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PRO COMP SUSPENSION

Suspension Systems that Work!

**Part # 55099 87 - 95 YJ, Wrangler
Coil Spring Suspension System**

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.

Special Notes:

- ◆ This kit will NOT fit right hand drive vehicles.
- ◆ This kit is for vehicles equipped with power steering only.
- ◆ A transfer case slip yoke conversion is required for this Pro Comp Suspension system. Correct rear drive shaft angles can only be obtained by elimination the slip yoke and replacing it with a CV joint. The following Pro Comp kits are recommended. More detailed information is available on the next page:
 - ◇ 4007 Tail shaft conversion kit. (NP231 transfer case only)
 - ◇ 4040 CV Style drive shaft.
 - ◇ 4041 CV Style drive shaft.
- ◆ **Installation of this suspension conversion allows for the use of larger tires. This along with the increase in ground clearance raises the center of gravity and will greatly affect the stability and handling of your vehicle both on and off highway. It is very important that you familiarize yourself with the new handling characteristics of your vehicle before driving at speeds above 25 mph either off road or on the highway. In addition, the vehicle will have moderate torque steer. (This means that it will pull slightly from side to side under acceleration and deceleration). This is a natural side effect of lifted coil spring vehicles.**

Recommended Tires and Wheels

Due to manufacturing, differences in dimensions and inflated measurements, tire and wheel combinations should be test fit prior to installation. Tire and wheel choice is crucial in assuring proper fit, performance, and the safety of your Pro Comp equipped vehicle. For this application, we recommend a wheel not to exceed 8" in width with a minimum backspacing of 4" must be used, additionally, a quality tire of radial design, not exceeding 35" tall X 12.5" wide is also recommended. Please note that the use of a 35" 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.

Introduction:

- ◆ This installation requires a professional mechanic!
- ◆ We recommend that you have access to a Jeep YJ 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! Additionally, very close attention must be given to the condition of the rear axle spring pads. Spring pads that are not perfectly flat must be repaired or replaced. Use only a factory replacement pad. Pro Comp kits use the spring pad as a mounting surface.
- ◆ Read the instructions carefully and study the illustrations before attempting installation! The more familiar you are with the procedures, the easier and quicker your installation will be.
- ◆ 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.
- ◆ Secure and properly block vehicle prior to beginning installation.
- ◆ **ALWAYS** wear safety glasses when using power tools or working under the vehicle!
- ◆ **NEVER** work under or around an unsupported 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.

JEEP YJ WRANGLER COIL SPRING CONVERSION (CSC)

| YEAR | DESCRIPTION | RIDE HEIGHT FRT/REAR | FRONT KIT | FRONT COIL SPRINGS | TIE DOWN RINGS | REAR COIL SPRINGS | BRAKE LINE KIT | PITMAN ARM | SHOCKS | REF # |
|-------|-------------------------------------|-------------------------|--------------|-----------------------|-------------------|----------------------|-------------------|---------------|--------|-------|
| 87-95 | YJ Wrangler 4WD 4 cyl w/soft top | 5.0"/5.0" | 55094 | Incl. | 55095 | Incl. | Incl. | Incl. | Incl. | K3050 |
| 87-95 | YJ Wrangler-4WD 4 cyl w/hard top | 5.0"/5.0" | 55194 | Incl. | 55095 | Incl. | Incl. | Incl. | Incl. | K3051 |
| 87-95 | YJ Wrangler 4WD 6 cyl w/soft top | 5.0"/5.0" | 55099 | Incl. | 55095 | Incl. | Incl. | Incl. | Incl. | K3052 |
| 87-95 | YJ Wrangler-4WD 6 cyl w/hard top | 5.0"/5.0" | 55199 | Incl. | 55095 | Incl. | Incl. | Incl. | Incl. | K3053 |

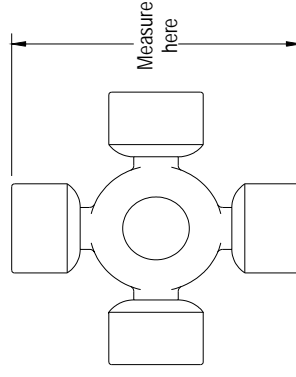
TAILSHAFT CONVERSION KIT AND CV DRIVESHAFT OPTIONS REQUIRED FOR CSC KIT

| YEAR | DESCRIPTION | RIDE HEIGHT | TAIL SHAFT CONVERSION KIT | C/V STYLE DRIVESHAFT |
|-------|-------------------------------|-------------|---------------------------|----------------------|
| 87-95 | YJ Wrangler 4WD 4 cylinder | 5.0"/5.0" | 4007 (See Notes) | 4040 |
| 87-95 | YJ Wrangler 4WD 6 cylinder | 5.0"/5.0" | 4007 (See Notes) | 4040 |
| 87-95 | YJ Wrangler 4WD 4 cylinder | 5.0"/5.0" | 4007 | 4041 (See Notes) |
| 87-95 | YJ Wrangler 4WD 6 cylinder | 5.0"/5.0" | 4007 | 4041 (See Notes) |

YJ CSC NOTES:

- ◆ This kit includes the steering stabilizer and provisions for re-installation of the factory sway bar.
- ◆ Lift achieved and vehicle stance will vary according to how the vehicle is equipped (motor, top, accessories, etc.) these can affect driving characteristics.
- ◆ Stainless steel tie down rings bolt to the front factory shackle hanger kit mounts (PN 55095)
- ◆ This kit is designed to work with the factory Dana 35 rear axle and the Dana 30 front axle.
- ◆ The required tire size is 33" X 12.5" X 15".
- ◆ The required rim size is a 15" X 8" with 3.5" backspace.
- ◆ Conversion kit 4007 is for the NP231 transfer case ONLY. The kit will not fit the NP207 transfer case found in some 1987 models.
- ◆ The driveshaft, PN 4041, uses a U-joint 3 5/8" from cap to cap and is the most common. Some vehicles may be equipped with the smaller U-joint measuring 3 1/4" from cap to cap and will require driveshaft PN 4040.

U-Joint Illustration



Part List:

Box 1 of 5 PN 55099-1

| PART# | DESCRIPTION | QUAN. | ILLUS. |
|-----------------|--------------------------------------|----------|--------|
| 90-1020 | REAR LOWER COIL MOUNT | 2 | 10 |
| 90-1022 | FRONT TRACK BRACKET, REAR PLATE | 1 | 9 |
| 90-1023 | FRONT TRACK BRACKET, FRONT PLATE | 1 | 9 |
| 90-1039 | UPPER CONTROL ARMS | 4 | 6, 19 |
| 90-1040 | LOWER CONTROL ARMS | 4 | 5, 18 |
| 90-1045 | ALUMINUM BUMP STOP SPACERS | 4 | 10 |
| 90-1050 | LOWER COIL RETAINER | 4 | 10 |
| 90-1059 | FRONT LOWER COIL MOUNT | 2 | 10 |
| 90-1068 | REAR AXLE CLAMP | 2 | 17 |
| 654031 | CONE BUMPSTOPS | 4 | 10 |
| 90-6005 | CONTROL ARM PARTS PACK | 1 | |
| 70-0503251800 | 1/2" X 3 1/4" USS GR 8 HEX BOLT | 4 | 6, 19 |
| 70-0503751800 | 1/2" X 3 3/4" USS GR 8 HEX BOLT | 4 | 8, 19 |
| 72-05000100816 | 1/2" USS GR 8 STOVER NUT | 8 | |
| 73-05000034 | 1/2" SAE HARDENED FLAT WASHER | 16 | |
| 70-0564501800 | 9/16" X 4 1/2" NC GR 8 HEX BOLT | 4 | 5, 18 |
| 72-05600100816 | 9/16" NC GD 8 STOVER NUT | 4 | |
| 73-05600034 | 9/16" SAE HARDENED FLAT WASHER | 8 | |
| 90-6006 | CAM BOLT PARTS PACK | 1 | |
| 15-11252-A | UPPER CONTROL ARM BUSHINGS | 16 | 6, 19 |
| 90-2026 | UPPER CONTROL ARM SLEEVES | 8 | 6, 19 |
| 90-1051 | CAM SPACER, 1/2" ID, GROUND | 8 | 6, 19 |
| 15-11252-B | LOWER CONTROL ARM BUSHINGS | 16 | 5, 18 |
| 90-2027 | LOWER CONTROL ARM SLEEVES, 1/2" ID | 4 | 5, 18 |
| 90-2028 | LOWER CONTROL ARM SLEEVE, 9/16" ID | 4 | 5, 18 |
| 90-1049 | LOWER CONTROL ARM SPACER, 9/16" ID | 8 | 5, 18 |
| 90-6008 | FRONT HARDWARE PARTS PACK | 1 | |
| 70-0503751800 | 1/2" X 3 3/4" NC GR 8 HEX BOLT | 8 | 5, 18 |
| 72-05000100816 | 1/2" NC GR 8 STOVER NUT | 8 | |
| 72-05000200816 | 1/2" NF GR 8 STOVER NUT | 4 | 6, 19 |
| 73-05000034 | 1/2" SAE HARDENED FLAT WASHER | 20 | |
| 90-6009 | FRONT HARDWARE PARTS PACK | 1 | |
| 20-65991 | 1/2" U-BOLT HARDWARE PACK | 1 | |
| 13-30034 | 1/2" GR 8 UNPLATED FLAT WASHER | 8 | 2 |
| 13-10332 | 1/2" NF GR8 HI NUT | 8 | 2 |
| 70-0501251800 | 1/2" X 1 1/4" USS GR 8 HEX BOLT | 5 | 10 |
| 72-05000100816 | 1/2" NC GR 8 STOVER NUT | 5 | |
| 73-05000034 | 1/2" SAE HARDENED FLAT WASHER | 11 | |
| 70-0433751800 | 7/16" X 3 3/4" USS GR 8 HEX BOLT | 4 | 4 |
| 72-04300100816 | 7/16" NC GR 8 STOVER NUT | 4 | |
| 73-04300034 | 7/16" SAE HARDENED FLAT WASHER | 8 | |
| 70-0371751800 | 3/8" X 1 3/4" USS GR 8 HEX BOLT | 3 | 2 |
| 70-0371501800 | 3/8" X 1 1/2" USS GR 8 HEX BOLT | 2 | 9 |
| 72-03700100816 | 3/8" NC GR 8 STOVER NUT | 5 | |
| 73-03700034 | 3/8" SAE HARDENED FLAT WASHER | 12 | |
| 72-03700100512 | 3/8" NC NYLOCK NUT | 2 | |
| 71-120301758800 | 12mm X 30mm X 1.75, BOLT | 1 | 3 |
| 90-6010 | REAR SUSPENSION HARDWARE PACK | 1 | |
| 20-65991 | 1/2" U-BOLT HARDWARE PACK | 1 | |
| 13-30034 | 1/2" GR 8 UNPLATED FLAT WASHER | 8 | 2 |

| PART# | DESCRIPTION | QUAN. | ILLUS. |
|----------------|---|-------|--------|
| 13-10332 | 1/2" NF GR8 HI NUT | 8 | 2 |
| 70-0501251800 | 1/2" X 1 1/4" GR 8 HEX BOLT | 4 | 10 |
| 70-0503251800 | 1/2" X 3 1/4" GR 8 HEX BOLT | 1 | 16 |
| 72-05000100816 | 1/2" USS GR 8 STOVER NUT | 5 | |
| 73-05000034 | 1/2" SAE HARDENED FLAT WASHER | 10 | |
| 73-05000042 | 1/2" USS HARDENED FLAT WASHER | 2 | |
| 70-0433751800 | 7/16" X 3 3/4" USS GR 8 HEX BOLT | 4 | 20 |
| 72-04300100816 | 7/16" USS GR 8 STOVER NUT | 4 | |
| 73-04300034 | 7/16" SAE HARDENED FLAT WASHER | 8 | |
| | 3/8" X 2" USS STUD | 4 | 17 |
| 70-0371001800 | 3/8" X 1" USS GR 8 HEX BOLT | 2 | 16 |
| 72-03700100816 | 3/8" USS GR 8 STOVER NUT | 2 | |
| 73-03700034 | 3/8" SAE HARDENED FLAT WASHER | 8 | |
| 72-03700100512 | 3/8" USS GR 5 NYLOCK NUT | 10 | 17 |
| 70-0310751800 | 5/16" X 3/4" USS GR 8 HEX BOLT | 1 | 16 |
| 72-03100100816 | 5/16" USS GR 8 STOVER NUT | 1 | |
| 73-0310034 | 5/16" SAE HARDENED FLAT WASHER | 2 | |
| 96-6012 | HARDWARE PACK-CAMS, SLEEVES, SPACERS 1 | | |
| 90-2025 | FRONT TRACK BRACKET SPACER | 1 | 9 |
| 54314 | SHOCK SLEEVE-1/2" X 5/8" X 1.480" | 2 | 13 |
| 90-1079 | SHOCK ADAPTER | 2 | 13 |
| 41-8243T | YJ CAM BOLT | 4 | 6, 19 |
| 90-2031 | REAR TRACK BRACKET SPACER | 1 | 16 |

Box 2 of 5 PN 55099-2

| PART# | DESCRIPTION | QUAN. | ILLUS. |
|----------------|---|----------|----------|
| 13-90481 | U-BOLT, 1/2" X 3.3" X 6" - LARGE, FRONT | 2 | 2 |
| 13-90496 | U-BOLT, 1/2" X 3.062 X 4 1/2" - REAR | 4 | 18 |
| 13-90504 | U-BOLT, 1/2" X 3.062 X 6" - SMALL FRONT | 2 | 2 |
| 219201 | YJ STEERING STABILIZER KIT | 1 | |
| 90-1053 | REAR LOWER U-BOLT PLATE | 2 | 17 |
| 90-1054 | REAR UPPER COIL MOUNT | 2 | 20 |
| 90-1055 | FRONT UPPER COIL MOUNT | 2 | 7 |
| 90-1063 | FRONT AXLE CLAMP, PASSENGER | 1 | 2, 3 |
| 90-1065 | FRONT AXLE CLAMP, DRIVER | 1 | 2, 3 |
| 90-1069 | FRONT U-BOLT PLATE | 2 | 2 |
| 90-1072 | REAR TRACK BRACKET, FRONT PLATE | 1 | 16 |
| 90-1073 | REAR TRACK BRACKET, REAR PLATE | 1 | 16 |
| 90-1076 | FRONT & REAR CAM MOUNT | 4 | 6, 8, 19 |
| 90-1095 | LOWER LINK MOUNT | 2 | 12 |
| 90-2008 | SWAY BAR LINK | 2 | 13 |
| YJ400-1 | PITMAN ARM | 1 | |
| 90-6007 | SHOCK ADAPTER PARTS PACK | 1 | |
| 70-0502751500 | 1/2" X 2 3/4" GR 5 HEX BOLT | 2 | 13 |
| 72-05000100512 | 1/2" NYLOCK NUT | 2 | |
| 73-05000100512 | 1/2" SAE HARDENED FLAT WASHER | 4 | |
| 72-06200100512 | 5/8" NYLOCK NUT | 2 | |
| 73-06200032 | 5/8" USS HARDENED FLAT WASHER | 2 | |
| 90-6011 | BRAKE LINE PARTS PACK | 1 | |
| 7425-A | FRONT BRAKE LINE KIT | 2 | |
| 7425-E | REAR BRAKE LINE | 1 | |
| 90-1031 | BRAKE LINE BRACKET | 2 | |
| 7425-P | BRAKE LINE CLAMP KIT | 1 | |

| PART# | DESCRIPTION | QUAN. | ILLUS. |
|----------------|-------------------------------|----------|--------|
| 90-6035 | SWAY BAR KIT | 1 | |
| 90-2053 | SWAY BAR SLEEVE | 1 | 14 |
| 90-2054 | SWAY BAR COLLAR | 2 | 14 |
| 45359 | 5/8" HOURGLASS BUSHING | 4 | 14 |
| 51792 | SLEEVE - 5/8" X 1/2" X 1.350" | 2 | 14 |
| 90-6043 | SWAY BAR HARDWARE PACK | 1 | |
| 70-0502501800 | 1/2" X 2 1/2" GR 8 HEX BOLT | 2 | 14 |
| 72-05000100816 | 1/2" USS GR 8 STOVER NUT | 2 | |
| 73-05000034 | 1/2" SAE HARDENED FLAT WASHER | 4 | |
| 70-0370751800 | 3/8" X 3/4" GR 8 HEX BOLT | 6 | 12 |
| 37F200SCB | 3/8" X 2" SAE 12 POINT BOLT | 2 | 14 |
| 72-03700100816 | 3/8" GR 8 STOVER NUT | 6 | |
| 37FNCB | 3/8" 12 POINT NUT | 2 | 14 |
| 73-03700034 | 3/8" SAE HARDENED FLAT WASHER | 12 | |
| 31C25KKC | 5/16" X 1/4" ALLEN SET SCREW | 2 | 14 |

Box 3 of 5 PN 55099-3

| PART# | DESCRIPTION | QUAN. | ILLUS. |
|---------|---------------|-------|--------|
| 55596-1 | YJ FRONT COIL | 2 | 10 |

Box 4 of 5 PN 55099-4

| PART# | DESCRIPTION | QUAN. | ILLUS. |
|---------|--------------|-------|--------|
| 55594-1 | YJ REAR COIL | 2 | 10 |

Box 5 of 5 PN 55099-5

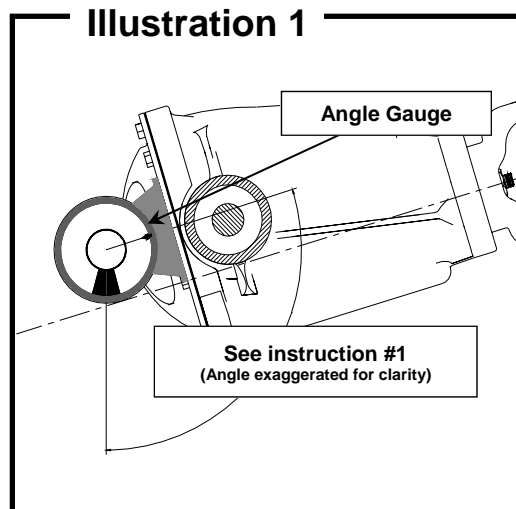
| PART# | DESCRIPTION | QUAN. | ILLUS. |
|--------|----------------|-------|--------|
| 926500 | YJ FRONT SHOCK | 2 | 13 |
| 923500 | YJ REAR SHOCK | 2 | 13 |

Front Installation:

1. Measure the front pinion angle at ride height and on level ground. Record this angle for future reference. This measurement is in degrees and will be needed to properly set up the front upper arm cam mounts. Refer to **Illustration 1**.

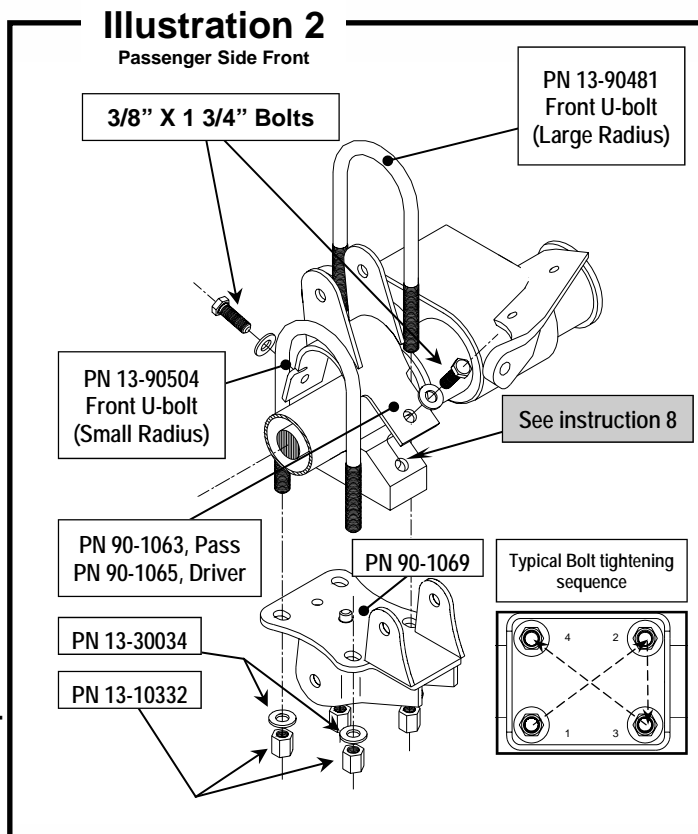
NOTE: This step is for unmodified vehicles. Vehicles with a previously installed aftermarket suspension system may not provide an accurate angle for reference.

2. Raise the front of the vehicle and support the frame behind the front spring hangers with jack stands. Raise the rear of the vehicle and support it with jack stands forward of the rear spring hangers. Having the vehicle level during the entire installation will assist in the accuracy of the pinion angle set up.



WARNING: NEVER WORK UNDER OR AROUND AN UNSUPPORTED VEHICLE!

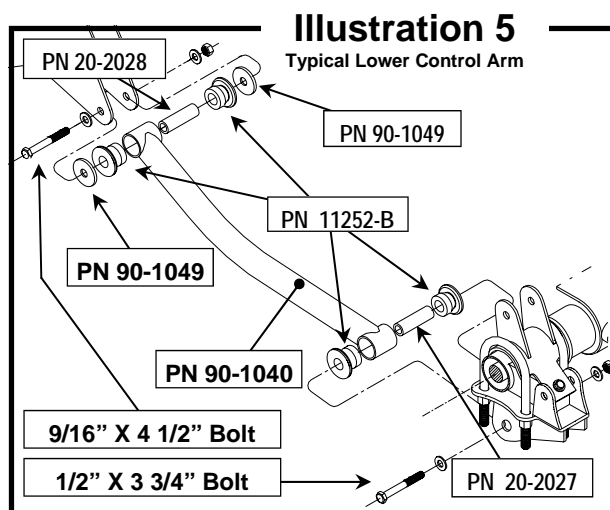
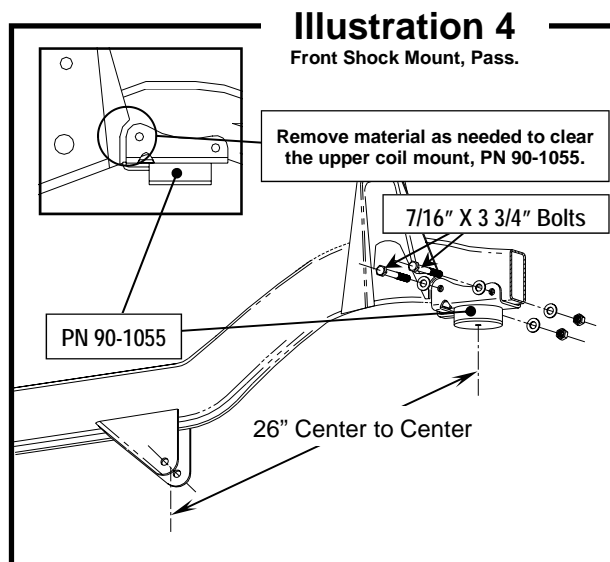
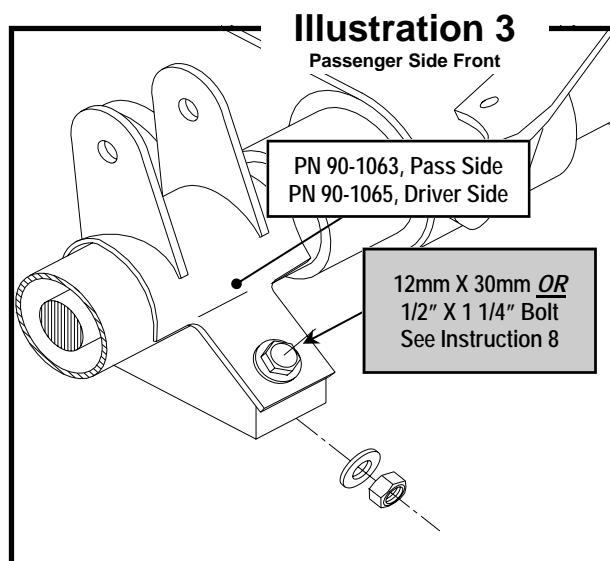
3. Remove the stock front brake lines and replace them with Pro Comp extended brake lines, (PN 7425-A) and brackets (PN 90-1031). Use the existing bolt to secure them in the factory location. Be sure to clean the banjo mounting surface on the caliper. Use new crush washers and check for sufficient clearance between the steering shaft and the factory brake line on the drivers side. It may be necessary to slightly bend the lower lip of the inner fender to clear the brake line or bracket.
4. Remove the wheels, steering stabilizer, front shocks, and the track bar bolt where it attaches to the front axle. Save this hardware.
5. Support the front axle with a floor jack and remove the passenger side leaf spring, U-bolts, U-bolt plate, and sway bar link. Loosen the driver side U-bolts but do not remove them at this time. This will ease alignment of the passenger side brackets and allow you to maintain control of the axle assembly.
6. Remove the sway bar links from the sway bar. Loosen the bolts that secure the sway bar rubber mounts. Swing the sway bar down and finish removing it from the vehicle.
7. Using **Illustrations 2 & 3** as reference, set the passenger side front axle clamp (PN 90-1063) on the axle tube. Make sure the clamp fits tightly against the axle tube. Due



to variations in the axle castings, some material may need to be removed from the casting so the clamp will fit properly. Drop the U-bolts (PN 13-90481 and PN 13-90504) over the clamp flanges and install the U-bolt plate (PN 90-1069) from the bottom. Install the hardened washers (PN 13-30034) and Hi-Nuts (PN 13-10332) from parts pack PN 20-65991. Align the U-bolts with the brackets and snug the bolts to 15 ft. lbs. using a crossing pattern. See the inset view in **Illustration 2**.

8. On the passenger side, drill a 3/8" diameter hole through the cast spring pad at the rear of the housing using the lower axle clamp as a guide. Install one 3/8" X 1 3/4" bolt with a washer through the rear hole as shown in **Illustration 2**, and either a 12mm X 30mm or a 1/2" X 1 1/4" bolt through the existing hole in the front. The size of the bolt used is determined by the size of the bolt used by the manufacturer for the factory steering damper. *On the drivers side, both holes will need to be drilled using the axle clamp as a guide*
9. Remove the U-bolt plate from the U-bolts and install the nuts and washers as needed from the bottom onto the previously installed bolts. Torque them to 35 ft. lbs. See **Illustration 3**.
10. Reinstall the U-bolt plate with the U-bolts and snug to 15 ft. lbs. Again use a crossing pattern to evenly draw down the U-bolts. Make sure the U-bolt plate is oriented as shown.
11. Position the front upper coil mount (PN 90-1055) on the frame as shown in **Illustrations 4 & 7**.

Note: The upper coil mounts for the front and rear are very similar. The only difference is that the rear mounts have a stop welded at the end of the groove. The front groove is open at both sides. The 26" centerline to centerline dimension shown is a critical dimension and must be maintained. It may be necessary to notch the shock mount slightly in the area indicated to properly position the upper coil mount. (See the inset view in the illustration). Once the mount is in place, drill through the frame and install 7/16" X 3 3/4" bolts with washers through the mount. Install the nuts and washers and torque these fasteners to 30 ft. lbs.



12. Install bushings (PN 15-11252-B) and sleeves (PN 90-2027 Axle End (1/2" ID), PN 90-2028 Frame End (9/16" ID)) into all lower arms (PN 90-1040). Install one arm into the U-bolt plate and rear OEM leaf spring mount.

Note: The radius on the lower arms is offset slightly, the short straight section is mounted to the frame.

Use the 1/4" thick spacers with 9/16" diameter hole (PN 90-1049) on both sides of the lower arm bushings at the frame mount. See **Illustration 5**. Install a new 9/16" X 4 1/2" bolt, nut, and washer at the frame mount and a 1/2" X 3 3/4" bolt, nut, and washer at the U-bolt plate. Do not tighten these fasteners at this time.

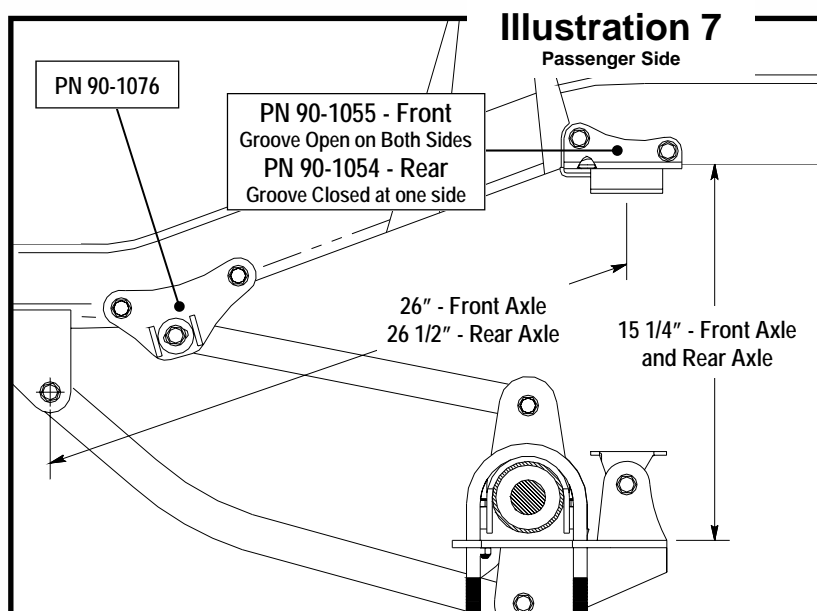
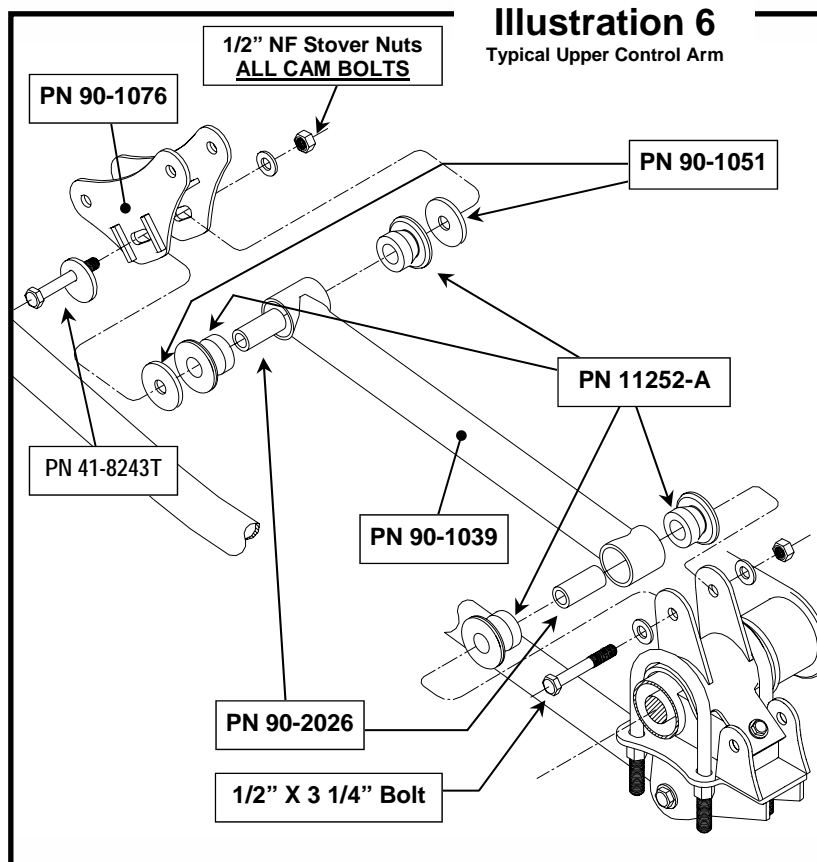
13. Install bushings (PN 11252-A) and sleeves (PN 90-2026) into all upper arms (PN 90-1039). Install one end into a front upper arm cam mount (PN 90-1076). Use the 1/4" thick spacer with 1/2" diameter hole (PN 90-1051) on both sides of the rear upper arm bushing and one cam bolt assembly (PN 41-8243T). See **Illustration 6**.

14. Install the upper arm into the front axle mount using the 1/2" X 3 1/4" bolts, nuts, and washers. Do not tighten. The upper arm cam mount will be positioned and secured later, just let it hang loose for now.

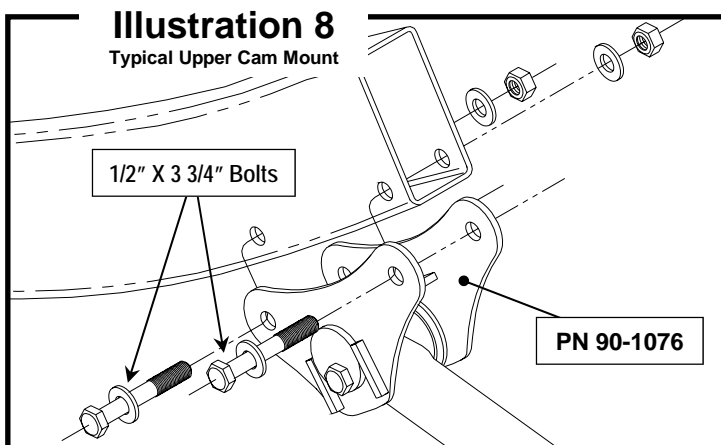
*Note: The upper cam mounts are mounted with the "long" tab oriented in the direction of the control arm. Use **Illustration 21** for reference.*

15. Support the pinion to prevent the axle from rolling over. Remove the driver side leaf spring, U-bolts, shackles and U-bolt plate.

16. Using **Illustrations 7 & 8** for



Repeat steps 7 thru 14 on the driver side except in step 7, both holes must be drilled to 3/8", and two 3/8" X 1 1/4" bolts, washers, and nuts used.



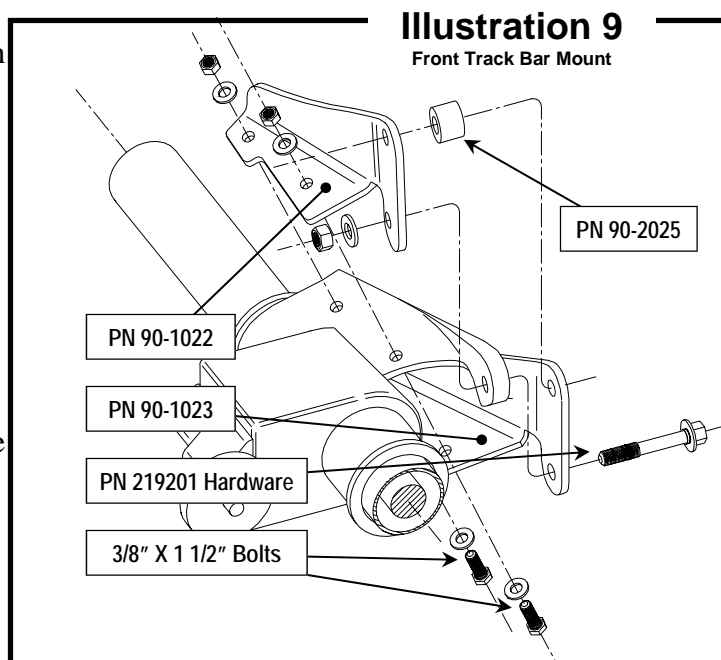
reference, Raise the axle evenly on both sides of the vehicle until there is 15 1/4" of space between the top surface of the U-bolt plate and the bottom of the frame. While maintaining this distance, set the pinion angle by rotating the axle

until the original angle (*recorded in step 1*) is duplicated. Locate the upper arm cam mount onto the frame and adjust its location until the alignment cam is in the "centered" position and clamp the cam mount to the frame. Make sure the mount is tight against the bottom of the frame. Both front cam mounts must be the same distance from the lower *rear* arm mounting bolts. (The original leaf spring bolt.) Drill through the frame with a 1/2" drill. Install the 1/2" X 3 3/4" bolts, nuts, and washers provided and torque them to 65 ft. lbs.

Note: On 4 cylinder models, the motor mount will need to be trimmed to install the upper cam mount.

17. Remove the nut and cotter pin and separate the drag link from the pitman arm. Use a suitable pitman arm puller and remove the factory pitman arm. Replace this with the new drop pitman arm (PN YJ400-1) from this kit. Install and torque the steering box to pitman shaft nut to 165 ft. lbs. Install the drag link to the pitman arm. Tighten the nut and install a new cotter pin.

18. Position both sides of the front track bar mount (PN 90-1022 Front, 90-1023 Rear) with the spacer (PN 90-2025) between them as shown in **Illustration 9** . Install a 1/2" X 3 3/4" bolt from the steering damper kit (PN 219201) into the bottom hole and the 12mm factory track bar bolt through the top hole. Snug the bottom bolt but do not tighten. Using the brackets as a guide, drill through the flange on the axle with a 3/8" drill. Loosely install the 3/8" X 1 1/2" bolts, nuts, and washers. Assemble as shown.



19. Install the steering damper assembly (PN 219201) as per the instructions enclosed with the damper kit.

20. Assemble and install the passenger side lower coil mount (PN 90-1059) to the U-bolt plate using the 1/2" X 1 1/4" bolts as shown in **Illustration 10**. Rotate the lower mount back until it contacts the U-bolts and torque these bolts to 75 ft. lbs.

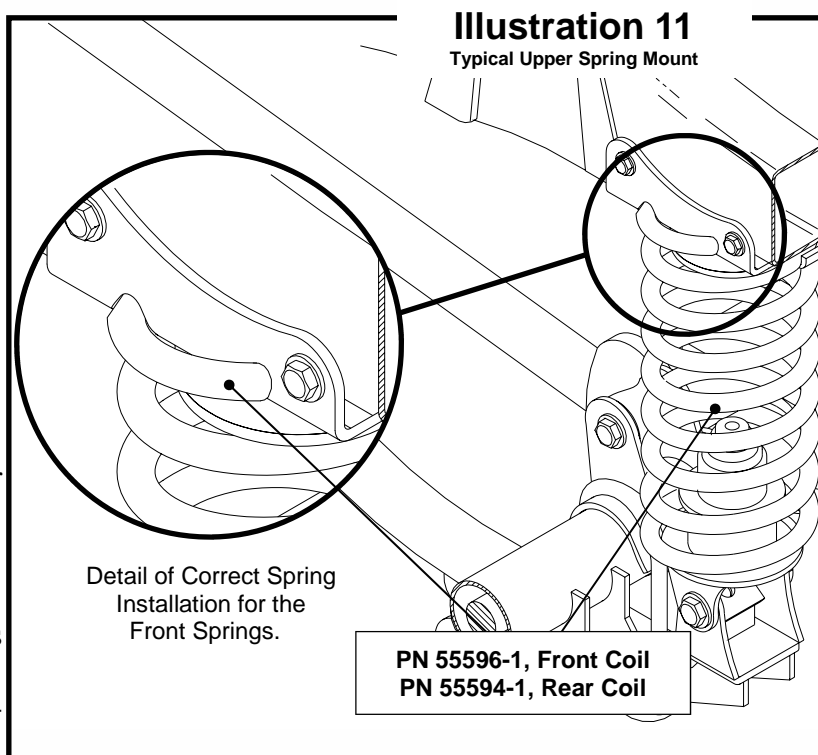
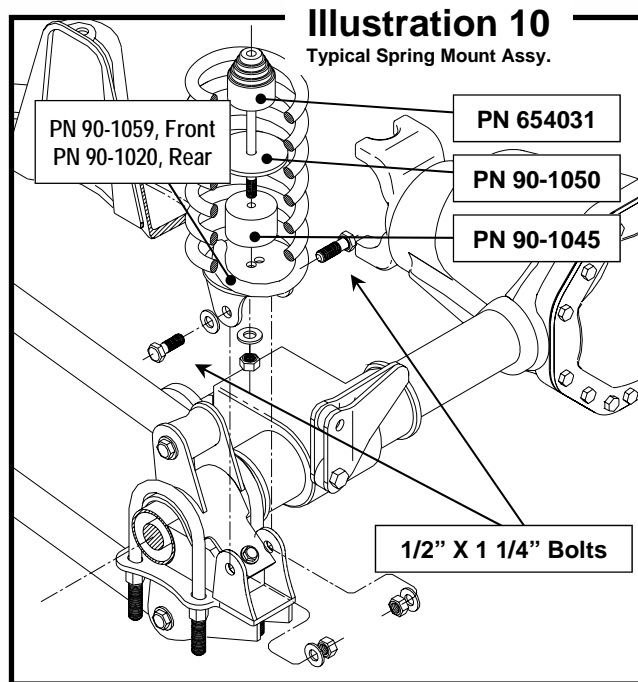
21. For the front coil, ((PN 55596-1) heavier wire diameter), place the bump stop

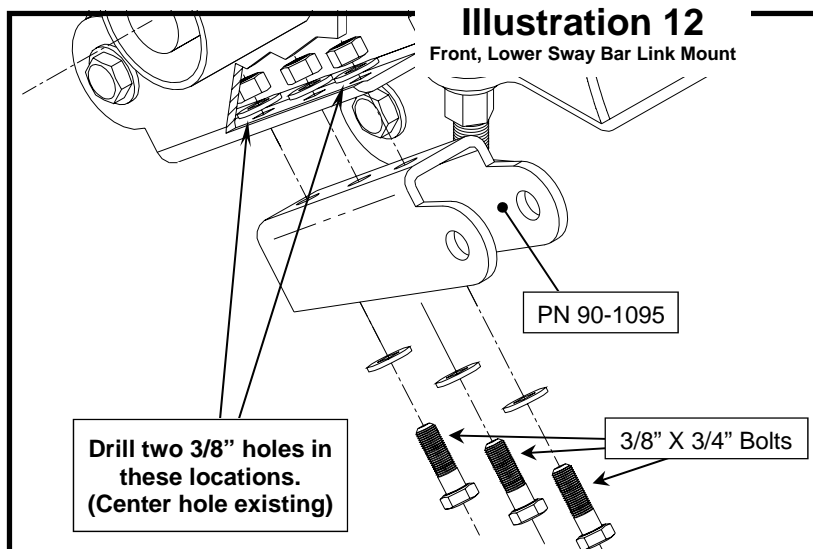
(PN 654031) and lower coil retainer (PN 90-1050) through the top of the coil spring allowing the retainer to restrain the bump stop at the bottom. Lower the axle sufficiently to thread the coil into the upper mount until the open end of the coil contacts the outside of the mount. Slide the bump stop spacer (PN 90-1045) through the bottom of the spring over the bump stop stud and raise the axle up onto the stud. Install the nuts and washers to retain assembly. See **Illustration 11**.

Note: The coil is offset on the passenger side lower mount for coil clearance at the track bar mount. The cast track bar mount may need to be ground away to provide clearance for the coil. (Do not remove any more material than is required to clear the coil spring)

Repeat steps 20 and 21 on the driver side.

22. Install the front shock (PN 926500) with adapters (PN 90-1079) as shown in **Illustration 13**. Torque the upper 5/8" mounts to 100 ft. lbs. Torque the lower 1/2" mounts to 75 ft. lbs.
23. Torque the U-bolts to 45 ft. lbs. **Do not over torque!** The bracket should **not** be deformed when finished. Torque the 1/2" upper and lower arm to bolts to 90 ft. lbs. and the 9/16" lower arm bolts to 105 ft. lbs.
24. Raise the front axle with a floor jack to align the track bar with the hole in the bracket and secure it using the factory 12mm bolt. Torque this bolt to 65 ft. lbs. Torque the lower 1/2" bolt to 90 ft. lbs. Torque the 3/8" bolts to 35 ft. lbs.
25. Note: By rotating the cams on the upper arm mounts, alignment of the track bar bolt may be simplified. Be sure to mark the alignment cam location prior to this step so they can be returned to their original position.
26. Install the lower sway bar link mount brackets (PN 90-1095) as shown in **Illustration 12**. Use the existing 3/8" hole in the cen-

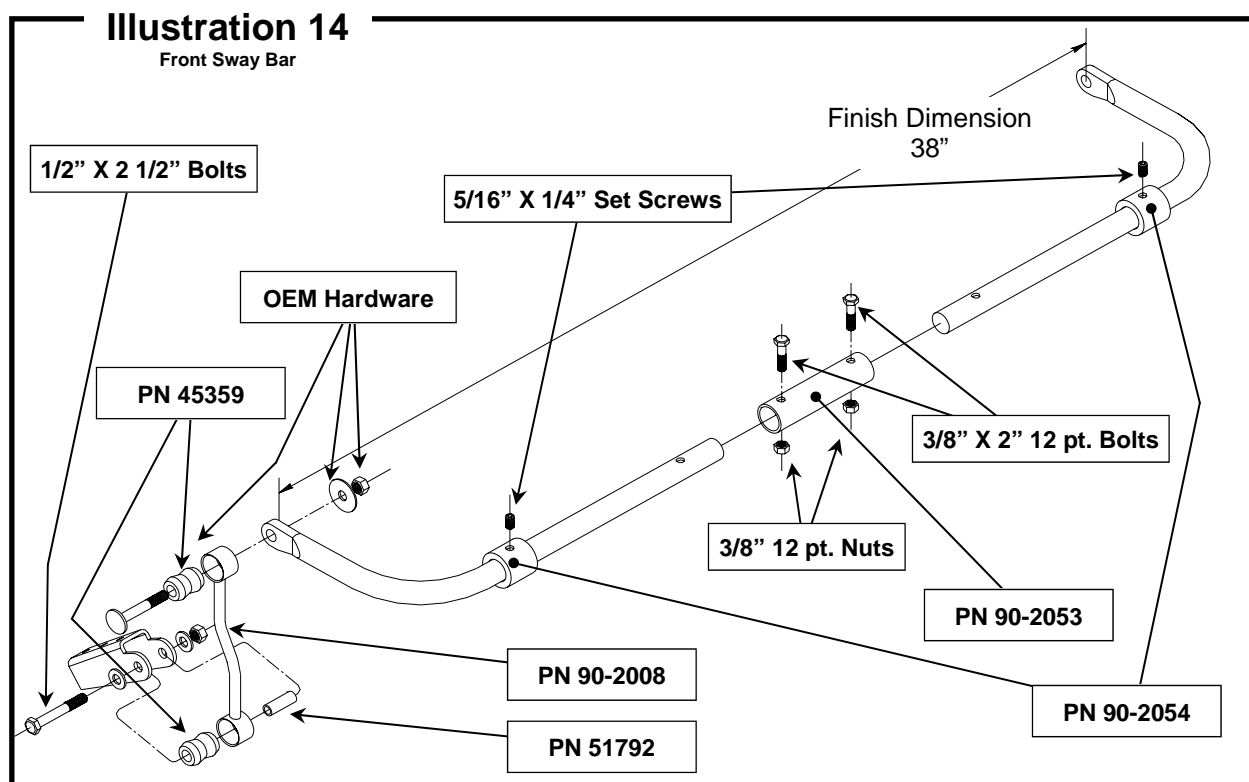
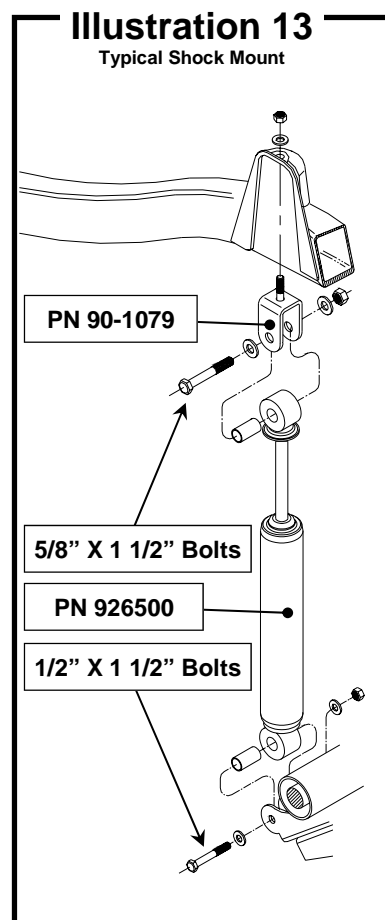




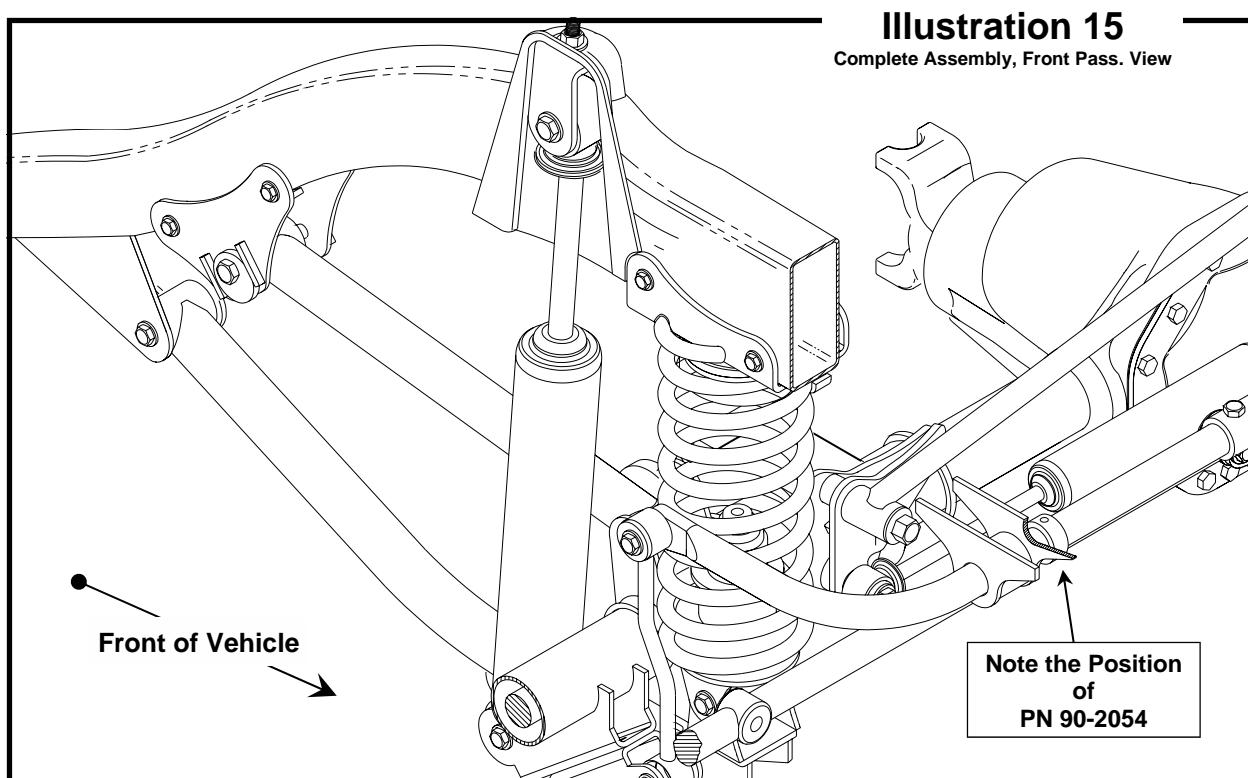
ter and one $3/8'' \times 3/4''$ bolt, nut and washers to hold this bracket in place. Use the bracket as a drill guide and drill the two additional mount holes through the OEM shock mount and finish installing the remaining $3/8'' \times 3/4''$ bolts, nuts and washers.

27. Install the sway bar links (**PN 90-2008**) as shown in **Illustration 14**. Assemble the sway bar links using the steel sleeve (**PN 51792**) at the lower mount end.

Note: The sway bar modification kit will only fit a 1 1/8" diameter sway bar.

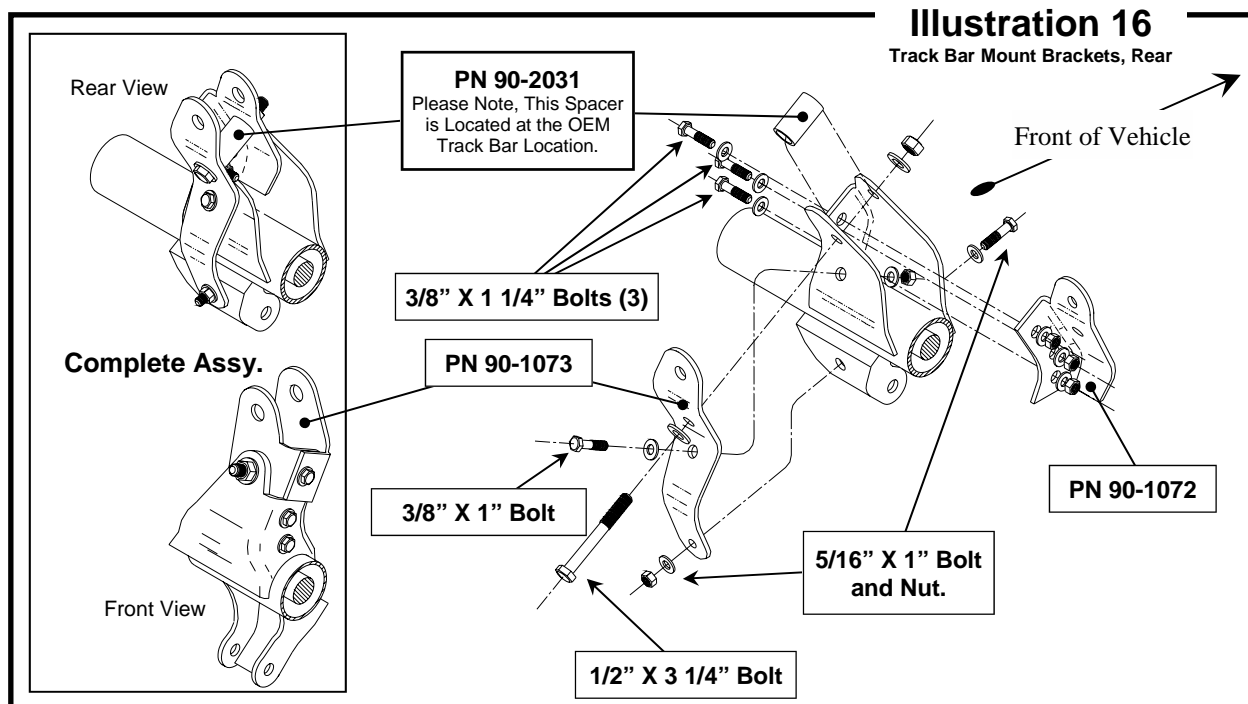


28. To modify the sway bar, measure to the center of the sway bar and cut through using an abrasive saw. Remove any rust and scale that may be present, and de-burr the ends. Slip the cut ends of the bar into the extension (PN 90-2053) until the width shown in **Illustration 14** is achieved.
Make sure there is equal engagement on both sides of the extension before drilling.
The extension is drilled undersize and is to be used as a drill guide for the final 3/8" diameter hole. Drilling of the sway bar must be done on a drill press to assure an accurate, centered hole.
29. Assemble the sway bar as shown using parts **90-2053, 90-2054, 45359, and 51792**. Leave the collars (PN 90-2054) loose until the sway bar is installed and centered in the vehicle. Use the provided 3/8" X 2"-12 point bolts through the sleeve and sway bar and install the 3/8"-12 point nuts. Torque these to 40 ft. lbs. The collars should have 1/8" clearance between them and the rubber mounts. Tighten the set screws. The collars will keep the sway bar centered in the vehicle. Install the sway bar links and torque the bolts to 55 ft. lbs. Use the OEM sway bar mount for the upper mount and the 1/2" X 2 1/2" bolt provided for the lower mount. See **Illustrations 14 & 15**
30. When complete, the front end assembly should look similar to **Illustration 15**.



Rear Installation:

1. Raise the rear axle until it begins to lift the vehicle off the rear jack stands.
2. Remove the track bar bolt at the rear axle and lower the axle.
3. Remove the stock brake line and replace with Pro Comp extended line, **PN 7425-E** using the enclosed instructions.

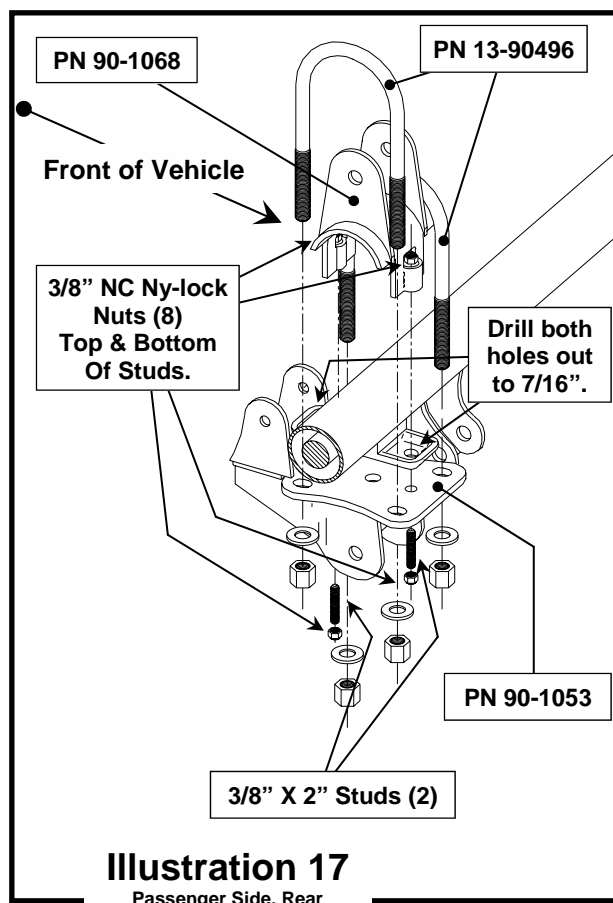


4. Support the rear axle and remove the shocks, U-bolts, and leaf spring from the passenger side. Loosen the U-bolts on the driver side but do not remove.
5. Using **Illustration 16** as a guide. Position the track bar mounting brackets (**PN 90-1072 & 90-1073**) as shown with spacer (**PN 90-2031**) onto the stock axle mount. Install all bolts. It may be necessary to drill through the small holes to install the 3/8\"

6. Drill out the two small holes in the stock axle spring mount to 7/16\"

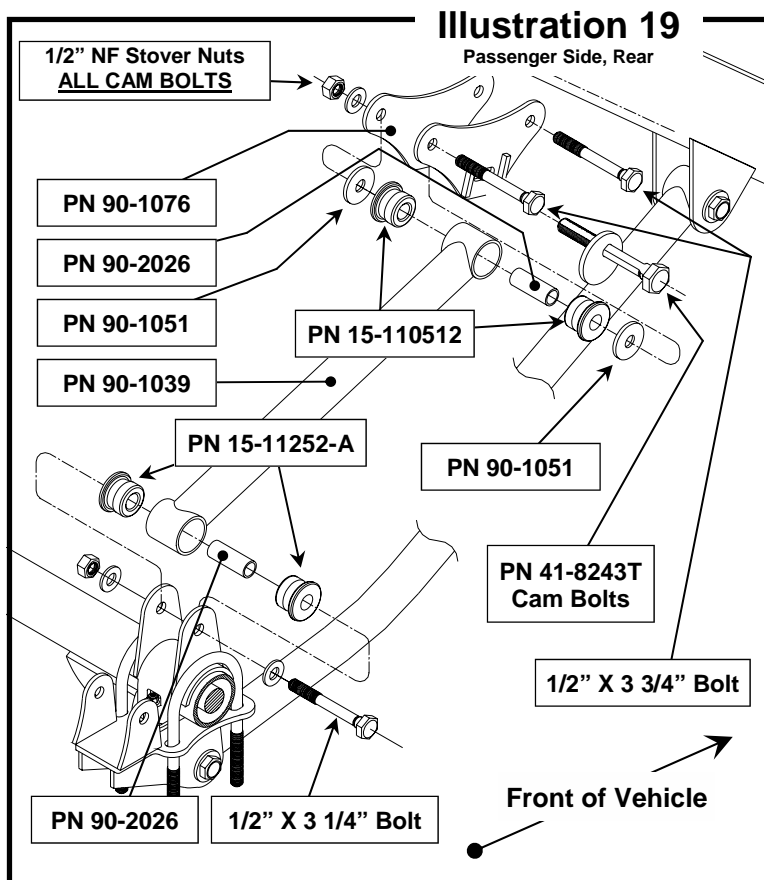
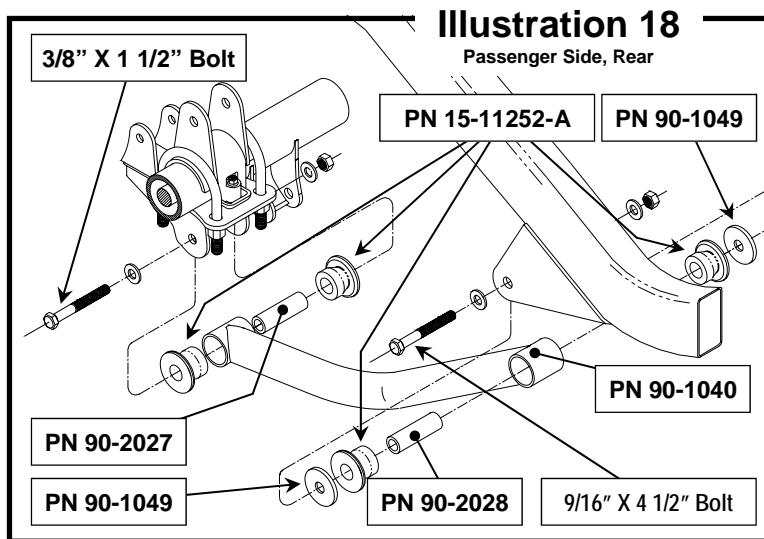
DO NOT use a hammer to install this part! The bracket should fit snugly on the axle tube and should almost touch the inside of the spring perch.

Note: The tabs on the top of (PN 90-1068) should angle towards the front of the vehicle. This will produce adequate clearance for the rear coil.

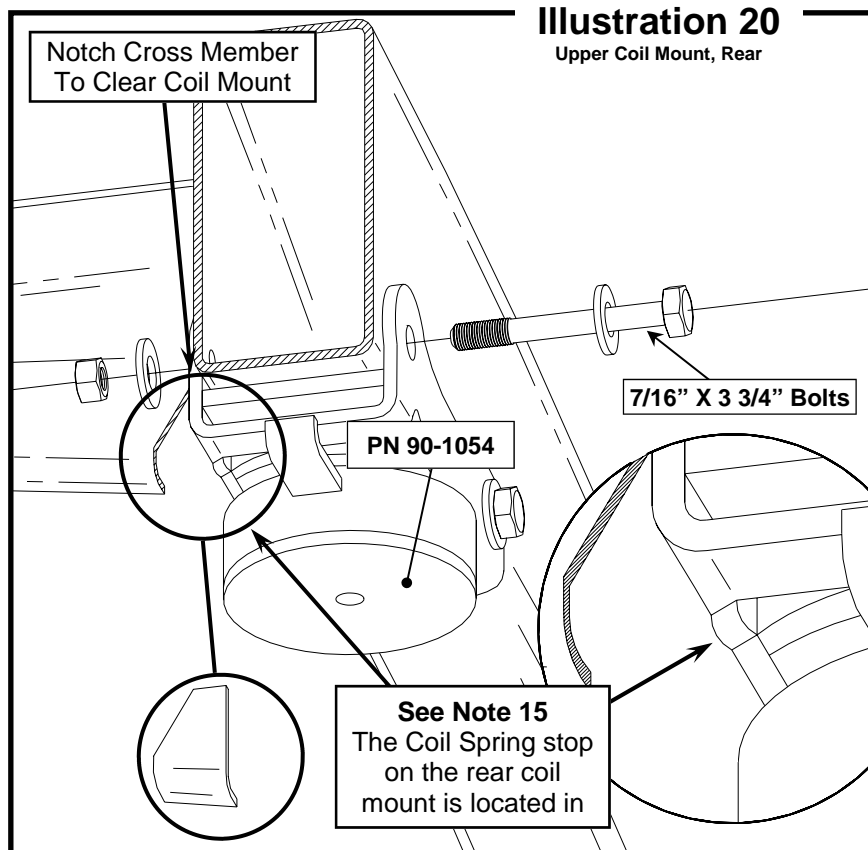


7. Position the U-bolt plate (PN 90-1053) on the spring perch and start one of the 3/8" X 2" studs from the bottom using a 3/8" NC Ny-lock nut inside the "window" of the axle bracket. It may be necessary to use a clamp to squeeze the bottom of the bracket together to install the second 3/8" stud. Be extra careful to properly start the threads on these bolts. Do not cross thread the fasteners.
8. Slide the U-bolts (PN 13-90496) over the upper bracket flange and through the U-bolt plate. Install the washers and nuts. Snug the U-bolt nuts using a crossing pattern as shown in **Illustration 2** making sure the U-bolts are square to the axle tube. Torque the 3/8" studs to 25 ft. lbs. and the U-bolts to 45 ft. lbs.
9. Install one of the previously assembled lower arms (PN 90-1040) with bushings and sleeves into the U-bolt plate mount and stock leaf spring mount. See **Illustrations 5 & 18**. Use 1/4" spacers on both sides of the bushing at the stock spring mount.
10. Assemble one of the previously assembled upper arms (PN 90-1039) to the upper arm cam mount (PN 90-1076) and install them into the upper axle bracket. Do not tighten the arm mounting hardware at this time. See **Illustrations 6 & 19**.
11. Notch the flange on the rear cross member as shown in **Illustration 20**. Position the rear upper coil mount (PN 90-1054) on the frame using **Illustration 7** as a reference for a proper installation location, 26 1/2" from the lower leaf spring mount. Be sure the coil mount fits against the bottom of the frame rail and drill through the frame. Install the 7/16" X 3 3/4" bolts, nuts, and washers. Torque to 30 ft. lbs.

Repeat steps 4 thru 11 on the driver side of the vehicle. Remember to support the axle pinion to prevent the axle from rolling.



12. Install your new CV style drive shaft to the transfer case. Raise the axle evenly on both sides until the distance between the top of the spring perch and the bottom of the frame rail is 15 1/4". For reference, see **Illustration 7**. Raise or lower the pinion until the pinion and the drive shaft are on the same line. This means there should be 0° misalignment between the drive shaft and the pinion shaft at this height.

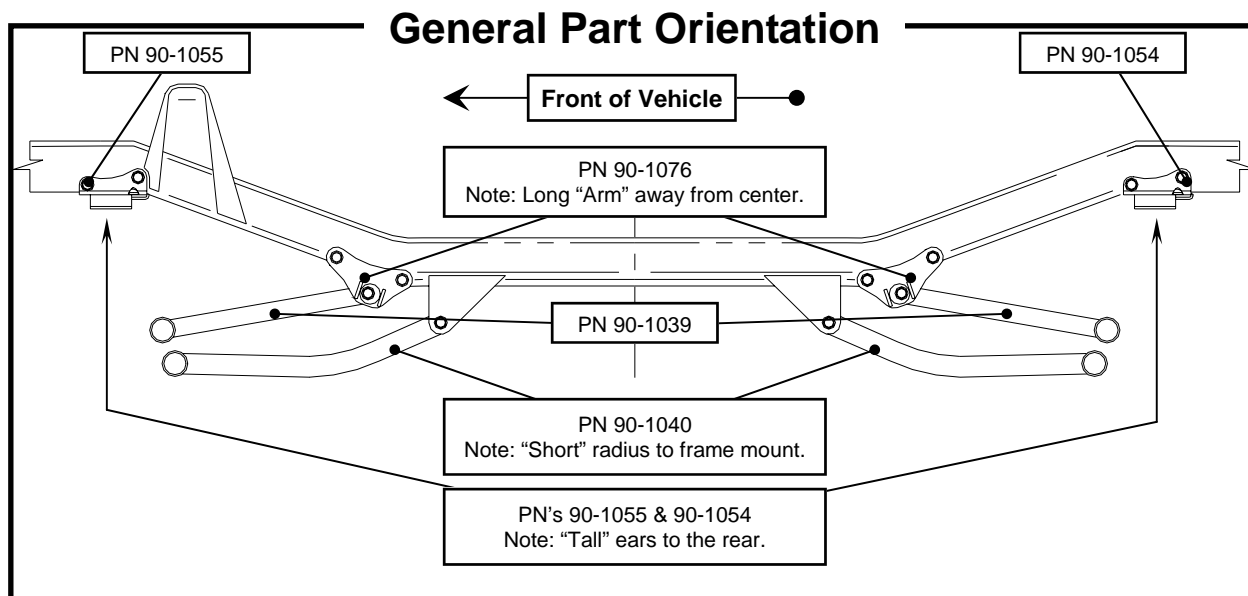


13. With the axle held firmly in position, center the cam bolt in the cam mount and slide it onto the frame rail until the cam mount is firmly against the bottom of the frame rail. Drill through the

frame with a 1/2" drill and install the 1/2" X 3 3/4" bolts, nuts, and washers. Torque these fasteners to 60 ft. lbs. See **Illustration 8**. By locating the upper arm cam mounts using this sequence, the rear pinion will have enough adjustment to compensate for varied ride height.

Note: EFI models may require removal of the gas filter shield to install 90-1076 on the driver side.

14. Assemble the lower coil mount (PN 90-1020) using **Illustration 10 & 11** as a guide and install the assembly to the rear coils.
15. Lower the axle enough to install the rear coils. Rotate the coils until the coil end contacts the stop on the upper mount. See detail in **Illustration 20**.
16. Install the lower 1/2" X 1 1/4" bolt, nut, and washers. Rotate the lower coil mount until it almost contacts the U-bolts and torque the 1/2" bolts to 70 ft. lbs. See **Illustration 19**.
17. Install your new Pro Comp shocks (PN 923500) and lower the axle until it hangs on the shocks. Rotate the drive shaft and make sure there is adequate clearance around both U-joints. If the drive shaft binds, drive shaft modification or lowering of the transfer case may be required to rectify the problem.
18. Install the wheels and lower the vehicle to the ground.
19. Install the track bar into the rear track bar mount. Use washers on both sides of the track bar bushing. Use factory bolt and torque to 65 ft. lbs. See **Illustration 12**.
20. Final caster adjustment on the front axle and rear pinion angle adjustments should be done at this time. When you are finished, torque all adjustment cams to 70 ft. lbs.



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)

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

M12-1.25x50 HHCS

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

- ### Final Checks and Adjustments:
- ⇒ Center the steering wheel.
 - ⇒ Have the front alignment adjusted.
 - ⇒ Readjust the headlights.
 - ⇒ Bleed the brakes, front and rear.
 - ⇒ Re-check all hardware after the first 100 miles of use and after each off highway use.
 - ⇒ Turn the steering wheel full left and full right to check for brake line clearance.
 - ⇒ Read and adhere to all warnings.
 - ⇒ Install handling decal to windshield.

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.

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| |
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