



1201AA

78-88 GMA/G-BODY

Double Adjustable Trailing Arms

Warning: This installation should be performed by a trained professional.

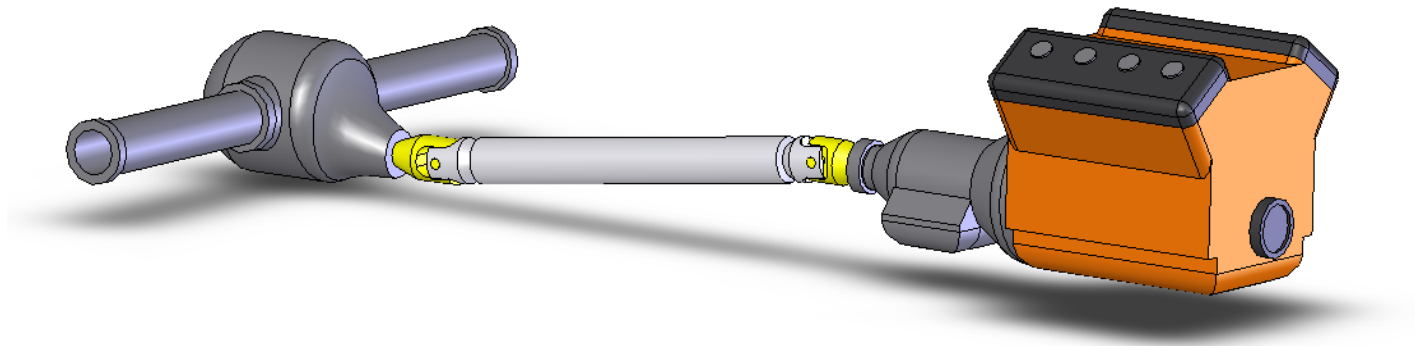
INSTALLATION INSTRUCTIONS

1. First, raise the rear of the vehicle so that the rear wheels are off the ground. If you are using a 2-post lift, support the differential with a hydraulic tranny jack.
2. Remove the rear shocks.
3. Remove the rear sway bar from the lower trailing arms.
4. Allow the differential to droop as far down as possible.
5. Remove the stock upper trailing arms.
6. As an initial starting point, set the Hotchkis trailing arms to the same length (hole to hole) as the stock pieces. Do not fully tighten the jam nuts yet.
7. Reinstall the Hotchkis trailing arms in the same manner as stock removal.
8. Continue to the next section "Setting Pinion Angle"

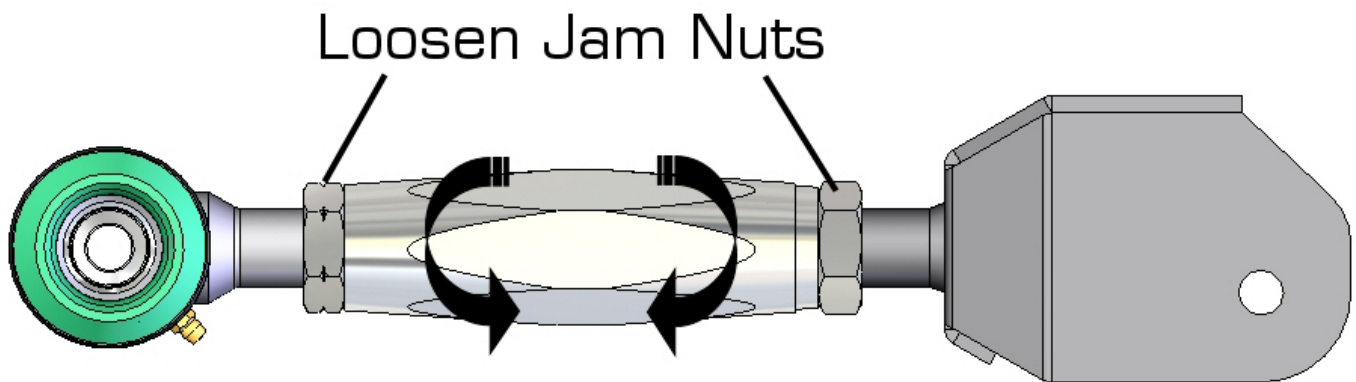
SETTING PINION ANGLE

It may be necessary to set pinion angle after installation of your new Hotchkis upper trailing arms.

First of all, what is pinion angle? Pinion angle is basically the angle between the centerline of the differential pinion and the drive shaft centerline. This angle changes during acceleration and braking. If the pinion angle is excessive, then vibration and increased U-joint wear will occur.

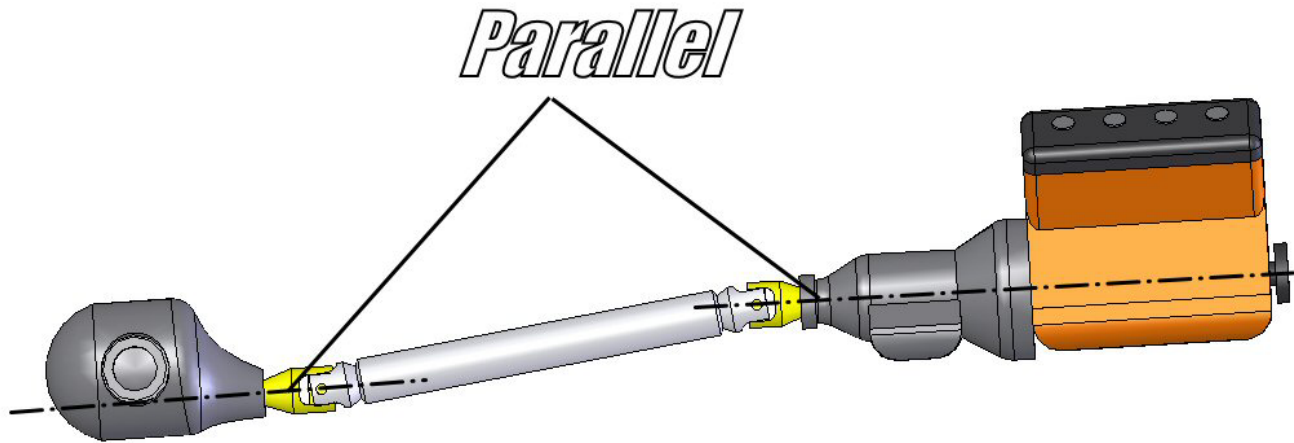


The Hotchkis double adjustable trailing arms allow you to adjust the pinion angle with ease. Simply loosen the two jam nuts and rotate the aluminum turnbuckle to lengthen or shorten the arm. So, how does one set the pinion angle?



The simplest rule of thumb is:

The centerline of the differential pinion should be parallel to the centerline of the engine's crankshaft without being the same line.



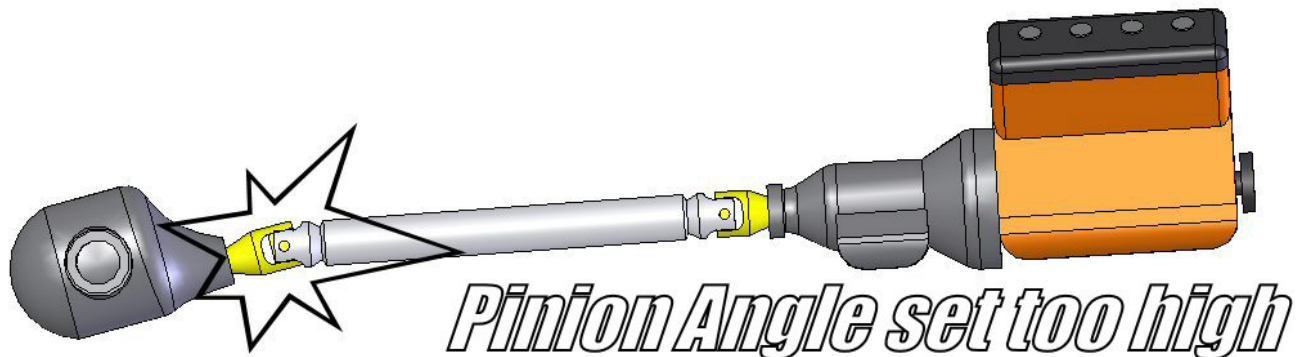
FYI... The centerlines should not be the same line because the U-joints would wear in the same areas all the time. Having an angle at the joint itself allows the joint to articulate and wear evenly along the entire bearing race.

So, the first thing to do is to find out the angle the engine's crankshaft is sitting at. One way to do this is to set a digital angle finder on the front crank pulley or harmonic balancer. Record this angle. Next, set the digital angle finder on the front flat face of the differential yoke. This angle needs to be the same as the recorded crank angle. Adjust your Hotchkis trailing arms to obtain the angle needed.

Tighten all hardware and drive the car. Test for driveline vibration by accelerating.

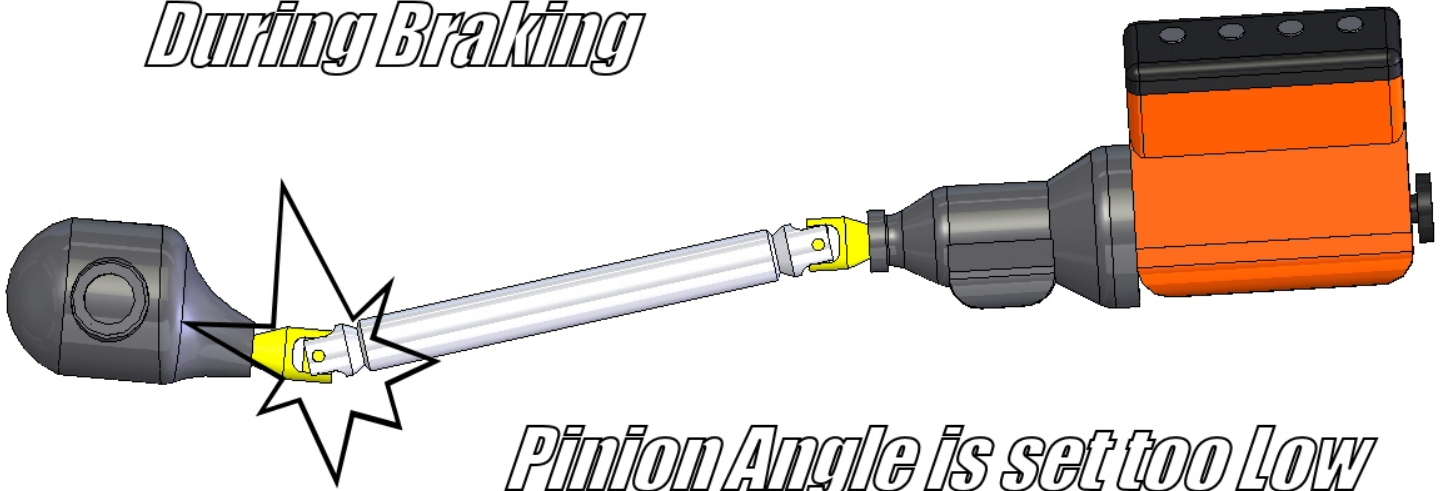
If there is vibration during acceleration, then the pinion angle is set too high!

During Acceleration



If there is vibration during braking, then the pinion angle is set too low!

During Braking



Fine tune your Hotchkis trailing arms to achieve the perfect setting for your driving style and horsepower.

During Acceleration

