PRO COMP SUSPENSION

Suspension Systems that Work!

PN# 62170
1998-2010
Ford Ranger 4wd &
Edge 2wd/4wd
Torsion Bar Key Kit

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.
94-4310	**TORSION BAR KEY**	**2**
90-8115	**SHOCK SPACER**	**4**
90-6764	**SPECIAL HARDWARE**	**1**
.80C400HCSMZ	8mm-1.25 X 40mm HEX BOLT Gr. 8.8	4
.80CNNEZ	8mm-1.25 NYLOCK NUT	4
.80NWHDY	8mm HARDENED FLAT WASHER	8

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

RECOMMENDED PRO COMP SHOCKS

	Front:	**Rear:**
1998-2007 Ford Ranger 4WD (inc. Edge)		
ES9000	**918515**	**926500**
MX-6	**MX6136**	**MX6135**
2000-2007 Ford Ranger 2WD (inc. Edge)		
ES9000	**918515**	**926500**
MX-6	**MX6136**	**MX6135**

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 32" X 10.50" tire and an 8" wheel combination with a maximum backspacing of 4 1/2". 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.

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.**

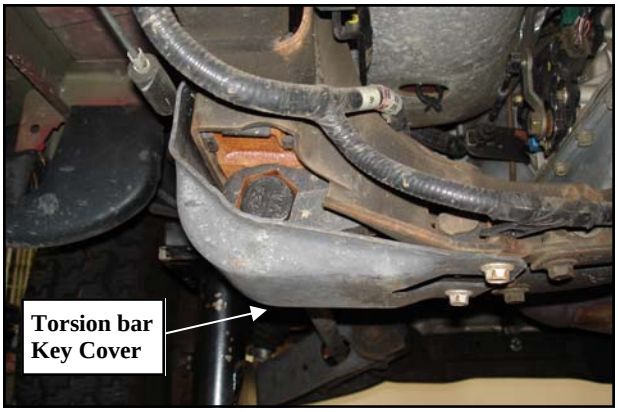
INSTALLATION INSTRUCTIONS:

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

LF:_____ **RF**:_____

LR:_____ **RR**:_____

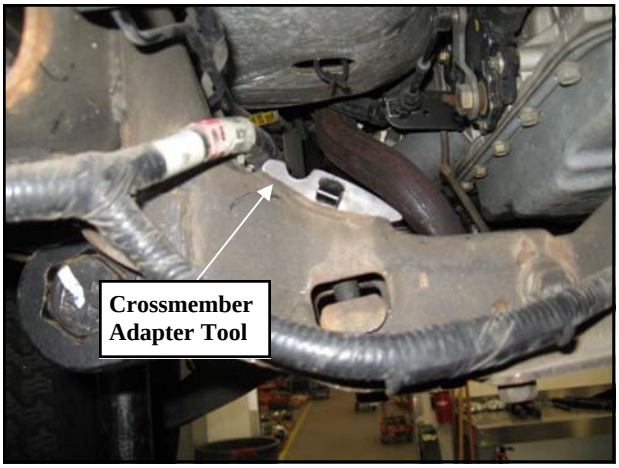
2. Be sure you are working on a level surface. Block the rear tires and raise the front of the vehicle. Support the frame with jack stands.
3. Remove the front wheels.
4. Unbolt and remove the torsion bar key cover from the frame.



5. Measure the torsion bar adjusting screw depths and record this dimensions for later use on reassembly. Mark the orientation of the torsion bar in relation to the front A-arm.

LEFT:_____**RIGHT**: _____

6. Starting on the driver's side, remove the torsion bar adjusting screw. Install the crossmember adapter tool that comes with torsion bar puller tool. Apply a small amount of lubrication grease to the torsion bar puller threads (**67965** is recommended) and the puller shaft-to-adjuster arm contact point. Load the puller and torsion adjuster arm until the torsion bar keeper can be removed from the cross member. Release the puller to unload the torsion bar.



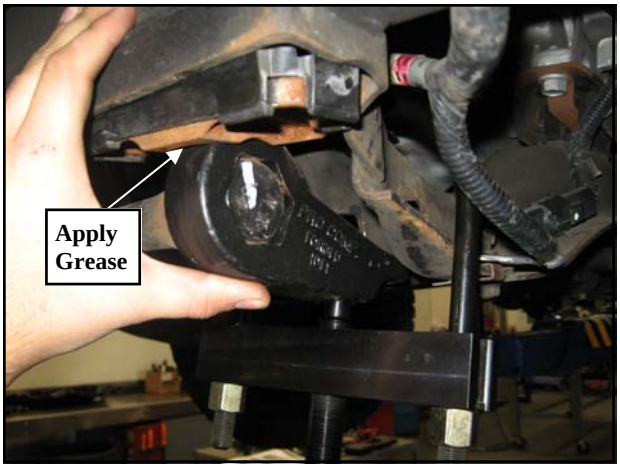
7. Completely remove the torsion bar key bolt from the key assembly.

8. With the bar unloaded, slide it forward out of the **OE** torsion bar key and remove the key from the vehicle.

NOTE: If the bar seems stuck, use a hammer and punch through the hole in the rear of the cross member to dislodge it.

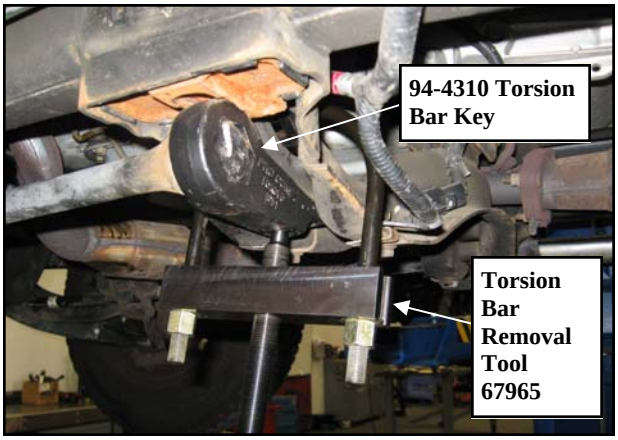
9. Install the Pro Comp Forged torsion key **(94-4310)** and slide the torsion bar back into position. Be sure to line up the previously applied orientation marks.

NOTE: Put a little grease on the top of the torsion key and in the pad that it sits in. This will allow it to rotate in the pad easier as you load the key.

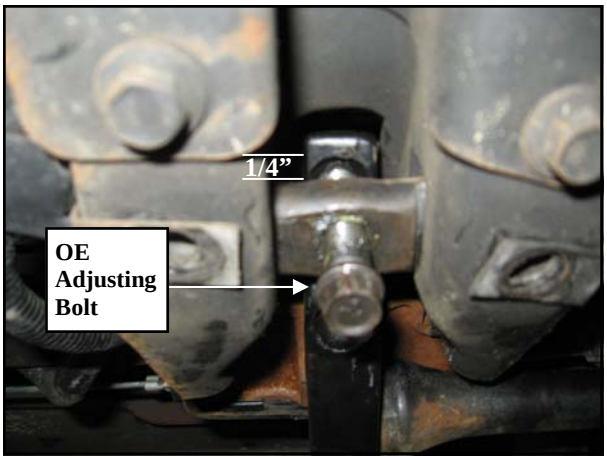


IMPORTANT! Make sure Torsion Bar is extended at least ¼" inch through the Torsion Key.

10. Using the torsion bar unloading tool, apply pressure with the torsion key to allow the torsion key keeper to be reinstalled.



11. Install the previously removed **OE** bolt to the keeper, and reset the torsion bar preload bolts using the measurements previously taken.



IMPORTANT!: Be sure that at least ¼" of bolt threads extend beyond torsion key keeper.

NOTE: Each ¼" of adjustment on the bolt equals approximately 1" at the wheel.

12. Reinstall the torsion bar key cover to the frame using the previously removed **OE** bolts and hardware.

13. Now would also be a good time to inspect the shocks for damage or fluid leakage. Replace if necessary.

NOTE: For improved performance Pro Comp shocks are recommended.

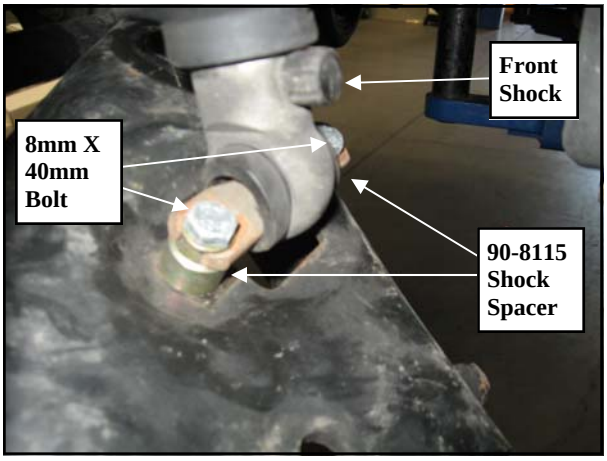
14. Remove the front shocks from the vehicle. You may need to raise the lower control arm to release tension on the shocks.

15. With the shocks removed from the vehicle, press the lower mounting studs out.

    NOTE: If you do not have access to a press you can carefully remove the studs with a 22mm socket and a hammer.

16. Reinstall the front shock to the **OE** upper mounting point using the previously removed hardware.

17. Secure the shock to the lower control arm mounting point using the supplied **8mm X 40mm** bolt, shock spacer **(90-8115)** and **8mm** hardware.



18. Repeat steps 4 through 17 and the shock box on the Passenger Side of the vehicle.

19. Install the front tires/wheels and lower the vehicle onto the ground.

20. Check ride height of the vehicle by Measuring the distance between the tires and fenders making sure both sides of the truck are even. Adjust as needed.

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

<u>NOTES</u>:

⇒ **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.**

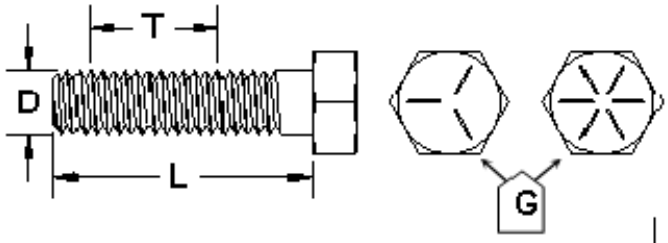
Use this only as a guide for hardware without a called out torque specification in the instruction manual.

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

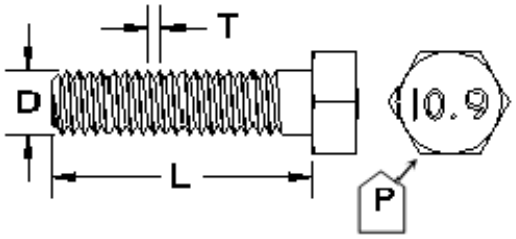


1/2-13x1.75 HHCS

Grade 5 **Grade 8**

(No. of Marks + 2)

G = Grade (Bolt Strength)
D = Nominal Diameter (Inches)
T = Thread Count (Threads per Inch)
L = Length (Inches)
X = Description (Hex Head Cap Screw)



M12-1.25x50 HHCS

P = Property Class (Bolt Strength)
D = Nominal Diameter (Millimeters)
T = Thread Pitch (Thread Width, mm)
L = Length (Millimeters)
X = Description (Hex Head Cap Screw)