

# off-road driven!™

## **PRO COMP SUSPENSION**

# 62159 2004-2014 Ford F-150 2wd/4wd 2.0" Front Spacer Kits

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.

	Parts List	62159 Revised 2.6.14
Part #	Description	Qty.
94-8087m	STRUT SPACER	2
90-6317m	HARDWARE PACK: SPACER MOUNT	1
	10mm FLANGE NUT	6

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

RECOMMENDED PRO COMP SHOCKS										
<u>2009-2013</u>	<u>2WD</u>	<u>4WD</u>	<u>2004-2008</u>	<u>2WD</u>	<u>4WD</u>					
Front Strut:	621553	621553	Front Strut:	620553	621553					
ES Series: (rear)	927504	929504	<u>ES Series:</u> (rear)	925504	927504					
<u>MX-6:</u> (rear)	MX6079	MX6164	<u>MX-6:</u> (rear)	MX6078	MX6079					

#### **PLEASE NOTE:**

Due to differences in manufacturing, dimensions and inflated measurements, tire and wheel combinations should be test fit prior to installation. Tire and wheel choice is crucial in assuring proper fit, performance, and the safety of your Pro Comp equipped vehicle. For this application, we recommend no larger than a 35" X 12.50" wheel combination with a maximum backspacing of 5 3/4". Additionally, quality tire of radial design wide is also recommended. Violation of these recommendations will not be endorsed as acceptable by Pro Comp Suspension and will void any and all warranties either written or implied.

Optional Equipment Available from your Pro Comp Distributor!						
PN 52209/52209MX	4WD 6" Suspension Lift Kit					
PN 52213/52213MX	2WD 6" Suspension Lift Kit					
62160	<b>2WD Level Lift Kit</b>					
13137*	Add a leaf kit: (Use with Suspension lift kit)					
52211MX*	4WD Coil Over Upgrade Kit					
52214MX*	2WD Coil Over Upgrade Kit					
52700	<b>Rear end shim kit</b>					
72096*	Traction Bar Kit: 4 wd Crew Cab Short Bed					
Also, check out our outsta	*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.

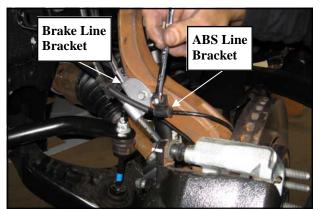
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## **INSTALLATION INSTRUCTIONS:**

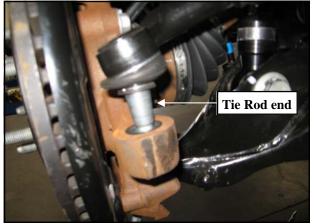
- 1. Measure the vehicle from the center of the hub to the fender lip and record this measurement below.
- LF:\_\_\_\_\_\_RF:\_\_\_\_\_

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

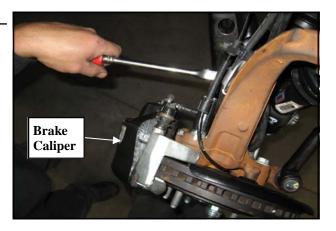


- 7. Remove the vacuum line from the back of the hub.
- 8. Remove the tie rod end nut and separate from the knuckle using the appropriate tool.



Remove the front caliper and bracket assembly from the front knuckle by removing the (2) retaining bolts.

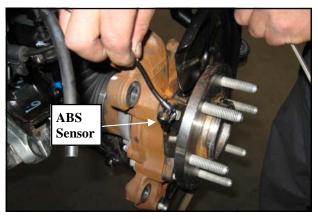
NOTE: Make sure you do not let the calipers hang on the brake lines or damage will occur.



10. Remove the front rotors from the front hub.



11. Remove the backing plate bolt from the knuckle to access the ABS sensor.

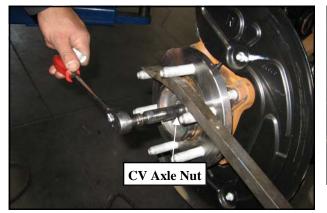


12. Unbolt the ABS sensor from the hub.

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



- 14. Remove the CV axle end nut. Save for reinstallation.
- 15. Unbolt the upper ball joint nut, but do not



remove it from the knuckle. Separate using the appropriate tool.

- 16. Remove upper ball joint nut to free the axle. Save hardware for reinstallation.
- 17. Carefully remove the CV axles from the hub.
- 18. 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.



- 19. Remove (3) upper strut tower nuts holding the strut assembly to the strut tower. Save the hardware for reinstallation.
- 20. Remove the strut assembly from the vehicle.
- 21. Install the strut spacer (94-8087m) onto the OE strut mounting studs. Secure with the

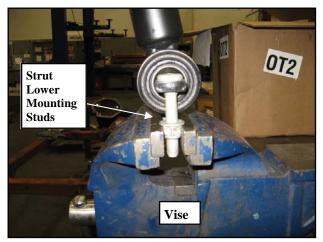


previously removed **OE** nuts. Torque the nuts to factory specifications. *NOTE: Be sure to use thread locker on* 

#### the OE nuts.

#### STEPS 22 THROUGH 24 ARE FOR 2014 MODELS ONLY!

22. The installation of the strut spacer (94-8087m) 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.

- 23. Install OE nuts on the OE strut lower mounting studs and clamp them in a vise.
- 24. 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.

25. Install the strut assembly into the strut tower

and start the upper three **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.

26. 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.

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. Reconnect the sway bar to the end links using the previously removed **OE** hardware.

- 29. Reinstall the ABS sensor to the hub using the previously removed hardware.
- 30. Reinstall the backing plate bolt to the knuckle using the previously removed **OE** bolt.
- 31. Install the front rotors on to the front hub.
- 32. 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.

- 33. Reconnect the ABS lines and brake lines to the knuckle using the previously removed hardware.
- 34. Reconnect the hub vacuum line to the back of the hub.
- 35. Reinstall the tie rod end to the knuckle. Torque to factory specifications.
- 36. 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.*
- 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.
- $\Rightarrow$  After 100 miles recheck for proper torque on all newly installed hardware.
- $\Rightarrow$  Recheck all hardware for tightness after

Bolt Torque and ID							
Decimal	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 - e   - T - e   - T - e   - T - e   - T - e   - T - e   - T - e   - T - e   - T - e   - T - e   - E - T - e   - E - E - E - E - E - E - E - E - E -							
	M12-1.25x50 HHCS $\square$ $\square$ $\square$ $\square$ $\square$ $\square$ $\square$						
G = Grade (Bolt Strength)			P = Property Class (Bolt Strength)				
D = Nominal Diameter (Inches) T = Thread Count (Threads nor Inch)			D = Nominal Diameter (Millimeters) T = Thread Ditch (Thread Width, mm)				
T = Thread Count (Threads per Inch)			T = Thread Pitch (Thread Width, mm)				
L = Length (Inches) X = Description (Hex Head Cap Screw)			L = Length (Millimeters) X = Description (Hex Head Cap Screw)				

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

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### **Revision Page:**

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