



**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. 1/2" X 1 1/2" BOLTS
12 EA. 1/2" NYLOCK NUTS 24 EA. 1/2" SAE WASHERS
3 EA. 1/2" X 3 1/2" 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.

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.

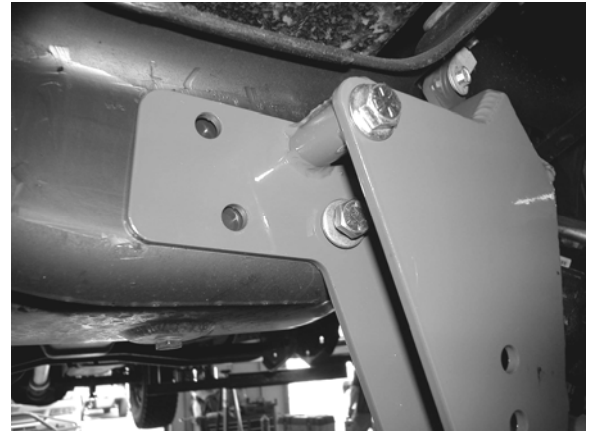


3. Support the I beam with a floor jack and remove the J clip at the top of the coil spring. Lower the floor jack supporting the I beams to release the coil spring from the coil bucket and remove the nut at the bottom of the coil spring. Set the coil spring, retaining washer, insulator and lower washer 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.

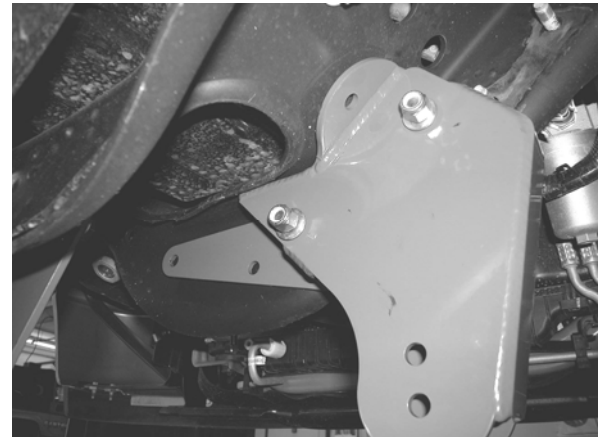
6. Attach the new drop brackets to the frame using the included hardware. You will reuse most of the factory holes and have to drill some new ones. Locate the existing holes with the supplied bolts and mark the new holes that must be drilled with a center punch. SEE PHOTOS BELOW.



Driver Side I-beam Bracket

Ft410-104

Viewed from the front



Passenger Side I-beam Bracket

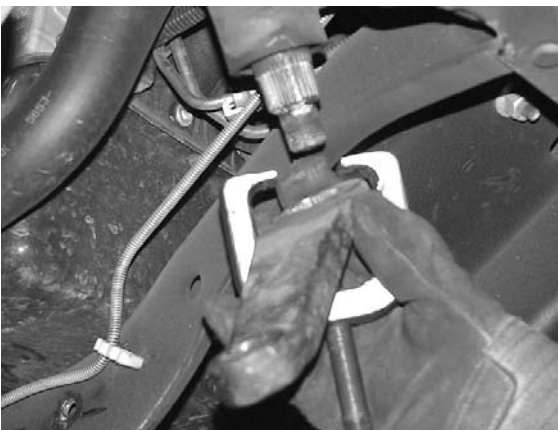
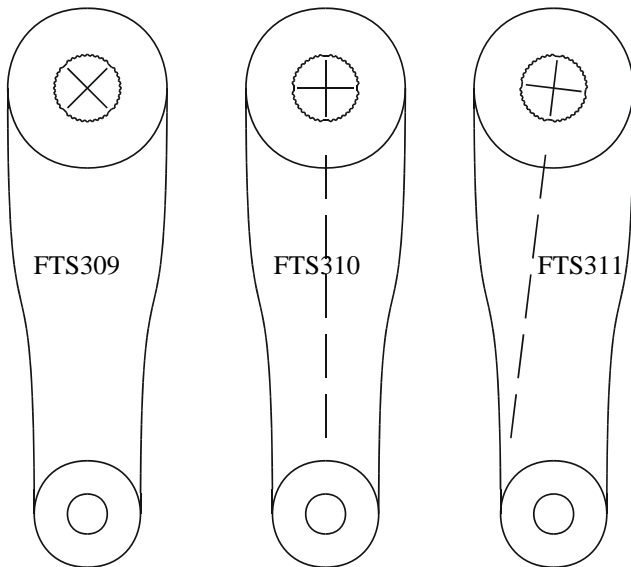
Ft410-103

Viewed from the rear

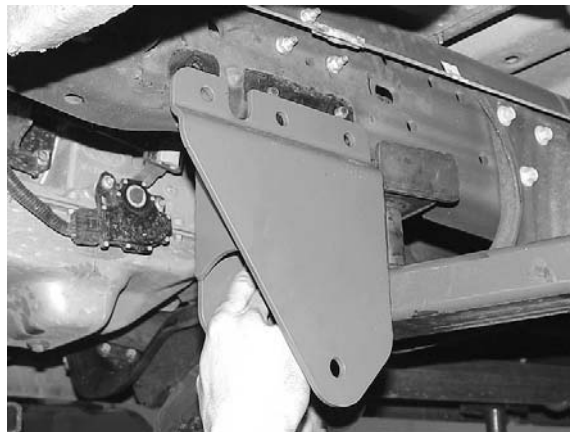
7. Drill the holes with a pilot drill (1/8") and follow through with a 1/2" drill. **BE SURE THERE IS NOTHING BEHIND THE FRAME SECTIONS YOU ARE DRILLING THROUGH, PLACE A PIECE OF PLATE STEEL ABOVE THE FRAME BELOW THE OIL PAN TO PREVENT DRILLING INTO THE PAN.** Tighten all the fasteners securing the brackets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



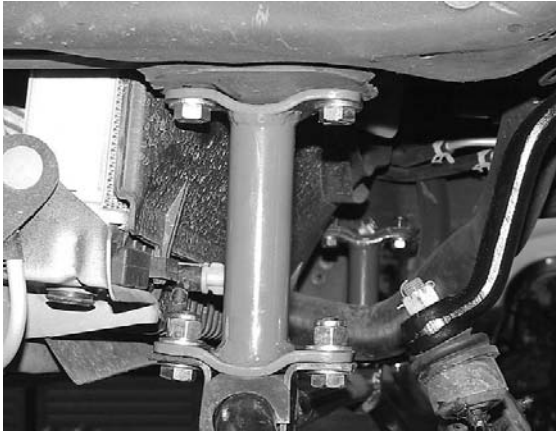
- 8 Remove the nut securing the original pitman arm to the steering box shaft. A pitman arm puller must be used to remove the pitman arm from the steering shaft. Using the diagram shown above, confirm that the master spline orientation on your factory pitman arm matches the one on the FT309 pitman arm 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 torquing 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