4331 EUCALYPTUS AVE. ~~ CHINO, CA 91710
909-597-7800 Fax 909-597-7185

1997-2006 JEEP TJ
FTS24027 COILOVER CONVERSION

PARTS LIST:

Qua	Part #	Description
1	FT50101BK	Driver Lower Mount
1	FT50102BK	Pass Lower Mount
1	FT50137BK	Coil Over Bump Stop Mount Driver
1	FT50138BK	Coil Over Bump Stop Mount Pass
2	FT50164	Frt. Bump stop Spacer
2	FT50232	Rubicon Lower Bump stop Spacer
1	FT50139BK	Coil Over Hoop Driver
1	FT50140BK	Coil Over Hoop Pass
1	FT50141BK	Driver Support Tube
1	FT50142BK	Pass Support Tube
1	FT50135	Nut Tab Lower Mount Pass
2	FT30182	Nut Tab Lower Mount
2	FT50192	Nut Tab Frt Hoop Mount
2	FT50193	Nut Tab Rear Hoop Mount
2	FT50194	Nut Tab Motor Mount
2	FTS86	Frt. Bump Stop
1	FT50169	Frame Sleeve Kit
1	FT50168	Hardware Kit
2	FTLOCK	Thread Locking Compound
2	FT741U	U-Bolt
2	FT24027i	Instruction Sheet

HARDWARE LIST:

Qua	Description
4	7/16"-14 x 1 1/4" Hex Cap Bolt
32	7/16" SAE Flat Washer
14	7/16"-14 x 3 3/4" Hex Cap Bolt
14	7/16"-14 C-Lock Nut
2	1/2"-13 x 5 1/2" Hex Cap Bolt
6	1/2"-13 C-Lock Nut
20	1/2"-13 SAE Flat Washer
2	1/2"-13 x 3 1/4" Hex Cap Bolt
2	1/2"-13 x 1 1/2" Hex Cap Bolt
2	1/2"-13 x 4" Hex Cap Bolt
2	1/2"-13 x 1 1/4" Hex Cap Bolt
4	1/4" x 1" Self Threading Bolt
4	1/2"-20 C-Lock Nut
4	5/16"-18 x 1" Hex Cap Bolt
4	5/16"-18 C-Lock Nut
8	5/16" SAE Flat Washer

TOOL LIST:

- **Floor Jack**
- **Jack Stands**
- **Assorted Metric & S.A.E. Wrenches & Sockets**
- **Die Grinder with cutoff wheel**
- **Drill With 1/4", 7/16", 1/2" & 5/8" Drill Bit**
- **Semi Flat Black Paint**

CHECK ALL PARTS INCLUDED IN THIS KIT TO THE PARTS LIST ABOVE BEFORE BEGINNING INSTALLATION OF THE KIT. IF ANY PIECES ARE MISSING, CONTACT FABTECH AT 909-597-7800

THIS KIT CAN BE USED WITH FABTECH'S 6" LONG ARM SYSTEM OR 6"/8" CRAWLER SYSTEM ONLY.

READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION.

THIS KIT MUST BE INSTALLED WITH FABTECH DIRT LOGIC COILOVER SHOCK KIT NOT INCLUDED IN THIS BOX KIT (FTS24019 Resi)

INSTRUCTIONS:

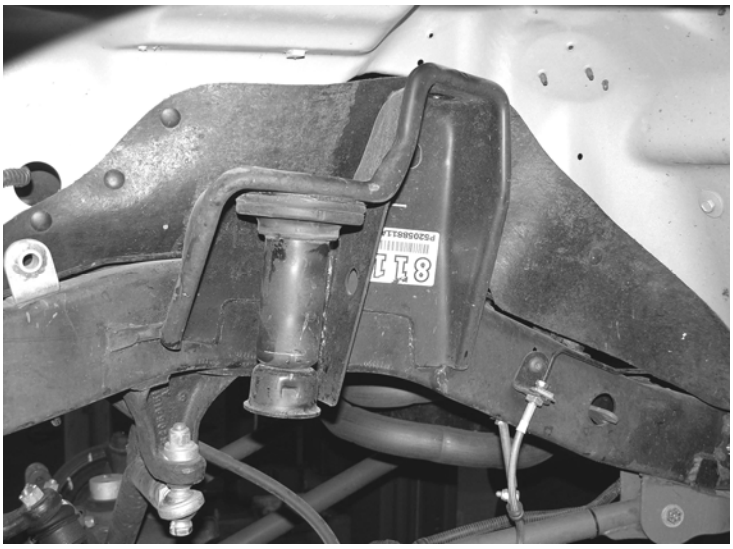
1. Disconnect the negative terminal on the battery. Take an accurate measurement of the front of the Jeep. This measurement will need to be taken from the center of the front wheel hub to the centermost part of the wheel well. This measurement will be needed to correctly set the height for the new Coil Over shocks. DO NOT exceed the 6" or 8" over stock 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. Jack up the front end of the truck and support the front axle with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE.** Remove the front tires. Support the front axle with a floor jack. Raise the floor jack approx. 1".

3. Working on both sides of the Jeep, remove the front shocks and discard. Disconnect the front sway bar from the axle mounts and save the hardware. Disconnect the front trac bar from the frame mount and save the hardware.

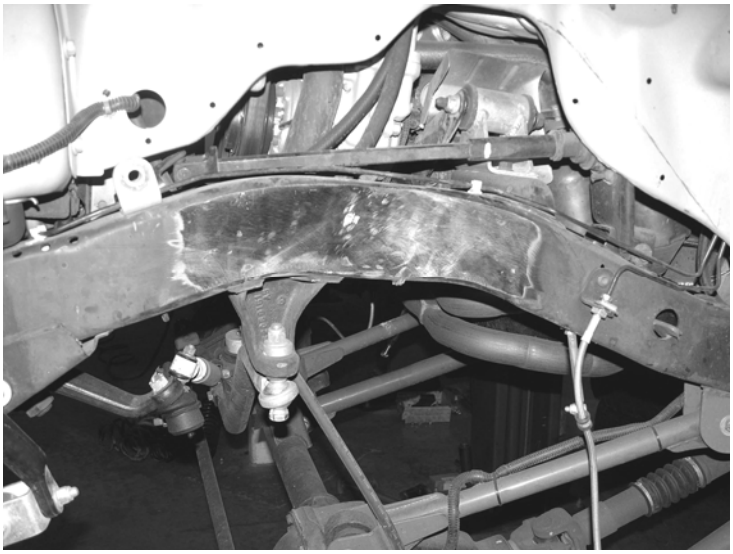
4. Lower the floor jack supporting the front axle to allow the coil springs to come free. **USE CARE WHEN WORKING WITH COIL SPRINGS UNDER LOAD!!** Remove the coil springs from the Jeep and discard. Some models may be equipped with lower coil spring retaining clips, if so remove and discard before removing the coil spring. SEE PHOTO BELOW



5. Remove the factory upper rubber coil seat and discard.

6. Remove the factory rubber fender well liner and discard.

7. Working from the driver side of the Jeep, using a die grinder with a cut-off wheel, cut the factory coil bucket and shock mount from the frame. **USE CARE WHEN CUTTING THE BUCKET FROM THE FRAME AS TO NOT CUT INTO THE FRAME ITSELF!!** SEE PHOTO BELOW.



8. Once the bucket is completely removed from the frame sand it smooth and paint all the raw metal on the frame black to prevent rust.

9. Mark the rear of the fender well as shown below and using a die grinder with a cut-off wheel, cut the fender well. You will be removing approximately a 2" x 12" section of the rear inner fender well (enough room to allow the support tube to clear the fender well). SEE PHOTO BELOW

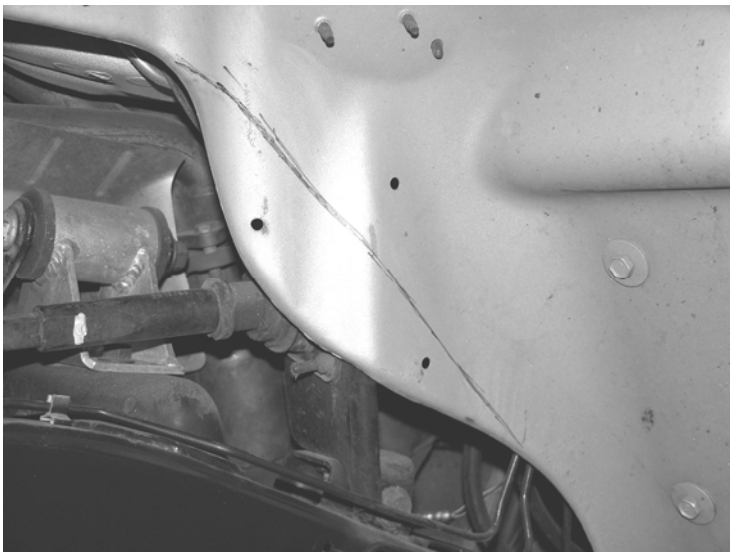
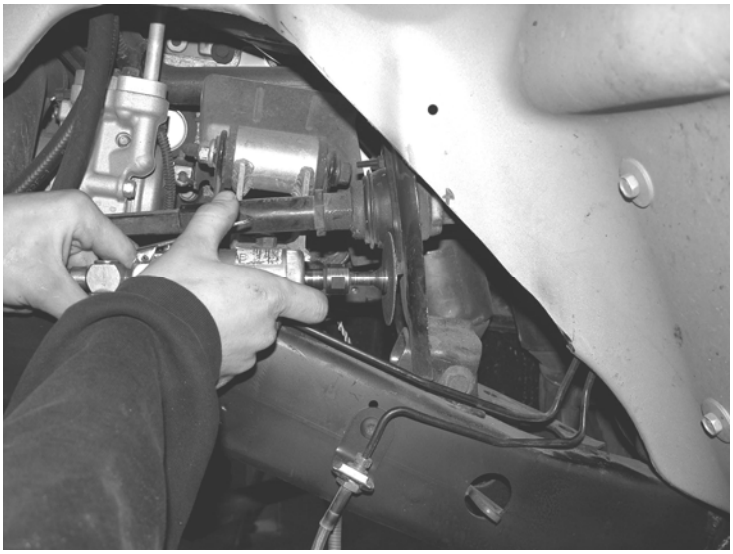


Photo shows where to cut

10. On the driver side only, you will need to cut the lower bolt flush with the nut on the factory steering shaft support bracket. Paint the bolt to keep it from rusting. SEE PHOTO BELOW.

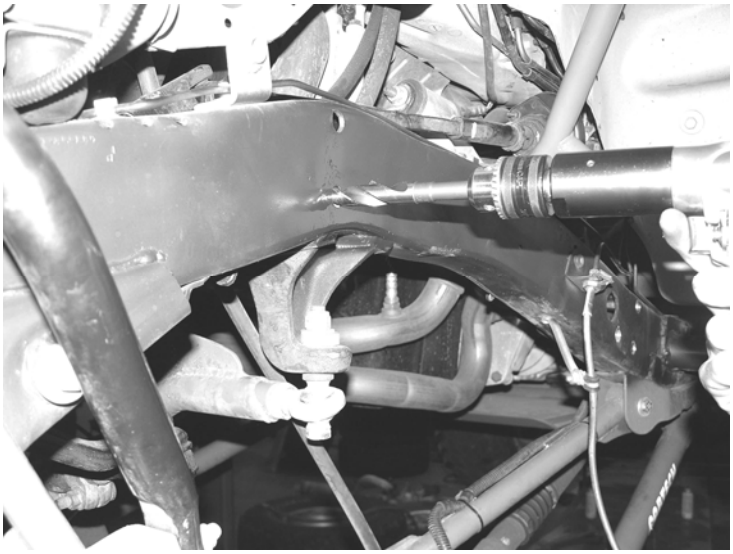


11. Working from the drivers side, locate FT50141 Support Tube and position into the fender well behind the motor mount.

12. Locate the FT50139 Shock Hoop and position it onto the frame aligning with the support tube. Using the supplied ½" x 5 ½" bolt attach the support tube to the hoop at the upper mount (only slide the bolt through at this time). Using the supplied 5/16" hardware attach the flange on the support tube to the flange on the hoop and tighten at this time. The two lower frame mounts have small tabs that fit flush against the bottom of the frame. The driver's side front mount tab will mount into the middle of the casted factory trac bar bracket. Using two clamps, clamp the hoop to the frame. SEE PHOTO BELOW.

13. Using a drill with a ½" drill bit, drill the support tube mount to the engine mount out and attach using the supplied ½" x 1 ½" hardware and FT50194 Nut Tab, tighten at this time. SEE PHOTO BELOW.

14. Check the top of the hoop for clearance with the fenderwell, loosen the clamps holding the hoop frame mounts if necessary and adjust accordingly. With the hoop clamped to the frame in the proper location, use a center punch to mark all the holes in each front and rear hoop mounts to the frame and drill a ¼" guide completely through the frame. Follow with a 7/16" bit completely through the frame **(DO NOT DRILL THE BACKSIDE OF THE FRAME ON THE TWO UPPER BOLT HOLES. THESE TWO HOLES USE A NUT TAB AND DO NOT REQUIRE ACCESS TO THE REAR OF THE FRAME**). IT IS VERY IMPORTANT THAT THESE HOLES BE DRILLED STRAIGHT!! Once all the holes are drilled remove the hoop only from the truck. SEE PHOTO ON BELOW.

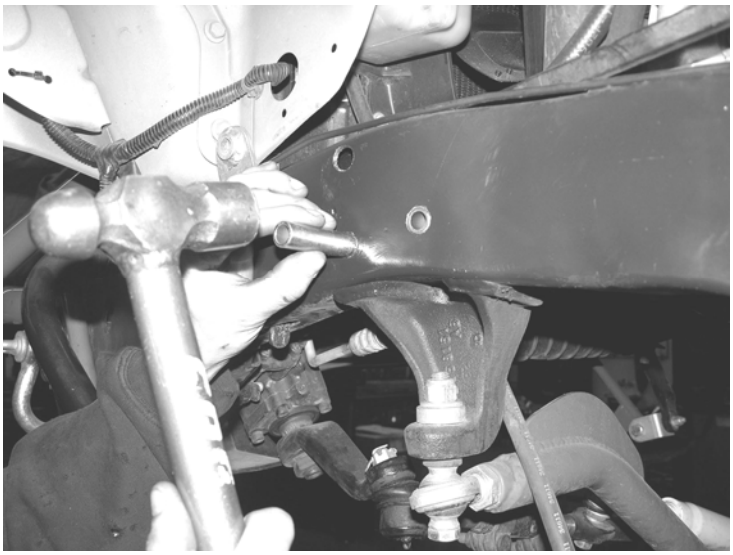


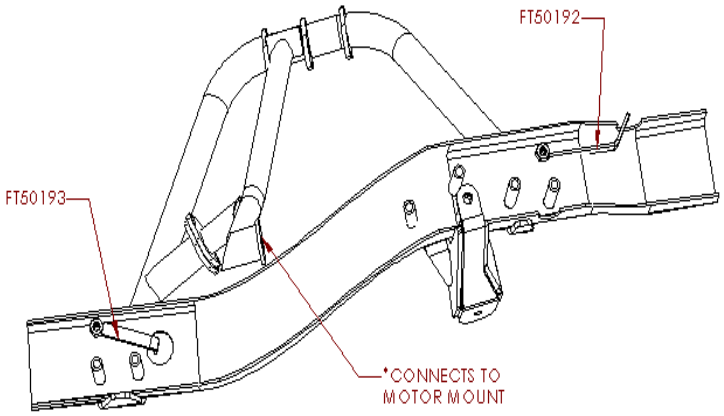
15. Using a drill with a 5/8" drill bit, drill **ONLY** the two bottom holes on each mount of the hoop, drill just the

outside hole on the frame out to 5/8", DO NOT DRILL A 5/8" HOLE COMPLETELY THROUGH THE FRAME. The top hole on each mount **WILL NOT** be drilled to 5/8"; they will have a nut tab that will insert into the frame. This is done so frame sleeves can be placed into the face of the frame and has the back of the frame hold it in place.

16. The factory upper link arm pocket must be cut off the frame for clearance of the hardware for the new shock hoop. Carefully cut the pocket bracket off the frame without cutting into the frame. Grind, sand, and paint the frame after cutting these brackets off. SEE PHOTOS BELOW.

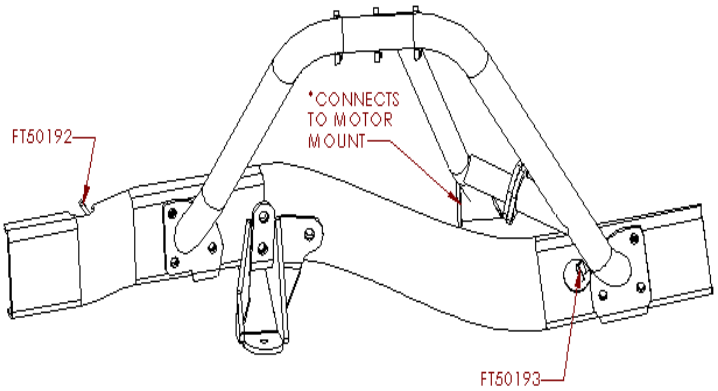
17. Insert one of the supplied sleeves into each hole previously drilled out to 5/8". SEE PHOTO AND DIAGRAM IN NEXT COLUMN AND ON LAST PAGE.





Rear side of Drivers side frame rail with hoop

18. Reposition the hoop back onto the frame aligning it with the support tube at the same time. Attach the two 5/16" bolts and hardware to the flange (leave loose at this time) and the ½" bolt on the upper mount. Locate one FT50192 Nut Tab Frt hoop mount, one FT50194 Nut Tab Rr. Hoop mount, and supplied 7/16" x 1 ¼", 7/16" x 3 ¾", C-locks, and flat washers. Place the 3 ¾" bolts with washers through the two lower holes on each mount and through the frame with the c-locks and washers on the back of the frame. Leave loose. Place the front nut tab in the frame through the factory hole on the top the frame and place the 7/16" x 1 ¼" bolt with washer through the hoop and thread it into the nut tab. The rear nut tab will go through the frame just in front of the hoop mount. Install a 7/16"x 1¼" bolt with washer through the mount and into the nut tab. **Note: All bolts secured with a nut tab will not have a washer on the nut tab itself.** Leave hardware loose until the shock is mounted. **Use a small amount of supplied thread locking compound on the bolts used with nut tabs**. SEE DIAGRAM ON NEXT PAGE AND ON LAST PAGE.

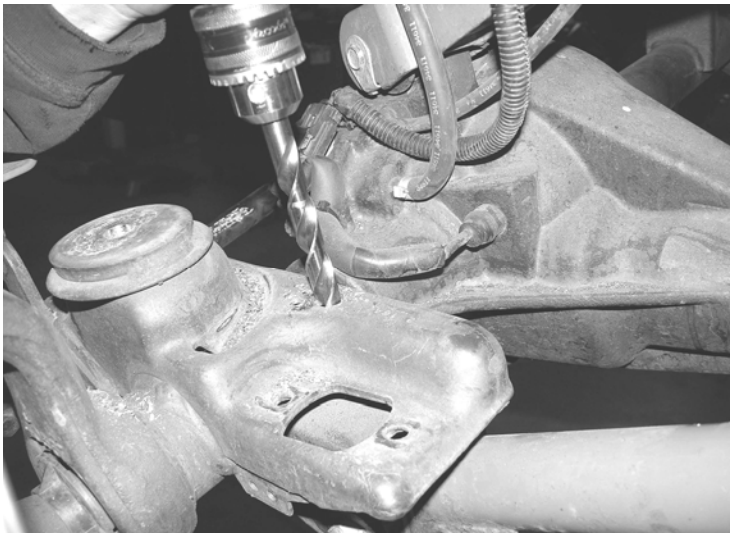


Front side of Drivers side frame rail with hoop

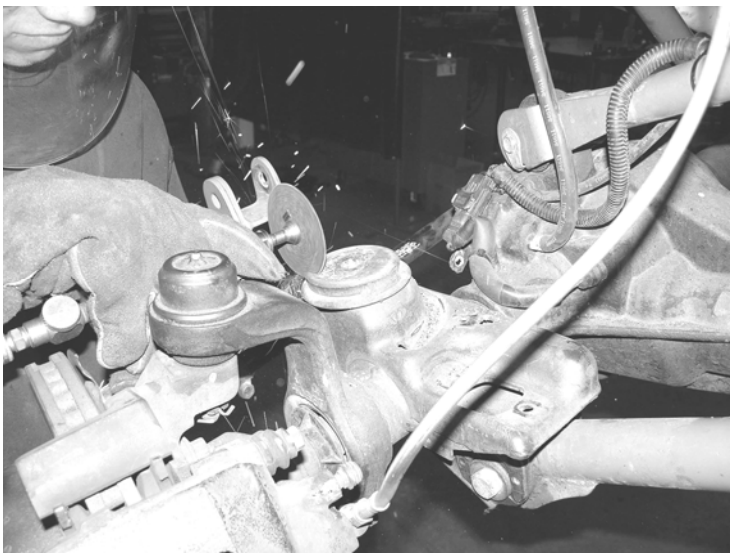
19. Repeat steps eleven through eighteen on passenger side of Jeep. **Note: Due to variances in the Jeep bodies, check for clearance from the top of the shock hoop to the fenderwell. There should be a minimum of a ¼"between them. Clearance the fenderwell accordingly.**

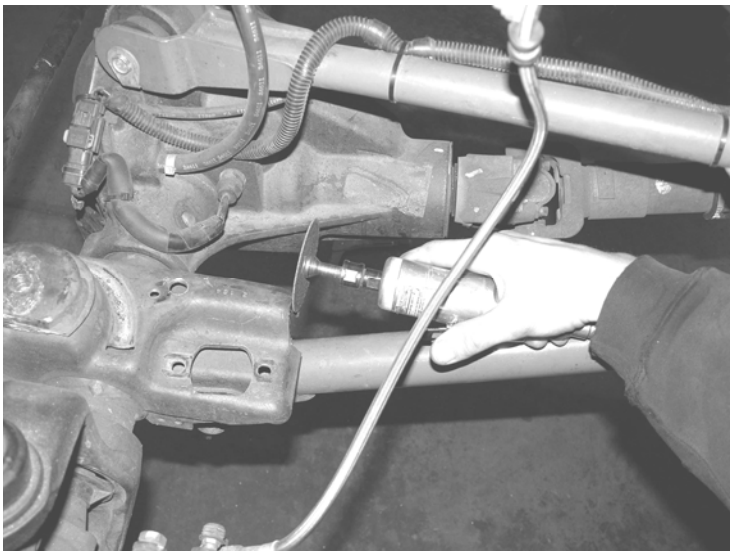
20. If a Fabtech kit was previously installed on the Jeep you will need to remove the lower aluminum bump stop spacers from the axle and discard them and the hardware.

21. Using a drill with a ½" drill bit, drill a hole through the center of the lower bump stop pad on the axle. Locate the lower coil retainer bolt hole and drill out to ½". SEE PHOTOS BELOW AND IN NEXT COLUMN.



22. On the axle spring perch, the coil pad must be cut on the side that faces the steering knuckle. The cut must match the flat side of the spring perch for clearance of the new lower coilover mount. The rear part of the lower shock mount must also be cut to install the nut tab. Mark and cut 3/8" from the rear edge of the mount. Grind, sand, and paint the mount after cutting. SEE PHOTOS BELOW





23. Locate FT50101 lower coil over mount, and position onto the axle to the holes previously drilled. Using the supplied FT741U u-bolt attach to the axle, leave loose at this time. Using the supplied ½" x 1 ¼" bolt, FT30182 nut tab, and washer attach the mount to the original coil retaining clip hole. **Use a small amount of supplied thread locking compound on the bolts used with nut tabs.** Locate FT50164 aluminum bump stop spacer and position on top of the axle as shown below and attach using the supplied ½" x 4" bolt, C-lock nut, and washer. **Note: Only Rubicon models must use the FT50232 Front Bump Stop Spacer over the lower coil bolt retainer hole that was drilled earlier. The Rubicon Models have an extra pad on top of the stock mount.** SEE PHOTOS BELOW.

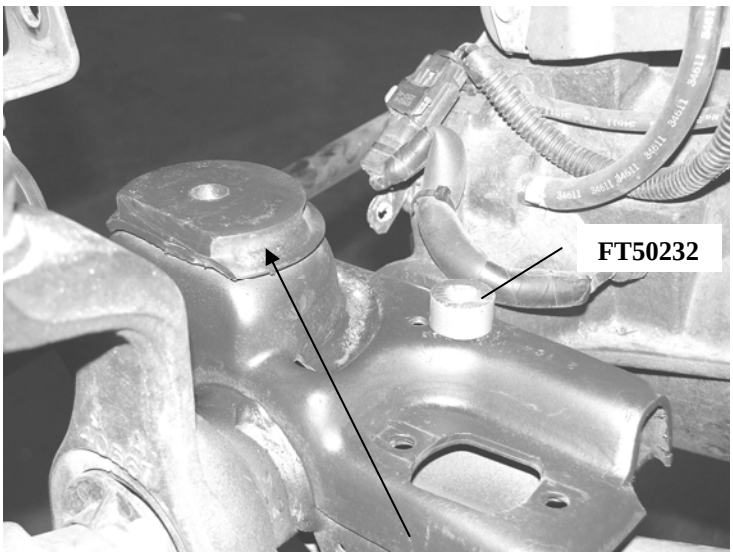
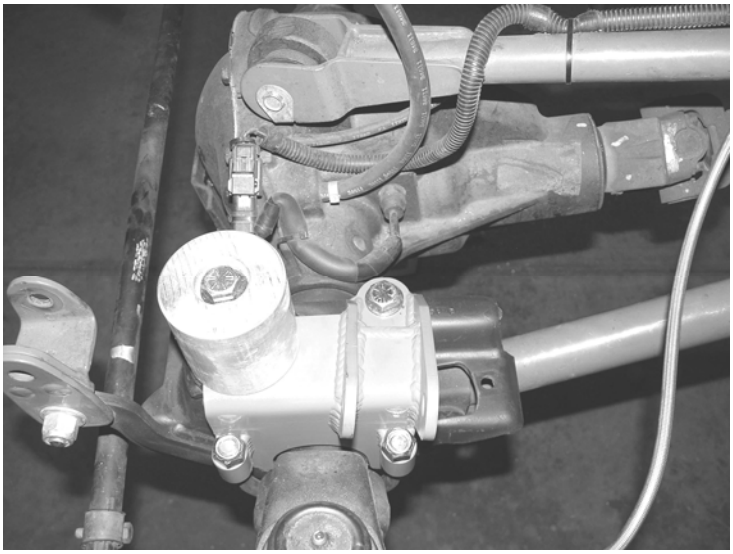
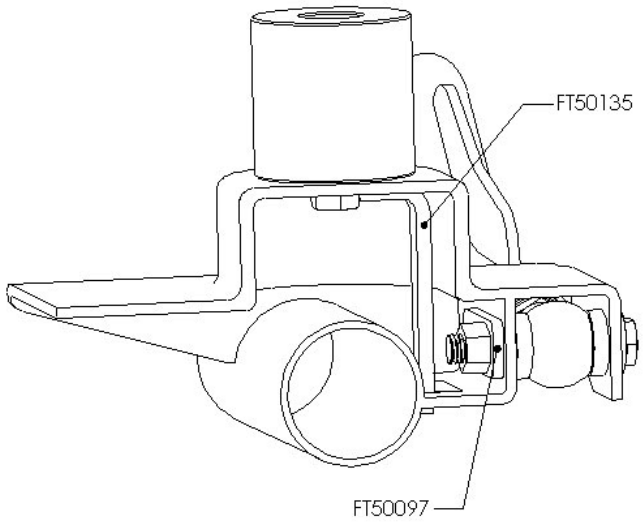


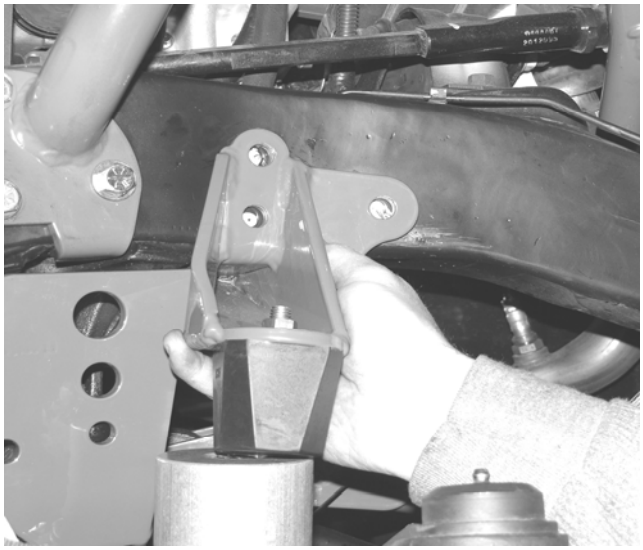
Photo is of a Rubicon with the factory welded spacer on the coil mount



24. Repeat steps six through twenty-one on passenger side of Jeep. **Note: You must use FT50135 Nut Tab lower Pass. Mount on the passenger side to attach the aluminum bump stop to the axle perch.** SEE DIAGRAM IN NEXT COLUMN AND ON LAST PAGE.



25. Working from both sides, locate FT50137BK + FT50138BK Upper Bump Stop Mounts and attach the supplied FTS86 Bump Stop to the new upper bump stop mount. Raise the floor jacks enough to bring the lower bump stop spacers up to the top of full compression where it will make contact with the new mount with upper bump stop. Position the new mount onto the frame and align it with the aluminum spacer. Clamp the bracket to the frame using a large C-clamp or Vise Grip Clamp. Using a drill, drill a ¼" guide hole completely through the frame on all holes. Follow with a 7/16" hole completely through the frame. Remove the bracket from the frame and drill a 5/8" hole through the outside of the frame **ONLY.** SEE PHOTO BELOW.



26. Locate three of the supplied sleeves and insert them in the holes previously drilled. Position the bump stop bracket back to the holes and attach using the supplied 7/16" x 3 ¾"bolts, nuts, and washers. Torque to 50lbs.

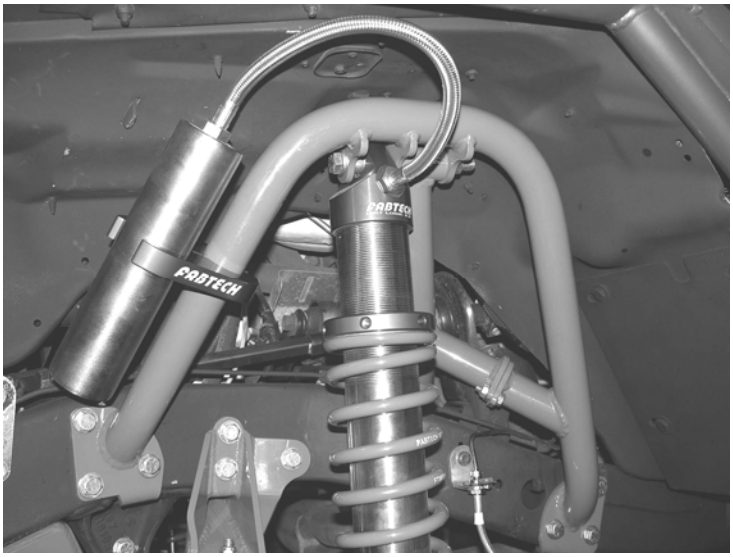
27. Locate the Dirt Logic 2.5" Coil Over Shock. (Not included in this kit) Place one of the supplied mis-alignment spacers on each side of the upper bearing in the shock. Place the shock into the upper hoop and

connect it using the supplied ½"x 5" ½" hardware. Leave loose at this time.

28. Locate two of the mis-alignment spacers and place one on each side of the lower bearing in the shock. Using the supplied ½" x 3 ¼" hardware attach the coil over to the lower mount. Torque the upper and lower shock bolts to 75 ft. lbs.

29. Torque the 5/16" hardware on the support tubes to the hoop to 20 ft. lbs., the 7/16" hardware on the Hoop Mounts and Bump Stop Mounts to 50 ft. lbs., and the ½" bolts on the support tubes to the frame at 75 ft. lbs.

30. Use the supplied large clamps and poly mounts to attach the Reservoirs to the front of the shock hoop. SEE PHOTO IN NEXT COLUMN.



Coilover shown with optional billet reservoir clamp

31. Reconnect the front trac bar to the frame using the original hardware. Torque the hardware to spec listed in the suspension kits instruction sheets. Reconnect the front sway bar back to the axle mount using the original hardware.

32. Reinstall the front tires and set the Jeep back on the ground. Measure front height of the Jeep and compare them to the measurements that were taken at the beginning of the install. Turning the steering wheel fully in each direction, check for contact between the tires and any newly installed components. Drive the truck fifty miles and complete a full front-end alignment. Re-adjust headlights.

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. 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.

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 in the catalog, but due to unknown auto manufacturers production changes and/or inconstancies 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 catalog 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'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 in our current catalog. 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.

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.

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.

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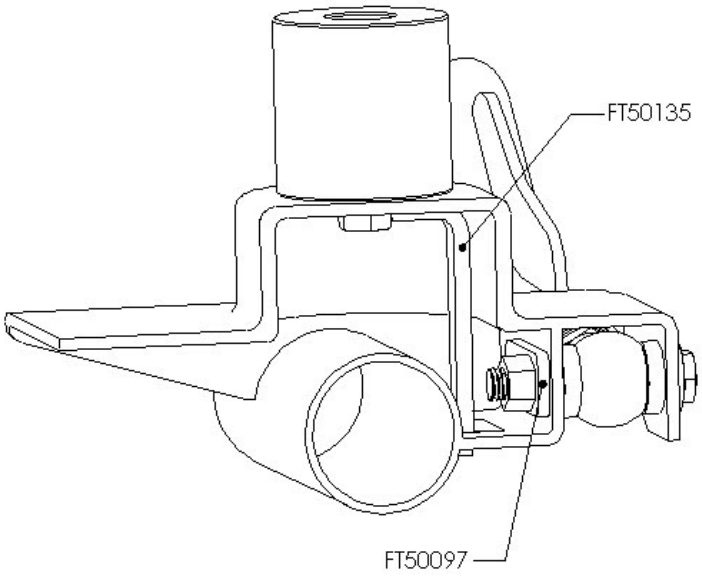
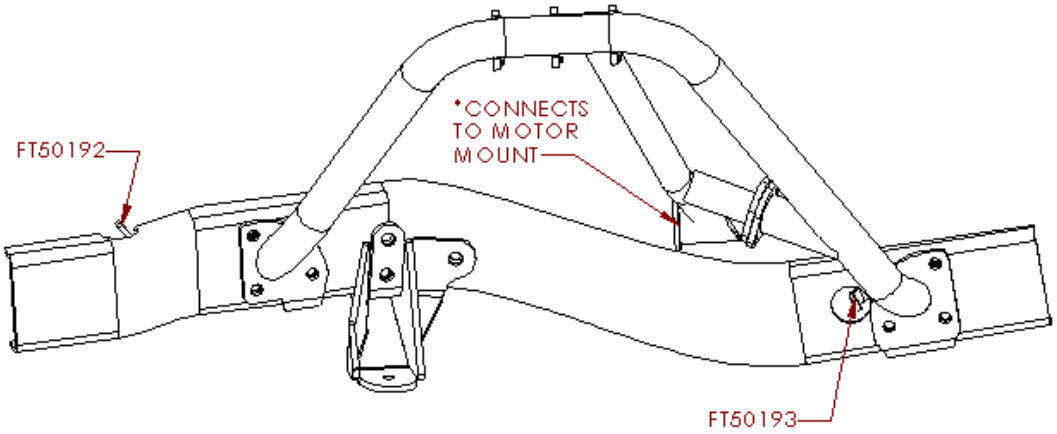
Drawing from step #22



Front side of Drivers side frame rail with hoop



Rear side of Drivers side frame rail with hoop