

# 72011



## 8" 2009-2013 FORD F150 2WD W/ 2.5" EMULSION COILOVERS

### 75001-6 COPONENT BOX 1

- 1) Rear Cross Member
- 1) Front Cross Member
- 1) Left Strut Spacer
- 1) Right Strut Spacer
- 2) Sway Bar Drops
- 1) Left Compression Strut
- 1) Right Compression Strut
- 2) Tie rods T538
- 1) Hardware

### 75001-7 Coilovers

- 2) 2.5 Emulsion Coilovers
- 2) Upper Coilover Brackets

### HARDWARE

- 2) 18mm x 150mm bolts
- 2) 18mm x 160 mm bolts
- 4) 18mm nylock nuts
- 8) 18mm washers
- 10) 7/16 X 1 1/4" bolts
- 10) 7/16" nylock nuts
- 20) 7/16" washers
- 4) 5/16" x 3/4" bolts
- 4) 5/16 nylock nuts
- 8) 5/16 washers
- 1) Left brake line bracket
- 1) Right brake line bracket

### 71001-3 COPONENT BOX 2

- 4) 9/16 x 3" x 15" Square U bolts
- 2) 5" Flat Blocks Double Pin
- 8) 9/16-18 Fine thread nuts
- 8) 9/16" Washers

### 75001-2 STEERING KNUCKLE

- 1) Left Steering Knuckle
- 1) Right Steering Knuckle

### 28420 Upper Control Arms

- 1) Left Upper A Arm
- 1) Right Upper A Arm

### FRONT SUSPENSION INSTRUCTIONS:

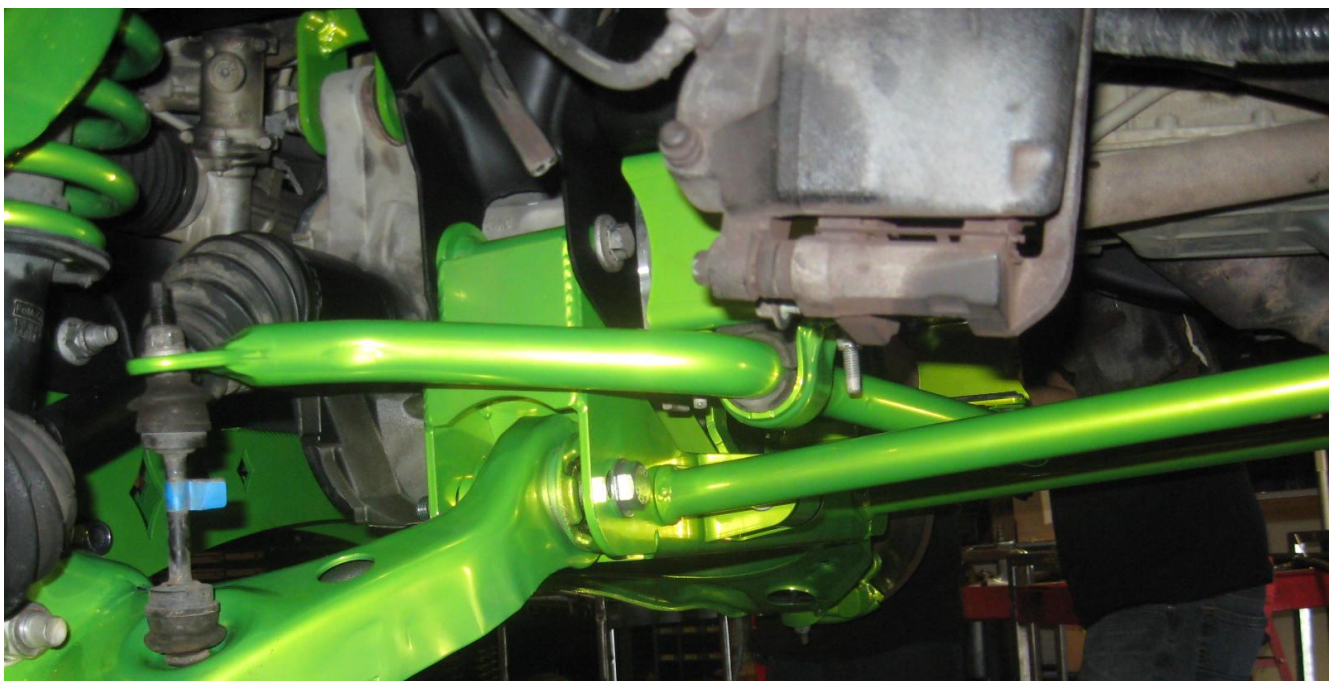
- 1) Disconnect the negative terminal on the battery.
- 2) With the vehicle on level ground, set the emergency brake and block the rear tires. Jack up the front end of the truck and support the frame rails with jack stands. NEVER WORK UNDER AN UNSUPPORTED VEHICLE! Remove the front tires.
- 3) Remove and discard the factory splash guard
- 4) Locate the sway bar end links and disconnect from the factory lower control arms, save the hardware. Locate the sway bar frame mounts and disconnect them from the frame, remove the sway bar from the truck. Save the hardware and sway bar.
- 5) Working from the driver side of the vehicle, disconnect the tie rod ends from the steering knuckle by striking the knuckle to dislodge the tie rod end.
- 6) Remove factory Tie Rod end and discard.
- 7) Remove the brake caliper and place it next to the frame. Do not overstretch the brake hose when doing so. Retain the hardware for reinstallation. Remove the brake rotor and save. Remove the electronic stability control (ESC) sensor from the top of the hub. Cover the sensor to keep it free from dirt and debris.
- 8) Remove the upper and lower ball joint nuts. Disconnect the upper and lower ball joints from the steering knuckle by striking the knuckle with a large hammer next to each ball joint on the knuckle to dislodge the ball joints. Use care not to hit the ball joints when removing. Retain hardware and remove the knuckle with the dust shield and the hub
- 9) Remove the four large bolts and three small bolts on the back side of the knuckle. Remove the hub and the actuator from the knuckle. Save hardware for install in the FTS knuckle.
- 10) Remove the bolts on the front side holding the dust shield. Remove the dust shield and discard the factory knuckle.
- 11) Remove the lower shock mount bolt and Save the hardware. Remove the three upper nuts and Save the hardware. Remove the shock assembly from the vehicle and mark "Driver" for assembly to install later with upper shock extensions.

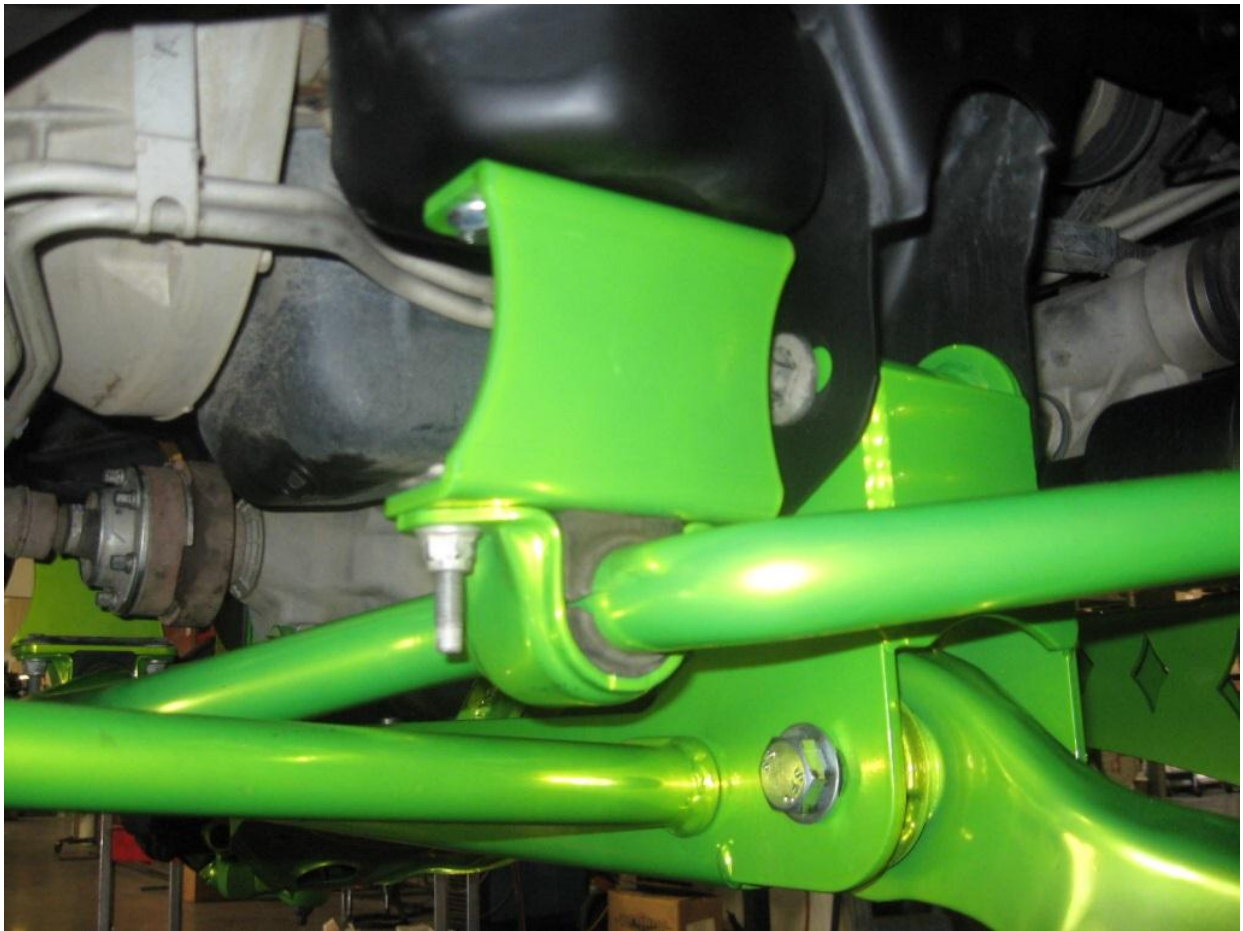
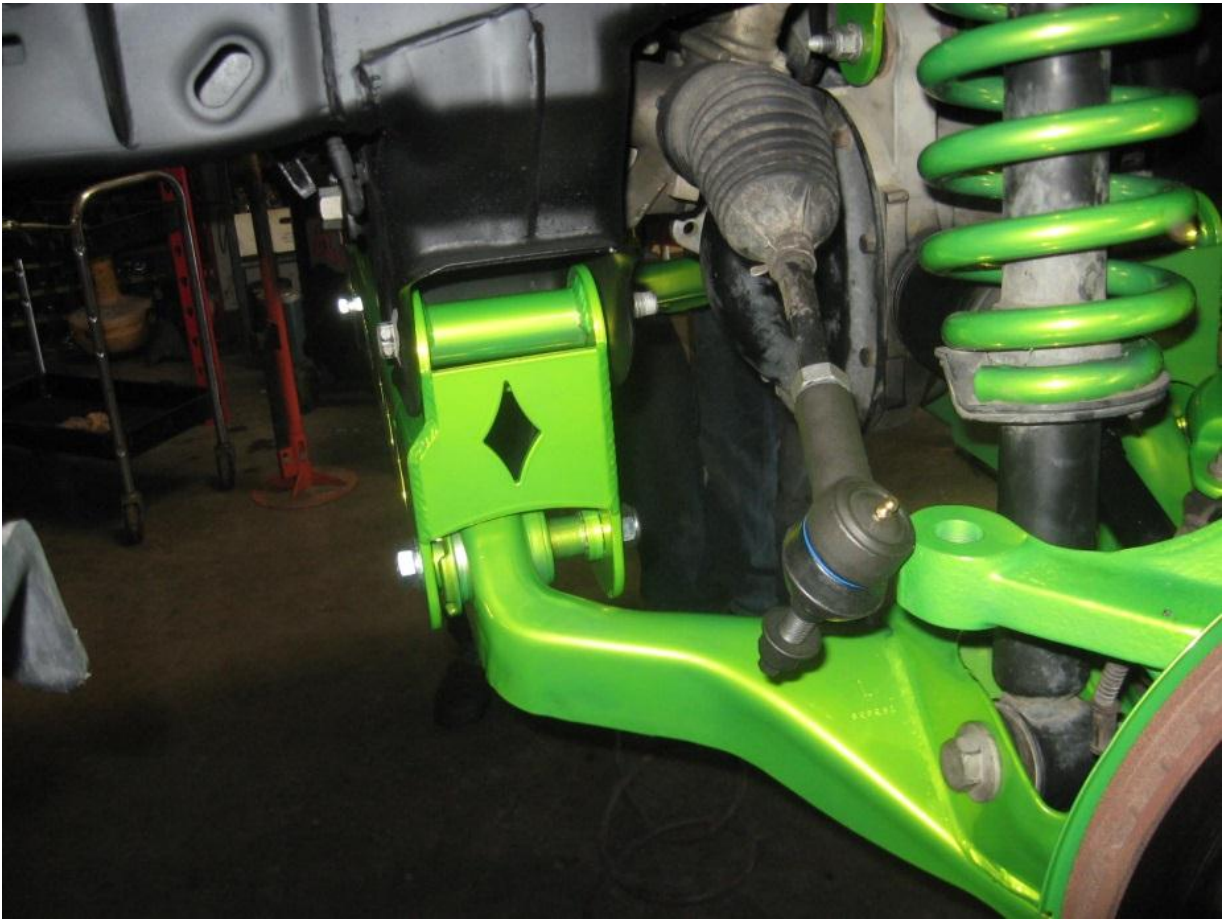
- 12) Remove the lower control arm bolts from the frame pivots and remove the lower control arm from the truck. Save hardware and lower control arm.
- 13) Repeat steps four through twelve on the passenger side of the truck.
- 14) Install the FTS rear cross member in the factory rear lower control arm pockets. With the open portion to the front of the vehicle. Mount the cross member using the factory control arm pivot hardware. Leave all hardware loose.
- 15) .Install the FTS front cross member into the factory front control arm pockets using the factory hardware. Leave the hardware loose at this time.
- 16) Install the FTS 2.5" emulision coilover with the schrader valve facing the outside of the vehicle. Using the 7/16" hardware supplied
- 17) Install the 5/8 x 4 bolt through the lower shock mount and a-arm. Torque to 110ft.-lbs.
- 18) Torque the 7/16" hardware.
- 19) Remove the factory upper control arm and Discard. Install the supplied bushing and sleeve into the FTS upper control arms. Using factory hardware, install the FTS upper control arm.
- 20) Install the FTS upper strut spacer to the factory strut using all factory hardware.
- 21) Using 7/16 x 1 1/4" bolts supplied install the strut assembly back in factory location Leave all hardware loose.
- 22) Install the factory lower control arms into the FTS cross members using 18mm x 160 bolts supplied.
- 23) Install the FTS impact tubes using the 7/16 x 1 1/4 bolts supplied
- 24) Install the FTS driver side spindle and install the factory hub. Torque the four 14mm bolts to 160 ft.- lbs.
- 25) Install the spindle onto the upper and lower control arms. Torque the upper ball joint to 85 ft.-lbs. and the lower ball joint to 110 ft.-lbs.
- 26) Install the dust shield and torque to 14 ft.-lbs.
- 27) Install the ABS wheel speed sensor. Make sure the end of the sensor is clean.
- 28) Install the frame brake line bracket. Using the factory hardware. Mount factory brake line bracket to the side of the knuckle. After installing the factory brake line bracket, check to insure full movement by steering the knuckle back and forth, and make sure none of the ABS lines, brake lines are inhibited during full test movement of the knuckle.
- 29) Reinstall the original brake rotor, followed by the brake caliper. Use a small amount of thread locking compound on the caliper bolts and torque to 145 ft.-lbs.
- 30) Locate the factory tie rod. Trim 3/4" off the end.
- 31) Install the new FTS tie rod end.
- 32) Reconnect the tie rod end to the steering knuckle and torque to 60 ft.-lb.
- 33) Install the factory sway bar using the FTS driver and pass brackets

#### 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) Locate the factory brake line mount on the driver side of the frame. Using the Supplied brake line bracket and attach the bracket between the factory fame mount and the factory bake line.
- 3) 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.

- 4) Install the rear shocks. Install the shocks using the factory hardware and torque upper and lower bolts to 45 ft.-lbs.
- 5) Install the E brake bracket
- 6) Recheck all bolts for proper torque. Recheck the front and rear brake hoses and ABS lines for proper clearances.
- 7) 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.
- 8) Check the front-end alignment and set to the factory specifications. Re-adjust vehicles headlights.







## Installation Picture Of Spacer Installed



## Driver Side Upper Control Arm Installed

### 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. Reservoir 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 manufacturer's 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's 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's 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. FTS reserves the right to supersede, discontinue, change the design, finish, part number and, or application of parts when deemed necessary without written notice. FTS is not responsible for misprints or typographical errors within the catalog or price sheet.

Full Throttle Suspension has a no refund return policy. Under special circumstances, returns might be accepted with prior written approval. All returned product will be shipped freight prepaid. Product returned is subject to a 40% restocking fee. No returns will be accepted after 30 days upon receipt of product.

Thank You for choosing Full Throttle Suspension

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