

INSTALLATION INSTRUCTIONS FOR 2003-2008 DODGE 2500/3500 4WD 4.5" SUSPENSION SYSTEM

Requires the following parts (sold separately) for a complete installation:

- Front Coil Spring Box depending on Gas or Diesel/V10:
 - Gas (Hemi) P/N 7004GS
 - Diesel/V10 P/N 7004DS
- Box Kit P/N 7104B
- Block Kit depending on 2500/3500:
 - 2500 P/N 724BK
 - 3500 P/N 734BK

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 MODIFICATIONS

SPECIAL ITEMS REQUIRED:

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

REVTEK INDUSTRIES RECOMMENDS 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 MECHANIC.
- 2. Compare all contents of the boxes to the parts list before starting to insure all components are included.
- 3. Prior to installing the suspension system, 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!!!!

1209/11/08

| 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) | | | 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- 7004GS | PART # | <u>QTY</u> . |
|------------------------------------|------------|--------------|
| 4.5" GAS FRONT SPRING-DRIVER'S | D4L-G | 1 |
| 4.5" GAS FRONT SPRING-PASSENGER | D4R-G | 1 |
| COIL SPRING BOX- 7004 DS | | |
| 4.5" DIESEL FRONT SPRING-DRIVER'S | D4L-D | 1 |
| 4.5" DIESEL FRONT SRPING-PASSENGER | D4R-D | 1 |
| 2500 REAR BLOCK KIT- 724BK | | |
| 2" REAR BLOCK | CB42 | 2 |
| 9/16 X3-1/2 X 12.5 U-BOLT | R91635125B | 4 |
| 9/16 X 4 X 13 ½" U-BOLT | R9164135B | 4 |
| 9/16 FLAT WASHER | R916FWB | 8 |
| 9/16 HIGH NUTS | R916HNB | 8 |
| 3500 REAR BLOCK KIT- 734BK | | |
| 2" REAR BLOCK | CB42 | 2 |
| 9/16 X 3 ½ X 13 ½" U-BOLT | R91635135B | 4 |
| 9/16 X 4 X 14 ½" U-BOLT | R9164145B | 4 |
| 9/16 FLAT WASHER | R916FWB | 8 |
| 9/16 HIGH NUTS | R916HNB | 8 |
| SWAY BAR BRACKET HARDWARE | | |
| SWAY BAR BRACKET RIGHT | DSBB-R | 1 |
| SWAY BAR BRACKET LEFT | DSBB-L | 1 |
| 3/8-16 X 1.5" GRADE 5 BOLTS | R381615Z | 4 |
| 3/8 FLAT WASHER (ZINC) | R38FWZ | 8 |
| 3/8 -16 NYLON LOCK NUT | R38NLZ | 4 |

09/11/08 2 OF 12

BOX KIT - 7106B

| BOX KII - 7106B | | |
|--|-----------------|----|
| TRACK BAR BRACKET | DTB-1 | 1 |
| SQUARE WASHER | DTBSW | 1 |
| TRACK BAR SLEEVE (LONG) | DTBS | 1 |
| TRACK BAR SLEEVE (SHORT) | DTBS-2 | 1 |
| LOWER CONTROL ARM | DLA-6 | 2 |
| UPPER CONTROL ARM-DRIVER'S SIDE | DUA-6L | 1 |
| UPPER CONTROL ARM-PASSENGER SIDE | DUA-6R | 1 |
| PITMAN ARM | D-300 | 1 |
| FRONT SHOCKS | R2716S | 2 |
| REAR SHOCKS | R2917 | 2 |
| CARRIER BEARING DROP BRACKET | RCB34D | 1 |
| SWAY BAR END LINK | DSBE-2 | 2 |
| PARKING BRAKE EXTENSION | DPBE | 1 |
| BUMP STOP SPACER | DBSS | 2 |
| SHOCK SLEEVE TUBE | DSST | 4 |
| ¹/₄-90 ZERK FITTING | Z1490 | 8 |
| UPPER CONTROL ARM BUSHING | DUA6B | 8 |
| LOWER CONTROL ARM BUSHING | DLA6B | 8 |
| UPPER CONTROL ARM SLEEVE | DUA6BS | 4 |
| LOWER CONTROL ARM SLEEVE | DLA6BS | 4 |
| ½-13 X 1 ½ GRADE 8 HEX BOLT | R15128Z | 4 |
| 9/16 X 3 1/4 GRADE 8 HEX BOLT | R9164158B | 1 |
| SAE ½ FLAT WASHER | R12FWZ | 12 |
| ½-13 GRADE C ALL METAL LOCKNUT | R12CMLZ | 3 |
| 9/16-12 X 3 ¹ / ₄ GRADE 8 BOLT | R3159168Z | 2 |
| 9/16 X 6 GRADE 8 BOLT | R91668Z | 1 |
| SAE 9/16 FLAT WASHER | R916SAEW | 8 |
| 9/16-12 GRADE C LOCKNUT | R916CMLZ | 3 |
| 9/16 FLAT WASHER-BLACK | R916FWB | 3 |
| M8 X 20MM BOLT | RM820Z | 4 |
| M8 FLAT WASHER | RM8FWZ | 8 |
| 8 X 1.25 LOCKNUTS | PVBN-2 | 4 |
| 10MM X 1.5 X 50MM BOLT | RM101570Z | 2 |
| SAE 7/16 FLAT WASHER | R716FWZ | 2 |
| SWAY BAR U-BRACKET | DSUB | 2 |
| SWAY BAR O-BRACKET SWAY BAR POLY BUSHING | EB1 | 4 |
| SWAY BAR SLEEVE | DSBE- | 4 |
| SWAT BAR SLEEVE | SLEEVE | 4 |
| 1/2-13X3 GRADE 5 BOLT (ZINC) | R1235Z | 4 |
| 1/2 -13 NYLON INSERT LOCKNUT | R128NZ | 4 |
| 1/2 -13 FLANGE NUT | R12FNZ | 2 |
| DRIVELINE SPACER | DRVSPCR1 | 1 |
| 7/16 – 14 X2 GRADE 8 BOLTS (ZINC) | R71628Z | 4 |
| 6.25 X 2 CLEAR MYLAR DECAL | | 4 |
| 0.23 A 2 CLEAR IN Y LAK DECAL | DECAL- RRWIN | 4 |
| INSTRUCTION SHEET & SAFETY LABEL | INSTRUCTIO | 1 |
| INSTRUCTION SHEET & SAFETT LABEL | N &SAFETY | 1 |
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09/11/08 3 OF 12



INSTALLATION INSTRUCTIONS FOR 2003-2008 DODGE 2500/3500 4WD 4.5" SUSPENSION SYSTEM

FRONT DISSASSEMBLE

- 1) Place vehicle on level concrete surface and chock rear wheels.
- 2) Remove upper and lower sway bar end link nuts (5/8" socket). Discard factory end link.
- 3) Remove sway bar assembly from frame.
- 3A) Make sure lower sway bar mounting hole on the axle is 1/2"; if this hole is not then you will have to drill it to 1/2".
- 3B) Clearance the passenger side lower sway bar end link mount located on the front axle so that the tie rod end on the steering does not interfere here. See fig E
- 4) 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.
- 5) Remove the pitman arm nut and washer (32mm socket). 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.
- 6) Remove the pitman arm from the sector shaft using the appropriate puller.
- 7) Remove the track bar bolt (18mm socket) and let the track bar rest on the axle. You will not be re-using the track bar bolt, a new bolt is provided in the kit.
- 8) On each side, remove the brackets securing the brake hose assemblies to the front axle (13mm socket) save hardware for re-use.
- 9) Remove lower shock bolts (21mm socket)

1209/11/08 4 O F 12

- 10) Remove upper shock bracket nuts (3) each side (15mm wrench), lift shocks out of vehicle. On Hemi models you will have to remove the air box to access the right shock.
- 11) 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.
- 12) Remove the front wheels (15/16" socket)
- 13) Remove the front springs.
- 14) 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.
- 15) Remove the control arms and save all of the hardware for re-use.

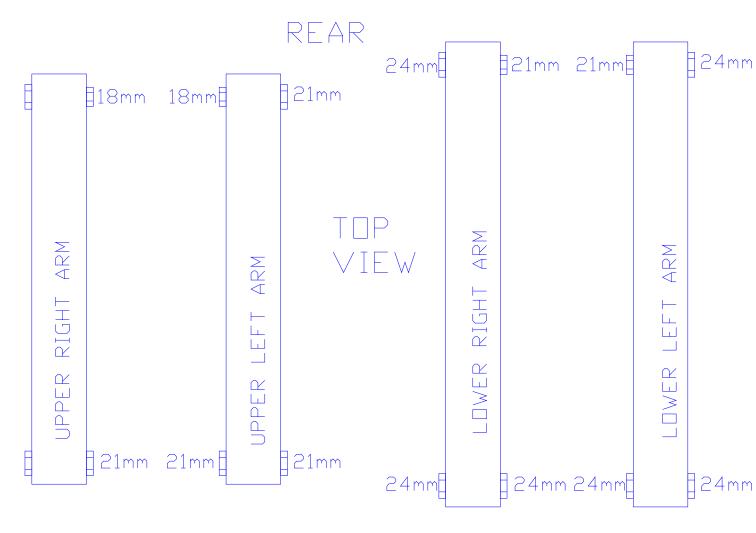
Note: On diesel trucks the upper right rear bolt will either need to be cut out (new bolt supplied-9/16" X 6") or the exhaust system will need to be removed. New bolt must be installed from outside of frame using three 9/16" black thick washers on inside of frame.

FRONT ASSEMBLY

- 16) 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.
- 17) 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.
- 18) Install the upper control arms; they will only go in one way. It is recommended to torque the control arm bolts to 120 ft. lbs at this point.

09/11/08 5 OF 12

CONTROL ARM HARDWARE SIZES



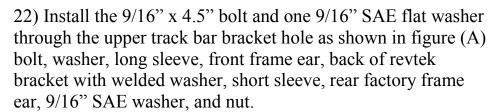
FRONT

09/11/08 6 OF 12

19) Position the track bar bracket on the factory upper track bar mount as shown in figure

(A).

- 20) Install the 9/16" x 3-1/4" grade 8 bolt and 9/16" flat washer loosely, (do not tighten) through the slotted hole in the Revtek bracket and slotted existing hole in the frame cross member as shown in figure (B).
- 21) The 9/16" bolt and 9/16" SAE washer should be installed from the bottom with the square washer, 9/16 SAE flat washer and grade C all metal lock nut on top of the cross member.



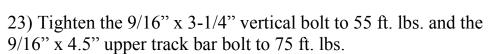






Figure B

- 24) Drill a ½" hole through the front frame ear by drilling through the existing ½"hole in the Revtek track bar bracket. See fig. A. Repeat this process on the rear of the track bar bracket where the tab is located.
- 25) Install the supplied ½" x 1 ½" bolts and all metal locknuts through the holes you just drilled.
- 26) Leave all of the hardware in the track bar bracket loose except for the ½" x 3" vertical bolt. Torque this bolt to 55 ft. lbs.
- 27) Install the new pitman arm with the existing nut and washer (32mm socket) torque to 225lbs.
- 28) Install the coil springs with D on the drivers side and the P on the passenger side. (This will mean that the longer spring belongs to the driver side.) It may be easier in some cases to compress the spring slightly to install them.

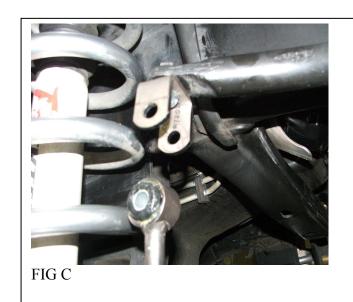
09/11/08 7 OF 12

- 29) 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.
- 30) 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.
- 31) 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)
- 32) 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 track bar bolt at this time by turning the steering wheel slightly from side to side in order to line up the hole. Install the remaining 9/16" x 3" bolt. 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 ½" bolts 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 F
- 35A) Install the new Revtek U-brackets. The U-bracket attaches to the bottom of the sway bar on either end using the supplied 1/2 X 1 1/2 bolt up through the U-bracket and 1/2" (flange nut) on top of the sway bar end with the upper hole in the U-bracket closest to the outside of the vehicle. Do not tighten completely yet.

 See fig C.
- 36) Install the bushings and sleeves into the sway bar end links, us some lithium grease to ease installation and prevent squeaks. See fig D.

09/11/08 8 OF 12

- 37) Attach the sway bar end links to the lower mount on the front of the axle with the supplied 1/2" X 3 bolts, washers and nyloc nuts. You will want the nuts to face the inside of the vehicle. Only snug at this point. See fig D.
- 38) Attach the upper end of the sway bar end link to the bottom of the U-bracket using the supplied $\frac{1}{2}$ X 3 bolts, washers, and nyloc nuts. You will want the nut to face the outside of the vehicle here. Only snug at this time. See fig C.
- 39) Once you have all of the sway bar parts in place then you can tighten the nuts and bolts to 30 lb. ft of torque, all nuts and bolts use a 19mm wrench.



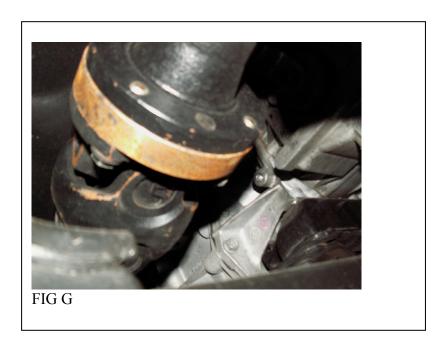






09/11/08 9 OF 12

40) Install the driveline spacer at the transfer case end of the front drive shaft with the 7/16 X 2 bolts supplied. (USE RED LOCK TITE ON THESE BOLTS) See fig G.



INSTALLATION OF REAR KIT

- 1) Place vehicle on level concrete and chock the front wheels.
- 2) Remove the left side park brake cable from the hanger and re-route the cable through the frame as seen in figure (H).
- 3) Install the new park brake cable hanger over the 2 park brake cables and secure with OEM bolts in the OEM location as seen in figure (I).
- 4) Position a floor jack under the rear axle to raise the vehicle.

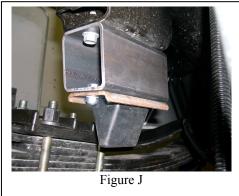
Figure H

09/11/08

- 5) Place jack stands under frame rails in front of the forward spring hangers.
- 6) Ease the jack down until the frame is resting on jack stands while keeping slight pressure on the jack.
- 7) Remove tires and shocks.
- 8) Doing one side at a time! Remove the u-bolts and lower the axle down just far enough to install the block. You will install the blocks with the small end forward and the pin down.



- Figure I
- 9) Install the supplied u-bolts, nuts and washers and torque to 175 ft. lbs.
- 10) Repeat this procedure on the other side.
- 11) Install the rear bump stop spacers (angled to the rear.) utilizing the OEM bump stop bolts then bolt the bump stops to the spacers using the supplied 8mm hardware. Torque to 18 ft. lbs. see figure (J)
- 12) Install the new rear shocks using special upper and lower steel sleeves 1.5x.560 ID (supplied in main hardware bag) 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 supplied bracket and hardware to drop the carrier bearing on the rear drive shaft if it has a two piece rear drive line.



09/11/08 11 OF 12

Limited Lifetime Warranty

Revtek Industries products are warranted to be free from material and workmanship defects for as long as the original retail purchaser owns the vehicle upon which such products were originally installed (proof of purchase required). The consumer will be responsible for removing from the vehicle and returning any defective item, freight prepaid, and for reinstallation. This warranty is non-transferable. Revtek Industries' limit of liability under this warranty is to repair or replace the product at Revtek Industries' option. Consequential costs such as, but not limited to labor fees, loss of use, loss of time or freight charges are not covered. Any product that has been abused, altered, incorrectly installed, or used in competition is not covered. Product finish is excluded from this warranty. Items that are subject to wear are not considered defective when worn and are not covered. The warranty is void if the "Warning to Driver" decal is not properly displayed on the vehicle. No other warranties are expressed or implied. We reserve the right to make changes in design, materials, and specifications without prior notice.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state. Some states do no allow limitations on how long an implied warranty lasts or allow the exclusion or limitation of incidental or consequential damages, the above limitation or exclusion may not apply to you.

There are no warranties, expressed or implied including any implied warranties of merchantability and fitness, which extend beyond this warranty period. There are no warranties that extend beyond the face hereof. Seller disclaims implied warranty of merchantability.

This warranty shall not apply to any product which has been improperly installed, modified or customized. Warranty does not apply to any components used for racing purposes or racing type activities.

To make a claim under this warranty contact Revtek Industries about the problem prior to removing any parts from the vehicle. If it appears that the part is warrantable, you will be given a Return Authorization (RA) number and asked to return the part freight prepaid. If the part is found to be warrantable, it will be repaired or replaced and returned to you. All freight charges are the customer's responsibility. If a replacement part is needed before the part in question can be returned, you must first purchase the replacement part. Then, if the part in question is deemed warrantable, you will be credited / refunded.



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09/11/08 12 OF 12