1. Raise and support the front of the vehicle with either jack stands or a lift, and remove the front wheels.

2. Remove the front lower half of the fender liners on both the left and right sides. Remove the center under tray as well.



3. Remove the front M14 subframe nuts on the left and right sides with a 19mm socket (Only the front M14 nuts are to be removed, make sure not to remove the rear nuts, otherwise the subframe can shift and lose alignment position).



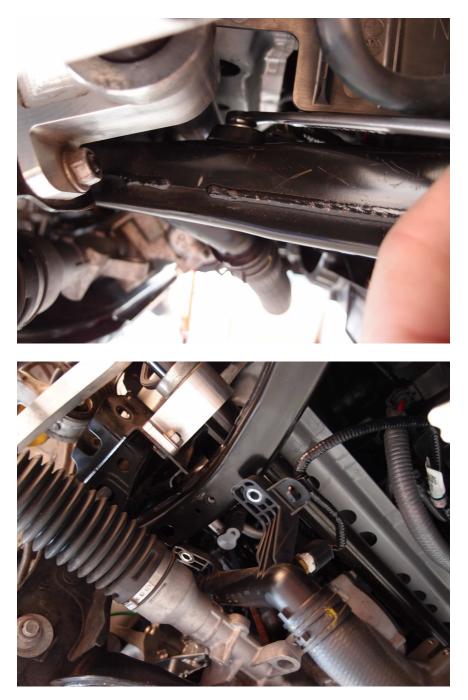
## 4. Nut removed:



5. Remove the ABS sensor bracket from the UCA as well as the 2x bolts holding the UCA to the subframe and pull the UCA out of the subframe. No other bolts need removed. We are just looking for access to the top hole inside the front of the subframe. The damper body will hold the UCA from dropping too far,



6. On the right side of the vehicle, remove the 2x M6 bolts holding the coolant pipe with a 10mm wrench and lower the plastic bracket out of the way.

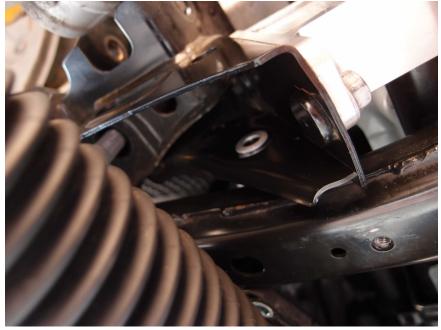


7. Put a few small drops of super glue onto one of the thick crush washers and glue 1x crush washer to the insides of the subframe as shown in the image below. Use the M10 bolt to guide and center the crush washer into place.

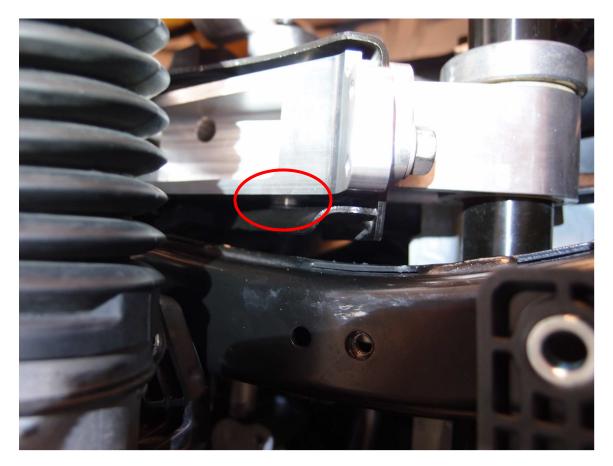


## 7. (continued..)





8. After the glue has dried and the washer is held in place, pop in the corresponding braces into the left and right sides of the subframe. Hold the braces in place and push them outward to contact the outside sheet metal. While doing that, look to see if there is any gap between the thick crush washer and the aluminum brace near the inside of the subframe. If there is any gap, glue in  $1 \times 0.5$ mm thick shim onto the crush washer. Retest fitment. Keep installing shims as required to minimize any gaps. If getting to a point where an added shim does not allow brace fitment, then too many shims have been installed. Because the subframe is a weldment, it is not perfect. Each subframe may require different amounts of shims. All subframes will require the  $1 \times$  crush washer that was installed in section 7. In general, either  $0 \times 1 \times 0.5$ mm shims will be required along with the  $1 \times$  crush washer.



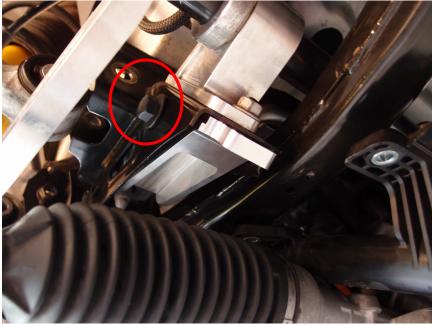
9. Install the remaining crush washers over the M10 x 25mm socket head bolts and install the bolts from the back side and thread into the braces. Screw in by hand almost to fully tight, but then crack loose to allow the brace to still flop around a little.



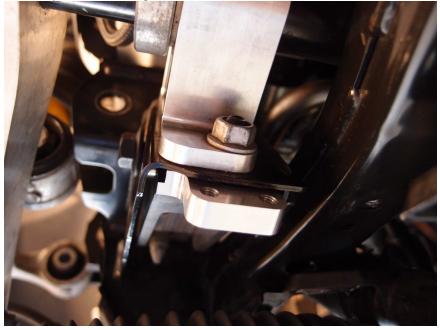
10. Thread the top M12 x 25mm long bolt by hand into the top of the braces. Screw in almost fully tight, but then leave loose, just like the M10 bolt.



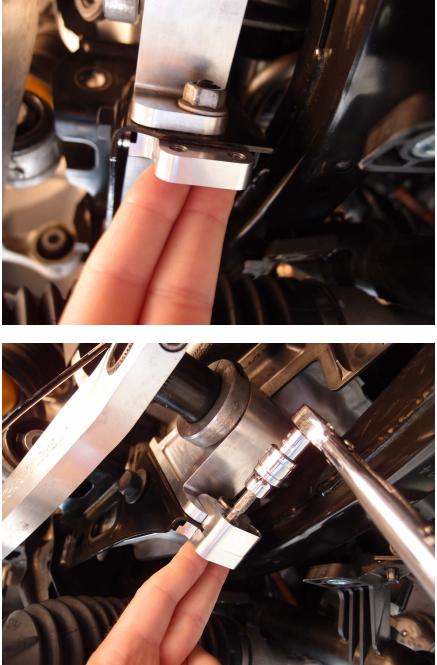
11. Thread in the side M12 x 20mm long bolts into the sides of the braces, near fully threaded, but still left loose.



12. With the bolts loose, there may be a gap between the brace and the top sheet metal of the sway bar mounting surface as shown below.



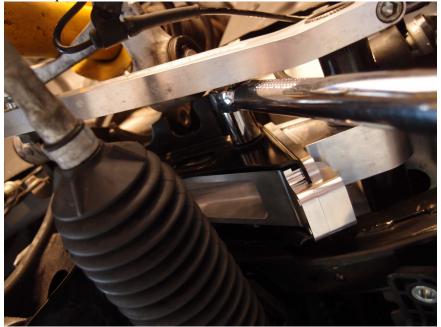
13. Push up on the bottom of the braces to close the gaps. While doing so, install the brace clamps with the M6 x 20mm socket head cap screws and tighten to EXACTLY 84in-lbs (7ft-lbs) of torque with a 5mm hex socket.



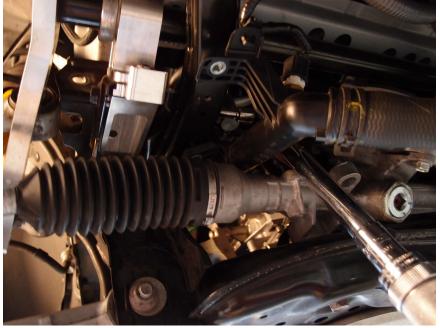
## 14. Torque the top M12 bolt to 85ft-lbs.



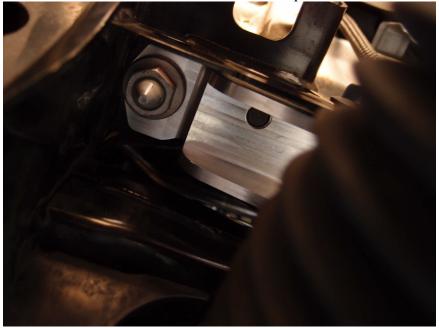
15. Torque the outside M12 bolt to 62ft-lbs.



16. Torque the inside M10 bolt with an 8mm hex socket to 48ft-lbs.



17. Re-install the M14 subframe nuts and torque to 100ft-lbs.



18. Brace installation is complete. Re-install the UCAs (45ft-lbs on the OE UCA bolts), ABS bracket, coolant pipe bracket, under tray, fender liners and wheels.

