



## **INSTALLATION INSTRUCTIONS**

**2018-19 JEEP JL 4WD**

**FRONT COILOVER KIT**

**FT24227i**

**NOTE:** TO ORDER WEARABLE REPLACEMENT COMPONENTS DO NOT USE PART NUMBERS SHOWN ON THIS INSTRUCTION SHEET. GO TO FABTECH WEBSITE AND LOOK UP WEARABLE REPLACEMENT PARTS TO FIND THE PROPER PART NUMBER TO ORDER.

**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)

<b>FTS24227 COILOVER MOUNT KIT</b>		
1	FT50681	UPPER COILOVER MOUNT (DRIVER)
1	FT50682	UPPER COILOVER MOUNT (PASS)
1	FT50714	LOWER COILOVER MOUNT (DRIVER)
1	FT50715	LOWER COILOVER MOUNT (PASS)
2	FT50698	UPPER MOUNT SPACER
1	FT50739	HARDWARE SUBASSEMBLY
1	FT50712	SUPPORT TUBE (DRIVER)
1	FT50713	SUPPORT TUBE (PASS)

<b>FT50739 HARDWARE SUBASSEMBLY</b>		
1	FT24227i	INSTRUCTIONS
4	FT50691	NUT TAB LONG
2	FT157	LOWER MOUNT SLEEVE
2	FT50692	NUT TAB SHORT
1	FT50741	HARDWARE KIT
1	FTAS12	STICKER FT BLUE 10X4 DIE CUT
1	FTAS16	DRIVER WARNING DECAL
1	FTREGCARD	REGISTRATION CARD

<b>FT50741 - HARDWARE KIT</b>		<b>LOCATION</b>
8	1/2-13 X 1-1/4" HEX BOLT	C/O TO FRAME
10	1/2" SAE WASHER	
6	1/2" SPLIT LOCK WASHER	
6	3/8-16 X 1-1/4" HEX BOLT	C/O TO COIL BUCKET
10	3/8" SAE WASHER	
2	3/8" USS WASHER	
6	3/8-16 C-LOCK NUT	
2	M12 FLAT WASHER	SUPPORT TUBE
2	M12-1.75 NYLOCK NUT	
4	1/4-20 X 1" HEX BOLT G5 ZINC	BRAKE LINE
8	1/4 SAE WASHER	
4	1/4-20 C-LOCK NUT	
4	7/16-14 X 1 1/4 HEX HD	LOWER C/O MOUNT
8	7/16 SAE WASHER G8 ZINC	
4	7/16-14 C-LOCK NUT ZINC	
2	1/2-13 X 3" HEX BOLT	UPPER C/O
2	1/2-13 X 4-3/4" HEX BOLT	LOWER C/O
8	1/2" SAE WASHER	
6	1/2-13 C-LOCK NUT	
4	#10 X 1" TEK SCREW	
4	CLAMP 3/8X1/2W .26THK NEOPRENE	
6	7.5" STANDARD CABLE TIE BLACK	
1	THREAD LOCKING COMPOUND 1 MIL	

## - TOOL LIST -

### *Required Tools (Not Included)*

- Basic Hand Tools
- Floor Jack
- Jack Stands
- Assorted Metric and S.A.E sockets, and Allen wrenches
- Torque Wrench
- Die Grinder w/ Cutoff Wheel or Sawzall
- Vise Grip Clamp

## - PRE-INSTALLATION NOTES -

For technical assistance call: **909-597-7800** or e-mail: **info@fabtechmotorsports.com**

### **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.

This suspension must be installed with Fabtech shock absorbers.

Use the provided thread locking compound on all hardware.

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

Vehicles that receive oversized tires should check ball joints, uniballs, tie rods ends, pitman arm and idler arm every 2500-5000 miles for wear and replace as needed.

Verify differential fluid is at manufactures recommended level prior to kit installation. Installation of the kit will reposition the differential and the fill plug hole may be in a different position. (For example, if the manufacture recommends 3 quarts of fluid, make sure the diff has 3 quarts of fluid). Check your specific manual for correct amount of fluid.

### **FOOTNOTES -**

- Installation requires welding
- Fits 4-door models only
- Exhaust modification required on all 2018 Jeep JL wranglers or order AFE # 48-48024 (Loop delete pipe)
- Requires driveshafts. 4-door models Front (FTS94057- Rear (FTS94065)
- Does not fit vehicles equipped with 2.0L engine.

# - INSTRUCTIONS -

## FRONT SUSPENSION

1. Take accurate measurements of the front suspension height. This measurement will need to be taken from the center of the front wheel hub to the center most part of the wheel well. This measurement will be needed to correctly set the height for the new Coilover shocks. DO NOT exceed 3" or 5" overstock height. If you are adding this kit to a Jeep that is already lifted, then match the current height. Record your measurements below.  
Right \_\_\_\_\_ Left \_\_\_\_\_
2. 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.
3. Remove the factory inner fender liners. Save all hardware.
4. On the Driver side, locate the bracket that supports the washer fluid reservoir and other components. The excess bolt threads and bent lip will need to be cut off. **SEE FIGURES 1-2**

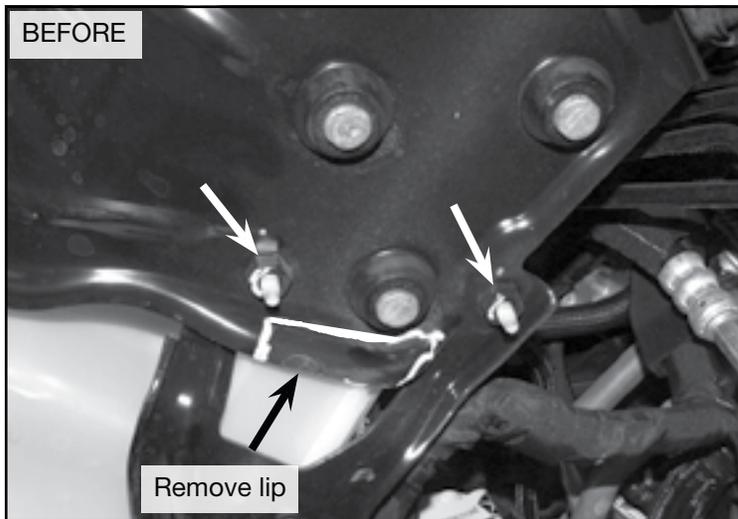


FIGURE 1 - STEP 4

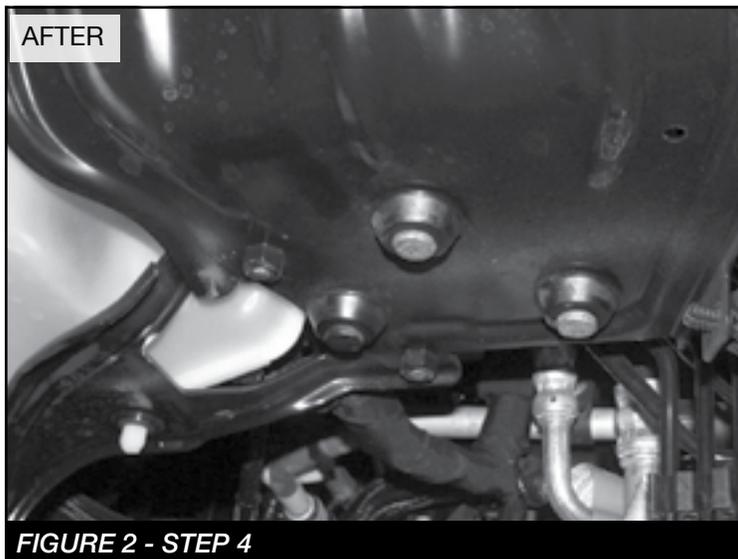


FIGURE 2 - STEP 4

5. Passenger side, locate the bracket underneath the battery holder. Refer to the figure below for the area that needs to be cut off, as well as the location of the bolt threads to be removed. **SEE FIGURES 3-4.** Paint all bare areas.

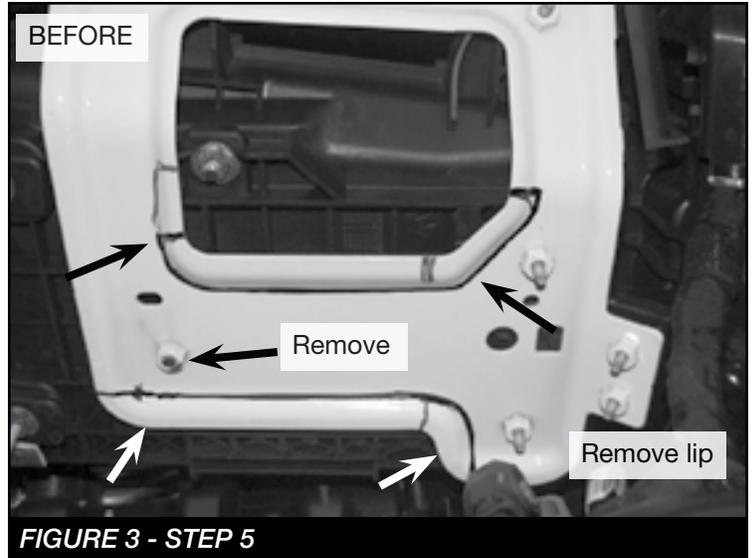
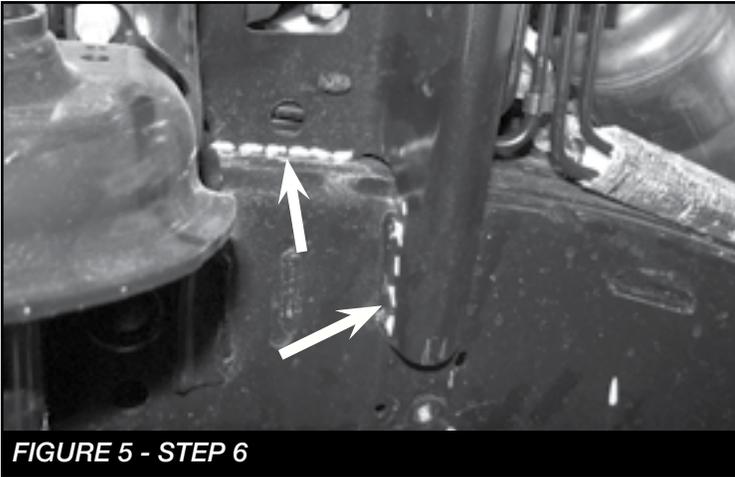


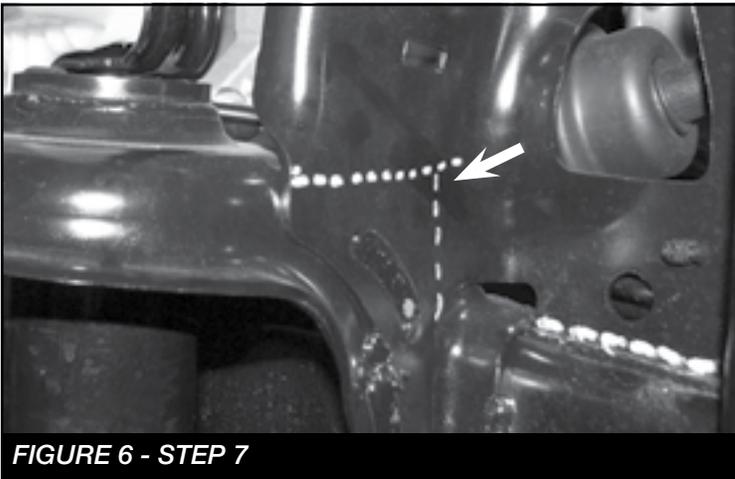
FIGURE 3 - STEP 5



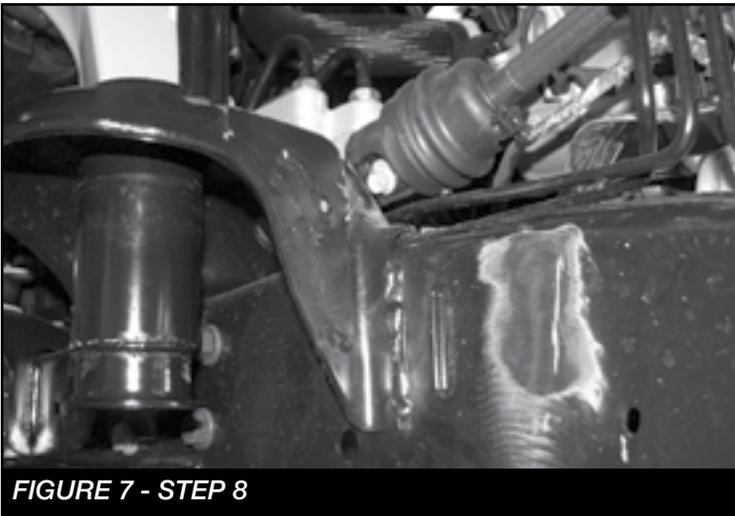
6. **Driver side upper shock mount:** Using a paint pen. Mark the factory welds that attach the shock tower mount to the frame. **SEE FIGURE 5**



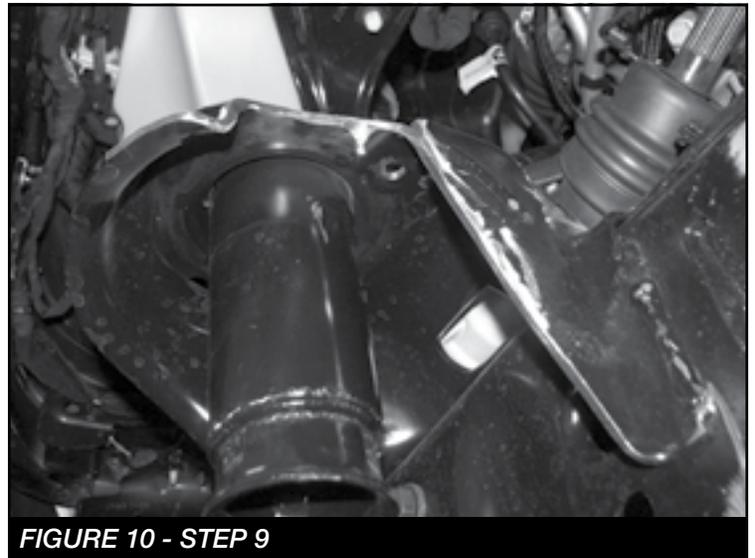
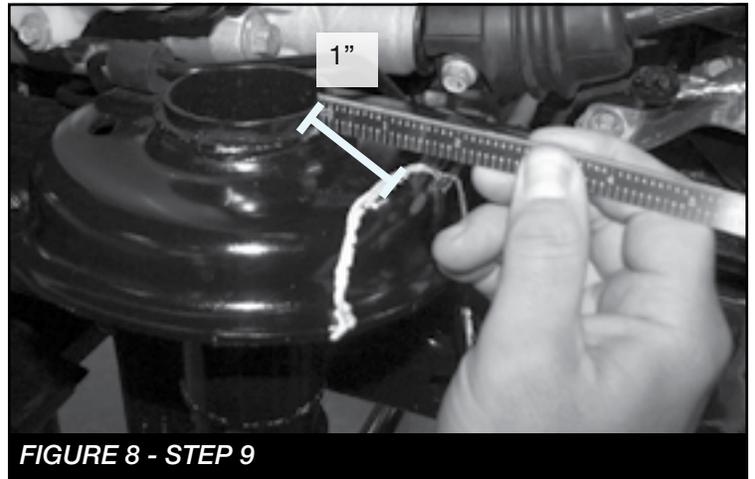
7. Mark 90 degrees on the inside of the shock tower only, not the coil bucket. **SEE FIGURE 6**



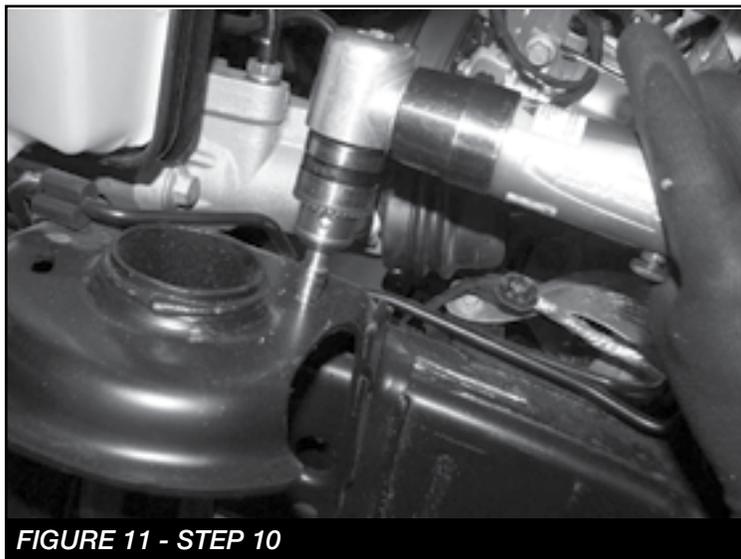
8. Using a cut off wheel and/or saw zaw. Cut the tower bracket off, then sand the frame to a smooth finish. **SEE FIGURE 7**



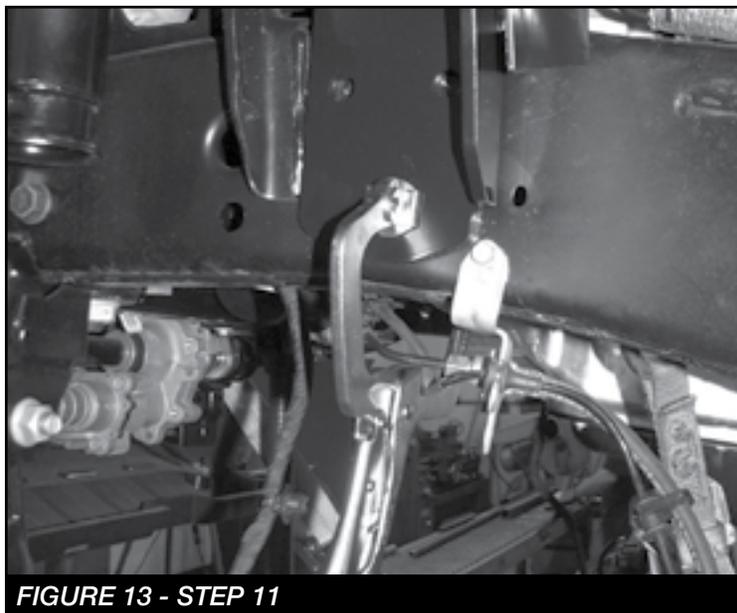
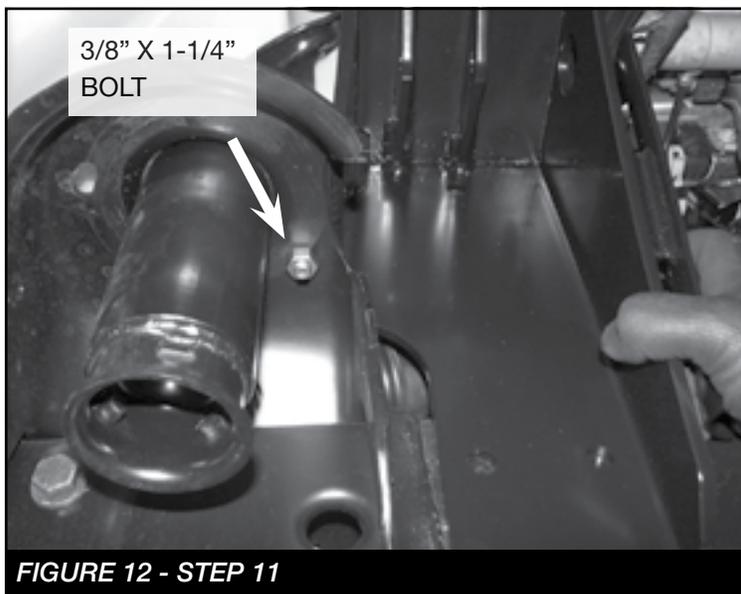
9. Measure 1" from the outside edge of the inner coil bucket lip. Mark a line. **Note: Everything past the 1" mark will need to be removed.** Using a cut off wheel or saw zaw cut the part off of the bucket. Sand to a smooth finish. Paint all bare areas. **SEE FIGURES 8-10**



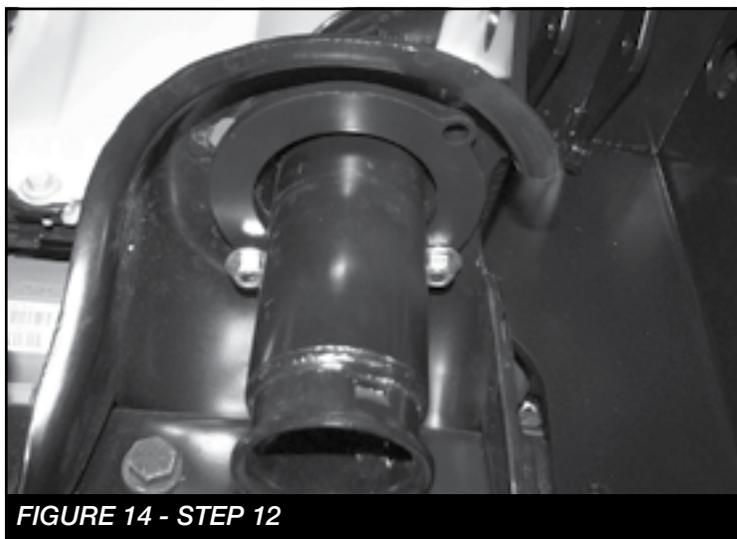
10. Using a drill and 3/8" bit. Drill out the existing hole on the coil bucket. **SEE FIGURE 11**



11. Install FT50681 (Driver Coilover Tower) to the factory coil bucket using a supplied 3/8" x 1-1/4" bolt and nut. Then, using a vise grip or clamp. Position the new tower so it is setting flush on the frame then clamp together. **SEE FIGURES 12-13**



12. Remove the 3/8" nut from the bottom of the coil bucket and install the FT50698 (Spacer) on the bottom side of the factory coil bucket using the 3/8" nut you just removed and another 3/8" x 1-1/4" bolt and hardware on the rear factory hole. **NOTE: Use one 3/8" USS washer on the top due to the factory hole diameter. SEE FIGURE 14**



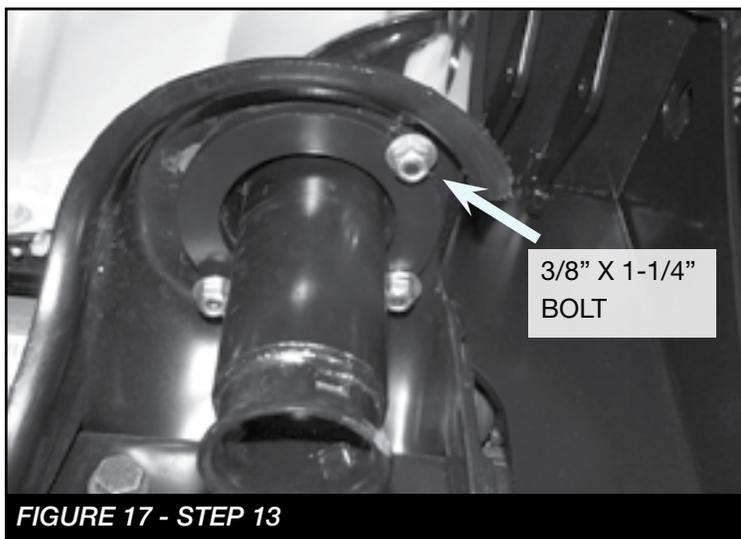
13. Mark and drill the last hole to 3/8" using the new tower/  
bottom spacer as a template. Then, install a 3/8" x 1-1/4"  
bolt and hardware. Hand tighten. **SEE FIGURES 15-17**



**FIGURE 15 - STEP 13**



**FIGURE 16 - STEP 13**

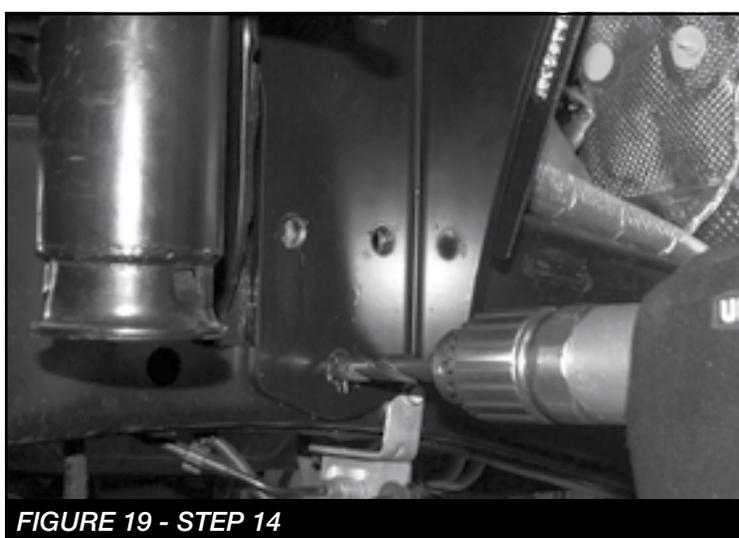


**FIGURE 17 - STEP 13**

14. Remove the clamp. Using a punch, mark and drill the 3  
holes in the side of the frame using the new bracket as a  
guide. Use a 1/2" drill bit. **SEE FIGURES 18-19**

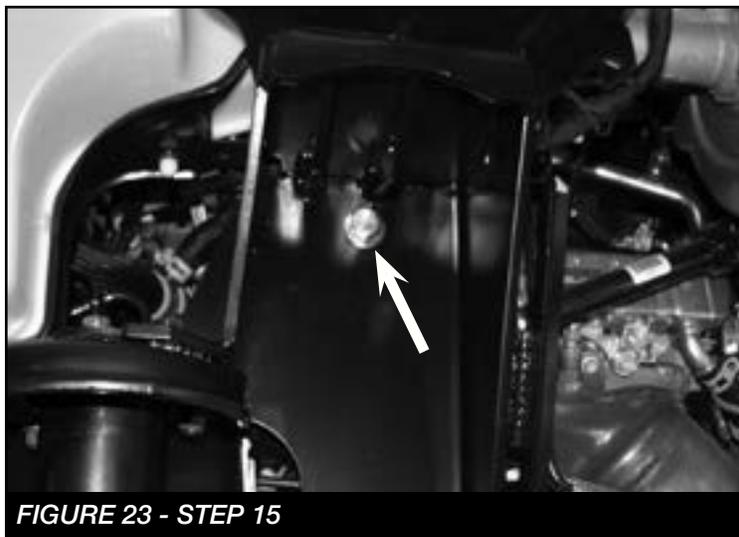


**FIGURE 18 - STEP 14**

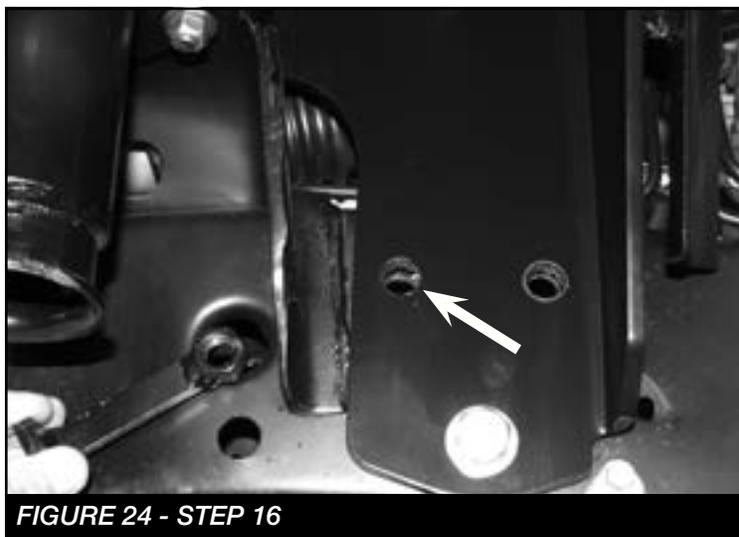


**FIGURE 19 - STEP 14**

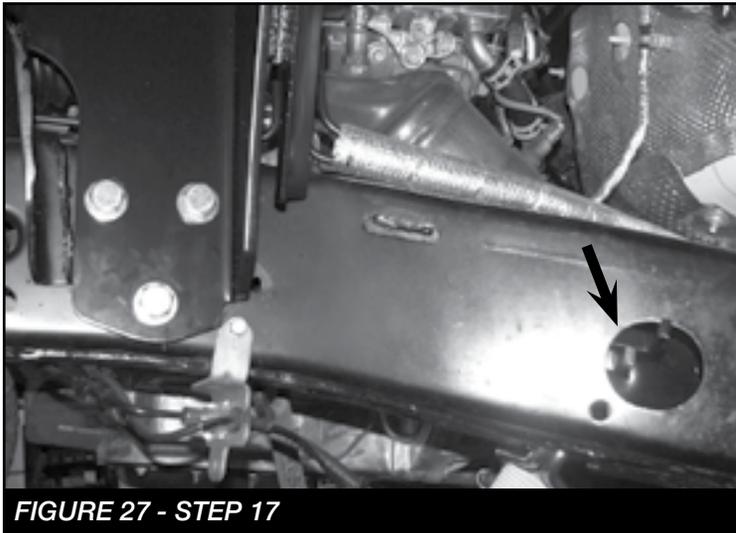
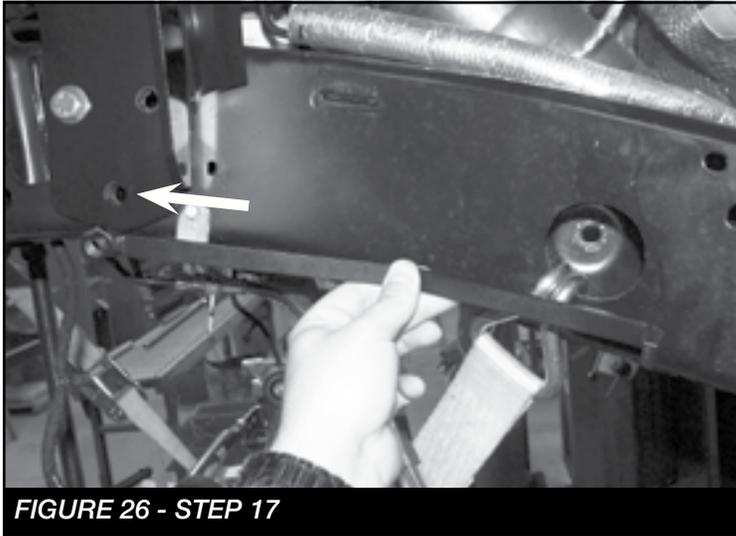
15. Locate the motor mount just underneath the A/C compressor. Remove the factory nut and discard. Install FT50712 (Driver support tube) to the motor mount bolt using the supplied M12 nut & washer. Then, mount the other end to the back side of the new coilover tower. Run the supplied 1/2-13 x 1-1/4 bolt, washers and nut. Through the front. Leave loose. **SEE FIGURES 20**



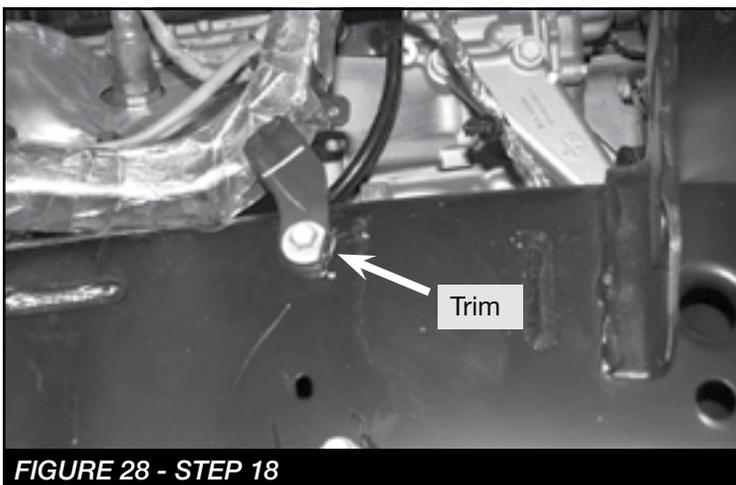
16. Install FT50692 (Short Nuttab) through the factory hole just left of the new coilover tower using the supplied 1/2-13 x 1-1/4" bolt, flat and split washers. Leave loose. **SEE FIGURES 24-25**



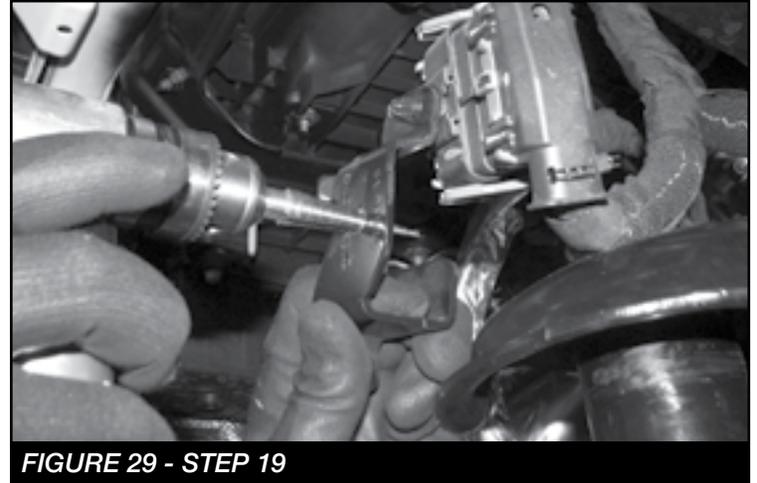
17. Install (2) of FT50691 (Long Nuttab) through the large factory hole on the frame to the right of the tower. Attach using the supplied 1/2-13 x 1-1/4" bolt, flat and split washers. Torque the 3 tower bolts as well as the support tube hardware to 106 ft-lbs and the 3/8" hardware to 44 ft-lbs. **SEE FIGURES 26-27**



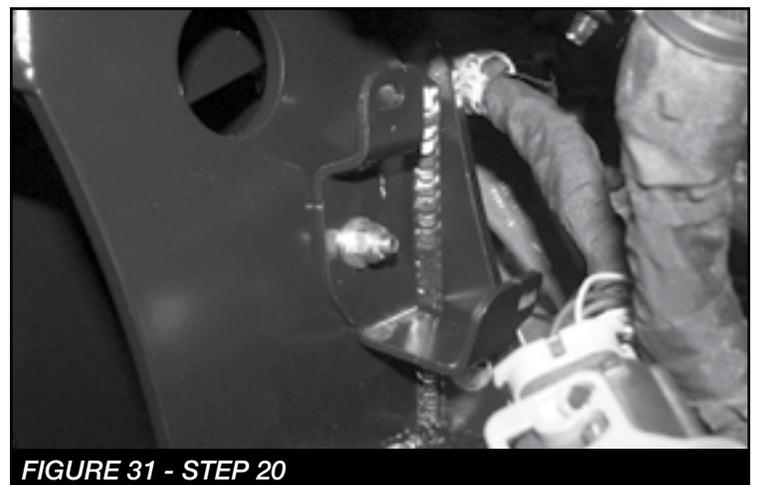
18. Repeat Steps 6-17 on the passenger side. **NOTE: The wire harness plastic bracket mounted to the frame will need to be trimmed to allow the fitment of the passenger coilover tower. SEE FIGURE 28**



19. Remove the bracket that attaches the main harness to the frame/coil bucket. Drill a 1/4" hole into the side of the bracket. Then cut the small bent ear off the side. **SEE FIGURES 39-30**



20. Install the bracket on the front side of the new coilover mount using the supplied 1/4" hardware. Torque to 12 ft-lbs. Then, reinstall the harness plug to the bracket. **SEE FIGURES 31-32**



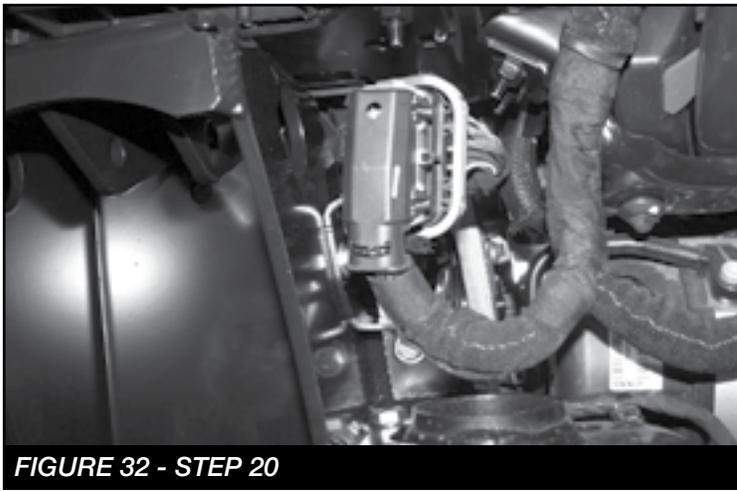


FIGURE 32 - STEP 20

21. Locate the driver side lower coil/shock mount. Mark and cut a straight line across the mount a 1/4" from the base of the round coil retainer. Also, drill out the factory hole on the top of the coil spring perch to 1/2". **SEE FIGURES 33-34**

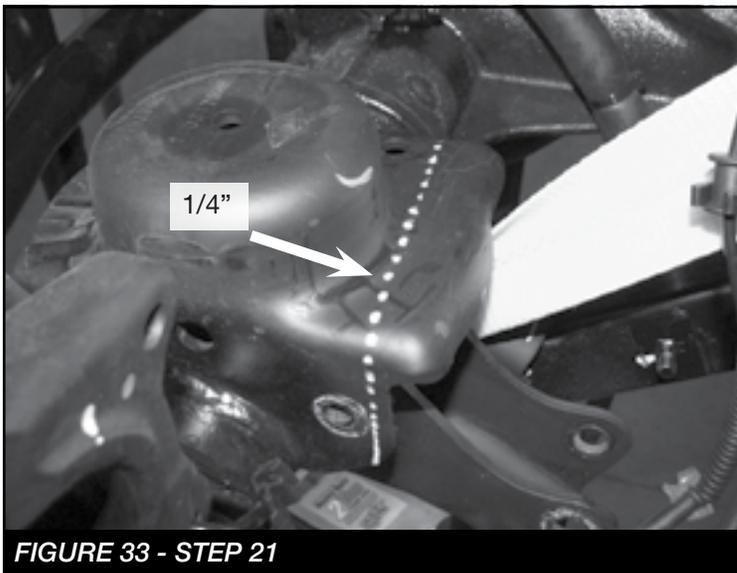


FIGURE 33 - STEP 21

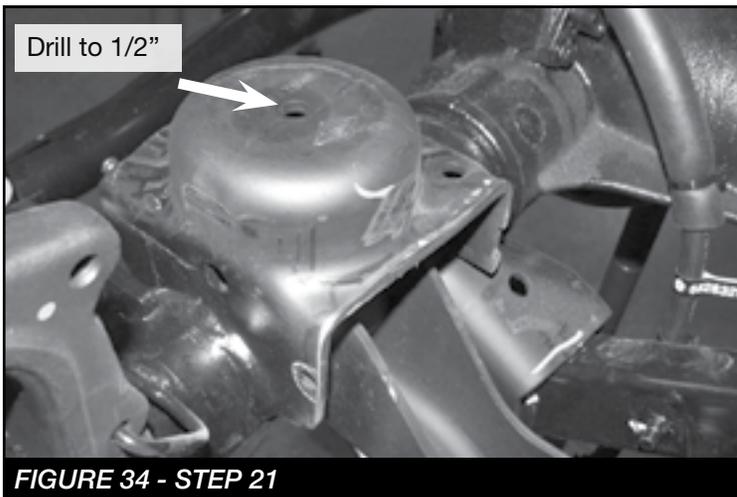


FIGURE 34 - STEP 21

22. Install FT50714 (Driver lower coilover mount) with the supplied 7/16" X 1-1/4" hardware x2 using the factory holes. Leave loose. **SEE FIGURES 35-37**

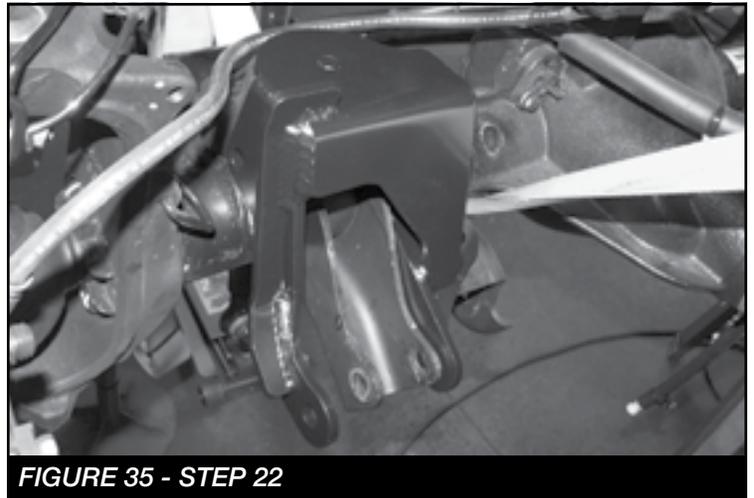


FIGURE 35 - STEP 22

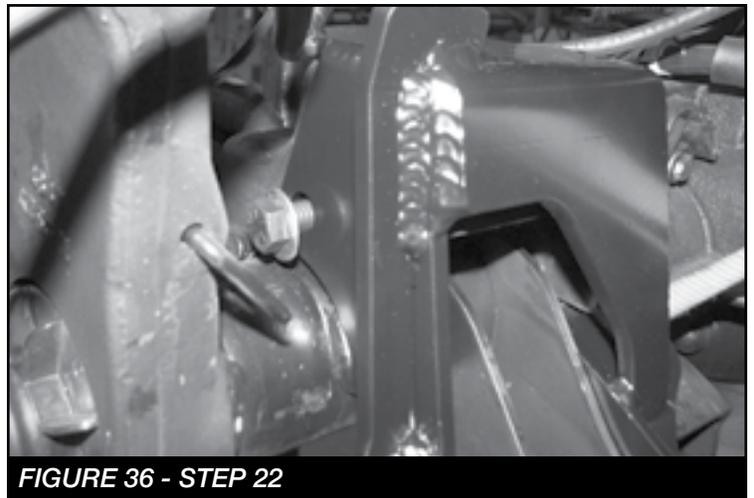


FIGURE 36 - STEP 22

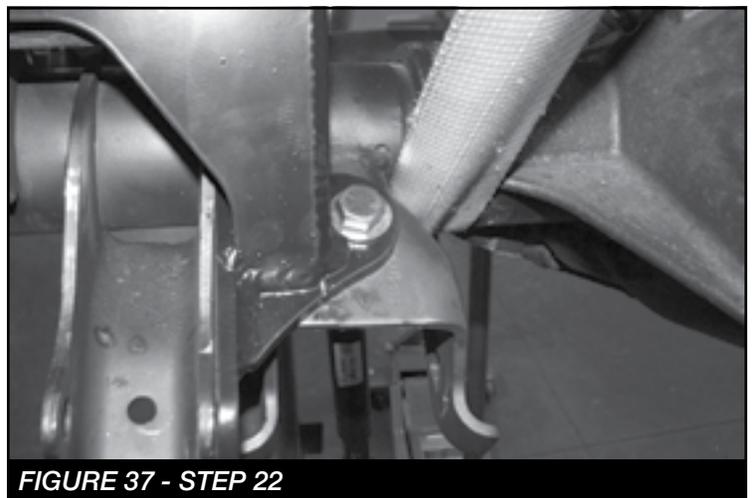
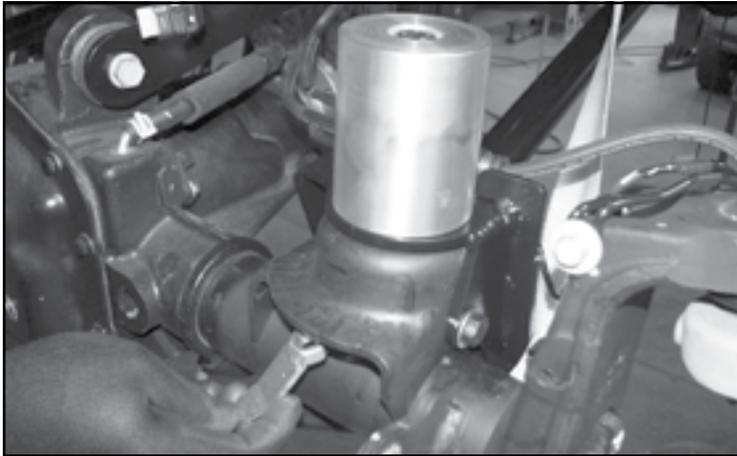


FIGURE 37 - STEP 22

23. Install the bumpstop spacer using the supplied FT50060 (Nuttab) and 1/2" bolt, all from the component box kit. **SEE FIGURE 38**



**FIGURE 38 - STEP 23**

24. Remove the factory brakeline bracket from the rubber brakeline hose as well as the plastic clips from the speed sensor cable. **SEE FIGURES 39-40**

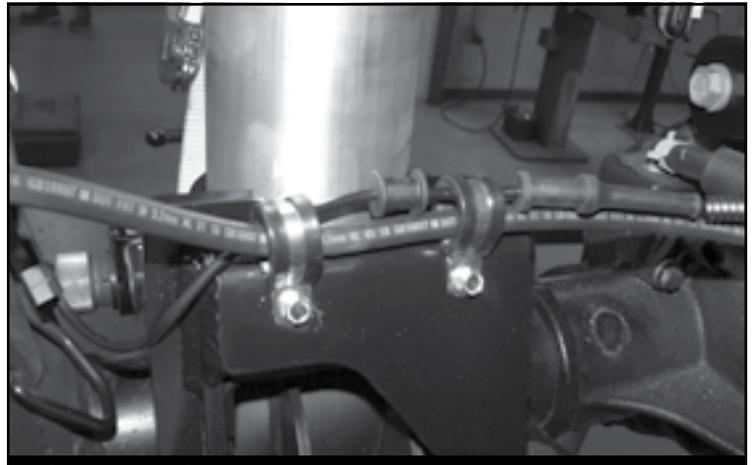


**FIGURE 39 - STEP 24**



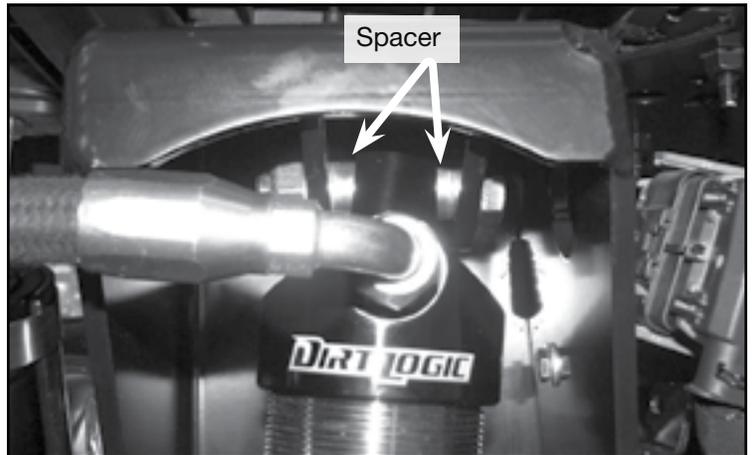
**FIGURE 40 - STEP 24**

25. Route the brakeline hose and speed sensor cable together and mount them to the lower mount using the supplied rubber clamps and self tapping screws. **SEE FIGURE 41**

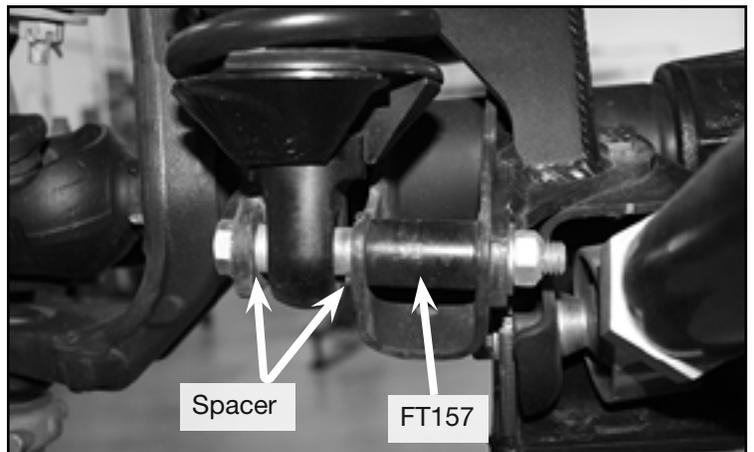


**FIGURE 41 - STEP 25**

26. Install the new Dirt Logic coilovers using the supplied misalignment spacers and 1/2" x 3" bolt and hardware for the upper mount. Then, install to the lower mount using the misalignment spacers, 1/2" x 4-3/4" bolt, hardware as well as FT157 (sleeve) at the lower factory shock mount location. Install the resi to the resi mount using the supplied clamps. **SEE FIGURES 42-44**



**FIGURE 42 - STEP 26**



**FIGURE 43 - STEP 26**



**FIGURE 44 - STEP 26**

27. 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.**
28. Check front end alignment and set to factory specifications. Readjust headlights.
29. Recheck all bolts for proper torque.
30. Recheck brake hoses, ABS wires and suspension parts for proper tire clearance while turning tires fully left to right.

31. 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.**
32. 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, uniballs 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)