4331 EUCALYPTUS AVE. ** CHINO, CA. 91710
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1984-95 TOYOTA 2 WHEEL DRIVE
FTS4130-ID LONG TRAVEL KIT

PARTS LIST:

1 EA. RIGHT UPPER CONTROL ARM (UCA)
1 EA. RIGHT LOWER CONTROL ARM (LCA)
4 EA. URETHANE BUSHINGS (FT1000)
4 EA. OUTER WASHERS FT55-1
2 EA. UCA PLATE BACK SPACERS FT4130-1S
2 EA. UPPER BUMPSTOPS FTS60235
2 EA. BUMPSTOP GUSSETS FTT05
4 EA. ½" NYLOC NUTS NF
4 EA. GREASE FITTINGS FT84
4 EA. 3/8" FLAT WASHERS
1 EA. LEFT UPPER CONTROL ARM (UCA)
1 EA. LEFT LOWER CONTROL ARM (LCA)
4 EA. INNER SLEEVES FT4130-1-101
1 EA. PKGS. OF SILICON LUBE FTLUBE
2 EA. LOWER BUMPSTOPS FT86
2 EA. BUMPSTOP PLATES FTT10
4 EA. ½" X 3" BOLTS GRADE 8 FINE
8 EA. ½" FLAT WASHERS
4 EA. 3/8" NYLOCK NUTS

TOOL LIST:

JACK STANDS
AIR CHISEL OR HYDRAULIC PRESS
ASSORTED METRIC WRENCHES AND SOCKETS
HAMMERS, CUTTERS, DRILL MOTOR W/ 3/8" BIT
FLOOR JACK
MISCELLANEOUS TOOLS
RED LOCTITE (PERMATEX 271)
MIG WELDER

THE INSTALLATION OF THIS KIT ALSO REQUIRES THE FOLLOWING PARTS KITS:

TIE ROD KIT	**FTS150RL**
LONG TRAVEL STRUT FRAME	**FTS4130-9ID OR FTS4130-10ID**
EXTENDED BRAKE LINE KIT	**FTS7217**
TORSION BARS	**SAW1636 OR SAW31636 (300M 27mm RECOMMENDED)**
LOWER BALL JOINT KIT	**FTSIDBJ (FOR 89-95 MODELS ONLY!)**

TO PROPERLY INSTALL THIS KIT, THERE IS CERTIAN MACHINE WORK AND WELDING THAT MUST BE DONE PROPERLY. THE TAPERS ON THE DRAGLINK AND STEERING KNUCKLES MUST BE ENLARGED TO ALLOW THE NEW TIE ROD ENDS TO SEAT PROPERLY. THIS MUST BE DONE WITH A 4 DEGREE AUTOMOTIVE REAMER. ALSO, THE STEERING KNUCKLE GUSSETS MUST BE WELDED TO THE STEERING KNUCKLES. WHEN WELDING THESE GUSSETS, WE RECOMMEND PREHEATING AND TIG WELDING WITH THE PROPER ROD. FABTECH MOTORSPORTS OFFERS THESE SERVICES FOR A NOMINAL FEE. CONTACT FABTECH MOTORSPORTS FOR MORE INFORMATION.

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.

READ ALL INSTRUCTION THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION!

WARNING: **FABTECH RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING WITH PRELOADED TORSION BARS TO AVOID POSSIBILITY OF SERIOUS INJURY.**

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 and the front shocks.

2. Remove the jam nuts off the top of the torsion bar adjuster bolts (located on top of the middle crossmember, under the cab of the truck.) Grease the threads on the torsion bar adjuster bolts and slowly loosen the bolts, holding the nut on top of the crossmember. **IF THE BOLTS LOCK UP OR SEEM EXCESSIVELY TIGHT, STOP AND CONTACT FABTECH FOR ADVISE. USE EXTREME CAUTION, THESE BOLTS ARE UNDER VERY HIGH LOADS!**

3. After you have removed the right and left torsion bar adjuster bolts, slide the torsion bars back and remove them from the truck. Remove the sway bar end links from the lower control arms (LCA) as well as the mounts holding the sway bar to the frame. Remove the sway bar from the truck and discard. **THE SWAY BAR MUST BE REMOVED FROM THE TRUCK WHEN USING FABTECH LIFT A ARMS TO PREVENT INTERFERENCE WITH THE BRAKE CALIPERS.**

4. Starting on the passenger side (right), remove the two bolts holding the brake caliper on the spindle and tie the caliper out of the way onto the frame. **DO NOT LET THE BRAKE CALIPER HANG FROM THE BRAKE LINE.** Remove the cotter pin and nut on the steering tie rod and separate the tie rod end from the steering knuckle. Support the lower control arm (LCA) with a jack. Remove the four bolts holding the upper ball joint to the upper control arm (UCA). Remove the two bolts holding the UCA cross shaft to the frame, remove the three bolts holding the lower ball joints to the LCA, and remove the two bolts holding the stock strut arm to the LCA, set the spindle and ball joint assembly aside. Remove the bolts holding the torsion bar socket onto the side of the LCA and set the socket aside. Remove the LCA pivot bolt and set the LCA aside. Using a air chisel or a grinder remove the two cross shaft nuts that are welded to the UCA mount. Next, remove the stock upper bumpstop mounts, 2 per side, using a die grinder with a cutoff wheel as shown on the supplied illustrations. Be sure not to cut into the frame and protect all exposed wires and hoses. Using a hand grinder, clean up all cut areas. If you are installing this kit on a late model (1989-95) truck separate the stock lower ball joint from the spindle and discard.

5. Remove both brake rotors off the spindles and remove the two bolts attaching the steering knuckles to the spindle. Perform the necessary machine work and welding on the steering knuckles, see note on page 1, and reassemble spindles.

6. Repeat steps 4 and 5 on the opposite side of the truck. Also, remove the factory strut frame and discard. If you are going to install a Fabtech weld-on double shock kit (part FTS8995ID) onto your truck, cut the factory upper shock mount off as explained in the instructions supplied with the double shock kit.

7. Remove the cotter pins and nuts from the idler arm and pitman arm and remove the drag link. Perform the necessary machine work (see note on page 1), and reinstall the modified draglink onto the truck using the original nuts and new cotter pins.

8. Secure the cross shaft of the UCA from the passenger side of the truck in a vise and remove the two bolts on each end of the cross shaft. Using either a air chisel or a press, drive a bushing out of one side of the UCA and remove the cross shaft from the UCA. Support the cross shaft in a vise. Using the supplied silicon lube, lubricate one bushing and one inner sleeve. Slide the inner sleeve onto the cross shaft, then the bushing (with the lip facing outward), followed by the outer washer. Apply loctite to the threads of the cross shaft and torque the original end bolt to factory specifications. Take the new passenger side UCA and press the cross shaft onto it. Lubricating all parts, slide one inner sleeve, one bushing and one outer washer onto the cross shaft. Apply a small amount of loctite to the threads of the cross shaft and torque the bolt to factory specifications. Repeat this step with the new driver side UCA.

9. Take the ¾" heim joints, supplied with the strut frame kit, and apply some grease to the threads. Thread a ¾" right hand jam nut up to the top of the threads. Thread the heim joint into the new LCA until the jam nut touches the tube. **IF THE THREADS SEEM EXCESSIVELY TIGHT, CLEAN THEM OUT WITH A ¾" NF TAP!** Repeat this step with the opposite LCA.

10. Remove the four bolts securing the stock lower crossmember to the LCA mounts. Keeping the stock crossmember in place, install the new strut frame using the four factory bolts on the cross member and the 1 ¼" x ½" bolts, nuts and washers, supplied with the strut frame kit, on the front frame rail. At the front frame rail, on late model trucks, you will use the lowest hole on the strut frame and the two factory ½" holes in the frame. On early model trucks, you will use the top holes on the strut frame and the bumper mounting holes on the frame. If you are installing this kit onto a late model (1989-95) truck, install the new lower ball joints supplied in the FTSIDBJ kit onto the new LCA.

11. Center punch a spot on the lower bumpstop contact plate (welded to the LCA mount on the frame) and drill a 3/8" hole. Attach the included lower bumpstop to the lower bumpstop contact plate. Using a hand grinder or sander remove 1/16" off the front and rear face of the factory lower control arm bushings. Starting with the passenger side LCA (the holes for the lower ball joint should be on top), place one heim spacer, supplied with the strut frame kit, on each side of the heim joint on the LCA. Take the LCA and place it on the truck, insert the LCA bolt through the LCA from rear to front. Line up the hole on the strut frame with the heim joint and insert the 2 ½" x ½" bolt through the strut frame from front to rear with a ½" c-lock nut on the back side. Take the factory torsion bar socket and attach it to the LCA using the factory hardware. If you are having any problems getting the LCA onto the stock bushings you can slightly sand the LCA bushing to add more clearance.

12. Take the UCA and cross shaft assembly and the supplied UCA back spacer and bolt the assembly to the UCA mount using the 3" x ½" grade 8 bolts. Insert the bolts from the inside through the cross shaft, through the back spacer and through the UCA mount, use a ½" c-lock nut. Attach the lower ball joint to the LCA using the three factory bolts. Attach the upper ball joint to the UCA using the four factory bolts.

13. The following parts are supplied in the FTS150RL tie rod kit. Take the four tie rod ends, two right and two left hand jam nuts, two tie rods and thread the jam nuts all the way onto the tie rods. Be sure to put the right hand jam nut onto the right hand tie rod end, do this with all four tie rod ends. Thread a right hand tie rod end into the tie rod and a left hand tie rod end into the other side (one side of the tie rod is right hand thread and the other side is left hand thread). **IF THE THREADS SEEM EXCESSIVELY TIGHT, CLEAN THEM OUT WITH A ¾" NF TAP!** Repeat this procedure to the other tie rod. Attach the tie rods to the draglink and the steering knuckles using the supplied castle nuts and cotter pins.

14. Repeat steps ten through thirteen on the opposite side of the truck.

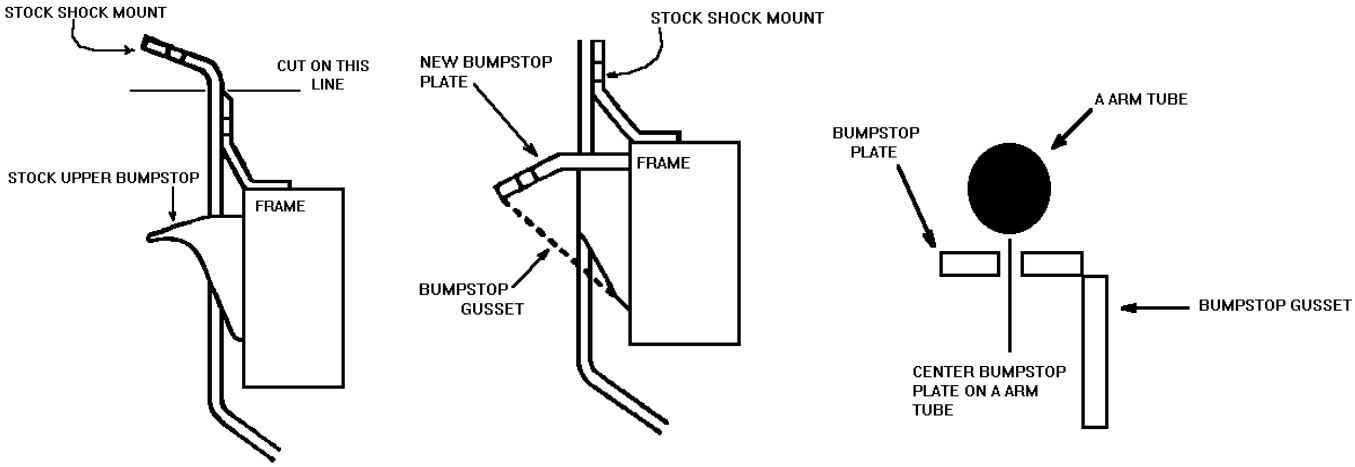
15. Take the bumpstop plate and tack weld it to the upper outside edge of the frame at the rear UCA tube, there should be a 3/8" gap between the bumpstop plate and the UCA tube at the lowest point of suspension travel. Also, tack weld the bumpstop gusset to the rear side of the bumpstop plate. Refer to the supplied drawing on page 6. When everything is in the proper position completely weld the plates in place. After the brackets have cooled, attach a low profile bumpstop onto the plate (you might want to paint the brackets first). If you are going to install a Fabtech weld on double shock kit onto your truck, follow the instructions on placing the double shock brackets onto the frame and LCA at this point. Repeat this step on the opposite side of the truck.

16. Take the brake caliper and reinstall it onto the spindle using the factory bolts. Remove the stock brake line from the frame and the caliper. Install the new brake lines onto the truck. Repeat this step on the opposite side of the truck. Completely bleed the front brakes until there is no air left in the system, brake bleeding instructions can be found in a factory shop manual.

17. Torque all fasteners that you have installed up to this point. Install the front shocks. Install the new torsion bars according to the manufactures instructions, making sure to lubricate the splines of the torsion bars and the threads of the torsion bar bolts. Fabtech recommends that you use new factory torsion bar bolts (Toyota part # 90101-12104) and nuts (Toyota part # 90170-12004) when installing the new torsion bars. Roughly torque down the torsion bar bolts, leaving the jam nuts loose.

18. Reinstall the front tires and torque all the lugs to factory specifications. Set the truck back onto the ground and bounce on the front end to settle the torsion bars. We recommend you set the torsion bars so that there is a 3/8" to ½" space between the upper bumpstop and the UCA tube. **WHEN MAKING ADJUSTMENTS ON THE TORSION BARS, JACK UP THE FRONT END OF THE TRUCK TO UNLOAD THE TORSION BARS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SEIZED OR BROKEN TORSION BAR BOLTS!**

19. Set the toe in to approximate factory specifications and tighten the four jam nuts on the tie rod ends. Grease all ball joints and tie rod ends. Drive the truck about 2-3 miles and recheck the ride height, also be sure the truck is sitting level from side to side. When all adjustments are completed, tighten the jam nuts on the torsion bar bolts. Rebleed the front brakes to make sure no addition air has made it's way into the calipers. We recommend you drive the vehicle for fifty miles and then have the vehicle aligned to factory specifications. Re-adjust headlights.


STOCK SHOCK MOUNT
CUT ON THIS LINE
STOCK UPPER BUMPSTOP
FRAME
STOCK SHOCK MOUNT
NEW BUMPSTOP PLATE
FRAME
BUMPSTOP GUSSET
A ARM TUBE
BUMPSTOP PLATE
BUMPSTOP GUSSET
CENTER BUMPSTOP PLATE ON A ARM TUBE

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.

Coil over 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.