

2007-2012 CHEVROLET C/K1500 FTS21121 4" UPPER CONTROL ARM SYSTEM



4331 EUCALYPTUS AVE. CHINO, CA. 91710 PHONE 909-597-7800 FAX 909-597-7185

	FTS21121	COMPONENT BOX 1 W/ PERF SHOCKS
2	FT20560BK	COIL SPACER
1	FT20561	DIFF MOUNT - DRIV
1	FT20562	DIFF MOUNT - PASS
1	FT20558BK	UCA - DRIV
1	FT20559BK	UCA - PASS
2	FT20154	UPPER BALL JOINT C10
1	FT20563BK	SKID PLATE
2	FTBK15	BLOCK 1.5 IN
4	FT1500U	UBOLT SQ 9/16-18X10.00X2.63
1	FT20564	HARDWARE KIT
1	FT20565	HARDWARE SUBASSEMBLY
2	FTS7333	PERFORMANCE SHOCK
1	ZPRELIMBOX1	PRELIM BOX1 LG 6LB \$6 COST
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	FT20565	HARDWARE SUBASSEMBLY
1	FT916H	HARDWARE KIT
4	FTS1001	A-ARM BUSHING
4	FT1002	BUSHING UCA HALF
4	FT1500-6-101	SLEEVE .750 X .560 X 2.180
1	FTLUBE	URETHANE LUBE PACKET
1	FT90032	HARDWARE KIT
2	FT21121i	INSTRUCTIONS
1	FTREGCARD	REGISTRATION CARD
1	FTAS16	DRIVER WARNING DECAL
1	FTAS12	STICKER FT BLUE 10X4 DIE CUT
	FT20564	HARDWARE KIT
2	10150301082	10MM-1.5 X 30 HEX BOLT G8 ZINC
1	12175701012	M12-1.75 X 70MM HEX BOLT G10.9
1	12175801012	M12-1.75 X 80MM HEX BOLT G10.9
2	25201001052	1/4-20 X 1 HEX BOLT G5 ZINC
4	25000005052	1/4 SAE WASHER G5 ZINC
2	25200003052	1/4-20 NYLOCK NUT ZINC
2	37160751152	3/8-16 X 3/4 HEX SELF TAP ZINC
8	31181001081	5/16-18 X 1 HEX BOLT G8 ZINC
16	31000005052	5/16 SAE WASHER G5 ZINC
8	31180004152	5/16-18 C-LOCK NUT ZINC
4	43142251081	7/16-14 X 2-1/4 HEX BOLT G8 ZC
20	43000005052	7/16 SAE WASHER G5 ZINC
6	43140003052	7/16 NYLOCK NUT ZINC
4	43140004181	7/16-14 C-LOCK NUT ZINC
1	50134001081	1/2-13 X 4 HEX BOLT G8 ZINC
1	50134501081	1/2-13 X 4-1/2 HEX BOLT G8 ZNC
4	50000005081	1/2 SAE WASHER G8 ZINC
2	50130004152	1/2-13 C-LOCK NUT ZINC
4	FTCLAMP	CLAMP 3/8X1/2W .26THK NEOPRENE
1	FTLOCK	THREAD LOCKING COMPOUND 1 MIL
6	12008007100	8" ZIP TIE

	FTS21122	COMPONENT BOX 1 W/ DL SHOCKS
1	FT20561	DIFF MOUNT - DRIV
1	FT20562	DIFF MOUNT - PASS
1	FT20558BK	UCA - DRIV
1	FT20559BK	UCA - PASS
2	FT20155	UPPER BALL JOINT C1500
1	FT20563BK	SKID PLATE
2	FTBK15	BLOCK 1.5 IN
4	FT1500U	UBOLT SQ 9/16-18X10.00X2.63
1	FT20564	HARDWARE KIT
1	FT20565	HARDWARE SUBASSEMBLY
2	FTS825281	2.5 RESI C/O T900 UCA BUDGET
2	FTS810151	DIRT LOGIC 2.25 NON RESI BLACK

TOOL LIST: (NOT INCLUDED)

FLOOR JACK JACK STANDS

ASSORTED METRIC AND S.A.E SOCKETS, & ALLEN WRENCHES

READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED, SEVERE FRAME OR UPPER CONTROL ARM DAMAGE MAY RESULT TO THE VEHICLE.

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.

OEM <u>WHEELS AND TIRES</u> CAN NOT BE USED AFTER THE INSTALLATION OF THIS KIT. A LARGER TIRE CANNOT BE INSTALLED ON THE OEM WHEELS. WE RECOMMEND AFTERMARKET WHEELS - 17 X 8 WITH A 4.5 BACKSPACE. TIRE – 33 X 12.5 X 17.

VEHICLES THAT WILL RECEIVE OVERSIZED TIRES SHOULD CHECK BALL JOINTS, TIE RODS ENDS, PITMAN ARM AND IDLER ARM EVERY 2500-5000 MILES FOR WEAR AND REPLACE AS NEEDED.

SUSPENSION SYSTEM WILL NOT WORK ON VEHICLES EQUIPPED WITH FACTORY AUTO RIDE SUSPENSION.

VERIFY DIFFERENTIAL FLUID IS AT MANUFACTURES RECOMMENDED LEVEL PRIOR TO KIT INSTALLATION. INSTALLATION OF THE KIT WILL RE-POSITION THE DIFFERENTIAL AND THE FILL PLUG HOLE MAY BE IN A DIFFERENT POSITION. (FOR EXAMPLE, IF THE MANUFACTURE RECOMMENDS 3 QUARTS OF FLUID, MAKE SURE THE DIFF HAS 3 QUARTS OF FLUID). CHECK YOUR SPECIFIC MANUAL FOR CORRECT AMOUNT OF FLUID.

INSTRUCTIONS:

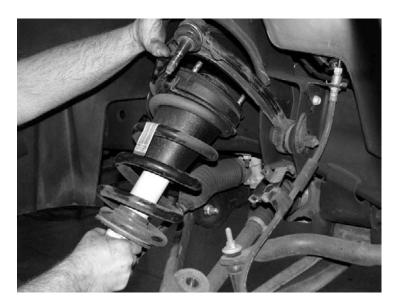
- Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the frame rails with jack stands. NEVER WORK UNDER AN UNSUPPORTED VEHICLE! Remove the front tires.
- 2. Starting on the driver side of the truck, remove the bolt attaching the brake line tab to the spindle.
- 3. Follow the wheel speed sensor wire from frame rail plug. Separate the wire from the upper control arm. SEE PHOTO BELOW.



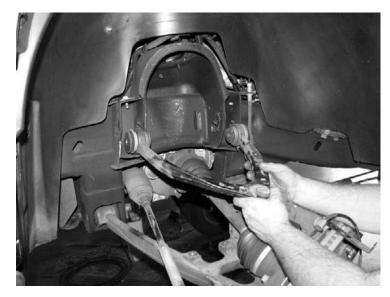
4. Remove the nuts securing the tie rod and upper arm ball joints to the spindle. Separate both joints from the spindle and remove the upper control arm and tie rod from the spindle. SEE PHOTO BELOW.



5. Remove the factory coil over and save. SEE PHOTO BELOW.



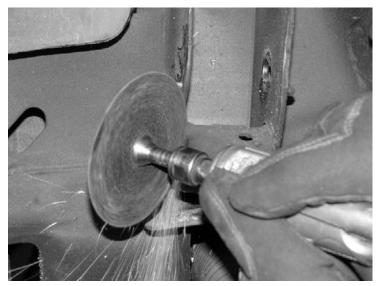
6. Remove the upper control arm form the vehicle and save the factory hardware. SEE PHOTO BELOW.



7. Remove the factory CV shaft from the Diff. drive flange. SEE PHOTO BELOW.



8. Using a die grinder remove the factory droop stop off the control arm pocket. SEE PHOTOS BELOW.





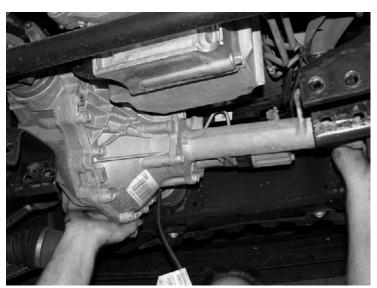
Remove the factory brake line bracket. SEE PHOTO BELOW.



10. Remove the factory rear cross member. SEE PHOTO BELOW.



11. Disconnect the drive shaft from the front differential solenoid wiring and remove the diff. SEE PHOTO BELOW.



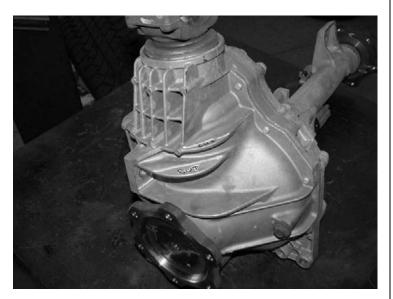
12. Locate the factory passenger side diff mount and remove. SEE PHOTO BELOW.



13. Remove the factory studs from the Diff mount and reinstall the Diff mount. SEE PHOTO BELOW.

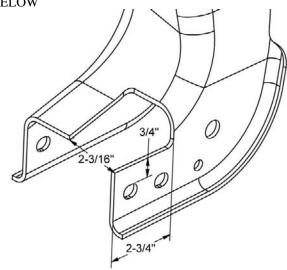


14. Locate the factory Diff and remove the driver side rear cooling fins shown in the photos below. SEE PHOTOS BELOW.





15. Locate the factory rear driver lower control arm pocket / cross member mount. Using a die grinder remove the material shown in the diagram below. SEE PHOTOS BELOW





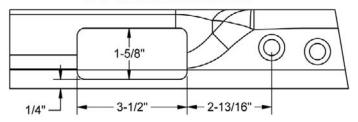
16. Locate the factory driver side Diff mount. Using a die grinder remove the locating pin from the mount. SEE PHOTOS BELOW.





17. Locate the factory rear cross member. Using a die grinder remove the material from the driver side shown in the diagram below.

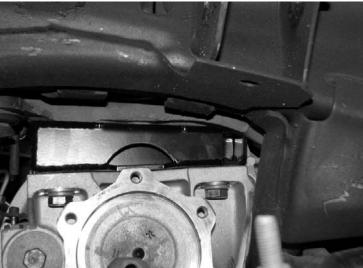
VIEW OF FRONT DRIVER SIDE





18. Locate the FT20561 Driver side Diff mount and the FT20562 Passenger side Diff mount. Staring on the driver side, remount the Diff with a M12-1.75x80mm bolt in the front hole and M12-1.75x80mm bolt in the rear hole. Leave loose at this time. SEE PHOTOS BELOW.





19. Using the passenger side Diff mount , one $\frac{1}{2}$ "-13x4-1/2" bolt front, one $\frac{1}{2}$ -13x4 bolt rear, nuts and washers, mount the passenger side of the diff. Torque the $\frac{1}{2}$ " bolts to 90 ft-lbs and the 12mm bots to 65 ft-lbs. SEE PHOTO BELOW.



20. Reconnect the drive shaft and solenoid.

21. Trim the front of the Diff to clear the new skid plate. SEE PHOTOS BELOW.





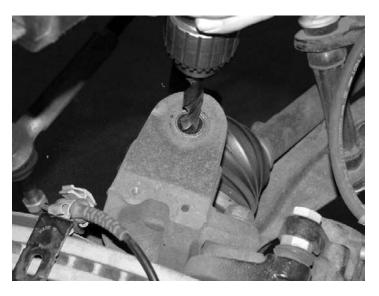
22. Locate the FT20563BK skid plate and the two 3/8"-16x3/4" self taping bolts. Mount the skid plate to the factory front cross member using two of the factory front bolts. With front of the skid plate mounted, use the back two holes in the skid plate for a drill guide. Drill two 5/16" pilot holes and install the two 3/8" self taping bolts. Torque to 21 ft-lbs. SEE PHOTOS BELOW.



- 23. Locate the FT20558BK upper control arm and one FT20154 ball joint, two FTS1001bushings, two FT1002 bushings and two FT1500-6-101 sleeves.
- 24. Install the ball joint onto the control arm with the supplied 5/16"-18 x 1" bolts, washers and nuts. Torque to 29 ft-lbs. SEE PHOTOS BELOW



- 25. Install one of each bushing and a sleeve in each barrel. Use the urethane lube on each bushing.
- 26. Using a ½" drill chase out the end of the upper ball joint tapper on the spindle. SEE PHOTO BELOW.



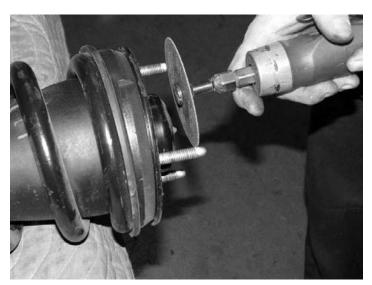
27. Install the upper control arm in to the frame using factory hardware and leave loose at this time. SEE PHOTO BELOW.



28. Locate the factory coil over and remove the sheet metal nut from the lower bar pin. SEE PHOTO BELOW.

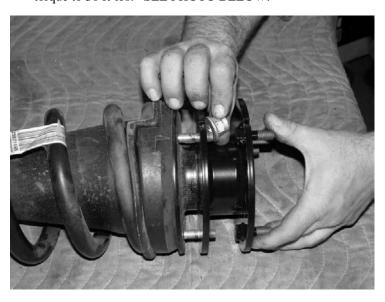


29. Trim a ¼" off the studs on the top side of the coil over. SEE PHOTO BELOW.





30. Install the FT20560BK coil spacer using the factory nuts and torque to 30 ft-lbs. SEE PHOTO BELOW.



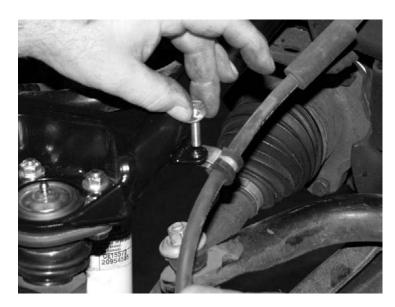
31. Locate the three 7/16" nylock nuts and install the coil over into the upper shock mount. Leave loose at this time. SEE PHOTO BELOW.



32. Locate the two 7/16"-14 x 2-1/4" bolts, nuts and washers and install the lower bar pin mount onto the lower control arm. Torque the upper and lower bolts to 59 ft-lbs. SEE PHOTO BELOW.



- 33. Install the upper ball joint in to the spindle and torque to 90 ft-lbs and the pivot bolts to 129 ft-lbs.
- 34. Reinstall the CV shaft and torque to 58 ft-lbs.
- 35. Install the FT clamp on top of the spindle to hold the wheel speed sensor wire. SEE PHOTO BELOW.
- 36. Use an FTclamp, 1/4" -20 x 1" bolt, nut, and washer to connect the brake line to the control arm. SEE PHOTO BELOW.



37. Reconnect the wheel speed sensor and zip tie to the brake line. SEE PHOTO BELOW



- 38. Locate the FTBK15 blocks and the four FT1500U u-bolts. With the stock u-bolts removed and the rear axle clear of the leaf spring, make sure the block will fully seat onto the leaf spring and the spring pad of the rear axle housing with the wide end of the block to the rear of the vehicle. On the leaf spring make sure the center pin head will seat fully into the hole in of the block allowing the top surface of the block to rest against the leaf spring. Install the new u-bolts and torque to 254 ft-lbs.
- 39. Install all tires and torque the wheel lugs to the factory specifications. Set the truck back on the ground and perform a proper wheel alignment.
- 40. WHILE TURNING THE STEERING WHEEL FULLY IN EACH DIRECTION, MAKE SURE THERE IS AMPLE CLEARANCE BETWEEN THE WHEELS, TIRES, CONTROL ARMS, BRAKE LINES AND ABS WIRES.

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 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.

Instruction Sheet Part #- FT21121i

1/30/12 SE