



# Sea-Doo Speed Control Override Modules

# **BEFORE YOU INSTALL:**

Read below items 1 & 2 completely. It will save you a lot of time!!!

1. If any of the below listed **Sea-Doo Modules** have been installed on your craft you only need to mount the supplied S.C.O.M. unit and plug it into the existing module (inline). Proceed to page 2 for mounting instructions. **DO NOT FOLLOW STEPS FOR WIRING.** Your craft is already wired for the S.C.O.M. unit. After mounting proceed to last page to complete installation.

# Sea-Doo Modules:

- X Package Module
- Ski Module
- Variable Trim System Module
- Cruise Control and Ski Module
- 2. If a Sea-Doo Bilge Pump Kit and/or Depth Finder Kit have been installed on your craft please contact RIVA Technical Support (see below) before proceeding with the installation as outlined on the following pages. We have determined that there are a number of variables with the instructions supplied with these kits which prevent us from providing one clear set of installation instructions for our S.C.O.M. unit. We apologize for any inconvenience.

# **Contact Info:**

• Times: Monday ~ Friday / 9:00am ~ 5:00pm U.S. Eastern Standard Time

• **Phone:** (954) 247-0705

• **E-mail:** tech\_support@rivamotorsports.com

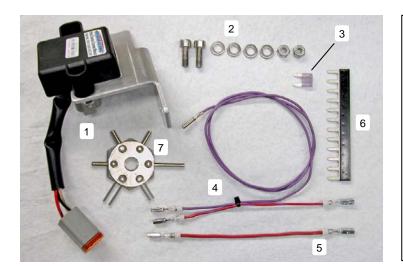




# Speed Control Override Module PART# - RS11090-SCOM-10

We strongly recommend the use of a service manual to familiarize yourself with the various components and procedures involved with this installation. Please note that some of the original components removed in the disassembly process will be used in the installation process. These instructions have been written in point form and refer to illustrations. Please follow these step-by-step instructions and illustrations carefully.

# APPLICATION(S): 2010 Sea-Doo iControl Models



## **SUPPLIED PARTS TO BE INSTALLED:**

- 1. Speed Control Override Module
- 2. Hardware
- 3. Fuse
- 4. Electrical Harness (small gauge)
- 5. Jumper Wire (medium gauge)
- 6. Buss Bar
- 7. Terminal Tool

## - INSTALLATION INSTRUCTIONS -

#### iS Models

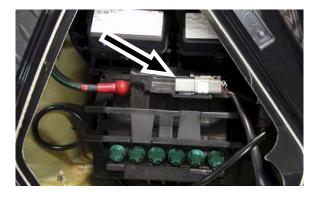
Open rear boarding platform.

Remove right storage bin.

#### Other Models

Remove battery access hatch.

Unplug diagnostic cable from retainer clip.



Remove battery cables. Black first. Red second.

Disconnect battery vent tube from battery. **NOTE: Take** care not to spill battery acid. Clean immediately.

Separate electrical component support from battery holder by prying top of support up & forward.



1

Move support aside to make room.

Remove bolts (2) securing battery holder to hull. Remove battery holder.



Align Speed Control Override Module (supplied item #1) with negative side of battery holder. Drill holes (2) for mounting hardware.



Secure S.C.O.M. bracket to battery holder with supplied hardware (supplied item #2). **NOTE: Do not over tighten bolts.** 

Inside hull flip electrical component support on its side to access voltage regulator. Disconnect black and gray electrical connectors from voltage regulator.



Follow voltage regulator wiring harness from connectors back to fuse boxes.

Insert and feed longest end of Electrical Harness Wire (supplied item #4 – purple wire) into harness sheath.



Feed purple wire into and through first section of sheathing to voltage regulator connectors. Pull purple wire through first section of sheathing. Insert and feed into second section of sheathing until end reaches diagnostic connector.



Remove o-ring from end of diagnostic connector.



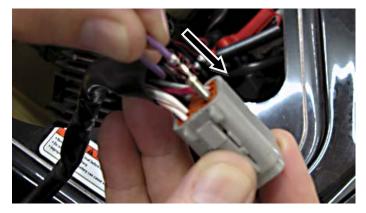
Carefully pry up edge of connector cap to remove.



Remove white plastic plug (block-off) from pin hole #6.



Insert end of Electrical Harness Wire (purple wire) into connector and lock into place. (Listen for a click!) Pull back on wire to ensure terminal is locked in place.





Replace connector cap and o-ring.

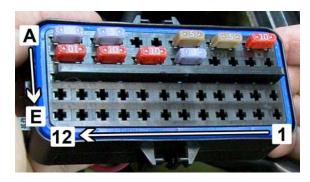
Reconnect black and gray electrical connectors to voltage regulator.



Rotate electrical component support to access fuse boxes. Remove fuse box closest to voltage regulator from electrical component support.



Remove fuse box cover to access fuses and bus bar.



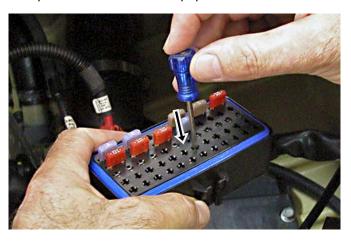
- FUSE PANEL REFERENCE -

**TIP:** Cavity locations are labeled on underside of fuse panel.

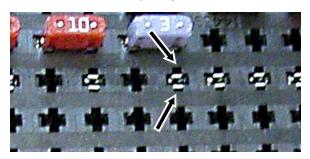
**Carefully** remove bus bar from row 'C' by prying ends UP evenly. Do not remove one end or work side to side

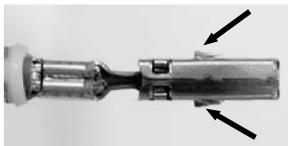


Remove rubber seal plugs from locations 'D6, D7, D8, E6 & E7' by pressing a small screwdriver into openings on top of fuse box. Seals will pop out at underside.



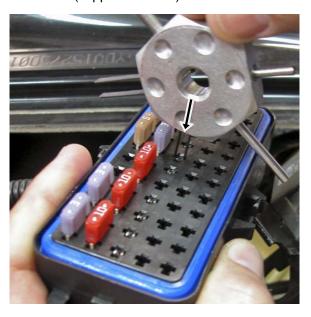
**TERMINAL REMOVAL:** Inserting supplied tool into slots at top and bottom of terminal depresses locking tabs (see below). It may be necessary to remove fuses in order to insert tool completely.



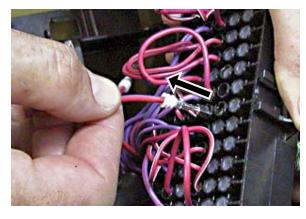


NOTE: Terminals fit one way only. Refer to top of fuse box to verify proper orientation. Do not force terminals into cavities.

Insert smallest set of dual prongs on supplied Terminal Removal Tool (supplied item #7) into location 'C6'.



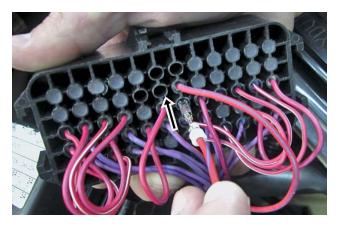
Flip fuse panel over. Pull wire from location 'C6' to remove.



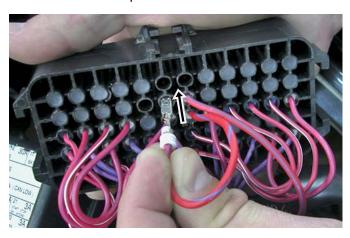
Insert wire removed from location 'C6' into location 'D6'. (Listen for a click!) Pull back on wire to ensure terminal is locked in place.



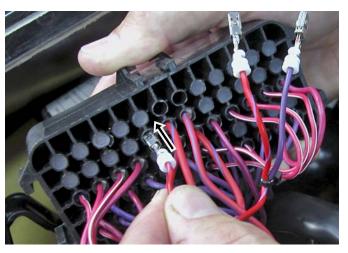
Insert one end of Jumper Wire (supplied item #5 – medium gauge red with blue stripe wire) into location 'C6'. (Listen for a click!) Pull back on wire to ensure terminal is locked in place.



Insert opposite end of Jumper Wire (supplied item #5 – medium gauge red with blue stripe wire) into location 'D7'. (Listen for a click!) Pull back on wire to ensure terminal is locked in place.



Insert one end of Electrical Harness Wire (supplied item #4 – small gauge red with purple stripe wire) into location 'D8'. (Listen for a click!) Pull back on wire to ensure terminal is locked in place.



Insert other end of Electrical Harness Wire (supplied item #4 – small gauge red with purple wire) into location 'E7'. (Listen for a click!) Pull back on wire to ensure terminal is locked in place.



Insert end of Electrical Harness Wire (supplied item #4 – small gauge purple wire) into location 'E6'. (Listen for a click!) Pull back on wire to ensure terminal is locked in place.



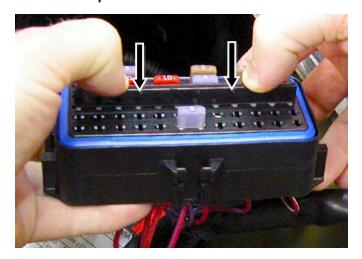
Flip fuse box over to view fuses. Install fuse (supplied item #3) into fuse panel across locations 'E6 & E7'.



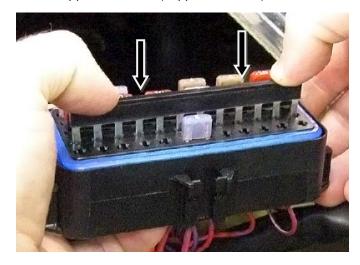
Replace bus bar removed previously (row 'C').



NOTE: It is important that you press bus bar evenly into place and straight down. Do not work side to side or bend pins.



Install supplied Bus Bar (supplied item #6) into row 'D'.



NOTE: It is important that you press the bus bar into place evenly and straight down. Do not work side to side or bend pins.



Replace fuse box cover.

Replace fuse box onto electrical component support.

Place battery holder in hull. Do not secure yet.

Attach battery vent hose to battery.

Connect craft's diagnostic cable to connector on underside of S.C.O.M. unit.

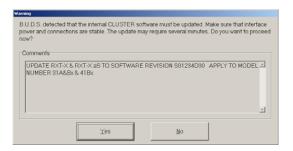
Secure battery holder to hull with stock hardware. NOTE: Apply blue Loc-tite to bolts. Do not over tighten bolts.

Reconnect battery cables. Red first. Black second.

Replace electrical component support.

#### **2010 MODELS**

You must update your craft's ECU with B.U.D.S. 3.0.3.5. The S.C.O.M. unit will not operate properly until the update is performed.



Connect S.C.O.M. unit wire to retainer clip on electrical component support.

Check bilge for tools, rags, etc. Run craft on a flush kit to check for proper operation.

#### iS Models

Replace right storage bin.

Close rear boarding platform.

#### Other Models

Replace battery access hatch.

#### Sport Mode 'Start Up' Feature:

Installation of S.C.O.M. enables you to switch your craft to SPORT MODE before starting engine. Press START/STOP button to power up Dash Display. Press MODE button repeatedly until DRIVING MODE scrolls across screen. Press SET button to enter driving mode function. Press SET button again to activate sport mode. A message SPORT MODE ACTIVATED will appear. Gauge will automatically return to normal display after a few seconds. SPORT MODE indicator will appear on gauge display. **NOTE:** Once powered down craft will revert to default touring mode setting.

#### **TUNING INFORMATION:**

The iControl Engine Management System has several factory limitations that must be considered when tuning/modifying your watercraft.

#### **GPS Controlled Speed Limiter:**

U.S. models are governed to 67mph and International models are governed to 72mph. Note that this is actual speed as measured by hand held GPS and not speed displayed on instrument cluster. Speed limiter function is completely removed on both U.S. and International models when using RIVA Speed Control Override Module.

#### **Engine RPM Limiter:**

Both U.S. and International models have a factory engine RPM limiter set at 8,040rpm. Target engine RPM for modified applications should be 7,900-8,000rpm. The design of the iControl engine rev limiter allows the craft to run closer to limit than previous generation Sea-Doo's without surging or losing power. iControl system will automatically close throttle as needed to reduce RPM if engine rev limit is reached.

#### **Torque Limiter:**

Both U.S. and International models have a control system that calculates throttle position, boost pressure & engine RPM to limit maximum torque. When torque limit is exceeded, system will close throttle as needed to stay within factory specifications. Please follow RIVA Performance Kit recommendations to stay within torque limits and maximize performance: www.rivaracing.com/kits.

# NOTE:

- Once installed S.C.O.M. units are mated to crafts ECU & Cluster Coding and cannot be transferred to another craft.
- Stock ECU limits peak RPM for first 5 hours of operation. Top speed increases should be measured after 5 hour break in period.

Remember, the water belongs to everyone. Please ride responsibly and respect the environment!

#### **Technical Support**

For answers to questions regarding installation or trouble shooting RIVA Performance Products contact: RIVA Technical Support directly at (954) 247-0705 or by e-mail at tech\_support@rivamotorsports.com.

#### **Limited Warranty**

RIVA Speed Control Override Modules carry a 30-day limited warranty to the original purchaser. They are warranted to be free of defects in materials and workmanship under normal use and service. Customer modified components will be void of warranty. This warranty is limited to defects in the primary components only. Finish and/or wear marks in or on primary components are not covered under this warranty.

RIVA Racing's liability is expressly limited to the repair or replacement of the components contained within or associated with this kit. RIVA Racing agrees to repair or at RIVA's option, replace any defective unit without charge, if product is returned to RIVA Racing freight prepaid within the warranty period. Any equipment returned which, in RIVA's opinion, has been subjected to misuse, abuse, overheating or accident shall not be covered by this warranty.

RIVA Racing shall have no liability for special, incidental or consequential damages or injury to persons or property from any cause arising from the sale, installation or use of this product.

No other warranty, express or implied, including, but not limited to the implied warranties of merchantability and fitness for a particular purpose, applies. Various states do not allow for the limitation of incidental or consequential damages and therefore the above exclusion or limitation may not apply to you.

Warranty does not include the expenses related to freight or transportation of parts or compensation for any inconvenience or loss of use while being repaired. A copy of the original invoice and a Return Authorization Number (RA#) must accompany all warranty claims.

Warranted replacement parts will be returned freight collect.