



## ECU REMOVAL INSTRUCTIONS ALFA ROMEO GIULIA QUADRIFOGLIO

### Step 1. Disconnecting the Battery

- A. Unlock vehicle, open driver's side door and roll down window. Open trunk. DO NOT KEY ON VEHICLE.
- B. Locate the battery cover in the passenger side of the trunk. Remove the cover by rotating the two plastic knobs.
- C. Disconnect the negative terminal on the battery. To do this, locate the negative cable (*Figure 3*). At the end of the cable there is a quick disconnect mechanism. Use your index finger to squeeze the gray release button (*Figure 5*) and lift upwards to disconnect the battery.

**Figure 1**



**Figure 2**



**Figure 3**



**Figure 4**



**Figure 5**



### Step 2. Disconnecting and Removing the airbox

- A. Open the hood of the car. Remove the engine cover by lifting the front edge of the cover (*figure 7*).
- B. Remove the inlet duct to the airbox by lifting from the rearmost point (where it enters the airbox, *figure 8*). This will release the four ball and rubber

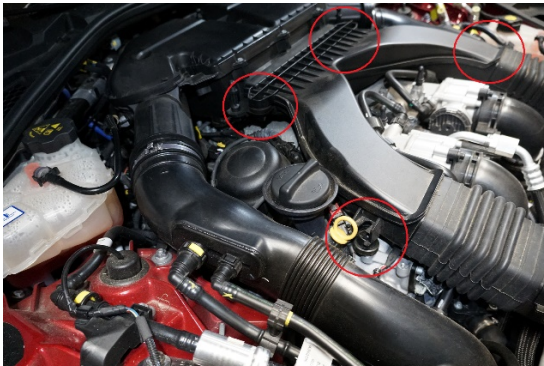
socket mounts. Pull out the two corrugated rubber connection hoses (figure 9). Set these parts aside.

- C.** Remove the band clamps (*figure 10*) that connect the air box assembly to the intake tubes. Use a 90 degree pick and pry away from the tube to release the clamp (*figure 11*). Remove clamps on both sides.
- D.** After the clamp is free, pull back on the intake tube to separate it from the airbox.
- E.** On the back side of the airbox, remove the plastic clamp from the coolant line (*figure 12*). *Note: There are two additional clamps that cannot be accessed until the airbox is lifted. In the following steps, be sure to lift the airbox with care to avoid damaging the still-attached coolant line.*
- F.** Lift up – *do not remove* – the airbox (*figure 13*). You will hear and feel the mounting sockets release.
- G.** Slide the intake tubes off the airbox (*figure 14*)
- H.** Disconnect the two remaining plastic clamps that attach the coolant line to the back of the airbox (*figure 15*). Remove the airbox from the vehicle and set it aside.
- I.** The engine bay should look like figure 16. Cover the open intake tubes (using towels, tape, plastic wrap etc.) to prevent debris from entering the chamber.

**Figure 6**



**Figure 8**



**Figure 10**

**Figure 7**



**Figure 9**



**Figure 11**

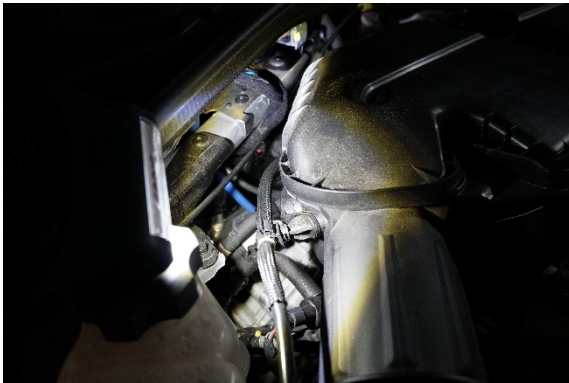




**Figure 12**



**Figure 13**



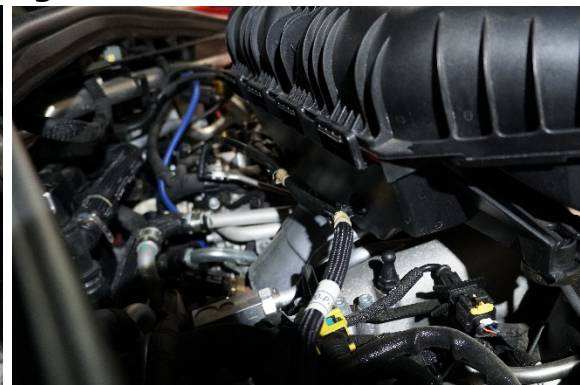
**Figure 14**



**Figure 15**



**Figure 16**



**Step 3. Disassembling the Wiper Cowl**

- A.** Remove hood to wiper cowl seal by gently peeling the hood seal upwards (*figure 17*).
- B.** Along the wiper cowl there are three service access panels. Remove the covers to all three panels (*figures 18 & 19*).
- C.** Use a pick to remove the plastic snap rivets, located on each end of the wiper cowl, that retain the foam hood seal (*figure 20 & 21*). After the plastic rivets are removed, the foam seals are easily lifted off the wiper cowl.
- D.** Remove any remaining plastic rivets that attach the wiper cowl to the vehicle.
- E.** Remove the hood hinge covers, located between the windshield, fender, and wiper cowl on both sides of the car (*figure x*). Do this by removing the plastic rivet on the inboard side of the hood hinge (*figure x*) and then pry the hinge cover away from the fender. *Note: there are two metal retainers that attach the hinge cover to the fender. Be sure to keep as they will be needed for reassembly.*

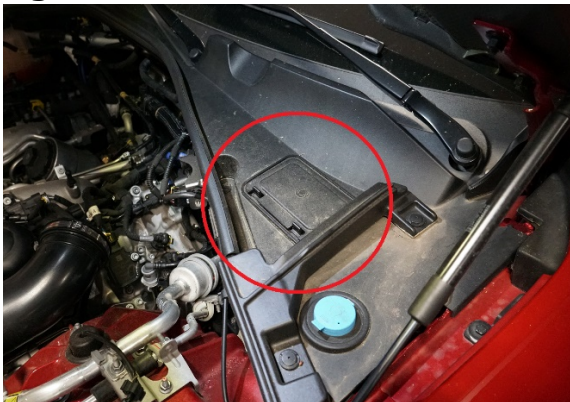
**Figure 17**



**Figure 18**



**Figure 19**



**Figure 20**





**Figure 21**



#### **Step 4. Removing the Wiper Blades**

- A.** Use painter's tape to mark the resting place of the wiper blades on the glass.
- B.** Remove the rubber seals that cover the attachment fasteners of the wiper blades.
- C.** The wiper blades are secured with a nut, use a 17mm socket to remove the nut and the spring washer below. (Figure 22)
- D.** Use a windshield wiper puller tool to remove both windshield wiper arms. (Figure 23)

**Figure 22**



**Figure 23**



#### **Step 5. Removing the Wiper Cowl**

- A.** Remove the plastic rivets located between the fender and the hood hinge. (Figure 24)
- B.** Lift and remove the wiper cowl and set aside. (Figure 25 & 26) *Note: The wiper cowl is wider than the hood hinges. To remove, flex the wiper cowl to get it past the hood hinges. Use caution to avoid scratches to the paint. Once past the hood hinges, the wiper cowl can be removed and placed aside.*

**Figure 24**



**Figure 25**



**Figure 26**



## **Step 6. Removing the Cabin Airbox**

- A.** Remove the cabin airbox filter screen by lifting it up and out. (*figure 27*)
- B.** Use a pick to remove the plastic rivet that attaches the cabin airbox to the passenger side strut tower brace. (*figure 28*)

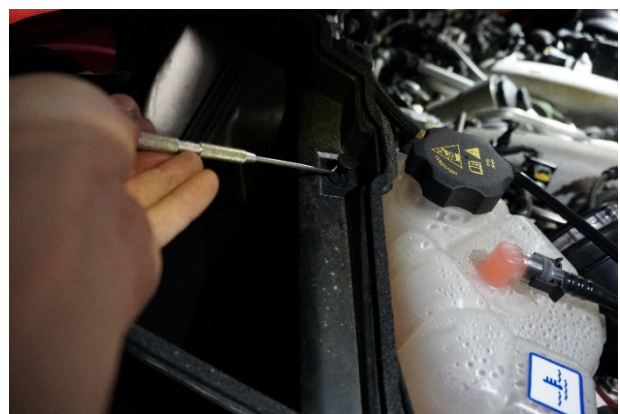


- C. Remove the two 10mm nuts holding down the airbox. (figure 29)
- D. Remove the two 10mm bolts holding down the coolant reservoir bottle. (figure 30)
- E. Remove the two 13mm bolts holding down the passenger side strut tower brace. (figure 31)
- F. Lift and "roll" the passenger side strut tower brace to the other side of the coolant bottle. Slide the brace towards the front of the car until it clears the mounting surface on the firewall. Rotate the brace clockwise. (figure 32)
- G. Remove the cabin airbox. *Note: There are two points near the windshield where the airbox has foam cushions – be careful not to damage them.* (figure 33)

**Figure 27**



**Figure 28**



**Figure 29**



**Figure 30**



**Figure 31**



**Figure 32**



**Figure 33**



### **Step 7.) Removing the Master ECU (driver side)**

*Note: Various nuts are removed in the following steps. Use caution to not drop them. If they fall, they will end up on top of the undertrays.*

- A.** Remove the 10mm nuts (3) holding down the Slave ECU (located on the passenger side). (figure 34 & 35)
- B.** Remove the 10mm (2) nuts that connect the Master ECU (located on the driver side) to the firewall. (figure 34)
- C.** Remove the Master ECU from the firewall. When it is free from the studs on the firewall, lift it partially out and disconnect the two ECU connectors. To remove the connectors, depress the latch lock. Swing the latch 90 degrees



and remove the connector. When both connectors have been removed, lift the ECU from the vehicle and set aside.

**Figure 34**



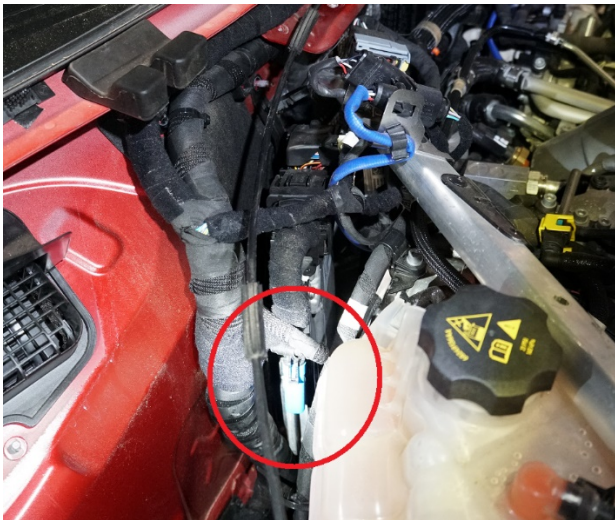
**Figure 35**



### **Step 8.) Removing the Slave ECU (passenger side)**

- A. There are two connectors attached to the Slave ECU. These must be removed in a specific order. First, remove the connector on the driver's side of the Slave ECU.
- B. Remove the 2-pin connector that is externally mounted to the side of the ECU. (*figure 36*)
- C. Remove the ECU from the vehicle and set aside.

**Figure 36**



### **Step 9) Box and ship ECU's to IdealRace**

Please contact us via email or phone to let us know you're sending your ECU's in.  
[eric@idealrace.com](mailto:eric@idealrace.com) 334 750 8940

Shipping Address

**IdealRace**  
**2700 Sandhill Rd.**  
**Auburn AL, 36830**

Please Print this page, fill out the form below, and put it inside the box with your ECU's

Full Name

Shipping Address

Email address

Phone Number

Customer Optional Feature Selections (please circle)

Pops and Bangs? YES / NO

Exhaust valves open full time in Dynamic mode? YES / NO

Octane Fuel to be used? 91 / 92 / 93 / Other -please specify.