

# INSTALLATION GUIDE



Part#: 014454-014456



**HARDCORE LIMITED LIFETIME WARRANTY**

## 4.5" Suspension System

**Jeep Wrangler JK | 2007-2018**

Rev. 060324

491 W. Garfield Ave., Coldwater, MI 49036 • Phone: 517-279-2135

E-mail: [tech-bds@ridefox.com](mailto:tech-bds@ridefox.com)

# Read And Understand All Instructions And Warnings Prior To Installation Of System And Operation Of Vehicle.



## THANK YOU

Your truck is about to be fitted with the best suspension system on the market today. That means you will be driving the baddest looking truck in the neighborhood, and you'll have the warranty to ensure that it stays that way for years to come.

Thank you for choosing BDS Suspension!

### BEFORE YOU START

BDS Suspension Co. recommends this system be installed by a professional technician. In addition to these instructions, professional knowledge of disassembly/ reassembly procedures and post installation checks must be known.

### FOR YOUR SAFETY

Certain BDS Suspension products are intended to improve off-road performance. Modifying your vehicle for off-road use may result in the vehicle handling differently than a factory equipped vehicle. Extreme care must be used to prevent loss of control or vehicle rollover. Failure to drive your modified vehicle safely may result in serious injury or death. BDS Suspension Co. does not recommend the combined use of suspension lifts, body lifts, or other lifting devices. You should never operate your modified vehicle under the influence of alcohol or drugs. Always drive your modified vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Always wear your seat belt.

### BEFORE INSTALLATION

- Special literature required: OE Service Manual for model/year of vehicle. Refer to manual for proper disassembly/reassembly procedures of OE and related components.
- Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the OE manual.
- Larger rim and tire combinations may increase leverage on suspension, steering, and related components. When selecting combinations larger than OE, consider the additional stress you could be inducing on the OE and related components.
- Post suspension system vehicles may experience drive line vibrations. Angles may require tuning, slider on shaft may require replacement, shafts may need to be lengthened or trued, and U-joints may need to be replaced.
- Secure and properly block vehicle prior to installation of BDS Suspension components. Always wear safety glasses when using power tools.
- If installation is to be performed without a hoist, BDS Suspension Co. recommends rear alterations first.
- Due to payload options and initial ride height variances, the amount of lift is a base figure. Final ride height dimensions may vary in accordance to original vehicle attitude. Always measure the attitude prior to beginning installation.



Visit [560plus.com](http://560plus.com) for more information.

### TIRES AND WHEELS

37x12.50 on 16x8  
4.5" Backspace Wheel



### BEFORE YOU DRIVE

Check all fasteners for proper torque. Check to ensure for adequate clearance between all rotating, mobile, fixed, and heated members. Verify clearance between exhaust and brake lines, fuel lines, fuel tank, floor boards and wiring harness. Check steering gear for clearance. Test and inspect brake system.

Perform steering sweep to ensure front brake hoses have adequate slack and do not contact any rotating, mobile or heated members. Inspect rear brake hoses at full extension for adequate slack. Failure to perform hose check/ replacement may result in component failure. Longer replacement hoses, if needed can be purchased from a local parts supplier.

Perform head light check and adjustment.

Re-torque all fasteners after 500 miles. Always inspect fasteners and components during routine servicing.

# CONTENTS OF YOUR KIT

| 014454 Box Kit |     |                                    |
|----------------|-----|------------------------------------|
| Part #         | Qty | Description                        |
| 084402R        | 1   | Pitman Arm - JK                    |
| 3396           | 2   | 3" x 3" Front Bump Stop            |
| 92025          | 2   | Sway Bar Links                     |
| 01964B         | 1   | JK Front Trackbar Bracket          |
| 01393B         | 1   | Trackbar Support Bracket           |
| 01967B         | 1   | JK Rear Trackbar Bracket           |
| 03574          | 1   | Drv Rear Bump Spacer               |
| 03575          | 1   | Pass Rear Bump Spacer              |
| A187           | 2   | JK Adjustable Rear UCA Assembly    |
| 01871          | 1   | JK Rear UCA                        |
| A180           | 1   | JK Rear UCA Forged Flex Assembly   |
| 02524          | 1   | Forged Housing - Small             |
| 01886          | 1   | 2.32" Wide Small Flex Ball         |
| 01338          | 2   | Small Spherical Bushing            |
| 01319          | 1   | Small Flex Joint Washer            |
| 68061          | 1   | 1-5/8" Circlip                     |
| 516            | 1   | Straight Grease Zerk               |
| 36270B         | 1   | 1"-14 Jam Nut                      |
| MB08B707750    | 1   | JK Rear UCA Bushing                |
| B1030          | 1   | Bag Kit - Bolt Packs               |
| 438            | 1   | Bolt Pack                          |
|                | 2   | 3/8"-16 x 3-1/2" Bolt              |
|                | 2   | 3/8" USS Washer                    |
|                | 1   | 3/8"-16 x 1" Self-Tapping Bolt     |
| 562            | 1   | Bolt Pack - Trackbar Hardware      |
|                | 2   | 7/16"-14 x 1" Bolt - Grade 8       |
|                | 4   | 7/16" SAE Washer                   |
|                | 2   | 7/16"-14 Prevailing Torque Nut     |
|                | 1   | 9/16"-12 x 3" Bolt - Grade 8       |
|                | 2   | 9/16" SAE Thru-Hardened Washer     |
|                | 1   | 9/16"-12 Prevailing Torque Nut     |
|                | 1   | 1/2"-13 x 1" Bolt - Grade 8        |
|                | 1   | 1/2"-13 Heavy Square Nut           |
|                | 1   | 1/2" SAE Washer                    |
| 563            | 1   | Bolt Pack - Rear Trackbar Hardware |
|                | 1   | 9/16"-12 x 3" Bolt - Grade 8       |
|                | 1   | 9/16"-12 x 3-1/2" Bolt - Grade 8   |
|                | 4   | 9/16" SAE Thru-Hardened Washer     |
|                | 2   | 9/16"-12 Prevailing Torque Nut     |
|                | 1   | 3/8"-16 x 1-1/4" Bolt - Grade 8    |
|                | 2   | 3/8" SAE Thru-Hardened Washer      |
|                | 1   | 3/8"-16 Prevailing Torque Nut      |
| 645            | 1   | Bolt Pack                          |
|                | 2   | 3/8"-16 x 1-1/4" Bolt - Grade 8    |
|                | 2   | 3/8"-16 Prevailing Torque Nut      |
|                | 4   | 3/8" SAE Washer                    |
|                | 1   | 9/16"-12 x 3-1/2" Bolt - Grade 8   |
|                | 2   | 9/16" SAE Washer                   |
|                | 1   | 9/16"-12 Prevailing Torque Nut     |

| 014454 Box Kit |   |  |
|----------------|---|--|
| 704            | 1 | Bolt Pack - Front Brake Line Brackets                  |
|                | 2 | 1/4"-20 Prevailing Torque Nut                          |
|                | 2 | 1/4" SAE Washer  |
| 758            | 1 | Bolt Pack - Rear Sway Bar Links                        |
|                | 2 | 12mm x 60mm Bolt                                       |
|                | 2 | 12mm Prevailing Torque Nut                             |
|                | 4 | 1/2" SAE Washer  |
| 763            | 1 | Bolt Pack - Rear Hardware                              |
|                | 2 | 5/16"-18 x 1-1/4" Bolt - Grade 8                       |
|                | 2 | 5/16"-18 x 7/8" Bolt - Grade 8                         |
|                | 4 | 5/16"-18 Prevailing Torque Nut                         |
|                | 8 | 5/16" SAE Flat Washer                                  |
|                | 2 | 1/4"-20 x 1" Type 23 self threading bolts - clear zinc |
| 768            | 1 | Bolt Pack - Rear Brake Line Relocation Brkts           |
|                | 2 | 1/4"-20 x 3/4" Bolt                                    |
|                | 2 | 1/4"-20 Nylock Nut                                     |
|                | 4 | 1/4" USS Washer  |
| B1031          | 1 | Bag Kit - Misc   |
| SB58BK         | 4 | 5/8" Bushing   |
| 62147          | 4 | 5/8" X 12mm ID x 1.375" Sway Bar Link Sleeves          |
| 69             | 1 | 3/4" x 9/16" ID x 1.375" Sleeve                        |
| 54587          | 1 | 3/4" x 9/16" ID x 1.575" Track Bar Spacer Sleeve       |
| 01716          | 2 | Front Brakeline Drop Brackets                          |
| JKBL-D         | 1 | DRV - JK Rear Brakeline Bracket                        |
| JKBL-P         | 1 | Pass - JK Rear Brakeline Bracket                       |
| 099000         | 4 | Zip Ties   |
| W96S           | 4 | 9/16" SAE Washers - Skid Plate Spacers                 |
| 3005           | 4 | Quick Disconnect Pin                                   |
| M03212-BK-01   | 2 | Offset Poly Sway Bar Spacer                            |
| A1046          | 2 | Stainless Steel Stud w/ Nut                            |
| 03013          | 1 | Stainless Steel Disconnect Post                        |
| 37130          | 1 | 1/2"-20 Nylock Nut                                     |
| A1045          | 1 | Stainless Steel Stud w/ Nut                            |
| 03017          | 1 | Stainless Steel Disconnect Post                        |
| 37130          | 1 | 1/2"-20 Nylock Nut                                     |
| A1044          | 1 | Stainless Steel Stud w/ Nut                            |
| 03018          | 1 | Sainless Steel Disconnect Post                         |
| 37130          | 1 | 1/2"-20 Nylock Nut                                     |
| 01399          | 2 | 11.5" Long Lanyard                                     |
| 768            | 1 | Bolt Pack - Sway Bar Links                             |
| A1024          | 2 | Sway Bar Disconnects                                   |
| 03010          | 1 | Female Disconnect End - Long                           |
| 03011          | 1 | Male Disconnect End - Long                             |
| M00475-BK-01   | 2 | Spherical Bushing                                      |
| 7050R          | 2 | Grease Zerk Cap  |
| 7607           | 2 | Press In Grease Zerk                                   |
| 36264          | 1 | 5/8"-18 Jam Nut  |

| 014456 Box Kit - RUBICON |     |                                    |
|--------------------------|-----|------------------------------------|
| Part #                   | Qty | Description                        |
| 084402R                  | 1   | Pitman Arm - JK                    |
| 3396                     | 2   | 3" x 3" Front Bump Stop            |
| 92025                    | 2   | Sway Bar Links                     |
| 01964B                   | 1   | JK Front Trackbar Bracket          |
| 01393B                   | 1   | Trackbar Support Bracket           |
| 01967B                   | 1   | JK Rear Trackbar Bracket           |
| 01928B                   | 2   | JK Rear Bump Stop                  |
| A187                     | 2   | JK Adjustable Rear UCA Assembly    |
| 01871                    | 1   | JK Rear UCA                        |
| A180                     | 1   | JK Rear UCA Forged Flex Assembly   |
| 02524                    | 1   | Forged Housing - Small             |
| 01886                    | 1   | 2.32" Wide Small Flex Ball         |
| 01338                    | 2   | Small Spherical Bushing            |
| 01319                    | 1   | Small Flex Joint Washer            |
| 68061                    | 1   | 1-5/8" Circlip                     |
| 516                      | 1   | Straight Grease Zerk               |
| 36270B                   | 1   | 1"-14 Jam Nut                      |
| MB08B707750              | 1   | JK Rear UCA Bushing                |
| 911110                   | 2   | Front Rubicon Sway Bar Links 9"    |
| B1030                    | 1   | Bag Kit - Bolt Packs               |
| 438                      | 1   | Bolt Pack                          |
|                          | 2   | 3/8"-16 x 3-1/2" Bolt              |
|                          | 2   | 3/8" USS Washer                    |
|                          | 1   | 3/8"-16 x 1" Self-Tapping Bolt     |
| 562                      | 1   | Bolt Pack - Trackbar Hardware      |
|                          | 2   | 7/16"-14 x 1" Bolt - Grade 8       |
|                          | 4   | 7/16" SAE Washer                   |
|                          | 2   | 7/16"-14 Prevailing Torque Nut     |
|                          | 1   | 9/16"-12 x 3" Bolt - Grade 8       |
|                          | 2   | 9/16" SAE Thru-Hardened Washer     |
|                          | 1   | 9/16"-12 Prevailing Torque Nut     |
|                          | 1   | 1/2"-13 x 1" Bolt - Grade 8        |
|                          | 1   | 1/2"-13 Heavy Square Nut           |
|                          | 1   | 1/2" SAE Washer                    |
| 563                      | 1   | Bolt Pack - Rear Trackbar Hardware |
|                          | 1   | 9/16"-12 x 3" Bolt - Grade 8       |
|                          | 1   | 9/16"-12 x 3-1/2" Bolt - Grade 8   |
|                          | 4   | 9/16" SAE Thru-Hardened Washer     |
|                          | 2   | 9/16"-12 Prevailing Torque Nut     |
|                          | 1   | 3/8"-16 x 1-1/4" Bolt - Grade 8    |
|                          | 2   | 3/8" SAE Thru-Hardened Washer      |
|                          | 1   | 3/8"-16 Prevailing Torque Nut      |
| 645                      | 1   | Bolt Pack                          |
|                          | 2   | 3/8"-16 x 1-1/4" Bolt - Grade 8    |
|                          | 2   | 3/8"-16 Prevailing Torque Nut      |
|                          | 4   | 3/8" SAE Washer                    |
|                          | 1   | 9/16"-12 x 3-1/2" Bolt - Grade 8   |
|                          | 2   | 9/16" SAE Washer                   |
|                          | 1   | 9/16"-12 Prevailing Torque Nut     |

| 014456 Box Kit - RUBICON |   |  |
|--------------------------|---|--|
| 704                      | 1 | Bolt Pack - Front Brake Line Brackets            |
|                          | 2 | 1/4"-20 Prevailing Torque Nut                    |
|                          | 2 | 1/4" SAE Washer                                  |
| 758                      | 1 | Bolt Pack - Rear Sway Bar Links                  |
|                          | 2 | 12mm x 60mm Bolt                                 |
|                          | 2 | 12mm Prevailing Torque Nut                       |
|                          | 4 | 1/2" SAE Washer                                  |
| 763                      | 1 | Bolt Pack - Rear Hardware                        |
|                          | 2 | 5/16"-18 x 1-1/4" Bolt - Grade 8                 |
|                          | 2 | 5/16"-18 x 7/8" Bolt - Grade 8                   |
|                          | 4 | 5/16"-18 Prevailing Torque Nut                   |
|                          | 8 | 5/16" SAE Flat Washer                            |
|                          | 2 | 1/4"-20 x 1" Type 23 self threading bolts        |
| 768                      | 1 | Bolt Pack - Rear Brake Line Relocation Brkt      |
|                          | 2 | 1/4"-20 x 3/4" Bolt                              |
|                          | 2 | 1/4"-20 Nylock Nut                               |
|                          | 4 | 1/4" USS Washer                                  |
| B1031                    | 1 | Bag Kit - Misc                                   |
| SB58BK                   | 4 | 5/8" Bushing                                     |
| 62147                    | 4 | 5/8" X 12mm ID x 1.375" Sway Bar Link Sleeves    |
| 69                       | 1 | 3/4" x 9/16" ID x 1.375" Sleeve                  |
| 54587                    | 1 | 3/4" x 9/16" ID x 1.575" Track Bar Spacer Sleeve |
| 01716                    | 2 | Front Brakeline Drop Brackets                    |
| JKBL-D                   | 1 | DRV - JK Rear Brakeline Bracket                  |
| JKBL-P                   | 1 | Pass - JK Rear Brakeline Bracket                 |
| 099000                   | 4 | Zip Ties   |
| W96S                     | 4 | 9/16" SAE Washers - Skid Plate Spacers           |
| B554                     | 1 | Bag Kit - Rubicon Sway Bar Links                 |
| 46                       | 4 | 3/4" x 1/2" ID x 1.450" Sleeve                   |
| SB34BK                   | 4 | 3/4" ID Hourglass Bushing                        |
| B12X3G5                  | 2 | 1/2" X 3" Bolt                                   |
| N12PT                    | 2 | 1/2" Prevailing Torque Nut                       |
| W12S                     | 4 | 1/2" Washer                                      |

**124314 Box Kit (2012+ Only)**

| Part # | Qty | Description              |
|--------|-----|--------------------------|
| 01839  | 1   | Exhaust Extension - Drv. |
| 01840  | 1   | Exhaust Extension - Pass |
| 814    | 1   | Bolt Pack                |
|        | 2   | 8mm x 70mm bolt          |
|        | 2   | 8mm x 60mm bolt          |
|        | 4   | 5/16" SAE washer         |

**2 Door Coil Springs**

| Part # | Qty | Description                          |
|--------|-----|--------------------------------------|
| 034311 | 2   | Front Coil Springs - taller (2 door) |
| 034319 | 2   | Rear Coil Springs (2 door)           |

**124339 Box Kit**

| Part # | Qty | Description                 |
|--------|-----|-----------------------------|
| A182   | 2   | Rear LCA w/ rubber bushings |

**124331 Box Kit**

| Part # | Qty | Description                  |
|--------|-----|------------------------------|
| A181   | 2   | Front LCA w/ rubber bushings |



#1425H - 4" Lift Kit Shown with Optional Adjustable Lower Control Arms

## TROUBLESHOOTING INFORMATION FOR YOUR VEHICLE

1. Will not fit 2wd models.
2. Exhaust modification may be required.

**TECH  
TIPS**

# INSTALLATION INSTRUCTIONS

## PRE-INSTALLATION NOTES

1. Stock wheels cannot be re-installed due to interference with the rear sway bar links.
2. If Fox 2.0 series shocks are being installed. BDS front (104002) and rear (104006) stainless steel brake lines are recommended.

## SPECIAL TOOLS

Pitman arm puller

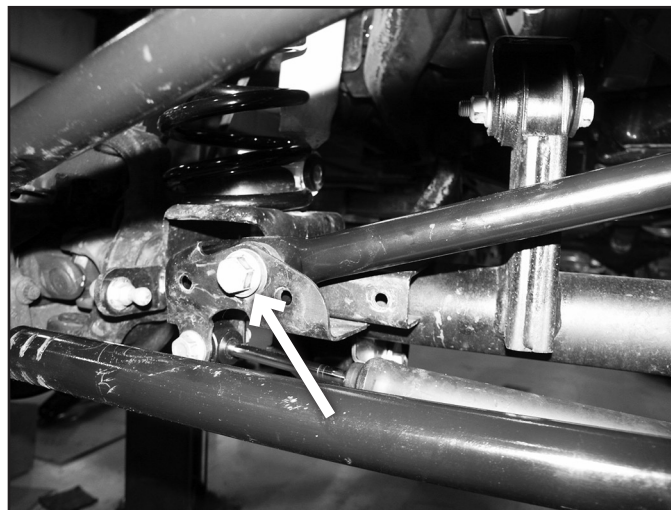
## INSTALLATION INSTRUCTIONS

3. Park the vehicle on a clean, flat surface and block the rear wheels for safety.
4. Measure from the center of the wheel up to the bottom edge of the wheel opening and record below:

LF \_\_\_\_\_ RF \_\_\_\_\_ LR \_\_\_\_\_ RR \_\_\_\_\_

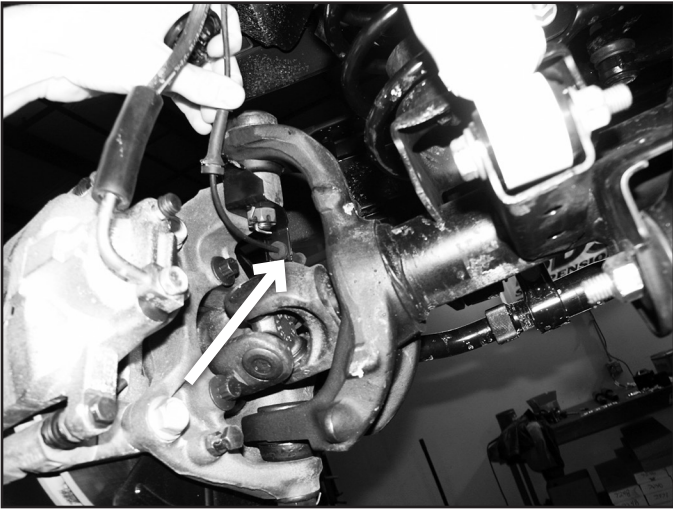
5. Disconnect the front track bar from the passenger's side of the front axle. (Fig 1)

**FIGURE 1**



6. Raise the front of the vehicle and support the frame with jack stands behind the front lower control arm pockets.
7. Remove the wheels. Remove the 3 bolts mounting the transmission skid plate and remove it from the vehicle.
8. Disconnect ABS wires from rubber grommets below outer knuckle (Fig 2). Disconnect wire from plastic clips on the OE brake line.
9. Disconnect brake line brackets from frame (Fig 3) and at the axle on newer models. Save hardware.

**FIGURE 2**



**FIGURE 3**



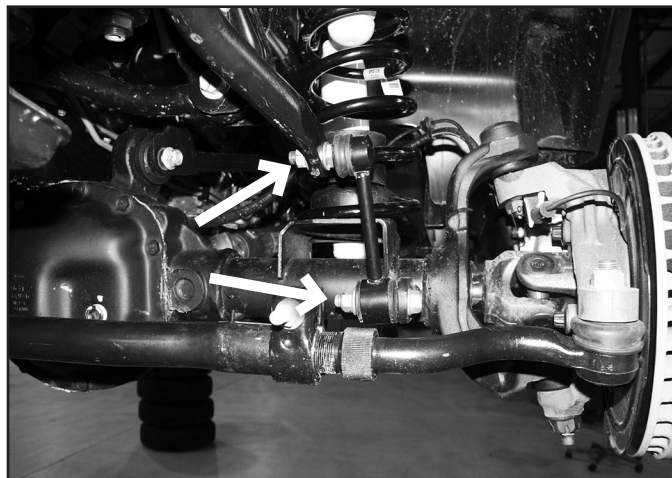
10. Remove the OE steering stabilizer. Save hardware. Leave the stabilizer bracket on tie rod. (Fig 4)

**FIGURE 4**



11. Disconnect the sway bar links from the axle and sway bar. (Fig 5)

**FIGURE 5**



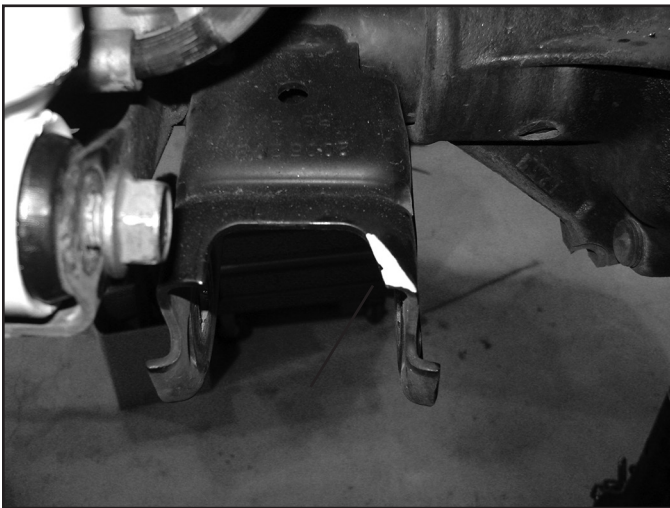
12. Disconnect the steering drag link from the pitman arm. Remove the tie rod end nut and dislodge the tie rod end from the pitman arm with the appropriate puller or pickle fork. Retain tie rod end nut.
13. Make indexing marks on the pitman arm to indicate the position relative to the splines. Remove pitman arm from steering box with appropriate puller. Retain hardware. (Fig 6)

**FIGURE 6**

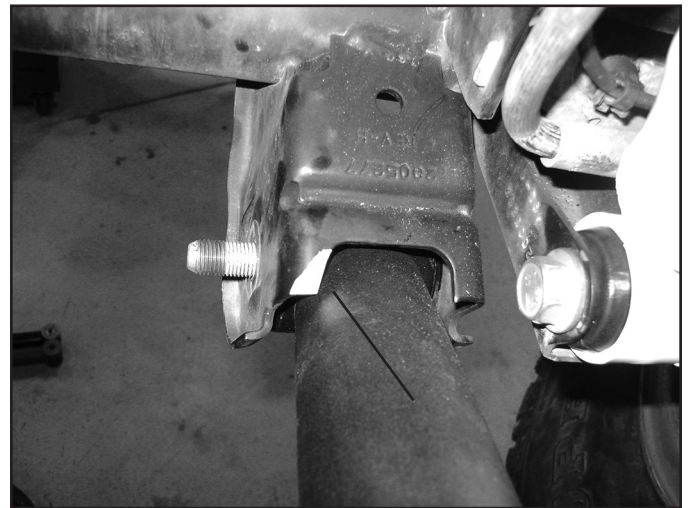


14. Transfer indexing marks on pitman arm to the new pitman arm. Install new pitman arm with OE hardware. Tighten to 185 ft-lbs.
15. 2012+ models only: Locate and install the 124314 Exhaust Extension Kit with the instructions included in the kit.
16. Support the front axle with a hydraulic jack. Remove the front shocks from the vehicle. Save lower mounting hardware.
17. Lower the front axle and remove the coil springs from the vehicle.
18. If working on a JK with front axle alignment eccentric bolts at the axle, mark the cam position for reference later.
19. With the axle well supported, remove the lower control arm bolts at the axle and frame. Remove both lower control arms from the vehicle. Save hardware.
20. Using a grinder, remove the material from the control arm mounts as shown for control arm clearance. (Figures 7a, 7b).

**FIG. 7A DRIVERS SIDE SHOWN**



**FIG. 7B PASSENGER SIDE SHOWN**



21. Using the OE hardware, install the arms so the bend is up and towards the center (Figure 8). The bend is centered. It may be necessary to raise or lower the axle to align the control arm bolts. Leave hardware loose, it will be tightened with the vehicle at ride height.

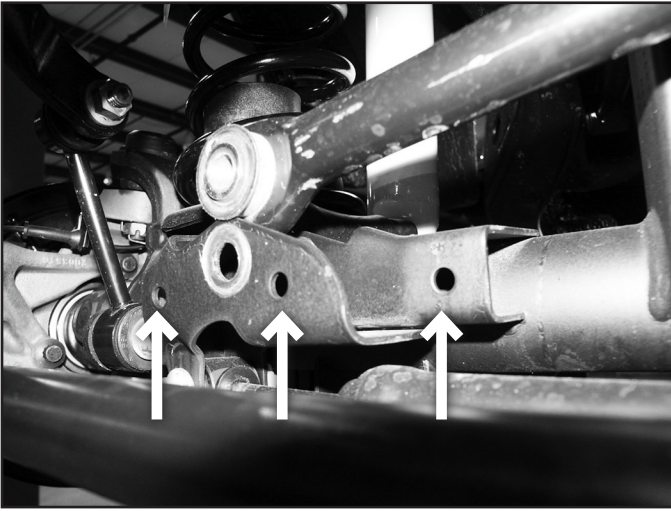
**FIGURE 8**



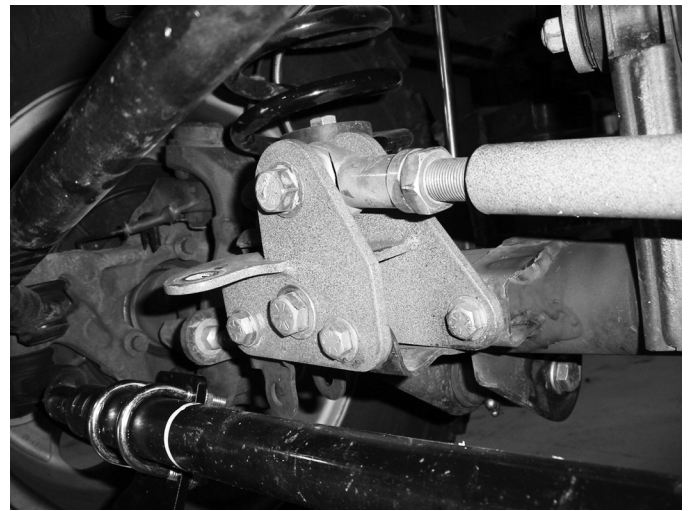


22. Drill the two small hole in the front face of the OE track bar bracket to 7/16". Drill the single small hole in the back face of the bracket to 1/2". Place track bar relocation bracket over the OE mount. Install the provided (69) crush sleeve (0.750 x 0.083 x 1.375) between bracket and OE pocket. (Fig 9A/B)

**FIGURE 9A**



**FIGURE 9B**



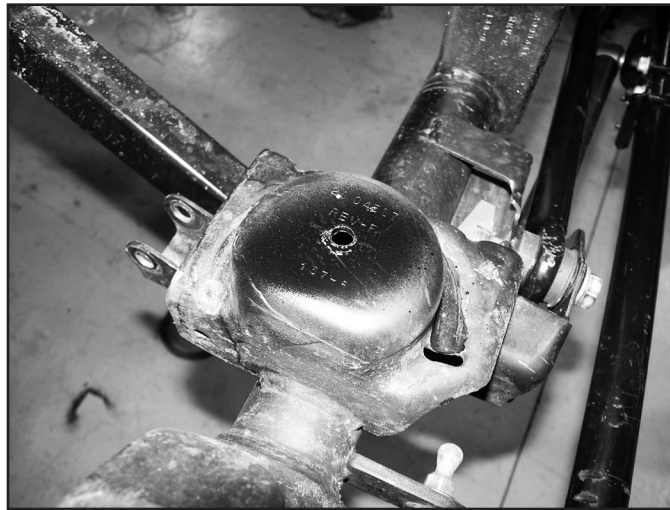
23. Attach track bar bracket to OE mount with 7/16" x 1" bolts, washers, and nuts in the front two holes. Attach the bracket to the back hole with a 1/2" x 1" bolt, washer and square nut. Use 9/16" x 3" bolt, washers and nut through the OE track bar position. Do not hook up the track bar at this time. Note: All hardware is located in bolt pack 562.
24. Tighten 9/16" hardware to 95 ft-lbs, and 7/16" hardware to 45 ft-lbs.
25. Position the new track bar support bracket on the back side of the track bar bracket by aligning the large hole in the bracket to the top hole in the already installed track bar bracket. The tabs on the support bracket will set against the coil mount (top in the front and inside surface in the back). Install the provided 9/16" x 3-1/2" bolt (BP 645) through the track bar bracket and support bracket to help keep the support in place. (Fig 10)

**FIGURE 10**



26. Make sure the support bracket is setting flush to all mounting surfaces and mark the two holes to be drilling in the coil mount. Remove the support bracket and drill 3/8" holes at the marks.
27. Reinstall the support bracket on the axle with 3/8" x 1-1/4" bolts, nuts and washer (BP 645) in the new holes. Leave hardware loose.
28. Make a mark in the center of the lower coil spring mount pad. Drill a 5/16" hole at the mark. This hole will be used to attach the provided bump stop extension to the axle (Fig 11)

**FIGURE 11**



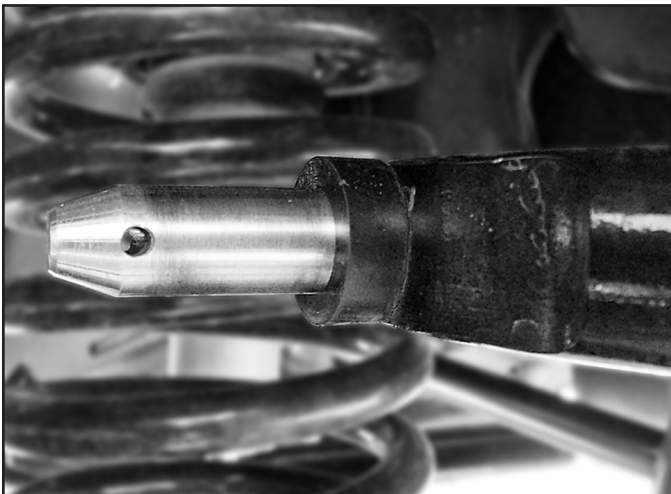
29. Tap hole threads by using the 3/8" x 1-1/4" self-tapping bolt provided in bolt pack 438. Remove and reuse for the other coil pad.
30. Place a provided bump stop extension inside one of the new front coil springs and install the spring in the vehicle. Make sure the spring is seated properly in the axle mount.
31. Attach the bump stop extension to the axle through the hole that was drilled earlier using a 3/8" x 3-1/2" bolt and 3/8" USS washer (BP 438). Use Loctite on the bolt threads and torque to approx. 25 ft-lbs. Repeat the spring/bump stop installation of the other side of the vehicle.
32. Install the new shocks with a 93 sleeve (12mm ID) in the lower bushing. Attach with OE lower hardware and new upper bushings, cup washers, and 1/2" fine thread nut. Torque the lower bolt to 65 ft-lbs and the upper nut until the bushings begin to swell.
33. Attach the drag link to the new pitman arm with the OE tie rod end nut. Torque nut to 55 ft-lbs.

**NON-RUBICON SWAY BAR DISCONNECT INSTRUCTIONS (KIT #014454)**

34. Adjust Sway Bar Links to 9" long center to center.
35. Install the long stainless steel posts onto the sway bar with included 1/2" nylock nut. Tighten to 65 ft-lbs. Place polyurethane spacer over the disconnect stud. Use a screw driver or punch to keep the pin from rotating while tightening stud. (Fig 12a, 12b).

*Note: Apply a drop or spray of lubricant before threading on the nut. (Oil, WD-40, Silicone, or Graphite all work)*

**FIGURE 12A**



**FIGURE 12B**



36. Attach the lower studs to the axle with included 1/2" nylock nuts. Tighten to 65 ft-lbs. The shortest stud will go on the Passenger's side, medium length stud goes on the Driver's side (Opposite for RHD vehicles). (Fig 12c, 12d)

**FIGURE 12C**



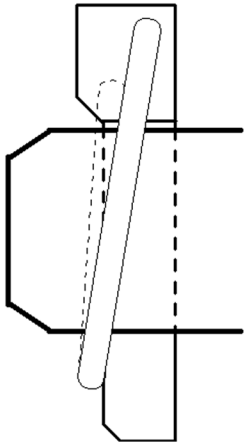
**FIGURE 12D**



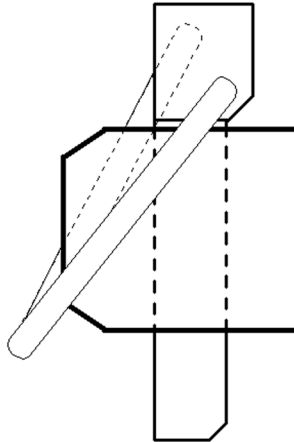
37. Place sway bar links onto pins, secure with click pins as shown. (Fig13a, 13b)

**FIGURE 13A**

**CORRECT**



**WRONG**



**FIGURE 13B**



38. Locate the existing inner fender bolt up near the front body mount. Remove the bolt and attach the new lanyard to the inner fender with the bolt. Torque bolt to 10 ft-lbs. Slide the male clip up the lanyard and attach the female clip to it. This will be the stowed position for the lanyard when not in use. Do not wrap around the swap bar when the sway bar is connected. (Fig 14)

**FIGURE 14**



*Note: The links must be completely removed from the vehicle when sway bar is disconnected and stowed in the vehicle with the retaining pins and spacers. Swing the sway bar up so that it is LEVEL and retain with straps. Do not drive the vehicle on-road with the sway bar disconnected.*

### **RUBICON FIXED SWAY BAR LINK INSTALL**

39. Install the provided 3/4" ID bushings and sleeves (46) into the new front sway bar links (911110). Attach the links to the inside of the OE axle mount with the OE hardware. Attach the link to the outside of the sway bar with the provided 1/2" x 3" bolt, nut and washers (B554). The link will offset toward the inside of the vehicle as it runs from the axle to the sway bar. Torque hardware to 60 ft-lbs.

### **ALL MODELS**

40. Turn wheel all the way to the driver's side. If installing optional stabilizer, lightly grease and install bushings into steering stabilizer with sleeves provided. Extend cylinder completely and attach stabilizer to trackbar bracket mounting tab. New stabilizer requires a 1/2" x 2-1/2" bolt with washers and nut, run bolt from bottom up. The OE stabilizer requires OE hardware, run bolt from bottom up. Do not tighten bolt at this time. (Fig 15)
41. Rotate tie rod bracket up and attach stabilizer with OE nut. (Fig 16)

**FIGURE 15**



**FIGURE 16**



42. Cycle steering and check for proper clearance, adjust as necessary. Tighten 1/2" hardware to 65 ft-lbs, u-bolts to 25 ft-lbs, and stabilizer OE 12mm hardware to 55 ft-lbs.
43. Attach brake line drop brackets (01716) to the side of the frame with OE hardware. Attach brake lines to relocation brackets with nuts and washers from bolt pack 704. It may be necessary to reform the 90 degree bend in the brake line to 45 degrees to gain adequate slack at full droop. Reattach the brake line to the axle on newer models. It may also be necessary to lube the brake line and pull it through the axle mount for additional slack.
44. Reattach ABS wire rubber grommets to mounting bracket on steering knuckles.

45. Attach ABS wire to brake lines with zip-ties.
46. Reattach the factory transmission skid plate to the transmission crossmember and frame rails with the factory hardware. At each frame rail mount, position two 9/16" washers (W96S) between the frame and the skid plate before installing the mounting bolts (Fig 17). This will ensure adequate driveshaft to skid plate clearance. Torque bolts to 55 ft-lbs.

**FIGURE 17**

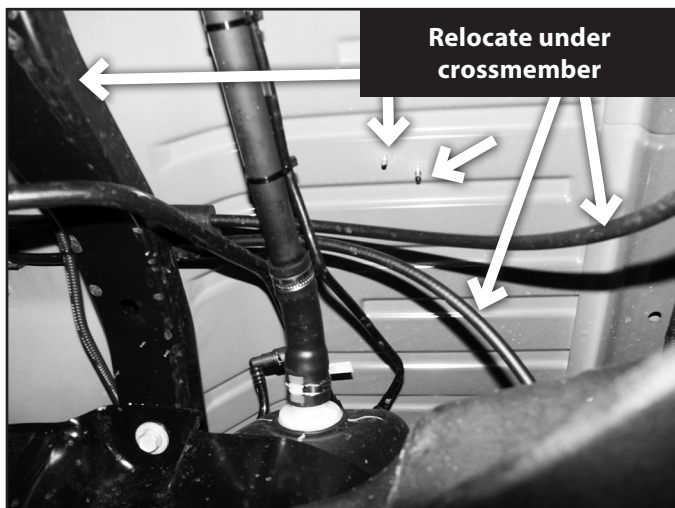


47. Install the wheels and torque lug nuts to manufacturer's specifications.
48. Lower the vehicle to the ground and bounce the front to settle the suspension. Torque the lower control arm hardware to 95 ft-lbs.
49. Attach the front track bar to the new axle bracket with the provided 9/16" x 3-1/2" bolt nut and washers (BP 645). Have an assistant turn the steering wheel to aid in aligning the track bar bolt. Run the bolt from front to rear through the bracket, track bar and support bracket. Torque the track bar bolt to 125 ft-lbs. Torque the 3/8" support bracket hardware to 35 ft-lbs.
50. Check all hardware for proper torque.

## REAR INSTALLATION

51. Block the front wheels for safety.
52. Mark track bar to indicate which end goes into the frame. Remove the rear track bar from vehicle. Retain hardware.
53. Raise the rear of the vehicle and support the frame with jack stands in front of the lower control arm mounts.
54. Remove the wheels.
55. Remove emergency brake cable bracket, it will not be reinstalled (Fig 18). Relocate cables under frame cross member to allow for maximum droop.
56. Disconnect the rear brake line brackets from frame rail (Fig 19).

**FIGURE 18**

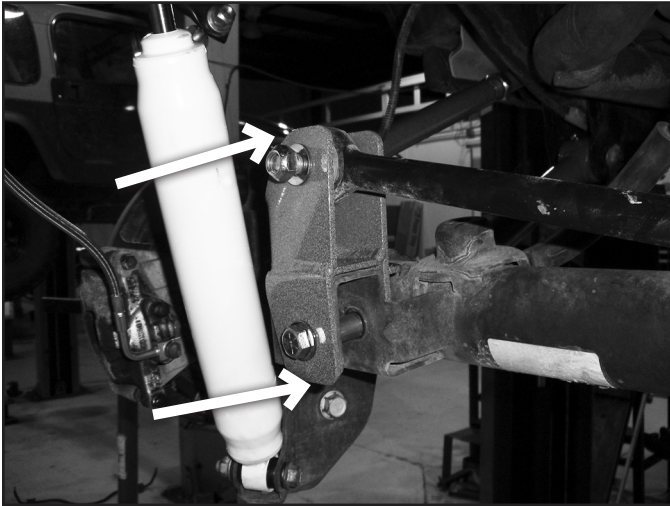


**FIGURE 19**

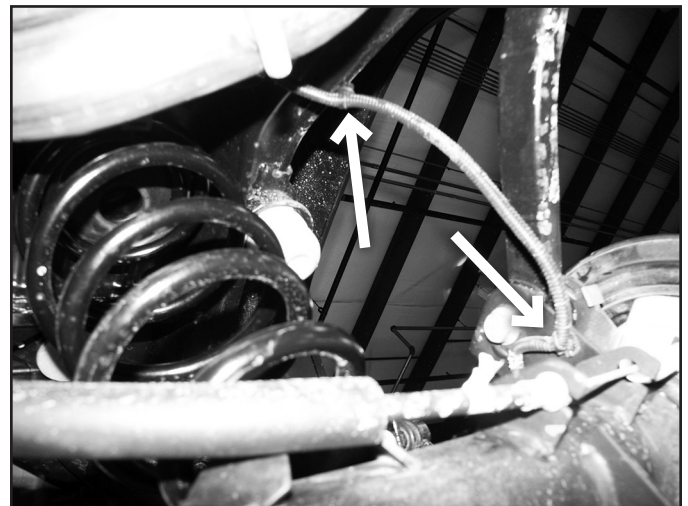


57. Support the rear axle with a hydraulic jack. Remove the shocks. Retain the upper and lower mounting hardware.
58. Remove the sway bar links. Retain lower mounting bolt/nut. Discard links. (Fig 20)
59. Lower the axle and remove the rear springs. Note: Do not overextend the brake lines or ABS wires. Remove these from their retaining clips temporarily if necessary. (Fig 21)

**FIGURE 20**

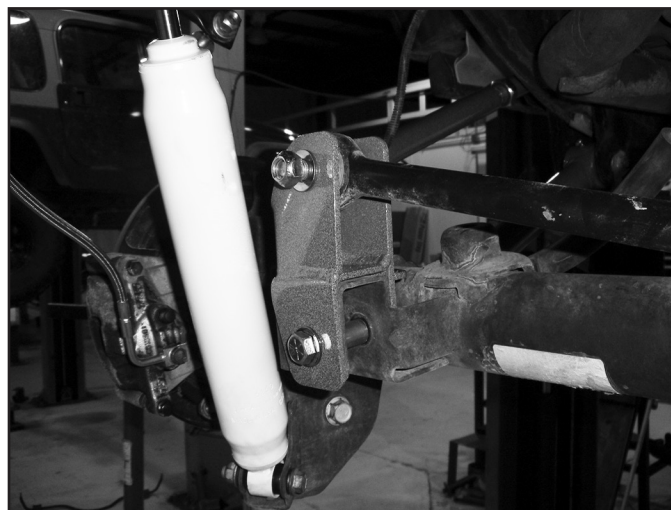


**FIGURE 21**



60. Install new provided track bar bracket (01967) over the OE track bar axle mount. The support wing on the bracket will set over the existing bump stop pad on the axle. Mark the hole to be drilled on the top of the factory track bar mount and drill to 3/8". Reinstall bracket with the provided crush sleeve (54587) in original track bar position and loosely fasten with a 9/16" x 3-1/2" bolt, nut and washers (BP 563). Install a 3/8" x 1-1/4" bolt, nut and washers in the newly drilled hole (BP 563). Leave hardware loose (Fig 22).

**FIGURE 22**



61. Position one of the new rear bump stop extensions over the support wing of the track bar bracket so that the existing holes in the factory bump stop pad are aligned with the holes in the track bar support and the bump stop. Orient the bump stop so it is offset forward and 3" from the factory axle pad. Fasten the bump stop and track bar bracket support to the factory bracket with 5/16" x 1-1/4" bolts, nuts and washers (BP 763). Run the bolts from the bottom up and torque to 25 ft-lbs.
62. With the support wing/bump stop hardware tight, torque the 3/8" (35 ft-lbs) and 9/16" (100 ft-lbs) track bar bracket hardware.
63. Install the axle end of the factory rear track bar into the new relocation bracket. Fasten the track bar in the bracket with a 9/16" x 3" bolt, nut and washers (BP 563). The bolt must be run from the front to rear to provide proper coil spring clearance. Leave track bar bolt loose. Note: Make sure the track bar is oriented correctly.
64. With the axle well supported, remove the lower control arm bolts at the axle and frame. Remove both lower control arms from the vehicle. Save hardware.
65. Using the OE hardware, install the control arms with the bend up for maximum ground clearance. The bend is centered on the arm. Leave all hardware loose. It will be tightened with the vehicle at ride height.

66. Note the orientation of the stock upper control arms. Disconnect the upper control arms from the frame and axle. Retain hardware.
67. Adjust center-to-center length of the rear upper control arms to 17-7/8" 4-door, or 18-3/8" 2-door. Note: These are a preliminary measurement. The arms may need to be fine tuned to adjust the pinion angle.
68. Install the arms similar to the factory orientation with the bend in towards the center of the vehicle and the adjustable flex end mount in the frame pocket with the grease fitting pointing down (Fig 23). Use factory hardware, and leave the axle hardware loose. It will be tightened once the vehicle is at normal ride height. Torque frame bolts to 95 ft-lbs.



**Tip** The pinion can be rotated up or down to aid in aligning the control arm mounting holes with the jack.

**FIGURE 23**



69. Install the new rear springs in the vehicle, making sure the OE upper rubber isolator is in place. Raise the axle to slightly compress the spring.
70. Assemble shocks for installation. Shock comes with a preinstalled bar pin in the upper eye. Grease and install the provided bushing and sleeve (0.625 x 0.075 x 1.475) in the lower eye.
71. Install the new shocks to the frame and axle mounts with the OE hardware. Tighten upper mounting hardware to 30 ft-lbs, and lower hardware to 55 ft-lbs.
72. Install the provided bump stop spacer on the passenger's side axle just like the driver's side earlier. Using the existing holes in the axle bump stop pad fasten the spacer to the axle with 5/16" x 7/8" bolts, nuts and 5/16" SAE washers (BP 763). Torque bolts to 20 ft-lbs.
73. Grease and install sway bar link sleeves 5/8" OD x 12mm ID x 1.375 long sleeves (62147) into the preinstalled bushings in the provided links. Attach sway bar links to axle with OE hardware and at sway bar with new 12mm bolts, nuts and washers (BP758). Run the upper bolt from the outside in. The links will mount to the outer surfaces of the sway bar and axle mount tab (Fig 24).

**FIGURE 24**



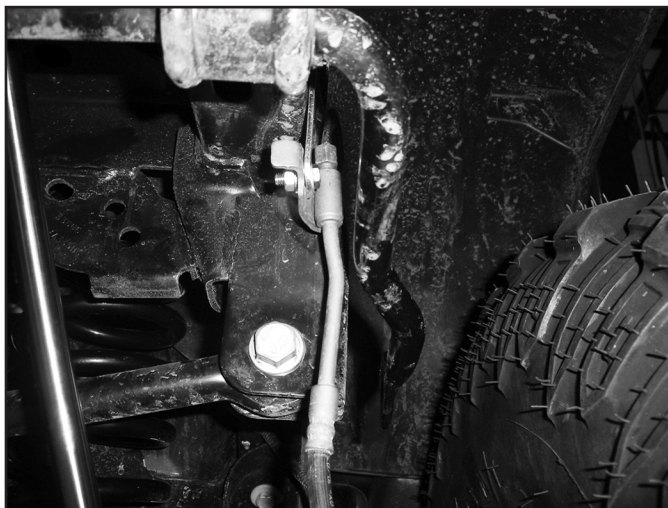
74. Reattach ABS wire clips to original positions.
75. Install brakeline relocation brackets as shown, there are drv and pass side brackets, they will be located into the factory locating tab. The the factory brakeline will be mounted towards the center of the vehicle on the 'inside' of the relocation bracket. Attach with OE and new 1/4" x 1" hardware (BP 768), tighten to 10 ft-lbs. (Fig 25, Note: do not disconnect brakeline, shown for inst. sheet pictures only)

**FIGURE 25**



**Tip** *The hardline portion of the brake line (below the mounting tab) can be straightened slightly for more slack and better clearance between the sway bar if necessary. (Fig 26)*

**FIGURE 26**



76. Reinstall wheels and torque to factory specifications. Lower vehicle to ground.
77. Tighten lower and upper rear control arms to 95 ft-lbs. Lock off control arm jam nuts on the upper arms securely.

### **FINAL INSTALLATION STEPS:**

78. Double check all hardware for proper torque.
79. Check all fasteners after 500 miles and at regularly scheduled maintenance intervals.





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