



**James Barone Racing**  
**Aftermarket Parts and Accessories**

## **2016+ MAZDA MIATA FRONT & REAR SWAY BAR INSTALLATION INSTRUCTIONS**

### **Tools Required:**

- ✓ Jack
- ✓ Lift or ramps
- ✓ Ratchet wrench
- ✓ Torque Wrench
- ✓ 6" and 12" Extension
- ✓ 10, 12, 14mm Sockets
- ✓ Philips head screw driver
- ✓ Flat head screw driver
- ✓ Needle nose pliers
- ✓ 10, 12, 14mm wrenches

### **Includes:**

- ✓ 1 adjustable front and/or rear bar sway bar
- ✓ 1 or 2 sets of sway bar bushings and brackets
- ✓ 2 or 4 packets of installation grease

-Rear sway bar in installation instructions begin on page 18

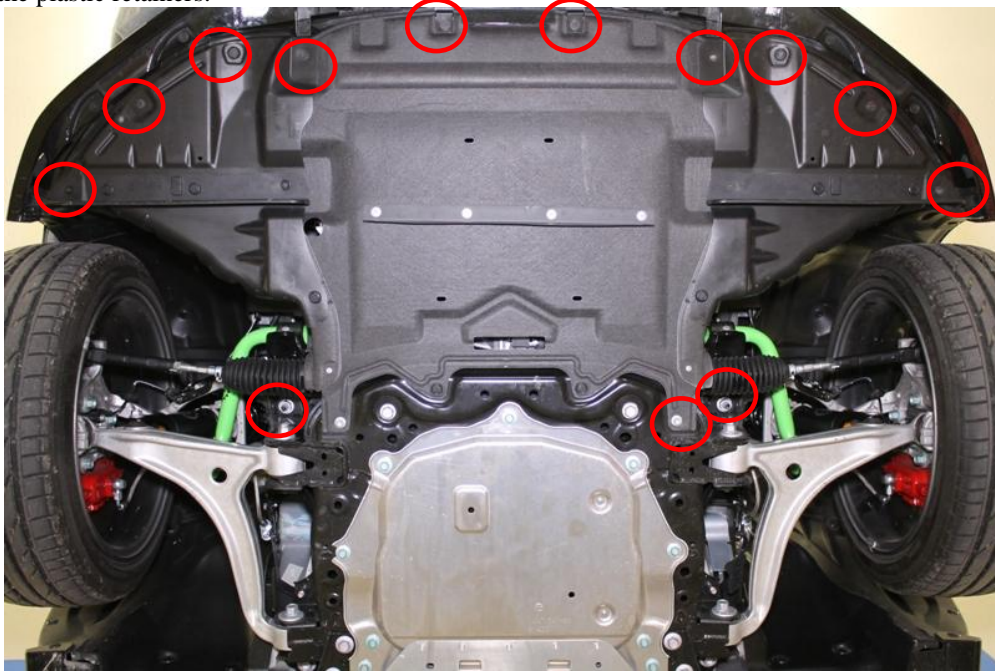
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- ❖ Begin by parking on a smooth level surface with the emergency brake engaged. Jack up the front of the vehicle and position jack stands underneath both sides. Put the car in neutral.



Refer to you vehicles owner's manual for proper jack placement and supporting procedures. **Never get under a vehicle without the proper support in place.**

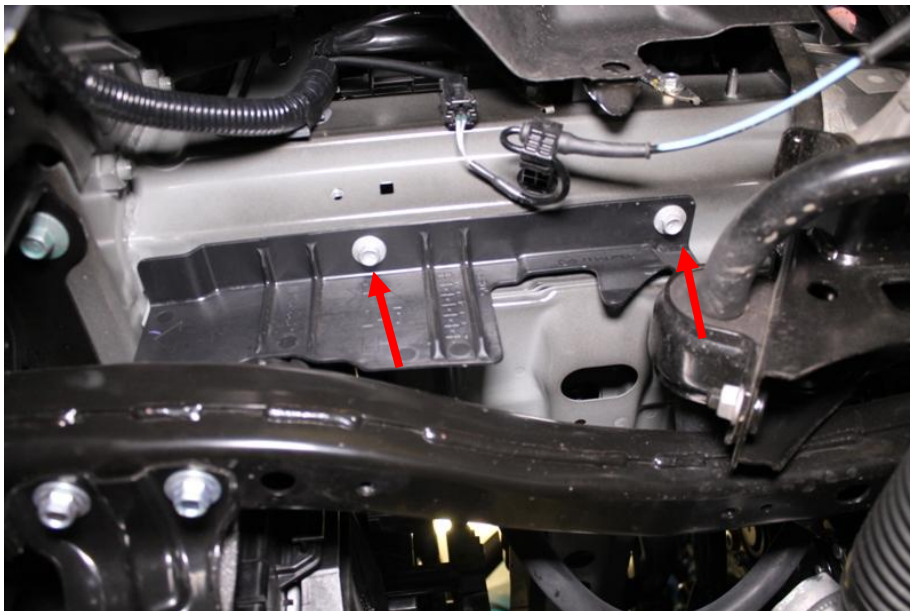
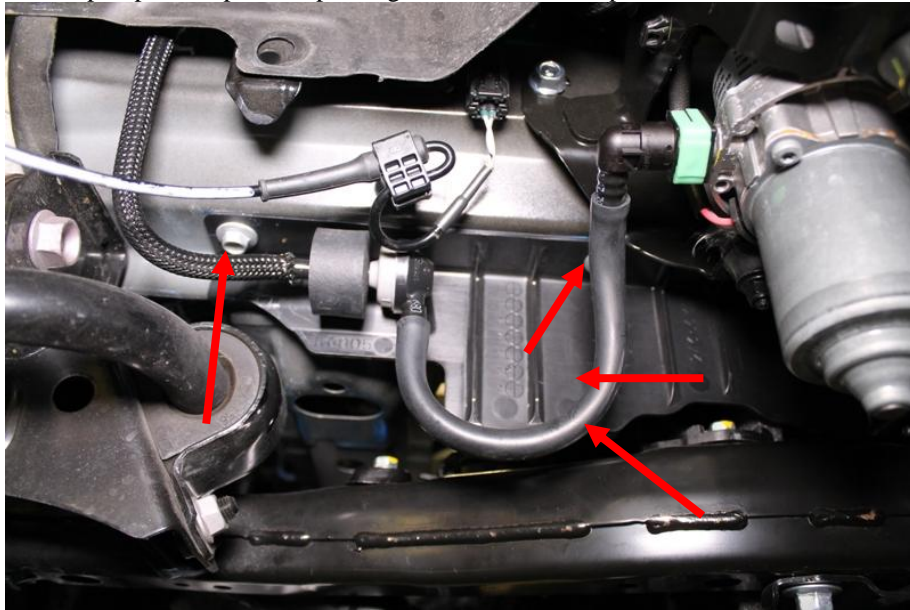
1. Begin removing the belly pan using a 10mm socket, and philips head screw driver. Use a flat head screw driver to remove the plastic retainers.



2. Remove the front portion of the fender liners on each side using a flat head screw driver.



3. Swivel the washer pump hose up on the passenger side and remove plastic covers on both sides with a 10mm socket.

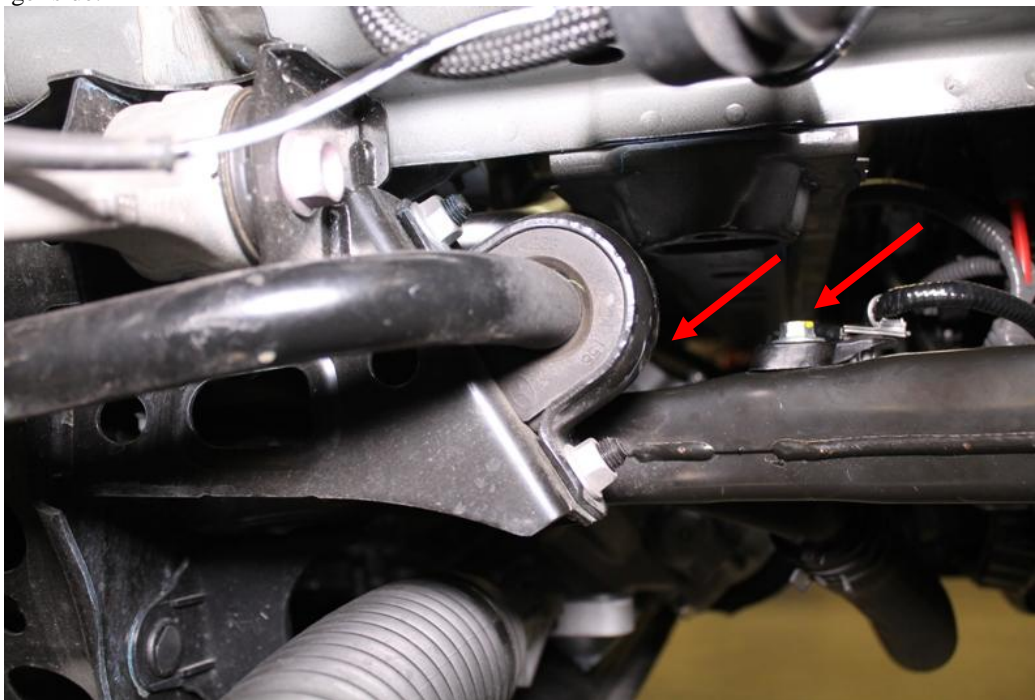




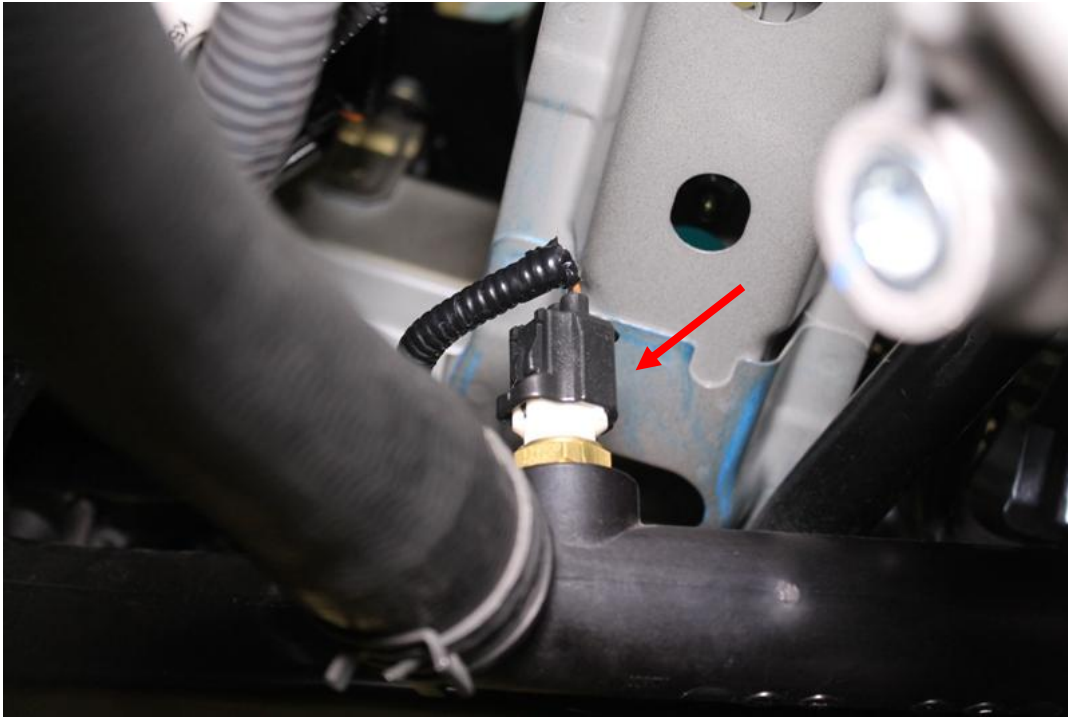
- Using a 14mm wrench, remove the nuts securing the endlinks to the sway bar.



- Using a 10mm wrench, remove the 2 bolts securing the lower radiator hose sensor housing to the sub-frame on the passenger side.



6. Remove the coolant sensor connector.



7. Unclip the coolant sensor wire from the sensor housing with a pair of needle nose pliers.

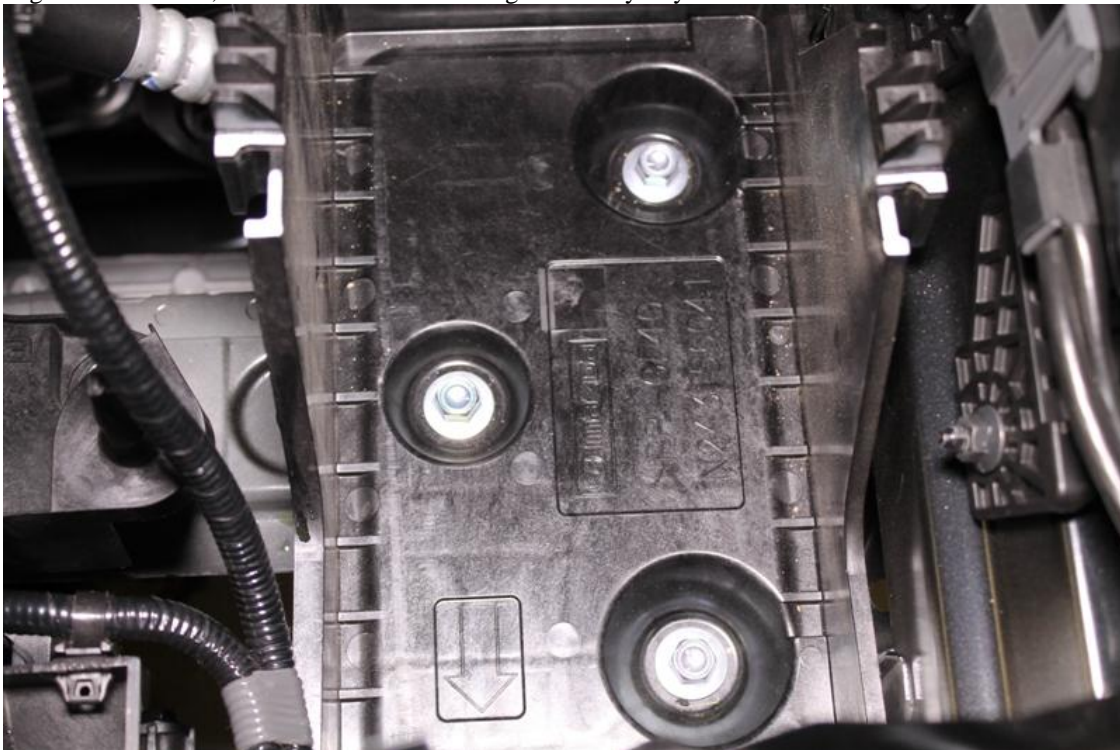




- Using a 10mm socket, remove the ground, then the positive battery cables. Loosen the nuts securing the hold down strap and remove the strap and J-Hooks. Remove the battery



- Using a 12mm socket, remove the 3 bolts securing the battery tray.



10. Using a 10mm socket, remove the two clamps securing the intake hose and remove from the air box and throttle body.

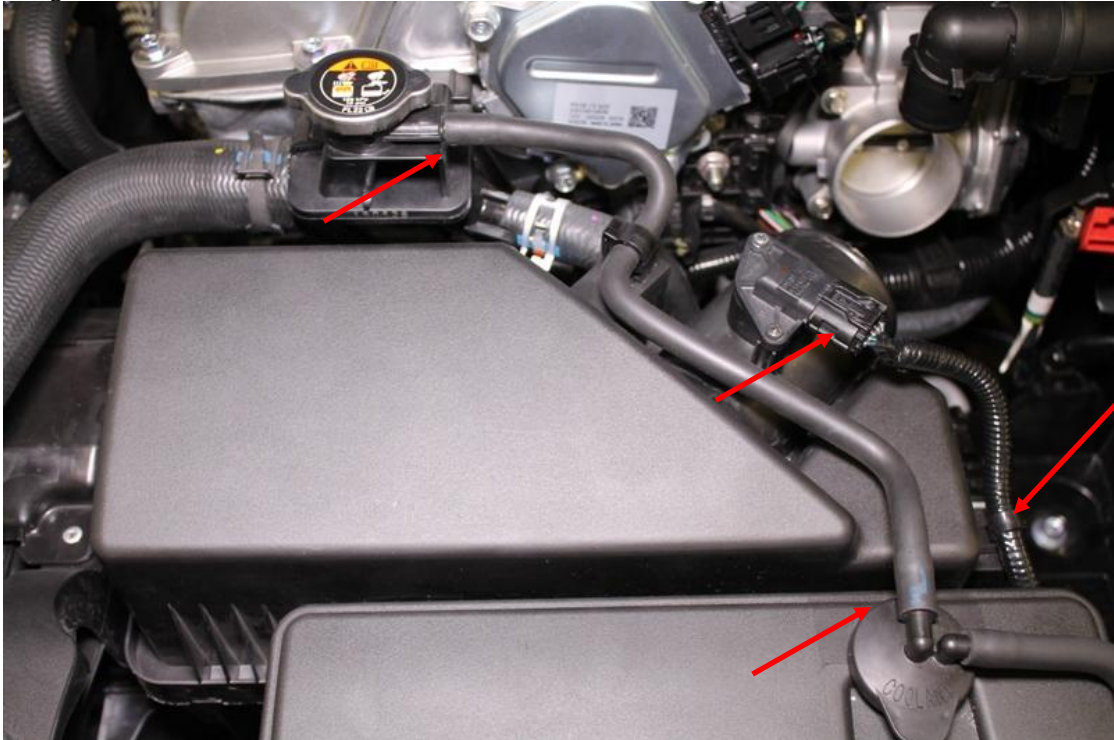


11. Using a 10mm socket remove the bolt securing the air box to the core support





12. Remove the coolant over-flow hose at the cap and at the reservoir. Disconnect the MAF sensor and the fastener securing the wire connector

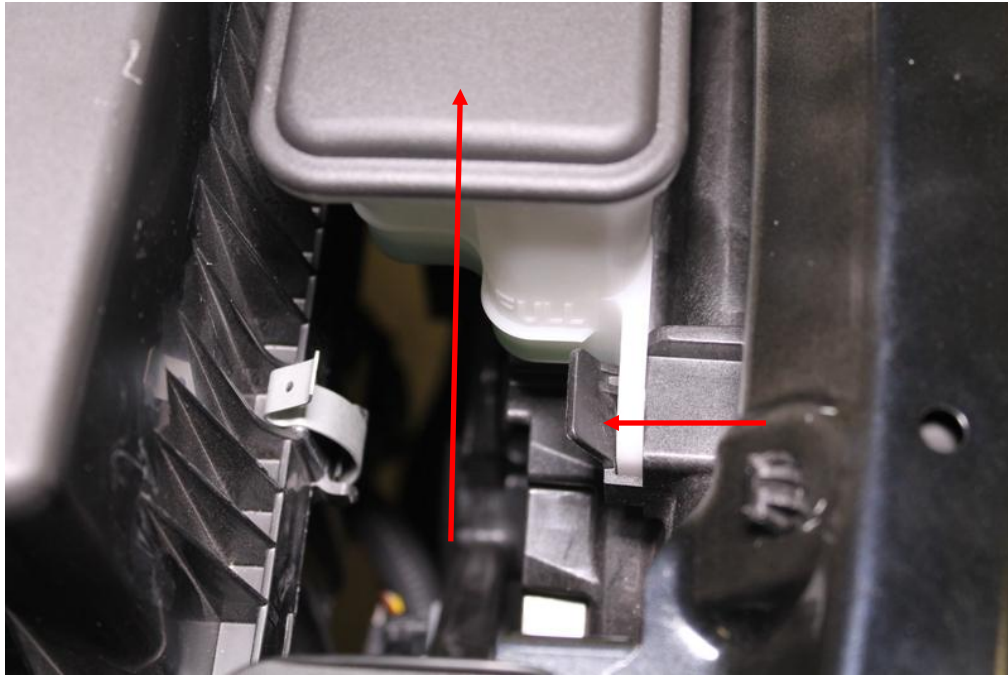


13. Tug up on the entire air box assembly and remove from the vehicle.

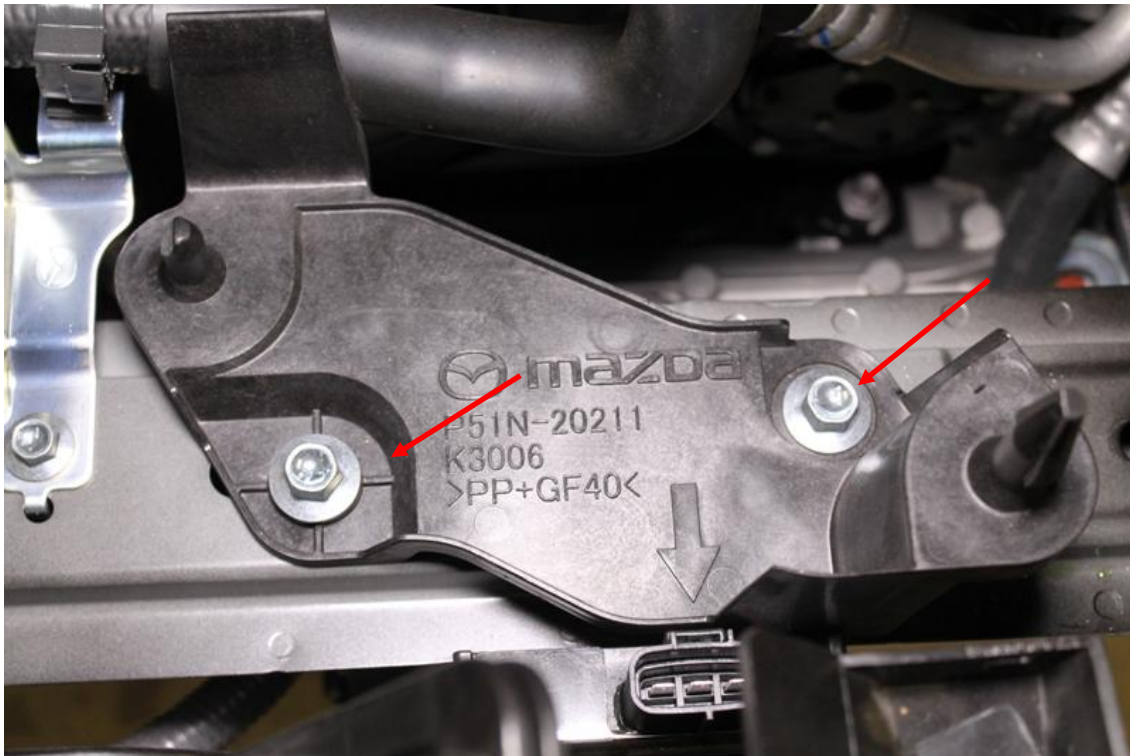




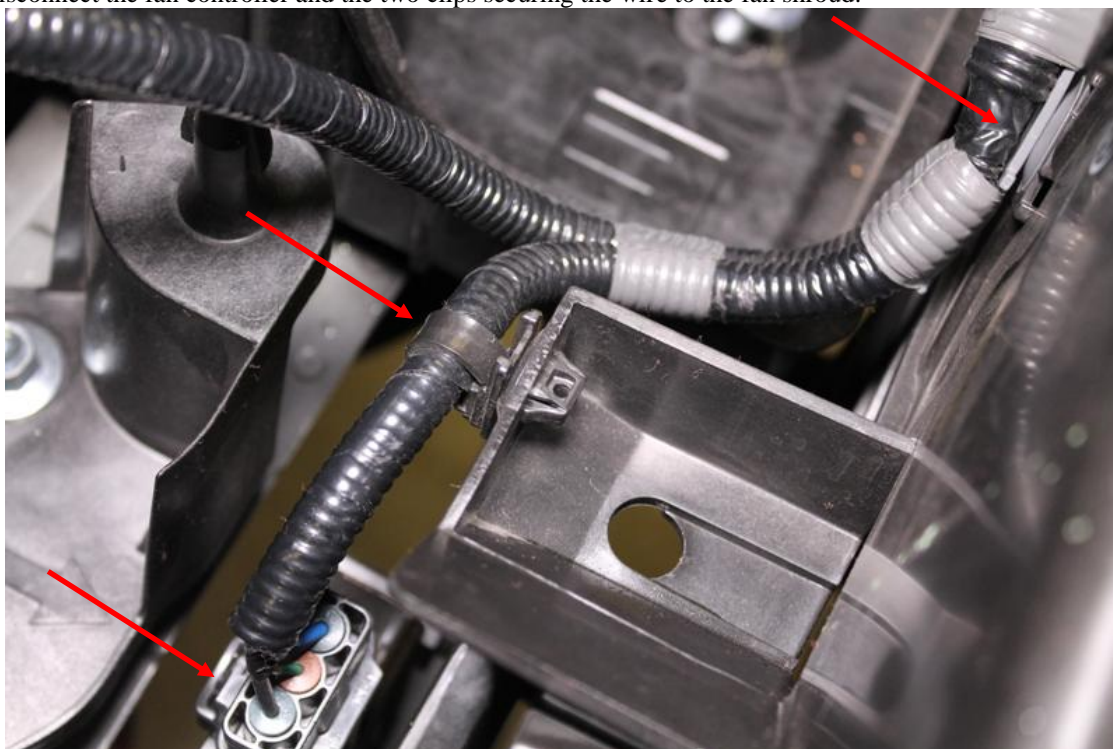
14. Spread the tabs on either side of the coolant reservoir, lift and remove from the vehicle.



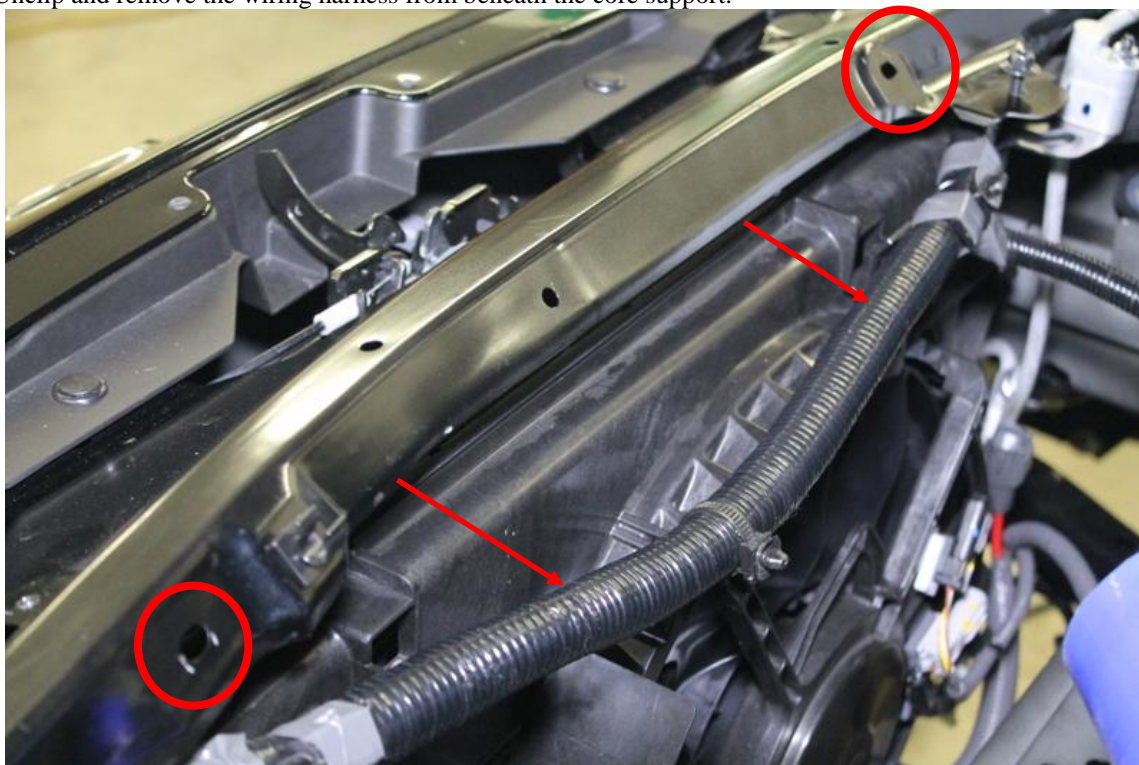
15. Using a 12mm socket remove the air box support bracket.



16. Disconnect the fan controller and the two clips securing the wire to the fan shroud.

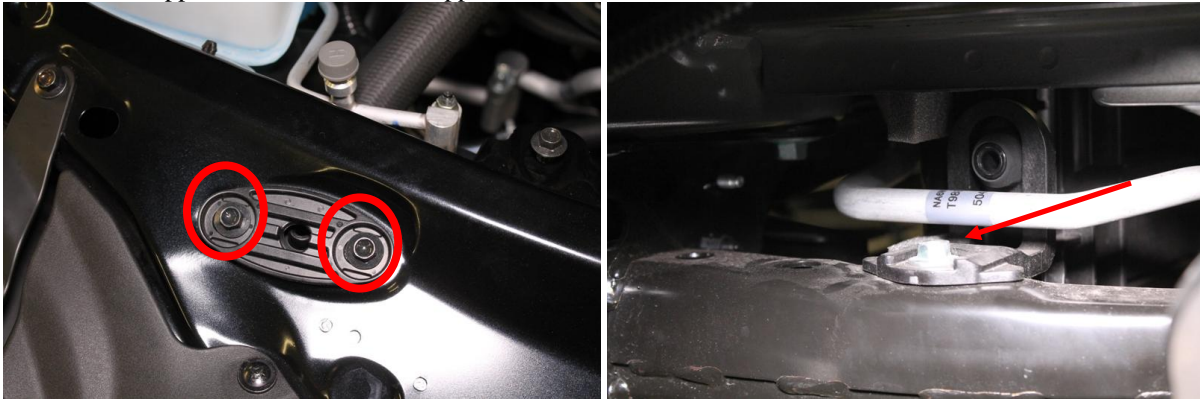


17. Unclip and remove the wiring harness from beneath the core support.

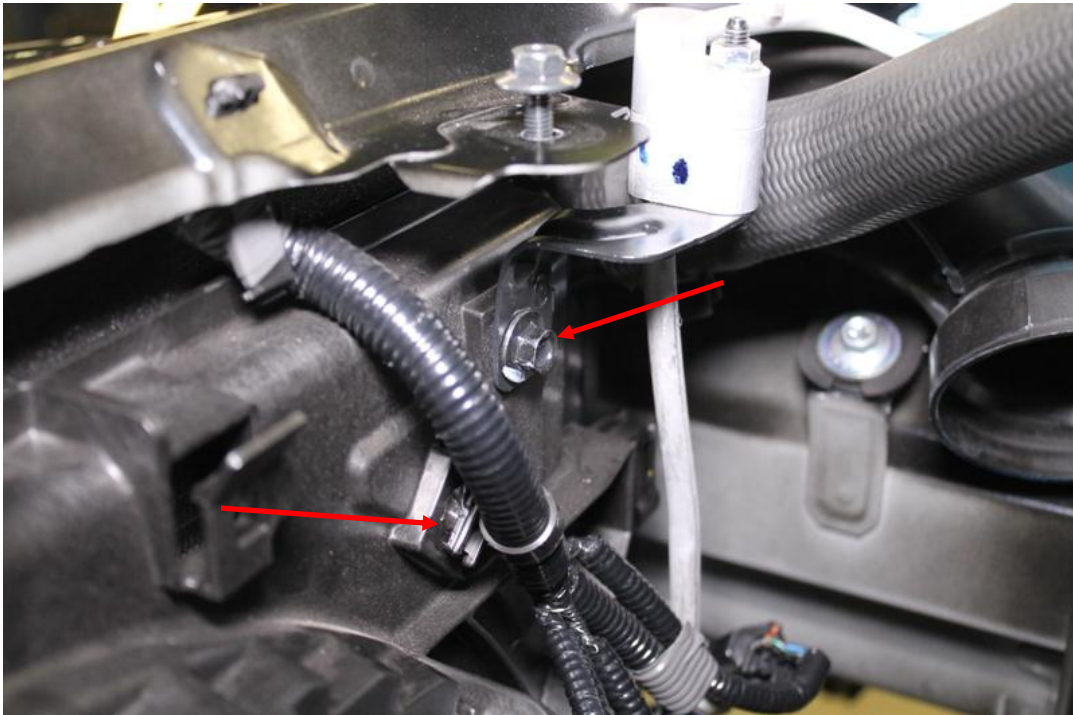




18. Remove the upper and lower radiator support brackets on both sides with a 10mm socket and 10mm wrench.

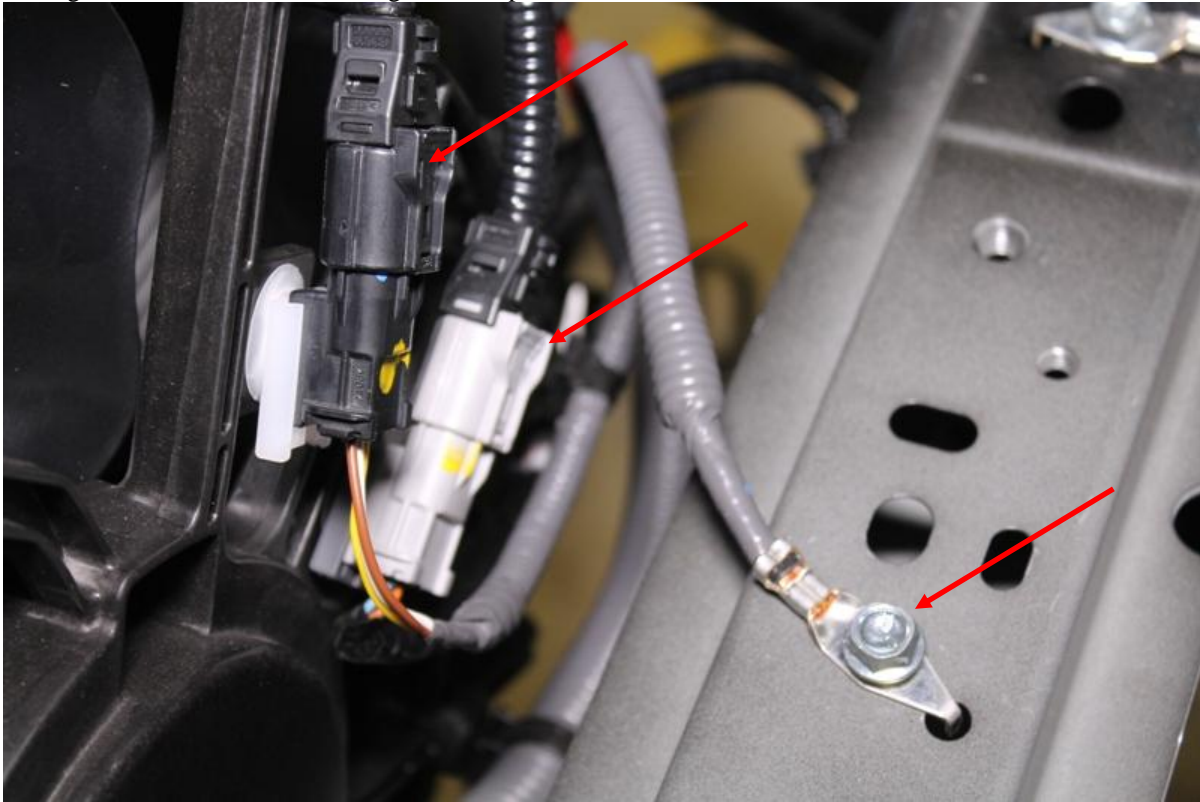


19. Remove the bolt securing the A/C line to the fan shroud with a 10mm socket and detach the wiring harness from the shroud.

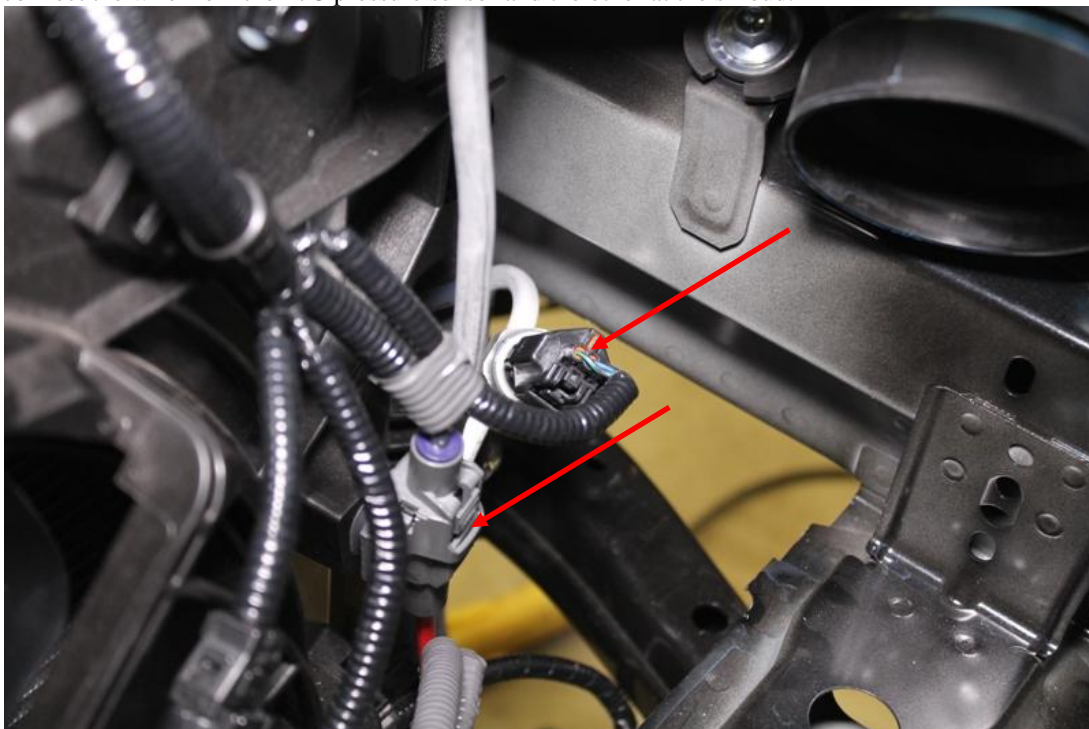




20. Using a 10mm socket, remove the ground strap from the frame and disconnect the two connectors on the fan shroud.



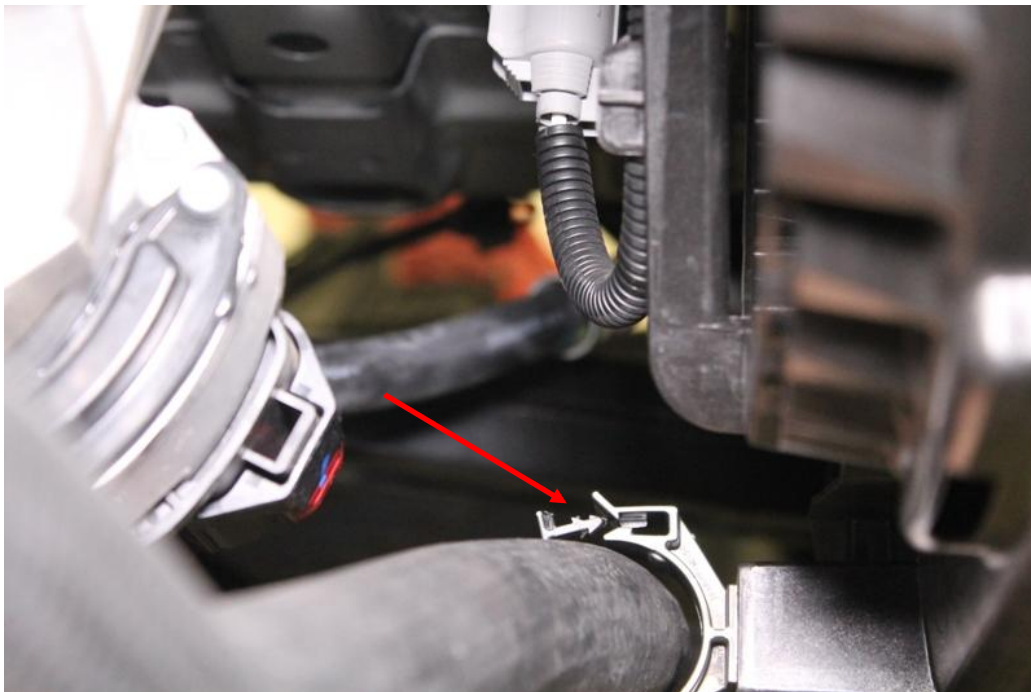
21. Disconnect the wire from the A/C pressure sensor and the other at the shroud.



22. Remove the connector from the shroud and ensure all wiring has been removed from the shroud.

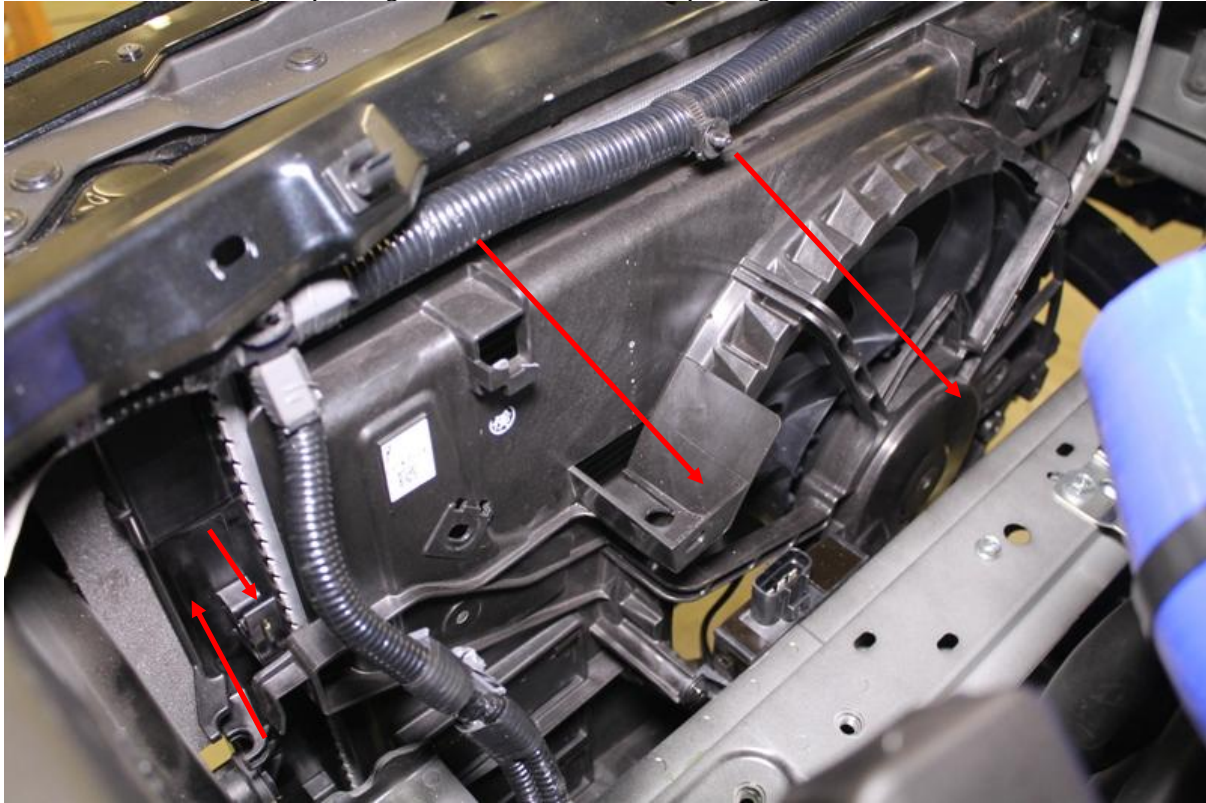


23. Disconnect the lower radiator hose from the fan shroud.





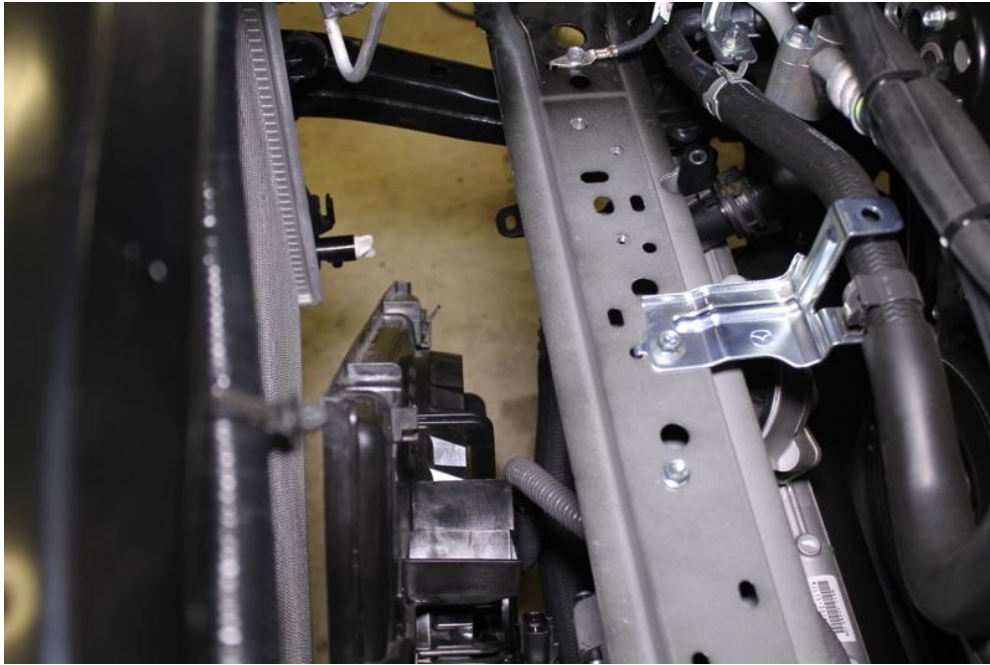
24. Carefully pull the fan shroud towards the rear of the car. Spread the tabs on either side of fan shroud, raise the shroud out of the tabs and begin separating it from the radiator on the passenger side first.



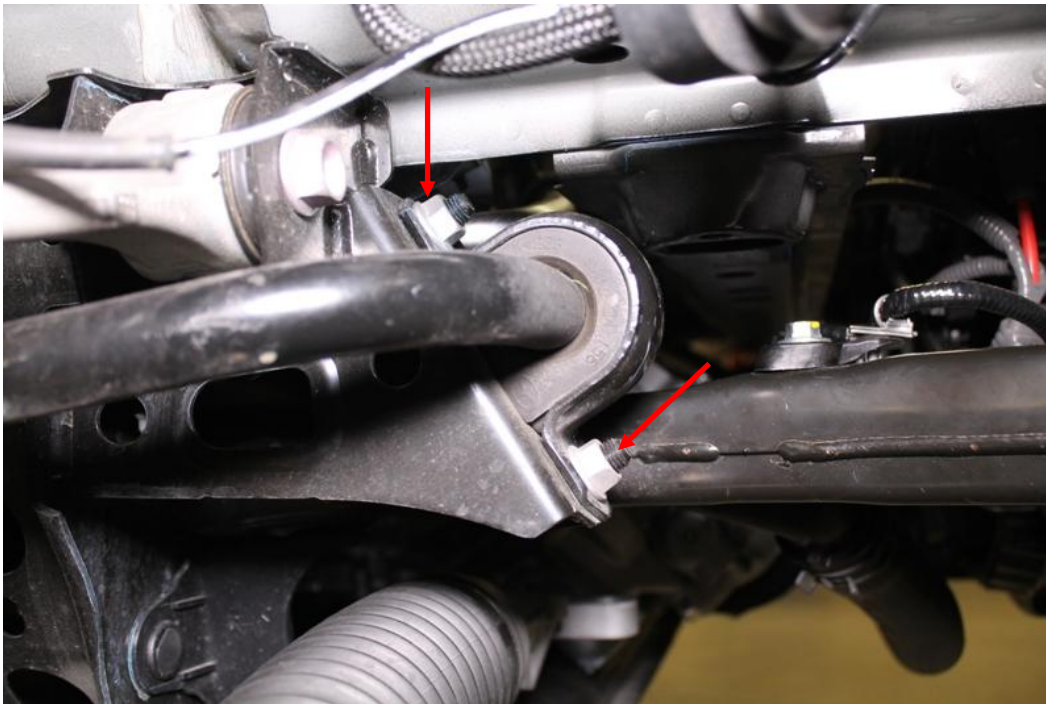
25. Remove the fan shroud by separating it from the radiator on the passenger side, tilting it down and removing it from the bottom of the vehicle. The next series of pictures illustrate the removal. This takes a bit of patience. Be careful not to damage the fins of the radiator.



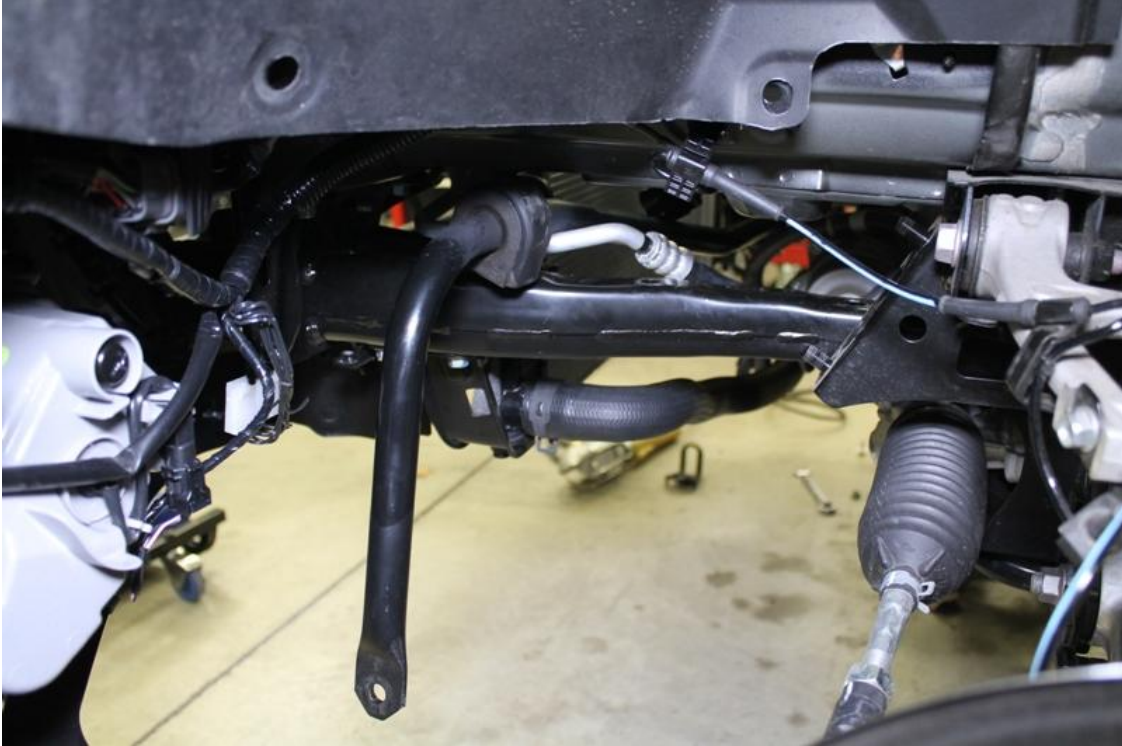




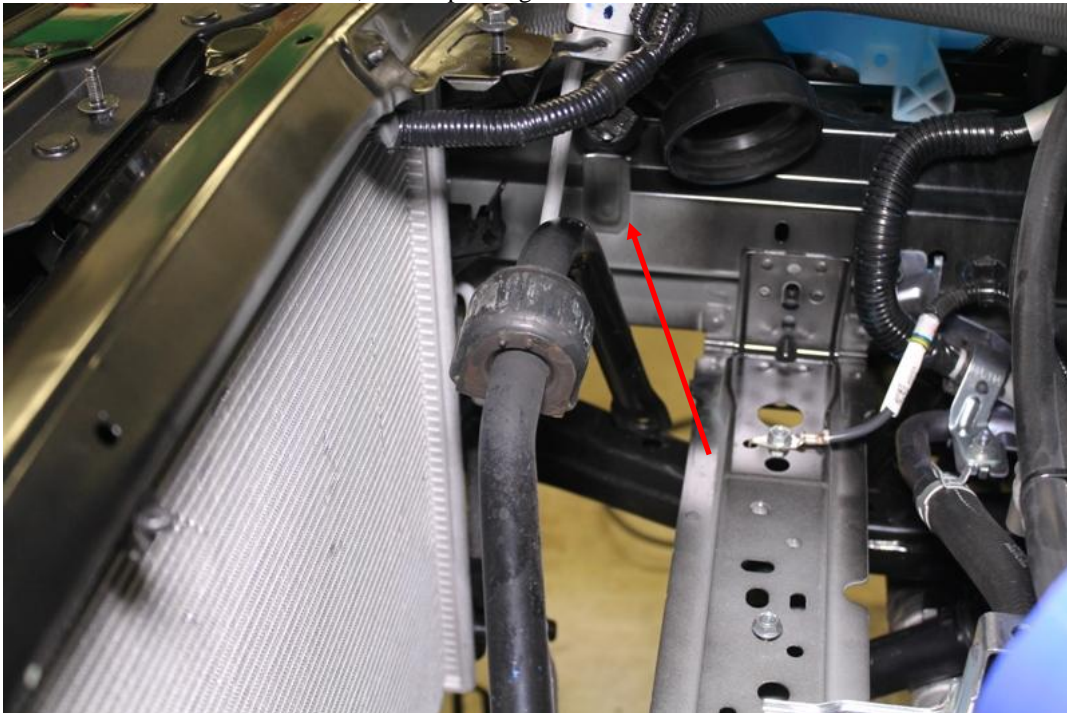
26. Using a 14mm sock and 14mm wrench, remove the 2 nuts from both brackets securing the sway bar to the sub-frame. Remove the brackets.



27. Slide the sway bar forward so each arm clears the tie rod ends and rotate the bar so the arms are pointing towards the ground.



28. Slide the bar towards the driver's side; lift the passenger side arm over the sub-frame.





29. Slide the bar towards the driver's side and squeeze the passenger side bushing out from between the body and the sub-frame as shown below.



30. Install your new JBR adjustable sway bar opposite of how the OEM was removed and get it into position.
31. Re-install and tighten the endlinks in the desired position to 36 ft/lbs. The hole towards the front of the car is the stiffest and the hole towards the rear is the softest setting.



Hole location specs:

Towards the Front of the vehicle	490 lb/in	197%
Middle	415 lb/in	151%
Towards the Rear of the vehicle	355 lb/in	115%

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17. Use one of the provided grease packets for each bushing and slip the bushing over the sway bar and the brackets over the bushings on to the studs and tighten the 14mm nuts to 30ft/lbs.



Use only synthetic grease when greasing the bushings. Grease should be applied at each oil change.

Carefully perform the steps in reverse in order to complete the installation of your front sway bar. Be cautious and take your time when reinstalling the fan shroud. Enjoy!

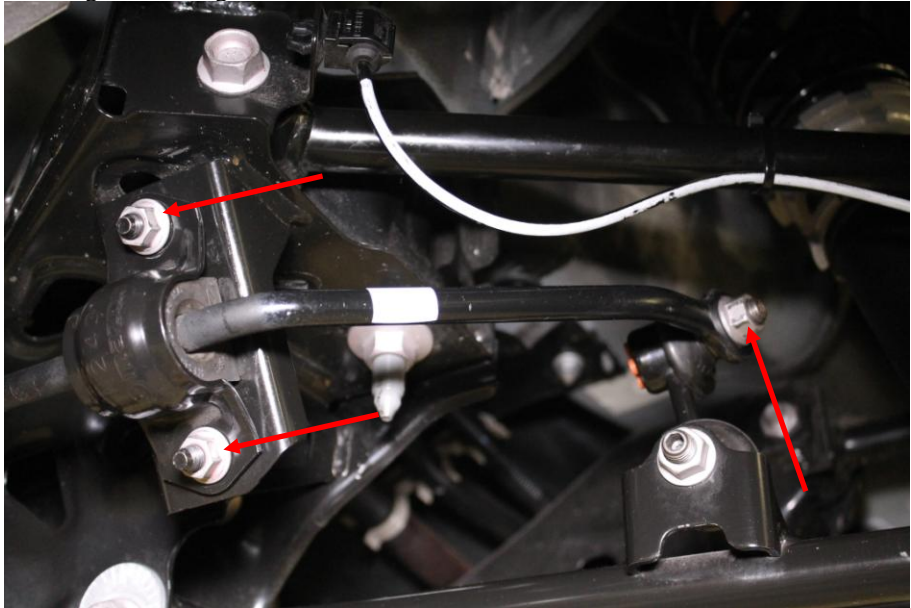
## Rear Sway bar Installation instructions

- ❖ Begin by parking on a smooth level surface with the emergency brake engaged. Jack up the rear of the vehicle and position jack stands underneath both sides. Put the car in neutral.

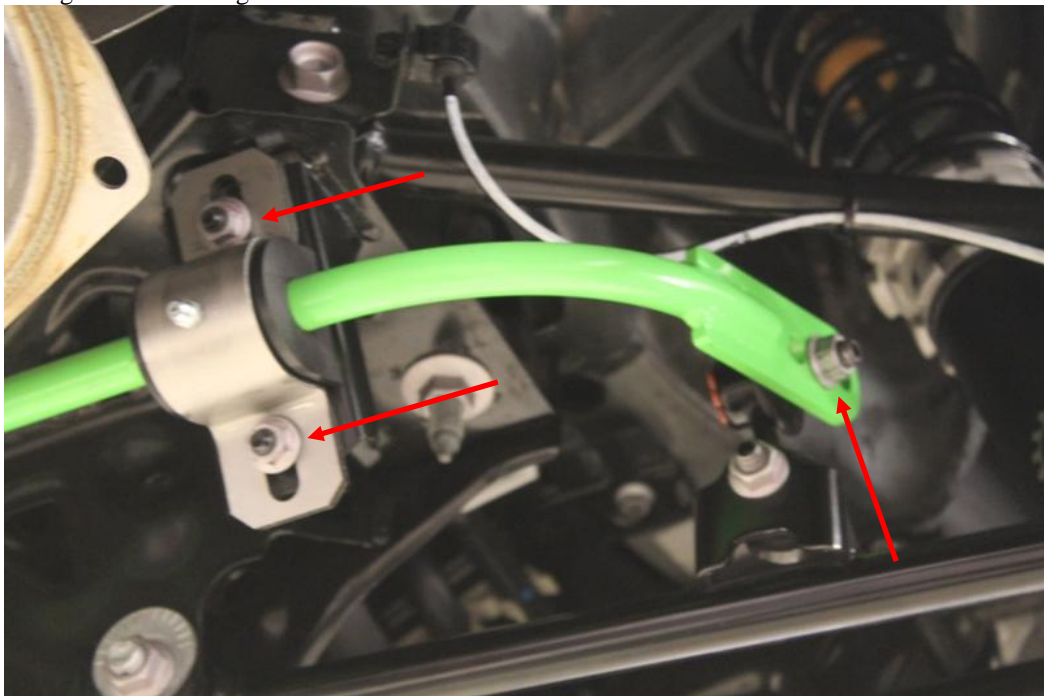


**Refer to you vehicles owner's manual for proper jack placement and supporting procedures. Never get under a vehicle without the proper support in place.**

- Using a 14mm socket, remove the two nuts securing the OEM sway bar to the endlinks. Using a 12mm socket remove the two nuts securing the bushing brackets to the sub-frame and remove the brackets.



- Slide the sway bar towards the driver's side and remove it from the vehicle
- Before installing your new JBR sway bar, apply one packet of grease to the inside of each bushing. Slide the bushing over the end of the sway bar using the thin section with the adjustment holes to spread the bushing over the bar. Slide the bushing in to position.
- Install the sway bar in the vehicle, secure the endlinks in the desired position, install the bushing brackets and reinstall the nuts. Tighten the bushing bracket nuts to 15 ft/lbs and the endlink nuts to 36 ft/lbs



Hole location specs

Towards Front of the vehicle	235 lb/in	446%
Middle	175 lb/in	225%
Towards the Rear of the vehicle	140 lb/in	207%

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**Congratulations!!**  
**You've just completed the installation of your new**  
**JBR front sway bar.**