

Installation Instructions

FTS23022 & FTS23023 Ram 2500/3500 <u>Traction Bars</u>

| | FTS23022 | Traction Bar Gas | | |
|------|-----------|--------------------------|--|--|
| Qty. | Part # | Description | | |
| 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 | | |

| | FTS23023 | Traction Bar Diesel | | |
|------|-----------|-----------------------------|--|--|
| Qty. | Part # | Description | | |
| 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 | | |

| | FT60022 | Hardware Kit - | | |
|-----|-----------------------|--------------------|--|--|
| Qua | Description | Location | | |
| 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 | | | |

| ра | 3 | | | |
|------|-------------|-----------------------|--|--|
| | FT44161 | Hardware Sub-Assembly | | |
| Qty. | Part # | Description | | |
| 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 | | |



FTS23022 & FTS23023 Ram 2500/3500 Traction Bars

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.

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.

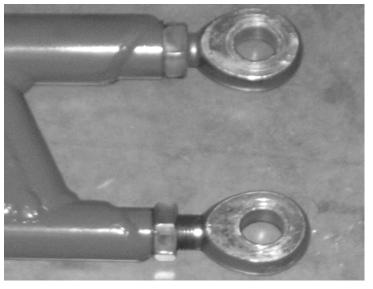
TOOL LIST- (NOT INCLUDED)

- Assorted Metric & SAE Sockets & Wrenches
- Drill, Assorted Drill Bits
- 1 1/4" Hole Saw
- Torque Wrench

INSTALLATION

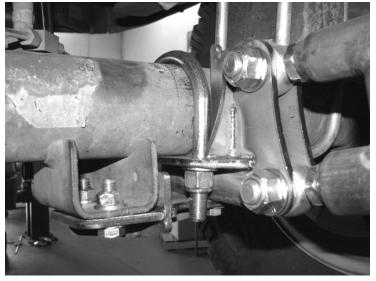
Disconnect the negative terminal on the battery. Locate both Fabtech traction bars and install the supplied FTS98003
Heim joints & Jam Nut into the single tube end. Locate FTS98002 Rod End & Jam Nuts and install two into the end of the traction bar with the two-tube ends. You will need to thread them 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.

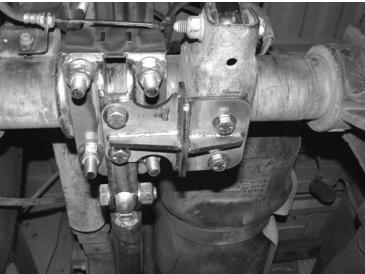


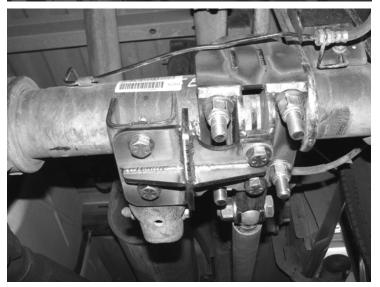


- 2. With the vehicle on flat ground, set parking brake and block tires. Locate FT44139BK (Gas Engine Truck) or FT44147BK (Diesel Engine Truck) Brackets & FT44140BK (drv side) & FT44141BK (pass side) Support Brackets & supplied axle U-Bolts w/ hardware. Attach the axle bracket to the axle with the U-bolts 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.





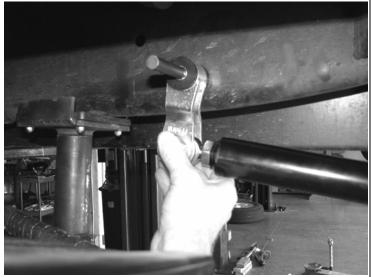




4. Re-install the rear tires & wheels and place the vehicle onto the ground if you are working on lift or jack stands. The vehicle **MUST** be on ground at ride height before starting step number five.

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









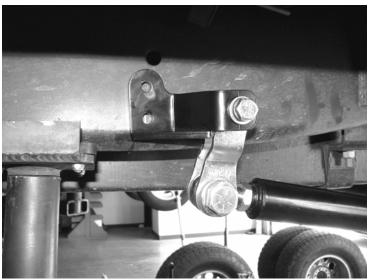


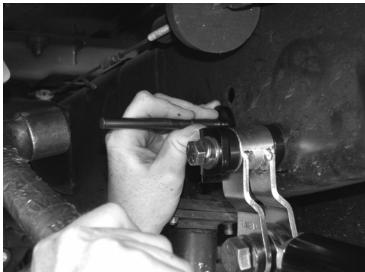


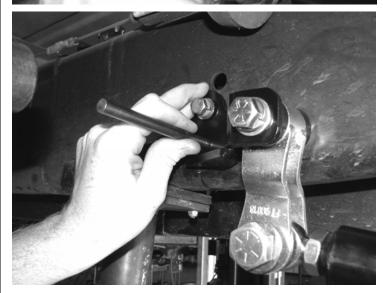
The vehicle can be put back on a lift or jack stands to finish installation

6. Locate FT70131 (Passenger) & FT70132 (Driver) Frame Mount, FT70136 Shackle Mount Nut Tab, and supplied ½" x 3 ½" hardware. Place the ½" bolt with washer through the shackle mount, then through the shackle, followed by the supplied 9/16" washer. Place the bolt into the new 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 3/8". SEE PHOTO ON NEXT PAGE.

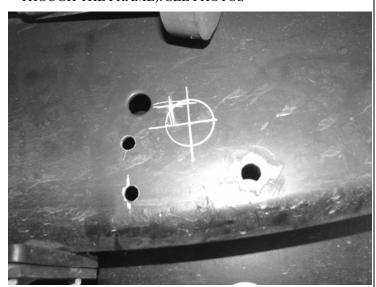


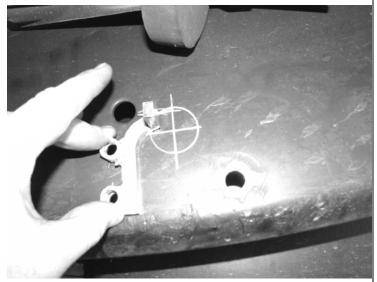


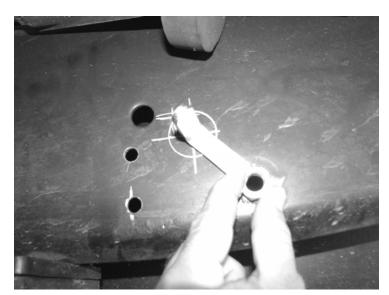


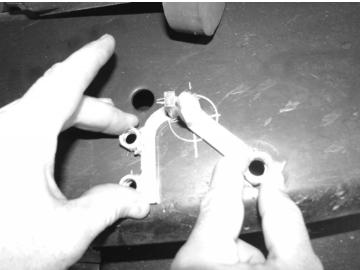


7. Locate the template on the last pages of this instruction sheet. Cut the template out of the sheet and the holes from the template. Line the 1/2" & 3/8" holes from the template to the new holes drilled into the frame. Using the template, mark the location for the 1 1/2" hole. Remove the template and 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 THOUGH THE FRAME). SEE PHOTOS

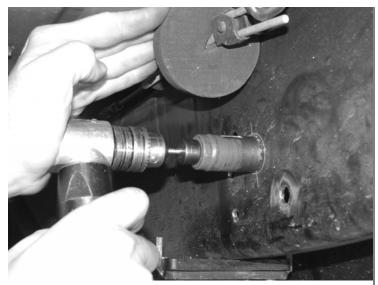




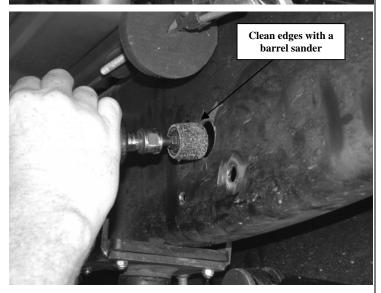










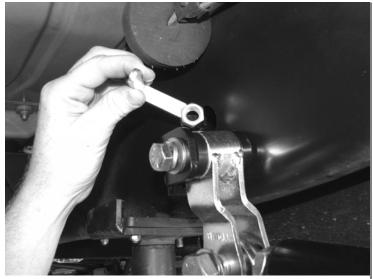


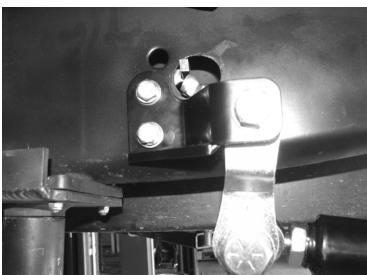


8. With the shackle attached to the traction bar, install the shackle into the frame bracket with the 1/2" bolt with the flat & locking split washers. Attach the bracket to the frame (place 9/16" washer between shackle bushing and frame) with the FT70136 1/2" nut tab. Leave loose. Attach the front of 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 ¾" 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.

S.A.E. Bolt Torque Specification Chart





Grade 8



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 |

