



**SUSPENSION INC.**

## Installation Instructions Tundra 6" and 8"

**IF YOUR ReadyLIFT® OFF ROAD SUSPENSION PRODUCT IS MISSING A PART OR HAS A DAMAGED PART, PLEASE CONTACT CUSTOMER SERVICE DIRECTLY.**

**A NEW REPLACEMENT PART WILL BE SENT TO YOU IMMEDIATELY**

**(800)549-4620**

**MON-FRI 7AM-5PM PST**

**OR**

**EMAIL: INFO@ReadyLIFT.COM**

**WEBSITE: www.ReadyLIFT.COM**

**\*\* Please retain this document in your vehicle at all times\*\***

### **ReadyLIFT® Off Road Suspension Limited Warranty**

#### **Limited Warranty details for ReadyLIFT® Off Road Suspension.**

The ReadyLIFT® Off Road Suspension Limited Lifetime Warranty covers defective materials or defective workmanship for the life of the product to the original purchaser and only on the original vehicle which the product was installed. The ReadyLIFT® Off Road Suspension Limited Lifetime Warranty excludes the following wearable items: bushings, bushing sleeves, bump stops, top-out stops, spherical bearings (uniballs), heim joints (rod ends), and misalignment spacers (upper control arm and steering). These items are considered wear items and are covered for 90 days from the original purchase date, therefore these items will not be considered defective because of wear. Wear is subject to use of product, use of vehicle, driving conditions, weather conditions, cleanliness of product/components, and maintenance/up-keep. The degree of wear and overall lifetime of each wear item is subject to afore mentioned conditions and circumstances. ReadyLIFT® Off Road Suspension will only warranty wear items in the case of workmanship and defects for the period of 90 days following the date of purchase. Please note that all products should be inspected by a professional technician before installing any part/kit onto the vehicle. In addition, all products should be installed by a qualified technician. Please contact ReadyLIFT® Off Road Suspension if there is any question as to the quality of workmanship of each component or its installation procedure. Contact ReadyLIFT® Off Road Suspension directly about any potentially defective parts prior to removing any parts from the vehicle. If it appears that the part is warrantable, you will be given an RGA number and asked to return the part freight prepaid. If the part is found to be warrantable, at the sole discretion of ReadyLIFT® Off Road Suspension, it will be repaired or replaced and returned to you. **The limited warranty expressed by ReadyLIFT® Off Road Suspension supersedes that of any claims made by authorized and unauthorized dealers of ReadyLIFT® Off Road Suspension products.**

**www.ReadyLIFT.com**



Installation Instructions Tundra 6" and 8"

Please read Instructions thoroughly and completely before beginning installation. Installation by a certified mechanic is recommended.

ReadyLIFT® Off Road Suspension is NOT responsible for any damage or failure resulting from improper installation.

Safety Warning: Suspension systems or components that enhance the on and off-road performance of your vehicle may cause it to handle differently than it did from the factory. Extreme care must be used to prevent loss of control or vehicle rollover during abrupt maneuvers. Always operate your vehicle at reduced speeds to ensure your ability to control your vehicle under all driving conditions. Failure to drive safely may result in serious injury or death to driver and passengers. Driver and passengers must ALWAYS wear your seat belts, avoid quick sharp turns and other sudden maneuvers. ReadyLIFT® Off Road Suspension does not recommend the combined use of suspension lifts, body lifts, or other lifting devices. You should never operate your vehicle under the influence of alcohol or drugs. Constant maintenance is required to keep your vehicle safe. Thoroughly inspect your vehicle before and after every off-road use. It is the responsibility of the retailer and/or the installer to review all state and local laws, with the end user of this product, related to bumper height laws and the lifting of their vehicle before the purchase and installation of any ReadyLIFT® products. It is the responsibility of the driver/s to check their surrounding area for obstructions, people, and animals before moving the vehicle. All raised vehicles have increased blind spots and damage, injury and/or death can

This suspension system was developed using a 35" x 12.5" tire with 20" x 9" wheel and a +25mm offset. If wider tires are used, offset wheels may be necessary and trimming may be required. Factory wheels can be used but are not recommended with tires over 11" wide. The stock spare rim can be run in an emergency. Please note that if running the spare factory tire, it is done for short distances and a speed not to exceed 45mph or damage to differentials may occur.

VEHICLE HEIGHT MEASUREMENTS

Driver Front: Driver Rear: Pass. Front: Pass. Rear: [Measurement boxes]

## Installation Instructions Tundra 6" and 8"

Park vehicle on a clean flat surface and block the rear wheels for safety. Engage the parking brake.

Record the stock vehicle measurements on both the front and the rear, this will provide a guideline on vehicle rake and lift height.

Measure from the center of the wheel up to the bottom edge of the fender well opening and record on the chart provided on page 2.

Disconnect the vehicle power source at the ground terminal on the battery.

Lock the steering wheel in the straight forward position with the column lock or steering wheel locking device.

Raise the front of the vehicle and support with jack stands at each frame rail behind the lower control arms.

**If installing on a 2WD, Ignore any steps pertaining to front differential removal and install.**

Remove the front wheels.

Remove the front skid plate. (Fig 1)

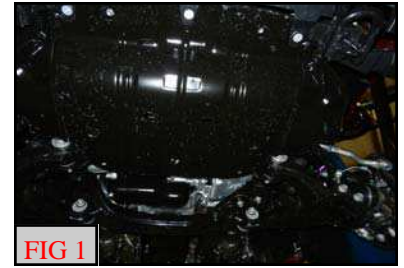
Remove the brake line brackets from the frame and knuckle. (Fig 2)

Remove the ABS line from the upper control arm and knuckle. Discard the factory brackets. (Fig 3)

Remove the ABS sensor from the knuckle. (Fig 4)

Remove the brake caliper and hang out of the way using a S hook or suitable strap. **DO NOT** let the brake caliper hang by the brake hose. Remove the brake rotor. (Fig 5)

Remove the safety clip from the upper ball joint, and cotter pins from the tie rod ends, and axle nuts. (Fig 6)



## Installation Instructions Tundra 6" and 8"

Remove the axle nut safety keeper and then remove the axle nut.

(Fig 7) *If 2WD, ignore this step.*



Remove the hub mounting bolts. Note; The bolts will not come off the hub. (Fig 8)

Taking care not to damage the threads on the axle, use an air hammer with a pointed bit in the axle and slowly press the axle through the hub. Do not drop the hub. (Fig 9) *If 2WD, ignore this step.*



Loosen the tie rod jam nut.

Remove the tie rod end nut. Strike the tie rod boss with a hammer to dislodge the taper and remove from the knuckle. Remove the outer tie rod end from the inner. The outer will be swapped side to side. (Fig 10)



Loosen but do not remove the upper ball joint nut. Strike the ball joint boss with a hammer to dislodge the taper. (Fig 11)

Remove the lower ball joint cradle from the knuckle. Now remove the knuckle from the vehicle. (Fig 12)



Remove the sway bar from the lower control arm and frame.

Remove the lower strut hardware.

Loosen the lower control arm cams and let swing out of the way.

Remove the strut from the frame.

Remove the lower control arm from the vehicle.



Remove the bump stops by turning them counter clockwise to unscrew from the frame. A pair of pliers may aid in removal. Install the ReadyLift extensions onto the frame and bump stops on to the extensions. (Fig 13)



## Installation Instructions Tundra 6" and 8"

Mark a line 1/2" from the end of the inner tie rod and using a suitable cutting tool, remove outer marked section. Clean any burrs from the cutting process. Install the outer tie rod end from the opposite side.

(Fig 14)

Support the differential and remove the rear mount. (Fig 15) *If 2WD, ignore this step.*

Mark a vertical line from the center of the driver rear control arm pocket out 2 3/4" onto the rear cross member. Mark another vertical line from the same center point out 8 1/2" onto the rear cross member. Make the same marks on the front of the rear cross member and connect the vertical lines over the top and bottom. Use a suitable cutting tool and cut the marked section of cross member out and discard. Sand and paint the bare metal with a quality rust preventative paint. (Fig 16, 17) *If 2WD, ignore this step.*

Install the rear cross member using **M18 x 150mm bolts, washers, cam block off plates, and c-lock nuts**. Do not tighten at this time. (Fig 18)

Install the bushing and sleeves into the ReadyLift differential mounts. *If 2WD, ignore any steps regarding differential mounting.*

Remove the differential front mounts from the frame and differential. There may be a small amount of fluid seep from the driver side once the mount is removed. This is completely normal and will stop once the new mount is installed and torqued down.

Install the drivers side front mount onto the differential using **M14 x 60mm bolts, and washers**. Do not tighten at this time. (Fig 19)

Install the drivers side rear mount onto the differential using **M14 x 25mm bolt, and washer**. Do not tighten at this time. (Fig 20)

Install the front cross member using **M22 x 150mm bolts, washers, cam block off plates, and c-lock nuts**. Do not tighten at this time. (Fig 21)



## Installation Instructions Tundra 6" and 8"

Install the passenger side differential mount to the front and rear cross member using **1/2" x 4" bolts, washers, and c-lock nuts**. Do not tighten at this time. (Fig 22)



Carefully lower the differential down into the driver and passenger side mounts. Install the driver side using **1/2" x 4" bolts, washer, and c-lock nuts**. Do not tighten at this time. Reconnect the electrical connectors. Install the vent tube extension.



Install the passenger side mount using the **factory bolts, M14 c-lock nuts, and washers**. Do not tighten at this time. (Fig 23)

Notch the lower control arm strut pocket as shown. (Fig 24)



Install the lower control arms using the **factory hardware**. Do not tighten at this time. (Fig 25)

Torque the front cross member bolts to **200 ft-lbs**, rear cross member bolts to **150 ft-lbs**, 1/2" diff hardware to **95 ft-lbs**, and M14 differential hardware to **80 ft-lbs**.



Drill out the 3 mounting holes on the back of the rear cross member into the frame using a 3/8" drill bit. (Fig 26)

Install the nut plate into the opening to the cross member using **3/8" x 1" bolts, and washers**. Torque to **30 ft-lbs**. (Fig 27) *If 2WD, open an access hole in the cross member to install the nut plate.*



Install the ReadyLift skid plate to the cross members using **3/8" x 1" bolts, and washers**. Torque to **30 ft-lbs**. (Fig 28)



**\*\*\*\*If installing the 8" Kit, refer to supplemental Strut Installation instructions at the end of the instructions. \*\*\*\***

Install the ReadyLift strut spacers on their corresponding struts using **M10 flange nuts**. D is for driver and P is for passenger. Torque to **30 ft-lbs**. (Fig 29)

## Installation Instructions Tundra 6" and 8"

Install the completed strut assemblies into their corresponding sides using **M10 flange nuts** and lower strut mounts using **factory hardware**. Do not tighten at this time. (Fig 30)



Protect the axle and ball joint boots with a wet rag or other suitable protection from grinding and welding sparks. Clean/grind off the paint on the steering stop on the ball joint cradle. Weld the turn stop extension plates on their corresponding sides across the top and bottom of the plates. (Fig 31)



Remove the dust seals from the factory knuckles and install onto the ReadyLift knuckles.

Install the factory dust shields and hub bearings to the ReadyLift knuckles. Add a drop of thread locker to the hub bolts. (Fig 32)



Install the ReadyLift knuckle to the upper ball joint and lower ball joint cradle (while positioning the axle through the dust seal and hub bearing) using the **factory hardware**. Add a drop of thread locker to the lower mounting hardware. Torque the upper ball joint nut to **67 ft-lbs**, install the factory safety clip, torque the lower cradle hardware to **200 ft-lbs**, the hub bearing hardware to **80 ft-lbs**, and the axle nut to **275 ft-lbs**.



Install the brake rotor and caliper using the **factory hardware**. Torque to **80 ft-lbs**.

Install the front brake line extensions to the frame using the factory hardware. Gently pull down on the metal brake line and install the bracket to the extension using **5/16" x 1" bolts, washers and c-lock nuts**. Install the brake line bracket to the knuckle using the factory hardware. Run the ABS wire over the upper control arm. Install the ABS sensor to the knuckle using **factory hardware**. Install the **Adel clamp** around the wire (offset facing up) to the knuckle using **factory hardware**. Turn the knuckle until it hits the turn stop. Using tie wraps, secure the ABS wire along the brake line up to the frame. Torque the 5/16", and factory M10 hardware to **10 ft-lbs**, the Allen hardware to **5 ft-lbs**. (Fig 33, 34, 35)



## Installation Instructions Tundra 6" and 8"

Install the outer tie rod end to the knuckle using the **factory hardware**. Torque to **65 ft-lbs**. Install the cotter pin.

Install the sway bar links to the lower control arms using the **factory hardware**. Do not tighten at this time. (Fig 37)

Install the Readylift sway bar extension brackets to the frame using the **factory hardware**, and the sway bar to the extensions using **7/16" x 1 1/2" bolts, washers, and c-lock nuts**. Torque all to **55 ft-lbs**. (Fig 36)

Install the front wheels and lower the vehicle to the ground. Torque the lug nuts to the wheel manufacturer specs.

Jounce the front suspension to settle the vehicle to ride height.

Center the lower control arm cams and torque to **100 ft-lbs**, the lower strut hardware to **125 ft-lbs**, and the sway bar end link hardware to **50 ft-lbs**.

With the steering wheel centered, turn the tie rod ends until the tires are straight. If the steering wheel is not centered properly, the ABS traction control lights may activate. Turn the wheels from lock to lock and make sure the brake lines and ABS routing clears all suspension components adequately. Reposition if necessary.

### Rear install

Block the front wheels, raise the rear of the vehicle and support the frame with jack stands in front of the rear leaf springs.

Remove the rear wheels.

Remove the 3 brake line brackets, and 2 parking brake brackets from the axle. Gently bend the ABS bracket on the charcoal canister down flat and remove.

With the axle fully supported, remove and discard the rear shocks.



FIG 31



FIG 32

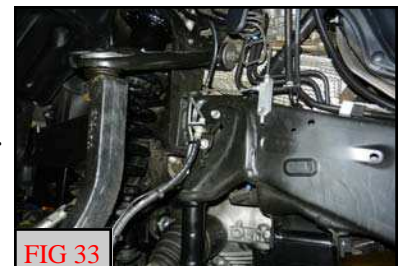


FIG 33



FIG 34



FIG 35



FIG 36



## Installation Instructions Tundra 6" and 8"

Slightly loosen but do not remove the driver side u-bolts. Remove the passenger side u-bolts completely and discard. Lower the axle just enough to install the lift block. Locate the passenger side lift block, making sure the tapered end points to the front. Raise the axle and the block up to the spring while aligning the center pin. Install the **provided u-bolts, and nuts**. Snug the u-bolt nuts but do not fully tighten at this time. Repeat steps for driver side.



FIG 37

Install the brake line extension to the centered axle mount using factory hardware. Attach the factory brake line bracket to the extension using **5/16" x 1" bolt, washers, and c-lock nuts**. Torque to **10 ft-lbs**.



FIG 38

Flip the 2 factory clamps to the left and right of the center mount over and install using **factory hardware**. You may have to gently pull the metal brake lines through the outer clamps to gain adequate clearance.



FIG 39

Install the parking brake brackets to the ReadyLift extensions using **5/16" x 1" bolts, washers, and c-lock nuts**. Install completed assembly to the axle using **factory hardware**. Torque all hardware to **10 ft-lbs**.



FIG 40

Install the ABS bracket to the ReadyLift extension using **5/16" x 1" bolt, washers, and c-lock nut**. Install completed assembly to the charcoal canister using **factory hardware**. Torque all to **10 ft-lbs**.



FIG 41

Install the extended shocks using the factory lower hardware and provided upper hardware. Do not tighten at this time.

Install the appropriate carrier bearing spacer between the carrier bearing housing and frame. **6" kit use the .5" spacer and 8" kit use the 3/4" spacer**. Torque hardware to **35 ft-lbs**.

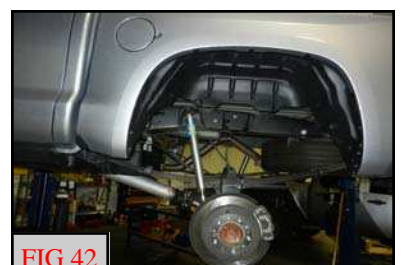


FIG 42

Install the rear wheels and lower vehicle to the ground.

Torque the lug nuts to the wheel manufacturer specs, the lower shock hardware to **45 ft-lbs**, upper shock hardware to **30 ft-lbs**, and u-bolts to **110 ft-lbs**. **Have a reputable alignment shop set the alignment to the provided alignment specs on the last page of the instructions.**

## Installation Instructions Tundra 6" and 8"

### \*\*\*Supplemental Strut Instructions\*\*\*

Mark the orientation of the strut hat to the spring and strut body.  
(Fig 43)

\*\*\*Caution, the spring is under extreme pressure and can cause bodily injury and or death if handled improperly.\*\*\*

Using a spring compressor, relieve the tension on the strut hat and remove the strut assembly from the spring.

Remove the rubber isolator from the strut hat and install the Ready-Lift preload spacer between the strut hat and coil spring. Install the strut hat in the same orientation as removed using the **factory hardware**. Torque to **30 ft-lbs**. (Fig 44)

Remove the spring compressor from the assembly.



### Final Install and Checks

Recheck that all hardware is of proper torque values and all electrical connections are hooked up. Start vehicle and verify that all dash warning lights are off. Cycle the steering wheel from lock to lock to check for any interference of steering intermediate shaft, steering extension, steering u-joint. wheels, tires, brake lines, hoses, wires, ect. and ensure adequate clearance through out the suspension cycle. Adjust as necessary.

If driving vehicle to an alignment shop, adjust toe prior to vehicle operation.

Install all warning tags and decals as directed:

1. Rear view mirror hanging warning card: Hang from rear view mirror to warn driver of vehicle modification.
2. Lifted truck warning decal: Apply decal to the upper left hand corner of the inside of the windshield facing the driver.

Give all installation instructions, warranty information, and all remaining literature to the end user to keep with vehicle records.



## Installation Instructions Tundra 6" and 8"

### Final Checks & Adjustments

**Post Installation Warnings:** Once the vehicle is lowered to the ground, check all parts which have rubber or urethane components to insure proper torque. Torque wheels to factory specs. Move vehicle backwards and forwards a short distance to allow suspension components to adjust. Turn the front wheels completely left then right and verify adequate tire, wheel, brake line, and ABS wire clearance. Test and inspect steering, brake and suspension components for tightness and proper operation. Inspect brakes hoses and ABS lines for adequate slack at full extension.

**\*\*\*FAILURE TO PERFORM THE POST INSPECTION CHECKS MAY RESULT IN VEHICLE COMPONENT DAMAGE AND/OR PERSONAL INJURY OR DEATH TO THE DRIVER AND/OR OTHERS\*\*\***

**Vehicle Handling Warning:** Vehicles with larger tires and wheels will handle differently than stock vehicles. Take time to familiarize yourself with the handling of your vehicle.

### Wheel Alignment/Headlamp Adjustment:

**It is necessary to have a proper and professional wheel alignment performed by a certified alignment technician. Align the vehicle to factory specifications. It is recommended that your vehicle alignment be checked after any off-road driving. In addition to your vehicle alignment, for your safety and others, it is necessary to check and adjust your vehicle headlamps for proper aim and alignment**

### Vehicle Re-Torque and Safety Inspection:

Upon completion of all services and adjustments performed on your vehicle, and within 50 miles of driving, check to ensure all fasteners and hardware are properly torqued to specification as noted in the vehicles factory service manual or the torque chart included.

**\*\*\*RECHECK ALL HARDWARE FOR PROPER TORQUE VALUES AFTER 500 MILES, AND THEN PERIODICALLY AT THE EACH SERVICE INTERVAL THERAFTER.\*\*\***

#### Recommended Alignment Specs

<b>Camber</b>	<b>-0.3</b>	<b>-0.3</b>	<b>Tolerance</b>	<b>+/- 0.5</b>
<b>Caster</b>	<b>+3.0</b>	<b>+3.0</b>	<b>Tolerance</b>	<b>+/- 0.5</b>
<b>Toe</b>	<b>+1.0</b>	<b>+1.0</b>	<b>Total</b>	<b>+20</b>