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Latest Revision

Date:

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PRO COMP SUSPENSION

Note: Installation of this kit will interfere with TRD dual exhaust tip option.

**K5150B
57086B**

2014 & Up 4WD Toyota Tundra Performance 4" 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.

Box 1 of 6 57086BMX-1

Part #	Description	Qty.
90-40069	UPPER A-ARM: Drvr	1
90-40075	LOWER A-ARM: Drvr	1
90-40073	TIE ROD END: Drvr	1
90-60050	HARDWARE PACK: Lower Shock mount 5/8"-11 X 5 1/2" HEX BOLT Gr. 8 5/8" SAE FLAT WASHER 5/8"-11 STOVER NUT	1 1 1 1
90-60648 72-01615008812	HARDWARE PACK: Upper A-arm M16 - 1.5 NYLOCK NUT	1 1

Box 2 of 6 57086BMX-2

90-40072	UPPER A-ARM: Pass	1
90-40080	LOWER A-ARM: Pass	1
90-40074	TIE ROD END: Pass	1
90-60050	HARDWARE PACK: Lower Shock mount 5/8"-11 X 5 1/2" HEX BOLT Gr. 8 5/8" SAE FLAT WASHER 5/8"-11 STOVER NUT	1 1 1 1

90-60648 72-01615008812	HARDWARE PACK: Upper A-Arm M16 - 1.5 NYLOCK NUT	1 1
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Box 3 of 6 57086BMX-3

7216	FRONT BRAKE LINES	1
84-10217	SWAY BAR MOUNT BRACKET: Drvr	1
84-10218	SWAY BAR MOUNT BRACKET: Pass	1
35-10227	SWAY BAR END LINK BRACKET: Drvr	1
35-10229	SWAY BAR END LINK BRACKET: Pass	1
84-10231	SWAY BAR LINK: Drvr	1
84-10233	SWAY BAR LINK: Pass	1
90-6340	HARDWARE PACK: Sway Bar Relocation 7/16"-14 X 1 1/4" HEX BOLT Gr. 8 7/16" SAE FLAT WASHER 7/16"-14 STOVER NUT	1 4 8 4

90-60051	HARDWARE PACK: Sway Bar Link/Bracket 14mm-1.5 X 65mm HEX BOLT 10.9 14mm-1.5 STOVER NUT 14mm SAE FLAT WASHER 9/16" -12 STOVER NUT 9/16" SAE FLAT WASHER	1 2 2 4 2 2
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Part #	Description	Qty.
84-10242	CAP: FRAME HORN	2
90-60052	HARDWARE PACK: Frame Horn Cap	1
25C75HC8I/IMP	5/16"-18 X 3/4" HEX BOLT Gr. 8	2
25RWHDI/IMP	5/16" FLAT WASHER	2
84-10250	VACUUM BREATHER BRACKET	1
90-40136	VACUUM BREATHER	2
90-40137	VACUUM HOSE	1
90-60053	HARDWARE PACK: Breather Assembly	1
	5/16"-18 X 3/4" HEX BOLT Gr. 8	1
	5/16"-18 NYLOCK NUT	1
	5/16" FLAT WASHER	2
	#12 HOSE CLAMP	4
90-40243	BUMPER EDGE	1
90-60065	HARDWARE PACK: Sway Bar Link	1
600020	BUSHING	4
35-40249	SLEEVE	4
90-6319	HARDWARE PACK: Zip Ties	1
10999	11" BLACK ZIP TIE	12
Box 4 of 6 57086BMX-4		
7217	REAR BRAKE LINES	1
84-10219	REAR SHACKLE	2
90-60055	HARDWARE PACK: Rear Shackle	1
	14mm SAE FLAT WASHER	8
	14mm-2.0 STOVER NUT	4
	14mm-2.0 X 120mm HEX BOLT	2
	14mm-2.0 X 140mm HEX BOLT	2
35-10244	EMERGENCY BRAKE WIRE BRACKET EXTENSION: Drvr	1
35-10245	EMERGENCY BRAKE RELOCATION BRACKET:	2
90-60054	HARDWARE PACK: Rear Brake Line Relocation Bracket	1
	5/16"-18 X 3/4" HEX BOLT Gr. 8	3
	5/16" FLAT WASHER	6
	5/16"-18 NYLOCK NUT	3
G/293-50-200	WHEEL SPACER KIT	1
G/293-50-200	WHEEL SPACER: 2"	2
NA-271	BOTTLE: Red Thread Locker	1
90-4596	14mm-1.5 ACORN LUG NUTS	10
13-90125E	9/16" U-Bolts	4
20-65303	HI NUT PACK	1

Part #	Description	Qty.
84-10223	SKID PLATE	1
84-10462	LOWER SKID PLATE	1
90-60056	HARDWARE PACK: Skid Plate 8mm-1.25 X 20mm HEX BOLT 10.9 5/16" OVERSIZED FLAT WASHER 3/8"-16 X 3 1/2" HEX BOLT Gr. 8 3/8"-16 STOVER NUT 5/16"-18 X 3/4" STAINLESS HEX BOLT Gr. 8	1 5 5 2 2 5
90-60068	HARDWARE PACK:	1
90-7881	WASHER	2
Box 6 of 6 57086BMX-6		
G/2197-2062-001	CV SHAFT	2
90-60605	HARDWARE PACK: CV Axle Band Clamp	2
90-40643	SMALL INNER BAND CLAMP	4
90-40644	LARGE OUTER BAND CLAMP	2
90-40645	LARGE INNER BAND CLAMP	2
90-60059	HARDWARE PACK: CV Shaft	1
90-40242	C-CLIP	2
90-60062	HARDWARE PACK: CV Shaft	1
90-2840	DIFFERENTIAL MOUNT SPACER: 1.75" X .5625" X .950"	2
90-6935	HARDWARE PACK: Diff Spacer 14mm-1.5 X 150mm HEX BOLT 10.9 14mm FLAT WASHER 14mm-1.5 NYLOCK NUT	1 2 4 2
Box 31223		
31223	REAR ADD-A-LEAF	2

**FOLLOWING PARTS ARE USED IN CONJUNCTION WITH THIS KIT.
THEY ARE PACKAGED AND MUST BE ORDERED SEPARATELY.**

ZX5078	ZX FRONT STRUT KIT: DRVR	1
ZX5079	ZX FRONT STRUT KIT: PASS	1
ZX5204	ZX REAR SHOCK ABSORBER KIT	2
57087	FRONT FENDER FLARE KIT	1
57088	REAR FENDER FLARE KIT	1

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.**

Please refer to your vehicle's service manual for more information.

A special removal tool is required for safe removal of the OE band clamps. (PN **09521-24010 or equivalent**).

This tool may be purchased at your local Toyota dealer.

You may be able to rent any of these tools at your local parts store.

FRONT INSTALLATION:

- Prior to installing this kit, with the vehicle on the ground. Measure the height of your vehicle. This measurement can be recorded from the center of the wheel, straight up to the top of the inner fender lip. Record the measurements below.

LF: _____

RF: _____

LR: _____

RR: _____

- Ensure that your work space is of adequate size and the work surface is level. Place the vehicle in park. Disconnect the negative battery cable from the battery. Place your floor jack under the front cross member and raise vehicle. Place jack stands under the frame rails behind the front wheel wells and lower the frame onto the stands. Remove the jack and place the vehicle back in gear, set the emergency brake, and place blocks both in front of and behind the rear wheels. Remove the front wheels.
- Remove the skid plate from the vehicle.
- Drain the front differential into a suitable pan.
- Work on one side of the vehicle at a time.
- Remove the outer tie rod end nut. Separate using the appropriate tool.
- Loosen the jam nut and remove the tie rod end from the steering rack.
- Un clip and unbolt the ABS line from the side of the knuckle. Unbolt the anti-lock brake sensor from the knuckle. Unbolt the upper brake line bracket from the knuckle.
- Remove the brake caliper from the rotor and secure them clear from the work area. **DO NOT** let the caliper hang by the brake line or damage may result.
- Remove the front rotor from the front

hub.

- Remove the dust cap from the hub. Remove the cotter pin and retaining nut from the center of the bearing hub.

NOTE: Using a rubber hammer or mallet, break the CV axle free from the hub bearing to aid in disassembly.

- Unbolt the (4) bolts holding the hub flange to the knuckle and remove the hub and backing plate. Save the hub for re-installation.

NOTE: You will not be able to remove the bolts from the hub assembly after the hub is removed from the knuckle.

- Unbolt the sway bar end links from the lower A-arm. Save the hardware for reuse.

- Unbolt the sway bar frame mounts and remove the sway bar from the vehicle. Save the hardware for reuse.

- Support the knuckle and remove the upper ball joint nut from the knuckle. Separate using the appropriate tool.

- Remove the (2) bolts from the lower ball joint bracket.

- Remove the knuckle from control arm assembly.

- Unbolt and remove the OE CV axle from the front differential.

- Unbolt and remove the factory strut assembly from the vehicle.

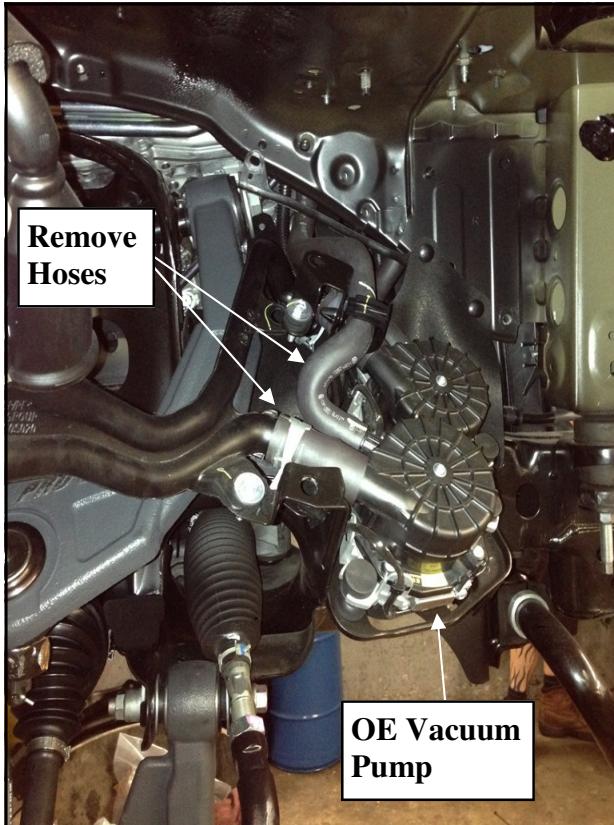
NOTE: The lower A-arm bolts may need to be loosened in order to release pressure on the strut.

- Unbolt and remove the lower A-arm from the vehicle. Save the hardware for reuse.

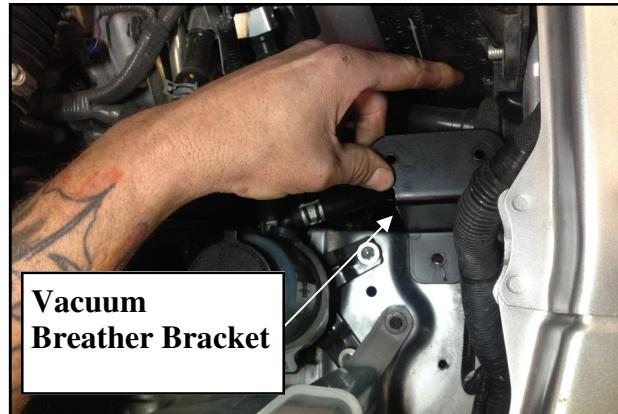
- Remove the cotter pin and the lower ball joint nut from the lower A-arm. Separate using the appropriate tool.

22. Unbolt and remove the upper A-arm from the vehicle. Save the hardware for reuse.
23. Remove the forward front bump stop from the frame.
24. Repeat steps **6** through **23** on the remaining side of the vehicle.
25. Unbolt and remove the front plastic inner fender liner from the vehicle.
26. On the passenger side of the vehicle, unbolt the vacuum pump from the underside of the fender. Save the **OE** hardware for reinstallation.

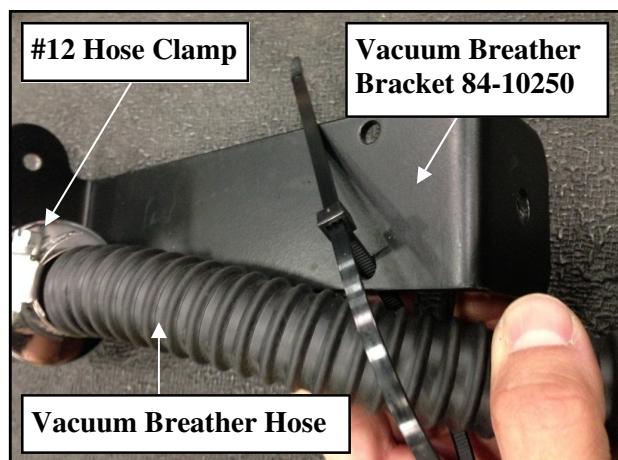
NOTE: Remove only the hoses from the top of vacuum pump.



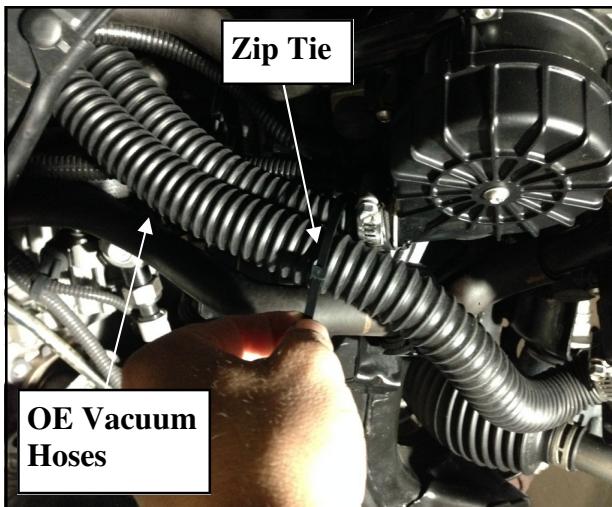
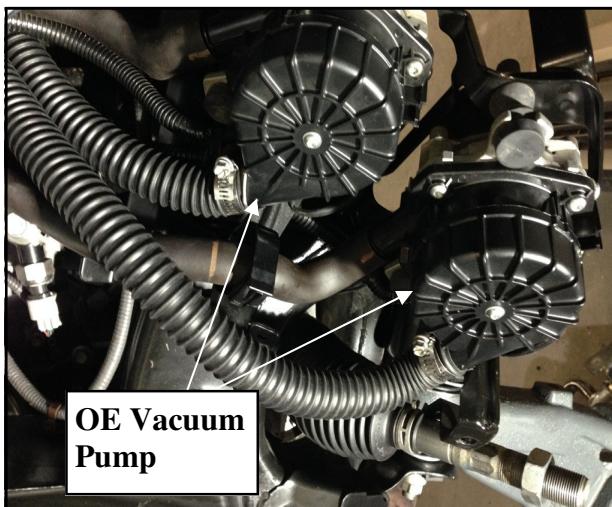
27. In the engine compartment, using the vacuum breather bracket (**84-10250**) as a guide, drill a hole in the passenger side fender apron next to the windshield washer reservoir using a **3/8"** drill bit.



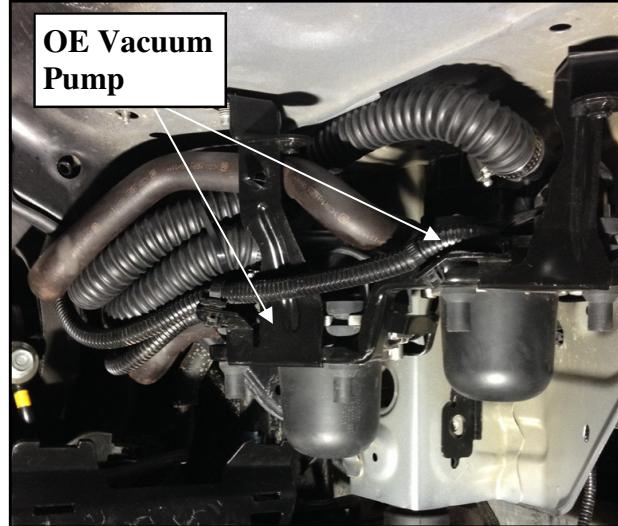
28. Cut the supplied vacuum hose (**90-40137**) in to (2) hoses with lengths of **22"** and **30"**.
29. Insert the vacuum hoses through the vacuum breather bracket (**84-10250**). Install the (2) vacuum breathers (**90-40136**) to the vacuum hoses using the (2) supplied #12 hose clamps and zip ties.
30. Install the vacuum breather bracket (**84-10250**) to the previously drilled hole in the passenger side fender apron using the supplied **5/16" X 3/4"** bolt and hardware.



31. Carefully route the vacuum hoses down through the engine compartment and secure to the previously vacated ports on the vacuum pump using the (2) supplied #12 hose clamps.
NOTE: Be sure to keep the vacuum lines away from any moving parts or heat sources using the provided zip ties.



32. Reinstall the vacuum pump into its original mounting position using the previously removed **OE** hardware.



33. Reinstall the corner panel under the headlights using the previously removed **OE** lock pins.
34. Reinstall the **OE** front fender liners to the fender and the bumper cover using the previously removed **OE** hardware and supplied hardware.
35. Cut the edge trim to length and install onto front bumper.
36. On both sides of the vehicle, measure up **2 1/2"** from the bottom of the front bump stop mounting pad and scribe a cut line.

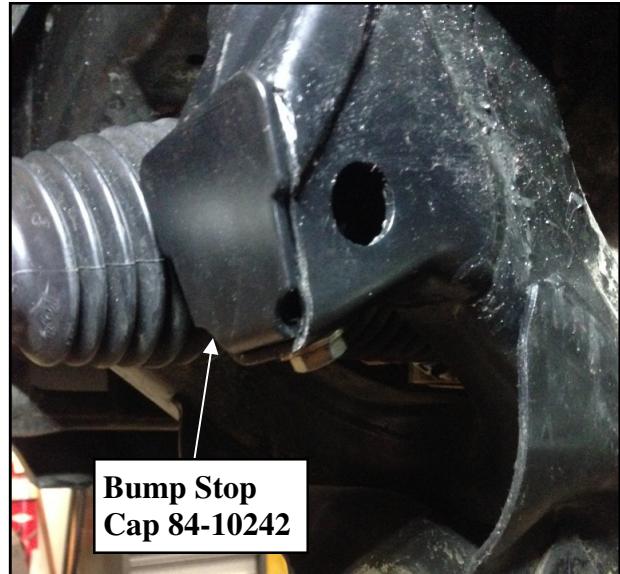


37. Cut the front bump stop pad along the previously applied cut lines using a cut-off wheel, Sawzall or another suitable cutting tool.

NOTE: Be sure to clean and de-bur any sharp edges.



38. Once the cut area has cooled, clean, sand, prime and paint the area with a quality paint.
39. Install the bump stop caps (**84-10242**) to the **OE** bump stop pads using the supplied **(1) 5/16" X 3/4"** bolt and hardware.



40. Carefully position a floor jack under the front differential and raise the pad to contact the differential.
41. Remove the **OE** differential mounting nuts and bolts.
42. Install the differential mount spacers (**90-2840**) between the diff mounts and the front crossmember. Secure the diff mount using the supplied **14mm X 150mm** bolt hardware. Torque according to the torque chart on page **21**.

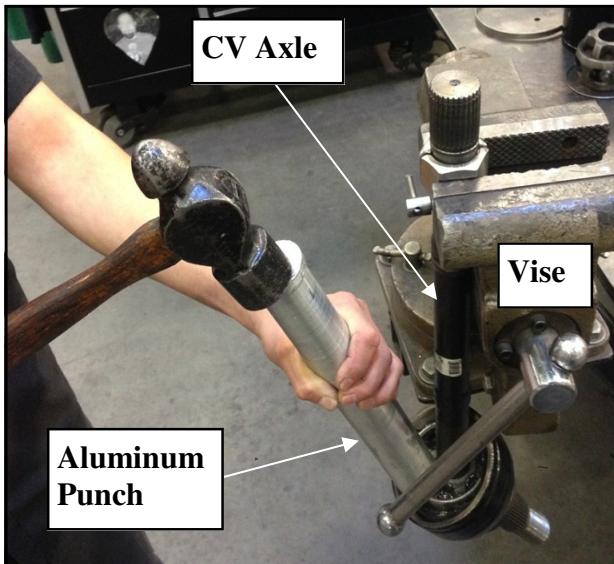
IMPORTANT!: Be sure to note how CV axle parts are disassembled. Take pictures if needed.

43. Place the **OE** CV axle securely in a vise. Using tin snips, cut the **OE** band clamps securing the **OE** rubber boots to the **OE** CV axles.
44. Slide the **OE** rubber boots to the center of the axle, wipe the excess grease from the CV, rubber boots and axle shaft.
45. On the differential side of the CV axle, remove the large spring clip, using a pick or a small screw driver.
46. Slide the stub axle away from the CV star and cage. Be sure to secure the ball bearings to prevent them from being damaged or lost.

47. Using the appropriate snap ring pliers remove the snap ring behind the CV star and slide the CV star off the shaft.

48. Slide the **OE** rubber boots off the CV axle.

49. Secure the CV axle in a vise as shown.



50. Using an aluminum bar or a bronze punch, remove the CV star. Be sure to not damage the axle seals when the CV star is removed.

51. Place the stub axle securely in a vise, remove the CV balls, star and cage. Be sure to note the factory orientation before disassembly.

52. Using a solvent or strong degreaser, clean all previously removed CV axle parts.

IMPORTANT!: Take care to keep all parts CV axle parts laid out in the order they were disassembled.

53. Install the previously removed **OE** protective rubber boots to the new CV axles (**G/2197-2062-001**).

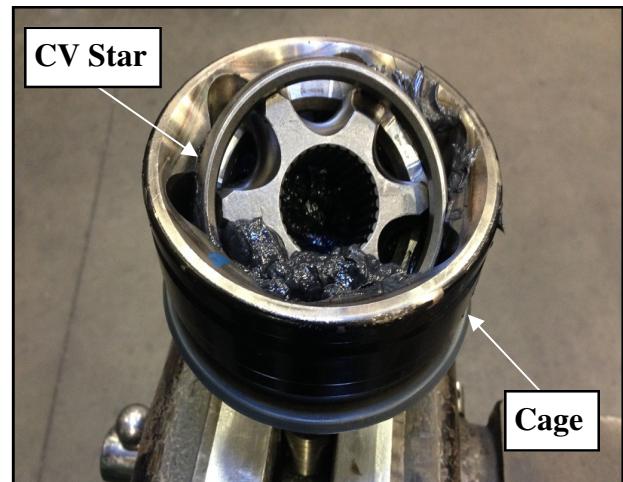
IMPORTANT!: CV Grease and band clamp pliers are necessary (purchased separately) to complete steps 55 through 62. Be sure to liberally apply CV grease while assembling the CV axles.

54. CV axle assembly (knuckle end): Install the supplied spring clip (**90-40242**) on the knuckle side of the CV axle.

IMPORTANT!: Make sure spring clip is installed on the deep groove side of the CV axle.



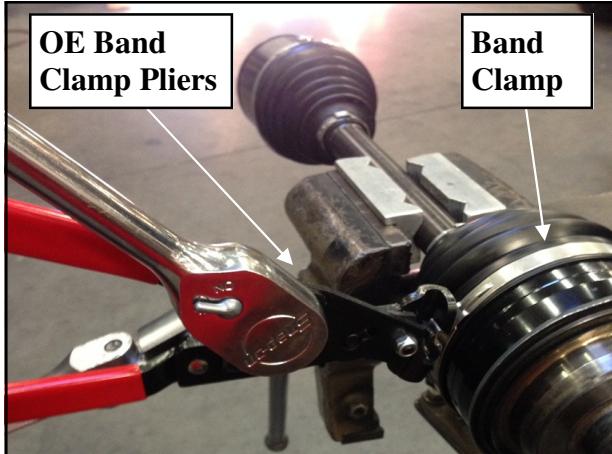
55. Place the knuckle side stub axle in a vise and place the CV star inside the cage and drop onto stub axle. Check for proper orientation. Using a screw driver, move the CV star and cage in allowing the ball bearings to inserted in their original locations.



56. Liberally apply grease throughout the CV star. Compress the spring clip (**90-40242**) and install axle on the stub axle. Be sure the spring clip is through the CV star.

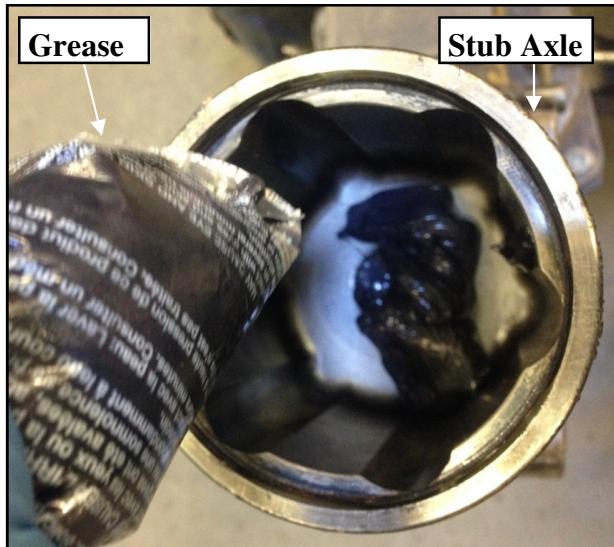


57. Move the axle assembly back and forth allowing the CV joint to lube itself. Apply additional grease to cover the entire CV joint. Slide the OE rubber boot onto the axle assembly and secure using supplied band clamp. Install band clamps (**90-40643, 90-40644, or 90-40645**) using OE pliers to crimp band clamps.

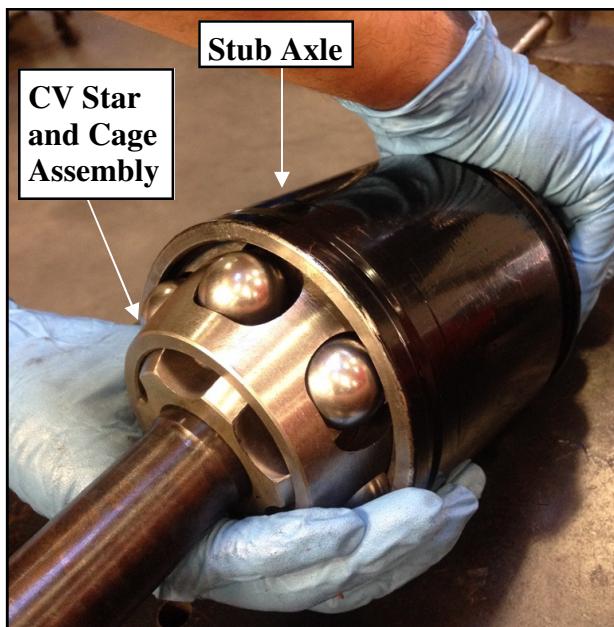


58. CV axle assembly (differential end): Place the differential side stub axle in a vice and install the CV star and cage onto stub axle and secure it using the previously removed **OE** snap ring.

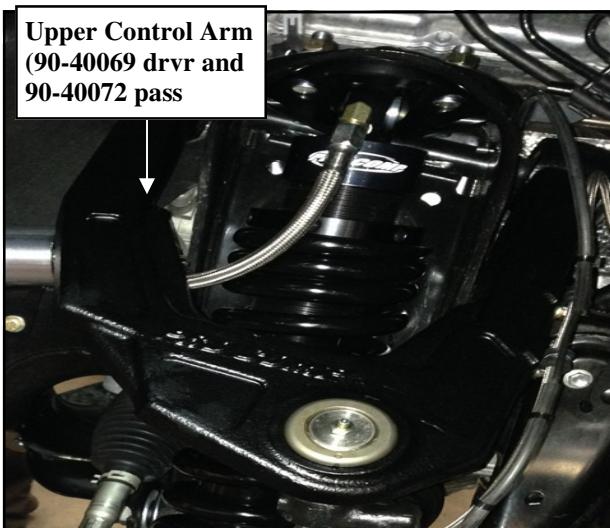
59. Liberally apply grease inside the differential side stub axle.



60. Insert the ball bearings on the CV star and cage. Slide the differential side stub axle onto the CV star and cage assembly. Secure the CV joint together by installing the previously removed large spring clip.



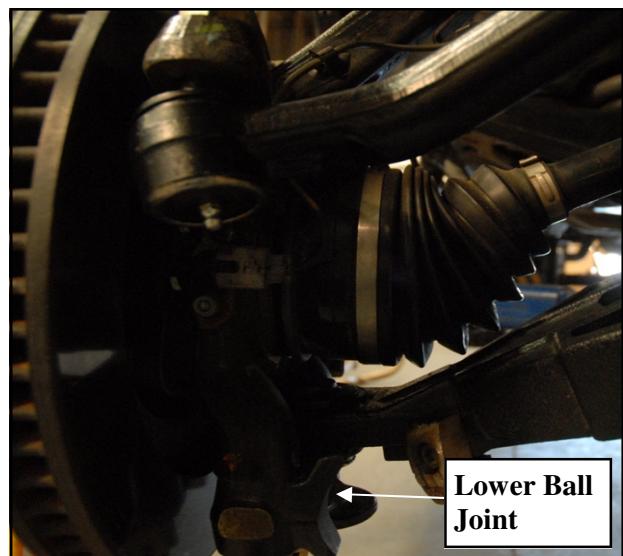
61. Move the axle assembly back and forth allowing the CV joint to lube itself. Apply additional grease to cover the entire CV joint. Slide the **OE** rubber boot onto the axle assembly and secure using the supplied band clamps (**90-40643**, **90-40644**, or **90-40645**) using **OE** pliers to crimp band clamps..
62. Install the upper control arm (**90-40069 drvr** and **90-40072 pass**) to the original frame mounts using the previously removed **OE** bolt and supplied **16mm** nut. Do not torque bolts until vehicle is on the ground.



63. Install the lower control arm (**90-40075 drvr** and **90-40080 pass**) to the original frame mounts using the previously removed **OE** cam bolts.



64. Support the lower A-arm (**90-40075 drvr** and **90-40080 pass**) and position the **OE** knuckle in place. Slide the CV axle through the knuckle from the rear and attach the knuckle to the upper ball joint. Torque to manufacturer's specifications. . Install a new cotter pin.
65. Apply grease to the differential end of the CV axle. Slide CV axle in place on the differential.
NOTE: A rubber mallet may be needed to properly install the CV axle.
67. Secure the knuckle to the lower ball joint bracket using the (2) previously removed **OE** mounting bolts. Apply thread locking compound to the bolts. Torque the bolts to manufacturer's specifications.



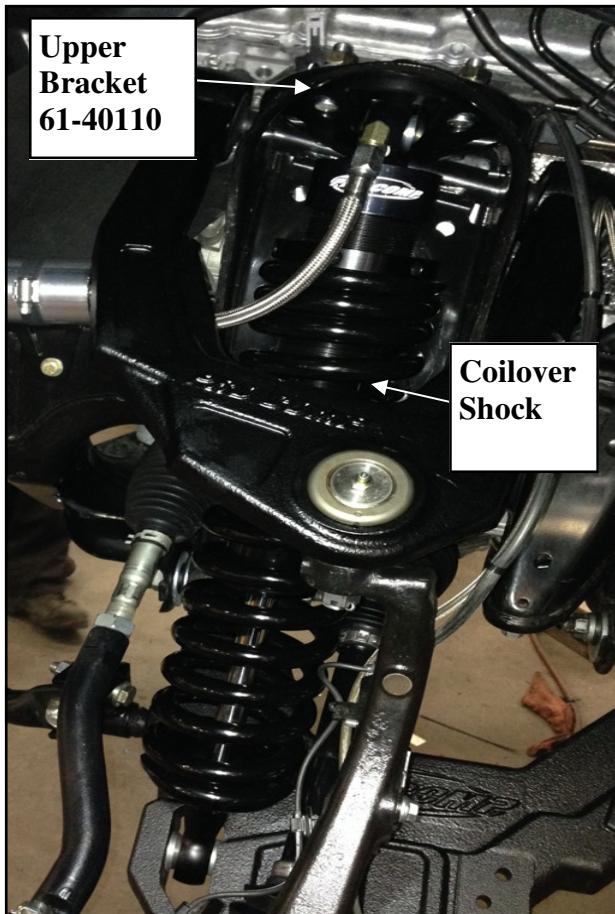
68. Attach the previously removed **OE** retaining nut to the end of the CV shaft. Torque to manufacturer's specifications. . Install a new cotter pin and reattach the dust cap.
69. Insert the mono ball spacers (**90-2433**) in the top of the coilover shock (**ZX5078 Drvr** and **ZX5079 Pass**).
70. Insert the mono ball spacers (**90-2812**) in the bottom of the coilover shock (**ZX5078 Drvr** and **ZX5079 Pass**).

NOTE: The spacers are a tight fit. A press might be needed to fit the spacers into the mono balls.

- Install the new Pro Comp coilover shock (**ZX5078 Drvr** and **ZX5079 Pass**) to the upper bracket (**61-40110**) with the supplied **1/2" X 2 3/8"** 12-point bolt (**90-4197**). Torque the mounting bolt to **55 ft./lbs.**

IMPORTANT!: Be sure to use ZX5078 coil over shock on the driver side and ZX5079 coil over shock on the passenger side.

NOTE: Be sure to use the supplied blue thread locker on the coil over mounting bolt (90-4197).



- Fasten upper bracket to truck using the supplied **7/16"** hardware on the top and torque to **45-50 ft./lbs.**

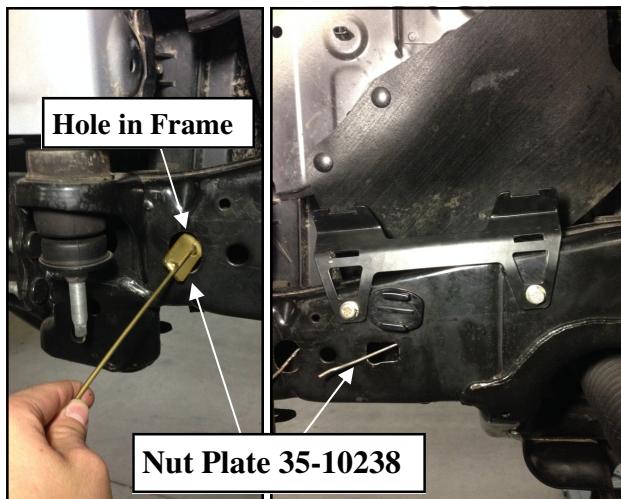
IMPORTANT!: DO NOT tighten the upper mount bolt (90-4179) using and impact gun. Damage to the mount may occur.

- Install the supplied **5/8" X 5 1/2"** bolt through the lower shock mount and lower a-arm (**90-40069 drvr** and **90-40072 pass**). Torque to **150 ft./lbs.**

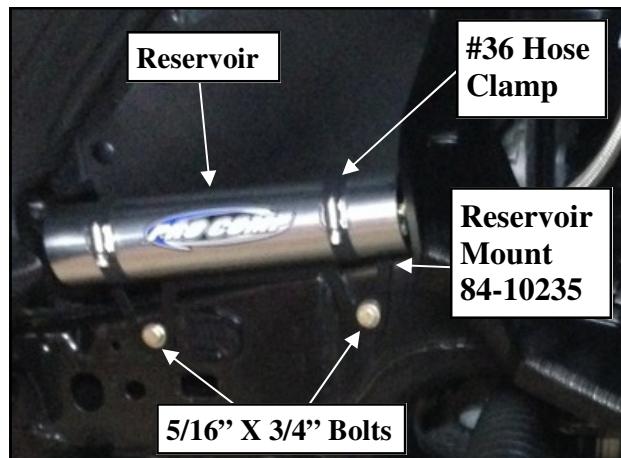
NOTE: Supplemental instructions for MX coil over installation are located in box 57047BMX-4/57057BMX-1.

- Bolt the coilover shock reservoir mount (**84-10235**) to the frame using the supplied **5/16" X 3 3/4"** bolt, washer and nut plates (**35-10238**).

NOTE: Trim the excess nut plate wire.



- Secure the coilover shock reservoir to the reservoir mount (**84-10235**) using the (2) supplied #36 stainless hose clamps.



76. Install the front rotors on to the front hubs.
77. Reinstall the brake calipers to the new knuckle using the previously removed **OE** bolts. Torque to manufacturer's specifications.
78. At the driver side, locate and remove the rubber brake hose that runs from the knuckle to the frame.
79. Thoroughly clean all mating surfaces. Connect the new brake line (**7216**) to the existing frame metal brake line and tighten. Install the brake line to the knuckle using the factory bolt. Position the line so it doesn't make contact with any other parts. Make sure brake lines are clean and dry of any material before ABS brake bleeding.
80. Repeat on the remaining side of vehicle.

**BLEEDING OF THE BRAKE SYSTEM
SHOULD BE DONE ACCORDING TO
A TOYOTA FACTORY SERVICE
MANUAL.**

**IMPORTANT: BE VERY CAREFUL
NOT TO LET THE MASTER CYLINDER RUN DRY! WITH ABS BRAKES
THIS SITUATION WILL DAMAGE
THE SYSTEM!**

IMPORTANT: Move the control arm assembly up and down to its limits several times to check for binding and to ensure that there are no interference or pinching problems with the brake lines and/or ABS wiring.

81. Bolt the anti-lock brake wiring sensor to the hub. Reroute the ABS line and secure the previously installed brake line and ABS line to the upper A-arm using the supplied Adel clamp and **OE** ABS wire retaining bolt. Secure the ABS lines away from any moving parts using the supplied zip ties.



82. Loosen the tie rod jam nuts and remove the **OE** outer tie rod ends. Be sure to hold the outer tie rod end with a wrench to avoid hyper extending the tie rod joint.
83. Thread the new outer tie rod ends (**90-40073 drvr** and **90-40074**) on until it is in its original location on the steering rack shaft with the stud facing up.



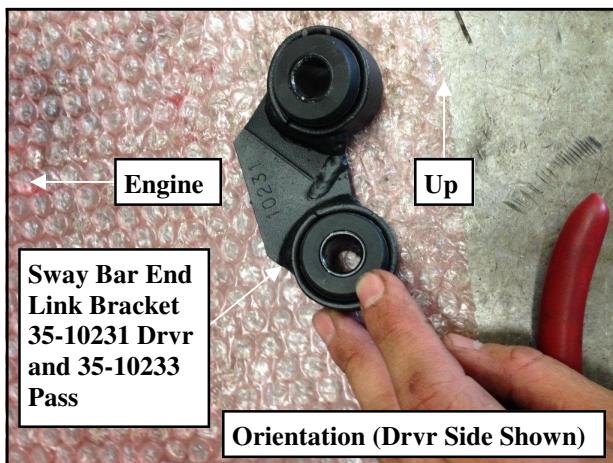
84. Insert from the bottom and secure the tie rod end to the knuckle and torque to **67** ft./lbs. Install a new cotter pin.

IMPORTANT!: The tie rod ends will need to be properly greased before the vehicle can be driven anywhere.

85. Assemble the sway bar end links (**35-10231 drvr** and **35-10233 pass**) using the supplied bushings (**600020**) and sleeves (**35-40249**).

NOTE: Be sure install sway bar end links with the bend side up and pointing toward the center of vehicle.

NOTE: Grinding of the sway bar may be necessary to install the sway bar end links brackets.



86. Temporarily install the sway bar end link brackets (**35-10227 drvr** and **35-10229 pass**) to the sway bar using the supplied **14mm X 65mm** bolts and hardware.

87. Mark and cut off the corner of the **OE** sway bar using a cut-off wheel, Sawzall or another suitable cutting tool.

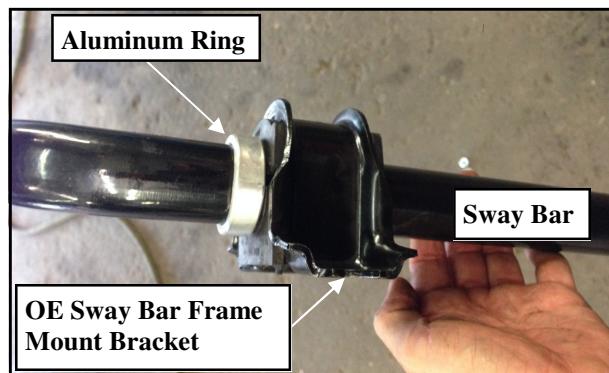
NOTE: Be sure to clean and de-bur any sharp edges.



88. Once the cut area has cooled, clean, sand, prime and paint the area with a quality paint.

89. Install the sway bar end link (**35-10231 drvr** and **35-10233 pass**) brackets to the **OE** sway bar using the supplied **14mm X 65mm** bolts and hardware.

NOTE: The OE sway bar frame mount brackets need to be relocated inside the aluminum rings on the sway bar.



90. Install the sway bar mount brackets (**84-10217 drvr** and **84-10218 pass**) to the existing sway bar frame mount bracket holes using the previously removed **OE** hardware.

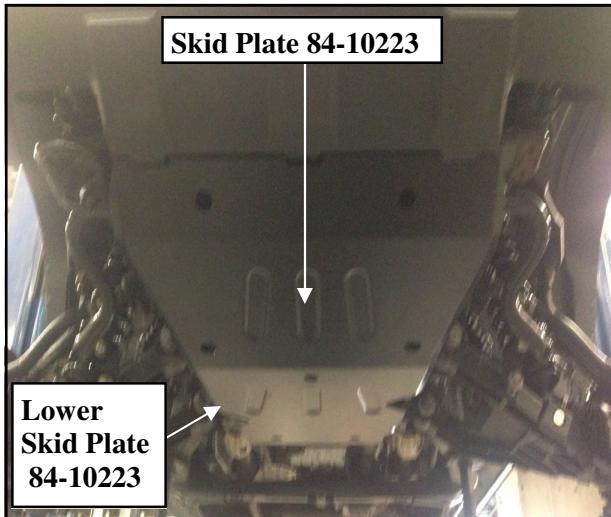
91. Raise the sway bar into place and secure the frame mounts to the sway bar mount brackets (**84-10217 drvr** and **84-10218 pass**) using the supplied **7/16" X 1 1/4"** bolts and hardware.

92. Install the sway bar end links (**84-10231 drvr** and **84-10233 pass**) to the sway bar brackets (**35-10227 drvr** and **35-10229 pass**) using the supplied **9/16"** nuts.

93. Install the sway bar end link (**35-10231 drvr** and **35-10233 pass**) lower control arm (**90-40075 drvr** and **90-40080 pass**) using the previously removed **OE** hardware.

94. Secure skid plate (**84-10223**) to lower skid plate (**84-10462**) using the (5) supplied **5/16" X 3/4"** button head bolts.

NOTE: Be sure holes are free of any excess powdercoating.



95. Install skid plate (**84-10223**) using the supplied hardware.
96. On both sides of the vehicle, check the routing of the brake lines and the ABS wire harnesses. There must be no pinching, rubbing, or stretching of either component. Use zip ties to secure these items to the steering components. At full droop, cycle the steering from lock to lock while observing the reaction of these components. Reposition them if needed.
97. Reconnect the negative battery cable to the battery.
98. Reinstall the wheels and lower the vehicle to the ground. Torque the lug nuts according to the wheel manufacturers recommendations.
99. With the vehicle on level ground, Fill the front differential, with an approved Toyota fluid, until the fluid starts to slightly pour out. Reinstall the fill level plug.
100. With the truck on the ground center the lower A-arm cam bolts and torque to manufacturer's specifications.
101. Center the steering wheel and lock it in place. Set the toe by adjusting the tie rod ends properly.

IMPORTANT!: If the steering wheel is not centered properly it will trigger the anti-lock brake and traction control warning lights.

102. Lock the outer tie rod ends by tightening the **OE** jam nuts.
103. Recheck all hardware for proper installation and torque at this time.

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

NOTES:

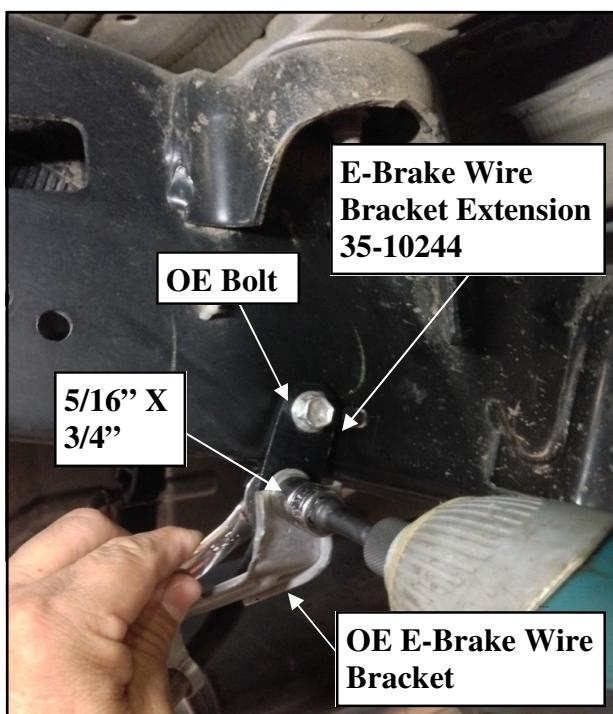
- ⇒ **On completion of the installation, have the suspension and headlights re-aligned.**
- ⇒ **After 100 miles recheck for proper torque on all newly installed hardware.**
- ⇒ **Recheck all hardware for tightness after off road use.**

REAR INSTALLATION:

1. Block the front tires and raise the rear of the vehicle. Support the frame with jack stands forward of the rear springs.
2. Remove the rear wheels.
3. Remove the shocks on both sides of the vehicle. It may be necessary that you slightly raise the axle to unload the shocks for removal.
4. Unbolt the ABS brake line bracket from the rear axle and install the ABS relocation brackets (35-10245). Use the **OE** bolt to secure the relocation brackets to the original mounting holes on the rear axle
5. Reconnect the ABS brake line bracket to the relocation brackets (35-10245) using the supplied **5/16" X 3/4"** bolts and hardware.
6. Unbolt the emergency brake cable bracket from the frame and install the (**1 per side**) E-brake wire bracket extension (35-10244). Use the **OE** bolt to secure the drop bracket to the original mounting hole on the frame rail
7. Reconnect the E-brake cable bracket to the extension bracket using the supplied **5/16" X 3/4"** bolt and hardware.
8. Unbolt the **OE** rear brake line bracket from the rear axle and remove both brake lines from the frame.
9. Thoroughly clean all mating surfaces. Connect the new brake line (7217) to the existing frame and rear axle metal brake lines and tighten. Position the line so it doesn't make contact with any other parts. Make sure brake lines are clean and dry of any material before brake bleeding.
10. Repeat on the remaining side of vehicle.

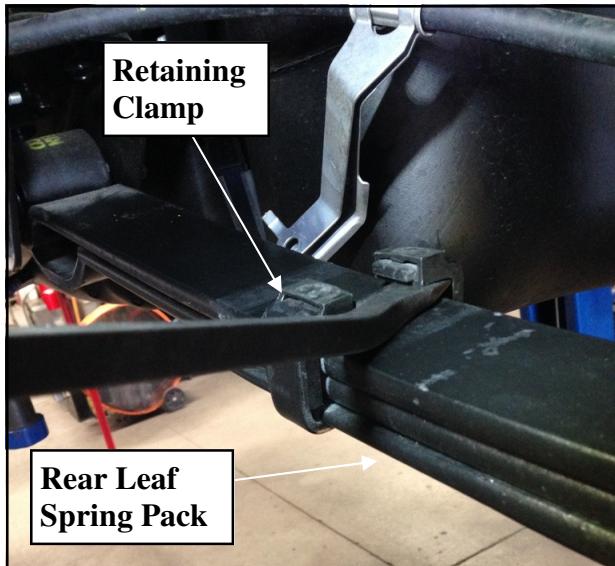
**BLEEDING OF THE BRAKE SYSTEM
SHOULD BE DONE ACCORDING TO
A TOYOTA FACTORY SERVICE
MANUAL.**

**IMPORTANT: BE VERY CAREFUL
NOT TO LET THE MASTER CYLINDER RUN DRY! WITH ABS BRAKES
THIS SITUATION WILL DAMAGE
THE SYSTEM!**



11. Remove the spare tire per the instructions in the factory manual.
12. Loosen the exhaust at the muffler joint and rotate to provide clearance. This task can be accomplished by a qualified muffler shop.
13. Work on one side of the vehicle at a time.
14. Support the rear axle with a floor jack and remove the **U-bolts** on the driver side. Loosen the **U-bolts** on the passenger side and carefully lower the rear axle.

NOTE: Be sure not to over extend the rear brake line and rear axle vent line.
15. While supporting the rear leaf spring, remove the factory spring mounting bolts and remove the leaf spring pack from the driver side only at this time.



16. Unbolt and remove the **OE** rear shackle from the frame mount.
17. Install the new rear shackle (**84-10219**) to the frame mount using supplied **14mm X 120mm** bolts and hardware. Leave hardware loose at this time.

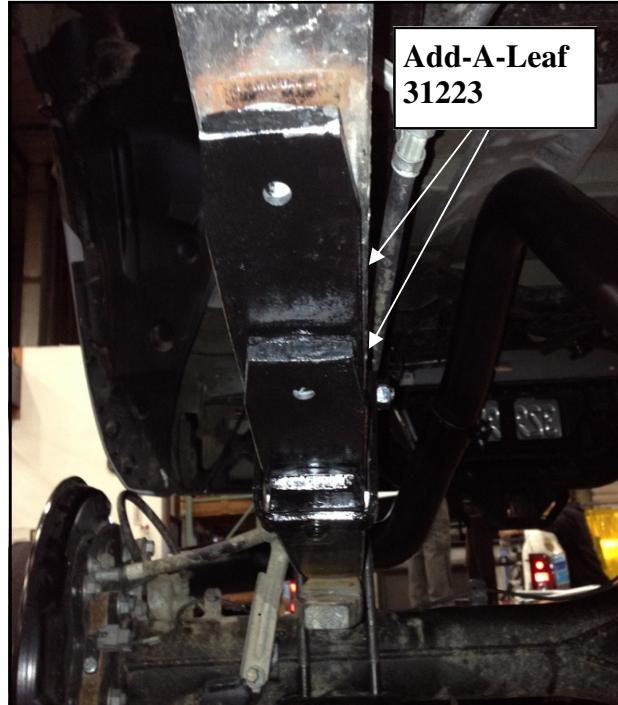


18. Use C-clamps to hold the leaves of the rear leaf spring together and remove spring center bolt.
19. Remove the last spring (with retaining clamps) above the overload spring). Insert the bottom (**2**) add-a-leaves from

mini-pack (**31223**). For added height and/or load all three add-a-leaves from the mini-pack can be installed.

NOTE: Be sure to maintain the factory style orientation between the overload leaf and the main leaf.

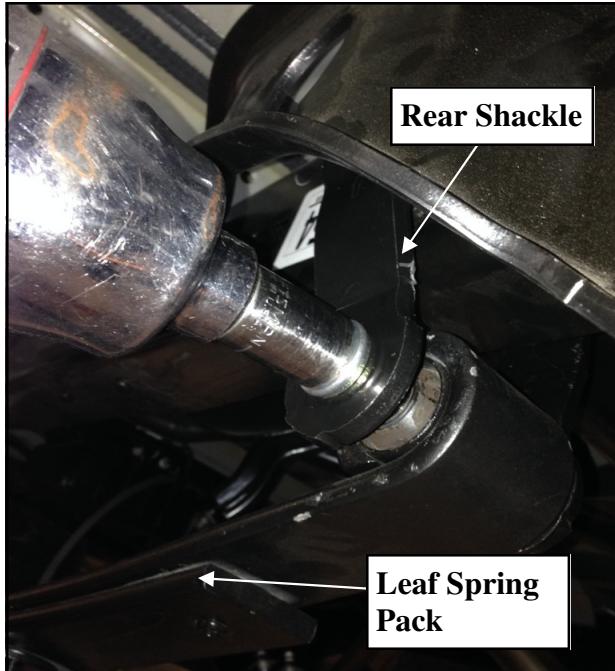
NOTE: Make sure the factory installed roll pin stays installed in the overload spring to align the spring pack.



20. Using the C-clamps, bolt the leaf pack back together using the supplied **3/8" X 3 1/2"** center bolt with the head of the bolt facing down. Be sure to adequately grease the **3/8"** center bolt.

NOTE: It may be necessary to cut the center pin bolt to allow for reattachment of the rear **OE** bump stop.

21. Reinstall the rear leaf spring pack to the **OE** front mount using the **OE** hardware. Do not torque at this time.
22. Install the rear leaf spring mount to the shackle secure using **14mm X 140mm** bolt and hardware. Do not torque at this time.



23. Use your floor jack to raise the axle to the spring making sure the pin on the leaf spring fit into the hole in the spring mounting plate
24. Secure the assembly with the **U-bolts** (13-90125E) and new hi-nuts and washers from hardware pack (20-65303). Do not torque the **U-bolts** at this time.

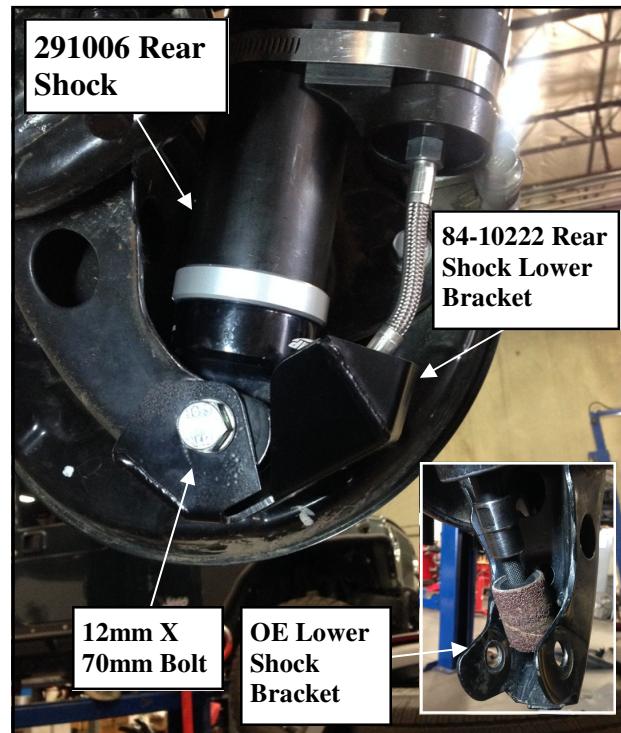
NOTE: *Make sure the block sits flush on the axle perch.*

25. Secure the supplied spring plate clamps over the ends of the spring pack to secure the add-a-leaf in place.
26. Repeat the installation on the other side of the vehicle.
27. When the installation of the remaining side is complete, torque the **U-bolts** to **105-110 ft./lbs.**
28. Install the new Pro Comp shock reservoir absorbers (291006) into the frame upper mount and install provided washers, bushings and nut. Torque this hardware according to the torque chart on page 21.



29. Install the new Pro Comp reservoir shock absorbers (291006) lower mount and rear shock lower bracket (84-10222) to the rear axle mount using the supplied **12mm X 70mm** bolts and hardware. Torque this hardware according to the torque chart on page 21.

NOTE: *It will be necessary to clear-ance the lower shock mount to allow proper shock fitment.*



30. Reinstall the spare tire per the instructions in the factory manual.
31. Using a flat head screwdriver, remove the rotor retainer star washers. Removing these washers will allow the wheel spacer to sit flush on the rotor surface.

NOTE: The surface of the rotor must be cleaned prior to spacer installation. All mud, dirt, rust and or scaling must be removed. Failure to follow these instructions may not allow the spacer to be properly torqued.

32. Install the wheel spacers (**G/293-50-200**) to the axle studs as shown with the supplied **14mm-1.5** acorn lug nuts (**90-4596**). Be sure to apply the supplied thread locker to the axle studs. Have another person apply the brakes to prevent the rotor from spinning and torque the **14mm** lug nuts, in a criss-cross pattern according to your vehicle's service manual, if that information is not available please refer the chart on page **21** for your vehicles specific stud size.



IMPORTANT!: Once installed, be sure the OE wheel studs do not protrude past the new wheel mounting surface of the wheel spacer (G/293-50-200). Never use an impact gun to tighten the lug nuts. Under torquing or over torquing of the lug nuts may lead to serious injury or death. Never double stack the wheel spacers, death or serious injury can occur.

33. Check all hardware at this time to ensure that everything is tight. Check for adequate clearance on all repositioned brake lines and emergency brake cables. Make sure you check with the suspension fully extended, and compressed.
34. Reinstall the wheels and lower the vehicle to the ground. Torque the lug nuts according to the wheel manufacturers recommendation.

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.



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	Grade 8	Bolt Size	Class 9.8	Class 10.9
5/16	15	20	M6	5	9
3/8	30	45	M8	18	23
7/16	45	60	M10	32	45
1/2	65	90	M12	55	75
9/16	95	130	M14	85	120
5/8	135	175	M16	130	165
3/4	185	280	M18	170	240
			M18	170	290

1/2-13x1.75 HHCS

Grade 5 Grade 8
(No. of Marks + 2)

D T L X

M12-1.25x50 HHCS

P

D T L X

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: _____