle”.



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## General Faq's:

- CANDoo Professional checks for updates on startup, if there is an active internet connection.
- The hardware box must always be connected to the PC when you startup the program to enable the system to check for new updates.
- If you are using wireless and get out of range, it can cause CANDoo Professional to freeze up while trying to connect to the website on startup. We suggest disabling the wireless on your laptop if you are moving out of wireless range.
- Make sure you have a fully charged battery, failure to do so can cause data corruption!
- When you are done, always close the program first before disconnecting the USB cable to the Candoopro box. If you disconnect the USB cable before closing the program, the program will freeze and you may need to stop the program manually via the Task Manager to exit the program.