



**4331 EUCALYPTUS AVE. ~~ CHINO, CA 91710
909-597-7800 FAX 909-597-7185
1999-2000 FORD F-250/350 SUPER DUTY 2 WHEEL DRIVE
FTS412 DROP BRACKET KIT**

PARTS LIST:

1 EA. I BEAM BRACKET DRIVERS SIDE FT410-104	
1 EA. I BEAM BRACKET PASSENGER SIDE FT410-103	
1 EA. RADIUS ARM BRACKET DRIVER'S SIDE FT412D	
1 EA. RADIUS ARM BRACKET PASSENGER'S SIDE FT412P	
1 EA. PITMAN ARM FT309	9 EA. ½" X 1 ½" BOLTS
12 EA. ½" NYLOCK NUTS	24 EA. ½" SAE WASHERS
3 EA. ½" X 3 ½" BOLTS	1 EA. COTTER PIN

TOOL LIST:

**FLOOR JACK
JACK STANDS
AIR HAMMER WITH CHISEL AND PUNCH BITS
DRILL WITH 1/8" AND 1/2" BITS
ASSORTED METRIC AND S. A. E. WRENCHES AND SOCKETS**

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

CHECK THE FACTORY PITMAN ARM SPLINE ORIENTATION WITH THE SUPPLIED PITMAN ARM BEFORE BEGIN INSTALLATION. SEE STEP 8 FOR MORE INFORMATION.

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

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

THIS KIT MUST BE INSTALLED WITH FTS131 OR FTS136 COIL SPRINGS.

SWAY BAR DROP BRACKETS ARE INCLUDED WITH THE FTS131 AND FTS136 COIL SPRING KITS.

THIS KIT CANNOT BE INSTALLED IN CONJUNCTION WITH THE FTS427 DUAL SHOCK SYSTEM.

INSTRUCTIONS:

1. Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the frame, at the front frame rails, with jack stands. **NEVER WORK UNDER AN UNSUPPORTED VEHICLE.** Remove the front tires.
2. Remove the brake calipers and tie them up out of the way. **DO NOT ALLOW THE CALIPERS TO HANG FROM THE BRAKE LINES!** Remove the front shocks and the sway bar end links. Loosen the I Beam and radius arm pivot bolts, **DO NOT REMOVE THESE BOLTS FROM THE BRACKETS.** SEE PHOTO BELOW.

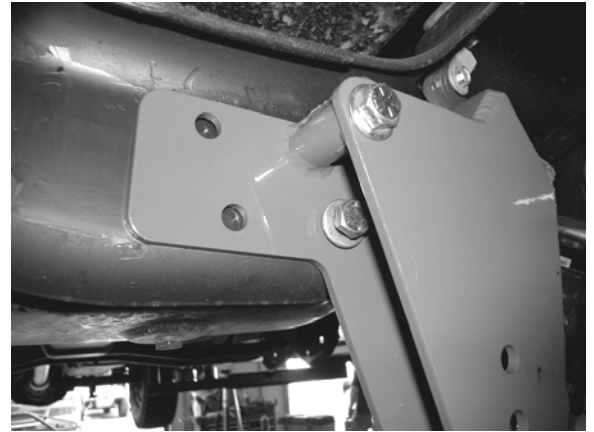


3. Support the I beam with a floor jack and remove the J clip at the top of the coil spring. Lower the floor jack supporting the I beams to release the coil spring from the coil bucket and remove the nut at the bottom of the coil spring. Set the coil spring, retaining washer, insulator and lower washer aside. Repeat this on the opposite side. SEE PHOTO BELOW.



4. Separate the drag link from the pitman arm. Remove the bolts securing the radius arms to the radius arm mounts and the I beam pivot bolts. Set the radius arm/I Beam assemblies aside.
5. The rivets and bolts securing the factory I beam brackets to the frame must be removed. The rivets can be removed by drilling out the heads and pushing the rivet out of the frame with a hammer and punch.

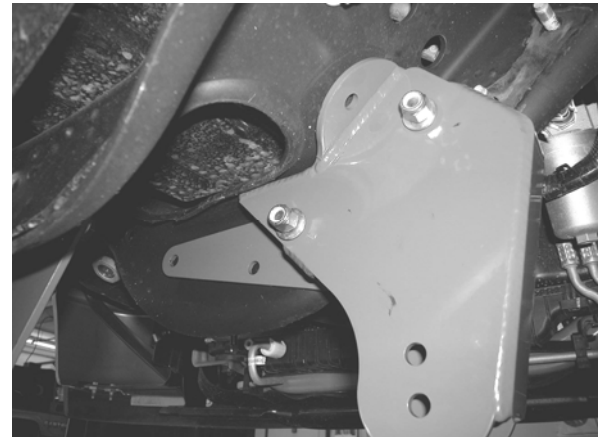
6. Attach the new drop brackets to the frame using the included hardware. You will reuse most of the factory holes and have to drill some new ones. Locate the existing holes with the supplied bolts and mark the new holes that must be drilled with a center punch. SEE PHOTOS BELOW.



Driver Side I-beam Bracket

Ft410-104

Viewed from the front



Passenger Side I-beam Bracket

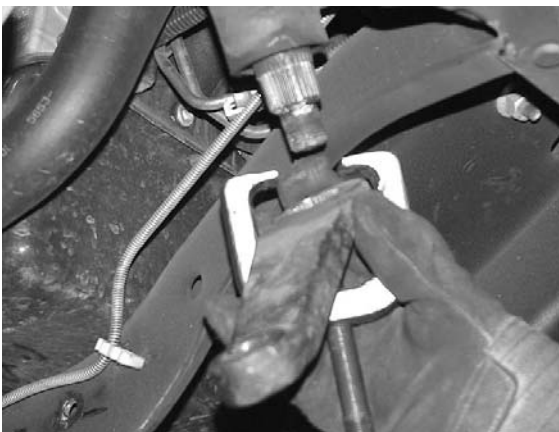
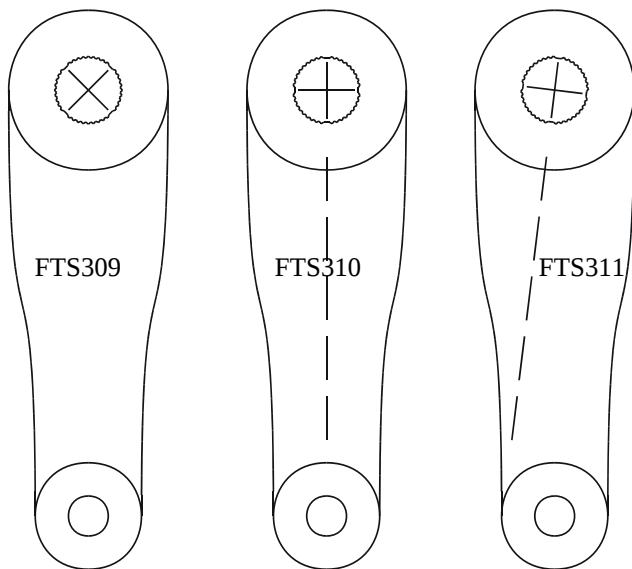
Ft410-103

Viewed from the rear

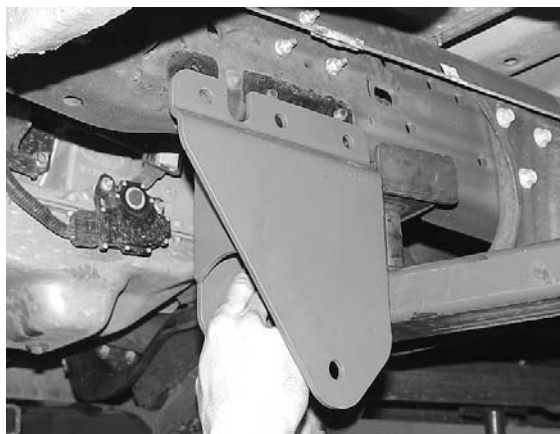
7. Drill the holes with a pilot drill (1/8") and follow through with a 1/2" drill. **BE SURE THERE IS NOTHING BEHIND THE FRAME SECTIONS YOU ARE DRILLING THROUGH, PLACE A PIECE OF PLATE STEEL ABOVE THE FRAME BELOW THE OIL PAN TO PREVENT DRILLING INTO THE PAN.** Tighten all the fasteners securing the brackets to the frame. SEE PHOTO ON NEXT PAGE.



- 8 Remove the nut securing the original pitman arm to the steering box shaft. A pitman arm puller must be used to remove the pitman arm from the steering shaft. Using the diagram shown above, confirm that the master spline orientation on your factory pitman arm matches the one on the FT309 pitman arm supplied with this kit. If they do not match, you will need to purchase a FTS310 or FTS311 replacement pitman arm. Align the master splines on the steering shaft, replace the original washer and nut and torque the new unit in place at 200-225 ft.-lbs. SEE DIAGRAM AND PHOTOS AND IN NEXT COLUMN BELOW.



- 9 Remove the bolts securing the radius arm bracket to the frame. Retain all of the factory hardware, it will be reused. Place the new bracket in place, aligning it with all of the factory holes and reinstall the original hardware. Fully tighten all the fasteners. SEE PHOTOS BELOW

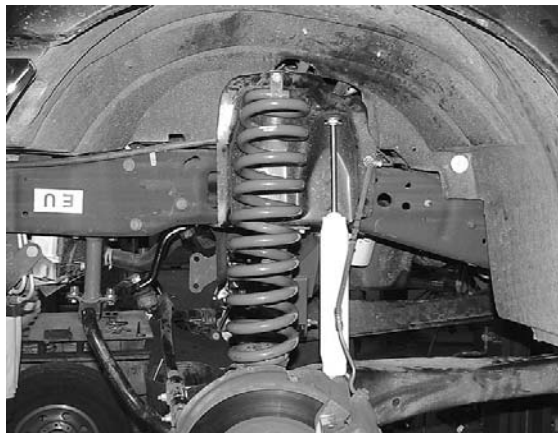


- 10 If you are installing FTS136 6" coil springs with this kit, install the bump stop and sway bar extensions that are included with the coil springs at this time. SEE PHOTOS ON NEXT PAGE.



- 11 Repeat steps 7 and 8 on the opposite side of the truck.
- 12 Slide the I beams and radius arms into the new drop brackets reusing the factory bolts, do not tighten them yet. Reattach the drag link onto the new pitman arm and torque the castle nut, be sure to install a new cotter pin.

- 13 Install the new coil springs, not included with this kit, the same way the original units were removed. Be sure to reinstall the j clips. Install the new shocks, not included with this kit. You may have to raise the I beam slightly to attach the lower shock mount. Complete this step on both sides of the truck and replace the tires, fully torqueing the lug nuts. SEE PHOTO BELOW.



- 14 Set the truck back on the ground. Reattach the sway bar end links to the I beams, using the factory hardware. Fully torque the I beam and radius arm pivot bolts and check all other fasteners. Set the toe-in to approximate factory specs. We recommend driving the truck for approximately fifty miles and then have the truck aligned to factory specs.

FACTORY FORD PITMAN ARM PART NUMBERS

FTS309 = F81A-3590-LC ALL HAVE 32 TEETH

F81A-3590 BA

F81Z- 3590 LB

FTS310 = YC3Z-3590 CA 36 TEETH

FTS311 = YC3Z-3590 DA ALL HAVE 36 TEETH

YC35-3590 DB

YC34-3590 DA

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.

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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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