2360 Boswell Road Chula Vista, CA 91914 Phone 619.216.1444 Fax 619.216.1474 E-Mail tech@explorerprocomp.com

DAIL

# **PRO COMP SUSPENSION**

# Suspension Systems that Work!

Part # 57489 1990 - 1995 Toyota 4 Runner Rear Suspension 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.

57489 REVISED 12.5.05

Part #	Description	Qty.	Illus.	Page
90-1204	Lower Link Relocating Bracket	2	2	5
90-1272	Upper Link Relocating Bracket	2	1	5
90-2130	Bump Stop Extension	2	2	5
90-1268	Trac Bar Relocating Bracket	1	3	6
90-2133	Sway Bar Extension	2	5	7
90-7210E	Brake Hose	1	•	•
5242-1	Limiting Strap	2	6	7
90-6106	Hardware Pack Containing:	-	•	•
90-1274	Proportioning Valve Bracket	1	7	8
90-1273	Reinforcement Strap	4	1	5
90-2132	Lower Link Bracket Spacer	2	1	5
90-1275	1-1/2" O.D. Washer	4	1	5
51792	Hour Glass Bushing Sleeve	2	4	6
45359	Hour Glass Bushing	2	4	6
90-6103	Hardware Pack Containing:			-
70-0431251500	7/16"x1-1/4 USS Gd. 5 Hex Bolt	5	2,6	5,7
70-0431001500	7/16"x1 USS Gd. 5 Hex Bolt	4	1	5
70-0501001500	1/2"x1 USS Gd. 4 Hex Bolt	2	5	7
70-0502501500	1/2"x2-1/2 USS Gd. 5 Hex Bolt	2	4	6
70-0623001500	5/8"x3 USS Gd. 5 Hex Bolt	1	6	7
70-0624001500	5/8"x4 USS Gd. 5 Hex Bolt	4	1	5
70-0624501500	5/8"x4-1/2 USS Gd. 5 Hex Bolt	4	2	5
72-05000100512	1/2" USS Nyloc Nut	4	4,5	6,7
72-04300100512	7/16" USS Nyloc Nut	9	1,2,6	5,7
72-06200100512	5/8" USS Nyloc Nut	9	4	6
73-04300032	7/16 SAE Flat Washer	8	2	5
73-05000032	1/2 SAE Flat Washer	8	4	6
73-06200032	5/8 SAE Flat Washer	18		
90-6104	Hardware Pack Containing:			
70-0803012508800	8mm-1.25 x 30mm Bolt	2		
70-0812012508800	8mm-1.25 x 120mm Bolt	2		
72-00812508812	8mm-1.25 Nyloc Nut	2		
73-00800036	8mm Split Lock Washer	2		
	-	1		
Dort # 57400 COIL SD	DING KIT will be used in conjunction	with this kit	It contai	201

Part # 57490 COIL SPRING KIT will be used in conjunction with this kit. It contains:

57489-1

Coil Spring

2 2 5

# 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.

# **Please Note:**

- Front end and head light realignment is <u>necessary</u>!
- Speedometer and ABS recalibration will be necessary if larger tires (10% more than stock diameter) are installed.

## **INSTRUCTIONS:**

## **BEFORE YOU BEGIN:**

- ⇒ Read the instructions and study the illustrations before attempting installation.
- ⇒ Check the parts and hardware against the parts list to assure that your kit is complete.
- ⇒ Separate the parts according to the area where they will be used. Placing the hardware with the parts before you begin will save installation time.
- ⇒ Secure and properly block vehicle prior to beginning installation.
- $\Rightarrow$  Always wear safety glasses when using power tools.

## SPECIAL NOTE:

Be sure your vehicle is in good working condition; repair and replace worn parts. Pay special attention to the steering and driveline systems including the tie rod/drag link ends, ball joints and wheel bearing preload. Also check for stress in areas where steering and suspension attach to frame.

## IN PREPARATION FOR INSTALLA-TION OF THIS KIT:

1) Place floor jack under differential and raise vehicle. Place jack stands under frame to support vehicle. Lower the frame onto the stands, keeping some tension on the floor jack.

2) Detach the **LSPV** shackle from the driver's side of the trac bar. Secure the shackle up and out of the way.

3) Remove the brake hose, detaching the upper end first. Install the new hose by attaching the lower end first. The upper retaining clip prongs will need to be spread slightly to fit the new hose. You will be instructed on how to bleed the brake system later. 4) Remove the shocks.

5) Remove the anti-sway bar links that connect the sway bar from to the frame rails. Some of the existing rubber bushings and hardware will be used to install new sway bar extension. See ILLUSTRATION 4.

6) Disconnect the upper end of the trac bar from the passenger side mount. Leave the driver side end of the trac bar attached. Let the trac bar hang.

7) Disconnect the upper and lower 4-link rods from the differential. Detach the rubber grommets which hold the parking brake cables, from the lower links. The cables will stay free.

At this time, place another floor jack directly under the pinion, where the drive shaft connects to the axle.

8) Disconnect the ends of the lower 4-link rods from the frame rails.

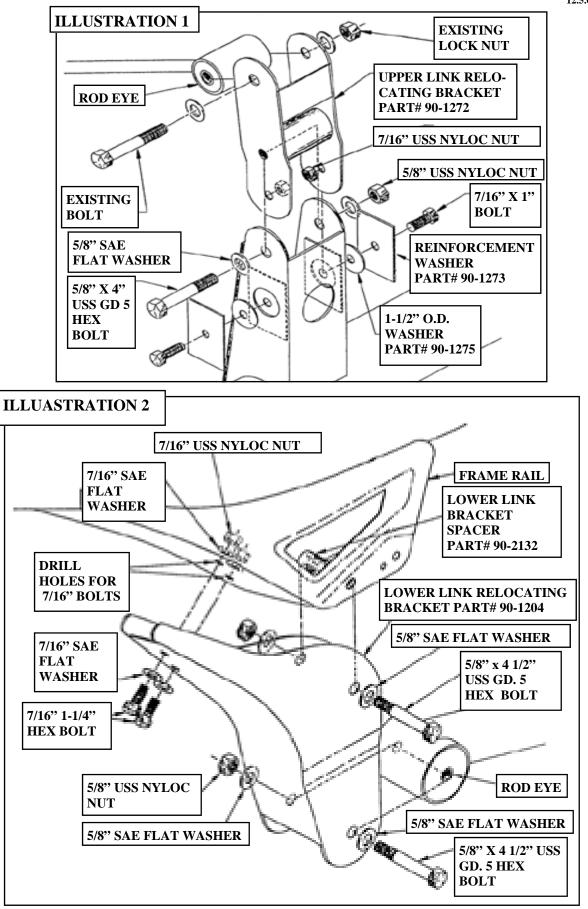
9) Using the floor jacks, lower the rear axle enough to enable you to remove the coil springs. Remove the bolts that secure the bump stops to the coil seats. (Inside the coils).

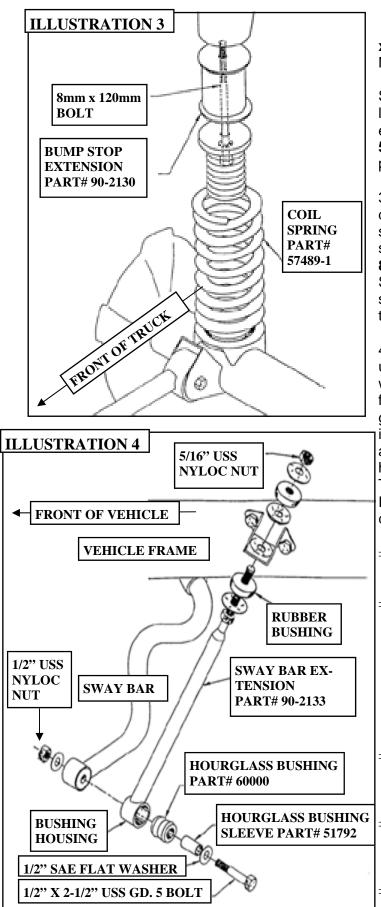
## **INSTALLATION:**

1) Install the upper link relocating brackets, 1-1/2" O.D. washers and reinforcement washers using the 7/16" hardware as shown in ILLUS-TRATION 1. Put a 5/8" x 4" bolt through the top hole in the existing bracket with a 5/8" nut; tighten. Put a 5/8" x 4" bolt through the top hole of the relocating bracket and the rod eye; do not tighten yet. Repeat this procedure on the other side.

2) Referring to ILLUSTRATION 2, install the lower link relocating bracket (90-1204) and the lower link bracket spacer (90-2132) using the supplied 5/8" x 4 1/2" bolt and 5/8" lock nut; do not tighten yet. Drill two (2) 7/16" holes through the frame rails at the existing holes in the lower link relocating bracket. Install the supplied 7/16"







x 1-1/4" bolts, 7/16" washers and lock nuts. Now tighten the 5/8" bolt.

Still referring to ILLUSTRATION 2, attach the lower link relocating bracket to the trac bar rod eye using the supplied **5/8**" **x 4-1/2**" bolt and **5/8**" lock nut; do not tighten yet. Repeat these procedures on the other side.

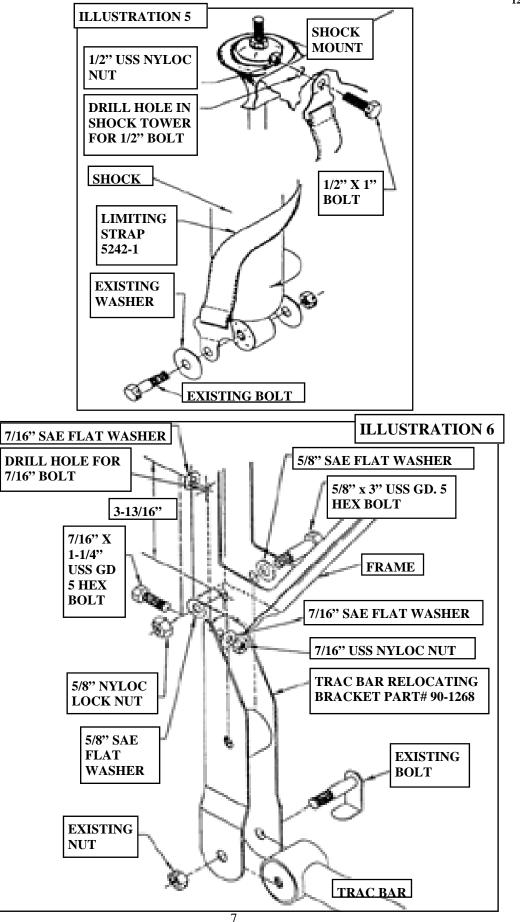
3) Reposition the floor jacks so that one is under each axle tube. Install the bump stop extensions **(90-2130)** between the existing bumps stops and the stock mounts using the supplied **8mm x 120mm** bolts and **8mm** lock washers. See ILLUSTRATION 3. Install the new coil springs. Raise the jacks to keep a slight load on the springs.

4) Install the new sway bar extension **(90-2133)** utilizing the existing rubber bushings and hardware where the extensions mount to the vehicle frame. See ILLUSTRATION 4. Install the hour glass bushing **(45359)** and the hour glass bushing sleeve (51792) into the bushing housing and attach to the sway bar using the supplied **1/2**" hardware.

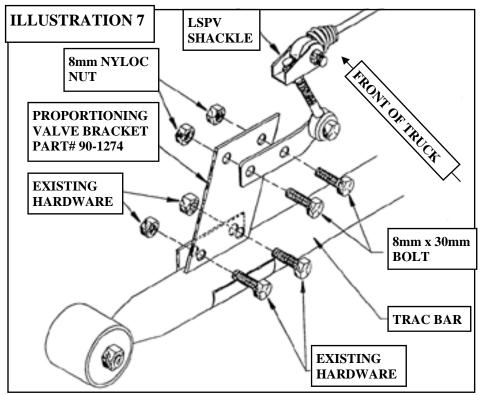
The next step will be to bleed the brake system. It will take two **(2)** people to complete this procedure.

- ⇒ Fill the master cylinder with approved brake fluid.
- ⇒ Pump up, then hold pressure on the pedal. Open up the wheel cylinder bleeder nut to purge air from the system. Close the bleeder nut when the pedal reaches the floor. Continue the bleeding process until only fluid (no air) is discharged. Bleed each wheel and replenish master cylinder after each process.
- ⇒ With all the air out of the system, the brake pedal should not pump-up or have excessive down-travel.
- ⇒ Bleed the proportioning valve, using this same procedure. The valve is located at the frame rail on the passenger side.

> Double check all fitting for leaks.







5) Reinstall the shocks. Drill a hole in the shock tower, as shown in ILLUSTRATION 5, and install the upper end of the limiting strap (5242-1) using the supplied 1/2" hardware. Bolt the bottom end of the limiting strap to the shock using the existing hardware as shown in the illustration.

### NOTE: The mounting brackets offset should face away from the attaching points to gain clearance.

At this point, install the wheels and lower the vehicle. Manually bounce the vehicle to stabilize the suspension.

With the suspension supporting the vehicle's weight, tighten the four 4-link rod eye bolts.

6) Install the trac bar relocating bracket (90-1268) to stock position on frame, as shown in ILLUSTRATION 6, using the supplied 5/8" hardware; do not tighten yet. Install the bottom holes of the trac bar relocating bracket to the trac bar using the existing hardware. Prior to drilling the 7/16" hole, center the body over tires. It may be necessary to shift the body slightly to the left or right. Install and tighten the 7/16" hardware to secure the upper end, then tighten and torque the 5/8" bolt and existing bolt. 7) Install the proportioning valve bracket **(90-1274)** as shown in ILLUSTRATION 7, using the supplied 8mm hardware in the upper holes and the existing hardware in the lower holes where bracket mount to trac bar).

As the suspension settles the **LSPV** rod activates the **LSPV**. This increases rear wheel braking force accordingly. The relocating bracket keeps the rod properly positioned in relation to the **LSPV**. Therefore, it is recommended that the **LSPV** system be inspected and adjusted by your Toyota dealer.

### RECHECK THE FASTENERS FOR PROPER TIGHTNESS. SEE TORQUE SPECIFICATION CHART.

### **TORQUE SPECIFICATIONS:**

5/16" Bolts	13' lbs.
8mm Bolts	19' lbs.
7/16" Bolts	37' lbs.
1/2" Bolts	70' lbs.
5/8" Bolts	112' lbs.
Existing Bolts	101'lbs.

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
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D = Nominal Diameter (Inches) T = Thread Count (Threads per Inch) L = Length (Inches)			P = Prop erty Class (Bolt Strength) D = Nominal Diameter (Millimeters) T = Thread Pitch (Thread Width, mm) 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.

#### 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 warranties 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 Website: www.explorerprocomp.com Fax: (619) 216-1474 Ph: (619) 216-1444

PLACE				
WARRANTY REGISTRATION				
NUMBER				
HERE:				