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Sea-Doo RXT-X & RXP-X 2010-2020 INSTALL INSTRUCTIONS



The following procedure details installation of this kit #11301 into various
Sea-Doo RXT-X RXP-X 2010 – 2020 models

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**Tools required:**

- T 25 Torx bit
- 8 mm hex socket
- Ratchet
- Ratchet extension (short)



Sea-Doo RXT-X RXP-X 2010 M1 Kit contents

1. MoTeC M130 ECU marine
2. Sea-Doo 2010 adaptor kit M130
 - IGN4 MoTeC ignition module
 - Sea-Doo 2010 adaptor loom M130
 - Waterproof relay
 - Sea-Doo 2010 M130 PWC mounting kit
 - 1 x Mounting plate
 - 3 x M6 x 18mm stainless steel washers
 - 3 x M5 x 10mm stainless steel washers
 - 3 x M5 Nyloc nuts



The M130 Marine ECU replaces the factory ECU fitted on top of the engine.

1. Detach the two OE factory ECU wiring plugs.
2. Remove the three T25 Torx screws. Retain screws for use later.
3. Remove the OE factory ECU.
4. Fit the MoTeC mounting plate. Studs facing upwards.
5. Install the 3 x M6 x 18mm flat washers from the mounting kit on to the three OE T25 Torx screws tighten using Loctite 243 or equivalent.

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6. Fit the M130 ECU over the 3 mounting studs and secure with M3 x 5mm stainless washers and M3 x 5mm Nylock nuts.

Note.

- Do not over-tighten.
- The recommended mounting torque value is 5 Nm.
- The torque value must not exceed 5.5 Nm.



7. Connect the stock wiring harness to the Sea-Doo 2010 adaptor loom M130. Connect plug **A** (Grey) first then plug **B** (Black).
8. Plug the Adaptor Loom into the M130.
9. Connect the IGN4 Ignition Module to DTM6 **IGN Output** and DTM4 **IGN4 Input**.
10. Connect the Waterproof Relay.
11. Using zip-ties, secure devices as required.
12. Route and secure ethernet connection for easy access.



Package Configuration

1. The M130 ECU must have the relevant firmware Package loaded before the Adaptor Loom is powered up.
2. If you have not loaded the Package you should unplug the IGN4 Ignition Module and remove all three injector/ignition fuses numbered 7, 8, and 9 from Fuse Box 1.
3. Only after unplugging the ignition module and removing the fuses, load the M130 Package.

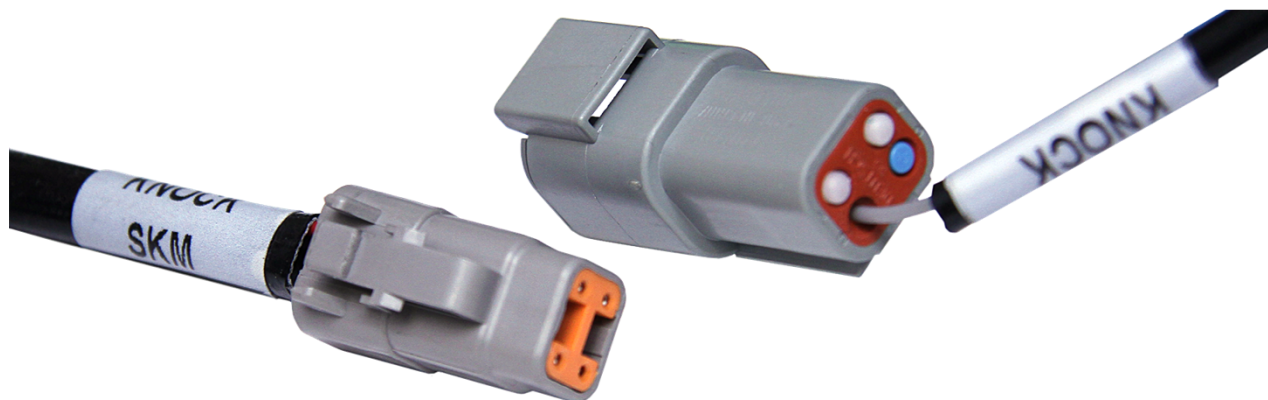
Note: Lambda measurements require a MoTeC Lambda-To-CAN (LTC) device and Bosch LSU4.9 Lambda Sensor. Before installing the LTC, it MUST be pre-configured to 500kbit/sec CAN bus speed.

Unused provided plugs

1. *DTM4* connector **Lambda** for connection to the optional LTC.
2. *DTM2* connector **Power Retain** used to maintain ECU power while programming.

Note A bridging connector can be made to join terminal 1 and 2 of the DTM2 for the Power Retain function.

3. *Ljet* connector **Boost** for connection to optional boost control valve.
4. *Packard* connector **Boost Pressure** for connection to optional MAP sensor.



DSP Knock Control Update for Revision B Adaptor Looms.

The April 2013 firmware update provides for on-board DSP Knock Control out of the box.

Earlier kits using the Revision B Adaptor Loom (March 2012) can be modified to utilise this feature.

If the April 2013 (or later) M130 firmware is installed on these earlier kits, the following modifications must be made to avoid possible engine damage:

1. Install the April 2013 M130 firmware and obtain a new licence (issued at no charge).
2. Replace the "Knock" connector plug (DTM2 Male) with a DTM4 pin male plug, with the grey wire inserted into the pin 2 position, as shown in the image.

Alternately, make a jumper cable to connect pin 2 of the "Knock" connector (DTM2 Male) to pin 2 of the "Knock SKM" connector (DTM4 Female)