



## YAMAHA FX SVHO & GP1800R INSTALL INSTRUCTIONS



The following procedure details installation of this kit into a  
2019 Yamaha FX SVHO or  
2021 Yamaha GP1800R.

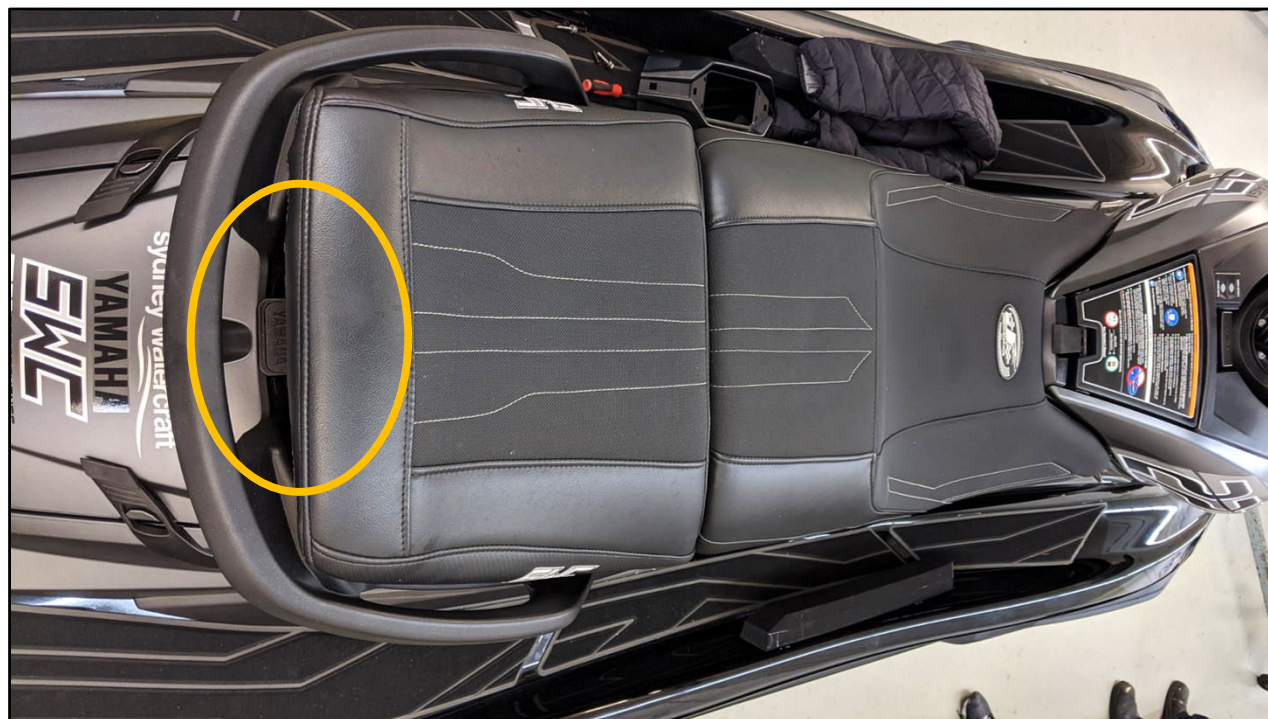


### Kit Components:

1. M130 ECU MARINE
2. M1 ADAPTOR 250MM 26W KEY 1 STUB LOOM
3. M1 ADAPTOR 250MM 34W KEY 1 STUB LOOM
4. YAMAHA FX SVHO 2019 BREAKOUT LOOM
5. M130 YAMAHA FX SVHO 2019 ADAPTOR BOX
6. M130 YAMAHA FX SVHO 2019 MOUNTING KIT
7. M5 x 25 mm BUTTON HEAD SCREWS x 3
8. NETWORK CABLE RJ45 1.5 METRE (not shown)

**MoTeC****Tools required:**

- 10 mm hex socket
- 12 mm hex socket (required for Yamaha FX SVHO only)
- 6 mm hex socket (required for Yamaha GP1800R only)
- Ratchet
- Ratchet extension (short)
- 3 mm hex key

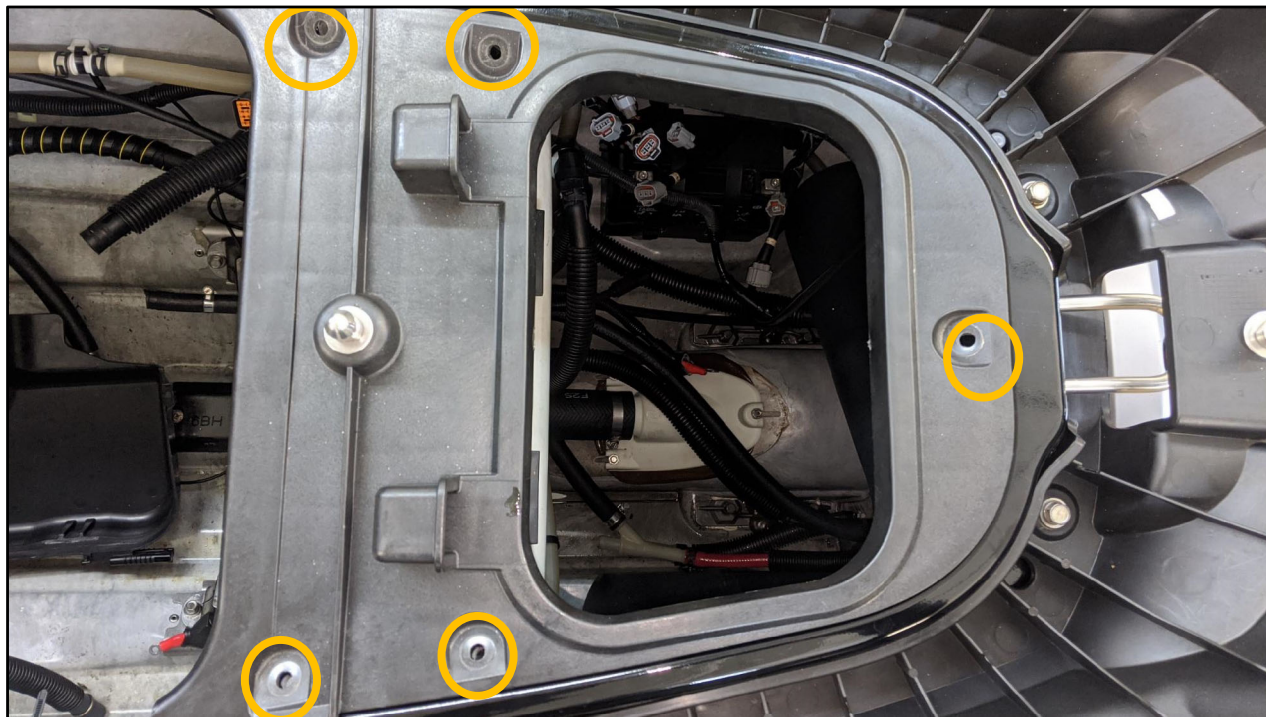


### Step 1: Remove seat

The seat removal is slightly different for the two models. The first steps relate to Yamaha FX SVHO followed by the steps for Yamaha GP1800R.

#### Yamaha FX SVHO

- Remove front and rear seats by releasing the latch at the rear of each seat.
- Remove the under-seat storage compartment by lifting the unit up.



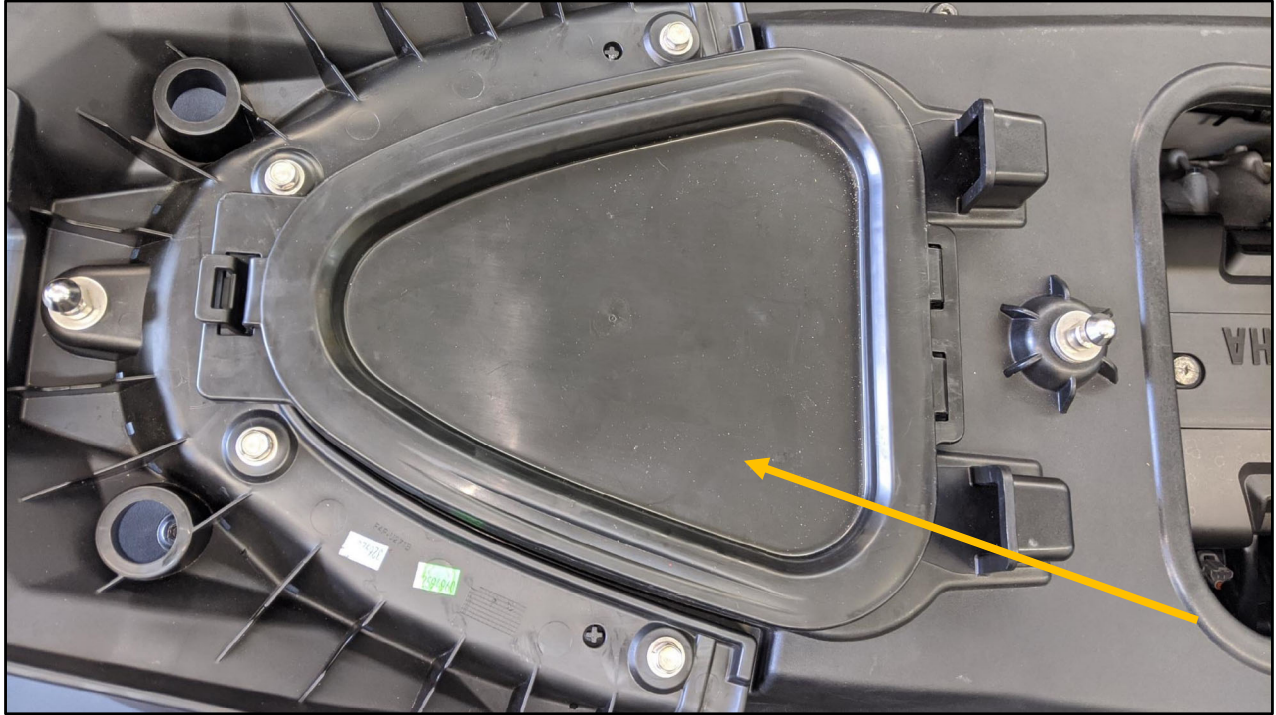
- Remove the 6 bolts using the 12 mm socket and ratchet.
- Lift the seat frame up to remove it.
- Go to Step 2.



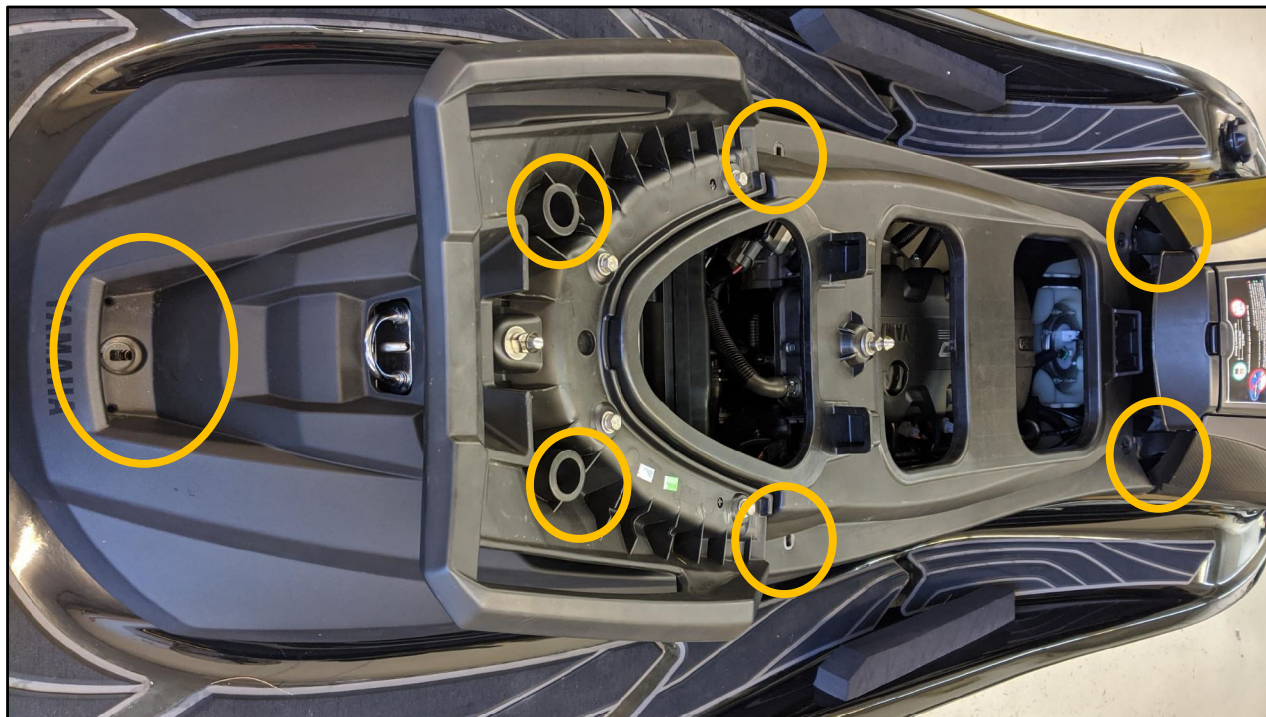


### Yamaha GP1800R

- Remove front and rear seats by releasing the latch at the rear of each seat.

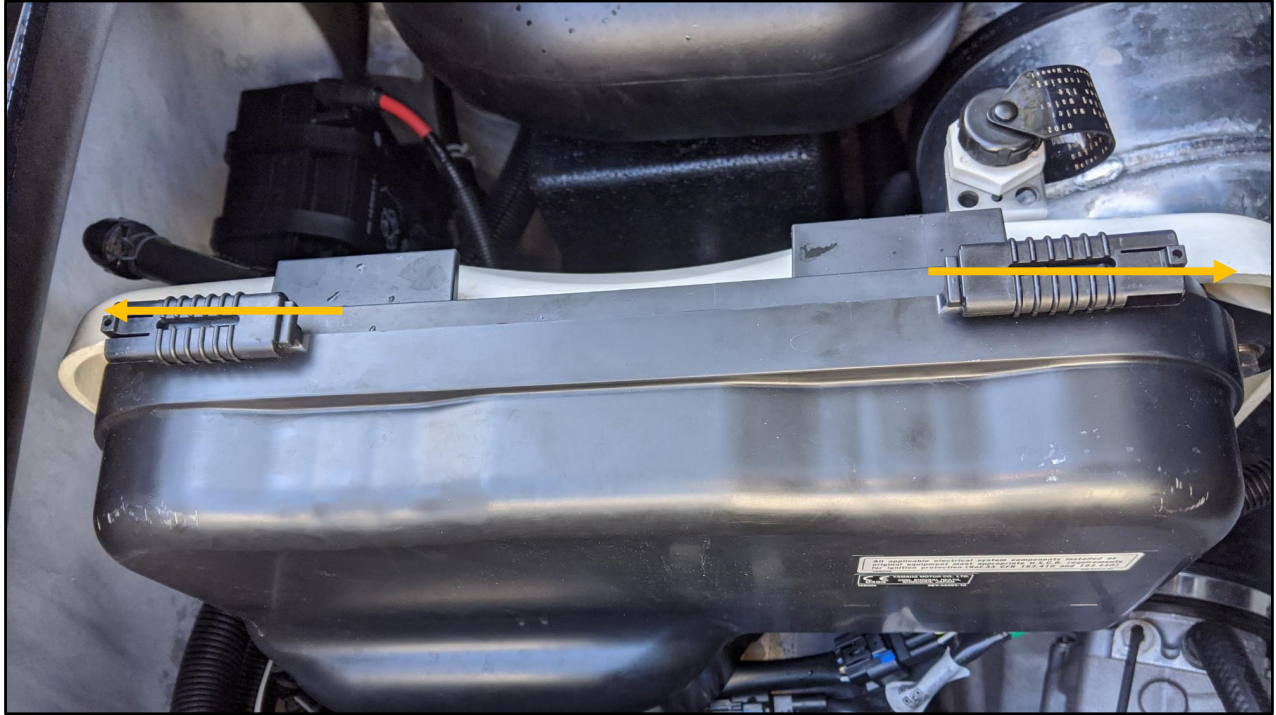


- Remove the under-seat storage compartment by lifting the unit up.



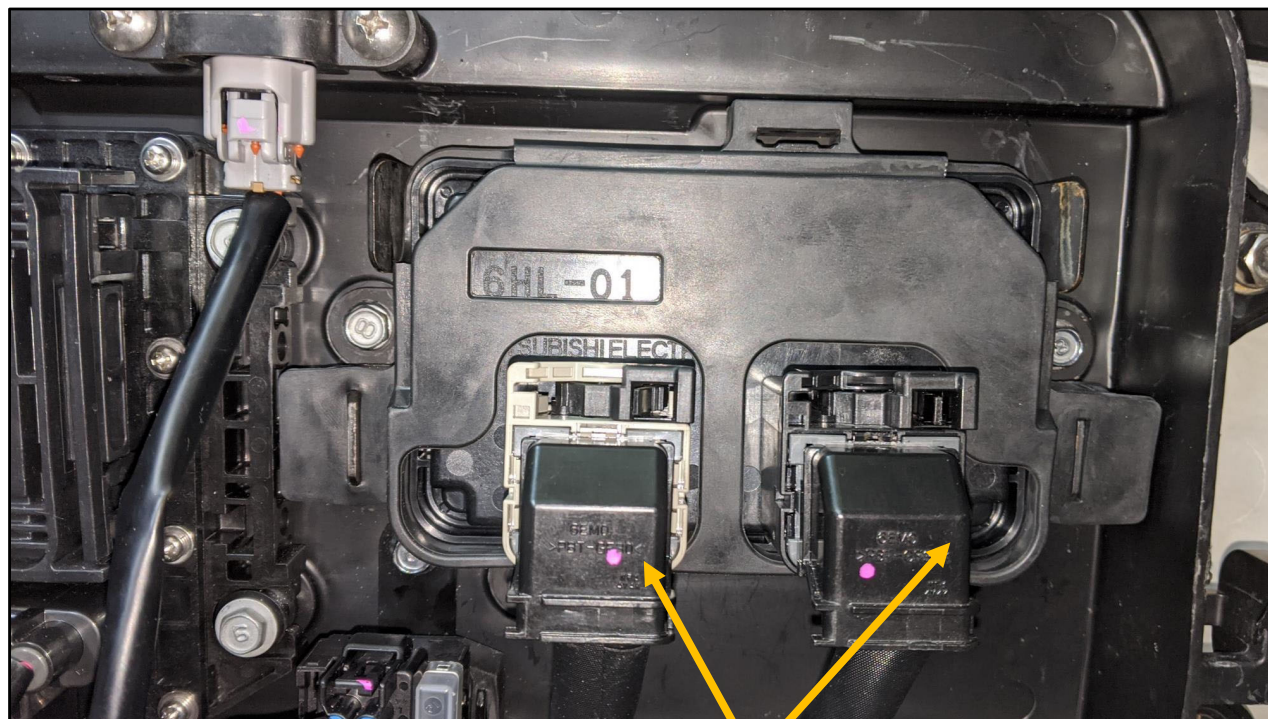
- Remove the seat frame by removing the 7 bolts using the 6mm hex socket and ratchet.
- Lift the seat frame back and then up.



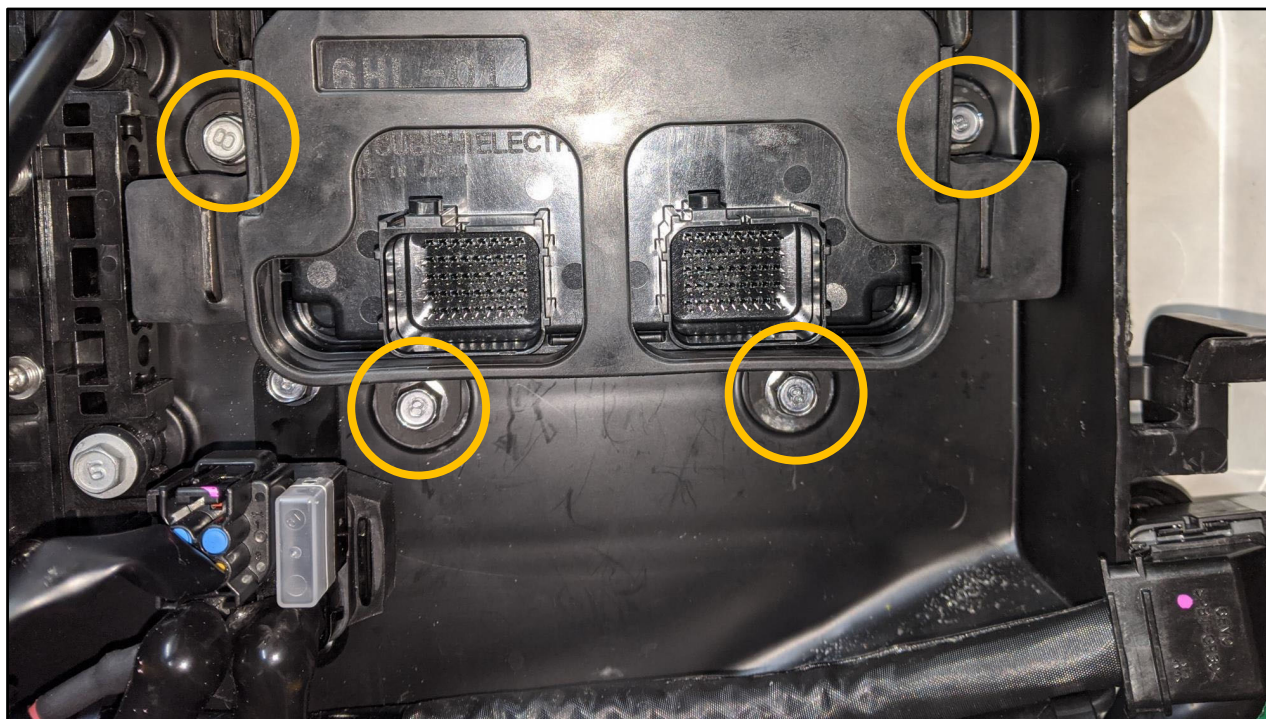


## Step 2: Remove the Yamaha ECU

- Locate the black plastic electrical box underneath the rear seat.
- Remove the cover by sliding the two clips outwards.
- Lift the cover forwards and up.



- Locate the original Yamaha ECU.
- To disconnect the two Yamaha engine harness connectors, slide the locking tabs to the left, then push the locking arm to the left and pull the connector away from the ECU.

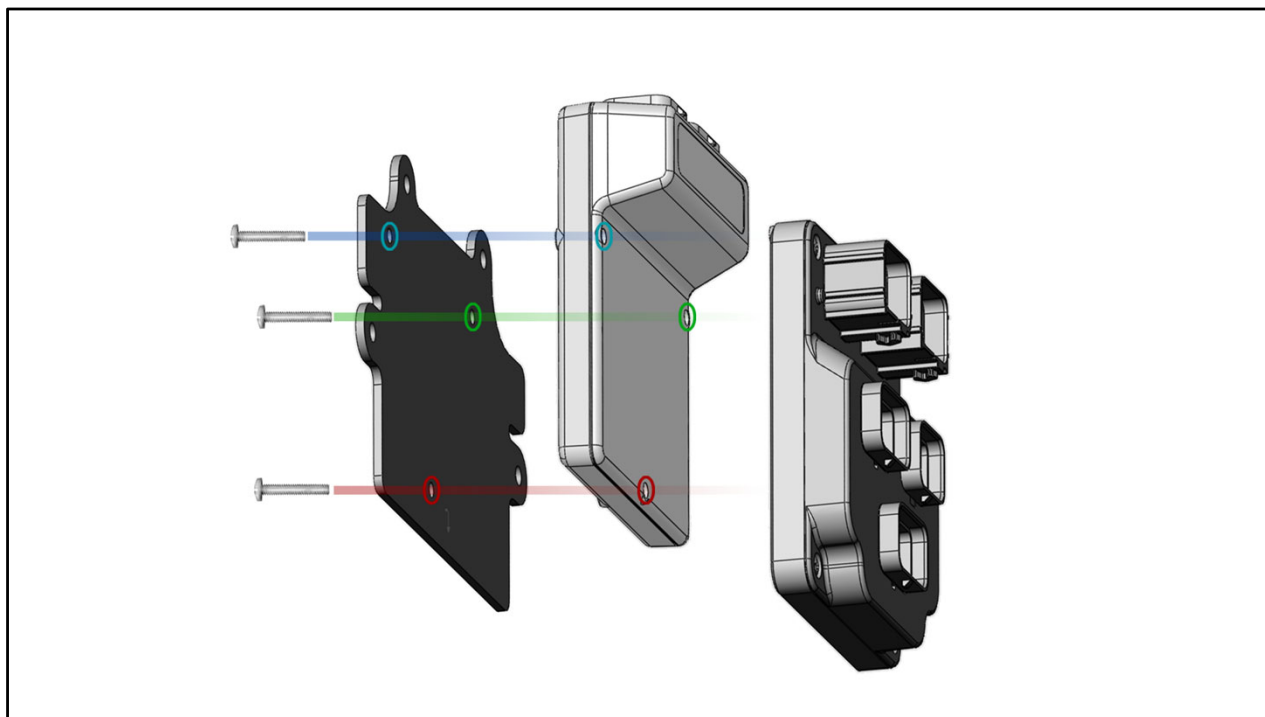


- Remove the 4 bolts that secure the factory ECU bracket to the electrical box using the 10 mm hex socket, ratchet and ratchet extension

**Note** Put these bolts aside as they will be reused to secure the MoTeC adaptor box assembly.

- Remove the ECU by pulling it forwards.



**MoTeC**

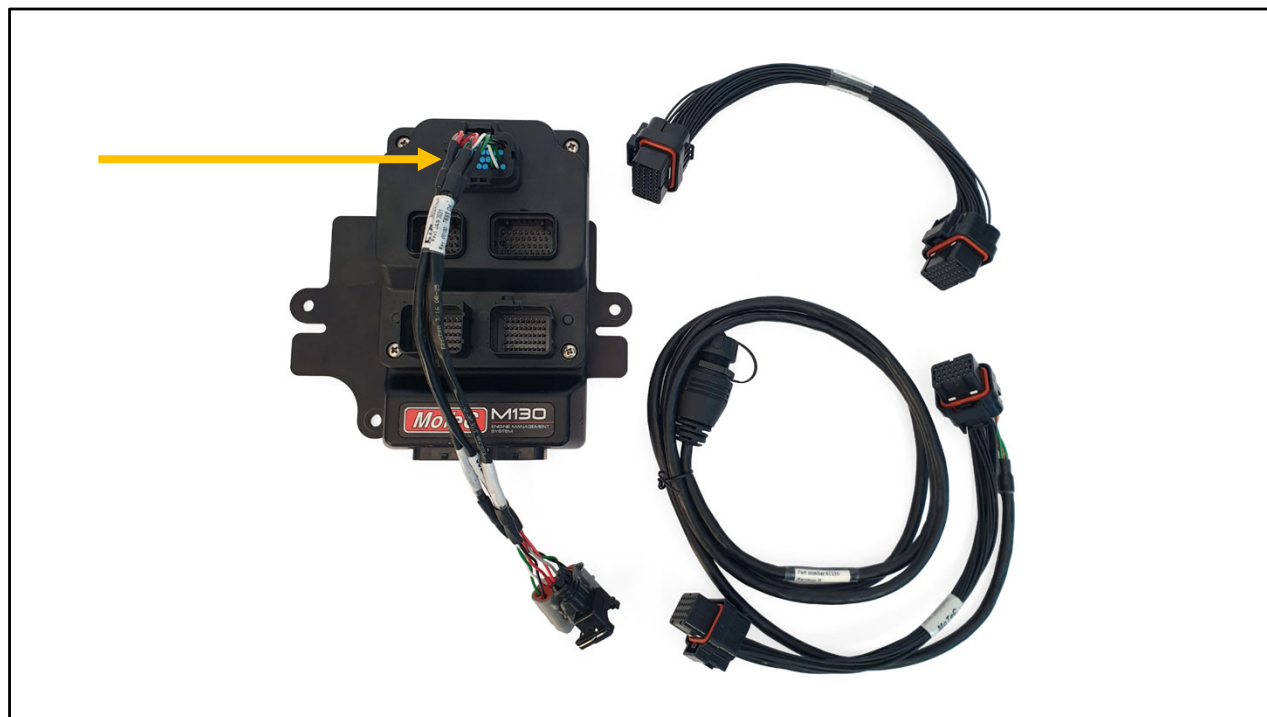
### Step 3: Install MoTeC Kit

#### **Note**

*The M130 ECU must be loaded with the Yamaha FX SVHO 2019 package prior to being connected to the ski. This package is loaded by MoTeC for the M130 ECU that is distributed as part of this kit.*

- Secure the MoTeC Mounting Bracket through the M130 ECU to the MoTeC Adaptor Box using the three M5 screws. Ensure the Mounting Bracket is orientated so that the screw heads sit in the counterbore.



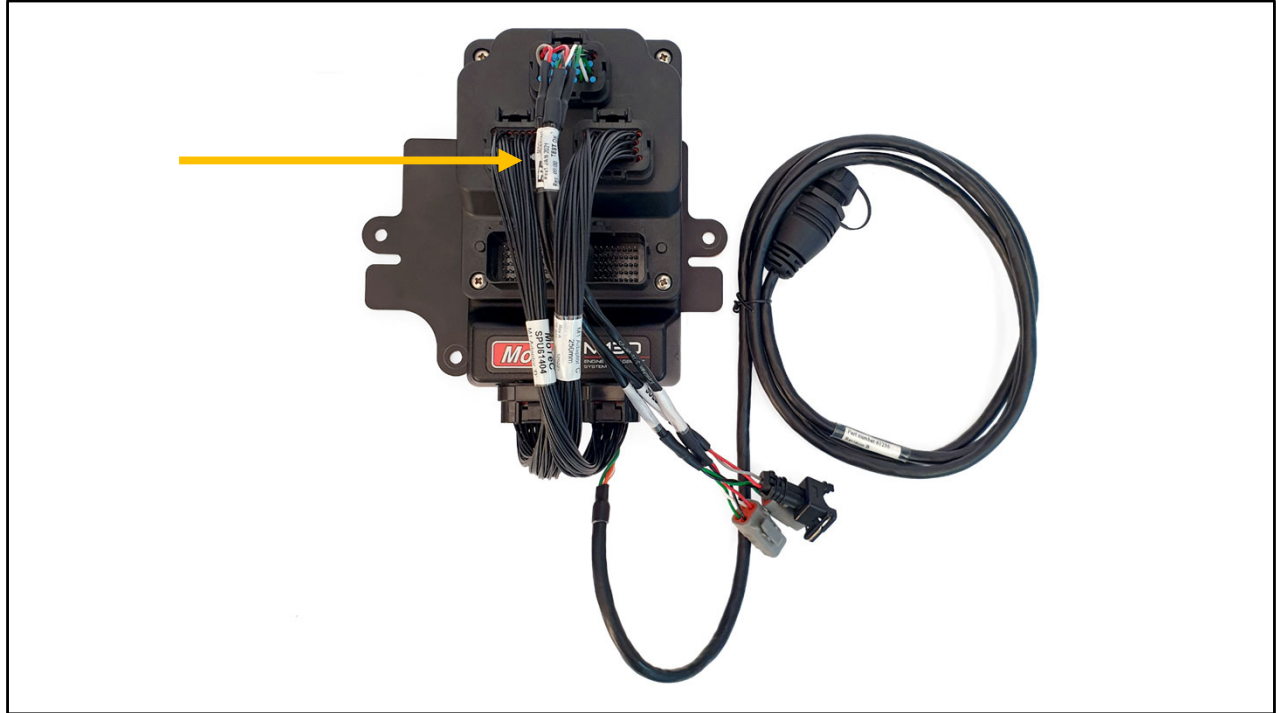


- Connect the MoTeC Breakout Loom to the breakout connector on the MoTeC Adaptor Box.

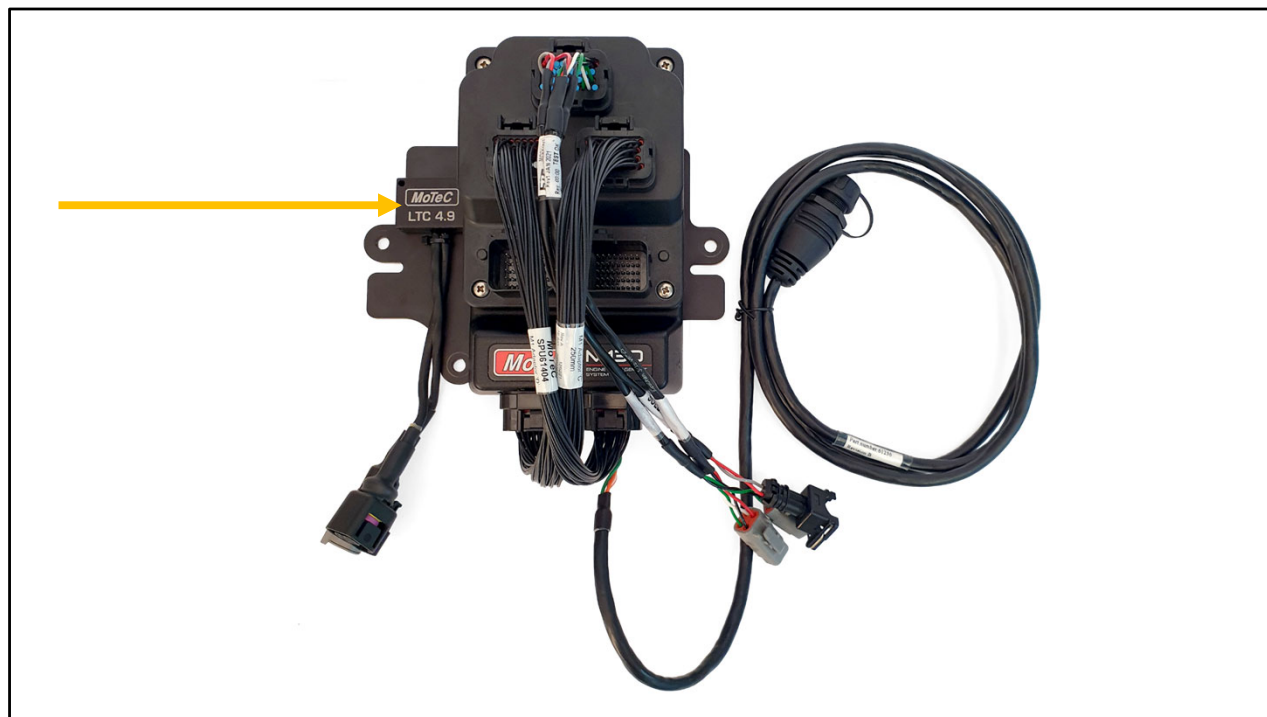


- Connect the adaptor stub looms to the associated M130 connectors.

**Note** When fitting the stub loom with the Ethernet communications cable, plug the end with the Ethernet cable into the MoTeC ECU (not the adapter box). This will provide communication with the ECU when installed.



- The other stub loom can be connected either end.



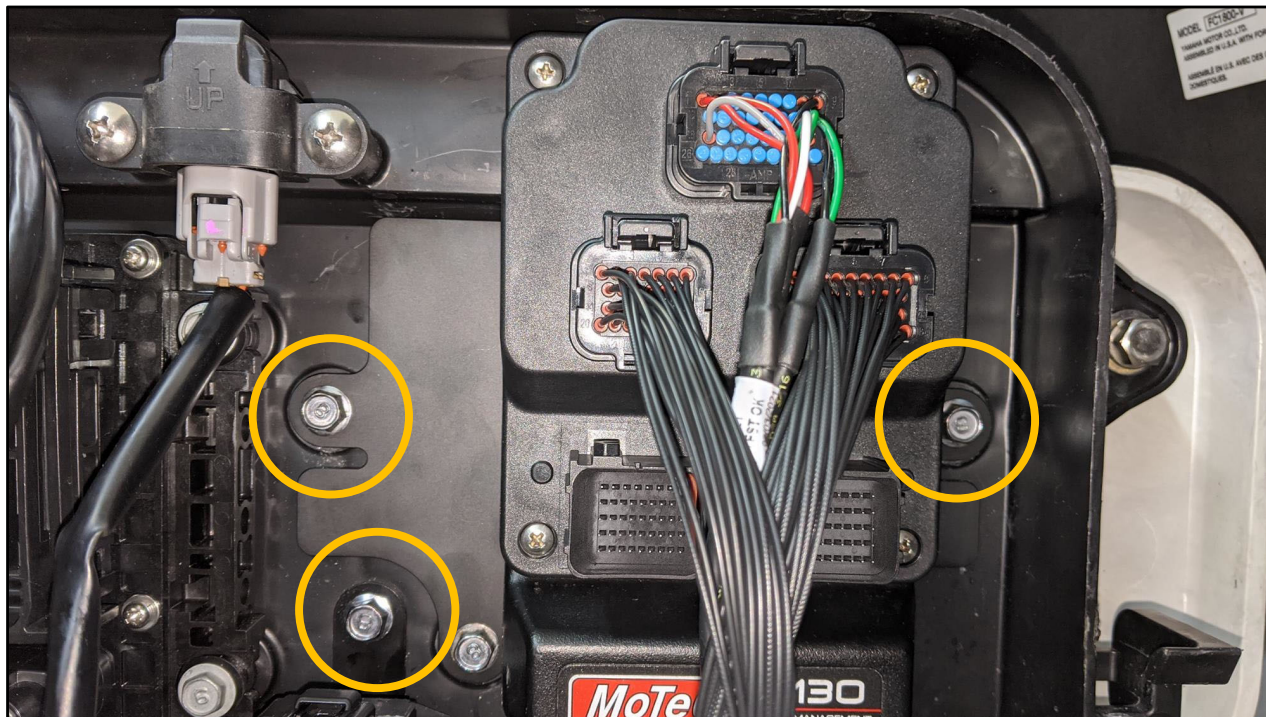
#### Step 4: OPTIONAL - Lambda sensor

##### **Note**

*The LTC CAN Bitrate Conversion must be set to 250kbps to ensure the CAN Bus continues to operate. This can be set using the LTC Manager software.*

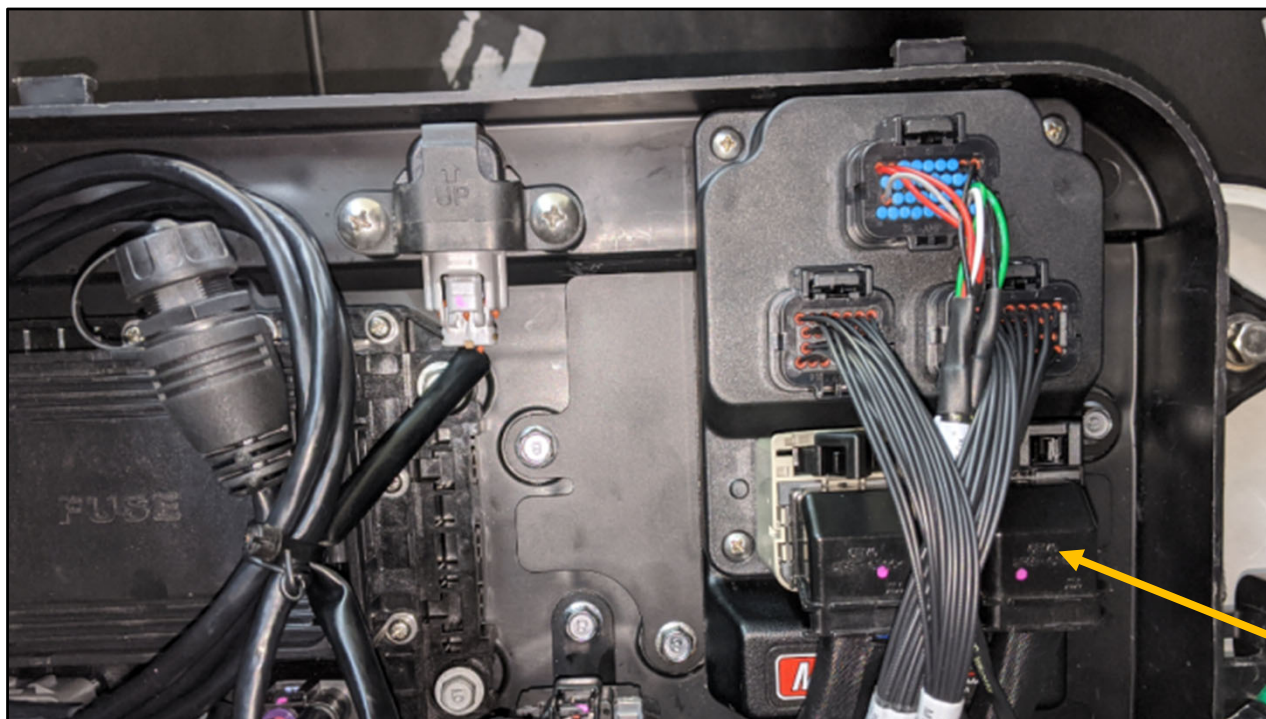
- If fitting a MoTeC LTC (not supplied with this kit), secure it to the space provided using double sided tape or duo lock.
- Connect the LTC 4 pin DTM connector to the connector marked LTC on the MoTeC breakout loom.





### Step 5: Finalise installation

- Using 3 of the Yamaha ECU mounting screws that were removed secure the MoTeC adaptor box assembly to the electrical box.

**MoTeC**

- Connect the Yamaha engine harness to the mating adaptor box connectors by pushing the connectors in and then rotating the locking arm to the right.
- Secure the Ethernet connector using cable ties (not provided).
- Refit the seat in the reverse order of step 1.