



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.

FTS24227 COILOVER MOUNT KIT		
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)

FT50739 HARDWARE SUBASSEMBLY		
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

FT50741 - HARDWARE KIT		LOCATION
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 -

READ THIS BEFORE YOU BEGIN INSTALLATION -

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**

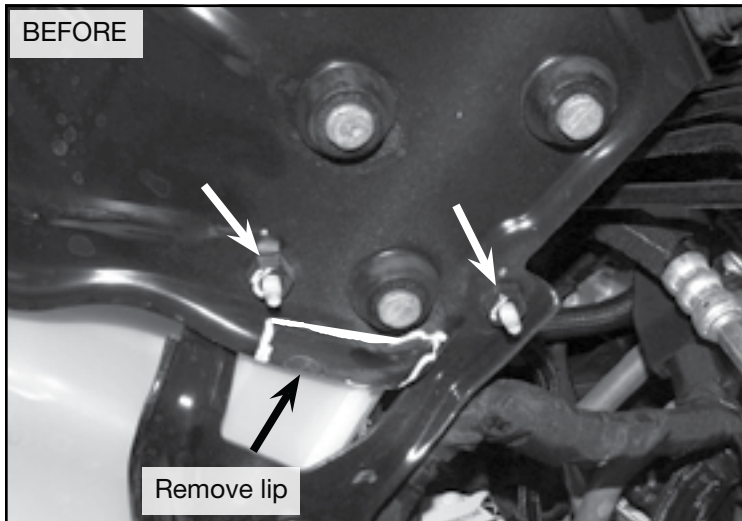


FIGURE 1 - STEP 4

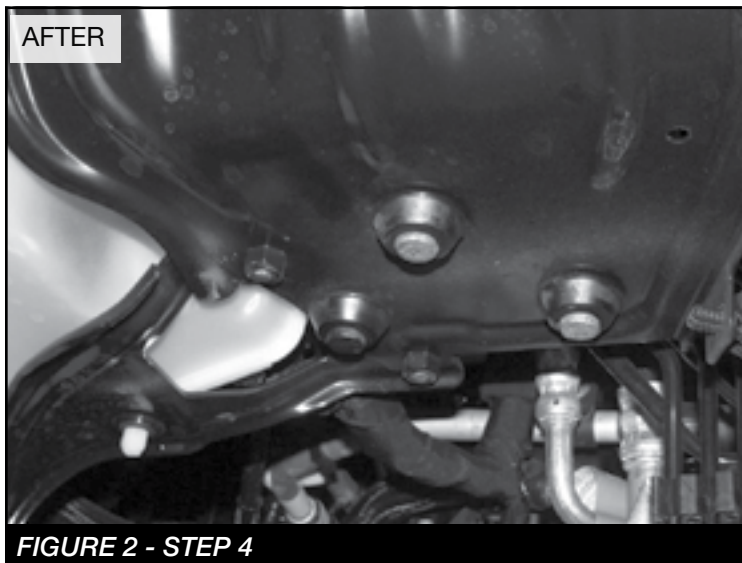


FIGURE 2 - STEP 4

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.

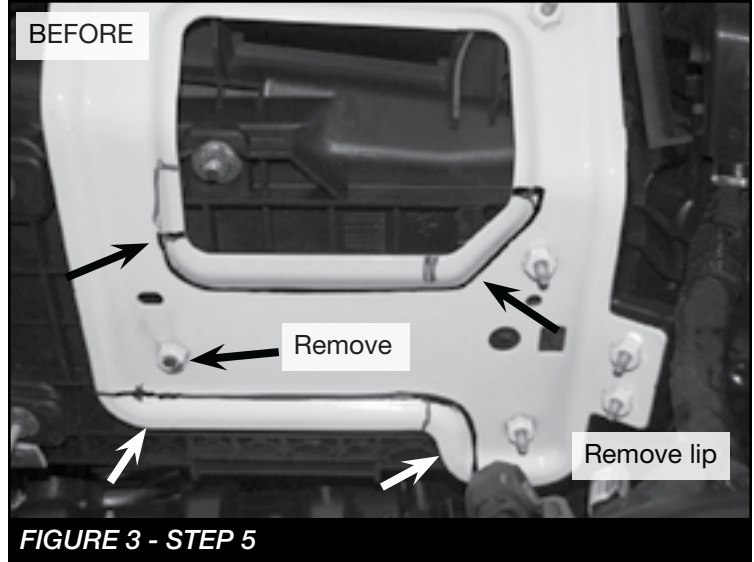
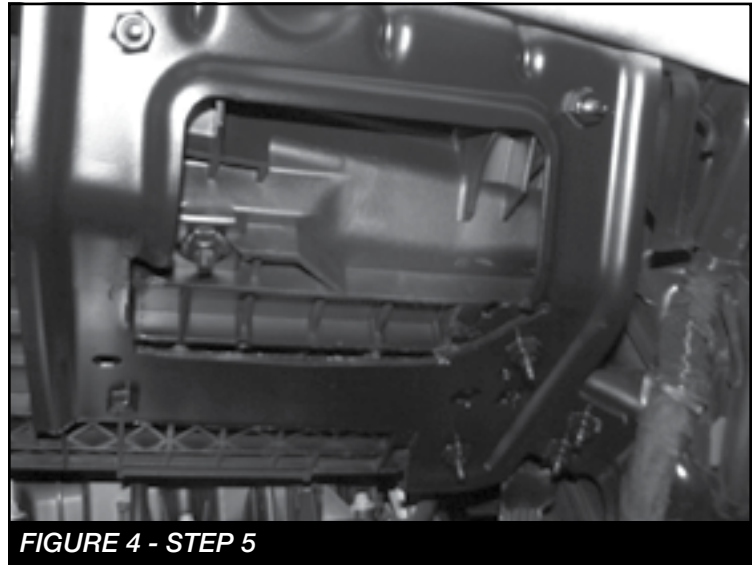
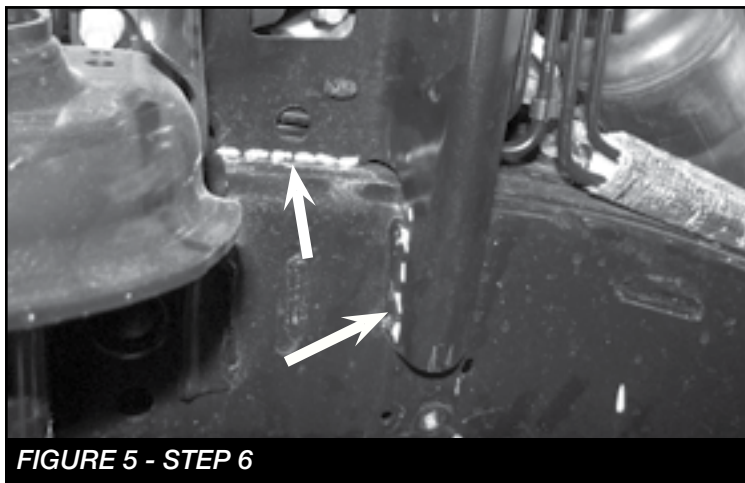


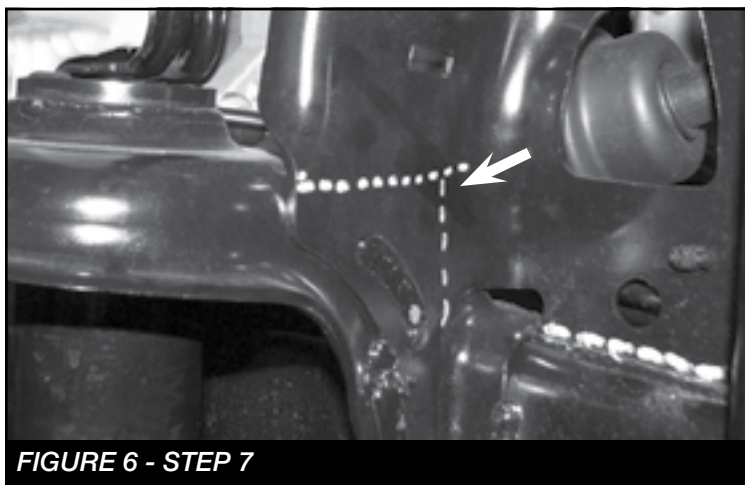
FIGURE 3 - STEP 5



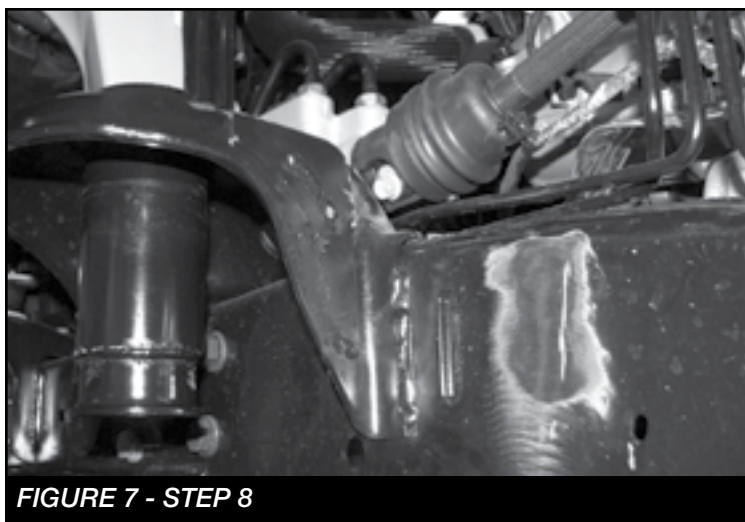
6. **Driver side upper shock mount:** Using a paint pen. Mark the factory welds that attach the shock tower mount to the frame. **SEE FIGURE 5**



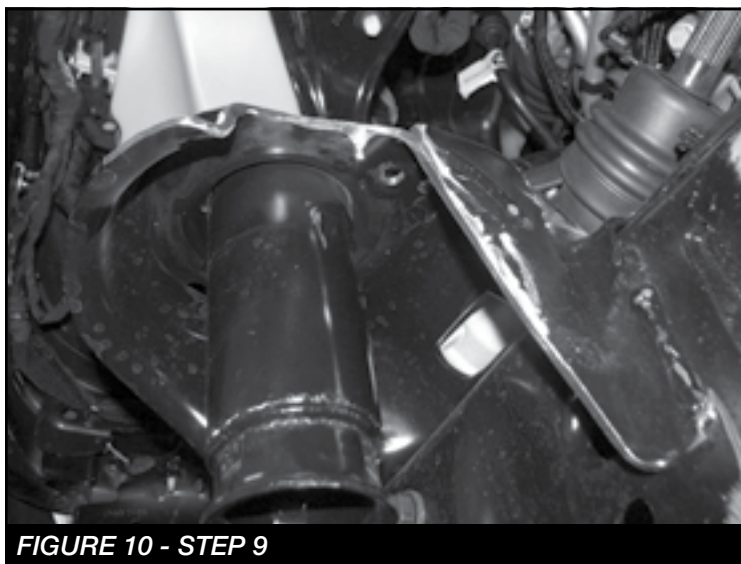
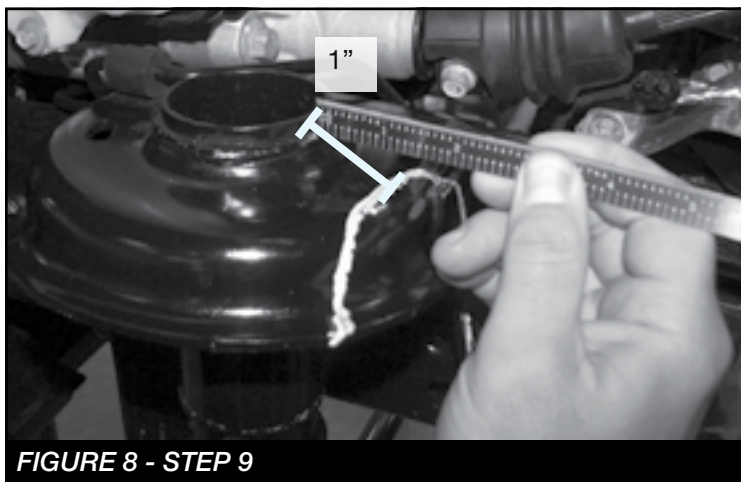
7. Mark 90 degrees on the inside of the shock tower only, not the coil bucket. **SEE FIGURE 6**



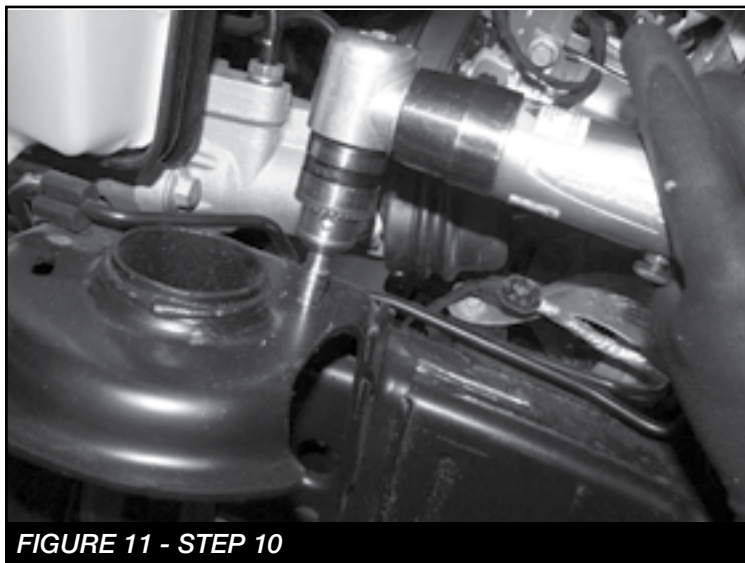
8. Using a cut off wheel and/or saw zaw. Cut the tower bracket off, then sand the frame to a smooth finish. **SEE FIGURE 7**



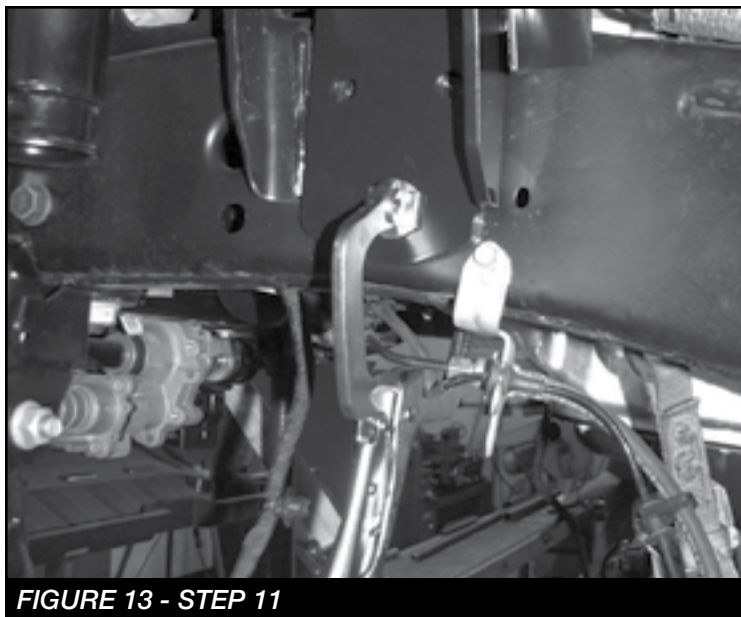
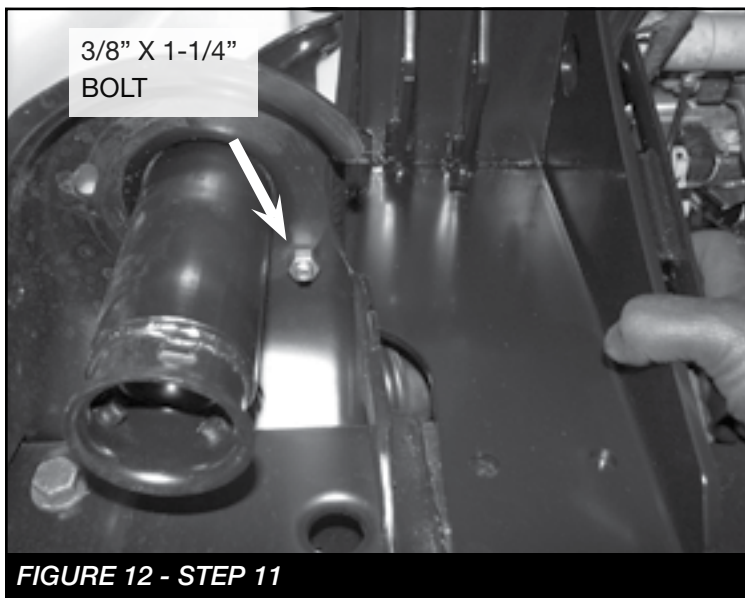
9. Measure 1" from the outside edge of the inner coil bucket lip. Mark a line. **Note: Everything past the 1" mark will need to be removed.** Using a cut off wheel or saw zaw cut the part off of the bucket. Sand to a smooth finish. Paint all bare areas. **SEE FIGURES 8-10**



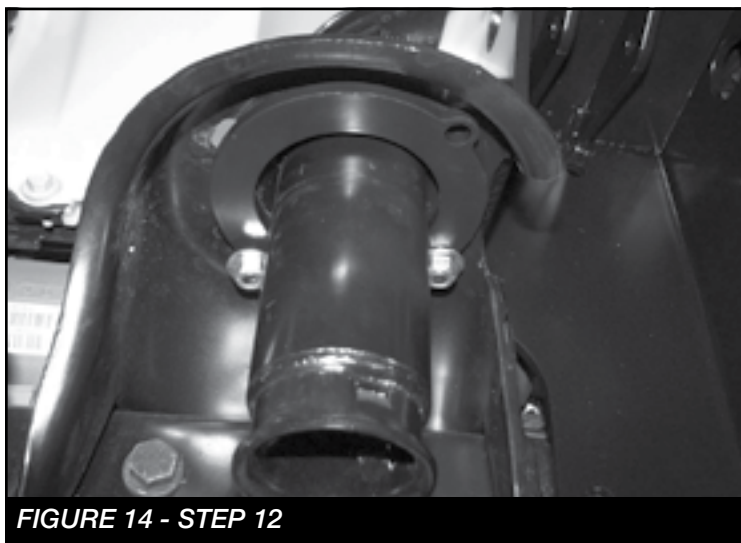
10. Using a drill and 3/8" bit. Drill out the existing hole on the coil bucket. **SEE FIGURE 11**



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

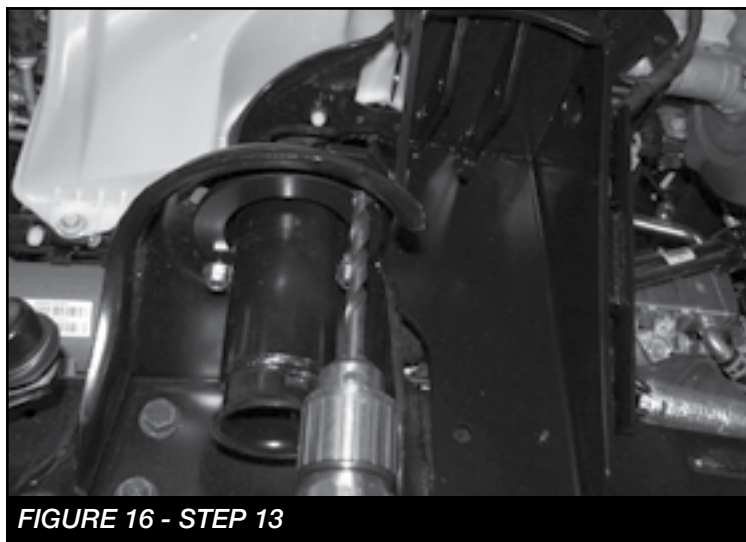


FIGURE 16 - STEP 13

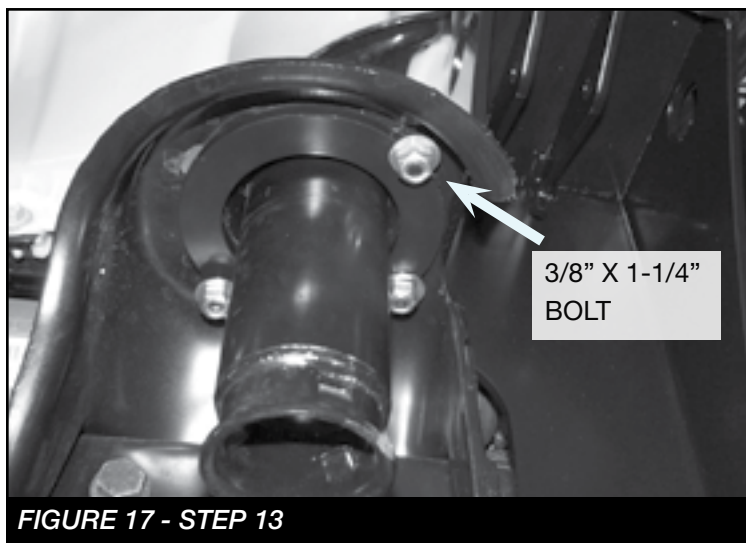


FIGURE 17 - STEP 13

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

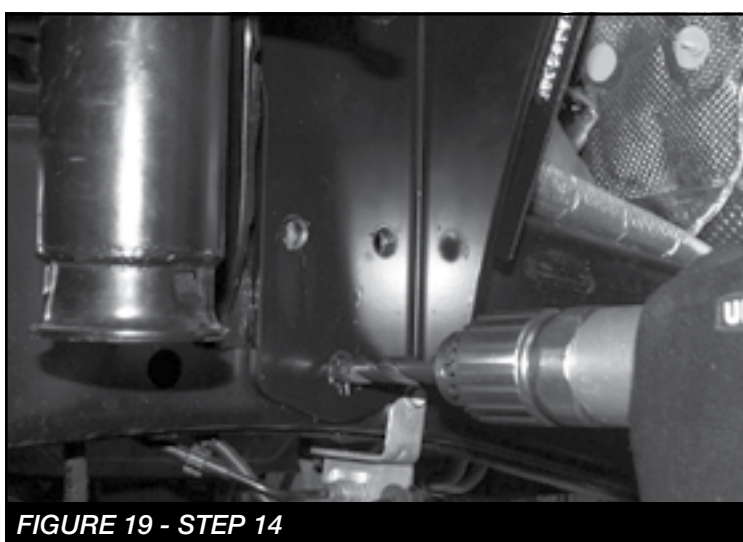


FIGURE 19 - STEP 14

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**



FIGURE 20 - STEP 15



FIGURE 21 - STEP 15



FIGURE 22 - STEP 15

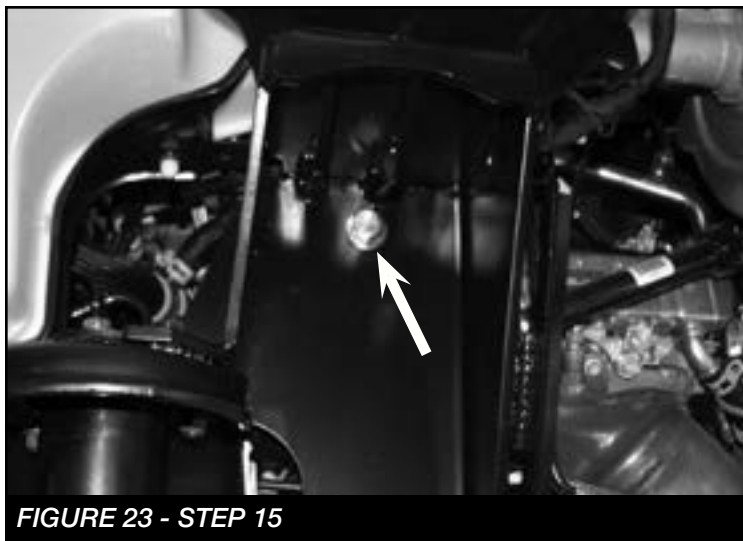


FIGURE 23 - STEP 15

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**

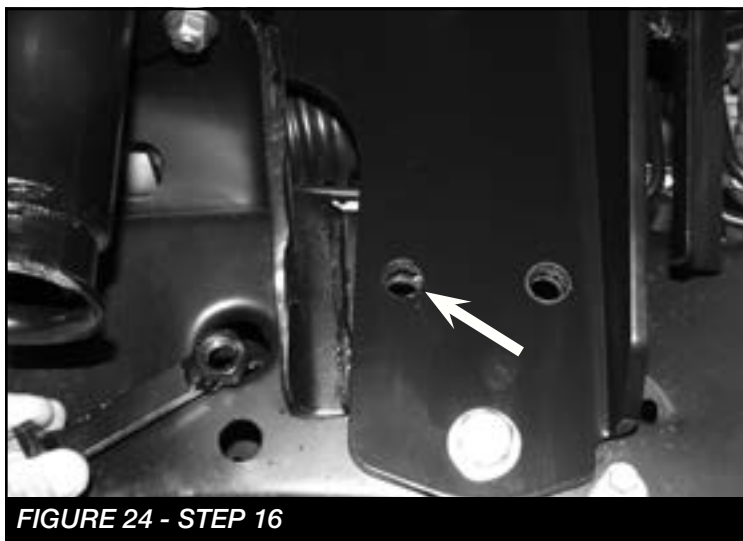
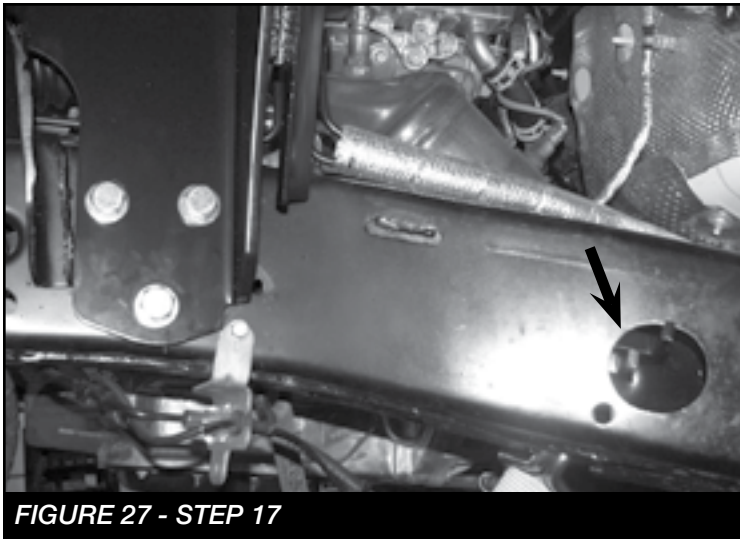
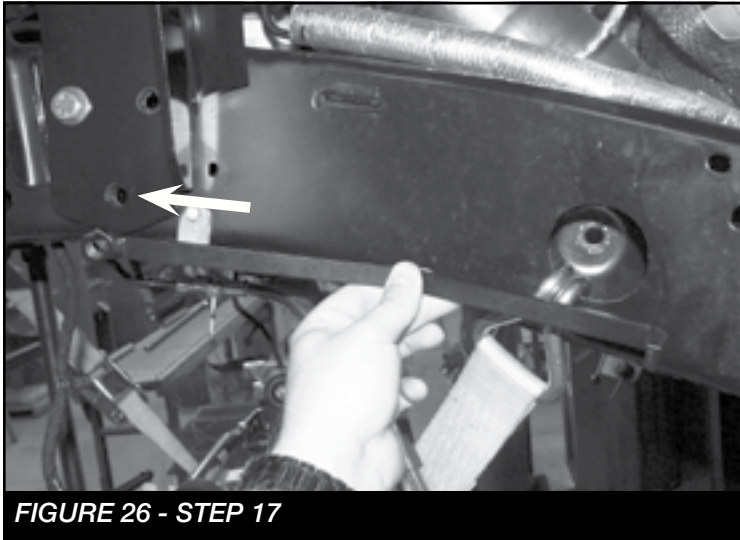


FIGURE 24 - STEP 16

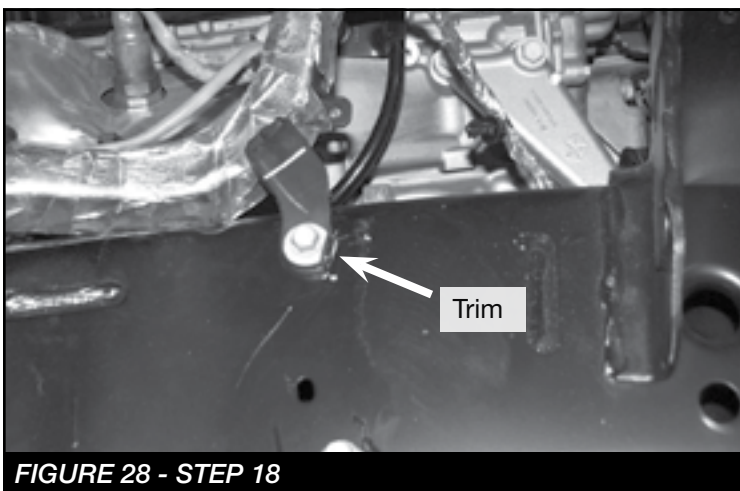


FIGURE 25 - STEP 16

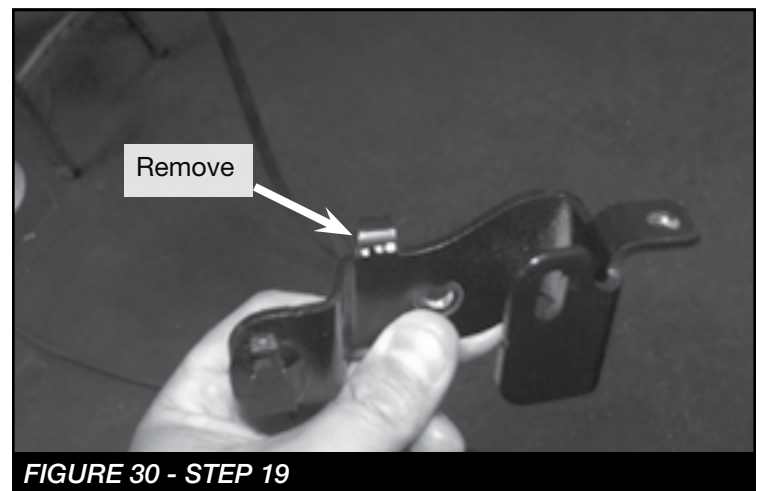
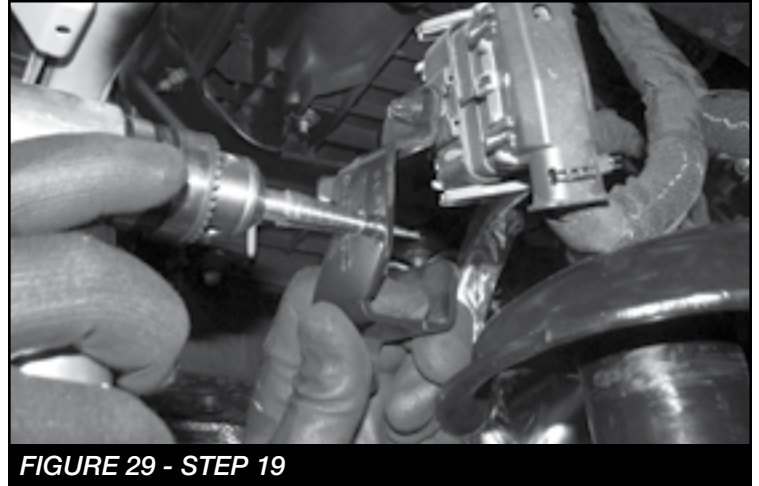
17. Install (2) of FT50691 (Long Nuttab) through the large factory hole on the frame to the right of the tower. Attach using the supplied 1/2-13 x 1-1/4" bolt, flat and split washers. Torque the 3 tower bolts as well as the support tube hardware to 106 ft-lbs and the 3/8" hardware to 44 ft-lbs. **SEE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



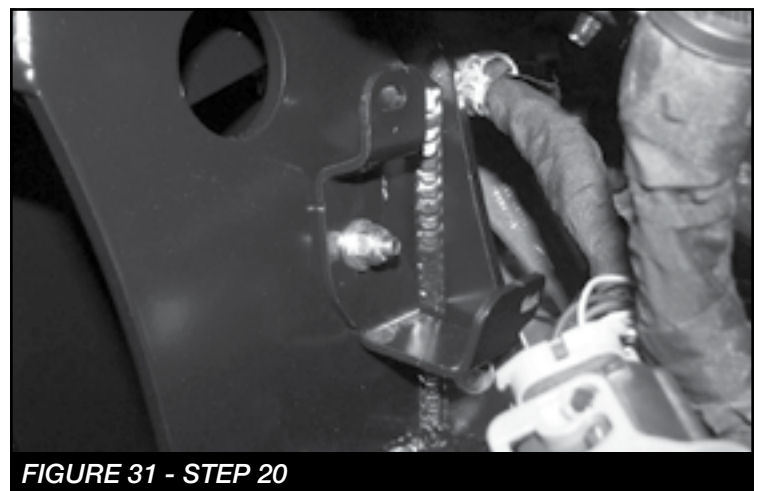
18. Repeat Steps 6-17 on the passenger side. **NOTE: The wire harness plastic bracket mounted to the frame will need to be trimmed to allow the fitment of the passenger coilover tower. SEE FIGURE 28**



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**



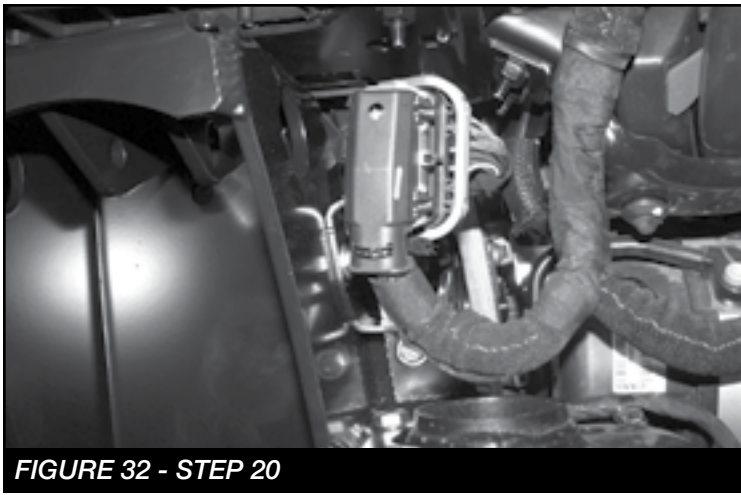


FIGURE 32 - STEP 20

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**

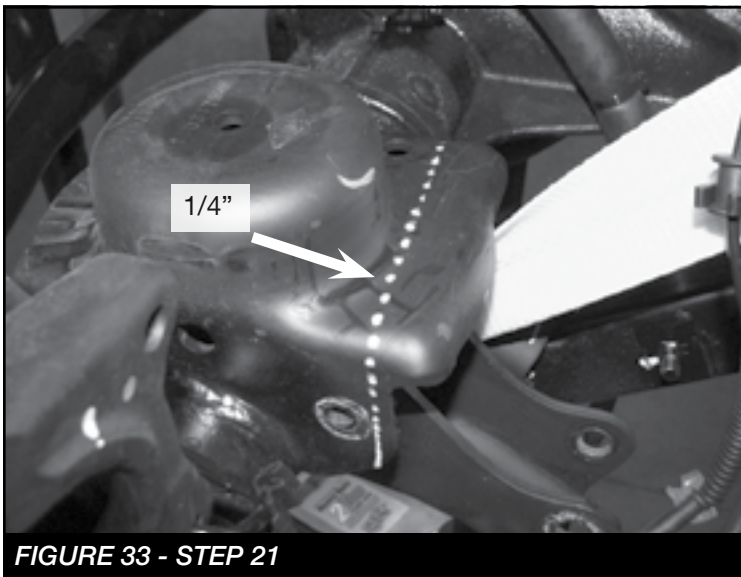


FIGURE 33 - STEP 21

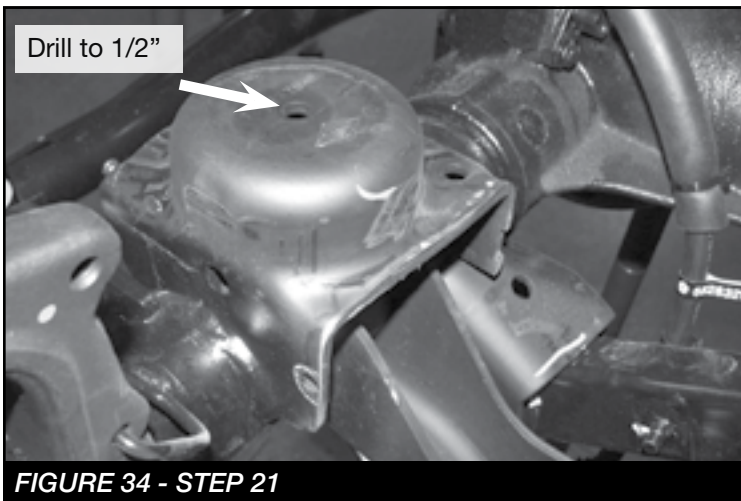


FIGURE 34 - STEP 21

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**

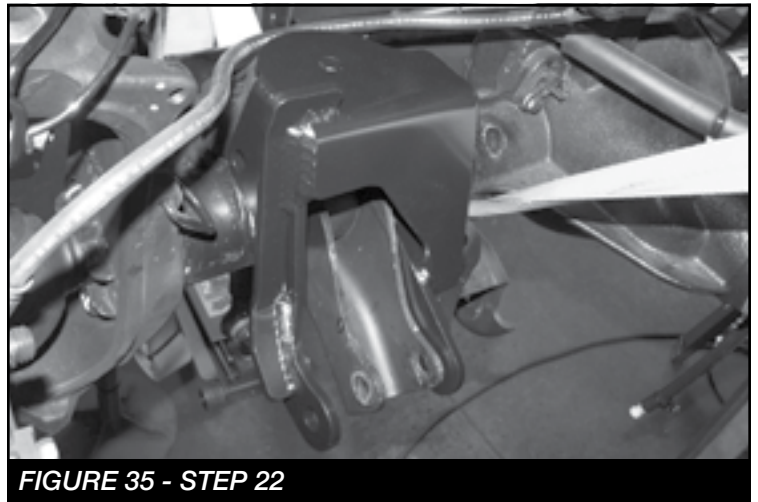


FIGURE 35 - STEP 22

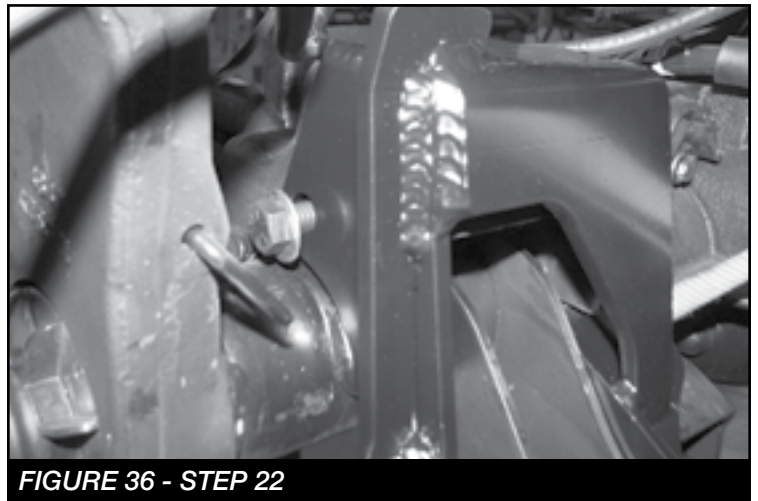


FIGURE 36 - STEP 22

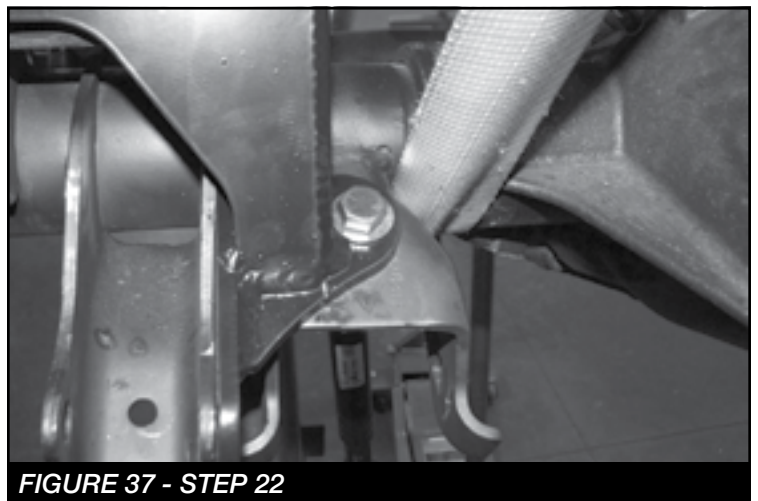


FIGURE 37 - STEP 22

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

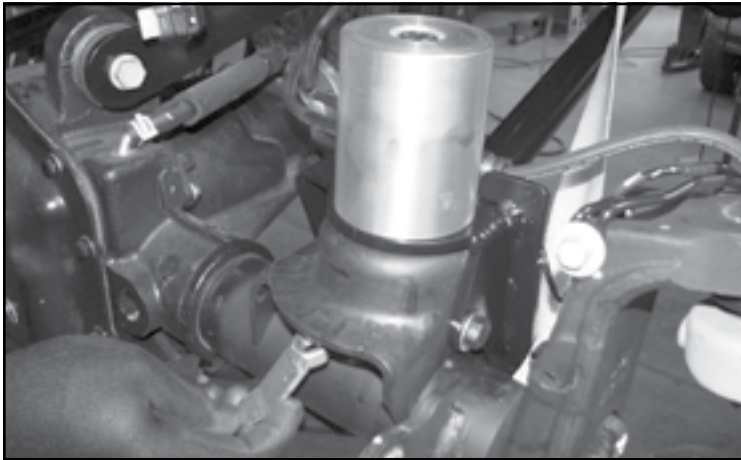


FIGURE 38 - STEP 23

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**

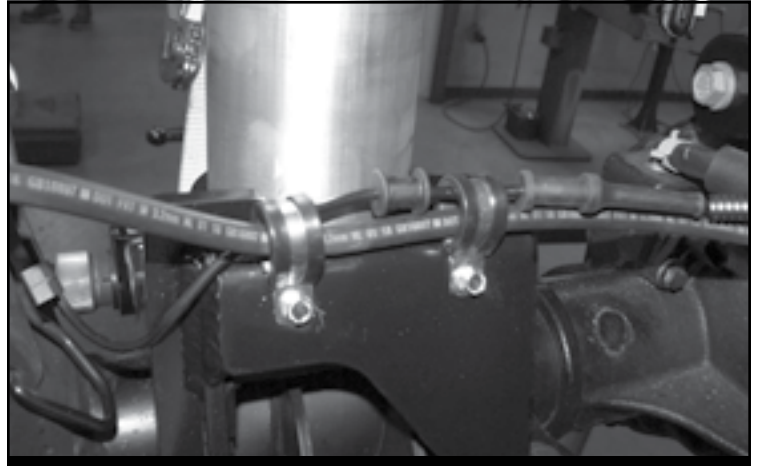


FIGURE 41 - STEP 25

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**

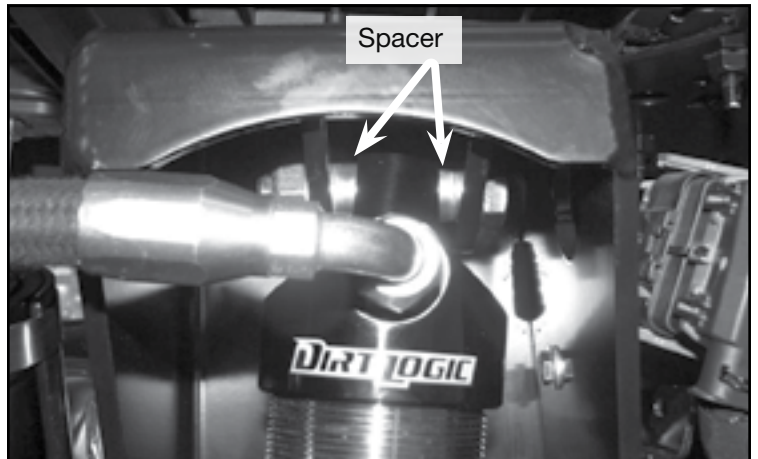


FIGURE 42 - STEP 26

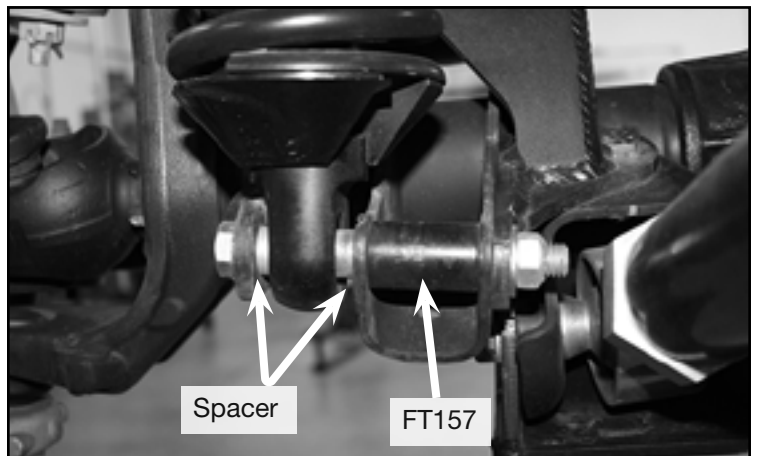


FIGURE 43 - STEP 26



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.



FTS24236		2.5" Dirt Logic SS Coilover w/ Resi (3" JEEP)
1	FT820582	2.5 DLSS C/O RESI (DRIVER)
1	FT820592	2.5 DLSS C/O RESI (PASS)
1	FT86104	HARDWARE KIT 104

FTS24237		2.5" Dirt Logic SS Coilover w/ Resi (5" JEEP)
1	FT820612	2.5 DLSS C/O RESI (DRIVER)
1	FT820622	2.5 DLSS C/O RESI (PASS)
1	FT86104	HARDWARE KIT 104

FT86104		HARDWARE KIT 104
8	FT83090	MISALIGNMENT SPACER
4	FT89016	RESI HOSE CLAMP

Thank you for purchasing Dirt Logic shocks, the finest off-road shock in the industry. Each unit is built to exacting standards and is properly tuned specifically for your vehicle. Dirt Logic shocks are designed and built to both beautify and upgrade your suspension system.

How To Care For Your Dirt Logic Shocks

Dirt Logic shocks have been designed as a take apart, serviceable, race style unit. That means, just like a race shock, it will need to be maintained and periodically rebuilt. The tight tolerances of this provide the exceptional ride and performance you are paying for but do require maintenance which is normal in a take apart shock like a Dirt Logic.

Externally, the shock should be kept clean at all times and kept free of dirt, road salt or other corrosive elements. The unit should be routinely washed with a pH balanced cleaner to keep the finish looking new. Do not use any abrasive or aggressive cleaners or degreasers as it will harm the finish for life including the aluminum anodizing.

Internally, the shock has high performance seals that allow the shock to cycle at very high rates and provide exceptional damping in aggressive off-road conditions. These seals are a wearable item and may need to be replaced periodically to keep the shock functioning correctly. Our in house Shock Lab is equipped to handle these needs when necessary.

Caution – Read Before Installing

This Dirt Logic Shock is shipped pressurized with Nitrogen. Do not remove tamper cap or warranty will be void.

If this shock is equipped with a reservoir hose, do not loosen or remove the hose or warranty will be void.

If this shock is equipped with a coil, be aware that the coil has some amount of preload from the factory and should not be removed. Removal of the coil will void the warranty.

If this shock product needs to be returned for any reason, it must be returned in its original packaging or warranty will be void.

Dirt Logic Shocks come with a one year warranty from the original date of purchase for defects in material or workmanship.

A spanner wrench can be purchased for future adjustment. (FTS89905 for 4.0, FTS98008 for 2.5, FTS98006 for 2.0)

If adjustment is needed. Jack up the vehicle to relieve tension on the Dirt Logic coil over before making adjustments or the top cap may come loose.

Should you have any questions regarding your Dirt Logic Shocks, please feel free to contact us.

Installation Instructions

- Refer to the instructions located in FTS24236 or FTS24237 component box for proper installation.