

1986-93 Mustang AMP MegaSquirt Plug and Play ECU

Tools Required

- Ratchet
- 10mm Socket
- 9/32" Socket
- Phillips Screwdriver
- Zip Ties
- Timing Light
- Laptop

Installation

Instructions provided by AMP Engine Management

1. Disconnect the negative battery cable
2. Factory ECU Location - Passenger Footwell
The stock ECU is located in the passenger-side footwell, just behind the kick panel that is located in front of the passenger door.
3. Remove the Passenger Kick Panel
Remove the kick panel push-pin in the bottom-left corner of the panel. Optionally, remove the door sill to make easier removal of the kick panel. Then, gently pull on the kick panel that is held by two push-pins. *(Figure A)*
4. Disconnect the Main ECU Connector & Remove Factory ECU
The ECU harness is held in the ECU by the large bolt in the center of the connector. Using a 10mm Socket & Ratchet loosen the bolt in the center of the harness until the harness comes out of the ECU. The bolt will remain in the ECU connector and will not come out completely. Finally, Remove the mounting screw securing the factory plastic ECU bracket. Then slide the ECU free from the bracket. *(Figure B)*
5. Connect Vacuum Line to Upper Intake
Locate an unused vacuum port on the upper intake or tee into an existing vacuum line using the supplied vacuum tee. The vacuum ports are located at the rear of the upper intake. *(Figure C)*
6. Route the Vacuum Line through the firewall
After connected to the upper intake, route the vacuum line to the ECU location inside the passenger compartment. This is typically done by passing the line through the large rubber grommet in the passenger-side corner of the firewall where the factory wiring harness enters the cabin. Carefully make a hole or slit only large enough for the vacuum line to pass through, taking care not to damage any nearby wiring. **Be sure the vacuum line is routed without kinks or pinching.** *(Figure D)*

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Figure A

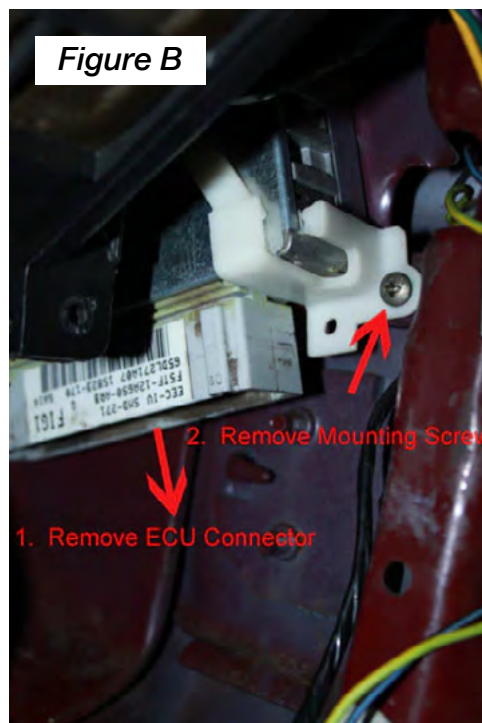
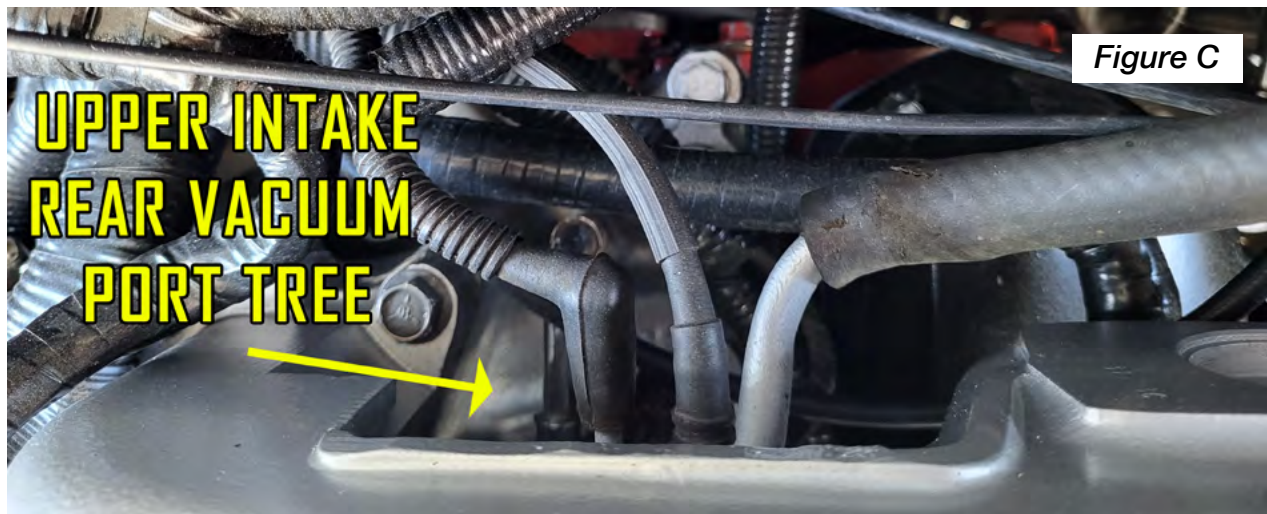


Figure B



7. Wiring the Rear Options Connector

This is the time to wire in your wideband along with completing any optional wiring you plan to use through the Rear Options Connector. This is the best time to wire additional sensors, inputs, outputs, speed inputs, or ignition upgrades, since the connector is easier to access before the ECU is mounted in the vehicle.

Internal Wideband ECU Models

If you selected the Internal Wideband ECU model, connect the provided wideband sensor cable to the rear options connector as instructed in the pinout section. This allows the wideband sensor to plug directly into the ECU without using a separate external wideband controller.

No Wideband ECU Models / External Wideband Setups

If you selected the No Wideband ECU model, or if you are using an external wideband controller, wire the external wideband controller signal to the appropriate rear options connector input.



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Additional Inputs and Outputs

We also recommend wiring any other planned sensors or accessories at this time, including additional analog inputs, digital inputs, speed inputs, or outputs. This helps avoid removing or accessing the ECU later as your setup expands. Once your wiring is complete, plug the rear options connector into the ECU until it clicks into place and neatly secure the wiring. (Figure E)

8. Connect the supplied Tuning Cable

Attach the provided tuning cable to the ECU and tighten the collar clockwise until snug with your fingers. Be sure the pins are aligned properly before tightening. (Figure F)

9. Install the AMP Play-N-Play ECU

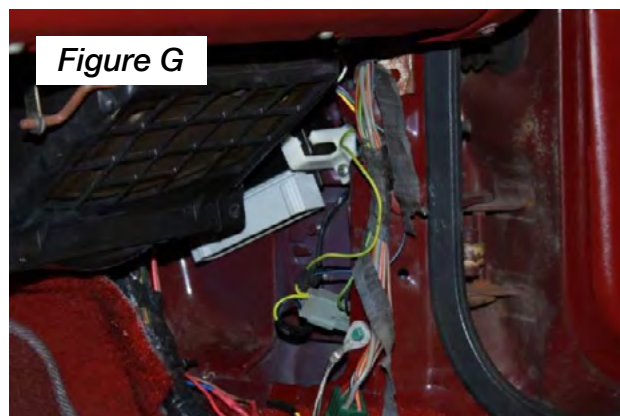
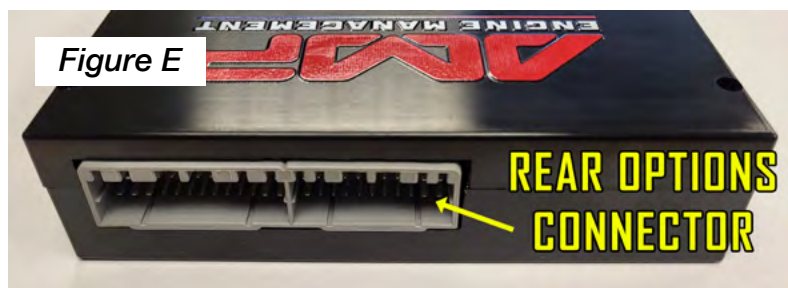
Installation is the reverse of removal. Slide the ECU in the factory location and secure it using the original plastic ECU bracket and screw. Please note that the bracket fitment will be slightly tighter due to the vacuum nipple next to the connector. Reconnect the main harness connector using the 10mm socket and ratchet as done in Step 4. (Figure G)

10. Connect the Vacuum Line to the ECU

After the ECU is mounted, connect the vacuum line the was done on Steps 5/6 to the vacuum port on the ECU. The vacuum port nipple is located on the right-side of the ECU. (Figure H)

11. Mass Air Flow Meter Removal

The preloaded base tune on your AMP Plug-N-Play ECU is configured for Speed Density, which is how most customers choose to tune these applications. Because of this, the factory mass air flow meter is no longer required and can be removed from the vehicle. If you prefer to tune using the factory mass air flow sensor, that option is still available.



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