

#### INSTALLATION INSTRUCTIONS FOR 2003-2008 DODGE 2500/3500 4WD 6" 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 7006GS
  - Diesel/V10 P/N 7006DS
- Box Kit P/N 7106B
- Block Kit depending on 2500/3500:
  - 2500 P/N 726BK
  - 3500 P/N 736BK

#### 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!!!!



#### **KIT CONTENTS INCLUDE:**

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

#### PARTS LIST INCLUDED IN KIT

COIL SPRING BOX- 7006GS	PART #	<u>QTY</u> .
6" GAS FRONT SPRING-DRIVER'S	D6L-G	1
6" GAS FRONT SPRING-PASSENGER	D6R-G	1
COIL SPRING BOX- 7006 DS		
6" DIESEL FRONT SPRING-DRIVER'S	D6L-D	1
6" DIESEL FRONT SRPING-PASSENGER	D6R-D	1
2500 REAR BLOCK KIT- 726BK	CB44	2
4" REAR BLOCK 9/16 X3-5/8 X 14 U-BOLT	02.11	2
	R91635814B	4
9/16 FLAT WASHER	R916FWB	8
9/16 HIGH NUTS	R916HNB	8
3500 REAR BLOCK KIT- 736BK		
4" REAR BLOCK	CB44	2
9/16 X 4-1/8 X 15-1/4 U-BOLT	R91641815B	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

#### **BOX KIT - 7106B**

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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	2
SWAY BAR END LINK	DSBE-2	2
PARKING BRAKE EXTENSION	DPBE	1
BUMP STOP SPACER	DBSS	2
SHOCK SLEEVE TUBE	DSST	4
<sup>1</sup> /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
1/2-13 X 1 1/2 GRADE 8 HEX BOLT	R15128Z	4
9/16 X 4.5" GRADE 8 HEX BOLT	R9164158B	1
SAE 1/2 FLAT WASHER	R12FWZ	12
1/2-13 GRADE C ALL METAL LOCKNUT	R12CMLZ	3
9/16-12 X 3 ¼ 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-DRACKET	EB1	4
SWAY BAR SLEEVE	DSBE-	4
SWAT DAR SELLYE	SLEEVE	7
1/2-13X3 GRADE 5 BOLT (ZINC)	R1235Z	4
1/2 -13 NYLON INSERT LOCKNUT	R12352 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	DECAL-	4
U.2.J A 2 ULEAR WITLAR DEUAL	RRWIN	4
INSTRUCTION SHEET & SAFETY LABEL	INSTRUCTIO	1
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# INSTALLATION INSTRUCTIONS FOR 2003-2008 DODGE 2500/3500 4WD 6" 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)

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.

# CONTROL ARM HARDWARE SIZES



FRONT

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 washer and grade C all metal lock nut on top of the cross member.

22) Install the 9/16" x 4.5" bolt and one 9/16 SAE flat washer through the upper track bar bracket hole as shown in figure (A) bolt, washer, long sleeve, front frame ear, back of revtek bracket with welded washer, short sleeve, rear factory frame ear, 9/16" SAE washer, and nut.

23) Tighten the 9/16" x 3-1/4" vertical bolt to 55 ft. lbs. and the 9/16" x 4.5"" upper track bar bolt to 75 ft. lbs.

24) Drill a  $\frac{1}{2}$ " hole through the front frame ear by drilling through the existing  $\frac{1}{2}$ "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. Failure to drill these holes may cause popping noise from truck.

25) Install the supplied  $\frac{1}{2}$ " x 1  $\frac{1}{2}$ " 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 <sup>1</sup>/<sub>2</sub>" 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.





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 3-1/4" 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  $\frac{1}{2}$ " 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  $1/2 \times 1 1/2$  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.

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.



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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.





10 OF 12

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.

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 (2) supplied carrier bearing drop down brackets (stacked) and the supplied hardware if the vehicle has a two piece rear drive shaft.





# **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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