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

# PRO COMP SUSPENSION

Suspension Systems that Work!

***IMPORTANT! THIS KIT IS TO BE USED WITH THE PRO COMP 6 1/2" LIFT KIT ONLY***

**Part # 52484**
**(April) 1999-2004 FORD 4 X 4**
**SUPER DUTY F250- F350**
**ADD ON FOR 6 1/2" LIFT KIT**

***Not for use on vehicles made prior to 04-01-1999!***

This document contains very important information that includes warranty information and instructions for resolving problems you may encounter. Please keep it in the vehicle as a permanent record.

Box 1 of 3-PN **52484-1**

| Part # | Description | Qty. | Illus. | Page |
|---|---|---|---|---|
| **90-3007** | **SUPERDUTY 2" FRONT HANGER DROP (DRVR)** | **1** | **1,3,4** | **5,6** |
| **90-3002** | **SUPERDUTY 2" FRONT HANGER DROP (PASS)** | **1** | **-** | **-** |
| **90-3000** | **SUPERDUTY 2" FRONT SHACKLE** | **2** | **2** | **6** |
| **95-100F** | **1" ALUMINUM BLOCK** | **2** | **11B** | **12** |
| **90-4107** | **DRIVESHAFT SPACER** | **1** | **6** | **7** |
| **90-3053** | **REAR DRIVESHAFT SHIM** | **1** | **9** | **10** |
| **13-90180** | **ROUND U-BOLT: 5/8”X3 1/2”X15 3/4”** | **4** | **11A,11B** | **11,12** |
| **20-65471** | **Hardware Pack: 5/8” Hi nuts & Washers** | **1** | **11A,11B** | **11,12** |
| **90-6042** | **PART PACK CONTAINING:** | **2** | **-** | **-** |
| 45359 | 5/8” RUBBER HOURGLASS BUSHING | 4 | 5,10 | 7,10 |
| 60859H | 5/8” ODX12 MM IDX1.480” SLEEVE | 4 | 5,10 | 7,10 |
| **90-2446** | **SWAY BAR LINKS** | **4** | **5,10** | **8,10** |
| **90-6338** | **CAM HARDWARE PACK:** | **1** | **-** | **-** |
| 90-2033 | CAM TUBE | 2 | 8 | 9 |
| 90-2034 | .230 OFFSET HEX | 4 | 8 | 9 |
| **90-6343** | **HARDWARE PACK: TRACK BAR BOLTS** | **1** | **-** | **-** |
| 70-0564001000 | 9/16” X 4” SAE GR. 10 HEX BOLT | 2 | 8 | 9 |
| 72-05600201016 | 9/16” SAE GR. 10 STOVER NUT | 2 | 8 | 9 |
| 73-05600034 | 9/16” SAE HARDENED FLAT WASHER | 4 | 8 | 9 |
| **90-6339** | **HARDWARE PACK: BUMPER SUPPORT** | **1** | **-** | **-** |
| 73-0400830 | 7/16" SAE FLAT WASHER | 2 | 3 | 6 |
| 70-0431001800 | 7/16" X 1" GR. 8 HEX BOLT | 2 | 3 | 6 |
| 73-4300832 | 7/16" USS FLAT WASHER | 2 | 3 | 6 |
| 72-043100816 | 7/16" GR. 8 STOVER NUT | 2 | 3 | 6 |
| **90-6341** | **HARDWARE PACK: DRIVESHAFT/SWAY BAR** | **1** | **-** | **-** |
| .120C600HCS1Y | 12MM X 1.75 X 60 MM 10.9 HEX BOLT | 4 | 10 | 10 |
| 73-01200830 | 12MM SAE FLAT WASHER | 4 | 10 | 10 |
| 70-0431251800 | 7/16"-14 X 1 1/4" HEX BOLT GR. 8 | 2 | 9 | 10 |
| 73-0400830 | 7/16" SAE FLAT WASHER | 4 | 9 | 10 |
| 72-043100816 | 7/16"-14 UNITORQUE NUT GR.8 ZINC | 2 | 9 | 10 |
| 73-05000032 | 1/2" USS FLAT WASHER | 14 | 5,10 | 7,10 |
| 71-1207517508800 | 12MMX75MM 1.75 PITCH GR. 8.8 HEX BOLT | 2 | 10 | 10 |
| 72-01217508812 | 12MMX1.75 PITCH NYLOC NUT | 2 | 10 | 10 |

Box 2 of 2-PN **52484-2**

| | | | | |
|---|---|---|---|---|
| **929508** | **FRONT SHOCKS** | **2** | **-** | **-** |
| **936008** | **REAR SHOCKS** | **2** | **-** | **-** |

**Optional Equipment Available from your Pro Comp Distributor!**

| | |
|---|---|
| Front Dual Shock Kits: | PN 52410 DOUBLE BRACKET KIT |
| | PN 52420 DOUBLE HOOP KIT |
| Traction Bars: | PN 72400 TRACTION BARS |
| | PN 72099 MOUNTING KIT |
| Light Bars: | PN 24400 (Black), 24400G (Grey) |
| Steering Stabilizers: | PN 222570 |
| Front Crash Bar Kit: | PN 52483 |

Also, Check out our outstanding selection of Pro Comp tires to compliment your new installation!

# Important!

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, we recommend a wheel not to exceed 10” in width with a minimum backspacing of 4” must be used. Additionally, a quality tire of radial design, not exceeding 37” tall X 13.5” wide is also recommended. Please note that the use of a 37” X 13.5” 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.

## Before You Begin:

⇒ Read the instructions and study the illustrations before attempting the installation.

⇒ Separation the 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 parts and hardware against the parts list to assure that your kit is complete.

⇒ ALWAYS wear safety glasses when using power tools or working beneath your vehicle.

⇒ Always use NEW cotter pins on re-assembly! (These items are NOT supplied)

# 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:

⇒ Front suspension and head light realignment is necessary!

⇒ Speedometer and ABS recalibration will be necessary if larger tires (10% more than stock diameter) are installed.

⇒ **IT IS ADVISABLE THAT YOU HAVE HELP AVAILABLE WHEN INSTALLING THIS KIT. SOME COMPONENTS ARE HEAVY AND AWKWARD. AN ADDITIONAL SET OF HANDS IS GOOD INSURANCE AGAINST INJURY!**

# Front Installation:

1. Position your vehicle on a smooth, flat, hard surface (i.e. concrete or asphalt) and block the rear tires. Set the parking 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. Remove the track bar and set aside for later reinstallation.
4. Place the vehicle in neutral. Place your floor jack under the front axle and raise the vehicle. Place jack stands under the frame rails behind the front leaf spring shackles and lower the frame onto the stands. Remove the jack and place the vehicle back in gear, set the emergency brake, and place blocks both in front and behind the rear wheels.
5. Remove the front wheels on both sides.
6. Remove the front bumper, support brackets and all plastic push pins from the core support. If vehicle is equipped with driving lights and or a block heater you must first disconnect wiring harnesses to allow bumper removal. Save hardware for reinstallation.
7. Remove the factory lower crash bar if the vehicle came equipped with one. The factory bar will not be re installed with this kit.

***NOTE: It is highly recommended that you replace the discarded factory crash bar with the new Pro Comp crash bar kit # 52483.***

8. Remove the sway bar end links from both sides of the vehicle.
9. Remove the front shocks from the vehicle.
10. Remove the bolts that secure the disk brake calipers, lift the calipers off the rotor. Use wire tie or tie wraps to secure them up clear of the work area.

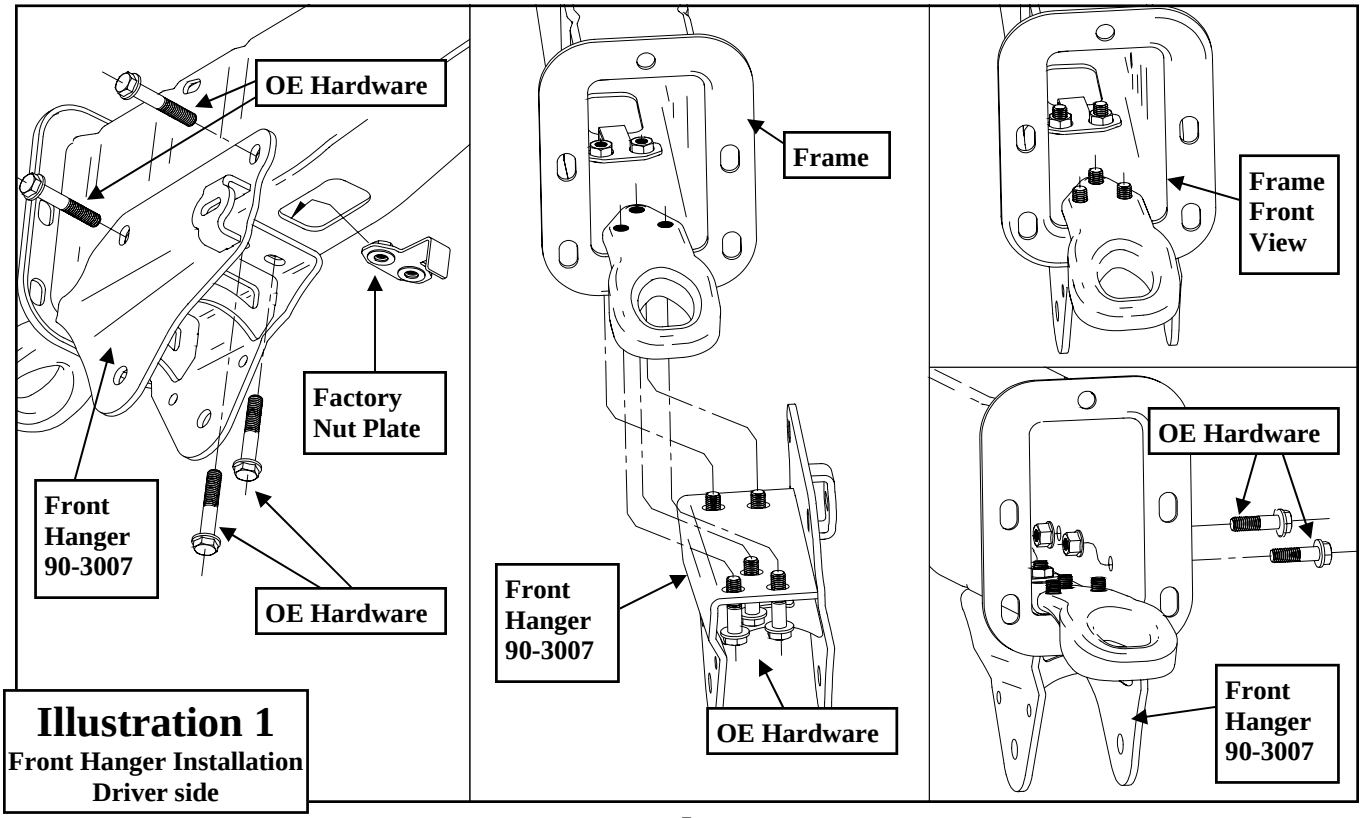
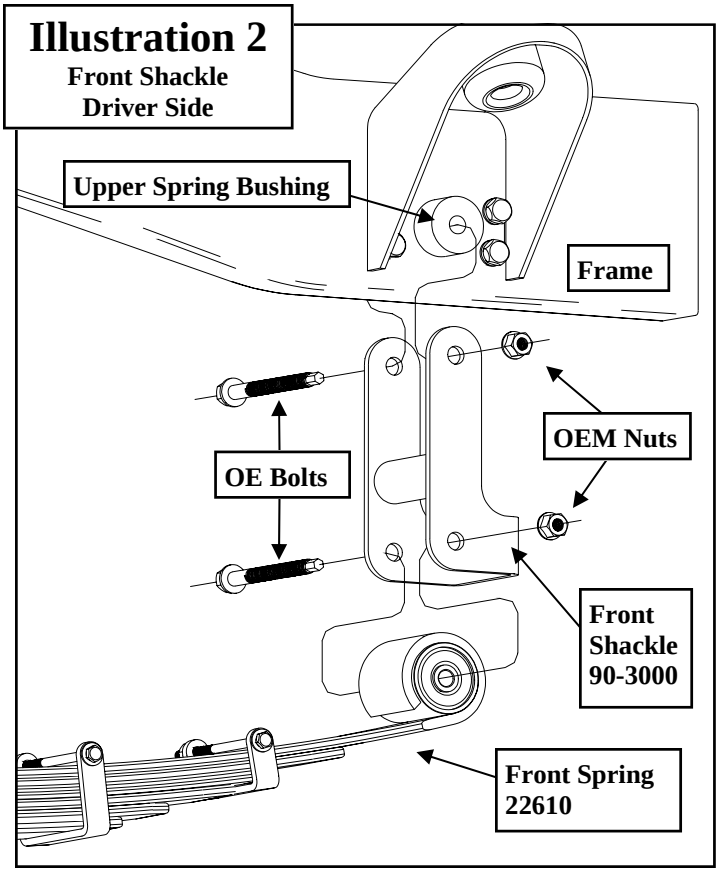
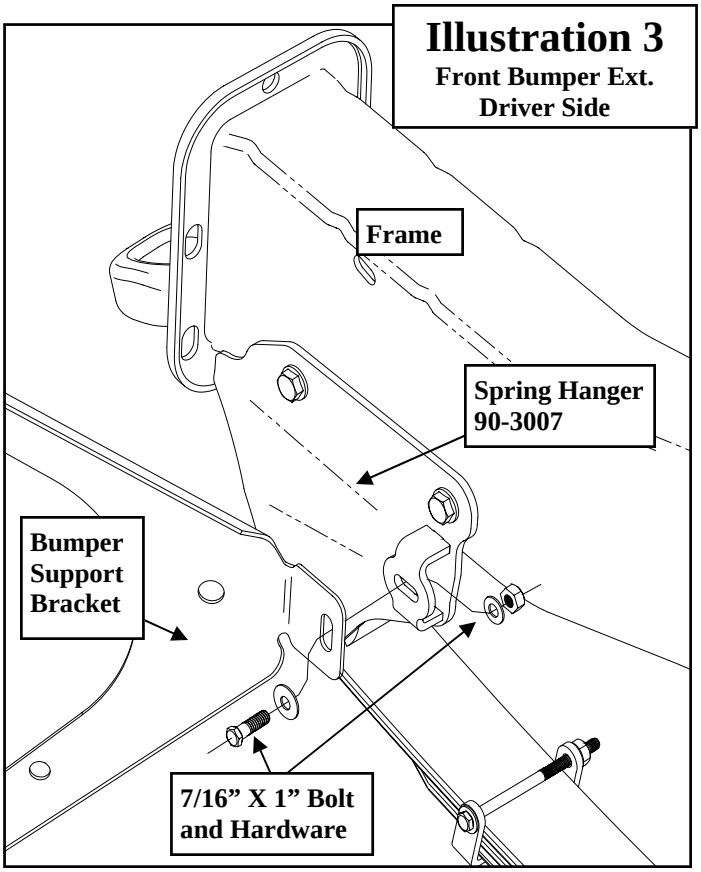



**Illustration 1**
**Front Hanger Installation Driver side**

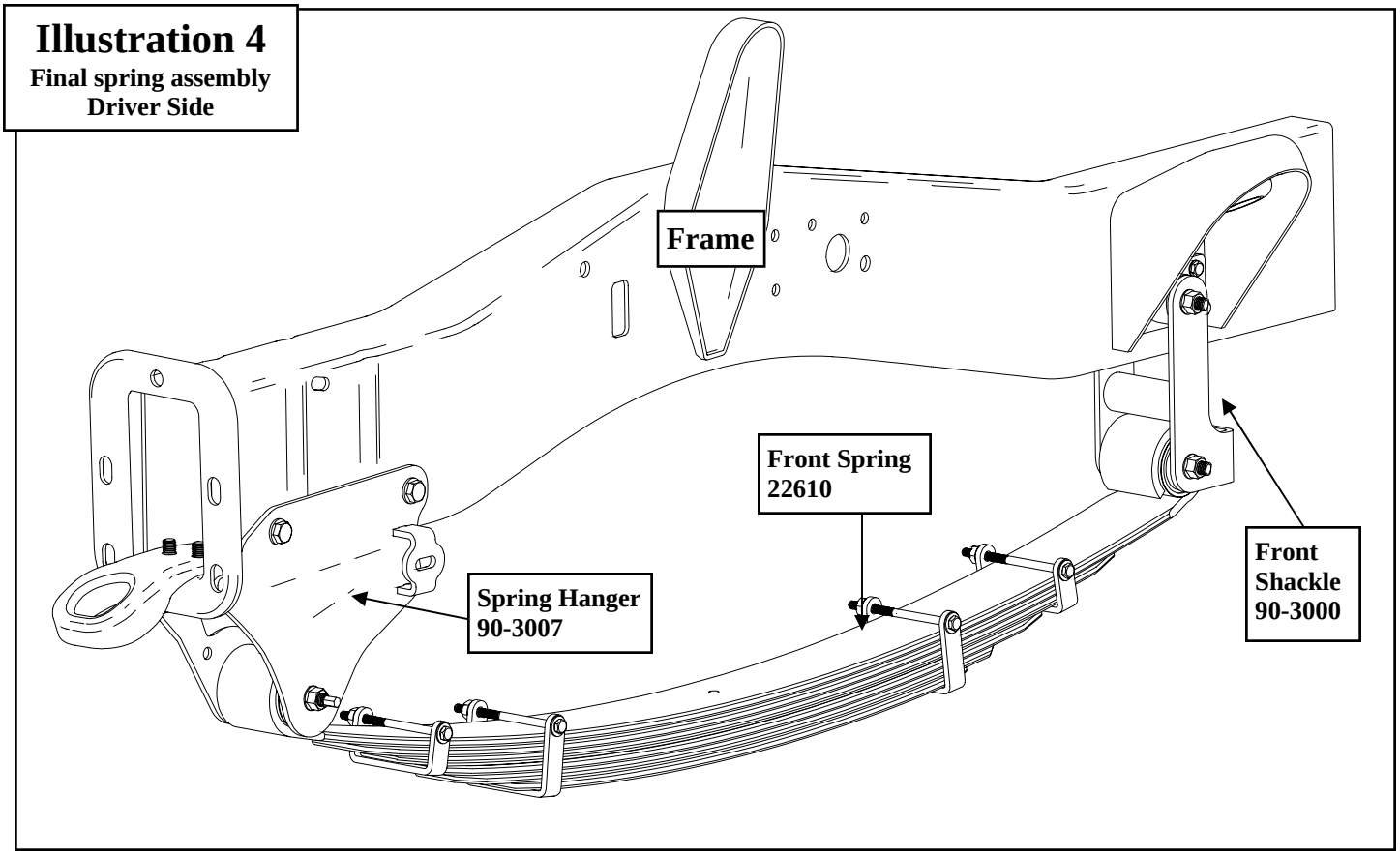
## Illustration 2
**Front Shackle**
**Driver Side**




## Illustration 3
**Front Bumper Ext.**
**Driver Side**




## Illustration 4
**Final spring assembly**
**Driver Side**



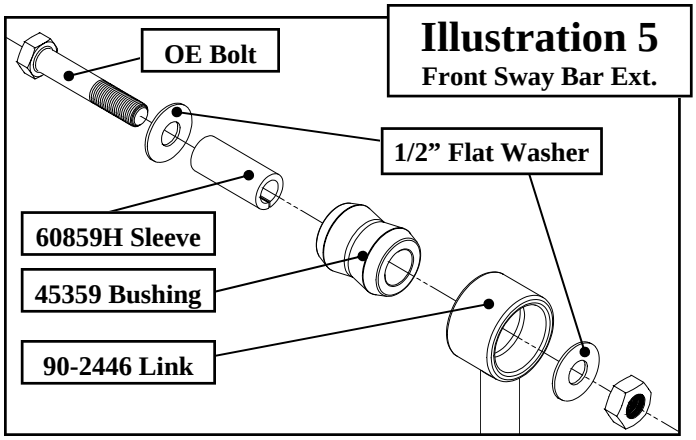



**Illustration 5**
**Front Sway Bar Ext.**

***NOTE: Be careful that you do not damage the brake lines! Never hang the calipers from the brake lines!***

11. Carefully support front axle with floor jack and remove front shackle spring bolts.
12. Remove the front shackles from the frame. Save all hardware for reuse.

    ***NOTE: It is necessary to loosen the passenger side upper shackle bushing to clear exhaust pipe when removing bolt. Leave loose until after reinstallation of new shackle.***

***TECH TIP: Factory spring bolts are secured with loctite which makes removal difficult. By warming the nut with a propane torch to approx. 300 degrees Fahrenheit the loctite will release and the hardware can be removed with hand tools.***

***NOTE: Have fire extinguisher extra handy whenever using a open flame on or near any vehicle.***

13. Install the front shackles **(PN 90-3000)** to the frame and the leaf spring to the shackles using previously removed hardware as shown in ILLUSTRATION 2. ***DO NOT*** torque at this time.
14. Remove the front spring bolts and lower front of springs to remove the factory front spring hangers. Save all hardware for reuse.
15. Install new front hanger drops **(PN 90-3007)** driver side and **(PN 90-3002)** passenger side using the previously removed hardware. The new hangers install exactly like the stock hangers using the previously removed **OE** hardware. SEE ILLUSTRATION 1.

***NOTE: If you purchased Pro Comp crash bar kit (PN 52483) install it at this time.***

16. Install the leaf springs into front spring hanger drops using existing **OE** hardware. Do not torque at this time.
17. Install the new shocks **(PN 929508)** and torque the mounting hardware to 60 ft. lbs.
18. Assemble **(2)** new front sway bar links **(PN 90-2446)** using the bushings **(PN 45359)** and sleeves **(PN 60859H)** supplied in parts pack **90-6042**. Install each side in the stock position using the previously removed **OE** hardware and supplied **1/2"** washers from pack **(90-6341).** See ILLUSTRATION 5. Torque this hardware to factory specifications.
19. Slip in new aluminum front driveshaft spacer **(PN 90-4107)** and fasten with supplied **12mm X 60mm** bolts and washers from hardware pack **(PN 90-6341)**. SEE ILLUSTRATION 6. Rotate driveshaft to check for binding. If it binds the driveshaft must be clearanced by a qualified driveline shop. SEE ILLUSTRATION 7**.**

***NOTE: The use of this driveshaft spacer is intended for light usage only. If the intended usage is for high speed off***

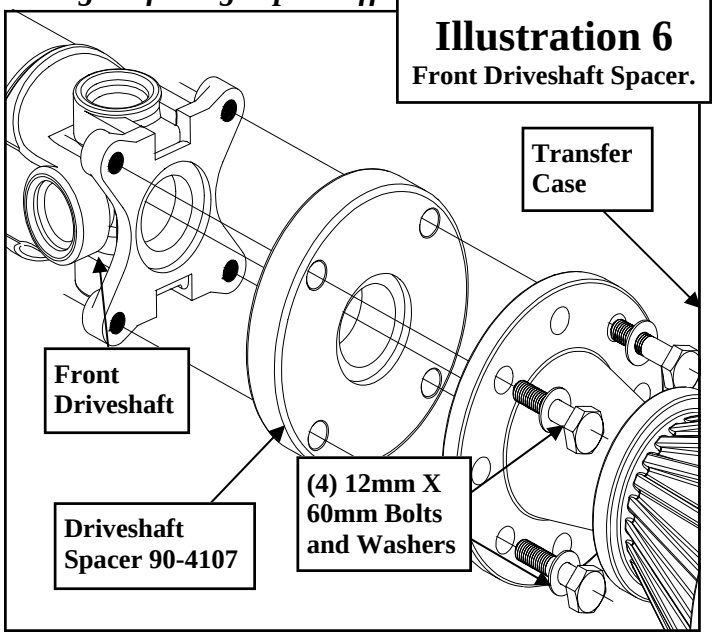



**Illustration 6**
**Front Driveshaft Spacer.**

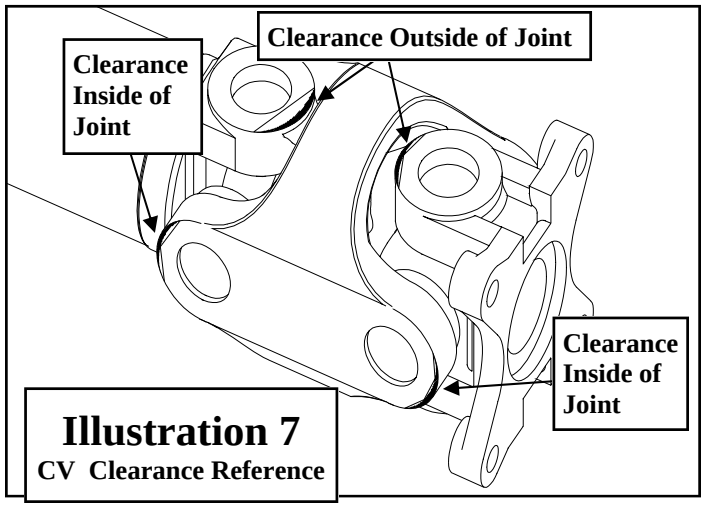



**Illustration 7**
**CV Clearance Reference**

***road, this spacer should not be installed. The factory front driveshaft should be lengthened by a qualified driveline shop.***

20. Re-install the front bumper using the previously removed **OE** hardware and the supplied **7/16" X 1 1/4"** hardware from hardware pack **(90-6339).** See ILLUSTRATION 3.

***NOTE: Loosening of the bumper support bracket bolts will aid in attaching bracket to spring hanger.***

***NOTE: Minor trimming of the lower plastic valance is required on vehicles equipped with one. Valance must be trimmed in order for the bumper to properly fit on the truck without contacting the front of the spring eye. Test fit, mark area, then remove and trim. See picture on page 13.***

***NOTE: It may be necessary to file smooth the inside of the track bar sleeves before continuing installation.***

21. Install offset drilled sleeves **(PN 90-2033)** into the track bar. Position sleeves so as to make the holes as far away from each other as possible. See ILLUSTRATION 8. ***(Press sleeves into holes, do not hammer).***

22. Install the two **.230** offset hex cams **(PN 90-2034)** from pack **(90-6338)** into the track bar bracket on the axle. Rotate until the hole in the cam is as close to the driver side as possible. Install track bar and **9/16" x 4"** bolt washers and nut from pack **(90-6343)**. Do not tighten at this time.

23. Reattach the brake calipers. Torque to factory specifications.

24. Carefully bend down factory front brake line brackets so that they are parallel with the ground.

***NOTE: Additional clearance may be necessary. Unbolt the bracket from the frame. Drill a 1/4" hole directly 2" below the existing hole and remount. Reroute all lines and wires to ensure that there is no rubbing, stretching or pinching.***

25. Install the wheels and set the vehicle on the ground. Torque the lug nuts according to manufacturers specifications.

26. Install the remaining **.230 hex cams** into the track bar bracket **(90-1318)** on driver side. The shoulder of the cam when installed must not protrude past the inside of the track bracket. See ILLUSTRATION 8.

27. Install track bar into bracket and rotate cams until they align with the hole in the track bar. Install **9/16" x 4 "** bolt, washers and nut from pack **(90-6343)**. It may be necessary to rotate cams on axle to help align track bar bolt holes. Torque **9/16" bolts** to 105 ft./lbs.

28. Torque the **18mm** spring mount bolts to 130 ft. lbs. Torque the **16mm** spring mount bolts to 115 ft. lbs. Torque the **9/16" U-bolts** to 100 ft.

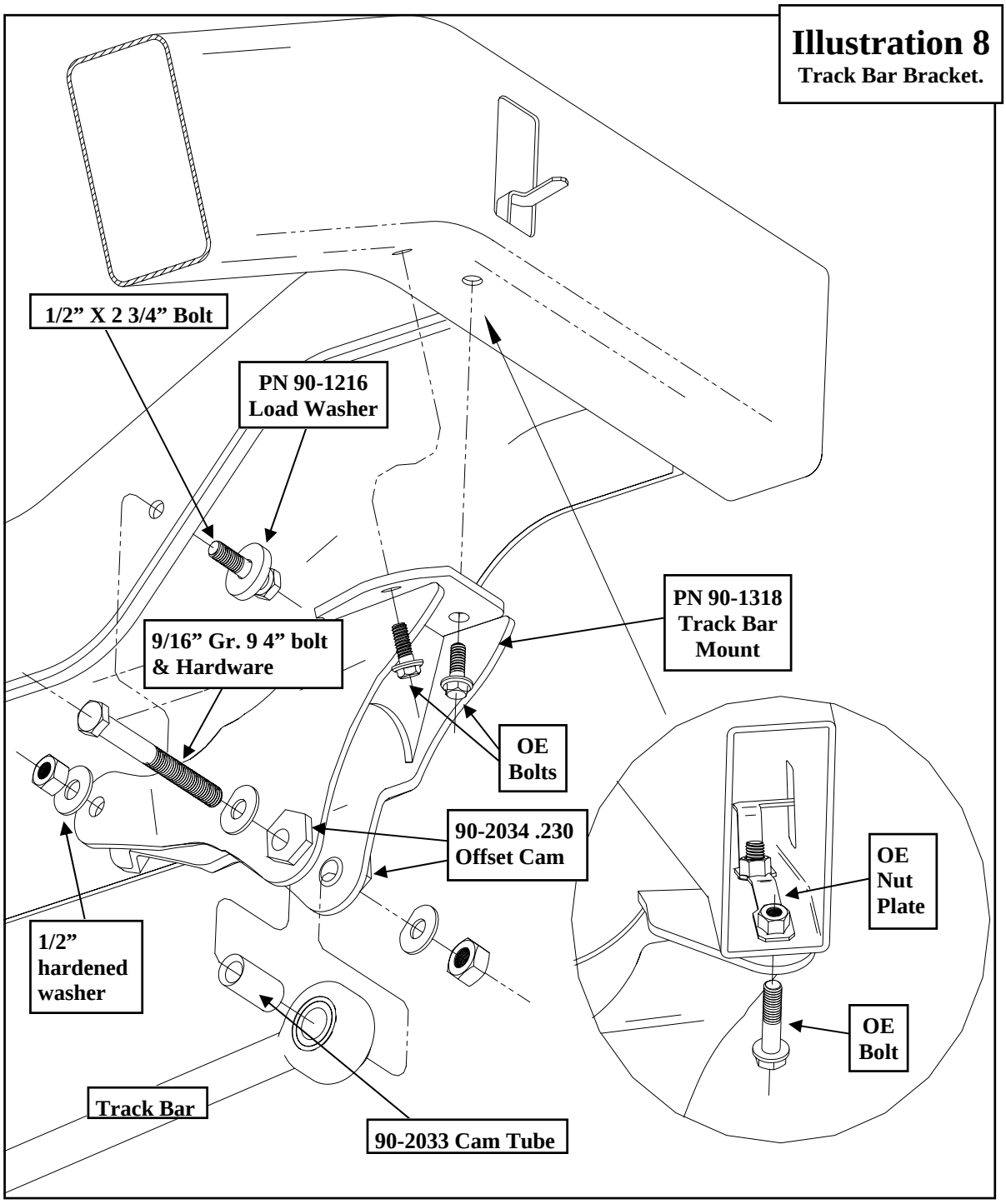


Illustration 8
Track Bar Bracket.
1/2” X 2 3/4” Bolt
PN 90-1216
Load Washer
PN 90-1318
Track Bar
Mount
9/16” Gr. 9 4” bolt
& Hardware
OE
Bolts
90-2034 .230
Offset Cam
OE
Nut
Plate
1/2”
hardened
washer
OE
Bolt
Track Bar
90-2033 Cam Tube

# Rear Installation:

1. Block the front tires and raise the rear of the vehicle. Support the frame with jack stands forward of the rear springs.
2. Remove the wheels and tires.
3. Remove the factory rear sway bars end links.
4. Remove the shocks on both sides of the vehicle. It may be necessary that you slightly raise the axle to unload the shocks for removal.
5. Carefully bend the factory brake line bracket down to provide adequate slack in the line. Remount differential vent tube and secure lines. Make sure there is no pinching, stretching or rubbing.
6. Loosen emergency brake cable bracket on driver side, over rear tire, and rotate it down into the larger hole below and refasten the bolt. Make sure there is no pinching, stretching or rubbing.
7. Support the rear axle with a floor jack and remove the **U-bolts** on the driver side.

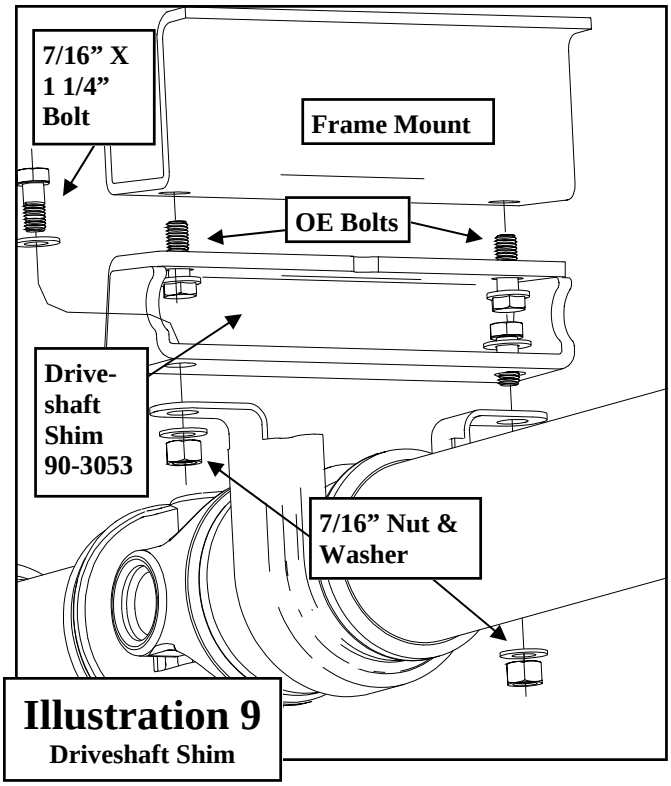



**Illustration 9**
**Driveshaft Shim**

Loosen the **U-bolts** on the passenger side.

8. Lower the rear axle and remove the block or blocks from the driver side.
9. The height of your factory block determines which combination of aluminum blocks you will need to use. See the note and ILLUSTRATIONS 11A,11B on the following pages for details.
10. Raise the axle to the spring and secure with the **5/8" U-bolts (PN 13-90180) 5/8"** hi-nuts **(PN 20-65471)** and washers supplied. Do not tighten these bolts at this time.
11. Torque the **U-bolts** to 115 ft. lbs.

**Repeat steps 7 thru 11 on the passenger side**

12. Install your new Pro Comp shocks **(PN 936008)** and torque this hardware to 60 ft. lbs.
13. Remove carrier bearing housing bolts and insert rear driveshaft shim **(PN 90-3053)** in between carrier bearing housing and frame mount. The open side will be facing to the front and the notch goes on the top. Use the **OE** bolts to secure the shim to the frame mount. Use the supplied **7/16" X 1 1/4" bolts** and hardware to secure the bearing housing to the shim. See ILLUSTRATION 9.
14. Assemble the remaining rear sway bar links **(PN 90-2446)** using the bushings **(PN 45359)** and sleeves **(PN**

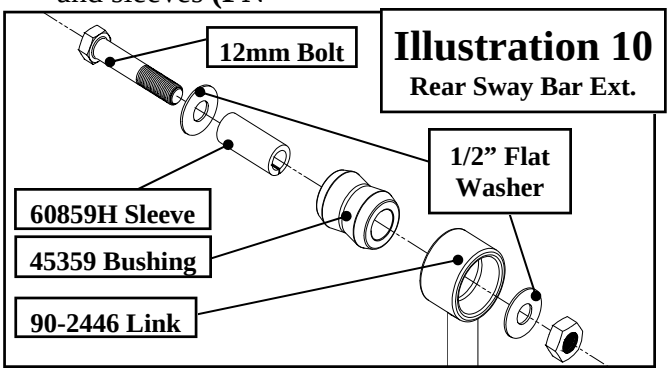
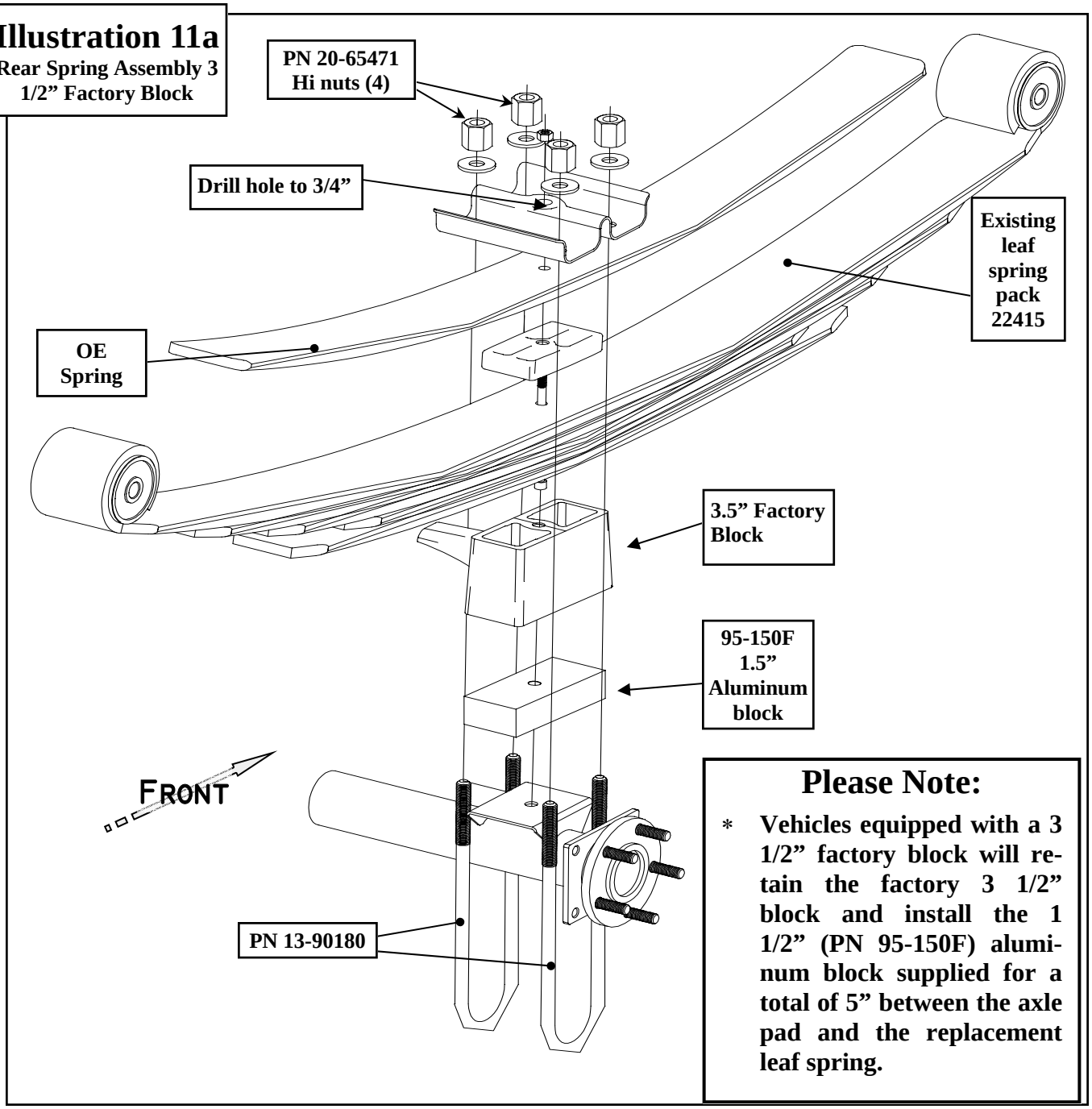



**Illustration 10**
**Rear Sway Bar Ext.**

**60859H)** supplied in parts pack **90-6042)** as seen in ILLUSTRATION 10. Install each side in the stock position using the new **12mm** bolts and nuts and **1/2"** washers supplied in hardware packs **(90-6341 and 90-6041)**. See ILLUSTRATION 10. The **75mm** bolt from hardware pack **(90-6341)** is used on the top mount and the **70 mm** bolt from hardware pack **(90-6041)** is used on the bottom mount. Torque this hardware to factory specifications.

15. Reinstall the wheels and tires and lower the vehicle to the ground. Torque the lug nuts to factory specifications.
16. Torque the spring bolts at this time. The **16mm** bolts are torqued to 115 ft. lbs. and the **18mm** bolts are torqued to 130 ft. lbs. Torque the **5/8" U-bolts** to 115 ft. lbs.

**Illustration 11a**
**Rear Spring Assembly 3 1/2" Factory Block**




## Please Note:

* **Vehicles equipped with a 3 1/2" factory block will retain the factory 3 1/2" block and install the 1 1/2" (PN 95-150F) aluminum block supplied for a total of 5" between the axle pad and the replacement leaf spring.**

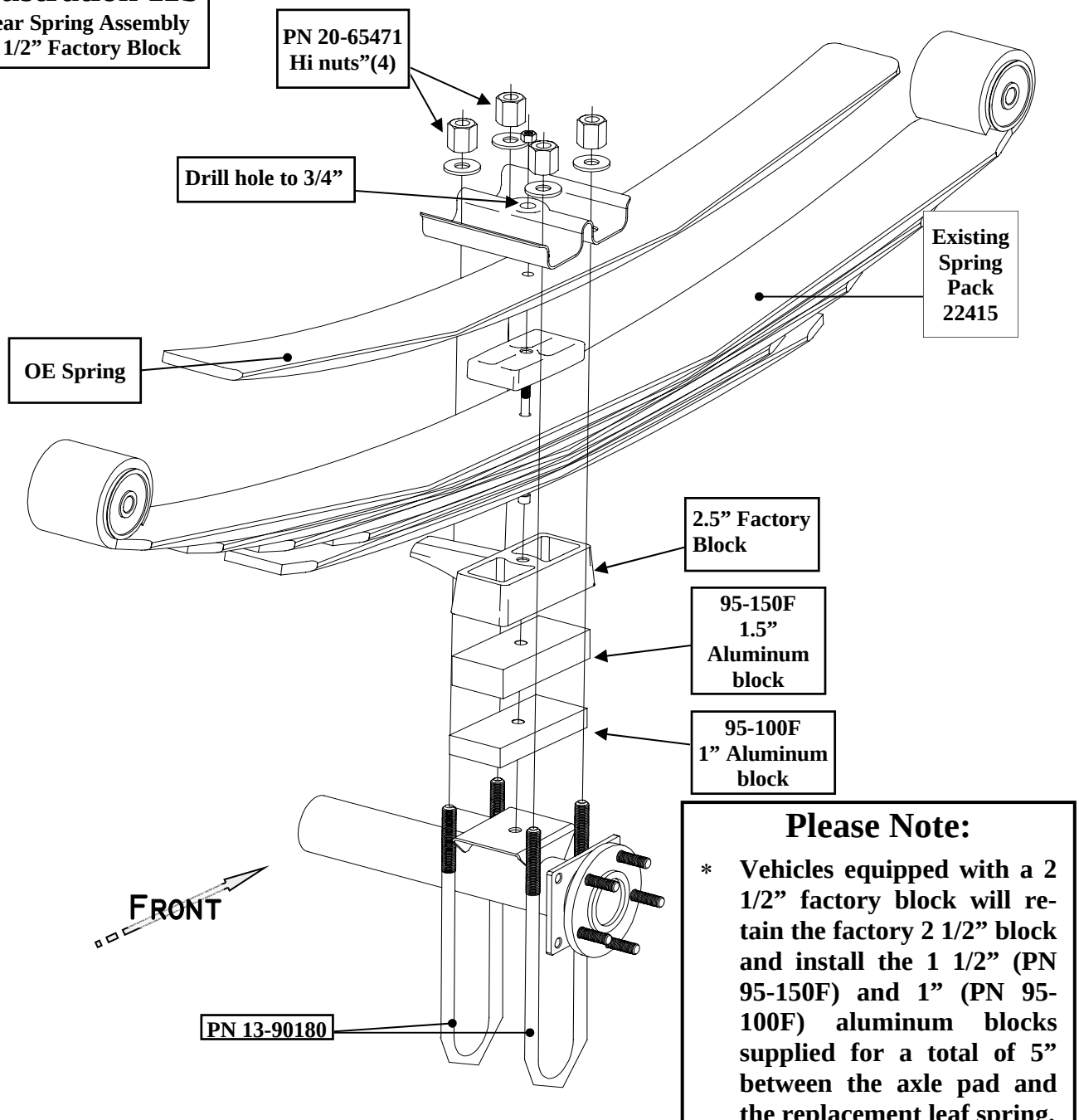
17. Re-check the wheel lug torque on all four wheels at this time.
18. Re-check ***all*** hardware **(both the front and the rear)** for proper installation and torque!!

⇒ **Have your headlights adjusted.**

⇒ **Recheck all hardware for tightness after the first 100 miles AND after any off road use.**

## Illustration 11b

**Rear Spring Assembly**
**2 1/2" Factory Block**



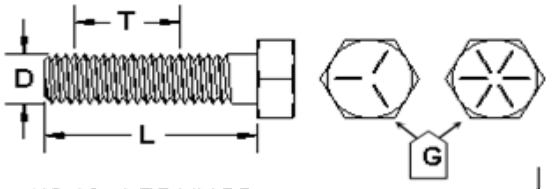

### Please Note:

* **Vehicles equipped with a 2 1/2" factory block will retain the factory 2 1/2" block and install the 1 1/2" (PN 95-150F) and 1" (PN 95-100F) aluminum blocks supplied for a total of 5" between the axle pad and the replacement leaf spring.**


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 |



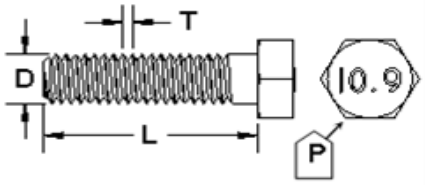

1/2-13x1.75 HHCS

D T L X

**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

D T L X

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:** _____