

Full Throttle Suspension

82202

1999-2006 CHEVY/GMC 1500 TRUCK 2WD 6 LUG 8" BASIC KIT

FRONT SUSPENSION INSTRUCTIONS

- 1) Disconnect the negative terminal on the battery. With the vehicle on level ground and the emergency brake set, block the rear tires. 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) Ensure that your work space is of adequate size and the work surface is level. Place the vehicle in neutral. Place your floor jack under the front cross member and raise vehicle. Place jack stands under the frame rails behind the front wheel wells and lower the frame onto the stands. Remove the jack and place the vehicle back in gear, set the emergency brake, and place blocks both in front of and behind the rear wheels. Remove the wheels.
- 3) Remove any skid plates or debris shields from the bottom of the vehicle. NOTE: The factory compression struts can be left on the vehicle, if desired.
- 4) Remove the shock absorbers. Using a wrench hold the shock absorber stem while backing the nut off the stem. Remove the bottom bolts from the lower control arm and remove the shock from the bottom.
- 5) Remove the sway bar end link assemblies from both sides of the vehicle.
- 6) Mark the sway bars orientation. Remove the mounts and the sway bar.
- 7) If your vehicle is equipped with ABS brakes, disconnect the wiring. Move it clear of the work area where it will not get damaged.
- 8) Remove the brake line clamp from the frame and control arm.
- 9) Remove the nuts from the tie rod ends. Using the tie rod end puller, remove the tie rod end from the OE knuckle.
- 10) Remove the two bolts to the disc brake caliper, lift the calipers off the rotor. Use wire tie or tie wraps to secure them clear of the work area. NOTE: Be careful that you do not damage the brake lines! Never hang the calipers from the brake lines!
- 11) Remove the disc brake rotor retaining clips. Then remove the rotor and set it clear of the work area.
- 12) Using a floor jack support the front lower control arm near the spring seat. Raise the jack until it just supports the lower control arm. CAUTION: The floor jack must remain under the front control arm spring seat during disassembly to retain the spring and control arm position or personal injury may result.
- 13) Mark the end of the spring's location in the bucket for coil installation.
- 14) Locate the lower ball joint, remove the nut from the ball joint. Using the ball joint separator tool apply pressure to the tool until the ball joint breaks loose from the lower part of the front knuckle.

- 15) Locate the upper ball joint, remove the nut from the ball joint. Using the ball joint separator tool apply pressure to the tool until the ball joint breaks loose from the upper part of the knuckle.
- 16) Slowly release the floor jack until all of the pressure has been released. Remove the front coil spring
- 17) Remove the knuckle.
- 18) Remove the three bolts from the backside attaching the bearing/ stud assembly and the dust shield from the OE knuckle. Set these parts aside for installation on new knuckle.
- 19) Install the three OE bolts to the backside of the new knuckle attaching the bearing/ stud assembly and the dust shield. Make sure drivers hardware goes to the new drivers knuckle and the passengers goes to the passengers knuckle. Torque this Hardware to factory specs.
- 20) Remove the nuts, washers and bolts fastening the lower control arm to the frame. Set these parts aside for future use.
- 21) Remove the lower control arms.
- 22) Remove the factory bump stops.
- 23) Repeat on other side of the vehicle.
- 24) Install the coil drop spacer using the 5/8 x2 bolts and tighten at this time
- 25) Install the front cross-member, into the existing front lower control arm mounting position, using the OEM hardware previously removed. Make sure that the bolt heads are facing towards the front of the vehicle. Do not fasten at this time.
- 26) Place the rear cross-member, into the existing lower control arm mounting position using the OEM hardware previously removed. Make sure that the bolt heads are facing to the rear of the vehicle. Do not fasten at this time.
- 27) Install the lower control arms into the new front and rear cross-member mounting areas. Use the 5/8 x 5 on the front and the 5/8 x 6 on the rear
- 28) Repeat on other side of the vehicle.
- 29) Torque existing upper sub-frame nuts and bolts to 100 ft./lbs. Starting with the front then the rear.
- 30) Using a floor jack support the front lower control arm as far out as possible. Install the coil spring insulators previously removed from the spring in the same
- 31) Position the coil spring on the lower control arm spring seat. Match up with the mark from the original coils location.
- 32) While the lower control arm is supported with the floor jack, compress the coil with the spring compressor. Place the top of the spring in the upper frame spring pocket.

33) Install front knuckle (85002L DRIVERS and 85002R PASSENGER) to lower control arm ball joint. Fasten with the OEM nuts.

NOTE: Make sure the brake line is behind the knuckle.

34) Raise the lower control arm using the floor jack. Attach the front knuckle to the upper ball joint. Fasten with the OEM nuts.

35) Remove the coil spring compressor tool.

36) Torque the lower ball joint nut to 94 ft./lbs.

37) Torque the upper ball joint nut to 74 ft./lbs.

38) Repeat on other side of the vehicle.

39) If applicable, re-attach ABS sensors to the factory harness.

NOTE: Make sure the ABS wire runs on the a-arm so the tire will not hit it.

40) Install brake rotor onto the front spindle.

41) Attach the brake caliper assembly to the new front spindle. Torque the bolts to 125-169 ft./lbs.

42) Install the original shock absorber back into stock location using stock hardware

43) Reinstall the new FTS tie rod ends and fasten with the new nuts.

44) Install and torque the tie rod ends to 40 ft./lbs.

45) Repeat on other side of the vehicle

46) Install new supplied sway bar drop with the angle pushing the sway bar toward the front of the vehicle

47) Flip the sway bar over and install the sway bar and mounts.

48) Install sway bar to the lower control arm using the sway bar hardware from pack

49) Loosen the factory brake line in the factory bracket by prying it open this will allow you to reposition the line in the factory in the factory bracket. Attach the existing brake line hose clamp to knuckle. Make sure that the brake line does not interfere with any of the moving suspension components.

50) Make sure you can cycle the steering from lock to lock.

51) Make sure the suspension can cycle through full travel without interference and check for adequate clearance between shocks, bump stops and brake line hose.

52) Install compression struts using the lower an arm hardware at lower end and 7/16 x 1 1/4 on the upper end , you may need to drill a 7/16 hole in the transmission cross member . Tighten at this time

- 53) Install your wheels and tires and lower the vehicle to the ground. Tighten the lug nuts to your manufactures specifications.
- 54) Torque sway bar ends to 13 ft./lbs.
- 55) Torque the 5/8" hardware (lower control arms) to the torque specifications chart in this instruction manual.
- 56) On both sides of the vehicle, check the routing of the brake lines and the ABS wire harnesses. There must be no pinching, rubbing, or stretching of either component. Use zip ties to secure these items to the steering components. At full droop, cycle the steering from lock to lock while observing the reaction of these components. Reposition them if needed.
- 57) Recheck for proper installation and torque all newly installed hardware.
- 58) After 100 miles recheck for proper torque on all newly installed hardware.
- 59) Have your headlights adjusted.
- 60) Recheck all hardware for tightness after off road use.

REAR SUSPENSION INSTRUCTIONS

- 1) Jack up the rear end of the vehicle and support the frame rails with jack stands. Release the parking brake at this time. Supporting the rear differential, remove the rear shocks, U-bolts, blocks and lower axle down. Use care not to over extend the brake hose.
- 2) Install the rear lift blocks .Using the provided U-bolts, nuts and washers, align the axle, lift blocks, and springs and torque U-bolts to 90 ft-lbs.
- 3) Install the rear shocks. Install the shocks using the factory hardware and torque upper and lower bolts to 45 ft-lbs.
- 4) Recheck all bolts for proper torque. Recheck the front and rear brake hoses and ABS lines for proper clearances.
- 5) Install tires and wheels and torque lug nuts to wheel manufacturer's specifications. Turn front tires left to right and check for appropriate tire clearance. Note -Some oversized tires may require trimming of the bumper and valance.
- 6)Test drive vehicle at speed and listen for noises. Drive vehicle in different conditions while turning in drive and reverse to check tire clearance, and trim plastic bumper valance if necessary. Re-adjust vehicles headlights. Engage 4WD in low and high range and check for correct function of Auto trac if applicable. Have a **QUALIFIED ALIGNMENT SPECIALTY SHOP** reset the front end alignment to correct specification. **DO NOT** drive vehicle more than 15 miles before having the alignment checked by a qualified shop. Retorqued wheels after 200 miles and recheck all lift kit hardware after 1000 miles, then at regular intervals thereafter. Please mail in warranty card and refer to the **WARRANTY INFORMATION** at the beginning of this document.

- 1) Rear cross member
- 2) Coil drops
- 1) Hardware pack
- 2) Sway bar end link kit
- 1) Left sway bar drop
- 1) Right sway bar drop
- 1) Left compression strut
- 1) Right compression strut

BOX 2

- 1) Front cross member
- 2) Rear 6.25" flat blocks
- 4) 9/16" x 2.5" x 15" U bolts
- 8) 9/16 fine nylock nuts
- 8) 9/16 washers
- 2) Tie rods T529
- 2) Rear shocks 132000

Box 3

- 1) Left steering knuckle
- 1) Right steering knuckle

HARDWARE

- 2) 5/8 X 1.5 BOLTS
- 2) 5/8 X 2 BOLTS
- 2) 5/8 X 5 BOLTS
- 2) 5/8 X 6BOLTS
- 6) 5/8 NYLOCK NUTS
- 14) 5/8 WASHERS
- 4) 3/8 X 1 1/2" BOLTS
- 4) 3/8 NYLOCK NUTS
- 8) 3/8 WASHERS
- 2) 1/2 X 5 BOLTS
- 2) 1/2" NYLOCK NUTS
- 4) 1/2" WASHERS
- 2) 7/16 X 1 1/4" BOLTS
- 2) 7/16 NYLOCK NUTS
- 4) 7/16 WASHERS

Product Warranty and Warnings-

FTS 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 FTS 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.

FTS does not warrant any product for finish, alterations, modifications and/or installation contrary to FTS instructions. Alterations to the finish of the parts including but not limited to painting, powder coating, 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.

FTS 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.

FTS 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,

FTS cannot be responsible for 100% compatibility, including the fitment of tire and wheel sizes listed. The Tire and Wheel sizes listed in FTS' catalog are only a guideline for street driving with noted fender trimming. FTS is not responsible for damages to the vehicle's body or tires.

FTS' obligation under this warranty is limited to the repair or replacement, at FTS 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. FTS is not responsible for damages and/or warranty of other vehicle parts related or non related to the installed FTS 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 FTS.

FTS suspension components must be installed as a complete system including shocks as shown on our current website. All warranties will become void if FTS 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. FTS does not warrant products not manufactured by FTS.

Installation of FTS 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 FTS products with the consumer prior to purchase.

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Thank You for choosing Full Throttle Suspension

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