



off-road driven!™

PRO COMP SUSPENSION

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**62160**

**2009-2014 Ford F-150 2WD ONLY 2 1/2" Front Spacer Kit**

*NOTE: This kit can be installed on 2009-2014 vehicles equipped with an electric steering rack*

***IMPORTANT!:*** *In order to maintain proper alignment for the life of the vehicle, the installation of a cam alignment kit may be necessary. This kit is now available for purchase from Specialty Products Company PN# S/P86230.*

This document contains very important information that includes warranty information and instructions for resolving problems you may encounter. Please keep it in the vehicle as a permanent record.

<b>Part #</b>	<b>Description</b>	<b>Qty.</b>
94-2834m	STRUT SPACER	2
90-6317m	<b>HARDWARE PACK: Spacer Mount</b> 10mm-1.25 FLANGE NUT	1 6
94-5456	<b>BUMP STOP BRACKET: Drvr</b>	1
94-5459	<b>BUMP STOP BRACKET: Pass</b>	1
90-6264 15-11018	<b>HARDWARE PACK: Bump Stop</b> <b>BUMP STOP</b> STOVER NUT WASHER	1 2 2 2
90-6693	<b>HARDWARE PACK: Bump Stop</b>	1
70-0371001800	3/8" X 1" Gr. 8 HEX BOLT	2
72-037100816	3/8" USS STOVER NUT	2
73-03700042	3/8" HARDENED FLAT WASHER	4
70-0501251800	1/2" X 1 1/4" Gr. 8 HEXBOLT	2
73-03700042	1/2" HARDENED FLAT WASHER	2

**NOTE: All part images may vary from catalog and instructions.**

**RECOMMENDED PRO COMP SHOCKS**

**2009-2014 2WD**

**Front Strut:** 621553

**ES Series: (rear)** 927504

**MX-6:(rear)** MX6079

**Optional Equipment Available from your Pro Comp Distributor!**

**PN 52209B/52209BMX**

**PN 52213B/52213BMX**

**62159**

**13137\***

**52211BMX\***

**52214BMX\***

**52700**

**72096\***

**4WD 6" Suspension Lift Kit**

**2WD 6" Suspension Lift Kit**

**4WD Spacer Kit**

**Add a leaf kit:** (Use with Suspension lift kit)

**4WD Coil Over Upgrade Kit**

**2WD Coil Over Upgrade Kit**

**Rear end shim kit**

**Traction Bar Kit:** 4 wd Crew Cab Short Bed

**\*Install on Pro Comp lift kit equipped vehicles ONLY!**

Also, check out our outstanding selection of Pro Comp tires  
compliment your new installation!

## Introduction:

- ◆ This installation requires a professional mechanic!
- ◆ We recommend that you have access to a factory service manual for your vehicle to assist in the disassembly and reassembly of your vehicle. It contains a wealth of detailed information.
- ◆ Prior to installation, carefully inspect the vehicle's steering and driveline systems paying close attention to the tie rod ends, ball joints, wheel bearing preload, pitman and idler arm. Additionally, check steering-to-frame and suspension-to-frame attaching points for stress cracks. The overall vehicle must be in excellent working condition. Repair or replace all worn or damaged parts!
- ◆ Read the instructions carefully and study the illustrations before attempting installation! You may save yourself a lot of extra work.
- ◆ Check the parts and hardware against the parts list to assure that your kit is complete. Separating parts according to the areas where they will be used and placing the hardware with the brackets before you begin will save installation time.
- ◆ Check the special equipment list and ensure the availability of these tools.
- ◆ Secure and properly block vehicle prior to beginning installation.
- ◆ ALWAYS wear safety glasses when using power tools or working under the vehicle!
- ◆ Use caution when cutting is required under the vehicle. The factory undercoating is flammable. Take appropriate precautions. Have a fire extinguisher close at hand.
- ◆ Foot pound torque readings are listed on the Torque Specifications chart at the end of the instructions. These are to be used unless specifically directed otherwise. Apply thread lock retaining compound where specified.
- ◆ **Please note that while every effort is made to ensure that the installation of your Pro Comp lift kit is a positive experience, variations in construction and assembly in the vehicle manufacturing process will virtually ensure that some parts may seem difficult to install. Additionally, the current trend in manufacturing of vehicles results in a frame that is highly flexible and may shift slightly on disassembly prior to installation. The use of pry bars and tapered punches for alignment is considered normal and usually does not indicate a faulty product. However, if you are uncertain about some aspect of the installation process, please feel free to call our tech support department at the number listed on the cover page. We do not recommend that you modify the Pro Comp parts in any way as this will void any warranty expressed or implied by the Pro Comp Suspension company.**

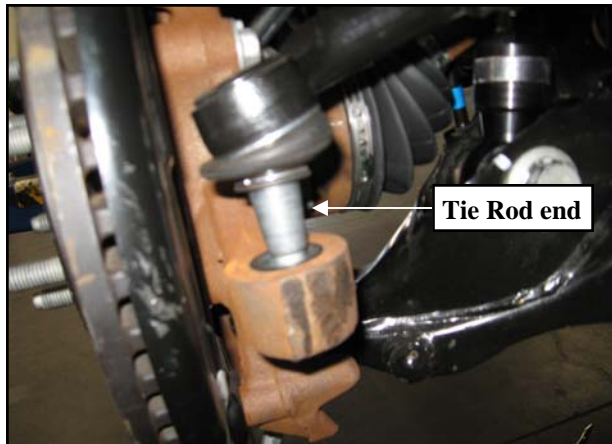
## FRONT INSTALLATION:

1. Measure the vehicle from the center of the hub to the fender lip and record this measurement below.

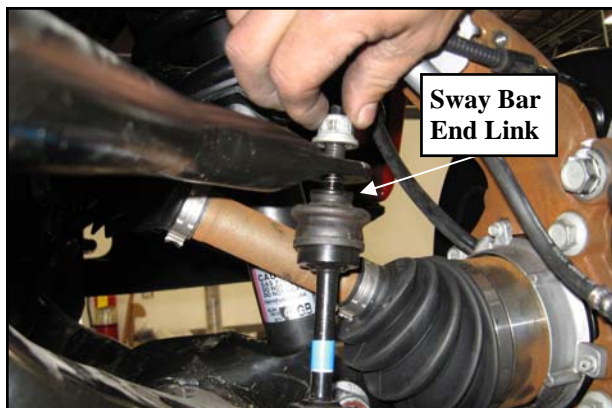
LF: \_\_\_\_\_ RF: \_\_\_\_\_

LR: \_\_\_\_\_ RR: \_\_\_\_\_

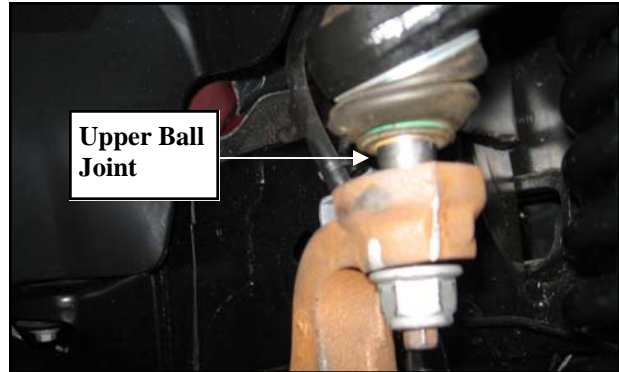
2. Be sure you are working on a level surface. Block the rear tires and raise the front of the vehicle. Support the frame with jack stands under the front cross-member.
3. Remove the front wheels.
4. Work on one side of the vehicle at a time.
5. Remove the tie rod end nut and separate from the knuckle using the appropriate tool.



6. Unbolt the sway bar from the sway bar end links. Save hardware for reinstallation.



7. Save for reinstallation.
8. Unbolt the upper ball joint nut, but do not remove it from the knuckle. Separate using the appropriate tool.



9. Remove upper ball joint nut and carefully lower the A-arm assembly. Save hardware for reinstallation.
10. Remove the lower strut bolt from the lower control arm. Save the hardware for reinstallation. Be sure to note the direction of the bolt for reinstallation.



11. Remove (3) upper strut tower nuts holding the strut assembly to the strut tower. Save the hardware for reinstallation.



12. Remove the strut assembly from the vehicle.
13. Now would also be a good time to inspect the struts for damage or fluid leakage. Replace if necessary.

**NOTE: For improved performance Pro Comp rear shocks are recommended. See the chart on page 2 for applications.**

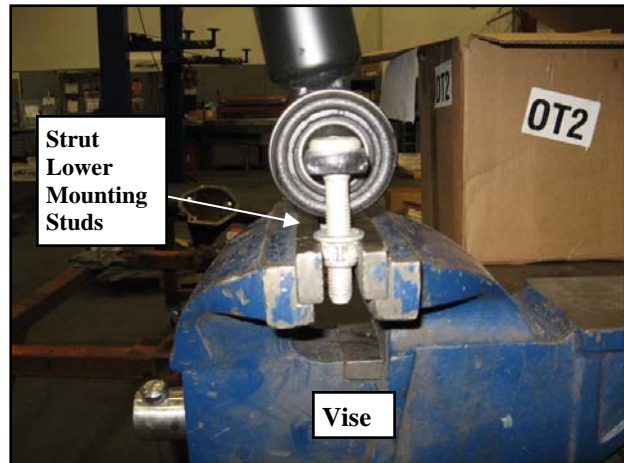
14. Install the strut spacer (94-2834m) onto the OE strut mounting studs. Secure with the previously removed OE nuts. Torque the nuts to factory specifications.

**NOTE: Be sure to use thread locker on the OE nuts.**



### STEPS 15 THROUGH 17 ARE FOR 2014 MODELS ONLY!

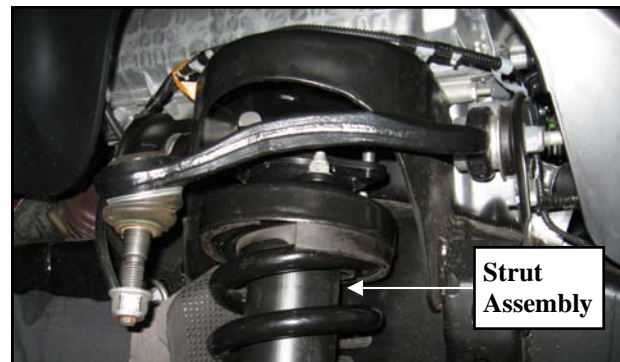
15. The installation of the strut spacer (94-2834m) requires that the strut be rotate 180 degrees from their factory position. The lower bushings with mounting studs will need to be repositioned in order to properly align them with the lower control arms.
16. Install OE nuts on the OE strut lower mounting studs and clamp them in a vise.



17. With the strut leaning opposite the pulling direction, carefully pull the top of the strut assembly to rotate it on the lower mount until it reaches an equal but opposite angle leaning toward you.

18. Install the strut assembly into the strut tower and start the (3) upper 10mm flange nuts. (Make sure that the bottom of the strut is aligned as well) Torque the upper strut tower 10mm nuts to 60 ft./lbs.

**NOTE: Be sure to use thread locker on the OE nuts.**



19. Install the lower strut bolt in the original position and torque to manufacturers specifications.

**NOTE: Be sure to use thread locker on the OE bolt.**

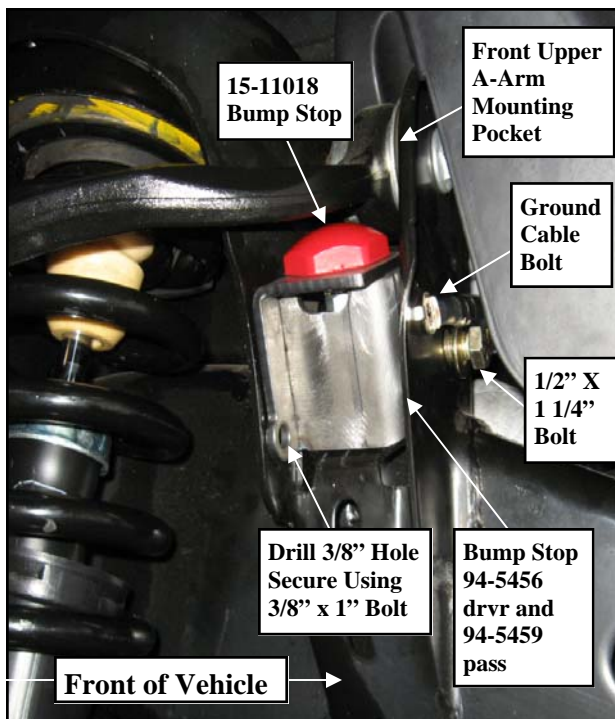
20. Reinstall the knuckle to the upper ball joint and secure using the OE nut. Torque the upper ball joint nut to factory specifications.

**NOTE: It may help to use (2)**

wrenches to tighten the upper ball joint nut. One to tighten the nut and one to keep the ball joint stud from spinning.



21. Reconnect the sway bar to the end links using the previously removed OE hardware.
22. Reinstall the tie rod end to the knuckle. Torque to factory specifications.
23. Unbolt the ground cable bolt from the front upper A-arm pocket. Save hardware for reinstallation.
24. Install the bump stop (15-11018) to the bump stop bracket (94-5456 drv and 94-5459 pass) using the supplied 3/8" hardware.



25. Install the bump stop bracket (94-5456 drv and 94-5459 pass) into the front upper A-arm pocket. Secure in place using the 1/2" X 1 1/4" bolt in the existing front inner hole. Tighten the bolt.

**NOTE:** Be sure the bracket is sitting flat on the frame

26. Using the rear outer hole in the bracket as a guide, drill through the A-Arm pocket using a 3/8" drill bit. Secure using the 3/8" X 1" bolt and hardware. Torque the 3/8" and 1/2" hardware according to the torque chart on page 7.
27. Reinstall the ground cable and bolt using the previously removed OE hardware.
28. Repeat steps 5 through 27 on the remaining side of the vehicle.
29. Reinstall the front wheels.
30. Now would also be a good time to inspect the rear shocks for damage or fluid leakage. Replace if necessary.

**NOTE:** For improved performance Pro Comp rear shocks are recommended. See the chart on page 2 for applications.

**IMPORTANT! BE SURE TO BRING THE VEHICLE IMMEDIATELY TO A REPUTABLE ALIGNMENT SHOP TO BE ALIGNED!**

31. Torque all bolts to factory specifications. Re-torque all bolts after 500 miles.

**NOTES:**

- ⇒ On completion of the installation, have the suspension and headlights re-aligned.
- ⇒ After 100 miles recheck for proper torque on all newly installed hardware.
- ⇒ Recheck all hardware for tightness after off road use.

## Revision Page:

2.27.14: Added steps and pictures for rotating lower strut mount.

Use this only as a guide for hardware without a called out torque specification in the instruction manual.

<b>Bolt Torque and ID</b>						
<b>Decimal System</b>			<b>Metric System</b>			
All Torques in Ft. Lbs. Maximums						
Bolt Size	Grade 5	Grade 8	Bolt Size	Class 9.8	Class 10.9	Class 12.9
5/16	15	20	M6	5	9	12
3/8	30	45	M8	18	23	27
7/16	45	60	M10	32	45	50
1/2	65	90	M12	55	75	90
9/16	95	130	M14	85	120	145
5/8	135	175	M16	130	165	210
3/4	185	280	M18	170	240	290

<p>1/2-13x1.75 HHCS</p> <p><math>\hat{D}</math> <math>\hat{I}</math> <math>\hat{L}</math> <math>\hat{X}</math></p>	<p><b>Grade 5</b>   <b>Grade 8</b></p> <p>(No. of Marks + 2)</p>	<p><b>Grade 8</b></p>	<p>M12-1.25x50 HHCS</p> <p><math>\hat{D}</math> <math>\hat{I}</math> <math>\hat{L}</math> <math>\hat{X}</math></p>	<p><b>10.9</b></p> <p><b>P</b></p>
<p>G = Grade (Bolt Strength)</p> <p>D = Nominal Diameter (Inches)</p> <p>T = Thread Count (Threads per Inch)</p> <p>L = Length (Inches)</p> <p>X = Description (Hex Head Cap Screw)</p>			<p>P = Property Class (Bolt Strength)</p> <p>D = Nominal Diameter (Millimeters)</p> <p>T = Thread Pitch (Thread Width, mm)</p> <p>L = Length (Millimeters)</p> <p>X = Description (Hex Head Cap Screw)</p>	