






Small Normal Large

04.00.AD Check and Adjust the Four Wheel Alignment (Check and Adjust)



-  WSM Data
-  Included Procedures
-  Is Used In

1. These initial conditions are necessary to get the correct results:
 - * A full tank of fuel.
 - * All fluids at the correct level.
 - * A 68kg weight in the right side front seat.
 - * A 68kg weight in the left side front seat.
 - * A 14kg weight in the luggage compartment.


2. Use the applicable equipment to lift the vehicle and make it safe.
3. Refer to the manufacturer operating instructions for the geometry setup tool.

4.
 -  *Note: The maximum tolerances for the camber angles on the front wheels are -25 minutes to -35 minutes. The nominal camber angles on the front wheels is -30 minutes.*
 -  *Note: Make sure the difference between the camber angles on the front wheels is no more than 10 minutes.*



Make sure that the camber angles on the front wheels are in tolerance.

5.
 -  *Note: The maximum tolerances for the caster angles on the front wheels are 4.85 degrees to 5.30 degrees. The nominal caster angles on the front wheels is 5 degrees.*
 -  *Note: Make sure the difference between the castor angles on the front wheels is no more than 0.25 degrees.*


Make sure that the caster angles on the front wheels are in tolerance.

6.
 -  *Note: The maximum tolerances for the left side and right side toe angles on the front wheels are -1 minutes to -5 minutes. The nominal toe angles on the front wheels is -3 minutes.*


Make sure that the toe angles on the front wheels are in tolerance.

7.
 -  *Note: The maximum tolerances for the camber angles on the rear wheels are -25 minutes to -35 minutes. The nominal camber angles on the rear wheels is -30 minutes.*
 -  *Note: Make sure the difference between the camber angles on the rear wheels is no more than 10 minutes.*

Make sure that the camber angles on the rear wheels are in tolerance.

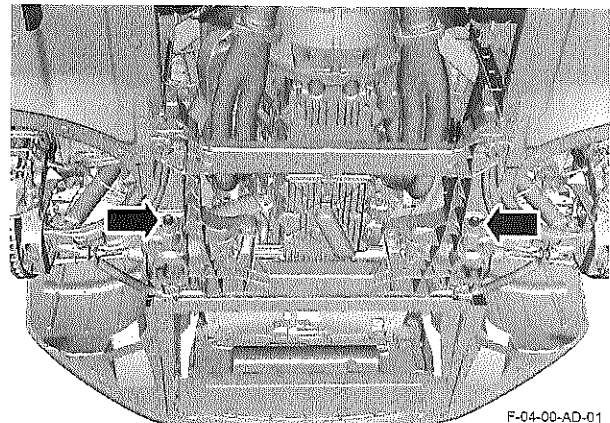
8.  *Note: The maximum tolerances for the left side and right side toe angles on the rear wheels are 6.75 minutes to 7.25 minutes. The nominal toe angles on the rear wheels is 7 minutes.*

Make sure that the toe angles on the rear wheels are in tolerance.



9.  *Note: The maximum tolerances for the thrust angles on the rear wheels are 2.5 minutes to -2.5 minutes. The nominal thrust angles on the rear wheels is 0 minutes.*

Make sure that the thrust angles on the rear wheels are in tolerance.

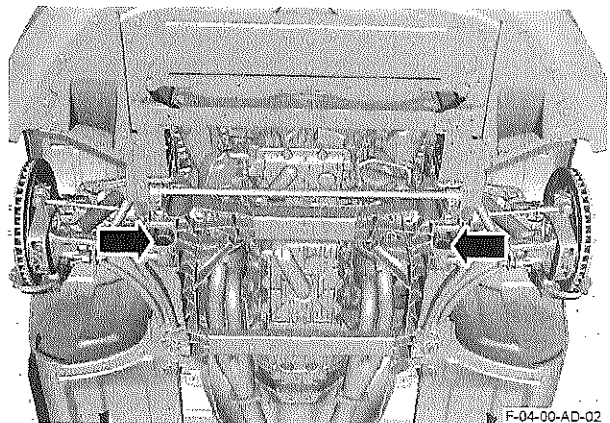
10. If any of the wheel alignments are incorrect then the wheel alignment must be adjusted. The adjustment is shown in the steps that follow.
11. Remove the front undertray.
12. Loosen the two nuts that attach the suspension bottom arms to the front subframe.




F-04-00-AD-01

13.  *Note: All adjustments to caster, camber and toe settings can have an effect on each other. After you have measured and adjusted each setting, minor adjustments to caster, camber and toe can be required to get the correct set up for the vehicle.*
-  *Note: The maximum tolerances for the camber angles on the front wheels are -25 minutes to -35 minutes. The nominal camber angles on the front wheels is -30 minutes.*

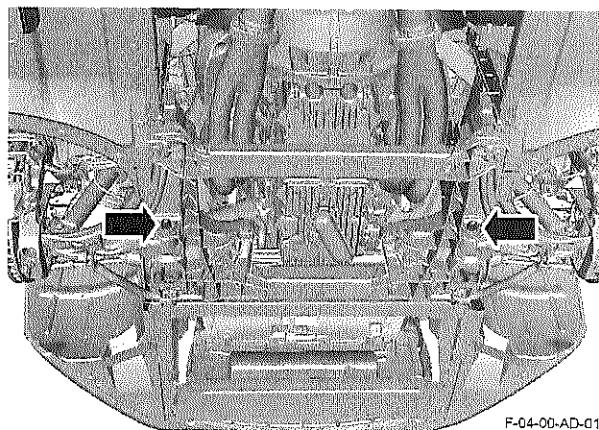
Turn the bolts until the camber angles for the front wheels are in tolerance.



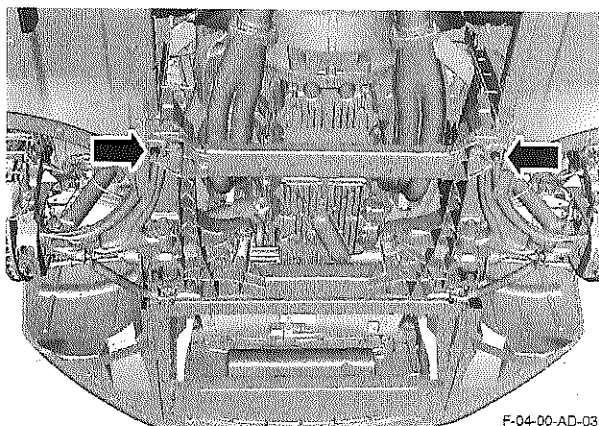
F-04-00-AD-02


14.  **Caution: Make sure that the bolt is held while the nut is tightened. Failure to obey this instruction will cause the wheel alignment to change.**


Loosely tighten the two nuts that attach the suspension bottom arms to the front subframe.



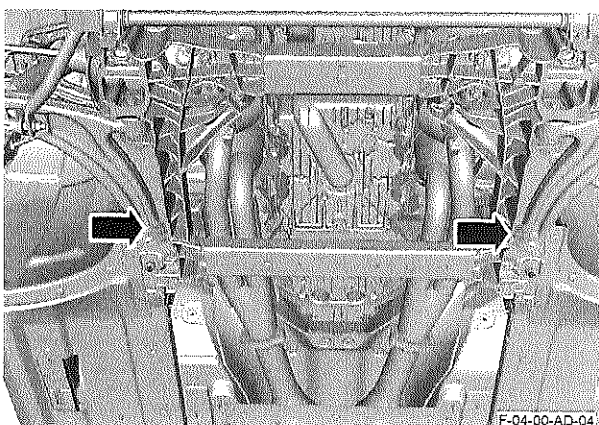
15. Loosen the two nuts that attach the suspension bottom arms to the front subframe.




16.  **Note: All adjustments to caster, camber and toe settings can have an effect on each other. After you have measured and adjusted each setting, minor adjustments to caster, camber and toe can be required to get the correct set up for the vehicle.**

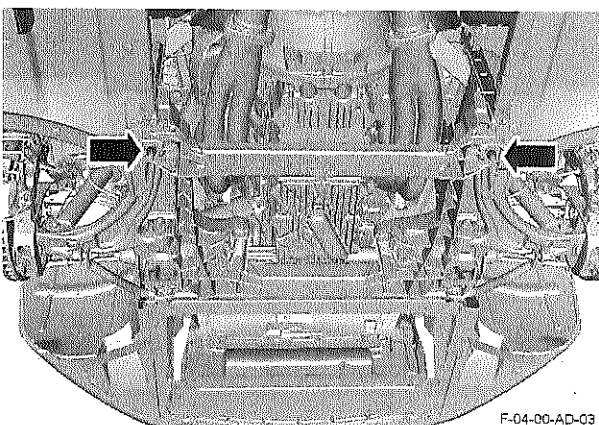
-  **Note: The maximum tolerances for the caster angles on the front wheels are 4.85 degrees to 5.30 degrees. The nominal caster angles on the front wheels is 5 degrees.**

Turn the bolts until the caster angles for the front wheels are in tolerance.

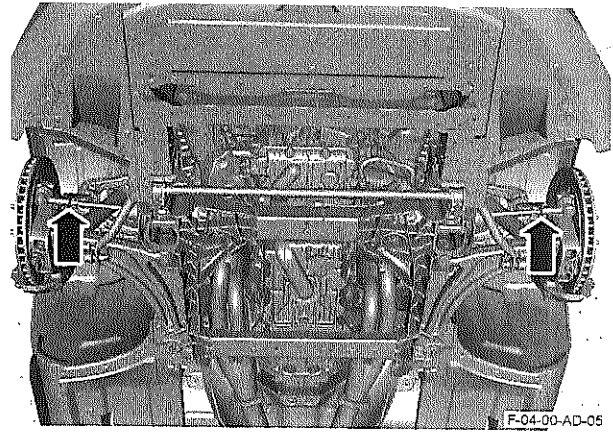


17.  **Caution: Make sure that the bolt is held while the nut is tightened. Failure to obey this instruction will cause the wheel alignment to change.**

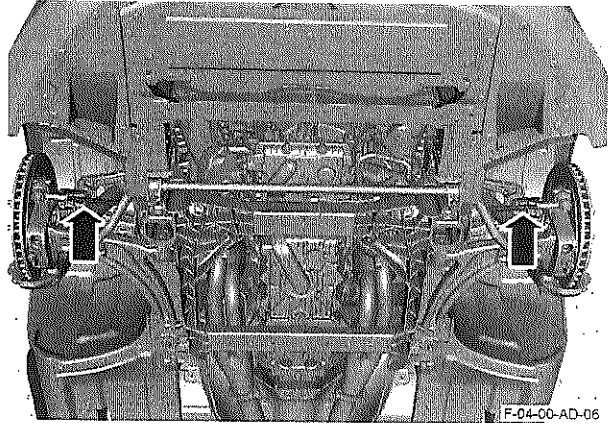
Loosely tighten the two nuts that attach the suspension bottom arms to the front subframe.



18. Loosen the two lock nuts that attach the track rods to the track rod ends.



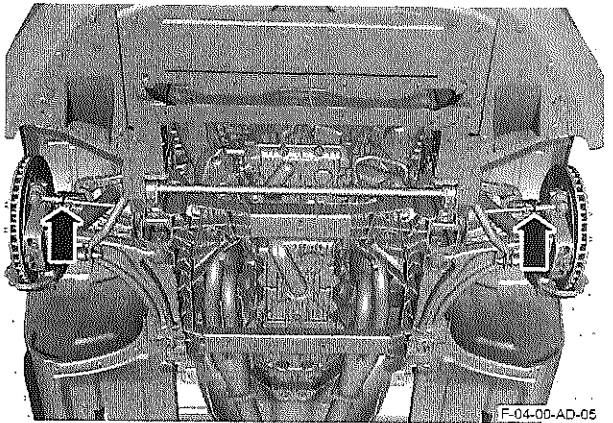
19. **Note:** All adjustments to caster, camber and toe settings can have an effect on each other. After you have measured and adjusted each setting, minor adjustments to caster, camber and toe can be required to get the correct set up for the vehicle.
- Note:** The maximum tolerances for the left side and right side toe angles on the front wheels are -1 minutes to -5 minutes. The nominal toe angles on the front wheels is -3 minutes.



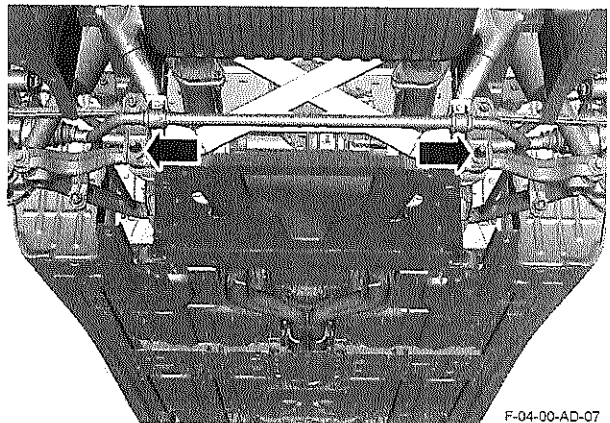
Turn the track rods until the toe angles for the front wheels are in tolerance.



20. **Caution:** Make sure that the track rod is held while the nut is tightened. Failure to obey this instruction will cause the wheel alignment to change.

Loosely tighten the two lock nuts that attach the track rods to the track rod ends.




21. Loosen the two nuts that attach the suspension bottom arms to the rear subframe.

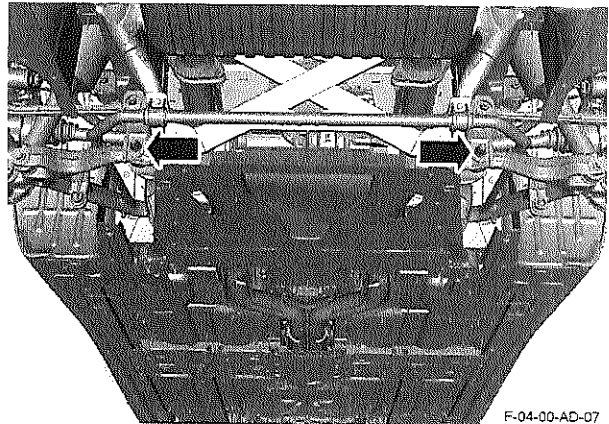
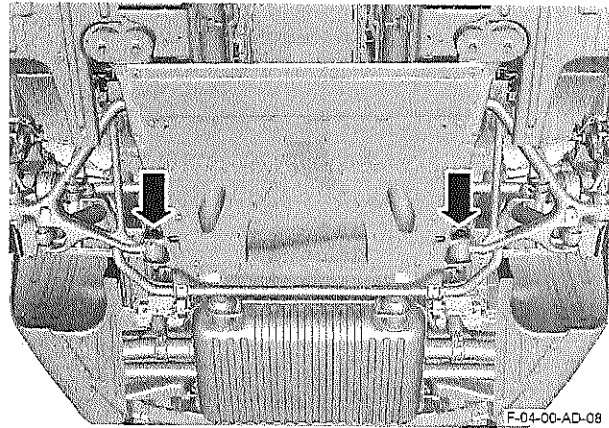


22.  *Note: All adjustments to caster, camber and toe settings can have an effect on each other. After you have measured and adjusted each setting, minor adjustments to caster, camber and toe can be required to get the correct set up for the vehicle.*
-  *Note: The maximum tolerances for the camber angles on the rear wheels are -25 minutes to -35 minutes. The nominal camber angles on the rear wheels is -30 minutes.*

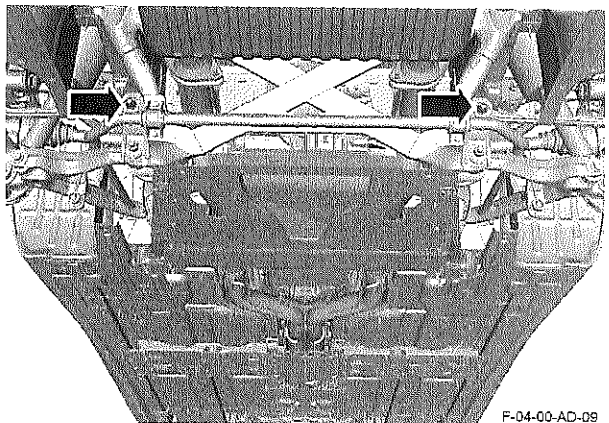
Turn the bolts until the camber angles for the rear wheels are in tolerance.



23.  **Caution: Make sure that the bolt is held while the nut is tightened. Failure to obey this will cause the wheel alignment to move.**

Loosely tighten the two nuts that attach the suspension bottom arms to the rear subframe.

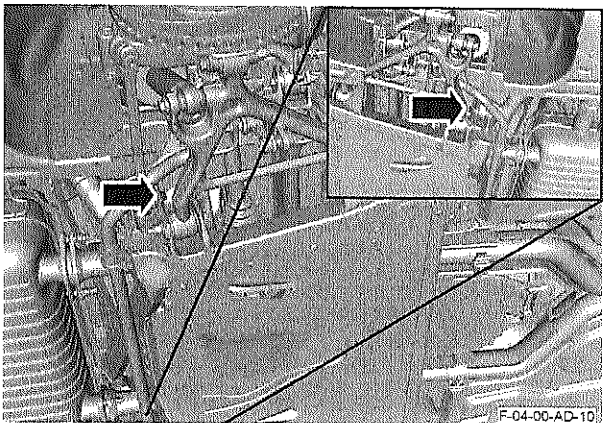


24. Loosen the two nuts that attach the toe control arms to the rear subframe.



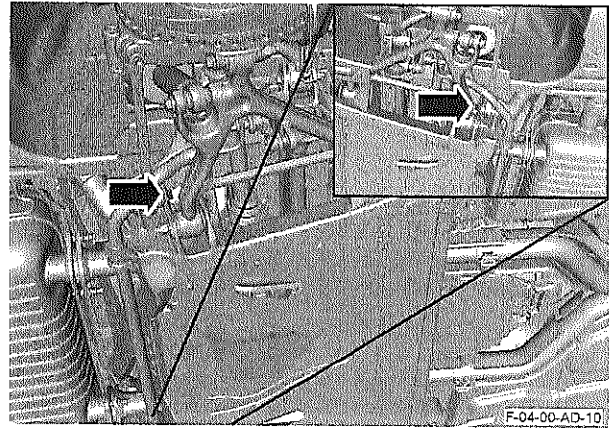
25.  *Note: All adjustments to caster, camber and toe settings can have an effect on each other. After you have measured and adjusted each setting, minor adjustments to caster, camber and toe can be required to get the correct set up for the vehicle.*
-  *Note: The maximum tolerances for the left side and right side toe angles on the rear wheels are 6.75 minutes to 7.25 minutes. The nominal toe angles on the rear wheels is 7 minutes.*

Turn the bolts until the toe angles for the rear wheels are in tolerance.



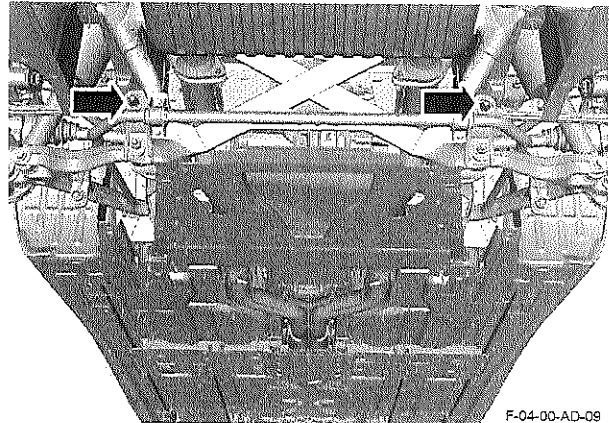
26. **Note:** All adjustments to caster, camber and toe settings can have an effect on each other. After you have measured and adjusted each setting, minor adjustments to caster, camber and toe can be required to get the correct set up for the vehicle.
- Note:** The maximum tolerances for the thrust angles on the rear wheels are 2.5 minutes to -2.5 minutes. The nominal thrust angles on the rear wheels is 0 minutes.

Turn the bolts until the thrust angles for the rear wheels are in tolerance.



27. **Caution:** Make sure that the bolt is held while the nut is tightened. Failure to obey this instruction will cause the wheel alignment to change.

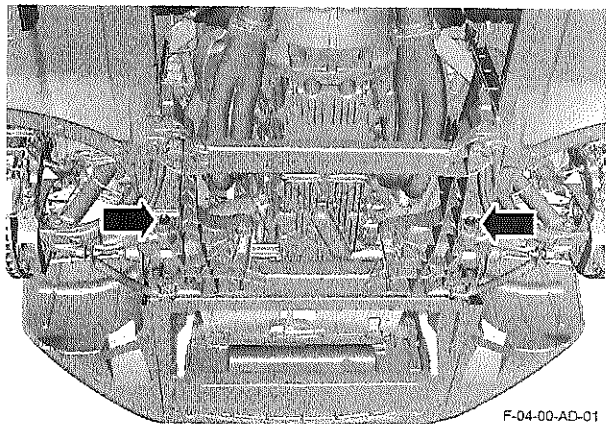
Loosely tighten the two nuts that attach the toe control arms to the rear subframe.



28. Do a check to make sure that all of the wheel alignments are correct.

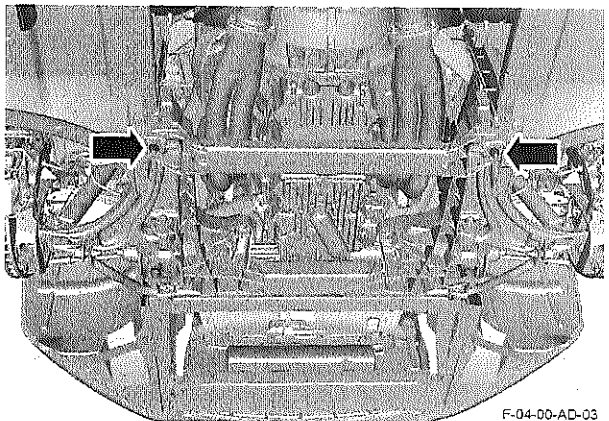
29. **Caution:** Make sure that the bolt is held while the torque is applied to the nut. Failure to obey this instruction will cause the wheel alignment to change.


Torque the two nuts that attach the suspension bottom arms to the front subframe to 175 Nm.



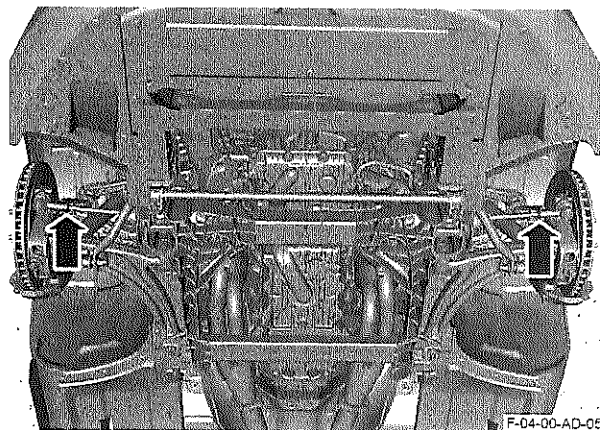
30. **Caution:** Make sure that the bolt is held while the torque is applied to the nut. Failure to obey this instruction will cause the wheel alignment to change.


Torque the two nuts that attach the suspension bottom arms to the front subframe to 115 Nm.



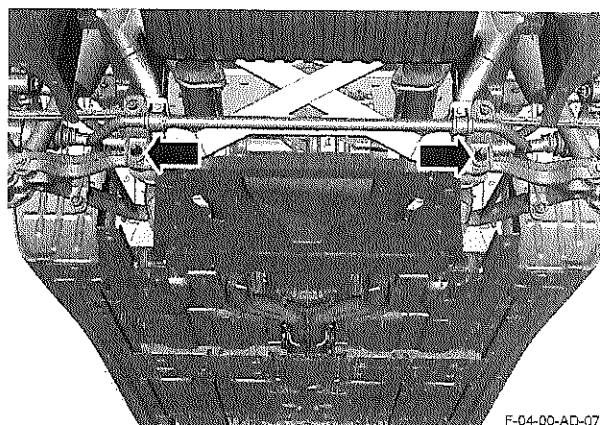
31.  **Caution: Make sure that the track rod is held while the torque is applied to the nut. Failure to obey this instruction will cause the wheel alignment to change.**


Torque the two lock nuts that attach the track rods to the track rod ends to 70 Nm.



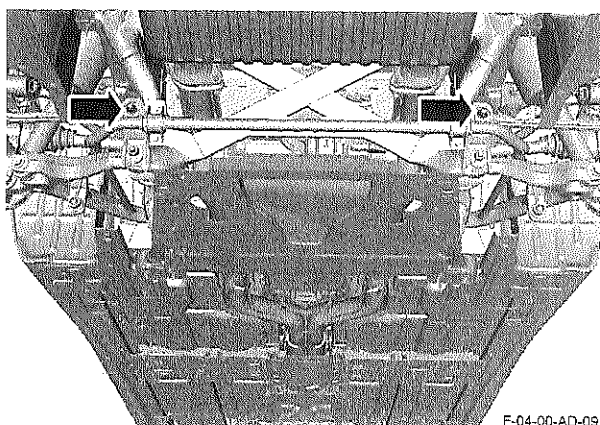
32.  **Caution: Make sure that the bolt is held while the torque is applied to the nut. Failure to obey instruction this will cause the wheel alignment to change.**

Torque the two nuts that attach the suspension bottom arms to the rear subframe to 115 Nm.



33.  **Caution: Make sure that the bolt is held while the torque is applied to the nut. Failure to obey this instruction will cause the wheel alignment to change.**

Torque the two nuts that attach the toe control arms to the rear subframe to 115 Nm.



34. Do a final check to make sure that all of the wheel alignments are correct.
35. Remove the geometry setup tool.
36. Install the front undertray.

Published date: 2012-02-01 Procedure last changed: 2015-06-25 16:39:17