

Truck and Jeep Accessories

841 S 71st Ave · Phoenix AZ 85043 800-595-7659 · 623-907-0081



# Kit 4003108

19 to Current RAM 1500 4WD (Non-Classic)
4" TACTICAL LIFT
INSTALLATION INSTRUCTIONS

DO NOT INSTALL THIS KIT ON ANY VEHICLE OTHER THAN THE ONE FOR WHICH IT IS SPECIFIED.

If anytime during the installation you encounter something different from what is outlined in the instructions, call technical support at (800) 595-7659.

#### Tools needed:

- Jack
- Jack Stands
- Wheel Chocks
- Breaker Bar
- Torque Wrench
- Ratchet
- Metric/Standard Socket Set
- Metric/Standard Wrench Set
- Drill and Drill Bit Set
- Die grinder, cut off wheel, reciprocating saw,
- or similar tool capable of cutting metal.
- Welder or access to a professional welding
- shop.

Verify all parts have been received in this kit by comparing with this parts list:

14 Big Block (2" x 3", Round)
2 Small Block (2" x 2", Round)
4 Steel Crush Block (2" x 2", Square)
1 Front Bumper Bracket (Driver)
1 Front Bumper Bracket (Passenger)
1 Rear Bumper Bracket (Driver)
1 Rear Bumper Bracket (Passenger)
1 Rear Bumper Bracket (Center)
1 Bracket (Spare Tire Winch)
1 Bolt Pack
2 Thread Lock

# **Important**

If parts are missing from kit, please be prepared to provide the following information:

- 1. Name of purchase location
- 2. Bar Code on side of box
- 3. Date above bar code
- 4. Date inside box cover
- 5. Inspector # from inside box cover

# **△ WARNING**

Before you install this kit, read and understand all instructions, warnings, cautions, and notes in this instruction sheet and in the vehicle owner's manual.

# **Pre-Installation**

# NOTE

Kit parts are prefaced by the word kit and appear in **bold** print.

- 1. Carefully read all warnings and instructions completely before beginning.
- Verify all parts have been received in this kit by checking the parts list at the beginning of this document.
- 3. Only install this kit on the vehicle for which it is specified.
  - If anytime during the installation you encounter something different from what is outlined in the instructions,
  - Call technical support at (928) 636-7080.
- 4. Park vehicle on a clean, dry, flat, level surface and block tires so vehicle cannot roll in either direction.

#### Measurements

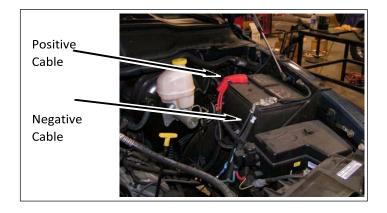
1.	Measure and record distance between front bumper and fenders.		
	Driver Side	Passenger Side	
2.	Measure and record distance between rea bumper and bed		
	Driver Side	Passenger Side	

3. Measure and record distance between cab and bed.

Passenger Side	
	Passenger Side

# **Engine Compartment**

1. Disconnect both battery cables. Disconnect negative cable first, then positive cable.

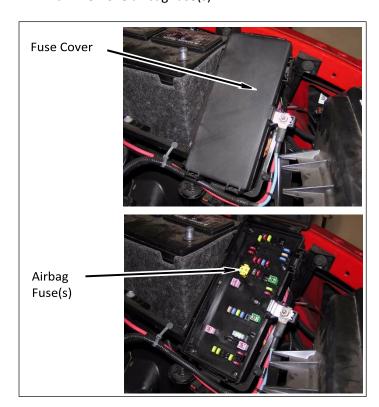


2. Airbag Fuse

# NOTE

The location of the airbag fuse may vary; check the vehicle owner's manual.

- a. Remove fuse cover.
- b. Remove airbag fuse(s).

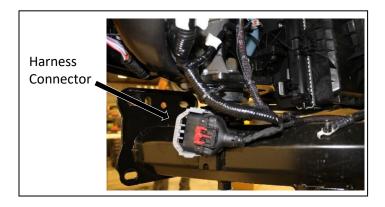


# **Front of Vehicle**

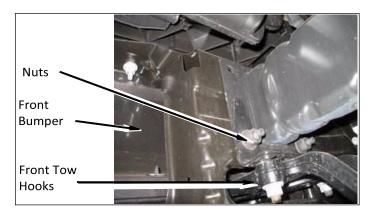
- 1. Front bumper
  - a. Remove inner fender covers held in by screws and plastic rivets.



b. If equipped, disconnect front equipment (fog light, collision sensors, etc.) junction harness on driver side of front bumper.

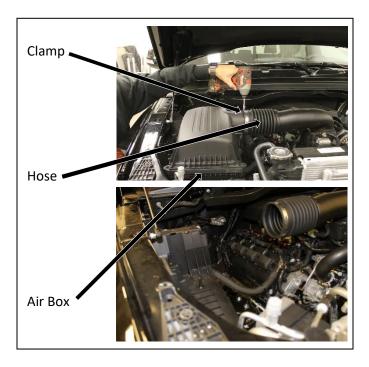


- c. If equipped, remove bolts for factory front tow hooks and remove each tow hook.
- d. Remove nuts fastening front bumper to frame horns, then remove front bumper.



# **Engine Compartment**

- 1. Air Box
  - a. Undo Clamp to disconnect hose, then pull out air box.



2. Remove cable protruding out of driver side fire wall from its holder/mount.



# 3. Steering Shaft

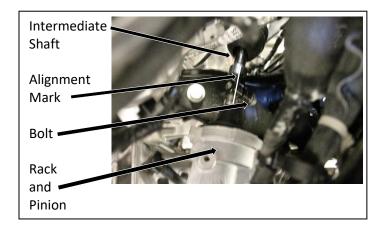
#### **△** WARNING

Accidental deployment of the air bag can result in serious personal injury or death. To avoid accidental deployment during installation of the lift kit, the Supplemental Restraint System (SRS, or airbag) must remain deactivated. Do not allow anyone near the airbag during installation. Refer to the factory service manual or owner's manual for the recommended procedure to disable the SRS. After kit installation, the SRS must be reactivated before driving the vehicle.

#### **A** CAUTION

If the following step is not performed, the airbag clockspring could be damaged. Do not turn the steering wheel while the steering shaft is disconnected.

- a. Strap steering wheel to prevent accidental movement.
- b. Mark intermediate shaft in relation to rack and pinion as shown.



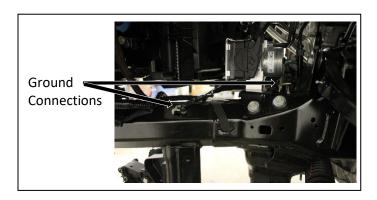
c. Remove bolt then intermediate shaft from rack and pinion. Slide intermediate shaft up to separate from rack and pinion.

#### NOTE

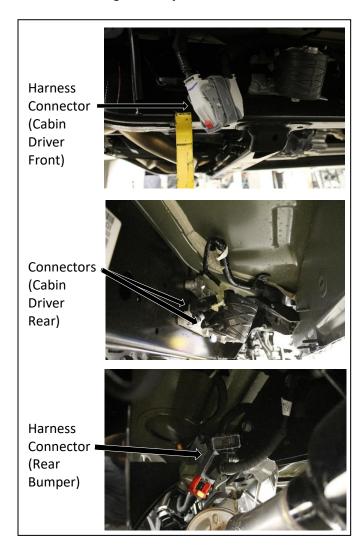
Intermediate shaft may not separate from rack and pinion until cab is lifted.

# **Underside of Vehicle**

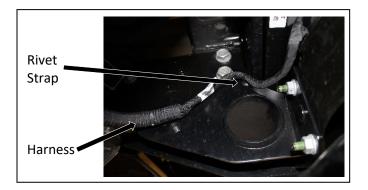
- 1. Ground connections, Wire Harnesses, and Cables
  - a. On both the driver and passenger side, follow the length of the vehicle and unbolt/detach all ground connections to frame.



b. On both the driver and passenger side, follow the length of the vehicle and unplug/disconnect all wiring harness junctions from frame.

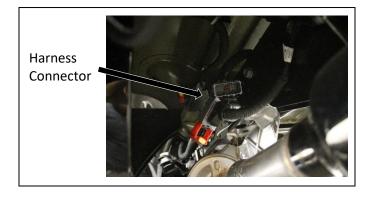


 c. On both the driver and passenger side, follow the length of the vehicle and detach all wires/cables tethered to the frame.

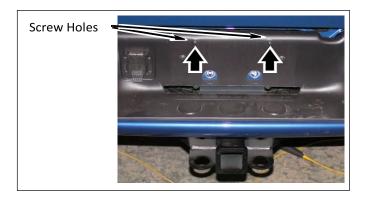


# Rear of Vehicle

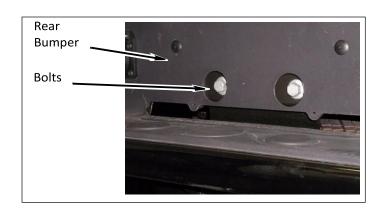
- 1. Rear bumper
  - a. Be certain that rear equipment (license plate light, backup/collision sensors, etc.) junction harness on driver side of rear bumper, along with any other cables/wiring, is disconnected.



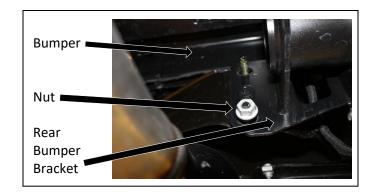
b. Remove two screws fastening license plate to rear bumper, then move license plate.



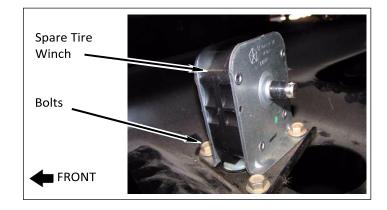
c. Remove two bolts fastening rear bumper to trailer hitch, if equipped.



d. On each side, remove nuts fastening rear bumper to vehicle rear bumper bracket, then remove rear bumper.



- 2. Spare tire winch
  - a. Lower spare tire to ground then remove spare tire (see owner's manual for proper procedure).
  - b. Remove bolts fastening spare tire winch to crossmember, then remove winch.



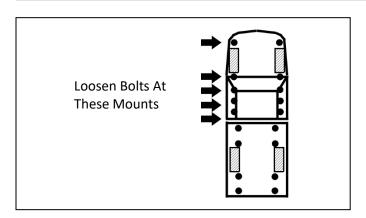
# Installation

# Cabin

- 1. Prepare to lift cabin from frame
  - a. Loosen, but DO NOT REMOVE, cabin mounting bolts on driver side.

# NOTE

The number of cabin mounting bolts may vary with the length of the cabin.



Engine Bay Cabin Mount



Mid-Front Cabin Mount



Mid-Rear Cabin Mount

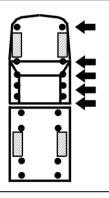


Rear Cabin Mount



b. Remove bolt from each cabin mount on passenger side.

Remove Bolts At These Mounts



# Engine Bay Cabin Mount



Mid-Front Cabin Mount



Mid-Rear Cabin Mount



Rear Cabin Mount



# **⚠** WARNING

Use extreme caution when lifting body from frame. To prevent serious personal injury, ensure the lifting device is securely placed. Keep your hands out from between the body and frame.

# **⚠** CAUTION

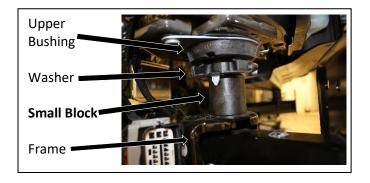
Continually check hoses, wires, lines, etc. to be sure that everything is flexing properly and not binding, or damage to the vehicle could result. Be especially careful of the a/c hoses at the fire wall, the belt pulley, and at the core support. Ensure brake lines stretch while lifting. Bending the lines to gain ample slack may be necessary. Be extremely careful not to kink the lines.

- 2. Cabin passenger side
  - a. Position a wood block on a hydraulic jack under passenger side of cabin (under the body seam).
     Slowly lift cabin slightly over 2 inches.

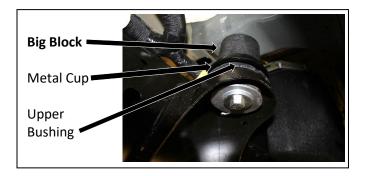
### **⚠ WARNING**

The *kit* **blocks** must be installed <u>in addition to</u> the factory upper and lower bushings. Installing the *kit* **blocks** without the factory upper and lower bushings could result in damage to the vehicle or serious personal injury.

b. For engine bay cabin mount, place *kit* **small block** (2" x 2", Round) under washer and upper bushing, above the frame.



c. For all other cabin mounts, place *kit* **big blocks** (3" x 3", Round) on metal cups and upper bushings on each cabin mount.



- d. Lower cabin onto kit blocks.
- e. Install *kit* **bolt** into each cabin mount. DO NOT TIGHTEN.

#### NOTE

Length of cabin mounting *kit* **bolts** may vary with their position on the cabin.

Cabin Mounting Bolts					
Mount Position	Factory Bolt	Kit Bolt			
Engine	M12 x 1.75mm x	M12 x 1.75mm x			
Bay	240mm	290mm			
Mid	M12 x 1.75mm x	M12 x 1.75mm x			
IVIIU	95mm	150mm			
Boar	M12 x 1.75mm x	M12 x 1.75mm x			
Rear	140mm	190mm			

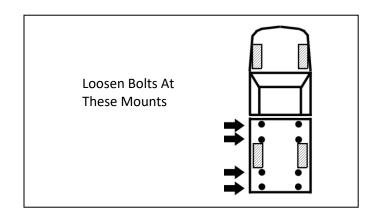
- 3. Cabin Driver Side
  - a. Repeat previous steps on driver side of cabin.
  - b. Set cabin-to-bed spacing according to previous measurement.

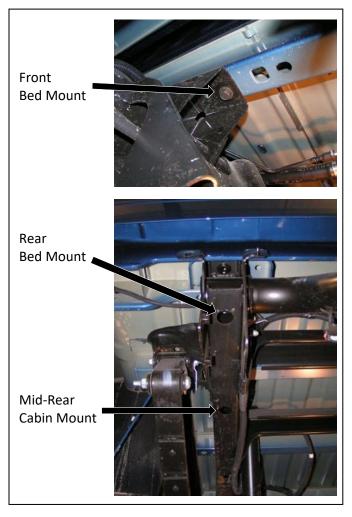
# Bed

- 1. Prepare to lift bed from frame
  - a. Loosen, but DO NOT REMOVE, bed mounting bolts on driver side.

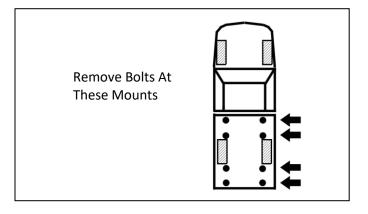
# NOTE

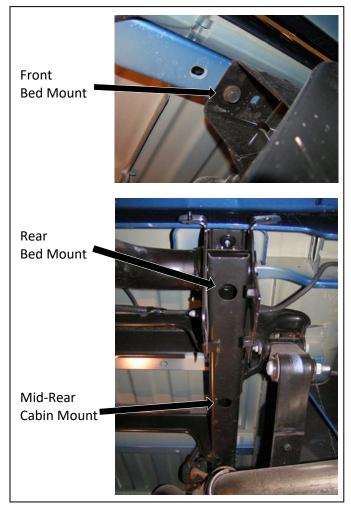
The number of bed mounting bolts may vary with the length of the bed.





b. Remove bolt from each bed mount on passenger side.





# **△ WARNING**

Use extreme caution when lifting the bed from the frame. To prevent serious personal injury, ensure the lifting device is securely placed. Keep your hands out from between the bed and frame.

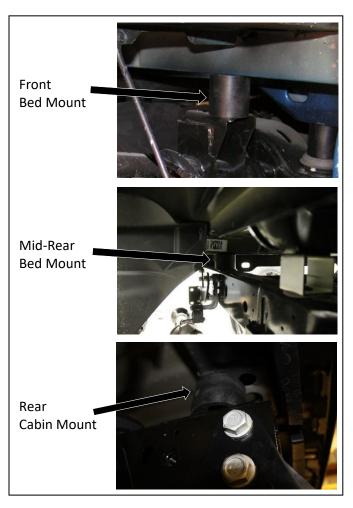
# **△** CAUTION

To prevent damage to the vehicle while lifting the bed, continually check hoses, wires, brake lines, etc. to ensure all is flexing properly and not binding. Ensure clearance between bed and cabin is maintained.

- 2. Bed passenger side
  - a. Position a wood block on a hydraulic jack under passenger side of bed. Slowly lift the bed slightly higher than 2 inches.
  - b. Remove alignment tabs near front and rear bed mounts.



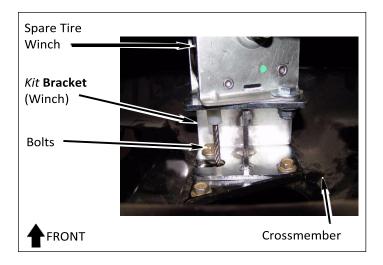
c. Place *kit* **big block** (3" x 3", Round) on each bed mount.



- d. Lower bed onto kit blocks.
- e. Install *kit* **bolt** (M12 x 1.75mm x 90mm) into each bed mount. DO NOT TIGHTEN.
- 3. Bed Driver Side
  - a. Repeat previous steps on driver side of cabin.
  - Set cabin-to-bed spacing according to previous measurement.

# **Rear of Vehicle**

- 1. Spare tire winch
  - Install kit bracket (winch) and mounting plate onto crossmember with two bolts. Position bracket between winch and the frame.
  - Install spare tire winch onto kit bracket (winch) with two kit bolts (3/8" x 1"), four kit washers (3/8" USS), and two kit nuts (3/8" Nylon lock).



- c. Verify ratchet tube is visible through hole in bed and plastic ratchet tube guide. Adjust kit bracket (winch), if necessary.
- d. Reinstall spare tire onto vehicle (see owner's manual for proper procedure).



#### 2. Crush Blocks

#### **△** WARNING

A certified welder should perform all welding.

a. Weld two kit steel crush block (2" x 2", Square) onto passenger side frame, below bed, where shown. Bolting kit steel crush block (2" x 2", Square) to frame is also an option.

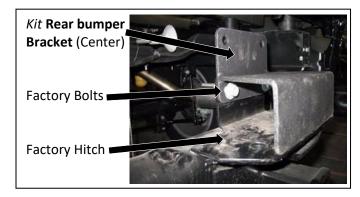


- b. Repeat above step for driver side.
- 3. Rear bumper

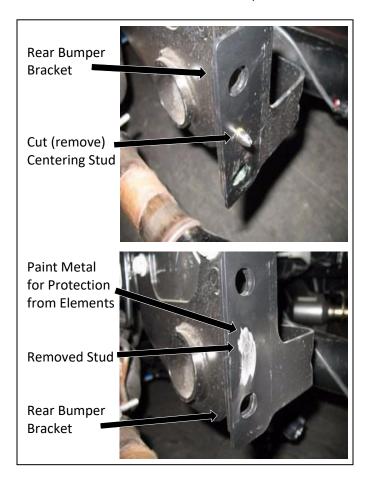
### **∆** WARNING

The following procedure is intended only to enhance the appearance of the vehicle. The rear bumper will no longer be rated for towing of any kind. Towing with the rear bumper after it has been lifted can result in death, serious personal injury, or damage to the vehicle. Towing after the bumper has been lifted should be accomplished using a rated Class III receiver type hitch.

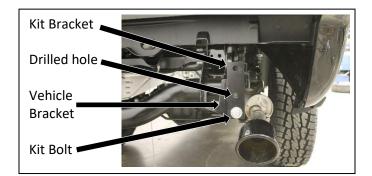
 Install kit rear bumper bracket (center) on trailer hitch with two factory bolts. Apply a few drops of kit thread lock to factory bolts.DO NOT TIGHTEN.



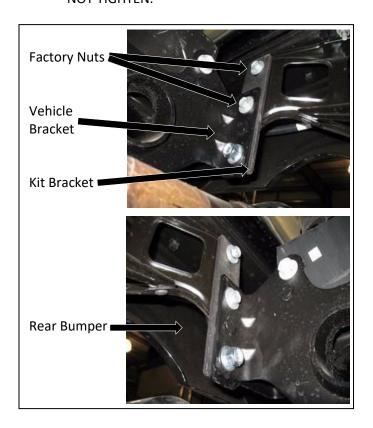
b. Remove stud on each rear bumper bracket.



c. Install and center kit rear bumper brackets to vehicle rear bumper brackets, then secure with 1/2" kit bolt. Drill out hole on vehicle rear bumper brackets using the center hole of the kit rear bumper brackets as a template and guide.



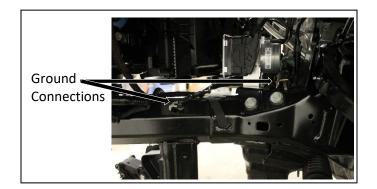
 d. Install rear bumper onto kit rear bumper brackets using factory nuts on each side. DO NOT TIGHTEN.



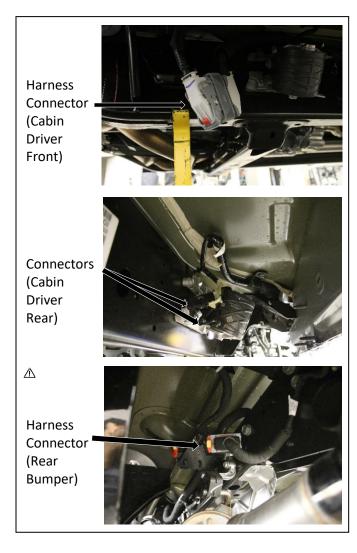
- e. Align rear bumper to previous bed-to-bumper measurements. TIGHTEN all hardware.
- f. Install license plate onto bumper with two factory screws.

# **Underside of Vehicle**

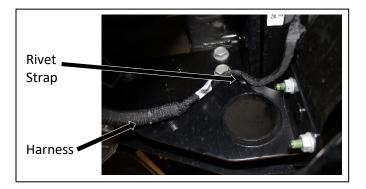
- 1. Ground connections, Wire Harnesses, and Cables
  - a. On both the driver and passenger side, follow the length of the vehicle and re-bolt/reattach all ground connections to frame.



b. On both the driver and passenger side, follow the length of the vehicle and replug/reconnect all wiring harness junctions to frame.



c. On both the driver and passenger side, follow the length of the vehicle and reattach all wires/cables tethered to the frame.



#### 2. Mount Bolts

 a. Remove each kit bolt from each mount, one at a time, and apply a few drops of kit thread lock to threads. Reinstall kit bolts, and tighten kit bolts to 55 lb-ft.

# **Engine Compartment**

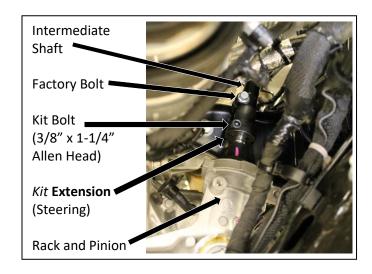
1. Steering shaft



#### **WARNING**

Verify the steering extension is securely installed as specified in the instructions. Failure to do so may cause steering malfunction, resulting in property damage or serious personal injury.

- a. Install kit extension (steering) in position on rack and pinion, then install intermediate shaft on kit extension (steering). Ensure marks on rack and pinion and intermediate shaft are aligned.
- b. Apply a few drops of *kit* **thread lock** to factory bolt and *kit* **bolt** (3/8" x 1-1/4" Allen head), then install and tighten bolts to 33 lb-ft.

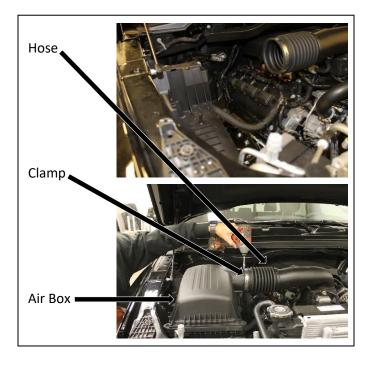


2. Reinstall cable protruding out of driver side fire wall from its holder/mount.



# 3. Airbox

a. Install airbox on vehicle, then reconnect hose and fasten clamp.



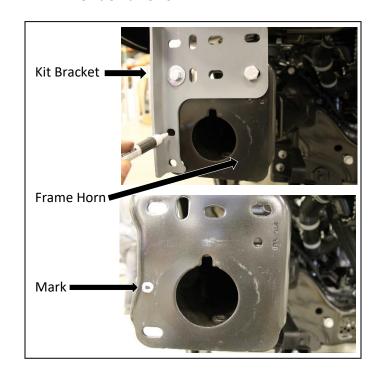
# **Front of Vehicle**

1. Front Bumper

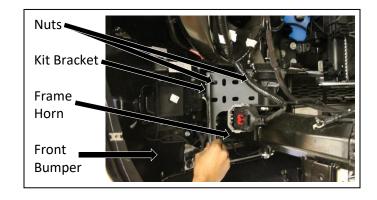
#### **△** CAUTION

Factory supplied front two hooks CAN NOT be used, if equipped.

a. Place and center kit front bumper bracket (Driver) to vehicle passenger side frame horn, then secure with 1/2" kit bolts. Mark hole on vehicle frame horn using the center hole of the kit front bumper bracket (Driver) as a template. Remove kit bracket, then drill out hole on vehicle frame horn.



- b. Repeat process on driver side.
- c. Install kit front bumper brackets behind frame horns. Center the holes, then use 1/2" kit bolts to secure the brackets to the frame horns. DO NOT TIGHTEN.
- d. Apply a few drops of kit thread lock to threads of front bumper studs. Align bumper to holes on frame horns and kit front bumper brackets, install factory front bumper nuts, and tighten all hardware.



e. If equipped, reconnect front equipment (fog light, collision sensors, etc.) junction harness on driver side of front bumper.

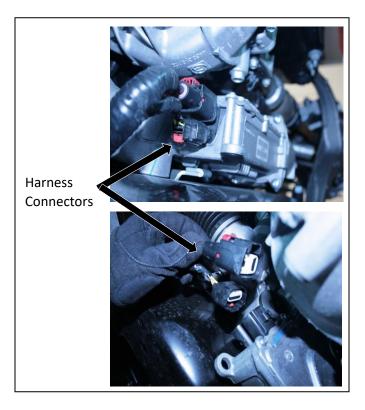


f. Reinstall inner fender covers using factory screws and plastic rivets.

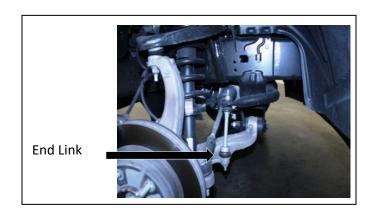


- 2. Front Suspension
  - a. Put the transmission in park and chock the rear tires.
  - Raise the front of the vehicle in accordance to manufacturer recommendations and support with jack stands, chock rear wheels. Raise vehicle so that the ground.
  - c. Remove Front Tires
  - d. Disconnect the factory Electronic Steering Control.

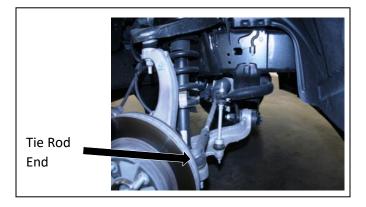
Failure to do so may result in damage to the Electronic Steering Control.



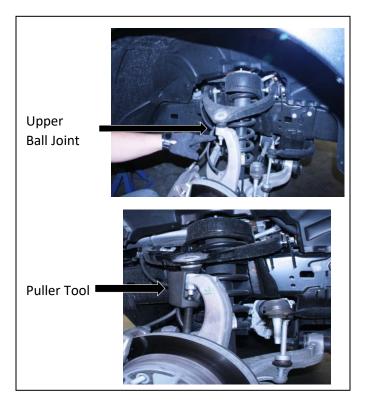
e. Remove the factory sway bar end link from the lower control arm.



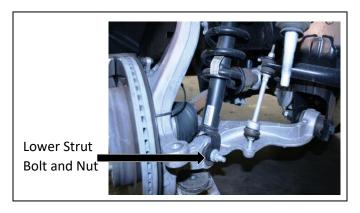
f. Remove the factory tie rod end from knuckle.



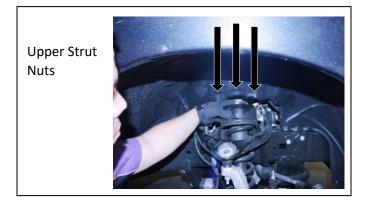
g. Remove the factory upper ball joint nut, and separate the knuckle from the upper control arm using the appropriate Puller tool.



h. Remove the factory lower strut bolt and nut. Note the direction of the bolt for reassembly.



i. Remove the 3 factory upper strut nuts on strut tower.



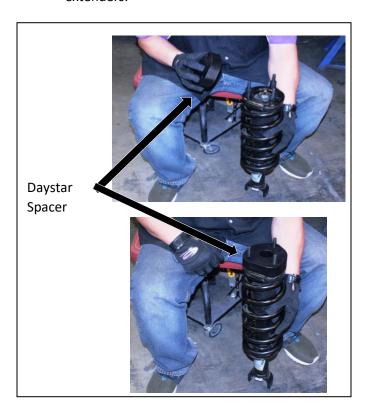
- j. Remove the factory strut from the vehicle
- k. Trim the 3 factory studs down until each is roughly 1" in length.



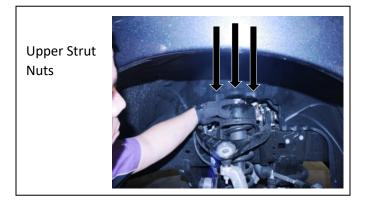
I. Install the *kit* **stud extenders** over the stock strut studs, use the supplied *kit* **thread lock**.



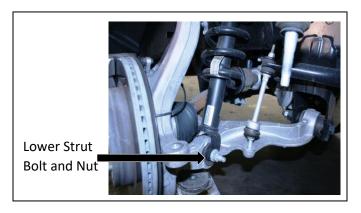
m. Install the *Daystar* **spacer** over the stud extenders.



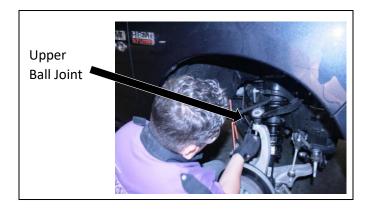
Install the strut to the strut tower using the supplied kit nuts and washers.
 Do not tighten at this time.



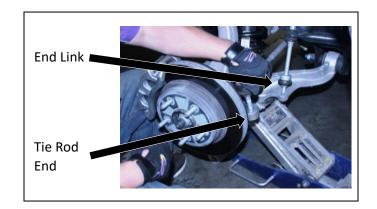
o. Install the factory lower strut bolt and nut.



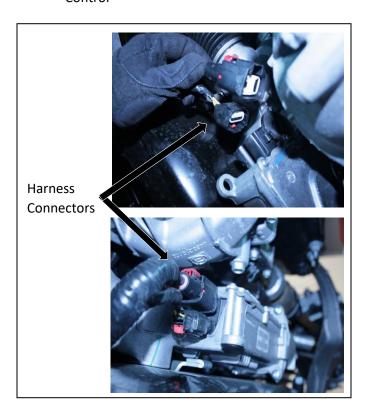
p. Using a floor jack, raise the lower control arm and reconnect the knuckle to the upper control arm and install the factory upper ball joint nut.



q. Install the factory tie rod end to the knuckle and the factory sway bar end link to the lower control arm



r. Reconnect the factory Electronic Steering Control



- s. Torque all fasteners to factory specifications.
- t. Install the wheels.
- u. Remove jack stands and lower the vehicle.
- v. Torque the lug nuts to factory specification.

# **Post Installation**

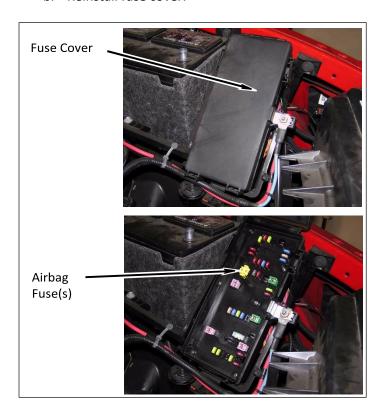
# **Engine Compartment**

1. Airbag Fuse

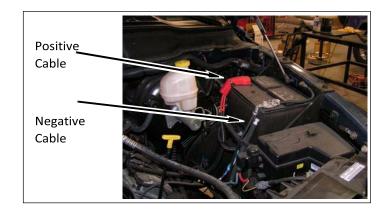
# NOTE

The location of the airbag fuse may vary; check the vehicle owner's manual.

- a. Reinstall airbag fuse(s).
- b. Reinstall fuse cover.



2. Reconnect both battery cables. Connect positive cable first, then negative cable.



# Miscellaneous

- 1. Apply *kit* **label** (warning) to dashboard in plain sight of all vehicle occupants.
- 2. Check all fasteners are torqued to proper spec.
- 3. Ensure all wires, hoses, cables, etc., are properly connected and there is ample slack.
- 4. Check steering in all positions to ensure that there is no bind. Check operation of clutch (if applicable), brake system, parking brake, transmission, and transfer case (Ensure there is full engagement in all gears and 4WD ranges).
- 5. Have a professional wheel alignment performed
- After 500 miles, retorque fasteners to factory specification.

# **⚠ WARNING**

Retorque all fasteners after 500 miles and after off road use. All Tactical lift components should be visually inspected and fasteners retorqued during routine vehicle servicing.

# **⚠** CAUTION

Daystar Products does not recommend any particular wheel and tire combinations for use with its tactical lifts and cannot assume responsibility for the customer's choice of wheels and tires. Refer to your owner's manual for recommended tire sizes and warnings related to the use of oversized tires. Larger wheel and tire combinations increase stress and wear on steering and suspension components, which leads to increased maintenance and higher risk for component failure. Larger wheel and tire combinations also alter speedometer calibration, braking effectiveness, center of gravity, and handling characteristics. Consult an experienced local off-road shop to find what wheel and tire combinations work best with your vehicle.

#### NOTE

All warranty information, instruction sheets, and other documents regarding the installation of this product must be retained by the <u>vehicle owner</u>. Information contained in the instructions and on the warranty card will be required for any warranty claims. The vehicle owner needs to understand the modifications made to the vehicle and how they affect vehicle handling and performance. Failure to provide the customer with this information can result in damage to the vehicle and severe personal injury.

#### NOTE

Depending on the vehicle configuration (automatic or manual transmission, 2WD or 4WD, cab length, bed length, etc.), some parts may not be used.

#### *∧* WARNING

Installation of a Daystar Products Tactical lift kit will change the vehicle's center of gravity and handling characteristics both on- and off-road. You must drive the vehicle safely! Extreme care must be taken to prevent vehicle rollover or loss of control, which could result in serious injury or death. Avoid sudden sharp turns or abrupt maneuvers and always make sure all vehicle occupants have their seat belts fastened.

# **⚠** CAUTION

Proper installation of this kit requires knowledge of the factory recommended procedures for removal and installation of original equipment components. We recommend that the factory shop manual and any special tools needed to service your vehicle be on hand during the installation. Installation of this kit without proper knowledge of the factory recommended procedures may affect the performance of these components and the safety of the vehicle. We strongly recommend that a certified mechanic familiar with the installation of similar components install this kit.

# **△** WARNING

DO NOT combine suspension, body, or other lift devices. Use of vehicle with combined lifts may result in unsafe and/or unexpected handling characteristics.

# **⚠ WARNING**

This kit should only be installed on a vehicle that is in good working condition. Before you install the kit, thoroughly inspect the vehicle for corrosion or deformation of the sheet metal around the factory body mounts. If the vehicle is suspected to have been in a collision or misused, do not install this kit. Off-road use of your vehicle with this kit installed may increase the stress applied to the factory body mounts. We do not recommend that any vehicle with a tactical lift kit installed be involved in any extreme off-road maneuvers such as jumping. Failure to observe this warning may result in serious personal injury and/or severe damage to your vehicle.

#### **△ WARNING**

Many states and municipalities have laws restricting bumper heights and vehicle lifts. Consult state and local laws to determine if the changes you intend to make to the vehicle comply with the law.

### **⚠ WARNING**

Before you install this kit, block the vehicle tires to prevent the vehicle from rolling.

# **⚠ WARNING**

Always wear eye protection when operating power tools.

# **△** WARNING

Accidental deployment of the air bag can result in serious personal injury or death. To avoid accidental deployment during installation of the kit, the Supplemental Restraint System (SRS, or airbag) must remain deactivated. Do not allow anyone near the airbag during installation. Refer to the factory service manual or owner's manual for the recommended procedure to disable the SRS. After you install the kit, reactivate the SRS before driving the vehicle.

#### NOTE

Daystat Products recommends using the Loctite® supplied in the kit on the threads of all kit nuts and bolts unless specified otherwise in these instructions.

# $\triangle$ WARNING

The installation of larger tires may reduce the effective- ness of the braking system.