



Coyote KRC Power Steering kit

ROADSTER AND COUPE INSTALLATION INSTRUCTIONS

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Tools required

10mm, 1/2", 3/4" Sockets
Ratchet
1 1/16" wrench
5mm, 6mm Hex Keys
Torque wrench

Supplies needed

Power steering fluid

Blue Loctite

Using a serpentine belt as a strap wrench

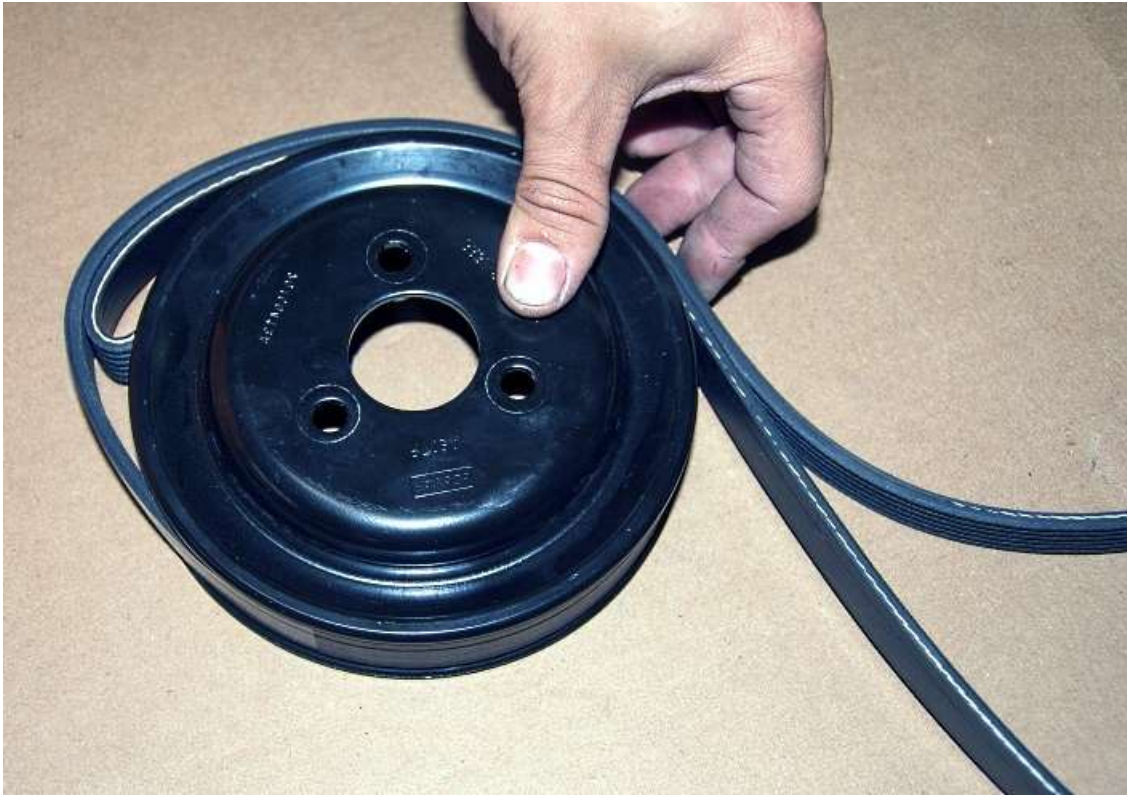
- ✎ If you do not own an impact wrench it is hard to loosen or tighten pulley bolts.
- ✎ Use the following to turn a belt into a strap wrench to hold the pulley in order to loosen or tighten pulley bolts or nuts.



Loop a belt around the pulley.



With the belt all the way around the pulley, double back the belt on itself in the opposite direction you are going to turn the wrench. The pictures above shows doubling back for tightening the bolts.



The picture above shows doubling back for loosening the bolts.

Parts preparation

ENGINE

Water pump pulley

✂ Serpentine Belt, 10mm socket, ratchet



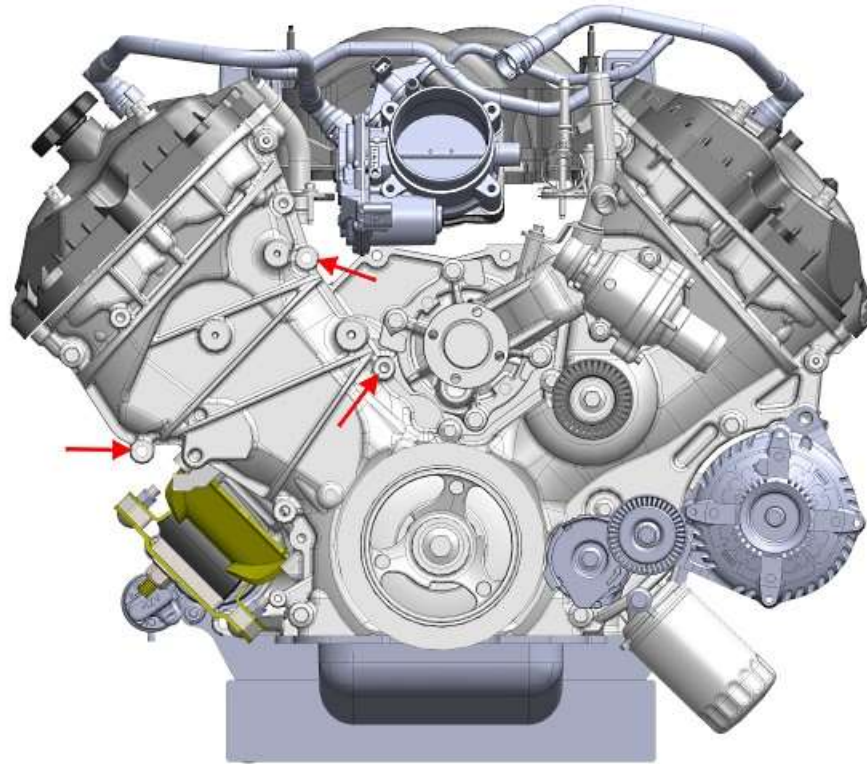
Use the included serpentine belt like a strap wrench to hold the water pump pulley while loosening the bolts with a 10mm socket.



Remove the bolts and pulley keeping the bolts for installation of the new pulley later.

Timing chain cover bolts


- ✂ 10mm socket, ratchet



Remove the three bolts on the timing chain cover at the places indicated above using a 10mm socket.

Installation

POWER STEERING PUMP BRACKET

-  Power steering pump mounting bracket and fasteners.
- ✂ Loctite, 6mm hex socket, torque wrench, ratchet



Locate the power steering pump bracket and fasteners.



Starting at the bottom right bracket hole, put a washer on the bolt then pass the bolt through the bracket and spacer.



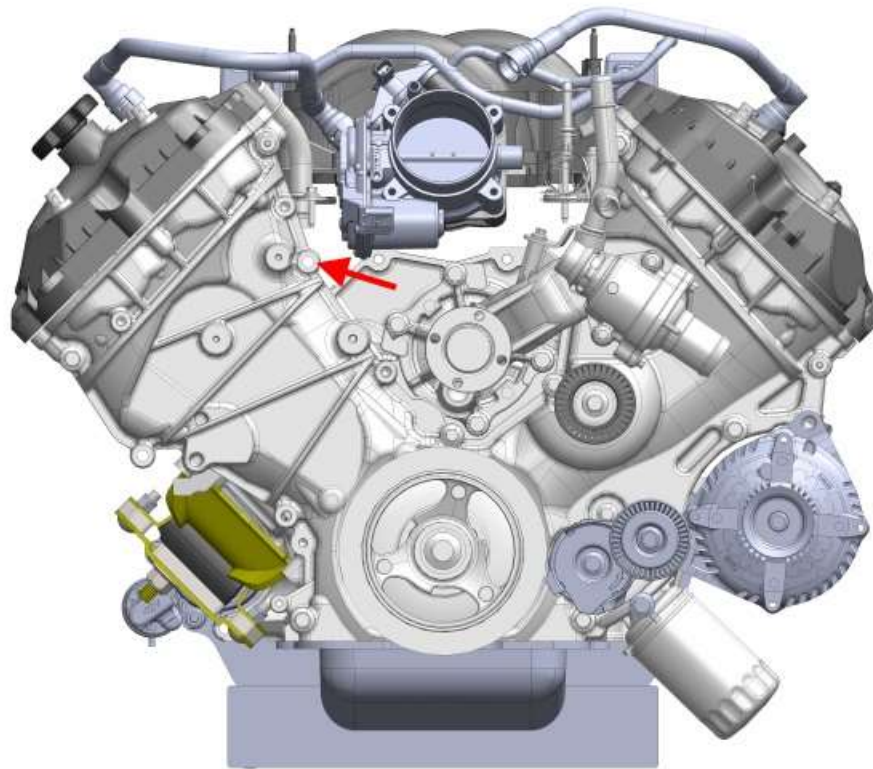
Turn the bracket over and place the flange nut in the slot with the flange first.



Slide the flange nut over so that it will not fall out.



Use a small amount of blue Loctite on the bolt threads.



Start the threads for this bolt in the timing chain hole indicated above.



Repeat the bolt assembly and Loctite procedure at the other two bracket locations.



Torque the mounting bolts using a 6mm hex socket to **18lbft.**

WATER PUMP PULLEY

🛠 Water pump pulley and fasteners, Serpentine belt.

✂ 5mm hex key, Loctite.



Locate the KRC water pump pulley.



Place the centering ring on the water pump snout.





Put blue Loctite on the screws.



Put the pulley on the water pump and screw the screws in using a 5mm hex key and the belt as a strap wrench.

POWER STEERING PUMP

-  Power steering pump and fasteners.
-  ½" socket, ratchet, Loctite.



Locate the power steering pump and fasteners.



Place the bolts through the mounting holes then put the spacers on the bolts and put Loctite on the bolts.





Attach the pump to the bracket so that the fittings are pointed up and to the right. The lower bolt will go into the flange nut in the slot.



Use a 1/2" socket and ratchet to snug the bolts so that the pump can still rotate for now.

POWER STEERING PUMP PULLEY

-  Power steering pump pulley, Serpentine belt.
-  Ratchet, Loctite.



Remove the nut and washer from the pump.



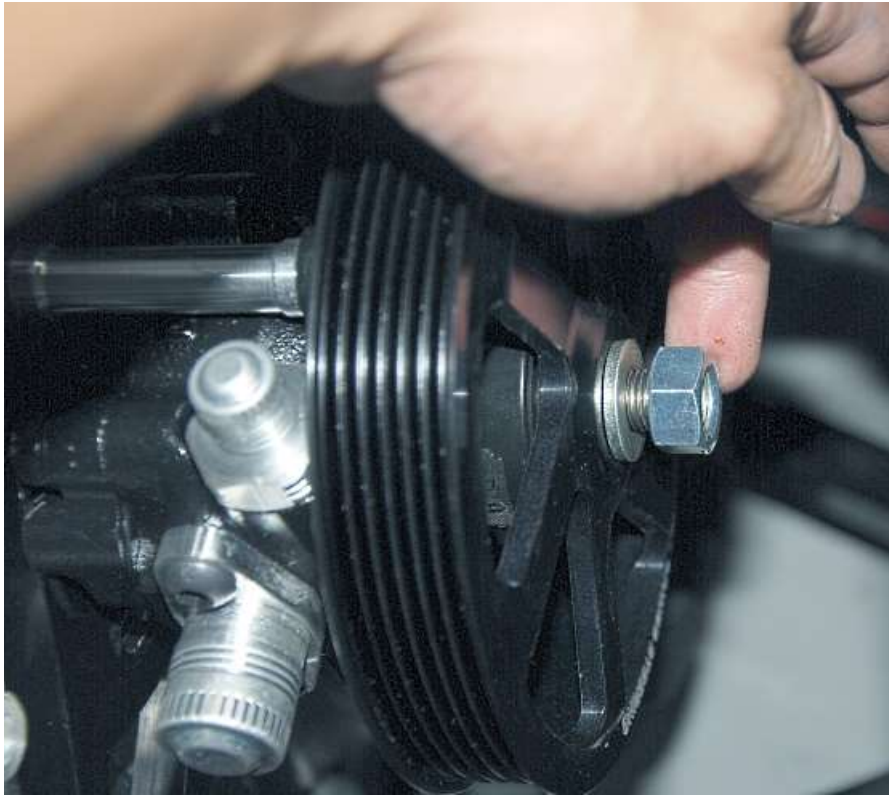
Locate the power steering pump pulley.



Put Loctite on the pump threads.



Put the pulley on the pump so the words are visible.



Screw the washer and nut on the pump.

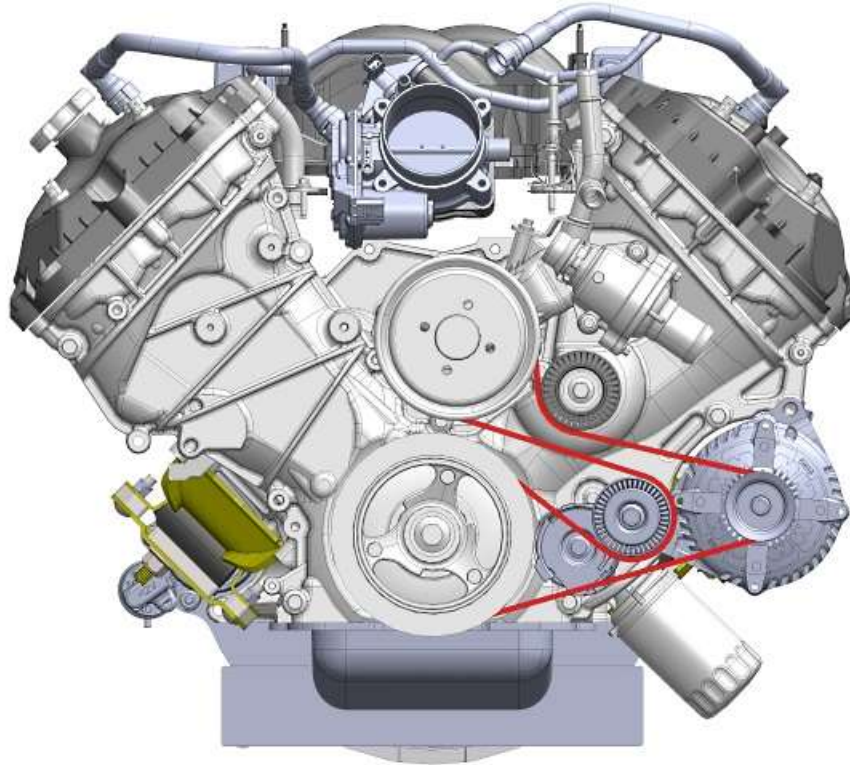


Use the belt as a strap wrench and tighten the pulley nut.

SERPENTINE BELTS

🚗 Serpentine belts

✂ Ratchet, ½", 15mm sockets



Install the alternator belt on the engine using the back serpentine belt location on the water pump. Use a 15mm socket and ratchet to pull the tensioner



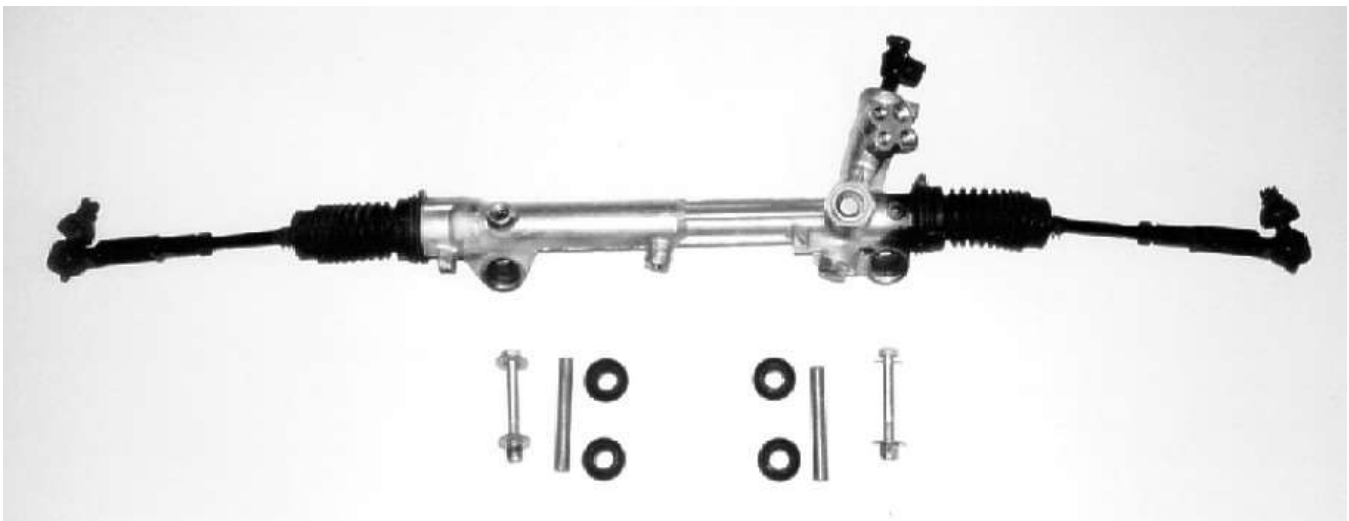
Put the power steering pump belt on the engine. The belt may be one rib short. If so make sure you put it in the same grooves on each pulley.



Pull the pump out so the belt is tight then tighten power steering pump bolts using a 1/2" socket.

POWER STEERING RACK

- ✂ Needle Nose Pliers, 3/4" wrench, 3/4" socket, Ratchet
- 🛠 Power steering rack, Steering System Hardware



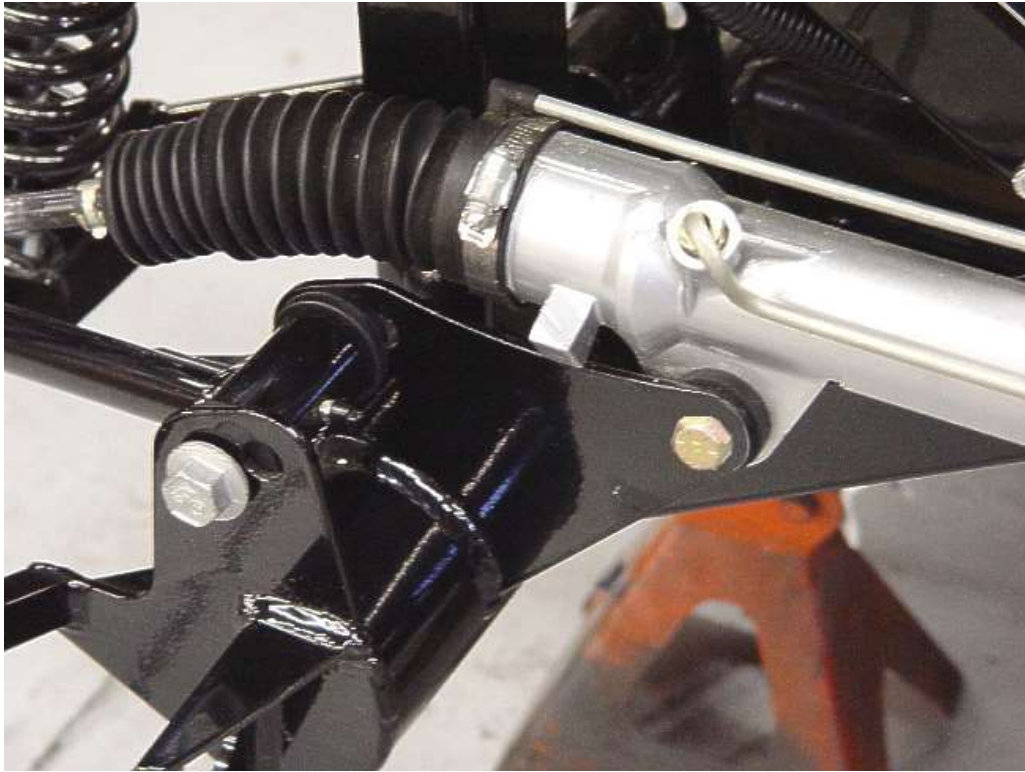
Power steering rack and fasteners.



Push the bushings and sleeves into the mounting bosses on the rack.



Line up the steering shaft and adapter and push the rack onto the steering shaft.



Bolt the rack into the frame. It is easier to do the driver side first then swing the passenger side down into the mount.

Torque the bolts to **55Nm (41 ft-lb)**.



Line up the steering shaft and adapter and push the rack onto the steering shaft.

Use thread locker on all of the steering shaft screws that do not have jam nuts and the adapter screws.



Attach the tie rod to the spindle, torque the castle nut to **25 ft-lbs** and install the cotter pin from the kit.



If the tie rod has a locknut instead of a castle nut, torque to **80Nm (59 ft-lb)**.

POWER STEERING LINES



Power steering lines, reservoir



Be careful with the Teflon seals, they are fragile and a one-time use part. Replacement seals can be found at any auto parts store, Dorman 82540.

Attach the power steering AN to port fitting adapters to the steering rack. Tighten the adapter fittings to **27-34Nm (21-29 ft-lb)**.



Attach the pressure line to the steering rack using the 90 degree fitting and the AN adapter fitting in the rack. power steering pump and the steering rack.



Attach the 90° end of the braided hose to the pump using an $11/16$ " wrench.



Attach the 10AN 90 degree fitting to the other connection on the pump. Leave the fitting slightly loose for now until the hose for it is cut.





Locate the power steering reservoir.

Attach the power steering pump feed line to the power steering pump and the reservoir.

Attach the return from the steering rack to the reservoir.

Bleeding the system


-  Power steering fluid.
-  Jack, jack stands.

Jack the front of the car up so the front wheels are off the ground and place on jack stands.

Fill the power steering fluid reservoir with fluid.

Turn the steering wheel slowly lock to lock.

Check the steering fluid level.

-  Do not hold the steering wheel at full lock while bleeding the system.

Start the engine and turn the steering wheel lock-to-lock.

Lower the car off the jack stands.

Power steering alignment specifications

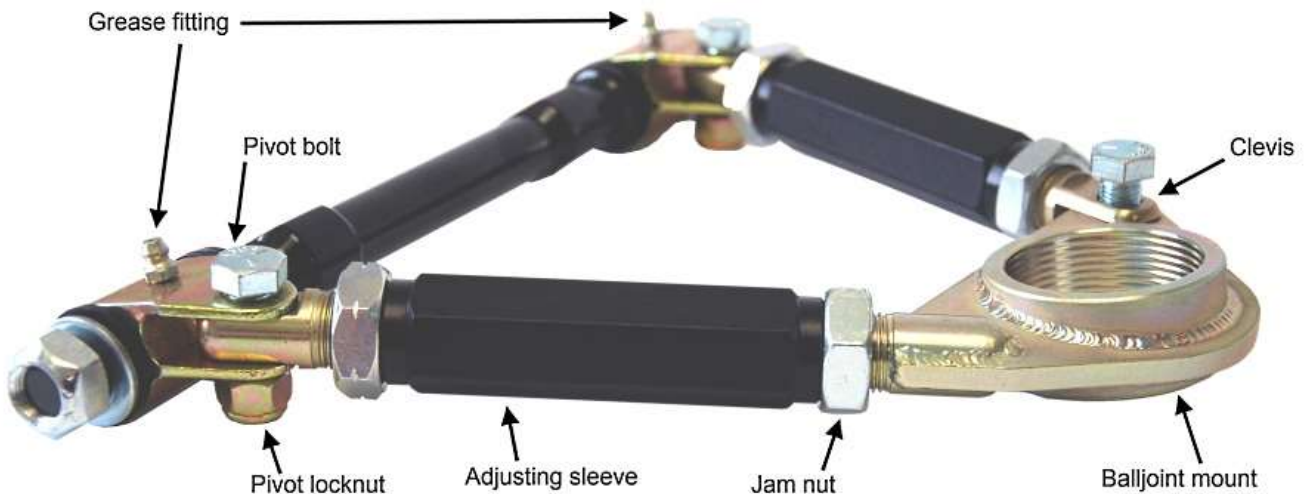
Caster: 7°

Camber: -0.5°

Total Toe: $\frac{1}{16}$ "

ADJUSTING THE UPPER CONTROL ARM

-  Use the diagram below for reference.




Slightly loosen the three pivot bolts using a $\frac{5}{8}$ " wrench and socket.

Loosen the jam nuts on both ends of each adjusting tubes using a $1\frac{1}{8}$ " wrench. Turn the adjusting tubes to lengthen or shorten the arm.

After you have adjusted the arm to the desired length, tighten down the jam nuts against the adjusting tubes, and then tighten each of the three pivot bolts. Torque the pivot bolts to 60 lbft.

Grease both ends using chassis grease frequently to insure smooth, trouble free operation.

 There should never be more than 1” of thread showing past the tightened down jam nuts on either end of both adjusting tubes.

The Pivot Bolts must be loosened while the car is being aligned and retightened afterwards