

# 48139



## DOUBLE FRONT SHOCK HOOPS W/ BALL JOINT UPPER A ARM KIT 2011-2013 2500HD / 3500HD 2WD & 4WD FITS STOCK 4", 7" & 10" FTS KITS

### Parts List

- 1) Driver upper control arm
- 1) Passenger upper control arm
- 2) Heavy duty ball joint
- 8) Polly bushings MO2918
- 4) Sleeves 1" OD x .635 ID x 2.55Long
- 1) Hardware package
- 1) Driver side shock hoop
- 1) Passenger side shock hoop
- 2) 1" X 3.375 Frame Sleeves
- 2) ½" x 5" Bolts
- 4) ½" x 6" Bolts
- 6) ½" Nylock Nuts
- 12) ½" Washers
- 2) 7/16 x 3 ½" Bolts
- 4) 7/16 x 1 ¼" Bolts
- 6) 7/16 Nylock Nuts
- 12) 7/16 Washers



1) With the vehicle on level ground set the emergency brake and blocks the rear tires. Disconnect the negative battery cable from the battery (Note that some vehicles have 2 or more batteries you will need to disconnect the negative cables from all batteries). Jack up the front end of the truck and support the frame rails with jack stands.

**NEVER WORK UNDER AN UNSUPPORTED VEHICLE**

2) Remove the front wheels and tires

3) The FTS Upper control arm kit is a direct replacement of the factory upper control arms on lifted vehicles with a spindle/knuckle replacement lift kit.

4) Remove the factory upper control arms by supporting the lower control arms with a floor jack or some kind of stand used in a safe fashion. Loosen the ball joint nut of the upper control arm enough until you can spin the nut with your fingers, but do not remove totally, and use a pickle fork to separate the ball joint from the spindle, or tap on the side of the spindle next to the ball joint stud. When the tapered seat of the ball joint breaks loose, you may then remove the ball joint nut, and separate the factory upper control arms from the spindles.

5) Remove the factory bolts and eccentric washers that connect the control arm to the frame, but retain them for future use. Place them aside in order so they can be reinstalled in the same place they came off. The plastic inserts will need to be removed and discarded from the eccentric washers.

6) Install the Ball joint into the upper control arms with a hydraulic press. The fit will be very tight and a press fit, so use a very small amount of grease inside the cup to help get it into the control arm, and make sure the ball joint is going straight into the housing, and not crooked. If it starts out crooked, it will not straighten out, you will have to remove it and start over.

- 7) Install the retaining ring with some snap ring pliers, DOUBLE CHECK that the snap ring has seated itself into the groove
- 8) Insert the polyurethane bushings, crush sleeves, and grease fittings into the ends of the Upper control arms.
- 9) Install the FTS upper control arms to the frame with the factory nuts, bolts, and eccentric washers as previously removed. The FTS arms are symmetrical from side to side. Figure 1 show the passenger side control arm installed on the truck. Torque alignment nut to 100 ft.-lbs.
- 10) Mount the ball joint to the spindle with supplied hardware. Use the 9/16" flat washers supplied if the castle nut needs to be spaced in order for the cotter pin to engage, and tighten to 60 ft.-lbs. of torque. Figure 1. You may have to chase the small end of the tapered hole with a 9/16" drill bit because the factory ball joint is a metric thread and the aftermarket ball joint is an American thread. Grease the ball joint until the dust boot starts to swell. Grease the a-arm pivot bushings also. If you do not grease these items, premature wear will result on these items!
- 11) If there were factory lines mounted to the factory upper control arms such as ABS or brake lines, they must be restrained as to avoid binding and contact with any moving parts of the vehicle. Use the 1/4" hardware provided to fasten the factory brake line bracket to the upper control arm. If necessary, slide the brake line through the bracket to obtain a suitable mounting situation
- 12) Remove the abs line clip from the top of the frame shock pocket and use the cable ties to restrain the abs line to the brake line as shown in Figure 1. Double check the clearance of both the brake lines and the abs lines after the install while the truck is on the ground through the complete steering cycle. Be sure there is no rubbing or loose cables anywhere
- 13) If there are shock absorbers in the factory shock mount pockets on the frame, they must be dismantled before continuing.
- 14) Mount the driver side shock hoop to the frame using the center mount as starting point, Use the 7/16" hardware on the center mounting location. Tighten these fasteners at this time.
- 15) Using the rear mount of the shock hoop as a drill guide, drill a 1/2" hole through both walls of the frame.
- 16) Drill a 7/16" hole thru the front lower portion of the upper an arm frame bracket using the shock hoop as a guide.
- 17) Remove the 7/16 hardware, Remove shock hoop to drill one more hole.
- 18) Then drill a 1" hole ONLY threw the outside of the frame where you just drilled the 1/2" hole.
- 19) Insert supplied sleeve in rear portion of frame (don't let it fall into the frame).
- 20) Mount the driver side shock hoop to the frame using the 7/16" X 3 1/2" hardware on the center mounting location. Tighten these fasteners at this time.
- 21) Use a 1/2" x 5" long bolt, 2 flat washers and a locknut to fasten the rear mount to the frame. And tighten to 70 ft. -lbs.
- 22) Install the front shock hoop hardware using the 7/16 x 3 1/2" bolts and locknut.
- 23) Have the vehicle's front end professionally aligned to the lift kit manufacturer specification.

**THIS KIT REQUIRE THE USE OF FULL THROTTLE SUSPENSION 4.5" TRAVEL SHOCK ONLY**

C2045-625R CHROME SHOCK  
B2045-625R BLACK SHOCKS  
C2015 CHROME 2.0 TO 1.5 CLAMP  
B2015 BLACK 2.0 TO 1.5 CLAMP

Thank You for choosing Full Throttle Suspension  
Tech support 559-271-8685 or send email to [fts.dwgs@gmail.com](mailto:fts.dwgs@gmail.com)



## 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 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'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.