



Preliminary Information

PIT5403H Various Vehicle Handling Concerns Suspension Noise or Damaged Suspension Components Due to Vehicle Modifications

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Cadillac	Escalade EXT	2007 - 2013	All	All	All	All
Cadillac	Escalade	2007 - 2021	All	All	All	All
Chevrolet	Avalanche	2007 - 2013	All	All	All	All
Chevrolet	Silverado	2007 - 2021	All	All	All	All
Chevrolet	Suburban	2007 - 2021	All	All	All	All
Chevrolet	Tahoe	2007 - 2021	All	All	All	All
GMC	Sierra	2007 - 2021	All	All	All	All
GMC	Yukon Model	2007 - 2021	All	All	All	All

Supersession Statement

This PI was superseded to add model years. Please discard PIT5403G.

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

Condition / Concern

Some owners may comment on various handling, vehicle dynamics concerns, noises from the suspension or underbody, or issues related to damaged suspension components.

These concerns may occur if the vehicle’s suspension system has been modified by using aftermarket suspension lift or lowering kits, or making modifications to the vehicle including adjusting components beyond factory specifications such as, but not limited to adjusting torsion bar suspensions to change suspension height and/or aftermarket wheels and/or tires installed.

Recommendations / Instructions

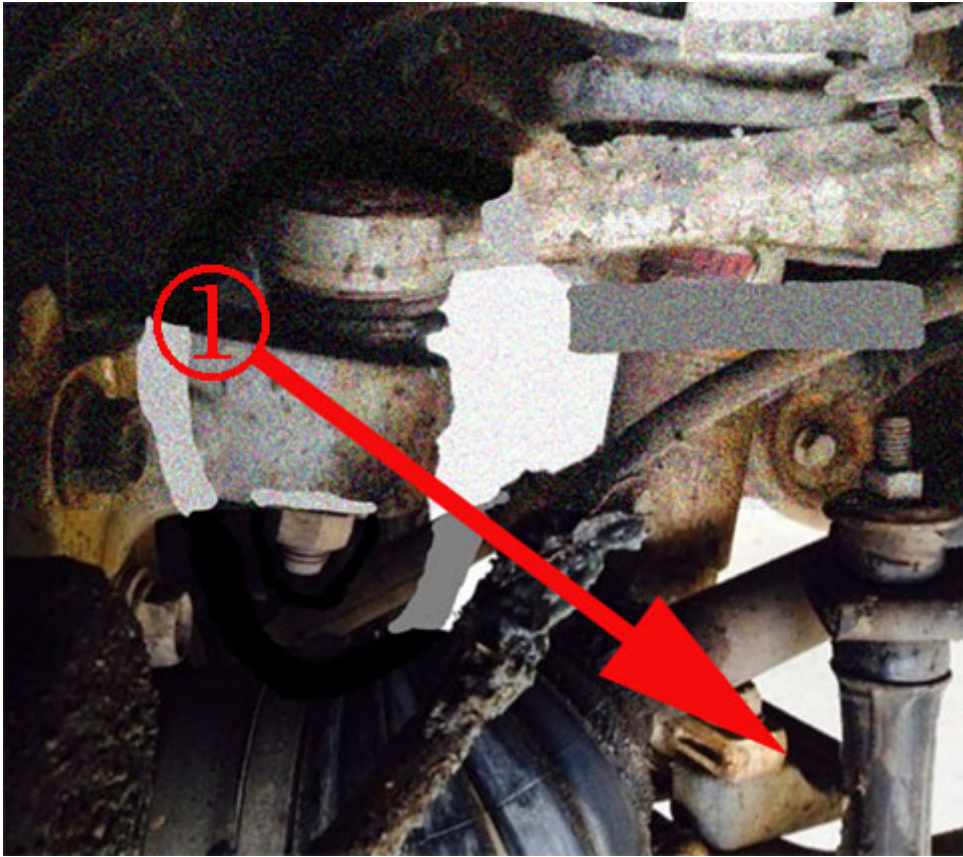
Before any in-depth diagnostics are performed, be aware that various issues could occur if the vehicle has been modified and inform the customer the conditions noted may not be covered under warranty.

Most of the larger lift kits are easy to identify because of the major modifications made as compared to a stock vehicle.

This bulletin will help identify some of the smaller changes that can still drive concerns.

If there is any question regarding potential modifications, compare the truck with concerns to a like vehicle looking for modified components.

Inspect for installed aftermarket suspension components such as but not limited to the examples below:



1. Aftermarket lift kit block



2. Aftermarket lift kit blocks removed from a truck

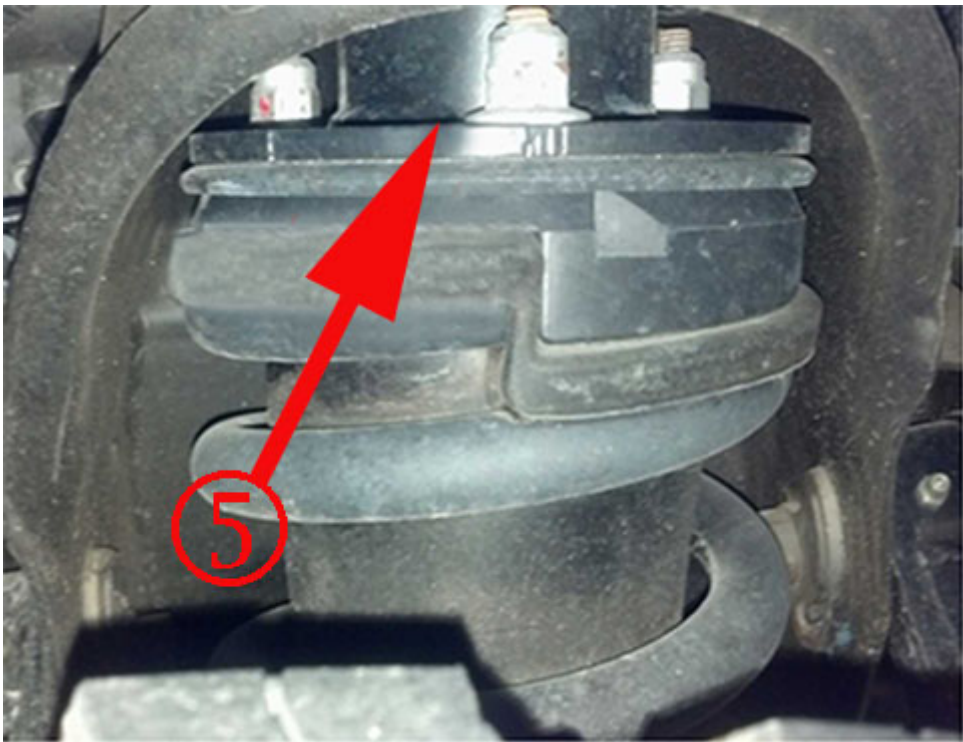




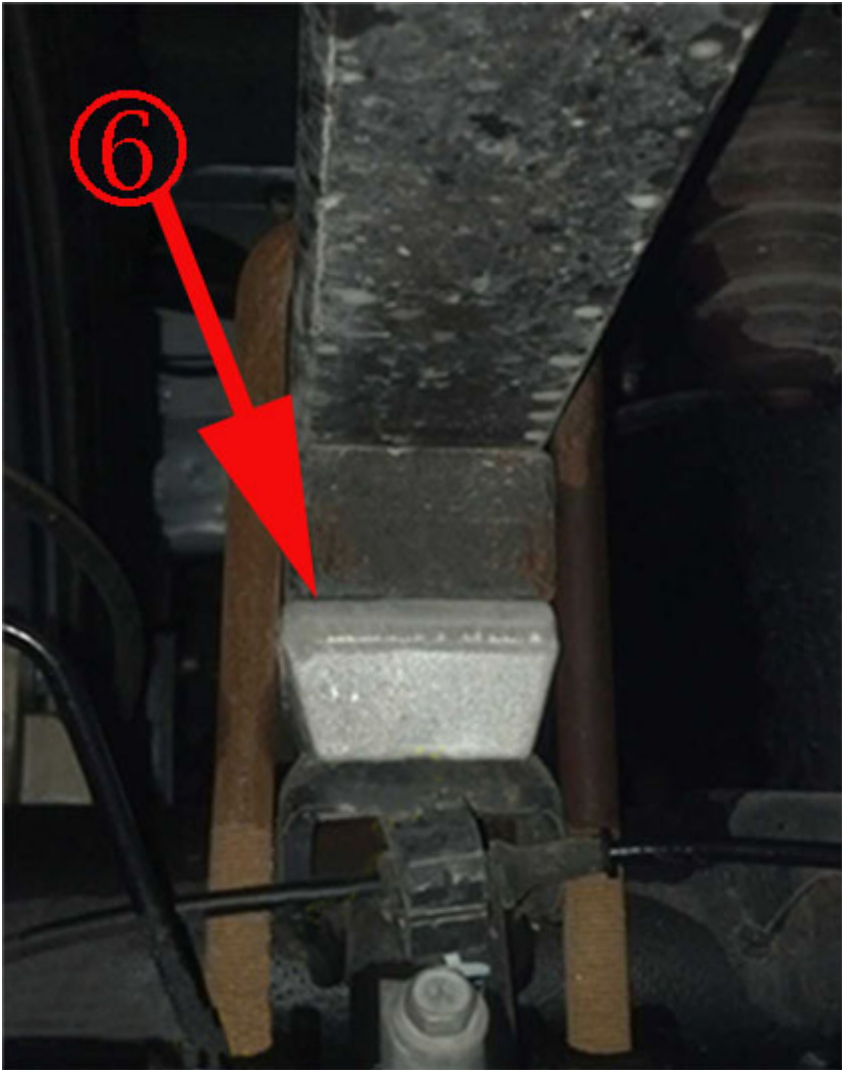
3. Aftermarket coil spring spacer



4. Aftermarket lift kit blocks installed

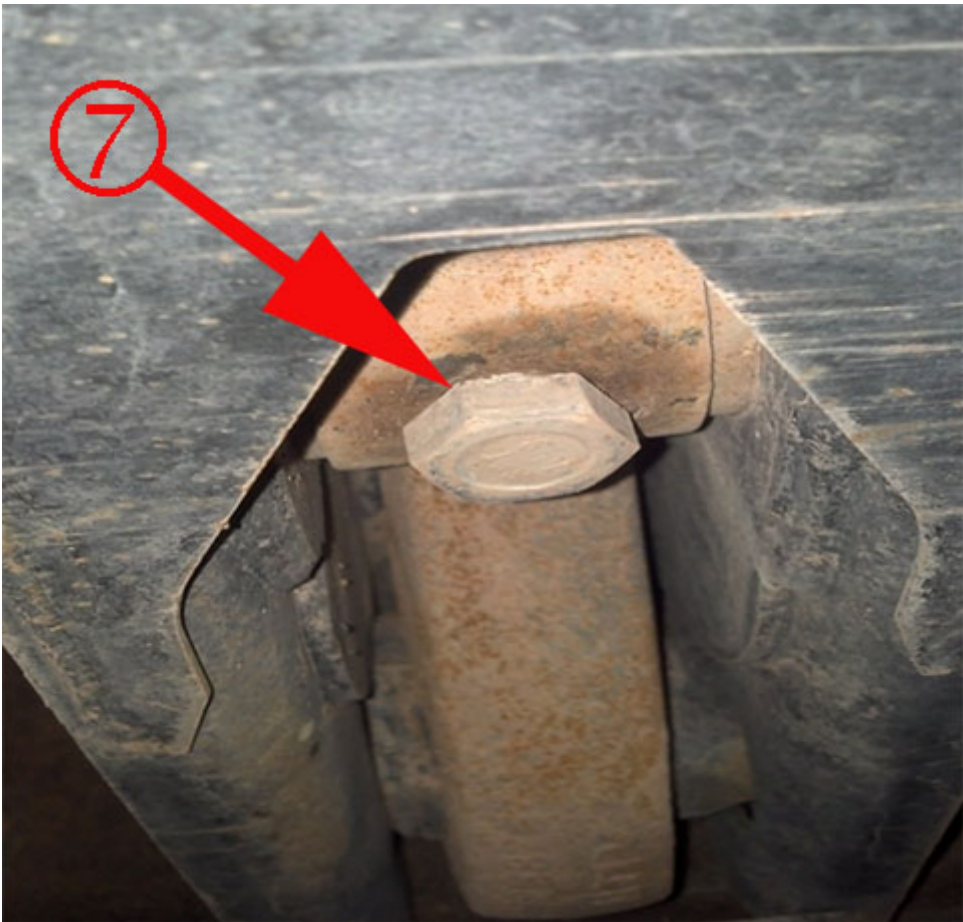


5. Aftermarket coil spring spacer



**6. Aftermarket rear leaf spring lift block**

**Inspect for improperly adjusted torsion bars (shown below #7) resulting in improper Z-height adjustments. For this example, the Z-height for this truck would be above the specifications but there is not an actual lift kit installed.**



**Below is an example of lift provided by improperly adjusting the z-height. In this example, the front suspension has been raised about 3 inches.**

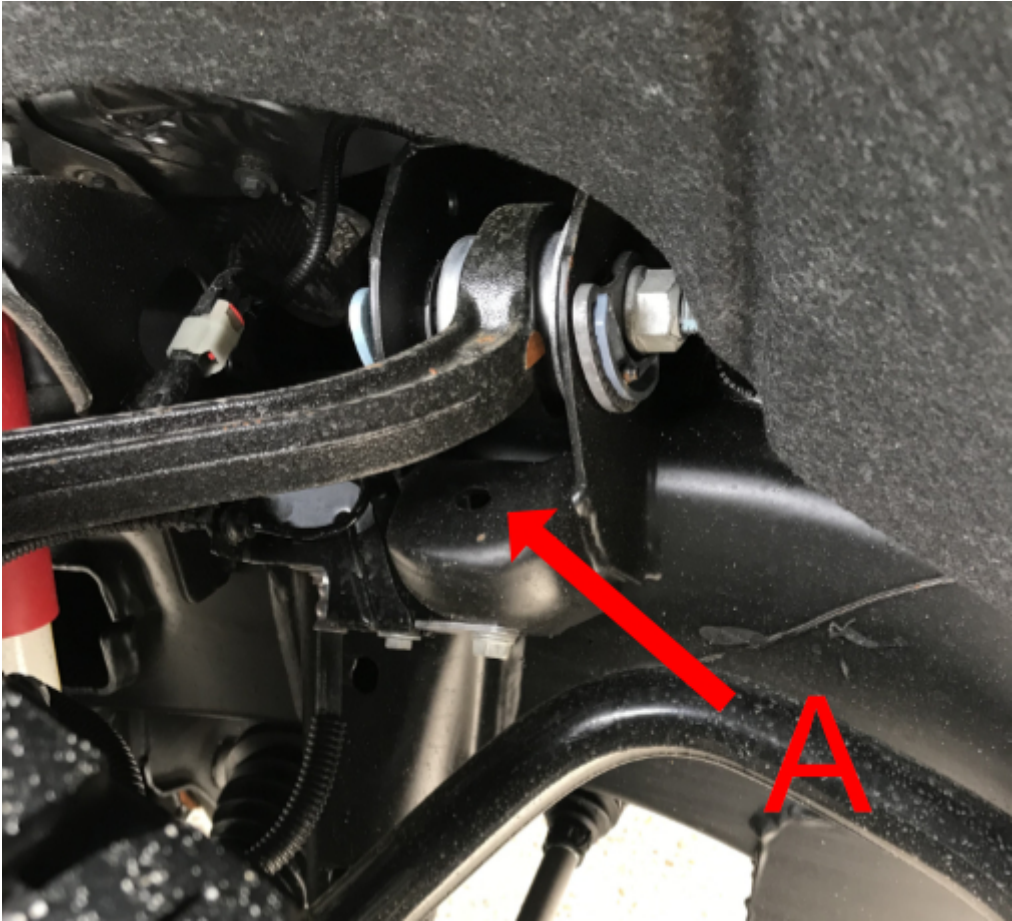


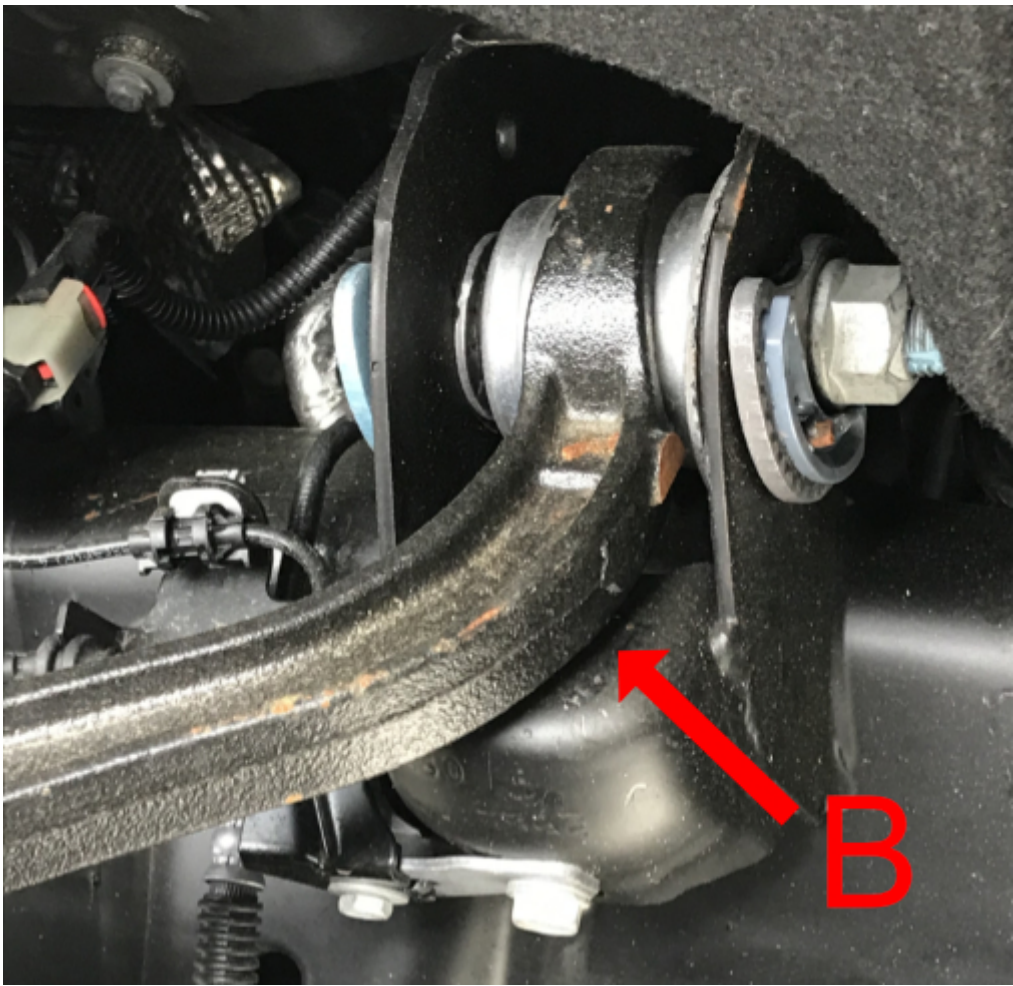


If the torsion bars have been improperly adjusted as shown above, also inspect for contact between the upper control arm (shown below #9) and the frame (shown below #10). If contact is found inspect the upper ball joint for looseness, as it may have been damaged by the modification.

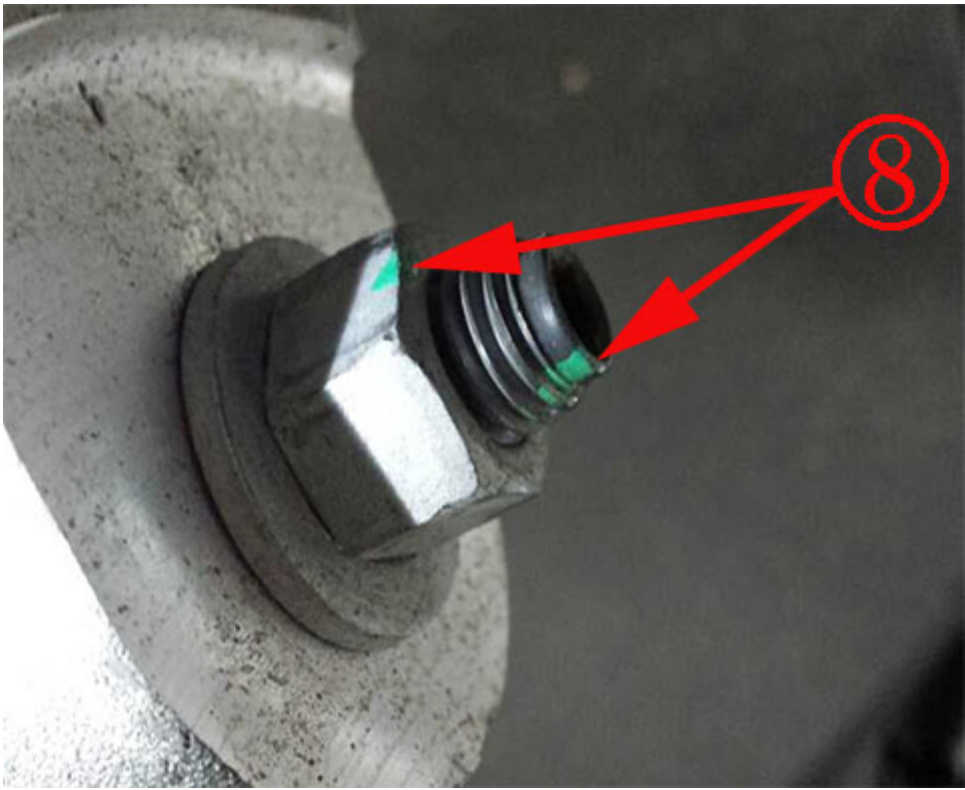


Below is an example of a vehicle sitting at factory ride height (A) with 25 mm gap between upper control arm and bump stop, and a vehicle that has had the torsion bar adjusted (B) has a 5 to 10 mm gap between upper control arm and bump stop.



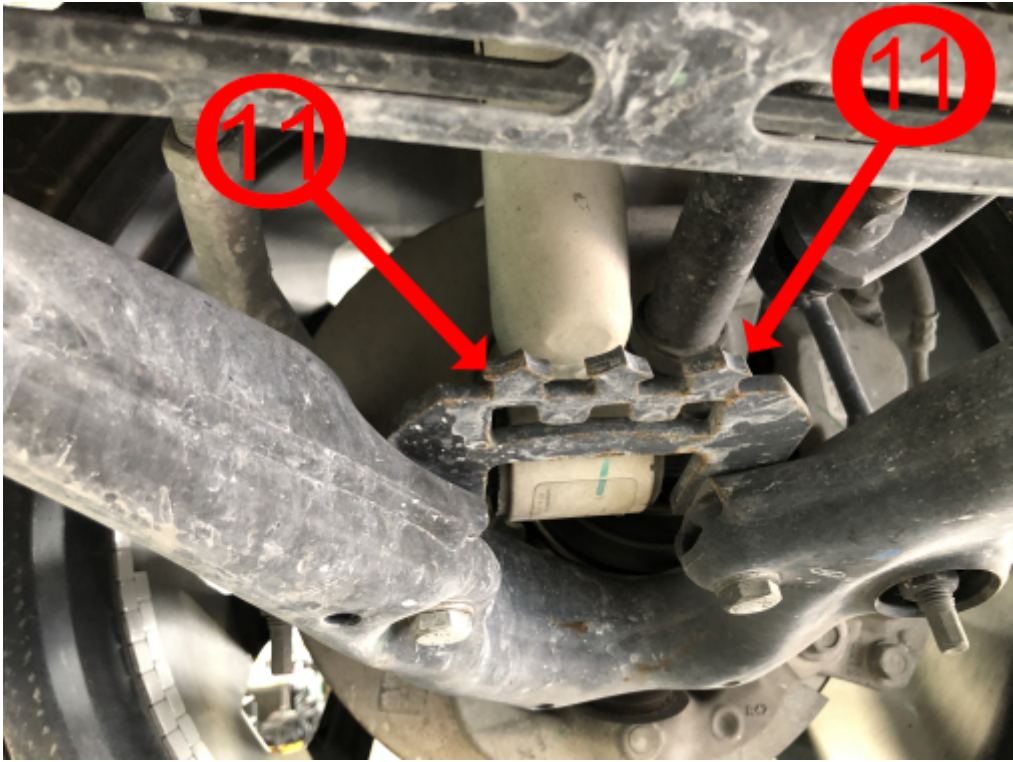


When determining if a vehicle has been modified additional clues can be found by inspecting for quality control marks (shown below #8) from the factory that are not aligned (especially on new trucks):



**Note: The green quality control marks do not line up indicating this vehicle has been tampered with.**





11. Aftermarket Lift Kit Block installed



12. Aftermarket Coil Spring Spacer installed

### Warranty Information

**Any concerns or damage that occurs as a result of vehicle modification may not be covered under the Terms of the New Vehicle Limited Warranty. Reference the latest version of TSB 09-00-89-016 - Warranty Administration - Labor Operation 0600014 - Suspected Tampering or Vehicle Modifications if needed.**

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.

### Additional SI Keywords

align alignment axle ball bar break broke broken control C0710 damage drag end front high inch inches inner joint kit left lift link loose low lower lowering modified noise outer plow rack rear right rod snow stabilitrak stability steer steering susp suspension sway tcs tie tire tires torsion traction turn underbody unwanted unwanted upper wear wheel wheels worn



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