

INSTALLATION INSTRUCTIONS FOR 2001-2002 DODGE 2500/3500 4WD 6" SUSPENSION SYSTEM PART NUMBER 7507

Requires the following parts for a complete installation:

- Front Coil Spring Box:-- P/N 7500-S
- Box Kit P/N 7507B
- ADD A Leaf Kit: P/N AAL750B

WARNING!!! READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE PROCEEDING. MAKE SURE THAT YOU HAVE ALL TOOLS AND PARTS BEFORE BEGINNING THE INSTALLATION.

*SOME VEHICLES MAY REQUIRE DRIVELINE& EXHAUST MODIFICATIONS

SPECIAL ITEMS REQUIRED:

- STEERING (PITMAN) ARM PULLER
- TIE ROD SEPARATING TOOL
- TORQUE WRENCH
- DODGE SERVICE MANUAL
- SPRING COMPRESSOR

<u>REVTEK SUSPENSION RECOMMENDS</u> THAT RED LOCTITE BE USED ON ALL FASTENERS UNLESS OTHERWISE NOTED. IT IS ALSO RECOMMENDED TO HAVE THE FRONT END ALIGNMENT CHECKED AFTER INSTALLATION.

GENERAL NOTES:

- 1. THIS SYSTEM SHOULD ONLY BE INSTALLED BY A PROFESSIONAL.
- 2. Compare all contents of the boxes to the parts list before starting to insure all components are included.
- 3. Prior to <u>installing the suspension system</u>, inspect the vehicle's suspension components, alignment, and frame for damage, corrosion, or cracks. Correct any worn or damaged parts before beginning install.
- 4. Always wear safety glasses during installation.
- 5. Unless otherwise noted, tighten all bolts to the torque specifications listed in the Torque Specification table included in these instructions. Use a torque wrench.
- 6. Estimated time to install this system is 6 hours.
- 7. Check off the step number at the beginning of each step when you finish it. Then when you stop during the installation, it will be easier to find where you need to continue from.

FRONT DRIVELINE MODIFICATION MAY BE NECESSARY!!!!

STANDARD BOLT TORQUE & IDENTIFICATION								
INCH SYSTEM			METRIC SYSTEM					
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 9.8	Class 10.9	Class 12.9		
5/16	15 ft. lbs.	20 ft. lbs.	M6	5 ft. lbs.	9 ft. lbs.	12 ft. lbs.		
3/8	30 ft. lbs.	35 ft. lbs.	M8	18 ft. lbs.	23 ft. lbs.	27 ft. lbs.		
7/16	45 ft. lbs.	60 ft. lbs.	M10	32 ft. lbs.	45 ft. lbs.	50 ft. lbs.		
1/2	65 ft. lbs.	90 ft. lbs.	M12	55 ft. lbs.	75 ft. lbs.	90 ft. lbs.		
9/16	95 ft. lbs.	130 ft. lbs.	M14	85 ft. lbs.	120 ft. lbs.	145 ft. lbs.		
5/8	135 ft. lbs.	175 ft. lbs.	M16	130 ft. lbs.	165 ft. lbs.	210 ft. lbs.		
3/4	185 ft. lbs.	280 ft. lbs.	M18	170 ft. lbs.	240 ft. lbs.	290 ft. lbs.		
1/2-13x1.75 HHCS								
G= Grade Marking (bolt strength) L= Length (inches) D= Nominal Diameter (inches) X= Description (hex head cap screw) T= Thread Pitch (threads per inch)			P= Property Class (bolt strength) D= Nominal Diameter (millimeters) T= Thread Pitch (thread width, mm) L= Length (millimeters) X= Description (hex head cap screw)					

KIT CONTENTS INCLUDE:

- Instructions including parts list
- Product Safety Label (orange)
- Decal
- Warranty Information

PARTS LIST INCLUDED IN KIT

COIL SPRING BOX- 7500-S	<u>QTY</u> .
6" FRONT SPRING-DRIVER	1
6" FRONT SPRING-PASSENGER	1
ADD-A-Leaf Box- AAL750B	1

BOX KIT - 7107B

TRACK BAR BRACKET	1
3/8-16 X 1.5" GRADE 5 BOLT	4
TRACK BAR SLEEVE-TAPERED	1
3/8" FLAT WASHER (ZINK)	8
LOWER CONTROL ARM	2
UPPER CONTROL ARM-DRIVER'S SIDE	1
UPPER CONTROL ARM-PASSENGER SIDE	1
PITMAN ARM	1
FRONT SHOCKS	2
REAR SHOCKS	2
7/16 NYLOCK NUT	4
3/8" FLANGE NUT	4

1/2-13 X 5" GRADE 8 BOLT	1
5/8 X 2-1/2" GRADE 8 BOLT	1
SHOCK SLEEVE TUBE	4
1/4-90 ZERK FITTING	8
UPPER CONTROL ARM BUSHING	8
LOWER CONTROL ARM BUSHING	8
UPPER CONTROL ARM SLEEVE	4
LOWER CONTROL ARM SLEEVE	4
5/8 FLAT WASHER (ZINC)	2
5/8 ALL METAL LOCK NUT	1
SAE ½ FLAT WASHER	10
9/16 X 3" GRADE 8 BOLT	1
SPACER	5
9/16 ALL METAL LOCK NUT	1
SAE 9/16 FLAT WASHER	2
12 X 110MM GRADE C ALL METAL LOCK NUT	1
ADJUSTABLE TRACK BAR	1
ADJUSTABLE TRACK BAR BUSHINGS	4
ADJUSTABLE TRACK BAR SLEEVE	2
7/16 X 2.5" HEX BOLT	4
SAE 7/16 FLAT WASHER	4
SWAY BAR DROP BRACKET-LEFT	1
SWAY BAR DROP BRACKET-RIGHT	1
BOX	1
6.25 X 2 CLEAR MYLAR DECAL	4
INSTRUCTION SHEET & SAFETY LABEL	1

FRONT DISSASSEMBLE

- 1) Place vehicle on level concrete surface and chock rear wheels.
- 2) Remove upper sway bar end link nuts. (Save for Re-Installation).
- 3) Remove cotter pin and castle nut (13/16 wrench) from the drag link where it attaches to the pitman arm. Using appropriate tools, separate tie rod end from pitman arm. You will be re-using this hardware.
- 4) Remove the pitman arm nut and washer. Mark the orientation of the stock pitman arm in relation to the sector shaft so that the new arm will be installed in the same orientation.
- 5) Remove the pitman arm from the sector shaft using the appropriate puller.
- 6) Remove the Track bar from the vehicle. Save lower bolt for re-installation.

- 7) On each side, remove the brackets securing the brake hose assemblies to the front axle, save hardware for re-use.
- 8) Remove lower shock bolts.
- 9) Remove upper shock bracket nuts (3) each side (15mm wrench), lift shocks out of vehicle.
- 10) Raise the front of the vehicle with a jack and support the vehicle with jack stands on the frame rails behind the lower control arms.
- 11) Remove the front wheels (15/16" socket)
- 12) Remove the front springs.
- 13) Mark the cam alignment adjusters on the lower control arms so that you will have an alignment baseline when you re-install the new arms.
- 14) Remove the control arms and save all of the hardware for re-use.

FRONT ASSEMBLY

- 15) Assemble control arms with zerk fittings facing inward toward the opposite end of the arm. Assemble bushing halves and sleeves using a silicone based grease.
- 16) Install the lower control arms with the zerk fittings facing up. It is recommended to torque the control arm bolts to 160 ft. lbs at this point.
- 17) Install the upper control arms; on the axle side, the zerk fitting will face down and the angled control arm eyelet will face out toward the tire. It is recommended to torque the control arm bolts to 120 ft. lbs at this point.
- 18) Remove the rear steering box bolt and retain for re-installation.
- 19) Make sure lower surface of frame is flat for mounting the track bar bracket.

- 20) Insert ½" x 5" bolt with washer. This bolt will go from the top down and will be located on the crossmember next to the steering box shaft. The bolt will sit at an angle with the threads exposed below the crossmember. See Figure A.
- 21) Insert tapered bushing into the tapered frame tab hole that the stock track bar tie rod was removed from.
- 22) Hold the new Revtek Track bar into place and insert a washer and finger tighten the nut onto the exposed threads from the 5" bolt that was installed through the crossmember. This bolt will go through the center hole on the bracket. Do not tighten at this time. See Figure A.
- 23) Insert stock steering box bolt through the forward hole in the Revtek bracket and back into the steering box. Do not tighten at this time. See Figure B.
- 24) Insert 5/8 x 2.5" bolt from the bottom up through the tapered hole where the stock track bar used to mount. Make sure tapered sleeve did not fall out while mounting track bar bracket.
- 25) After all bolts are inserted into bracket, please tighten the $5/8 \times 2.5$ " to 180 ft. lbs, then tighten the steering box bolt to 135 ft. lbs, and finally tighten the center 5" bolt to 40ft. lbs.
- 26) Install the new Revtek Pitman arm using the existing nut and washer. Use loc tight and torque to 225lbs.



Figure A



Figure B



- 27) Install the coil springs; it may be easier in some cases to compress the spring slightly to install them.
- 28) Install the front shocks and tighten the lower bolts (21mm socket) torque to 90 ft. lbs. do not install the top of the shock at this point.
- 29) Install the front wheels, (15/16) socket) and tires at this point so that you can let the truck down fully on the ground. Torque factory lug nuts to 145 ft. lbs. on factory wheels.
- 30) With the truck now fully on the ground it is time to install the top shock towers and the shocks to the towers. Shock tower nuts (15mm wrench), shock top nuts (3/4" socket)
- 31) Install the steering link to the small end of the pitman arm using the OEM hardware. (13/16" wrench) torque to 65 ft. lbs.
- 33) Install the new Adjustable Revtek track bar. Use the correct bushing sleeves for your year; do this by comparing the stock lower track bar bolt to the sleeve. Bolt up at this time by turning the steering wheel slightly side to side in order to line up the hole. Install the remaining 9/16" x 3-1/4" bolt in the upper hole. It is now time to tighten and torque all hardware concerning the track bar bracket. All 9/16" bolts torque to 85 ft. lbs and the lower bolt torque to 55 ft. lbs.

- 34) Secure the brake line brackets back to the front axle using OEM bolts (13mm socket). Torque to 18 ft. lbs.
- 35) Install the sway bar drop brackets to the frame using the OEM bolts. Make sure you have the left and right positioned properly. Install the sway bar to the drop brackets using the supplied 3/8" hardware. See fig C.
- 36) Re-Attach the sway bar end links using the OEM hardware.
- 37) Once you have all of the sway bar parts in place then you can tighten the nuts and bolts to 30 lb. ft on frame mounts and 10lb. ft on the end link nuts.

INSTALLATION OF REAR KIT

- 1) Place vehicle on level concrete and chock the front wheels.
- 2) Position a floor jack under the rear axle to raise the vehicle.
- 3) Place jack stands under frame rails in front of the forward spring hangers.
- 4) Ease the jack down until the frame is resting on jack stands while keeping slight pressure on the jack.
- 5) Remove tires and shocks.
- 6) Doing one side at a time! Clean excess threads on the factory rear U-bolts then remove them and save for re-installation. Lower the axle down just far enough to gain access to the leaf spring pin.
- 7) Clamp the spring assembly securely together with two C-clamps.
- 8) Loosen the nut and remove the center bolt. If necessary, Hold the head of the center bolt with locking pliers.
- 9) Carefully remove the C-clamps.

NOTE: Removing and installing a leaf may require the use of a soft mallet, and lightly clamping sections of the spring pack to relieve binding.

- 10) Insert the new leaf into the spring pack in accordance with length of leaves; longest on the top and shortest on the bottom.
- 11) Center the leaves and align the center holes with a drift punch. Then install the new center bolt and nut.
- 12) Reinstall the C-clamps on each side of the center pin to squeeze the spring pack together and tighten the center bolt to 20 ft-lbs.
- 13) Install the anchor plate and OEM U-bolt hardware. Torque to specs.
- 14) Repeat steps 6 through 13 for the other side.
- 15) Install the new rear shocks and torque to 35 ft. lbs.
- 13) Install the rear wheels and tires. OEM lug nuts and OEM wheels torque to 145 ft. lbs.
- 14) Use the (4) supplied carrier bearing drop down spacers, bolts, nuts, and washers if the vehicle has a two piece rear drive shaft.

15) CHECKS AND ADJUSTMENTS:

*Check all hardware for tightness after 100 miles and after every off road use.

*Headlights should be adjusted.

*Vehicle must be aligned.

Important Installation Notes:

- Manufacturing tolerances do create certain variations that we cannot fully account for. At times you may need to use a punch, or pry bar to get holes to line up. Also you may need to slightly enlarge a hole to create a proper alignment. These are all normal situations.
- Altering your suspension may change the way your vehicle handles. Care must be taken to operate your vehicle safely.
- Adding large wheels and tires, will change how your suspension operates. It may put extra strain on certain components causing them to wear sooner than normal.
- While every effort is made to design our kits to work within factory geometry, there are situations where additional alignment tools like adjustable or replacement components may be needed. This is normal.
- It is possible when changing the driveline angles that a vibration may occur, and require an adjustment to repair this situation.
- Other modifications may be needed due to optional equipment on the vehicle or other prior modifications that have been made.
- All fasteners should be checked and retightened after 500 miles. After the initial recheck, they should be checked and tightened as needed with every following service.
- Once the installation is complete a thorough road test should be performed to verify proper clearance of all items.
- Revtek Suspension kits are not designed for race applications.
- Altering the suspension on your vehicle may change the characteristics of some systems such as: fuel economy, transmission shift points, etc.
- While Revtek systems are designed to work within all factory specifications and tolerances, there are some situations where exceeding the capability of the vehicle such as load capacity or speed will result in some undesirable results. If you overload your vehicle it will not handle correctly. If you drive or turn with excessive speed your vehicle will handle differently and some onboard vehicle systems may detect this and take appropriate action.
- Our tire and wheel fitments are only a guideline. Different production times or tolerances will vary and this sizes should only be used as a starting point. Each vehicle is different and will need to be treated as such.
- Our lift heights can vary slightly based on manufacturing tolerances. Some vehicles will exhibit slightly
 different amounts of lift heights and different final heights. Every vehicle is not identical and every vehicle
 will not be perfectly the same at all four corners.
- Once your vehicle is lifted components may wear faster, this is normal. A lifted vehicle is exerting more stress on most components and therefor causing them to wear faster.
- After altering the height of your vehicle, you should aim the headlights for proper coverage.
- The use of Loctite on fasteners is highly recommended.