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PRO COMP SUSPENSION

Suspension Systems that Work!

***IMPORTANT:** Because this vehicle will be equipped with a rear 4 link suspension. The exhaust system may need to be altered from the rear of the muffler back by a qualified exhaust shop depending on which year/model and exhaust system type the vehicle is equipped with.*

Part # 55800
1997-2006 Jeep Wrangler TJ
w/Dana 35 and 44 rear axle
2003-2006 Jeep Rubicon
w/ Dana 44 rear axle
2004-2006 Jeep Wrangler
Unlimited
Rear Axle Truss 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-PN 55800/55800MX-1

Part #	Description	Qty	Illus.	Page
90-6505	HARDWARE PACK: Rear Upper Arm	1	-	-
90-2626	3/4" X .156" WALL X 2"	2	2	6
15-11310	BUSHING JEEP UPPER ARM	4	2	6
90-2673	UPPER ARMS: REAR	2	2	6
90-6553	HARDWARE PACK: Rear Upper Arm Rod Ends	1	-	-
JMX-12T	ROD END	2	2	6
SJNR12	NUTS	2	2	6
90-2449	SPACER, .750" OD X .438" ID X 1.600" LONG	4	2	6
90-6551	HARDWARE PACK: Axle Truss	1	-	-
70-0310751800	5/16" X 3/4" GR 8 HEX BOLT	4	1	5
73-03100830	5/16" GR 8 SAE FLAT WASHER	4	1	5
70-0372251800	3/8" X 2 1/4" GR 8 HEX BOLT	8	1	5
72-037100816	3/8" STOVER NUT	8	1	5
73-03700030	3/8" HARDENED FLAT WASHER	16	1	5
72-043100816	7/16" STOVER NUT	1	1	5
70-0563001800	9/16" X 3" GR 8 HEX BOLTS	2	1	5
72-056100816	9/16" STOVER NUTS	2	1	5
73-05600830	9/16" GR 8 SAE WASHERS	4	1	5
90-3757	REAR AXLE TRUSS	1	1	5
90-4158	REAR AXLE VENT TUBE	1	1	5
90-3781	DANA 44 REAR DIFFERENTIAL SPACER PLATE	1	1	5
90-3767	REAR AXLE TRUSS CLAMPS	2	1	5
90-3893	DANA 35 REAR DIFFERENTIAL SPACER PLATE	1	1	5
90-3894	OVERLAP PLATE	2	1	5
90-6577	HARDWARE PACK: Axle Truss Overlap Plate	1	-	-
37C100HCS8Y	3/8" X 1" GR. 8 HEX BOLT	4	1	5
37CNUCZ	3/8" STOVER NUT	4	1	5
37NWHDY	3/8" SAE HARDENED FLAT WASHER	8	1	5

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

(Unless you already have a suitable (long enough) after market rear brake line installed).

7450	STAINLESS STEEL BRAKE LINE KIT	1	-	-
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Optional Equipment Available from your Pro Comp Distributor!

Winch Spacer, 1" (Front) - Pair: 55496

Steering Stabilizer: 219505

Slip Yoke Eliminator Kit: 4007

Jeep TJ CV Style Driveshaft: 4042

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.
- ◆ **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 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, a wheel not to exceed 8" in width with a minimum backspacing of 3.25" must be used. Additionally, a quality tire of radial design, not exceeding 33" tall X 12.5" wide is recommended. Please note that the use of a 33" X 12.5" tire may require fender modification. 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.

NOTE: If you are planning to install a differential air locker you will need to use a 90 degree 3/16" compression fitting to clear the axle truss (90-3757) and the accompanying parts and hardware.

INSTALLATION INSTRUCTIONS:

1. Position your vehicle on a smooth, flat, hard surface (i.e. concrete or asphalt). Block the rear tires and set the emergency brake.
2. Measure and record the distance from the center of each wheel to the top of its fender opening. Record below.

LF: _____ RF: _____

LR: _____ RR: _____

3. Place the vehicle in neutral. Place your floor jack under the rear axle and raise the vehicle. Place jack stands under the front body mounts and lower the vehicle onto the stands. Remove the jack and place the vehicle back in gear, set the emergency brake.

DISASSEMBLY:

4. Remove the rear wheels from the vehicle.
5. Unbolt the rear sway bar from the rear axle. Save the hardware for reuse.
6. With the rear axle fully supported, unbolt and remove the rear upper control arms from the vehicle.
7. Remove the rear axle vent tube and unbolt the brake line junction block from the rear axle.
8. Drain the rear axle fluid and remove the differential cover.

REAR AXLE TRUSS:

9. With the axle clear of accessories, test fit the axle truss assembly.
10. Test fit the rear axle differential spacer plate (**90-3781 for Dana 44 or 90-3893 for Dana 35**) to the rear axle to ensure proper alignment. Secure using the **OE** bolts. See ILLUSTRATION 1.
11. Place the rear axle truss (**90-3757**) on top of the differential housing. Line up and install the

5/16" X 3/4" bolts that secure the rear axle differential spacer plate to the rear axle truss. Secure the truss to the rear axle using the (2) axle truss clamps (**90-3767**), **3/8" X 2 1/4"** clamp bolts and hardware. See ILLUSTRATION 1.

12. A new vent tube hole will need to be drilled on the front, driver side of the rear axle.

13. Use the hole in the axle truss (**90-3757**), next to the **7/16"** brake line mounting stud, on the front side of the rear axle as a guide to drill a new vent hole in the rear axle tube using a **3/8"** drill bit. See ILLUSTRATION 1.

NOTE: When drilling into an oil cavity, pack the flutes of the drill bit with grease to catch all the metal shavings.

14. Once the new vent tube hole is drilled, unbolt and remove the axle truss. Clean and remove any remaining metal chips from inside and outside the rear axle.

15. Run a bead of silicone around the new vent tube hole in the rear axle. Also seal the original vent tube hole in the rear axle.

NOTE: There is no pressure on the rear axle vent system so do not overload the holes with silicone.

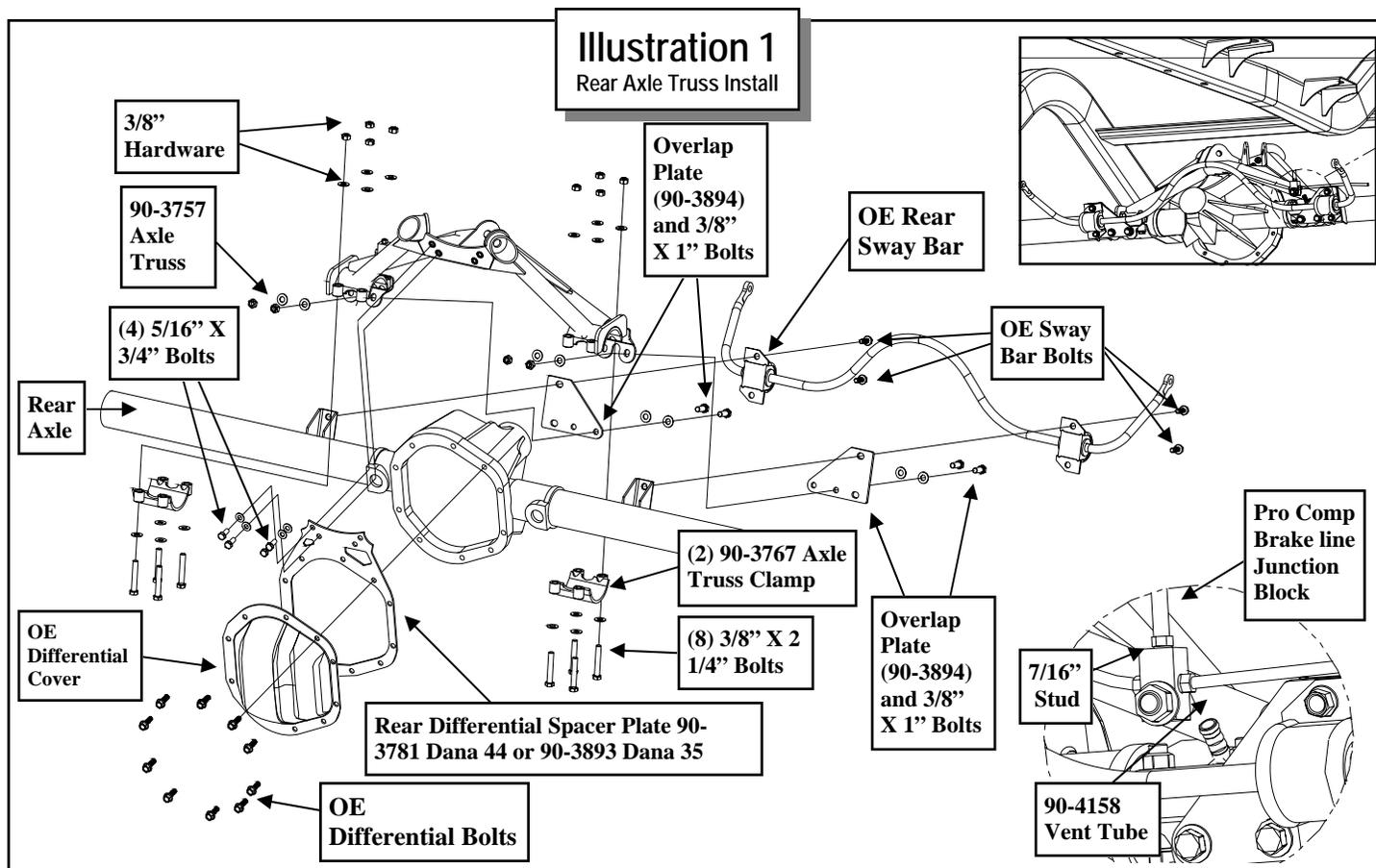
16. Install the **3/8"** vent tube (**90-4158**) through the hole in the rear axle truss. See ILLUSTRATION 1.

17. Reinstall the axle truss (**90-3757**) by lining up and reinstalling the **5/16" X 3/4"** bolts that secure the rear axle differential spacer plate (**90-3781 for Dana 44 or 90-3893 for Dana 35**) to the rear axle truss. Reinstall the axle clamps (**90-3767**) to the rear axle. Secure the clamps using the supplied **3/8" X 2 1/4"** bolts and hardware. See ILLUSTRATION 1.

NOTE: The vent tube should line up with the newly drilled hole on the rear axle.

NOTE: Be sure the inside of the vent tube is clear of silicone after installation.

18. Install the (2) overlap plates (**90-3894**) to the axle truss using the (4) **3/8" X 1"** bolts and hardware. Reinstall the sway bar to its original rear axle mounting position. Secure the sway bar



frame mounts to the overlap plates and rear end using the previously removed (4) OE sway bar bolts. See ILLUSTRATION 1.

19. Torque the rear axle truss (*Except the (4) 5/16\"* bolts), overlap plate and sway bar mounting hardware according to the torque chart on page 7 or according to manufacturers recommendations.

20. Unbolt and remove the rear axle differential spacer plate (90-3781 for Dana 44 or 90-3893 for Dana 35). See ILLUSTRATION 1.

21. Run a bead of silicone along the differential cover mating surface.

22. Reinstall the differential spacer plate (90-3781 for Dana 44 or 90-3893 for Dana 35) to the rear axle truss using the (4) 5/16\"

23. Run another bead of silicone on the face of the differential cover.

24. Raise the differential cover into place and secure using the OE bolts. Torque the differential spacer plate and cover hardware according to the torque chart or manufacturers specifications. See ILLUSTRATION 1.

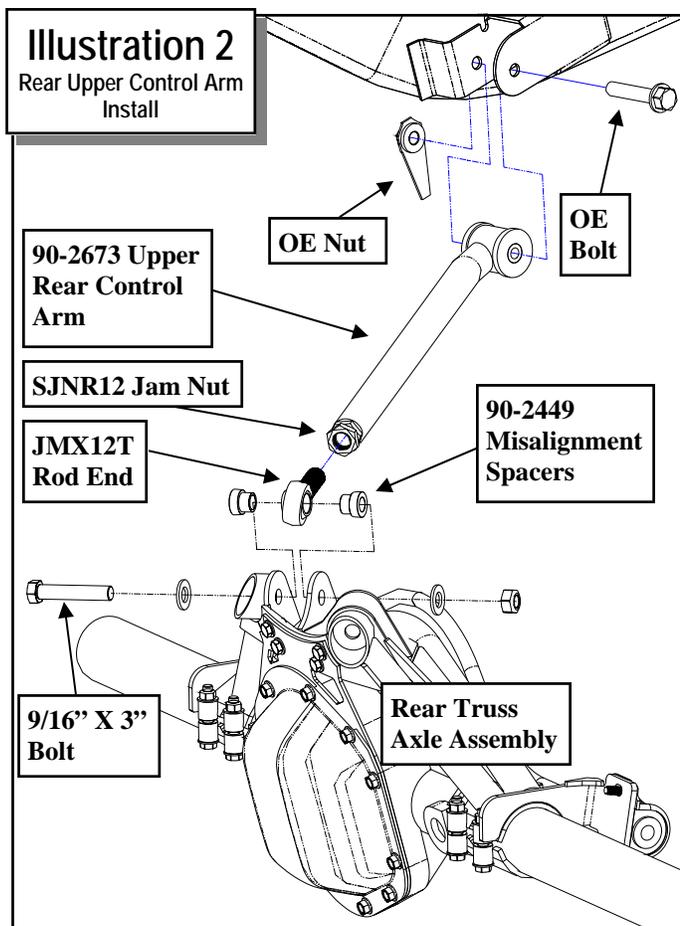
REAR BRAKE LINE:

NOTE: If you have a stock rear brake line it will be necessary to purchase separately Pro Comp Stainless Steel Brake Line kit (PN 7450)

NOTE: If you already have a suitable (long enough) after market rear brake line installed skip this section.

25. Unbolt the rear rubber brake line from the frame. Save the hardware for reuse.

26. Detach the rear rubber brake line from the factory metal brake lines on the frame and the rear axle.

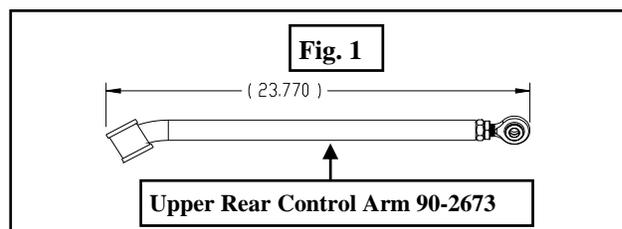


NOTE: Depending on brake application, the steel lines may need to be carefully rerouted to attach to the junction block.

IMPORTANT: MAKE SURE BRAKE LINES ARE CLEAN AND DRY OF ANY MATERIAL BEFORE ABS BRAKE BLEEDING AND REASSEMBLY.

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

IMPORTANT: BLEEDING OF THE BRAKE SYSTEM SHOULD BE DONE ACCORDING TO A JEEP FACTORY SERVICE MANUAL.



UPPER CONTROL ARMS:

27. Thoroughly clean all mating surfaces and secure the supplied 90 degree brake line mounting bracket (90-1031) to the frame using the previously removed OE bolt. At the upper end of the brake line (7450), insert the threaded end of the brake line from the bottom through the supplied brake line mounting bracket (90-1031). Install the supplied jam nut to threaded end of the brake line (7450) and tighten. Position the line so it doesn't make contact with any other parts.
28. Connect the new brake line (7450) to the existing frame metal brake line and tighten.
29. Slip the junction block end of the new brake line (7450) over the 7/16" stud on the front of the axle truss. Secure using the supplied 7/16" nut from pack (90-6551). See ILLUSTRATION 1.
30. Attach the Pro Comp brake line junction block to the existing rear axle metal brake lines and tighten.

31. Assemble the rear upper control arms (90-2673) using bushings (15-11310) and sleeves (90-2626). See ILLUSTRATION 2.
32. Install the rod end (JMX12T) into the remaining end of the rear upper arms (90-2673) with the jam nut (SJNR12) as shown in ILLUSTRATION 2. Adjust the arm length according to figure 1 and tighten the jam nut.
33. Insert the spacers (90-2449) into the rod end. See ILLUSTRATION 2.
34. Install the bushing end of the upper arm to the mounting pockets on the frame using the previously removed OE hardware. See ILLUSTRATION 2.
35. Install the rod end of the upper arm to the mounting pockets on the rear axle truss using the supplied 9/16" X 3" bolts and hardware. See ILLUSTRATION 2.

NOTE: Centering of the rear axle under

the vehicle and pinion angle adjustment are done using these rod ends.

36. Torque the **OE** upper control arm mounting bolts according to factory specifications and the supplied **9/16"** bolts to 130 ft./lbs.

37. Install the wheels and tires. Remove the jack stands and lower the vehicle. Torque the lug nuts to manufacturers specifications.

CHECKS AND ADJUSTMENTS:

⇒ **Recheck all hardware for tightness after the first 100 miles.**

⇒ **Headlights should be adjusted.**

⇒ **The exhaust system may need to be altered from the rear of the muffler back by a qualified exhaust shop.**

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	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)	M12-1.25x50 HHCS 	P
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)	

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 your Dealer/Installer explains and delivers all warning notices, warranty forms and instruction sheets included with Pro Comp product.

Application listings in this catalog have been carefully fit checked for each model and year denoted. However, Pro Comp reserves the right to update as necessary, without notice, and will not be held responsible for misprints, changes or variations made by vehicle manufacturers. Please call when in question regarding new model year, vehicles not listed by specific body or chassis styles or vehicles not originally distributed in the USA.

Please note that certain mechanical aspects of any suspension lift product may accelerate ordinary wear of original equipment components. Further, installation of certain Pro Comp products may void the vehicle's factory warranty as it pertains to certain covered parts; it is the consumer's responsibility to check with their local dealer for warranty coverage before installation of the lift.

Warranty and Return policy:

Pro Comp warrants its full line of products to be free from defects in workmanship and materials. 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
 - Discontinued products at Pro Comp's discretion
- Bent or dented product
- Finish after 90 days
- Leaf or coil springs used without proper bump stops
- Light bulbs
- Products with evident damage caused by abrasion or contact with other items
- Damage caused as a result of not following recommendations or requirements called out in the installation manuals
- Products used in applications other than listed in Pro Comp's catalog
- Components or accessories used in conjunction with other manufacturer's systems
- Tire & Wheel Warranty as per Pro Competition Tire Company policy
- Warranty claims without "Proof of Purchase"
- Pro Comp Pro Runner 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: tech@explorerprocomp.com
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PLACE
<u>WARRANTY REGISTRATION</u>
<u>NUMBER</u>
HERE: _____