

2004-2008 CHEVY COLORADO 2WD 2004-2008 GMC CANYON 2WD FTS21027 3" <u>SPINDLE KIT</u>

PARTS LIST:

	FTS21027	COLORADO 2WD BOX FT.& RR.
Qty	Part #	Description
2	FT20238	Rear Shackle
1	FT20240	Hardware Kit
1	FT20417	Hdwr Sub-Assembly Kit
1	FTS20234D	Driver Side Spindle
1	FTS20234P	Passenger Side Spindle

Qty	Part #	Description
8	12175801081	12mm-1.75 x 80mm Hex Bolt
8	12175003381	12mm-1.75 Stover Lock Nut
16	12000005081	12mm Flat Washer
1	FTLOCK	Thread Locking Compound

	FT20417	Hdwr Sub-Assembly Kit
Qty	Part #	Description
1	FT20235	Brake Lines w/crush washers
4	FT20236	Ball Joint Relocation Bracket
2	FT20239	Steering Stop
2	FT21027i	Instruction Sheet
2	FT83216	Sleeve
2	FTSBP8	Bar Pin
1	FTAS12	Fabtech Sticker
1	FTAS16	Driver Warning
1	FTREGCARD	Registration Card

READ BELOW BEFORE INSTALLING KIT

CHECK ALL PARTS INCLUDED IN THIS KIT TO THE PARTS LIST ABOVE BEFORE BEGINNING INSTALLATION OF THE KIT.

READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED, SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE.

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.

THIS KIT IS DESIGNED FOR 2WD COIL SPRING FRONT END MODELS.

THIS KIT FITS ALL COIL SPRING MODELS.

NOTE SOME MODEL MAY SIT LOW IN THE REAR, FTS202 ADD A LEAF MAY BE NEED TO BE USED TO HELP LEVEL OFF.

TOOL LIST: (NOT INCLUDED)

- FLOOR JACK AND JACK STANDS
- ASSORTED METRIC AND S.A.E SOCKETS, & ALLEN WRENCHES
- DIE GRINDER WITH A CUTOFF WHEEL
- TORQUE WRENCH

INSTRUCTIONS:

- Disconnect the negative terminal on the battery. Jack up the front end of the truck and support the frame rails with jack stands. Remove the front tires. <u>NEVER</u> WORK UNDER AN UNSUPPORTED VEHICLE!
- Starting on the driver's side, remove the 2 bolts securing the brake caliper to the spindle and place out of the way. DO NOT ALLOW THE BRAKE CALIPER TO HANG FROM THE BRAKE LINE.
- Remove the nut connecting the tie rod end to the spindle and save. Using a large hammer strike the spindle to break the tie rod end free. USE CARE TO NOT HIT THE TIE ROD END ITSELF.
- 4. Locate the ABS plug towards the rear of the fender well and unplug it. Remove the three ABS clips form the upper control arm. USE CARE TO NOT DAMAGE THE CLIPS. Remove the bracket bolted to the front side of the upper control arm and save along with the hardware. Remove the ABS bracket that is bolted to the factory spindle and discard the hardware. This ABS line bracket will need to be removed from the ABS line itself and discarded also. DO NOT DAMAGE THE ABS LINE WHEN REMOVING THE BRACKET FROM THE LINE. SEE PHOTO BELOW.



picture shown removing ABS line bracket

- 5. Using a floor jack, support the lower control arm. Remove the nuts from the upper and lower ball joints and save. Using a large hammer strike the spindle next to the upper and lower ball joints to break them free. USE CARE TO NOT HIT THE BALL JOINTS. Remove the spindle from the truck and discard.
- 6. Remove the four bolts holding the hub and rotor assembly to the spindle. Remove the hub and rotor assembly and save along with the hardware. NOTE, THE HUB AND ROTOR ARE ONE UNIT DO NOT SEPARTE THEM. LEAVE THE ABS SENSOR ATTACHED TO THE HUB AND ROTOR ASSEMBLY!

- 7. Remove the lower ball joint from the lower control arm and discard the factory hardware. Save the ball joint.
- 8. Locate the lower ball joint previously removed from the lower control arm. Locate the steering stops on the lower ball (shown in the photo painted white) and cut them from the housing using a die grinder with a cut off wheel. SEE PHOTOS BELOW.



With the factory steering stops uncut



With the factory steering stops removed

- Locate FT20236 Ball Joint Relocation Plates and FT20039 Steering Stop Plate. Following the diagram on the last page assemble the lower ball joint to the lower control arm using the supplied 12mm bolts, nuts, and washer. Torque to 90 ft. lbs. SEE DIAGRAM ON LAST PAGE.
- 10. Locate FTS20234D Driver Spindle, and attach the previously removed hub and rotor assembly to the new spindle using the original hardware and a small amount of the supplied thread locking compound on each bolt. Make sure to position the hub and rotor assembly in the same position as when removed. Torque to 90 ft. lbs. SEE PHOTO ON NEXT PAGE.



- 11. Place the assembled spindle onto the lower ball joint first than onto the upper ball joints. Using the original hardware and attach the ball joints. Torque the upper ball joint to 45 ft. lbs and the lower to 65 ft. lbs.
- 12. Reattach the ABS wire to the plug at the rear of the fender well. Attach the three clips on the upper control arm. Then reattach the bolted bracket to the upper control arm.
- 13. Locate the factory brake hose from the caliper to the hard line on the frame. Remove the brake hose and discard along with the original copper crush washers on the caliper fitting. Using the supplied FT20235 front brake hose attach to the hard line on the frame first than to the brake caliper using two new crush washer on both sides of the fitting on the caliper. Make the 90 degree fitting on the caliper fitting is facing straight up. SEE PHOTO BELOW.

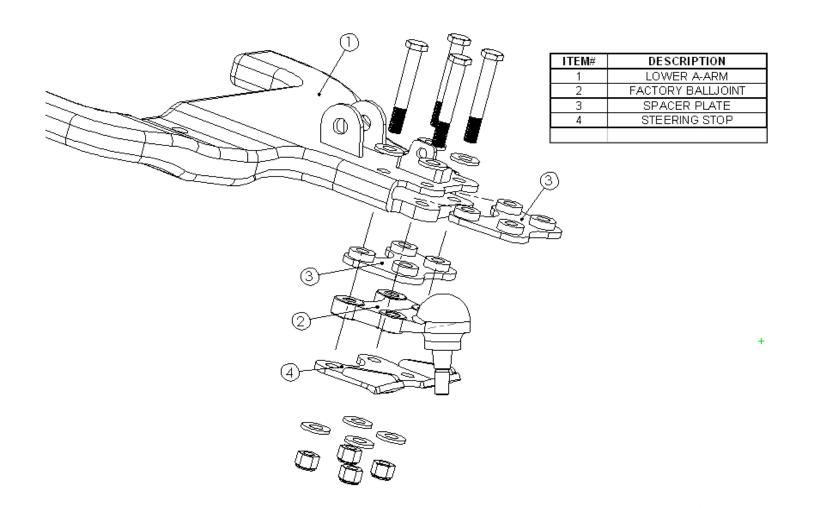


- 14. Reattach the brake caliper to the spindle and torque the bolts to 65 ft. lbs. Use a small amount of the supplied thread locking compound on each of the caliper bolts.
- 15. Connect the tie rod to the spindle using the original nut. Torque the nut to 45 ft. lbs.

- Repeat steps two through fifteen on the opposite side of the truck.
- 17. With both sides of the truck completely finished and the truck still off the ground, cycle the steering left to right from stop to stop. Make sure there is plenty of clearance between the ABS line, all other components, the lower control arm, spindle and brake caliper.
- 18. Fully bleed the front brakes. Refer to the factory maintenance manual for the proper procedure.
- 19. Reinstall the tires onto the truck and torque the lugs to factory specifications, which can be found in the owners manual. Set the truck back on the ground and cycle the steering left to right from stop to stop. Make sure there is plenty of clearance between the ABS line, all other components, the lower control arm, spindle and brake caliper.

REAR INSTALLATION

- 20. Jack up the rear end of the truck and support the frame rails with jack stands. <u>NEVER WORK UNDER AN UNSUPPORTED VEHICLE!</u> Remove the rear tires.
- 21. Using a floor jack, raise the differential just enough to slightly compress the rear shocks. Remove the shocks and discard. Lower the jack down to release all the tension on the leaf springs. Leave the floor jack under the differential to support it during shackle removal.
- 22. With the floor jack still supporting the differential remove the bolts securing the shackle to the frame and the leaf spring. Remove the shackle from the truck and discard along with the hardware.
- 23. Locate the supplied FT20238 shackle and install on to the frame bushing first than on to the leaf spring bushing. Using the original hardware attach the shackle. Leave the hardware loose at this time. Repeat on the opposite side of the truck at this time.
- 24. Install the new Fabtech rear shocks at this time (FTS7232). Not supplied with the kit.
- 25. Reinstall the tires onto the truck and torque the lugs to factory specifications, which can be found in the owners manual. Set the truck back on the ground.
- 26. Torque the rear shackle bolts to 55 ft. lbs. USE CARE TO NOT OVER TIGHTEN THE SHACKLE BOLTS AND BEND THE SHACKLE.
- 27. Drive the truck for several miles and recheck all clearances. Re-bleed the front brakes if necessary.
- 28. Check front-end alignment and set to factory specifications. Re-adjust headlights.



Lower Ball Joint Assembly With Relocation Brackets