





Good to know







Key programming

- the key programming is self-explaining and you'll be guided by the software

SEA DOO – (instructions online)

- machines until 2010 with Siemens ecu you must use the BRP KPS Key Programming System
- machines 2009 and up with Bosch ecu, you've the choice to either use the KPS or program the keys right on the vessel
- Lanyard has to be attached to dess post to keep the ecm powered up in order to save the data for the new lanyard

KAWASAKI – (instructions online)

- at least one useable key is needed to program (copy) a new key
- if all keys are lost, the control unit must be replaced, or the old ecu need to be reset. To reset an ecu, it must be shipped to the factory in Europe (please contact us at tool@sws1.com).

YAMAHA Remote control programming – (instructions online)

- existing remotes can be copied or complete new remotes can be programmed. Please see detailed instructions online.

Special handling

SEA DOO DI models

- start the software. Before you can hit "connect to the ecm" button, you must remove the lanyard from the dess post and attach it agin. After this the "connect button" will be highlighted and available.







External Power

SEA-DOO

 PWC models up to year 2020 do not need external power. Necessary power will be provided through the USB connection

KAWASAKI

 2-stroke models require external power using the power clamps



 12F/15F can either be diagnosed by having the engine running, or for more comfortable diagnostic, the power up cable can be used (Instructions online)



- Ultra models (2007 Ultra 250, 260, 300), this power up cable is recommended by Kawasaki. It is supposed to keep the ecm powered up during the diagnostic session, all the time.



YAMAHA

 PWC models up to year 2020 do not need external power. Necessary power will be provided through the USB connection

HONDA

PWC models do not need external power. Necessary power will be provided through the USB connection

POLARIS

- 2-stroke models receive the power through an additional plug, added to the connector cable.
 Old style connector cables (without the extra plug) require power clamps for external power.
 (instructions online)
- 4-stroke models

The Polaris MSX110 and MSX150 are equipped with a Battery System Interface Box (IFB) which prevents the battery from being drained if the lanyard is left in.

The system will shut off power to the engine controller after a short period of time (approx. 2 minutes) if the engine is not running. When the IFB timeout occurs communication with the ecu will stop and the diagnostic software will no longer function.

To disable the IFB timeout perform the following steps:

- 1. Start the engine, or press the start button long enough for the engine to turn over twice.
- 2. Remove the lanyard and wait for 15 seconds
- 3. Re-insert the lanyard and press the vehicle stop button 3 times within 3 seconds. (The system IFB is now in "Diagnostic Mode" and the timeout is disabled).





4. Press the vehicle start button or start the engine to wake up the ecu and enable communications to the diagnostic interface cable.

If the vehicle stop button is pressed, communication will stop until the start button is pressed again, but the IFB will remain in diagnostic mode.

To re-enable the IFB timeout remove the lanyard and wait 15 seconds.



In case external power clamps are required, these clamps <u>MUST</u> be connected to the boat battery (for ground purposes), you're working on (not to an additional, external battery). Make sure the boat battery is fully charged.

VOLVO2

 Penta model EDC1/KAD44/300 Diesel requires power clamps for external power



EVINRUDE E-TEC 25/30HP

- Power up cable



For many models you'll find a "help" button on the software screen. Please use the help button, to get as many information as possible.

SCAN-LAND

BRP CAN-AM

- Keys (lanyards) will be programmed right on the vehicle dess post

BRP SPYDER

- Key programming currently with OEM tool only







BRP SPYDER

- Key programming currently with OEM tool only



SKI DOO – (instructions online)

- KPS Key Programming System is required to program keys (lanyards)
- Lanyard has to be attached to dess post to keep the ecm powered up in order to save the data for the new lanyard
- Some models require external power (instructions online)

POLARIS

- Some models (without battery) require external power (instructions online)
- 50 models, extra power up cable (instructions online)







BRP KPS Key Programming System













INSTRUCTIONS

Connect the Kawasaki Programmer to the Jetski.



2. Insert any Key that is currently registered to the PWC (either FPO or SLO key). From the key's detent position, push it in for approximately one second then release. The buzzer will produce two short beeps, followed by a slightly longer beep, signaling that the key is recognized and the system's key registration program is on.

- 3. Remove the key, insert the second key to be programmed and press it in for approximately one second then release to start the key registration process for the key number two. Two short beeps will be heard indication that the key has been successfully programmed. If additional keys will be programmed at this time, repeat this step. After each key is registered, a corresponding number of beeps will be heard (three beeps after the third key, four beeps after the fourth, up to the six-key maximum).
- 4. When you have programmed the final key, do not remove it. Press the key in a second time and hold in in until a long beep (at least three seconds) is heard and then stops, then release the key. This ends the registration process for all keys that have been inserted. You must not remove the key until the long beep is emitted. If the last key is removed before the long beep, all previous keys will not be programmed (the initial key is not affected).
- Remove the key Registration special tool, replace the diagnostic receptacle cap and battery cover, and install the storage bucket.







Y-RPS® - YAMAHA REMOTE PROGRAMMING SYSTEM INSTRUCTIONS

Programming new Remote(s)

Attention! In order to add an additional remote transmitters, you MUST reprogram any existing remote also, because they will automatically erased from the receiver memory, when connecting the Remote Programmer. As many as 5 different remotes can be programmed to one ski.

IMPORTANT! All remote control transmitter for a particular ski MUST be programmed in the same session!

Step 1- Locate Remote Service Connector

The Remote Programming Service Connector is located behind the white panel in the front storage compartment of the ski. In order to remove this panel, you can use a small screwdriver or other useful tool and push it in the center of the plastic rivet until it pops down. Now you can remove the rivet. Please be aware you need to re-use these rivets when re-installing the panel (for re-installation, please press the pointed end of the rivet against a hard surface so the center section sticks out of the top of the rivet.) Now you can install the rivet by pressing down flush the center section.

The black 2-pin connector (with sealing cap), has a black and gray wire. It is located behind the access panel, in the bundle of harness wires/connectors.

Step 2- Program Remote(s)

Connect the RPS Remote Programming System into the Remote Service Connector until it clicks.



RPS connected – please press either "Lock" or "Unlock" button on the Remote Control, you like to program to the ski. Keep holding it down until the Security or Unlock LED on the instrument cluster starts blinking. The Remote is now programmed to the ski. Repeat this process for any additional Remote you wish to program to this ski (max. 5 Remotes to one ski).

Step 3- Remove RPS (Remote Programming System) / Re-install Panel Cover

Disconnect the RPS. Replace the sealing cap on to the service connector (important protection).

Re-install the plastic panel cover using the plastic rivets (for re-installation, please press the pointed end of the rivet against a hard surface so the center section sticks out of the top of the rivet.) Now you can install the rivet by pressing down flush the center section.







Y-RPS® - YAMAHA REMOTE PROGRAMMING SYSTEM INSTRUCTIONS

About Yamaha Remote Transmitters

YAMAHA manufactures two different security systems. One system for USA and Canada (315MHZ), and a second system that is used in rest of the World (433MHZ). The Scan World System RPS (remote programming system), works for both systems. You MUST have the correct remote transmitter. Therefore in order to purchase or marry a new Yamaha Remote Transmitter, it is very IMPORTANT, to always check which security system your ski is using.

THE REMOTES ARE NOT INTERCHANGEABLE! YOU NEED TO HAVE THE CORRECT TYPE TO PROGRAM TO YOUR JETSK!!

How do I identify which system I have?

Look at the back of your existing remote. The numbers are etched into the back of the remote.











Y-RPS® - YAMAHA REMOTE PROGRAMMING SYSTEM INSTRUCTIONS

How about if I don't have any Remotes?

In case all remotes have been lost, you still can identify the security system by checking which version IMMOBILIZER RECEIVER your ski has. The receiver can be found on the starboard side of the ski, front storage compartment, behind the access panel.

All receivers show a part number, such as 6B6-00 for the US/Canadian receiver and 6B6-10 for the Rest of the world receiver. Sometimes the rubber protector covers the number, just push it by side to check the number.



6B6-00 US/Canadian receiver



6B6-10
Rest of the World receiver





■ Kawasaki

12F/15F Models

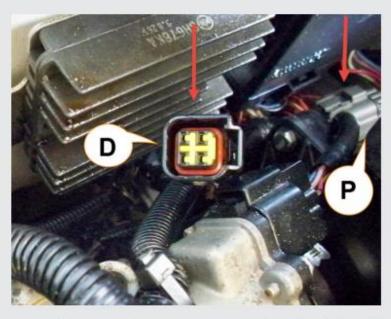


Connecting die connector cable to the diagnostic plug

Locate the 4pin diagnostic plug, located in the engine compartment adjacent to voltage regulator. The connector is black and has a cap with yellow sealed inserts. In the picture marked "D", shown without dust cap.

Remove dust cap. Connect Scan World System 4-stroke diagnostic connector to the diagnostic plug.

Locate the man relay connector, located near the battery. It's a gray 8pin connector, in the picture marked as "P".





Locate the man relay connector, located near the battery. It's a gray 8pin connector, in the picture marked as "P".

Disconnect main relay connector. Connect Scan World System power up cable inline, between the two halves of the main relay connector.

Fasten the ring terminal of the Scan World System power up cable to the negative/ground post of the battery.

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.



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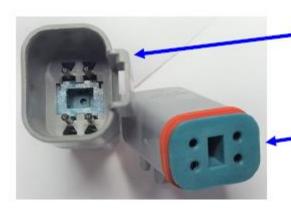


POLARIS 2-stroke (A) Diagnostic connector plug

POLARIS 2-stroke (A)
Power plug
(additional power clamps
necessary for old style single
connector plug only)

power clamps necessary for old style single connector plug only





POLARIS 2-stroke (B) Diagnostic connector plug

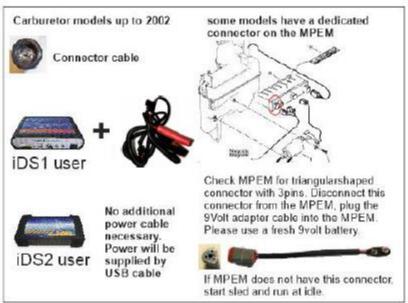
POLARIS 2-stroke (b)
Power plug
(additional power clamps
necessary for old style single
connector plug only)





BRP SKI DOO POWER UP







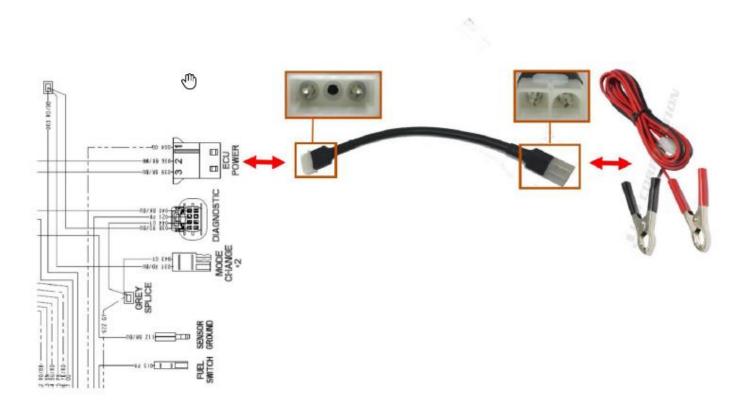
SDI and 4-tec

Carburetor models 2003 and up





POLARIS SLED POWER UP

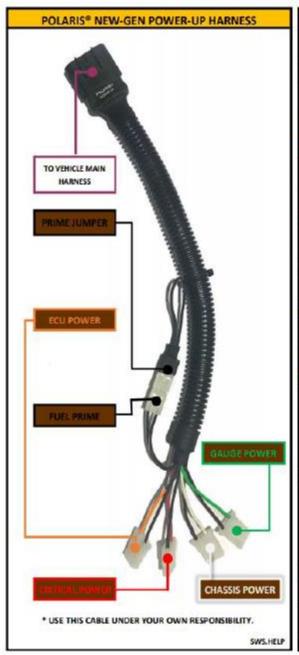






POLARIS 850 POWER UP

NEW-GEN POWER UP HARNESS



POLARIS® NEW-GEN POWER-UP HARNESS

The function of each connector on the NEXT-GEN Service Power Harness are as follows:



Connect 12 VDC battery voltage to this connector to power the ECU, Diagnostic Tool and PBR.

CHASSIS POWER / WHITE - BROWN CABLES.

Connect 12 VDC battery voltage to this connector to power all DC chassis component, including hand warmers and thurnb warmer.

GAUGE POWER / GREEN - BROWN CABLES.

Connect 12 VDC battery voltaje to power instrument cluster, lights, and to supply EV actuator when viewing data list items and the engine is off.

CRITICAL POWER / RED - BROWN CABLES.

Connect 12 VDC battery voltaje to this connector to power fuel pump and oil pump. Also provides the power to EV Learn Relay.

FUEL PRIME / BLACK - BROWN CABLES.

This connector connects to the prime jumper and connects the ground for the fuel pump. The fuel prime and prime jumper MUST be plugged connected on the NEW-GEN Power Harness for the vehicle run.

PRIME JUMPER / BLACK CABLE.

This connector connects to the fuel prime and connects the ground for the fuel pump. The fuel prime and prime jumper MUST be plugged connected on the NEW-GEN Power Harness for the vehicle run.

IMPORTANT

The power connector MUST be Plugged into main harness mating connector for vehicle to run.

If fuel system is leaking or open, disconnect fuel pump prime connection "before" powering up CRITICAL power connection.