

# SOUTHERN TRUCK

Lift your life.

## 2014-2015 3.5" GMC/Chevrolet 1500 4WD Suspension Lift Kit

# 15006

2 - Control Arm (Driv/Pass)      2 - Preload Spacers  
4 - Differential Spacer          4 - 9/16" x 10 1/2" U-Bolts  
1 - Differential Lower Skid Plate    2 - 3" Spacer Blocks  
2 - Strut Spacers                  2 - Rear Shock Absorbers

\*See back page for complete list of included hardware

## PRE-INSTALLATION

**Professional installation by a certified technician is strongly recommended.**

*No responsibility for altered products. No claims are made regarding any lifting devices. Any and all claims implied in this document excluded.*

### NOTES:

**This kit will not fit trucks with aluminum arms and knuckles.**

The following instructions assume the use of factory wheels with size 32 x 11.5 tires. The use of wider tires will require trimming and offset wheels. \* To avoid damage, electric power steering must be unplugged before any steering components are removed.

### REQUIRED TOOLS:

10mm Wrench                      11mm Wrench                      15mm Wrench  
17mm Wrench                      18mm Wrench                      21mm Wrench  
Floor Jack                          Jack Stands                          Thread Locker  
Strut Compressor                  Die Grinder

### Torque Specs:

Size	Grade 5	Grade 8	Size	Class 8.8	Class 10.9
5/16"	15 ft/lbs	20 ft/lbs	6MM	5ft/lbs	9ft/lbs
3/8"	30 ft/lbs	35 ft/lbs	8MM	18ft/lbs	23ft/lbs
7/16"	45 ft/lbs	60 ft/lbs	10MM	32ft/lbs	45ft/lbs
1/2"	65 ft/lbs	90 ft/lbs	12MM	50ft/lbs	75ft/lbs
9/16"	95 ft/lbs	130 ft/lbs	14MM	85ft/lbs	120ft/lbs
5/8"	135 ft/lbs	175 ft/lbs	16MM	130ft/lbs	165ft/lbs
3/4"	185 ft/lbs	280 ft/lbs	18MM	170ft/lbs	240ft/lbs

## INSTALLATION INSTRUCTIONS

- STEP 1:** Chock rear wheels. Jack up front of vehicle and support with jack stands under frame rails, letting front suspension hang.
- STEP 2:** Remove front wheels.
- STEP 3:** Remove 6 bolts securing factory skid plates. (15mm socket - Save factory hardware and front skid plate) Unplug three connectors going to electric power steering.
- STEP 4:** Remove tie-rod nut. (21mm wrench) Hit the mount on side to help loosen tie-rod end. Remove from knuckle.
- STEP 5:** Remove ABS sensor wire from plastic clip. Remove brake line bracket from control arm. (10mm wrench)
- STEP 6:** Remove and unplug the ABS sensor wire from frame.
- STEP 7:** Remove sway bar link. (15mm socket and wrench) Support knuckle with jack stand. Remove upper ball joint nut. (18mm wrench) Tap side of knuckle with hammer to dislodge ball joint. Separate knuckle and upper control arm.
- STEP 8:** Remove upper strut nuts. (18mm wrench - Save factory hardware)
- STEP 9:** Remove two bolts securing lower strut mount to lower control arm. (15mm wrench - Save factory hardware) Remove strut from vehicle.
- STEP 10:** Mark location of alignment cams on upper control arms to allow installation of new arms in same position. Remove upper control arms from vehicle. (21mm wrench and socket - Save factory hardware)
- STEP 11:** Remove four bolts securing factory cross-member and remove from vehicle. (18mm socket - Save factory hardware)
- STEP 12:** Support differential assembly with floor jack. Remove 6 axle bolts on each side and secure axles out of way. (15mm wrench - Save factory hardware) Unplug electrical connector on differential and vent hose.
- STEP 13:** Remove four differential bolts securing differential to frame. Lower differential slowly to ground. (16mm and 18mm socket)
- STEP 14:** Using hand grinder, grind away portion of cooling fins indicated in **Figure 1** until flush with casing.
- STEP 15:** Reinstall differential, inserting 1" aluminum spacers between frame and each differential mount.  
Secure differential assembly with included 7/16" x 4.5" bolts, lock washers and nuts. (16mm and 18mm wrenches)  
Reinstall axles and secure to differential with factory hardware. (15mm wrench) Plug in electrical connector and reattach vent tube.
- STEP 16:** On driver side of factory cross member, measure and mark on front side 4.5" and 8" from end of tube. Measure and mark 1/4" from bottom edge and 2" from back edge. See **Figure 2** for reference.
- STEP 17:** Cut along marked lines to remove rectangular piece from cross member. Hold cross member in place and check clearance around front differential.
- STEP 18:** Reinstall cross-member and secure with factory hardware. (18mm socket and wrench)
- STEP 19:** Place strut in strut compressor and apply pressure to coil spring. Make alignment marks on top of strut and one end of lower bar pin. Remove strut cap nut. (18mm wrench)
- STEP 20:** Slowly release pressure on spring and disassemble strut.
- STEP 21:** Place included preload spacer on strut between lower coil seat and plastic isolator ring.
- STEP 22:** Place strut assembly back in strut compressor. Turning alignment marks 180 degrees apart, re-assemble strut.
- STEP 23:** Install each of the six 10mm studs in the smaller holes of strut spacers facing upward.

## INSTALLATION INSTRUCTIONS *Front (Continued)*

- STEP 24:** Use sleeve and non-locking 10mm nut on each stud to lock it into place. (17mm wrench)
- STEP 25:** Install strut spacer on factory strut with factory hardware. (18mm wrench)
- STEP 26:** Install strut assembly in factory mount with included 10mm nuts/washers and lock-washers on upper mount and tighten. Lock washers must be installed on the studs between nuts and flat washers. (17mm wrench)
- STEP 27:** Install strut in lower control arm using factory hardware. (15mm wrench)
- STEP 28:** Reinstall sway bar on lower control arm. (15mm wrench)
- STEP 29:** Reinstall knuckle to upper control arm with included castle nuts and cotter pins. Tighten to 50 ft/lbs. - DO NOT OVER-TORQUE CASTLE NUT (3/4" wrench)
- STEP 30:** Reinstall tie rod end into knuckle with factory hardware. (21mm wrench)
- STEP 31:** Install brake line bracket on new control arm with included 1/4" lock-nut. (7/16" wrench)
- STEP 32:** Reconnect ABS wire.
- STEP 33:** Install new lower skid plate below differential in factory location and secure with factory hardware. (15mm wrench)
- STEP 34:** Reconnect three connectors going to electric power steering.
- STEP 35:** Reinstall wheels and tires.
- STEP 36:** Jack up vehicle and remove jack stands.
- STEP 37:** Lower vehicle to ground.

## INSTALLATION INSTRUCTIONS *Rear*

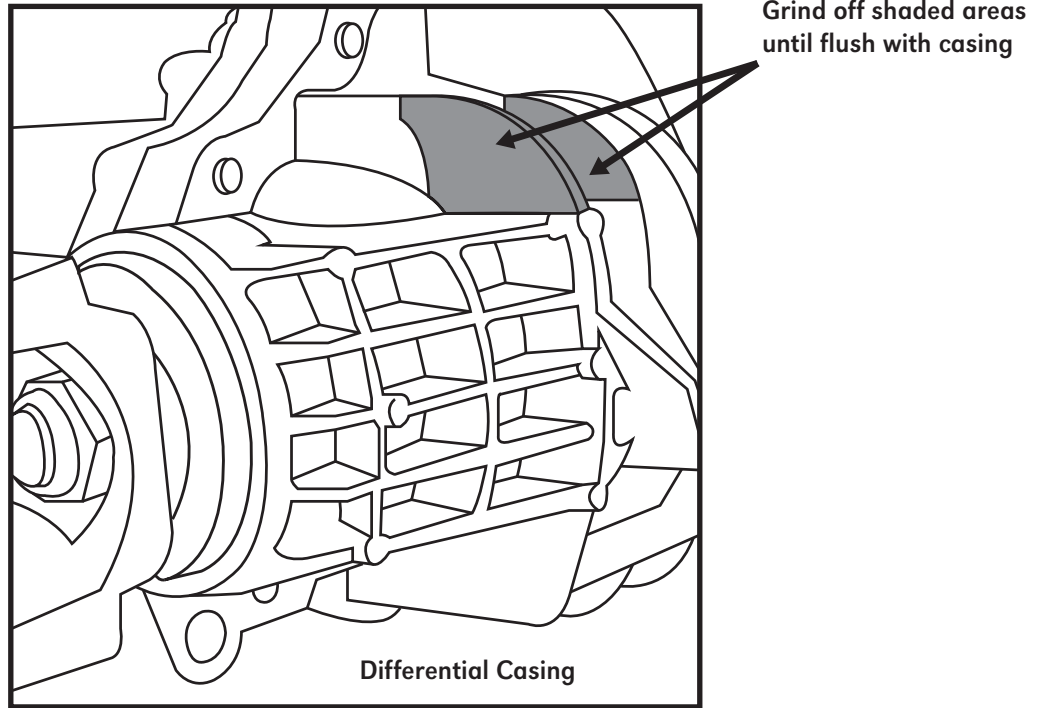
- STEP 1:** Chock front wheels and jack up rear of vehicle. Place jack stands under frame rails.
- STEP 2:** Remove wheels and tires.
- STEP 3:** Remove factory shock absorbers. (21mm wrench & socket - Save factory hardware)
- STEP 4:** Remove stock u-bolts. (21mm socket) Remove factory blocks.
- STEP 5:** Lower axle assembly with jack to allow lift block installation. Install new lift blocks between factory spring pad and axle. Raise axle with jack and align center pins. Narrower end of block faces front of vehicle.
- STEP 6:** With jack applying slight pressure, install new u-bolts with included hardware. (7/8" socket - torque to factory specs)
- STEP 7:** Install new shock absorbers and secure with factory hardware. (21mm wrench & socket)
- STEP 8:** Install wheels and tires.
- STEP 9:** Jack up vehicle to remove jack stands, then lower vehicle to floor.

## POST-INSTALLATION

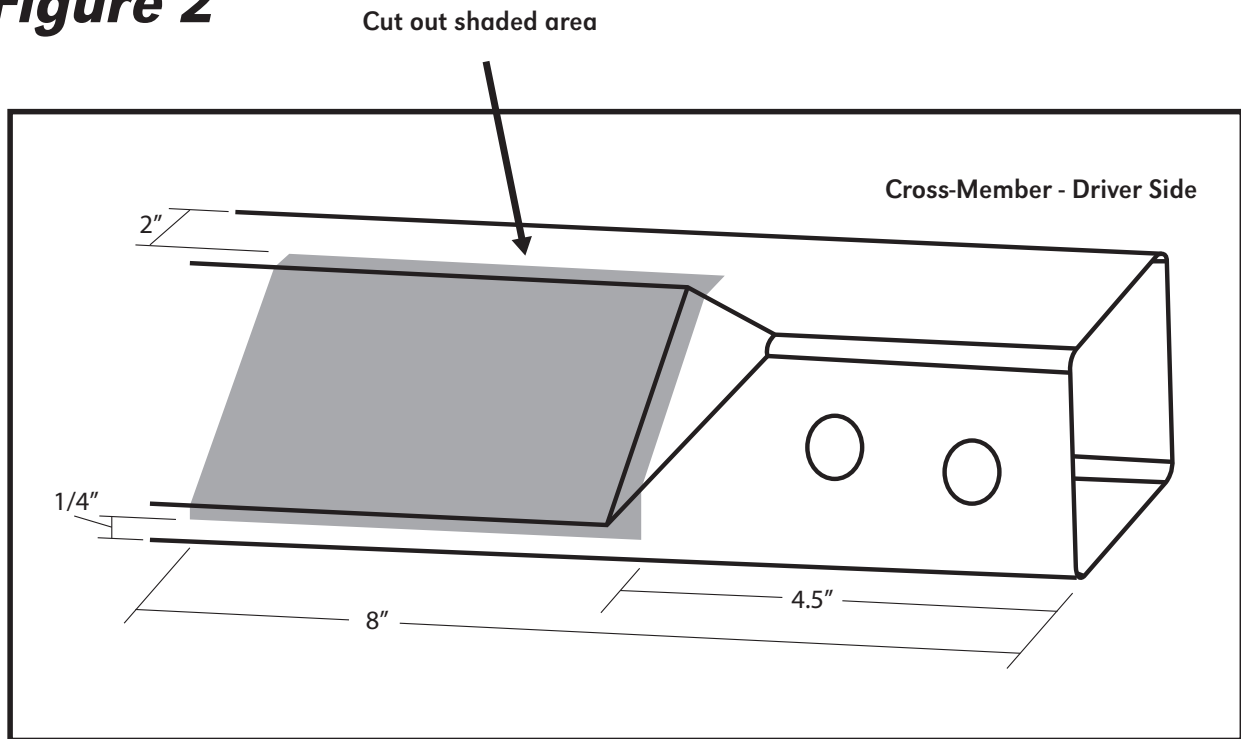
- STEP 1:** Lightly grease ball joints. Do not over-grease ball joint, as this could cause boot failure.
- STEP 2:** Have vehicle alignment performed immediately by qualified technician.
- STEP 3:** Wheels must be retightened after 50 miles.
- STEP 4:** Re-torque u-bolts and other fasteners after first 100 miles, then again after another 100 miles.
- STEP 5:** Adjust headlights to proper alignment.

**MAINTENANCE:** After 500 miles, re-torque all fasteners. (Recommended every 1000 miles thereafter) Have all suspension, driveline and steering components inspected by a certified technician during routine maintenance (Recommended every 3000 miles)

**Figure 1**



**Figure 2**



## HARDWARE PARTS LIST

### Front Strut Spacers:

- 6 - 10mm Self Clinch Studs
- 6 - 10mm Lock Washer
- 6 - 10mm Flat Washer
- 7 - 10mm Nuts
- 1 - Spacer Sleeve

### Differential Spacers:

- 4 - 7/16" x 4.5" Bolts
- 4 - 7/16" Nuts
- 4 - 7/16" Lock Washers
- 8 - 7/16" Hardened Washers

### Lower Strut Mount:

- 4 - 3/8" x 2 1/4" Bolts
- 8 - 3/8" Washers
- 4 - 3/8" Lock Nuts

### Lower Skid Plate:

- 2 - 3/8" Self-tapping Bolts

### Brake Line Bracket:

- 2 - 1/4" Lock Nuts

