



## *Installation Instructions*

### **FTS23022 & FTS23023 Ram 2500/3500 Traction Bars**

	<b>FTS23022</b>	<b>Traction Bar Gas</b>
<b>Qty.</b>	<b>Part #</b>	<b>Description</b>
2	FT44138BK	Traction Bars
2	FT44139BK	Traction Bar Bracket Gas
1	FT44140BK	Dr. Support Bracket
1	FT44141BK	Ps. Support Bracket
1	FT70131	Dr. Frame Bracket
1	FT70132	Ps. Frame Bracket
2	FT90018	Traction Bar Shackle
1	FT60022	Hardware Kit
4	FT739U	U-Bolt
1	FT44161	Hardware Sub-Assembly

	<b>FT44161</b>	<b>Hardware Sub-Assembly</b>
<b>Qty.</b>	<b>Part #</b>	<b>Description</b>
4	FT1004	Shackle Bushing
2	FT66	Shackle Sleeve
4	FTS98002	3/4" Solid Rod End
2	FTS98003	3/4" Heim Joint
6	FTS50	3/4" Jam Nut
1	FT58H	U-bolt Hardware
2	FT70136	Nut tab (1/2")
1	FT90058	Dual Nut Tab Dr.
1	FT90059	Dual Nut Tab Ps.
8	50131501081	SCREW 1/2-13 X 1 1/2
4	50130004152	NUT 1/2-13 CRIMP LOCK
12	50000005081	WASHER 1/2 SAE
4	50000005252	WASHER 1/2 SPLIT
2	56000005081	WASHER 9/16 SAE
1	FTREGCARD	Reg. Card
1	FTAS16	Decal
1	FTAS12	Fabtech Sticker
2	FT23022i	Instruction Sheet

	<b>FTS23023</b>	<b>Traction Bar Diesel</b>
<b>Qty.</b>	<b>Part #</b>	<b>Description</b>
2	FT44138BK	Traction Bars
2	FT44147BK	Traction Bar Bracket Diesel
1	FT44140BK	Dr. Support Bracket
1	FT44141BK	Ps. Support Bracket
1	FT70131	Ps. Frame Bracket
1	FT70132	Dr. Frame Bracket
2	FT90018	Traction Bar Shackle
1	FT60022	Hardware Kit
4	FT751U	U-Bolt
1	FT44161	Hardware Sub-Assembly

	<b>FT60022</b>	<b>Hardware Kit -</b>
<b>Qua</b>	<b>Description</b>	<b>Location</b>
6	3/4"-10 x 2 1/2" Bolt	Heim Bolt
6	3/4"-10 C-Lock Nut	
12	3/4" Flat Washer	
4	3/8"-16 x 1 1/4" Bolt	Frame Bracket Bolt
4	3/8" SAE Washer	
4	3/8" Split Washer	
2	1/2"-13 x 3 1/2" Bolt	Shackle Bolt
2	1/2" SAE Washer	
2	1/2" Split Washer	
6	3/4"-10 Nut	Heim/Rod End
1	Lock Tight	



## FTS23022 & FTS23023 Ram 2500/3500 Traction Bars

**CHECK ALL PARTS INCLUDED IN THIS KIT TO THE PARTS LIST ABOVE BEFORE BEGINNING THE INSTALLATION OF THE KIT. IF ANY PIECES 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, DRIVELINE AND / OR SUSPENSION DAMAGE MAY RESULT.**

**CHECK FOR FRAME AND SUSPENSION DAMAGE PRIOR TO INSTALLTION. THIS KIT DOES NOT REQUIRE WELDING FOR INSTALLATION. DO NOT WELD ANY OF THESE COMPONENTS.**

**THE INSTALLATION OF THIS KIT SHOULD BE PERFORMED BY A PROFESSIONAL MECHANIC. CHECK ALL PARTS INCLUDED IN THIS KIT TO THE PARTS LIST ABOVE BEFORE BEGINNING THE INSTALLATION OF THE KIT. IF ANY PIECES ARE MISSING, CONTACT FABTECH AT 909-597-7800**

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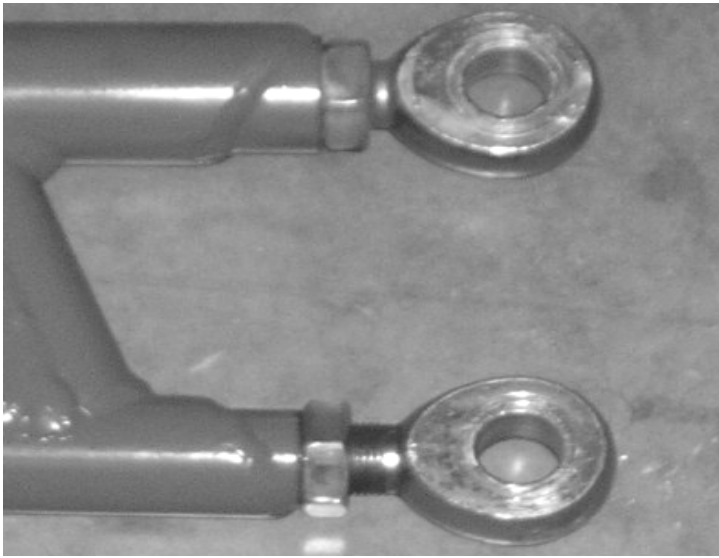
### **TOOL LIST- (NOT INCLUDED)**

- Assorted Metric & SAE Sockets & Wrenches
- Drill, Assorted Drill Bits
- 1 ¼" Hole Saw
- Torque Wrench

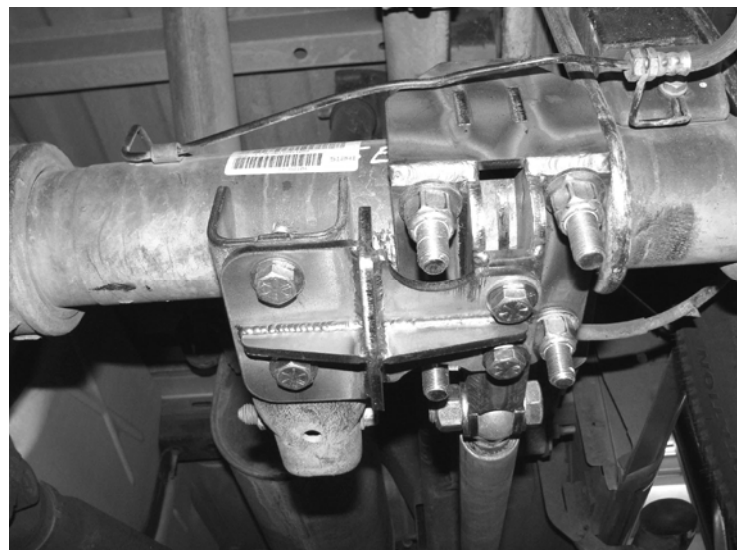
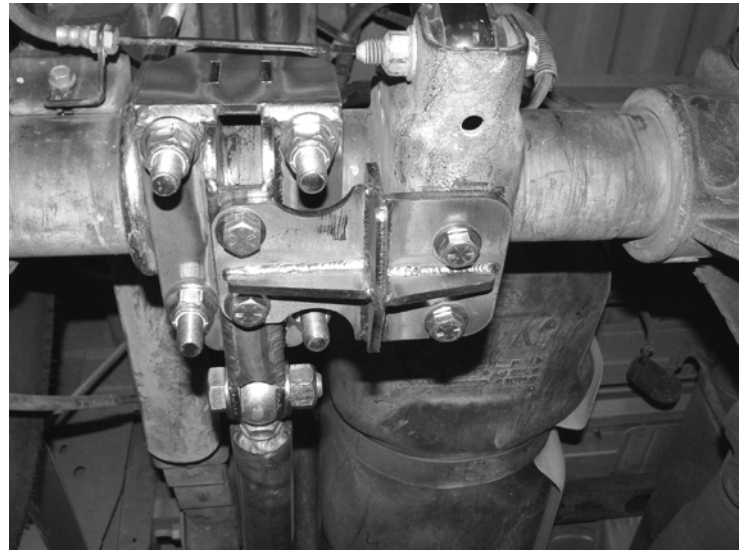
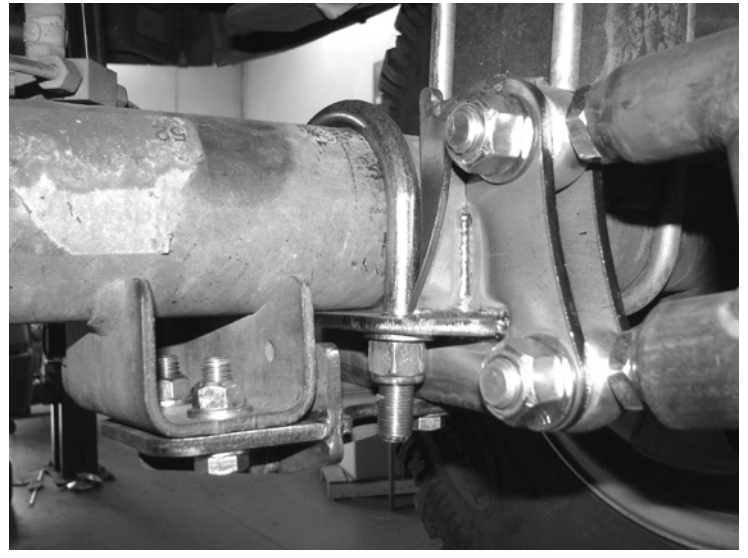
### **INSTALLATION**

1. Disconnect the negative terminal on the battery. Locate both Fabtech traction bars and install the supplied FTS98003 Heim joints & Jam Nut into the single tube end. Locate FTS98002 Rod End & Jam Nuts and install two into the end of the traction bar with the two-tube ends. You will need to thread them in so that ¾" of thread above the Jam Nut show. **NOTE: One inch of thread must be threaded into the traction bars at all times. The ¾" measurement shown below is only a starting point.** The solid rod ends will be mounted to the axle and the heim will be mounted to the frame end. SEE PHOTOS BELOW.



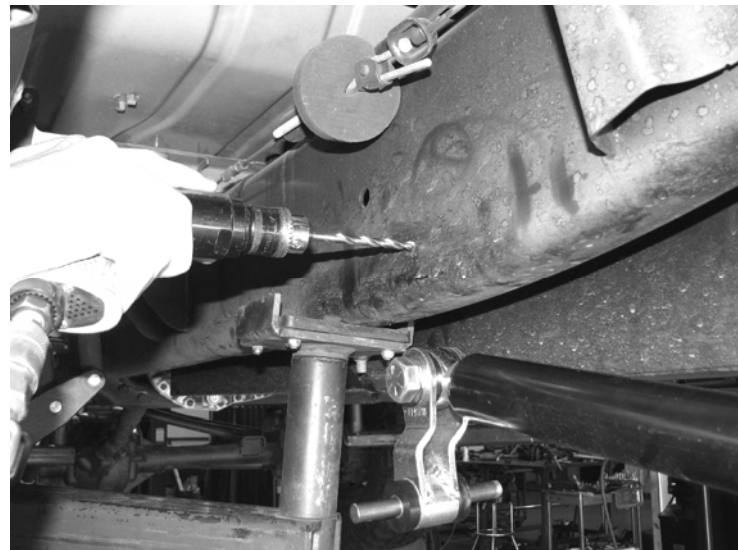
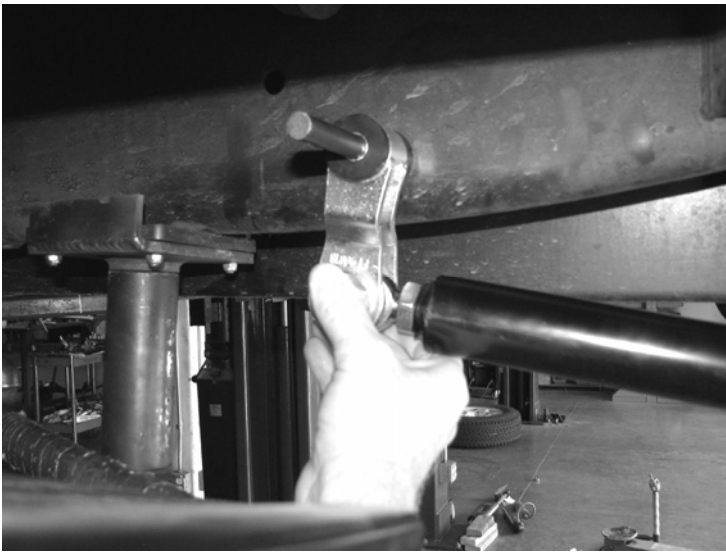
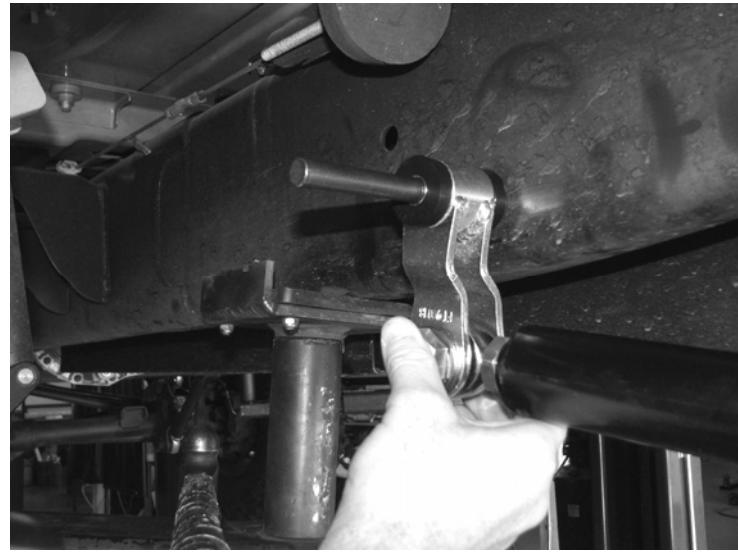


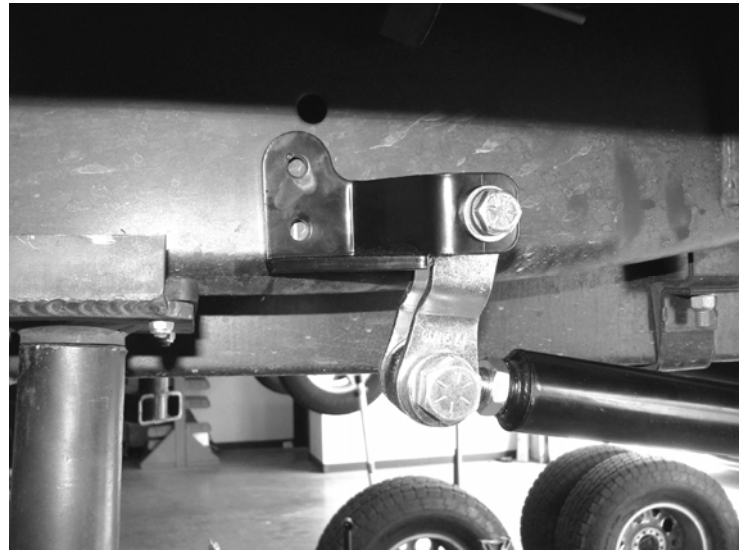
2. With the vehicle on flat ground, set parking brake and block tires. Locate FT44139BK (Gas Engine Truck) or FT44147BK (Diesel Engine Truck) Brackets & FT44140BK (drv side) & FT44141BK (pass side) Support Brackets & supplied axle U-Bolts w/ hardware. Attach the axle bracket to the axle with the U-bolts and leave loose.
3. Attach the Support Brackets to the bottom of the new axle mount with the supplied 1/2" hardware. With the support brackets flush with the bottom of the shock mount, mark hole from the bracket to the shock mount. Drill the existing holes to 1/2 and attach the new support bracket to the shock mount. Torque the bolts to \*\* 127 ft. lbs. Torque the 5/8" Ubolts to 130 ft lbs. Install the Traction Bars to the axle mounts using the supplied 3/4" hardware. SEE PHOTO IN NEXT COLUMN.



4. Re-install the rear tires & wheels and place the vehicle onto the ground if you are working on lift or jack stands. The vehicle **MUST** be on ground at ride height before starting step number five.

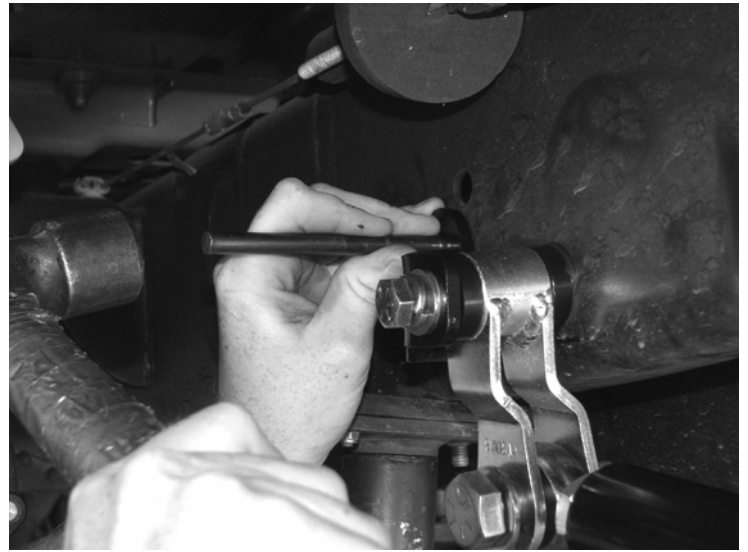
5. Locate the Fabtech shackle bracket FT90018 and install two FT1004 bushings and one FT66 sleeve into the end of the shackle with the barrel. Attach the shackle to the heim joint on the front of the traction bar with the supplied 3/4" hardware, leave loose (**when attaching the Fabtech shackle to the traction bar, make sure the bend in the shackle is facing towards the outer side of the truck**). Rotate the shackle so that is 90 degrees from the ground (straight up and down) and mark the hole from the shackle to the frame. Use a center punch and mark the frame. Rotate the shackle out of the way and drill a 1/2" hole through the face of the frame, **DO NOT** drill all the way through the frame. SEE PHOTOS





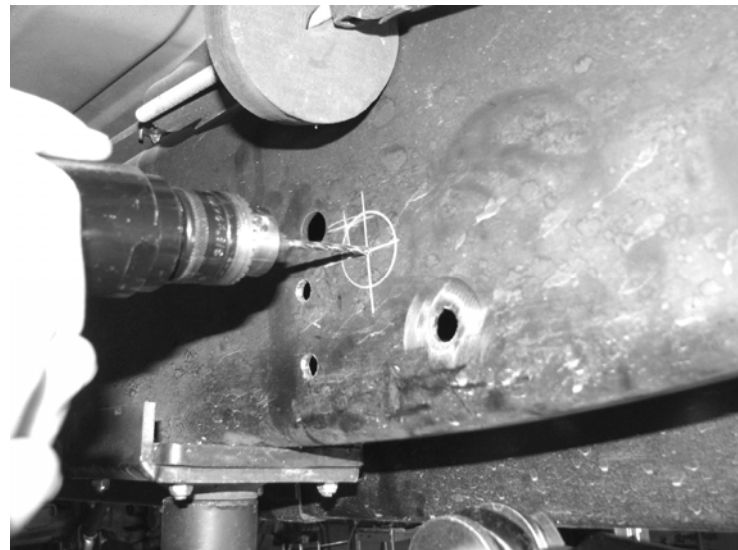
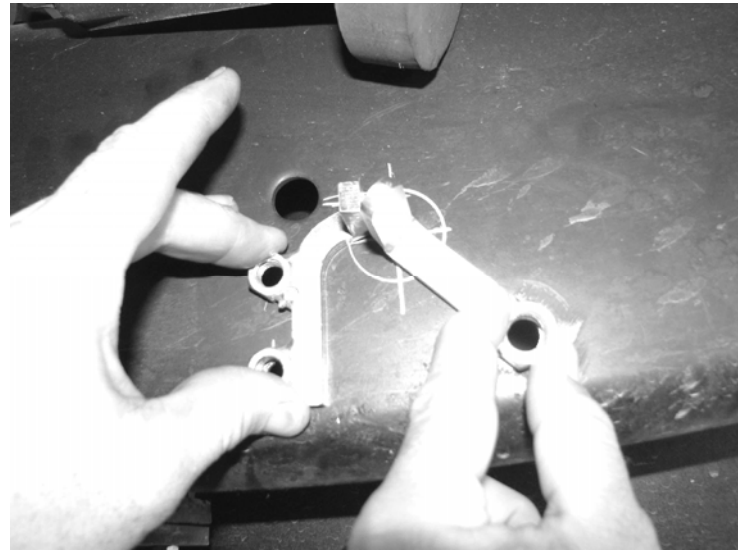
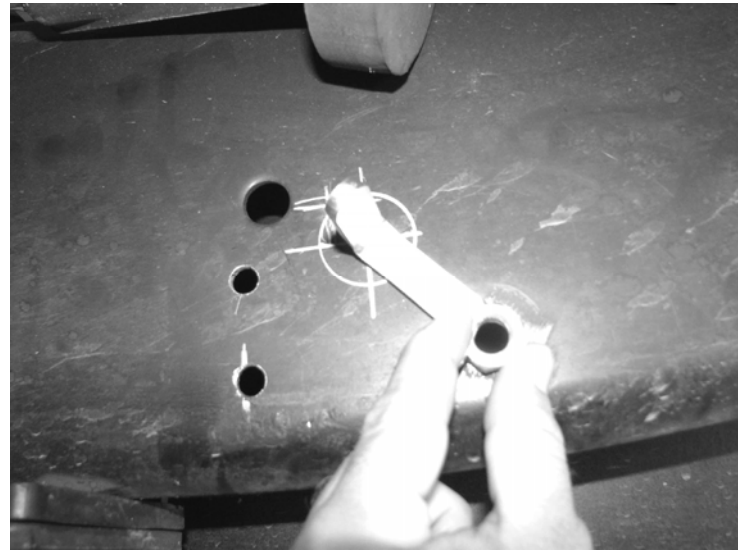
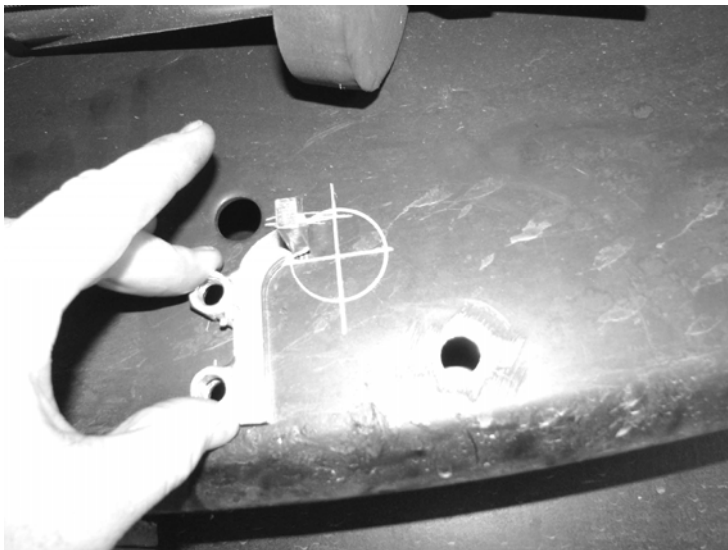
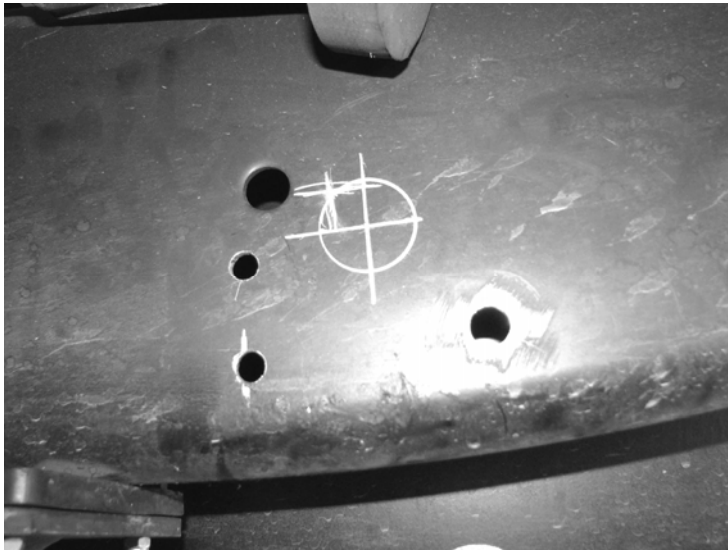
**The vehicle can be put back on a lift or jack stands to finish installation**

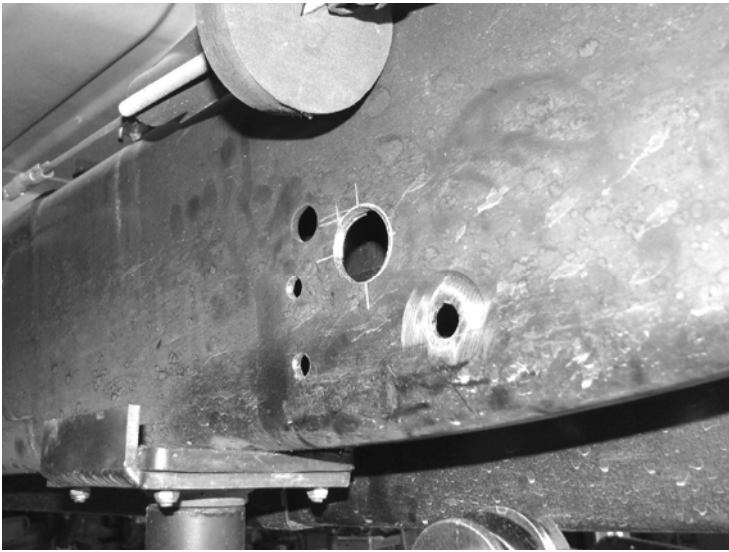
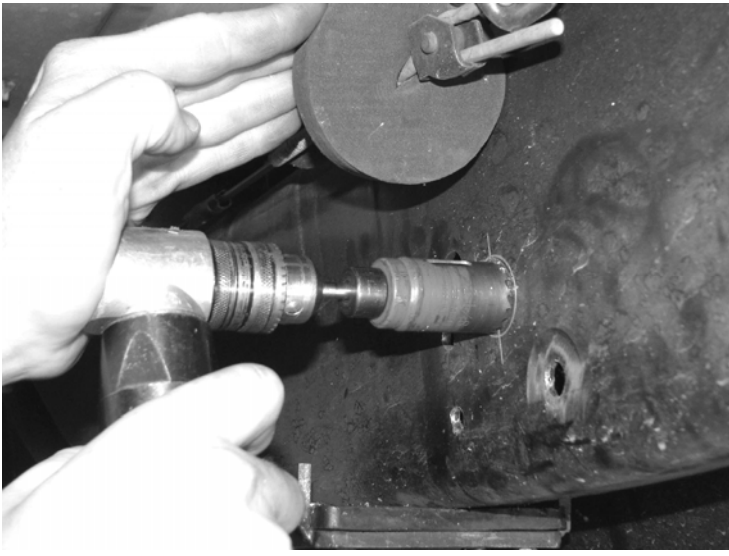
6. Locate FT70131 (Passenger) & FT70132 (Driver) Frame Mount, FT70136 Shackle Mount Nut Tab, and supplied  $\frac{1}{2}$ " x  $3\frac{1}{2}$ " hardware. Place the  $\frac{1}{2}$ " bolt with washer through the shackle mount, then through the shackle, followed by the supplied  $\frac{9}{16}$ " washer. Place the bolt into the new  $\frac{1}{2}$ " hole. Rotate the mount so the bottom of the mount is flush with the bottom of the frame. Mark the two holes in the mount to the frame using a center punch or paint pen. Rotate the mount out of the way and drill the two holes to  $\frac{3}{8}$ ". SEE PHOTO ON NEXT PAGE.



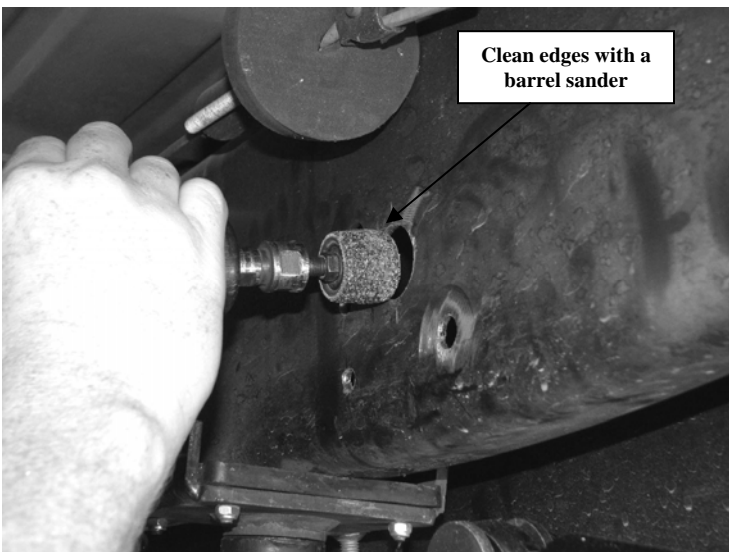


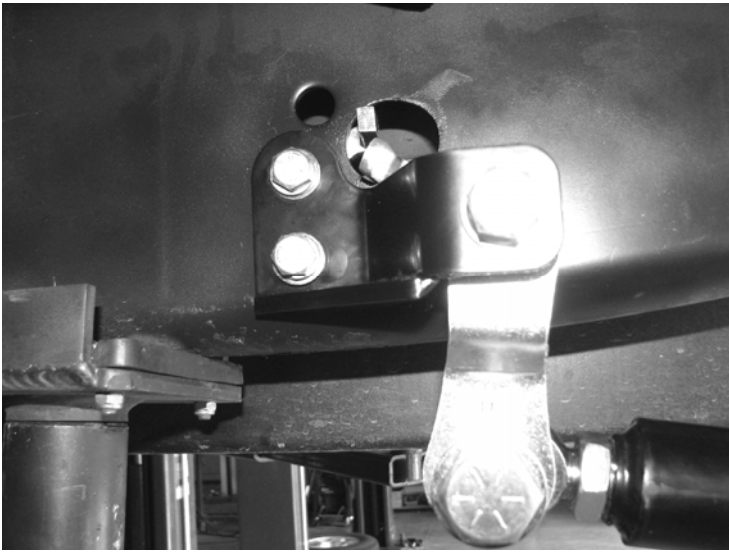
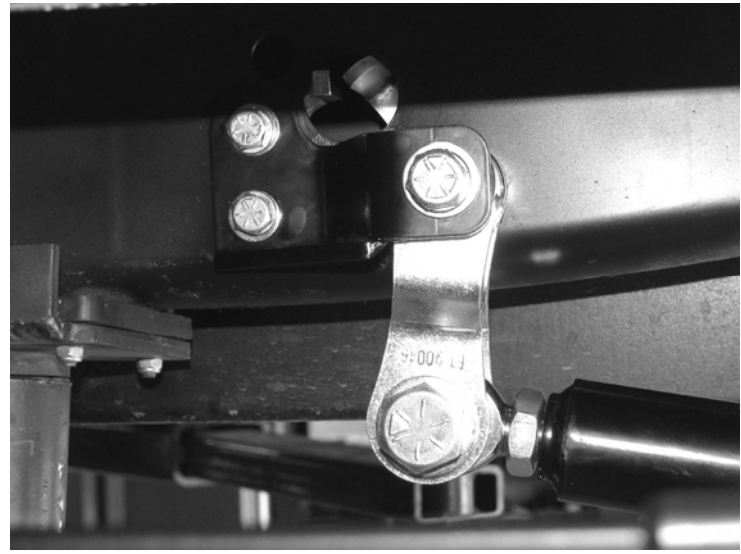
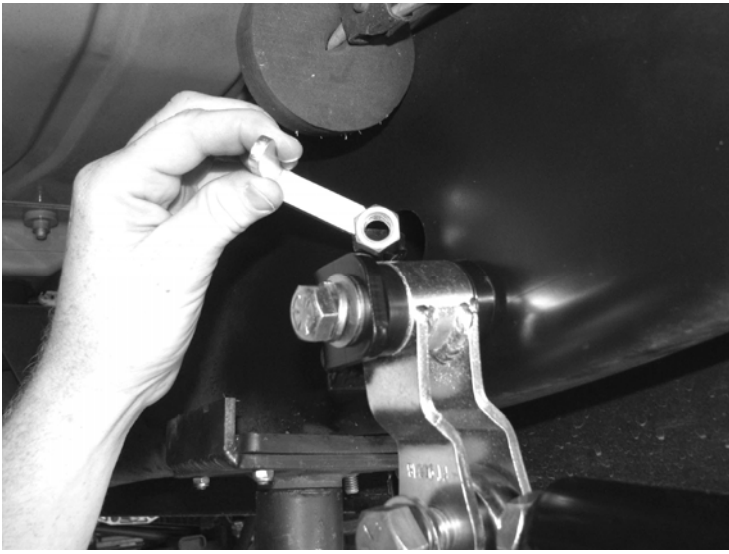
7. Locate the template on the last pages of this instruction sheet. Cut the template out of the sheet and the holes from the template. Line the 1/2" & 3/8" holes from the template to the new holes drilled into the frame. Using the template, mark the location for the 1 1/2" hole. Remove the template and locate the dual 3/8" & 1/2" nut tabs. Position the nut tabs over the new holes to make sure that both nut tabs will fit through the new 1 1/2" hole before drilling. Once the hole location is determined, use a 1 1/2" hole saw and drill into just the face of the frame (DO NOT DRILL ALL THE WAY THROUGH THE FRAME). SEE PHOTOS





8. With the shackle attached to the traction bar, install the shackle into the frame bracket with the 1/2" bolt with the flat & locking split washers. Attach the bracket to the frame (place 9/16" washer between shackle bushing and frame) with the FT70136 1/2" nut tab. Leave loose. Attach the front of the bracket with the dual nut tab and the 3/8" bolts with flat & locking split washers. Torque the 3/8" hardware to \*\*52 ft. lbs. & the 1/2" hardware to \*\*127 ft. lbs. SEE PHOTOS





9. Loosen all the jam nuts away from the bars and make sure that the required 1" of thread is in each of the bars (there is 1 3/4" of threads total on the ends). Apply some of the supplied thread locking compound to each joint and retighten the jam nuts. Torque the 3/4" bolts to \*\*450 ft. lbs.



10. RETORQUE ALL NUTS, BOLTS AND LUGS AFTER 500 MILES.



**\*\* USE THE SUPPLIED THREAD-LOCKING COMPOUND ON ALL HARDWARE.**

## S.A.E. Bolt Torque Specification Chart

Grade 5



Grade 8



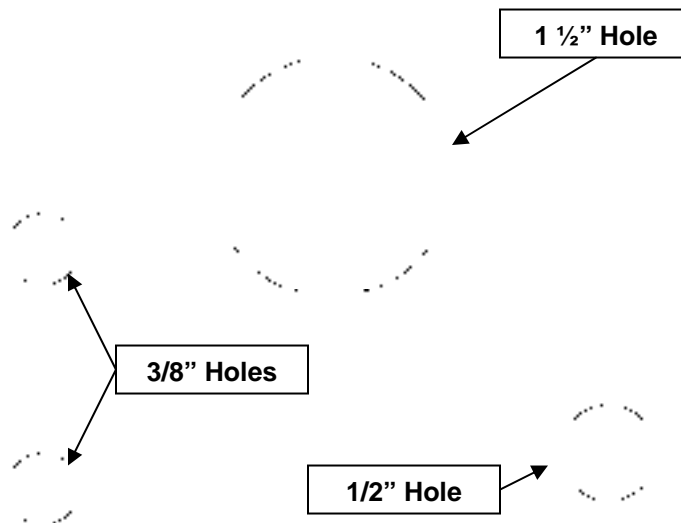
Metric



Standard

Metric

	Grade 5	Grade 8		Grade 8.8	Grade 10.9
SIZE	ft. lbs.	ft. lbs.	SIZE	ft. lbs.	ft. lbs.
1/4"	10	14	M-6	7	12
5/16"	21	29	M-8	17	29
3/8"	37	52	M-10	35	58
7/16"	59	83	M-12	65	100
1/2"	90	127	M-14	100	160
9/16"	129	184	M-16	150	240
5/8"	179	254	M-18	200	300
3/4"	317	450	M-20	300	400



**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 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 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.