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# PRO COMP SUSPENSION

Suspension Systems that Work!

Part # 51315 79'-85' Toyota 4WD Pickup & 4-Runner Front 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.

# **INSTALLATION INSTRUCTIONS**

### **PARTS LIST:**

ITEM#	EM# DESCRIPTION		ILLUST.
13-90365	U-Bolt - 9/16" x 2.40" x 7.75" (Square)	2	-
13-90370	U-Bolt - 9/16" x 2.4" x 6.50" (Square)	2	-
20-65302	Hardware Pack: U-Bolt	-	-
90-2088	2	2	
90-6054	Hardware Pack Containing:		
90-2089	Stabilizer Bar Sleeve (6-1/2")	2	-
13-90412	Stabil. Bar Stud, 3/8" - SAE x 10" Lg.	2	-
90-831269	Brakeline Drop Bracket	2	3
652011	Bushing Leaf Spring	8	-
90-6055	Hardware Pack Containing:		
72-03100100512	Nyloc Nut, 5/16" - 18"	4	2
72-03700100500	Hex Nut, 3/8" - 24"	4	-
70-0311001520	Self Tapping Screw, 5/16" x 1" Lg.	2	3
70-0310751500	Hex Bolt, 5/16" - USS x 3/4" Lg.	4	2
73-03700030	Flat Washer, 3/8" Hrdn.	4	-
73-03100030	Flat Washer, 5/16" SAE	8	2

## TOOLS REQUIRED FOR INSTALLATION:

- $\Rightarrow$
- Floor jack Jack stands  $\Rightarrow$
- **Torque wrench**  $\Rightarrow$
- **Metric hand tools**  $\Rightarrow$
- **Electric drill**  $\Rightarrow$

# Introduction:

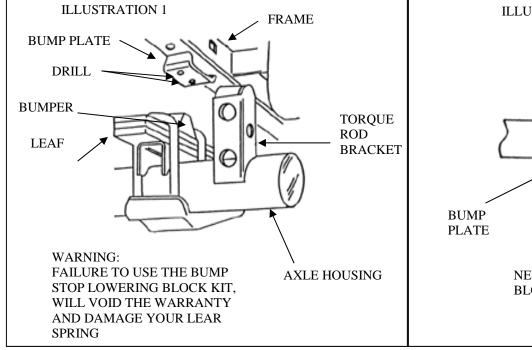
- This installation requires a professional mechanic!
- We recommend that you have access to a Toyota service manual for your vehicle to assist in the disassembly and reassembly of your vehicle. It contains a wealth of detailed information.
- Prior to installation, carefully inspect the vehicle's steering 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.

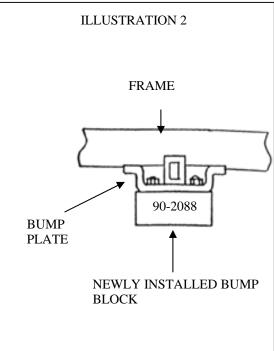
#### **INSTRUCTIONS:**

- 1) Place floor jack under front axle and raise vehicle. Place jack stands under frame ahead of the axles. Front tires should be approximately 2" off the ground.
- 2) Remove front shock absorbers from the vehicle.
- 3) Remove the nuts, cushions and bolts holding the stabilizer bar to the axle housing.
- 4) Place the floor jack under the front axle housing.
- 5) Mark the position of the front drive shaft spline to yoke alignment. Sometimes the drive shaft will separate during disassembly.
- 6) Remove the u-bolt nuts, u-bolts and spring plates from the springs.
- 7) Lower the axle enough to enable removal of the springs. Be careful not to stretch, kink or pinch the brake hose and lines.
- 8) Remove the shackle pins and the hanger pins from the springs.
- 9) Remove the front leaf springs.

#### **INSTALL FRONT SPRINGS:**

1) Center punch drill hole locations 2-1/4" on center of the frame mount bump top plates. Drill two 11/32" holes in each bump stop plate and de-burr as shown in ILLUSTRATION 1. 90-2088 bump block can be used as a template to lay out location of holes.

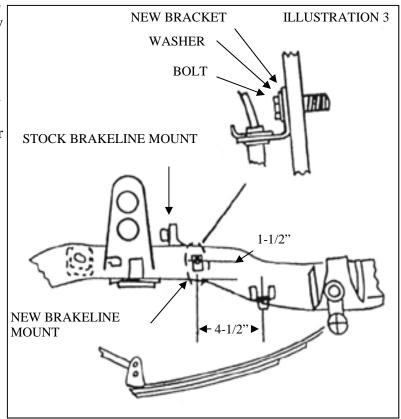




- 2) Install the bump stop blocks using the 5/16" bolts and nuts as shown in ILLUSTRATION 2.
- 3) Install new bushings in springs. Lubricate as needed.
- 4) Mount the new springs into position and install the shackle pins and hanger pins. Hand tighten only at this time.
- 5) Raise the axle housing with the floor jack so the spring center bolt fits into the mounting holes.
- 6) Install the spring bumper, new ubolts, spring plate, new washers and new nuts. Torque the u-bolt nuts to 75 ft./ lbs.
- 7) Raise the front axle housing with the floor jack until the vehicle is free from the jack stands. Tighten the hanger pin and the shackle pin nuts; torque to 65 ft./lbs. Lower the vehicle to the ground.
- 8) Install the new stabilizer bar tubes and studs using the factory washers and cushions and the supplied 3/8" lock nuts. Torque to 20 ft./lbs.

#### **BRAKELINE RELOCATION:**

1) When installing 3" lift kits on some 1983/1984 Toyota 4WD trucks, it may be necessary to relocate the front brake frame brackets. This is done by installing the brakeline drop brackets.



- 2) Position the bracket on the side of the frame rail, 1-1/2" up from the bottom side of the rail and 4-1/2" in front of the rear bump stop. See ILLUSTRATION 3. Drill a 3/16" hole and bolt the bracket into place using the supplied 5/16" self tapping screw.
- 3) Carefully re-shape the stock steel brakeline. Re-assemble lines and bleed the brakes.
- ⇒ You must bleed the brakes, otherwise loss of braking may occur.
- ⇒ After installation is complete, double check all phases of installation before test driving vehicle. Recheck periodically.

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	
- T -   - T   -   - T   -   - T   -   -							
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 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:





Explorer Competition Products, Inc. Chula Vista, CA USA

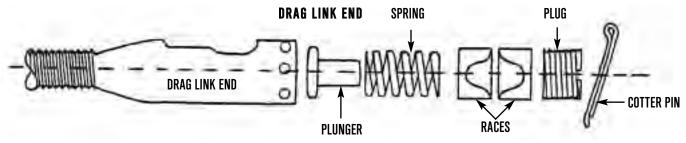
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# N S T A L L A T I O N **NSTRUCTIONS**

# **Part # T0Y400** Adjustable Dropped Drag Link '79-'85 Toyota with 3" or more

	Installation should be performed by a professional mechanic. Read these instructions several times before starting, and read each step completely
as y	ou go. These parts are intended to decrease angles at the drag link attaching points. The desired end result is to achieve horizontal planes at the drag
link-	to-pitman arm attaching points.
	Those parts are NOT TO RE LISED on vehicles exceeding 7" of suspension lift

Put the transmission in neutral. Position a floor jack under each side of the front axle and raise the vehicle. Place jack stands under the frame a few inches behind the front springs' shackles. Ease the jacks down until frame is resting on the stands. Keep a slight load on the jacks. Put the vehicle in gear or park, set emergency brake and place chocks behind the rear wheels to prevent any possibility of movement. Remove driver's side front tire/wheel.



- DRAG LINK REMOVAL: Remove the cotter pin and plug from each end of the stock drag link. Detach link and retain both rubber dust covers for re-use. \*\*\*IMPORTANT NOTE\*\*\* Inspect the ball studs (the link attaching points) for elongation (they should be perfectly spherical), deformations, pits, etc... Be sure the studs are still properly "swedge" fitted (as in "tight") in the pitman and steering arm. Also inspect the steering sector-to-frame attaching points for tightness (37-47 ft./lbs.) and the frame rail for stress cracks. If any problems exist, repair them before proceeding.
- CENTERING THE STEERING SECTOR The turning radius stop bolts are located on the front axle knuckles. Adjust both stop bolts all of the way in. Turn the steering wheel all the way to the right. Then turn the wheel all the way to the left, counting the number of rotations to full lock. Turn the wheel back to the right half the number of total rotations. The pitman arm/steering sector should be centered and the steering wheel crossbars should be positioned properly. Scribe a line on the pitman arm and sector to note its centered position for future reference.
- Raise the jacks so the full weight of the truck is on the suspension and the frame is barely off the jack stands. Position the drop link in place (do not bolt it up) and adjust the length accordingly, without moving either the pitman arm or knuckles.
- \*\*\*IMPORTANT NOTE\*\*\* Adjust each end evenly; the more thread contact the better. DO NOT EXCEED THESE SPECS:
- MINIMUM THREAD CONTACT 1.20" (checked through slots in tube, so install link with slots facing outward). MAXIMUM THREAD EXPOSURE .94" \*\*Reference - Overall Thread Length = 2.14"
- DRAG LINK INSTALLATION Install the old rubber dust covers onto the new link. A hole must be cut into both covers to allow for grease fittings.
- Prior to installing, be sure all mating points are clean. Connect both ends. Tighten the slotted plugs completely then loosen 1-1/3 turns.
- The steering wheel will be centered and turning radius equal if your per-adjustment was correct. Some "Fine Turning" adjustments may be necessary. When properly adjusted, install cotter pins and grease fittings. Apply proper chassis lube.
- Position the clamps approximately 1/2" from each end of the tube body. The clamp/bolt assemblies must be positioned so they will not make contact with any other components while going through the turning cycle. Also be sure the tube body is not rotated. Tighten the self-locking clamp bolt nuts to 23 ft./lbs.
- Install the tire/wheel. Turn the steering wheel lock to lock and be sure that turning is not obstructed in any way. Adjusting the turning radius stops With the bolts adjusted all the way in, either the end of the sectors actual ability to turn or tire-to-leaf contact will limit turning. Adjust the stop bolt out until the bolt limits turning at least 1/2" before tire contact or end of sector radius. Use the same procedure to adjust the other side. The amount of adjustment may differ slightly. Longer grade 8 bolts may be needed. If a tire makes contact with a radius arm, tire damage may occur. This can also increase the possibility of vehicle roll-over. If the steering sector is at full lock and receives a blow, steering linkage and/or steering sector main shaft failure may occur.
- With the suspension loaded then unloaded (front axle hanging), double check the steering system through its lock-to-lock cycle. Recheck every nut/bolt that has been touched for proper tightness.
- ALIGNMENT Caster/camber angles nor toe-in settings have been altered by installing these parts. We do suggest that these specifications are checked to ensure proper handling and tire wear.
- \*\*\*IMPORTANT NOTE\*\*\* It is the ultimate buyers responsibility to have all the bolts/nuts checked for tightness after the first 100 miles and then every 10000 miles. Wheel alignment, steering system, suspension and drive line systems must be inspected by a qualified professional mechanic at least every 3000 miles.