

Truck and Jeep Accessories

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



KIT 4003106 Dodge Ram 1500 4WD 4" Tactical Lift Kit 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.

PRE-INSTALLATION PREPARATION

1. Read all warnings and instructions

2. Locate tools needed:

- Welder or access to a professional welding shop.
- Die grinder, cut off wheel, Sawzall, or similar tool capable of cutting metal and plastic.
- \square Drill with 1/2" drill bit

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

- 2 Strut Spacer
- 16 Lift Block (3" x 2" Round)
- 4 Bed Block (2" x 2" x 2" Square)
- 2 Bracket (Front Bumper, C-shaped)
- 2 Bracket (Front Bumper)
- 2 Bracket (Rear Bumper)
- 1 Bracket (Rear Bumper, Center)
- 1 Bracket (Winch)
- \square 1 Bolt Pack
- 1 Hardware Pack
- \square 1 Bag Kit
- 3 Thread Lock
- **Decal/Warning Labels**

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

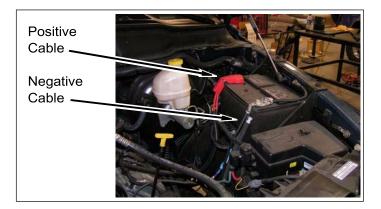
NOTE

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

4. Park vehicle on a clean, dry, flat, level surface and block tires so vehicle cannot roll in either direction.

5. 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.



Prepare to Install Kit

Measurements

1. Measure and record distance between front bumper and fenders.

Driver Side _____ Passenger Side_____

2. Measure and record distance between rear bumper and bed

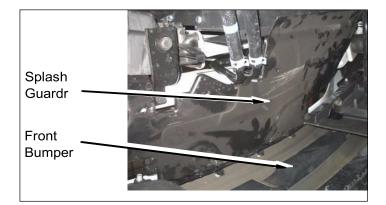
Driver Side _____Passenger Side_____

3. Measure and record distance between cab and bed.

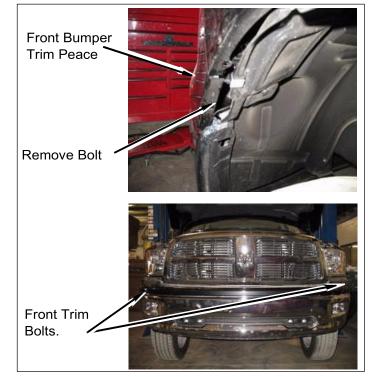
Driver Side _____Passenger Side_____

Front of Vehicle

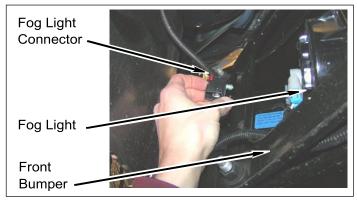
- 1. Front bumper
 - a. Remove front grill by removing four bolts from top, then pulling grill out.
 - b. Remove push clips and lower splash guard from bumper, core support, and fan shroud.



c. Remove bumper trim by removing one bolt at each corner(Under inner fender cover). Slide cover forward to remove.

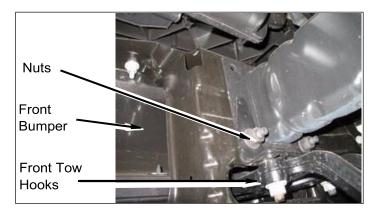


- d. Remove grill support by removing two bolts from each side.
- e. Disconnect fog light harness at driver side of front bumper and pull connector off of front bumper, if equipped.



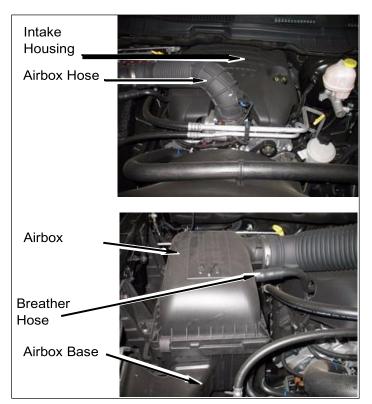
f. Remove three bolts for drivers side factory tow hook and remove tow hook. Repeat to passenger side

g. Remove six nuts and front bumper from frame horns .

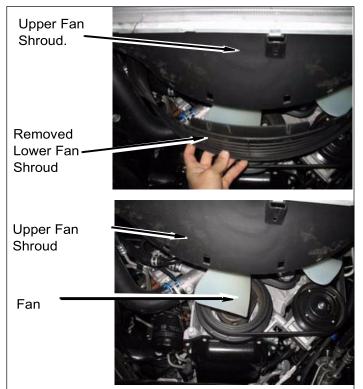


Engine Compartment

- 1. Airbox
 - a. Release four clips from airbox cover. Remove breather hose from airbox cover. Loosen clamp and airbox hose at intake housing.



b. Remove airbox cover, base and filter from vehicle. c. Remove lower fan shroud section(Will not be reused).



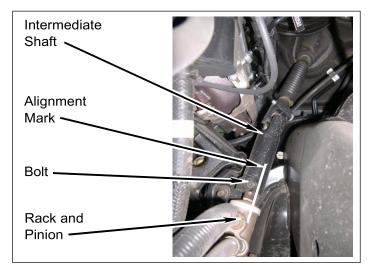
2. Steering Shaft

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.

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.

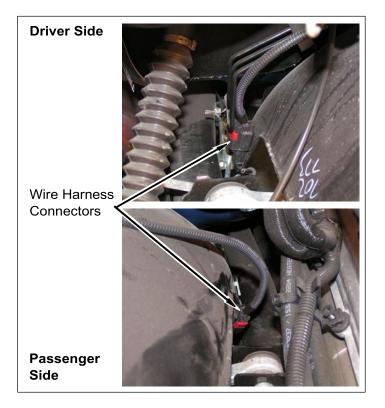


c. Remove bolt and intermediate shaft from rack and pinion. Slide intermediate shaft up to separate from rack and pinion.

NOTE

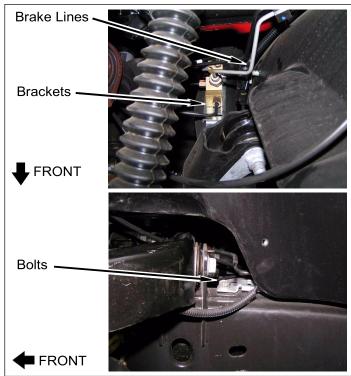
Intermediate shaft may not separate from rack and pinion until cab is lifted.

3. Remove brake sensor harness from passenger and driver fender wells.

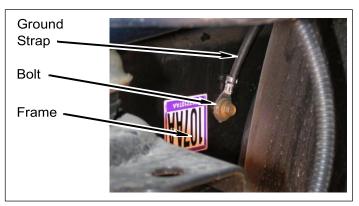


Underside of Vehicle

- 1. Wire harnesses and brake lines
 - a. Remove bolts and brake line brackets from driver side frame rail.



b. Remove bolt and ground strap from driver side frame rail.



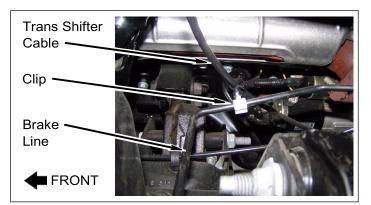
c. Remove harness from driver side body mount bracket.



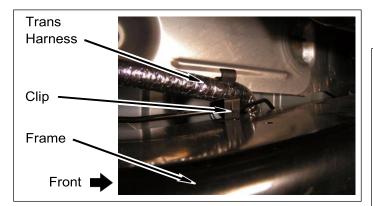
NOTE

The following procedures applies ONLY to automatic transmissions.

d. Automatic transmission models: Remove transmission shifter cable from clip on driver side brake line.

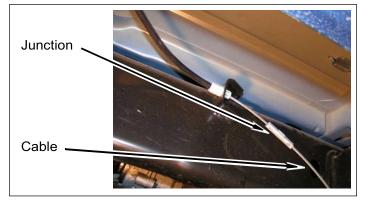


e. **Automatic transmission models:** Remove transmission wire harness from frame mount clip.



- 2. Parking brake cable
 - a. Pull slack into parking brake cable. Attach locking pliers to parking brake cable to allow slack, if necessary.

b. Use expanding pliers to disconnect parking brake cable from junction.



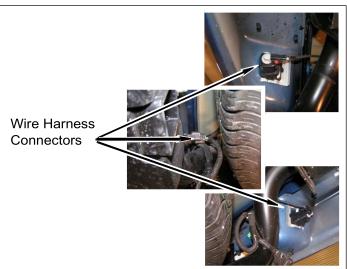
c. Remove parking brake cable from driver side frame mount.

Rear of Vehicle

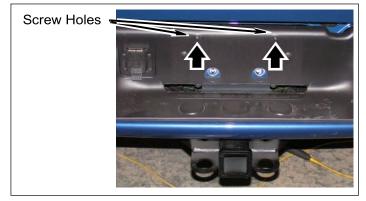
1. Fuel filler

Use extreme caution when working near fuel line(s) and fuel tank(s). Clean up spilled fuel immediately. Any spark could cause an explosion or fire resulting in serious personal injury and/or property damage.

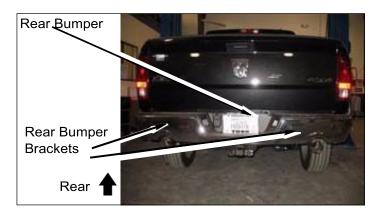
- a. Remove fuel cap from fuel filler.
- 2. Ground strap
 - a. Remove bolt and ground strap from frame near fuel filler hoses.
- 3. Rear bumper
- a. Remove wire harness connectors from rear bumper.



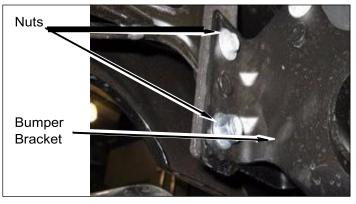
b. Remove two screws and license plate.



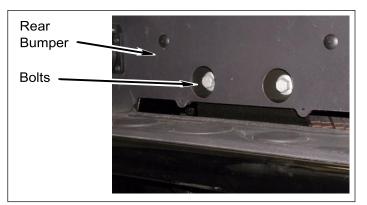
c. Remove four bolts from rear bumper bracket..



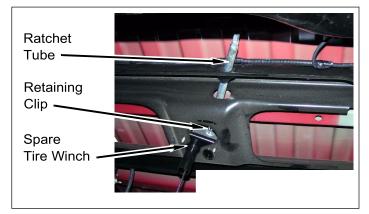
d. Remove two nuts on each side of bumper.



e. Remove two bolts from rear bumper and trailer hitch, if equipped.

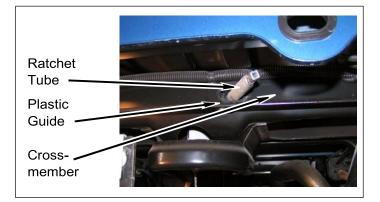


- f. Remove rear bumper.
- 4. Spare tire winch
 - a. Lower spare tire to ground and remove (see owner's manual for procedure).
 - b. Remove retaining clip and ratchet tube from spare tire winch.



c. Remove Spare tire winch.

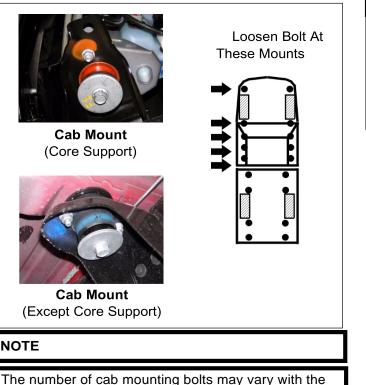
d. Remove plastic ratchet tube guide from crossmember.



Install Kit

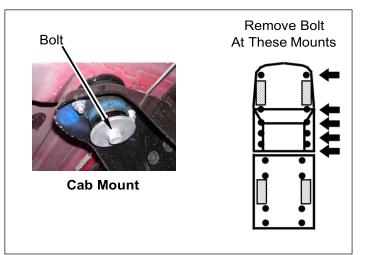
Cab

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



The number of cab mounting bolts may vary with th length of the cab.

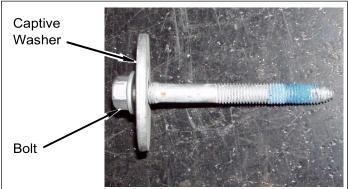
b. Remove bolt from each cab mount on passenger side.



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.

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.

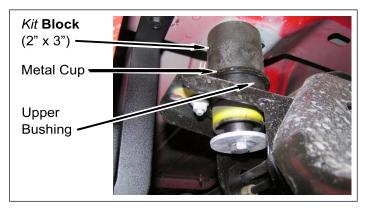
- 2. Cab passenger side
 - a. Remove captive washers from each factory cab body mount bolt.



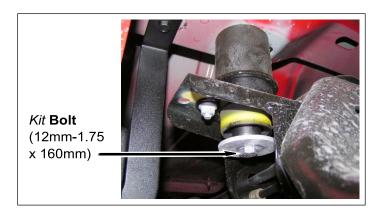
 b. Position a hydraulic jack and a wood block under passenger side of cab (under the body seam).
Slowly lift cab just enough to install a *kit* block on top of factory upper bushing.

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.

c. Place *kit* **blocks** (2" x 3") on metal cups and upper bushings on each cab mount.



- d. Lower cab onto kit blocks (2" x 3").
- e. Install *kit* **bolt** (12mm-1.75 x 160mm) into each cab mount. DO NOT TIGHTEN.



- 3. Cab driver side
 - a. Repeat previous steps on driver side of cab.
 - b. Set cab-to-bed spacing according to previous measurement.

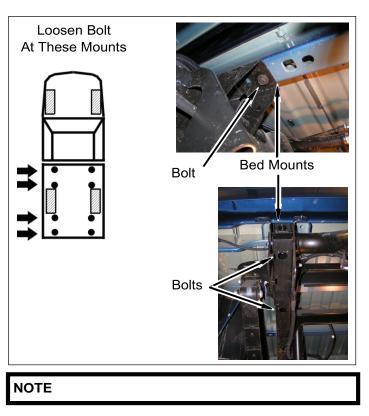
c. Remove each *kit* **bolt**, one at a time, and apply a few drops of *kit* **Loctite**® to threads. Install *kit* **bolt**, and captive washer. Tighten *kit* **bolts** to **55** ft. lbs.

Kit **Bolt** (12mm-1.75 x 160mm), Captive — Washer



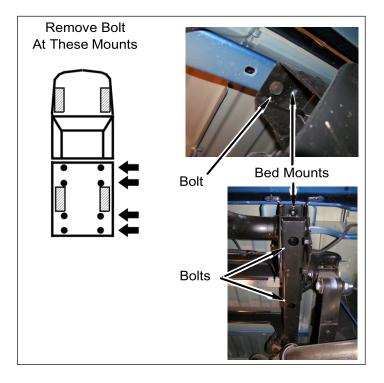
Bed

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



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

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

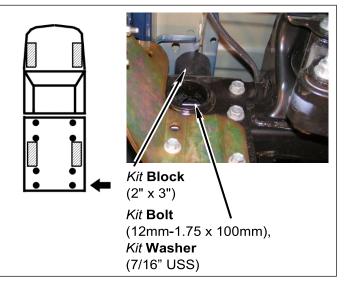


Use extreme caution when lifting the bed from the frame. To prevent serious personal injury, ensure the lifting device is securely placed. Keep your hands out from between the bed and frame.

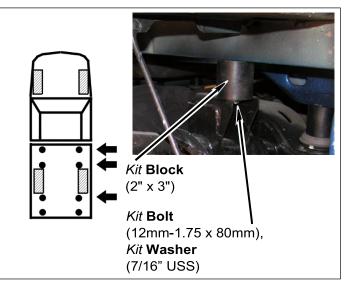
To prevent damage to the vehicle while lifting the bed, continually check hoses, wires, brake lines, etc. to ensure everything is flexing properly and not binding. Ensure clearance between bed and cab is maintained.

- 3. Bed passenger side
 - a. Using a hydraulic jack and a wood block, slowly lift passenger side of bed a little more than 2".

b. Place a *kit* **block** (2" x 3") rear frame mount.



c. Place *kit* **blocks** (2" x 3") on two (or three) other frame mounts.

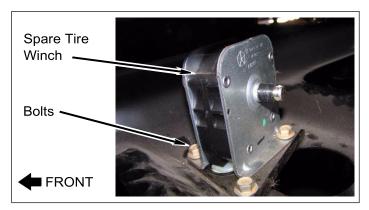


- d. Lower bed onto kit blocks.
- e. At rear bed mount, install *kit* **bolt** (12mm-1.75 x 100mm) and *kit* **washer** (7/16" USS). DO NOT TIGHTEN.
- f. At each other bed mount, install *kit* **bolt** (12mm-1.75 x 80mm) and *kit* **washer** (7/16" USS). DO NOT TIGHTEN.
- g. Repeat previous steps on driver side of bed.
- h. Set bed-to-cab spacing according to previous measurement.

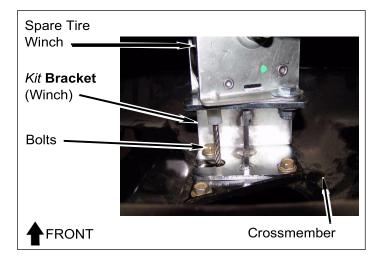
i. Remove each *kit* **bolt**, one at a time, and apply a few drops of *kit* **Loctite**® to threads. Install *kit* **bolt** with *kit* **washer** (7/16" USS). Tighten *kit* **bolts** to **55** ft. lbs.

Rear of Vehicle

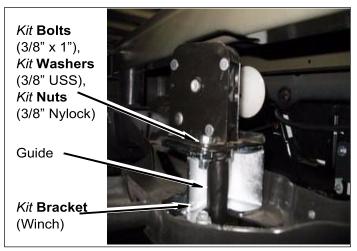
- 1. Spare tire winch
 - a. Remove two bolts and spare tire winch from crossmember.



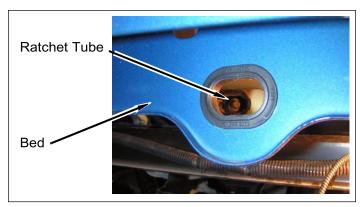
b. Install *kit* **bracket** (winch) and mounting plate onto crossmember with two bolts. Position bracket between winch and the frame.



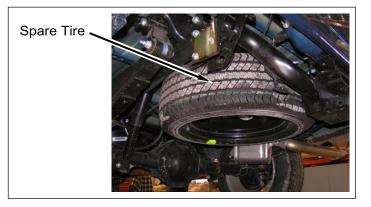
c. Install spare tire winch onto *kit* bracket (winch) with two *kit* bolts (3/8" x 1"), four *kit* washers(3/8" USS), and two *kit* nuts (3/8" Nylock).



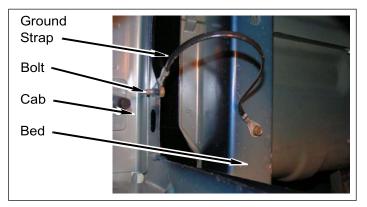
- d. Install ratchet tube onto spare tire winch with retaining clip
- e. Verify ratchet tube is visible through hole in bed and plastic ratchet tube guide. Adjust *kit* **bracket** (spare tire ratchet tube), if necessary.



f. Install spare tire on vehicle (see owner's manual).



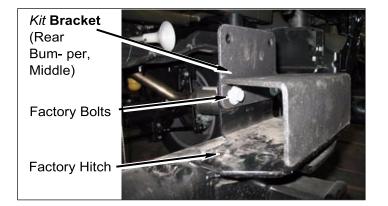
g. Reattach ground strap to frame with bolt near fuel filler hoses.



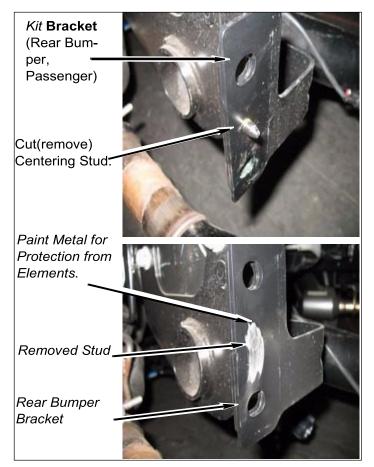
2. Rear bumper

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.

a. Apply a few drops of *kit* Loctite® to factory bolts. Install *kit* bracket (rear bumper, middle) on trailer hitch with two factory bolts. DO NOT TIGHTEN.



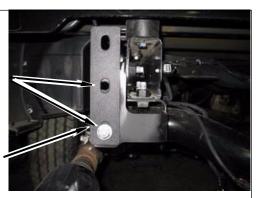
b. Remove stud on each rear bumper bracket..



c. Place rear bumper brackets in place with 1/2" bolt. Center bracket so that all holes align..

Align Factory Holes to New Bumper Bracket.

Use 1/2" Bolt to Secure Rear Bracket.



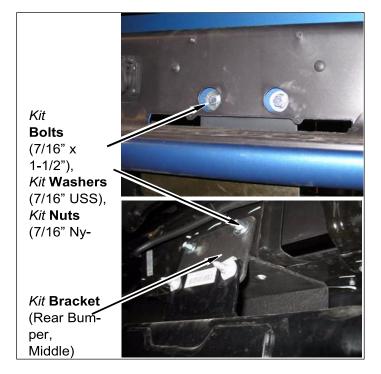
Rear Bumper Brackets.



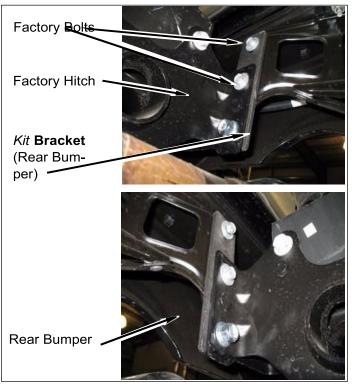
d. Install rear bumper onto *kit* **bracket**. DO NOT TIGHTEN. Mark rear bumper and clearence bumper for center bumper support bracket (Cut about 9 1/2" across & 1 3/4" in).



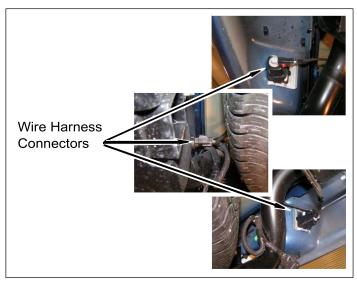
e. Install rear bumper onto *kit* **bracket** (rear bumper, middle) with two *kit* **bolts** (7/16" x 1-1/2"), four *kit* **washers** (7/16" USS) and two *kit* **nuts** (7/16" Nylock). DO NOT TIGHTEN.



f. Install *kit* **brackets** (rear bumper) onto bumper with two factory bolts on each side. DO NOT TIGHTEN.



- g. Align rear bumper to previous bed-to-bumper measurements. TIGHTEN all hardware.
- h. Connect wiring harnesses to bumper.



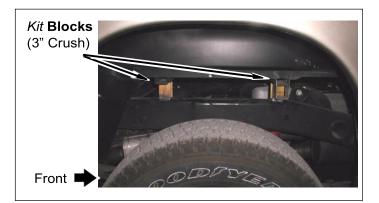
i. Install license plate onto bumper with two factory screws.

Underside of Vehicle

1. Crush blocks

A certified welder should perform all welding.

a. Weld two *kit* **blocks** (3" crush) onto passenger side frame, below bed, where shown.

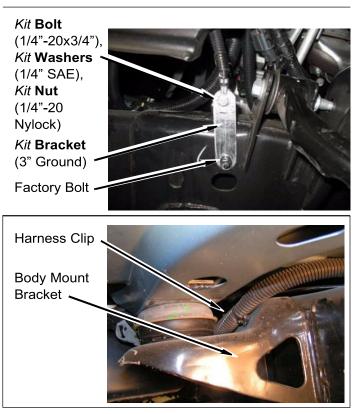


b. Repeat above step for driver side.

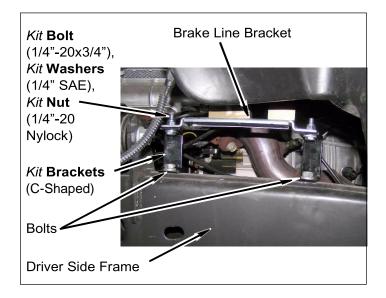
Use extreme caution when working near the fuel lines and the fuel tank. Clean up spilled fuel immediately. A spark could cause an explosion or fire resulting in serious personal injury and property damage.

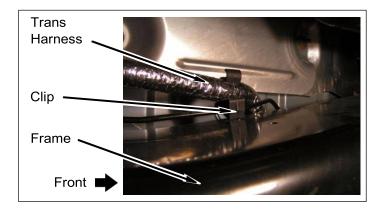
- 2. Fuel filler
 - a. Tighten gas cap.
- 3. Parking brake cable
 - a. ReInstall Parking brake cable.
- 4. Ground strap
 - a. Install ground strap onto *kit* bracket (3" ground, big hole) with *kit* bolt (1/4"-20 x 3/4"), two *kit* washers (1/4"-20 x 3/4") and *kit* nut (1/4"-20 Nylock)
- 7. Install transmission wire harness on frame mount clip.

5. Install wire harness to body mount bracket on driver side with clip. .



- 6. Brake line bracket
 - a. Install two *kit* **brackets** (C-shaped) onto driver side frame with two bolts.
 - b. Install brake line bracket onto to *kit* brackets (C-shaped) with two *kit* bolts (1/4" x 1"), four *kit* washers (1/4" SAE), and two *kit* nuts (1/4" Nylock).





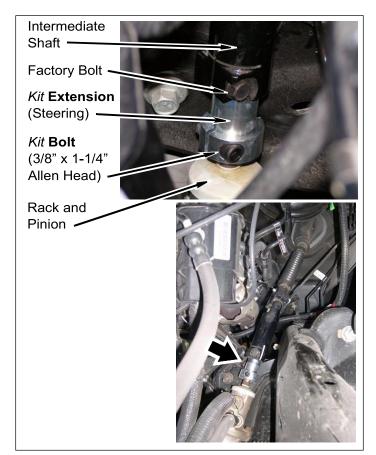
Engine Compartment

1. Steering shaft



Kit Extension (Steering)

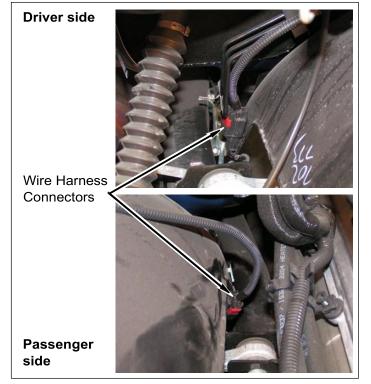
Verify the steering extension is securely installed as specified in the instructions. Failure to do so may cause steering malfunction, resulting in property dam- age or serious personal injury. and intermediate shaft are aligned.



- b. Install intermediate shaft on *kit* **extension** (steering), ensuring marks on intermediate shaft and rack and pinion are aligned.
- c. Apply a few drops of *kit* **Loctite**® to factory bolt and *kit* **bolt** (3/8" x 1-1/4" Allen head).
- d. Install and TIGHTEN bolts to **33** lb.-ft.

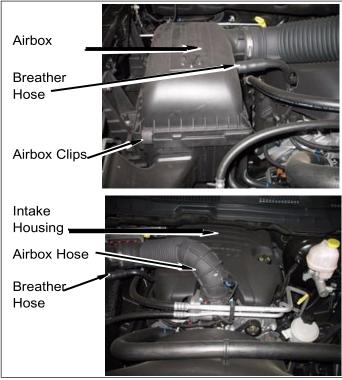
a. Install *kit* **extension** (steering) in position on rack and pinion. Ensure marks on rack and pin- ion

2. If possible, install brake sensor harness on passenger and driver fender wells.



- 3. Fan shroud
 - a. Be sure that the fan clears the fan shroud.

- 4. Airbox
- a. Install airbox base and filter on vehicle.
- Install airbox cover onto airbox base with four clips. Install breather hose on airbox cover. TIGHTEN airbox hose clamp at intake housing.

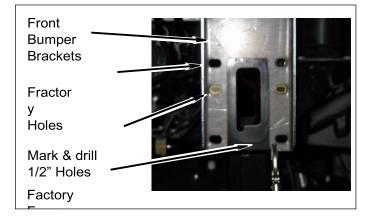


Front of Vehicle

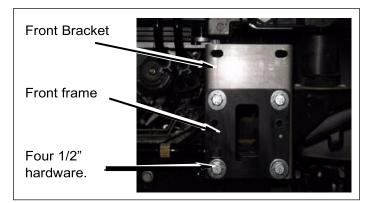
1. Front bumper

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

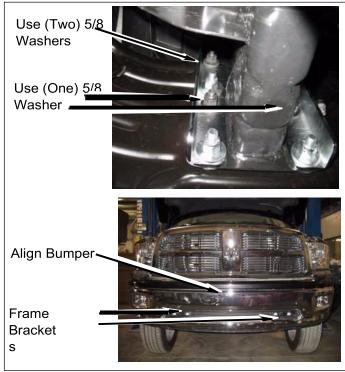
a. Place new front bracket over driver frame horn, clamp it in place. Mark and drill two 1/2" holes(Centered) where marked(Be sure that everything is square). NOTE: Non-Chrome bumper will need to be drilled to 9/16". Repeat to passenger side.



b. Place new frame brackets behind the frame horn. Center the holes, use 1/2" hardware two secure the brackets to the factory frame. Do NOT TIGHTEN.



- c. Chrome bumper only: Place two 5/8 washers on driver side top stud on bumper. Then use one 5/8 washer on each lower stud(Between bumper and bracket). Use your factory nuts on the studs. NOTE: Non-Chrome bumper use three 5/8 washers on top and two on each lower stud.
- d. Apply a few drops of *kit* **Loctite**® onto threads of studs. Align bumper, then tighten all hardware.

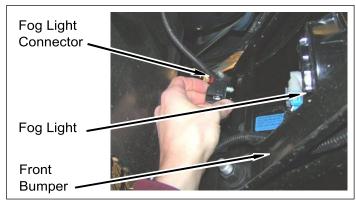


- e. Install front grill brace with factory hardware.
- f. Install trim peace over bumper gill support. Install each bolt at each corner (Under inner fender cover). Ensure both edges of fender well fit on backside of bumper edge.
- g. Install front grill using factory hardware.

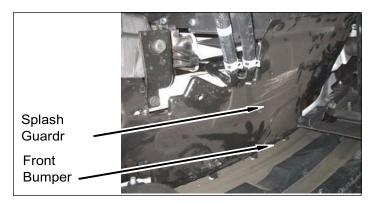
Tactical # 2803106 RAM 1500 4WD



h. Connect fog light harness at driver side of front bumper and install onto front bumper, if equipped.



i. **2009:** Install push clips and lower splash guard on bumper, core support, and fan shroud.



2. Front Suspension

a. Chock rear tires and raise the front of vehicle placing jack stands under the frame rails so the tires are off the ground.

- b. Support the front axle with a floor jack.
- c. Remove front tires.
- d. Remove the sway bar link from sway bar at the frame.
- e. Remove the upper ball joint nut and separate the knuckle from the upper A-arm using the appropriate Puller tool.
- f. Remove the lower strut nuts on strut tower (3) per side.
- **NOTICE:** leave one of the nuts on the strut to prevent the strut from dropping out in the next step.
- g. Remove the lower strut bolt and nut.
- h. Remove the strut from the upper strut tower so you can install the spacer.
- i. Install the stud extenders over the stock strut studs.
- j. Install the spacer over the stud extenders.
- k. Install the strut with the spacer onto the lower strut mount. Leave the bolt loose.
- I. Install the strut to the strut tower. Using a floor jack, raise the lower control arm and reconnect the strut to the strut tower using the supplied nuts and washers.
- m. Reconnect the upper ball joint to the knuckle.
- n. Torque all nuts and bolts to OEM specifications.
- o. Install the wheels.
- p. Remove jack stands and lower the truck back on the ground. Remove all jacks and jack stands from under vehicle.
- q. Torque the lug nuts to 85ft.lbs. using an X pattern.

Caution: Have an alignment professional check and adjust the alignment to factory specifications.

After Completing Installation

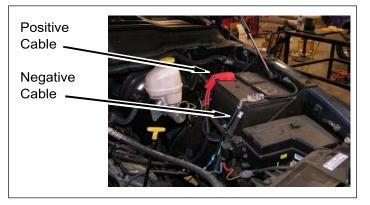
Engine Compartment

1. Airbag fuse

NOTE

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

- a. Install airbag fuse(s).
- b. Install fuse cover.
- 2. Connect 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 to ensure they are tight.
- 3. Ensure all wires, hoses, cables, etc. are properly connected and there is ample slack.
- 4. Test-drive vehicle. Check steering in both directions to ensure that there is no bind. Check operation of clutch, brake system, and parking brake. Check operation of transmission and transfer case. Ensure there is full engagement in all gears and 4WD ranges. Check battery connections and electrical component operation.