DINAN

ADJUSTABLE ANTI-ROLL BAR SET
INSTALLATION INSTRUCTIONS

PART NUMBER D120-0635

DESCRIPTION: Front 25mm, Rear 19mm adjustable

APPLICATION: 2022-25 G42 230i xDrive
2023-25 G42 M240i xDrive
2019-25 G20 330i xDrive
2020-25 G20 M340i xDrive
2021-25 G22 430i xDrive
2021-25 G23 430i Convertible xDrive
2022-25 G26 430i Gran Coupe xDrive
2021-25 G22 M440i xDrive
2021-25 G23 M440i Convertible xDrive
2022-25 G26 M440i Gran Coupe xDrive

PARTS LIST

Qty	Part #	Description
1	D122-0622	Front Swaybar; 25mm
2	D132-0029	Front Swaybar Bushing; 25mm
1	D122-0630	Rear Swaybar; 19mm adjustable
2	D132-0028	Rear Swaybar Bushing; 19mm
2	D131-0001	Grease Packet

**** IMPORTANT ****

This D120-0635 swaybar set is for xDrive vehicles only. This swaybar set does not fit 2-wheel-drive vehicles!

Congratulations on being selective enough to use a Dinan anti-roll bar kit. We have spent many hours developing this kit to assure that you will receive maximum performance and durability with minimum difficulty in installation. Please take the time to read these instructions and contact us if you have any difficulties during the installation.

NOTES:

a) The steps in this instruction set are intended as an overview of the factory procedure. A few shortcuts have been provided to expedite the procedure.

b) A thorough understanding of the factory procedure & torque specs to remove and replace the front sway bar is required. **Do not attempt this installation without the factory procedure available to you.**

c) We highly recommend that you first read and fully understand these instructions before beginning the installation.

d) Some mechanical skill is required to install this kit. If you feel that you do not have the requisite skill or tools, please arrange for a qualified repair facility to perform the installation.

e) The factory procedure recommends the replacement of many fasteners. Please pay particular attention to:
   1. Fasteners with an angle-torque requirement (these connections are stretch-to-yield, and correct assembly is critical to proper performance).
   2. Fasteners which have pre-applied thread lock compound.

   These fasteners include, but are not limited to, the following:

Part #	Description	Qty req'd
31 10 6 867 397	Front control arm nuts	2
33 32 6 768 884	Anti-roll bar end link nuts	4
07 11 9 907 484	Front anti-roll bar mounting bolts	4
07 14 6 885 922	Front subframe bolts	4
07 14 6 886 209	Front subframe bolts	2
32 30 6 778 609	Steering shaft bolt	1
51 75 5 A38 3B7	Blind rivet, plastic	6
07 14 9 304 766	Center reinforcement bolts	10
33 30 6 793 892	Rear subframe bolts	4
07 11 9 907 333	Rear anti-roll bar mounting bolts	4

f) Note the orientation of the stock anti-roll bars. The Dinan bars will be oriented the same way.

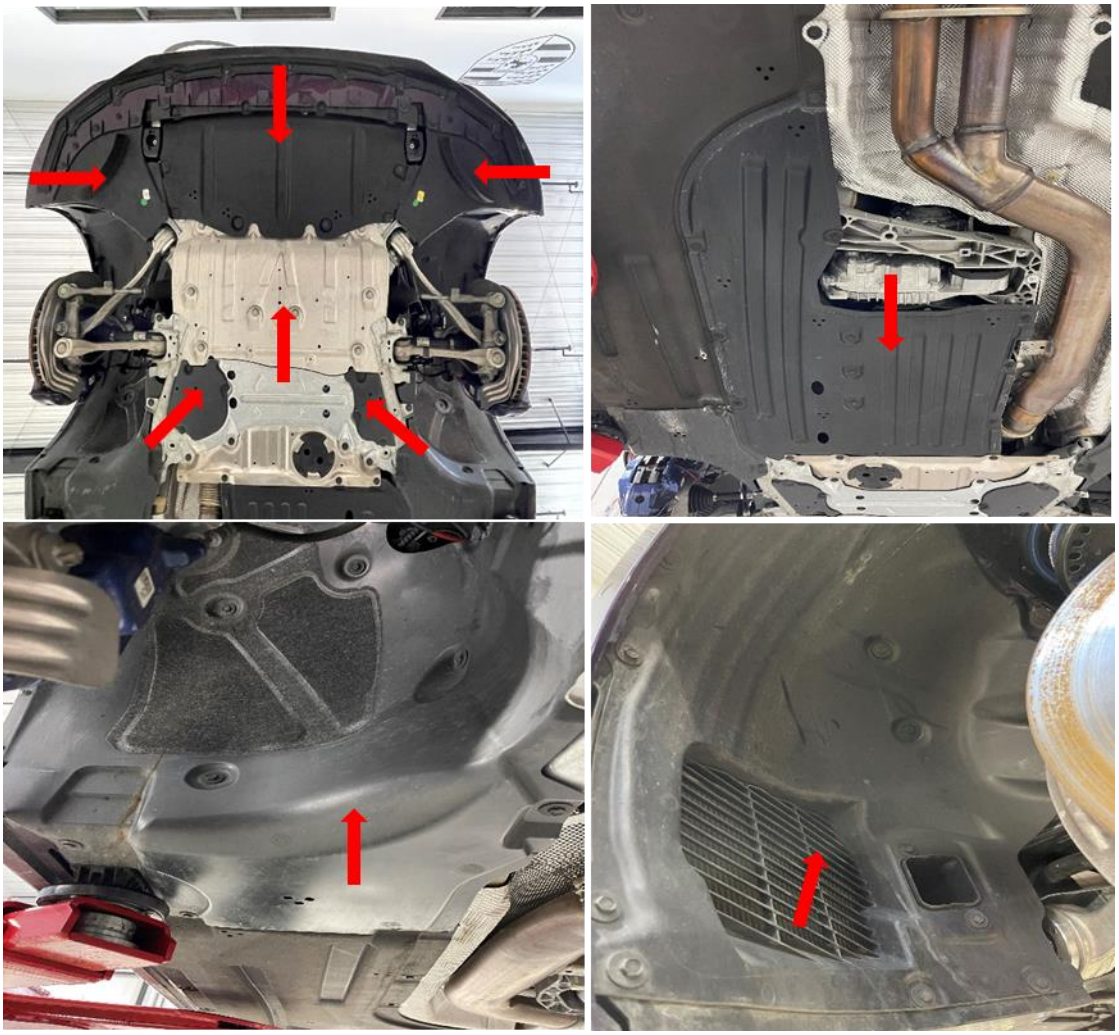
g) Please note that an alignment will be required after installation.

1. Disconnect the ground from the vehicle battery.

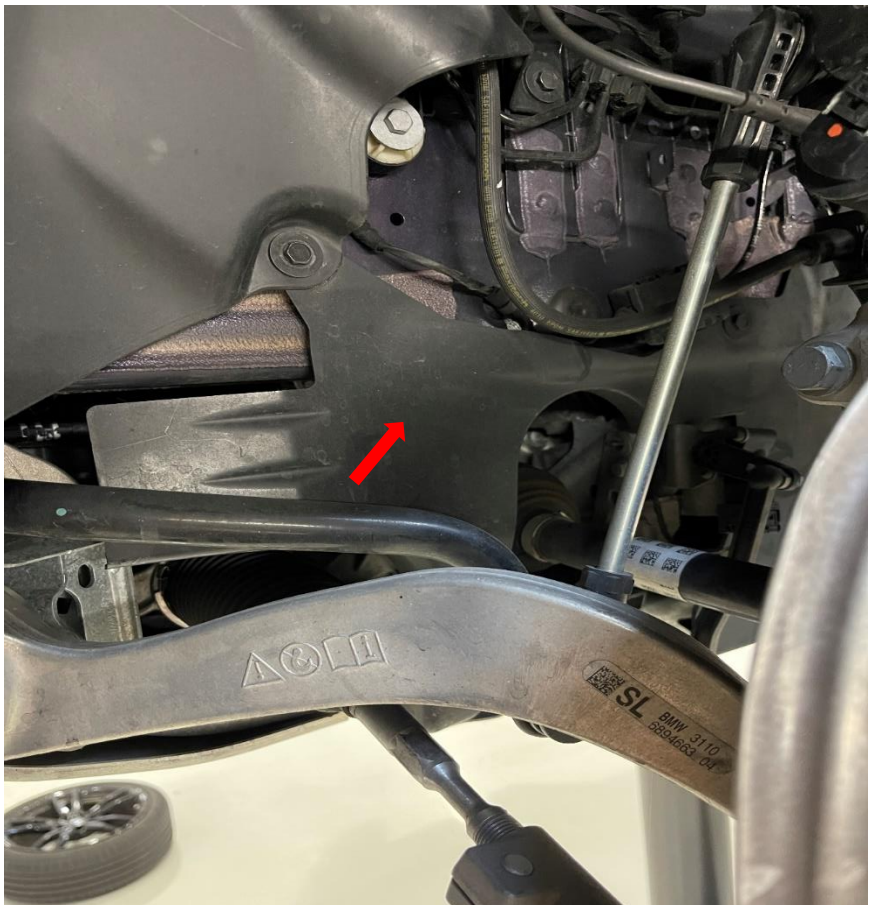
2. Jack up the front of the vehicle and place the jack stands securely under the vehicle.

3. Remove both front wheels and set them aside.

4. Remove the underside covers indicated in the photos below.



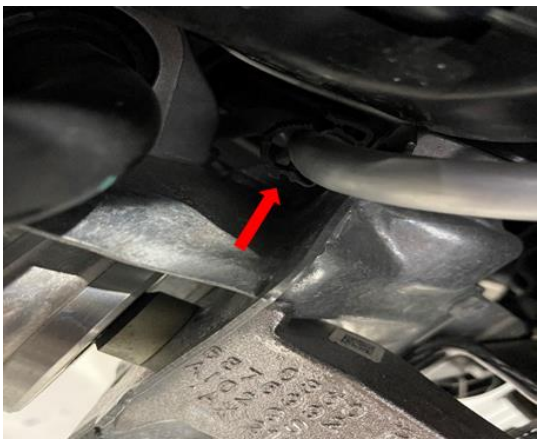
5. Remove the inner side covers from both sides.



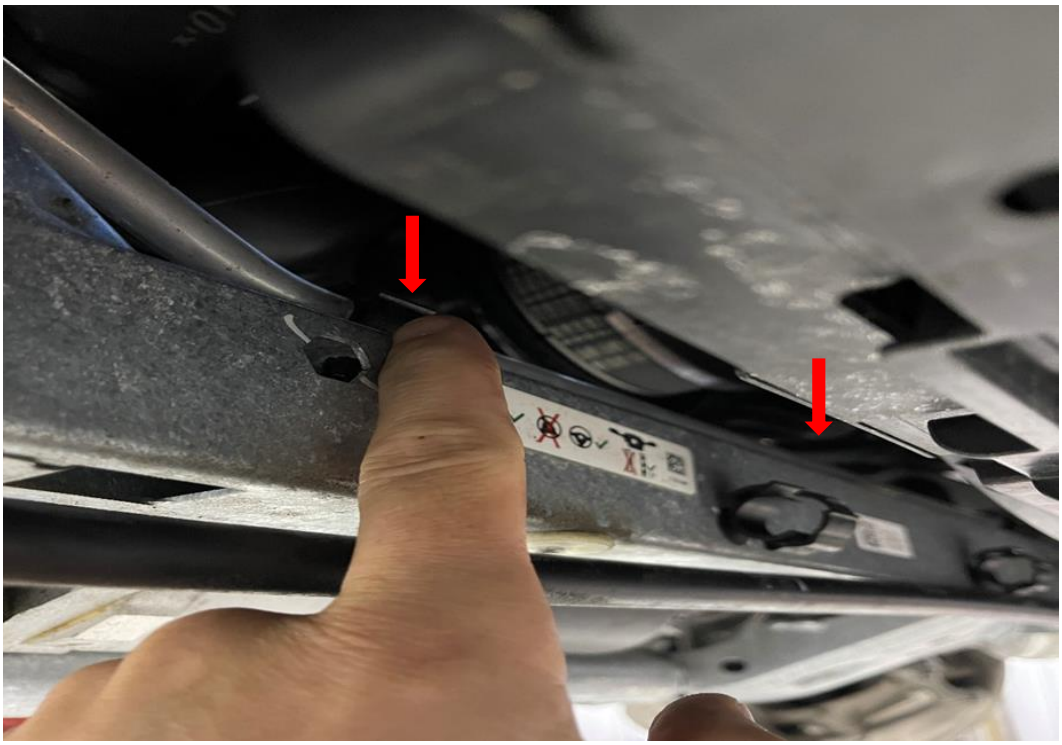
6. Remove both brake ducts from the vehicle.

7. Install the under-hood engine support per BMW procedure.

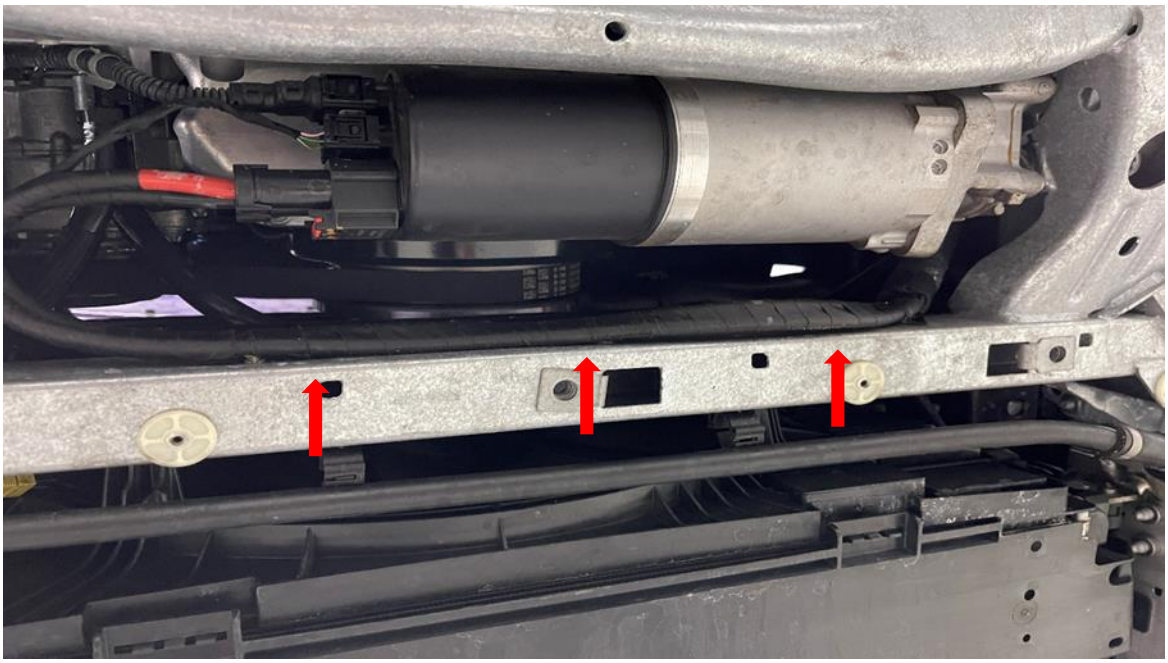
8. Remove the (4x) clamps and the (3x) clips for the coolant pipe so it is free to move.



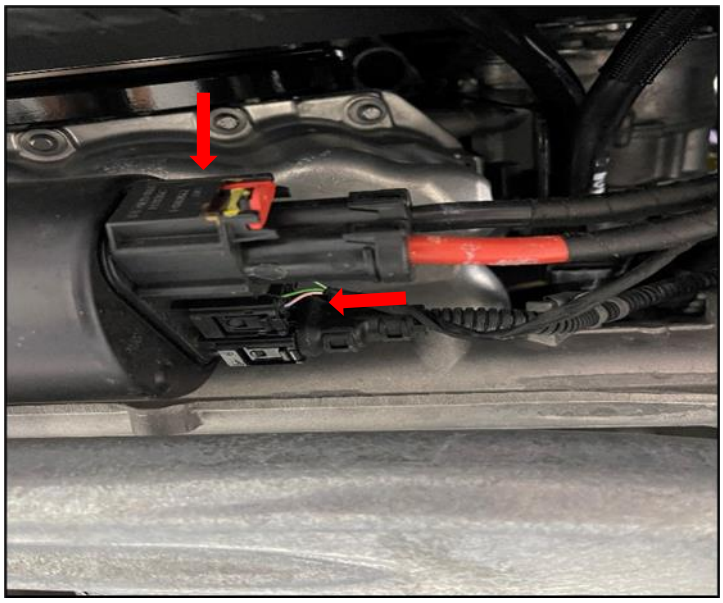
9. Remove the coolant tube from the (2x) clips that run along the top of the subframe.



10. Remove the clips that secure the steering rack wiring harness to the subframe.



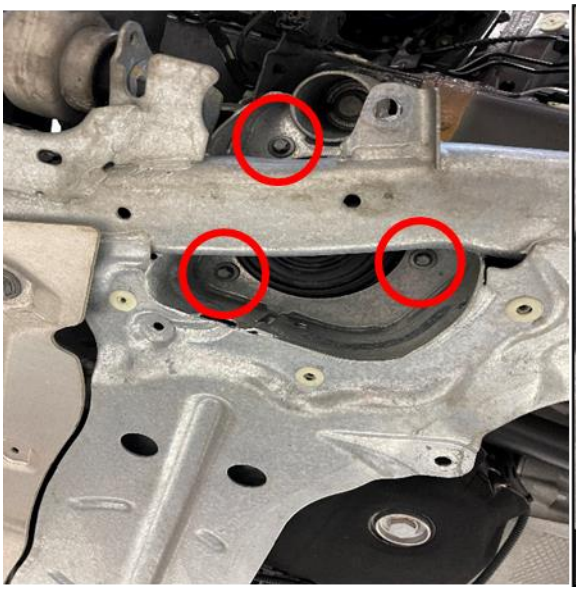
11. Disconnect the two plugs of the steering rack and move the harness aside.

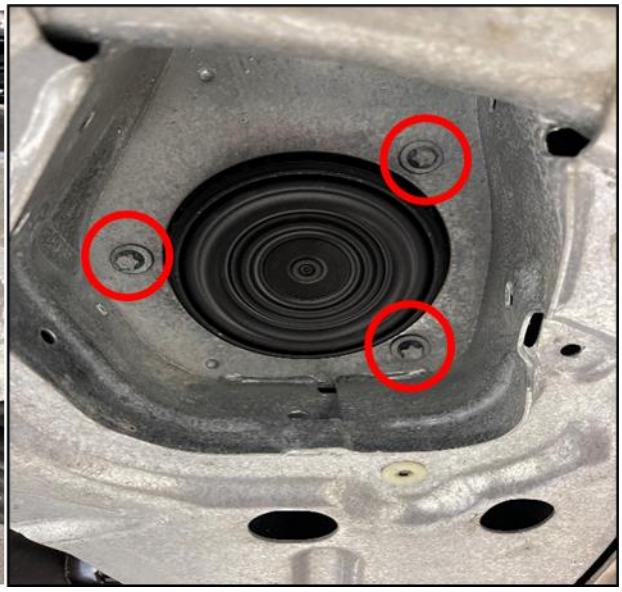


12. IMPORTANT -- Lock down the steering wheel so it cannot rotate. **This is vital! If the steering wheel spins around, it will cause damage!**

13. Remove the bolt for the steering shaft on the rack side.
    - Tightening torque = 28 Nm (21 ft-lbs)

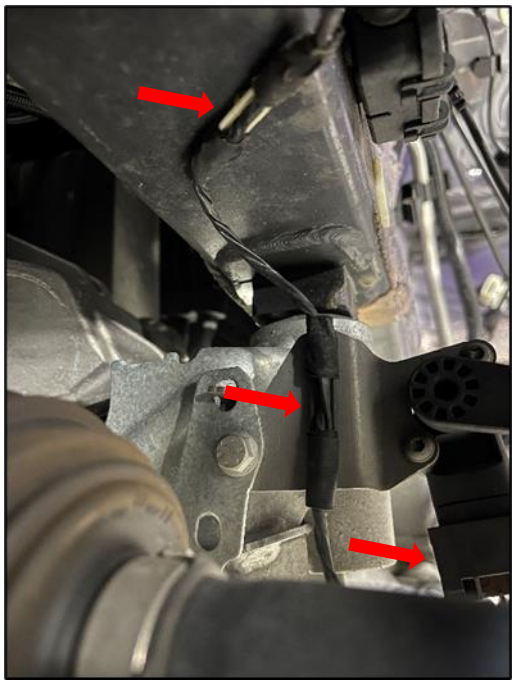
14. Remove the (3x) bolts from the bottoms of the motor mounts on both sides.
    - Tightening torque = 19 Nm (14 ft-lbs)





15. Disconnect end links from the sway bar. The end links will remain attached to the strut.
    - Tightening torque = 56 Nm (41 ft-lbs)

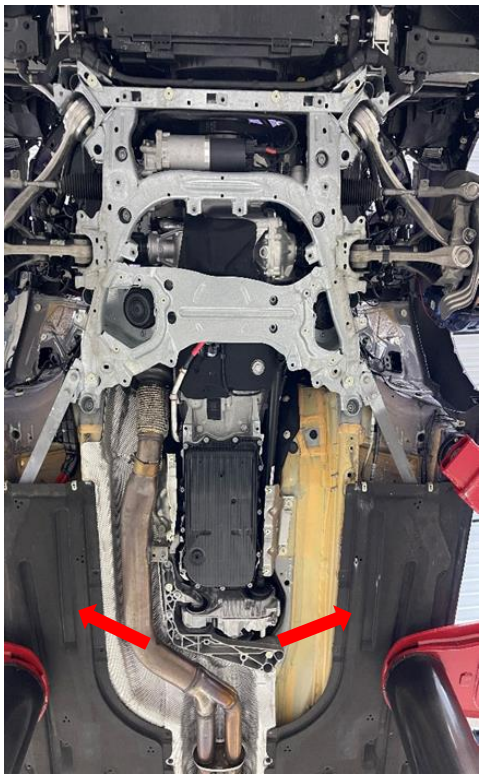
16. Remove the wire harness holders from the chassis and unplug the sensor.



17. Remove the (2x) bolts on both sides of the subframe leading to the front bumper.
    - Tightening torque = 19 Nm (14 ft-lbs)

18. Remove the bolt and counterweight for the torsion arm. Take care to avoid damaging the coolant hose.
    - Tightening torque = 100 Nm (74 ft-lbs), +90°

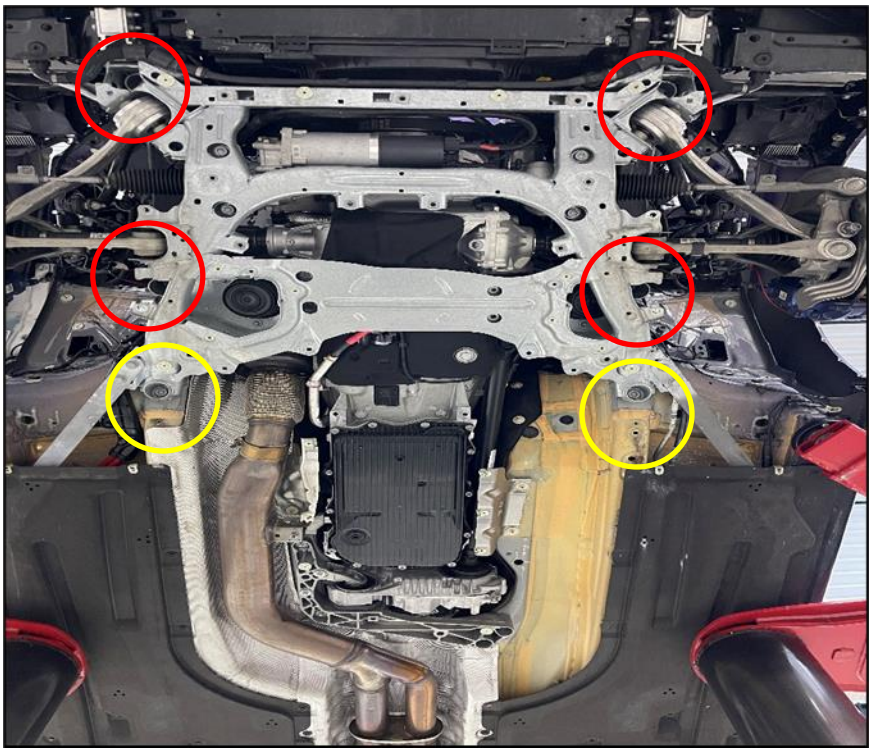
19. Remove the (2x) side covers from the middle of the car. This will allow access to the cross-brace bolts.



20. Remove the bolts for the cross braces on both sides of the car. Please pay attention to how they are removed. One side of the braces has a built-in spacer, which goes towards the body.

21. Use a pole or floor jack to support the front of the subframe.

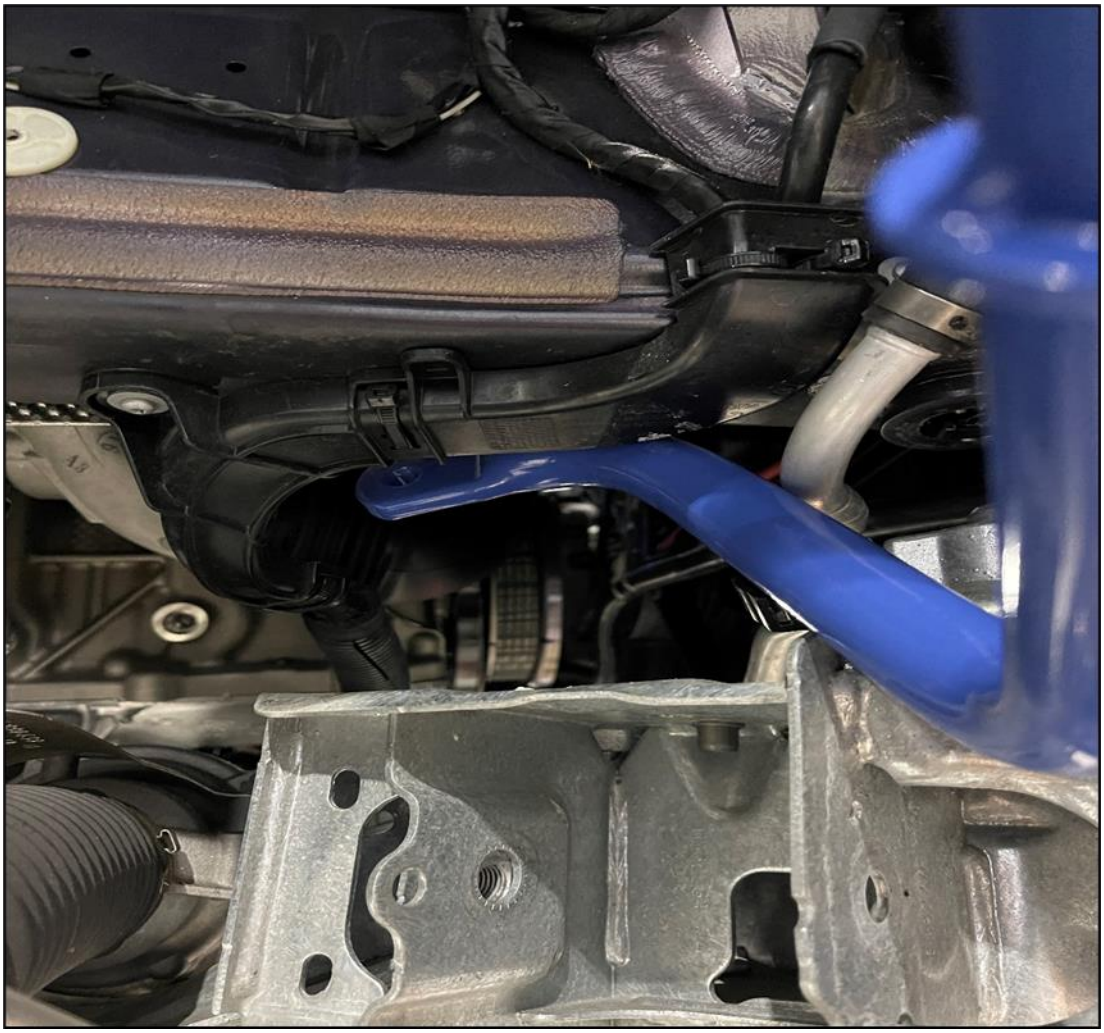
22. Remove the (4x) bolts for the front of the subframe (see red circles). Then <u>loosen</u> (do not remove) the (2x) bolts at the rear of the subframe (see yellow circles).
    - Tightening torques:
        - M12 bolts = 108 Nm (80 ft-lbs)
        - M14 bolts = 175 Nm (129 ft-lbs)



23. Lower the subframe down about 4" to 6". You may need to pry the subframe slightly to accomplish this.

24. Remove the (4x) nuts securing the sway bar brackets.

25. Remove the front sway bar from the vehicle:
    a) On the left side strut, separate the brake line and any wires from their holders on the strut tube, and leave them loose so they can be moved aside later as needed. It is not required to disconnect any of these lines.
    b) While moving the bar towards the right, rotate the bar until the large bend is in the position shown. Lower the subframe further if necessary.



c) Move the bar further to the right and rotate as needed to fully remove the bar from the side.

26. With the bar out of the vehicle, remove the bushing brackets from the stock bar and set aside. These brackets will be reused on the Dinan bar.

27. Install the Dinan bar into the vehicle in a manner similar to removal of the stock bar.

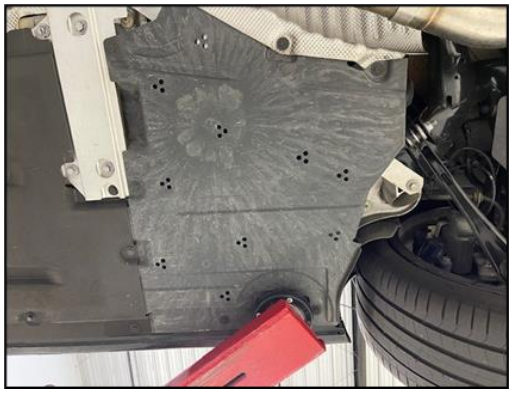
28. Lubricate the Dinan bushings with the supplied urethane grease (or an equivalent high-pressure, waterproof, grease), and install onto the Dinan bar, next to the locating rings.

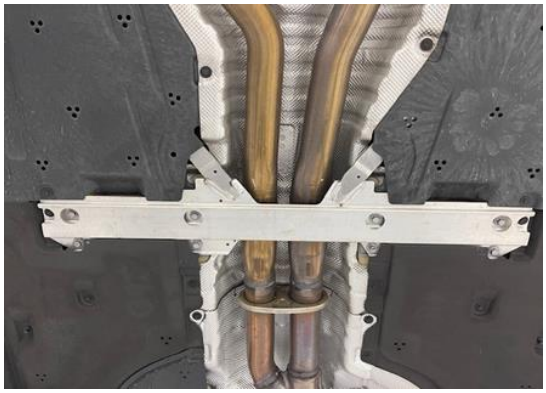
29. Reinstall the bushing brackets and mount to the vehicle.
    - Tightening torque = 21 Nm (15 ft-lbs)

30. Reverse the steps to reassemble the car.

1. Jack up the rear of the vehicle and place the jack stands securely under the vehicle. Remove both rear wheels.

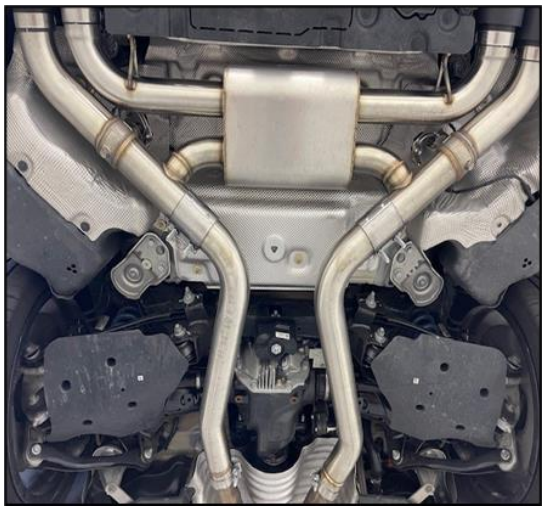
2. Remove the (2x) fuel tank covers. Remove the (10x) 13mm-head and (2x) 10mm-head bolts from the center reinforcement plate as shown. Remove the plate and set aside.
   - Tightening torques:
     - M8 bolts = 25 Nm (18 ft-lbs), +90°
     - Cover bolts = 3 Nm (2.2 ft-lbs)

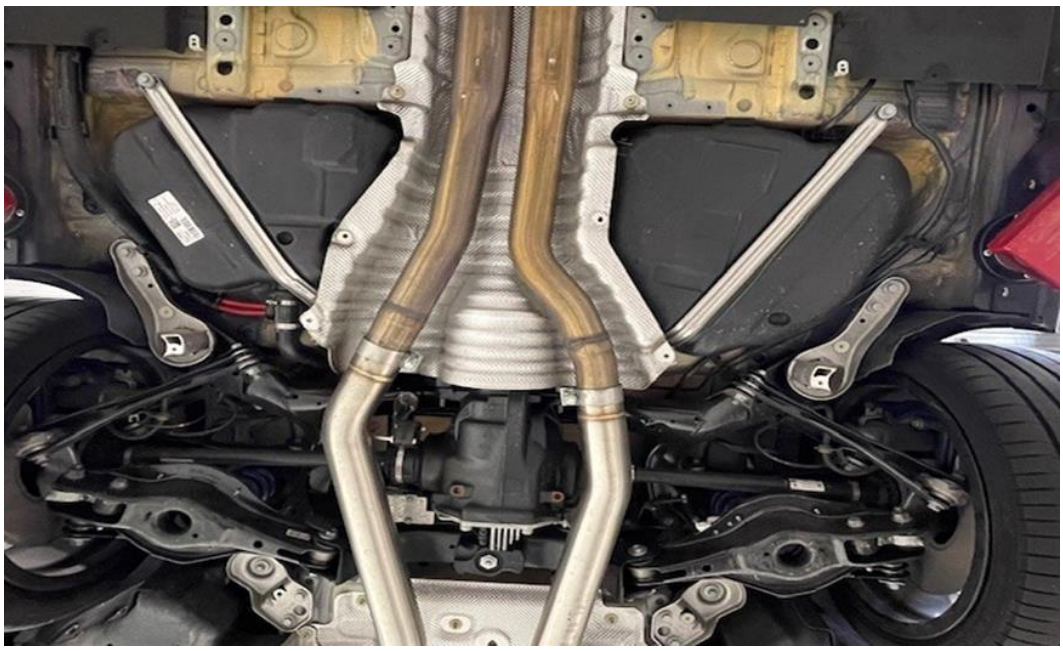




3. Remove the (4x) nuts from both lower control arm covers. Remove covers and set aside.
   - Tightening torque = 6 Nm (4.4 ft-lbs)

4. Remove the exhaust system:
   a) Using a pole jack or floor jack, support the muffler.
   b) Remove the (2x) nuts for the exhaust hangers.
   c) Remove the nut from the hanger at the subframe.
   d) If applicable, disconnect the exhaust valve.
   e) Loosen the front clamp at the catalyst outlet and remove the nut from the front hanger.
   f) Remove the exhaust in its entirety.
      - Tightening torques:
        - M8 nuts = 19 Nm (14 ft-lbs)
        - Clamp hardware:
          - 8mm = 26 Nm (19 ft-lbs)
          - 10mm = 55 Nm (41 ft-lbs)
          - V-band = 25 Nm (18 ft-lbs)



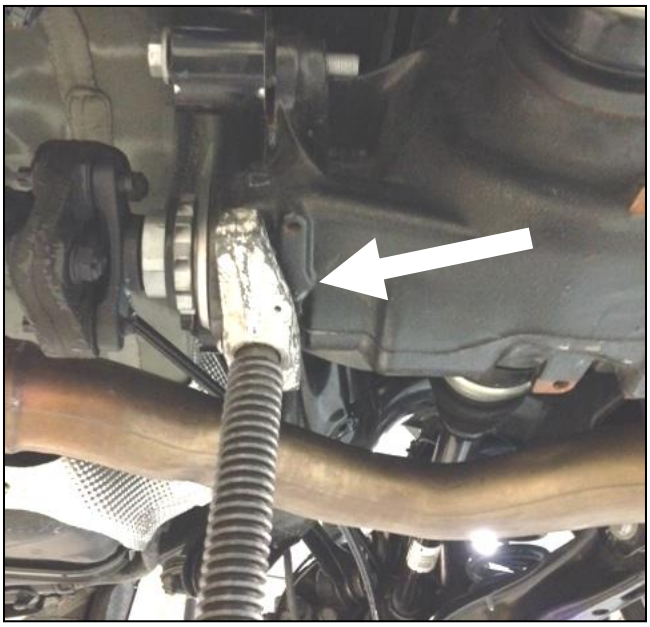


5. Remove the center heat shield:
   - **Take care to avoid bending the shield!**
   - The rear shield is under the front shield and can be removed while the other shields remain on the vehicle.
   - Remove the (2x) nuts and the (4x) 10mm-head bolts for the center heat shield as shown.
     - Tightening torque = 3 Nm (2.2 ft-lbs)

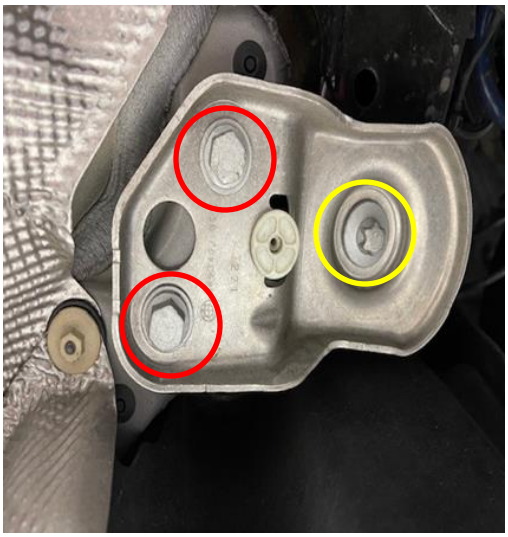
6. Remove the (2x) bolts for the center support bearing.
   - Tightening torque = 18 Nm (13 ft-lbs)

7. Disconnect both sway bar end links from the bar and move them aside.
   - Tightening torque = 56 Nm (41 ft-lbs)

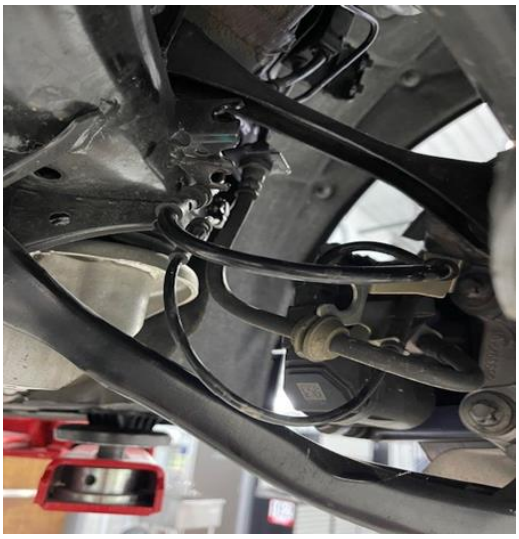
8. Use a pole or floor jack to support the front of the differential housing as shown.



9. Remove the bolts and brackets for the subframe:
   - Remove the bolts and brackets at the front mounts as shown.
   - On the rear mounts, the (2x) bracket bolts are removed (see red circles), but the subframe mounting bolt is only loosened (see yellow circles):
   - Tightening torques:
     - M12 bolts = 108 Nm (80 ft-lbs)
     - M10 bolts = 47 Nm (35 ft-lbs), +45°

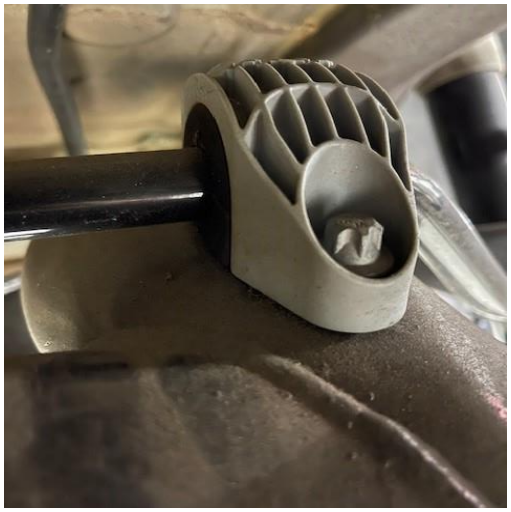


10. Remove the brake hose and the wires from the holders. This allows additional slack and avoids damage in subsequent steps.



11. Lower the pole/floor jack about 3", to allow the subframe to separate from the vehicle.

12. Remove the 4 bolts for the sway bar mounts.
    - Tightening torque = 28 Nm (21 ft-lbs)



13. The sway bar is now loose. Move the sway bar above the upper control arms on both sides as shown.

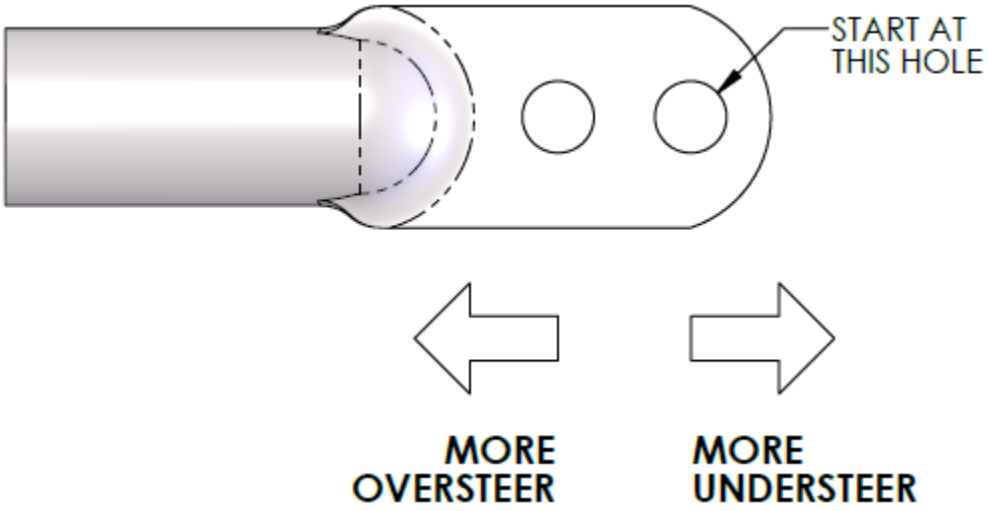
14. Snake the bar out of the car as shown.

15. Carefully snake the Dinan bar into place.

16. Lubricate the Dinan bushings with the supplied urethane grease (or an equivalent high-pressure, waterproof, grease), and install onto the Dinan bar, next to the locating rings.

17. Reinstall the bushing brackets and mount to the vehicle.

18. The rear bar is adjustable. See the figure below for description of adjustments and determine which hole you will be using. Dinan recommends starting at the indicated setting, and then adjusting as needed after evaluating the handling.



19. Reverse the steps to assemble the car.

20. Please note that an alignment will be required after installation.

Happy Motoring!