HOTCHKIS SPORT SUSPENSION

1216

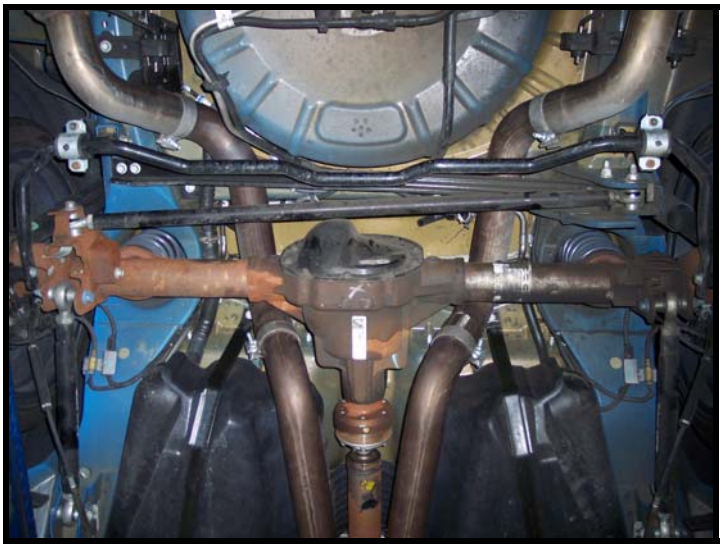
05+ Ford Mustang

Adjustable Upper Trailing Arm

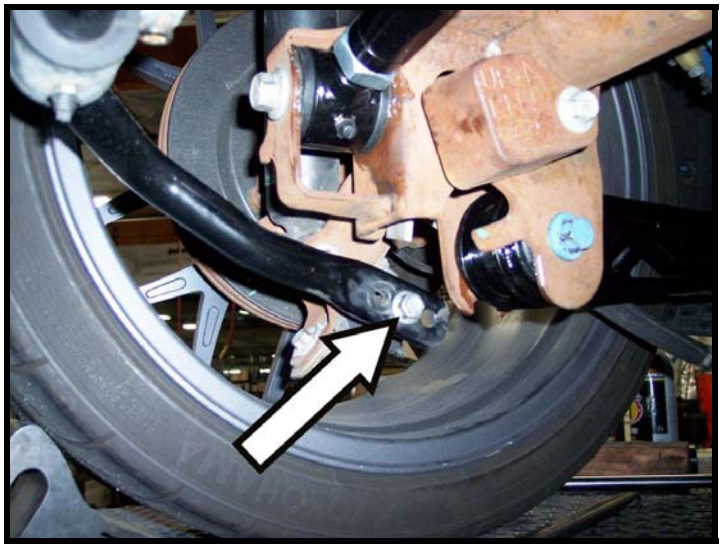
Warning: This installation should be performed by a trained professional.

REMOVAL OF STOCK UPPER TRAILING ARM

1. Raise the vehicle to access the rear end section and lift on the body of the car to ensure the rear end can be dropped.



2. Disconnect the sway bar ends from both sides.

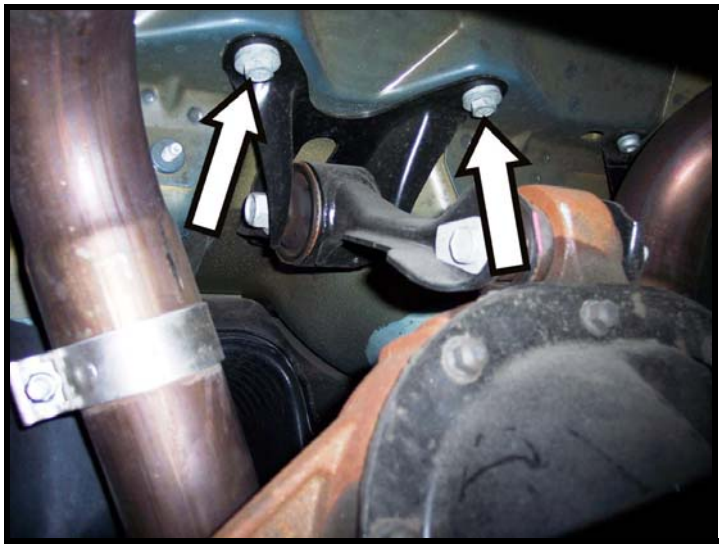


3. Disconnect the rear lower shock mounts on the both sides.

4. Remove bolt from the cabin that is under the rear seat. To gain access, there are two plastic tabs, one on each side that must be pushed in to be able to remove the bottom of the rear seats.

5. Lift car further up to gain access to the upper trailing arm by allowing the differential to droop as far as possible.

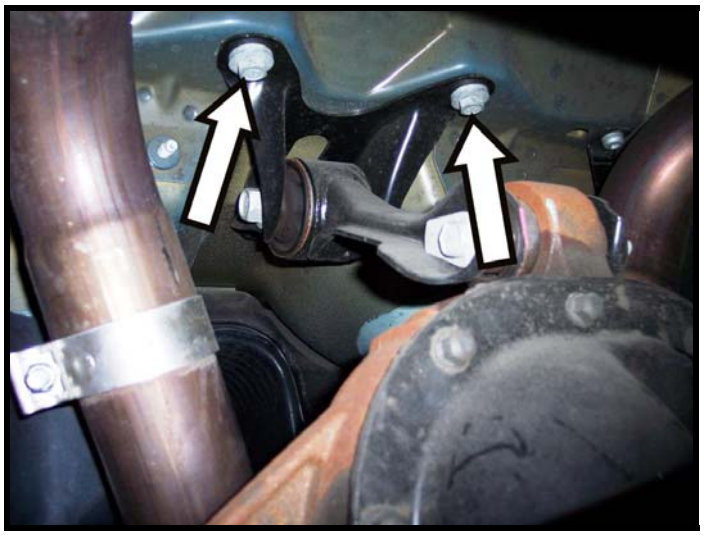
6. Remove the remaining two (2) bolts for the upper mount to the upper trailing arm.

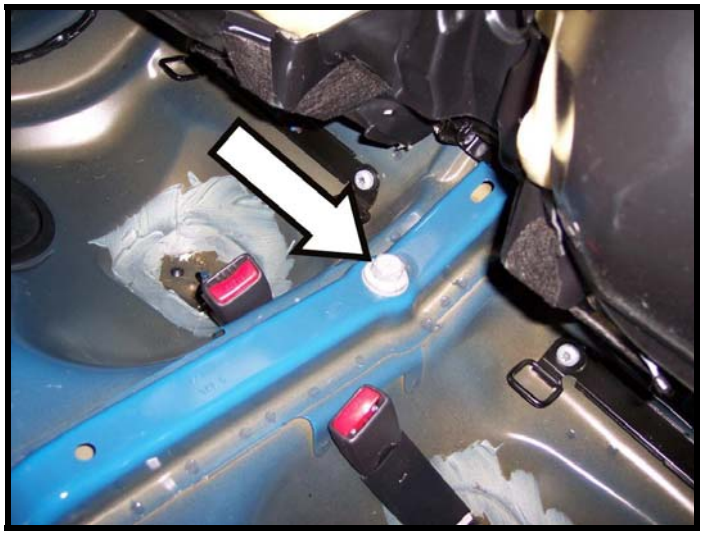


7. Remove the lower mounting bolt of the upper trailing arm to the differential.

8. Remove upper trailing arm from upper mount and adjust the Hotchkis adjustable upper trailing arm to the same center to center length as the stock upper trailing arm. Tighten the jam nuts. Fine adjustments can be made later to set the pinion angle. Details of this is at the end of the installation instructions.

9. Install first the two (2) bolts from the upper mounts by having it finger tight, and then install the third bolt for the upper mount under the rear seat.





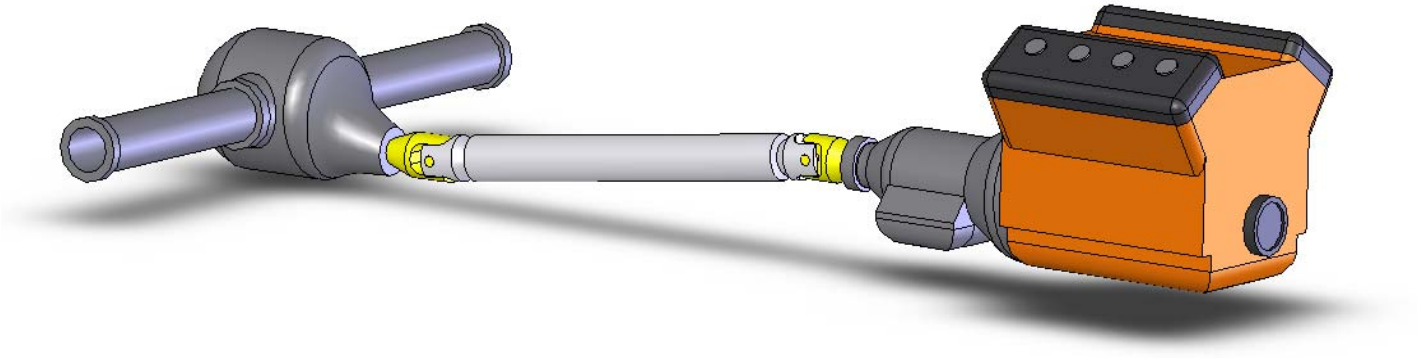
10. Connect the lower mount to the differential. To make the bolt align properly during installation, you may need to lift up the differential as shown below.

11. Reconnect the lower shock mounts and sway bar.

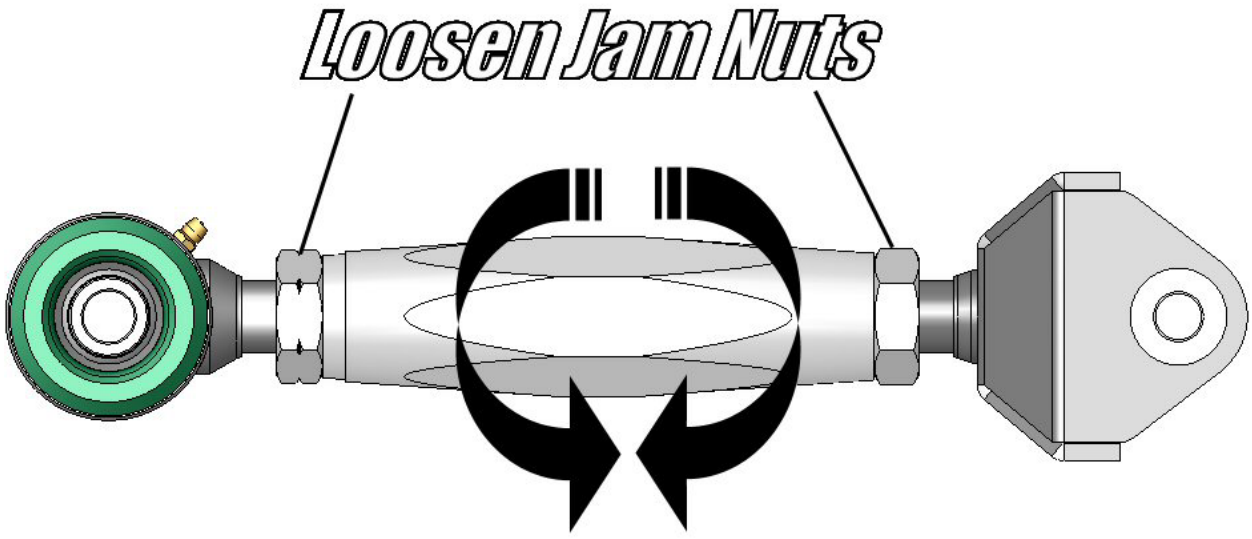
SETTING PINION ANGLE

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.

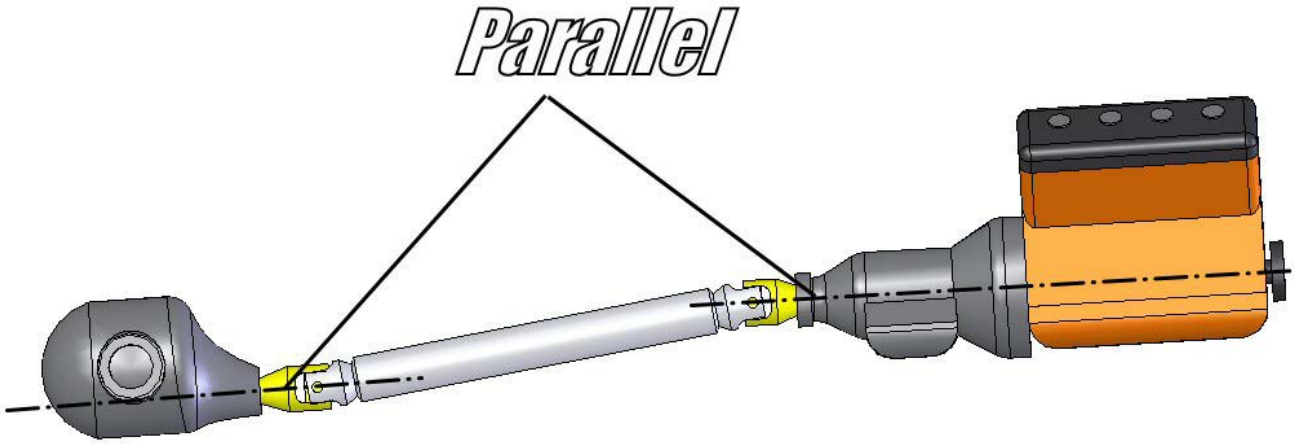


The Hotchkis double adjustable trailing arms allow you to adjust the pinion angle with ease. Simply loosen the two jam nuts and rotate the aluminum turnbuckle to lengthen or shorten the arm. So, how does one set the pinion angle?



The simplest rule of thumb is:

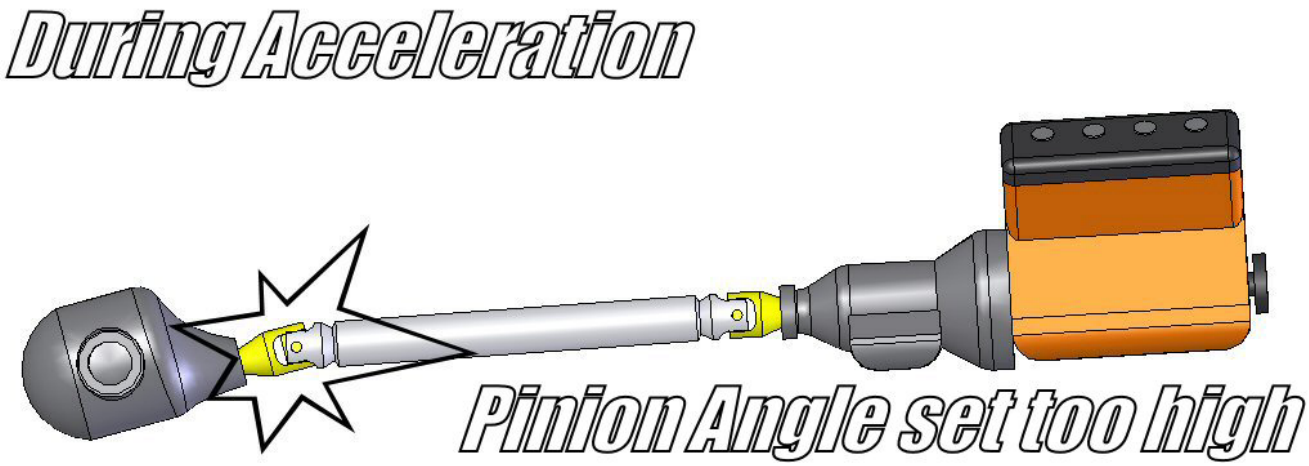
The centerline of the differential pinion should be parallel to the centerline of the engine's crankshaft without being the same line.



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!



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