

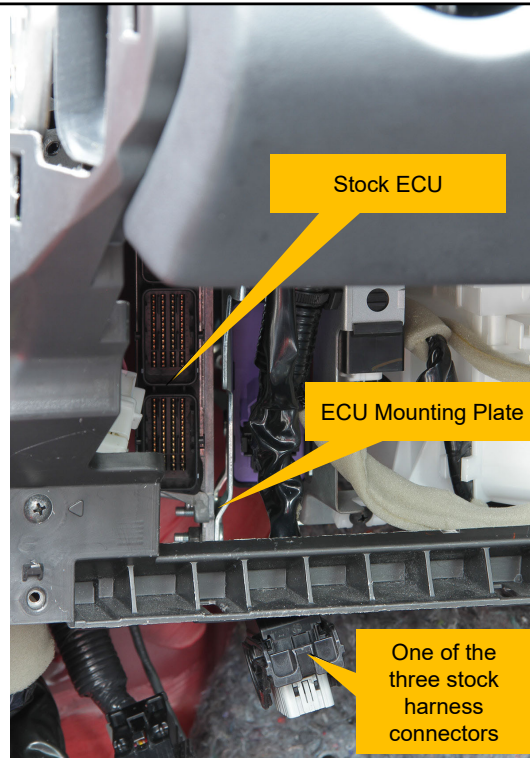


## NISSAN R35 GT-R ENGINE PLUG-IN KIT (RHD & LHD) INSTALL INSTRUCTIONS





Figure 1



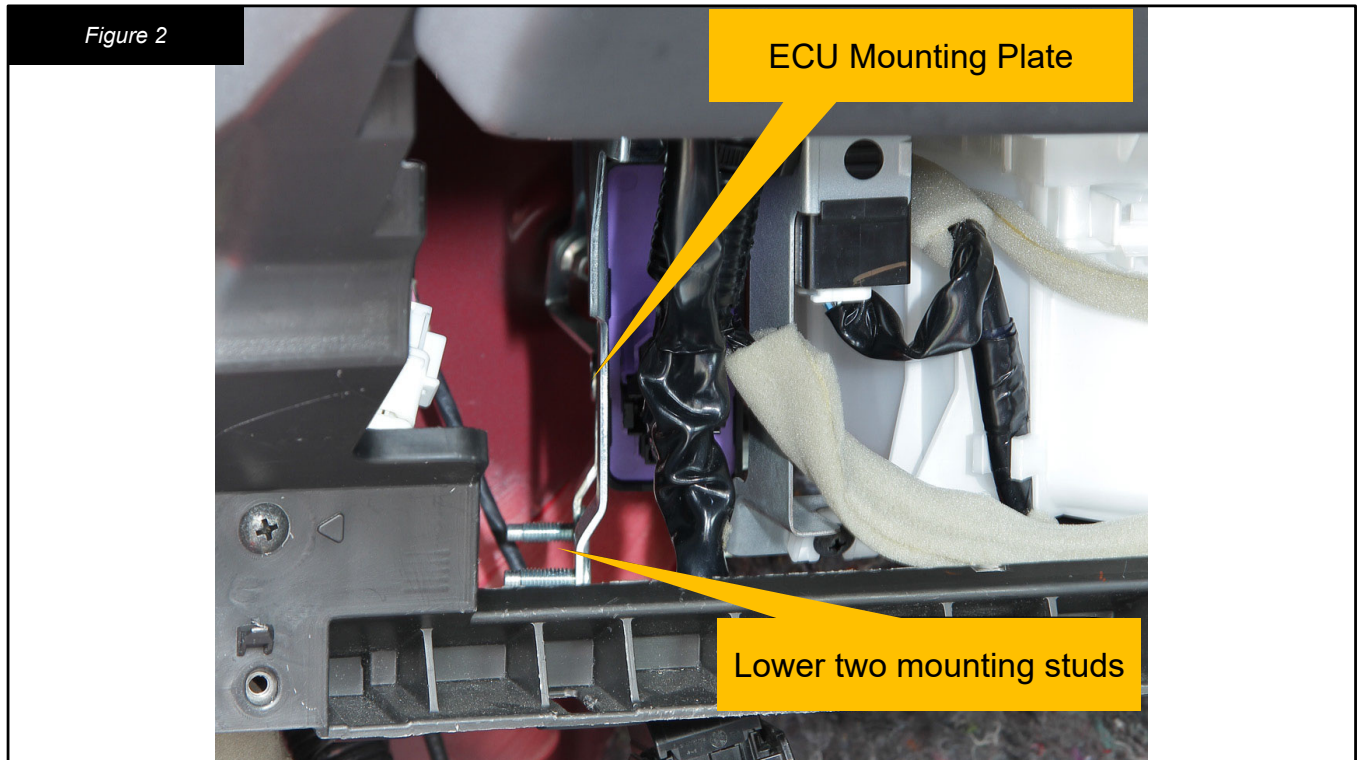
## INSTALLATION

Left-hand and right-hand drive cars require different mounting of the M150 ECU, but otherwise the installation process is similar.

1. Remove the battery to gain access to a firewall grommet.
2. Remove the stock ECU as follows:
  - a) Access the stock ECU by removing the glovebox.
  - b) Remove harness plugs from the stock ECU, see Fig 1.

**MoTeC**

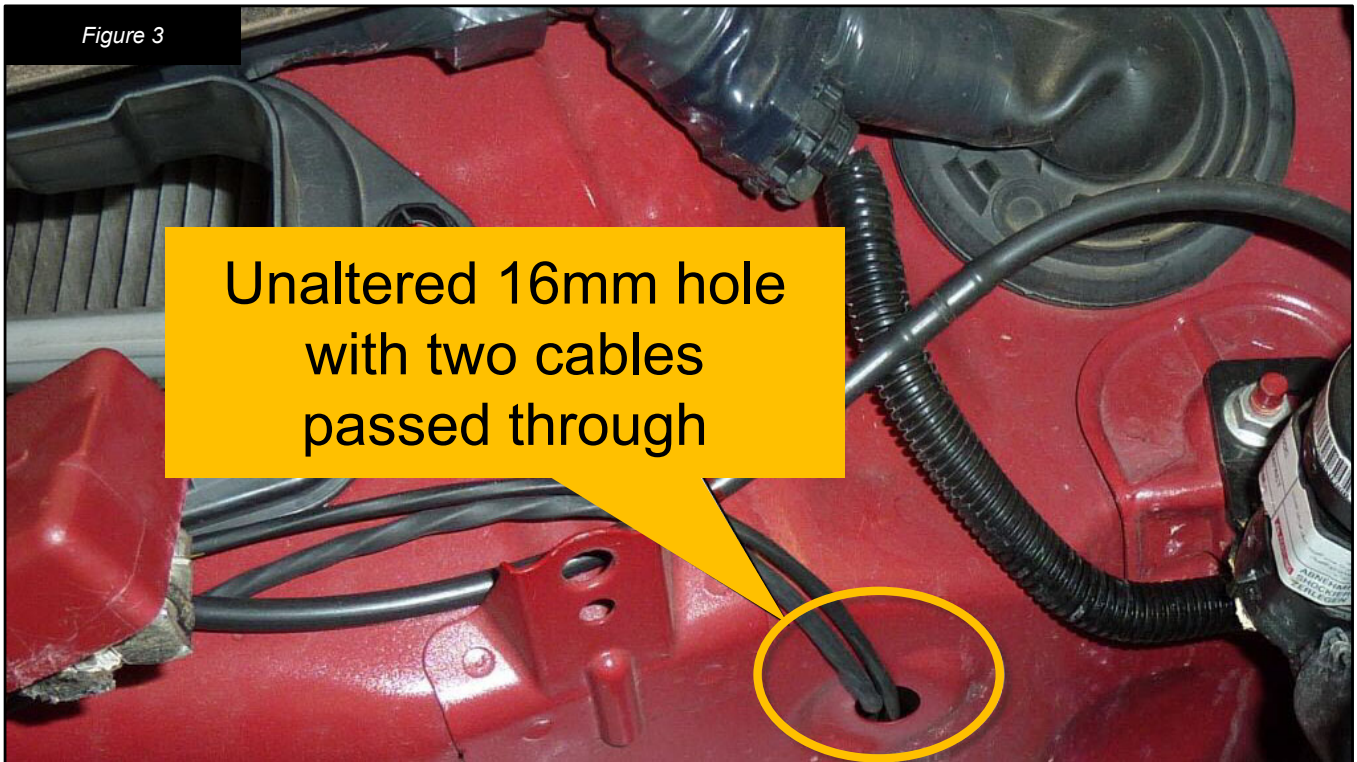
Figure 2



- c) Remove and retain the four M6 flange nuts from the stock ECU.
- d) Remove stock ECU from the mounting plate, see Fig 2.

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Figure 3



3. Use one of the following options to pass the Breakout Loom's **Air Temperature**, LTCD, and **Fuel Pressure** cables and plugs through the firewall.

⇒ Also, see Fig 8. It shows the main harness grommet and the 16mm hole from the passenger footwell.

**Option 1:** Drill the unused existing 16mm hole (has a blank grommet installed) out to 21mm and pass through the **Fuel**

**Pressure**, **Air Temperature**, and LTCD connectors and cables, using a suitable grommet to seal the hole.

**Option 2:** The 16mm grommet hole may be used without drilling by first removing the **Fuel Pressure**, **Air Temperature** connectors and the LTCD female pins from the LTCD socket, then passing the loom wires through the 16mm hole and sealing with a suitable grommet. Re-terminate the **Air Temperature** and **Fuel Pressure connectors**. The LTCD connector need only have the female contacts re-inserted and the orange cap replaced.



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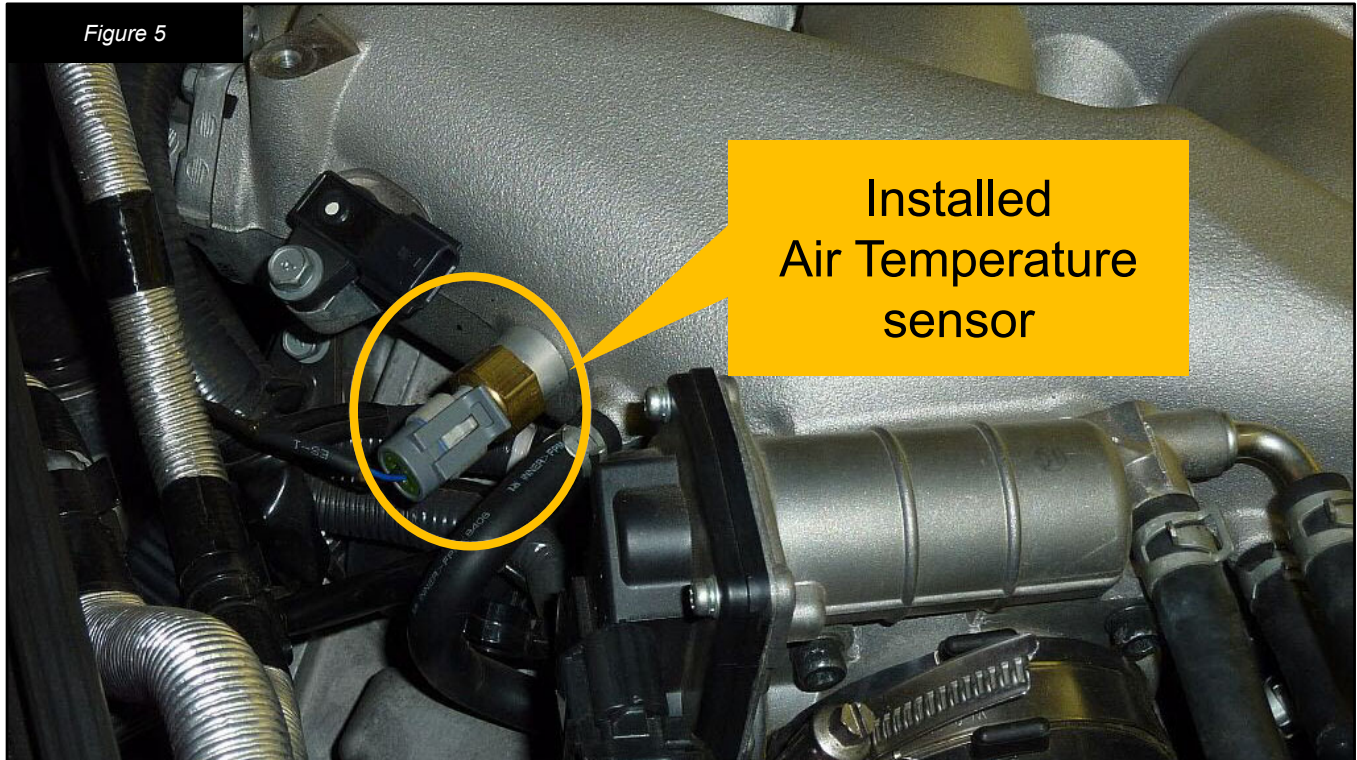
Figure 4



**Option 3:** Remove the main harness rubber boot from the upper firewall (best done from inside the passenger compartment). Feed the cables and connectors through the main harness rubber boot by adjusting or modifying the boot to suit. The rubber boot should then be re-positioned, ensuring a good seal. See Fig 4.

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Figure 5

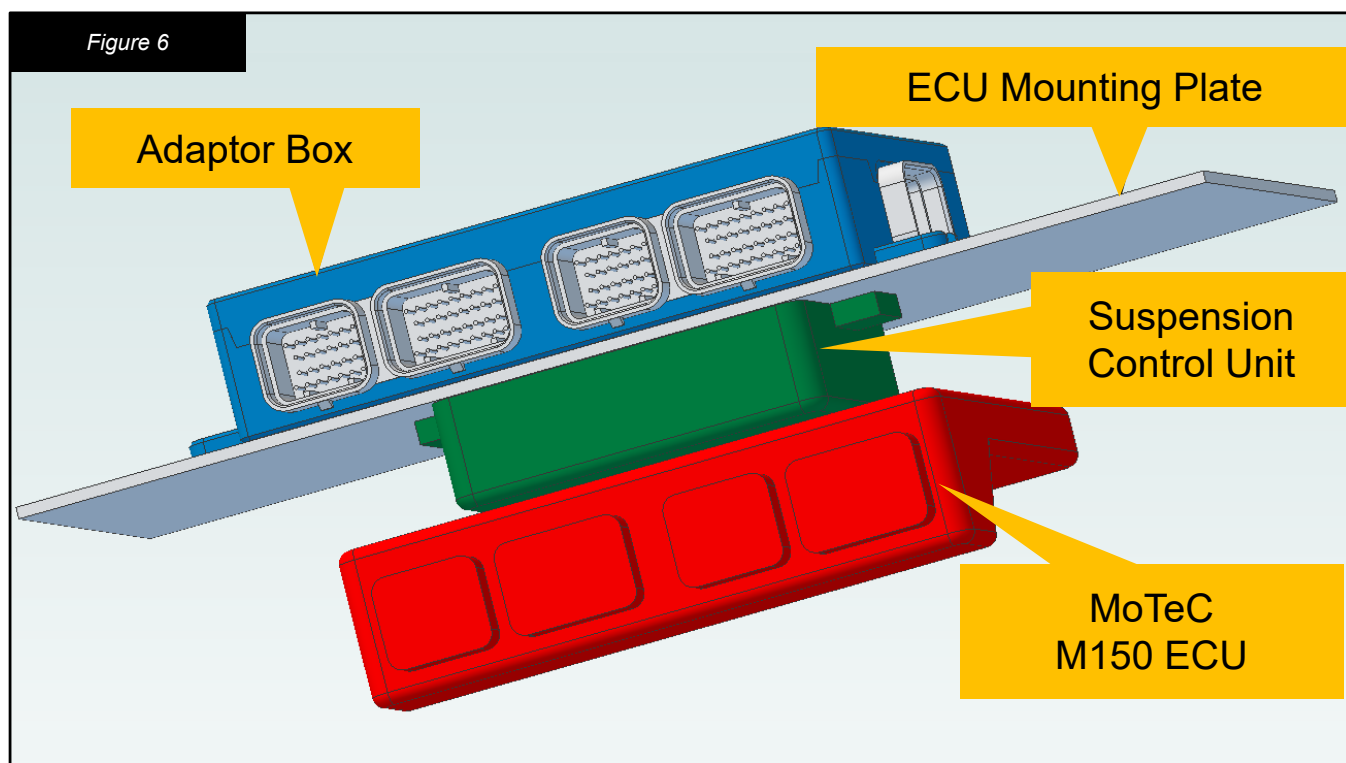


1. Replace the stock Lambda sensors with the supplied NTK Lambda sensors, extended via NTK extension looms to LTCD NTK.
2. Install the supplied Air Temperature Sensor.

⇒ It is highly recommended that this is installed in the inlet manifold. Ideally, the manifold should be removed and an M14 x 1.5 threaded hole should be drilled and tapped as shown in Fig 5.

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Figure 6



6. Insert the four Stub Looms into the M150 ECU. The Stub Looms, except for the loom with the Ethernet connector (see note) are symmetrical and either end may be inserted into the M150 ECU. The connectors are keyed so that they can only be inserted into the corresponding sockets.

⇒ For the Stub Looms with the Ethernet cable, ensure the plug containing the Ethernet cable is plugged into the M150.

7. Fix the three Velcro Dual Lock strips to the M150 mounting position, orientated to match the orientation of the Velcro strips on the ECU. The mounting position is different for RHD and LHD vehicles, as described below:

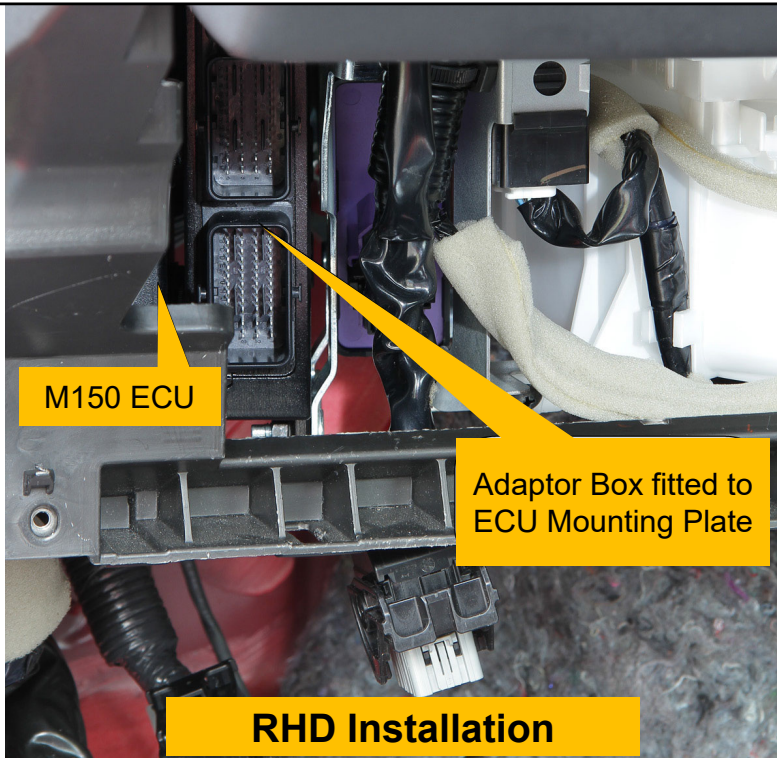
**Choose from:**

- For RHD — M150 mounting position is on top of the Adaptor Box, as shown on the first page product image.
- For LHD — M150 mounting position is behind the original ECU Mounting Plate, on top of the Suspension Control Unit. See Fig 6 for a representation of the assembly.



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Figure 7

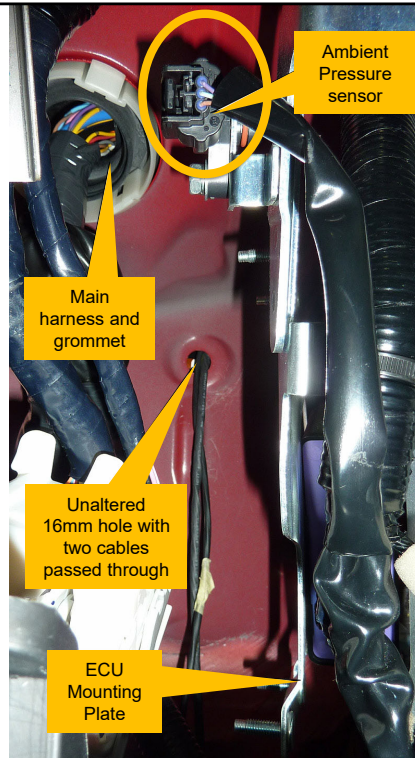


8. Place M150 over mounting position and secure by applying firm pressure to ensure Velcro locks.
  9. Plug Stub Looms into the Adaptor Box.
  10. Place Adaptor Box onto stock ECU mounting studs and fix using original four M6 flange nuts.
- ⇒ LHD mounting requires a metal tab to be bent away from Adaptor Box housing.





Figure 8



11. Connect the R35 Breakout Loom to the Adaptor Box.
12. Connect the stock ECU harness plugs to the Adaptor Box.
13. Position the Ethernet cable for easy access and connect to a laptop with M1 Tune installed.
14. There are several engine and sensor combinations on this vehicle. Ambient Pressure sensor has two options. It may be derived from a sensor in the evaporative canister, or a sensor may be mounted above the ECU, as in Fig 8.