



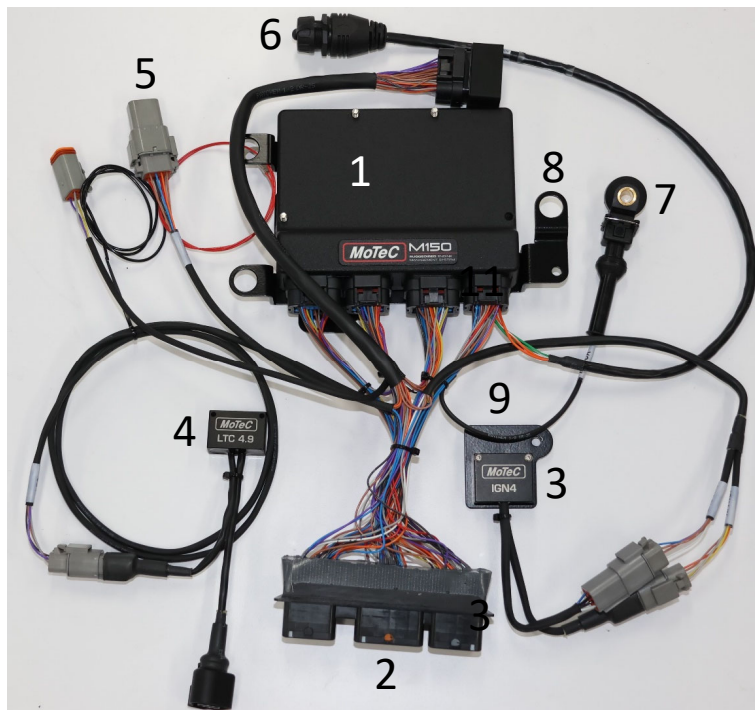
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Mercury 450R and 500R V8 Dev Kit INSTALLATION INSTRUCTIONS



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M150 Mercury V8 450R Development Kit Components

1. MoTeC M150M ECU
2. Mercury 450 V8 Adaptor Loom
3. IGN4 Ignition Module – 4 Channel
4. LTC – LSU Lambda To CAN (250K)
5. R3 Relay Module
6. Ethernet connection
7. Knock Sensor (045)
8. Bracket Asy- Mercury V8 450R ECU Mount
9. Bracket Asy- Mercury V8 450R IGN4 Mount

Fasteners

- 3 x M5 S/S Nyloc nuts
- 3 x M5 S/S Flat Washer
- 2 x M3 S/S Button Head Socket Screw
- 1 x M8 x 30mm S/S Hex Head Bolt

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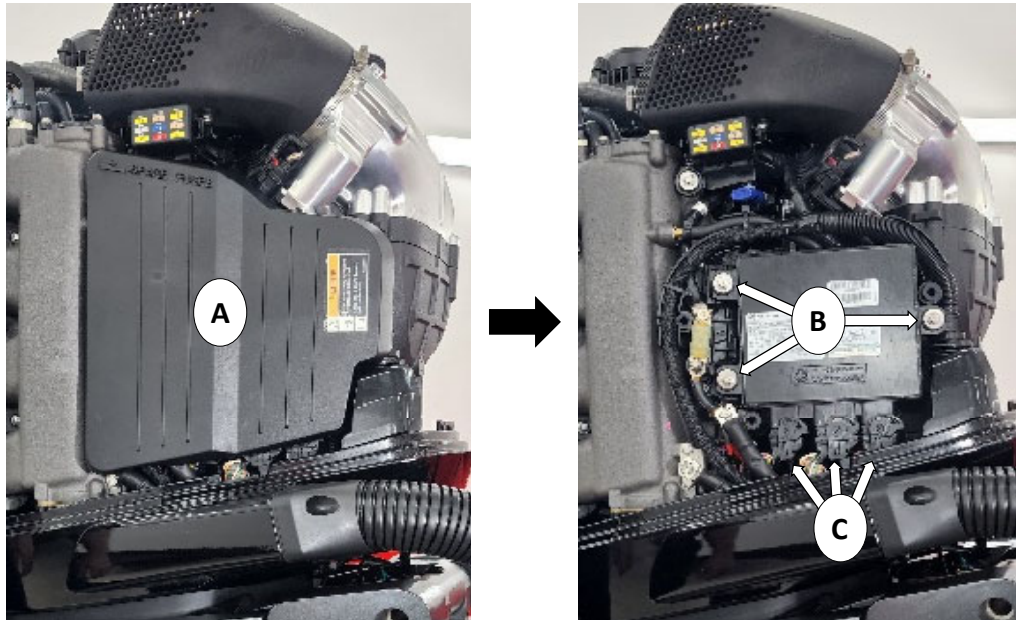


Tools Required

- 1/4 drive socket set with extensions
- If cowl removal, then universal 8mm 1/4 socket
- Universal grab tool
- Jewellers Screwdriver set
- Razor blade

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**Step #1**

- Remove plastic ECU cover (A).
- Remove 3 x stock ECU mounting bolts (B) keep bolts aside for later.
- Remove 3 x ECU connectors (C).

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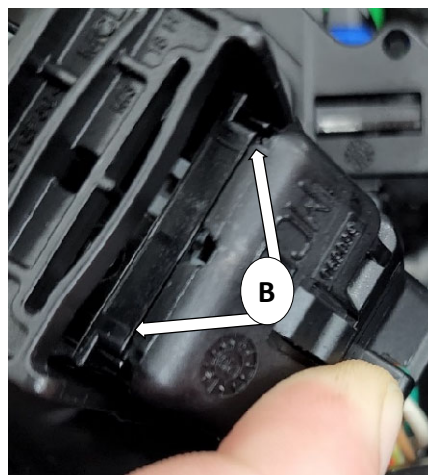
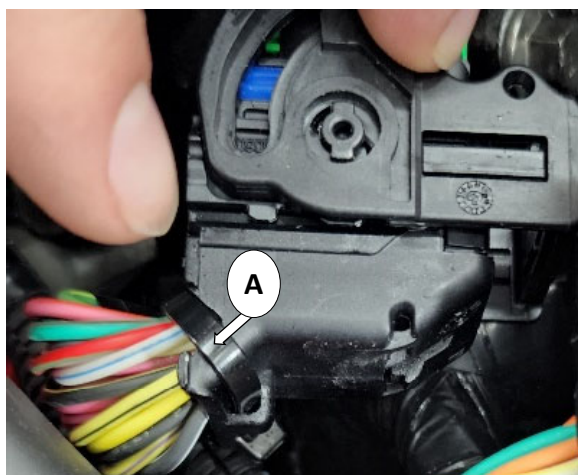


Step #2

- Remove metal sleeves and rubber mounting grommets from the stock ECU.
- Fit grommets and metal sleeves to Bracket Asy- Mercury V8 450R ECU Mount.

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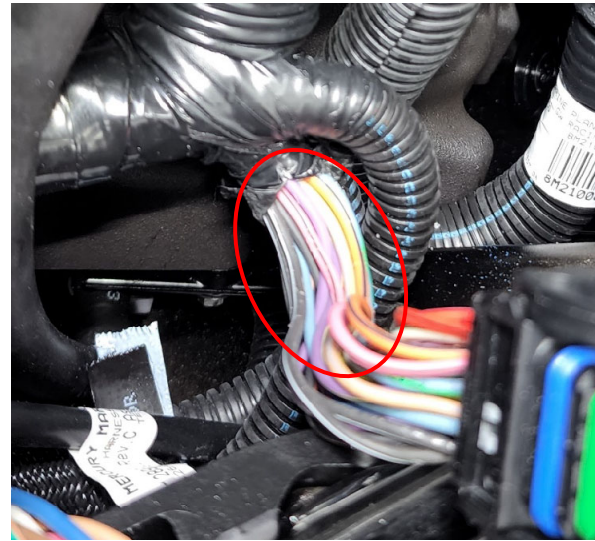
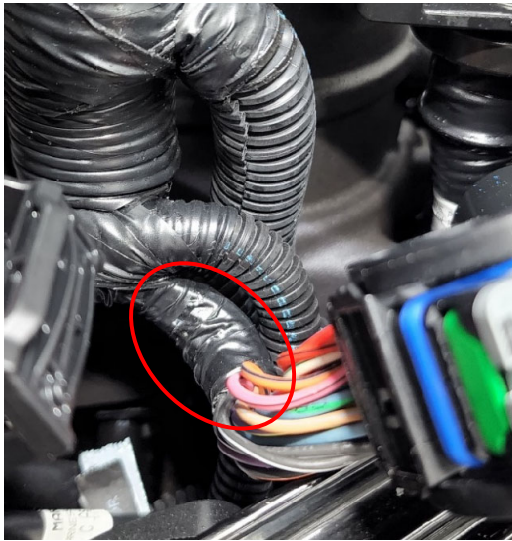
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Step #3

Remove Stock ECU loom side connector back shells.

- Cut cable tie (A).
- Pry back locking tabs (B) and slide forward.



Step #4

Remove the tape on all three connector looms to allow more freedom for the looms to flex.

- Carefully cut tape back as shown in the image.

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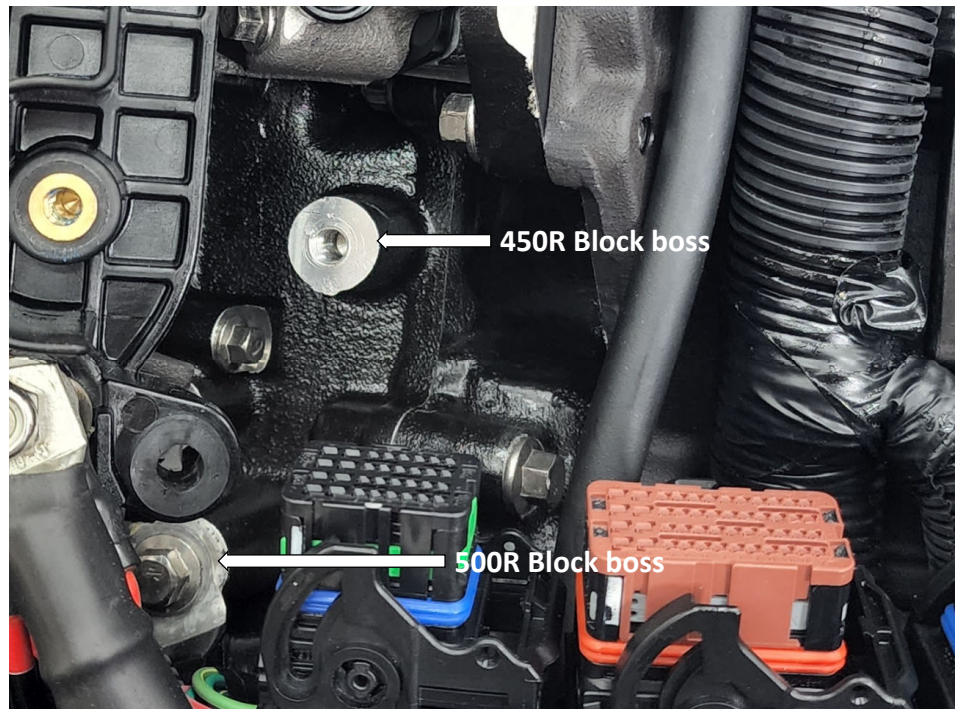
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**Step #5**

Disconnect main Positive battery lead (**A**) to allow more flexibility for installation.

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**Step #6****450R**

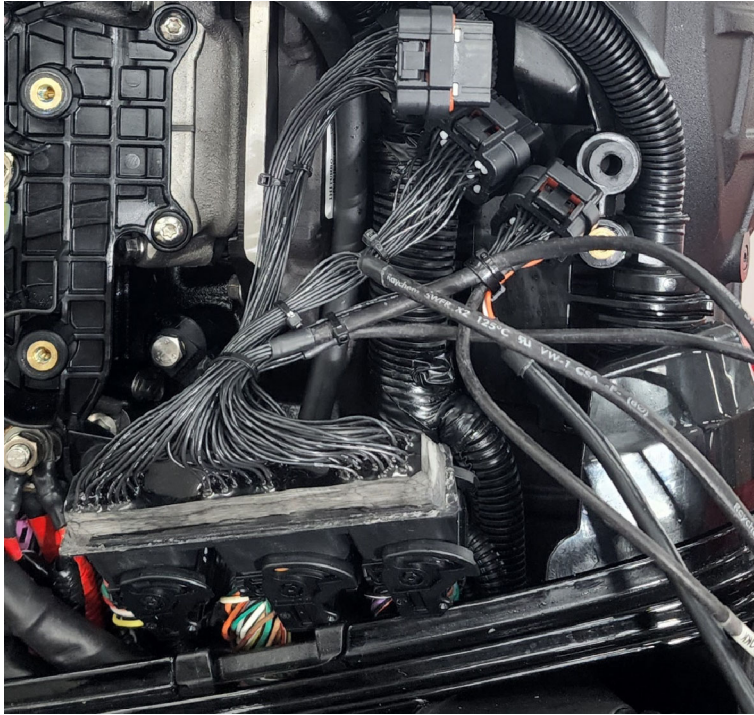
Fit knock sensor (1 only) to the 8mm predrilled block boss just behind and to the front of the battery cable standoffs.

500R

500R models have no unused hole and sensor must be fitted on top of earth support bracket.

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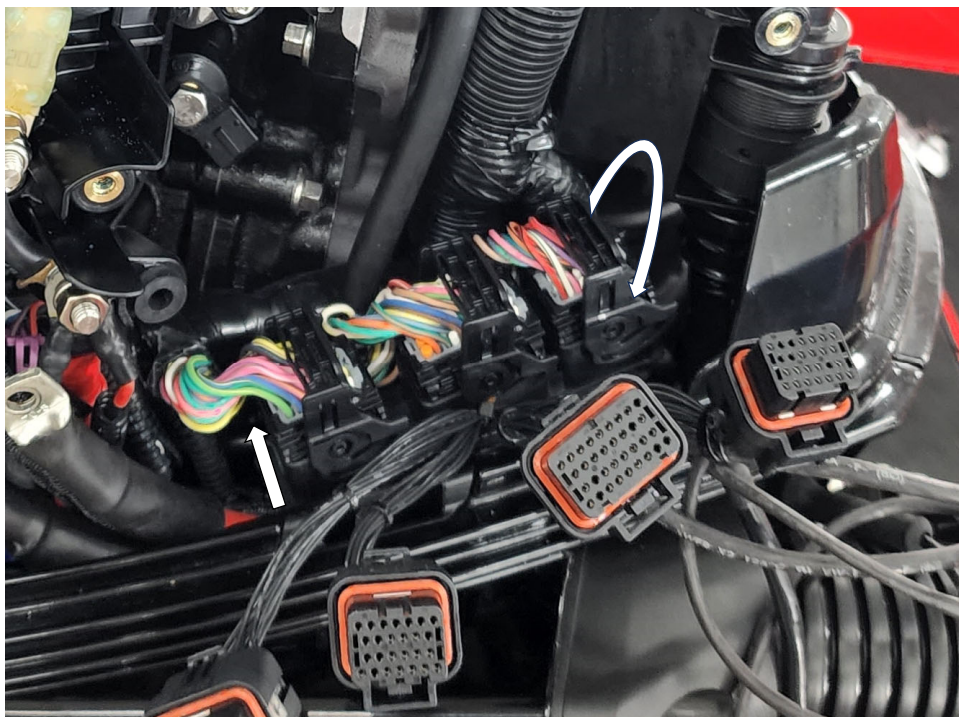
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**Step #7**

Connect MoTeC adapter loom as pictured.

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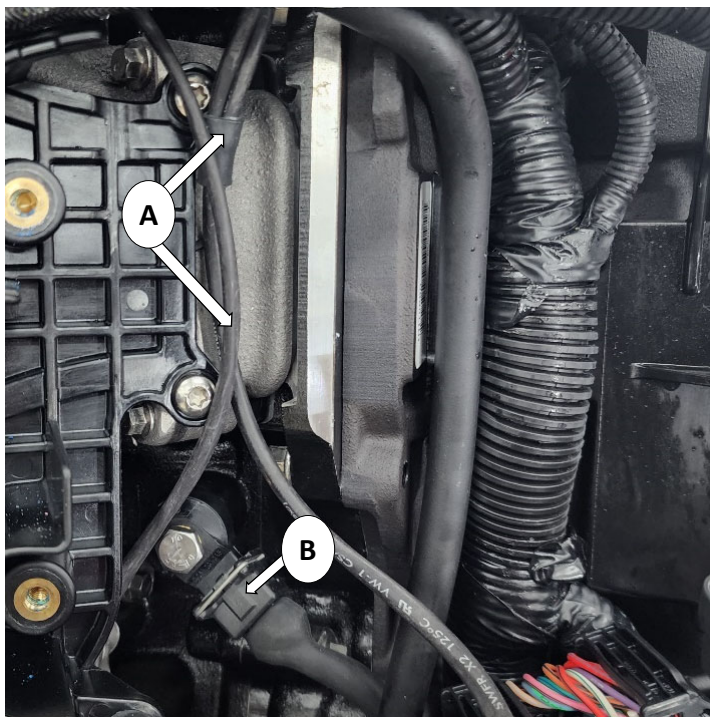
Step #8

Lift and invert the stock ECU connectors and new harness and roll into the gap next to the Mercury fuel line and battery cables.

NOTE: Where the adapter loom crosses the potting is a space critical area so spreading the wiring wide at this point will assist with final clearance

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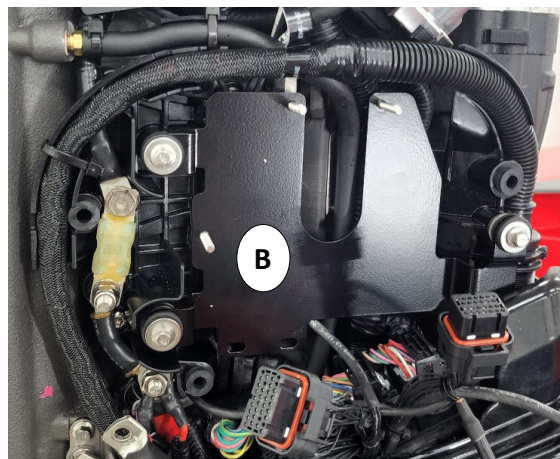
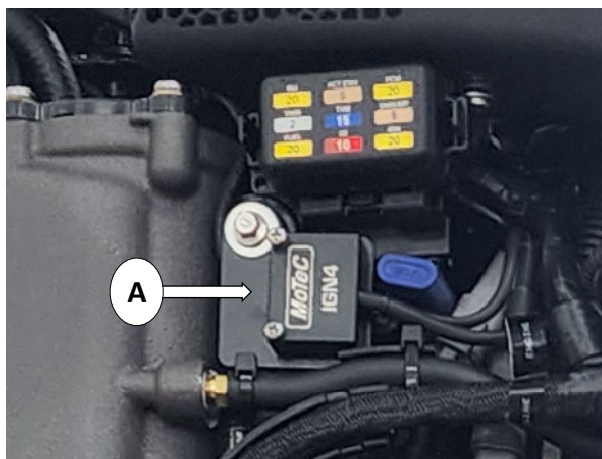
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**Step #9**

- Run vertically up the engine the wiring for the IGN4, LTC and Power control (A).
- Fit knock sensor connector (B).



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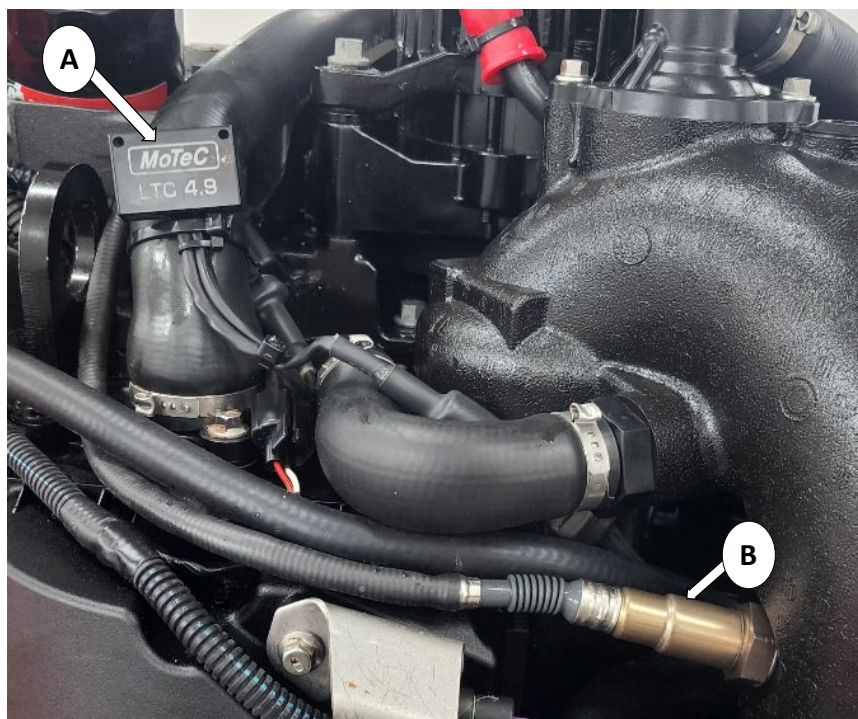


Step #10

- Fit the Bracket Asy- Mercury V8 450R IGN4 Mount (**A**) to lower bolt of fuse box and mount the IGN4, DO NOT CONNECT.
- Fit Bracket Asy- Mercury V8 450R ECU Mount (**B**) using the OE bolts removed in step 1.

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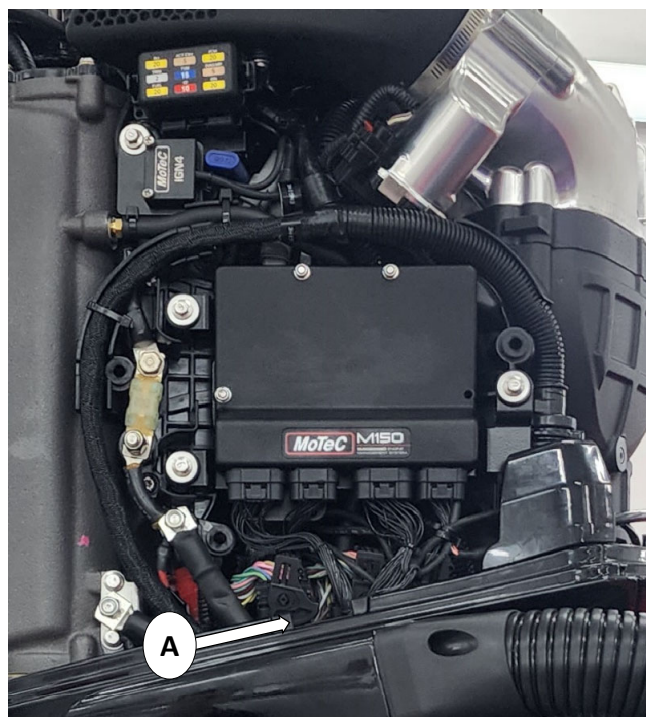
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**Step #11**

- Ensure the LTC (A) is preprogrammed to 250K and the correct address when used in a Multi engine installation.
NOTE: The LTC will come pre-programmed in the kit.
- Disconnect factory lambda sensor (B) from its wiring and connect to LTC, Cable tie LTC to secure.
- Run LTC wiring around engine and connect.

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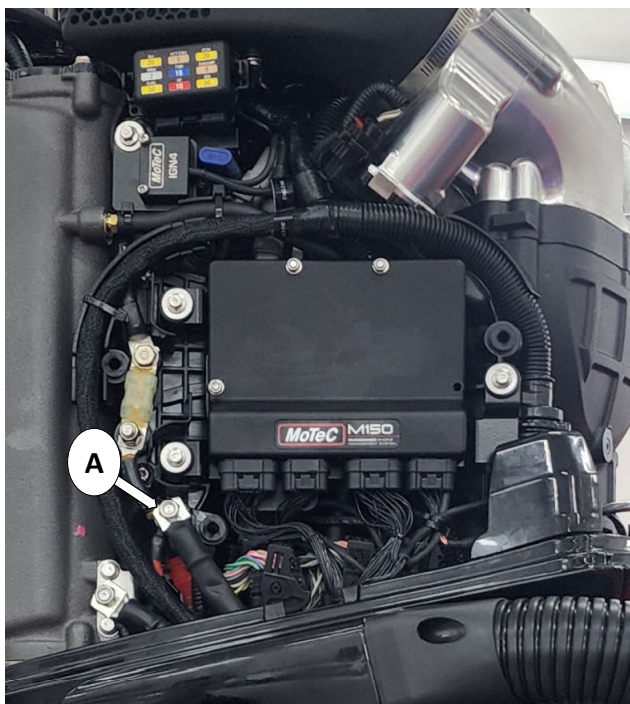
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**Step #12**

- Fit M150 ECU – if possible, have 450 Package/start file already loaded.
NOTE: 1. The M150M will be pre-loaded with the correct start file when supplied in the kit.
2. If the correct start file is loaded in the ECU, connect the IGN4.
- Cable tie the adapter loom wires back and away from Cowl location tab cavity (A).

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- Fit the fuse holder eyelet & main Positive battery lead to the main battery stud (**A**).
- Torque main positive battery stud, nut.
- Tie back the fuse holder and wires appropriately.