



Installation Instructions 69-2300 / 2301 / 2302 / 2303

IMPORTANT NOTE:

2015-2017

Stock measurements of the vehicle should not exceed 22” when measured from the center of the wheel to the fender line above in the front.

2018-2020

Due to the body update, this model year range will require a different baseline measurement. The vehicle should not exceed 22.5” when measured from the center of the wheel to the fender line above in the front.

If so, then the preload spacer cannot be used as the truck is pre-lifted from the factory.

This applies to any model truck with off road package front struts assemblies (IE: FX4 or any other special ordered vehicle with snow prep or other add on beyond the classic frame option).

READYLIFT®

SUSPENSIONS

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IF YOUR ReadyLIFT® PRODUCT IS MISSING A OR HAS A DAMAGED PART, PLEASE CONTACT CUSTOMER SERVICE DIRECTLY. For warranty issues please return to the place of installation and contact ReadyLIFT® .

A NEW REPLACEMENT PART WILL BE SENT TO YOU IMMEDIATELY

(800)549-4620

MON-FRI 7AM-5PM PST

OR

EMAIL: INFO@ReadyLIFT.COM

WEBSITE: ReadyLIFT.COM

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

Limited Lifetime Warranty

This unique product warranty proves our commitment to the quality and reliability of every product that ReadyLIFT® manufactures. The ReadyLIFT® product warranty only extends to the original purchaser of any ReadyLIFT® product, if it breaks, we will give you a new part. Warranty does not apply to discontinued parts. Our Limited Lifetime Warranty excludes the following ReadyLIFT® items; bushings, bump stops, ball joints, tie rod ends, heim joints and shock absorbers. These parts are subject to wear and are not considered defective when worn. They are warranted for 12 months from the date of purchase for defects in workmanship. **This product warranty is voided if the vehicle is not aligned after kit installation and proper maintenance is routinely done.**

Product purchased directly from ReadyLIFT® has a 30 day return policy on uninstalled products from the date of purchase. Uninstalled product returns must be in the original ReadyLIFT® packaging. Please call **800-549-4620** to get an RGA# for any return. Customer is responsible for shipping costs back to ReadyLIFT®.

Returns without RGA# will be refused. Contact ReadyLIFT® directly about any potentially defective parts prior to removal from vehicle. If the part in question is deemed warrantable an RGA# will be assigned and can be returned for repair or replacement. Replacement parts required prior to warranty claim completion must be purchased. Upon receipt and verification of deemed warranty parts claim, a credit or refund can then be processed to complete warranty claim transaction.

ReadyLIFT® products are **NOT** intended for off-road abuse. Any damage or failure as a result from off-road abuse voids the warranty of the ReadyLIFT® product. ReadyLIFT® is **NOT** responsible for any subsequent damages to any related vehicle parts due to misuse, abuse, improper installation, or lack of maintenance. Furthermore, ReadyLIFT® reserves the right to change, modify or cancel this warranty without prior notice.

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

ReadyLIFT[®] 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[®] 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 occur if these instructions are not followed.

This suspension system was developed using a 35 - 11.5 R20 tire with 20" x 9" wheel and a offset of +25. 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:
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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BILL OF MATERIALS

Description	QTY
Upper Control Arms	2
Upper Control Arm Bushings	8
Grease Pack	1
Crush Sleeve	4
Ball Joint Boot Spacer	2
Heavy Washer	2
Strut Extension	2
Pre-load Spacer	2
Rear Block	2
U-Bolt and Hardware Pack	1
Carrier Bearing Spacer	1

Carrier Bearing Spacer only included with kits for 2 piece drive lines.
*** 2WD models will ignore all steps involving axle shafts.***

It is imperative you measure factory ride height prior to the installation process, failure to do so may result in a nullified warranty claim.

Safety Warning

Before you start installation:

ReadyLIFT® Suspension highly recommends that the installation of this product be performed by a professional mechanic with experience working on and installing suspension products. Professional knowledge and skill will typically yield the best installation results. If you need an installer in your area, please contact ReadyLIFT® Suspension customer service to find one of our "Pro-Grade" Dealers.

Notes:

- Installation by a professional mechanic is highly recommended.
- A Factory Service Manual for your specific Year / Make / Model is highly recommended for reference during installation.
- All lifted vehicles may require additional driveline modifications and or balancing.
- A four wheel vehicle alignment will need to be performed after installation of this product.
- Speedometer / Computer recalibration is required if changing +/- 10% from factory tire diameter.
- Use of a Vehicle Hoist will greatly reduce installation time.
- Vehicle must be in excellent operating condition. Repair or replace any and all worn or damaged components prior to installation.

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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.

*****2011 and newer models equipped with EPAS (Electronic Power Assist Steering), disconnect the power steering control module to avoid arching of the contacts in the internal power relay from a hammer blow or impact wrench.*****

Front Install

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

Remove the brake line brackets from the knuckle and frame. Remove the ABS line from the knuckle. Disconnect the clips on the inside of the wheel well to gain slack in the ABS line. Disconnect the vacuum line from the actuator on the backside of the knuckle. (Fig 1, 2)

Remove the outer tie rod end from the knuckle. Strike the tie rod boss on the knuckle with a dead blow hammer to dislodge the taper from the knuckle. (Fig 3)

Remove the axle nut cover, and then axle nut. (Fig 4)

Remove the lower strut and sway bar end link from the lower control arm.

Place a suitable jack under the lower control.



FIG 1



FIG 2



FIG 3



FIG 4



FIG 5



FIG 6

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Loosen but do not remove the upper and lower control arm bolts.

Remove the upper ball joint from the knuckle. Strike the ball joint boss on the knuckle with a dead blow hammer to dislodge the taper from the knuckle. (Fig 5)



FIG 5

Take care to watch the brake lines and ABS for over extension through the following steps.

Lower the control arm down slowly while holding the top of the knuckle. Slide the axle out of the hub and actuator being careful not to damage the actuator. (Fig 6)



FIG 6

Lower the control arm enough to remove the strut. (Fig 7)

Remove the strut assembly from the vehicle.

Mark the top of the strut in correlation to the lower mount. Using a spring compressor, release the pressure from the top hat of the strut. (Fig 8)



FIG 8

Remove the top hat and place the preload spacer into the top hat. Make sure to place between the top hat and rubber isolator. (Fig 9)



FIG 9

Reinstall the top hat with spacer in the same orientation as previously removed. Torque to 30 ft-lbs.

Install the strut spacer onto the strut using the provided hardware. Torque to 30 ft-lbs. 2009 - 2013 use spacer that says Right Only on the passenger strut. 2014 and up are the same spacer for left and right struts. (Fig 10)



FIG 10

Making sure not to damage the studs, put the lower strut studs into a suitable vice and rotate the lower sleeve in the strut by pressing on the top of the strut the opposite direction of the original lean. You are going to install this strut assembly back into the vehicle 180 degrees from the original orientation and will need the studs on the bottom of the strut to lean the opposite direction. (Fig 11)



FIG 11

Remove the upper control arm from the frame. (Fig 12)

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Grease the bushings and sleeves and install into the ReadyLIFT control arms using the provided grease pack. This is a one time grease install. Install the control arms into the frame using the factory hardware. Do not tighten at this time. (Fig 13)



Install the completed strut assembly into the frame 180 degrees from the original orientation making sure that the offset of the top spacer is going in towards the frame and that the stamped word OUT on the spacer is going towards the outside of the vehicle, using the factory hardware. Do not tighten at this time. (Fig 14)



Raise the lower control arm up and guide the lower strut studs into place.

Continue to raise the lower control arm up while guiding the axle shaft through the actuator and hub bearing. Take special care not to damage the vacuum actuator as the internal ring is made of plastic and can be easily broken, resulting in a new part being purchased.



Once the knuckle is high enough, install the boot spacer onto the upper ball joint and attach to the knuckle. Use supplied heavy washer and castle nut for the ball joint. Do not tighten at this time. (knuckle and ball joint shown off vehicle for clarification) (Fig 15, 16)



*****Very important***** To avoid damage to the vacuum actuator, these steps must be done with major **caution**. Hold the axle and rotate the hub assembly while pulling outwards on the axle to engage the splines in the actuator to the splines on the axle. Once the splines are engaged, the axle will “pop” through the hub assembly. When the axle is seated you will be able to see the shoulder of the axle through the hub. If this shoulder is not visible, keep rotating the hub until it is. The shoulder will be 2mm under the mounting surface of the nut in the hub when properly seated. Install the axle using the **factory hardware**. Torque the axle nut to **20 ft-lbs**, and the upper ball joint to **65 ft-lbs**. (Fig 17, 18)



Install the tie rod end to the knuckle using factory hardware. Torque to **85ft-lbs**. (Fig 19)



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Install the vacuum lines, ABS, and brake line brackets into their locations on the frame using the factory hardware. You will leave the ABS lines loose from the inner wheel well. Torque brackets to **10 ft-lbs.** (Fig 20)

Install the wheels and lower the vehicle to the ground. Torque the lug nuts to the manufactures specifications.

Reconnect the vehicles negative lead at the power source and the EPAS module.

Jounce the front suspension to get the vehicle to settle to ride height. Torque the upper and lower control arms to **120 ft-lbs.**



Rear Install

Block the front wheels and raise the rear of the vehicle. Place jack stands under the frame rails ahead of the spring hanger.

Place a suitable jack under the rear end for support.

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 remove the factory block and install the lift block. Locate the passenger side lift block, making sure the tapered end points to the front if installing on a 1 piece drive line. If installing on a 2 piece drive line, the blocks are universal. Install the lift block on the axle pad aligning the pins. Raise the axle and the block up to the spring while aligning the center pins. Install the provided **u-bolts, washers and nuts.** Snug the u-bolt nuts but do not fully tighten at this time. Repeat steps for driver side. (Fig 21, 22, 23)

Lower the vehicle to the ground and jounce the suspension.

Torque the u-bolts to **110 ft-lbs.**

Install carrier bearing drop if on a 2 piece drive line. Torque to **40 ft-lbs.** (Fig 24)



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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

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

Instructions for Ford F-150/Expedition Front Caster/Camber Kit

1. Before beginning any alignment always check for loose or worn parts, tire pressure, and odd tire wear patterns.
2. Raise and support the front of the vehicle by lifting on the frame rail to unload the front suspension.
3. Remove nut from lower control arm bolt. (Do not remove bolt.)

Mount cam shoulder plate so pin fits in existing small hole in frame and over bolt end then install eccentric cam nut by threading bolt into nut.

Install each kit so the eccentric cam nut threaded hole is towards the center of the vehicle. (Most positive camber position of wheel) and tighten slightly.

6. Repeat steps 3, 4, & 5 for each lower control arm bolt

7. Lower vehicle and adjust camber and caster by rotating hex on cam nut.

Note: If cam bolt and washer start to bind while rotating, it may be necessary to raise vehicle by the frame to unload the suspension and start with the cam bolt positioned for the most positive camber.

8. Torque cam bolt nut to 240-260 lb-ft. Make sure suspension is loaded before tightening.
9. Adjust toe, recheck alignment and road test vehicle.

Always check for proper clearance between suspension components and other components of the vehicle.