400 W. Artesia Blvd. Compton, CA 90220 Fax: (310) 747-3912

Ph: 1-800-776-0767 E-Mail: info@procompusa.com Latest Revision 2.27.14

Website: www.procompusa.com



off-road driven!™

PRO COMP SUSPENSION

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.

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

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

RECOMMENDED PRO COMP SHOCKS						
<u>2009-2014 2WD</u>						
Front Strut:	621553					
ES Series: (rear)	927504					
<u>MX-6:</u> (rear)	MX6079					



Optional Equipment Available from your Pro Comp Distributor! <

PN 52209B/52209BMX 4WD 6" Suspension Lift Kit PN 52213B/52213BMX 2WD 6" Suspension Lift Kit

62159 4WD Spacer Kit

13137* Add a leaf kit: (Use with Suspension lift kit)

52211BMX* 4WD Coil Over Upgrade Kit 52214BMX* 2WD Coil Over Upgrade Kit

52700 Rear end shim kit

72096* 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:

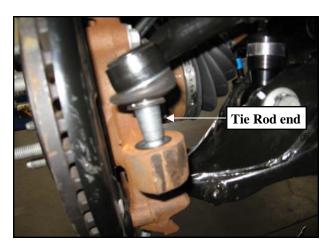
- This installation requires a professional mechanic!
- We recommend that you have access to a factory service manual for your vehicle to assist in the disassembly and reassembly of your vehicle. It contains a wealth of detailed information.
- Prior to installation, carefully inspect the vehicle's steering 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.
- <u>ALWAYS</u> 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 crossmember.
- 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.



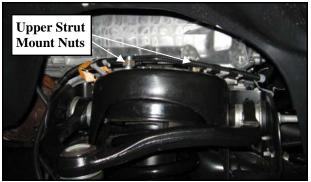
- 7. Save for reinstallation.
- 8. Unbolt the upper ball joint nut, but do not remove it from the knuckle. Separate using the appropriate tool.



- 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.

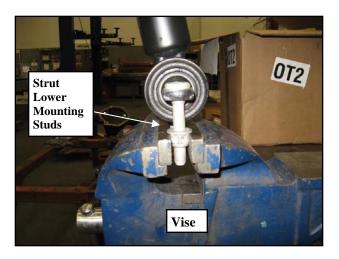
14. Install the strut spacer (94-2834m) onto the **OE** strut mounting studs. Secure with the previously removed **OE** nuts. Torque the nuts to factory specifications.

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.

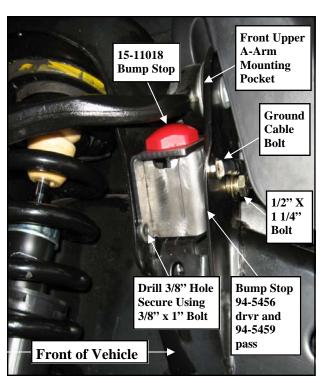
20. Reinstall the knuckle to the upper ball joint and secure using the **OE** nut. Torque the upper ball joint nut to factory specifications.

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 drvr and 94-5459 pass) using the supplied 3/8" hardware.



25. Install the bump stop bracket (94-5456 drvr 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 realigned.
- ⇒ 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.

Bolt Torque and ID								
Decimal System			Metric System					
All Torques in Ft. Lbs. Maximums								
Bolt Size	Grade 5	Grade8	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		
- T - - T								
G = Grade (Bolt Strength) D = Nominal Diameter (Inches) T = Thread Count (Threads per Inch) L = Length (Inches) X = Description (Hex Head Cap Screw)			P = Property Class (Bolt Strength) D = Nominal Diameter (Millimeters) T = Thread Pitch (Thread Width, mm) L = Length (Millimeters) X = Description (Hex Head Cap Screw)					



The PRO COMP PROMISE WARRANTY

At Pro Comp, we know you have many choices when selecting products to personalize your vehicle. You should demand nothing but the highest quality available and have total confidence that the products you selected are the best in the industry. It is for these reasons that Pro Comp Suspension products are backed by the best warranty in the industry...the Pro Comp Promise!

Pro Comp promises that its products will last a lifetime or we will replace it free of charge. It's that simple! Because of our commitment to quality and manufacturing excellence, we are able to stand behind our products. FOREVER. It is Pro Comp's Promise that if one of our suspension products breaks not due to misuse, neglect or vandalism, we will replace it. Whether you are the original purchaser or not, you can be assured that we will make it right. The Pro Comp Promise covers all suspension products including shocks and steering stabilizers. Buy Pro Comp Suspension today and enjoy it for the rest of your life!

That's our Pro Comp Promise!

Notice to Owner, Operator, Dealer and Installer:

Vehicles that have been enhanced for off-road performance often have unique handling characteristics due to the higher center of gravity and larger tires. This vehicle may handle, react and stop differently than many passenger cars or unmodified vehicles, both on and off-road. You must drive your vehicle safely! Extreme care should always be taken to prevent vehicle rollover or loss of control, which can result in serious injury or even death. Always avoid sudden sharp turns or abrupt maneuvers and allow more time and distance for braking! Pro Comp reminds you to fasten your seat belts at all times and reduce speed! We will gladly answer any questions concerning the design, function, maintenance and correct use of our products.

Please make sure that the Dealer / Installer explains and delivers all warning notices, warranty forms and instruction sheets included with Pro Comp product.

Warranty and Return Policy:

Pro Comp warranties its full line of products to be free from defects in workmanship and materials for the life of the product. Pro Comp's obligation under this warranty is limited to repair or replacement, at Pro Comp's option, of the defective product. Any and all costs of removal, installation, freight or incidental or consequential damages are expressly excluded from this warranty. Pro Comp is not responsible for damages and / or warranty of other vehicle parts related or non-related to the installation of Pro Comp product. A consumer who makes the decision to modify his vehicle with aftermarket components of any kind will assume all risk and responsibility for potential damages incurred as a result of their chosen modifications. Warranty coverage does not include consumer opinions regarding ride comfort, fitment and design. Warranty claims can be made directly with Pro Comp or at any factory authorized Pro Comp dealer.

IMPORTANT! To validate the warranty on this purchase please be sure to mail in the warranty card. Claims not covered under warranty

- * Parts subject to normal wear; this includes bushings, bump stops, ball joints, tie rod ends and heim joints.
- * Finish after 90 days.
- * Damage caused as a result of not following recommendations or requirements called out in the installation manuals. Pro Comp MX Series coil-over shocks are considered a serviceable shock with a one-year warranty against leakage only. Rebuild service and replacement parts will be available and sold separately by Pro Comp. Contact Pro Comp for specific service charges. Pro Comp accepts no responsibility for any altered product, improper installation, lack of or improper maintenance or improper use of our products.

E-Mail: info@procompusa.com Website: www.procompusa.com

Fax: (310) 747-3912 Ph: 1-800-776-0767 PLACE
WARRANTY REGISTRATION
NUMBER
HERE: