



## **INSTALLATION INSTRUCTIONS**



### **UPPER CONTROL ARM SYSTEM**

**FTS26028 - 2005-13 TOYOTA TACOMA 2WD/4WD**

**- 2006-09 TOYOTA FJ 4WD**

**FTS26034 - 2010-12 TOYOTA FJ 4WD**

**Fabtech Motorsports** | 4331 Eucalyptus Ave. Chino, CA 91710

**Tech Line:** 909-597-7800 | **Fax:** 909-597-7185 | **Web:** [www.fabtechmotorsports.com](http://www.fabtechmotorsports.com)



## - PARTS LIST -

|     | <b>FTS26028</b> | <b>3" Tacoma UCA Kit</b> |
|-----|-----------------|--------------------------|
| Qty | Part #          | Description              |
| 1   | FT70146BK       | Upper Arm Driver         |
| 1   | FT70147BK       | Upper Arm Passenger      |
| 2   | FT70148         | Sway Bar Relocator       |
| 1   | FT70149         | Hardware Sub-Assembly    |

|     | <b>FTS26034</b> | <b>3" Toyota FJ Kit</b>  |
|-----|-----------------|--------------------------|
| Qty | Part #          | Description              |
| 1   | FT70146BK       | Upper Control Arm Driver |
| 1   | FT70147BK       | Upper Control Arm Pass   |
| 2   | FT70166         | Sway Bar Relocator       |
| 1   | FT70149         | Hardware Subassembly     |

|     | <b>FT70149</b> | <b>Hardware Sub-Assembly</b> |
|-----|----------------|------------------------------|
| Qty | Part #         | Description                  |
| 4   | FTS1001        | Bushing Half                 |
| 4   | FT1002         | Bushing Half                 |
| 4   | FT174          | Sleeve                       |
| 8   | FT58-1         | A-Arm Bushing Washer         |
| 4   | FT147          | Misalignments                |
| 2   | FT26028i       | Instruction                  |
| 1   | FTREGCARD      | Reg. Card                    |
| 1   | FTAS16         | Decal                        |
| 1   | FTAS12         | Sticker                      |
| 1   | FT70156        | Hardware kit                 |

|   | <b>FT70156 - Hardware kit</b> | <b>Location</b>       |
|---|-------------------------------|-----------------------|
| 2 | 3/4"-10 x 5" Hex Bolt         | Uniball / Control arm |
| 2 | 3/4"-10 C – Lock Nut          |                       |
| 2 | 3/4" SAE Flat Washer          |                       |
| 2 | 1/4" - 20 x 3/4" Hex Bolt     | Brake line            |
| 2 | 1/4" – 20 Ny – lock Nut       |                       |
| 4 | 1/4" SAE Flat Washer          |                       |
| 4 | 3/8" -16x1" Hex Bolt          | Sway bar              |
| 4 | 3/8" SAE Flat Washer          |                       |
| 4 | 3/8" Lock Washer              |                       |
| 2 | Adel Clamp                    | Brake line            |
| 4 | Zerk Fitting                  | Control arm           |
| 2 | Thread Locking Compound       |                       |
| 2 | 1/8" x 2" cotter Pin          | Tie rod               |

## - TOOL LIST -

### Required Tools (Not Included)

Floor Jack

Jack Stands

Assorted Metric and S.A.E sockets, and Allen wrenches

Torque Wrench

Barrel Sander

Drill & Drill Bits



## **- PRE-INSTALLATION NOTES -**

### ***Read this before you begin installation-***

Check all parts to the parts list above before beginning installation. If any parts are missing contact Fabtech at 909-597-7800 and a replacement part will be sent to you immediately.

Read all instructions thoroughly from start to finish before beginning the installation. If these instructions are not properly followed severe frame, driveline and / or suspension damage may occur.

Check your local city and state laws prior to the installation of this system for legality. Do not install if not legal in your area.

Prior to the installation of this suspension system perform a front end alignment and record. Do not install this system if the vehicle alignment is not within factory specifications. Check for frame and suspension damage prior to installation.

The installation of this suspension system should be performed by two professional mechanics.

Use the provided thread locking compound on all hardware.

Do not combine this suspension system with any other lift device or parts.

This suspension must be installed with Fabtech shock absorbers.

**WARNING-** Installation of this system will alter the center of gravity of the vehicle and may increase roll over as compared to stock.

For technical assistance call: 909-597-7800 or e-mail: [info@fabtechmotorsports.com](mailto:info@fabtechmotorsports.com)

Kit does not fit models with factory electronic controlled shocks.

If installing the optional Dirt Logic coilover, record the ride height of the vehicle so that the proper ride height can be done when completed

Must use 17" wheels or larger.

Note about uniball joints: this system utilizes uniballs in the upper control arm to allow increased travel and strength as compared to a ball joint found in the stock upper control arm. Uniballs may make an audible operating / clacking noise. This noise is normal. Uniballs should be inspected every 2,500 miles and after offroad use for unusual wear. They should be rebuilt as required to reduce noise and maintain the integrity of the uniball.

### ***Recommend Tires and Wheels:***

Use 33/12.50R17 tire w/ 17x8 wheels w/ 4-5/8" BS w/ minor trimming

# - INSTRUCTIONS -

## FRONT SUSPENSION

1. Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the frame rails with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE!** Remove the front tires.
2. Locate and remove the factory skid plate. **SEE FIGURE 1**

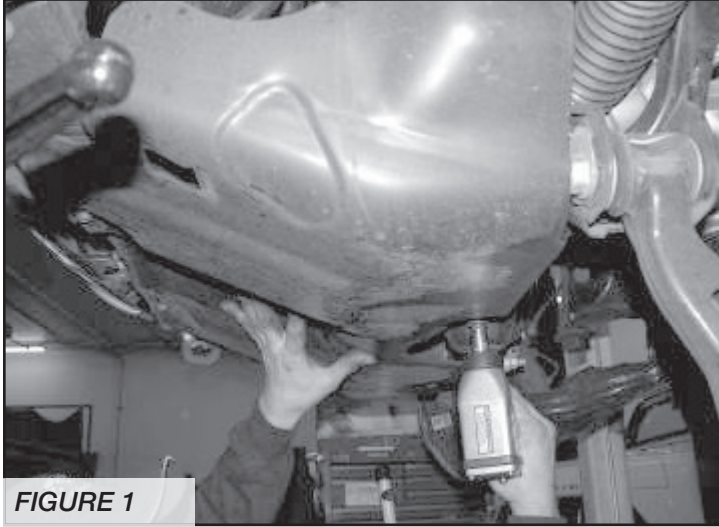


FIGURE 1

3. Remove factory mud flaps off front of the vehicle and discard.
4. Working on the Drivers side of the vehicle remove the nut from the tie rod ends. Disconnect the tie rod ends from the steering knuckle using a pickle fork tool. **SEE FIGURE 2**

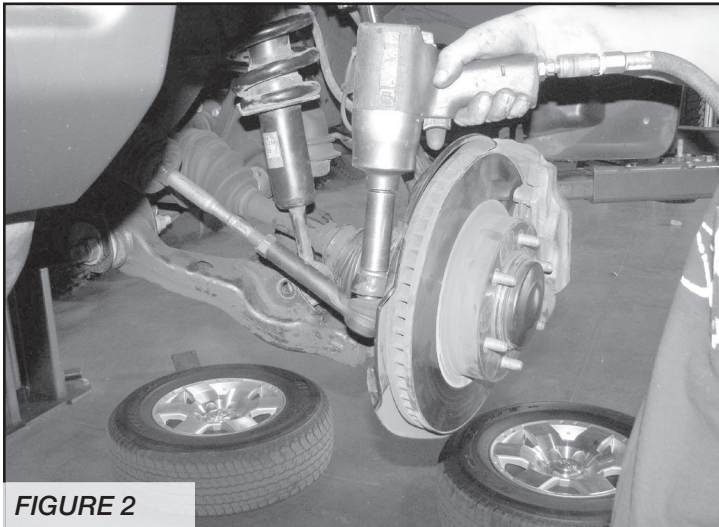


FIGURE 2

5. Remove the sway bar end links from the factory steering knuckles. Leave the links connected to the sway bar. Then remove the bar from the truck. Save the bar and the end links with all hardware. **SEE FIGURE 3**

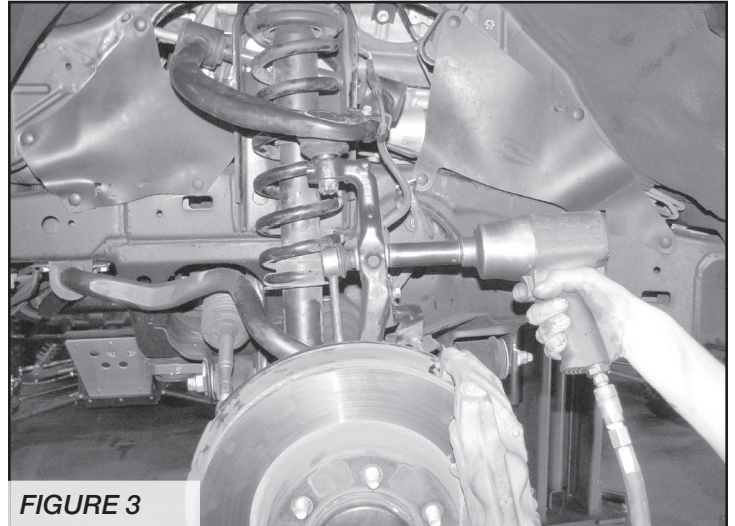


FIGURE 3

6. Remove the brake caliper from the steering knuckle. **Do not allow the brake caliper to hang from the brake line.** Remove the brake line brackets from the knuckle. Carefully remove the bracket from the brake hose. On trucks equipped with ABS brakes unbolt the ABS line and disconnect from steering knuckle and the upper control arm. Remove the brake rotor, save all hardware. **SEE FIGURES 4-8**

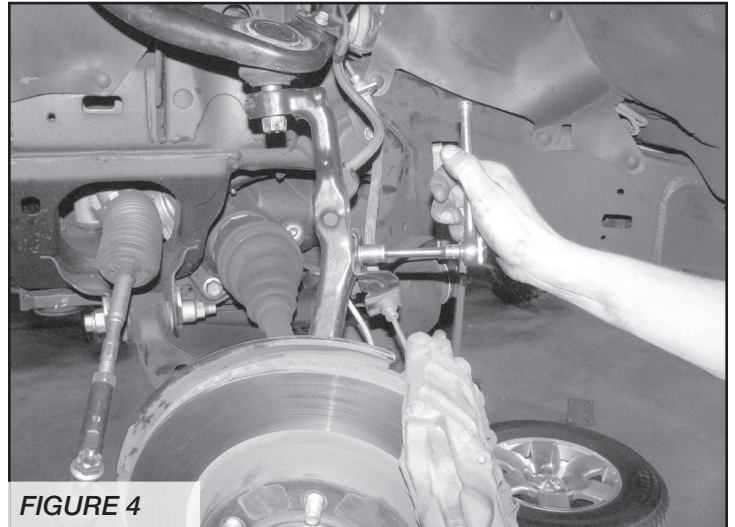


FIGURE 4



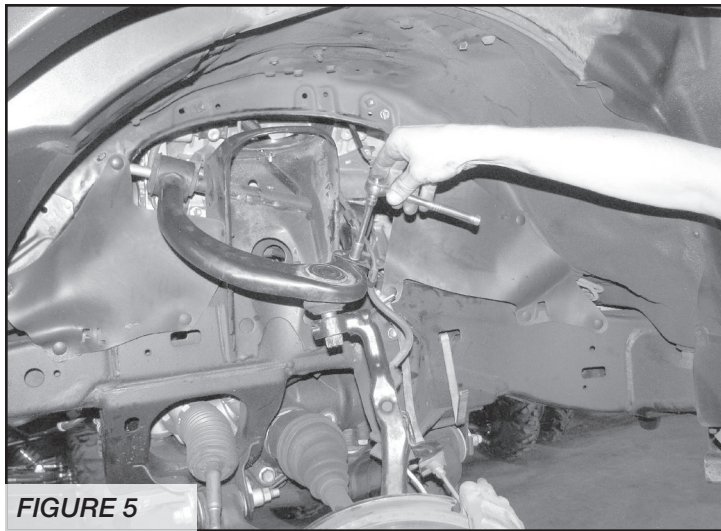


FIGURE 5

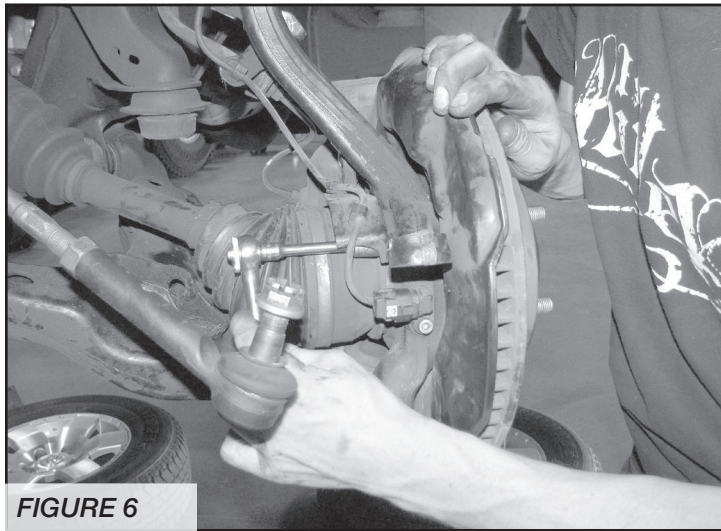


FIGURE 6

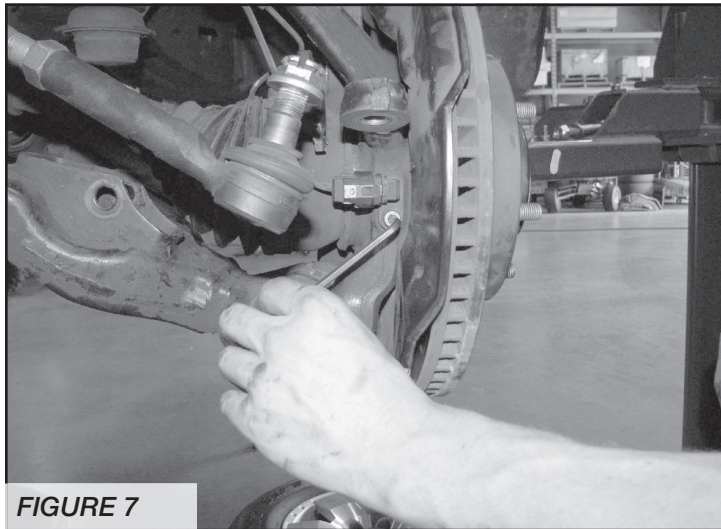


FIGURE 7

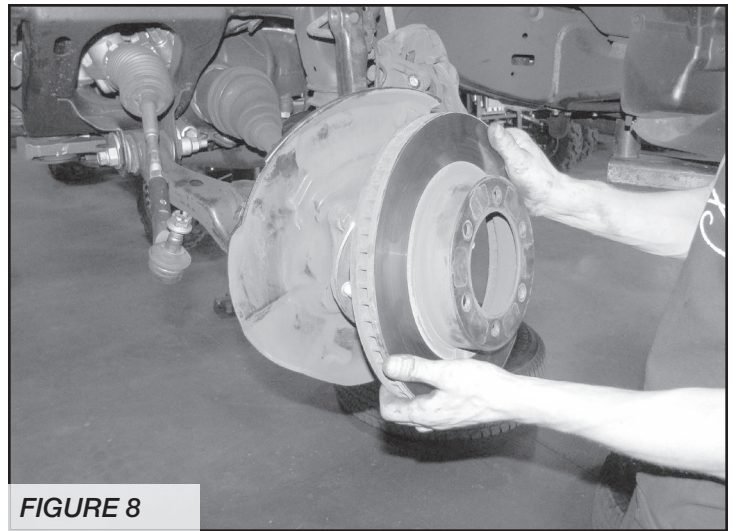


FIGURE 8

7. Support the lower A-Arm with a floor jack. Remove the three upper nuts from the top of the shock assembly then the lower bolt from the shock at the lower control arm. Save the hardware. **SEE FIGURES 9-10**

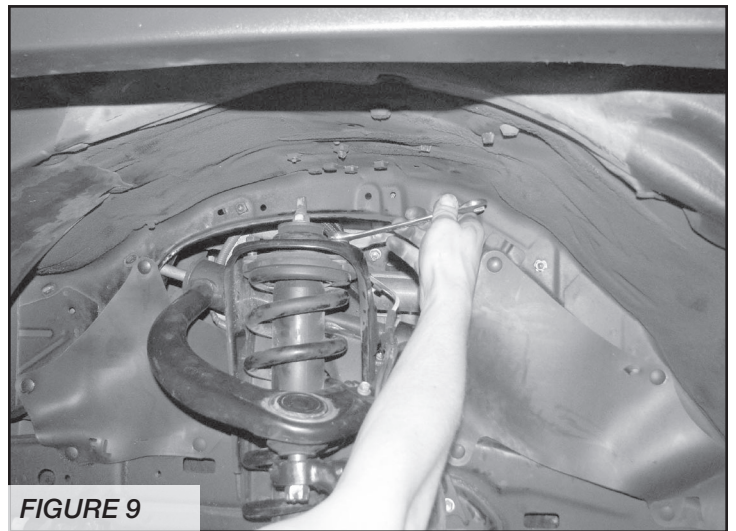


FIGURE 9

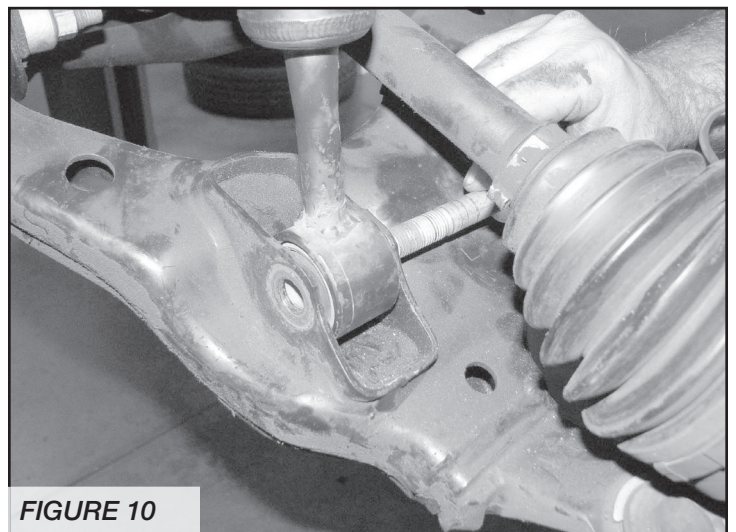
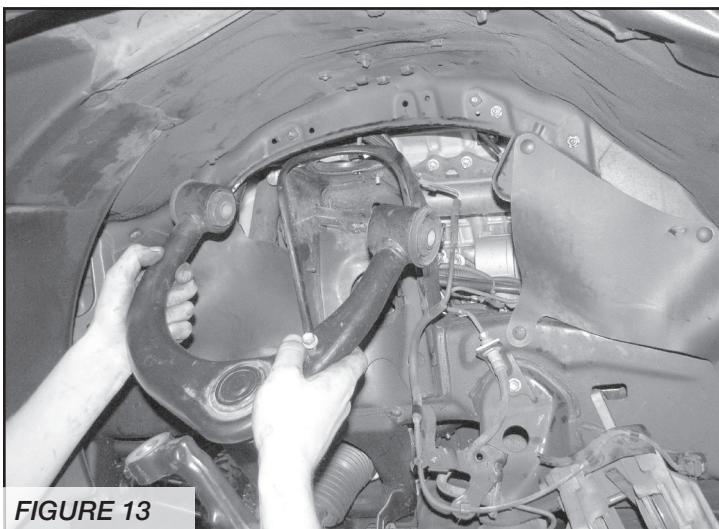
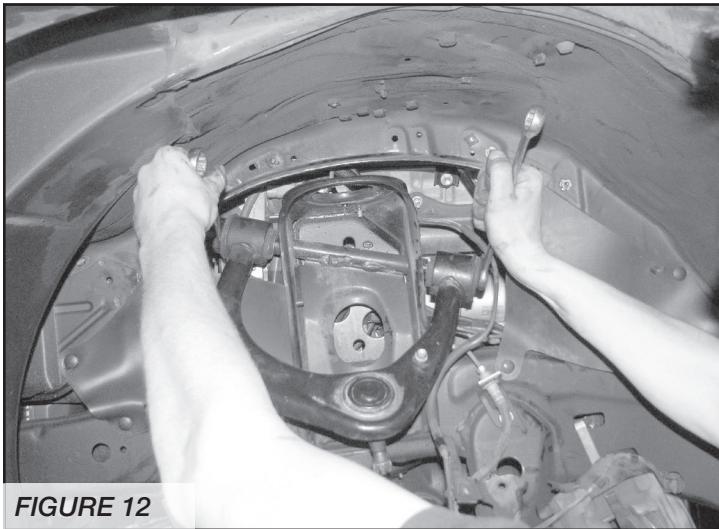
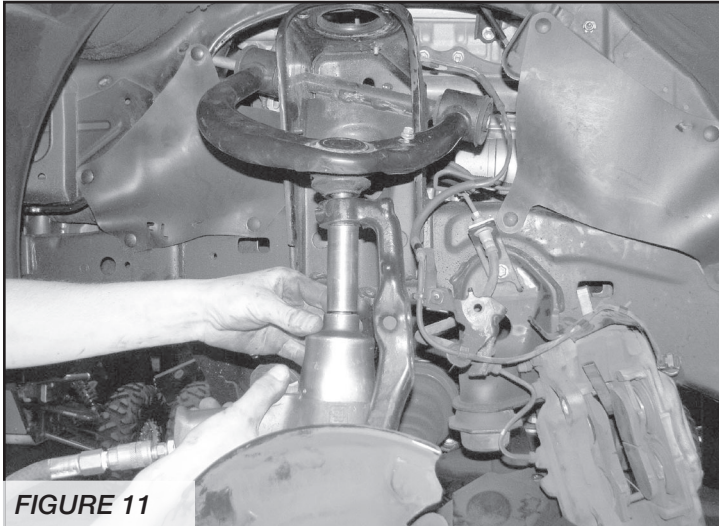


FIGURE 10

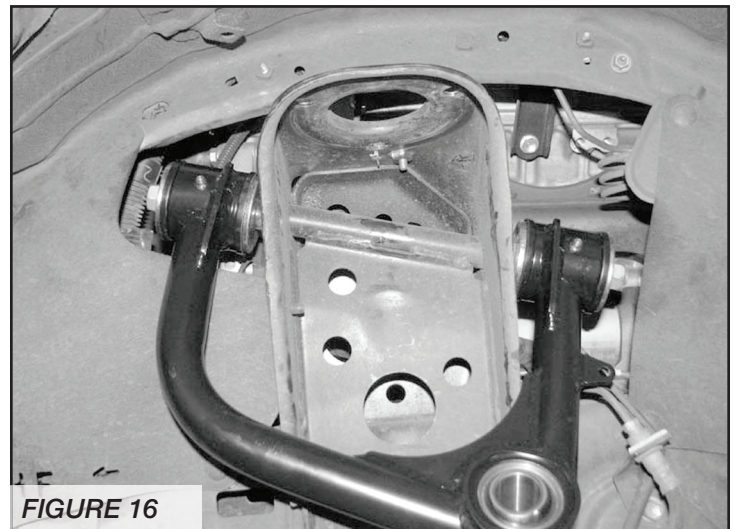
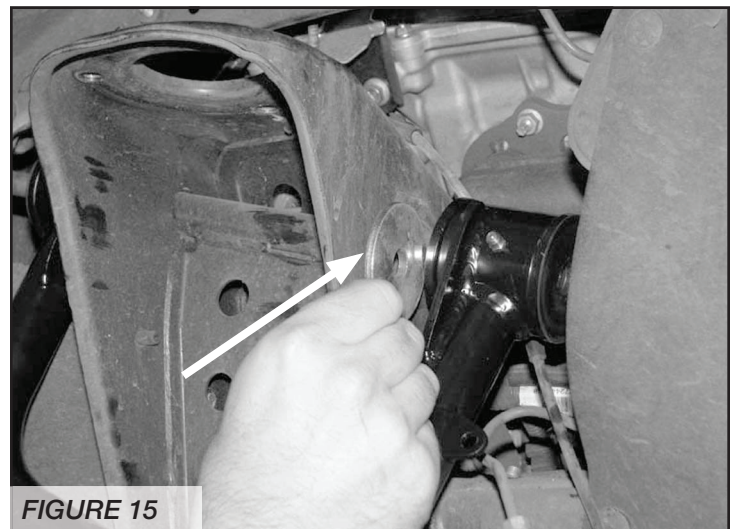
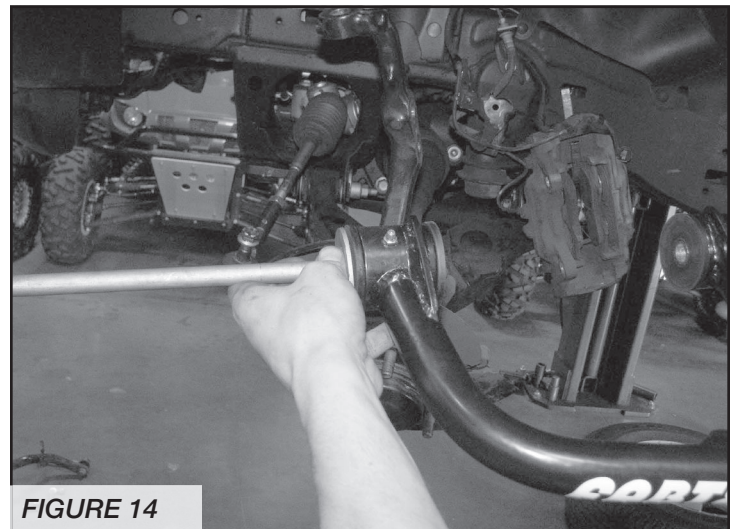


8. Loosen the upper ball joint nut, disconnect the upper ball joint from the knuckle using a pickle fork tool, Remove the Upper Control Arm, save the hardware, and discard the arm. **SEE FIGURES 11-13**



9. Locate FT70146BK upper arm driver, FT1001 & FT1002 bushings, FT174 sleeves, FT 58-1 washers, and Zerk Fittings. Insert bushings, sleeves, and Zerk fittings into the control arm barrels.

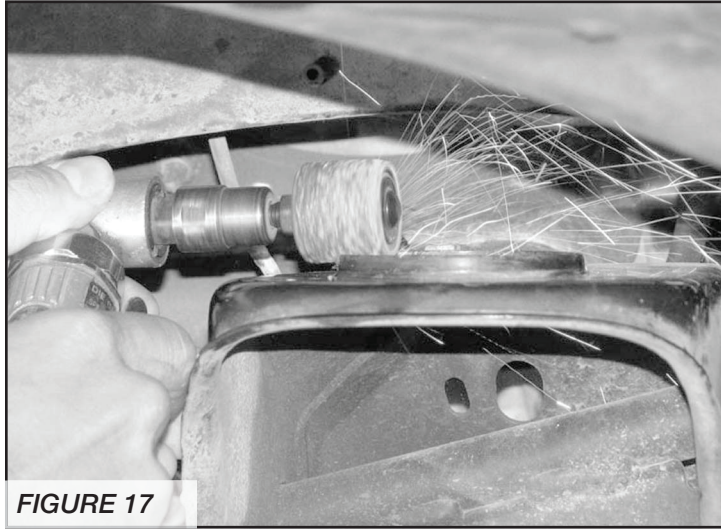
10. Install the upper arm using the factory hardware and the FT 58-1 washers. Place the new washers on the inside and outside of the bushings. **SEE FIGURES 14-16**



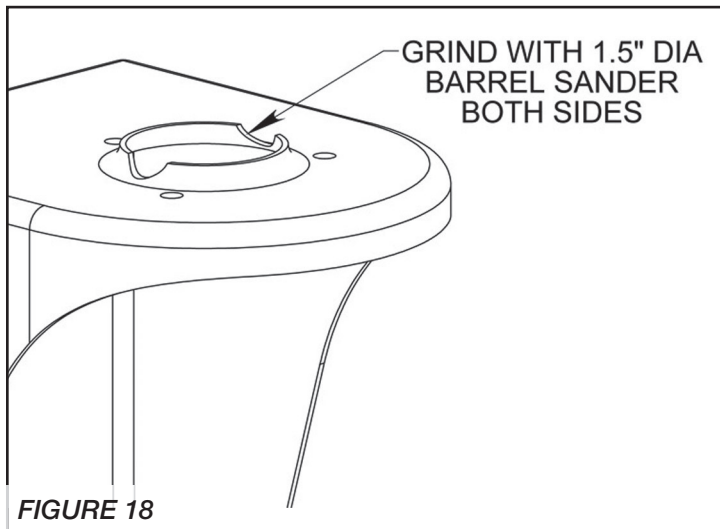


11. Using 1-1/2" Barrel sander, sand a small notch in the lip at the top of the bucket. The radius should be on both sides of the bucket parallel to the front of the bucket. This radius is to add clearance the shock pivot bolt.

**SEE FIGURES 17-18**

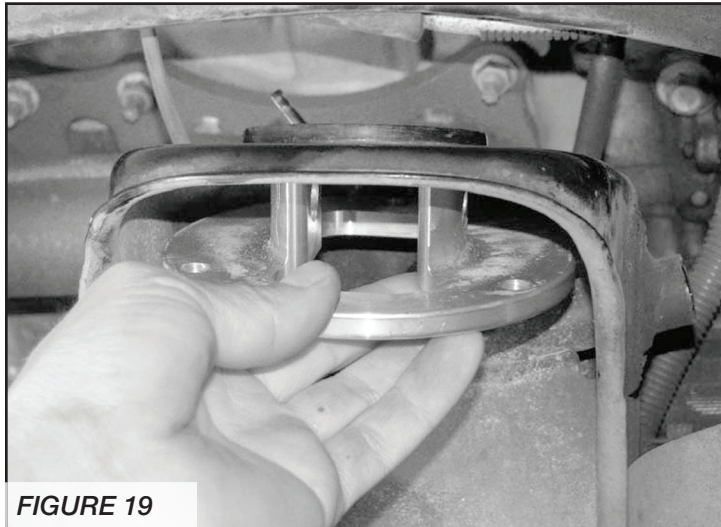


**FIGURE 17**

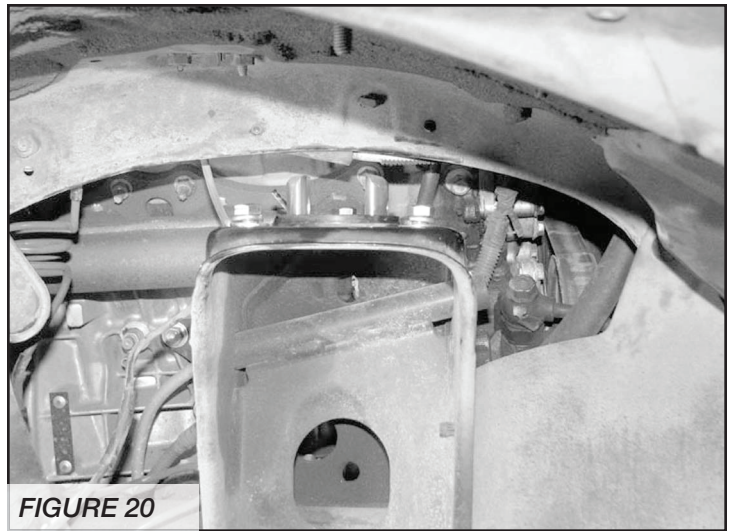


**FIGURE 18**

12. Locate FT825251 Dirt Logic 2.5 Coilover, FT833121 upper mount and supplied 3/8" hardware. Install Coilover FT833121 upper mount using the supplied 3/8" hardware and torque 37 ft-lbs. **SEE FIGURES 19-20**

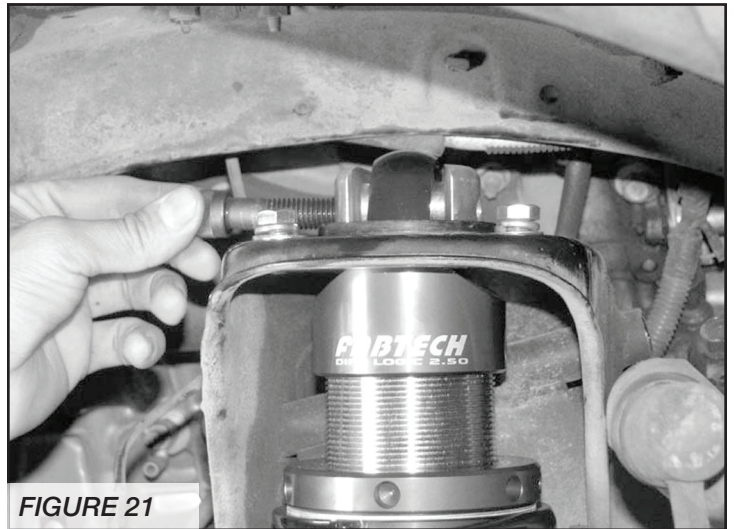


**FIGURE 19**

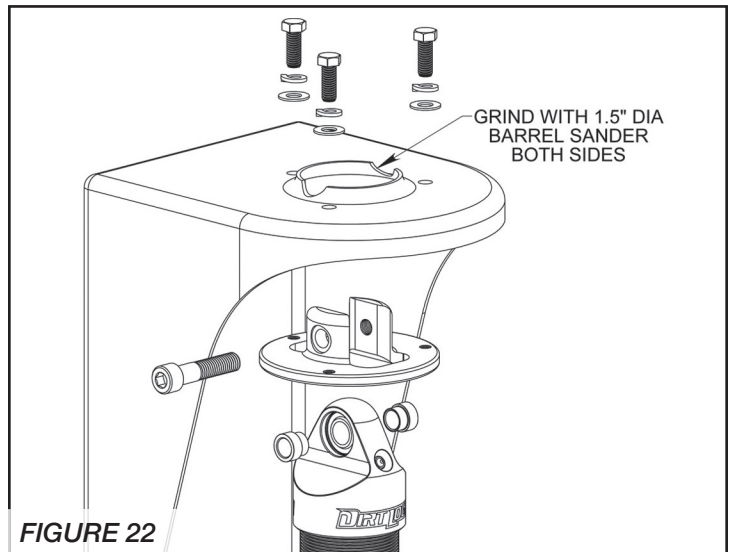


**FIGURE 20**

13. Install the FT825251 Coilover into the new upper mount using the 1/2-13 x 2-1/4 bolt from the shock hardware. Torque 90 Ft-lbs **SEE FIGURES 21-23**



**FIGURE 21**



**FIGURE 22**

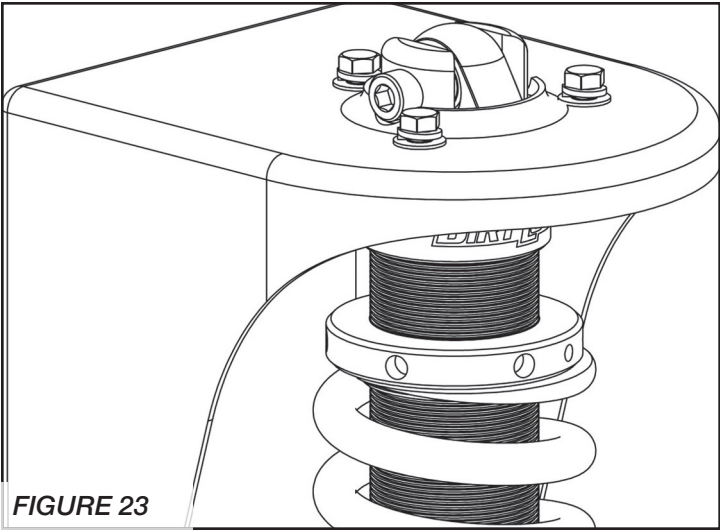


FIGURE 23

14. Install the rod end at the bottom of the shock into the lower control arm with the larger misalignment to the front of the Vehicle. Reinstall the factory bolt into the lower mount. Torque 100 Ft-lbs. **SEE FIGURE 24**

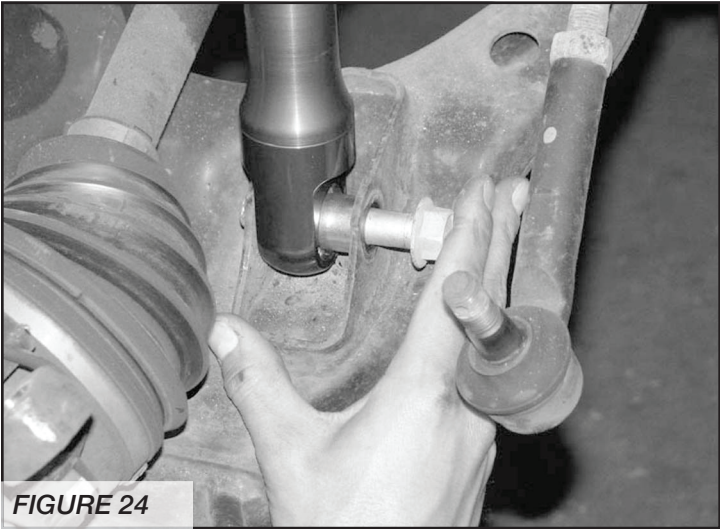


FIGURE 24

15. Drill upper ball joint taper out to 3/4".

16. Locate the FT147 misalignments, the 3/4" x 5" bolt washer, and lock nut. Assemble the misalignments, Bolt, uniball and the spindle using the diagram below. Tighten to 317 Ft-lbs.

**SEE FIGURE 25**

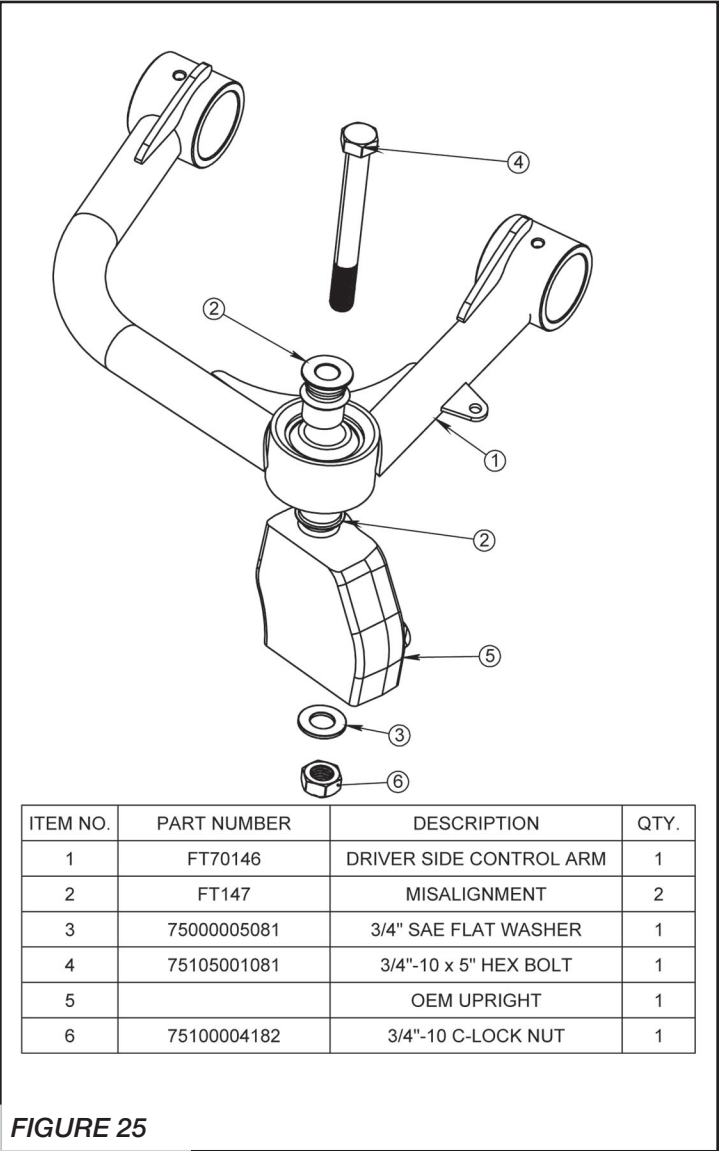
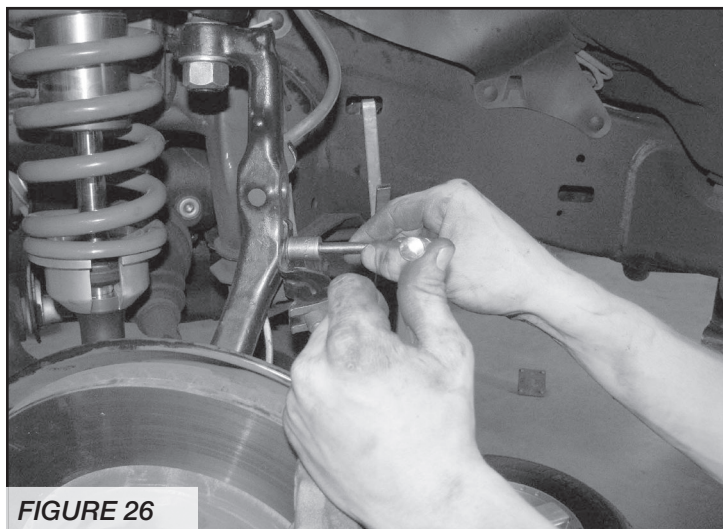


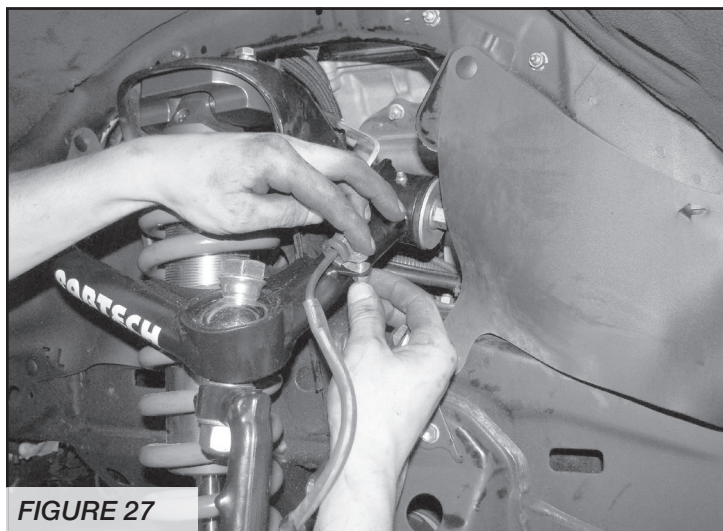
FIGURE 25



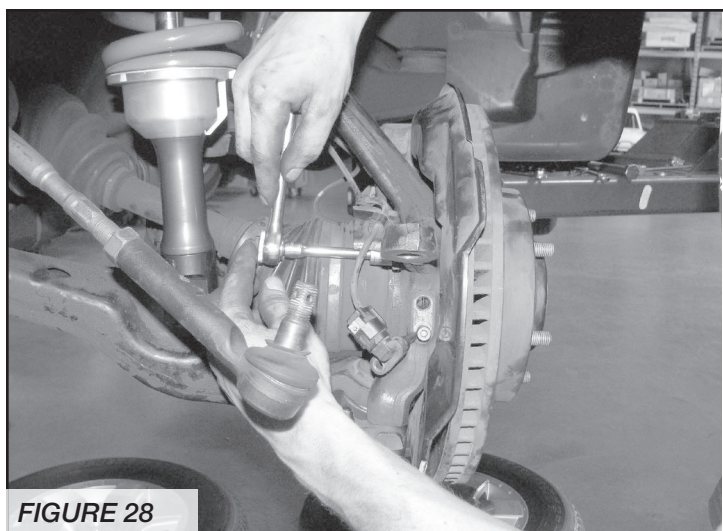
17. Re-install brake rotor, caliper, ABS line, and brake line in stock positions. Using supplied 1/4" hardware, attach Adel clamp to brake line and tab on upper control arm. **SEE FIGURES 26-29**



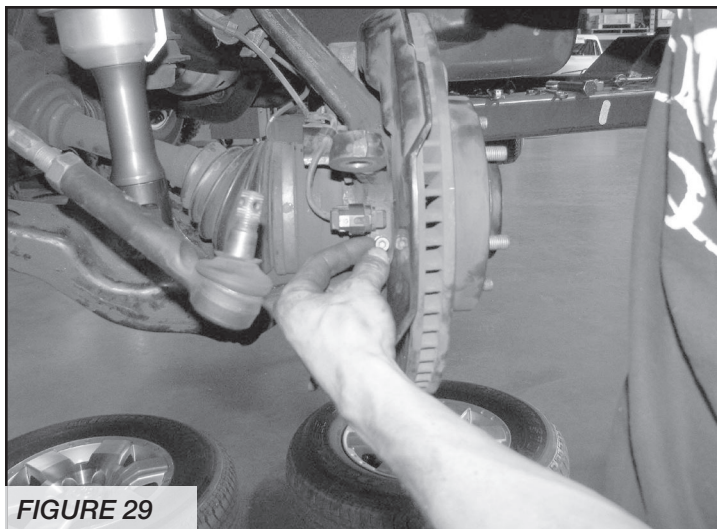
**FIGURE 26**



**FIGURE 27**

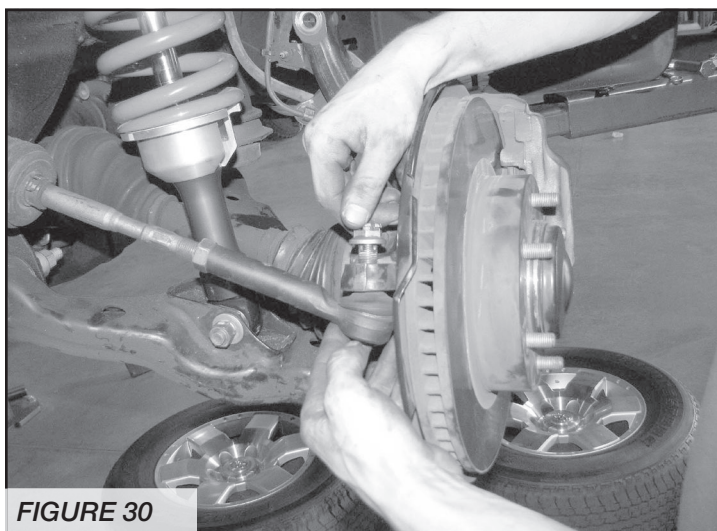


**FIGURE 28**



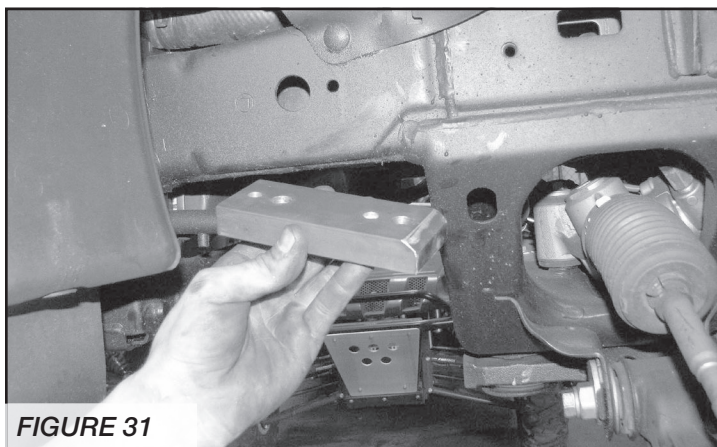
**FIGURE 29**

18. Re-connect Tie Rod to knuckle using the factory hardware, and supplied cotter pin. Tighten Tie Rod nut to 135 Ft - Lbs. Repeat all steps 4-14 on the passenger side of the Vehicle. **SEE FIGURE 30**



**FIGURE 30**

19. Locate FT70148 or FT70166 sway bar relocater, depending on the vehicle, and install into factory sway bar location, using the factory hardware. The chamfered edge goes up & toward the rear of the vehicle. Re-install sway bar onto the new mounting plate using the supplied 3/8" hex bolt, lock washer, and washer. Tighten to 52 Ft - Lbs. **SEE FIGURES 31-33**



**FIGURE 31**



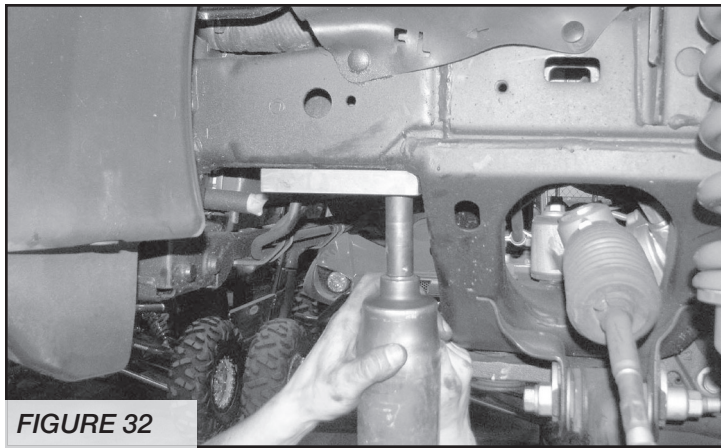


FIGURE 32

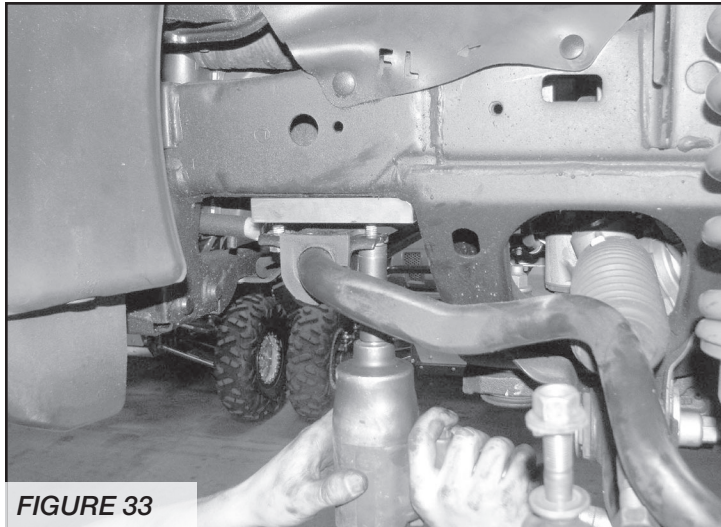


FIGURE 33

20. Re-attach sway bar end link to knuckle using factory hardware. Tighten to 75 Ft - Lbs. **SEE FIGURE 34**

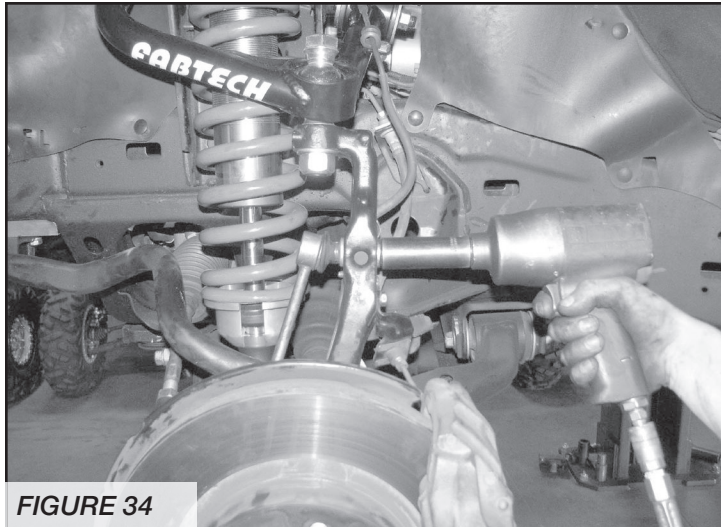


FIGURE 34

21. Re-install the factory skid plate and brackets with the retained hardware.
22. 18. Recheck all bolts for proper torque.
23. Install tires and wheels and torque lug nuts to wheel manufacturer's specifications. Turn front tires left to right and check for appropriate tire clearance. **Note - Some oversized tires may require trimming of the front bumper & valance.**

24. Check front end alignment and set to factory specifications. Readjust headlights.
25. Recheck all bolts for proper torque.
26. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.
27. Check the fluid in the front and rear differential and fill if needed with factory specification differential oil. **Note - some differentials may expel fluid after filling and driving. This can be normal in resetting the fluid level with the new position of the differential/s.**
28. Install Driver Warning Decal. Complete product registration card and mail to Fabtech in order to receive future safety and technical bulletins on this suspension

**Vehicles that will receive oversized tires should check ball joints and all steering components every 2500-5000 miles for wear and replace as required.**

**RETORQUE ALL NUTS, BOLTS AND LUGS AFTER 50 MILES AND PERIODICALLY THEREAFTER.**

For technical assistance call: 909-597-7800

## - Product Warranty and Warnings -

Fabtech provides a Limited Lifetime Warranty to the original retail purchaser who owns the vehicle, on which the product was originally installed, for defects in workmanship and materials.

The Limited Lifetime Warranty excludes the following Fabtech items; bushings, bump stops, ball joints, tie rod ends, limiting straps, cross shafts, heim joints and driveshafts. These parts are subject to wear and are not considered defective when worn. They are warranted for 60 days from the date of purchase for defects in workmanship.

Dirt Logic and Performance Coilover take apart shocks are considered a serviceable shock with a one year warranty on leakage only. Service seal kits are available separately for future maintenance. All other shocks are covered under our Limited Lifetime Warranty.

Fabtech does not warrant any product for finish, alterations, modifications and/or installation contrary to Fabtech's instructions. Alterations to the finish of the parts including but not limited to painting, powder coating, plating and/or welding will void all warranties. Some finish damage may occur to parts during shipping, which is considered normal and is not covered under warranty.

Fabtech products are not designed nor intended to be installed on vehicles used in race applications or for racing purposes or for similar activities. (A "RACE" is defined as any contest between two or more vehicles, or any contest of one or more vehicle against the clock, whether or not such contest is for a prize). This warranty does not include coverage for police or taxi vehicles, race vehicles, or vehicles used for government or commercial purposes. Also excluded from this warranty are sales outside of the United States of America.

Installation of most suspension products will raise the center of gravity of the vehicle and will cause the vehicle to handle differently than stock. It may increase the vehicle's susceptibility to a rollover, on road and off road, at all speeds. Extreme care should be taken to operate the vehicle safely at all times to prevent rollover or loss of control resulting in serious injury or death. Fabtech front end Desert Guards may impair the deployment or operation of vehicles equipped with supplemental restraining systems/air bag systems and should not be installed if the vehicle is equipped as so.

Fabtech makes every effort to ensure suspension product compatibility with all vehicles listed on the website, but due to unknown auto manufacturer's production changes and/or inconsistencies by the auto manufacturer, Fabtech cannot be responsible for 100% compatibility, including the fitment of tire and wheel sizes listed. The Tire and Wheel sizes listed in Fabtech's website are only a guideline for street driving with noted fender trimming. Fabtech is not responsible for damages to the vehicle's body or tires. Fabtech is not responsible for premature wear of factory components due to the installation of oversized tires and wheels.

Fabtech's obligation under this warranty is limited to the repair or replacement, at Fabtech option, of the defective product only. All costs of removal, installation or re-installation, freight charges, incidental or consequential damages are expressly excluded from this warranty. Fabtech is not responsible for damages and/or warranty of other vehicle parts related or non related to the installed Fabtech product. This warranty is expressly in lieu of all other warranties expressed or implied. This warranty shall not apply to any product that has been subject to accident, negligence, alteration, abuse or misuse as determined by Fabtech.

Fabtech suspension components must be installed as a complete system including shocks as shown on our website. All warranties will become void if Fabtech parts are combined and/or substituted with other aftermarket suspension products. Combination and/or substitution of other aftermarket suspension parts may cause premature wear and/or product failure resulting in an accident causing injury or death. Fabtech does not warrant products not manufactured by Fabtech.

Depending on the condition of the factory suspension components retained after the installation of a Fabtech suspension not all vehicles may have the same ride stance front to rear as described in the website. The blue color of suspension components shown in all Fabtech photographs are for display purposes only. Majority of all Fabtech components will be black specifically where noted with part numbers ending in BK.

Installation of Fabtech product may void the vehicles factory warranty; it is the consumer's responsibility to check with their local vehicle's dealer for warranty disposition before the installation of the product. Some state laws may prohibit modification of suspension to a vehicle in whole or in part. It is the responsibility of the installer and consumer to consult local laws prior to the installation of any Fabtech suspension product to comply with such written laws.

It is the responsibility of the distributor and/or the retailer to review all warranties and warnings of Fabtech products with the consumer prior to purchase.

Fabtech reserves the right to super cede, discontinue, change the design, finish, part number and/or application of parts when deemed necessary without written notice. Fabtech is not responsible for misprints or typographical errors within the website or price sheet. For the most recent Product Warranty and Warnings visit our website [www.fabtechmotorsports.com](http://www.fabtechmotorsports.com)