

# INSTALLATION INSTRUCTIONS PART#: SMX-TD720/TD725/TD720 FITS: Toyota Tundra •2007-2017

Thank you for choosing SuspensionMaxx for your vehicle. This kit is designed to add suspension travel and increase front and ground clearance. Specially designed tools and experience are required to complete the installation properly. These parts should only be installed by a qualified mechanic otherwise an unsafe vehicle and/or injury may result. Consult manufactures service manual for proper torque specifications and procedures. Instructions are supplied for the leveling kit installation only. Safety is important. Use safe working habits.

### WARNING!

This suspension system will enhance off road performance and increase ground clearance. Larger tires will increase vehicle roll center height. The vehicle will handle and respond to driver steering and braking differently from a stock factory equipped passenger car or truck. Extreme care must be used to prevent loss of control or vehicle rollover during abrupt maneuvers both on and off-road. Failure to operate this vehicle safely can result in vehicle damage, serious injury or death to the driver and passengers. Always wear your seat belt and reduce your speed, avoid sharp turns, inclines and abrupt maneuvers. Tread lightly, respect nature and enjoy the Off-Road Experience! Help keep it available for future generations.

Thank You! SuspensionMAXX Inc.

# INSTRUCTIONS

SuspensionMAXX kits are designed to be easily installed and completely reversible to the factory supplied settings. These instructions are supplied for ease of installation, correct procedures and safety. Automotive experience recommended.

# **RECOMMENDED TOOLS**

- 1. Metric socket & wrench set
- 2. 150 ft/lbs capacity torque wrench
- 3. Belt sander or grinder

#### **PRELIMINARY STEPS**

- 1. Park vehicle on level surface.
- 2. Block rear wheels.
- 3. Using load-rated floor jack and stands, raise and safely support vehicle under certified frame lift points and remove front wheels.



#### **STEP 1: Removal**

1. With the front end of the vehicle supported and the front wheels off, remove four upper strut mount nuts and lower strut bolt.

#### WARNING: DO NOT REMOVE CENTER STRUT ASSEMBLY NUT

- 2. Disconect sway bay from lower control arm.
- 3. Remove strut from vehicle.
- 4. Disconnect upper ball joint from knuckle.
- 5. Repeat step 1-4 on both sides of vehicle.

#### **STEP 2: Customize Lift Options**

- 1. Locate the ARROW on strut mounts. FIG. 2-1
- 2. Choose a desired lift height, see **LIFT ASSEMBLY GUIDE** for assembly procedure. **FOR 2 INCH LIFT**



Grind the tip of all the stock strut studs down, but do not go any further than the thread. FIG. 2-2

3. Install lower polyurathane shims (2.5" & 3.0" ONLY) **NOTE:** Lower shims have a smaller diameter holes. **NOTE:** ALIGN ALL **ARROWS ON SHIMS** WITH ARROW ON STRUT MOUNT.





- 4. Set aluminum spacer on top of the strut mount. Align the flat side of the aluminum spacer with the arrow on the polyurathane shims.
- 5. Install coupling nuts onto each of the existing strut mount studs, torque to 20 ft/lbs.
- 6. Install the extension studs into each coupling nut. Apply threadlocker before installing. Use vice grips to tighten studs in place.
- 7. Install additional shims on top of the aluminum spacer. Arrow must face the flat side on of the aluminum spacer.





**INCLUDED PARTS** 



# LIFT ASSEMBLY GUIDE **LIFT INCHES** 2.0" 2.5" 3.0" PARTS NEEDED **\*REQUIRES TRIM-MING OF STUDS. SEE STEP 2 OF** INSTALLATION.

# **STEP 3: Lower Control Arm Modification**

To ease reassembly the following modification may be required.

1. Use a die grinder or other cutting tool to carefully remove excess lip of the lower strut mount on the lower control arm. FIG. 3-1, FIG. 3-2

WARNING: DO NOT **CLEARANCE INTO THE** WELDED PORTION OF THE BRACKET

**NOTE:** This modification has no negative effects on the vehicles performance.





Again, Thank you for your purchase! Enjoy your SuspensionMAXX leveling system! Questions? E-mail us at tech@suspensionmaxx.com or call 1.888.629.9226

# **STEP 4: Installation**

- 1. Reinstall strut assembly, tighten upper and lower strut mounting hardware. Reconnect upper ball joint.
- Loosen the "thru-bolts" on the upper and lower A-arms that attach A-arms to the vehicle frame brackets.
   NOTE: This is done to allow free movement of the A-arms to bushing bind at the new ride height.
- 3. Reinstall front wheels and torque lugnuts to 120 ft/lbs. carefully lower the vehicle to the ground.
- 4. With the vehicle suspension loaded and sitting at curb height, re-tighten upper and lower A-arm bolts.
- 5. With the vehicle on the ground reconnect sway bar to lower control arm.

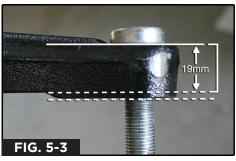
**NOTE:** It is much easier to reconnect sway bar with the vehicle on the ground.

# **STEP 5: Differential Lowering**

- 1. Support front differential with jack. Remove factory front skid plate.
- 2. Remove differential support arm bolt.
- Insert supplied 16mm aluminum spacer and replace bolt. See FIG. 5-1, Repeat this step on opposite side of vehicle.
- With differential supported remove driver side torque arm bracket.
   FIG. 5-2
- 5. Remove pressed in stud from toque arm bracket. Pay special attention to the direction in which the stud was inserted.
- With the stud removed, proceed to evenly grind away the ridge around the threaded portion







of stud. FIGXX. Reduce the thickness to 19mm or 0.78" as indicated by the dotted linesv in **FIG. 5-3** 

7. Reinstall differential support arm stud in original position. **FIG. 5-4** 

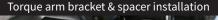
- Reinstalled torque arm bracket with supplied 10mm spacer.
   FIG. 5-8 & 5-9
- 9. Torque all bolts to 120 ft/lbs and remove the jack supporting the differential.
- Using the three supplied 8mm x
   1.25 x 30mm bolts and 3/4" spacers. Reinstall factory skid plate.
   FIG. 5-8
- When work

   is complete ,
   installed spacers
   should appear as
   depicted in FIG.
   5-5, 5-6, 5-7
- 12. Vehicle will require a front wheel alignment.



Installation of torque arm bracket











# WHEEL ALIGNMENT SPECS W/ LEVELING KIT

 CAMBER
 0.0Deg. +/- 0.5Deg.

 CASTER
 2.0Deg. +/- 1.0Deg.

 (LEFT TO RIGHT MUST BE EQUAL +/- 0.25Deg.)
 TOTAL TOE
 1/8 in. +/- 1/16 in.