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, or visit our Forum at http://forums.candoopro.com/.

## Quick Start Guide – Kawasaki Jet Skis

The Candoopro Kawasaki version software works with the following Jet Ski models:

**1999-2003 STX-1100 Ultra 130 DI (fuel injected)**

**2002 and newer STX-12F/STX-15F/STX-160 series**

**2017 and newer SX-R**

**2007 and newer Ultra LX/250X/250LX/260X/260LX/300 series/310 series**

## Hardware and Cable Guide; what's included:

The Candoopro system setup for Kawasaki Jet Ski includes the following parts:

**The Vehicle Diagnostic System Box, which connects between your PC and the Jet Ski:**
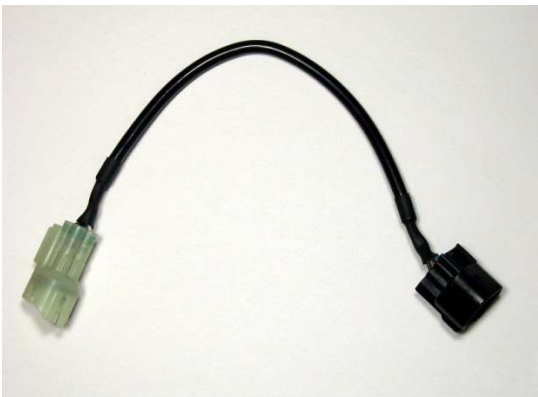
**The USB Cable, which connects the Vehicle Diagnostic System Box to the PC:**
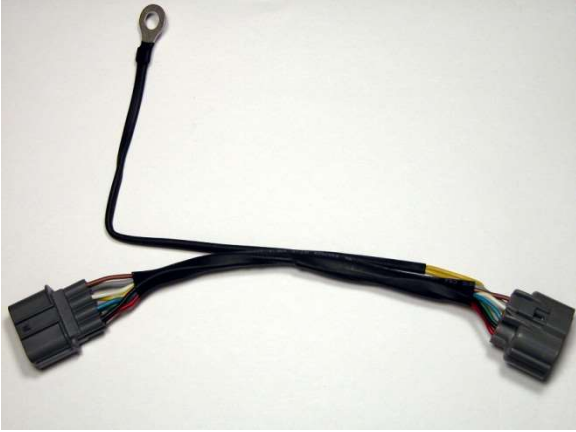


**The Main Diagnostic cable is used to connect the Candoopro diagnostic box to all 4 stroke models:**



**The 2010+ Adapter is used to connect the Main Diagnostic cable to the new-style connector on 2010+ Ultra, and 2015+ STX-15F skis:**

**The Early Relay Bypass cable is used on 2003 to 2014 STX-12F/15F skis to keep the ECU awake during the diagnostic session:**



**The Late Immobilizer Bypass cable is used on 2007+ Ultra and 2015+ STX-15F models to keep the ECU awake during the diagnostic session:**



**The 2-stroke DI Main Diagnostic cable is used to connect the Candoopro diagnostic box to the 1999-2003 STX-1100 Ultra 130 DI models :**
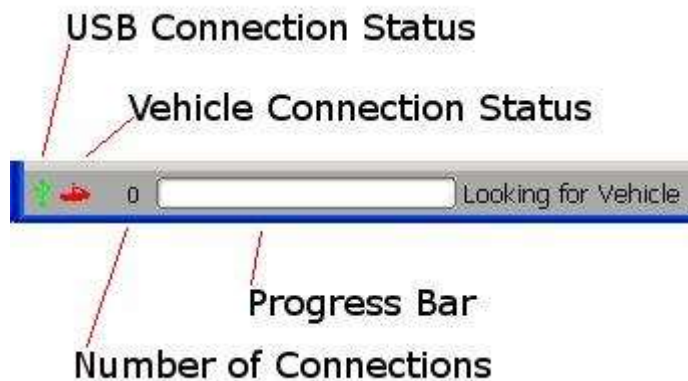
# Getting Started- Loading Software and Starting up the Program:

## First Time: (Internet Connection is REQUIRED)

- Install USB Drivers, by entering the following into your web browser
    - http://www.candoopro.com/candooinstall/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.candoopro.com/candooinstall/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 (Sea Doo, Yamaha, Kawasaki), select Kawasaki
- Bottom left of the CANDoo Professional software shows the current status



- Connect the Candoopro system to the Jet Ski Diagnostic Connector
- For all 4-stroke models, attach the appropriate bypass cable to keep the ECU powered up.
- Ensure the safety lanyard/tether is attached to the stop switch
- For the DI and 12F/15F models, turn the key switch to ON.
- For the Ultra models, insert a FAST or SLO key into the ignition switch

## Vehicle Connection:

**NOTE: Before connecting to a ski, please read the service manual for the particular model of Jet Ski!**

**In general, starting a diagnostic session involves two steps:**

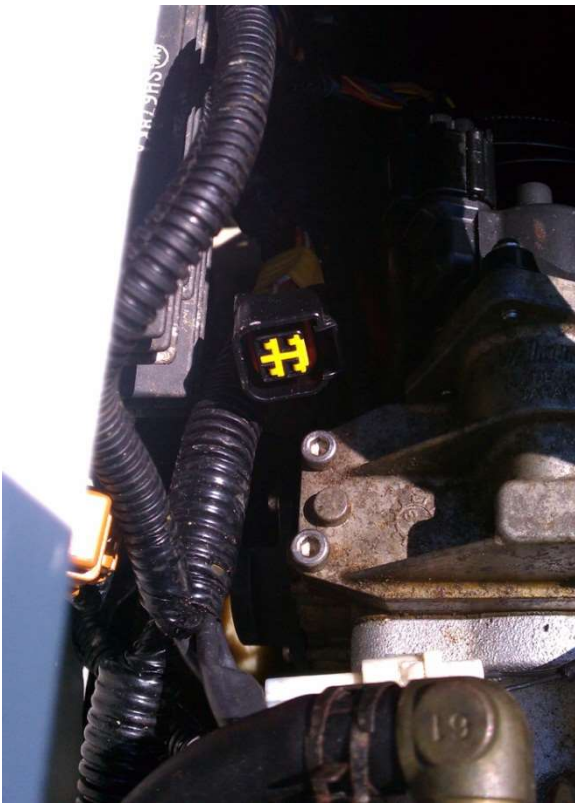1. **Connecting the Candoopro system to the Jet Ski diagnostic connector**

2. "Waking up" the engine ECU to enable the Candoopro system to talk to the ECU. In addition, the 4-stroke models need an additional bypass cable attached to keep the ECU powered up during the diagnostic session.
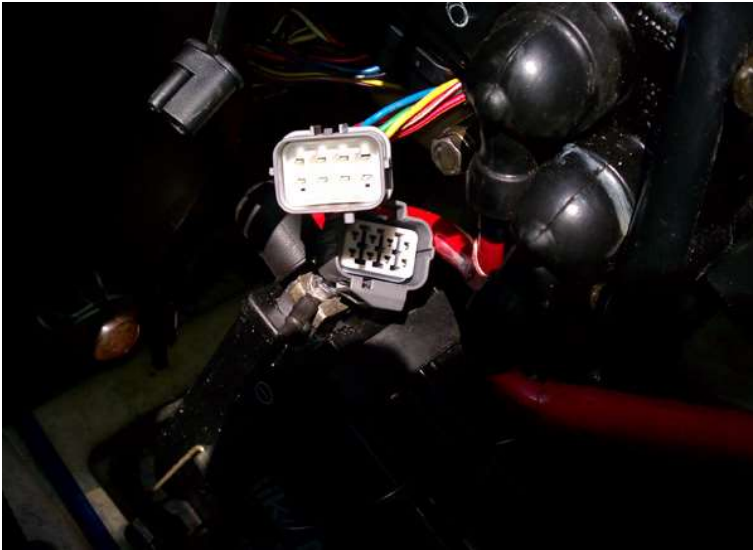
## 2003 to 2014 STX-12F/15F 4-stroke Models:

## Connecting the Diagnostic Cable to the Jet Ski:

**Steps to connect:**

1. Locate the 4-pin Diagnostic Connector, which is located in the engine compartment adjacent to the voltage regulator assembly. The connector is black, and has a cap on it with yellow sealed inserts(connector shown with dust cap removed):



2. Remove the dust cap, and plug the Candoopro Kawasaki Main Diagnostic cable into this connector.
3. Locate the Main Relay connector located near the battery. It is a light gray 8-pin connector (shown disconnected):

4. Disconnect the Main Relay connector and connect the Early Relay Bypass cable inline between the two halves of the Main Relay connector. Fasten the ring terminal of the Early Relay Bypass cable to the negative/ground (-) post of the battery:



5. Ensure the emergency stop tether is attached to the stop switch, and attach the ignition key to the switch and turn to the ON position. You are now ready to start the Diagnostic session.

## 2015 and up STX-15F/STX-160/SX-R 4-stroke Models:

**Connecting the Diagnostic Cable to the Jet Ski:**

**Steps to connect:**

1. Locate the 4-pin Diagnostic Connector, which is located buried deep on the harness under the voltage regulator and the  throttle body assembly.  It is white/translucent plastic, with a sealing cap on it, and usually you can only see it with a light shining down between engine and body.  See the photo for a view of the connector:



**NOTE!: There is a black 4 pin connector you can see on the harness right adjacent to the yellow fuse block, that looks like the same connector you used to connect to on the STX models.  This is NOT the diagnostic connector!  You must use the white 4 pin connector on the 2015 and newer STX skis!**

2. Getting to the new connector is a real challenge!  You may be able to clip the wire ties to pull the harness up enough to get at it, but we have simply just removed the air box and hose from the throttle body to get to the connector without disturbing the wire ties.  Remove the dust cap, attach the 2010+ Adapter cable to the Main cable, then connect the 2010+ Adapter cable to the diagnostic connector on the ski and plug the Candoopro Kawasaki Main Diagnostic cable into this connector.
3. To keep the ECU powered up for the diagnostic session, you must attach the Immobilizer Bypass cable. The connector for the immobilizer is located between the front storage compartment and the rear opening.  It is the only 6 pin connector located in this area.  If in doubt, the Immobilizer is located in the hatch just below the steering column.  Follow the wires harness down to the 6 pin connector.
4. Disconnect this connector and connect the Late Immobilizer Bypass cable in-line:

5. Once the Immobilizer Bypass cable is installed, connect the two small white one-pin connectors together on this cable (Ultra is shown, the STX is the same principle, different location:



6. Insert a Kawasaki key (either FAST or SLO) into the key switch to power up the ski, ensure the emergency lanyard is attached to the stop switch, and you are now ready to start the diagnostic session.

## 2007 and newer Ultra 4-stroke Models (LX/250(L)X/260(L)X/300(L)X/310(L)X & R):

## Connecting the Diagnostic Cable to the Jet Ski:

**Steps to connect:**

1. Locate the 4-pin Diagnostic Connector, which located next to the battery in the front storage compartment. The connector is black on the 2007-2009 models, and white on 2010 and newer models:

2. Remove the dust cap from the connector, and attach the Main Diagnostic cable to the diagnostic connector. NOTE: On 2007-2009 models, the Main cable connects directly to the connector on the ski. On 2010 models, you must first attach the 2010+ Adapter cable to the Main cable, then connect the 2010+ Adapter cable to the diagnostic connector on the ski.



3. To keep the ECU powered up for the diagnostic session, you must attach the Immobilizer Bypass cable. The connector for the immobilizer is located behind the ECU, so you need to first remove the ECU cover panel in the front storage compartment:

4. Once you move the ECU out of the way, you now have access to the immobilizer connector. It is a natural nylon colored 6 pin connector:



5. Disconnect this connector and connect the Late Immobilizer Bypass cable in-line:

6. Once the Immobilizer Bypass cable is installed, connect the two small white one-pin connectors together on this cable:



7. Insert a Kawasaki key (either FAST or SLO) into the key switch to power up the ski, ensure the emergency lanyard is attached to the stop switch, and you are now ready to start the diagnostic session.
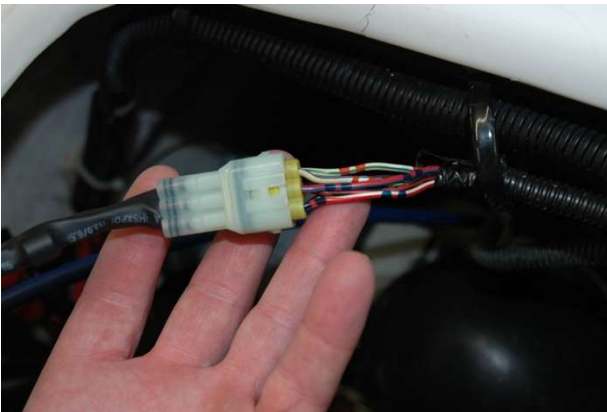
## 1999 to 2003 STX-1100 DI 2 stroke model:

**Connecting the Diagnostic Cable to the Jet Ski:**

**Steps to connect:**

1. Remove the seat, and look for the Yellow 6-pin diagnostic connector at the rear of the engine bay, just under the seat.  It will have a dust cap on it with a looped single wire on the end of it:



2. Remove the dust cap from the diagnostic connector, and attach the STX-1100 DI Main Diagnostic cable to the yellow diagnostic connector on the ski.
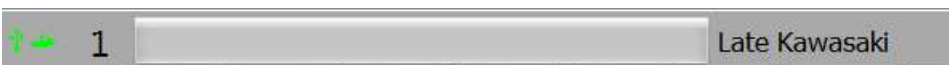


3. Ensure the Safety Lanyard is installed on the stop switch, and turn the key to the ON position.  You are now ready to start the diagnostic session.
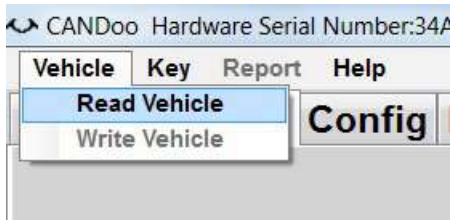
## Starting the Diagnostic Session:

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

Once the ECU is powered up, the Candoopro application should detect the Kawasaki 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 "Early Kawasaki " for the STX-12F/15F, "Late Kawasaki" for the Ultra series skis, or "Kawasaki DI Detected" for the STX-1100 DI skis.

Once the Kawasaki ECU detected indication 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, and activate various functions available for that particular model.

## 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.