#### 3 Link Rear Suspension

- ★ <sup>3</sup>/<sub>16</sub>", <sup>3</sup>/<sub>8</sub>", <sup>1</sup>/<sub>2</sub>" drill bits, <sup>5</sup>/<sub>8</sub>", <sup>3</sup>/<sub>4</sub>", <sup>15</sup>/<sub>16</sub>", 1" wrenches, <sup>3</sup>/<sub>8</sub>", <sup>5</sup>/<sub>8</sub>", <sup>3</sup>/<sub>4</sub>", <sup>15</sup>/<sub>16</sub>" sockets, <sup>5</sup>/<sub>16</sub>" Hex key, Ratchet, Torque Wrench, Drill, Ruler/Tape measure, Pliers, Flat head Screwdriver, Tin Snips/scissors/razor, Marker.
- $\Rightarrow$  3-Link rear suspension with kit.



#### Upper Link Axle Mount

<sup>1</sup> If using the FFR Moser axle skip to the next section since the upper link bracket is welded to the axle.

Test fit the two halves of the upper arm mount together. If it is hard to put all of the bolts in the mount holes, put in as many as you can then use a  $\frac{1}{2}$ " drill bit through the remaining bolt holes.

Attach the upper link bracket onto the axle using the fine hardware (FFR# 12217 & 12218)



The front attachment of the upper link axle mount attaches to the hole on the flange section of the pumpkin. This hole has some variance and may need to be drilled out from the bottom side using the mount as a guide.



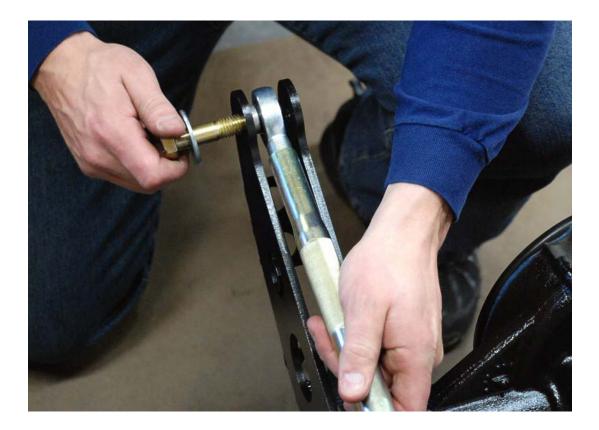
Install a jam nut on each of the rod ends, remembering that two of them are left hand thread.

Insert the rod ends into the swedged tubes (one is right hand thread and one is left hand thread). The longer tube is the Panhard bar and the shorter one is the upper link.



# Upper Link

Attach the short upper link tube to the axle upper link mount using the  $\frac{1}{4}$ " spacers on either side of the rod end.



# Rear Axle

 $\overset{\text{W}}{\sim}$  Have someone help with this step, the rear axle is very heavy and mistakes can result in serious injury.

Use a floor jack to position the rear axle assembly under the frame.



- Make sure that the rear jack stands are positioned under the 4" round tube as far back as possible to prevent the frame from tipping up once the axle is mounted
- <sup>1</sup> Do not hold the end of the axle from the bottom of the disc, if the axle falls, the axle can crush your fingers and result in serious injury.

With one person holding a side of the axle raise the axle so that the lower control arms can be bolted onto the frame.



Attach the lower control arms to the frame mounts.



Jack the rear axle up and attach the upper link to the frame.



### Rear Coil-Over Shock Assembly

- Snap ring pliers,  $\frac{3}{4}$ " wrench,  $\frac{3}{4}$ " socket, ratchet, ruler, marker, hack saw.
- Roadster/Coupe rear shock kit
- The rear shocks are pre-valved at the factory in compression and rebound for good street use. The shocks can be adjusted in rebound as per Koni's instructions if so desired. The rear springs are 350lb. Other springs are available for different ride characteristics.
- WARNING! Incorrect assembly and maintenance of this part can cause serious injury or death.

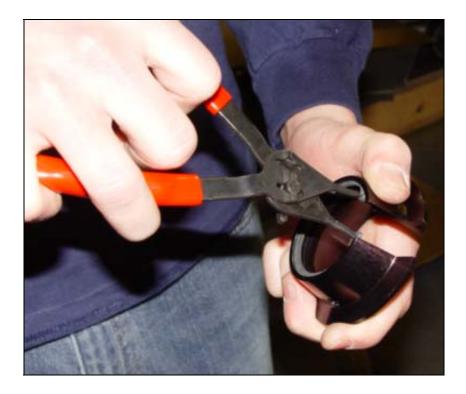


Unpack the rear shocks, coil over's and hardware.

Double check the jam nut under the rod end and bump stop to make sure that it is tight. Screw the spring seat down on the sleeve so it is closer to the unthreaded end. The center high part of the set should be pointed away from the unthreaded end. Slide the coil sleeve over the body of the damper beginning at the end which has the rubber bump stop. The unthreaded end of the sleeve goes first so that it will sit on the snap ring on the shock body.



The coil-over hats have a snap ring which holds it in place. Remove this snap ring to assemble the coil over shock.



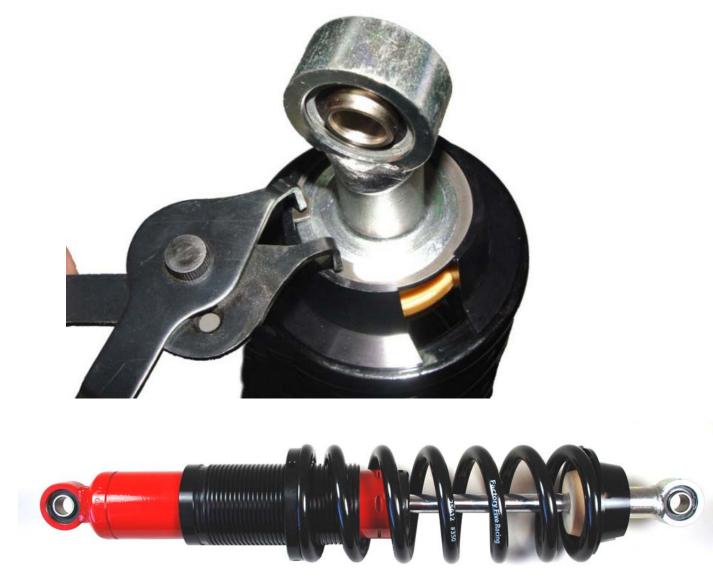
Slide the rubber bumper about two inches down on the shaft.



Put the spring on the shock, then install the spring hat on the shaft end of the shock and push the rubber bumper up against it.

Rotate the spring seat back up the sleeve so that the spring pushes the hat tight against the end of the shock.

Install the snap ring on the spring hat so that it holds onto the shock end. Make sure that the slot in the snap ring and the slot in the spring hat are not aligned.



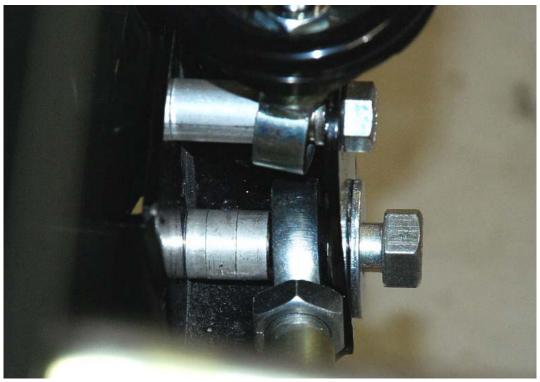
Assembled solid axle Koni coil-over shock.

Attach the body end of the shock to the upper shock mount using the two equal length (1.09") spacers.



Jack the rear axle up so the rod end of the shocks can be mounted on the axle through the shock mount hole.

Install the kit  $\frac{1}{2}$ "x 4" bolts are provided for each lower shock mount. The bolt should be installed from front to rear going through the axle and bracket then the long spacer (1.13") from the rear shock assembly, the shock, and the  $\frac{1}{8}$ " shim toward the rear. Use a  $\frac{3}{4}$ " socket and Torque wrench to tighten both upper and lower mounts to **40 ft-lbs**.



Passenger side



Driver Side

Check for shock clearance on brake lines, emergency brake cables, brake calipers, frame and axle parts.

Check to make sure that the spring is seated correctly on the shock.

Run zip ties through the holes in the spring hat and around the spring to prevent the spring from becoming unseated.





Panhard Bar Frame mount



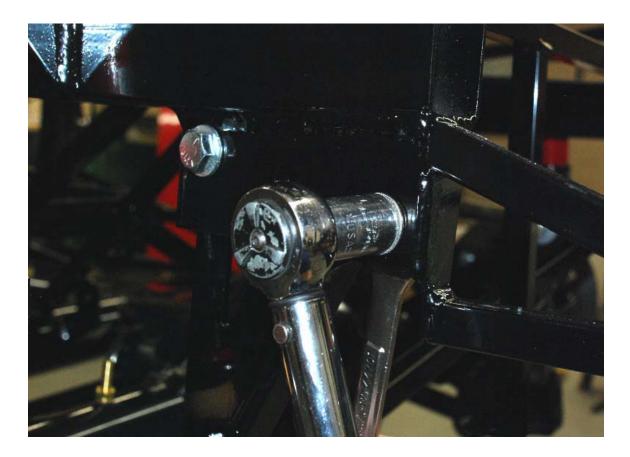
Attach the Panhard Bar frame mount to the inside of the quad shock brackets, the forward leg will attach to the back of the angled 2"x 3" tube. Do not tighten the quad shock bracket bolts yet.



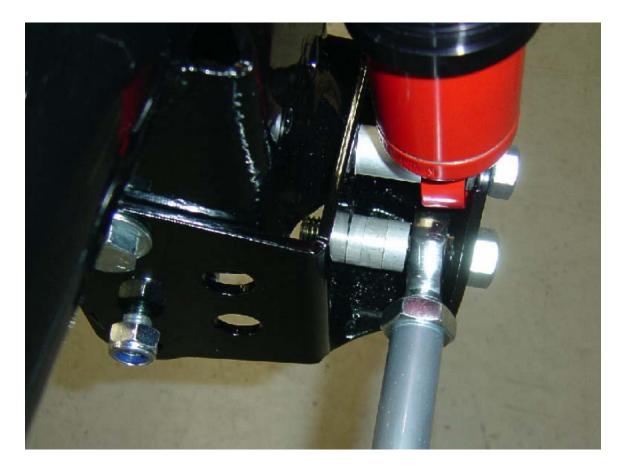
For the front mount, use a  $\frac{1}{2}$  drill bit and drill through the sleeve on the mount. Make sure before drilling that the hole is away from the side of the 2"x 3" tube so that a nut can be attached on the back of the bolt from the bottom of the tube.



Install the  $\frac{1}{2}$ "-13 x 2.5" bolt and tighten. Tighten the bolts on the quad shock brackets.



The Panhard bar mounts to the car using the  $\frac{5}{8}$ "x 3" bolts and spacers. Install the Panhard bar to the passenger side traction lock bracket. Three spacers are used in the front (2) 0.375" (FFR# 14064) and (1) 0.25" (FFR# 14065). The rear uses the thin 0.0625" shim (FFR# 13337). It will be necessary to adjust the length some to fit, make sure that you adjust the same amount on both sides. There should never be less than  $\frac{3}{4}$ " of threads screwed into either the Panhard bar or the upper arm.



Attach the Panhard bar to the frame mount using the spacers provided.



There should never be less than  $\frac{3}{4}$  of threads screwed into either the Panhard bar or the upper arm.

To set the pinion angle, make sure that your ride height is where you want it, and then adjust the upper arm until the desired angle is reached. We usually run about 2° up on the rear axle, but you can adjust this to fit your particular set-up.

The Panhard bar can center the axle left to right in the frame.

At ride height, level the Panhard bar as much as possible.



Double check all your nuts and bolts, and make sure that all four jam nuts are tight.

Item	Nm	Lbft
Upper link to axle	101-111	75-82
Upper link to frame	101-111	75-82
Lower control arm to axle	101-111	75-82
Lower control arm to frame	101-111	75-82
Upper shock to frame	61-81	45-60
Lower shock to axle bracket	61-81	45-60
Panhard bar	101-111	75-82

Rear Suspension Torque Specs Chart

<sup></sup> If a 3-link was used, skip the next section on the IRS.