

# off-road driven!™

## PRO COMP SUSPENSION

## 62200 2004-2008 Ford F-150 2WD & 4WD (2004 Heritage Excluded) 2009-2014 Ford F-150 2WD ONLY 3" Front Spacer Kit

NOTE: This kit can be installed on 2009- 2011 vehicles equipped with an electric steering rack

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
<b>90-6317m</b> .100FNFLZ	HARDWARE PACK: Strut Spacer 10mm-1.25 SERRATED FLANGE NUT	1 6

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

RECOMMENDED PRO COMP SHOCKS									
<u>2009-2014</u>	<u>2WD</u>	<u>2004-2008</u>	<u>2WD</u>	<u>4WD</u>					
<u>Front Strut:</u>	621553	<u>Front Strut:</u>	620553	621553					
ES Series: (rear)	927504	<u>ES Series:</u> (rear)	925504	927504					
<u>MX-6:</u> (rear)	MX6079	<u>MX-6:</u> (rear)	MX6078	MX6079					

#### **Equipment Available from your Pro Comp Distributor!** 2004-2008 Models: 2004-2008 F-150 (4WD) 6" Suspension Lift Kit: 52204/52204MX 2004-2008 F-150 (2WD) 6" Suspension Lift Kit: 52205/52205MX 2004-2008 Coil over upgrade kit: (Use with Suspension lift kit) 52206MX (4WD),52207MX (2WD) 2004-2008 Skid plate: 52104 (4WD) 2004-2008 Traction Bars (Extra cab): Mounting kit: 72095, Bars: 72500 2004-2008 Traction bars (Super Crew cab): Mounting kit: 72096, Bars: 72500 2004-2008 MX-6 Rear shock: (Use with Suspension lift kit) MX6009 (4WD), MX6079 (2WD) 2004-2008 MX-6R Reservoir Rear shock: (Use with Suspension lift kit) MX6068R (4WD), MX6066R (2WD) 2004-2008 MX-6R Reservoir Mounting Kit: (Use with Suspension lift kit) 63012 and 63013 2004-2008 Add a leaf kit: (Use with Suspension lift kit) 13134 2004-2008 Light Bar: 24700 2009-2014 Models: 2009-2011 F-150 (4WD) 6" Suspension Lift Kit 52209/52209MX 2009-2011 F-150 (2WD) 6" Suspension Lift Kit 52213/52213MX 2009-2011 Traction bars (4WD Crew cab short bed): Mounting kit: 72096, Bars: 72500 2009-2011 Coil over upgrade kit: (Use with Suspension lift kit) 52211MX(4WD), 52214MX (2WD) 2009-2011 Add a leaf kit: (Use with Suspension lift kit) 13137 2009-2011 F150 4WD Spacer Kit: 62159 2004-2011 Rear end shim kit: 52700 Also, Check out our outstanding selection of Pro Comp tires to 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.



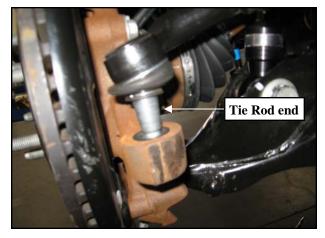
### **FRONT INSTALLATION:**

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.



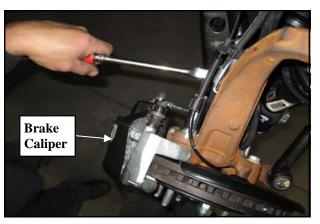
<u>Complete steps 7 Through 13 On 4WD models</u> <u>ONLY!</u>:

- 7. Remove the dust cap from the hub.
- 8. Unbolt the **OE** brake line, ABS line and brackets from the side of the knuckle. Save the hardware for reinstallation.

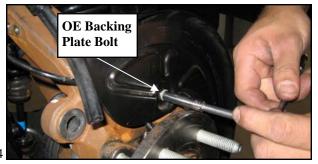


- 9. Remove the vacuum line from the back of the hub.
- 10. Remove the front caliper and bracket assembly from the front knuckle by removing the (2) retaining bolts.

NOTE: Make sure you do not let the calipers hang on the brake lines or damage will occur.

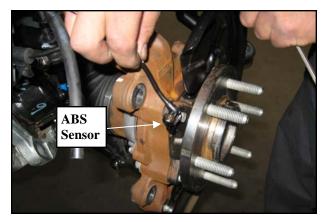


- 11. Remove the front rotors from the front hub.
- 12. Remove the backing plate bolt from the knuckle to access the ABS sensor.





13. Unbolt the ABS sensor from the hub. Remove the CV axle end nut. Save for reinstallation.



14. Unbolt the upper ball joint nut, but do not remove it from the knuckle. Separate using the appropriate tool.



- 15. Remove upper ball joint nut and carefully lower the A-arm assembly. Save hardware for reinstallation.
- 16. <u>*4WD ONLY!:*</u> Carefully remove the CV axles from the hub.

17. 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.



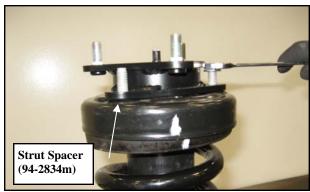
18. Remove (3) upper strut tower nuts holding the strut assembly to the strut tower. Save the hardware for reinstallation.



- 19. Remove the strut assembly from the vehicle.
- 20. 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.

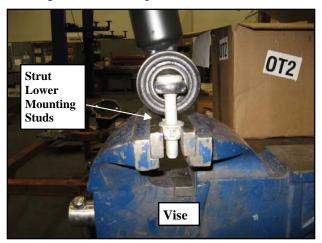
*NOTE: Be sure to use thread locker on the OE nuts.* 





# STEPS 21 THROUGH 23 ARE FOR 2014 MODELS ONLY!

- 21. The installation of the strut spacer (94-2834m) requires that the strut be rotated 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.
- 22. Install OE nuts on the OE strut lower mounting studs and clamp them in a vise.

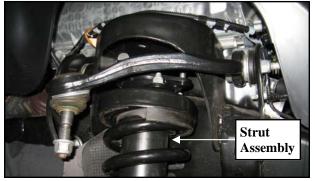


23. With the strut leaning opposite the pulling direction, carefully pull the top of the strut assembly to rotate it on the lower mount until it reaches an equal but opposite angle leaning toward you.



24. 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.



25. 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.

26. <u>2WD ONLY</u>: 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.

# Complete steps 27 Through 34 On 4WD models ONLY!:

27. Carefully guide the CV axle through the hub and reinstall the upper ball joint nut. Torque the upper ball joint nut to factory specifications.

NOTE: It may help to turn the wheel to aid in reinstallation of the CV axle into the hub.

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.



- 28. Reinstall the ABS sensor to the hub using the previously removed hardware.
- 29. Reinstall the backing plate bolt to the knuckle using the previously removed **OE** bolt.
- 30. Install the front rotors on to the front hub.
- 31. Install the front calipers on to the front rotors by reinstalling the retaining bolts. Torque to factory specifications.

# NOTE: Use thread locker on the OE caliper mounting bolts.

- 32. Reconnect the ABS lines and brake lines to the knuckle using the previously removed hardware.
- 33. Reconnect the hub vacuum line to the back of the hub.
- 34. Reinstall the CV end nut and dust cap. Torque the nut to factory specifications. *NOTE: Be sure to use thread locker on the OE bolt.*
- 35. Reconnect the sway bar to the end links using the previously removed **OE** hardware.
- 36. Reinstall the tie rod end to the knuckle. Torque to factory specifications.
- 37. Repeat steps 5 through 36 on the remaining side of the vehicle.
- 38. Reinstall the front wheels.
- 39. 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 REPU-TABLE ALIGNMENT SHOP TO BE ALIGNED!

40. Torque all bolts to factory specifications. Retorque all bolts after 500 miles.

#### NOTES:

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

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			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $									
G = Grade (Bolt Strength) D = Nominal Diameter (Inches) T = Thread Count (Threads per Inch) L - Length (Inches) X = Description (Hex Head Cap Screw)			P = Prop erty ClassD = Nominal DiarT = Thread PitchL - Length (MillinX = Description (	meter (Millin (Thread Wid meters)	neters) lth, mm)				

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

62200 Revised 2.27.14

### **Revision Page:**

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