#### Quick Start Guide – Kawasaki

Models Serviced: 1999-2003 STX-1100 Ultra 130 DI 2002-2012 STX-12F/15F 2007-2012 Ultra LX/250X/250LX 260X/260LX/300X/300LX

The USB Cable, which connects the SBT Diagnostic box to the PC.



The Main Diagnostic Cable is used to connect the SBT Diagnostic box to all 4-stroke models.



The 2010+ Adapter is used to connect the Main Diagnostic Cable to the new-style connector on the 2010+ Ultra skis:



The Early Relay Bypass Cable is used on the 2003-2012 STX 12-F/15F skis to keep the ECU awake during the diagnostic session:



The Late Model Immobilizer Bypass Cable is used on 2007+ Ultra models to keep the ECU awake during the diagnostic session:



The 2 stroke DI Main Diagnostic Cable is used to connect the SBT Diagnostic box to the 1999-2003 STX-1100 Ultra130 Di models:



Gonnect SBT Diagnostic System to the PC with the provided USB Cord.

Start SBT Diagnostics 102 by going to start menu and launching SBT Diagnostics 102.

Choose Kawasaki from the listed OE manufactures.

Connect the SBT Diagnostic System to the Jet Ski 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 that particular model of Jet Ski!

In general, starting a diagnostic session includes two steps:

- Connecting the SBT Diagnostic 102 system to the Jet Ski Diagnostic connector.
- 2. "Waking up" the engine ECU to enable the SBT Diagnostic 102 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.

### 2003-2012 STX-12F/15F 4-stroke Models: Connecting the Diagnostic Cable to the Jet Ski:

#### Steps to connect:

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 in the SBT Kawasaki Main Diagnostic cable into this connector.
- Locate the Main Relay connector 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 in line 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.

2007-2012 Ultra 4-stroke Models (LX/250 (I) X/260 (I)X/300 (I)X):

Connecting the Diagnostic Cable to the Jet Ski:

#### Steps to connect:

 Locate the 4-pin Diagnostic Connector, which is located next to the battery in the front storage compartment. The connector is black on the 2007-2009 models, and white on the 2010-2012 models:



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:





 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 inline:



 Once the Immobilizer Bypass cable is installed, connect he 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 emergeny lanyard is attached to the stop switch, any you are now ready to start the diagnostic session.

1999-2003 STX-1100 DI 2-Stroke model: Connecting the Diagnostic Cabel to the Jet Ski:

### Steps to connect:

 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:



 Remove the dust cap from the diagnostic connector, attach the STX-100 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 dignostic session.

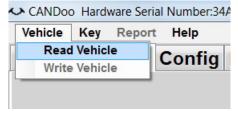
#### Starting the Diagnostic Session:

When the SBT 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 SBT 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 the "Kawasaki" DI Detected" for the STX-1100 DI skis.



Once the Kawasaki ECU indication appears, go to the upper left of the screen, select "Vehicle", and 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, and activate various functions available for the particular model you are working on.

#### 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 start up the program to enable the system to check for new updates.
- If you are using wireless and get out of range it can cause the SBT Diagnostic 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 finished, 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.