

Yamaha Diagnostics Quick Start Guide

Quick Start Guide – Yamaha WaveRunners

NOTE: Yamaha Waverunners do NOT have a dedicated Diagnostic Port! Please read instructions below how to connect the diagnostic system!

Connect SBT Scanner Tool 102 System to the PC with the provided USB Cable



- Start SBT Scanner Tool 102 by going to start menu and launching the SBT software,
- You will see both Sea Doo and Yamaha, select Yamaha.
- Bottom left of the SBT Scanner Tool 102 software shows the current status. (green usb icon)
- Connect the SBT system to the Waverunner diagnostic connector



Vehicle Connection:

NOTE: Before connecting to a ski, please read the service manual for the particular model of Waverunner! In general, starting a diagnostic session involves two steps:

1. Connecting the SBT system to the Waverunner diagnostic connector.
2. “Waking up” the engine ECU to enable the SBT 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 (SBT 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 SBT 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.

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Waking up the ECU:

In order to initiate a diagnostic session, you need to “wake up” or turn on the ECU.

Starting the ski does this. (Or attempting to start the ski if it will not run!)

1. Start the Waverunner engine. 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.

2. If you do not wish to run the engine while doing diagnostics (for example, to read and clear faults) you can just start the ski, start the diagnostic session with SBT, 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 restart the ski and start the diagnostic session over)

Starting the Diagnostic Session:

When the SBT 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 SBT 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 SBT 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.

General FAQ's:

- SBT Scanner Tool 102 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 SBT Scanner Tool 102 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 SBT 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.