

38138

# LEVEL TECH

BY



4" Leveling Kit 2011 HD 2500/3500 2WD CHEVY /GMC 2WD

## KIT INCLUDES:

- |  |                           |                     |
|--|---------------------------|---------------------|
| 1) Left Upper Control Arm W/ Ball Joint  | 2) 2011 HD Torsion Keys   | 8) 3/4 Washers      |
| 1) Right Upper Control Arm W/ Ball Joint | 8) 3/8 X 1 1/4 Bolts      | 4) 7/16 X 2" Bolts  |
| 2) Cotter Pin                            | 8) 3/8 Nuts               | 4) 7/16 Nylock Nuts |
| 2) Castle Nut                            | 16) 3/8 Washers           | 8) 7/16 Washers     |
| 8) Uca Bushings Black                    | 2) 1" Flat Block          | 4) 1" Shock Spacers |
| 4) Uca Crush Sleeve                      | 4) 3/4 X 15 Square U-Bolt |                     |
| 6) Zerk Fittings                         | 8) 3/4 U Bolt Nuts        |                     |



### Disassembly

1) With the vehicle on level ground set the emergency brake and block 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) Important first step, must be followed to prevent damaging torsion bar tool. Peel back fender liner exposing upper shock mounting nuts. Loosen and remove mounting nuts.

- 4) Locate the torsion bar adjusting cams and threaded bolts. Measure exposed threads of torsion bar adjusting bolts and record for reinstallation.
- 5) Mark torsion bars indicating driver and passenger. Using a torsion bar removal tool unload the torsion bars and remove them. Retain the hardware for reinstallation.

**(NOTE- Do not attempt to unload or remove torsion bars without the proper torsion bar tool. Torsion Bars are under extreme tension)**

- 6) Remove the sway bar end link bolt using a 15mm socket and a 15mm open end wrench. Do this on both side.
- 7) Remove the brake caliper using an 21mm socket. Secure the caliper so that the brake line does not get stretched or damaged. Repeat on opposite side.
- 8) Unbolt the tie rod end using a 21mm socket. A additional wrench may be need to keep the ball joint from spinning. Repeat on opposite side.
- 9)Separate the upper ball joint from the steering knuckle. Repeat on opposite side.
- 10) Remove the stock steering linkage from the pitman arm and idler arm.
- 11) Mark the position of the alignment cams. Remove the 21mm UCA nuts, cams, and bolts.
- 12) Remove the upper control arm. Repeat on other side.
- 13) Locate the stock steering linkage and you will need to grind the thicker side to match the thinner side. See pic below
- 14) After grinding the steering linkage to the proper thickness reinstall the steering linkage facing forward ( do not tighten at this time) See pic below.
- 15) With the steering linkage facing forward you will need to grind the frame for clearance. See pic below.
- 16) After grinding the frame for proper clearance you can tighten the steering linkage to factory specs.
- 17) Install the FTS upper control arm. The upper ball joint will be placed inside the control arm use the 3/8 x 1 1/4" bolts and tighten. Install the poly bushing into the control arm with the sleeves supplied (Use some grease on the bushing) Install the cam bolts and cams and line up your markings.
- 18) Re-install the tie rod into the stock spindle. Tighten to 90 ft-lb.
- 19) Install the front brake calipers using the factory hardware and 21mm socket. Tighten to 146 lb-ft.
- 20) Reconnect the ABS line and place back in factory location. Reinstall the sway bar end links on both sides. Tighten to 45 lb-ft.
- 21) Install the shock spacer on the top side of the shock and reinstall the shocks using the 7/16" x 1 3/4" bolts supplied and the factory bolt at the bottom and tighten at this time.
- 22) Install FTS torsion keys into position, and then slide torsion bar into hex as original.
- 22) Use torsion bar tool load tool torsion keys up just enough to insert adjuster blocks into cross member, Remove torsion bar loading tool.
- 24) Now install torsion key adjuster bolt and adjust for initial setting. Final adjustments will be done during alignment.
- 25) Reinstall tires and torque lugs to factory specs.
- 26) **FRONT END ALIGNMENT IS REQUIRED AT THIS TIME.**

### **REAR BLOCK INSTALLATION:**

- 1) Unhook the ABS line located behind the rear bump stops on the underside of the frame on both sides.
- 2) Support the axle with a floor jack. Remove the rear shock with a 21mm socket and wrench.
- 3) Using a socket to remove the factory U-bolt nuts, axle plate, and U-bolts on the passenger side only.
- 4) Lower the axle.
- 5) Install FTS 1" block.
- 6) Install the new U-bolts, factory axle plate, washers, and nuts provided. Tighten to 200 lb.-ft.
- 7) Install the shock into the lower mount using the factory hardware Tighten to 110 lb.-ft

8) Tighten the upper shock mount to 110 lb-ft. Repeat steps 1-8 on opposite side.9) You may need to bend the upper and lower brake line brackets to allow enough slack in the line at full droop.

**THANK YOU FOR USING FULL THROTTLE SUSPENSION LEVELING KITS**





## 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 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,

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