

Driveline Angle Adjustment

NOTE: Some vehicles may exhibit a drive-away shudder or vibration under moderate to heavy acceleration from a stop, especially when heavily loaded or when towing a trailer. It is important to confirm how the vehicle is driven the majority of the time (loaded or unloaded), as adjusting the driveline angle in one condition (loaded or unloaded) may result in a shudder or vibration with the vehicle in the opposite condition (loaded or unloaded).

NOTE: Verify suspension is not modified from the original configuration. Aftermarket leveling kits and rear leaf spring shackle kits change ride height, which affects pinion angle and other critical driveline related operating angles. Vehicle must be at Original Equipment Manufacturer (OEM) specifications before accurate evaluation and diagnosis can be performed.

NOTE: The driveline angle must be measured with the vehicle in the same condition as the concern (loaded or unloaded) to determine the amount of adjustment necessary to correct the condition.

1. Measure the driveline angle. For additional information, refer to [Driveline Angle Measurement](#) in this section.
 - If the driveline does not have an optimum 3.5 degree operating range, proceed to the following adjustment steps using the parts listed in the table below.

Part Number	Part Name
5A313	1 degree pinion angle shim
5A313	2 degree pinion angle shim
00812	Upper u-bolt center plate bolt (4 required)
5705	U-bolt (4 required)
W520215	U-bolt nut (8 required)
W713078	Center bearing support bolt
W713649	Center bearing support nut
4A209	Center bearing support shim
506545	Shock absorber lower bolt
W520214	Shock absorber lower nut

NOTE: The driveline angle on these vehicles can be changed by adding 1 degree or 2 degree pinion angle shims.

2. Remove and discard the shock absorber lower nut and bolt.
3. **NOTE:** To change the pinion angle.

Using a suitable jack to support the rear axle, remove and discard the 8 u-bolt nuts and the 4 u-bolts. For additional information, refer to [Section 204-02](#).

4. **NOTE:** Replace one bolt at time.

Replace the upper u-bolt center plate bolts. For additional information, refer to [Section 204-02](#).