Installation Instructions

7” Performance Suspension System
1988-1998 Chevy/GMC 2WD C1500 P/U
Ext. Cab V8 Only

FABTECH MOTORSPORTS
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7” Performance Suspension System
FTS21024 & FTS21025
Parts List / Hardware List

FTS21024

Qua	Part #	Description
1	FTS20184D	Spindle Drv.
1	FTS20184P	Spindle Pass
2	FT41003BK	Coil Springs EXT CAB V8
1	FT21024i	Instruction Sheet
1	FTREGCARD	Registration Card
1	FTAS12	Sticker
1	FTAS16	Driver Warning Sticker

FTS21025

Qua	Part #	Description
1	FT20182BK	Crossmember Frt.
1	FT20183BK	Crossmember RR
1	FT20185	Hardware Kit
1	FTS1500GK	A-Arm Gusset
2	FT20072BK	Rear Bump Stop Drop
2	FTBK5	Block
4	FT3400U	U-Bolt
1	FT20527	Hardware Subassembly
1	FT916H	U-Bolt Hardware

Hardware FT20185

Qua	Description
2	5/8"-11 x 5" Bolt
2	5/8"-11 x 4 1/2" Bolt
4	5/8"-11 C-lock Nut
8	5/8"SAE Flat washer
4	7/16"-14 x 2 1/2" Bolts
4	7/16"-14 x 1 1/4" Bolt
8	7/16"-14 C-lock Nut
16	7/16" SAE Flat Washer
6	3/8"-16 Nyloc Nut
6	3/8" SAE Flat Washer
2	1/2"-13 x 2 3/4" Bolt
2	1/2"-13 Nyloc Nut
4	1/2" SAE Flat washer
5	5/16"-18 x 1" Bolt
5	5/16"-18 C-lock Nut
10	5/16" SAE Flat Washer
4	1/4"-20 x 3/4" Bolt
2	1/4"-20 C-Lock Nut
6	1/4" SAE Flat Washer
2	1/4" Split Washer
2	Adel Clamp
8	1/8" Cotter Pin
1	Thread Locking Compound

FT20527

Qua	Part #	Description
1	FTS1500-9	Frt. Brake Lines
1	FT20071	Frt. Sway Bar End Link (pair)
1	FT1599-1-5	Rear Brake Line Tab
4	FTS60235	Low Profile Bump Stop
2	FT20213	Carrier Bearing Drop
2	FT20194	Steering Stops
2	FT50089	1/2" Shock Sleeve
2	FT20188	Frt Shock Mount LCA Bracket
2	FT50013	Frt Shock Mount U-Bracket

7” Performance Suspension System
FTS21024 & FTS21025
Warnings

THIS KIT IS DESIGNED TO BE INSTALLED ON STOCK VEHICLES ONLY. DO NOT INSTALL THIS KIT ON A VEHICLE UNLESS THE SUSPENSION IS STOCK.

DO NOT ALTER THE FINISH OF THESE COMPONENTS, EXAMPLE- CHROMING, ZINC PLATING OR PAINTING. CHANGING THE FINISH CAN CAUSE STRUCTURAL FATIGUE OF COMPONENTS.

THIS SUSPENSION SYSTEM MUST BE INSTALLED WITH FABTECH SHOCK ASBORBERS.

VEHICLES THAT WILL RECEIVE OVERSIZED TIRES SHOULD CHECK BALL JOINTS, TIE RODS ENDS AND IDLER ARM EVERY 2500-5000 MILES FOR WEAR AND REPLACE AS NEEDED.

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

READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED, SEVERE FRAME OR UPPER CONTROL ARM DAMAGE MAY RESULT TO THE VEHICLE.

WARNING: FABTECH RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING WITH COIL SPRINGS TO AVOID ANY POSSIBILITY OF INJURY.

THIS KIT IS NOT COMPATABLE WITH AUTO RIDE OR ELECTRONIC CONTROL RIDE SHOCK SYSTEMS.

FABTECH RECOMMENDS AFTER MARKET 15 X 8 WHEELS WITH A MAXIMUM BACKSPACING OF 3 3/4” WITH A 35X12.50R15 TIRE BE USED WITH THIS KIT.

TOOL LIST: (NOT INCLUDED)

- **Floor Jack**
- **Jack Stands**
- **Assorted Metric & S.A.E Sockets, & Allen Wrenches**
- **Die Grinder With A Cut Off Wheel Or Sawzall**
- **Mig Welder**
- **Drill With Assorted Drill Bits**
- **Wheel Bearing Grease**

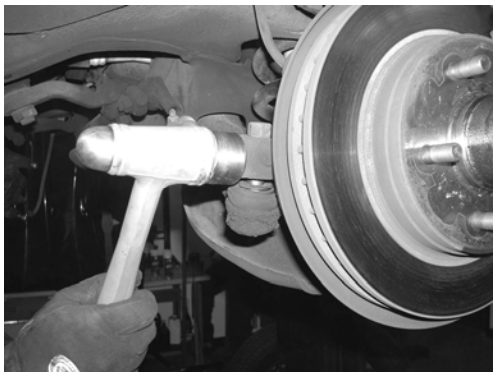
INSTRUCTIONS:

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.

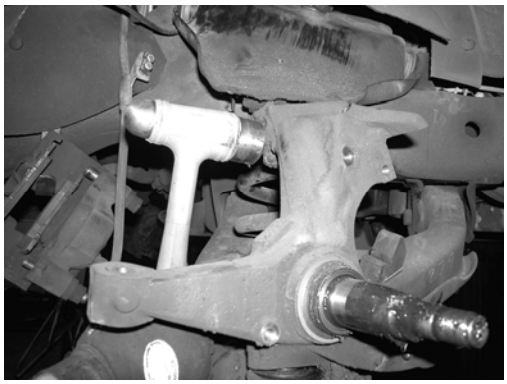
2. Working from both sides of the truck, remove and discard the factory sway bar end links from the truck. Remove the sway bar from the truck and save with hardware.

3. Remove the bolts attaching the brake caliper to the spindle, save the hardware. Remove the caliper and tie it up and out of the way. **DO NOT ALLOW THE CALIPER TO HANG BY THE BRAKE LINE!** Remove the brake rotor and save. Remove the ABS / Dust Shield from the spindle and set them aside and save along with the hardware.

4. On the driver side of the vehicle, support the lower control arm (LCA) with a jack and remove the front shock and discard, save the hardware from lower shock mount and discard the upper shock hardware. Remove the nut from the end of the tie rod and separate the tie rod from the spindle by hitting the end of the steering knuckle with a hammer. **DO NOT HIT THE THREADS ON THE TIE ROD END.** Save the hardware. SEE PHOTO BELOW.



5. With the lower control arm still supported by the jack remove the cotter pins and loosen the nuts holding the upper and lower ball joints to the spindle, do not remove the nuts completely at this time. Separate the ball joints from the spindle by hitting the side of the spindle near each ball joint with a hammer. **DO NOT HIT THE THREADS ON THE BALL JOINTS**. Remove the ball joint nuts from ball joints then remove the spindle from the truck and discard, save the ball joint castle nuts and discard the original cotter pins. SEE PHOTO BELOW.



6. Slowly lower the floor jack supporting the lower control arm to release the coil spring. **EXERCISE EXTREME CAUTION WHEN WORKING WITH COIL SPRINGS UNDER LOAD!** Set the coil spring aside and remove the upper spring isolator and save them. **DO NOT DISCARD THE COIL ISOLATOR, THEY WILL BE REINSTALLED ON THE NEW COILS.**

7. Locate the factory bump stops on the factory lower control arms and remove them. Discard the bump stops and the hardware.

8. Remove the factory lower control arms from the truck and save the factory hardware. SEE PHOTO BELOW.

9. Remove the upper control arm from the truck and save the hardware. Inspect the control arm pockets to see if the alignment cam knock-outs have been removed out of the pockets. If they have not been removed, do so at this time. If they have been removed the pivot holes will be slotted.

10. Using a solvent like acetone, remove the black wax off the frame on the UCA mounts. Locate FTS1500GK and tack weld the UCA gussets into place as shown on the supplied drawing. Slide the UCA back into the frame mount and be sure there is adequate clearance between the UCA and the new gussets. Remove the arm once you have checked for proper clearance. Completely weld both sides of the gusset onto the frame and UCA mount. Inspect the factory UCA pocket for proper factory weld size and penetration. Many factory welds are undersized and do not have good penetration due to automation assembly process at GM. Should the factory weld on the UCA pocket appear to lack proper penetration and structure re-weld at this time. When all the welded areas have cooled, paint all exposed areas. Reinstall the upper control arm using the original hardware. When reinstalling the cam bolts in the upper control arm, set the cam in the middle of its adjustment. SEE THE DRAWING 1-1 ON THE LAST PAGE.

11. Repeat steps four through ten on the passenger side of the vehicle at this time.

12. Following the diagram on the last page of this instruction sheet, mark and cut the factory front lower control arm pockets. SEE DIAGRAM 1-2 ON THE LAST PAGE OF THE INSTRUCTION SHEET.

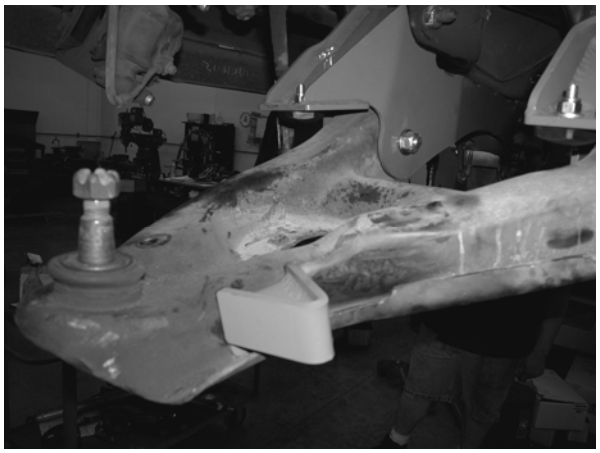
13. Locate the front crossmember FT20182. Install the crossmember into the two front lower control arm pockets. Use the factory hardware, leave loose at this time.

14. Locate the rear crossmember FT20183. Install the rear crossmember into the two rear lower control arm pockets. Use the factory hardware, and leave loose at this time.

15. Locate the four supplied low profile bump stops, FTS60235, attach the bump stops to the bump stop mounts on the front and rear crossmembers previously installed with the supplied 3/8 nuts and washers, torque to 15 lbs. SEE PHOTO BELOW.

16. Locate the factory lower control arms. Install them into the new crossmembers. Use the supplied 5/8" x 5" bolt, nut and washer on the front pivot and the supplied 5/8" x 4 ½" bolt, nut and washer on the rear pivot, leave loose at this time.

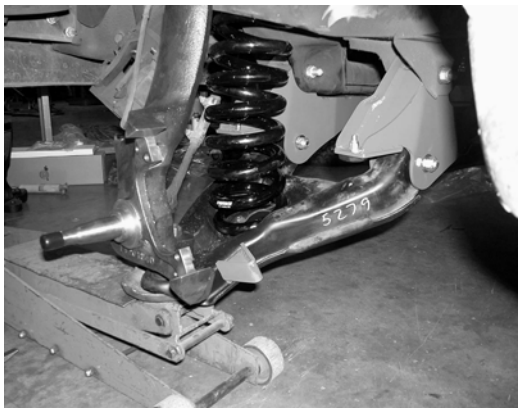
17. Working from the driver side of the truck, locate the factory steering stop on the lower control arm. Using a die grinder with a cut off wheel, cut the rivets attaching the steering stop to the arm and remove the steering stop and discard. Locate FT20194 steering stop, using the supplied 5/16" x 1"bolt, nut, and washer attach to the existing holes from the factory steering stop. Torque the bolts to 18 ft lbs. SEE PHOTOS BELOW AND NEXT COLUMN.



18. Locate one of the lift coil springs, FT41000BK and attach the original upper coil insulator onto the top of the coil spring using electrical tape.

19. Lower the factory lower control arm as far as possible and position the top of the coil spring into the upper coil mount. Rotate the coil spring aligning the bottom of the coil spring with the timing pocket in the Lower Control Arm. Using a floor jack raise the lower control arm to hold the coil spring in place. **EXERCISE EXTREME CAUTION WHEN WORKING WITH COIL SPRINGS UNDER LOAD!**

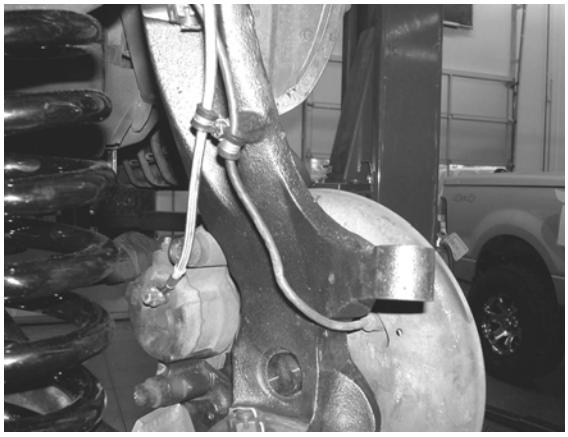
20. Locate the new lift spindle FT20184D. Attach the new lift spindle onto the lower ball joint using the original castle nut. Torque the lower ball joint nut to 90 ft/lbs. **MAKE SURE THE BRAKE CALIPER IS TO THE REAR OF THE FENDER WELL AT THIS TIME, AS IT WILL BE REINSTALLED LATER.** Holding the top of the spindle inboard slowly raise the floor jack to set the upper ball joint into the spindle. You may have to move the floor jack as far out as possible on the Lower Control Arm to raise the Lower Control Arm high enough. When the upper ball joint is fully seated in the spindle install the factory castle nut. Torque to 74 ft/lbs. Insert one of the supplied cotter pins into the upper and lower ball joint castle nuts. Lower the floor jack supporting the LCA. **DO NOT RAISE THE JACK HIGH ENOUGH TO LIFT THE TRUCK OFF THE JACK STANDS. USE EXTREME CAUTION WHEN WORKING WITH COIL SPRINGS TO AVOID ANY POSSIBILITY OF INJURY.**



21. Torque the factory pivot bolts to the crossmember to 96 ft lbs on 1988-1990 and 120 ft lbs on 1991-1998 models. Toque the LCA pivot bolt to 125 ft lbs.

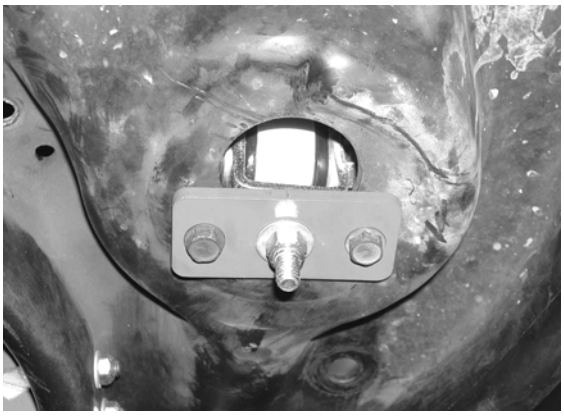
22. Locate the new extended brake line kit FTS1500-9. Remove the banjo bolt securing the brake line to the caliper. Separate the hard line section from the rubber brake line at the frame. Remove the clip holding the rubber brake line to the frame tab and set aside. Insert the new brake line into the frame mount tab and reinstall the clip. Using the supplied crush washers attach the end of the brake line with the banjo fitting to the caliper. Be sure there is a crush washer on each side of the banjo fitting and the old washer is not still attached to the bolt or caliper. Do not over tighten the banjo bolt. Attach the factory hard line to the upper fitting on the new brake line. Tighten the upper fitting on the new brake line. You will now need to bleed the brakes per the factory shop manual.

23. Reinstall the factory ABS / Dust Shield to the lift spindle using the factory hardware. The ABS wire will be positioned under the tie rod end routed up the backside of the control arm. Reinstall the brake rotor onto the lift spindle using the factory hardware. **REPACK THE WHEEL BEARINGS WITH HEAVY DUTY WHEEL BEARING GREASE AT THIS TIME**. Reinstall the brake caliper onto the spindle, use thread locking compound on the caliper bracket bolts and torque 1988-1991 models to 28ft/lbs and 1992-1998 models to 38 ft. lbs. Using two of the supplied adel clamps attach the brake line and the ABS line to the back side of the spindle. SEE PHOTO BELOW.



24. Locate the Fabtech FTS9330 front shocks (not supplied with the kit) along with the FT50013 shock mount. Press one of the supplied ½" shock sleeves into the lower shock bushing on the shock. Attach the shock mount to the shock using the supplied ½" x 2 ¾" bolt, nut, and washer. SEE PHOTO NEXT COLUMN.

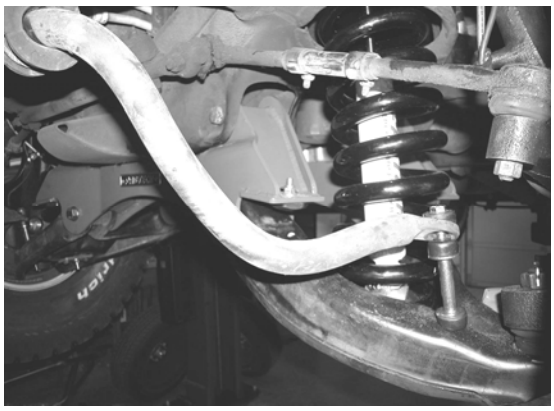
25. Install the previously assembled shock assembly into the truck. Attach the upper mount of the shock using the supplied bushing kit with the shock. Place a floor jack under the lower control arm and raise the lower control arm approximately two inches. Locate FT20188 lower control arm shock mount and attach to the lower control arm in the original mounting holes of the factory shock using the original hardware. With the shock installed inside the coil spring extend the shock so the stud on the new lower mount can be attach to the new bracket on the lower control arm. Attach the shock bracket to the bracket on the lower control arm using the supplied 3/8" nut and flat washer. SEE PHOTO BELOW.



26. Reinstall the tie rod onto the spindle using the factory nut. Torque to 45 ft/lbs.

27. Repeat steps 17 through 26 on the passenger side of the truck.

28. Locate the previously removed factory sway bar. Install the sway bar back onto the truck flipped upside down using factory hardware and torque to 24 lbs. Locate the new Fabtech sway bar end links (FT20071) and reconnect sway bar to lower control arm. **IT MAY BE EASIER TO RECONNECT THE SWAY BAR END LINKS WHEN THE TRUCK IS BACK ON THE GROUND.** SEE PHOTO BELOW.



REAR INSTRUCTIONS

29. Jack up the rear end of the vehicle and support the frame rails with jack stands. Do not allow the rear differential to hang freely, supporting the rear differential with a floor jack. Use care, not to over extend the brake hose.

STEP 30 IS FOR TWO PIECE DRIVESHAFT MODEL TRUCKS ONLY

30. Locate the factory carrier bearing crossmember. Using a drill, drill out the four rivets attaching it to the frame. Once the rivets are removed, drill the factory crossmember and the frame holes to 7/16". Locate the supplied FT20213 carrier bearing drop brackets and place the bracket between the frame and the crossmember. Attach the crossmember using the supplied 7/16"x 2 ½" bolt, nuts, and washer. SEE PHOTO BELOW.

31. Locate the brake hose bracket and attached to the center of the rear differential. Remove the factory bracket and save the hardware. Locate the FT1599-1-5 brake line bracket and attach it to the factory bracket using the supplied 5/16" bolt, nut, and washers. Using the original hardware attach the Fabtech bracket to the differential. SEE PHOTO BELOW.

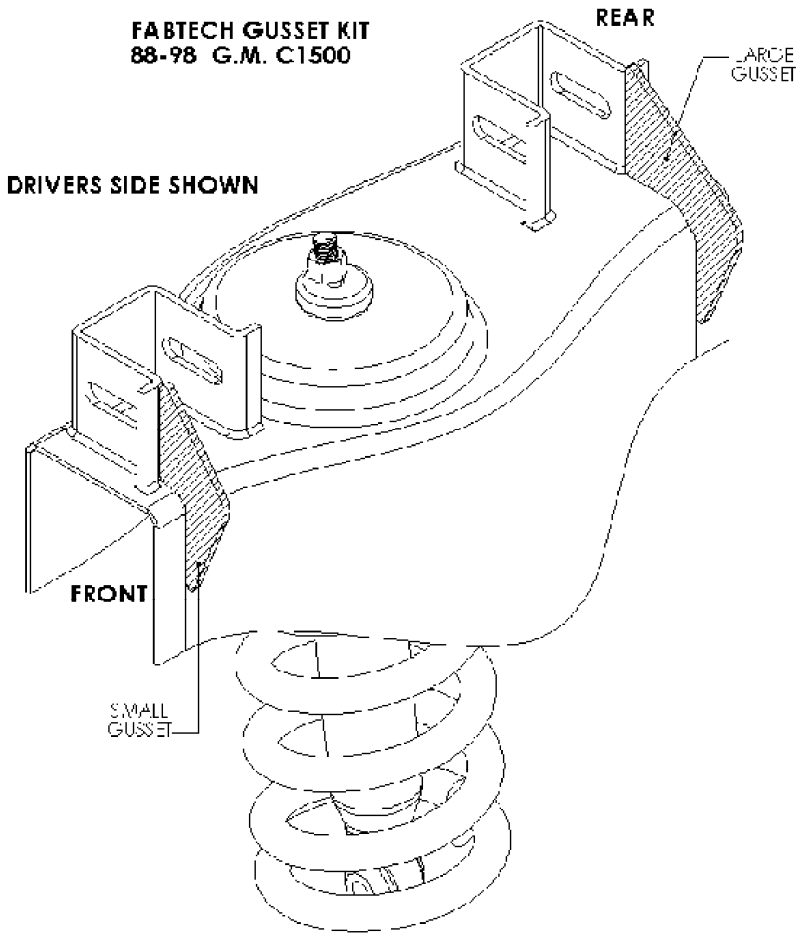
32. Remove and discard the rear shocks and u-bolts. Lower the axle down slowly. Use care, not to over extend the brake hose. Locate and install the rear lift blocks with the provided short center pin on the bottom of the block to the axle. The short end of the block should face to the front of the vehicle. Using the provided U-bolts, nuts, and washers align axle, lift blocks, and springs and torque to U Bolts to 90lbs. SEE PHOTO BELOW.

33. Remove the factory rear bump stops and save the hardware. Install the new Fabtech bump stop extension bracket using the supplied 7/16" x 1 ¼" bolts, nuts, and washer. Reinstall factory bump stop to the bottom of the new bracket. Torque all of the bump stop hardware to 40 ft lbs. SEE PHOTO BELOW.

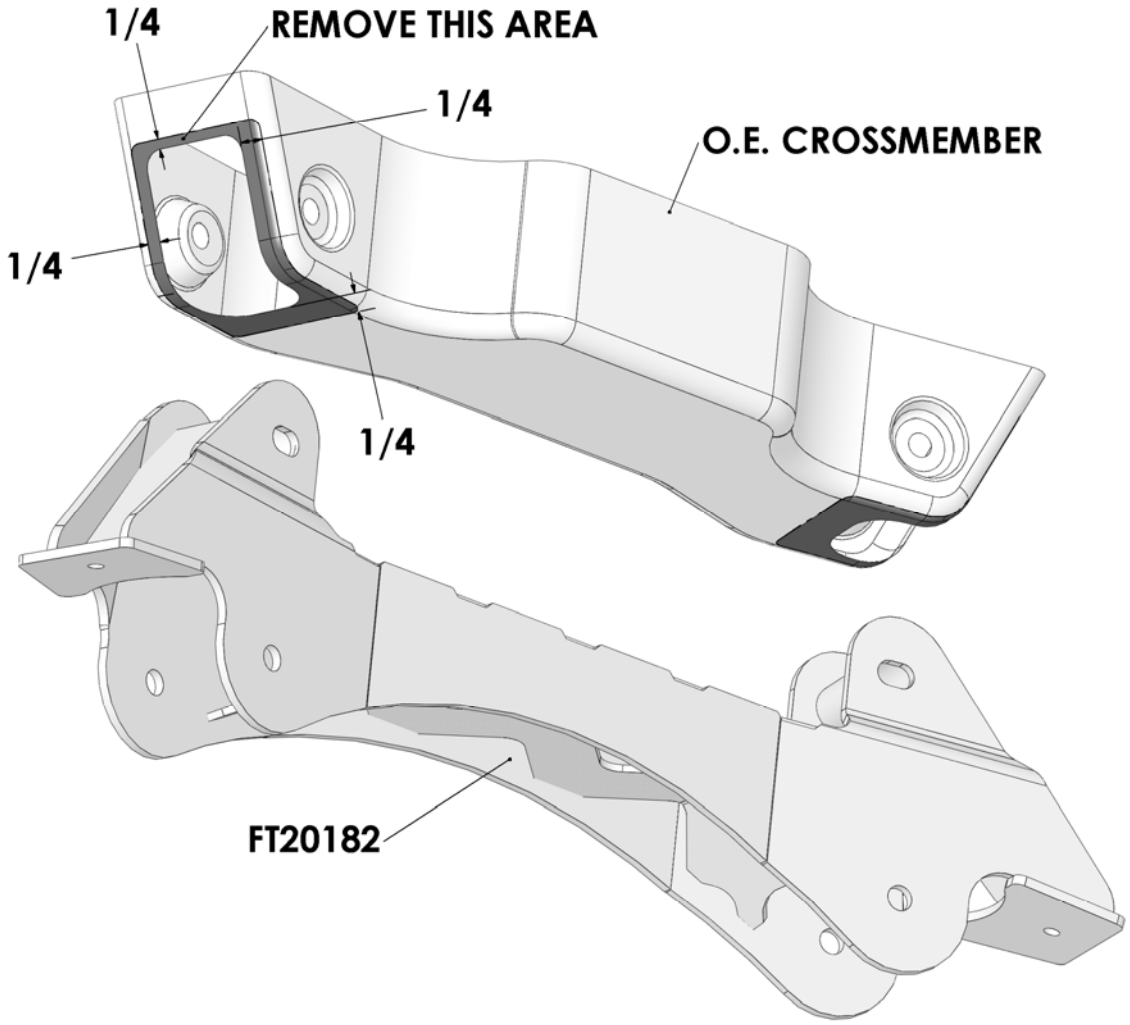
34. Install the new Fabtech FTS7333 shocks (not included in the kit) and Torque to 65 lbs using factory hardware on both upper and lower mounts.

35. Reinstall the wheels and tires and torque the lugs nuts to wheel manufacture specifications. Set the truck back onto the ground and set the toe to factory specifications. **WHILE TURNING THE STEERING WHEEL FULLY IN EACH DIRECTION, MAKE SURE THERE IS AMPLE CLEARANCE BETWEEN THE WHEELS, TIRES, CONTROL ARMS, BRAKE LINES AND ABS WIRES. TRIM FENDERS AS REQIURED.**

36. Recheck all nuts and bolts for proper torque tightness before driving. Drive the truck for 50 miles and have it aligned to factory specifications. Re-adjust headlights.



DRAWING 1-1



DRAWING 1-2

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, powdercoating, 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.

Fabtech reserves the right to supercede, 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 catalog or price sheet.