

INSTALLATION INSTRUCTIONS FOR 2013.5-2014 DODGE 3500 4WD 6.5" SUSPENSION SYSTEM PART NUMBER 7406-3

Requires the following parts for a complete installation:

- Box Kit P/N 7406B
- Radius Arm Box P/N 7400A

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

SPECIAL ITEMS REQUIRED:

- STEERING (PITMAN) ARM PULLER
- CUTOFF WHEEL
- TORQUE WRENCH
- SAFETY GLASSES
- HYDRAULIC JACK
- JACK STANDS

REVTEK SUSPENSION 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.
- 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 7 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.

TORQUE SPECIFICATIONS FOR SPECIFIC FASTNERS:

-PITMAN ARM TO STEERING GEAR – 225 FT. LBS.
-RADIUS ARM HARDWARE – 250 FT. LBS.
-SWAY BAR TO FRAME – 43 FT. LBS.
-SWAY BAR TO END LINK – 110 FT. LBS.
-FRONT DRIVELINE – 55 FT. LBS.
-REAR UBOLTS – 110 FT. LBS.
-TRACK BAR TO FRAME 324 FT. LBS.
-TRACK BAR TO AXLE – 285 FT. LBS.
-SHOCK UPPER MOUNT – 27 FT. LBS.
-SHOCK LOWER MOUNT – 89 FT. LBS.

PARTS LIST INCLUDED IN KIT

<u>Radius Arm Kits – 7400A</u>	
DODGE RADIUS ARMS	2
<u>BOX KIT – 7406B</u>	
TRACK BAR BRACKET	1
TRACK BAR SLEEVE (LONG)	1
REAR SHOCKS	2
FRONT SHOCKS	2
REAR LIFT BLOCKS	2
REAR UBOLTS	4
REAR UBOLT NUTS	8
REAR UBOLT WASHERS	8
REAR BUMP STOP EXTENDERS	2
10MM REAR BUMP STOP BOLTS	4
10MM REAR BUMP STOP WASHERS	4
10MM REAR BUMP STOP FLANGE NUTS	4
DODGE SWAY BAR DROP-RIGHT	1
DODGE SWAY BAR DROP-LEFT	1
DRIVELINE SPACER	1
CARRIER BEARING DROP BRACKET	2
PITMAN ARM	1
LONG PARK BRAKE CABLE BRACKET	1
SHORT PARK BRAKE CABLE BRACKET	1
LONG BRAKE CABLE BRACKET CLIP	1
9/16" BRAKE CABLE CLIP BOLT	1
LEFT REAR BRAKE LINE	1
RIGHT REAR BRAKE LINE	1
ABS CABLE ZIP TIES	8
10 MM CARRIER BEARING BOLTS	2
6.5" FRONT COILS	2
6.25 X 2 CLEAR DECAL	4
INSTRUCTION SHEET & SAFETY LABEL	1
DODGE BOX	1
3/8" SWAY BAR DROP BRACKET BOLTS	4
3/8" SWAR BAR DROP BRACKET WASHERS	8

BOX KIT – 7406B CONTINUED

3/8" SWAY BAR DROP BRACKET LOCK NUTS	4
10MM TRACK BAR RELOCATION BRACKET BOLTS	2
10MM TRACK BAR RELOCATION BRACKET WASHERS	2
10MM TRACK BAR RELOCATION BRACKET FLANGE NUTS	2
18MM TRACK BAR RELOCATION BRACKET BOLTS	2
18MM TRACK BAR RELOCATION BRACKET WASHERS	4
18MM TRACK BAR RELOCATION BRACKET LOCK NUTS	2
FRONT BRAKE LINES	2
FRONT BUMP STOPS	2
8MM REAR BRAKE LINE BOLTS	2
8MM REAR BRAKE LINE LARGE WASHERS	2
8MM REAR BRAKE LINE LOCK NUTS	2
¹ / ₂ " DRIVELINE SPACER BOLTS	4
¹ / ₂ " DRIVELINE SPACER WASHERS	4
SHOCK SLEEVES	4

INSTALLATION OF FRONT KIT

- a) Remove factory brake lines from their mounts just inside the frame rail and the connection just above the radius arm. Loosen ABS lines and leave loose for now. Also loosen from axle 4WD wiring. Retain brake line spring clips for reuse.
- b) Install new braided brake lines, reuse spring clips to secure them.
- c) Support front axle with a jack and raise slightly to relieve tension on suspension components.
- d) Remove upper track bar to frame bolt and discard the bolt and nut. Loosen the track bar to axle bolt.
- e) Remove the sway bar end links to sway bar nuts. Retain nuts for reuse.
- f) Remove both shocks and discard.
- g) Lower axle slowly until it is low enough for factory springs to come out. Remove and discard the springs.
- h) Now with the axle supported remove the radius arm on one side. Do this by removing the rear bolt and nut, also both front bolts and nuts. Retain all hardware for reuse.
- i) Install new radius arms using all factory hardware in the same locations. Do not fully tighten at this time.
- j) Repeat steps H & I for the other side.
- k) Remove factory bump stops and discard.
- 1) Install new longer Revtek front stem shocks. Use provided larger shock sleeves for lower mount.
- m) Install new Revtek track bar relocation bracket using 2 10mm bolts, washers and flanges nuts. And 1 18mm bolt, washers and lock nut and factory steering box bolt. You will need to insert the 18mm bolt from the rear of the vehicle so the nut will be on the front side. The inner bolt near the oil pan will also install in the same manner. Install steering box bolt, 18mm bolt, washers and nut, 2 10mm bolts, washers and nuts, so they are all in place. Tighten both 10mm bolts to the proper torque. Now tighten the steering box bolt to the proper torque. Do not tighten the 18mm bolt yet. See Fig. 1
- n) As you raise the axle back into position, install each coil spring. Be sure the double wrap of the spring is on the bottom. The upper ends should line up in the factory isolators for proper location.

- o) Once you have the springs in place, raise the axle enough to install the lower shock bolt. Do not tighten yet.
- p) Now install the tires and lower the vehicle onto the ground.
- q) Tighten the lower shock bolt to proper torque
- r) Tighten the radius arm hardware to proper torque
- s) Remove the drag link from the pitman arm.
- t) Remove the pitman arm from the steering box and discard the arm. Be sure to note the orientation of the pitman arm for installation of the new one.
- u) Install new pitman arm in the same orientation as the old one. Tighten to proper torque.
- v) Mark drag link adjustment nuts on both sides.
- w) Remove steering gear side of drag link from adjuster and then remove adjuster from tire side of drag link. It will be necessary to remove the entire tab from the gearbox side of the drag link. See Fig. 2
 & Fig. 3
- x) It will also be necessary to remove $\frac{1}{2}$ " from the tire side tab on the drag link.
- y) Reinstall the center adjuster and steering gear side of drag link. Adjust the center to be as close to the marks made as possible.
- z) Install drag link into pitman arm and tighten to proper torque.
- aa) Remove factory sway bar to frame bolts. Be cautious as sway bar is heavy. Install new sway bar drop brackets into place. Be sure to put them the correct way. The closed side should face the outside of the vehicle. Using factory hardware tighten drop bracket to frame. Using 3/8 bolts, washers, and lock nuts, install sway bar onto drop brackets and tighten to proper torque. See Fig. 4
- bb) Reinstall sway bar onto end links and tighten to proper torque.
- cc) Install track bar into relocation bracket and install remaining 18mm bolt, washers and lock nut in the same orientation as the upper bolt. It may be necessary to work the steering wheel back and forth to line to bar up in the bracket.
- dd) Tighten 18mm track bar relocation bracket bolt to proper torque. Tighten track bar 18mm bolt to proper torque, and tighten track bar to axle bolt to proper torque.
- ee) Install new longer bump stops. It will be easier if you grease the ends slightly. You will need to press them into the factory locations. Generally a block of wood and raising the axle will press them into place.
- ff) Using 2 zip ties per side, route and secure the ABS wiring free from any moving parts.
- gg) Unbolt the front driveline from the pinion yoke. Discard factory hardware. Install driveline spacer and using 4 ½ bolts and washers tighten to proper torque. See Fig. 5













Fig. 5

INSTALLATION OF REAR KIT

- a) Place vehicle on level concrete and chock the front wheels.
- b) Remove both rear rubber brake lines from their upper and lower mounts. Retain upper clips for later use. Loosen ABS wiring and leave loose for now.
- c) Install new longer braided rear brake lines. Be sure to put the proper one on the proper side. The upper threads are a different size. Install clips to secure top and using two 8mm bolts, large washers, and lock nuts install bottom into factory mount bracket as shown. See Fig. 6
- d) Support axle in center with a jack.
- e) Remove axle vent tube upper clip from frame and leave loose for now.
- f) Remove factory shocks and discard.
- g) Install new Revtek rear eyelet shocks with factory hardware. Use provided larger shock sleeves for lower mount. Some factory brackets may require the use of washers (not included in kit) on either side of the eyelet to allow the shock to be tightened in place properly.

- h) Remove U-bolts from one side and discard. Lower axle enough to install new 4" lift block.
- i) Install new longer U-bolts and nuts and washers. Do not fully tighten at this time.
- j) Repeat steps F & G for the other side of the rear axle.
- k) Lower vehicle onto tires and tighten U-bolts to proper torque.
- 1) Remove factory park brake cable bracket. Retain hardware for reuse. See Fig. 7
- m) Loosen and remove park brake cable from adjuster under driver's rear door. Pull cable out of leaf spring mount. See Fig. 8
- n) Route cable under leaf spring and back through forward most hole and reinstall clip to mount cable. Tighten back to proper adjustment. See Fig. 7
- o) Install new longer park brake cable using factory hardware.
- p) Install new long park brake cable bracket and capture both left and right cables to secure them. You will need to install The "J" nut over the lip in the bed and around the top of the bracket. Secure with provided 9/16 bolt. See Fig. 7
- q) Unbolt factory bump stops and retain hardware. Install provided bump stop extensions using factory hardware to mount to frame and provided 10mm bolts, washers, and flanges nuts to secure bump stop to extension.
- r) Clip axle vent tube to bump stop extension.
- s) If you have a rear carrier bearing, then install two rear carrier bearing drop brackets and use provided longer 10mm bolts to tighten carrier bearing down.
- t) Route ABS lines away from any moving or hot parts and using 2 zip ties for each line secure them.







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 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.



Limited Lifetime Warranty

Revtek Suspension 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 Suspension's limit of liability under this warranty is to repair or replace the product at Revtek Suspension's 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 not 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.

Other than stated above, there are no warranties.

SELLER DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY

SELLER DISCLAIMS ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE

This warranty to be free from material and workmanship defects shall not apply to any product which has been improperly installed modified or customized and does not apply to any components used for racing purposes or racing type activities.

To make a claim under this warranty to be free from material and workmanship defects, contact Revtek Suspension 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 by the authorized Revtek dealer the part was purchased from.

Shocks and bushings are considered to be wear items. As such, they will be covered for a period of 12 months from the original installation. Any failure outside of 12 months will be considered typical wear.

REVTEK SUSPENSION, LLC 503-659-1650 2800 Taylor Way BLDG 2A, Forest Grove, OR 97116