

INSTALL/REMOVAL INSTRUCTIONS: AIR SUSPENSION CONVERSION KIT

ATTENTION: Refer to the appropriate shop manual for your vehicle to obtain specific service procedures for this part. If you do not have a service manual or lack the skill to install this part, it is recommended that you seek the services of a qualified technician. Pay special attention to all cautions and warnings included in the shop manual. Read and follow all instructions carefully.



Installation Instructions

Air Suspension Conversion Kit

General Installation Instructions

When servicing any vehicle be sure to follow all safety procedures. First, make sure that when lifting the vehicle that you use an appropriate jack with a proper weight rating. Before going underneath any vehicle, make sure that it is properly supported with sturdy jack stands and on level ground so that the vehicle doesn't fall or slide off of the jack and onto you. As with any automotive repair, make sure you have the appropriate tools to do the job so you don't damage any parts on the vehicle. Safety glasses and mechanic's gloves should also be worn for your protection.

Take care not to exceed the Gross Vehicle Weight Rating (GVWR), or the maximum load recommended by the manufacturer. It is important that all the vehicle owner manuals recommendations are followed for your own safety and to prevent damage to the vehicle.

Once you are ready to disable the ride light, you will need to disconnect the negative battery cable (-) to prevent electrical shock/malfunction.

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2003-2009 Lexus GX 470

Toyota 4Runner

Rear Conversion

Parts included

- 2- coil springs
- 2- rear shocks
- 2- upper spring locators
- 2- lower spring perches



Tools needed

- Metric socket set
- Metric wrenches
- Level work surface
- Floor jack screw
- Drivers spring
- Compressor
- Jack stands
- Wire cutter/stripper/crimping tool
- Allen wrenches

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Rear Removal 2003-2009 Lexus GX 470 Toyota 4 Runner

- Turn the suspension switch to “OFF”. The switch is located on the center console.
- Raise and support the vehicle.
- Remove the wheels
- Remove the upper retaining clip from the rear air spring.
- Locate the air canister underneath the rear of the vehicle on the driver’s side.
- Remove the air lines that run to the Air Springs. This will release any air pressure from the Air Springs.



Remove these air lines

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Rear Removal 2003-2009 Lexus GX 470 Toyota 4Runner

- Remove the lower portion of the Air Spring from the axle perch.
- Pull down the top of the Air Spring to access the Air Line.



- Squeeze the white plastic clip and remove the Air Line from the Air Spring.



- Remove the Air Spring from the vehicle.



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Rear Removal

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Toyota 4Runner

- Place a jack stand under the rear axle. Remove the lower shock bolt and lower the rear axle.



- Disconnect the electrical connector from the shock.



- Remove the upper shock nut and remove the shock from the vehicle.



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Rear Installation

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Toyota 4 Runner

- Install the shock absorber into the upper mounting location, add the bushing and secure with upper shock nut.



- Install the upper spring locator puck and secure with the supplied bolt.



- Tighten bolt.

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Rear Installation

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- Place the plate and puck assembly onto the axle's spring perch with the head of the bolt positioned down through the hole in the perch.



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Rear Installation

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Toyota 4 Runner

- Lower one side of the rear axle at a time. Lower until axle hangs free.
- Using an External Spring Compressor, compress the spring 2-3 inches.



- Now place the spring on the axle plate.
- Slowly remove the spring compressor while keeping the top of the spring in line to fit over the upper locator.



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Rear Installation

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- Raise the rear axle and install the lower shocks onto the mounting location and secure the bolts.



Install the wheels

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Front Removal and Installation 2003-2009 Lexus GX 470 Toyota 4 Runner

Vehicle must be raised to perform conversion. Use proper lifting equipment only!

Caution: Always wear eye protection

- Disconnect ground wire from battery
- Raise vehicle and remove front tires
- Remove front rock shield from underside of vehicle. (Fig. 1)
- Remove sway bar mounting bolts from frame on both sides and from the spindles. Remove sway bar from vehicle. (Fig. 2 – 3)
- Remove tie rod end. (Fig. 4)
- Place a drain pan under the control arm and wrap a shop towel around the lower strut where the hydraulic line connects to the strut.
- The hydraulic line is under pressure (wear eye protection) and slowly loosen the banjo bolt to allow the fluid and pressure to escape. (Fig. 5)

Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



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2003-2009 Lexus GX 470 Toyota 4 Runner Front Removal Installation Guide

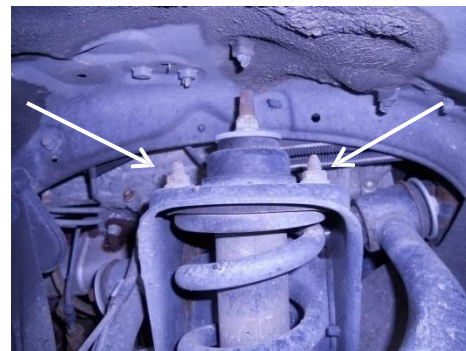
- After allowing the fluid to drain place a jack or stand under the control arm.
- Remove the lower strut mounting bolt and lower the jack or stand. (Fig. 6)
- Remove the strut's three upper mounting stud nuts and remove strut from the vehicle. (Fig.7)

Removal is complete.

Fig. 6



Fig. 7



New Front Strut Installation

- Before installing the new struts, zip-tie the hydraulic line up to the steel brake line bracket. This line is no longer used. (Fig. 8)
- Remove the three nuts and washers from your new conversion strut.
- Align the upper studs into the existing mounting holes while making sure the lower mount is in alignment for the bolt. (Fig. 9) Install strut then the washers and nuts and tighten. (Fig. 9)

Fig. 8



Fig. 9



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- Align the lower strut mount into the mounting bracket and install bolt and nut and tighten.
(Fig. 10)

Fig. 10



- Install sway bar and tighten bolts
- Install tie rod end and tighten bolts.
- Install rock shield.
- Replace tires and tighten lugs to factory spec.
- Repeat steps for the opposite side of vehicle.

Fig. 11



- After any new conversion kit installation, have an alignment performed for proper tire wear and safety.

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Suspension Light Out Procedure

Disconnect the negative battery cable

- Locate the ride control module, under the dash behind the driver's side kick panel. (Fig 1)
- Remove the panel to locate a silver colored box with three connectors. This is above and behind the big blue harness connector. (Fig 2)
- The connector needed in the silver box is the one closest to you. (Connector C in Fig. 2) (Arrow)
- Pull this connector out of the box and from behind the other wire harnesses. (Fig 3)
- Locate the yellow/green stripe wire. Pin # 15
- Cut the yellow/green stripe wire and tape the ends. (Fig 4)
- Plug the connector back into the box.
- Replace trim panel.
- Reconnect battery.

Fig. 1



Fig. 2



Fig. 3

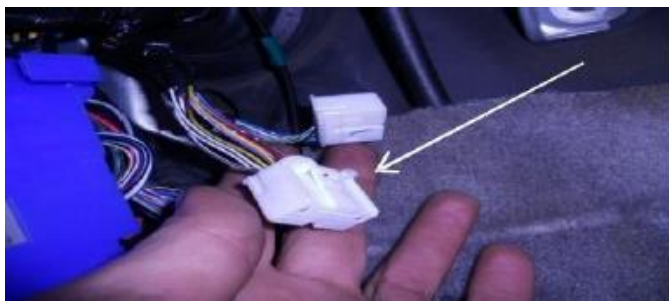


Fig. 4

