



**INSTALLATION INSTRUCTIONS FOR 2011-2014  
FORD 4WD SUPER DUTY F250-350  
4 1/2" COIL SPRING SUSPENSION SYSTEM**

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Requires the following parts for a complete installation:

- **KIT PART NUMBER (6641) – REQUIRES P/N 6641B and 6411H**
- **KIT PART NUMBER (6741) – REQUIRES P/N 6641B, 6412H AND 6300A**

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

**AS WITH ALL LIFT SYSTEMS, DRIVE SHAFT MODIFICATIONS MAY BE NECESSARY!!!**

**SPECIAL TOOLS REQUIRED:**

- STEERING (PITMAN) ARM PULLER
- TIE ROD SEPARATING TOOL
- TORQUE WRENCH
- FORD SERVICE MANUAL

**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:**

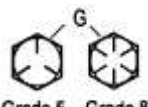
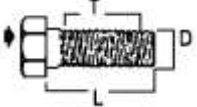
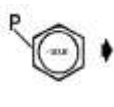
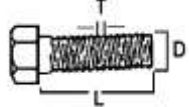
1. THIS SYSTEM SHOULD ONLY BE INSTALLED BY A PROFESSIONAL.
2. Compare all contents of the boxes to the parts list before starting to insure all components are included.
3. Prior to installing the suspension system, inspect the vehicle's suspension components, alignment, and frame for damage, corrosion, 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 4 hours.
7. Suspension components that use rubber or urethane bushings should be tightened with the vehicle at normal ride height. This will prevent premature failure of the bushing and maintain ride comfort.
8. 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.

**ATTENTION:** Exhaust modification may be required on all 5.4 and V10 trucks at the front driveline.

Failure to determine if this modification is required may cause catalytic converter damage.

**KIT CONTENTS INCLUDE:**

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

| <b>STANDARD BOLT TORQUE &amp; IDENTIFICATION</b>  |              |              |   |              |              |              |
|---|--------------|--------------|---|--------------|--------------|--------------|
| <b>INCH SYSTEM</b>  |              |              | <b>METRIC SYSTEM</b>  |              |              |              |
| 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. |
| <p>1/2-13x1.75 HHCS</p> <p style="text-align: center;"> <span style="margin-right: 20px;">D</span> <span style="margin-right: 20px;">T</span> <span style="margin-right: 20px;">L</span> <span style="margin-right: 20px;">X</span> </p> <div style="display: flex; justify-content: center; align-items: center;"> <div style="text-align: center; margin-right: 20px;">  <p style="font-size: small;">Grade 5    Grade 8</p> </div> <div style="text-align: center;">  </div> </div> <p style="font-size: x-small;">             G= Grade Marking (bolt strength)    L= Length (inches)<br/>             D= Nominal Diameter (inches)        X= Description (hex head cap screw)<br/>             T= Thread Pitch (threads per inch)         </p> |              |              | <p>M12-1.25x50 HHCS</p> <p style="text-align: center;"> <span style="margin-right: 20px;">D</span> <span style="margin-right: 20px;">T</span> <span style="margin-right: 20px;">L</span> <span style="margin-right: 20px;">X</span> </p> <div style="display: flex; justify-content: center; align-items: center;"> <div style="text-align: center; margin-right: 20px;">  <p style="font-size: x-small;">P</p> </div> <div style="text-align: center;">  </div> </div> <p style="font-size: x-small;">             P= Property Class (bolt strength)    L= Length (millimeters)<br/>             D= Nominal Diameter (millimeters)    X= Description (hex head cap screw)<br/>             T= Thread Pitch (thread width, mm)         </p> |              |              |              |

**KIT NUMBER 6641 W/DROP BRACKETS**

| <b><u>HARDWARE KIT</u></b>                |                   |
|---|-------------------|
| <b><u>BOX 1 OF 2</u></b>                  |                   |
| <b><u>6411H</u></b>                       | <b><u>QTY</u></b> |
| TRACK BAR BRACKET                         | 1                 |
| PITMAN ARM                                | 1                 |
| LEFT RADIUS ARM BRACKET                   | 2                 |
| RIGHT RADIUS ARM BRACKET                  | 2                 |
| RADIUS ARM SLEEVE                         | 4                 |
| 3/4"X 5" NF BOLT GRADE 8                  | 4                 |
| GRADE "C" ALL METAL LOCKNUT 3/4"          | 4                 |
| 3/4" FLAT WASHER ZINC                     | 8                 |
| 5" BLOCKS – FLAT                          | 2                 |
| 5/8 X 3 1/4 X 17.5" SEMI ROUND TOP U-BOLT | 4                 |
| 5/8" H/NUTS – PLAIN                       | 8                 |
| 5/8" FLAT WASHER – PLAIN                  | 8                 |
| CARRIER BEARING DROP BRACKET              | 1                 |
| SHOCK – REAR                              | 2                 |
| SHOCK – FRONT                             | 2                 |
| ZIP TIE                                   | 6                 |
| SWY BAR DRP BRKT R                        | 1                 |
| SWY BAR DRP BRKT L                        | 1                 |
| 10 X 1.5 X 35 BOLT                        | 4                 |
| 10 X 1.5 FLANGE NUT                       | 4                 |
| 10MM FLAT WASHER                          | 4                 |
| OUTER BOX                                 | 1                 |

| <b><u>BOX KIT</u></b>            |                   |
|----------------------------------|-------------------|
| <b><u>BOX 2 OF 2</u></b>         |                   |
| <b><u>6641B</u></b>              | <b><u>QTY</u></b> |
| F250-350 SPRING                  | 2                 |
| 1/2" SPRING PLATE                | 2                 |
| CENTER PIN                       | 2                 |
| CENTER PIN NUT                   | 2                 |
| EXT BRKT FOR BRAKE               | 2                 |
| 10 X 1.5 X 25 BOLT               | 2                 |
| 10 X 1.5 FLANGE NUT              | 4                 |
| 7/16-14 X 2" GRADE 8 HEX (ZINC)  | 2                 |
| SAE 7/16 FLAT WASHER (ZINC)      | 2                 |
| INSTRUCTION SHEET & SAFETY LABEL | 1                 |
| 6.25 X 2 CLEAR MYLAR ITEM #705   | 4                 |
| OUTER BOX                        | 1                 |

**KIT NUMBER 6741 W/RADIUS ARMS**

| <b><u>HARDWARE KIT</u></b>                |                   |
|---|-------------------|
| <b><u>BOX 1 OF 3</u></b>                  |                   |
| <b><u>6412H</u></b>                       | <b><u>QTY</u></b> |
| TRACK BAR BRACKET                         | 1                 |
| PITMAN ARM                                | 1                 |
| 5" BLOCKS – FLAT                          | 2                 |
| 5/8 X 3 1/4 X 17.5" SEMI ROUND TOP U-BOLT | 4                 |
| 5/8" H/NUTS – PLAIN                       | 8                 |
| 5/8" FLAT WASHER – PLAIN                  | 8                 |
| CARRIER BEARING DROP BRACKET              | 1                 |
| SHOCK – REAR                              | 2                 |
| SHOCK – FRONT                             | 2                 |
| ZIP TIE                                   | 6                 |
| SWY BAR DRP BRKT R                        | 1                 |
| SWY BAR DRP BRKT L                        | 1                 |
| 10 X 1.5 X 35 BOLT                        | 4                 |
| 10 X 1.5 FLANGE NUT                       | 4                 |
| 10MM FLAT WASHER                          | 4                 |
| OUTER BOX                                 | 1                 |

| <b><u>BOX KIT</u></b>            |                   |
|----------------------------------|-------------------|
| <b><u>BOX 2 OF 3</u></b>         |                   |
| <b><u>6641B</u></b>              | <b><u>QTY</u></b> |
| F250-350 SPRING                  | 2                 |
| 1/2" SPRING PLATE                | 2                 |
| CENTER PIN                       | 2                 |
| CENTER PIN NUT                   | 2                 |
| EXT BRKT FOR BRAKE               | 2                 |
| 10 X 1.5 X 25 BOLT               | 2                 |
| 10 X 1.5 FLANGE NUT              | 4                 |
| 7/16-14 X 2" GRADE 8 HEX (ZINC)  | 2                 |
| SAE 7/16 FLAT WASHER (ZINC)      | 2                 |
| INSTRUCTION SHEET & SAFETY LABEL | 1                 |
| 6.25 X 2 CLEAR MYLAR ITEM #705   | 4                 |
| OUTER BOX                        | 1                 |

| <b><u>RADIUS ARM BOX</u></b> |                   |
|------------------------------|-------------------|
| <b><u>BOX 3 OF 3</u></b>     |                   |
| <b><u>6300A</u></b>          | <b><u>QTY</u></b> |
| RADIUS ARM                   | 2                 |
| RADIUS ARM BUSHING           | 2                 |
| M18 X 2.0 ALL METAL LOCKNUT  | 1                 |

## FRONT OF VEHICLE – DISASSEMBLY AND ASSEMBLY

1. Park vehicle on level, hard (concrete) surface.
2. Block the rear wheels of the vehicle to prevent vehicle from moving either direction, then set parking brake.
3. Remove the track bar bolt 30 mm (save for later use) on the driver side of the frame mount **Fig. 1** and the tie rod end from the pitman arm. Use 15/16 wrench.
4. Raise the front of vehicle and support with jack stands on the frame behind the front radius arm hangers. **Fig. 2**
5. Support the front axle with a floor jack.
6. Remove the front wheels.
7. Remove the upper sway bar end link nuts so that the sway bar can move freely **Fig. 3**
8. Remove front brake lines from frame mount and save OE bolts for later re-use.
9. Free up the vacuum lines at both ends of the radius arms so that you can create enough “slack” in them to accommodate the lift. Leave them loose at this time. **Fig. 4**
10. Remove upper sway bar bolts that secure the sway bar to the frame and move the sway bar down out of the way. (Save bolts for later re-use.)
11. Remove front shocks (saving lower bolts for reinstallation).
12. Stretch the hard lines very carefully so that you create about 4” of slack.
13. Install the PVB8F bracket to the frame with the OEM bolt where the brake line was just fastened to the frame but do not fasten the hard line to the drop bracket until step 27. **Fig. 5**
14. Remove the track bar bracket. 21mm deep socket on passenger side (3 spots). 18mm socket on driver side (2 spots).
15. Remove pitman arm from sector shaft on steering box. 1-13/16” socket and special pitman arm puller.
16. While supporting front differential, lower the axle with a floor jack, then remove the driver and passenger side coil springs.
17. Install new pitman arm using Red Locktite. 1-13/16” impact socket Torque to 350 ft. lbs. **Fig. 6**
18. Install new track bar bracket. Install all of the hardware before you tighten any of the hardware. This will help insure proper alignment and save you some frustration. Passenger side – 21mm deep socket (3 ea.). Torque 120 Ft. lbs. Driver side – 18mm socket (2 ea.). Torque 120 ft. lbs. **Fig. 6 (NOTE: THE NEW TRACK BAR BRACKET INSTALLS TO THE BACK SIDE OF THE CROSSMEMBER).**
19. While the frame is still being supported by jack stands also support the front axle with jack stands. Now use a floor jack to support the radius arms while removing the rear radius arm bolt (save for reinstallation) using 24mm wrench and socket.

## DROP BRACKET INSTALLATION

20. Now carefully lower the back of the radius arms down “**one side at a time**” about 4.5” and slide the new hangers in place.
21. Install the sleeves between the hanger plates and install the new 3/4”x 5” bolts with nuts and washers (do not tighten). **Fig. 7**
22. Install the OEM radius arms to the new hangers using OEM hardware saved in step 25 using 24mm socket and wrench. **DO NOT TIGHTEN. Fig. 8**
23. Tighten the radius arm **hanger** bolts to 221 ft. lbs. using 1 1/8” socket & wrench.
24. Torque Radius Arm bolts to 221 ft. lbs.

SKIP TO STEP 30

## REVTEK RADIUS ARM INSTALLATION

25. Remove front bolts attaching the radius arm to the front axle and remove factory radius arm. **(NOTE! Do one side at a time)**. (Save OEM bolts for re-installation).
26. Replace OEM Radius arm with new Revtek Tubular radius arm. Insert factory bolts and nuts in all spots on radius arm. (Use new supplied Revtek all metal locknut on the upper driver's side only). Do not tighten at this time.
27. Repeat this process on the other side of the vehicle.
28. Please use new zip ties to re-attach the factory line that was on the OEM radius arm.
29. Torque Radius Arm bolts to 221 ft. lbs.
30. Install the new coil springs (leave the rubber isolator on the spring) and place the entire assembly into the lower spring bucket making sure the spring end at the bottom of the spring touches the stop on the bucket. Raise the axle until the springs are trapped in their location.
31. Install the new R2515S Revtek front shocks using 3/4" ratchet wrench top, 18mm socket bottom. Torque to 75 ft. lbs.
32. Install the draglink to the small end of the pitman arm using 15/16" socket or wrench and reinstall cotter key. Torque to 85 ft lbs.
33. Install the brake lines to the bottom hole of the brake line extension brackets. **Fig. 5**
34. Install zip ties to hold the lines that you loosened up in step 9
35. Zip ties suggestion for rear of radius arm on driver side **Fig. 9**
36. Zip ties suggestion on front driver side of radius arm. **Fig. 10 & Fig. 11**
37. Install track bar into the track bar bracket using the OEM bolt (30mm). You may have to jog the steering wheel a bit to get the hole to line up. Torque to 406 ft. lbs.
38. Install the sway bar drop brackets to the frame using the OEM bolts and secure the sway bar to the drop brackets using the supplied 10mm hardware. **Fig. 12**
39. Install tires. Set vehicle on ground and torque wheels to factory specs.
40. Now tighten the radius arm bolts using 24mm socket & wrench. Torque to 221 ft lbs.
41. Tighten the upper sway bar end link bolts and nuts.
42. Make sure you have adequate clearance between tires & brake lines.

## REAR OF VEHICLE – DISASSEMBLY AND ASSEMBLY

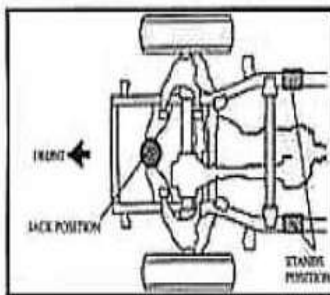
1. Block front wheels to prevent vehicle from moving in either direction.
2. Lift the vehicle from the center of the rear differential housing, leaving the jack in place to support the differential.
3. Support the frame with jack stands forward of the rear springs.
4. Remove rear wheels and shocks.
5. Remove the U-bolts and anchor plate on driver side only.
6. Carefully lower the floor jack, while watching for brake line extension.
7. Clamp the spring assembly together securely 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. Insert the new lower spring plate into the spring pack, placing it on the bottom of the pack.
10. Install the NEW center bolt and nut with the pin side at the bottom of spring pack.
11. Tighten the center bolt to 20 ft-lbs.

12. Align the center bolt with the hole in the new 5" lift block. (**NOTE:** The realignment of center pin may require slight loosening of opposite side U-bolts.)
13. Install the anchor plate and the new U-bolt hardware. Torque U-bolts to (140 ft lbs) these must also have a re-torque after the vehicle has been test drove also.
14. Repeat steps 5 through 14 for the other side.
15. Separate and remove the e-brake cable from the lower front spring eye mount on the driver's side. Re-locate cable under the leaf spring and re-connect cable to bracket and main line.
16. Reinstall emergency brake cable bracket back to the top of the rear U-bolt top plate stud.
17. Install Revtek shocks P/N R3319 and torque hardware to specs.
18. Cut off excess U-bolt, if applicable.
19. Install tires and lower vehicle to ground. Torque wheels to factory specs.
20. Install (1) carrier bearing drop bracket with supplied 7/16"x 2" bolt and washers. (**NOTE:** Some vehicles may require major driveshaft modifications, or may require more or less shimming to correct vibrations.)
21. CHECKS AND ADJUSTMENTS:
  - Check all hardware for tightness and re-torque after 100 miles and after every off road use.
  - Headlights should be adjusted.
  - Vehicle must be aligned

**PRODUCT SAFETY LABEL MUST BE INSTALLED INSIDE CAB  
IN PLAIN VIEW OF ALL OCCUPANTS**



**Figure 1**



**Figure 2**



**Figure 3**



**Figure 4**



**Figure 5**



**Figure 6**



**Figure 7**



**Figure 8**



**Figure 9**



**Figure 10**



**Figure 11**



**Figure 12**



## **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.